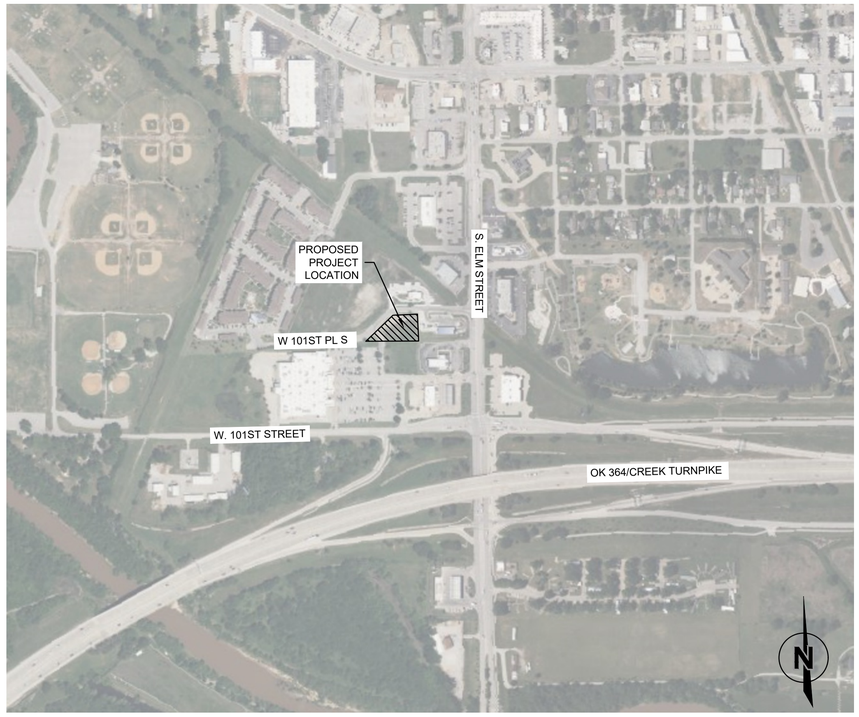
BRAKES PLUS

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 24, TOWNSHIP 18 NORTH, RANGE 12 EAST OF THE I.B.&M. LOCATED IN THE CITY OF JENKS, TULSA COUNTY, OKLAHOMA



SITE LOCATION MAP

SCALE: 1"=400'

LOCATION MAP

SCALE: 1"=1000'
SECTION 024, TOWNSHIP 18 NORTH,
RANGE 12 WEST, INDIAN PRINCIPAL MERIDIAN

"I HEREBY CERTIFY THAT I AM FAMILIAR WITH THE ADOPTED ORDINANCES AND REGULATIONS OF THE CITY OF JENKS GOVERNING DRAINAGE, STREETS, DETENTION AND FLOOD PLAINS; THAT THESE PLANS HAVE BEEN PREPARED UNDER MY DIRECT SUPERVISION; THE ABOVE AND FORGOING DRAINAGE PLANS COMPLY WITH ALL GOVERNING ORDINANCES AND THE ADOPTED STANDARDS OF THE CITY OF JENKS PERTAINING TO DRAINAGE, DETENTION AND EARTH CHANGE TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF."

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COMPREHENSIVE / ZONING INFORMATION

ZONING:	LIGHT RETAIL GENERAL COMMERCIAL (D-2)
ROW DEDICATION	50'
SIDE & REAR YARD SETBACK	10'
FRONT YARD SETBACK	25'
LANDSCAPE BUFFER	6'

SITE DATA

PROPOSED USE		MAINTENANCE SHOP
PROPOSED LOT SIZE		±0.96 ACRES
REQUIRED PARKING	3 PARKING SPACES FOR EACH SERVICE BAY	
	TOTAL	25 SPACES
	ADA	2 SPACES
PROPOSED PARKING	STANDARD	15 SPACES
	ADA	2 SPACES
	TOTAL	17 SPACES
BUILDING AREA		4897 SQFT
PAVEMENT/PARKING/SIDEWALK AREA		12054 SQFT
TOTAL IMPERVIOUS AREA		16951 SQFT
TOTAL PERVIOUS AREA		109001 SQFT

LEGAL DESCRIPTION:

A TRACT OF LAND THAT IS PART OF THE SOUTHEAST QUARTER (SE¼) OF SECTION TWENTY-FOUR (24), TOWNSHIP EIGHTEEN (18) NORTH, RANGE TWELVE (12) EAST OF THE INDIAN BASE AND MERIDIAN, TULSA COUNTY, STATE OF OKLAHOMA, ACCORDING TO THE U.S. GOVERNMENT SURVEY THEREOF, SAID TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS, TO-WIT:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SE¼; THENCE NORTH 1° 03' 42" WEST AND ALONG THE EAST LINE OF THE SE¼, FOR A DISTANCE OF 502.37 FEET;
THENCE SOUTH 88° 56' 18" WEST AND PERPENDICULAR TO SAID EAST LINE, FOR A DISTANCE OF 50.00 FEET TO A POINT, SAID POINT ALSO BEING THE NORTHEAST CORNER OF LOT ONE (1), BLOCK ONE (1), ELM STREET CROSSING, AN ADDITION IN THE CITY OF JENKS, TULSA COUNTY, STATE OF OKLAHOMA, ACCORDING TO THE RECORDED PLAT NO. 5866; THENCE NORTH 1° 03' 42" WEST AND PARALLEL WITH THE EAST LINE, FOR A DISTANCE OF 8.00 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 85° 40 38" WEST AND PARALLEL WITH THE NORTH LINE OF SAID LOT 1, FOR A DISTANCE OF 24.00 FEET TO A POINT; THENCE SOUTH 1° 03' 42" EAST AND PERPENDICULAR TO SAID NORTH LINE, FOR A DISTANCE OF 8.00 FEET TO A POINT ON THE NORTH LINE; THENCE SOUTH 85° 40' 38" WEST AND ALONG THE NORTH LINE, FOR A DISTANCE OF 571.97 FEET TO A POINT; THENCE NORTHEASTERLY ALONG A 125.00 FOOT RADIUS NON-TANGENT CURVE TO THE LEFT, HAVING AN INITIAL TANGENT BEARING OF NORTH 85° 40' 38" EAST, A CENTRAL ANGLE OF 41° 40' 20", FOR AN ARC DISTANCE OF 91.06 FEET TO A POINT OF TANGENCY; THENCE NORTH 43° 56' 18" EAST FOR A DISTANCE OF 130.79 FEET TO A POINT OF CURVATURE; THENCE ALONG A 75.00 FOOT RADIUS CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 45° 00' 00", FOR AN ARC DISTANCE OF 58.90 FEET TO A POINT OF TANGENCY; THENCE NORTH 88° 56' 18" EAST AND PERPENDICULAR TO SAID EAST LINE, FOR A DISTANCE OF 228.22 FEET TO A POINT OF CURVATURE; THENCE ALONG A 88.00 FOOT RADIUS CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 13° 29' 40", FOR AN ARC DISTANCE OF 20.73 FEET TO A POINT OF TANGENCY; THENCE SOUTH 77° 34' 02" EAST FOR A DISTANCE OF 36.33 FEET TO A POINT OF CURVATURE; THENCE ALONG A 112.00 FOOT RADIUS CURVE TO THE LEFT, HAVING A CENTRAL ANGLE OF 13° 29' 40", FOR AN ARC DISTANCE OF 26.38 FEET TO A POINT OF CURVATURE; THENCE NORTH 88° 56' 18" EAST AND PERPENDICULAR TO THE EAST LINE, FOR A DISTANCE OF 38.00 FEET TO A POINT OF CURVATURE; THENCE ALONG A 20.00 FEET RADIUS CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 90° 00' 00", FOR AN ARC DISTANCE OF 31.42 FEET TO A POINT OF TANGENCY, SAID POINT BEING 50.00 FEET PERPENDICULARLY DISTANT FROM THE EAST LINE; THENCE SOUTH 1° 03' 42" EAST AND PARALLEL WITH THE EAST LINE, FOR A DISTANCE OF 74.95 FEET TO THE POINT OF BEGINNING.

VESTING DEED INCLUDED ADDITIONAL INFORMATION BELOW PER DOCUMENT NO. 2023018182:

*****[LESS AND EXCEPT: TIDAL WAVE AT ELM, A SUBDIVISION IN THE CITY OF JENKS, TULSA COUNTY, STATE OF OKLAHOMA, ACCORDING TO THE RECORDED PLAT THEREOF.]*****

ZONING INFORMATION:

SITE REZONED TO BE COMPLETELY COMMERCIAL SHOPPING (CS) ON 4/3/26

DATUM:

THE VERTICAL DATUM FOR THIS PROJECT IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE HORIZONTAL DATUM FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE OKLAHOMA STATE PLANE COORDINATE SYSTEM OF 1983 – NORTH ZONE (NAD83)

SITE CONTROL:

CONTROL POINT 100
N: 377432.438'
E: 2566436.209'
ELEV: 621.53'
DESCRIPTION: 1/2" REBAR W/ PINK CAP

CONTROL POINT 101
N: 3776626.121
E: 256632.58"
ELEV: 615.04'
DESCRIPTION: 1/2" REBAR W/ PINK CAP

FLOOD ZONE:

THE SITE IS ASSUMED TO LIE WITHIN FLOOD ZONE "A" AREA SPECIAL FLOOD HAZARD WITHOUT BASE FLOOD ELEVATION ACCORDING TO THE NATIONAL HAZARD LAYER FIRMETTE, OBTAINED ONLINE FROM WEB SERVICES PROVIDED BY FEMA. SEE INFORMATION BELOW:
MAP NUMBER: 40143C0363;
EFFECTIVE DATE: OCTOBER 19, 2012

OWNER/APPLICANT:
BRAKES PLUS LLC
1880 SOUTH DRIVE,
BIRMINGHAM, AL 35244

PROJECT TEAM:

CIVIL ENGINEER:
OLSSON, INC.
11600 BROADWAY EXTENSION
SUITE 300
OKLAHOMA CITY, OK 73114
CONTACT: MADELINE KNECHT
PH: (214)473.2698

SURVEYOR:
OLSSON, INC.
11600 BROADWAY EXTENSION
SUITE 300
OKLAHOMA CITY, OK 73114
CONTACT: CHASE GARTEN
PH: (405)242.6600

ARCHITECT:
ARCODEV ARCHITECTS PC
45 SPYGLASS DRIVE
LITTLETON, CO 80123
CONTACT: NORM HERMAN
PH: (303)881.8925

UTILITIES:

WATER:
CITY OF JENKS
211 N. ELM STREET
JENKS, OK 74037
PH: (918)299.5363

SANITARY SEWER:
CITY OF JENKS PUBLIC WORKS DEPARTMENT
211 N. ELM STREET
JENKS, OK 74037
PH: (918)299.9511

STORM SEWER:
CITY OF OKLAHOMA CITY
PUBLIC WORKS DEPARTMENT
211 N. ELM STREET
JENKS, OK 74037
PH: (918)299.9511

GAS:
ONG
PH: (800)664.5463

ELECTRIC:
PUBLIC SERVICE COMPANY OF OKLAHOMA
DUSTIN PHILLIPS
PH: (918)599.2000

COMMUNICATIONS:
AT&T
PH: (800)464.7928

CITY INFRASTRUCTURE INSPECTOR:
CHAD CICERO
211 N. ELM STREET
JENKS, OK 74037
PH: (847)804.0327

CITY OF JENKS ENGINEERING:
211 N. ELM STREET
JENKS, OK 74037
PH: (915)556.7444

–CAUTION–

THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS–BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTILITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.

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olsson

11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114

olsson.com
TEL 405.242.6600
FAX 405.242.6601

Olsson - Engineering
Oklahoma COA #2483

ISSUE FOR BID - NOT FOR CONSTRUCTION

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

COVER SHEET

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C0.0

F:\2025\07501-08000\025-07660\4d-design\AutoCAD\final plans\Sheets\SDNIC_TTL01_025076600.dwg
DATE: Jul 22, 2026 2:28pm USER: jgegoux

GENERAL NOTES:

1. WHEREVER THE WORD "CITY" APPEARS HEREIN THE SAME SHALL CONCLUSIVELY BE DEEMED TO MEAN THE CITY OF JENKS, OKLAHOMA UNLESS THE CONTEXT CLEARLY DICTATES OTHERWISE.
2. ALL CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY WILL REQUIRE PROPERTY OWNER APPROVAL. CONTRACTOR, UPON NEEDING TO DO ANY CONSTRUCTION ACTIVITIES ON PROPERTY OTHER THAN THE DEVELOPERS (I.E. OTHER PROPERTY OWNERS, CITY OF JENKS, CITY OF TULSA, TULSA COUNTY, ETC.) SHALL LEAVE THE PROPERTY IN THE SAME OR BETTER CONDITIONS.
3. CONTRACTOR AND ALL RELATED CONSTRUCTION ACTIVITIES WILL BE REQUIRED TO MAINTAIN NORMAL WORKING HOURS IF SIGNIFICANT PUBLIC REQUEST IS MADE TO THE CITY IN THIS REGARD.
4. A PRE-CONSTRUCTION MEETING IS REQUIRED AND CAN BE COORDINATED WITH CITY STAFF AT (918) 556-7467. FIVE (5) 11"X17" SETS OF FINAL PLANS ARE TO BE PROVIDED AT THE TIME OF THE MEETING.
5. CONDITIONS SET FORTH WITHIN THE EARTH CHANGE PERMIT REMAIN VALID THROUGHOUT ALL CONSTRUCTION ACTIVITIES AND DEVELOPMENT SEQUENCES OF THIS DEVELOPMENT.
6. NO CONSTRUCTION ACTIVITIES ON THE WATER AND SANITARY SEWER SYSTEMS ARE PERMITTED UNTIL THE CITY ENGINEER'S OFFICE HAS RECEIVED A COPY OF THE ODEQ "PERMIT TO CONSTRUCT" AND AUTHORIZATION TO PROCEED WITH THE WATER SYSTEM AND SANITARY SYSTEMS HAS BEEN PROVIDED BY THE CITY ENGINEER.
7. ALL CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE CURRENT CITY OF JENKS, DEPARTMENT OF PUBLIC WORKS, ENGINEERING DEPARTMENT STANDARDS AND SPECIFICATIONS AND THE 2019 EDITION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND AS MAY BE SUBSEQUENTLY REVISED, UPDATED AND ADOPTED.
8. EASEMENTS, BUILDING SETBACKS, RIGHTS-OF-WAY, SIGNS, LIGHTING, LANDSCAPING AND OTHER APPURTENANCES ARE DESIGNED TO BE IN COMPLIANCE WITH THE CONDITIONS SET FORTH BY THE CITY PLANNER, PLANNING COMMISSION AND CITY COUNCIL. ALL DESIGN PLANS FOR WATER DISTRIBUTION, SANITARY SEWER COLLECTION, ROADWAY AND STORM WATER SYSTEMS CONSTRUCTION INSTALLATION SHALL MEET OR EXCEED THE CITY OF JENKS CONSTRUCTION STANDARDS AND MUNICIPAL POLICY AND ARE IN COMPLIANCE WITH CITY OF JENKS STANDARDS.
9. ALL PREVIOUS CONDITIONS SET FORTH WITHIN THE EARTH CHANGE PERMIT REMAIN VALID THROUGHOUT ALL OF THE CONSTRUCTION ACTIVITIES AND DEVELOPMENT SEQUENCES OF THIS DEVELOPMENT.
10. THE CONTRACTOR AND ANY OTHER SUBCONTRACTORS UNDER SEPARATE CONTRACT IS/ARE REQUIRED TO ATTEND A PRE-CONSTRUCTION MEETING WITH THE CITY OF JENKS STAFF. SUCH A MEETING IS REQUIRED BEFORE ANY INFRASTRUCTURE CONSTRUCTION IS PERFORMED. THE CITY OF JENKS WILL NOT APPROVE CONSTRUCTION ACTIVITIES TO PROCEED UNTIL SUCH A MEETING IS HELD. SUCH MEETINGS WILL ALSO BE MANDATORY, UPON THE CITY OF JENKS' REQUEST, DURING THE CONSTRUCTION PROCESS SHOULD THE CITY OF JENKS DETERMINE IT TO BE NECESSARY.
11. SITE GRADING SHALL BE PERFORMED IN A MANNER CONSTINENT WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWP3) PREVIOUSLY SUBMITTED FOR THIS PROJECT.
12. ALL EXCAVATED AREAS WITHIN THE DETENTION POND BANKS ABOVE THE WATER LINE, RIGHTS-OF-WAY, PARKS AND DRAINAGE WAYS SHALL HAVE GROUND COVER (I.E., SOD OR HYDRO-MULCH) INSTALLED IMMEDIATELY FOLLOWING FINAL EXCAVATION WORK PER ODEQ OKR10. ALL GROUND COVER SHALL BE MAINTAINED AND WATERED UNTIL WELL ESTABLISHED.

PAVING NOTES

1. ALL PAVING, DRAINAGE AND EROSION CONTROL IS DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF JENKS LAND SUBDIVISION CODE AND ALL CONSTRUCTION INSTALLATION SHALL MEET OR EXCEED THE CITY OF JENKS CONSTRUCTION STANDARDS AND MUNICIPAL POLICY.
2. THE PROJECT RESPONSIBLE CONTRACTOR AND ANY OTHER SUB-CONTRACTORS UNDER SEPARATE CONTRACT IS/ARE REQUIRED TO HAVE A PRE-CONSTRUCTION MEETING WITH CITY STAFF. SUCH A MEETING IS REQUIRED BEFORE ANY INFRASTRUCTURE CONSTRUCTION IS PERFORMED. SHOULD THE RESPONSIBLE CONTRACTOR(S) REPRESENTATIVE FAIL TO PARTICIPATE WITHIN A MUTUALLY SCHEDULED PRE CONSTRUCTION MEETING, ALL CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY, TERMINATED INDEFINITELY BY THE CITY.
3. ALL PAVING CONSTRUCTION SHALL BE INSPECTED BY THE ENGINEERING DEPARTMENT UTILITY INSPECTORS, IN ACCORDANCE WITH CITY POLICY.
4. THE PAVING CONTRACTOR SHALL NOTIFY THE ENGINEERING DEPARTMENT AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.
5. ALL UTILITY CONSTRUCTION (WATER, SEWER, AND STORM WATER) SHALL BE COMPLETED PRIOR TO SUBGRADE PREPARATION.
6. SUBGRADE SHALL BE FREE OF ALL ORGANIC MATTER, TREATED, AND COMPACTED ACCORDING TO THE PLANS AND SPECIFICATIONS.
7. SUBGRADE STABILIZATION SHALL BE BASED UPON CITY'S REVIEW OF GEOTECHNICAL REPORT. GEOTECHNICAL FIRM TO CONTACT CITY ENGINEER PRIOR TO TESTING.
8. PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF UNACCEPTABLE SUBGRADE AT ALL UTILITY, CABLE OR CONDUIT CROSSINGS.
9. PAVING CONTRACTOR SHALL INSPECT SUBGRADE PRIOR TO COMMENCING WORK AND SHALL REPAIR AREAS WHERE GRADE VARIES MORE THAN 0.1 FEET, WHERE DENSITY IS LESS THAN 95% STANDARD PROCTOR OR WHERE SUBGRADE DRAINAGE IS INADEQUATE, AT THE UNIT PRICE BID FOR FINE GRADING IN THE PROPOSAL SUBGRADE MODIFICATIONS, WHERE REQUIRED, SHALL NOT COMMENCE UNTIL SUBGRADE REPAIRS HAVE BEEN ACCEPTED BY THE ENGINEER DEPARTMENT INSPECTOR.
10. SEQUENCE OF CONSTRUCTION FOR STABILIZED SUBGRADES SHALL BE BLUE TOP AND FINE GRADE, FABRIC PLACEMENT, AGGREGATE BASE, AND THEN FINAL FINE GRADING.
11. COMPACTION TESTS SHALL BE TAKEN A MINIMUM OF EVERY 300 LINEAR FEET IN ALTERNATING LANES FOR EACH EIGHT (8) INCH LIFT OF MATERIAL.
12. SUBGRADES SHALL BE PROOF-ROLLED IF THE STABILITY OF THE MATERIAL IS QUESTIONED. ALSO, THE SUBGRADE EXPOSED AFTER STRIPPING AND COMPLETING ANY CUTS SHALL BE PROOF-ROLLED ACCORDING TO THE GEOTECHNICAL REPORT.
13. PORTLAND CEMENT CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF NOT LESS THAN 3,500 PSI, A SLUMP OF NOT MORE THAN 3", AND SHALL CONTAIN SIX (6) PERCENT AIR + OR -1% OR PER PROJECT GEOTECHNICAL REPORT.
14. ASPHALTIC CONCRETE SHALL HAVE DENSITY OF NOT LESS THAN 94% AND NOT MORE THAN 96%, AND HVEEM STABILITY OF NOT LESS THAN 40% OR PER PROJECT GEOTECHNICAL REPORT.
15. THE CONTRACTOR SHALL FURNISH THE FOLLOWING TESTING SERVICES BY A REPUTABLE INDEPENDENT TESTING LABORATORY APPROVED BY THE OWNER'S REPRESENTATIVE:
    - 15.1 FIELD DENSITY TEST OF EMBANKMENT, SUBGRADE, OR BASE, AT LOCATIONS SPECIFIED BY THE INSPECTOR.
    - 15.2 PLASTICITY TESTS OF THE SUBGRADE AT LOCATIONS SPECIFIED BY THE ENGINEER.
    - 15.3 MOISTURE DENSITY CURVES FOR MATERIAL TO BE USED FOR EMBANKMENT OR SUBGRADE CONSTRUCTION.
    - 15.4 MIX DESIGNS FOR PORTLAND CEMENT CONCRETE AND ASPHALTIC CONCRETE.
    - 15.5 AGGREGATE GRADATION TESTS.
    - 15.6 STABILITY, DENSITY, BITUMEN CONTENT AND GRADATION TESTS OF ASPHALTIC CONCRETE EVERY 200 TONS OR DAILY WHICHEVER IS LESS.
    - 15.7 COMPRESSION TEST OF CONCRETE CYLINDERS AT SEVEN (7) AND TWENTY-EIGHT (28) DAYS WITH ONE (1) OF EACH TESTS CONDUCTED FOR EVERY 100 CUBIC YARDS PLACED.
    - 15.8 ONE CORE SAMPLE, AT A LOCATION SPECIFIED BY THE INSPECTOR FOR EVERY 8,000 SQUARE FEET OF PAVEMENT.
16. THE CONTRACTOR SHALL FURNISH CERTIFICATION FROM THE MANUFACTURER THAT ALL MATERIALS MEET APPLICABLE SPECIFICATIONS. COPIES OF MATERIAL CERTIFICATION SHALL BE FURNISHED TO THE ENGINEERING DEPARTMENT PRIOR TO INSTALLATION OR INCORPORATION OF MATERIAL IN THE WORK.
17. THE PAVING CONTRACTOR SHALL ADJUST ALL VALVE BOXES TO GRADE AFTER PAVING HAS BEEN COMPLETED.
18. THE PAVING CONTRACTOR SHALL PLACE A CONCRETE COLLAR TWO (2) FEET SQUARE AND EQUIVALENT IN THICKNESS TO THE STREET BEING CONSTRUCTED, AROUND EACH VALVE BOX NOT LOCATED IN A PAVED area. THE VALVE BOX SHALL BE ADJUSTED TO GRADE PRIOR TO PLACING OF THE CONCRETE COLLAR.
19. THE PAVING CONTRACTOR SHALL MARK ALL WATER LINE CROSSINGS BY CUTTING A "W" ¼-INCH DEEP IN THE FACE OF THE CURB, OVER THE CROSSING AND PAINTING THE "W" BLUE. THE PAVING CONTRACTOR SHALL MARK ALL WATER VALVE LOCATION BY CUTTING A "V" ¼ INCH DEEP IN THE FACE OF THE CURB, OVER THE VALVE AND PAINTING THE "V" BLUE.
20. ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE WITH JENKS PUBLIC WORKS DEPARTMENT AND JENKS POLICE DEPARTMENT. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE CITY ENGINEER.
21. ALL PAVEMENT STRIPING MATERIAL SHALL COMPLY WITH 2019 ODOT STANDARDS SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND PLACEMENT WILL COMPLY WITH THE LATEST VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
22. NO EXCAVATION OF EXISTING ASPHALT FOR DRIVEWAY MODIFICATIONS, ROADWAY CONNECTIONS, ETC. IS PERMITTED WITHOUT PRIOR SAW-CUTTING ASPHALT AT CONSTRUCTION BOUNDARY.
23. THE LOT PROPERTY OWNER/BUILDER SHALL BE RESPONSIBLE FOR CONSTRUCTING THE SIDEWALK IN FRONT OF THE LOT OWNER'S PROPERTY IN ACCORDANCE WITH THE PAVING PLANS.
24. ALL HANDICAP ACCESS RAMPS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONSTRUCT AS THE CURB AND/OR AS ROADWAY IS BEING CONSTRUCTED.

GRADING AND EROSION CONTROL NOTES

1. ALL GRADING AND EROSION CONTROL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT CITY STANDARD CONSTRUCTION SPECIFICATIONS.
2. ALL EROSION CONTROL CONSTRUCTION SHALL BE INSPECTED BY THE ENGINEERING DEPARTMENT UTILITY INSPECTORS, IN ACCORDANCE WITH CITY POLICY.
3. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS BEFORE EXCAVATING.
4. TOPSOIL SHALL BE STRIPPED TO A DEPTH WHERE SOIL IS FREE OF ROOTS AND VEGETATION.
5. STRIPPINGS SHALL BE STOCKPILED OR WINDROWED ON SITE IN AREAS DESIGNATED BY OWNER AND RE SPREAD AS DIRECTED BY OWNER AFTER GRADING IS COMPLETE. TOPSOIL SHALL BE SPREAD TO A DEPTH NOT EXCEEDING SIX (6) INCHES.
6. CLEARING AND TREE REMOVAL WILL BE PERFORMED AS PART OF THE UNIT PRICE FOR EXCAVATION AND EMBANKMENT AND SHALL INCLUDE GRUBBING ROOTS AND VEGETATION AS MAY BE NECESSARY.
7. STRIPPING, PROOF-ROLLING, SUBGRADE SCARIFICATIONS AND COMPACTION AND FILL CONSTRUCTION IN THE BUILDING AND PAVING AREAS SHALL BE PERFORMED ACCORDING TO THE SUBSURFACE GEOTECHNICAL REPORT. EMBANKMENT BENEATH BUILDING PADS OR FOR PAVING SUBGRADE SHALL BE PLACED IN LIFTS NOT EXCEEDING EIGHT (8) INCHES AND COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT, UNLESS OTHERWISE SPECIFIED THEREIN.
8. ALL EXISTING PAVEMENTS, GRAVEL AND SAND FILL, CONCRETE RUBBLE OR SLABS OR OTHER SURFACE AND SUBSURFACE FEATURES FROM PREVIOUS SITE USE SHALL BE REMOVED FULL-DEPTH THROUGHOUT THE BUILDING AND PAVEMENT AREAS BEFORE COMPLETING SUBGRADE PREPARATION AND PLACING ANY FILL (REFER TO THE GEOTECHNICAL REPORT FOR ONSITE OBSERVATIONS).
9. CONTRACTOR SHALL PROVIDE WATER AS REQUIRED TO OBTAIN SPECIFIED COMPACTION.
10. SUBGRADE STABILIZATION SHALL BE AT THE DIRECTION OF THE ENGINEER OR AS SPECIFIED IN SUBSURFACE GEOTECHNICAL REPORT.
11. CIVIL ENGINEER WILL NOT INTERPRET SOILS REPORTS OR ACCEPT RESPONSIBILITY FOR ALTERNATIVE METHODS PROPOSED BY THE CONTRACTOR.
12. DENSITY TESTING WILL BE PROVIDED BY THE OWNER. ANY FAILING TEST SHALL BE RE-TESTED AT THE CONTRACTOR'S EXPENSE UNTIL PASSING TESTS ARE OBTAINED.
13. EROSION CONTROL SHALL START PRIOR TO INITIAL CONSTRUCTION AND BE PRACTICED THROUGHOUT THE PROJECT. FOR PROJECTS OVER 1 ACRE, EROSION CONTROL SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE SWP3 FOR THE SITE.
14. EROSION CONTROL WATTLES OR SILT FENCES SHALL BE CONSTRUCTED ADJACENT TO ALL DRAINAGE-WAYS AND IN ALL AREAS THAT WILL ERODE INTO THE STORM SEWER SYSTEM.
15. THE CONTRACTOR SHALL RE-SEED ALL AREAS DISTURBED DURING CONSTRUCTION, AND CONTRACTOR SHALL BE RESPONSIBLE FOR RESEEDING AREAS UNTIL GROWTH IS ESTABLISHED TO A UNIFORM HEIGHT OF TWO (2) REPORT FINAL STABILIZATION FOR EROSION SHALL COMPLY WITH ODEQ OKR10.
16. UNDERCUTTING OF SOFT SPOTS AND PLACEMENT OF EARTHWORK IS GOVERNED FIRST BY THE GEOTECHNICAL REPORT. OBSERVATION AND TESTING SHALL BE PERFORMED BY THE GEOTECHNICAL ENGINEER TO VERIFY THAT THE SOFT SPOTS ARE PROPERLY OVER EXCAVATED AND REPLACED OR STABILIZED.
17. CORRECTIVE MEASURES DIRECTED BY THE ENGINEER MAY INCLUDE COMPLETE REMOVAL AND REPLACEMENT AT NO COST TO OWNER IN CASES OF POOR WORKMANSHIP OR UNSATISFACTORY IN-PLACE CONDITIONS.
18. THE EARTHWORK CONTRACTOR IS ULTIMATELY RESPONSIBLE TO IMPORT OR EXPORT MATERIAL AS NECESSARY TO ACHIEVE THE GRADES SHOWN ON THE CIVIL ENGINEER'S DOCUMENTS.
19. ROUGH PAD ELEVATIONS AND APPROXIMATE PAD OUTLINES HAVE BEEN SHOWN. PAD ELEVATIONS WERE SET BASED ON A MINIMUM ELEVATION DIFFERENCE OF ONE (1) FOOT ABOVE TOP OF CURB AT PAD CORNER NEAREST TO HIGHEST ROW ON ADJACENT CURB.
20. SOME APPROXIMATE ELEVATIONS BETWEEN PADS HAVE BEEN SHOWN FOR DRAINAGE PURPOSES. THE EARTHWORK CONTRACTOR IS RESPONSIBLE TO PROVIDE AND MAINTAIN DURING CONSTRUCTION POSITIVE DRAINAGE AWAY FROM AND BETWEEN ALL PADS.

STORM SEWER NOTES

1. ALL STORM SEWER SYSTEM CONSTRUCTION INSTALLATION SHALL MEET OR EXCEED THE CITY OF JENKS CONSTRUCTION STANDARDS AND MUNICIPAL POLICY.
2. THE PROJECT RESPONSIBLE CONTRACTOR AND ANY OTHER SUB-CONTRACTORS UNDER SEPARATE CONTRACT, IS/ARE REQUIRED TO HAVE A PRE-CONSTRUCTION MEETING WITH CITY STAFF. SUCH A MEETING IS REQUIRED BEFORE ANY INFRASTRUCTURE CONSTRUCTION IS PERFORMED. SHOULD THE RESPONSIBLE CONTRACTOR(S) REPRESENTATIVE FAIL TO PARTICIPATE WITHIN A MUTUALLY SCHEDULED PRE-CONSTRUCTION MEETING, ALL CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY TERMINATED INDEFINITELY BY THE CITY. SUCH MEETINGS WILL ALSO BE MANDATORY, UPON CITY'S REQUEST, DURING THE CONSTRUCTION PROCESS, IF NECESSARY.
3. ALL STORM SEWER AND DRAINAGE CONSTRUCTION SHALL BE INSPECTED BY THE ENGINEERING DEPARTMENT UTILITY INSPECTORS IN ACCORDANCE WITH CITY POLICY.
4. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS BEFORE EXCAVATING.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DEPARTMENT AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.
6. MANHOLES AND APPURTENANCE DETAILS SHALL BE APPROVED BY THE CITY ENGINEER BEFORE CONSTRUCTION IS STARTED.
7. ALL STORM SEWER PIPE UNDER PAVING SHALL BE HP STORM UNLESS OTHERWISE NOTED.
8. ALL HDPE STORM SEWER PIPE SHALL BE ADS-N-12, OR EQUIVALENT, CORRUGATED, SMOOTH INTERIOR PLASTIC PIPE.
9. STORM SEWER BEDDING, BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWINGS OR REFERENCED ODOT DRAWINGS.
10. ALL STORM SEWER LINES NOT UNDER PAVING SHALL BE LAID IN TYPE A AGGREGATE BEDDING TO A DEPTH OF THE SPRING LINE. THE TRENCH MAY BE BACKFILLED WITH COMPACTED SOIL UPON APPROVAL BY THE INSPECTOR.
11. STORM SEWER LINES LOCATED UNDER PAVED STREETS SHALL BE LAID IN TYPE A AGGREGATE BEDDING AND THE TRENCH COMPLETELY FILLED TO SUBGRADE WITH TYPE A AGGREGATE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
12. PIPE BACKFILL SHALL BE PLACED IN LIFTS NOT EXCEEDING EIGHT (8) INCHES AND COMPACTED BY VIBRATORY PLATE OR OTHER METHOD APPROVED BY THE ENGINEER.
13. PAVING SUBGRADE SHALL BE RESTORED TO PROPER GRADE (+ OR - 0.1 FT) AND DENSITY AFTER PIPE IS BACKFILLED.
14. ALL CURB INLETS SHALL HAVE CAST IRON HOODS.
15. ALL CULVERTS SHALL BE FURNISHED WITH HEADWALLS OR END SECTIONS ON BOTH ENDS AND AN APRON ON THE DOWNSTREAM SIDE.
16. CONSTRUCTION OF STORM SEWER STRUCTURES SHOULD INCLUDE A TEMPORARY DRAIN HOLE AT A POINT TWELVE (12) INCHES BELOW PAVING SUBGRADE TO PROMOTE DRAINAGE DURING CONSTRUCTION. PAVING AND STORM SEWER CONTRACTORS SHALL COORDINATE THE PLUGGING OF THE TEMPORARY HOLES.
17. ALL PRECAST MANHOLES SHALL HAVE ADJUSTABLE TOP RIMS PROVIDING SIX (6) INCHES, PLUS OR MINUS, FOR ADJUSTMENT TO FINAL GRADES. ELEVATIONS SHOWN ON PLANS MAY BE ADJUSTED WHILE THE WORK IS IN PROGRESS TO CONFORM TO FINAL IN-PLACE PAVING AND LANDSCAPE GRADES.
18. THE UTILITY CONTRACTOR ASSUMES THE RISK OF ORDERING PRECAST CONCRETE COMPONENTS PRIOR TO FIELD STAKING AND REVIEW OF FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.
19. VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL DISTURBED AREAS AS SOON AS THE WORK IS COMPLETED.
20. ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE WITH JENKS ENGINEERING DEPARTMENT AND JENKS POLICE DEPARTMENT. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE CITY ENGINEER.

WATER LINE NOTES

1. WHEREVER THE WORD "CITY" APPEARS HEREIN THE SAME SHALL CONCLUSIVELY BE DEEMED TO MEAN THE CITY OF JENKS, OKLAHOMA UNLESS THE CONTEXT CLEARLY DICTATES OTHERWISE.
2. ALL CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY WILL REQUIRE PROPERTY OWNER APPROVAL. CONTRACTOR, UPON NEEDING TO DO ANY CONSTRUCTION ACTIVITIES ON PROPERTY OTHER THAN THE DEVELOPERS (I.E. OTHER PROPERTY OWNERS, CITY OF JENKS, CITY OF TULSA, TULSA COUNTY, ETC.) SHALL LEAVE THE PROPERTY IN THE SAME OR BETTER CONDITIONS.
3. CONTRACTOR AND ALL RELATED CONSTRUCTION ACTIVITIES WILL BE REQUIRED TO MAINTAIN NORMAL WORKING HOURS IF SIGNIFICANT PUBLIC REQUEST IS MADE TO THE CITY IN THIS REGARD.
4. A PRE-CONSTRUCTION MEETING IS REQUIRED AND CAN BE COORDINATED WITH CITY STAFF AT (918) 556-7467. FIVE (5) 11"X17" SETS OF FINAL PLANS ARE TO BE PROVIDED AT THE TIME OF THE MEETING.
5. ALL WATER LINES ARE TYPICALLY 8" INSIDE THE STREET RIGHT-OF-WAY EXCEPT AT BENDS, TEES OR AS NOTED.
6. ALL WATER LINE PIPE UNDER PAVEMENT SECTION OR AT PAVEMENT SECTION CROSSINGS SHALL BE BACKFILLED WITH "ODOT TYPE A AGGREGATE BASE" AS SPECIFIED IN SECTION 703.01 IN THE 2019 ODOT STANDARD SPECIFICATIONS AND COMPACTED TO 99% STANDARD PROCTOR DENSITY, OR A FLOWABLE FILL CONSISTING OF A SAND-CEMENT SLURRY OF 2,970 POUNDS OF SAND, 100 POUNDS OF CEMENT AND APPROXIMATELY 458 POUNDS OF WATER PER CUBIC YARD. THE SLURRY WILL BE MIXED TO A POURABLE SOUPY MIX IN A READY MIX report.ALL PROPOSED PAVEMENT CROSSINGS SHALL BE BACKFILLED 2.0 FEET BEYOND THE BACK OF CURB. THE COST OF THIS BACKFILL SHALL BE INCLUDED IN THE PRICED BID FOR OTHER ITEMS. NO ADDITIONAL PAYMENT WILL BE MADE.
7. ALL UTILITY TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY THE APPROPRIATE MOISTURE-DENSITY ROTATION TEST OR AS DIRECTED BY THE CITY OF JENKS.
8. ALL WATER DISTRIBUTION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF JENKS LAND SUBDIVISION CODE AND ALL CONSTRUCTION INSTALLATION SHALL MEET OR EXCEED THE CITY. OF JENKS CONSTRUCTION STANDARDS AND MUNICIPAL POLICY.
9. THE PROJECT RESPONSIBLE CONTRACTOR AND ANY OTHER SUB-CONTRACTORS UNDER SEPARATE CONTRACT, IS/ARE REQUIRED TO HAVE A PRE-CONSTRUCTION MEETING WITH CITY STAFF. SUCH A MEETING IS REQUIRED BEFORE ANY INFRASTRUCTURE CONSTRUCTION IS PERFORMED. SHOULD THE RESPONSIBLE CONTRACTOR(S) REPRESENTATIVE FAIL TO PARTICIPATE WITHIN A MUTUALLY SCHEDULED PRE-CONSTRUCTION MEETING, ALL CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY TERMINATED INDEFINITELY BY THE CITY. SUCH MEETINGS WILL ALSO BE MANDATORY, UPON CITY'S REQUEST, DURING THE CONSTRUCTION PROCESS, IF NECESSARY.
10. ALL WATER DISTRIBUTION SYSTEM CONSTRUCTION SHALL BE INSPECTED BY THE ENGINEERING DEPARTMENT UTILITY INSPECTORS.
11. DIG THROUGH LOCATOR TAPE WILL BE BURIED 2 FEET ABOVE THE LINE.
12. WHEN C-900 PVC IS USED, A NO. 8 BARE COPPER WIRE SHALL BE TAPED TO THE TOP SURFACE OF THE PIPE AND CONNECTED TO EACH FIRE HYDRANT BY ATTACHING TO A BOLT, JUST MOVE GROUND LEVEL.
13. ALL IRON PIPE AND FITTINGS SHALL BE POLY-WRAPPED.
14. STREET CROSSINGS FOR MAIN LINES TWELVE (12) INCHES AND LARGER SHALL BE PLACED IN CONDUIT.
15. ALL DISTRIBUTION LINES IN CONDUIT AND AT DRAINAGE FEATURE CROSSINGS SHALL BE CONSTRUCTED WITH RESTRAINED JOINTS.
16. ALL MAIN LINES SHALL HAVE A MINIMUM OF THREE (3) FEET AND A MAXIMUM OF EIGHT (8) FEET OF COVER, UNLESS OTHERWISE SHOWN HEREIN.
17. BEDDING, BACKFILL AND COMPACTION OVER WATER LINES SHALL BE IN ACCORDANCE WITH STANDARD DRAWINGS. BACKFILL AND COMPACTION REQUIREMENT FOR STREET CROWNING SHALL EXTEND TWO (2) FEET BACK OF CURB.
18. ALL WATER DISTRIBUTION SYSTEM LINES, EXCEPT DEAD END FOR FIRE HYDRANTS ONLY, SHALL BE LOOPED TO PROVIDE CIRCULATION.
19. DISTRIBUTION LINES SMALLER THAN FOUR (4) INCHES SHALL NOT BE INSTALLED.
20. ALL WATER SYSTEM SERVICE LINES AT ROAD CROSSINGS SHALL BE ENCASED WITHIN A MINIMUM 4-INCH DIAMETER SCHEDULE 40 PVC PIPE SLEEVE WITH A 3-FOOT BURY DEPTH. EACH SERVICE LINE ROAD CROSSING SHALL ONLY BE ALLOWED FROM LOT LINE INTERSECTING POINT TO LOT LINE INTERSECTING POINT NO WATER SERVICE ROADWAY CROSSINGS WILL BE ALLOWED TO BE CONNECTED TO THE MAIN WATERLINE IN ANY LOCATION OTHER THAN AT LOT LINE INTERSECTION POINTS, EXCEPT WHERE NECESSARY. IN SIDE-LOT SITUATIONS, CONNECTION SHALL BE LOCATED BEHIND THE CURB POINT OF CURVATURE AND WILL ONLY BE ALLOWED TO TERMINATE ACROSS THE STREET AT INTERSECTING LOT LINE LOCATIONS 3 LINEAR FEET BEHIND BACK OF CURB. IN NO CASE SHALL THE WATER SERVICE LINE BE CONSTRUCTED UNDER A DRIVEWAY.
21. WHEN WORKING IN OR ADJACENT TO EXISTING SUBDIVISIONS ONLY ONE (1) DAY'S WORTH OF TRENCH MAY BE OPEN AT A GIVEN TIME. THIS REQUIREMENT MAY BE MODIFIED, IN WRITING BY THE CITY ENGINEER, FOR A SPECIFIC PROJECT.
22. ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE CITY ENGINEER.
23. ALL FITTING BENDS, TEES AND FIRE HYDRANTS SHALL HAVE MECHANICAL JOINT RESTRAINTS, WITH MIDCO GRIP RINGS.
24. NO CONSTRUCTION ACTIVITIES ON THE WATER SYSTEM ARE PERMITTED UNTIL THE CITY ENGINEER'S OFFICE HAS RECEIVED A COPY OF THE ODEQ "PERMIT TO CONSTRUCT" AND AUTHORIZATION TO PROCEED WITH THE WATER SYSTEM HAS BEEN PROVIDED BY THE CITY ENGINEER.
25. THE FOLLOWING MINIMUM SEPARATION DISTANCES BETWEEN WATER LINES AND OTHER UTILITIES SHOULD BE MAINTAINED, SHOULD SUCH UTILITIES BE UNEXPECTEDLY ENCOUNTERED DURING CONSTRUCTION:
    1. TEN FEET HORIZONTALLY AND TWO FEET VERTICALLY FROM SEWER LINES. WHEN IT IS IMPOSSIBLE TO OBTAIN SUCH HORIZONTAL SEPARATION BETWEEN THE WATER AND SEWER LINES, CONSTRUCT THE SEWER LINE OF WATER PIPE AND PRESSURE TEST IT TO ASSURE WATER TIGHTNESS.
    2. FIVE FEET HORIZONTALLY FROM EXISTING OR PROPOSED STORM SEWERS, RAW WATER LINES, PETROLEUM PRODUCT LINES, NATURAL GAS LINES AND OTHER BURIED UTILITY LINES.
    3. LOCATE PVC WATER LINES AT LEAST 50 FEET HORIZONTALLY FROM ANY GASOLINE STORAGE TANKS AND LINES.
    4. FIFTEEN FEET FROM ALL PARTS OF SEPTIC TANKS, ABSORPTION FIELDS OR OTHER SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
26. DOMESTIC WATER SERVICE TAP SHALL BE INSTALLED ACCORDING TO CITY OF JENKS SPECIFICATIONS BY AN APPROVED WATER SERVICE INSTALLATION CONTRACTOR/PLUMBER AND INSPECTED BY PUBLIC WORKS DEPARTMENT.
27. FIRE HYDRANTS:
    1. FIRE HYDRANTS SHALL BE A MINIMUM 5 INCH STORTZ NOZZLE TYPE AND OF THE KENNEDY AND MUELLER BRAND NAME.
    2. EACH HYDRANT SHALL BE SET WITH THE STREAMER NOZZLE FACING THE STREET AND WITH A MINIMUM CLEARANCE OF EIGHTEEN (18) INCHES ABOVE THE FINISHED GRADE.
    3. ALL EXPOSED PORTIONS OF FIRE HYDRANTS SHALL BE PAINTED WITH A SAFETY YELLOW ENAMEL AS MANUFACTURED BY GLIDDEN OR DUPONT.
    4. ALL FIRE HYDRANTS MUST HAVE A 6-INCH DIAMETER GATE VALVE INSTALLED BETWEEN THE FIRE HYDRANT AND THE WATERLINE MAIN WITH RESTRAINTS BETWEEN THE VALVE AND HYDRANT.

olsson

11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114

olsson.com
TEL 405.242.6600
FAX 405.242.6601

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Oklahoma COA #2483

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REV. NO.	DATE	DESCRIPTION	BY

REVISIONS

GENERAL NOTES

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

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CONSTRUCTION:

1. TEN FEET HORIZONTALLY AND TWO FEET VERTICALLY FROM SEWER LINES. WHEN IT IS IMPOSSIBLE TO OBTAIN SUCH HORIZONTAL SEPARATION BETWEEN THE WATER AND SEWER LINES, CONSTRUCT THE SEWER LINE OF WATER PIPE AND PRESSURE TEST IT TO ASSURE WATER TIGHTNESS.
2. FIVE FEET HORIZONTALLY FROM EXISTING OR PROPOSED STORM SEWERS, RAW WATER LINES, PETROLEUM PRODUCT LINES, NATURAL GAS LINES AND OTHER BURIED UTILITY LINES.
3. LOCATE PVC WATER LINES AT LEAST 50 FEET HORIZONTALLY FROM ANY GASOLINE STORAGE TANKS AND LINES.
4. FIFTEEN FEET FROM ALL PARTS OF SEPTIC TANKS, ABSORPTION FIELDS OR OTHER SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

26.DOMESTIC WATER SERVICE TAP SHALL BE INSTALLED ACCORDING TO CITY OF JENKS SPECIFICATIONS BY AN APPROVED WATER SERVICE INSTALLATION CONTRACTOR/PLUMBER AND INSPECTED BY PUBLIC WORKS DEPARTMENT.

SANITARY SEWER NOTES

1. WHEREVER THE WORD "CITY" APPEARS HEREIN THE SAME SHALL CONCLUSIVELY BE DEEMED TO MEAN THE CITY OF JENKS, OKLAHOMA UNLESS THE CONTEXT CLEARLY DICTATES OTHERWISE.
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3. CONTRACTOR AND ALL RELATED CONSTRUCTION ACTIVITIES WILL BE REQUIRED TO MAINTAIN NORMAL WORKING HOURS IF SIGNIFICANT PUBLIC REQUEST IS MADE TO THE CITY IN THIS REGARD.
4. A PRE-CONSTRUCTION MEETING IS REQUIRED AND CAN BE COORDINATED WITH CITY STAFF AT (918) 556-7467. FIVE (5) 11"X17" SETS OF FINAL PLANS ARE TO BE PROVIDED AT THE TIME OF THE MEETING.
5. ALL SANITARY SEWER COLLECTION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF JENKS LAND SUBDIVISION CODE AND CONSTRUCTION INSTALLATION SHALL MEET OR EXCEED THE CITY OF JENKS CONSTRUCTION STANDARDS AND MUNICIPAL POLICY.
6. THE PROJECT RESPONSIBLE CONTRACTOR AND ANY OTHER SUB-CONTRACTORS UNDER SEPARATE CONTRACT, IS/ARE REQUIRED TO HAVE A PRE-CONSTRUCTION MEETING WITH CITY STAFF. SUCH A MEETING IS REQUIRED BEFORE ANY INFRASTRUCTURE CONSTRUCTION IS PERFORMED. SHOULD THE RESPONSIBLE CONTRACTOR(S) REPRESENTATIVE FAIL TO PARTICIPATE WITHIN A MUTUALLY SCHEDULED PRE CONSTRUCTION MEETING, ALL CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY TERMINATED INDEFINITELY BY THE CITY. SUCH MEETINGS WILL ALSO BE MANDATORY, UPON CITY'S REQUEST, DURING THE CONSTRUCTION PROCESS, IF NECESSARY.
7. ALL SANITARY SEWER COLLECTION SYSTEM CONSTRUCTION SHALL BE INSPECTED BY THE ENGINEERING DEPARTMENT UTILITY INSPECTORS.
8. C900 PVC PIPE SHALL BE USED UNDER ALL STREET CROSSINGS MANHOLE TO MANHOLE, AT ANY POINT WHERE CONCRETE ENCASEMENT IS SPECIFIED, OR WHERE A WATER MAIN IS WITHIN TWO (2) FEET OF THE SEWER.
9. CONCRETE ENCASEMENT WILL BE REQUIRED AT ANY POINT WHERE CENTERLINE CUT TO ORIGINAL GROUND IS 30 INCHES OR LESS.
10. ALL TAPS SHALL BE INSTALLED DURING MAIN LINE CONSTRUCTION.
11. SPECIAL RISERS SHALL BE INSTALLED FOR EACH LOT.
12. BEDDING, BACKFILL, AND COMPACTION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING. WHEN CROSSING THE STREET, BACKFILL AND COMPACTION REQUIREMENTS SHALL EXTEND TWO (2) FEET BACK OF CURB. WHEN REPLACING A SEWER IN SERVICE 3/8 INCH CHIPS SHALL BE USED FOR BEDDING AND INITIAL BACKFILL.
13. TAPS ON EXISTING LINES, THAT DID NOT HAVE TAPS INSTALLED DURING CONSTRUCTION, SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DRAWINGS AND INSPECTED BY PUBLIC WORKS DEPARTMENT.
14. ALL FORCE MAINS CONSTRUCTED OF NON-METALLIC PIPE SHALL HAVE A NO. 8 BARE COPPER CONDUCTOR WIRE TAPED TO THE TOP SURFACE OF THE PIPE AND BOLTED TO LIFT STATION AND MANHOLE RING, IF APPLICABLE.
15. WHEN WORKING IN OR ADJACENT TO EXISTING SUBDIVISIONS ONLY ONE (1) DAYS WORTH OF TRENCH MAY BE OPEN AT A GIVEN TIME. THIS REQUIREMENT MAY BE MODIFIED, IN WRITING BY THE CITY ENGINEER, FOR A SPECIFIC PROJECT.
16. ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE CITY ENGINEER.
17. DIG THROUGH LOCATOR TAPE WILL BE BURIED 2 FEET ABOVE THE SEWER LINE.
18. ALL SANITARY SEWER PIPING UNDER ROADWAYS SHALL HAVE COMPACTED BACKFILL.
19. NO CONSTRUCTION ACTIVITIES ON THE SEWER SYSTEM ARE PERMITTED UNTIL THE CITY ENGINEER'S OFFICE HAS RECEIVED A COPY OF THE ODEQ "PERMIT TO CONSTRUCT" AND AUTHORIZATION TO PROCEED WITH THE SEWER SYSTEM HAS BEEN PROVIDED BY THE CITY ENGINEER.
20. ALL SANITARY SEWER PIPE UNDER PAVEMENT SECTION OR AT PAVEMENT SECTION CROSSINGS SHALL BE BACKFILLED WITH "ODOT TYPE A AGGREGATE BASE" AS SPECIFIED IN SECTION 703.01 IN THE 2019 ODOT STANDARD SPECIFICATIONS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. OR A FLOWABLE FILL CONSISTING OF A SAND-CEMENT SLURRY OF 2,970 POUNDS OF SAND, 100 POUNDS OF CEMENT AND APPROXIMATELY 458 POUNDS OF WATER PER CUBIC YARD. THE SLURRY WILL BE MIXED TO A POURABLE SOUPY MIX IN A READY-MIX TRUCK. ALL PROPOSED PAVEMENT CROSSINGS SHALL BE BACKFILLED 2.0 FEET BEYOND THE BACK CURB. THE COST OF THIS BACKFILL SHALL BE INCLUDED IN THE PRICED BID FOR OTHER ITEMS. NO ADDITIONAL PAYMENT WILL BE MADE.
21. ALL UTILITY TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY THE APPROPRIATE MOISTURE-DENSITY RELATION TEST OR AS DIRECTED BY THE CITY OF JENKS.
22. ALL SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED THE TOP LEVEL, AND FURTHER, THEY SHALL BE CONSTRUCTED TO ALLOW FOR FUTURE ADJUSTMENT TO ACCOMMODATE FINAL GRADING AND PAVEMENT CONSTRUCTION. TOP RIM OF MANHOLES NOT IN PAVEMENT SHALL BE 2 INCHES ABOVE FINAL GRADE.

olsson

11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114

olsson.com
TEL 405.242.6600
FAX 405.242.6601

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REVISIONS

GENERAL NOTES CONTINUED

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

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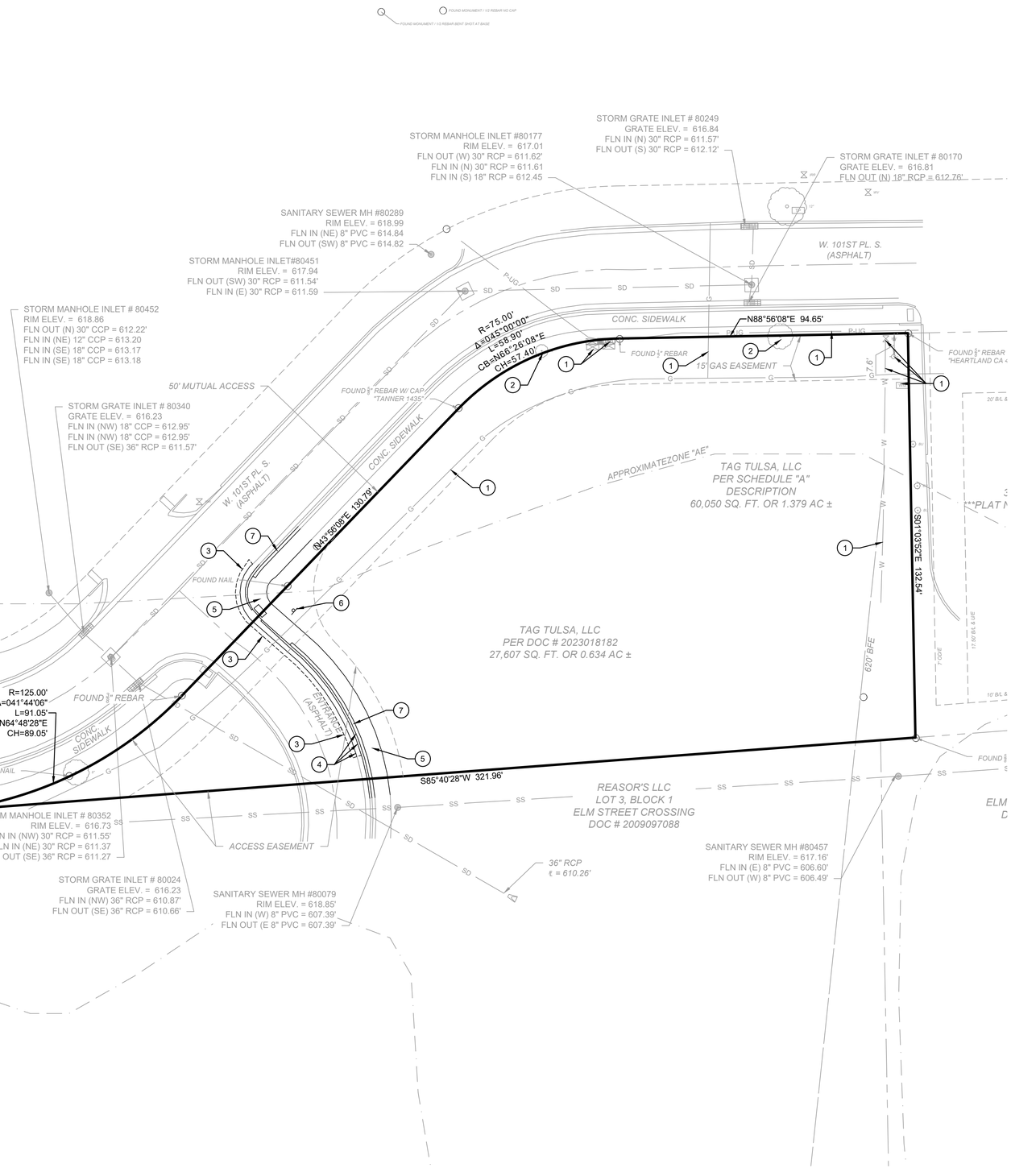

LEGEND

- CONTROL POINT
- SIGN
- TREE
- FOUND
- POWER INSTRUMENT
- TRANSFORMER
- STORM INLET
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- STORM
- PROPERTY BOUNDARY
- WATER
- SANITARY SEWER
- OVERHEAD POWER LINE
- UNDERGROUND GAS LINE
- EASEMENT

DEMOLITION KEYNOTES

1. PRESERVE AND PROTECT EXISTING UNDERGROUND UTILITIES
2. PRESERVED AND PROTECT EXISTING TREES
3. SAWCUT EXISTING ASPHALT
4. REMOVE EXISTING CURB & GUTTER
5. REMOVE EXISTING CONCRETE SIDEWALK
6. REMOVE & RELOCATE EXISTING STOP SIGN TO PROPOSED LOCATION ON SITE PLAN
7. REMOVE EXISTING BRICK PAVERS

0' 10' 20' 40'
SCALE IN FEET

OKIE811 Know what's below Call before you dig.

—CAUTION—

THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS-BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTILITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.

olsson
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Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
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EXISTING CONDITION & DEMOLITION PLAN

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

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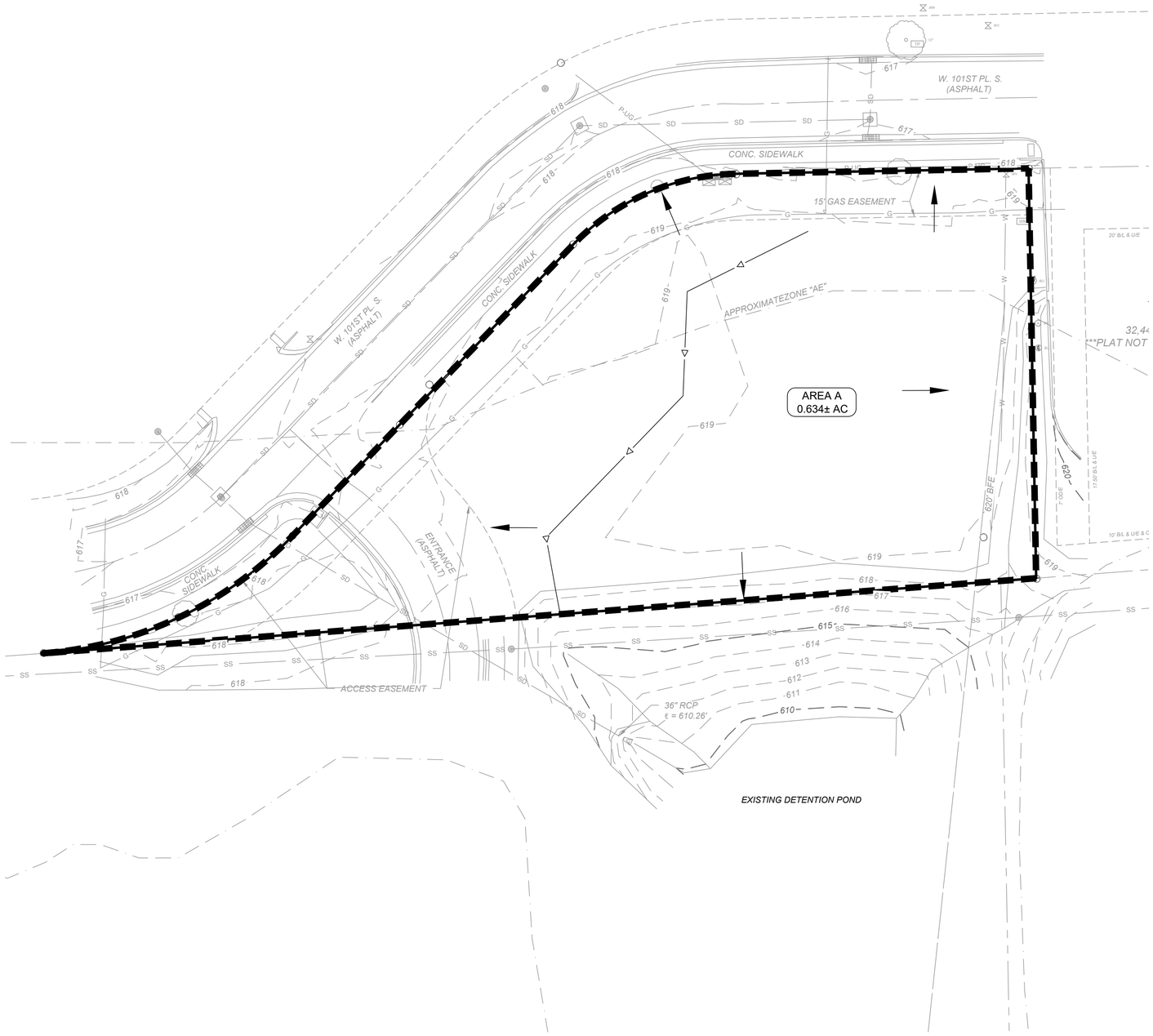

DRAINAGE AREA CALCULATIONS:

Existing Drainage Areas	
DA#	A
Size (acre)	0.634
C	0.26
Overland (LF)	166
ΔE (ft)	2.24
S (%)	1.35%
K	1.04
T_c (min)	16.3
i_{100} (in/hr)	7.62
Q_{100} (cfs)	1.6

NOTE:
STORMWATER RUNOFF FROM SITE TRAVELS OVERLAND AND INTO THE EXISTING DETENTION POND LOCATED TO THE SOUTH

LEGEND

- CONTROL POINT
- HYDRANT
- STORM DRAIN MANHOLE
- SIGN
- SANITARY SEWER MANHOLE
- WM — WATER METER
- W — WATER
- SD — STORM
- PROPERTY BOUNDARY
- PROPERTY LINE
- SS — SANITARY SEWER
- P-UG — OVERHEAD POWER LINE
- G — UNDERGROUND GAS LINE
- EASEMENT
- SET BACK LINE
- SD — PROPOSED STORM PIPE
- DRAINAGE AREA DIVIDE
- DRAINAGE & TIME OF CONCENTRATION FLOW PATH
- FLOW ARROW
- AREA XX / X-XXX AC — AREA NAME & NUMBER / ACREAGE

0' 10' 20' 40'
SCALE IN FEET

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olsson
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olsson.com
TEL 405.242.6600
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PRE-DEVELOPMENT DRAINAGE AREA MAP

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
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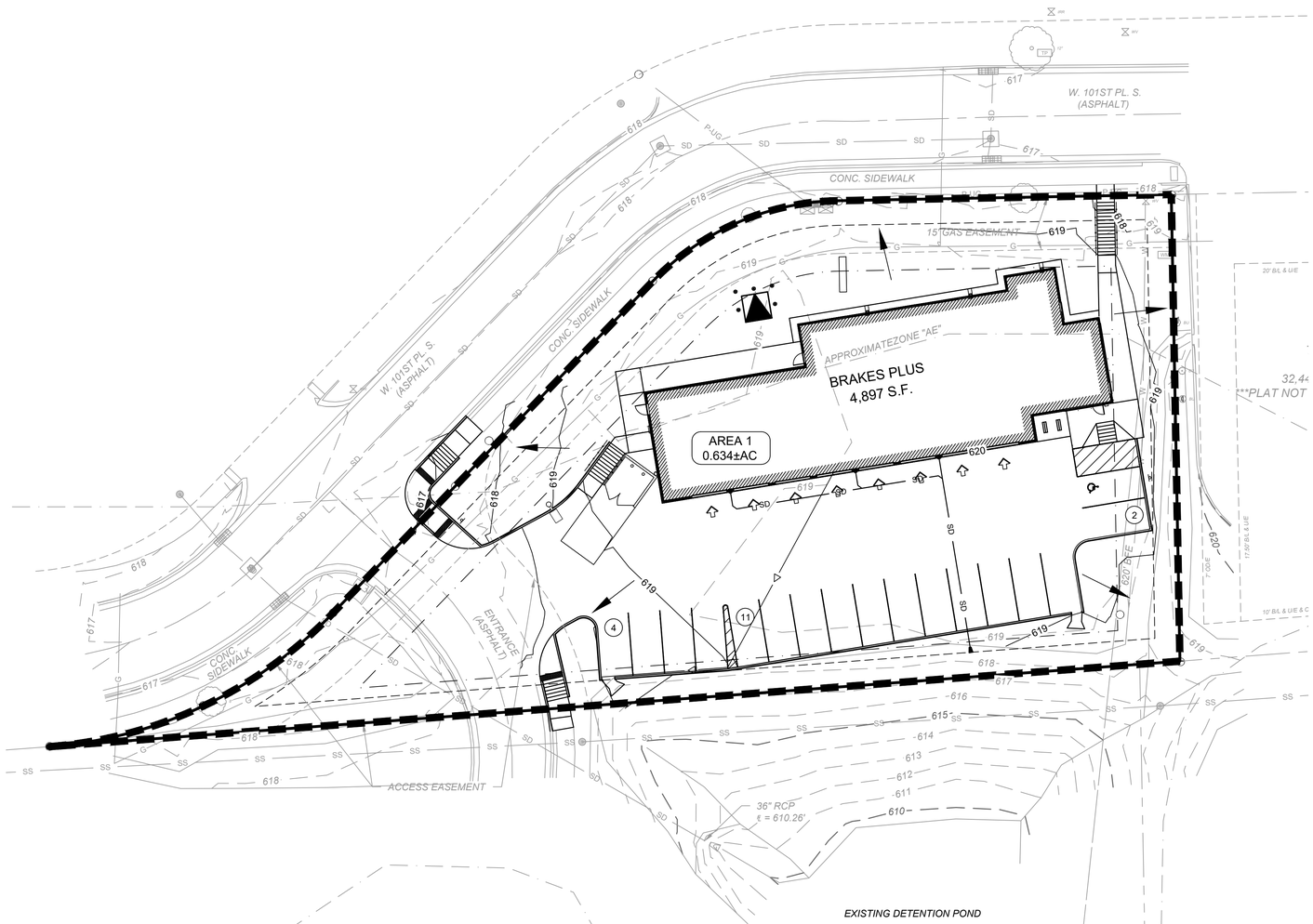

DRAINAGE AREA CALCULATIONS:

Proposed Drainage Areas	
DA#	1
Size (acre)	0.634
C	0.63
Overland (LF)	108
ΔE (ft)	2.5
S (%)	2.73%
K	0.487
T_c (min)	5.7
i_{100} (in/hr)	10.49
Q_{100} (cfs)	5.3

NOTE:
STORMWATER RUNOFF FROM SITE TRAVELS OVERLAND AND INTO THE EXISTING DETENTION POND LOCATED TO THE SOUTH

LEGEND

- CONTROL POINT
- HYDRANT
- STORM DRAIN MANHOLE
- SIGN
- SANITARY SEWER MANHOLE
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11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
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TEL 405.242.6600
FAX 405.242.6601
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		REVISIONS	

POST-DEVELOPMENT DRAINAGE AREA MAP

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C0.5

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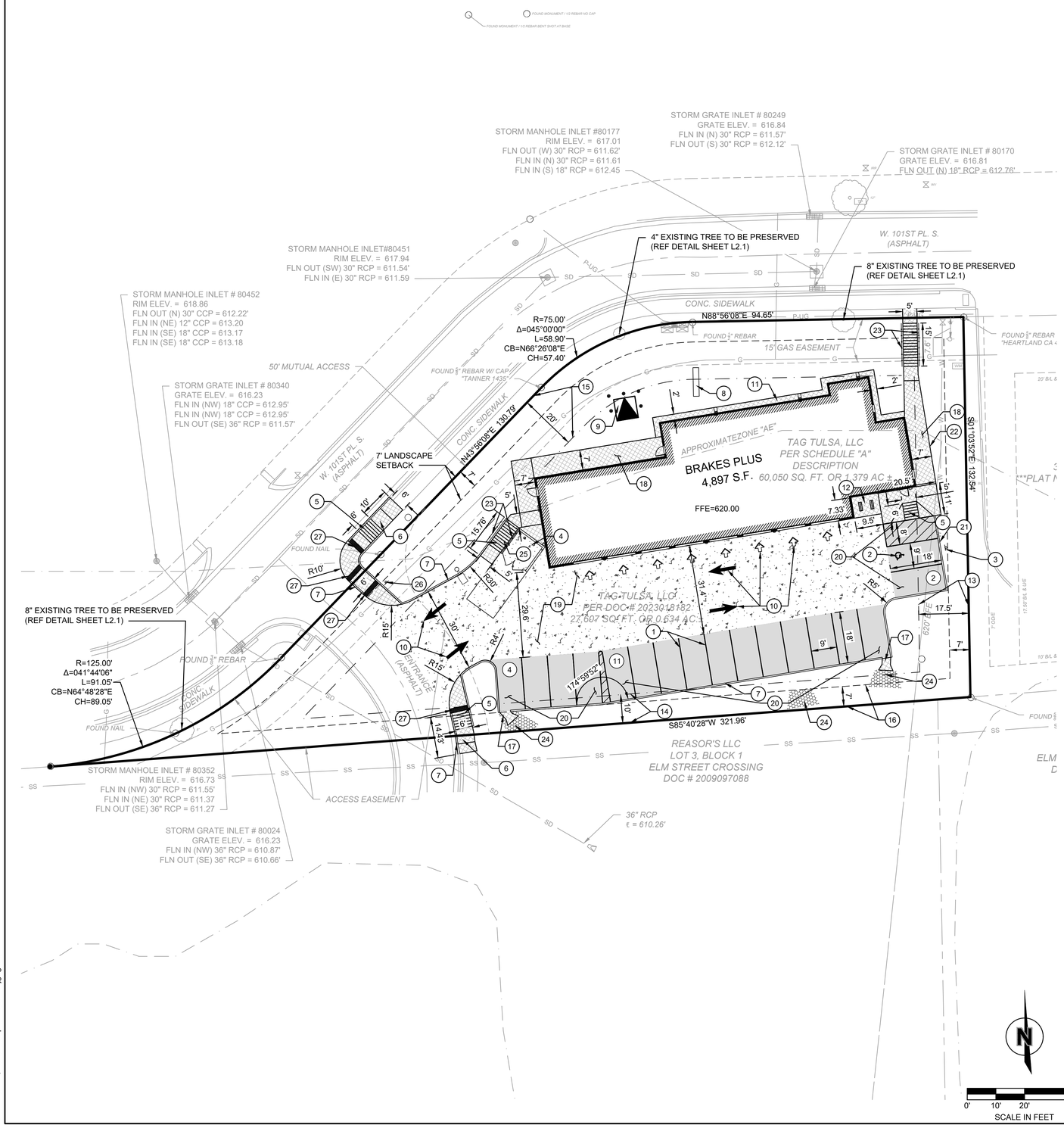

SITE PLAN LEGEND

- # — PARKING STALL COUNT
- PROPERTY LINE
- PROPOSED BUILDING OUTLINE
- PROPOSED SIDEWALK PCC PAVEMENT (REF DETAIL, SHEET C4.0)
- PROPOSED DRIVE AISLE PCC PAVEMENT (REF DETAIL, SHEET C4.0)
- PROPOSED PARKING STALL PCC PAVEMENT (REF DETAIL, SHEET C4.0)
- PROPOSED HEAVY VEHICLE PCC PAVEMENT (REF DETAIL, SHEET C4.0)
- PROPOSED RIP RAP (REF DETAIL, SHEET C4.0)
- PROPOSED DETECTABLE WARNING SURFACE

SITE PLAN KEYNOTES

1. PROPOSED WHITE PAVEMENT STRIPING, TYP. (CONFORM TO LATEST MUTCD VERSION STANDARDS AND SPECIFICATIONS)
2. PROPOSED ADA PAVEMENT MARKING (REF DETAIL SHEET C5.0)
3. PROPOSED ADA SIGNAGE (REF DETAIL SHEET C5.1)
4. PROPOSED TRASH ENCLOSURE (REF ARCHITECTURAL PLANS)
5. PROPOSED ADA RAMP (REF DETAIL SHEET C5.2)
6. PROPOSED 6" INTEGRAL SIDEWALK/CURB (REF DETAIL SHEET C5.0)
7. PROPOSED 6" INTEGRAL CURB (REF DETAIL SHEET C5.0)
8. PROPOSED MONUMENT SIGN. REFERENCE ARCHITECTURAL PLANS FOR SIGN DETAILS. SEPARATE SIGN PERMIT IS REQUIRED.
9. PROPOSED ELECTRICAL (REF MEP PLANS)
10. PROPOSED TRAFFIC FLOW ARROWS
11. PROPOSED 2' CONCRETE MOW STRIP (REF LANDSCAPE SHEETS)
12. PROPOSED BICYCLE PARKING (2 SPOTS)
13. PROPOSED 17.5' UTILITY EASEMENT AND BUILDING SETBACK
14. PROPOSED 10' BUILDING SETBACK
15. PROPOSED 20' BUILDING SETBACK
16. PROPOSED 7' LANDSCAPE SETBACK
17. PROPOSED CONCRETE CURB CUT & FLUME (REF DETAIL SHEET C5.1)
18. PROPOSED SIDEWALK (REF DETAIL SHEETS C5.0 & C5.1)
19. PROPOSED HEAVY DUTY PORTLAND CEMENT CONCRETE (REF DETAIL SHEET C5.0)
20. PROPOSED PARKING AREA PORTLAND CEMENT CONCRETE (REF DETAIL SHEET C5.0)
21. PROPOSED 6" TURNDOWN CURB (REF DETAIL SHEET C5.0)
22. PROPOSED 6" TURNDOWN SIDEWALK/CURB (REF DETAIL SHEET C5.0)
23. PROPOSED HANDRAIL (REF DETAIL SHEET C5.1)
24. PROPOSED RIPRAP (REF DETAIL SHEET C3.3)
25. PROPOSED DIE OUT CURB RAMP (REF DETAIL SHEET C5.1)
26. RELOCATED STOP SIGN
27. DETECTABLE WARNING SURFACES

NOTES:
ALL DISTURBED AREAS TO BE GRASS, SOD ONLY, NOT SEEDED.

PARKING CALCULATIONS

CS – COMMERCIAL SHOPPING
25 SPACES FOR ENTIRE BUILDING SQFT.
1 ACCESSIBLE SPACES REQUIRED (1:25)

PROVIDED: 16 STANDARD + 1 ACCESSIBLE

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SITE PLAN

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

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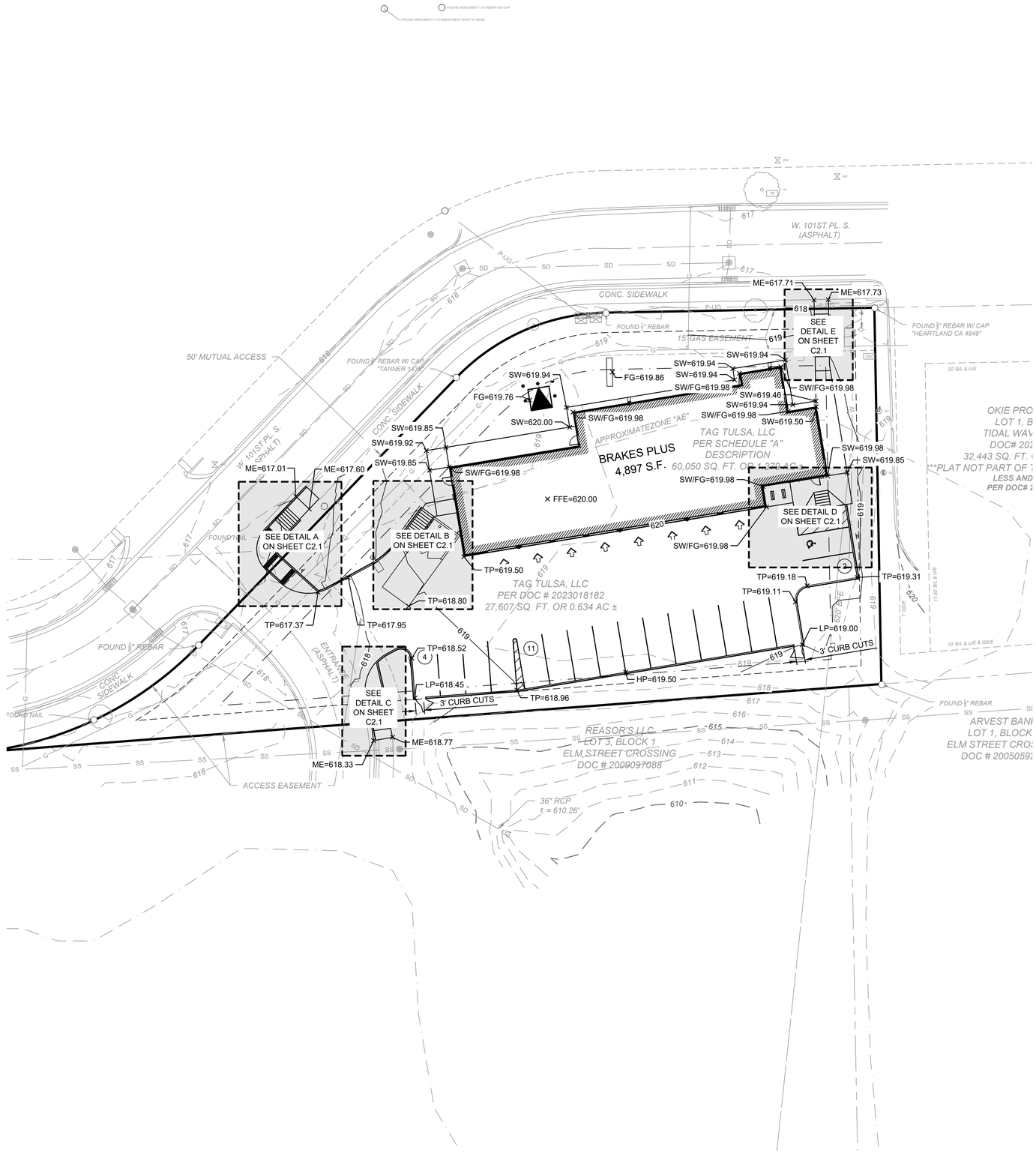

GRADING PLAN LEGEND:

	PROPERTY BOUNDARY LINE
	RIGHT-OF-WAY LINE
	EASEMENT LINE
620	PROPOSED MAJOR CONTOUR
619	PROPOSED MINOR CONTOUR
620	EXISTING MAJOR CONTOUR
619	EXISTING MINOR CONTOUR
	PROPOSED POND OUTLINE
ME	MATCH EXISTING
TC	TOP OF CURB
TP	TOP OF PAVEMENT
TS	TOP OF STRUCTURE
SW	SIDEWALK
HP	HIGH POINT
LP	LOW POINT
FFE	FINISHED FLOOR ELEVATION
SW/ME	SIDEWALK/MATCH EXISTING
SW/TC	SIDEWALK/TOP OF CURB

N

0' 10' 20' 40'
SCALE IN FEET

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GRADING PLAN

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C2.0

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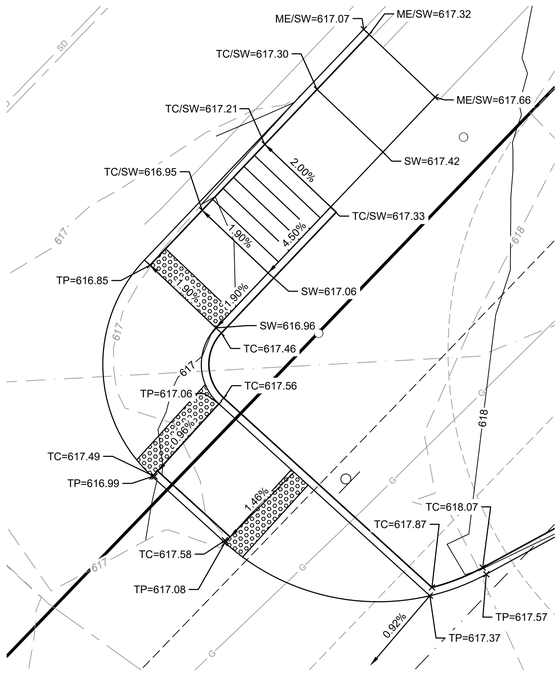
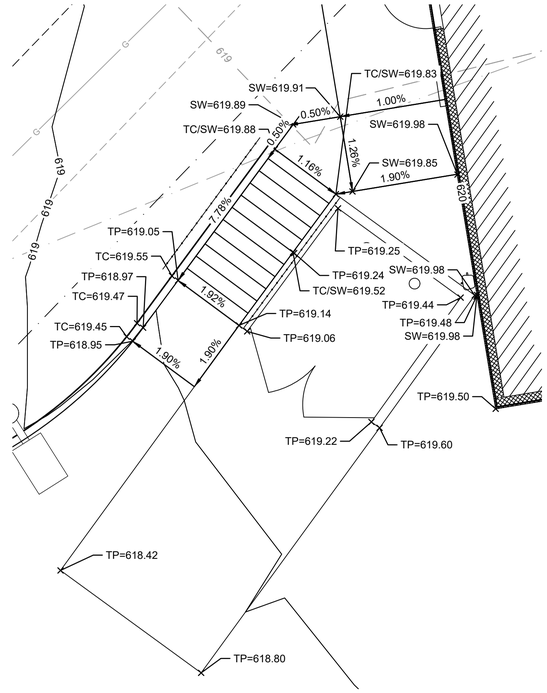
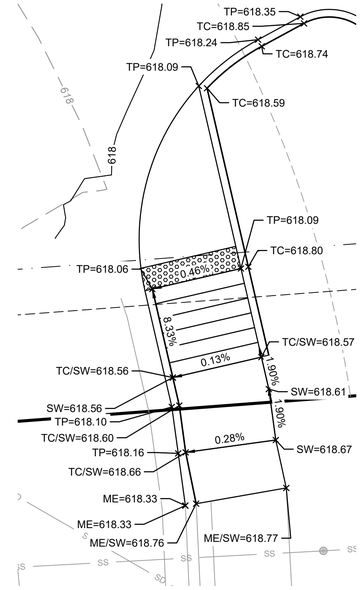


A GRADING DETAIL A
SCALE: 1" = 5'



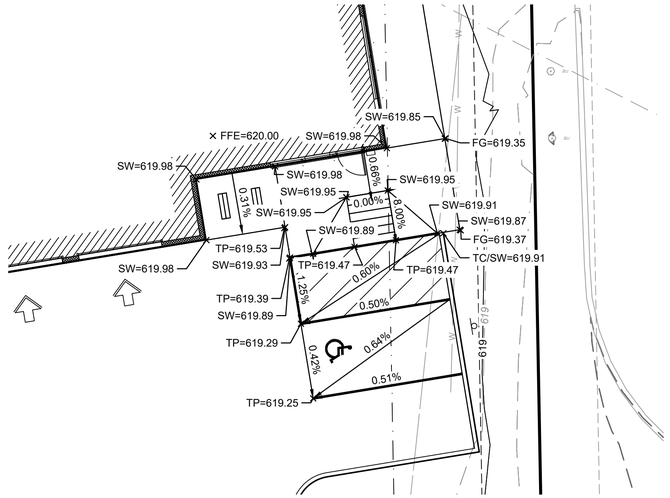
B GRADING DETAIL B
SCALE: 1" = 5'



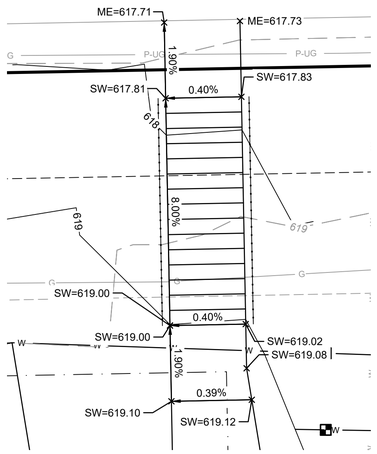
C GRADING DETAIL C
SCALE: 1" = 5'

GRADING PLAN LEGEND:

	PROPERTY BOUNDARY LINE
	RIGHT-OF-WAY LINE
	EASEMENT LINE
620	PROPOSED MAJOR CONTOUR
619	PROPOSED MINOR CONTOUR
620	EXISTING MAJOR CONTOUR
619	EXISTING MINOR CONTOUR
	PROPOSED POND OUTLINE
ME	MATCH EXISTING
TC	TOP OF CURB
TP	TOP OF PAVEMENT
TS	TOP OF STRUCTURE
SW	SIDEWALK
HP	HIGH POINT
LP	LOW POINT
FFE	FINISHED FLOOR ELEVATION
SW/ME	SIDEWALK/MATCH EXISTING
SW/TC	SIDEWALK/TOP OF CURB



D GRADING DETAIL D
SCALE: 1" = 5'



E GRADING DETAIL E
SCALE: 1" = 5'

0' 2.5' 5' 10'
SCALE IN FEET

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GRADING PLAN DETAILS

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C2.1

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LEGEND:

- LOD — LIMITS OF DISTURBANCE
- SILT FENCE, STANDARD
- PROPERTY LINE
- DRAINAGE ARROW
- STABILIZED CONSTRUCTION ENTRANCE PER STANDARD
- CONCRETE WASHOUT AREA, SEE DETAIL SHEET
- 910 — EXISTING MAJOR CONTOUR
- 910 — PROPOSED MAJOR CONTOUR
- INLET PROTECTION

EROSION CONTROL CHART

PROJECT STAGE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES
A-PRE CONSTRUCTION	A1	TEMPORARY CONSTRUCTION ENTRANCE	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A2	TEMPORARY CONCRETE WASHOUT	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A3	TEMPORARY STAGING/STOCKPILE AREA	B	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A4	TEMPORARY SILT FENCE	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A5	INSTALL TEMPORARY INLET PROTECTION	B	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
B - CONSTRUCTION	B1	MAINTAIN SILT FENCE, CONSTRUCTION ENTRANCE, INLET PROTECTION, AND CONCRETE WASHOUT.	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	B2	PAVING	N/A	INSTALL AS INDICATED ON PLANS.
	B3	APPLY PERENNIAL SEEDING	N/A	INSTALL AS INDICATED ON PLANS AND IN REFERENCE NOTES. SEE DETAIL SHEET C3.3.
	B4	INSTALL RIPRAP	N/A	INSTALL AS INDICATED ON PLANS. SEE DETAIL C3.3.
C - POST-CONTSTRUCTION	C1	REPLACE TOPSOIL, MULCH, SOD, LANDSCAPE	N/A	ESTABLISH PERENNIAL VEGETATION WITH A 80% DENSITY OVER 100% OF DISTURBED AREA ACCORDING TO LANDSCAPE PLAN SEE SHEET L1.0.

NOTE:

- AREA OF DISTURBANCE = 0.62 ACRES

N

0' 10' 20' 40'

SCALE IN FEET

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EROSION CONTROL PLAN - PHASE I

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C3.0

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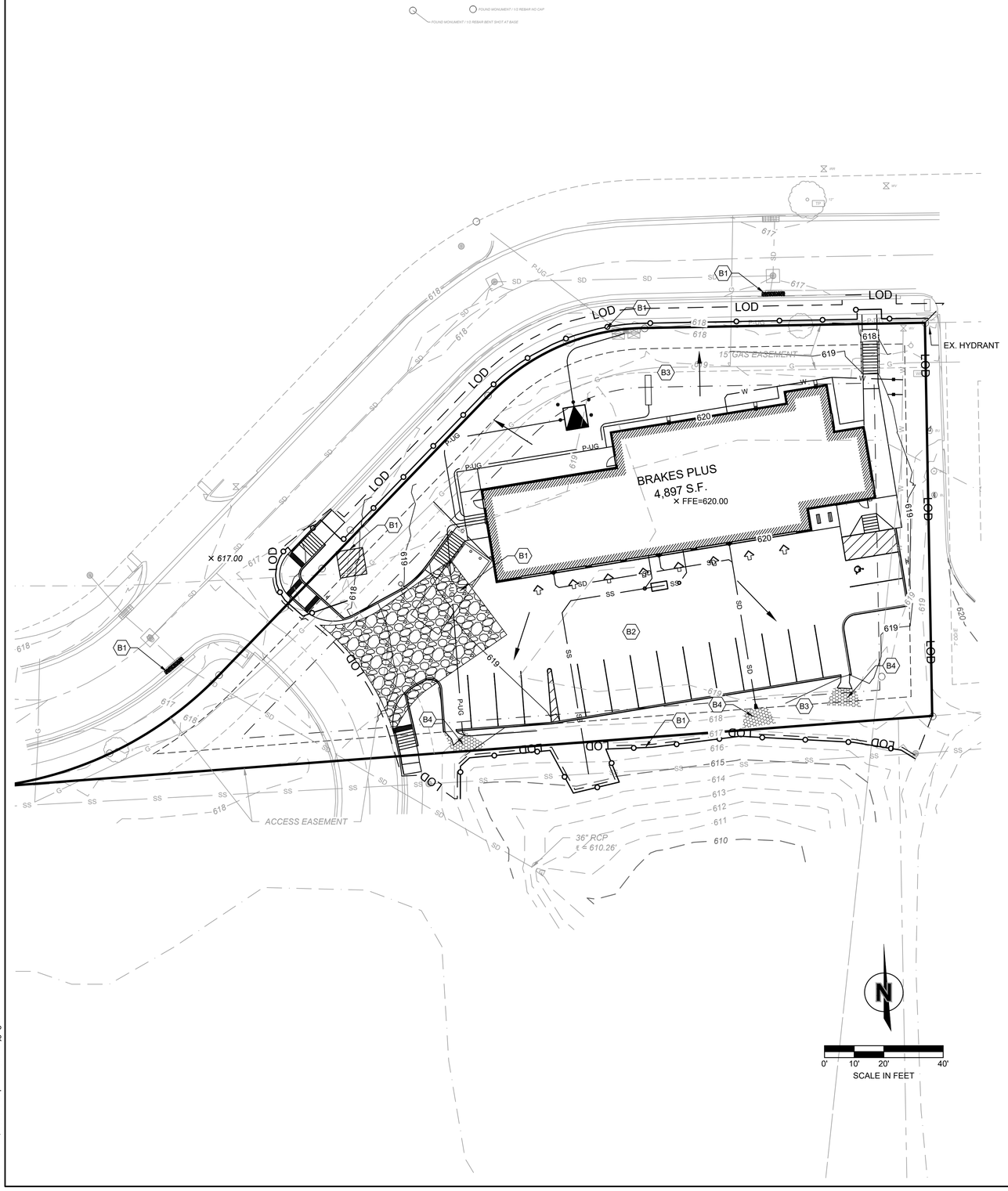

LEGEND:

- LOD — LIMITS OF DISTURBANCE
- SILT FENCE, STANDARD
- PROPERTY LINE
- DRAINAGE ARROW
- STABILIZED CONSTRUCTION ENTRANCE PER STANDARD
- CONCRETE WASHOUT AREA, SEE DETAIL SHEET
- 910 — EXISTING MAJOR CONTOUR
- 910 — PROPOSED MAJOR CONTOUR
- INLET PROTECTION
- PROPOSED RIPRAP

EROSION CONTROL CHART

PROJECT STAGE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES
A-PRE CONSTRUCTION	A1	TEMPORARY CONSTRUCTION ENTRANCE	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A2	TEMPORARY CONCRETE WASHOUT	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A3	TEMPORARY STAGING/STOCKPILE AREA	B	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A4	TEMPORARY SILT FENCE	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A5	INSTALL TEMPORARY INLET PROTECTION	B	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
B - CONSTRUCTION	B1	MAINTAIN SILT FENCE, CONSTRUCTION ENTRANCE, INLET PROTECTION, AND CONCRETE WASHOUT.	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	B2	PAVING	N/A	INSTALL AS INDICATED ON PLANS.
	B3	APPLY PERENNIAL SEEDING	N/A	INSTALL AS INDICATED ON PLANS AND IN REFERENCE NOTES. SEE DETAIL SHEET C3.3.
	B4	INSTALL RIPRAP	N/A	INSTALL AS INDICATED ON PLANS. SEE DETAIL C3.3.
C - POST-CONTSTRUCTION	C1	REPLACE TOPSOIL, MULCH, SOD, LANDSCAPE	N/A	ESTABLISH PERENNIAL VEGETATION WITH A 80% DENSITY OVER 100% OF DISTURBED AREA ACCORDING TO LANDSCAPE PLAN SEE SHEET L1.0.

NOTE:
- AREA OF DISTURBANCE = 0.62 ACRES

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EROSION CONTROL PLAN - PHASE II

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C3.1

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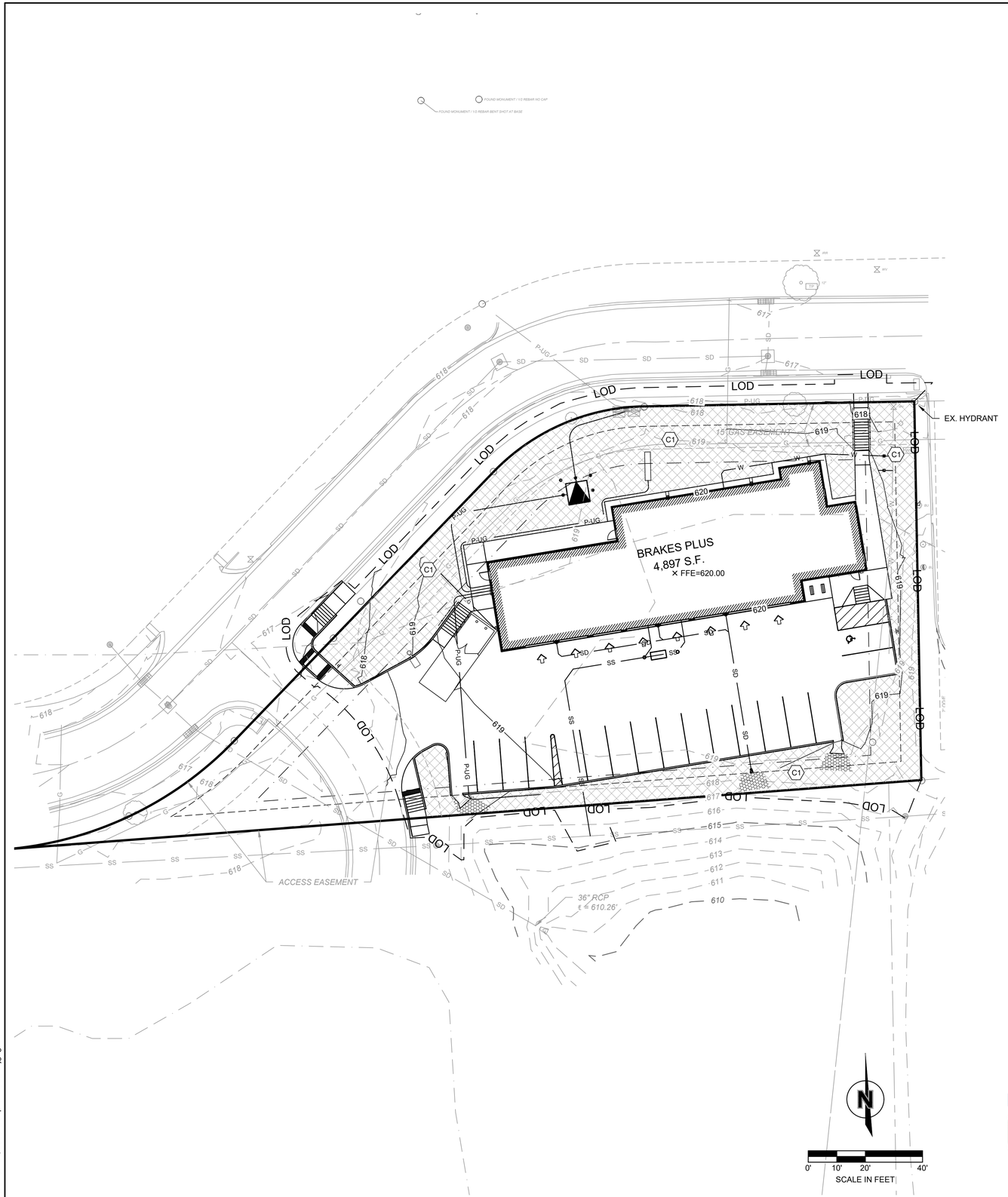

LEGEND:

- LOD — LIMITS OF DISTURBANCE
- PROPERTY LINE
- DRAINAGE ARROW
- 910 — EXISTING MAJOR CONTOUR
- 910 — PROPOSED MAJOR CONTOUR
- INSTALL TOP SOIL AND SOD/FINAL STABILIZATION ACCORDING TO LANDSCAPE PLAN – SEE SHEET L1.1.

EROSION CONTROL CHART

PROJECT STAGE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES
A-PRE CONSTRUCTION	A1	TEMPORARY CONSTRUCTION ENTRANCE	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A2	TEMPORARY CONCRETE WASHOUT	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A3	TEMPORARY STAGING/STOCKPILE AREA	B	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A4	TEMPORARY SILT FENCE	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	A5	INSTALL TEMPORARY INLET PROTECTION	B	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
B - CONSTRUCTION	B1	MAINTAIN SILT FENCE, CONSTRUCTION ENTRANCE, INLET PROTECTION, AND CONCRETE WASHOUT.	C	INSTALL AS INDICATED ON PLANS. SEE DETAIL SHEET C3.3
	B2	PAVING	N/A	INSTALL AS INDICATED ON PLANS.
	B3	APPLY PERENNIAL SEEDING	N/A	INSTALL AS INDICATED ON PLANS AND IN REFERENCE NOTES. SEE DETAIL SHEET C3.3.
	B4	INSTALL RIPRAP	N/A	INSTALL AS INDICATED ON PLANS. SEE DETAIL C3.3.
C - POST-CONTSTRUCTION	C1	REPLACE TOPSOIL, MULCH, SOD, LANDSCAPE	N/A	ESTABLISH PERENNIAL VEGETATION WITH A 80% DENSITY OVER 100% OF DISTURBED AREA ACCORDING TO LANDSCAPE PLAN SEE SHEET L1.0.

NOTE:
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EROSION CONTROL PLAN - PHASE III

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

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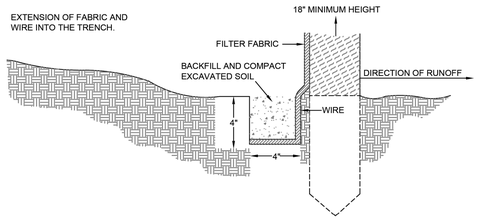


INSTALLATION:

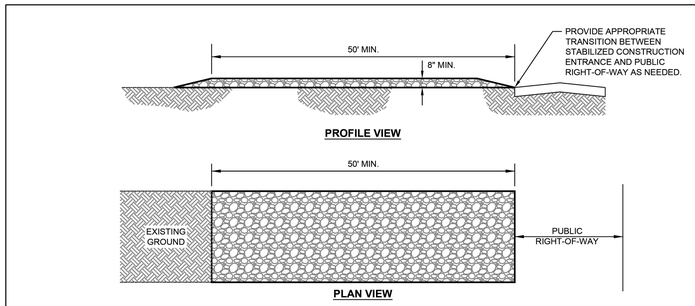
1. SET POSTS AND EXCAVATE A 4"x4" TRENCH, UPSLOPE, ALONG THE LINE OF POSTS.
2. ATTACH THE FILTER FABRIC TO POSTS AND/OR THE WIRE FENCE AND EXTEND IT INTO THE TRENCH. BACKFILL AND COMPACT THE EXCAVATED SOIL.
3. SPLICES IN THE FILTER FABRIC ARE NOT RECOMMENDED. WHEN JOINTS ARE UNAVOIDABLE, FILTER FABRIC SHALL BE SPLICED TOGETHER AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP.
4. IF A WIRE MESH SUPPORT FENCE IS USED, IT SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS, USING HEAVY DUTY WIRE STAPLES AT LEAST 1" LONG. TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2" AND SHALL NOT EXTEND MORE THAN 18" ABOVE THE ORIGINAL GROUND SURFACE.
5. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8" OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 18" ABOVE THE ORIGINAL GROUND SURFACE.
6. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.

MAINTENANCE:

1. SEDIMENT FENCES AND SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SEDIMENT FENCE OR SEDIMENT BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE EXPECTED USABLE LIFE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SILT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. IT MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. ANY SILT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT FENCE OR SEDIMENT BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, AND SEEDED IN CONFORMANCE WITH APPLICABLE VEGETATIVE SPECIFICATION.

REVISION	BY	DATE

SILT FENCE
STANDARD DETAILS
CITY OF JENKS, OKLAHOMA
ENGINEERING DEPARTMENT
DATE: 4-11-22 STANDARD NO.: STRM-19



NOTES:

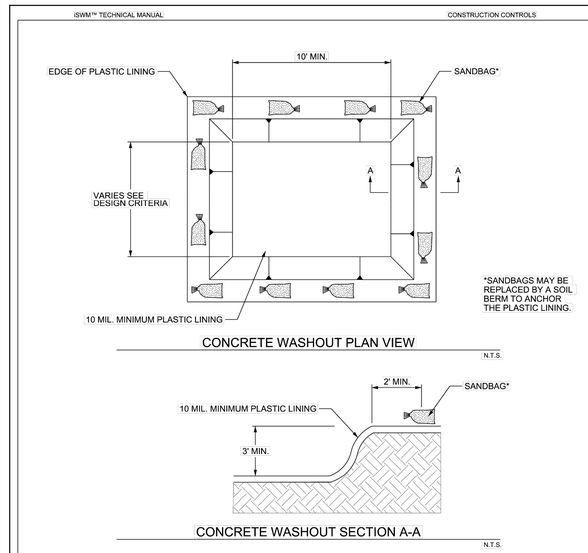
1. CRUSHED STONE SIZE AASHTO DESIGNATION M43, SIZE NO. 2 (1 1/2" TO 2 1/2").
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50'.
3. THICKNESS - NO LESS THAN 8".
4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF DESIGNATED CONSTRUCTION ENTRANCE/S.
5. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS OR GATOR GUARD (SEE STRM-18).
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO CONTROL SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE OWNER.

REVISION	BY	DATE

STABILIZED CONSTRUCTION ENTRANCE
STANDARD DETAILS
CITY OF JENKS, OKLAHOMA
ENGINEERING DEPARTMENT
DATE: 4-11-22 STANDARD NO.: STRM-20

EROSION CONTROL NOTES:

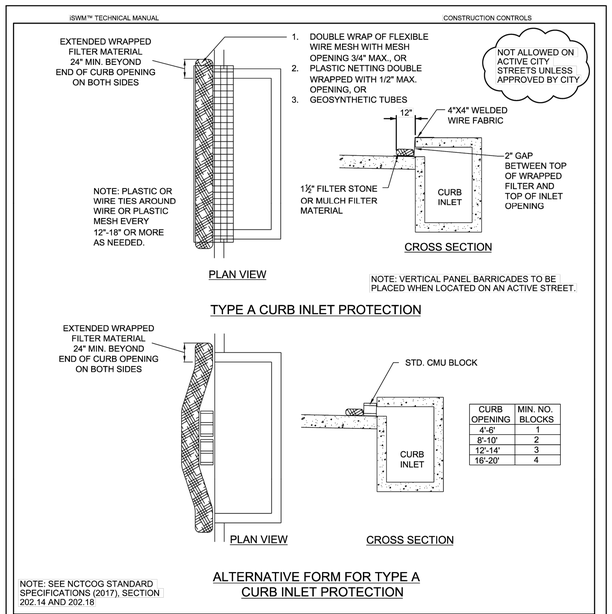
1. PROVIDE EROSION CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.
2. LIMITS OF EROSION AND SEDIMENT CONTROL STRUCTURES SHOWN ARE SCHEMATIC. NECESSARY EROSION AND SEDIMENT CONTROL MEASURES DEPEND HEAVILY ON CONTRACTOR SCHEDULING AS WELL AS MEANS AND METHODS. ANY ADDITIONAL TYPE OR QUANTITY OF STRUCTURES NOT SHOWN THAT ARE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE ARE THE CONTRACTOR'S RESPONSIBILITY.
3. CONSTRUCT EROSION CONTROL IMPROVEMENTS PRIOR TO BEGINNING OF ANY OTHER WORK.
4. FREQUENTLY INSPECT AND REPAIR OR REPLACE EROSION AND SEDIMENT CONTROL MEASURES PROMPTLY AS NEEDED.
5. DISPOSE OF SEDIMENT TRAPPED BY THESE PRACTICES IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.
6. REMOVE ACCUMULATED SILT WHEN IT REACHES A DEPTH OF 6 INCHES AND DISPOSE OF IN AN APPROVED SPOIL SITE OR AS ABOVE.
7. DO NOT ALLOW SILT FENCES TO OBSTRUCT SIDEWALKS, BUILDING ENTRANCES OR DRIVEWAYS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION & SEDIMENT CONTROL MEASURES AND PRACTICES THROUGHOUT THE PROJECT. ANY AND ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
9. EROSION CONTROL IS THE CONTRACTOR'S RESPONSIBILITY. THIS PLAN SHOULD BE USED AS A GUIDE AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED.
10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION & SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
11. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL EROSION & SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL EVENT.
12. THE CONTRACTOR SHALL PROVIDE ANY FURTHER EROSION CONTROL MEASURES IN ADDITION TO THOSE LISTED TO ENSURE THAT SILT WILL NOT LEAVE THE PROJECT CONFINES.
13. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION & SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED WITH A HEALTHY STAND OF PERMANENT VEGETATION.
14. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AT COMPLETION OF CONSTRUCTION.
15. THE CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
16. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.
17. THE CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION ENTRANCE FOR VEHICULAR TRAFFIC AT LOCATION SHOWN.
18. ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE ENGINEERING DIVISION, DEPARTMENT OF PUBLIC WORKS, CITY OF JENKS, OKLAHOMA.
19. REFERENCE DETAILS ON THIS SHEET FOR TYPICAL EROSION CONTROL DEVICE INSTALLATION.
20. THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE STREETS OF DEPOSITED MUD AS FREQUENTLY AS NEEDED AS DETERMINED BY THE ENGINEER IN ORDER TO KEEP THEM USABLE AND TO CONTROL DUST.
21. SEE TEMPORARY VEGETATION REQUIREMENT NOTES ON THIS SHEET FOR EXPOSED SOIL WHERE NO ACTIVITY WILL OCCUR FOR MORE THAN 14 DAYS.
22. CONTRACTOR IS RESPONSIBLE FOR PHASED INSTALLATION OF EROSION CONTROL BMP'S IN ORDER TO PREVENT SEDIMENT FROM BREACHING THE LIMITS OF DISTURBANCE.



CONCRETE WAHSOUT NOTES:

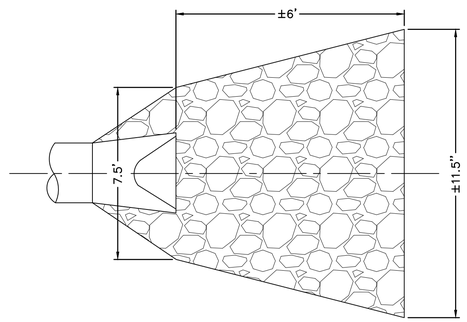
1. WASHOUT AREA MUST BE CLEARLY MARKED WITH SIGNAGE NOTING THE WASHOUT AREA.
2. WASHOUT STRUCTURES SHALL BE CLEANED OUT WHEN THE STRUCTURE IS 75% FULL. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY.

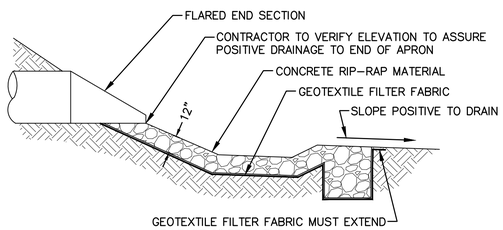
FIGURE 4.1 SCHEMATICS OF CONCRETE WASHOUT CONTAINMENT



CURB OPENING	MIN. NO. BLOCKS
4'-6'	1
8'-10'	2
12'-14'	3
16'-20'	4

FIGURE 3.6 STANDARD CONSTRUCTION DETAIL - FILTER TUBE CURB INLET PROTECTION





RIP-RAP DETAIL
NOT TO SCALE

—CAUTION—

THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS—BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTILITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.

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11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114

olsson.com
TEL 405.242.6600
FAX 405.242.6601

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REV. NO.	DATE	DESCRIPTION	BY
		REVISIONS	

EROSION CONTROL DETAILS

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

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C3.3

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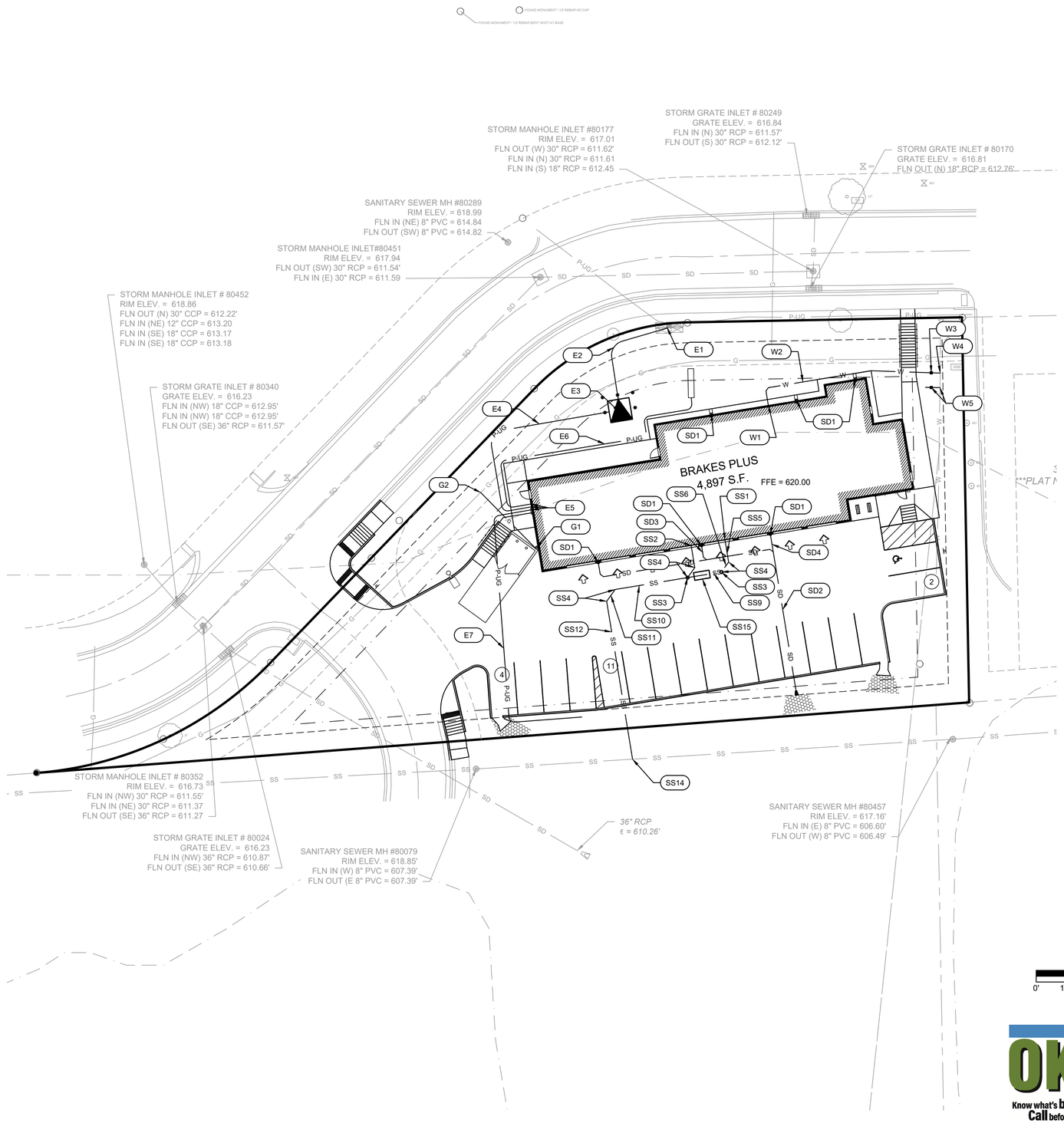

NOTE:

- NO FLOOR DRAINS IN BUILDING, MOP SINK TIED TO OIL/WATER SEPARATOR WITHIN BUILDING. REFERENCE MEP PLANS.

LEGEND:

- PROPERTY BOUNDARY LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING UNDERGROUND POWER
- EXISTING UNDERGROUND GAS
- PROPOSED STORM SEWER
- PROPOSED ELECTRIC LINE
- PROPOSED SANITARY SEWER
- PROPOSED GAS LINE
- PROPOSED WATER LINE

UTILITY KEYNOTES ←

WATER:

W1. UTILITY ENTRANCE POINT, REFERENCE M.E.P. PLANS FOR CONTINUATION INV. = 616.00'

W2. INSTALL 66 LF 1" TYPE K COPPER WATER LINE.

W3. INSTALL CITY OF JENKS STANDARD 1" WATER METER. COORDINATE LOCATION OF METER AND SERVICE CONNECTION TAP WITH CITY METER DEPARTMENT.

W4. CONNECT TO EXISTING WATER MAIN WITH SADDLE CONNECTION (OR TAPPING SLEEVE) W/VALVE & BOX.

W5. INSTALL 1" IRRIGATION TAP AND METER. (IRR. BY OTHERS) DOMESTIC IRRIGATION METER REQUIRES SEPARATE TAP WITH 12"X1" SADDLE CONNECTION (OR TAPPING SLEEVE) (CORP. STOP & VALVE).

ELECTRICAL:

E1. CONNECT TO EXISTING POWER SOURCE, COORDINATE WITH AEP (PUBLIC SERVICE COMPANY OF OKLAHOMA).

E2. INSTALL 38 LF OF 4" PVC CONDUIT FOR PRIMARY ELECTRICAL SERVICE PER AEP STANDARDS & SPECIFICATIONS. COORDINATE WITH AEP BEFORE INSTALLING.

E3. PROPOSED TRANSFORMER BY AEP. CONTRACTOR SHALL COORDINATE EXACT SIZE, LOCATION AND INSTALLATION WITH AEP AND PROJECT ELECTRICAL PLANS.

E4. INSTALL 76 LF OF 4" PVC CONDUIT FOR SECONDARY ELECTRICAL SERVICE.

E5. CONNECT TO BUILDING AND REFERENCE ELECTRICAL PLANS FOR CONTINUATION'

E6. INSTALL 99 LF 3" OF ELECTRICAL CONDUIT TO MONUMENT SIGN. CONNECTS FROM BUILDING. SEE PROJECT ELECTRICAL PLANS.

E7. INSTALL 108 LF OF 3" ELECTRICAL CONDUIT FOR FUTURE EV CHARGING STATION. CONNECTS FROM BUILDING. SEE PROJECT ELECTRICAL PLANS.

NATURAL GAS:

G1. CONNECT TO BUILDING AT GAS METER. REFERENCE M.E.P. PLANS FOR CONTINUATION.

G2. CONNECT TO EXISTING NATURAL GAS SOURCE AND INSTALL 29 LF OF 1-1/4" PRIVATE GAS LINE AND ASSOCIATED BENDS. COORDINATE WITH ONG FOR CONNECTION AND METER LOCATION.

STORMWATER DRAIN PIPES:

SD1. INSTALL ROOF DRAINS AND PIPES, DAYLIGHT TO FG

SD2. INSTALL 115 LF OF 12" HDPE @ -0.58%. START INV @ BLDG = 618.00'. DAYLIGHT W. FES & RIPRAP INV. = 617.37'.

SD3. INSTALL 5.5 LF OF 12" HDPE @ -3.99%. INV @ BLDG = 618.00'. CONNECTION INV. = 617.78'.

SD4. INSTALL 6 LF OF 12" HDPE @ -5.63 %. INV @ BLDG = 618.00'. CONNECTION INV. = 617.66'.

SANITARY SEWER:

SS1. CONNECT TO BUILDING. REFERENCE MEP PLANS FOR CONTINUATION. INV. OUT = 613.0' (4" PVC)

SS2. CONNECT TO BUILDING. REFERENCE MEP PLANS FOR CONTINUATION. INV. OUT = 613.0' (4" PVC)

SS3. INSTALL SANITARY SEWER CLEANOUT PER DETAIL SHEET C6.0

SS4. INSTALL 45° BEND

SS5. INSTALL 7.67 LF OF 4" PVC @ -5.42%

SS6. INSTALL 4.24 LF OF 4" PVC @ -5.42%

SS7. INSTALL 7.67 LF OF 4" PVC @ -10.78%

SS8. INSTALL 4.24 LF OF 4" PVC @ -10.78%

SS9. INSTALL 11.8 LF OF 4" PVC @ -5.42%

SS10. INSTALL 25.26 LF OF 4" PVC @ -5.42%

SS11. INSTALL 5 LF OF 4" PVC @ -5.42%

SS12. INSTALL 55.06 LF OF 4" PVC @ -5.42%

SS13. INSTALL WYE

SS14. CONNECT TO EXISTING 8" PVC SANITARY SEWER PER CITY STANDARDS AND SPECIFICATIONS EX. INV. = 607.10' (8" PVC) INVERT TO BE FIELD VERIFIED. CONNECTION TO BE CONCRETE ENCASED PER CITY DETAIL C5.3.

SS15. PROPOSED SAND/OIL INTERCEPTOR. REFERENCE M.E.P. PLANS FOR CONTINUATION

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olsson
11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
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ISSUE FOR BID - NOT FOR CONSTRUCTION

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

UTILITY PLAN

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

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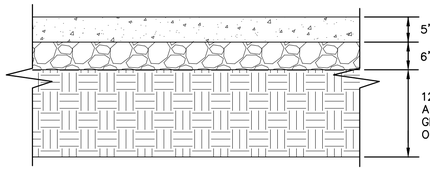
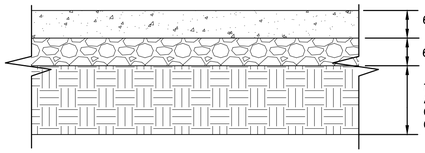
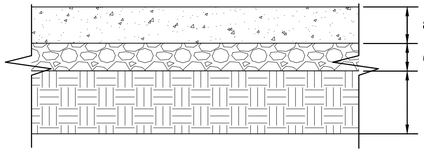


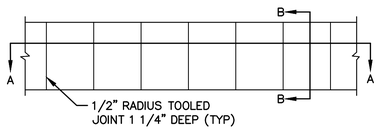
PORTLAND CEMENT CONCRETE IN PARKING AREAS SECTION



PORTLAND CEMENT CONCRETE IN DRIVE AREAS SECTION

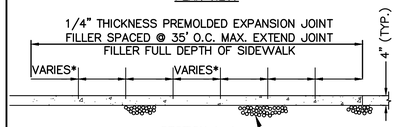


PORTLAND CEMENT CONCRETE IN HEAVY VEHICLE AREAS SECTION



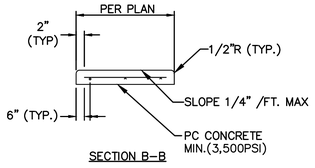
PLAN VIEW

NOTE:
1. REINFORCEMENT WILL BE No. 3 BARS 24" O.C. EACH WAY MAX. SPACING, OR 6 x 6 – W1.4 X W1.4 WWF
2. NON–SLIP BROOM FINISH FREE OF TROWEL MARKS EXCEPT FOR EDGING TOOL.



SECTION A–A

*CONTRACTION JOINT SPACING TO MATCH SIDEWALK WIDTH (TYP) UNLESS OTHERWISE NOTED ON THE PLANS



SECTION B–B

SIDEWALK NOTES:

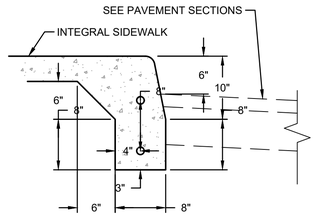
1. ALL WORK MUST MEET CURRENT AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.
2. MINIMUM SIDEWALK WIDTH SHALL BE PER PLAN. SIDEWALK CROSS SLOPE SHALL BE A MAXIMUM OF 2%
3. WHENEVER THE WIDTH OF THE SIDEWALK IS LESS THAN 5'–0" A 5'X5' PASSING AREA WITH A MAXIMUM 2% SLOPE AND MINIMUM ½% SLOPE IN ANY DIRECTION AT INTERVALS OF 200' SHALL BE INSTALLED.
4. WHENEVER CHANGING DIRECTION IN A SIDEWALK, INSTALL A 5'X5' PASSING AREA WITH MAXIMUM 2% SLOPE AND MINIMUM ½% SLOPE IN ANY DIRECTION.
5. OBJECTS SUCH AS TREE BRANCHES, SIGNS, WATER FOUNTAINS, ETC. SHALL NOT PROTRUDE INTO THE SIDEWALK MORE THAN 4" AT THE HEIGHTS BETWEEN 27" AND 80".
6. SIDEWALK SHALL BE CONSTRUCTED OF 4" THICK CONCRETE ON TOP OF 2" OF 1 ½" CRUSHER RUN, ⅜" ROCK SCREENINGS, 1 ½" CLEAN RECYCLED CONCRETE OR APPROVED EQUAL.
7. ALL OBSTRUCTIONS INTO THE WALK, SUCH AS POWER POLES, HYDRANTS, SIGN POSTS, ETC. MUST HAVE AT LEAST 48" OF CLEAR TRAVEL SPACE AROUND THE OBSTRUCTION.
8. SIDEWALK RUNNING GRADE SHALL NOT EXCEED 5% UNLESS THE SIDEWALK IS CONTAINED IN THE R–O–W AND THEN CANNOT EXCEED THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREETS.

SIDEWALK JOINT NOTES:

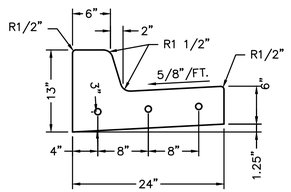
9. ALL JOINTS TO BE SEALED, TO BE THOROUGHLY CLEANED BY HYDROBLASTING AND/OR SAND BLASTING METHODS. THE JOINTS ARE TO BE FREE FROM ALL DUST COATINGS, ANY CONTAMINATES, AND FREE FROM ALL MOISTURE THAT MIGHT INTERFERE WITH THE PROPER AND SATISFACTORY BONDING OF THE JOINT SEALANT MATERIAL. THE JOINT WILL BE BLOWN OUT WITH DRY COMPRESSED AIR IMMEDIATELY PRIOR TO APPLYING SEALANT.
10. CONSTRUCTION EQUIPMENT AND OTHER VEHICLES AND PEDESTRIANS THAT MAY CAUSE DAMAGE TO THE JOINTS SHALL NOT BE ALLOWED ON THE PAVEMENT AND SIDEWALKS BEFORE THE SEALANTS BECOMES TACK FREE.
11. USE 1/2" BY 4" EXPANSION JOINT MATERIAL ALONG SIDEWALK CURB AND ALONG BUILDING.
12. USE 1/2" BY 4" EXPANSION JOINT MATERIAL AROUND POLES OR OTHER OBSTRUCTIONS IN WALK AND FOR JOINTS SHOWN AS EXPANSION JOINTS ON THE PLAN VIEW OF THE SITE.
13. SAW CUT JOINTS WITHIN 24 HOURS.
14. SIDEWALK EXPANSION JOINTS ARE NOT DOWELED.

JOINT SEALANT NOTES:
JOINT SEALERS FOR SIDEWALKS SHALL CONFORM TO THE FOLLOWING:
(1) LOW MODULUS SILICON JOINT SEALANT, MACHINE EXTRUDED OR APPLIED BY GUN. GREY IN COLOR.
JOINT SEALERS FOR PARKING LOT PAVEMENT SHALL CONFORM TO THE FOLLOWING:
(1) LOW MODULUS SILICON JOINT SEALANT, MACHINE EXTRUDED OR APPLIED BY GUN. FOR SLAB, SEALANT SHALL BE DOW CORNING 890 SL, DOW CORNING 888 OR EQUAL (JOINT MUST BE TOOLED). FOR CURBS, SEALANT SHALL BE DOW CORNING 888 OR EQUAL (JOINT MUST BE TOOLED).

SIDEWALK DETAIL
NOT TO SCALE



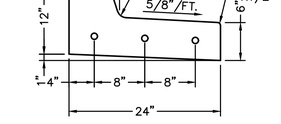
INTEGRAL TURN DOWN CURB
NOT TO SCALE



GENERAL NOTES:

1. 3/4" ISOLATION JOINTS WITH 5/8" DIA. X 2' SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 1" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. FIX DOWEL BARS WITH BAR SUPPORTS.
4. DEPTH OF CURB SHALL BE A MINIMUM OF 8" THROUGH HANDICAP ACCESSRAMP.

STRAIGHT BACK WET CURB & GUTTER
NOT TO SCALE



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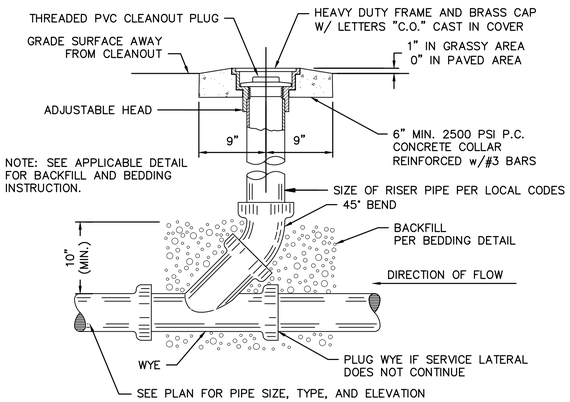
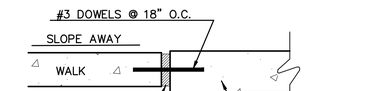
3. FIX DOWEL BARS WITH BAR SUPPORTS.
4. DEPTH OF CURB SHALL BE A MINIMUM OF 8" THROUGH HANDICAP ACCESSIBLE RAMP.

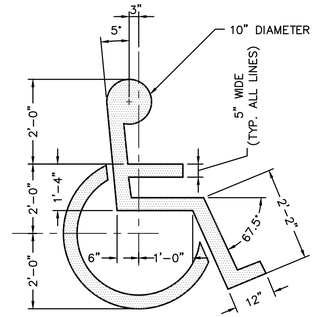
STRAIGHT BACK DRY CURB & GUTTER
NOT TO SCALE



SANITARY SEWER CLEAN-OUT
NOT TO SCALE

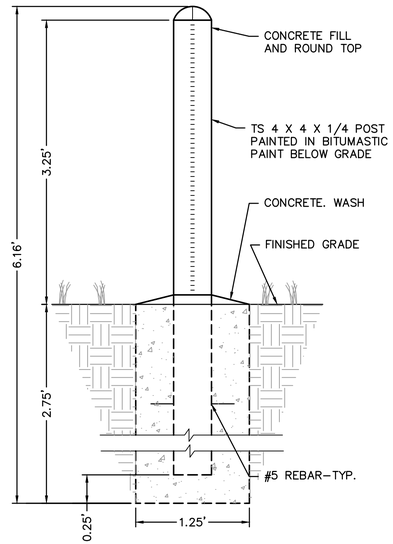


SIDEWALK TO BUILDING SLAB CONNECTION DETAIL
NOT TO SCALE



PROVIDE PAINTED SYMBOL AT EACH DESIGNATED ACCESSIBLE PARKING STALL. CENTER SYMBOL IN EACH STALL.

ACCESSIBLE PARKING SYMBOL
NOT TO SCALE



BOLLARD DETAIL
NOT TO SCALE

olsson
11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
FAX 405.242.6601
Olsson - Engineering
Oklahoma COA #2483

ISSUE FOR BID - NOT FOR CONSTRUCTION

REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY

SITE DETAILS I

BRAKES PLUS JENKS
JENKS, OKLAHOMA
2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C5.0

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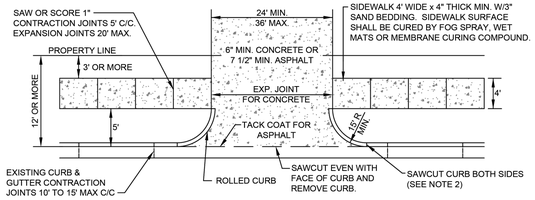
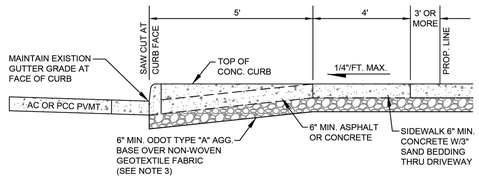
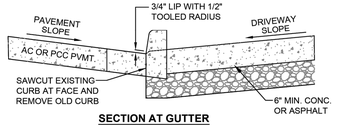


COMMERCIAL DRIVEWAY



STREET/DRIVEWAY SECTION



SECTION AT GUTTER

NOTES:

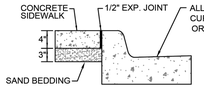
1. DRIVEWAY SHALL BE SESIGNED FOR THE HEAVIEST RECURRING LOAD POSSIBLE.
2. IF CURB CUT IS WITHIN 18" OF EXISTING CURB CONTRACTION JOINT, REMOVE EXISTING CURB TO THE CONTRACTION JOINT AND REPLACE WITH NEW CURB RETURN PLACEMENT.
3. GEOTEXTILE FABRIC SHALL BE CONTECH C-80NW OR EQUIVALENT.

REVISION	BY	DATE

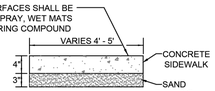
COMMERCIAL DRIVEWAY
STANDARD DETAILS
CITY OF JENKS, OKLAHOMA
ENGINEERING DEPARTMENT
DATE: 4-11-22 STANDARD NO: STRT-10

6" BARRIER CURB & GUTTER

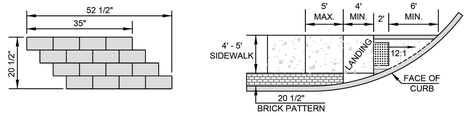
8" BARRIER CURB & GUTTER



SIDEWALK ADJACENT TO CURB

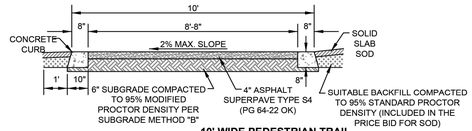


SIDEWALK SECTION



SIDEWALK - STAMPED BRICK PATTERN

PENNSYLVANIA AVENUE BRICK RUNNING BOND (OR EQUAL)
BRICK SIZE: 8" x 3 7/8" GROUT LINE WIDTH: 1/4" - 3/8"
MFR: BUTTERFIELD COLOR PRODUCT NUM. BST6605



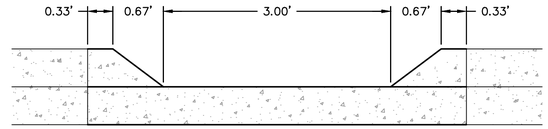
10' WIDE PEDESTRIAN TRAIL
TYPICAL SECTION

NOTES:

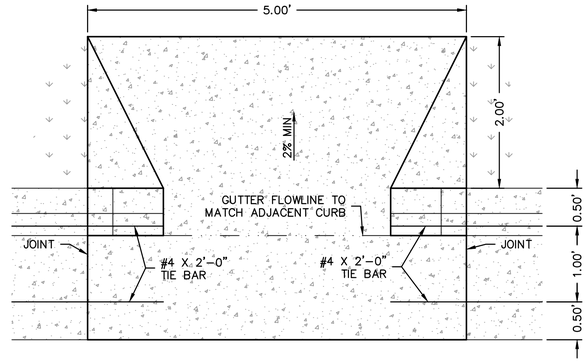
1. #6 x 24" DOWELS AT 24"-30" MAX. C/C REQUIRED WHEN PAVEMENT SECTION IS NOT PLACED INTEGRALLY WITH CURB AND GUTTER.
2. FOR ASPHALTIC CONCRETE PAVEMENTS, SAW CUT CURB AND GUTTER JOINTS 10'-15' MAX. C/C WITH EVERY 8TH JOINT A 3/4" EXPANSION JOINT. FOR CONCRETE PAVEMENTS, CURB JOINT SHALL MATCH PAVEMENT JOINTS.
3. CONCRETE SHALL BE 4,000 PSI (ODOT CLASS AA).
4. EXPANSION JOINTS ARE REQUIRED AT INTERSECTIONS WITH STORMWATER INLET BOXES.

REVISION	BY	DATE
ADD BRICK PATTERN	CAW	1/16/24

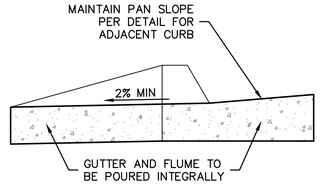
CURB & GUTTER, SIDEWALK, AND TRAIL
STANDARD DETAILS
CITY OF JENKS, OKLAHOMA
ENGINEERING DEPARTMENT
DATE: 1/16/24 STANDARD NO: STRT-06



ELEVATION VIEW

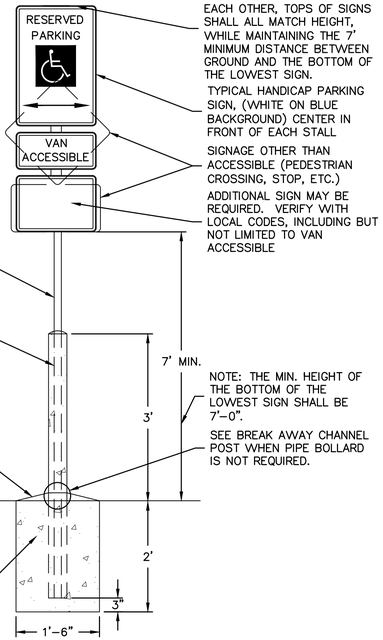


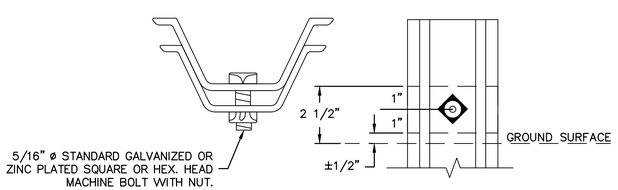
PLAN VIEW



SECTION VIEW

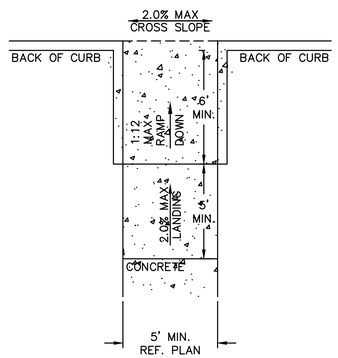
CONCRETE CURB CUT W/ FLUME
NOT TO SCALE



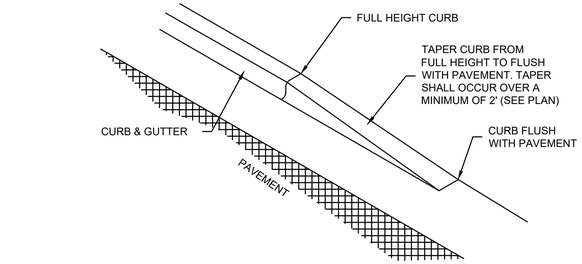


PLAN VIEW PARTIAL ELEVATION

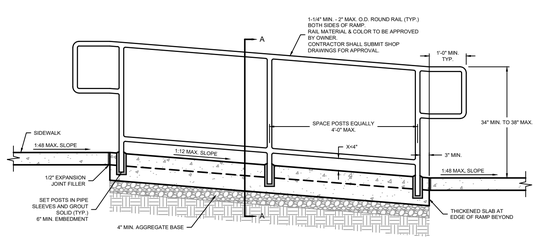
BREAK AWAY CHANNEL POST DETAIL
SIGN DETAIL
NOT TO SCALE



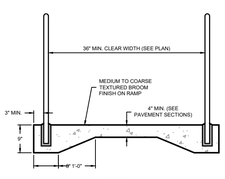
DIE OUT CURB RAMP



CURB TRANSITION DETAIL
NOT TO SCALE



ACCESSIBLE RAMP WITH HANDRAIL
NOT TO SCALE



SECTION A-A

NOTES:
1. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.
2. CLEARANCE BETWEEN HANDRAIL GRIPPING SURFACES AND ADJACENT SURFACES SHALL BE 1-1/2" MINIMUM.
3. AT THE CONTRACTOR'S OPTION, OTHER POST ATTACHMENT METHODS AND RAIL STYLES MAY BE USED AS APPROVED BY OWNER.

olsson
11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
FAX 405.242.6601
Olsson - Engineering
Oklahoma COA #2483

ISSUE FOR BID - NOT FOR CONSTRUCTION

REV./ NO.	DATE	DESCRIPTION	BY

REVISIONS

SITE DETAILS II

BRAKES PLUS JENKS
JENKS, OKLAHOMA
2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET C5.1

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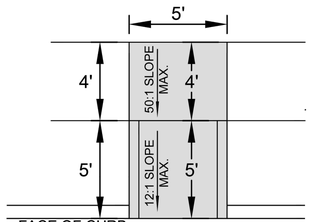
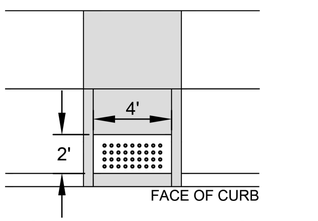


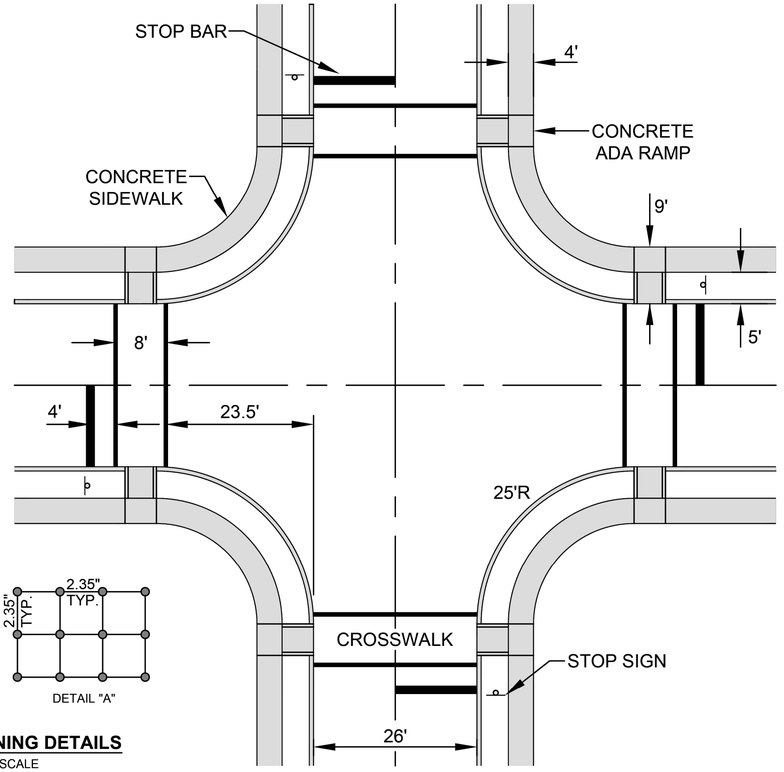
RESIDENTIAL ADA RAMP

NOT TO SCALE



TRUNCATED DOME MAT PLACEMENT

NOT TO SCALE



RESIDENTIAL STREET INTERSECTION

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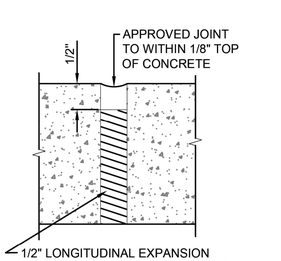
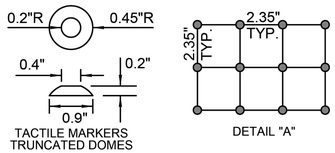


1/2" EXPANSION JOINT

NOT TO SCALE

1. JOINT FILLER SHALL MEET THE REQUIREMENTS OF SECTION 701.08b AND 701.08e.
2. EXPANSION JOINT SHALL BE USED BETWEEN SIDEWALK AND CURBS, ADA RAMPS, DRIVEWAYS, STREETS, RETAINING WALLS, ETC.



TACTILE WARNING DETAILS

NOT TO SCALE

INSTALLATION NOTES:

1. THE TRUNCATED DOME SURFACE SHALL CONTRAST VISUALLY WITH THE ADJOINING WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK ON LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE TRUNCATED SURFACE.
2. RETROFIT INSTALLATIONS WILL NOT REQUIRE EXISTING DEPRESSED CURBING TO BE REPLACED. A NOMINAL 6" TO 8" SETBACK FROM FACE OF CURB SHALL BE ENFORCED NEAR EDGE OF TACTILE DOMES.
3. COST OF INSTALLATION AND MATERIALS FOR TACTILE WARNING DEVICES SHALL BE INCLUDED IN THE PRICE BID FOR THE RAMPS AND SIDEWALKS.

REVISION	BY	DATE

RESIDENTIAL ADA RAMP

STANDARD DETAILS

CITY OF JENKS, OKLAHOMA

ENGINEERING DEPARTMENT

DATE: 4-11-22 | STANDARD NO. STRT-07

olsson

11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114

olsson.com
TEL 405.242.6600
FAX 405.242.6601

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Oklahoma COA #2483

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REV. NO.	DATE	DESCRIPTION	BY
		REVISIONS	

SITE DETAILS III

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C5.1

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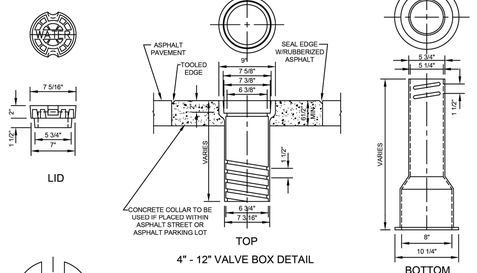
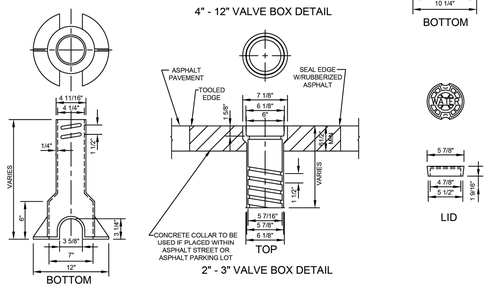
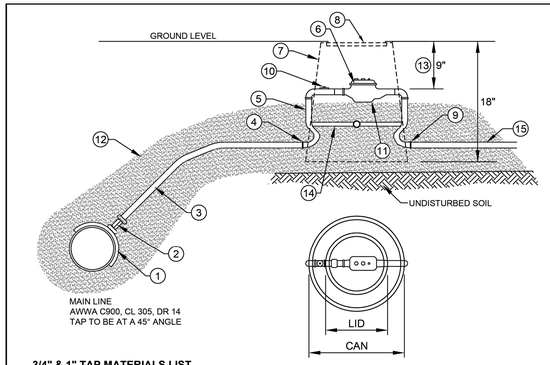




NOTES:
1. IN PAVED AREAS, WATER LINE CONTRACTOR TO PLACE 2 FOOT SQUARE CONCRETE PAD AROUND EACH WATER VALVE AFTER PAVING IS COMPLETE . THE PAVEMENT SHALL BE SAW-CUT FOR PAD PLACEMENT.
2. VALVE BOXES REQUIRING OVER 2 ADDITIONAL BOTTOM SECTIONS SHALL BE EXTENDED USING PVC PIPE WITH A BOTTOM AND TOP SECTION PLACED ON TOP OF THE PVC PIPE.

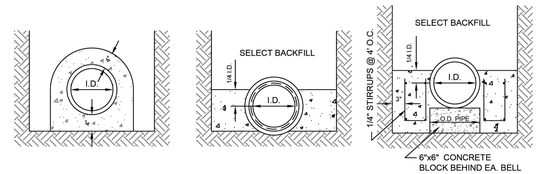
REVISION	BY	DATE	**VALVE BOX** STANDARD DETAILS
			CITY OF JENKS, OKLAHOMA
			ENGINEERING DEPARTMENT
			DATE: 4-11-22 STANDARD NO. WAT-04



3/4" & 1" TAP MATERIALS LIST
1. TAPPING SADDLE: 3/4" OR 1" - FORD OR SMITH-BLAIR, MODEL 315, SINGLE BAND, IP THREAD, OR MUELLER DR1S MODEL, SS SINGLE BAND IP THREAD.*
2. CORPORATION STOP:
   3/4" - FORD, MODEL #F1100-3-NL, IP THREAD x CTS COMPRESSION FITTING, OR MUELLER 3/4" P15028N.**
   1" - FORD, MODEL #F1100-4-NL, IP THREAD x CTS COMPRESSION FITTING, OR MUELLER 1" P15028N.**
3. SERVICE LINE: 3/4" OR 1" - TUFF-TUBE, BLUE.
4. COMPRESSION FITTING: 3/4" OR 1" - CTS WITH STIFFENER INSERTS.
5. METER SETTER: 3/4" OR 1" - FORD OR MUELLER BRASS/COPPER, CTS x FEMALE IP OR CTS x CTS.
6. METER: 3/4" OR 1" - PROVIDED BY THE CITY OF JENKS.
7. METER CAN:
   3/4" - BROOKS, B2200.
   1" - BROOKS, 1220-12.
8. METER CAN LID:
   3/4" - BROOKS, CAST IRON LID W/SITE HOLE TOUCH READ.
   1" - BROOKS, 1220-CT LID.
9. FITTING: 3/4" OR 1" - CTS x CTS
10. 3/4" OR 1" - METER SHUT OFF VALVE.
11. 3/4" OR 1" - METER FREEZE PLATE.
12. 3/4" OR 1" - CLEAN RIVER/FILL SAND.
13. 3/4" OR 1" - METER SETTER SHALL BE 9" BELOW LID (FINAL GRADE).
14. STABILIZATION BAR.
15. CUSTOMER SERVICE LINE.

* RANGE SHALL BE FOR C900 OR DR21 PVC PIPE.
** INSTALL CORPORATION STOP SO OPERATING LEVER IS OVER CENTERLINE OF MAIN.

REVISION	BY	DATE	**3/4" & 1" METER SETTING** STANDARD DETAILS
			CITY OF JENKS, OKLAHOMA
			ENGINEERNG DEPARTMENT
			DATE: 4-11-22 STANDARD NO. WAT-08



CONCRETE ENCASEMENT CONCRETE PER LF

8" I.D.	DIP, RCP	1.41 CF
10" I.D.	DIP, RCP	1.67 CF
12" I.D.	DIP, RCP	1.93 CF
15" I.D.	DIP, RCP	2.36 CF
18" I.D.	DIP, RCP	2.81 CF
21" I.D.	DIP, RCP	3.27 CF
24" I.D.	DIP, RCP	3.76 CF
27" I.D.	DIP, RCP	4.26 CF
30" I.D.	DIP	4.78 CF
30" I.D.	RCP	5.09 CF
36" I.D.	DIP, RCP	5.80 CF
36" I.D.	RCP	6.20 CF

CONCRETE CRADLE CONCRETE PER LF

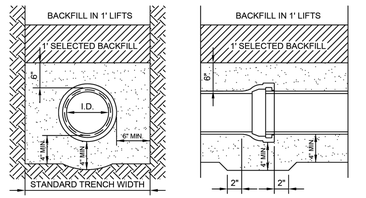
8" I.D.	DIP, RCP	1.09 CF
10" I.D.	DIP, RCP	1.23 CF
12" I.D.	DIP, RCP	1.33 CF
15" I.D.	DIP, RCP	1.66 CF
18" I.D.	DIP, RCP	2.00 CF
21" I.D.	DIP, RCP	1.96 CF
24" I.D.	DIP, RCP	2.69 CF
27" I.D.	DIP, RCP	3.52 CF
30" I.D.	DIP	3.38 CF
30" I.D.	RCP	4.40 CF
36" I.D.	DIP, RCP	4.12 CF
36" I.D.	RCP	5.26 CF

WATER TABLE CRADLE CONCRETE PER LF

8" I.D.	DIP, RCP	2.34 CF
10" I.D.	DIP, RCP	2.48 CF
12" I.D.	DIP, RCP	2.58 CF
15" I.D.	DIP, RCP	3.04 CF
18" I.D.	DIP, RCP	3.50 CF
21" I.D.	DIP, RCP	3.46 CF
24" I.D.	DIP, RCP	4.44 CF
27" I.D.	DIP, RCP	5.52 CF
30" I.D.	DIP	5.38 CF
30" I.D.	RCP	6.65 CF
36" I.D.	DIP, RCP	6.37 CF
36" I.D.	RCP	7.76 CF

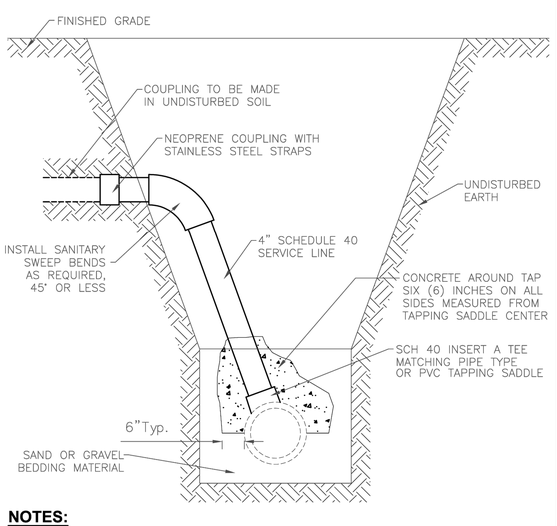
CONCRETE ENCASEMENT & CRADLES

NOTES:
1. ALL FINISHED SUB-GRADES SHALL BE PREPARED ACCU-RATELY BY MEANS OF HAND TOOLS.
2. TRENCH WIDTHS ARE DE-TAILED IN SPECIFICATION EXCAVATION.



CROSS SECTION LONGITUDINAL SECTION

REVISION	BY	DATE	**PIPE ENCASEMENT & CRADLES** STANDARD DETAILS
			CITY OF JENKS, OKLAHOMA
			ENGINEERING DEPARTMENT
			DATE: 4-11-22 STANDARD NO. MISC-04



NOTES:
1. PVC SHOWN, HOWEVER, CLAY TILE, CONCRETE, AND DUCTILE IRON SHALL BE TAPPED IN SAME MANNER WITH CHANGE OF TAPPING SADDLE AND EXPANDING POLYURETHANE IN PLACE OF SOLVENT WELDING.
2. ALL MAIN LINE HOLES TO BE SAWED OR DRILLED AND COUPON PRESENTED AT TIME OF INSPECTION.
3. TAPS SHALL BE LEFT UNCOVERED FOR ONE (1) FOOT ON EACH SIDE OF SADDLE, UNTIL TAP IS INSPECTED.

SANITARY SEWER TAP DETAIL (EXISTING SEWER)

CITY OF BROKEN ARROW | STANDARD DRAWING: STD SS 02 | LAST REVISION DATE: 2/01/2012

DRAWN BY: ZSS	CHECKED BY: TSR	APPROVED: KDS	DATE: 02/01/2024

olsson
11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
FAX 405.242.6601
Olsson - Engineering
Oklahoma COA #2483

ISSUE FOR BID - NOT FOR CONSTRUCTION

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

UTILITY DETAILS

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: JDG
designed by: JDG
project no.: 025-07660
date: 07-22-2026

SHEET
C5.3

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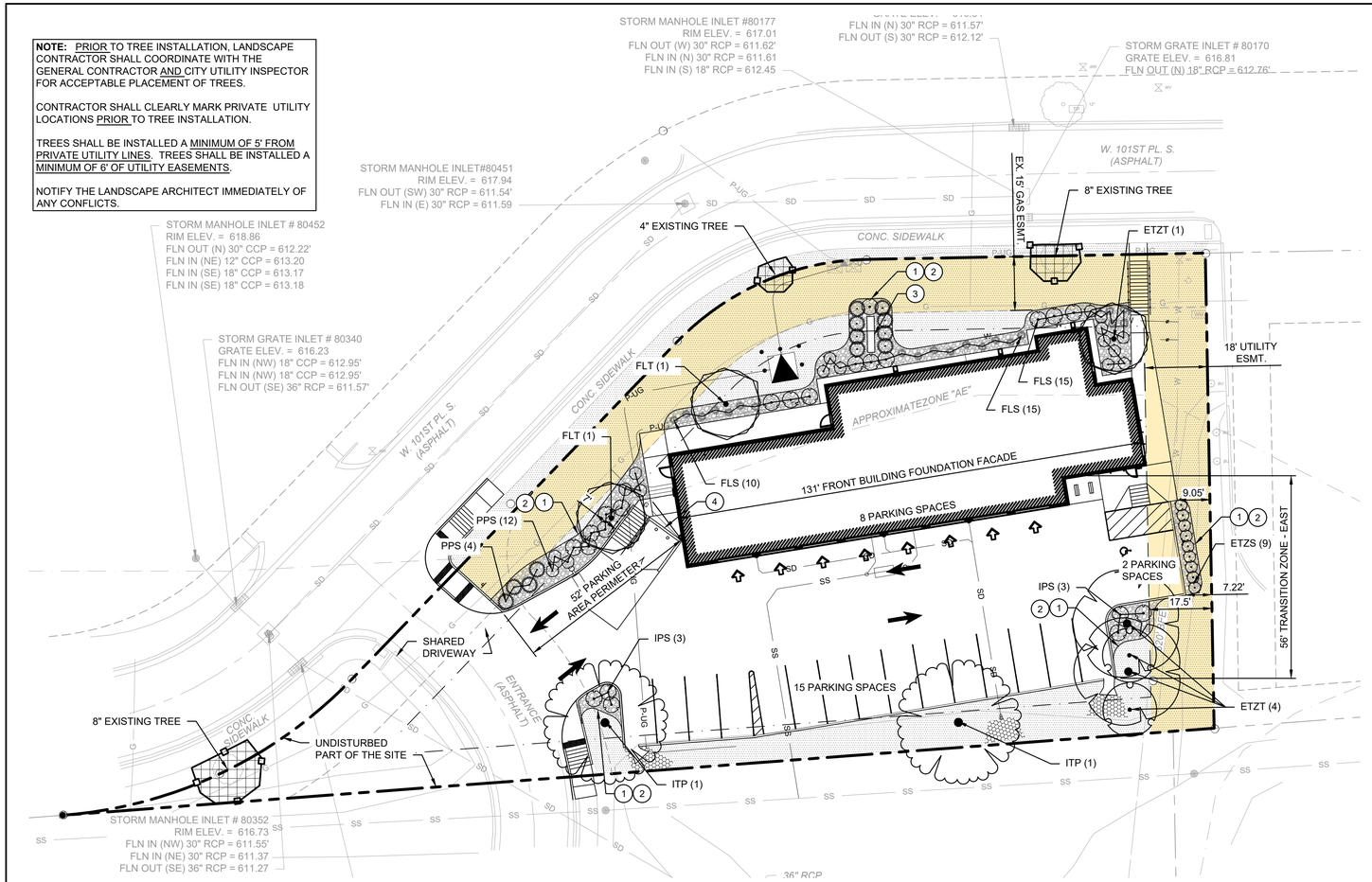
DATE: Jul 22, 2026 2:33pm USER: jgegoux

NOTE: PRIOR TO TREE INSTALLATION, LANDSCAPE CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND CITY UTILITY INSPECTOR FOR ACCEPTABLE PLACEMENT OF TREES.

CONTRACTOR SHALL CLEARLY MARK PRIVATE UTILITY LOCATIONS PRIOR TO TREE INSTALLATION.

TREES SHALL BE INSTALLED A MINIMUM OF 5' FROM PRIVATE UTILITY LINES. TREES SHALL BE INSTALLED A MINIMUM OF 6' OF UTILITY EASEMENTS.

NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY OF ANY CONFLICTS.



LANDSCAPE LEGEND

- TREES TO BE PRESERVED. (REFER TO DETAIL ON SHEET L2.1 FOR ACTUAL LIMITS OF TREE PROTECTION BASED ON THE TREE CANOPY)
- GRASS - SOD - BERMUDA GRASS, OR APPROVED EQUAL
- RIVER GRAVEL MULCH (REFER TO PLANTING NOTES)
- RIPRAP (REFER TO SHEET C1.0)
- UTILITY EASEMENT. NO NEW TREES PERMITTED IN THIS AREA.

KEYNOTES:

1. METAL EDGING (SEE DETAIL, SHEET L2.0)
2. RIVER GRAVEL MULCH
3. PROPOSED MONUMENT SIGN (REFER TO ARCHITECTURAL PLANS)
4. PROPOSED TRASH ENCLOSURE (REFER TO ARCHITECTURAL PLANS)

LANDSCAPE CALCULATIONS:

ZONING
SITE - CS Commercial within PUD-67 (PUD-67 not applicable per predevelopment meeting with City staff)

NORTH - CS Commercial
EAST - PUD-67 Vehicular Use (Car Wash)
SOUTH - PUD-67 Agriculture Use (Detention Basin)
WEST - CS Commercial

FOUNDATION LANDSCAPE
Applicable development is required to maintain a building foundation area at front and exterior side yards with a minimum width of 7'. Foundation plantings shall be installed across 40% of the length of the facade of the building. Foundation plantings may include trees, shrubs, native grasses, and groundcover.

Front Foundation Landscape
Required: 131' facade length x 7' minimum width = 917 SF x 40% minimum = 367 SF minimum landscape area
Provided: 734 SF landscape area

PARKING AREA PERIMETER LANDSCAPE ZONE:
All off-street parking areas which abut a public or private right-of-way, excluding alleys, shall include landscape and trees as required by this section located between the back of curb of the off-street parking area and the right-of-way. Perimeter landscape shall be established along the edge of the off-street parking area and have a minimum width of 7' as measured from the back of curb of the off-street parking area to accommodate vehicle bumper overhang and ensure planting areas that are adequate in size. One shrub or native grasses the height of which shall not be less than 3' nor greater than 5' shall be planted for every 4' of landscape area length. Landscape areas outside of shrub/native grasses and tree masses shall be planted in live groundcover.

52 LF parking area perimeter landscape
Required: 13 shrubs or grasses
Provided: 12 shrubs, 4 groundcover (due to sight distance at driveway intersection)

PARKING AREA INTERIOR
Off-street parking areas consisting of 15 or more continuous spaces shall be required to provide full interior landscaping amenities as specified below:

A parking area end cap shall be located at the end of any bay of parking bordered by a drive aisle, public or private street, or pedestrian circulation system. Parking area end caps shall be a minimum of 9' wide by 18' long and shall have a minimum soil depth of 36 inches. A minimum of 1 canopy tree and 3 shrubs or native grasses shall be provided for every parking area end cap.
Parking area islands shall be spaced not more than 135 feet or more than 15 continuous spaces apart. Parking area islands shall be a minimum of of 9' wide by 18' long and shall have a minimum soil depth of 36 inches. A minimum of 1 canopy tree shall be provided for every island.

Required: 2 end caps; 2 canopy trees, 6 shrubs or native grasses
Provided: 2 end caps; 2 canopy trees*, 6 shrubs or native grasses
*Due to the 17.5' utility easement and the transition zone's shifted trees, 1 of the end cap canopy trees was shifted to the south of the parking lot to better shade the pavement and provide adequate growing room for all canopy trees

TRANSITION ZONE LANDSCAPE
Transition zone landscape shall be required along interior property lines of all nonresidential, mixed use, and multifamily development. As per Table 16-6-3(F)(2), the type of required transition zone is dependent upon the land use type of the subject lot and the land use type of the adjacent lots.

Property Uses
Site's Proposed Use: Vehicle Related

East Interior Property Line: Vehicle Related - 56 LF
Required: Type "B" Transition Zone; 10' minimum zone width (560 SF), 3 understory trees, 2 canopy trees, 9 shrubs/native grasses
Provided: Variable zone width (from 7.37' to 17.14'), 3 understory trees, 2 canopy trees, 9 shrubs*
*Due to the 17.5' utility easement, the 3 understory trees and 2 canopy trees are planted further than 10' from the property line

South Interior Property Line: Agricultural
Required: The two uses do not require a transition zone
Provided: Not Applicable

SPECIES DIVERSITY REQUIREMENTS
A minimum of 60% of the landscape elements utilized on a parcel that is between 1/2 and 5 acres shall be drought tolerant native species. Total landscape elements, excluding turf, shall not be comprised of more than 30% of any single species or 50% of any genus.

Total Plants = 89
Max. of 1 Species = 25% (Virginia Sweetspire 22 plants)
Native Plant Min. = 60% (Combined native and nativar species of 53 plants)

IRRIGATION
Any required landscaped zone not intended for stormwater management, greater than 150 SF in area, shall be provided with an underground irrigation system or be provided with a portable water supply within 50' of said landscaped areas. No part of an irrigation system may be installed in City right-of-way.

Provided: Underground irrigation system shall be designed and installed by the contractor. Refer to Sheet L2.0 for delegated design notes.

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER TYPE	M. HT.	M. WDTH.	SUN/SHADE	WATER	REMARKS
CANOPY TREES										
	GT	2	GLEDITSIA TRIACANTHOS F. INERMIS 'SKYCOLE' SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B	35'–45'	25'–35'	FULL SUN	MEDIUM	NATIVAR
	QS	2	QUERCUS SHUMARDII SHUMARD OAK	2.5" CAL.	B&B	40'–60'	30'–40'	FULL SUN	DRY TO MEDIUM	OK NATIVE
UNDERSTORY TREES										
	AA	2	AMELANCHIER ARBOREA SERVICEBERRY	1.5" CAL.	B&B	15'–20'	15'–20'	FULL SUN / PART SHADE	MEDIUM	OK NATIVE
	CC	3	CERCIS CANADENSIS EASTERN REDBUD	1.5" CAL.	B&B	20'–25'	15'–20'	FULL SUN	MEDIUM	OK NATIVE
DECIDUOUS SHRUBS										
	AE	6	ABELIA X 'EDWARD GOUCHER' EDWARD GOUCHER ABELIA	24" MIN. HT. AFTER INSTALLATION AND INITIAL PRUNING	CONTAINER	3'–4'	3'–4'	FULL SUN/PART SHADE	MEDIUM	OK STATE ADAPTED
	CS	20	CEPHALANTHUS OCCIDENTALIS 'SMCOSS' SUGAR SHACK BUTTONBUSH	24" MIN. HT. AFTER INSTALLATION AND INITIAL PRUNING	CONTAINER	3'–4'	3'–4'	FULL SUN/PART SHADE	MEDIUM TO WET	NATIVAR
	IT	22	ITEA VIRGINICA VIRGINIA SWEETSPIRE	24" MIN. HT. AFTER INSTALLATION AND INITIAL PRUNING	CONTAINER	3'–6'	3'–6'	FULL SUN/PART SHADE	MEDIUM TO WET	OK NATIVE
GRASSES										
	NT	20	NASSELLA TENUISSIMA MEXICAN FEATHER GRASS	2 GAL.	CONTAINER	2'–3'	2'–3'	FULL SUN/PART SHADE	MEDIUM	OK STATE ADAPTED
GROUNDCOVERS										
	JG	12	JUNIPERUS PROCUMBENS 'GREEN MOUND' GREEN MOUND JAPANESE GARDEN JUNIPER	3 GAL.	CONTAINER	0.5'–0.75'	4'–6'	FULL SUN	MEDIUM	OK STATE ADAPTED

CALIPER SHALL BE MEASURED 6 INCHES ABOVE THE SOIL LEVEL

PLANT CODE LEGEND

'ETZS' for East Transition Zone Shrub
'ETZT' for East Transition Zone Tree

'IPT' for Interior Parking Tree
'IPS' for Interior Parking Shrub

'PPS' for Parking Perimeter Shrub/Grass

'FLT' for Foundation Landscape Tree
'FLS' for Foundation landscape Shrub/Grass

N

0' 10' 20' 40'
SCALE IN FEET

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

—CAUTION—

THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS–BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTILITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.

olsson
11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
FAX 405.242.6601
Olsson - Landscape Architecture
Oklahoma COA #CA02321

ISSUE FOR BID - NOT FOR CONSTRUCTION

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

LANDSCAPE PLAN & CALCULATIONS

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JENKS, OKLAHOMA

2026

drawn by: RAR
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SHEET
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PLANTING NOTES

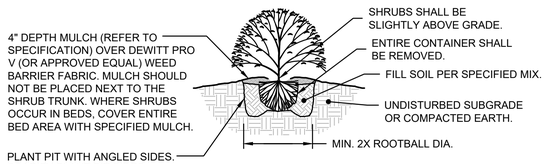
1. ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES.
2. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITY LINES AND OTHER ABOVE OR BELOW GROUND OBSTRUCTIONS SO THAT PROPER PRECAUTIONS SHALL BE TAKEN NOT TO DISTURB OR DAMAGE SUCH IMPROVEMENTS. REFER TO CIVIL AND MEP DRAWINGS FOR PROPOSED AND EXISTING UTILITY LOCATIONS.
3. STANDARDS SET FORTH IN "AMERICAN STANDARDS FOR NURSERY STOCK" REPRESENT GENERAL GUIDELINE SPECIFICATIONS ONLY AND WILL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
4. THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
5. ALL TREES SHALL BE CALIPERED AND UNDERSIZED TREES SHALL BE REJECTED. SPECIFIED CALIPER MEASUREMENT FOR TREES SHALL BE MEASURED AT 6" ABOVE THE GRADE.
6. ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF THE WORK) WILL BE PROMPTLY REMOVED AND REPLACED.
7. THE CONTRACTOR IS RESPONSIBLE FOR SOIL SAMPLING AND TESTING TO DETERMINE EXACT FERTILIZER REQUIREMENTS.
8. PLANTS AND OTHER MATERIALS ARE QUANTIFIED AND SUMMARIZED FOR THE CONVENIENCE OF THE CITY AND LOCAL GOVERNING BODIES. CONFIRM AND INSTALL SUFFICIENT QUANTITIES TO COMPLETE THE WORK AS DRAWN.
9. THE LANDSCAPE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING MIX.
10. BACKFILL TREE AND SHRUB PITS WITH A PREPARED PLANTING MIX AS FOLLOWS UNLESS NOTED OTHERWISE:
    - 2 PARTS BY VOLUME TOPSOIL
    - 1 PART BY VOLUME BROWN RIVER SAND
    - 1 PART BY VOLUME PEAT MOSS
    - 1 LB. COMMERCIAL SLOW RELEASE FERTILIZER PER CY OF MIX.
11. A PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL SHRUB BEDS PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL.
12. ALL PLANTING BEDS AND TREE PITS SHALL RECEIVE A MINIMUM OF 36" OF THE SPECIFIED PLANTING MIX.
13. ALL LANDSCAPE PLANTING AREAS, EXCLUDING TURF AREAS, SHALL BE MULCHED WITH A 4" LAYER OF 2"-4" DIAMETER WASHED RIVER GRAVEL AFTER INSTALLATION OF PLANT MATERIAL. REFER TO DETAILS FOR LOCATION OF MULCH. USE SHREDDED HARDWOOD MULCH AROUND TREES IN LAWN AREAS. IF TREES OCCUR IN PLANTING BEDS, USE THE BED MULCH SPECIFIED.
14. ALL WOODY SHRUB PLANTING MATERIAL SHALL MEASURE A MINIMUM OF 24" IN HEIGHT AT THE TIME OF PLANTING, UNLESS OTHERWISE NOTED.
15. INSTALL METAL EDGING TO SEPARATE ALL MULCHED PLANTING AREAS AND GRAVEL AREAS FROM TURF AREAS. REFER TO DETAIL ON THIS SHEET.
16. INSTALL WOVEN BLACK LANDSCAPE WEED BARRIER FABRIC (DEWITT 20 YEAR, 4.1 OZ. WOVEN WEED BARRIER FABRIC OR EQUAL) IN ALL PLANTING BEDS AND UNDER GRAVEL MULCH AREAS. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
17. THE PLAN IS SUBJECT TO CHANGES BASED ON PLANT SIZE AND MATERIAL AVAILABILITY. ANY DEVIATION TO THE APPROVED FINAL LANDSCAPE PLAN SHALL REQUIRE THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
18. LANDSCAPE CONTRACTOR SHALL PROVIDE UNIT COSTS AND POSSIBLE ALTERNATES FOR PLANT MATERIAL TO THE LANDSCAPE ARCHITECT.
19. KILL AND REMOVE ALL EXISTING WEEDS FROM THE SITE AREA PRIOR TO PLANTING.
20. THE ENTIRE SURFACE TO BE PLANTED SHALL BE REASONABLY SMOOTH AND FREE FROM STONES, ROOTS, OR OTHER DEBRIS.
21. PLANTING SEASON RUNS FROM MARCH 15 TO JUNE 15 AND SEPTEMBER 1 TO OCTOBER 15.
22. LANDSCAPE CONTRACTOR IS TO BE RESPONSIBLE FOR WATERING ALL PLANT MATERIALS UNTIL THE TIME THE PERMANENT IRRIGATION SYSTEM IS FULLY FUNCTIONAL AND ACCEPTANCE OF THE PROJECT HAS TAKEN PLACE. ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF THE WORK) WILL BE PROMPTLY REMOVED AND REPLACED.
23. THE CONTRACTOR WILL COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF ACCEPTANCE. CONTRACTOR WILL MAKE ALL REPLACEMENTS PROMPTLY (AS PER DIRECTION OF OWNER).
24. CONTRACTOR WILL STAKE OR MARK ALL PLANT MATERIAL LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL HAVE OWNERS REPRESENTATIVE APPROVE ALL STAKING PRIOR TO INSTALLATION.
25. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SOD NOTES

1. UNLESS OTHERWISE NOTED ON PLANS, ALL DISTURBED AREAS SHALL BE SODDED WITH BERMUDA GRASS.
2. ALL LAWN AREAS SHALL RECEIVE A MINIMUM 6-INCH DEPTH OF TOPSOIL COMPACTED TO 85% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
3. THE ENTIRE SURFACE TO BE SODDED SHALL BE REASONABLY SMOOTH AND FREE FROM STONES, ROOTS, OR OTHER DEBRIS.
4. SOD SHALL BE MACHINE STRIPPED AT A UNIFORM SOIL THICKNESS OF APPROXIMATELY 3 INCH (PLUS OR MINUS 1/4-INCH). THE MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH, AND SHALL BE DETERMINED AT THE TIME OF CUTTING IN THE FIELD. PRECAUTIONS SHALL BE TAKEN TO PREVENT DRYING AND HEATING. SOD DAMAGED BY HEAT AND DRY CONDITIONS, AND SOD CUT MORE THAN 18 HOURS BEFORE BEING INCORPORATED INTO THE WORK SHALL NOT BE USED.
5. HANDLING OF SOD SHALL BE DONE IN A MANNER THAT WILL PREVENT TEARING, BREAKING, DRYING AND OTHER DAMAGE. PROTECT EXPOSED ROOTS FROM DEHYDRATION. DO NOT DELIVER MORE SOD THAN CAN BE LAID WITHIN 24 HOURS.
6. MOISTEN PREPARED SURFACE IMMEDIATELY PRIOR TO LAYING SOD. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE INSTALLING SOD. FERTILIZE, HARROW OR RAKE FERTILIZER IN THE TOP 1-1/2-INCHES OF TOPSOIL, AT A UNIFORM RATE OF ONE POUND OF NITROGEN PER 1000 S.F.
7. SOD SHALL BE CAREFULLY PLACED IN THE DIRECTION PARALLEL WITH THE SLOPE OF THE AREA TO BE SODDED. SOD STRIPS SHALL BE BUTTED TOGETHER BUT NOT OVERLAPPED WITH THE SEAMS STAGGERED ON EACH ROW.
8. FERTILIZER SHALL BE 10-10-10 OR 13-13-13 COMMERCIAL FERTILIZER OF THE GRADE, TYPE, AND FORM SPECIFIED AND SHALL COMPLY WITH THE RULES OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION 2019 STANDARD SPECIFICATIONS FOR CONSTRUCTION SECTIONS 234 "FERTILIZING AND AGRICULTURAL LIMING". FERTILIZER SHALL BE IDENTIFIED ACCORDING TO THE PERCENT N, P, K, IN THAT ORDER.
9. ALL SOD IN DRAINAGE WAYS SHALL BE PINNED. ALL SOD ON SLOPES GREATER THAN 5:1 SHALL BE PINNED.
10. SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK AFTER PLANTING, WATER DAILY OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF FOUR INCHES BELOW SOD.
11. CONTRACTOR SHALL PROVIDE FULL MAINTENANCE FOR SODDED TURF GRASS FOR A PERIOD OF 30 DAYS AFTER THE DATE OF FINAL ACCEPTANCE. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE TURF MUST BE ESTABLISHED. THE TURF GRASS SHALL BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.

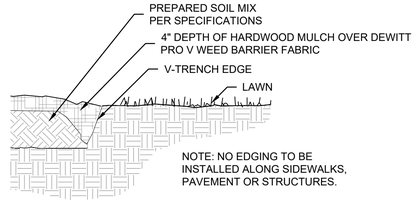
LANDSCAPE IRRIGATION DESIGN:

CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN & INSTALLATION OF LANDSCAPE IRRIGATION PER THE DIRECTION OF THE OWNER.

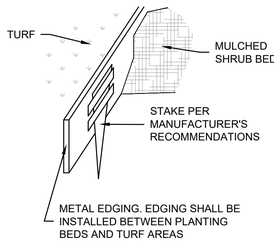


SHRUB PLANTING DETAIL
NOT TO SCALE

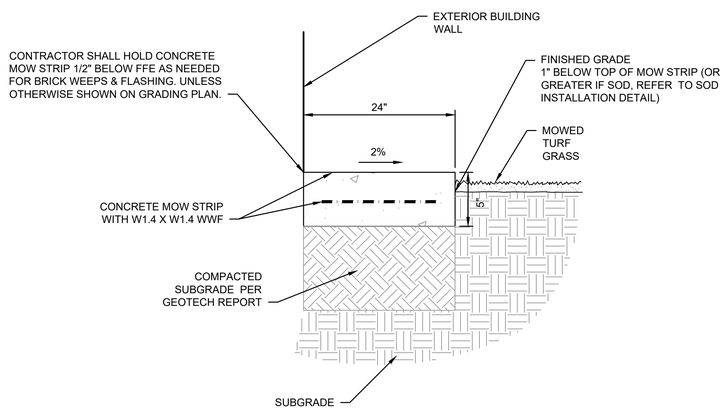
NOTES:
1. MINIMUM ROOT SPREAD TO BE IN ACCORDANCE WITH AAN STANDARDS
2. PRUNE DAMAGED LIMBS OR ROOTS AFTER INSTALLATION
3. MAKE SURE ROOTS DO NOT DRY OUT DURING INSTALLATION
4. SOAK GENEROUSLY TO COMPACT AND SETTLE



V-TRENCH EDGING DETAIL
(AROUND TREES IN LAWN AREA)
NOT TO SCALE

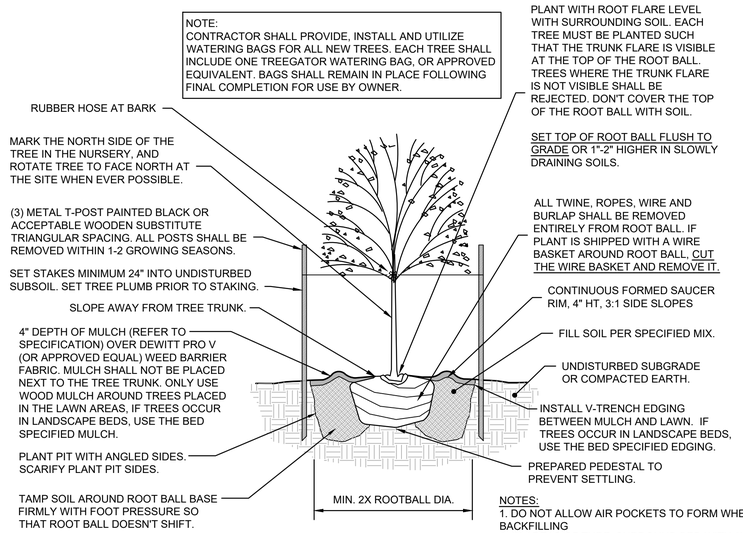


METAL EDGING DETAIL
(AROUND PERIMETER OF SHRUB PLANTING BED)
NOT TO SCALE



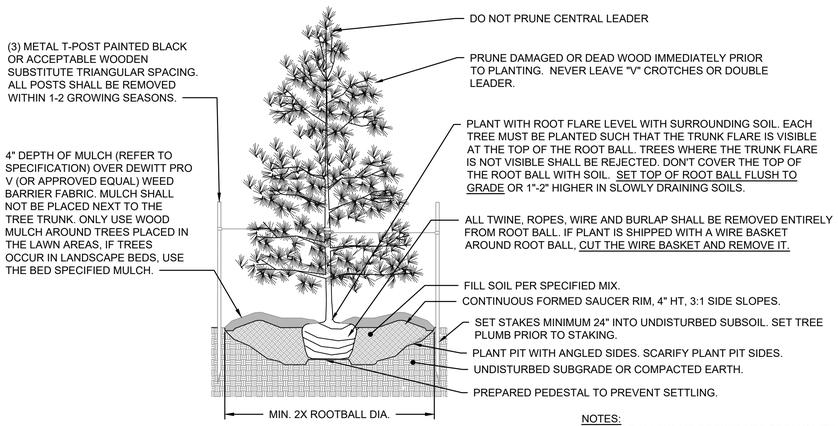
CONCRETE MOW STRIP ADJACENT TO BUILDING
NOT TO SCALE

NOTE:
CONTRACTOR SHALL PROVIDE, INSTALL AND UTILIZE WATERING BAGS FOR ALL NEW TREES. EACH TREE SHALL INCLUDE ONE TREEGATOR WATERING BAG, OR APPROVED EQUIVALENT. BAGS SHALL REMAIN IN PLACE FOLLOWING FINAL COMPLETION FOR USE BY OWNER.



NOTES:
1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
2. IN AREAS OF TURF, SURROUND BED WITH 6' DIAMETER OF MULCH
3. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



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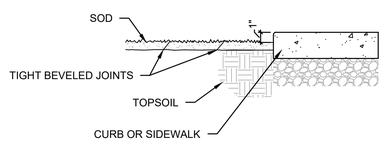
EVERGREEN TREE PLANTING
NOT TO SCALE



SOD INSTALLATION
NOT TO SCALE

OKIE811 Know what's below Call before you dig.

—CAUTION—

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olsson
11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
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LANDSCAPE NOTES & DETAILS

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JENKS, OKLAHOMA

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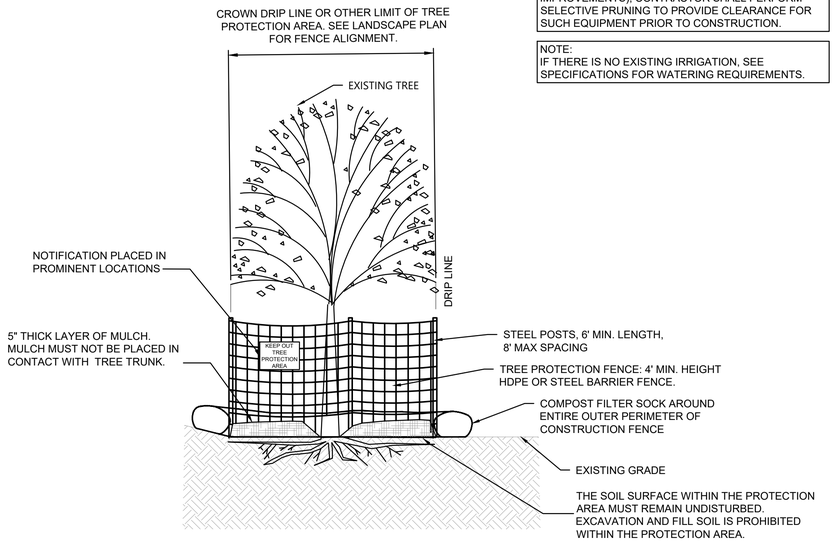
DATE: Jul 22, 2026 2:15pm USER: reynolds

NOTE:
WHERE PAVING MACHINERY AND OTHER EQUIPMENT WILL BE UTILIZED BENEATH EXISTING TREE CANOPY NOT MARKED FOR DEMOLITION (SUCH AS STREET IMPROVEMENTS), CONTRACTOR SHALL PERFORM SELECTIVE PRUNING TO PROVIDE CLEARANCE FOR SUCH EQUIPMENT PRIOR TO CONSTRUCTION.

NOTE:
IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.



TREE PROTECTION DETAIL

NOT TO SCALE

TREE PRESERVATION NOTES

1. GRADING AROUND TREES TO BE LIMITED TO OUTSIDE THE DRIPLINE UNLESS OTHERWISE NOTED ON THESE PLANS.

2. THERE SHALL BE NO GRADING OR FILLING WITHIN THE PROTECTED CRITICAL ROOT ZONES OF PROTECTED TREES UNLESS OTHERWISE NOTED ON THESE PLANS.

3. NO VEHICLES OR EQUIPMENT SHALL BE DRIVEN OR PARKED UNDER THE DRIPLINE OF PROTECTED TREES. NO MATERIALS SHALL BE STORED UNDER THE DRIPLINE OF PROTECTED TREES.

4. TREE FENCE, COMPOST FILTER SOCK AND SILT FENCE FOR ALL PROTECTED TREES MUST BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION.

5. ALL REQUIRED TREE, SILT FENCING AND COMPOST FILTER SOCK SHALL REMAIN IN PLACE UNTIL ALL GRADING AND LANDSCAPING ACTIVITIES HAVE CEASED AND SHALL ONLY BE REMOVED UPON THE REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT.

6. ATTACHMENTS (WIRES, FENCES, ETC.) OTHER THAN THOSE APPROVED FOR GUYING, BRACING OR WRAPPING MUST NOT BE ATTACHED TO PROTECTED TREES.

ROOT PRUNING NOTES:

1. ROOT PRUNING IS INCIDENTAL TO OTHER TREE PROTECTION WORK.
2. ROOT PRUNING SHOULD BE COORDINATED WITH THE TREE PROTECTION FENCING. IN SOME CASES, THAT FENCE LINE IS ON THE ROOT CUT, AND PROVISIONS FOR ROOT PRUNING MAY NEED TO BE ACCOMMODATED BEFORE FENCE IS ERECTED.
3. CAREFULLY EXPOSE ROOTS WITHIN THE LIMITS OF CONSTRUCTION AND MARK FOR PRUNING. THE CITY OF JENKS REPRESENTATIVE SHALL BE CONTACTED TO REVIEW PROPOSED ROOTS PRIOR TO TRENCHING, EXCAVATION, OR CUTTING TO DETERMINE THE IMPACT ON ANY STRUCTURAL CRITICAL ROOTS AND THE CLOSEST POINT TO THE TREES THAT SOIL MAY BE DISTURBED.
4. ROOT PRUNING CAN BE ACCOMPLISHED WITH CIRCULAR SAWS OF VARYING TYPES AND/OR A ROTARY TYPE STUMP GRINDER TO A DEPTH OF 18" OR TO THE MAXIMUM DEPTH OF THE REQUIRED GRADING CUT, WHICHEVER IS LESS. SAW BLADE AND GRINDER TEETH MUST BE SHARPENED AND CLEANED PRIOR TO USE. TRENCHING MACHINES ARE NOT ALLOWED IN ROOT PRUNING OPERATIONS.
5. ROOTS OVER 1 INCH IN DIAMETER MUST BE CLEANLY AND SHARPLY CUT WITH A HAND SAW.
6. PRUNING CUTS SHALL BE FLUSH WITH THE SIDE OF THE TRENCH CLOSEST TO THE TREE.
7. THE CITY OF JENKS REPRESENTATIVE SHALL BE CALLED TO REVIEW ANY ROOTS OVER 2 INCHES IN DIAMETER ENCOUNTERED DURING EXCAVATION AND/OR CONSTRUCTION ACTIVITIES TO DETERMINE STRUCTURAL STABILITY OF THE TREE.

LIMB PRUNING NOTES:

1. LIMB PRUNING IS INCIDENTAL TO OTHER TREE PROTECTION WORK.
2. WHERE PAVING MACHINERY AND OTHER EQUIPMENT WILL BE UTILIZED BENEATH EXISTING TREE CANOPY NOT MARKED FOR DEMOLITION, CONTRACTOR SHALL PERFORM SELECTIVE PRUNING TO PROVIDE CLEARANCE FOR SUCH EQUIPMENT PRIOR TO CONSTRUCTION.
3. PRUNING FOR ADEQUATE CLEARANCE TO ACCOMMODATE EQUIPMENT USE, TEMPORARY SITE ACCESS FOR VEHICLES, AND OTHER CONSTRUCTION ACTIVITIES MAY BE NEEDED PRIOR TO COMMENCING WORK. PRUNING MAY ALSO BE NECESSARY TO ENSURE WORKER AND PUBLIC SAFETY AND TO SAFEGUARD THE HEALTH AND VIGOR OF PROTECTED TREES.
4. FOLLOW CURRENT ANSI A300 STANDARDS FOR TREE CARE OPERATIONS – TREE, SHRUB, AND OTHER WOODY PLANT MANAGEMENT – STANDARD PRACTICES (PRUNING).
5. PRUNING SHALL NOT BE ATTEMPTED BY CONSTRUCTION OR CONTRACTOR PERSONNEL, BUT SHALL BE PERFORMED BY A QUALIFIED TREE CARE SPECIALIST.
6. NEVER REMOVE MORE THAN 25% OF A TREE'S CROWN AT ONE TIME.
7. USE THE THREE CUT METHOD TO REMOVE LARGE OR HEAVY LIMBS. IF THE WHOLE LIMB MUST BE REMOVED, PROPERLY PRUNE TO THE TRUNK WITHOUT CUTTING INTO THE BRANCH BARK RIDGE. DO NOT LEAVE A STUB OR FLUSH CUT INTO THE TRUNK.
8. IF ONLY PART OF A LIMB MUST BE REMOVED, PRUNE BRANCHES TO AN EXISTING BRANCH OF THE PROPER SIZE. THE REMAINING LATERAL BRANCH MUST BE AT LEAST ONE-HALF TO ONE-THIRD THE DIAMETER OF THE BRANCH OR LEADER THAT IS BEING REMOVED.
9. LIMBS MAY BE GENTLY LIFTED AND TEMPORARILY TIED BACK WITH ROPE TO ALLOW ACCESS OR CLEARANCE, THUS ELIMINATING THE NEED FOR PRUNING AT ALL.

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

—CAUTION—

THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS—BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTILITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.

olsson
11600 Broadway Extension
Suite 300
Oklahoma City, OK 73114
olsson.com
TEL 405.242.6600
FAX 405.242.6601
Olsson - Landscape Architecture
Oklahoma COA #CA02321

ISSUE FOR BID - NOT FOR CONSTRUCTION

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

LANDSCAPE DETAILS

BRAKES PLUS JENKS

JENKS, OKLAHOMA

2026

drawn by: RAR
designed by: JKE
project no.: 025-07660
date: 07-22-2026

SHEET
L2.1

F:\2025\07501-08000\025-07660\40-design\AutoCAD\final plans\Sheets\SDNIL_DTL01_02507660.dwg
DATE: Jul 22, 2026 2:15pm USER: reynolds

BRAKES PLUS

JENKS, OKLAHOMA

GENERAL NOTES

1. WE CERTIFY THAT TO THE BEST OF OUR KNOWLEDGE AND INFORMATION, AND IN ACCORDANCE WITH ACCEPTED PROFESSIONAL STANDARDS, WE HAVE COMPLIED WITH APPLICABLE PORTIONS OF ANSI A117.1 1980 EDITION PERTAINING TO BUILDING ACCESSIBILITY FOR THE PHYSICALLY HANDICAPPED (ARS34-401 THROUGH 34-411), UBC CHAPTER STANDARDS (UFAS) AND 1990 AMERICANS WITH DISABILITIES ACT (ADA) TITLE III ACCESSIBILITY GUIDELINES FOR BUILDING AND FACILITIES.
2. ALL DIMENSIONS ARE TO THE FACE OF STUD AT FRAME WALLS AND TO THE FACE OF MASONRY WALLS AS SHOWN, UNLESS NOTED OTHERWISE.
3. INSTALL SEALANT AT ALL INTERIOR AND EXTERIOR JOINTS, SEAMS, CONNECTIONS OF OPENINGS WHICH WOULD ALLOW WATER OR AIR INFILTRATION EXCEPT AS NOTED OTHERWISE. SEALANT COLOR TO MATCH ADJACENT SURFACE. COLOR REQUIRES ARCHITECTS APPROVAL.
4. DOOR OPENINGS IN FRAME CONSTRUCTION WHICH ARE NOT DIMENSIONED ARE EITHER CENTERED IN THE WALL OR LOCATED 5" FROM THE FACE OF STUD TO FINISH JAMB
5. ALL HANDICAPPED FACILITIES SHALL BE IDENTIFIED WITH APPROVED SINAGE.
6. THE CONTRACTOR IS RESPONSIBLE FOR PRODUCING A WEATHER TIGHT BUILDING - - DETAILS AND OMISSIONS TO DRAWINGS NOTWITHSTANDING. ALL DRAWING CONFLICTS WHICH MAY NOT ALLOW THIS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF TH ARCHITECT.
7. DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND PLANS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
8. ALL FLOORS WITH DRAINS ARE SLOPED MINIMUM ⅛" PER FOOT TO DRAIN UNLESS NOTED OTHERWISE.
9. LOCATION OF EXISTING UTILITIES ARE SHOWN TO THE BEST OF OUR KNOWLEDGE. CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF VERIFYING IN THE FIELD BEFORE CONSTRUCTION STARTS, AND COORDINATING ALL NEW UTILITY LOCATIONS, CONNECTIONS, AND PENETRATIONS W/ CIVIL ENGINEER.
10. ALL REQUIRED EXITS SHALL BE OPERABLE FROM THE INSIDE WITHOUT SPECIAL KNOWLEDGE OF THE USE OF A KEY.
11. PROVIDE FULL 2X6 WOOD BLOCKING AS REQUIRED TO SECURELY ANCHOR ALL WALL MOUNTED EQUIPMENT(E.G., CABINETS, TOILET ROOM, ACCESSORIES, HARDWARE, ETC.). BLOCKING SHALL PROVIDED A RIGID CONNECTION CAPABLE OF SUPPORTING LOADS AS DETERMINED BY MANUFACTURER. PROVIDE SOLID 2X6 WOOD BLOCKING SECURED TO 2 MAIN WALL STUDS TO SECURELY SUPPORT ALL WALL STOPS (DOOR BUMPER).
12. THE GENERAL CONTRACTOR SHALL VERIFY AND COORDINATE WITH ALL TRADES, SIZES AND LOCATIONS OF ALL OPENINGS OF MECHANICAL AND ELECTRICAL EQUIPMENT, EQUIPMENT PADS, AS WELL AS POWER, WATER, AND DRAIN INSTALLATIONS, BEFORE PROCEEDING WITH WORK, ANY CONCERNS OF STRUCTURAL CONFLICTS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. A REASONABLE RESPONSE TIME SHALL BE ALLOWED.
13. ALL FLOOR OR WALL OPENINGS REQUIRED FOR PIPES, DUCTS,CONDUITS, ETC. SHALL BE SEALED IN A MANNER APPROVED BY THE ARCHITECT.
14. ROOMS ENCLOSED WITH 1-HOUR RATED WALLS REQUIRE RATED DOORS, 1-HOUR PARTITIONS PENETRATING THROUGH AND ABOVE ROOF SURFACE AND STRUCTURE ABOVE. ANY DUCTS PASSING THROUGH WALLS REQUIRE FIRE DAMPERS. ANY CONDUIT OF PIPING REQUIRES RATED SEALANT.
15. STRUCTURAL NOTES SHALL GOVERN TYPICAL CONDITIONS WHETHER OR NOT SPECIFICALLY DETAILED OR NOTED.
16. CONTROL JOINTS SHALL BE PROVIDED IN CONCRETE FLOOR SLABS AND MASONRY WALLS WHETHER OF NOT SPECIFICALLY REFERENCED ON PLANS. THE MAXIMUM AREA PERMITTED BETWEEN JOINTS SHALL BE 650 SQUARE FEET FOR REINFORCED CONCRETE SLABS, 250 SQUARE FEET FOR NON-REINFORCED SLABS AND 400 SQUARE FEET FOR MASONRY UNLESS SHOWN OTHERWISE.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY ELECTRIC CONNECTIONS, METERS, TRANSFORMERS AND GENERATORS.
18. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE ELECTRICAL RECEPTACLES AND SWITCHES TO AVOID CASEWORK, DOORS, ETC.
19. FOLLOW ALL RECOMMENDATIONS OF THE SOILS REPORT BY OLSSON, 719-338-7589, PROJECT #025-07660 DATED MARCH 2026 3.

PROJECT TEAM

OWNER: BRAKES PLUS
1880 SOUTPARK DRIVE
BIRMINGHAM, AL. 35244
205-533-1724 ASHLEY.BERNATSKI@EXPRESSOIL.COM
ATTN: ASHLEY BERNATSKI

ARCHITECT: NORMAN L. HERMAN
45 SPYGLASS DRIVE
LITTLETON, COLORADO 80123
(303) 881-8925
ATTN: NORMHERMAN@ARCODEV.COM

STRUCTURAL ENGINEER: PERFORMANCE ENGINEERING
7400 EAST ORCHARD ROAD, # 240
ENGLEWOOD, COLORADO 80111
(303)721-3322
ATTN: TOM SCHOTT

MECHANICAL ENGINEER LOREN PRIEST
12005 ANTELOPE TRAIL,
PARKER, COLORADO 80138
(303)748-1189
ATTN: LOREN@EEPARKER.COM

ELECTRICAL ENGINEER LOREN PRIEST
12005 ANTELOPE TRAIL,
PARKER, COLORADO 80138
(303)748-1189
ATTN: LOREN@EEPARKER.COM

CIVIL ENGINEER OLSSON
5700 TENNISON PARKWAY
SUITE 100
PLANO, TEXAS 75024
ATTN: MADDIE KNECHT
214-473-2698
MKNECHT@OLSSON.COM

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A3-1 EXTERIOR BUILDING ELEVATIONS
A4-1 BUILDING SECTIONS
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CODE INFORMATION

APPLICABLE CODES

2018 IBC	INTERNATIONAL BUILDING CODE
--	--
2018 IBC	INTERNATIONAL PLUMBING CODE
2018 IFGC	INTERNATIONAL FUEL GAS CODE
2018 IMC	INTERNATIONAL MECHANICAL CODE
2017 NEC	NATIONAL ELECTRIC CODE
2018 IECC	INTERNAT'L ENERGY CONSERVATION CODE
2017 ANSI A117.1	
2021 IFC	NFPA LIFE SAFETY CODE

TYPE OF CONSTRUCTION

TYPE V-B

MAXIMUM BUILDING HEIGHT

ALLOWED: 1 STORY
ACTUAL: 1 STORY

ALLOWABLE BUILDING AREA

ALLOWED: 9,000 S.F.
ACTUAL: 4,975 S.F.

ACTUAL BUILDING AREA

4,975 S.F.

EXIT WIDTH

42 x 0.2 = 9" REQ.
36" PROVIDED

EXIT DISTANCE

ALLOWED: 250 FT.
ACTUAL MAX: 85 FT.

OCCUPANCY

B AND S-1 NON-SEPARATED USES

OCCUPANT LOAD COUNT

SALES / WAITING AREA - 639 SF/ 30 OLF = 22 OCCPANTS
ADMIN / OFFICE - 70 SF / 100 OLF = 1 OCCUPANTS
INVENTORY - 513 SF / 300 OLF = 2 OCCUPANTS
SERVICE BAYS - 3,456 SF / 300 = 12 OCCUPANTS
RESTROOMS - 187 SF = 0 OCCUPANTS
BREAK ROOM - 115 SF /15 OLF = 8 OCCUPANTS

TOTAL OCCUPANT LOAD (4980 S.F.) = 45 OCCUPANTS

FIRE PROTECTION

BUILDING IS NON SPRINKLED

ROOFING MATERIALS

REQUIRED: CLASS "C" (CAN BE CLASS A OR B PER CODE)
PROVIDED: CLASS "A" ROOF

ROOF INSULATION REQUIREMENT: MEETS ASTM C 1289
ROOF INSULATION PROVIDED: MEETS ASTM C 1289

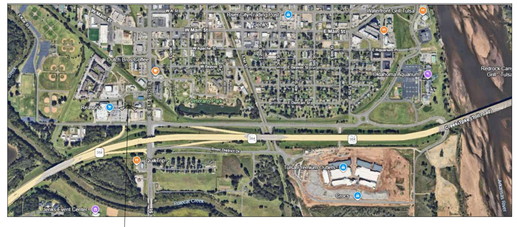
NUMBER OF EXITS REQUIRED:
2 REQUIRED.....2 PROVIDED

FIRE RESISTANCE OF EXTERIOR WALLS:
NONE REQUIRED.....DISTANCE GREATER THAN 30 FEET AND TYPE 5 CONSTRUCTION HAS NO RQUIREMENTS

FIRE RESISTANCE OF ELEMENTS
TYPE 5B CONSTRUCTION HAS NO RQUIREMENTS CONSIDERING SQ. FOOTAGE THIS BLDG.

OPENING PROTECTION REQUIREMENTS: NONE REQUIRED
NO REQUIREMENTS - FIRE SEPARATION DISTANCE EXCEEDS 30 FEET

VICINITY MAP



HAZARDOUS GLAZING REQUIREMENTS:
THESE REQUIREMENTS HAVE BEEN MET....SEE SHEET A5-1 AND A5-2

PARAPET REQUIREMENTS - .....PARAPETS MEET REQUIREMENTS. THEY EXCEED 30" IN HEIGHT.

SPECIAL INSPECTION REQUIREMENTS -
A QUALIFIED SPECIAL INSPECTION AGENCY HAS BEEN RETAINED TO DO SPECIAL INSPECTIONS PER THIS REQUIREMENT.

SOILS INFORMATION REQUIREMENTS AS REQUIRED BY CHAPTER 18 HAS BEEN PROVIDED

REQUIRED PLUMBING FIXTURES:
- 2 RESTROOMS REQUIRED AND TWO PROVIDED
- 2 WATER CLOSETS REQUIRED AND TWO PROVIDED
- 2 LAVATORIES REQUIRED AND TWO PROVIDED
- HANDICAP WATER FOUNTAIN REQUIRED AND 1 PROVIDED
- 1 SERVICE SINK REQUIRED AND ONE PROVIDED.

ROOF DRAINAGE REQUIREMENTS REF:20121 IBC 1503 2021 IPC.....ROOF DRAINAGE HAS BEEN PROVIDED PER #1503. SEE SUBMITTAL DWG A2-4 AND PLUMBING DRAWINGS

BRAKES PLUS
APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. HERMAN
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26

ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.18.26	SUBMITTED TO BLDG. DEPT.
	07.24.26	ISSUED FOR CONSTRUCTION

ARCODEV

ARCODEV_JOB #: --
CLIENT/JOB #: --
DRAWN BY: NLH
CHECKED BY: NLH
DATE OF ISSUE: 04.09.26

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

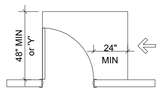
A0

TITLE SHEET

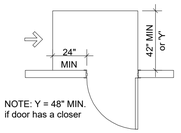
ICC A117.1-2017 : ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

DOORS

1. Doors, doorways, and gates that are part of an accessible route shall comply with 404.
2. Door openings shall provide a clear width of 32 inches, unless the opening is more than 24 inches deep, in which case the clear width of the opening shall be 36 inches. For swinging doors, the clear width shall be measured between the face of the door and the stop, with the door open 90 degrees.
3. There shall be no projections into the clear opening lower than 34 inches. Projections into the clear opening between 34 inches and 80 inches shall not exceed 4 inches.
4. In accordance with 404.2.3 exception 2, door closers and stops shall be permitted to be a minimum of 78 inches above the floor or ground.
5. Minimum maneuvering clearances at swinging doors shall comply with ICC A117.1-2017 Section 404.2.3, Table 404.2.3.2 and Figure 404.2.3.2.
6. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority.
7. Hinged doors other than fire doors shall have an opening force of 5 pounds maximum.
8. Sliding doors shall have an opening force of 5 pounds maximum.
9. Door and gate surfaces shall comply with 404.2.10.
10. Doors shall be permitted to swing into turning spaces, per 304.4.
11. Two doors in a series shall comply with ICC A117.1-2017 Section 404.2.5 and Figure 404.2.5.

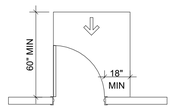


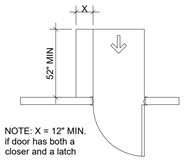
NOTE: Y = 54" MIN. if door has a closer



NOTE: Y = 48" MIN. if door has a closer

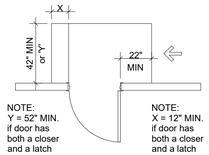
Latch-Side Approaches - Swinging Doors





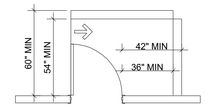
NOTE: X = 12" MIN. if door has both a closer and a latch

Front Approaches - Swinging Doors

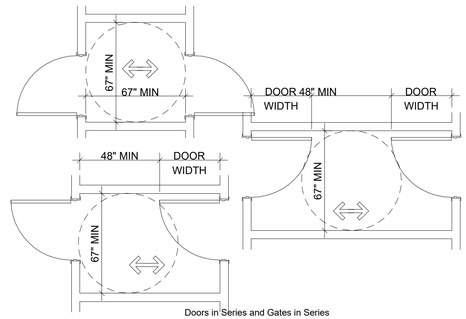


NOTE: Y = 52" MIN. if door has both a closer and a latch

NOTE: X = 12" MIN. if door has both a closer and a latch



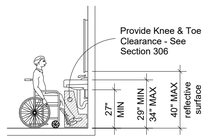
Hinge-Side Approaches - Swinging Doors



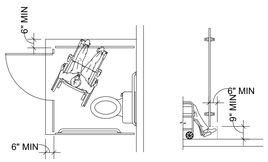
Doors in Series and Gates in Series

RESTROOMS & DRINKING FOUNTAINS

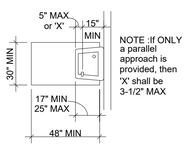
1. Where toilet rooms are provided, each toilet room shall comply with 603.
2. Where toilet compartments are provided, at least one toilet compartment shall comply with 604.8.1. In addition to the compartment required to comply with 604.8.1, at least one compartment shall comply with 604.8.2 where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures.
3. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches maximum above finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches maximum above the finish floor or ground.
4. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches minimum and 48 inches maximum above the finish floor.
5. Water closets shall comply with 604.2 through 604.8.
6. Toilet paper dispensers shall comply with ICC A117.1-2017, Chapter 6, Section 604.7 and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.
7. Grab bars shall be provided at water closets and shall comply with ICC A117.1-2017, Chapter 6, Figure 604.5
8. Urinals shall comply with 605 and shall be either wall-hung or stall type urinals.
9. Lavatories shall comply with 606. Faucets for lavatories shall comply with 606.4. Exposed pipes under lavatories shall be insulated or otherwise protected to prevent against contact.
10. Drinking Fountains shall comply with ICC A117.1-2017, Chapter 6, Section 602.2.
11. Toilet paper dispensers shall comply with ICC A117.1-2017, Chapter 6, Figure 604.9.2.
12. Fixed side wall grab bars shall comply with ICC A117.1-2017, Chapter 6, Section 604.5.1.



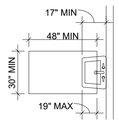
Clearances & Heights at Lavatory



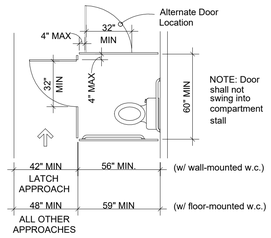
Stall Compartment Toe Clearance



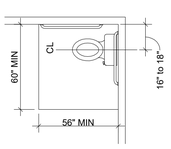
Drinking Fountain Clearance and Spout Location



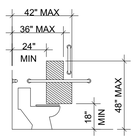
Lavatory Clearance



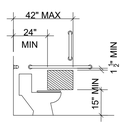
Standard Stall



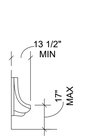
Clear Floor Space and Water Closet Location



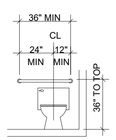
Recessed Toilet Paper Dispenser Location

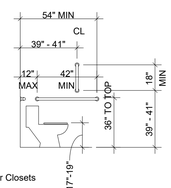


Protruding Toilet Paper Dispenser Location



Height and Depth of Urinal

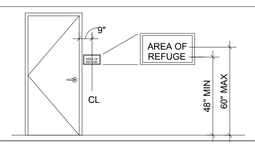


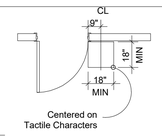


Grab Bars at Water Closets

SIGNAGE

1. Signs shall comply with 703.
2. Signs identifying permanent rooms and spaces shall comply with 703.1, 703.2, and 703.5. Where pictograms are provided as designations of permanent rooms and spaces, the pictograms shall comply with 703.6 and shall have text descriptors complying with 703.2 and 703.5.
3. Signs that provide direction to or information about spaces and facilities shall comply with 703.5.
4. Where more than one check-out aisle is provided, check-out aisles complying with 904.3 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Where check-out aisles are identified by numbers, letters, or functions, signs identifying check-out aisles complying with 904.3 shall be located in the same location as the check-out aisle identification.

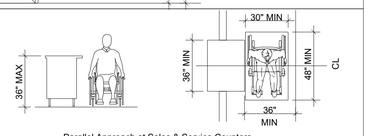




Centered on Tactile Characters

FOODSERVICE LINES, TABLEWARE AREAS & CHECKOUT AISLES

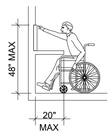
1. Where check-out aisles are provided, check-out aisles shall comply with 904.3 and be dispersed.
2. Where provided, at least one of each type of sales counter and service counter shall comply with 904.4. Where counters are dispersed throughout the building or facility, counters complying with 904.4 also shall be dispersed.
3. Food service lines shall comply with 904.5. Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with 308.
4. Queues and waiting lines servicing counters or check-out aisles required to comply with 904.3 or 904.4 shall comply with 403.
5. Check-out aisles and sales and service counters shall comply with the applicable requirements of 904.
6. All points of counters required to comply with 904 shall be located adjacent to a walking surface complying with 403.



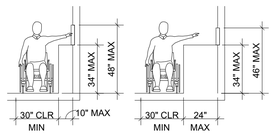
Parallel Approach at Sales & Service Counters

REACH RANGES, CONTROLS & OPERATING MECHANISMS

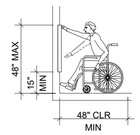
1. Reach ranges shall comply with 308.
2. Operable parts shall comply with 309 and shall be placed within one or more of the reach ranges specified in 308.
3. In accordance with 309.4, operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds maximum.



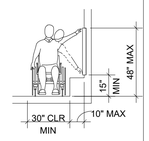
Obstructed Forward Reach



Obstructed Side Reach



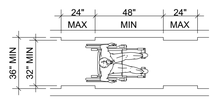
Unobstructed Forward Reach



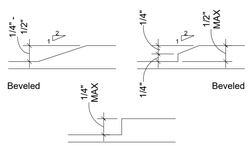
Unobstructed Side Reach

PATH OF TRAVEL

1. The running slopes of walking surfaces that are part of an accessible route shall not be steeper than 1:20 with a cross slope that is not steeper than 1:48.
2. Changes in level shall comply with ICC A117.1-2017 Section 303.
3. The clear width of walking surfaces on an accessible route shall comply with 403.5.1.
4. The clear width at turns along an accessible route shall comply with 403.5.2.
5. In accordance with 403.5.3, an accessible route with a clear width of less than 60 inches shall provide passing spaces at intervals of 200 feet.

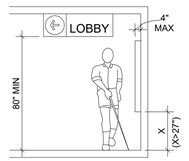


Clear Width of an Accessible Route



Vertical

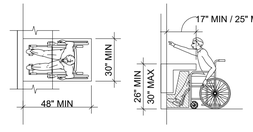
Changes in Level



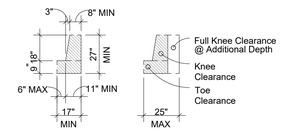
Walking Parallel To A Wall

SEATING AT TABLES & COUNTERS

1. Where dining surfaces are provided for the consumption of food and drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with 902. Confirm actual seat counts with Table 221.2.1
2. Dining surfaces and work surfaces required to comply with 902 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.
3. Dining surfaces and work surfaces shall comply with 902.2 and 903.3.



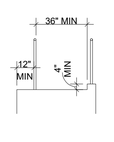
Toe and Knee Clearances



STAIRS AND RAMPS

1. Ramps on accessible routes shall comply with 405.
2. Ramp runs shall have a running slope not steeper than 1:12 with a cross slope not steeper than 1:48.
3. The clear width of a ramp run or (where handrails are provided) the clear width between handrails shall be 36 inches minimum.
4. The rise for any ramp run shall be 30 inches maximum.
5. Ramps shall have landings at the top and the bottom of each ramp run complying with 405.7.
6. Ramps with a rise greater than 6 inches shall have handrails complying with 505.
7. Edge protection complying with 405.9.1 or 405.9.2. shall be provided on each side of ramp runs and each side of ramp landings.
8. Stairs that are part of a means of egress shall comply with 504.
9. All steps on a flight of accessible stairs shall have uniform riser heights and uniform tread depths. Risers shall be between 4 inches and 7 inches in height. Treads shall be 11 inches deep minimum.
10. Open risers are not permitted.
11. Nosings in steps shall comply with 504.5.
12. Stairway handrails shall comply with 505.

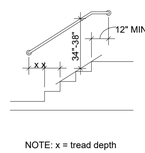
Handrail Location with Barrier Edge Protection



Handrail Location with Alternate Edge Protection

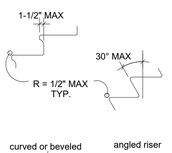
SLOPE	MAX. RISE
1:12 MIN	30"
1:12 to 1:10	6"
1:10 to 1:08 MAX	3"

*Only for Existing Sites, Buildings and Facilities



NOTE: x = tread depth

Handrail Location



curved or beveled nosing

angled riser

Stair Nosings

BRAKES PLUS
APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. HERMAN
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26
ARCHITECT OF RECORD

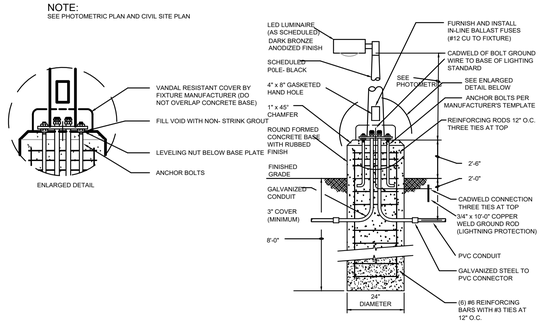
REVISION	DATE	COMMENTS
	06.18.26	SUBMITTED TO BLDG. DEPT.
	07.24.26	ISSUED FOR CONSTRUCTION

ARCODEV JOB #: --
CLIENTJOB #: --
DRAWN BY: NLH
CHECKED BY: NLH
DATE OF ISSUE: 04.09.26

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

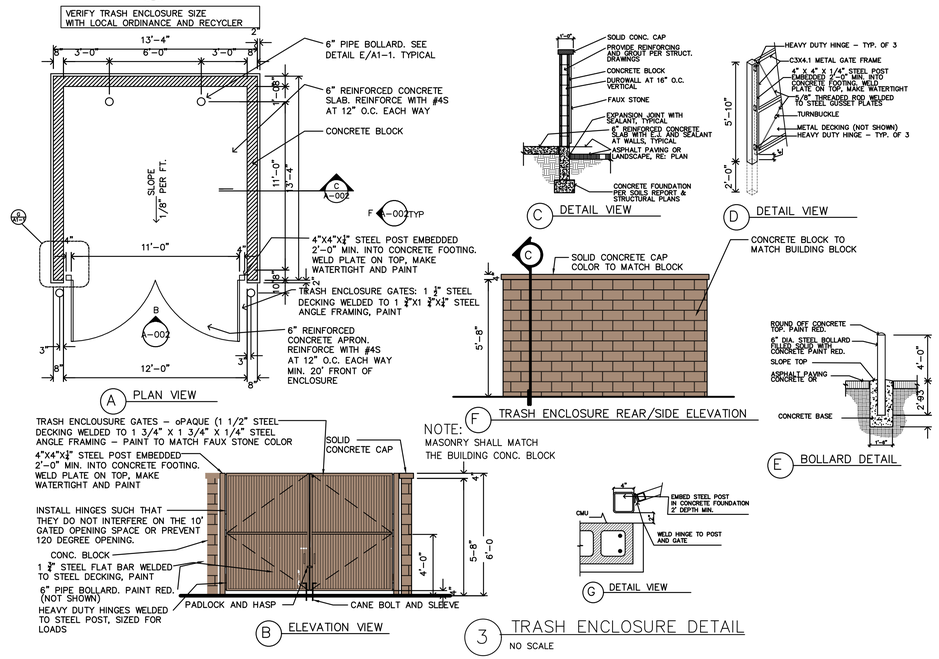
SHEET
A0.1
ACCESSIBLE DETAILS

NOTE:
SEE PHOTOMETRIC PLAN AND CIVIL SITE PLAN



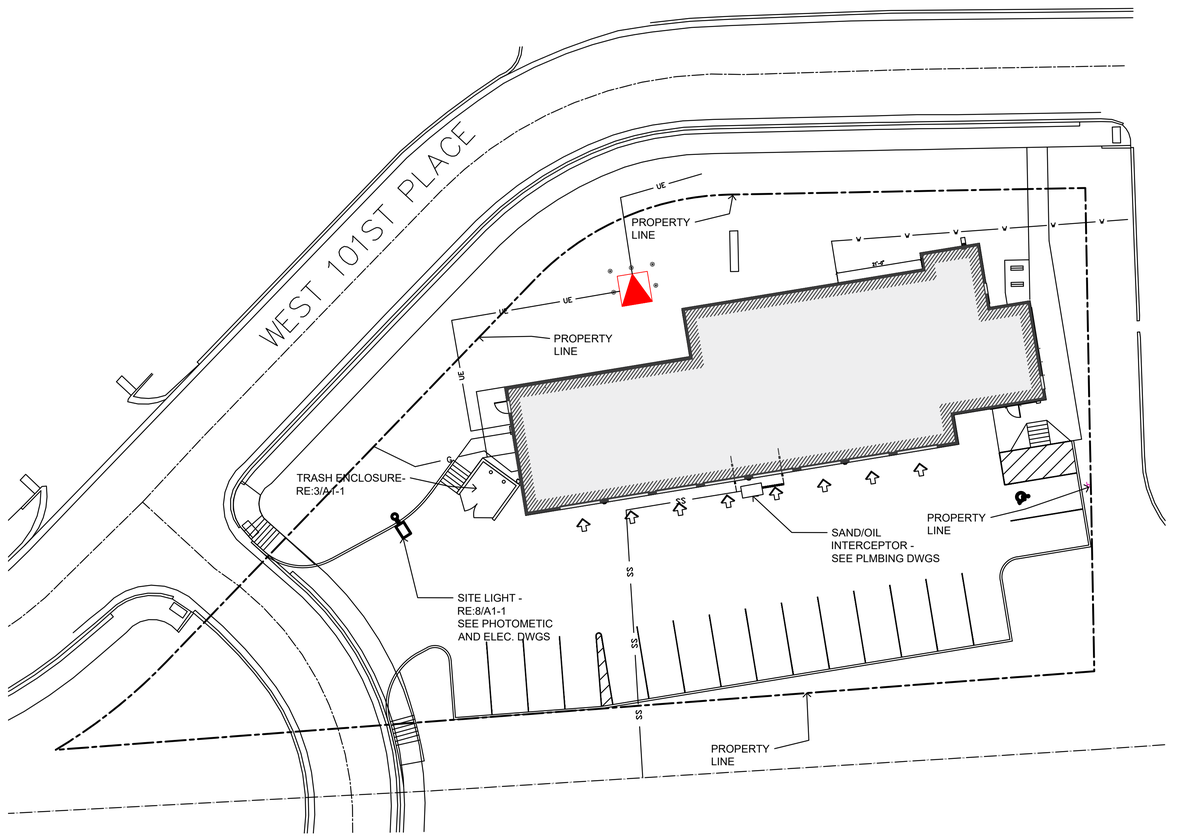
8 / A1-1 SITE LIGHT DETAIL

NO SCALE



3 TRASH ENCLOSURE DETAIL

NO SCALE



NOTE:
SEE CIVIL DWGS FOR ADDITIONAL INFORMATION

N

SITE PLAN

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
HERMAN L. HERRING
No. 2737
Lincoln, Colorado
LICENSED ARCHITECT
7.24.26

ARCHITECT OF RECORD

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	06.18.26	SUBMITTED TO BLDG. DEPT.
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ARCODEV_JOB #: –
CLIENTJOB #: –
DRAWN BY: NLH
CHECKED BY: NLH
DATE OF ISSUE: 04.09.26

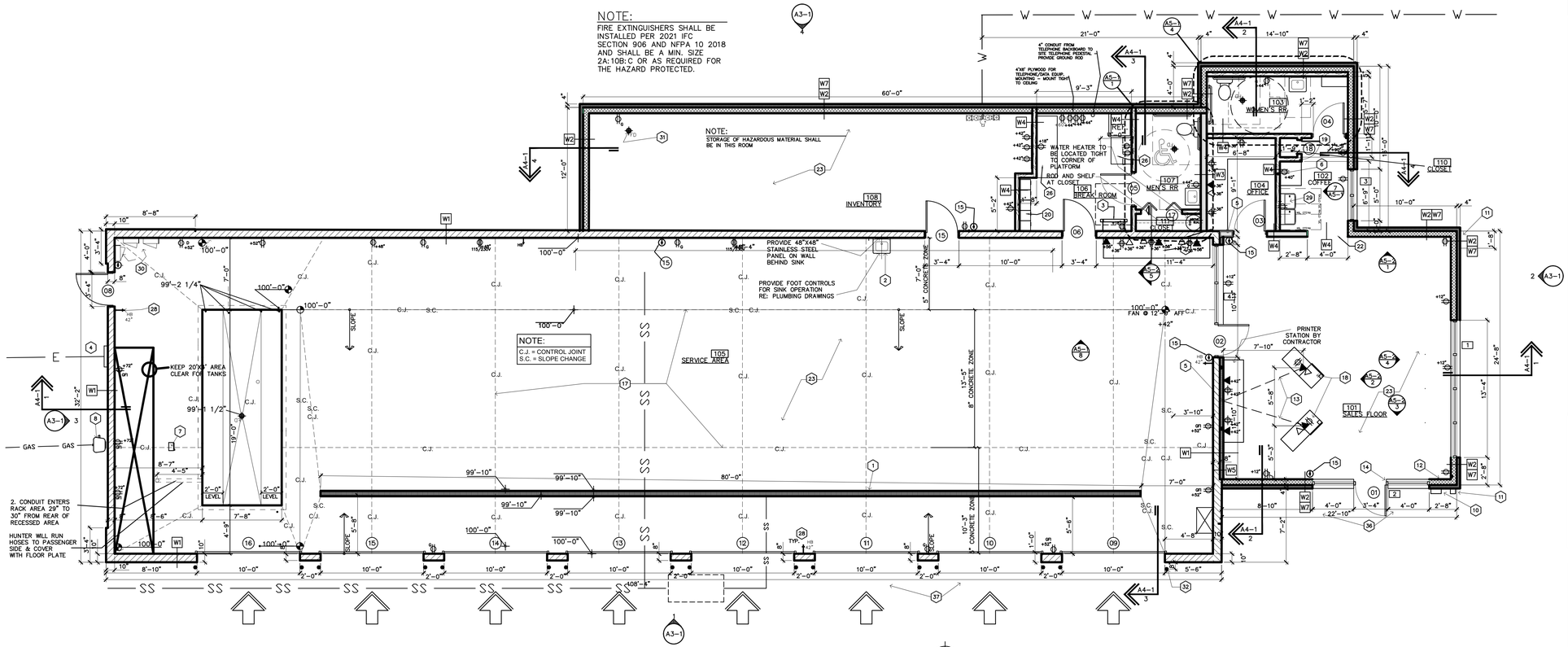
ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

A1-1

SITE PLAN AND DETAILS

NOTE:
FIRE EXTINGUISHERS SHALL BE INSTALLED PER 2021 IFC SECTION 906 AND NFPA 10 2018 AND SHALL BE A MIN. SIZE 2A:10B:C OR AS REQUIRED FOR THE HAZARD PROTECTED.



FLOOR PLAN
3/16" = 1'-0"

NORTH

WALLS ASSEMBLIES:

ID	WALL TYPE / SYMBOL	DESCRIPTION	FIRE RATING	UL LISTING
W1	8" NOM. CONCRETE BLOCK FULL HEIGHT / DECK	NOMINAL (SEE PLAN)X16X8 LIGHT WEIGHT CONCRETE BLOCK. PROVIDE INSULATION BY TAILORED CHEMICAL PRODUCTS (OR EQUAL) HICKORY, N.C. . MIN R COMPOSITE VALUE OF 10.	CORE-FILL	500
W2	NEW WOOD STUD WALL	⅝" GYP BD INTERIOR SIDE OVER 2X6 WOOD STUDS @ 16" O.C. TO ELEVATION NOTED ON DRAWINGS. . USE EXTERIOR SHEATHING ON OUTSIDE SURFACES. PROVIDE MIN. FULL BATT R-19 INSULATION W/ VAPOR BARRIER (#30 KRAFT PAPER OF EQUAL CLASS III VAPOR BARRIER) PROVIDE WATER BARRIER "GREENGUARD MAX BUILDING WRAP. PROVIDE DRAINAGE PER IBC SETICON 1404.2 & INSTALLED PER 1405.	-	-
W3		⅝" GYP BD. EACH SIDE OF 2X6 STUDS TO 10'-0" AFF (EXTEND TO ROOF DECK FOR WALL BETWEEN ROOMS 106 AND 108 - SEE WALL SECTIONS) PROVIDE MOISTURE RESISTANT GYP. BD. AT RESTOOMS) PROVIDE FULL BATT INSULATION.		
W4	NEW WOOD STUD WALL	⅝" GYP BD EACH SIDE OVER 2X4 WOOD STUDS @ O.C. @10'-0" AFF PROVIDE FULL BATT SOUND INSULATION. PROVIDE MOISTURE RESISTANCE GYP. BD. AT RESTROOMS	-	-
W5	NEW FURRING	⅝" GYP BD OVER 2X2 WOOD FURRING STUDS @ 16" O.C. TO 6" ABOVE CEILING. PROVIDE FULL BATT INSULATION IN FURRED CAVITY	-	-
W6	NOT USED	NOT USED	-	-
W6		4"x8"x16" SPLIT FACE BLOCK - SEE ELEVATIONS		

GENERAL WALL CONSTRUCTION NOTES:

PROVIDE SLIP TRACK HEAD RECEPTOR WHERE REQUIRED. ALL WALLS AROUND RESTROOMS TO RECEIVE R-19 BATT INSULATION. ALL RESTROOM CEILINGS TO RECEIVE R-19 BATT INSULATION.

FLOOR PLAN KEYNOTES:

1. 6" WIDE CONTINUOUS PRE-FORMED TRENCH DRAIN. MAX OPENING = ½". SEE PLUMBING DRAWINGS AND DRAIN SPEC.
2. DEEP-BASIN SERVICE SINK. RE: MECHANICAL DRAWINGS. PROVIDE 48" HIGH x 36" WIDE STAINLESS STEEL PANEL ON WALL BEHIND SINK.
3. ROOF LADDER (HATCH ABOVE) - RE: 2/A2-4 - COORDINATE EXACT LOCATION WITH BAR JOIST LOCATIONS.
4. ELECTRICAL ENTRY EQUIPMENT. REFER TO ELECTRICAL DRAWINGS.
5. PROVIDE ELECTRICAL CONDUIT FROM 18" AFF TO ABOVE CEILING AND PENETRATE THROUGH MASONRY WALL TO OFFICE.
6. COLD WATER LINE FOR COFFEE MACHINE. RE: PLUMBING DRAWINGS.
7. PROVIDE DISCONNECT FOR A LIFT AT THIS LOCATION.
8. GAS METER...GAS PIPE SHALL ENTER BLDG. AT 11'-0"AFF.
9. BACK FLOW PREVENTER. SEE CIVIL DRAWINGS. REFER TO PLUMBING DRAWINGS.
10. CONTRACTOR SHALL PROVIDE HALLON FD-2014k DEPOSITORY SAFE LOCK TYPE: DUEL KEY GRAY WITH SALESBURY INDUSTRIES 395 STAND (BLACK).
11. KNOX BOX IS NOT REQUIRED.
12. PROVIDE BACKING AS REQUIRED TO SUPPORT TV MOUNTING BRACKET. COORDINATE WITH OWNER.
13. TWO 1" ELECTRICAL CONDUITS FROM WALL TO EACH KIOSK & SERVICE COUNTER.
14. PROVIDE SIGN AT EXIT "MAXIMUM NUMBER OF OCCUPANTS
15. PROVIDE FIRE EXTINGUISHER AS DIRECTED BY LOCAL FIRE DEPARTMENT
16. NOT USED.
17. CONTROL JOINTS TYP. AS SHOWN BY DASHED LINES
18. KIOSK AND PRINTER CABINET PROVIDED AND INSTALLED BY G.C.
19. PROVIDE ACCESSIBLE SIGNAGE AT RESTROOM AS REQUIRED PER CODE
20. LOCKERS PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.
21. SERVICE COUNTER PROVIDED AND INSTALLED BY G.C.-RE: SHEET A6-2
22. 4'-0" W X 7'-4" H OPENING
23. CONCRETE SLAB - RE: STRUCTURAL DRAWINGS.
24. PROVIDE CONDUIT FOR CONTROLS AND PIPING TO LANDSCAPE MANIFOLD
25. GAS METER.
26. MILLWORK PROVIDED AND INSTALLED BY G.C.
27. NOT USED.
28. HOSE BIB. REFER TO PLUMBING DRAWINGS.
29. ADA COMPLIANT WATER FOUNTAINS
30. ELECTRICAL CIRCUIT PANELS
31. FLOOR DRAIN
32. CONCRETE FILLED 4" DIA. STEEL BOLLARD 36" HIGH - PAINT RED
33. NOT USED
34. NOT USED
35. NOT USED.
36. ACCESSIBLE ENTRY SIDEWALK.
37. PROVIDE 5' WIDE CONC. APRON IN FRONT OF OVERHEAD DOORS (6" DEEP WITH #4'S 16" O.C. EACH WAY IN CENTER OF SLAB)
38. PROVIDE EXIT SIGN AS SHOWN ON DETAIL 10 ON SHEET A4-4 INCLUDING TACTILE REQUIREMENTS.

GENERAL NOTES:

1. PAINT EXPOSED UNFINISHED METALS PER SPECIFICATIONS. COLOR TO MATCH ADJACENT SURFACE IF NOT SPECIFIED.
2. MAKE SURE TO HAVE A MINIMUM OF 6" CONCRETE UNDER HEAVY EQUIPMENT
3. KEEP ALL EXPOSED PLUMBING AND CONDUIT LINES AT LEAST 6" ABOVE F.F.
4. PROVIDE ANCHORS, BOLT AND OTHER NECESSARY FASTENERS AND BLOCKING AS REQUIRED AND ATTACH ACCESSORIES SECURELY TO WALLS AND PARTITIONS IN LOCATIONS AS SHOWN AS REQUIRED
5. PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY LOCAL FIRE MARSHALL. CONTRACTOR IS REQUIRED TO CONTACT FIRE DEPARTMENT FOR FIRE EXTINGUISHER TYPE AND EXACT MOUNTING LOCATIONS.
6. ALL ELECTRICAL DEVICES SHALL BE EXPOSED SURFACE MOUNTED IN SERVICE BAYS. ALL DEVICES IN PUBLIC AREAS SHALL BE CONCEALED IN WALLS.
7. CONVENIENCE POWER IS INDICATED ON THIS DRAWING FOR REFERENCE. PROVIDE POWER PER EQUIPMENT AND ALL ASSEMBLIES NOTED AS WELL.
8. FOLLOW ALL RECOMMENDATIONS OF THE SOILS REPORT. OLSSON (719-338-7589), PROJECT #025-07660, DATED MARCH 2026.
9. N/A
10. ALL DIMENSIONS OF FACE OF STUDS AND FACE OF CMU BLOCKS

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. HERRADA
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26

ARCHITECT OF RECORD

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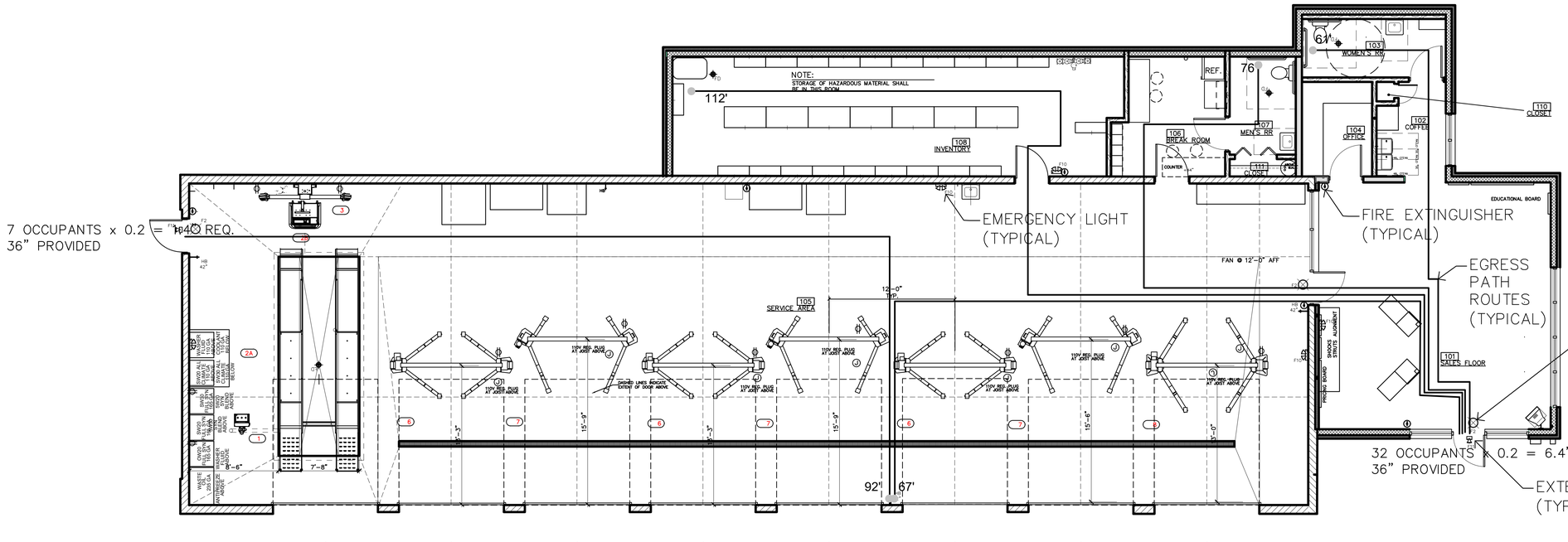
DRAWN BY: NLH
CHECKED BY: NLH
DATE OF ISSUE: 04.09.26

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET
A2-1
FLOOR PLAN



LIFE SAFETY PLAN

3/16" = 1'-0"

NORTH

WALLS ASSEMBLIES:				
ID	WALL TYPE / SYMBOL	DESCRIPTION	FIRE RATING	UL LISTING
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W2	NEW WOOD STUD WALL	⅝" GYP BD INTERIOR SIDE OVER 2X6 WOOD STUDS @ 16" O.C. TO ELEVATION NOTED ON DRAWINGS. . USE EXTERIOR SHEATHING ON OUTSIDE SURFACES. PROVIDE MIN. FULL BATT R-19 INSULATION W/ VAPOR BARRIER (#30 KRAFT PAPER OF EQUAL CLASS III VAPOR BARRIER) PROVIDE WATER BARRIER "GREENGUARD MAX BUILDING WRAP. PROVIDE DRAINAGE PER IBC SETICON 1404.2 & INSTALLED PER 1405.	–	–
W3		⅝" GYP BD. EACH SIDE OF 2X6 STUDS TO 10'-0" AFF (EXTEND TO ROOF DECK FOR WALL BETWEEN ROOMS 106 AND 108 – SEE WALL SECTIONS) PROVIDE MOISTURE RESISTANT GYP. BD. AT RESTOOMS) PROVIDE FULL BATT INSULATION.		
W4	NEW WOOD STUD WALL	⅝" GYP BD EACH SIDE OVER 2X4 WOOD STUDS @ O.C. @10'-0" AFF PROVIDE FULL BATT SOUND INSULATION. PROVIDE MOISTURE RESISTANCE GYP. BD. AT RESTROOMS	–	–
W5	NEW FURRING	⅝" GYP BD OVER 2X2 WOOD FURRING STUDS @ 16" O.C. TO 6" ABOVE CEILING. PROVIDE FULL BATT INSULATION IN FURRED CAVITY	–	–
W6	NOT USED	NOT USED	–	–
W6		4"x8"x16" SPLIT FACE BLOCK – SEE ELEVATIONS		
GENERAL WALL CONSTRUCTION NOTES:				
PROVIDE SLIP TRACK HEAD RECEPTOR WHERE REQUIRED. ALL WALLS AROUND RESTROOMS TO RECEIVE R-19 BATT INSULATION. ALL RESTROOM CEILINGS TO RECEIVE R-19 BATT INSULATION.				

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L HERRMAN
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26

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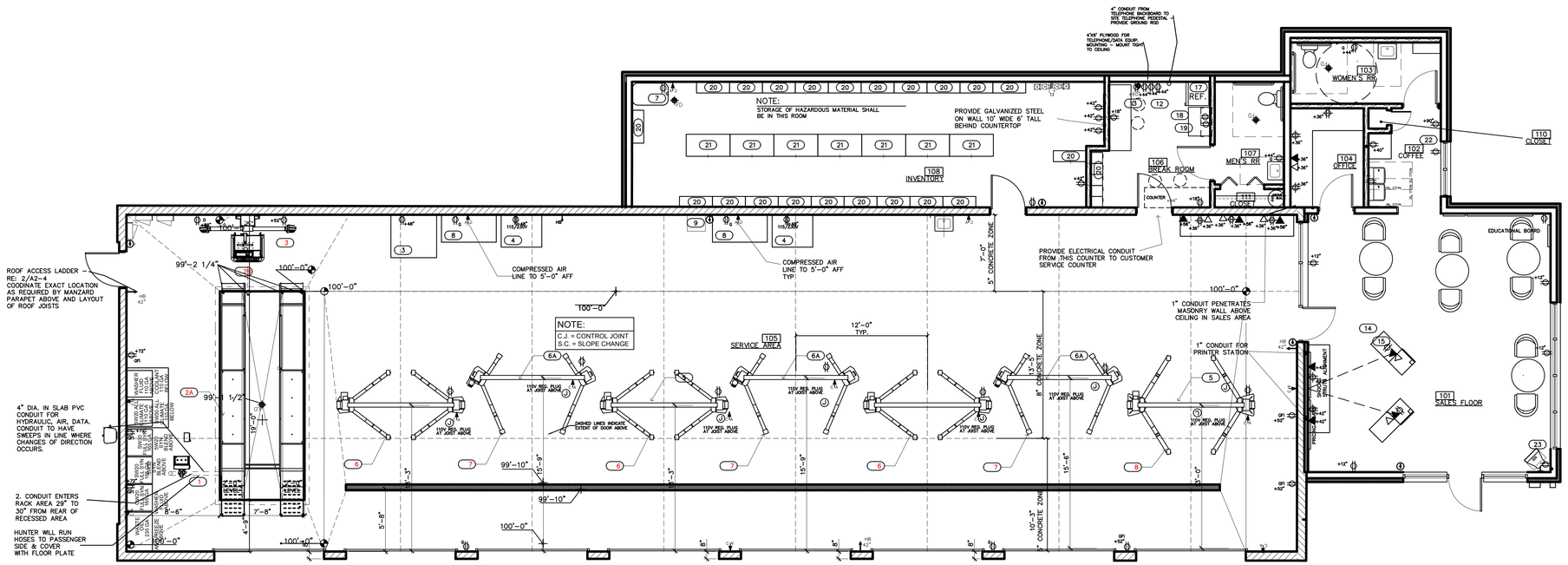
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

A2-1b

LIFE SAFETY PLAN



EQUIPMENT PLAN
3/16" = 1'-0"

NORTH

GENERAL NOTES:

1. VERIFY ALL EQUIPMENT LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
2. COORDINATE INSTALLATION OF EQUIPMENT ITEMS SUPPLIED BY OWNER.
3. TELEPHONE SYSTEM PROVIDED BY VENDORS. COORDINATE SCHEDULE WITH GENERAL CONTRACTOR.

ELECTRICAL LEGEND:

- DUPLEX OUTLET
- GFI DUPLEX OUTLET
- AUTOCLAVE RECEPTACLE
- FOUR-PLEX OUTLET
- 220-VOLT OUTLET
- FLOOR OUTLET
- TELEPHONE JACK
- TELEPHONE JACK +60"
- DATA JACK
- PLUGMODE
- ABOVE COUNTER
- LIGHT SWITCH @ 56" AFF
- THREE-WAY LIGHT SWITCH @56' AFF
- TELEPHONE BACKBOARD W/ OUTLET
- ELECTRICAL PANEL
- TIME CLOCK
- CABLE TV CONNECTION
- JUNCTION BOX
- THERMOSTAT

VERIFY ELECTRICAL REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION

EQUIPMENT SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LENGTH	DEPTH	HEIGHT	HP	VOLTAGE	AMPS	PHASE	NOTES
1	ALIGNMENT RACK	HUNTER	RX-12-XL-PS	19'-2"	7'-4 1/2"	–	–	208-230	22A	1	DEDICATED CIRCUIT
2A	ALIGNMENT MACHINE	HUNTER	SB11	36"	29"-7 1/2"	64 1/2"	–	120	15A	1	DEDICATED CIRCUIT
2B	ALIGNMENT SENSORS	HUNTER	DSP600	11'-7"	14"	103"	–	120	15A	1	DEDICATED CIRCUIT
3	WHEEL BALANCER	HUNTER	DSP7701	36 3/4"	23 1/2"	42 1/4"	1	110	10A	1	DEDICATED CIRCUIT
4	BRAKE LATHE	HUNTER	BL500	44 1/2"	35 1/2"	–	1	115/230	15A/7.5A	1	DEDICATED CIRCUIT
5	ABOVE-GROUND 10k TWIN POST LIFT	ROTARY	SP010	–	–	–	2	208/230	25A	1	DEDICATED CIRCUIT
6A	ABOVE-GROUND 10K TWIN POST LIFT	ROTARY	SP0A10	–	–	–	2	208/230	25A	1	DEDICATED CIRCUIT
6B	ABOVE-GROUND 12K TWIN POST LIFT	ROTARY	SP0A12	–	–	–	2	208/230	25A	1	DEDICATED CIRCUIT
7	AIR COMPRESSOR	KAISER	AIRPOWER 5C	24"	39"	58"	–	208/230	–	3	DEDICATED CIRCUIT
8	WORK BENCH	SHURE	811102	73 1/2"	34 1/2"	–	–	–	–	–	–
9	STRUT COMPRESSOR	BRANICK	7200	20"	18"	–	–	–	–	–	–
10	NEW OIL TANK	VALVOLINE	–	60"	34.5"	36"	–	–	–	–	–
11	USED OIL TANK	VALVOLINE	–	60"	34.5"	36"	–	–	–	–	–
12	TELEPHONE SYSTEM	–	–	–	–	–	–	–	–	–	–
13	BURGLER ALARM	ALARM ASSOCIATES	–	–	–	–	–	–	–	–	MOUNTED ON PHONE BOARD
14	COMPUTER SYSTEM	–	–	–	–	–	–	–	–	–	–
15	CREDIT CARD PROCESSOR	WELLS FARGO	–	–	–	–	–	–	–	–	MOUNTED ON SALES COUNTER
16	OVERHEAD OIL REELS	GRACO	–	–	–	–	–	–	–	–	MOUNTED FROM BAR JOISTS 23' INSIDE OVERHEAD
17	REFRIGERATOR	GE	–	–	–	–	–	120	–	–	MOUNTED UNDER LUNCH COUNTER
18	COFFEE POT	–	–	–	–	–	–	120	–	–	–
19	MICROWAVE	–	–	–	–	–	–	120	–	–	MOUNTED ON LUNCH COUNTER
20	WAREHOUSE RACKING	LYNCH MATERIAL	–	36"	12"	72"	–	–	–	–	–
21	WAREHOUSE RACKING	LYNCH MATERIAL	–	48"	24"	84"	–	–	–	–	–
22	COFFEE UNIT	–	–	–	–	–	–	120	–	–	–
23	TV	PANASONIC	–	–	–	–	–	120	–	–	–

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
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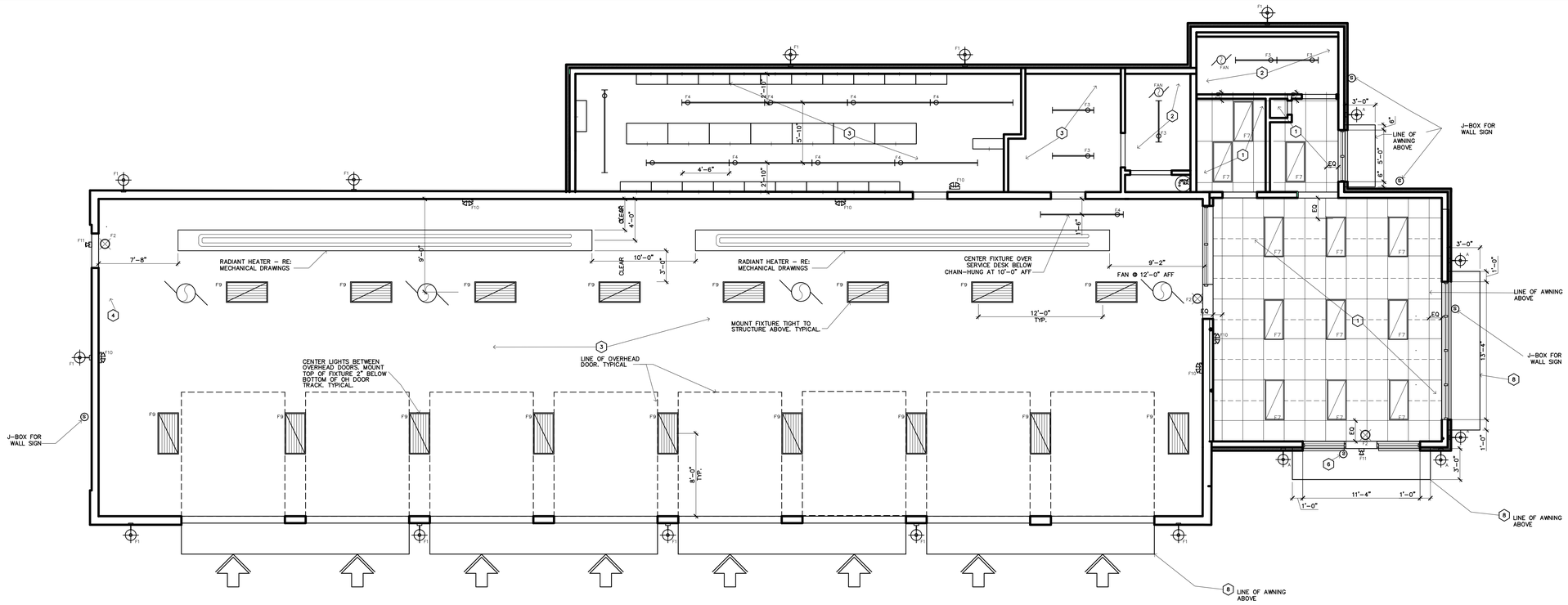
VOICE: 303.881-8925

SHEET
A2-2
EQUIPTMENT PLAN



CEILING PLAN
1/4"=1'-0"

NORTH

LIGHT FIXTURE SCHEDULE
ALL FIXTURES FURNISHED AND INSTALLED BY GENERAL CONTRACTOR

SYMBOL	MARK	QUANTITY	DESCRIPTION	MANUF.	CAT. NO.	LAMP	MOUNTING	VOLTAGE	REMARKS
	A	4	EXTERIOR DECORATIVE LIGHT FIXTURE	COOPER LIGHTING	303-W1-LEDB2-3000-UNV-T4-DIM10	16W LED	WALL	120	REFER TO ELEVATIONS FOR MOUNTING LOCATIONS
	F1	10	EXTERIOR DECORATIVE LIGHT FIXTURE	MCGRAW EDISON	IST-SA1F-730-U-T4FT	25W LED	WALL	120	
	F2	3	EXIT SIGN	COOPER LIGHTING	APC7 G	LED	WALL/CENTER ON DOOR	120	PROVIDE EMERGENCY BATTERY PACK (90 MINUTE MIN.)
	F3	3	4'-0" STRIP LED	COOPER LIGHTING	4SNLED LD5 UNV	38W LED	UNIVERSAL	120	MOUNT AT 12'-0" AFF
	F4	11	8'-0" STRIP LED	COOPER LIGHTING	8TSNLED LD5 UNV	61W LED	UNIVERSAL	120	MOUNT AT 12'-0" AFF
	F7	12	2x4 RECESSED LED TROFFER	COOPER LIGHTING	24CGT 4540C	39W LED	GRID MOUNT	120	
	F9	17	4' – LED HIGHBAY	COOPER LIGHTING	LHB 18 UNV	87W LED	HUNG FROM STRUCT.	120	
	F10	6	EMERGENCY LIGHT W/ BATTERY BACKUP	COOPER LIGHTING	SEL 25	LED	WALL MOUNTED	120	PROVIDE EMERGENCY BATTERY PACK (90 MINUTE MIN.) AND TIME DELAY RELAY
	F11	2	EMERGENCY EGRESS LIGHT – EXTERIOR	COOPER LIGHTING	AEL 246	LED	SURFACE	120	PROVIDE EMERGENCY BATTERY PACK (90 MINUTE MIN.)

CEILING PLAN KEYNOTES:

1. 2x4 ACOUSTICAL TILE CEILING GRID @ 11'–0" WITH ARMSTRONG "DUNE – FINE FISURED SECOND LOOK I" CEILING TILES. RE: ROOM FINISH SCHEDULE.
2. GYP BD CEILING OVER WOOD STUD FRAMING. PAINT. RE: ROOM FINISH SCHEDULE
3. OPEN TO STRUCTURE ABOVE. PAINT. RE: ROOM FINISH SCHEDULE
4. ROOF LADDER AND HATCH ABOVE– COORINATE EXACT LOCATION WITH ROOF FRAMING.
5. NOT USED.
6. JUNCTION BOX FOR EXTERIOR WALL SIGNS
7. NOT USED
8. LINE OF METAL AWNING
9. CENTER LIGHT FIXTURE IN ROOM
10. NA.
11. NA.
12. CENTER LIGHT FIXTURES BETWEEN OVERHEAD DOOR. MOUNT BOTTOM OF FIXTURE 2" BELOW BOTTOM OF OVERHEAD DOOR TRACK. TYPICAL
13. LINE OF OVERHEAD DOOR
14. MOUNT FIXTURES TIGHT TO STRUCTURE ABOVE. TYPICAL
15. CENTER FIXTURE OVER SERVICE DESK BELOW
16. DECK MOUNTED WATER HEATER. RE: PLUMBING DRAWINGS.

BRAKES PLUS

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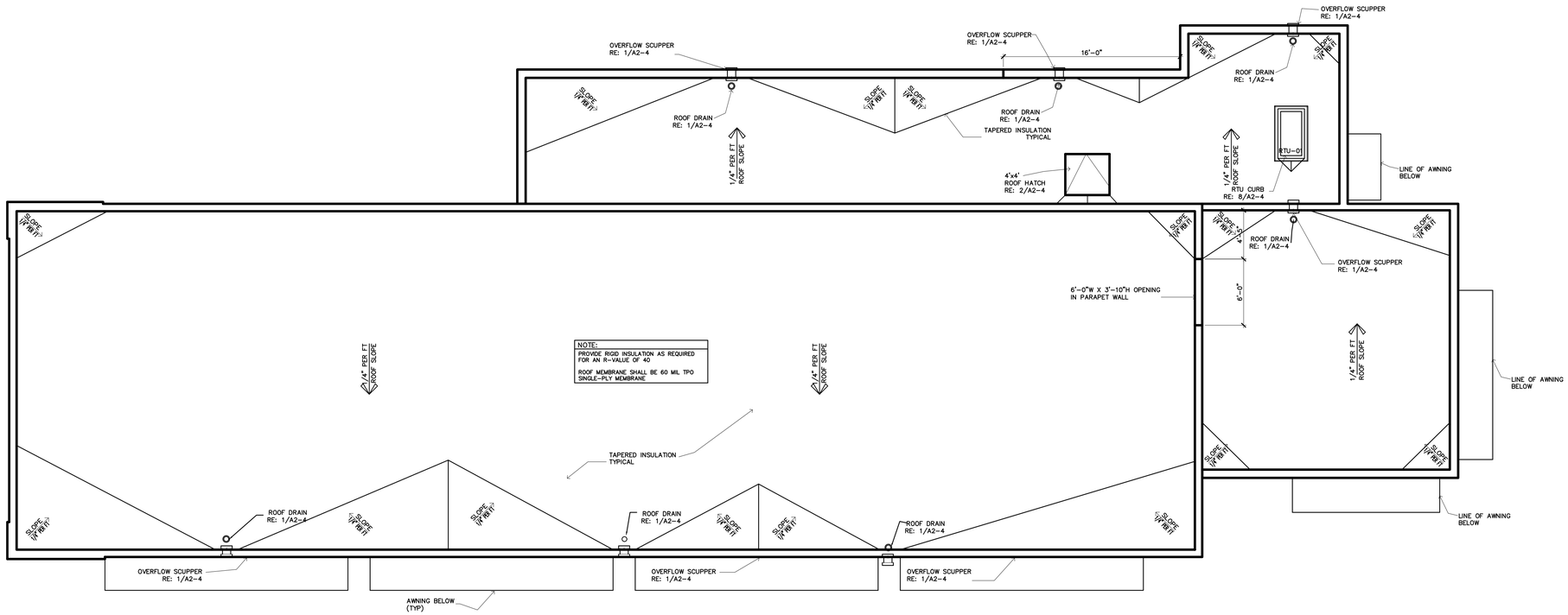
SHEET

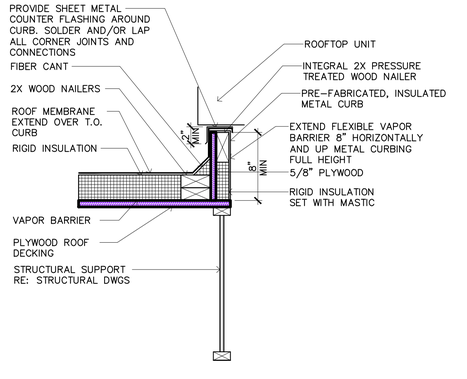
A2-3

REFLECTED CEILING PLAN

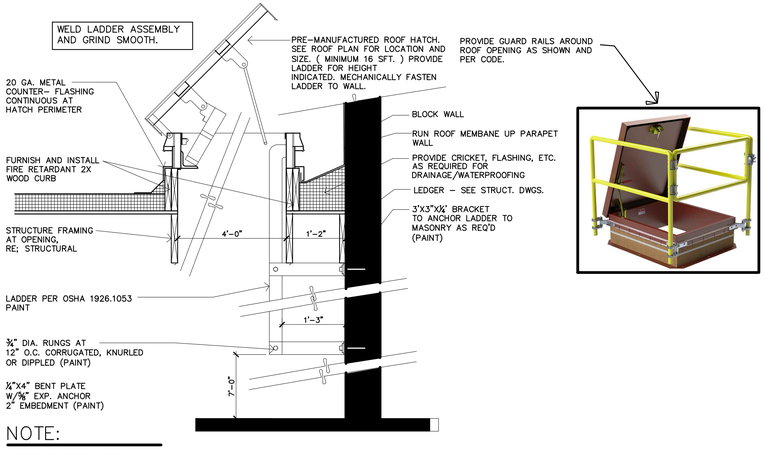


ROOF PLAN
1/4"=1'-0"

NORTH

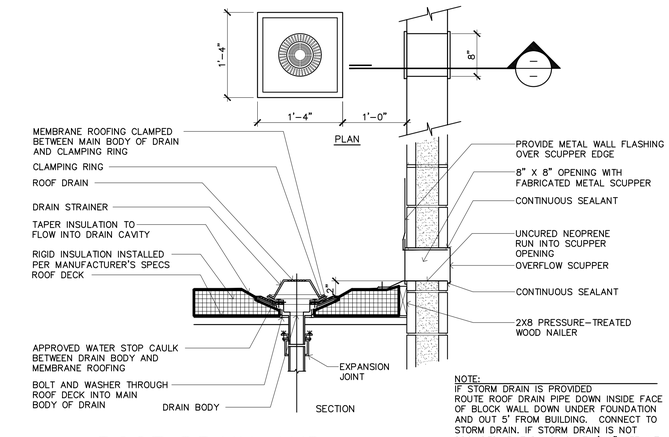


8 HVAC UNIT CURB DETAIL
1 1/2" = 1'-0"



NOTE:
LADDER SHALL BE 18" WIDE

2 ROOF HATCH DETAIL
3/4' = 1'-0"



NOTE:
IF STORM DRAIN IS PROVIDED ROUTE ROOF DRAIN PIPE DOWN INSIDE FACE OF BLOCK WALL DOWN UNDER FOUNDATION AND OUT 5' FROM BUILDING. CONNECT TO STORM DRAIN. IF STORM DRAIN IS NOT PROVIDED, EXIT BUILDING AT 1'-0" AFF WITH LAMB'S TOOTH SPOUT.

1 ROOF DRAIN AND OVERFLOW SCUPPER DETAIL
1 1/2" = 1'-0"

BRAKES PLUS

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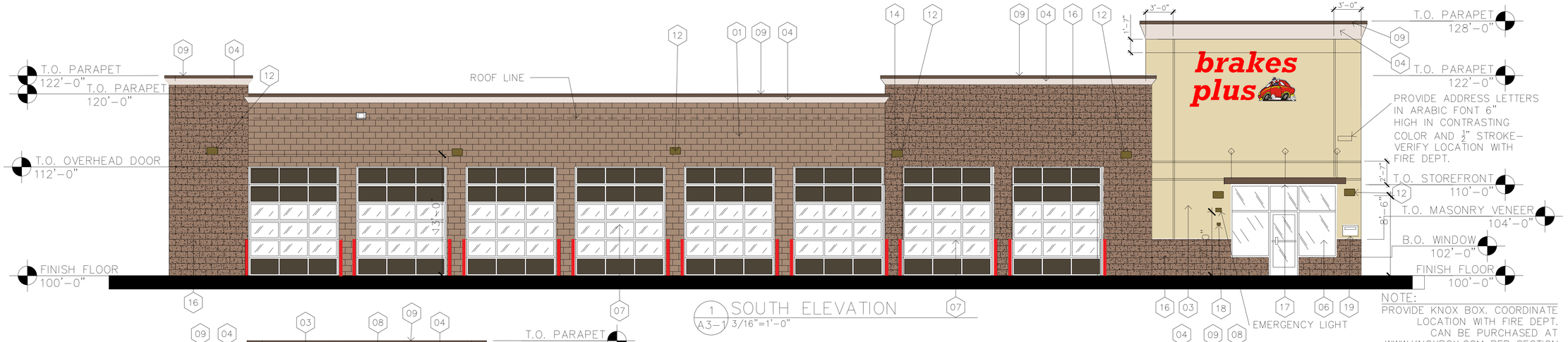
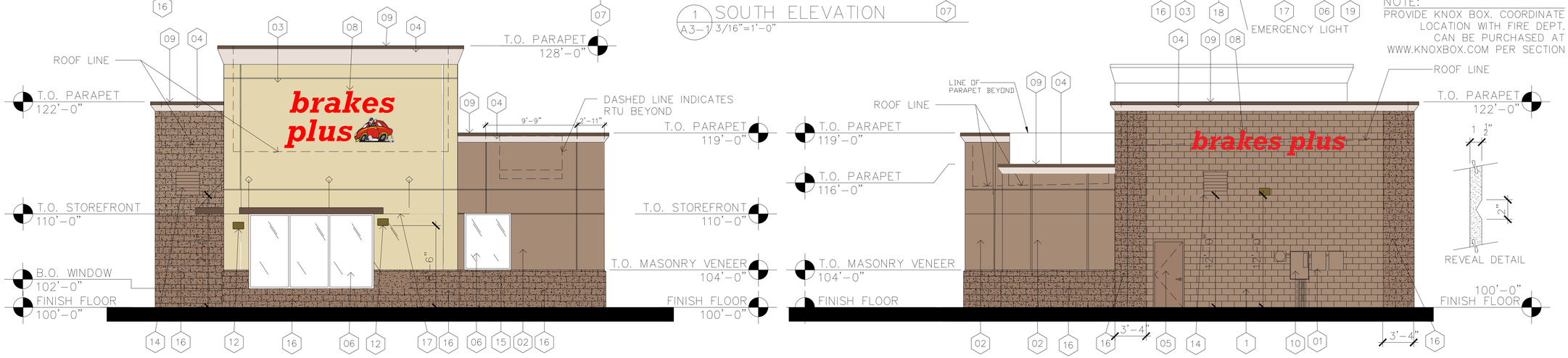
SHEET
A2-4
ROOF PLAN



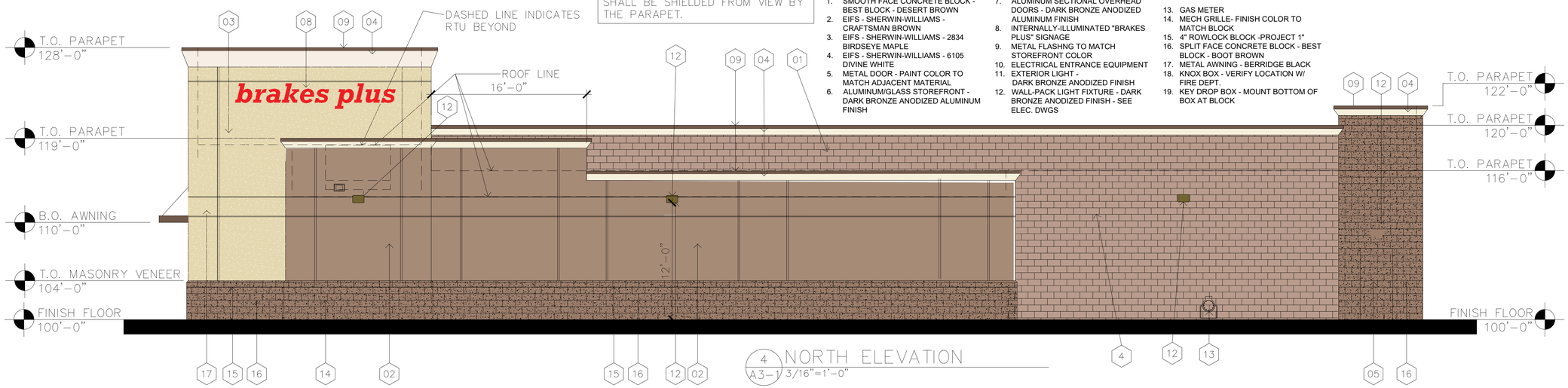
1 SOUTH ELEVATION
A3-1 3/16"=1'-0"



2 EAST ELEVATION
A3-1 3/16"=1'-0"

3 WEST ELEVATION
A3-1 3/16"=1'-0"

NOTE:
ALL ROOF TOP MOUNTED EQUIPMENT SHALL BE SHIELDED FROM VIEW BY THE PARAPET.



4 NORTH ELEVATION
A3-1 3/16"=1'-0"

KEY NOTES:

1. SMOOTH FACE CONCRETE BLOCK - BEST BLOCK - DESERT BROWN
2. EIFS - SHERWIN-WILLIAMS - CRAFTSMAN BROWN
3. EIFS - SHERWIN-WILLIAMS - 2834 BIRDSEYE MAPLE
4. EIFS - SHERWIN-WILLIAMS - 6105 DIVINE WHITE
5. METAL DOOR - PAINT COLOR TO MATCH ADJACENT MATERIAL
6. ALUMINUM/GLASS STOREFRONT - DARK BRONZE ANODIZED ALUMINUM FINISH
7. ALUMINUM SECTIONAL OVERHEAD DOORS - DARK BRONZE ANODIZED ALUMINUM FINISH
8. INTERNALLY-ILLUMINATED "BRAKES PLUS" SIGNAGE
9. METAL FLASHNG TO MATCH STOREFRONT COLOR
10. ELECTRICAL ENTRANCE EQUIPMENT
11. EXTERIOR LIGHT - DARK BRONZE ANODIZED FINISH
12. WALL-PACK LIGHT FIXTURE - DARK BRONZE ANODIZED FINISH - SEE ELEC. DWGS
13. GAS METER
14. MECH GRILLE- FINISH COLOR TO MATCH BLOCK
15. 4" ROWLOCK BLOCK -PROJECT 1"
16. SPLIT FACE CONCRETE BLOCK - BEST BLOCK - BOOT BROWN
17. METAL AWNING - BERRIDGE BLACK
18. KNOX BOX - VERIFY LOCATION W/ FIRE DEPT.
19. KEY DROP BOX - MOUNT BOTTOM OF BOX AT BLOCK

BRAKES PLUS

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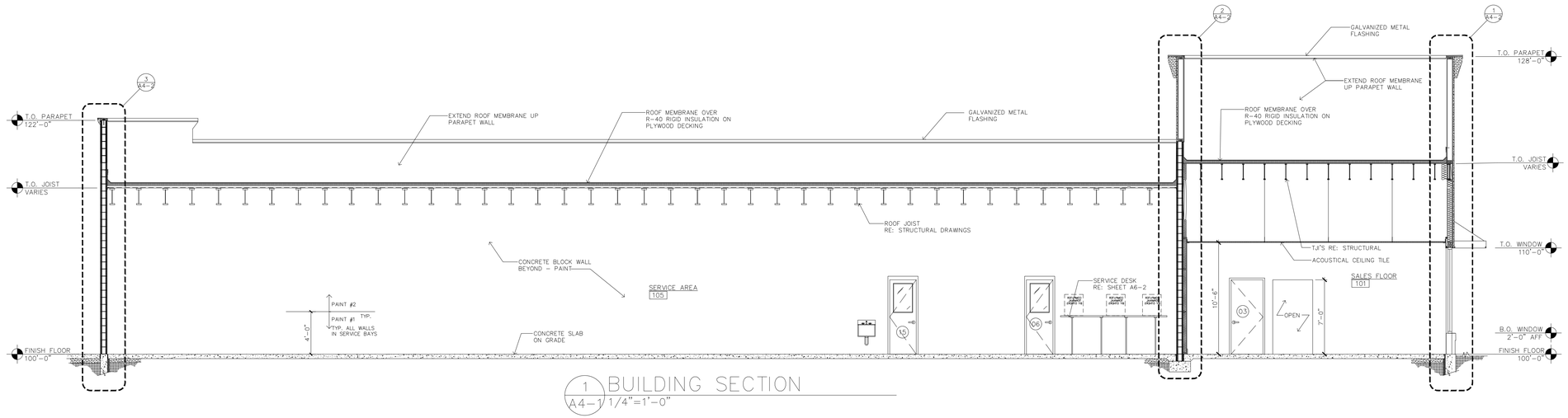
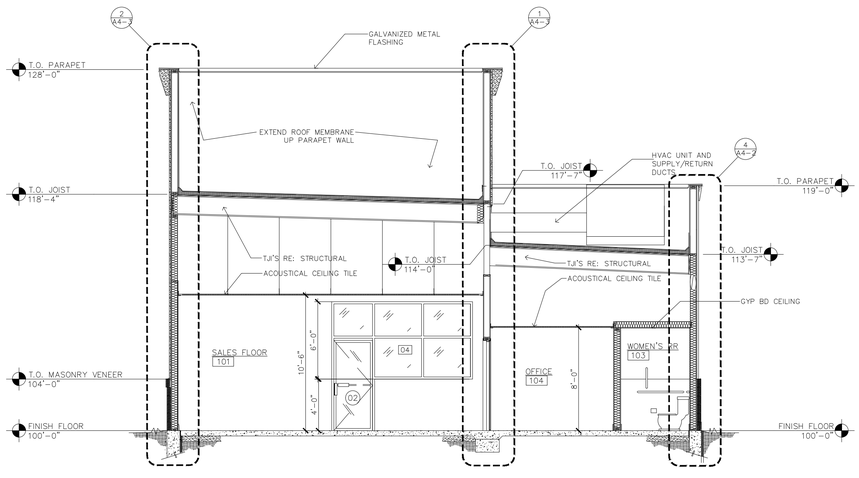
A3-1

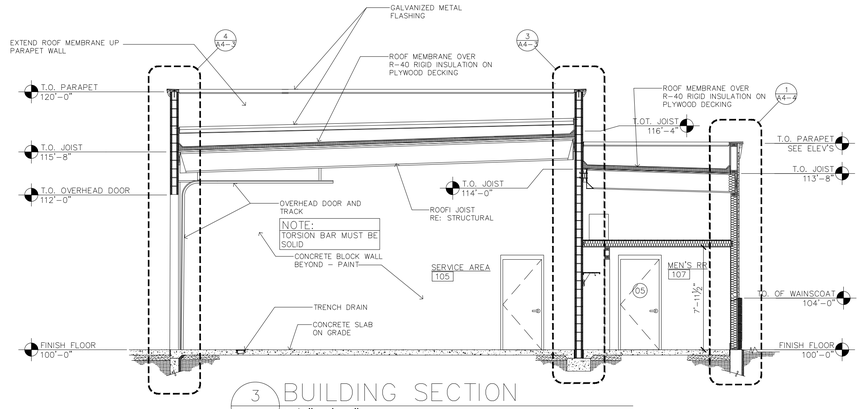
EXTERIOR ELEVATIONS



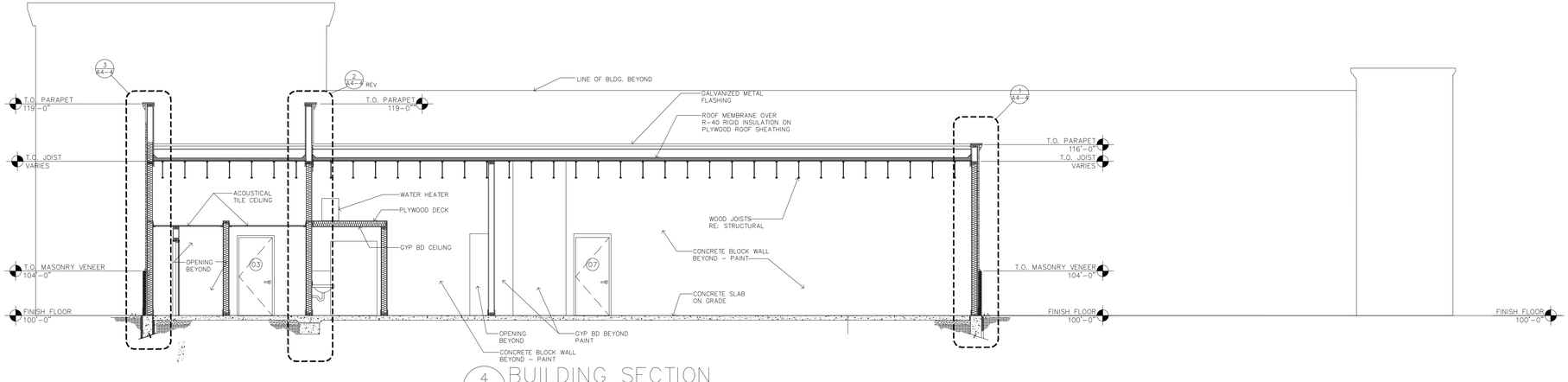
1 A4-1 BUILDING SECTION
1/4"=1'-0"



2 A4-1 BUILDING SECTION
1/4"=1'-0"



3 A4-1 BUILDING SECTION
1/4"=1'-0"



4 A4-1 BUILDING SECTION
1/4"=1'-0"

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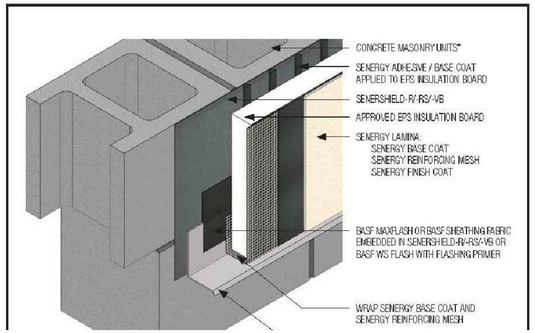
A4-1

BUILDING SECTIONS

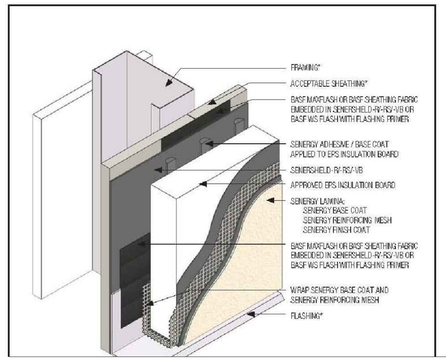
Channeled Adhesive CI Design

TYPICAL APPLICATION OVER CMU



- Install BASF materials in accordance with current installation instructions.
- Unsatisfactory conditions shall be reported to the General Contractor and corrected before the application of BASF products.
- Verify all materials are installed in accordance with current installation instructions.
- All terminations must be fully encapsulated with mesh reinforced base coat.
- Ensure a means for drainage is provided at system termination.

TYPICAL APPLICATION



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- Verify all materials are installed in accordance with current installation instructions.
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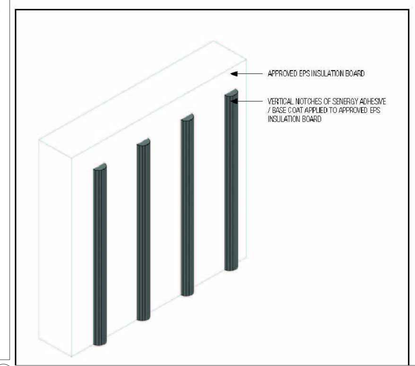
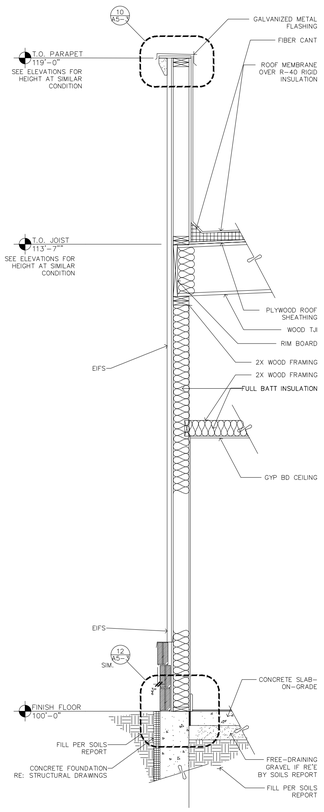
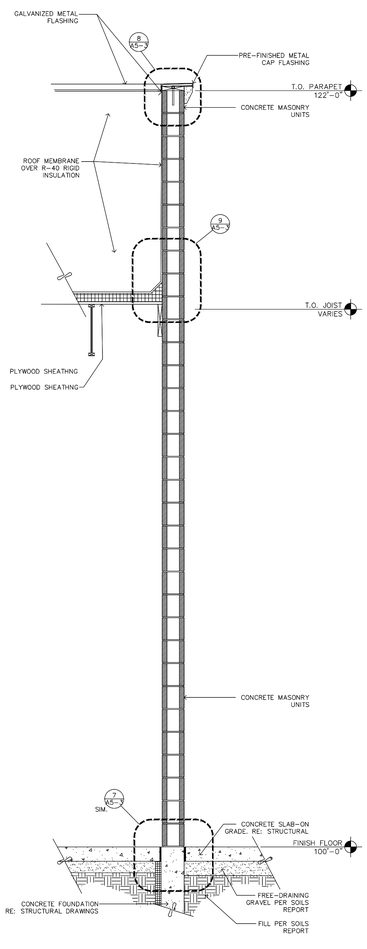
TYPICAL CHANNELED ADHESIVE



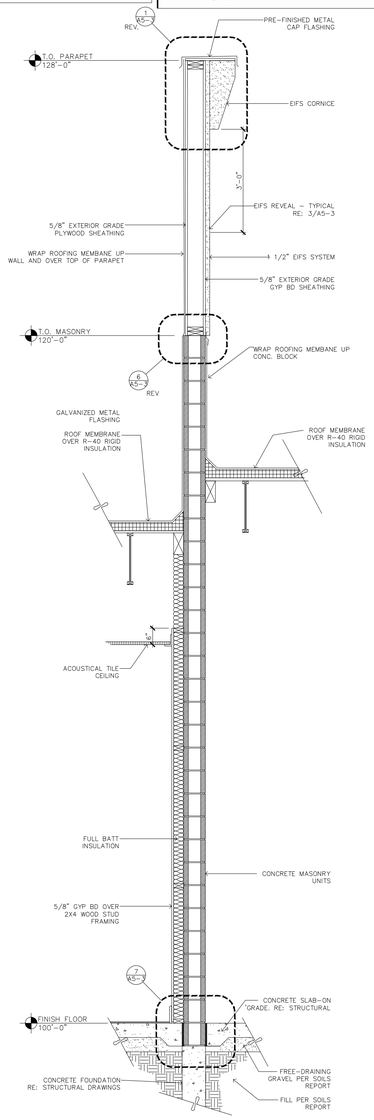
- Install BASF materials in accordance with current installation instructions.
- Unsatisfactory conditions shall be reported to the General Contractor and corrected before the application of BASF products.
- Verify all materials are installed in accordance with current installation instructions.
- Apply mixed base coat to entire surface of insulation board using a stainless steel trowel with 1/2" x 1/2" (13 mm x 13 mm) notches spaced 2" (50 mm) apart. Ribbons of adhesive must be applied parallel to the 2' (610 mm) dimension of the EPS insulation board to ensure they are vertical when the EPS insulation board is applied to the substrate.
- Set EPS insulation board into place and apply pressure over entire surface of board to ensure positive uniform contact and high initial grab. Do not slide board into place.



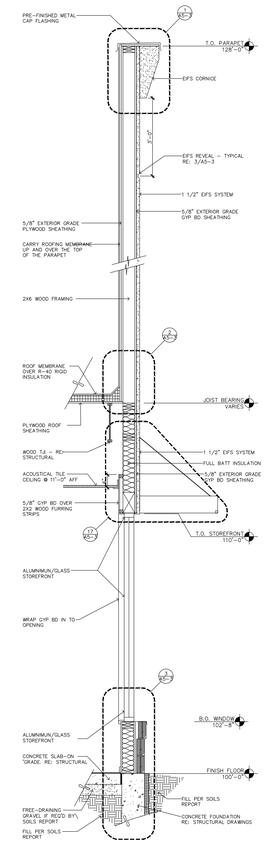
4 A4-2 WALL SECTION
1/2"=1'-0"



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



2 A4-2 WALL SECTION
1/2"=1'-0"



1 A4-2 WALL SECTION
1/2"=1'-0"

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. REBROOK
No. 2737
Littleton, Colorado
REGISTERED ARCHITECT
7.24.26

ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.18.26	SUBMITTED TO BLDG. DEPT.
	07.24.26	ISSUED FOR CONSTRUCTION

ARCODEV JOB #: –
CLIENTJOB #: –
DRAWN BY: NLH
CHECKED BY: NLH
DATE OF ISSUE: 04.09.26

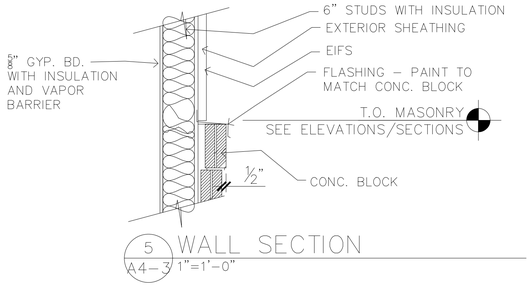
ARCODEV

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

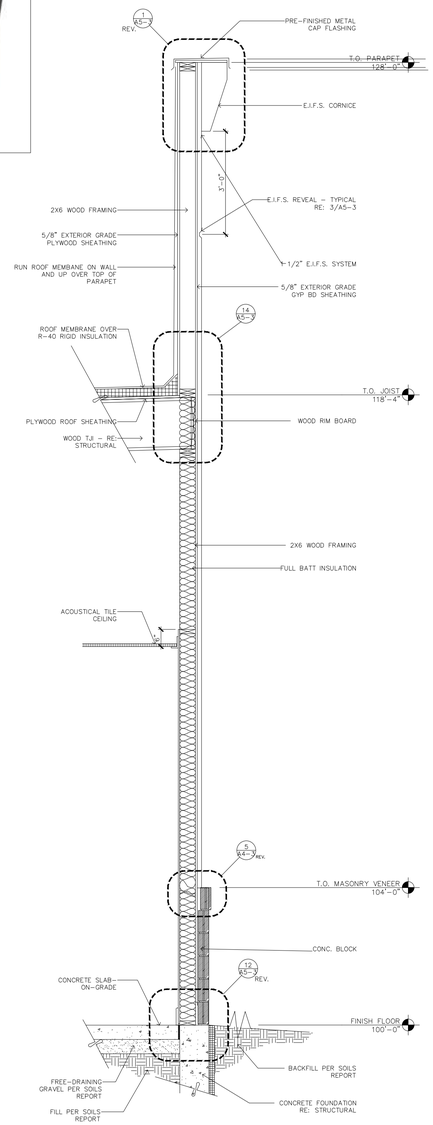
SHEET

A4-2

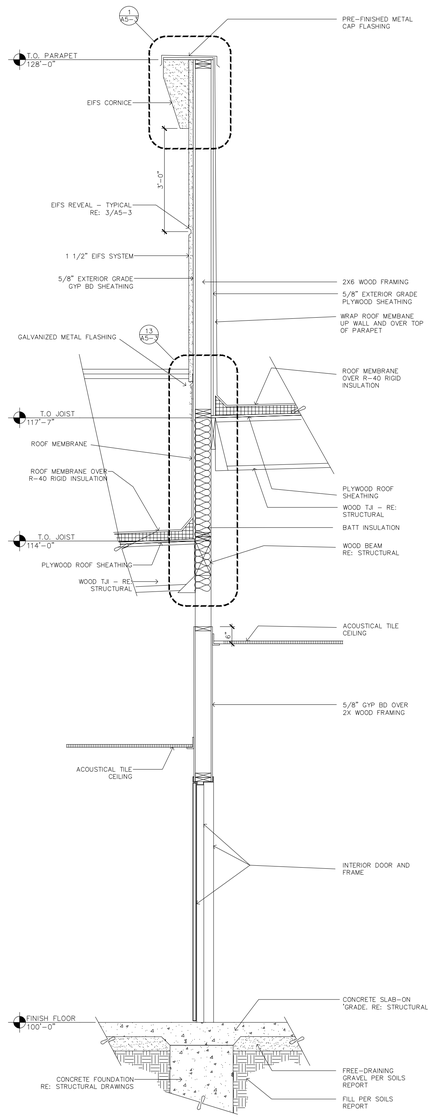
WALL SECTIONS



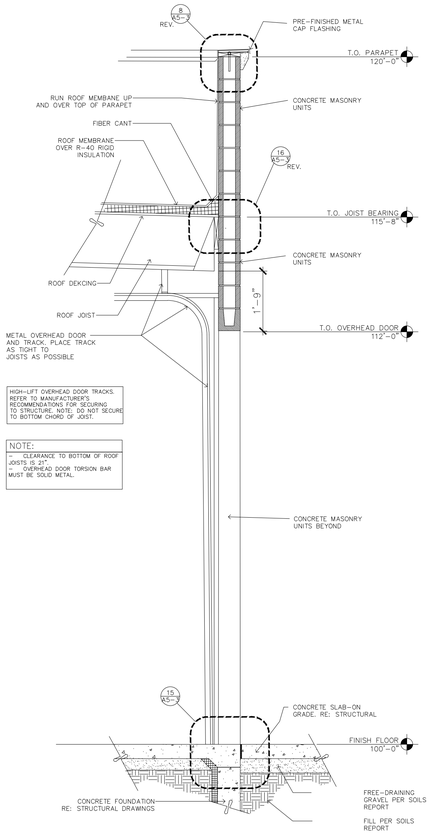
5 A4–3 WALL SECTION 1"=1'-0"



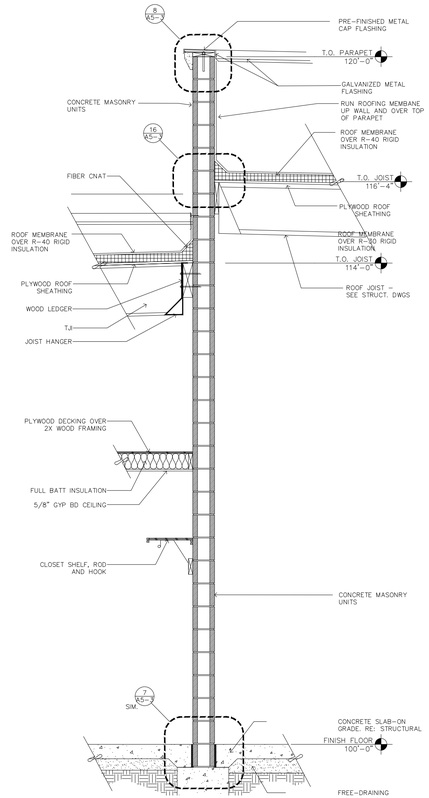
2 A4–3 WALL SECTION 1/2"=1'-0"



1 A4–3 WALL SECTION 1/2"=1'-0"



4 A4–3 WALL SECTION 1/2"=1'-0"



3 A4–3 WALL SECTION 1/2"=1'-0"

BRAKES PLUS
APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. REBSAMEN
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26
ARCHITECT OF RECORD

ARCODEV

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

REVISION	DATE	COMMENTS
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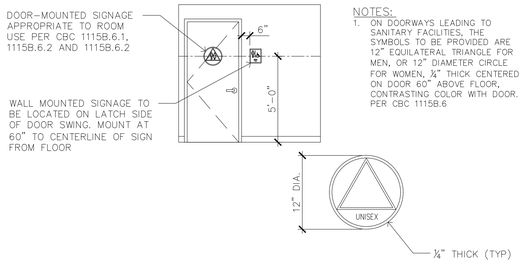
DRAWN BY: NLH
CHECKED BY: NLH
DATE OF ISSUE: 04.09.26

SHEET
A4-3

WALL SECTIONS

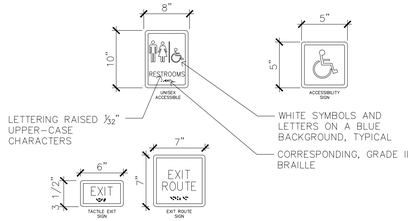


NOTES:

1. ON DOORWAYS LEADING TO SANITARY FACILITIES, THE SYMBOLS TO BE PROVIDED ARE 12" EQUILATERAL TRIANGLE FOR MEN, OR 12" DIAMETER CIRCLE FOR WOMEN, ¼" THICK CENTERED ON DOOR 60" ABOVE FLOOR, CONTRASTING COLOR WITH DOOR. PER CBC 1115B.6

NOTES:

1. H.C. SIGNS PER ADA
2. ALL LETTERS AND SYMBOLS SHALL BE RAISED 1/32"
3. 12" DIAMETER CIRCLE, 1/4" THICK WITH THE COLOR AND CONTRAST BEING DISTINCTLY DIFFERENT FROM THE COLOR OF THE DOOR
4. INTERNATIONAL SIGN OF ACCESSIBILITY, WHITE FIGURE ON BLUE (#15090 FEDERAL STANDARD 595A) BACKGROUND
5. SIGN SHALL BE DISPLAYED AT 60" A.F.F., CENTERED ON THE DOOR, COLOR AND CONTRAST SHALL BE DISTINCTLY DIFFERENT FROM COLOR AND CONTRAST OF THE DOOR TYP. FOR MEN'S AND WOMEN'S SIGNS
6. EDGES OF SIGNS SHALL BE ROUNDED, CHAMFERED OR EASED AND CORNERS OF SIGNS SHSALL HAVE A MINIMUM RADIUS OF ¼"
7. 12" EQUILATERAL TRIANGLE, 1/4" THICK WITH THE VERTEX POINTING UPWARD AND THE COLOR AND CONTRAST BEING DISTINCTLY DIFFERENT FROM THE COLOR OF THE DOOR
8. LETTERS AND NUMERALS ON SIGNS ARE RAISED 1/32", SANS SERIF UPPERCASE CHARACTERS TO BE ACCOMPANIED BY GRADE 2 BRAILLE.
9. BRAILLE DOTS ARE 1/10" ON CENTER IN EACH CELL WITH 2/10" SPACE BETWEEN CELLS
10. BRAILLE DOTS ARE RAISED A MINIMUM OF 1/40" ABOVE THE BACKGROUND
11. MOUNTING HEIGHT IS 60" FROM FINISH FLOOR TO THE CENTERLINE OF THE SIGN

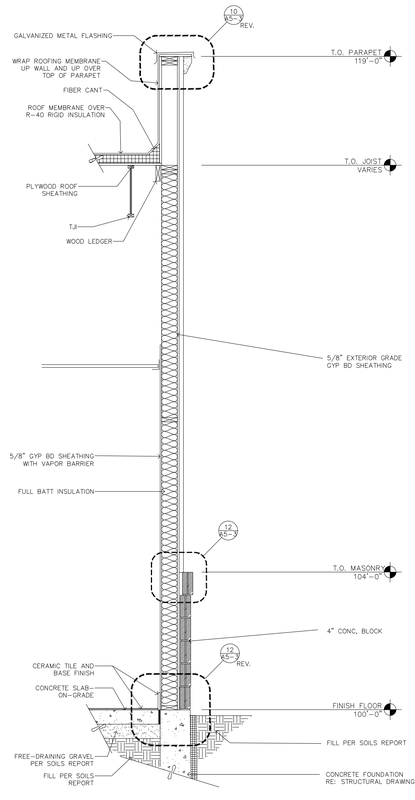


NOTE
PROVIDE SIGNAGE AT RESTROOMS AND EXITS

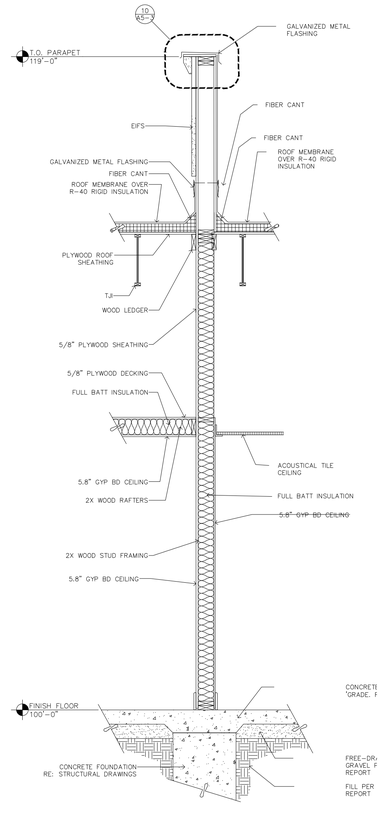
NOTES:

1. CHARACTERS, SYMBOLS AND THEIR BACKGROUND SHALL HAVE A NONGLARE FINISH
2. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND
3. VISUAL CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MINIMUM AND 110% MAXIMUM OF HTE HEIGHT OF THE UPPERCASE LETTER "I." STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10% MINIMUM AND 20% MAXIMUM OF THE HEIGHT OF THE CHARACTER
4. CHARACTERS ON SIGNS REQUIRED TO BE ACCESSIBLE SHALL BE SIZED ACCORDING TO THE "VISUAL CHARATER HEIGHT" TABLE. THE MINIMUM HEIGHT IS MEASURED USING AN UPPERCASE LETTER "I."
5. RAISED CHARACTERS ON SIGNS SHALL BE RAISED 1/32" MINIMUM AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY CONTRACTED (GRADE 2) BRAILLE.
6. RAISED CHARACTERS HSALL BE A MINIMUM OF 5/8" AND A MAXIUM OF 2" HIGH.
7. PICTORIAL SYMBOL SIGNS (PICTOGRAMS) SHALL BE ACCOMPANIED BY THE VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE OUTSIDE DIMENSION OF THE PICTOGRAM FIELD SHALL BE A MINIMUM OF 6" IN HEIGHT.
8. BRAILLE SHALL BE PLACED A MINIMUM OF 3/8" AND A MAXIMUM OF ½" DIRECTLY BELOW THE TACTILE CHARACTERS, FLUSH LEFT OR CENTERED.
8. RAISED CHARACTERS ON SIGNS SHALL BE SELECTRED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I." STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10% MINIMUM AND 20% MAXIMUM OF THE HEIGHT OF THE CHARACTER.
9. CONTRACTED (GRADE 2) BRAILLE SHALL BE USED.
10. MOUNTING HEIGHT SHALL BE 48" MINIMUM, MEASURED FROM THE BASELINE OF THE LOWEST LINE OF BRAILLE, AND 60" MAXIMUM, MEASURED FROM THE BASELINE OF THE HIGHEST RAISED CHARACTERS, ABOVE THE FINISH FLOOR OR GROUND SURFACE.

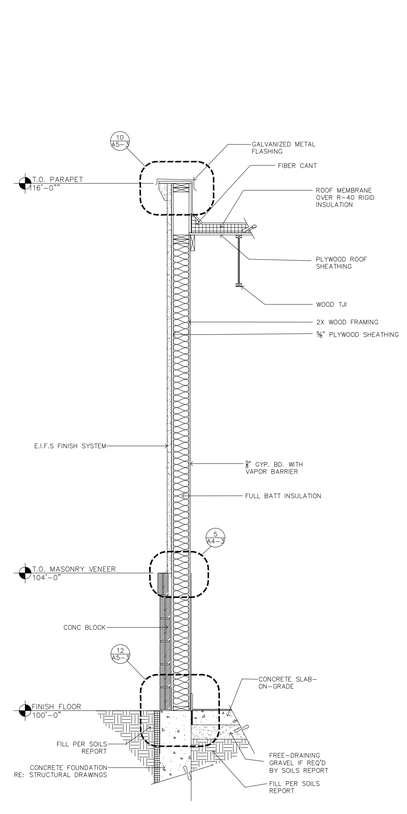
10 INTERIOR SIGNAGE INFORMATION
NO SCALE



3 WALL SECTION
A4-4 1/2"=1'-0"



2 WALL SECTION
A4-4 1/2"=1'-0"



1 WALL SECTION
A4-4 1/2"=1'-0"

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. HERMAN
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26

ARCHITECT OF RECORD

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ARCODEV JOB #: –
CLIENT JOB #: –
DRAWN BY: NLH
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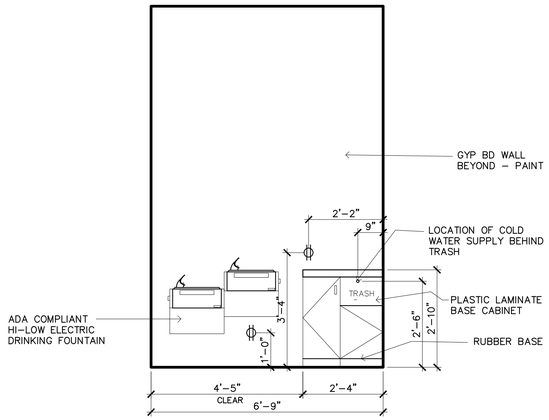
DATE OF ISSUE: 04.09.26

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

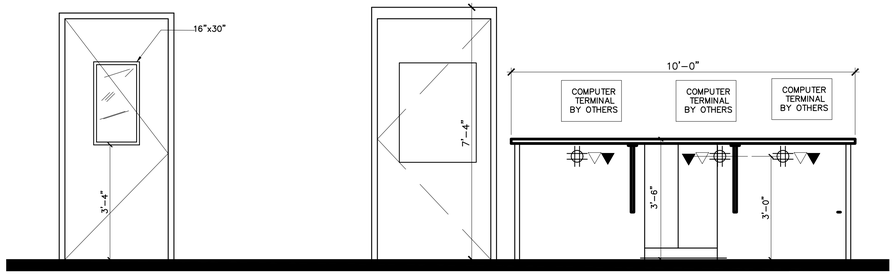
SHEET

A4-4

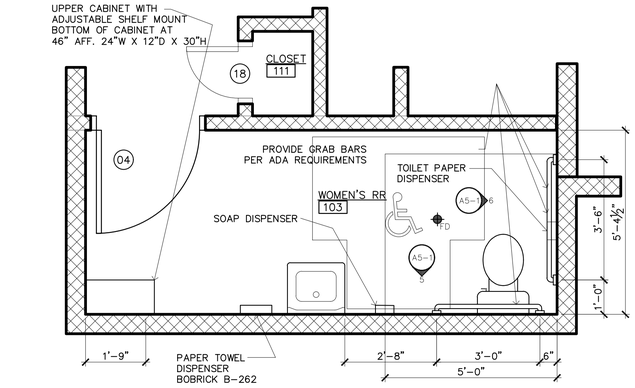
WALL SECTIONS



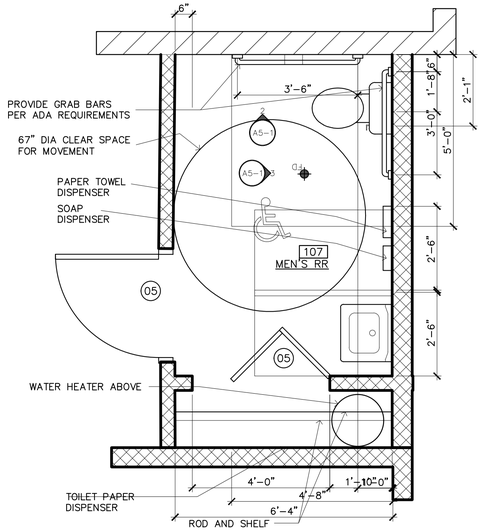
7 A5–1 ELEVATION 1/2" =1'–0" TYPICAL



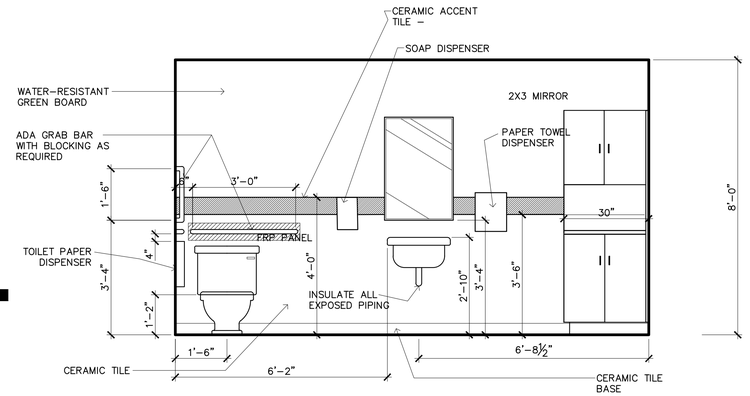
8 A5–1 ELEVATION 1/2" =1'–0" TYPICAL



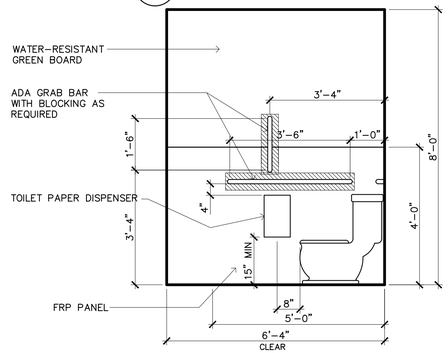
4 A5–1 ENLARGED PLAN RR 103 1/2" =1'–0" TYPICAL



1 A5–1 ENLARGED TOILET PLAN #107 1/2" =1'–0" TYPICAL



5 A5–1 ELEVATION RR #103 1/2" =1'–0" TYPICAL



2 A5–1 ELEVATION #107 1/2" =1'–0" TYPICAL

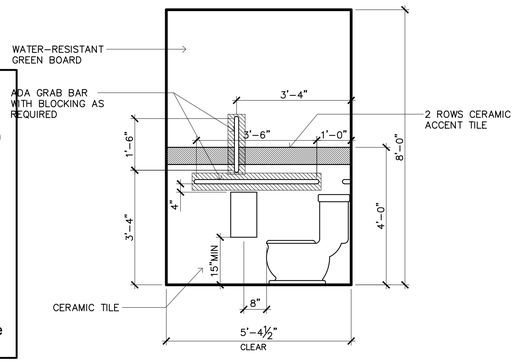
Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor measured to the top of the gripping surface

Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow

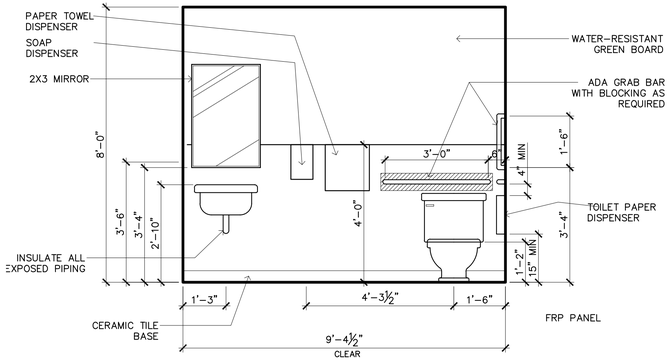
All operable parts of dispensers shall not exceed 44" AFF

Soap dispenser operable part shall be at 44" AFF

Paper towel dispenser shall be mounted between 15" and 48" AFF…..Operable part shall not be higher than 44".



6 A5–1 ELEVATION RR #103 1/2" =1'–0" TYPICAL



3 A5–1 ELEVATION #107 1/2" =1'–0" TYPICAL

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. HERRMANN
NO. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26

ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
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ARCODEV

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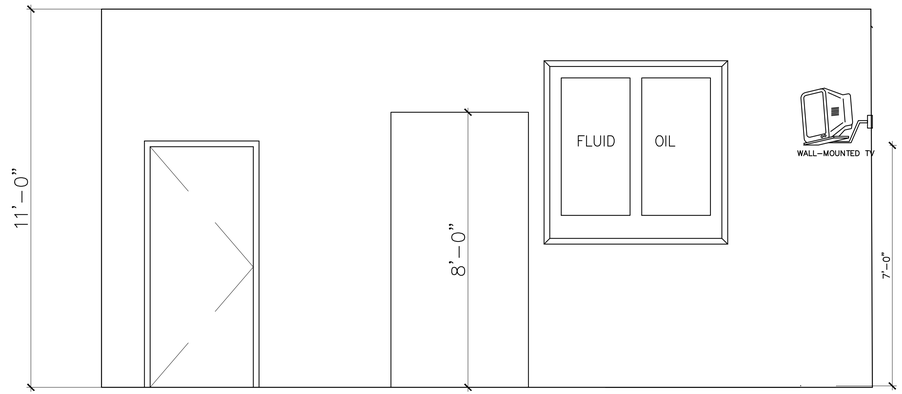
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881–8925

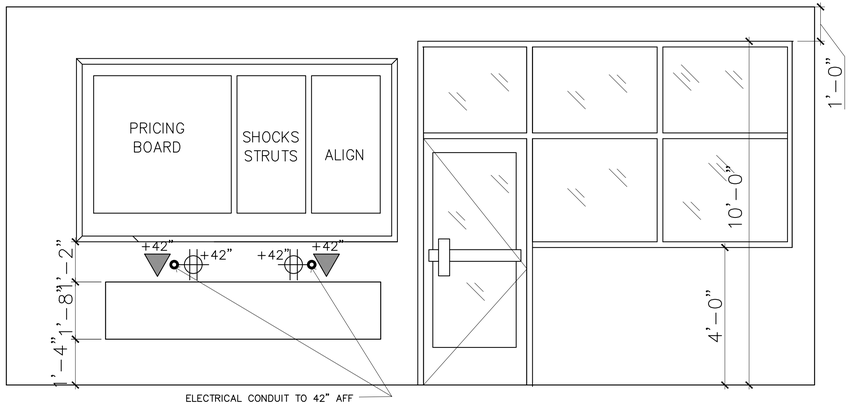
SHEET

A5-1

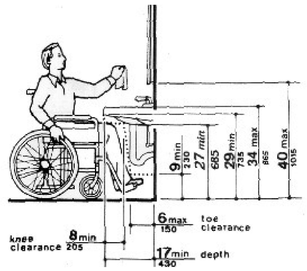
DETAILS



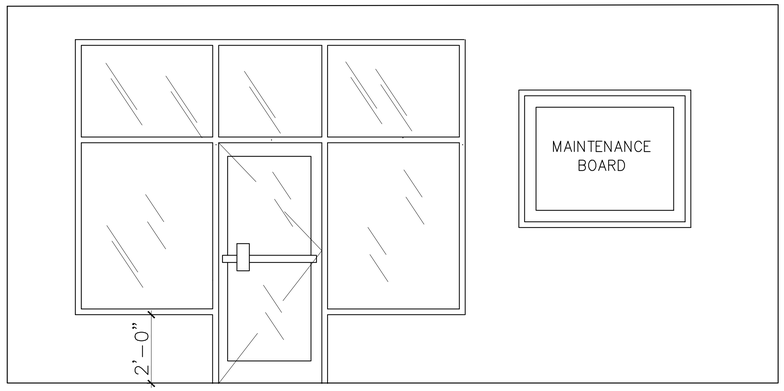
1 A5-2 ELEVATION
1/2" =1'-0" TYPICAL



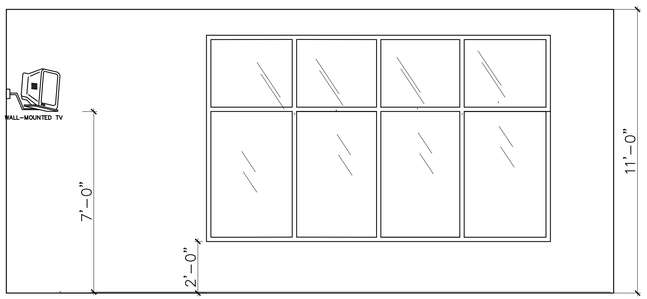
2 A5-2 ELEVATION
1/2" =1'-0" TYPICAL



4 A5-2 ADA DETAIL
3/8"" =1'-0" TYPICAL



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



4 A5-2 ELEVATION
1/2" =1'-0" TYPICAL

BRAKES PLUS
APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
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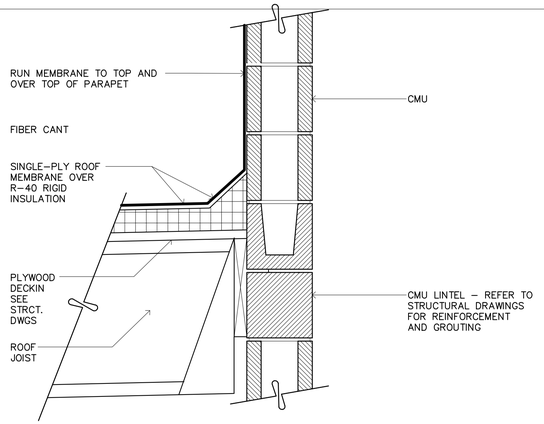
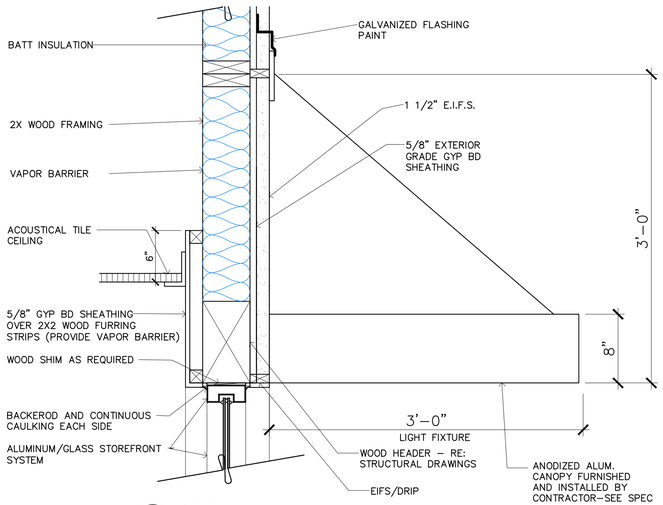
ARCODEV

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

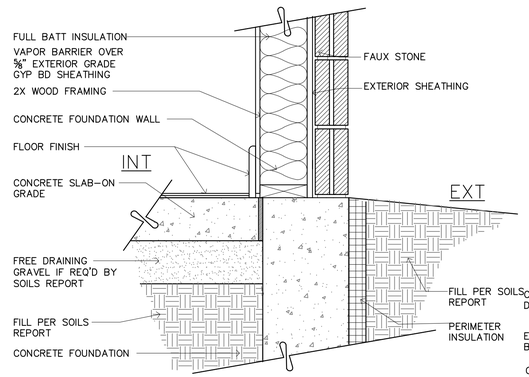
SHEET
A5-2
DETAILS



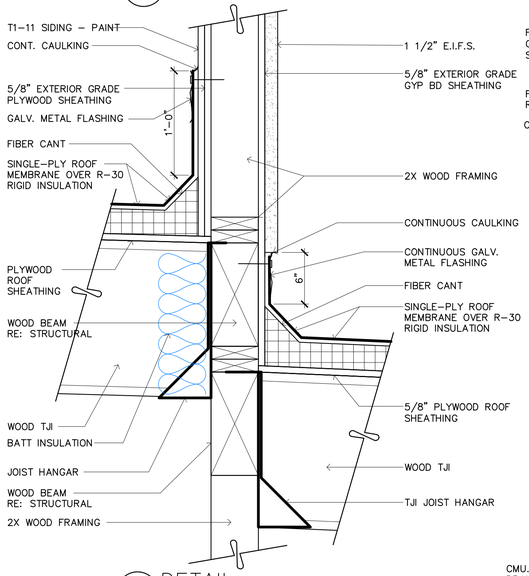
16 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



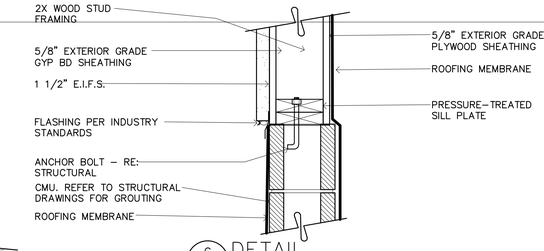
17 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



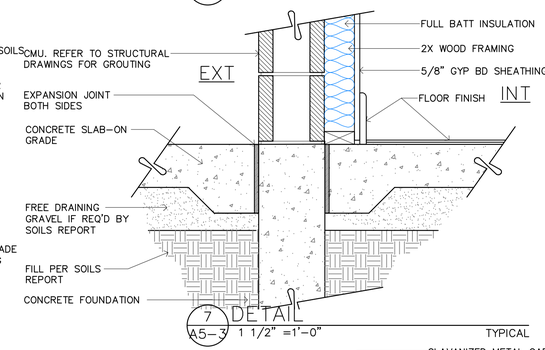
12 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



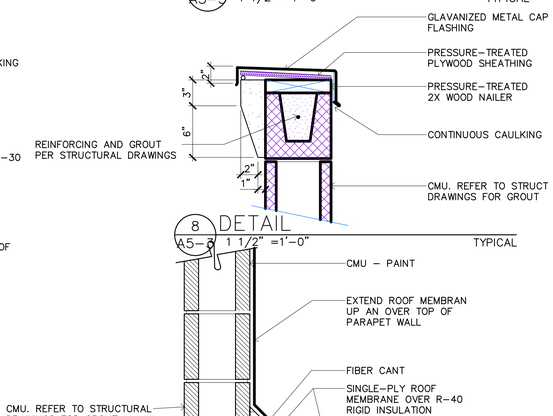
13 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



6 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL

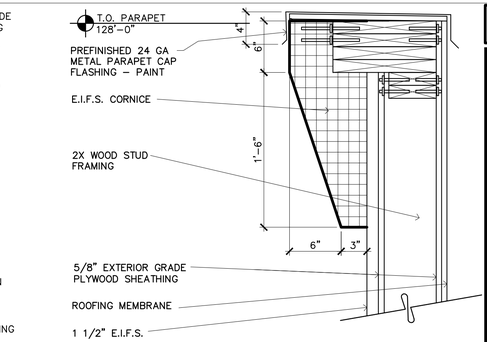


7 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



8 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL

9 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



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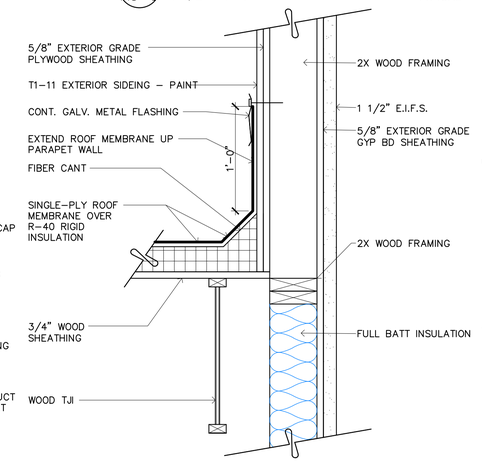

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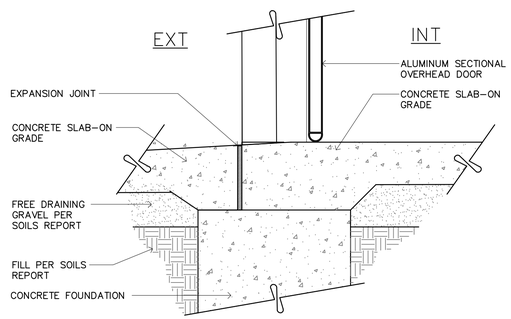
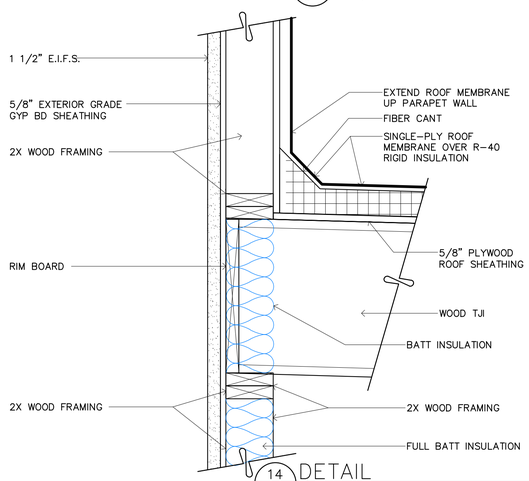
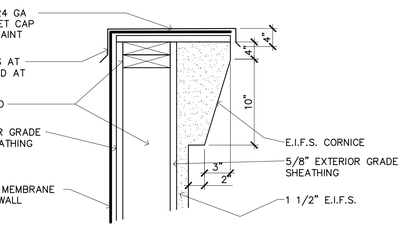


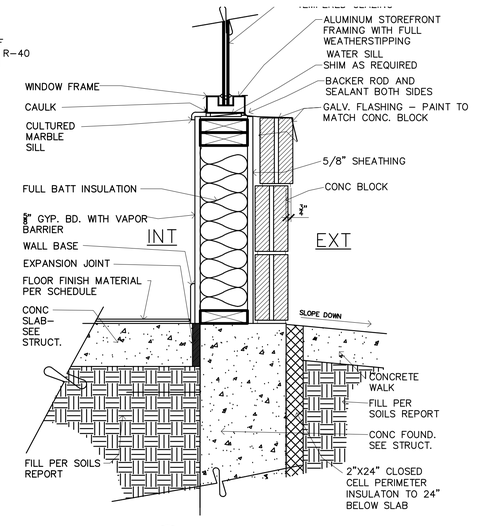
15 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



14 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



10 A5-3 DETAIL 1 1/2" =1'-0" TYPICAL



3 A5-3 DETAIL 3" =1'-0" TYPICAL

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. REIMANN
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26

ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.18.26	SUBMITTED TO BLDG. DEPT.
	07.24.26	ISSUED FOR CONSTRUTION

ARCODEV JOB #:	-
CLIENTJOB #:	-
DRAWN BY:	NLH
CHECKED BY:	NLH
DATE OF ISSUE:	04.09.26

ARCODEV

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

A5-3

DETAILS

DOOR SCHEDULE

DOOR NO.	DOOR SIZE	DOOR TYPE	DOOR MAT'L	DOOR FINISH IN	DOOR FINISH OUT	FRAME MAT'L	FRAME FINISH	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	HDWR GROUP	FIRE RAITING	REMARKS
1	3'-0" X 7'-0"	C	ALUM/GL	M1	M1	ALUM.	M1	8/A6-1	9/A6-1	8/A6-1	3	–	SIGN THIS DOOR SHALL REMAIN UNLOCKED DURING BUSINESS HOURS. NO PANIC BAR REQUIRED.
2	3'-0" X 7'-0"	C	ALUM/GL	M1 SIM.	M1 SIM.	ALUM.	M1 SIM.	8/A6-1	9/A6-1	8/A6-1	3	–	THIS DOOR DARK BRONZE FINISH TO MATCH STOREFRONT FRAMING
3	3'-0" X 6'-8"	B	H.M.	P2	P2	H.M.	P2	3/A6-1	3/A6-1	–	2	–	
4	3'-0" X 6'-8"	B	H.M.	P2	P2	H.M.	P2	3/A6-1	3/A6-1	–	1	–	PROVIDE UNISEX RESTROOM SIGNAGE.
5	3'-0" X 6'-8"	B	H.M.	P2	P2	H.M.	P2	3/A6-1	3/A6-1	–	5	–	PROVIDE UNISEX RESTROOM SIGNAGE.
6	2'-0" X 7'-0"	E	H.M.	P2	P2	H.M.	P2	4/A6-1	4/A6-1	–	5	–	PROVIDE 16"X24" VIEW PANEL.
7	3'-0" X 7'-0"	E	H.M.	P2	P2	H.M.	P2	4/A6-1	4/A6-1	–	4	–	
8	3'-0" X 7'-0"	B	H.M.	P2	P2	H.M.	P2	2/A6-1	4/A6-1	2/A6-1	3	–	
9	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
10	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
11	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
12	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
13	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
14	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
15	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
16	10'-0" X 12'-0"	D	ALUM.	–	–	–	–	7/A6-1	6/A6-1	7/A6-1	–	–	
17	4'-0" x 6'-8" BIFOLD SET	F	H.C. WD	P-2	P-2	–	–	–	–	–	–	–	PROVIDE STANDARD MANUFACTURER'S HARDWARE
18	1'-0" X 7'-0"	A	S.C. WD	P2	P-2	H.M.	P2	3/A6-1	3/A6-1	–		–	
19	3'-0" X 7'-0"	B	H.M.	P2	P2	H.M.	P2	2/A6-1	4/A6-1	2/A6-1	3		

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOORS FLOOR	FLOORS BASE	WALLS NORTH MATERIAL	WALLS NORTH FINISH	WALLS SOUTH MATERIAL	WALLS SOUTH FINISH	WALLS EAST MATERIAL	WALLS EAST FINISH	WALLS WEST MATERIAL	WALLS WEST FINISH	CEILINGS MATERIAL	CEILINGS FINISH	CEILINGS HEIGHT (AFF)	REMARKS
101	SALES FLOOR	LVT	RB	GB	F3	ALUM/GB	F3	ALUM/GB	F3	ALUM/GB	F3	ACT	F1	10'-6"	–
102	COFFEE AREA	LVT	RB	GB	F3	GB	F3	GB	F3	GB	F3	ACT	F1	10'-6"	–
103	WOMEN'S TOILET	CT	CT	GB/CT	F4/F1	GB	F4	GB/CT	F4/F1	GB/CT	F4/F1	GB	F4	8'-0"	–
104	OFFICE	LVT	LVT	GB	F3	GB	F3	GB	F3	GB	F3	ACT	F1	8'-0"	–
105	SERVICE AREA	SEALED CONCRETE	–	CONC	F5	CONC	F5	CONC	F5	CONC	F5	–	F4	–	–
106	BREAK ROOM	SEALED CONCRETE	RB	GB	F3	CONC	F3	GB	F3	CONC	F5	–	F4	–	–
107	MEN'S TOILET	CT	CT	GB/FRP	F4/F1	GB/FRP	F4/F1	GB/FRP	F4/F1	GB/FRP	F4/F1	GB	F4	8'-0"	–
108	INVENTORY	SEALED CONCRETE	–	GB	F3	CONC	F3	GB	F3	GB	F5	–	–	–	–
109	NOT USED	–	–	–	–	–	–	–	–	–	–	–	–	–	–
110	CLOSET	CT	CT	GB	F3	GB	F3	GB	F3	GB	F3	ACT	F1	10'-6"	–
111	CLOSET	SEALED CONCRETE	–	GB	F4	CONC	F4	GB	F4	GB	F4	GB	F4	8'-0"	–

NOTES:
1. PROVIDE MOISTURE-RESISTANT GYPSUM BOARD IN RESTROOMS.

HARDWARE SCHEDULE

GROUP	QTY.	DESCRIPTION
1	1 EACH 1 EACH 3 EACH 1 EACH 1 EACH 1 EACH	FRAME – ME416 3068 X 5 3/4" HMF RH CR ASA DOOR – 3068 X 1 3/4" SCWD BIRCH MVE RH CH161 HINGE – STANLEY FBB179 4.5 X 4.5 X 626 LOCKSET – SCHLAGE AL40S SAT X 626 (PRIVACY) NOT USED FLOOR STOP – MM FS13 X US26D
2	1 EACH 1 EACH 3 EACH 1 EACH 1 EACH 1 EACH	FRAME – ME416 3068 X 5 3/4" HMF LH CR ASA DOOR – 3068 X 1 3/4" SCWD BIRCH MVE RH CH161 HINGE – STANLEY FBB179 4.5 X 4.5 X 626 LOCKSET – SCHLAGE AL53PD SAT X 626 (ENTRY) CLOSER – LCN 1461 REG/PA TBMS X ALU FLOOR STOP – MM FS13 X US26D
3	1 EACH 1 EACH 3 EACH 1 EACH 1 EACH 1 EACH 1 EACH 1 EACH 1 EACH 1 EACH	FRAME – ME416 3068 X 5 3/4" 4" HD HMF RH CR BJPR DOOR – 3068 X 1 3/4" HMD BLANK MOLCR HINGE – STANLEY FBB179 NRP 4.5 X 4.5 X 626 EXIT DEVICE – VON DUPRIN 22NL 3' X SP28 RIM CYLINDER – SCH 'C' X US26D CLOSER – LCN 4041 CUSH TBMS X ALU LATCHGUARD – MM MG2C THRESHOLD – PEMKO 179AV X 36" SWEEP – PEMKO 18137P X 36" SMOKE SEAL – PEMKO S88C 17'
4	1 EACH 1 EACH 3 EACH 1 EACH 1 EACH	FRAME – ME416 3068 X 5 3/4" HMF LH CR ASA DOOR – 3068 X 1 3/4" HMD CHCR HINGE – STANLEY FBB179 4.5 X 4.5 X 626 LOCKSET – SCHLAGE AL539D SAT X 626 (ENTRY) CLOSER STOP – MM FS13 X US26D
5	1 EACH 1 EACH 3 EACH 1 EACH 1 EACH	FRAME – ME416 3068 X 5 3/4" HMF LH CR ASA DOOR – 3068 X 1 3/4" HMD CHCR HINGE – STANLEY FBB179 4.5 X 4.5 X 626 LOCKSET – SCHLAGE AL40S SAT X 626 (PRIVACY) FLOOR STOP – MM FS13 X US26D

FINISHES (ALSO SE SHEET A6-3)

DOOR AND FRAME MATERIAL

SCW	SOLID CORE WOOD
HM	HOLLOW METAL
ALUM	ALUMINIUM
STL	STEEL

DOOR AND FRAME FINISHES

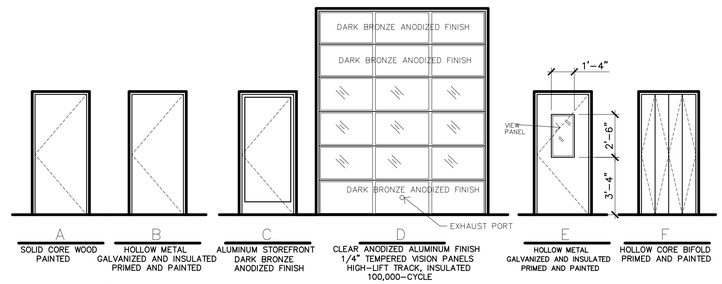
P1	NOT USED
P2	PRIMED AND PAINTED
P3	FACTORY PRIMED, STANDARED WHITE/LIGHT GRAY
M1	ANODIZED ALUMINIUM, DARK BRONZE FINISH

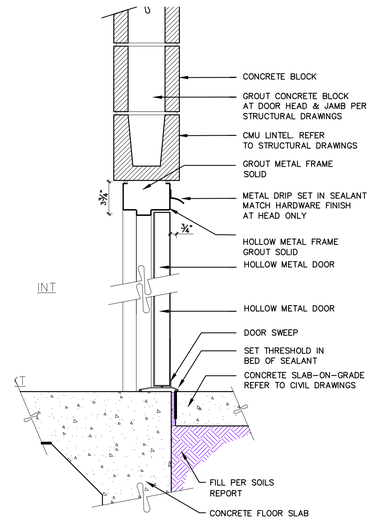
FINISH MATERIALS

ACT	ACOUSTICAL CEILING TILES
CT	CERAMIC TILE
CONC	CONCRETE BLOCK
RB	RUBBER BASE
GB	GYPSUM BOARD
FRP	FIBERGLASS REINFORCED PLASTIC
LVT	LUXURY VINYL TILE

FINISHES

F1	NONE
F2	HARDENER AND SEALER
F3	2 COATS STIPPLING ENAMEL
F4	2 COATS ENAMEL
F5	1 COAT BLACK FILLER – 1 COAT HIGH GLOSS ENAMEL TO 4'-0" AFF – 2 COATS HIGH GLOSS ENAMELABOVE 4'-0" AFF
F6	2 COATS SEMI-GLOSS ENAMEL



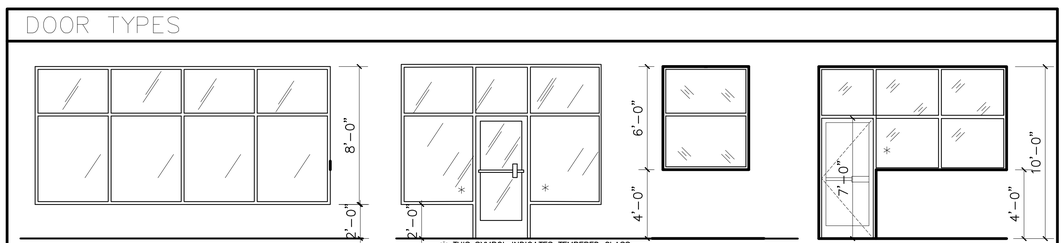


2 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL

REQUIRED SUBMITTALS: (item if applicable)

- CAST-IN-PLACE CONCRETE/REBAR PLACEMENT DRAWINGS
- UNIT MASONRY
- STRUCTURAL STEEL FRAMING
- STEEL JOIST FRAMING
- STEEL DECKING
- LADDERS
- MATAL COPINGS AND CANOPIES
- FOUNDATION WATERPROOFING
- TPO ROOFING
- STANDING SEAM METAL ROOF
- ROOF SPECIALTIES
- INTERIOR / EXTERIOR PAINT
- EFIS CORNICE
- SMOKE VENT
- ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS
- ALUMINUM WINDOWS
- OH DOORS
- DOORS, FRAMES AND DOOR HARDWARE
- GLAZING
- EXHAUST FANS IN SHOP
- GAS FIRED UNIT HEATERS / RADIANT HEATERS
- HEAT PUMP / GAS FIRED FURNACE
- SUMP PUMP
- WATER HEATER / RECIRC PUMP
- OIL WATER SEPERATOR
- PLUMBING FIXTURES
- ELECTRICAL PANELS
- LIGHT FIXTURES
- TERMITE CONTROL
- SIGNAGE
- FIRE EXTINGUISHERS
- FIRE SUPRESSION SYSTEM (IF NECESSARY)
- UNDERGROUND PIPING MATERIALS (TO CIVIL ENG.)
- UNDERGROUND WATER RETENTION SYSTEM (TO CIVIL ENG)
- SEWER PUMP OR GRINDER PUMP (TO CIVIL ENG)

DOOR TYPES

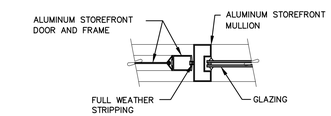


1 FACTORY FINISHED ALUMINUM W/ 1" CLEAR INSULATED GLASS DARK BRONZE ANODIZED ALUMINUM

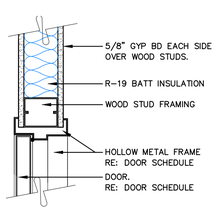
2 FACTORY FINISHED ALUMINUM W/ 1" CLEAR INSULATED GLASS DARK BRONZE ANODIZED ALUMINUM

3 FACTORY FINISHED ALUMINUM W/ 1" CLEAR INSULATED GLASS DARK BRONZE ANODIZED ALUMINUM

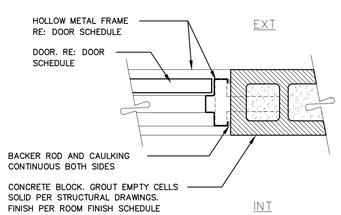
4 FACTORY FINISHED ALUMINUM W/ 1" CLEAR INSULATED GLASS DARK BRONZE ANODIZED ALUMINUM



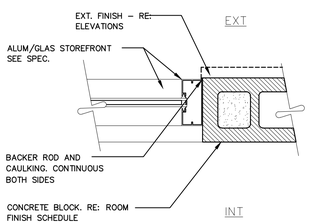
9 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL



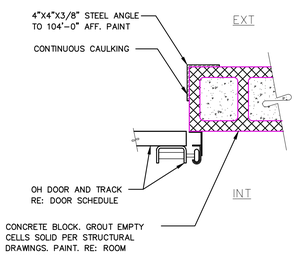
3 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL



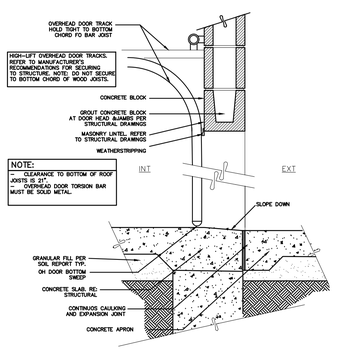
4 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL



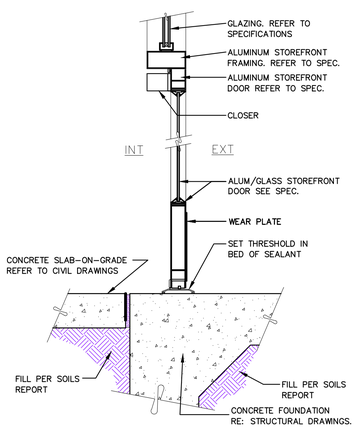
5 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL



6 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL



7 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL



8 A6-1 DETAIL 1 1/2" =1'-0" TYPICAL

BRAKES PLUS
APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. REINHART
No. 2737
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ARCODEV JOB #: –
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DRAWN BY: NLH
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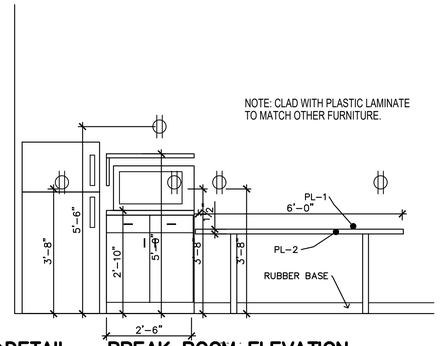
DATE OF ISSUE: 04.09.26

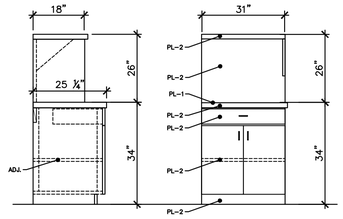
ARCODEV

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

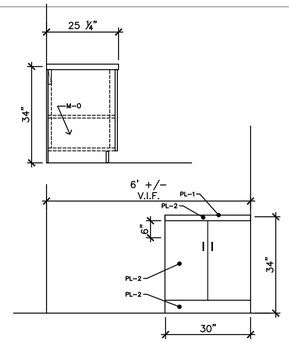
SHEET
A6-1
SCHEDULES DETAILS



13 DETAIL – BREAK ROOM ELEVATION
SCALE: 1/2" = 1'-0"



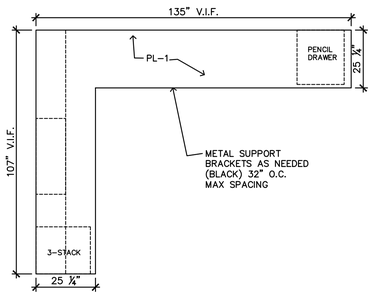
9 DETAIL – MICROWAVE STAND
SCALE: 1/2" = 1'-0"



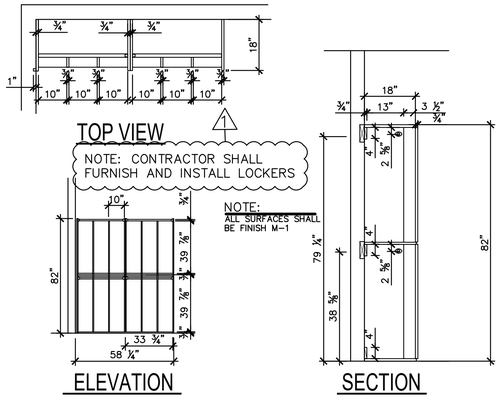
5 DETAIL – COFFEE ROOM 102
SCALE: 1/2" = 1'-0"

PLAM COLORS LEGEND:
PLAM COLORS - WILSON ART:
PL-1 = #4689 NATURAL TIGRUS
PL-2 = #4623 GRAPHITE NEBULA
M-0 = WHITE MELAMINE
M-1 = BLACK MELAMINE

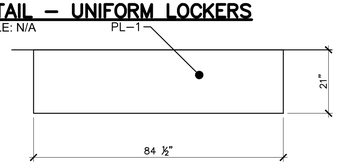
NOTE:
SELECTED CONTRACTOR WILL PROVIDE COMPLETE NEW DRAWINGS FOR APPROVAL.



14 DETAIL – OFFICE 103 FURNITURE
SCALE: 1/2" = 1'-0"

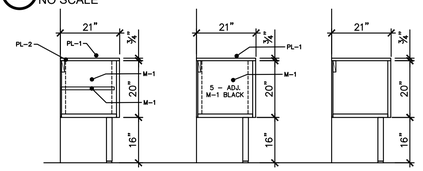


10 DETAIL – UNIFORM LOCKERS
SCALE: N/A



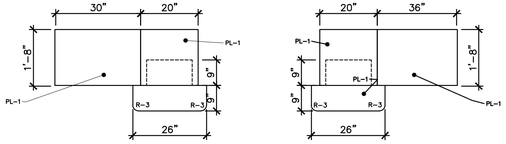
NOTE:
- 24" DIAMETER, 1.5" THICK
- EDGE - 3MM PVS EDGEBAND TO MATCH NATURAL TIGRUS LAMINATE
- FLAT TOP SURFACE - WILSON ART 4689-60 NATURAL TIGRUS MATT FINISH
- CENTER POST BASE, 30" TABLE HEIGHT, BLACK BASE

5B BISTRO TABLE
NO SCALE

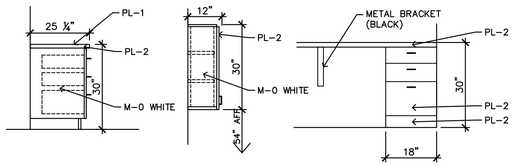


6 DETAIL – SALES AREA – PRINTER CABINETS
SCALE: 1/2" = 1'-0"

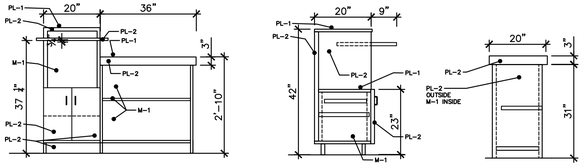
NOTE: FOR SALES AREA PLEASE INCLUDE (4) 24" ROUND TABLES WITH BLACK METAL PEDESTAL LEG. SAME PLAM AS KIOSK



2 DETAIL – SALES AREA KIOSKS
SCALE: 1/2" = 1'-0"

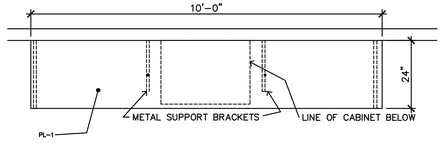


15 DETAIL – OFFICE 103 FURNITURE
SCALE: 1/2" = 1'-0"

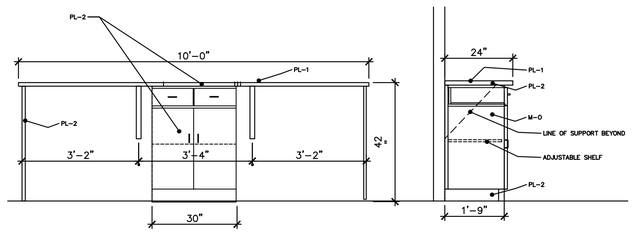


7 DETAIL – SALES AREA – PRINTER CABINETS
SCALE: 1" = 1'-0"

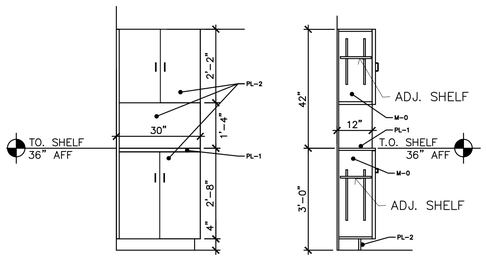
3 DETAIL – KIOSK 2 – ADA COMPLIANT
SCALE: 1/2" = 1'-0"



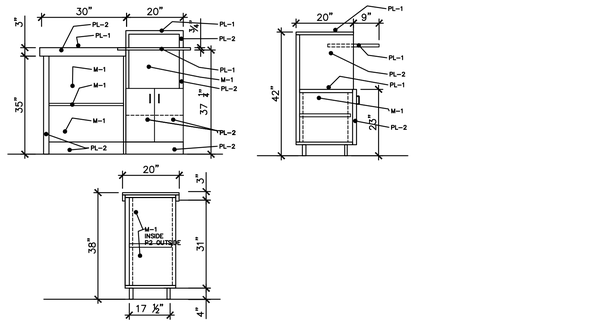
16 DETAIL – SERVICE ADVISORS DESK
SCALE: 1/2" = 1'-0"



12 DETAIL – SERVICE ADVISORS DESK
SCALE: 1/2" = 1'-0"



8 DETAIL – RESTROOM CABINETS
SCALE: 1/2" = 1'-0"



4 DETAIL – KIOSK 1 – NON ADA
SCALE: 1/2" = 1'-0"

BRAKES PLUS
APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. HERSHBERGER
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
7.24.26
ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.18.26	SUBMITTED TO BLDG. DEPT.
	07.24.26	ISSUED FOR CONSTRUTION

ARCODEV JOB #: –
CLIENT JOB #: –
DRAWN BY: NLH
CHECKED BY: NLH
DATE OF ISSUE: 04.09.26

ARCODEV

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET
A6-2

FURNITURE AND FIXTURE DETAILS

RESTROOM WAINSCOT FINISHES	
MAIN COLOR	TWO TOP ROWS
DALTILE (SEMI-GLOSS)	DALTILE (SEMI-GLOSS)
PRICE GROUP 2	PRICE GROUP 3
#0132	#DM-1
URBAN PUTTY #0161	CURRENT
SEMI-GLOSS	SEMI-GLOSS
4 1/4" X 4 1/4"	4 1/4" X 4 1/4"
GROUT: MAYEI BLANCO	GROUT: MAYEI BLANCO

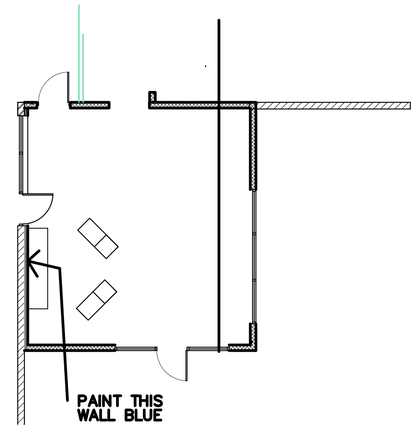
4 RESTROOM FINISHES
SCALE: N.T.S.

GENERAL NOTES:

- APPLY THE WALK OFF CARPET (4'X6' DIRECTRLY TO THE CONRETE SLAB DO NOT APPLY IT OVER THE FLOORING. PROVIDE JOHNSONITE REDUCER AROUND ALL EDGES (STYLE: CTA-09-A1, COLOR: BURNT UMBER)
- ALL FLOORING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR
- PROVIDE 1 EXTRA BOX (32 S.F.) OF ALL FLOORING PRODUCTS FOR ATTIC STOCK
- ALL FLOORING MATERIALS MAY BE PURCHASED FROM EF CONTRACT FLOORING EXCEPT ADHESIVE AND THE TRANSITION STRIPS.....CONTACT KIMBERLY LYNCH AT THE CONTACT INFORMATION SHOWN BELOW.
- RUBBER TRANSITION STRIP HAS A 1-3 WEEK LEAD TIME

NOTE:

ALL INTERIOR FINISHES SHALL COMPLY WITH THE REQUIREMENTS CONTAINED IN TE 2018 IBC CHAPTER 18



1 DETAIL - INTERIOR PAINT DETAILS
SCALE: N.T.S.

	Floor	Supplied by:
Manufacturer (1)	Bolyu/EF Contract Flooring	Bolyu/EF Contract Flooring
Number (1)	**Main Floor LVT Style: Woodlands, Color Ironwood**	Bolyu/EF Contract Flooring
	LVT direction – Run lengthwise in the wide direction of the room. Regardless of entry location /showroom design	
Color (1)	**Ironwood - Item # EFCWL001**	Bolyu/EF Contract Flooring
Finish	N/A	
Size (1)	**7" x 48" (42 sq ft per box)**	Bolyu/EF Contract Flooring
Note (1)	LVT - with Hardwood Plank Pattern	
	Attic Stock - Provide 1 extra Box (32 sq. ft) extra for Attic Stock	
Adhesive (1a)	LVT Adhesive	
	The LVT adhesive, Taylor, RESOLUTE (MS-PLUS® RESILIENT™) Adhesive	**Supplied by Installer**
Transition	**Johnsonite - Rubber Reducer - Style: CTA-09-A1, Color: #63 Burt Umber**	**Supplied by Installer - Lead Time 1 - 3 weeks**
Size (2)	24" x 24" , (6.22 sq yds per box)	Bolyu/EF Contract Flooring
Note (2)	Install Quarter Turn	
Adhesive (2a)	Nexus, multipurpose carpet tile adhesive	Bolyu/EF Contract Flooring

CONTACT PRICING AND QUESTIONS
(ALL LOCATIONS, NATIONWIDE)

TARA KALVA
BOLYU/EF CONTRACT
720-404-0644
TARA.KALVA@EFCONTRACTFLOORING.COM

3 DETAIL - FLOORING SPECIFICATIONS
SCALE: N.T.S.

Location	Worldly Gray	Intellectual Gray	Virtual Taupe	Balanced Beige	Safety Red	Brakes Plus Blue
Shop	All walls above red base	Ceiling & Joists	Metal Doors & Frames (Interior of Building)		Lower 4' of walls This area to receive block filler & gloss paint	
Office			Painted Wood Doors and Frames	Walls		
Showroom			Half Wall Drywall Painted Wood Doors and Frames (to office and bathroom and Closet)	Walls		See attached Drawing
Parts Room	Walls	Ceiling & Joists	Metal Door and Frame			
Employee Bath	Walls & Ceiling		Metal Doors & Frames			
Customer Bath			Painted Wood Doors and Frames	Walls & Ceiling		Formula: Promar 200 Deep Base B31W2253 1 Gallon Formula W1 2Y 23+11 B1 1+01 L1 2Y 21+11 R3 55+01
Break Room	Walls	Ceiling				

* **Use block fill on all cinder block walls prior to painting (See Finish Schedule Section 3.05)**

Brand	Sherwin-Williams	Sherwin-Williams	Sherwin-Williams	Sherwin-Williams	Sherwin-Williams	Sherwin-Williams
Color	Worldly Gray	Intellectual Gray	Virtual Taupe	Balanced Beige	Safety Red	Blue
Number	SW7043	SW7045	SW7039	SW7037		Brakes Plus Custom Color
Product Finish	See Finish Schedule	**Dry Fall**	See Finish Schedule	See Finish Schedule	See Finish Schedule	
	Section 3.05		Section 3.05	Section 3.05	Section 3.05	

2 DETAIL - INTERIOR PAINT SPECIFICATIONS
SCALE: N.T.S.

BRAKES PLUS EXTERIOR PAINT SPECIFICATIONS

LOCATION	BRAND	COLOR	NUMBER	FINISH	SPEICAL INSTRUCTIONS
CORNER-GUARD	SHERWIN WILLIAMS	ASTISAN TAN	SW75-40		
DOORS	SHERWIN WILLIAMS	ASTISAN TAN	SW75-40		
TRASH ENCLOSURE DOORS	SHERWIN WILLIAMS	ASTISAN TAN	SW75-40		

5 DETAIL - EXTERIOR PAINT SPECIFICATIONS
SCALE: N.T.S.

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

STATE OF OKLAHOMA
NORMAN L. HERRIOTT
No. 2737
Littleton, Colorado
LICENSED ARCHITECT
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LITTLETON, CO 80123
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SHEET

A6-3

MATERIAL FINISHES

GENERAL STRUCTURAL NOTES

A. DESIGN DATA:

DESIGN CODE:	2018 INTERNATIONAL BUILDING CODE
CONCRETE 28-DAY STRENGTH:	F'C = 4,000 PSI
MISCELLANEOUS ROLLED SECTIONS AND PLATES (ANGLES, CHANNELS, PLATES, ETC.)	ASTM A36 (UNLESS NOTED OTHERWISE)
PLAIN BOLTS AND ANCHORS	ASTM A307
REINFORCING STEEL	ASTM A615 FY = 60,000 PSI
WELDED WIRE FABRIC	ASTM A185

MORTAR TYPE S & GROUT 28-DAY COMPRESSIVE STRENGTH = 2,000 PSI
(MASONRY CEMENT IS NOT ACCEPTABLE) ASTM C1019

CONCRETE MASONRY UNITS (LIGHTWEIGHT) ASTM C652
NET COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS = 2,800 PSI
NET AREA COMPRESSIVE STRENGTH OF MASONRY F'M = 2,000 PSI

ALLOWABLE SOIL BEARING CAPACITY: 2,000 PSF (PER SOIL REPORT)

RISK CATEGORY II

DESIGN LOADS
ROOFS D = 20 PSF
Lr = 20 PSF
S = 10 PSF (Pg-GROUND); 10 PSF (Pf - ROOF)

WIND LOADING CRITERIA (2018 IBC & ASCE 7-16)
110 MPH, EXPOSURE C

SEISMIC LOADING CRITERIA (2018 IBC & ASCE 7-16)
IMPORTANCE FACTOR = 1.0
MAPPED SPECTRAL RESPONSE Ss = 0.135g, S1 = 0.072g
SITE CLASS = D,
SPECTRAL RESPONSE COEFFICIENTS: SDS = 0.144g, SD1 = 0.116g
SEISMIC DESIGN CATEGORY = B
SEISMIC FORCE RESISTANT SYSTEM = ORDINARY REINFORCED MASONRY SHEAR WALLS & WOOD SHEAR WALLS
RESPONSE MODIFICATION FACTOR (R) = 2.0

B. FOUNDATION WORK:

1. THE GEOTECHNICAL REPORT PREPARED BY OLSSON (PROJECT NO. 025-07660) DATED MARCH 9, 2026 IS AVAILABLE AND SHALL BE REVIEWED BY THE CONTRACTOR. SEE SPECIFICATIONS AND GEOTECHNICAL REPORT FOR OVEREXCAVATION RECOMPACTION.

2. CONTRACTOR SHALL COORDINATE FOOTING ELEVATIONS WITH FINAL GRADING PLAN TO PROVIDE A MINIMUM OF 30" OF GRADE ABOVE THE BOTTOM OF ALL FOOTINGS.

3. SUBSOILS SUPPORTING OR IN DIRECT CONTACT WITH FOOTINGS, SLABS/ON/GRADE, OR OTHER FOUNDATION ELEMENTS SHALL BE PROTECTED AGAINST FREEZING CONDITIONS THAT COULD CAUSE MOVEMENT OR OTHER DETRIMENTAL EFFECT TO THE STRUCTURE AS A WHOLE OR TO ANY OF ITS COMPONENT PARTS.

4. WHEN WORKING NEAR EXISTING AND/OR NEW CONSTRUCTION, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION SO AS NOT TO UNDERMINE, DISTURB, DAMAGE OR, IN ANY WAY, CAUSE UNDESIRABLE MOVEMENT, CRACKING, AND/OR SETTLEMENT OF THE ADJACENT CONSTRUCTION.

5. SLABS ON GRADE SHALL BE SUPPORTED ON SUBGRADE THAT HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE "FLOOR SLAB SUBGRADE PREPARATION" SECTION IN THE GEOTECHNICAL REPORT. ANY UNACCEPTABLE UNDISTURBED VIRGIN SOIL OR BACKFILL/GRANULAR FILL, AS DETERMINED BY THE OWNER'S GEOTECHNICAL ENGINEER, SHALL BE REMOVED AND REPLACED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.

C. CONCRETE:

1. FOR REINFORCEMENT DEVELOPMENT LENGTH AND SPLICE LENGTH SEE TYPICAL REINFORCEMENT TABLE ON THIS SHEET.

2. PROVIDE CORNER BARS IN WALLS AND FOOTINGS THE SAME SIZE AND NUMBER AS THE CONTINUOUS REINFORCING.

3. REINFORCING IN FOOTINGS SHALL BE ACCURATELY PLACED BEFORE PLACING CONCRETE. DO NOT FLOAT REINFORCING INTO FOOTINGS.

4. CONCRETE SHALL BE REGULAR WEIGHT (144 PCF) WITH TYPE I/II CEMENT, $\frac{3}{4}$" MAXIMUM AGGREGATE SIZE WITH POTABLE WATER. CONCRETE SHALL CONFORM TO ACI 301. THE MAXIMUM WATER-CEMENT RATIO FOR FOOTINGS, WALLS & SLABS SHALL BE 0.45. PROVIDE 6% AIR ENTRAINMENT IN CONCRETE USED IN FOOTINGS & WALLS. INTERIOR SLABS SHALL HAVE NATURAL ENTRAPPED AIR (3% MAXIMUM). $\frac{3}{4}$" MAXIMUM AGGREGATE SIZE.

5. MECHANICALLY VIBRATE CONCRETE, EXCEPT THAT SLABS ON GRADE NEED TO BE VIBRATED ONLY AROUND UNDERFLOOR DUCTS AND OTHER ITEMS EMBEDDED IN THE SLAB. EMBEDDED ITEMS INCLUDE ELECTRICAL CONDUITS, MECHANICAL PIPING, AND STEEL ANGLES OR CHANNELS. EMBEDDED ITEMS DOES NOT IMPLY REINFORCING STEEL. ALL OTHER CONCRETE PLACEMENT SHALL BE VIBRATED. CONCRETE SHALL BE VIBRATED IN CONFORMANCE WITH ACI 309. VIBRATE CONCRETE ONLY UNTIL THE CONCRETE IS THOROUGHLY CONSOLIDATED AND THE VOIDS FILLED. INSERT INTERNAL VIBRATORS VERTICALLY TO THE FULL DEPTH OF THE LAYER BEING PLACED AND INTO THE PREVIOUS LAYER IF APPLICABLE. DO NOT DRAG VIBRATORS THROUGH THE CONCRETE. DO NOT FLOW CONCRETE FROM ONE LOCATION TO ANOTHER BY USE OF VIBRATOR.

6. DO NOT PLACE PIPES, DUCTS, OR CHASES IN STRUCTURAL CONCRETE WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS.

7. FLOOR SURFACE TOLERANCE CLASS "B". SEE ACI 301 FOR PROCEDURE OF MEASUREMENT AND CORRECTION.

8. CONTROL JOINTS SHALL BE PLACED AT COLUMN-LINE INTERSECTIONS AT A MAXIMUM SPACING INDICATED BELOW AND HAVE A MAXIMUM ASPECT RATIO OF 1.5 TO 1.0 UNLESS OTHERWISE INDICATED. SEE DETAIL - ON DRAWING - FOR CONTROL JOINT REQUIREMENTS.

SLAB THICKNESS	MAX. CONTROL JOINT SPACING
4"	12'-0"
5"	15'-0"

9. ALL CONSTRUCTION JOINTS IN CONCRETE WALLS SHALL HAVE A 2" X 4" CONTINUOUS KEYWAY. ALL CONSTRUCTION JOINTS, EXCEPT THOSE DETAILED, SHALL HAVE ARCHITECT/ENGINEER APPROVAL. SEE SPECIFICATIONS FOR OTHER CONSTRUCTION JOINT REQUIREMENTS.

10. ALL REINFORCING STEEL SHALL BE DEFORMED NEW BILLETS BARS (A615, GRADE 60), BENT COLD, AND DETAILED, FABRICATED, AND HELD IN PLACE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315 - LATEST EDITION) EXCEPT AS OTHERWISE DETAILED OR SPECIFIED.

11. UNLESS NOTED OTHERWISE ON PLAN SHEETS SLABS ON GRADE SHALL BE:

SLAB THICKNESS	SLAB REINFORCEMENT	SUBBASE
4"	6x6-W1.4xW1.4 WWF	SEE GEOTECHNICAL REPORT
5"	6x6-W2.9xW2.9 WWF	SEE GEOTECHNICAL REPORT

12. ALL REINFORCING IN SLABS AND WALLS SHALL BE CONTINUOUS UNLESS DETAILED OTHERWISE AND LAP SPLICED ONLY IN REGIONS OF LOW STRESS. ALL BARS SHALL HAVE A STANDARD HOOK WHERE A HOOK IS SHOWN, UNLESS DETAILED OTHERWISE.

13. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING, UNLESS NOTED OTHERWISE:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
CONCRETE EXPOSED TO EARTH OR WEATHER: 2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS AND WALLS: 1"

D. MASONRY:

1. FURNISH AND CONSTRUCT MASONRY IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR MASONRY CONSTRUCTION (ACI 530.1-11/ASCE 6-11/TMS 602-11.)

2. LAY MASONRY UNITS IN RUNNING BOND.

3. MAXIMUM GROUT LIFT WITHOUT CLEANOUTS 4'-0" IN BLOCK WALLS AND 8" IN GROUTED TWO-WYTHE WALLS.

4. IN 8" WALLS, PROVIDE CONTINUOUS FULL HEIGHT VERTICAL REINFORCING IN CENTER OF GROUT AT CENTER OF WALL. TYPICAL REINFORCING SHALL BE 1-#5 AT 2'-0" ON CENTER AND 2-#5 AT CORNERS, INTERSECTIONS, WALL ENDS, DOOR AND WINDOW JAMBS, AND SIDE OF EXPANSION OR CONTROL JOINTS UNLESS NOTED OTHERWISE.

5. GROUT CELLS FULL AT ALL ANCHOR AND EMBED LOCATIONS.

6. PROVIDE LADDER TYPE #9 JOINT REINFORCING AT 16" ON CENTER VERTICAL SPACING IN ALL CLAY MASONRY AND UNLESS NOTED OTHERWISE.

7. SPLICE MASONRY WALL REINFORCING AS SCHEDULED ON 3/S3-3.

8. PLACE BOND BEAM REINFORCING CONTINUOUS THROUGH EXPANSION CONTROL JOINTS, WRAPPING BARS WITH 1/8 INCH THICK BOND BREAKING TAPE 2'-0" BOTH SIDES OF JOINT. DO NOT SPLICE BOND BEAM REINFORCING WITHIN 6'-0" OF AN EXPANSION OR CONTROL JOINT.

9. PROVIDE CONTINUOUS BOND BEAMS AT ALL BEAM BEARING AND TRUSS BEARING ELEVATIONS, AND AT THE TOP OF ALL WALLS.

10. SPLICE BOND BEAM REINFORCING AT MASONRY CONTROL/EXPANSION JOINTS AS SHOWN ON MASONRY JOINT DETAIL ON 4/S3-3.

11. PROVIDE CONTINUOUS WIRE LATH GROUT BARRIERS BELOW BOND BEAMS.

12. PROVIDE LINTELS OVER ALL OPENINGS AND RECESSES IN MASONRY WALLS.

13. ALL LINTELS SHALL HAVE A MINIMUM BEARING OF 8 INCHES EACH END.

14. FOR ALL OPENINGS NOT OTHERWISE DETAILED OR SCHEDULED, MINIMUM LINTELS SHALL BE FOR EACH 4 INCH OF MASONRY WIDTH 1-L 3-1/2 X 3-1/2 X 1/4 FOR SPANS UP TO 4'-0", 1-L 4 X 3-1/2 X 1/4 FOR SPANS UP TO 6'-0" AND 1-L 5 X 3-1/2 X 1/4 FOR SPANS UP TO 8'-0". FOR SPANS LESS THAN 2'-0" PROVIDE A 5/16" PLATE.

15. MASONRY CONTROL JOINT SPACING SHALL NOT EXCEED 24'-0".

16. ALL MASONRY CONSTRUCTION SHALL HAVE SPECIAL INSPECTION PER IBC SECTION 1705.4 AND HAVE LEVEL 2 QUALITY ASSURANCE IN ACCORD WITH ACI530-11 SECTION 1.14. PERIODIC INSPECTION SHALL BE INTERPRETED AS TWO TIMES PER WEEK.

E. WOOD:

1. WOOD SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION OR THE WEST COAST LUMBER INSPECTION BUREAU.

2. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED GRADING AGENCY.

3. SAWN LUMBER SHALL HAVE THE FOLLOWING MINIMUM GRADE UNLESS NOTED OTHERWISE:

TYPE OF USE	MATERIAL AND GRADE
TOP PLATES, ALL OTHER SAWN LUMBER	DOUGLAS FIR NO. 2
POSTS AND BEAMS	DOUGLAS FIR NO. 1

4. ALL 2x BEARING WALLS SHALL BE BLOCKED HORIZONTALLY AT 4'-0" O.C. VERT. SPACING FOR ALL WALLS GREATER THAN 9'-0" IN HEIGHT.

5. ALL PLYWOOD SHALL BE C-D OR C-C SHEATHING EXTERIOR GRADE CONFORMING TO STANDARD PS0.019.

6. PLYWOOD SHALL BE PLACED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS USING A MINIMUM 5-PLY PLYWOOD. PLYWOOD JOINTS SHALL BE STAGGERED.

7. PLYWOOD ATTACHMENT SHALL BE DONE USING COMMON NAILS. NAILING SHALL BE AS NOTED ON ROOF FRAMING PLAN.

8. ALL SILL PLATES IN CONTACT WITH CONCRETE OR MASONRY SHALL BE TREATED DOUGLAS FIR OR FOUNDATION GRADE REDWOOD.

9. BRACE WOOD TRUSSES LATERALLY AT BEARING POINTS AND INTERMEDIATE LOCATIONS AS REQUIRED BY MANUFACTURER.

10. ULTIMATE UPLIFT ON JOISTS SHALL BE PER 3/S1-0.

F. SPECIAL INSPECTION

1. IN ACCORD WITH 2018 IBC SECTIONS 1704 & 1705, AS NOTED BELOW, TESTING AND INSPECTION SHALL BE BY AN INDEPENDENT TESTING/INSPECTION FIRM UNDER THE SUPERVISION OF A LICENSED ENGINEER EMPLOYED BY THAT FIRM. THIS ENGINEER SHALL BE DEEMED THE DESIGNATED ENGINEER OF RECORD FOR SPECIAL INSPECTIONS PERFORMED BY HIS FIRM OR HIS CONSULTANTS. INSPECTORS SHALL BE ICBO CERTIFIED AND APPROVED BY THE BUILDING OFFICIAL.

2. THE DESIGNATED ENGINEER OF RECORD FOR SPECIAL INSPECTIONS SHALL BE RESPONSIBLE FOR DEFINING THE ACTIVITIES OF THE INSPECTORS, FOR CERTIFYING THE QUALIFICATIONS OF THE INSPECTORS WITH THE BUILDING OFFICIAL AND TO ATTEND THE PRE-CONSTRUCTION MEETING TO DEFINE THEIR SCOPE OF SERVICES AND THE TESTING OR TEST PROCEDURES THAT ARE REQUIRED AS OUTLINED IN THE INTERNATIONAL BUILDING CODE.

3. SPECIAL INSPECTION IS TO BE PROVIDED IN ADDITION THE INSPECTIONS CONDUCTED BY THE LOCAL DEPARTMENT OF BUILDING SAFETY AND SHALL NOT BE CONSTRUED TO RELIEVE THE OWNER OR HIS AUTHORIZED AGENT FROM REQUESTING THE PERIODIC AND CALLED INSPECTIONS REQUIRED BY SECTION 108.5 AND 108.7 OF THE INTERNATIONAL BUILDING CODE.

4. CONCRETE PER SECTION 1705.3 AND TABLE 1705.3.

5. REINFORCING PER TABLE 1705.3 .

6. STRUCTURAL MASONRY: PER SECTION 1705.4.

7. GRADING, EXCAVATION AND FILLING: PER SECTION 1705.6. SEE GEOTECHNICAL REPORT.

8. EXPANSION BOLT, SCREW ANCHOR AND ADHESIVE ANCHOR INSTALLATION TO VERIFY INSTALLATION IN ACCORD WITH ICBO REPORTS NOTED PREVIOUSLY OR APPROVED EQUAL.

9. THE INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.

10. THE INSPECTOR SHALL FURNISH DAILY INSPECTION REPORTS ON THE WORK TO THE BUILDING OFFICIAL AND TO THE ENGINEER. ALL DISCREPENCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND, IF UNCORRECTED, TO THE ENGINEER AND THE BUILDING OFFICIAL.

11. THE TESTING/ INSPECTION FIRMS ENGINEER SHALL COMPLETE, SIGN AND SEAL, A FINAL REPORT CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE, THE WORK IS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.

12. THE SPECIAL INSPECTOR SHALL BE SELECTED AND CREDENTIALS SHALL BE SUBMITTED TO THE CITY PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.

G. OTHER:

1. UNLESS NOTED OTHERWISE, EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT II EXPANSION ANCHORS OR APPROVED EQUAL. ADHESIVE ANCHORS SHALL BE HILTI STANDARD HAS RODS WITH THE HVA ADHESIVE SYSTEM, THE SIMPSON SET SYSTEM, OR APPROVED EQUAL.

2. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES.

3. VERIFY IN FIELD ALL EXISTING CONDITIONS SHOWN ON DRAWINGS.

4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR MECHANICAL, ELECTRICAL, AND PLUMBING WITH APPROPRIATE TRADES. PROVIDE ALL TEMPORARY BRACING, SHORING, GUYING, OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION.

5. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE STAMP (AND SIGNATURE) OF AN ENGINEER REGISTERED IN OKLAHOMA.

TYPICAL REINFORCING NOTES

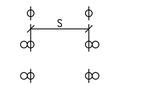
1. REINFORCING BAR DEVELOPMENT AND LAP SPLICE LENGTH SHALL BE AS SHOWN IN THIS TABLES UNLESS OTHERWISE NOTED ON THE DRAWINGS.

2. THE LENGTHS SHOWN IN THE TABLES ARE BASED ON THE FOLLOWING CONCRETE COVERAGE AND REINFORCING C-C SPACING:
BEAMS OR COLUMNS:
COVER (EQUAL OR MORE) 1.0bd (BAR DIAMETER)
CENTER TO CENTER (C-C) SPACING (EQUAL OR MORE) 2.0bd.
ALL OTHERS:
COVER (EQUAL OR MORE) 1.0bd
CENTER TO CENTER SPACING (EQUAL OR MORE) 3.0bd.

3. TOP BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE DEVELOPMENT LENGTH OR SPLICE.

4. DEVELOPMENT AND SPLICE LENGTH SHOWN SHALL NOT APPLY IF ANY OF THE FOLLOWING CONDITIONS OCCUR:
A) f'c < 2,500 PSI
B) fy > 60,000 PSI
C) THE COVER OR C-C BAR SPACING IS NOT AS LISTED ABOVE
D) THE REINFORCING STEEL IS EPOXY COATED
E) LIGHT WEIGHT CONCRETE IS USED.

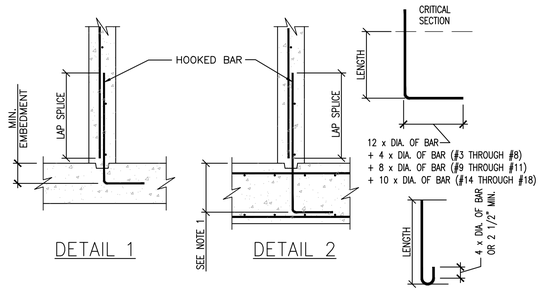
5. CENTER ON CENTER SPACING (S) IS DEFINED AS BELOW:



DEVELOPMENT LENGTH NOTES

1. WHERE DRAWINGS ARE DETAILED SIMILAR TO DETAIL 2, EXTEND THE EMBEDMENT LENGTH SUCH THAT THE HOOKED BAR CONTACTS THE LAYER OF MAIN REINFORCING SHOWN.

2. EMBEDMENT LENGTHS IN CHART ARE TYPICAL EXCEPT AS NOTED IN DETAIL 2, OR AS INDICATED ON DRAWINGS.



REINFORCING DEVELOPMENT AND SPLICES f'c = 4,000 PSI

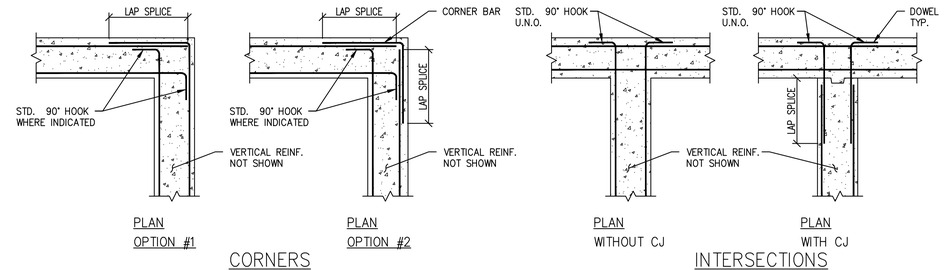
BAR SIZE	DEVELOPMENT LENGTH		SPLICE LENGTH	
	TOP	OTHER	TOP	OTHER
#3	1'–7"	1'–3"	2'–0"	1'–7"
#4	2'–1"	1'–7"	2'–8"	2'–1"
#5	2'–7"	2'–0"	3'–4"	2'–7"
#6	3'–1"	2'–5"	4'–0"	3'–1"
#7	4'–6"	3'–6"	5'–10"	4'–6"
#8	5'–2"	4'–0"	6'–8"	5'–2"
#9	5'–10"	4'–6"	7'–7"	5'–10"
#10	6'–7"	5'–1"	8'–6"	6'–7"
#11	7'–3"	5'–7"	9'–5"	7'–3"

DEVELOPMENT LENGTHS HOOKED BARS (f'c = 4,000 PSI)

BAR SIZE	LENGTH OR MIN. EMBEDMENT
#3	8"
#4	10"
#5	1'–0"
#6	1'–3"
#7	1'–5"
#8	1'–7"
#9	1'–10"
#10	2'–0"
#11	2'–3"

MINIMUM CONCRETE REINFORCEMENT COVER

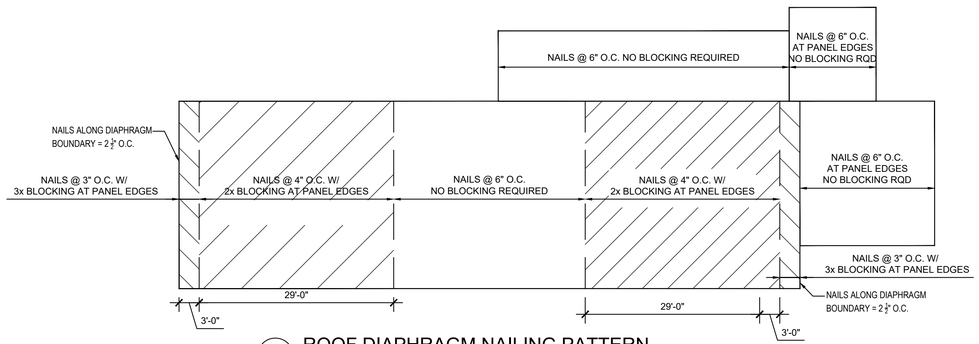
CONCRETE EXPOSURE	MEMBER	REINFORCEMENT	SPECIFIED COVER
CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND	ALL	ALL	3"
EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	ALL	#6 TO #18	2"
		#5 AND SMALLER	1 1/2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	SLABS, JOISTS, & WALLS	#14 & #18	1 1/2"
		#14 & SMALLER	3/4"
	BEAMS, COLUMNS, PEDASTALS, AND TENSION TIES	PRIMARY REINFORCEMENT STIRRUPS, TIES, SPIRALS, AND HOOPS	1 1/2"



NOTE:
UNLESS OTHERWISE INDICATED, THE CONTRACTOR HAS THE OPTION OF REINFORCING CORNERS IN ACCORDANCE WITH OPTION #1 OR OPTION #2.

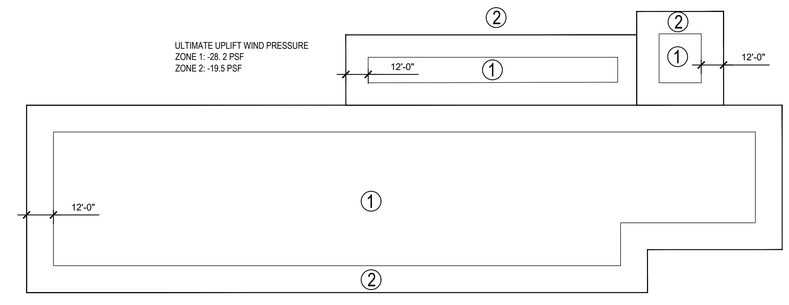
NOTE:
UNLESS OTHERWISE INDICATED, THE CONTRACTOR HAS THE OPTION OF CONSTRUCTING INTERSECTIONS WITH OR WITHOUT CONSTRUCTION JOINTS. REINFORCE PER APPLICABLE DETAIL.

1 / S1-0 HORIZONTAL WALL REINFORCEMENT DETAILS
3/4"=1'-0"



2 / S1-0 ROOF DIAPHRAGM NAILING PATTERN
NO SCALE

ULTIMATE UPLIFT WIND PRESSURE
ZONE 1: -28. 2 PSF
ZONE 2: -19.5 PSF



3 / S1-0 ROOF WIND UPLIFT LOADING
NO SCALE

PERFORMANCE Engineering
11811 Fort Street, Suite 104 - Omaha, NE 68164 (402) 343-3866
399 Perry St., Suite 204A - Castle Rock, CO 80104 (303) 721-3322
PE #: 2020543
NE-CA2455

BRAKES PLUS
APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER Robert A. Whorley 21024 OKLAHOMA
06/19/26
ENGINEER OF RECORD

REVISION	DATE	COMMENTS
	JULY 24, 2026	ISSUED FOR CONSTRUCTION

ARCODEV JOB #: --
CLIENTJOB #: --
DRAWN BY: SLM
CHECKED BY: TAS
DATE OF ISSUE: 05.04.26

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881–8925

SHEET
S1-0
GENERAL STRUCTURAL NOTES AND DETAILS

STATEMENT OF SPECIAL INSPECTIONS

2018 IBC SECTION 1705

Category	Item #	Verification & Inspection	Continuous	Periodic	Req Y / N	Reference Standard or Compliance Document	IBC Reference	Special Inspector
1704.2.4 Report Requirement								
Rep.	1	Special Inspector to keep record of special inspections and furnish inspection reports to the building official and to the Registered design professional in responsible charge.	•	--	Y		1704.2.4	
1704.2.5 Inspection of Fabricated Items								
Fab.	1	Work done in fabricator shop reviewed and inspected, unless the applicable work is approved according to IBC 1704.2.5.1. Where fabricator is approved, provide **fabricator certification document.**	--	•	N		1704.2.5 Document Required	
Fab.	2	At completion of fabrication, submit certificate of compliance to building official stating the work was performed in accordance with the approved construction documents.	--	•	N		1704.2.5.1 Document Required	
1705.2.1 Steel Construction Inspection								
Stl.	1	Structural Steel shall be in accordance with the quality assurance inspection requirements of AISC 360	--		Y	AISC 360	1705.2.1	
1705.2.2 to 1705.2.4 Steel Construction other than Structural Steel Inspection								
Stl.	1	Material verification of high-strength bolts, nuts and washers		•	N	ASTM Standards	1705.2	
Stl.	1a	Identification markings to conform to ASTM standards specified in the approved construction documents	--	•	N	AISC 360, Section A3.3 and applicable ASTM material standards	1705.2	
Stl.	1b	Manufacturer's certificate test reports	--	•	N		1705.2	
Stl.	2	Inspection of welding			N			
	2a.	Cold-formed steel deck			N			
Stl. (str)	2a (1)	Floor and roof deck welds	--	•	N	AWS D1.3	1705.2	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req Y / N	Reference Standard or Compliance Document	IBC Reference	Agent
	2b	Reinforcing steel		--	N		1705.2	
Stl. (reinf)	2b (1)	Verification of weldability of reinforcing steel other than ASTM A 706		•	N	AWDS D1.4 ACI 318: 3.5.2	1705.2	
Stl (reinf)	2b (2)	Reinforcing steel-resisting flexural and axial forces	•	--	N	AWDS D1.4 ACI 318: 3.5.2	1705.2	
Stl. (reinf)	2b (3)	Shear reinforcement	•	--	N	AWDS D1.4 ACI 318: 3.5.2	1705.2	
Stl. (reinf)	2b (4)	Other reinforcing steel	--	•	N	AWDS D1.4 ACI 318: 3.5.2	1705.2	
1705.2.3 Inspection of Open-web Steel Joist and Joist Girders								
Stl.	1	Installation of open-web steel joist and joist girders			N	SJI specification listed in Section 2207.1	Table 1705.2.3	
Stl.	1a	End connections – welding or bolted	--	•	N		Table 1705.2.3	
Stl.	1b	Bridging – horizontal or diagonal			N	SJI specification listed in Section 2207.1	Table 1705.2.3	
Stl.	1b (1)	Standard bridging	--	•	N		Table 1705.2.3	
Stl.	1b (2)	Bridging that differs from the SJI specifications listed in Section 2207.1	--	•	N		Table 1705.2.3	
1705.3 Concrete Construction								
Conc.	1	Inspection of reinforcing steel including prestressing tendons, and placement	--	•	Y	ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3, 26 and IBC 1905	1705.3	
Conc.	2	Reinforcing bar welding			N		Table 1705.3	
Conc.	2a	Verify weldability of reinforcing bars other than ASTM A 706	--	•	N	IBC 1905 AWS D1.4 ACI 318: 26.5.4	Table 1705.3	
Conc.	2b	Inspect single-pass welds, maximum 5/16"	--	•	N		Table 1705.3	
Conc.	2c	Inspect all other welds	•	--	Y		Table 1705.3	
Conc.	3	Inspection of anchors cast in concrete	--	•	Y	IBC 1905 ACI 318: 17.8.2	Table 1705.3	
Conc.	4	Inspection of anchors post-installed in hardened concrete members			Y			
Conc.	4a	Adhesive anchors installed in horizontally or upwardly inclined	•	--	Y	ACI 318: 17.8.2.4	Table 1705.3	
Conc.	4b	Mechanical anchors and adhesive anchors not defined in 4a	--	•	Y	ACI 381: 17.8.2	Table 1705.3	
Conc.	5	Verifying use of required design mix	--	•	Y	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3, Table 1705.3	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req Y / N	Reference Standard or Compliance Document	IBC Reference	Agent
Conc.	6	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	•	--	Y	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12	1908.10 & Table 1705.3	
Conc.	7	Inspection of concrete and shotcrete placement for proper application techniques	--	•	Y	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8, Table 1705.3	
Conc.	8	Verify maintenance of specified curing temperature and techniques	--	•	Y	ACI 318: 26.4.7 – 26.4.9	1908.9 & Table 1705.3	
Conc.	9	Inspection of pre-stressed concrete			N			
Conc.	9a	Application of pre-stressing forces	--	--	N	ACI 318: 26.9.2.1 ACI 318: 26.9.2.3	Table 1705.3	
Conc.	9b	Grouting of bonded pre-stressing tendon	--	--	N		Table 1705.3	
Conc.	10	Inspect erection of precast concrete members	--	•	N	ACI 318: Ch. 26.8	Table 1705.3	
Conc.	11	Verification of in-situ concrete strength, prior to stressing of tendons in post0tensioned concrete and prior to removal of shores and forms from beams and structural slabs	--	•	N	ACI 318: 26.10.2	Table 1705.3	
Conc.	12	Inspect formwork for shape, location and dimensions of the concrete member being formed	--	•	Y	ACI 318: 26.10.1(b)	Table 1705.3	
1705.4 Masonry Construction								
Mas.		Masonry construction shall be inspected and verified per standards	--	•	Y	TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ ASCE 6	1705.4	
Mas.	1	Empirically design masonry, glass unit masonry and masonry veneer in Risk Category IV	--	--	N	Section 2109, 2110 or Chapter 14, Section 1604.5, shall comply with TMS 402/ACI 530/ ASCE 5 Level B Quality Assurance	1705.4.1	
Mas.	2	Vertical masonry foundation elements	--	•	N	IBC Section 1705.4	1705.4.2	
1705.5 Wood Construction								
Wd	1	High-Load Diaphragms	--	--	N	IBC Sec. 2306.2; Sec 1704.2, approved construction drawings	1705.5.1	
Wd	2	Metal-plate-connected wood trusses spanning 60 feet or greater	--	--	N	Approved truss submittal package (bracing)	1705.5.2	
1705.6 Soils								
Soil	1	Verify materials below shallow foundations are adequate to achieve the design bearing capacity	--	•	Y		Table 1705.6	
Soil	2	Verify excavations are extended to proper depth and have reached proper material	--	•	Y		Table 1705.6	
Soil	3	Perform classification and testing of compacted fill materials	--	•	Y		Table 1705.6	
Soil	4	Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	•	--	Y		Table 1705.6	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req Y / N	Reference Standard or Compliance Document	IBC Reference	Agent
Soil	5	Prior to placement of compacted fill, observe sub-grade and verify that site has been prepared properly	--	•	Y		Table 1705.6	
1705.7 Driven Deep Foundation								
Drv	1	Verify element materials, sizes and lengths comply with the requirements	--	--	N		Table 1705.7	
Drv	2	Determine capacities of test elements and conduct additional load tests, as required	--	--	N		Table 1705.7	
Drv	3	Inspect driving operations and maintain complete and accurate records for each element	--	--	N		Table 1705.7	
Drv	4	Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element	--	--	N		Table 1705.7	
Drv	5	For steel elements, perform additional inspections in accordance with Section 1705.2	--	--	N		Sec. 1705.7 & Table 1705.7	
Drv	6	For concrete elements and concrete filled elements, perform additional inspections in accordance with Section 1705.3	--	--	N		Sec. 1705.7 & Table 1705.7	
Drv	7	For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge	--	--	N		Table 1705.7	
1705.8 Cast-In-Place Deep Foundation								
CIP	1	Inspect drilling operations and maintain complete and accurate records for each element	--	--	N		Table 1705.8	
CIP	2	Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end bearing strata capacity. Record concrete or grout volumes	--	--	N		Table 1705.8	
CIP	3	For concrete elements, perform additional inspections in accordance with Section 1705.3	--	--	N		Sec. 1705.3 & Table 1705.8	
1705.9 Helical Pile Foundations								
HPF	1	Installation of helical pile foundations	--	--	N	Approved Geotechnical report and registered design professional	1705.9	
1705.10 Special Inspections for Fabricated Items								
Fab		Special inspections of fabricated items shall be performed in accordance with Section 1704.2.5		•	N		1705.10	
1705.11 Special Inspections for Wind Resistance								
Wind		Wind Requirements for buildings and structures per 1705.11			N		1705.11	
Wind	1	Structural Wood	--	--	N		1705.11.1	
Wind	2	Cold-formed steel light-frame construction	--	--	N		1705.11.2	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req Y / N	Reference Standard or Compliance Document	IBC Reference	Agent
Wind	3	Wind-resisting components. 1. Roof covering, roof deck and roof framing connections 2. Exterior wall covering and wall connections to roof and floor diaphragms and framing	--	--	N		1705.11.3	
1705.12 Special Inspection for Seismic Resistance								
Seis	1	Structural Steel seismic resistance shall be in accordance with Section 1705.12.1.1 or 1705.12.1.2 as applicable			N	Section 1705.12.1.1 Section 1705.12.1.2	1705.12.1	
Seis	1a	Seismic force-resisting systems of structural steel in the seismic force-resisting systems of buildings and structures assigned to Seismic Design Category B, C, D, E or F shall be performed in accordance with the quality assurance of requirements of AISC 341.	--	--	N	AISC 341	1705.12.1.1	
Seis	1b	Structural steel elements in the seismic force resisting systems of buildings and structures assigned to Seismic Design Category B, C, D, E or F other than those covered in Section 1705.12.1.1, including struts, collectors, chords and foundation elements, shall be performed in accordance with the quality assurance requirements of AISC 341	--	--	N	Section 1705.12.1.1 AISC 341	1705.12.1.2	
Seis	2	Structural wood for the seismic force-resisting systems of structures assigned to Seismic Design Category C, D, E or F			N		1705.12.2	
Seis	2a	Structural wood field gluing operations of elements of seismic force-resisting system	--	--	N		1705.12.2	
Seis	2b	Structural wood fastening for nailing, bolting, anchoring and other fastening of elements of the seismic force-resisting system, including wood shear walls, wood diaphragms, drag struts, braces, shear panels and hold downs	--	--	N		1705.12.2	
Seis	3	Cold-formed steel light-frame construction for seismic force resisting systems of structures assigned to Seismic Design Category C, D, E or F			N		1705.12.3	
Seis	3a	For welding operations of elements of the seismic force resisting system	--	--	N		1705.12.3	
Seis	3b	For screw attachment, bolting, anchoring and other fastening of elements of the seismic force-resisting system, including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs	--	--	N		1705.12.3	
Seis	4	Designated seismic system verifications for structures assigned to Seismic Design Category C, D, E or F, the special inspector shall examine designated seismic systems requiring seismic qualification in accordance with Section 13.2.2 of ASCE 7 and verify that the label, anchorage and mounting conform to the certificate of compliance	--	--	N	Section 13.2.2 ASCE 7	1705.12.4	

Category	Item #	Verification & Inspection	Continuous	Periodic	Req Y / N	Reference Standard or Compliance Document	IBC Reference	Agent
Seis	5	Architectural Components in D, E, or F	--	•	N		D, E, F	1705.12.5	
Seis	5.1	Access Floors in D, E, or F	--	•	N		D, E, F	1705.12.5.1	
Seis	6	Plumbing, Mechanical and Electrical Components			N			1705.12.6	
Seis	6a	Anchorage of electrical equipment for emergency or standby power systems, in C, D, E or F	--	•	N			1705.12.6	
Seis	6b	Anchorage of other electrical equipment in E or F	--	•	N			1705.12.6	
Seis	6c	Installation and anchoring of piping systems designed to carry hazardous materials and associated mechanical units in C, D, E or F	--	•	N			1705.12.6	
Seis	6d	Installation of HVAC ductwork that will carry hazardous materials in C, D, E or F	--	•	N			1705.12.6	
Seis	6e	Installation of vibration isolation systems with clearance less than 0.25 inches between equipment support frame and restraint where indicated on construction documents in C, D, E or F	--	•	N			1705.12.6	
Seis	7	Storage Rack during anchoring storage racks 8 feet or greater in height in D, E or F	--	•	N			1705.12.7	
Seis	8	Seismic Isolation System	--	•	N			1705.12.8	
Seis	9	Cold-formed steel special bolted moment frames in the seismic force-resisting systems of structures assigned to seismic Design Category D, E or F	--	•	N			1705.12.9	
1705.13 Testing for Seismic Resistance								
Test	1	Structural Steel	--	•	N	Section 1705.13.1.1 Section 1705.13.1.2	1705.13.1	
Test	2	Seismic force-resisting systems	--	•	N	AISC 341	1706.13.1.1	
Test	3	Structural steel elements	--	•	N	AISC 341	1705.13.1.2	
Test	4	Seismic certification of nonstructural components and designated seismic systems	--	•	N	Per the registered design professionals requirements on the construction documents. Sec. 13.2 of ASCE 7	1705.13.2 and 1705.13.3	
Test	5	Seismically isolated structures	--	•	N	Sec. 17.8 of ASCE 7	1705.13.4	

PERFORMANCE Engineering
11811 Fort Street, Suite 104 - Omaha, NE 68164 (402) 343-3900 Fax: (402) 343-3961
399 Perry St., Suite 204A - Castle Rock, CO 80104 (303) 721-3322
NE-CA0405
PE #: 2005043

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

ENGINEER OF RECORD

REVISION	DATE	COMMENTS
	JULY 24, 2026	ISSUED FOR CONSTRUCTION

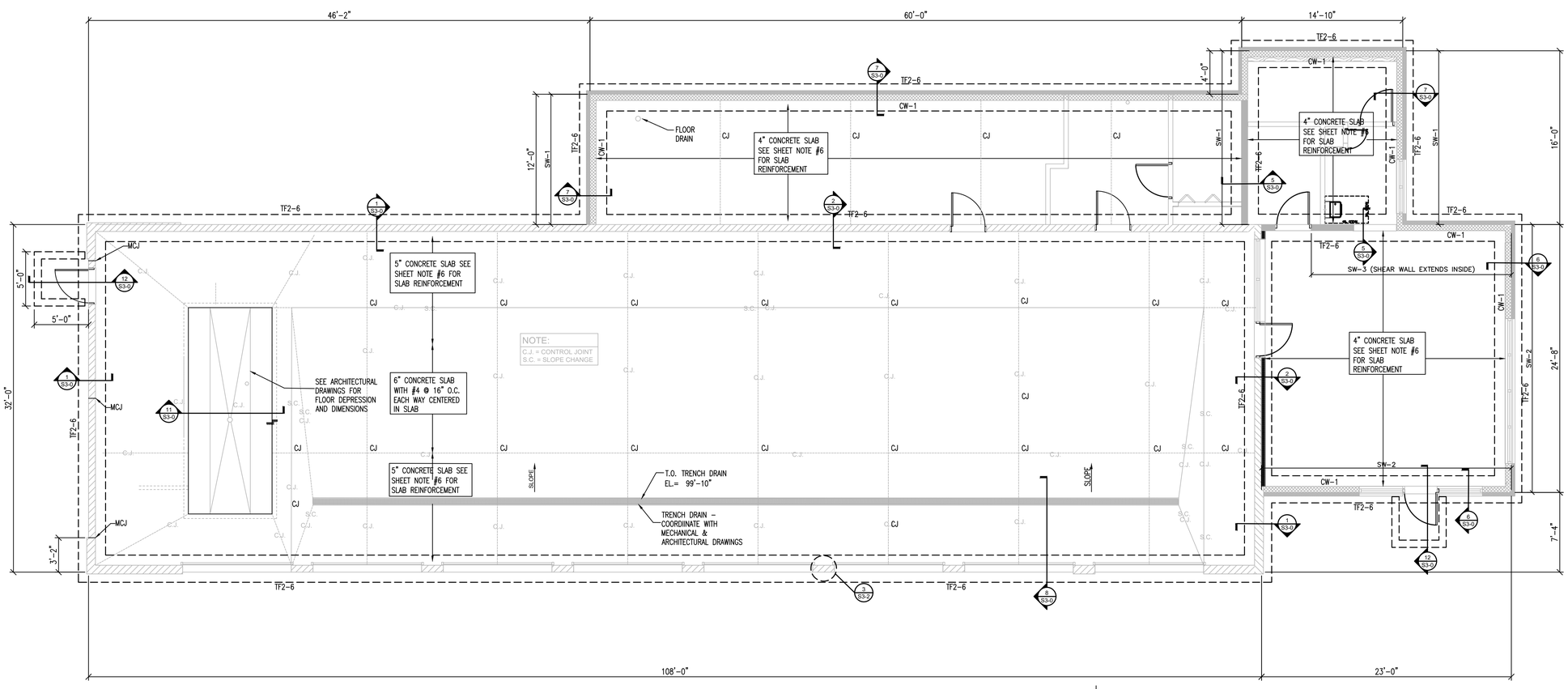
ARCODEV JOB #: –
CLIENTJOB #: –
DRAWN BY: SLM
CHECKED BY: TAS
DATE OF ISSUE: 05.04.26

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

S1-1

SPECIAL INSPECTIONS



FOUNDATION PLAN
3/16" = 1'-0"

SHEAR WALL SCHEDULE										
MARK	WALL SHEATHING	NAILS, PENETRATION	PANEL EDGE NAILING	FIELD NAILING	SILL BOLTS	STUDS, SILLS & PLATES	ALLOWABLE SHEAR (PLF)	HOLDOWNS	FOUNDATION ANCHOR	END MEMBERS
SW-1	15/32" NOMINAL STRUCTURAL I SHEATHING, ONE SIDE, BLOCKED	10d x 3" 1 1/2" PEN.	6" O.C.	6" O.C.	3/4" DIA. @ 24" O.C.	2x STUDS, 2x SILL, 2x PL	340	HDU8-SDS2.5	7/8" DIA. EMBED 9"	4x OR (3) 2x
SW-2	15/32" NOMINAL STRUCTURAL I SHEATHING, ONE SIDE, BLOCKED	10d x 3" 1 1/2" PEN.	4" O.C.	6" O.C.	3/4" DIA. @ 24" O.C.	2x STUDS, 2x SILL, 2x PL	510	HDU8-SDS2.5	7/8" DIA. EMBED 9"	4x OR (3) 2X
SW-3	15/32" NOMINAL STRUCTURAL I SHEATHING, ONE SIDES, BLOCKED	10d x 3" 1 1/2" PEN.	4" O.C.	6" O.C.	3/4" DIA. @ 24" O.C.	2x STUDS, 2x SILL, 2x PL	510	HDU11-SDS2.5	1" DIA. EMBED 12"	6x OR (4) 2X

NOTE:
1. ALL WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.

2. NAILING & HARDWARE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED.

3. WHERE PANELS ARE APPLIED ON BOTH FACES OF WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. STAGGER NAILING AT EACH SIDE OF JOINT.

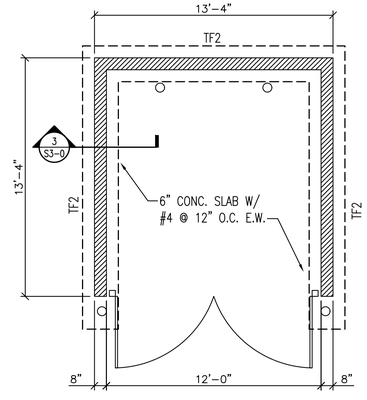
4. INSTALL HARDWARE IN ACCORD WITH MANUFACTURER'S RECOMMENDATIONS.

5. ALL BOLT HOLES SHALL BE 1/16" (MAX) OVERISZED AT THE CONNECTION OF HOLD DOWNS TO POSTS. INSPECTOR SHALL VERIFY.

6. SEE DETAIL 5/S3-3 FOR TYPICAL SHEAR WALL FRAMING.

FOUNDATION SCHEDULE		
MARK	SIZE L x W x D	REINFORCING
TF2-6	CONT. x 2'-6" x 3'-0"	3 - #5 CONT. TOP & BOTT W/ #4 STIRRUPS @ 16" O.C.

FOUNDATION WALL SCHEDULE		
MARK	SIZE	REINFORCING
CW-1	6" WIDE x 1'-2" HIGH	2 - #5 CONT. & # DOWELS AT 24"O.C.



2 FOUNDATION PLAN-TRASH ENCLOSURE
SCALE: 1/4" = 1'-0"

SHEET NOTES:

1. INDICATES CMU WALLS WITH #5 VERTICAL BARS @ 2'-0" O.C. CENTERED IN MASONRY WALLS (UNLESS NOTED OTHERWISE). SEE 6/S3-3 FOR MASONRY CONSTRUCTION.

2. SOIL PREPARATION BENEATH BUILDING AND FOUNDATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT FOR SHALLOW FOUNDATION SYSTEM AND SLAB ON GRADE CONSTRUCTION. THIS ACTION SHALL BE OBSERVED BY A REPRESENTATIVE OF THE GEOTECHNICAL FIRM ON A CONTINUOUS BASIS TO ENSURE THAT SOIL PROPERTIES MEET THE REQUIREMENTS IN THE GEOTECHNICAL REPORT.
- ALL FOUNDATIONS SHALL BE SUPPORTED ON NATIVE, OVEREXCAVATED AND RECOMPACTED SILTY SANDS OR ON NEWLY PLACED AND COMPACTED STRUCTURAL FILL.
- ALL FOUNDATIONS SHALL BE SEATED AT A MINIMUM EMBEDMENT DEPTH OF 2'-6" BELOW LOWEST, ADJACENT, FINISHED GRADE.
- THE BUILDING FLOOR SLAB SHALL BE SUPPORTED BY A MINIMUM OF 12" OF LOW PLASTICITY STRUCTURAL FILL. STRUCTURAL FILL SOILS SHALL EXTEND 5'-0" BEYOND THE BUILDING PERIMETER AND BE MOISTURE CONDITIONED AND RECOMPACTED IN ACCORDANCE WITH THE SOIL REPORT.
- CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS FOR MATERIAL AND COMPACTION LISTED IN THE SOIL REPORT.

3. CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF FLOOR AND WALL PENETRATIONS AND BLOCK OUT ACCORDINGLY.

4. TOP OF FOOTING ELEVATION SHALL BE 99'-4" UNLESS NOTED OTHERWISE.

5. "MCJ" INDICATES MASONRY CONTROL JOINT LOCATION FOR CONCRETE MASONRY UNITS. SEE 2/S3-3 & 4/S3-3 FOR DETAILS. SEE ARCHITECTURAL DRAWINGS FOR BRICK CONTROL JOINTS.

6. SEE PLAN FOR SHOP AREA SLAB ON GRADE THICKNESS. REINFORCE CONCRETE SLAB WITH 4 LBS PER CUBIC YARD OF "GRACE STRUX 90/40" MACRO FIBER REINFORCEMENT ON PREPARED SUBGRADE. OFFICE & CUSTOMER SERVICE AREA SLAB SHALL BE A 4" CONCRETE SLAB ON PREPARED SUBGRADE AND REINFORCED IN THE SAME MANNER. REINFORCEMENT SHOWN ON THE PLANS IS IN ADDITION TO THE MACRO FIBER REINFORCEMENT. TOP OF SLAB SHALL BE 100'-0" UNLESS NOTED OTHERWISE.

7. SW-# INDICATES SHEAR WALL TYPE. SEE SCHEDULE.

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-

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
Robert A. Whorley
21028
OKLAHOMA
06/19/26

ENGINEER OF RECORD

REVISION	DATE	COMMENTS
	JULY 24, 2026	ISSUED FOR CONSTRUCTION

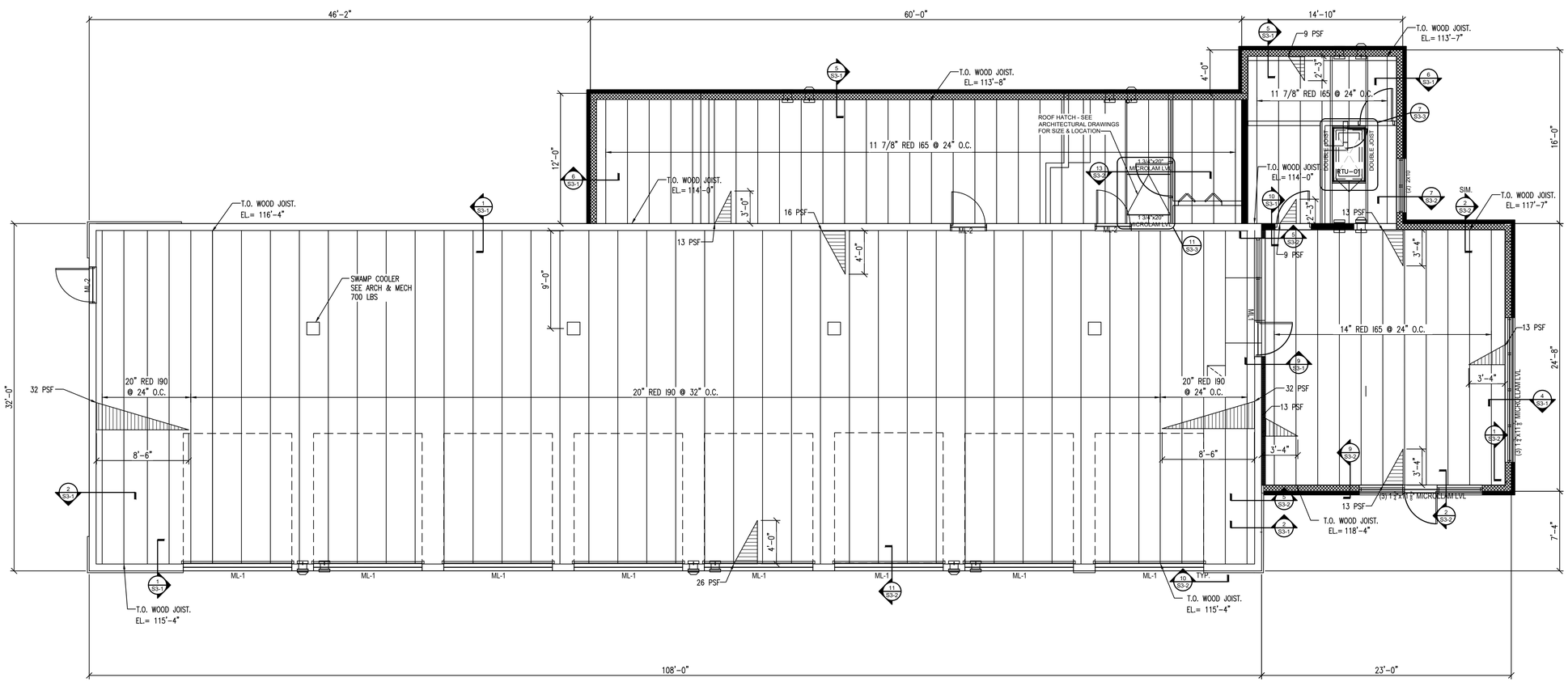
ARCODEV JOB #: --
CLIENTJOB #: --
DRAWN BY: SLM
CHECKED BY: TAS
DATE OF ISSUE: 05.04.26

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

S2-0

FOUNDATION PLAN



ROOF FRAMING PLAN

3/16" = 1'-0"

NORTH

SHEET NOTES:

1. DIAPHRAGM SHALL BE A MINIMUM OF 19/32" PLYWOOD SHEATHING WITH A SPAN RATING OF 48/24, EXTERIOR GRADE AND SHALL BE FASTENED TO STRUCTURE AS FOLLOWS:
   a) 10d (0.148" DIA.) NAILS WITH A MINIMUM OF 1 ½" PENETRATION INTO FRAMING MEMBER
   b) SEE 2/S1-0 FOR NAILING PATTERNS
   c) FIELD NAILING = 12" O.C.

2. ML-# INDICATES MASONRY LINTEL TYPE. SEE DETAIL 11/S3-2.

3. UNLESS OTHERWISE DETAILED, CONNECTIONS FOR ITEMS HUNG FROM JOISTS (FANS, HEATERS, GARAGE DOORS, ETC.) SHALL BE DESIGNED AND INSTALLED BY THE GENERAL CONTRACTOR AND THEIR RESPECTIVE TRADES. THIS LOAD SHALL NOT EXCEED 250 LBS PER JOIST.

4. ATTACH 2x12 LEDGER PIECES TO CMU WALL W/ (2) 3/4" DIA. ANCHORS @ 24" O.C., EMBED 6" MIN. FASTENERS SUCH AS NAILS, SCREWS, AND ANCHORS SHALL BE HOT DIPPED GALVANIZED WHEN CONNECTING TO OR ANCHORING PRESSURE TREATED LUMBER .

5. CORROSION PROTECTION FOR CONNECTORS AND HANGERS WHEN IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE AS FOLLOWS:
- HARDWARE & HANGERS - ZMAX
- FASTENERS (NAILS & SCREWS) - GALVANIZED
- SIMPSON TITEN HD ANCHORS - MECHANICALLY GALVANIZED

6. SEE DETAIL 7/S3-3 FOR ROOF OPENINGS & PENETRATIONS.

7. WOOD WALLS SHALL BE 2x6 DOUGLAS FIR NO. 2 STUD. STUD SPACING SHALL BE 16" O.C. UNLESS NOTED OTHERWISE.

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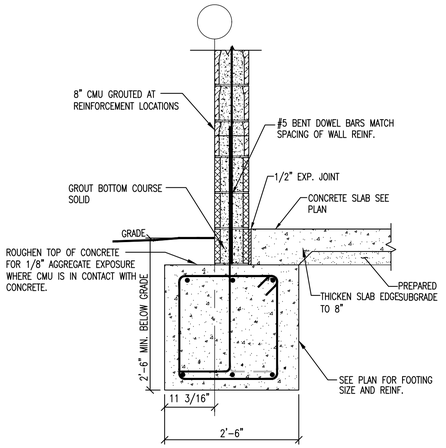
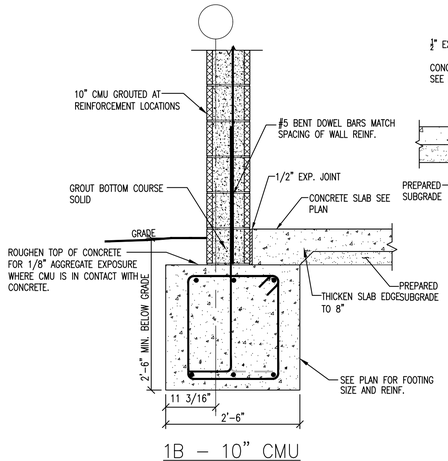
SHEET

S2-1

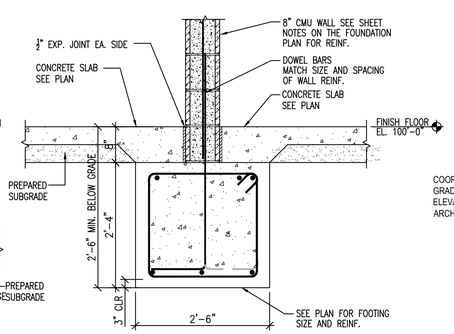
ROOF FRAMING PLAN



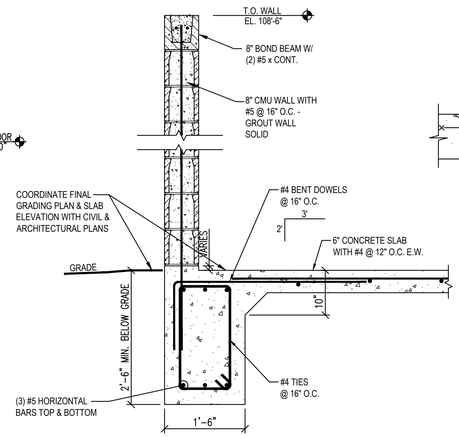
1 S3-0 TRENCH FOOTING @ WALL
3/4"=1'-0"



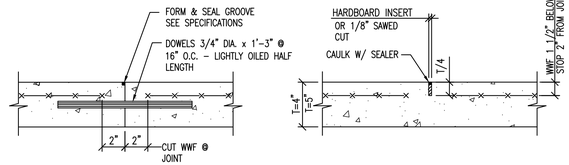
1B – 10" CMU



2 S3-0 FOOTING
3/4"=1'-0"



3 S3-0 TRASH ENCLOSURE WALL SECTION
3/4"=1'-0"



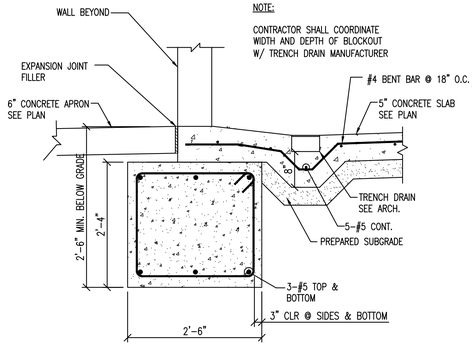
CONSTRUCTION JOINT CONTROL JOINT

NOTES:

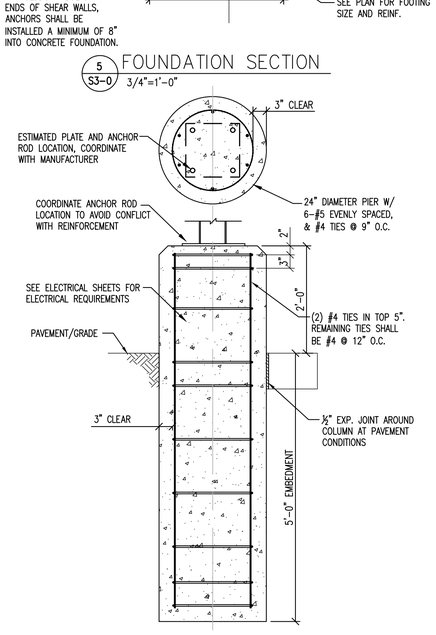
1. EPOXY JOINT FILLER TO BE SIKADUR 51 BY SIKA CORPORATION OR APPROVED EQUAL. MINIMUM AGE OF CONCRETE TO BE 28 DAYS WHEN FILLED.

2. SAW JOINT AS SOON AS SURFACE IS FIRM ENOUGH TO BE TORN OR DAMAGED BY THE BLADE (USUALLY 4 TO 12 HOURS AFTER CONCRETE HARDENS).

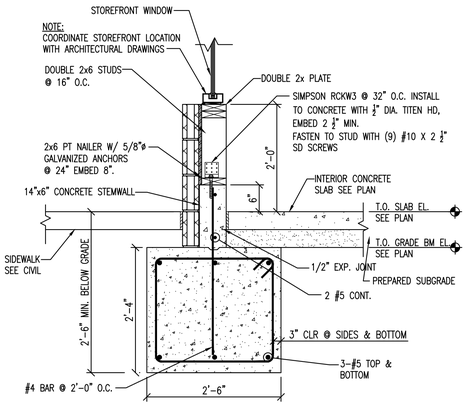
4 S3-0 4"& 5" CONCRETE SLAB (C.J.) DETAILS
N.T.S.



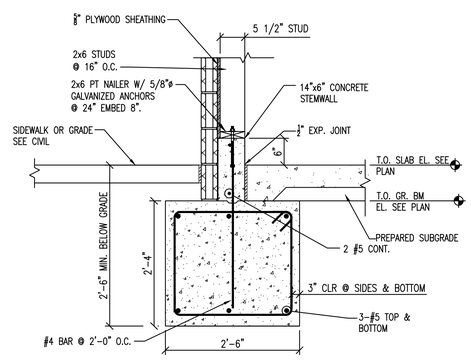
8 S3-0 FOOTING & TRENCH DRAIN
3/4"=1'-0"



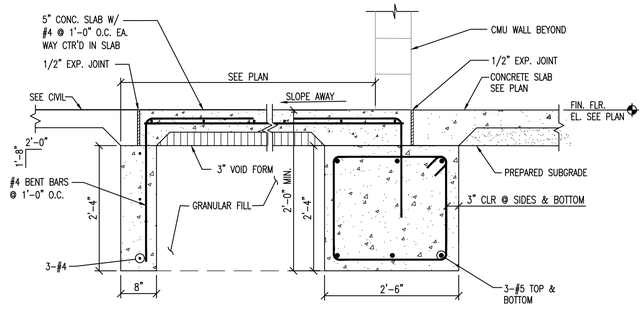
5 S3-0 FOUNDATION SECTION
3/4"=1'-0"



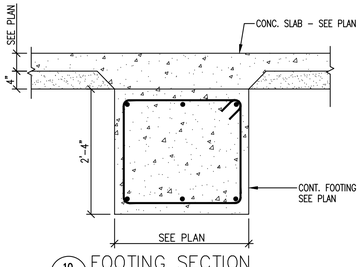
6 S3-0 FOOTING @ STOREFRONT
3/4"=1'-0"



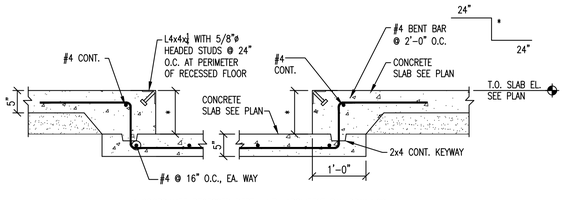
7 S3-0 FOOTING @ WOOD WALL
3/4"=1'-0"



12 S3-0 STRUCTURAL STOOP
3/4"=1'-0"



10 S3-0 FOOTING SECTION
3/4" = 1'-0"



* COORDINATE RECESSED DEPTH WITH ARCHITECTURAL DRAWINGS

11 S3-0 DEPRESSED SLAB DETAIL
3/4"=1'-0"

9 S3-0 LIGHT POLE FOUNDATION
3/4" = 1'-0"

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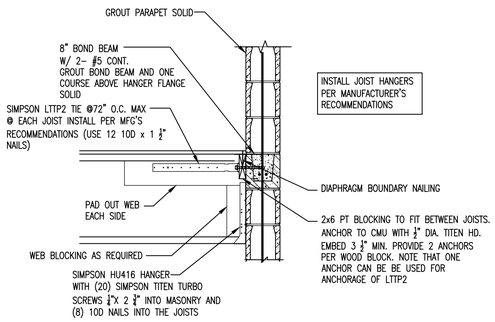
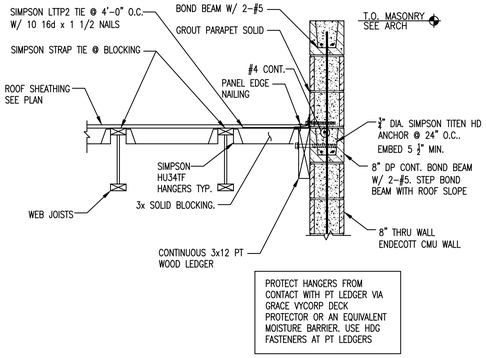
S3-0

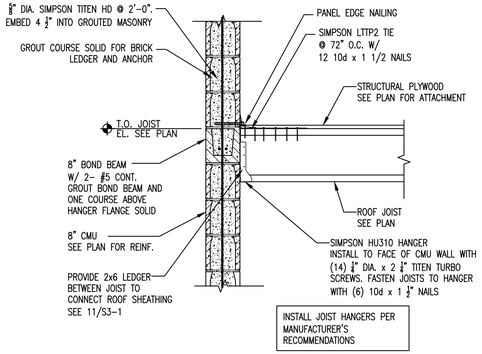
SECTIONS AND DETAILS



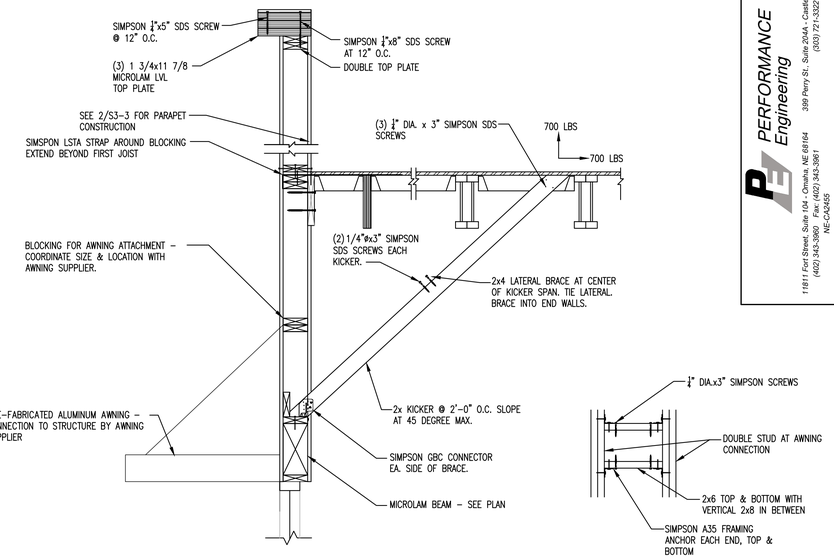
1 S3-1 JOIST CONNECTION
3/4"=1'-0"



2 S3-1 ROOF DIAPHRAGM CONNECTION
3/4" = 1'-0"

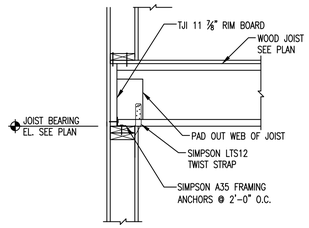


3 S3-1 WALL SECTION
3/4"=1'-0"

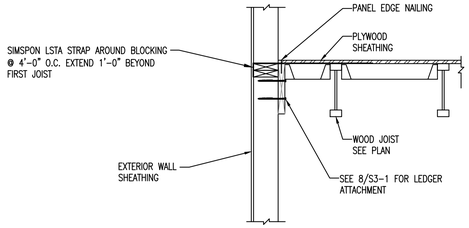


4 S3-1 STOREFRONT WALL SECTION
3/4"=1'-0"

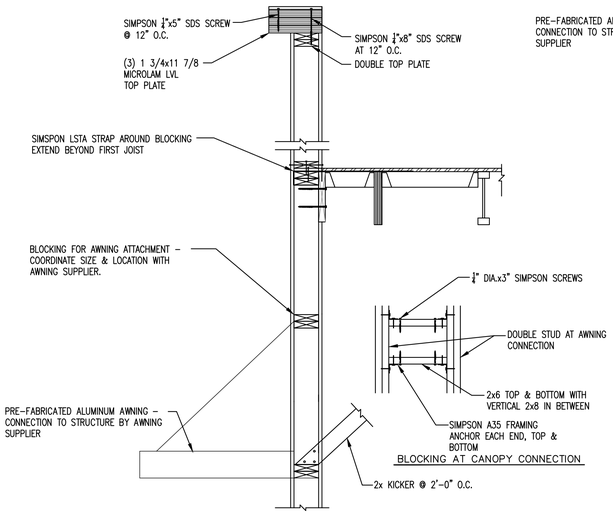
BLOCKING AT CANOPY CONNECTION



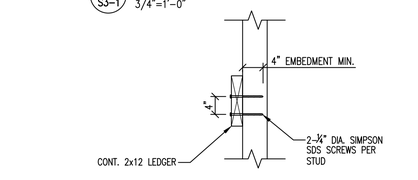
5 S3-1 FRONT WALL SECTION
3/4"=1'-0"



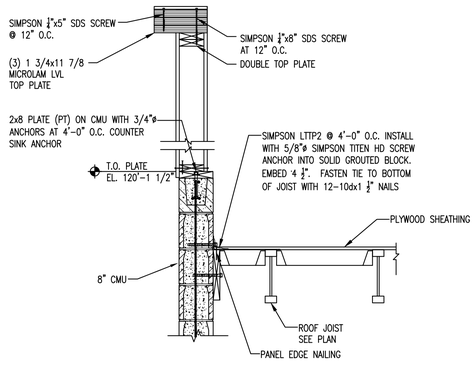
6 S3-1 SIDE WALL SECTION
3/4"=1'-0"



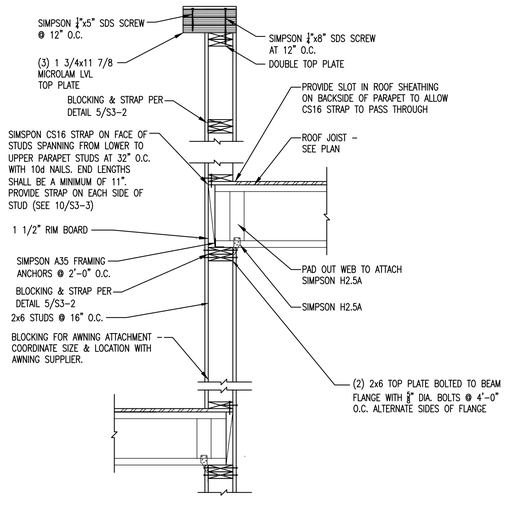
7 S3-1 WALL SECTION
3"=1'-0"



8 S3-1 LEDGER ATTACHMENT
3"=1'-0"



9 S3-1 PARAPET WALL SECTION
3/4"=1'-0"



10 S3-1 WALL SECTION
3/4" = 1'-0"

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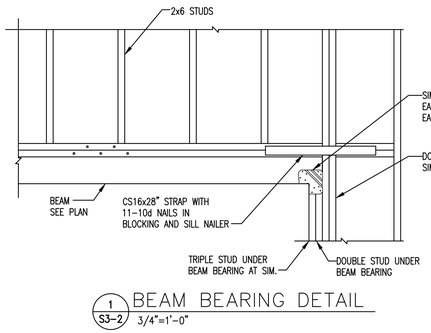
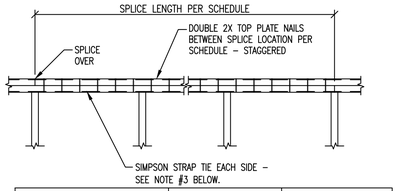
SHEET

S3-1

SECTIONS AND DETAILS



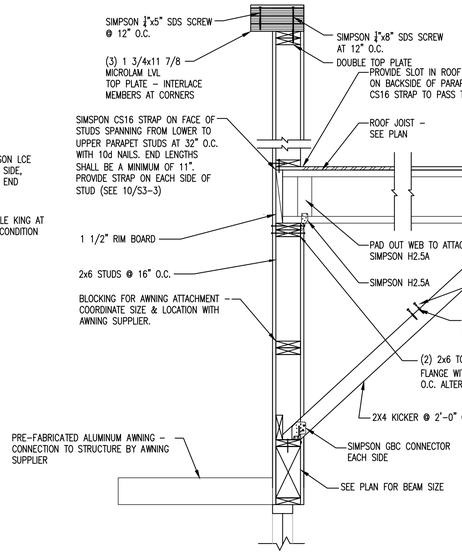
1 S3-2 BEAM BEARING DETAIL
3/4"=1'-0"



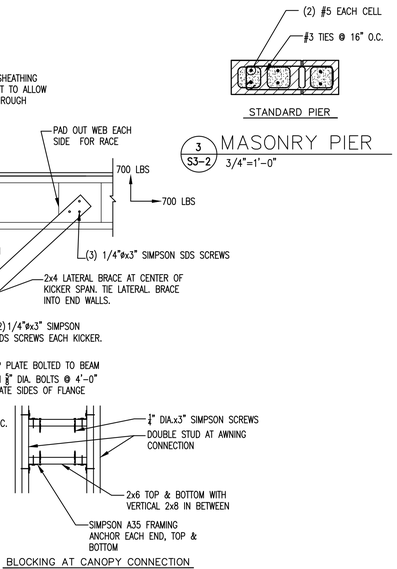
LENGTH OF WALL (BETWEEN CORNERS)	SPLICE LENGTH (MINIMUM)	NAILS ALONG SPLICE LENGTH
OVER 30'	4'-0"	18-16d
OVER 20'	2'-8"	10-16d
OVER 10'	1'-4"	6-16d
LESS THAN 10'	1'-4"	4-16d

NOTE:
1. DO NOT SPLICE TOP PLATES WITHIN 6'-0" OF ENDS OF WOOD STRUCTURAL PANEL SHEAR WALLS.
2. THIS DETAIL APPLIES TO ALL EXTERIOR WALLS AND INTERIOR WALLS. SIMPSON STRAP TIE NEED NOT BE APPLIED TO INTERIOR WALLS.
3. PROVIDE SIMPSON CMST 14 ON EACH SIDE OF TOP PLATE AT SPLICE LOCATION. EXTEND STRAP 34" BEYOND END OF PLATE SPLICE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

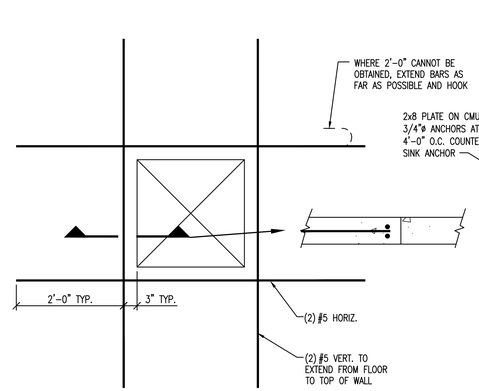
6 S3-2 CHORD SPLICE
3/4"=1'-0"



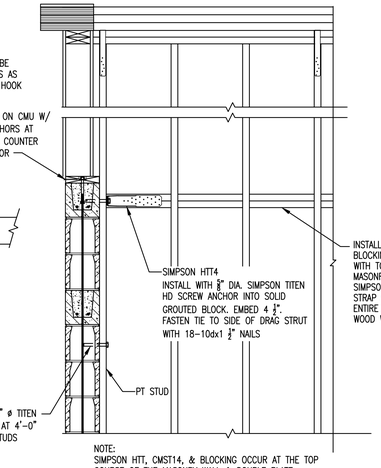
2 S3-2 HIGH PARAPET
3/4"=1'-0"



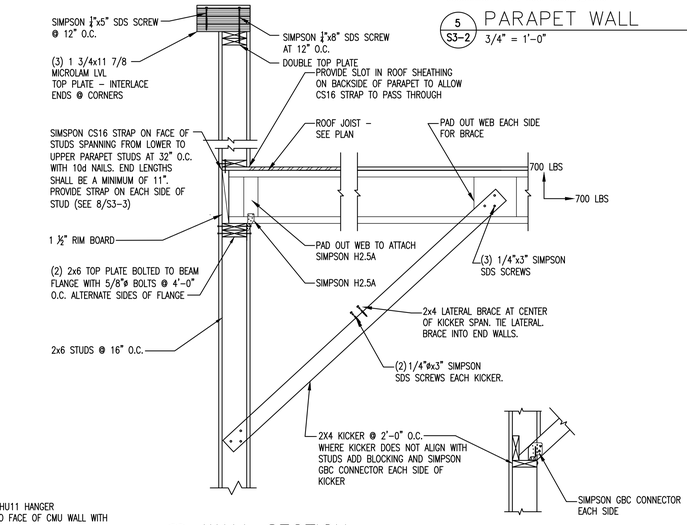
3 S3-2 MASONRY PIER
3/4"=1'-0"

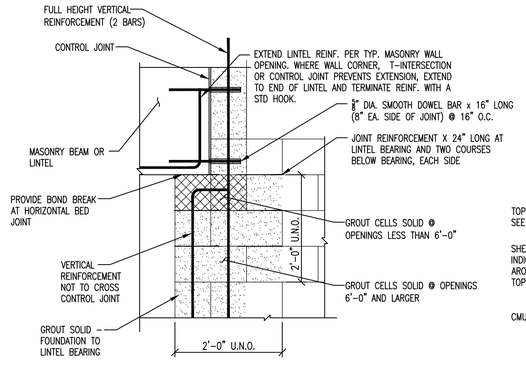


4 S3-2 REINF. AROUND OPENINGS IN MASONRY WALLS
3/4"=1'-0"

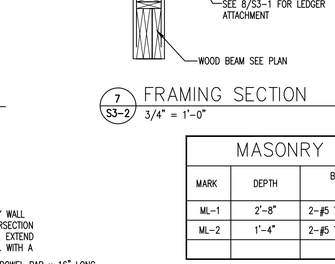


5 S3-2 PARAPET WALL
3/4" = 1'-0"

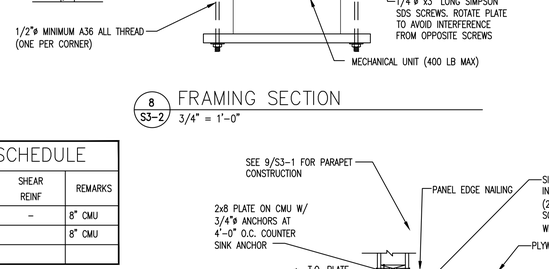




10 S3-2 TYP. MASONRY BM/ LINTEL BEARING
3/4"=1'-0"



7 S3-2 FRAMING SECTION
3/4" = 1'-0"

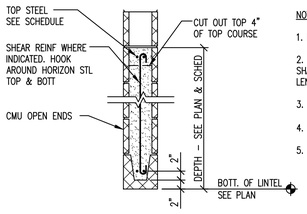


8 S3-2 FRAMING SECTION
3/4" = 1'-0"

MASONRY LINTEL SCHEDULE				
MARK	DEPTH	BOND BM REINF	SHEAR REINF	REMARKS
ML-1	2'-8"	2-#5 TOP & BOTT	-	8" CMU
ML-2	1'-4"	2-#5 TOP & BOTT		8" CMU

NOTE:

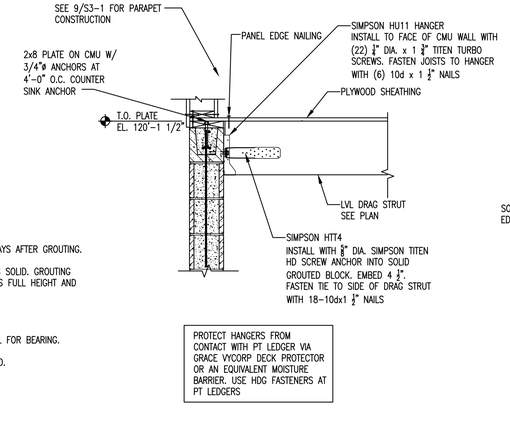
1. USE LINTEL ML-2 AT ALL OPENINGS LESS THAN 4'-0" WIDE UNLESS NOTED OTHERWISE.
2. BOND BEAM REINFORCEING SHALL BE CONTINUOUS WITHOUT SPLICES.
3. MASONRY LINTELS SHALL BE GROUTED SOLID.



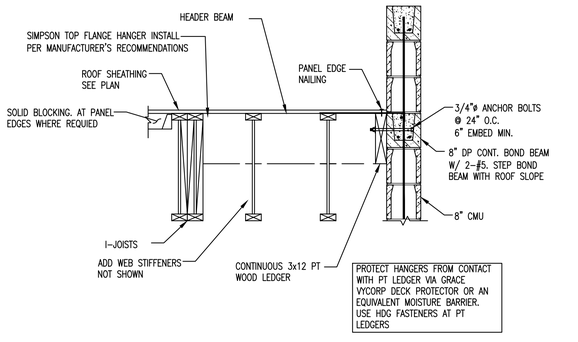
NOTES:

1. PROVIDE SHORING UNDER BEAM FOR A MIN.OF 7 DAYS AFTER GROUTING.
2. MONOLITHICALLY GROUT BOND BEAM AND ALL CELLS SOLID. GROUTING SHALL HAVE NO VERTICAL OR HORIZONTAL COLD JOINTS FULL HEIGHT AND LENGTH OF LINTEL INCLUDING END BEARINGS.
3. MECHANICALLY VIBRATE GROUT.
4. SEE TYPICAL MASONRY BEAM/LINTEL BEARING DETAIL FOR BEARING.
5. HORIZONTAL REINFORCEMENT SHALL NOT BE SPLICED.

11 S3-2 TYP. MASONRY BEAM/ LINTEL
3/4"=1'-0"



12 S3-2 PARAPET WALL SECTION
3/4"=1'-0"



13 S3-2 ROOF OPENING DETAIL
3/4"=1'-0"

PERFORMANCE Engineering
11811 Fort Street, Suite 104 - Omaha, NE 68164 (402) 343-3860
399 Perry St., Suite 204A - Castle Rock, CO 80104 Fax: (402) 343-3861 (303) 721-3322
NE-CA2455
PE #: 2605543

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
Robert A. Whorley
21028
OKLAHOMA
06/19/26

ENGINEER OF RECORD

REVISION	DATE	COMMENTS
	JULY 24, 2026	ISSUED FOR CONSTRUCTION

ARCODEV JOB #: --
CLIENTJOB #: --
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CHECKED BY: TAS
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ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

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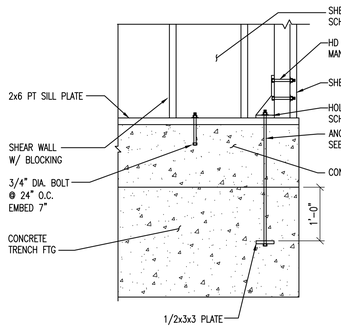
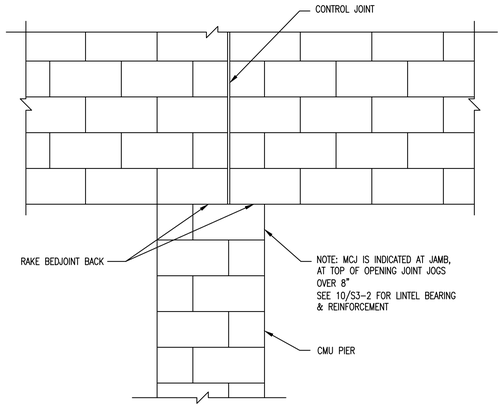
S3-2
SECTIONS AND DETAILS



1 S3-3 FOOTING @ COLUMN
3/4"=1'-0"



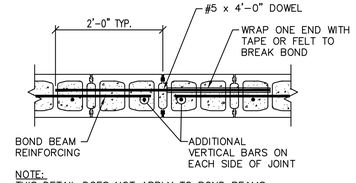
2 S3-3 CONTROL JOINT @ PIER
3/4"=1'-0"

MASONRY REINF. SPLICE TABLE

BAR SIZE	6" BLOCK	8" BLOCK		10" BLOCK		12" BLOCK		REMARKS
	BAR @ CL	BAR @ CL	BAR @ EDGE	BAR @ CL	BAR @ EDGE	BAR @ CL	BAR @ EDGE	
#4	2'-1"	1'-9"	2'-7"	2'-1"	2'-5"	2'-1"	2'-4"	–
#5	3'-3"	2'-2"	4'-0"	2'-7"	3'-10"	2'-7"	3'-7"	–
#6	–	3'-6"	8'-2"	4'-4"	7'-8"	4'-4"	7'-3"	–
#7	–	5'-0"	–	5'-1"	10'-5"	5'-1"	9'-10"	–

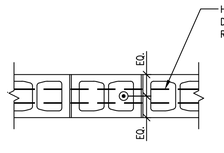
NOTE: WHEN REQUIRED SPLICE LENGTH EXCEEDS 4'-0" USE HIGH LIFT GROUTING WITH NO SPLICES OR USE MECHANICAL TENSION SPLICES WITH LOW LIFT GROUTING.

3 S3-3 MASONRY REINFORCEMENT SPLICE & DEVELOPMENT LENGTH
3/4"=1'-0"



NOTE:
THIS DETAIL DOES NOT APPLY TO BOND BEAMS LOCATED AT DIAPHRAGM CHORDS SUCH AS FLOORS OR ROOFS. AT DIAPHRAGM CHORD LOCATIONS, REINFORCEMENT SHALL RUN THROUGH JOINT WITH NO BOND BREAK.

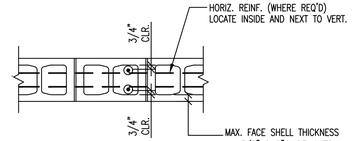
4 S3-3 MASONRY CONTROL JOINT
3/4"=1'-0"



NOTE:

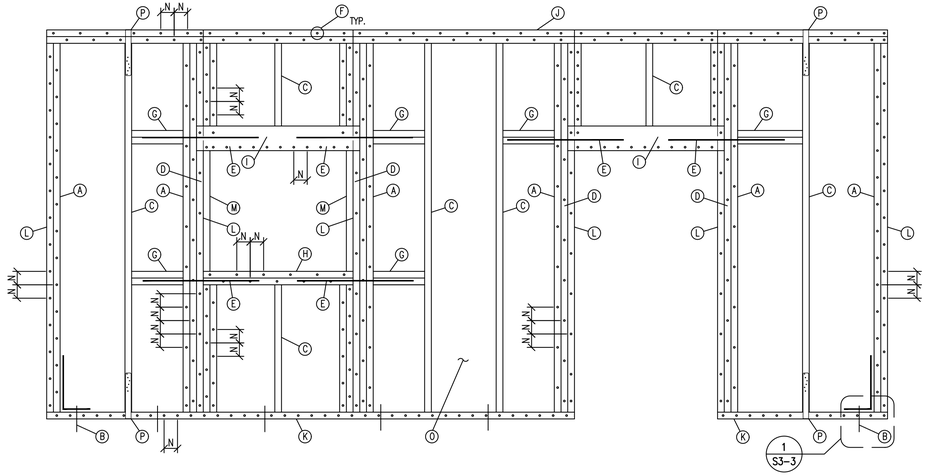
1. SEE PLANS AND STRUCTURAL NOTES FOR BAR SIZES.
2. LOCATE REINF. AT ALL CORNERS, EACH SIDE OF OPENINGS AND CONTROL JOINTS, AND AT SPACING SHOWN ON PLANS AND STRUCT. NOTES.
3. PROVIDE WIRE REBAR POSITIONERS TO HOLD BARS IN PLACE.

A BAR @ CENTER



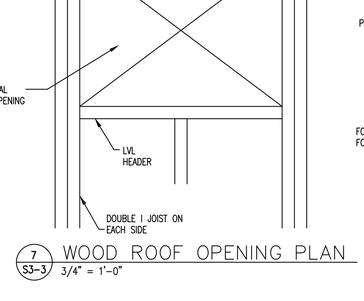
B BAR @ EDGE

6 S3-3 TYP. MASONRY WALL REINF. PLACEMENT
3/4"=1'-0"

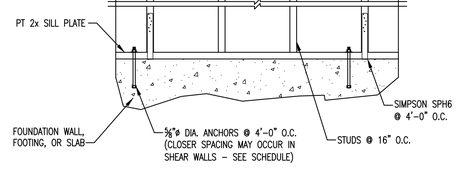


- (A) SHEARWALL END STUDS (KING STUDS @ OPENINGS). NAIL THESE STUDS TOGETHER WITH SHEARWALL BOTTOM PLATE NAILING (2 STUDS MIN.) EDGE NAIL WOOD STRUCTURAL PANEL SHEARWALL TO THESE STUDS.
- (B) SHEARWALL ANCHORS OR STRAPS.
- (C) TYPICAL STUDS (OR JACK STUDS) @ 16" O.C. MAX. SPACING. FIELD NAIL WOOD STRUCTURAL PANEL SHEARWALLS TO STUDS. EDGE NAIL AT PANEL EDGES.
- (D) TRIMMER STUDS, CONTINUE EDGE NAILING FROM KING STUDS AND NAIL STUDS TOGETHER WITH SHEARWALL BOTTOM PLATE NAILING.
- (E) CS16 x 28" STRAP WITH 11-10d NAILS IN BLOCKING AND HEADER OR WINDOW PLATE.
- (F) SHEAR EDGE NAILING.
- (G) 2-2X BLOCKING (WIDTH TO MATCH STUDS).
- (H) WINDOW PLATE (2-2X MIN., WIDTH TO MATCH STUD).
- (I) HEADER (2-2x6 MIN.) WITH SHEARWALL EDGE NAILING.
- (J) DOUBLE TOP PLATE WITH SHEARWALL EDGE NAILING.
- (K) BOTTOM PLATE WITH SHEARWALL EDGE NAILING AND BOLTED OR NAILED TO BELOW.
- (L) WOOD STRUCTURAL PANEL EDGE.
- (M) 2X BLOCK BETWEEN HEADER AND WINDOW PLATE. NAIL TO TRIMMER WITH 16d NAILS @ 6" O.C.
- (N) SHEARWALL EDGE NAILING SPACING.
- (O) SHEARWALL PANEL.
- (P) STUD PLATE TIE – SEE TYPICAL WALL FRAMING DETAIL 8/S3-3.

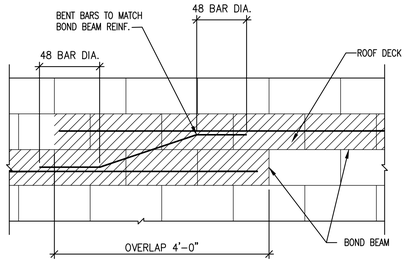
5 S3-3 SHEAR WALL CONSTRUCTION
3/4"=1'-0"



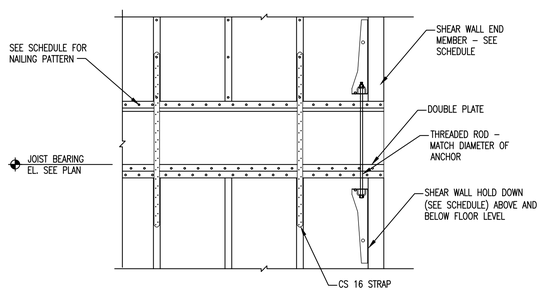
7 S3-3 WOOD ROOF OPENING PLAN
3/4" = 1'-0"



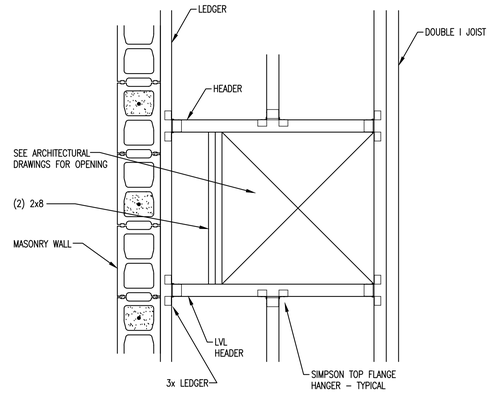
8 S3-3 TYPICAL WALL FRAMING
3/4"=1'-0"



9 S3-3 BOND BEAM STEP AT SLOPING ROOF
3/4"=1'-0"



10 S3-3 TWO LEVEL SHEAR WALL CONNECTION
3/4" = 1'-0"



11 S3-3 ROOF ACCESS OPENING
3/4" = 1'-0"

PERFORMANCE Engineering
11811 Fort Street, Suite 104 - Omaha, NE 68164 (402) 343-3861
399 Perry St., Suite 204A - Castle Rock, CO 80104 (303) 721-3322
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45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET
S3-3

SECTIONS AND DETAILS

MECHANICAL GENERAL NOTES AND SPECIFICATIONS

GENERAL CONSTRUCTION NOTES:

1. DRAWINGS ARE MEANT TO SHOW INTENT ONLY, NOT EXACT DETAIL. THESE DRAWINGS ARE A "BUILDERS SET" AND INTENDED FOR THE USE ON AN EXPERIENCED AND WELL QUALIFIED CONTRACTOR WHO MAY INFER REASONABLE INFORMATION BASED ON EXPERIENCE COMMON IN THE INDUSTRY AND TRADES, QUALITY LEVEL IS A REQUIRED STANDARD. DO NOT SCALE DRAWINGS. FIELD VERIFY ALL CONDITIONS OF WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER FOR CLARIFICATIONS BEFORE STARTING ANY WORK. CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL ERRORS IN HIS WORK, INCLUDING THE LACK OF FIELD VERIFICATION OF EXISTING CONDITIONS.
2. THE ARCHITECT AND PROFESSIONAL CONSULTANTS WILL NOT HAVE CONTROL, OF AND WILL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK ON THIS PROJECT OR FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK ON THIS SITE, NOR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE INTENT OF THE CONTRACT AND OR THESE CONSTRUCTION DOCUMENTS.

BASIC REQUIREMENTS:
MECHANICAL DESIGN SHALL CONFORM TO THE 2018 INTERNATIONAL MECHANICAL CODE, AS ADOPTED BY THE CITY OF JENKS, OK. PROJECT SHALL BE COORDINATED WITH THE EXISTING BUILDING SERVICES AND SHALL INCLUDE ALL ITEMS NECESSARY FOR COMPLETE AND FULLY OPERATIONAL TENANT MECHANICAL SYSTEMS. MAKE CONNECTIONS TO AND EXTEND SYSTEMS INSTALLED BY OTHERS AND/OR FURNISHED BY OTHERS. PROVIDE ACCESSORIES AND INCIDENTAL ITEMS AS REQUIRED FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM WHETHER OR NOT SPECIFICALLY SPECIFIED AND/OR SHOWN ON THE PLANS.

COORDINATE WITH OTHER TRADES FOR A COORDINATED INSTALLATION WITHIN THE AVAILABLE SPACE. WHERE CROWDED CONDITIONS EXIST, PREPARE COORDINATION DRAWINGS SHOWING ALL TRADE CONFLICTS AND SUBMIT TO ARCHITECT FOR APPROVAL AND DIRECTION PRIOR TO ROUGH-IN AND/OR INSTALLATION.

RELOCATION OF OUTLETS AND/OR DEVICES MADE PRIOR TO ROUGH-IN SHALL BE DONE AT NO ADDITIONAL COST.
ALL WORK SHALL BE PERFORMED BY PROPERLY LICENSED MECHANICS OR UNDER THEIR DIRECT SUPERVISION. ALL MATERIALS AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE APPLICABLE STANDARDS OF UL AND SHALL BEAR THE UL LABEL AS EVIDENCE THAT THE MATERIAL AND/OR EQUIPMENT MEETS THIS REQUIREMENT.

INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND DETAILS UNLESS OTHERWISE NOTED IN THESE PLANS. IF DISCREPANCIES EXIST CONTACT THE ENGINEER PRIOR TO ORDERING EQUIPMENT AND ROUGH-IN.
ALL EQUIPMENT START UP AND TESTING SHALL BE PERFORMED BY THE EQUIPMENT MANUFACTURER TRAINED SERVICE TECHNICIAN.

THE SUB-CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIARIZED WITH ALL REQUIREMENTS OF THE CONTRACT PRIOR TO SUBMISSION OF BID. THE SUB-CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO BID OR START OF INSTALLATION.

THE SUB-CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS WHEN THEY BECOME DUE, AND SHALL NOT COVER ANY WORK UNTIL APPROVED BY THE INSPECTION AUTHORITY. ANY AND ALL FEES ASSOCIATED WITH THE MECHANICAL WORK, INCLUDING CONSTRUCTION AND INSPECTIONS SHALL BE PAID FOR BY THE SUB-CONTRACTOR IN ORDER TO DELIVER A COMPLETE AND FINISHED BUILDING, READY FOR OCCUPANCY AND 100% USAGE. THE SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE SUB-CONTRACTOR HAS FAMILIARIZED HIMSELF/HERSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED, WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORESEEN HAD PROPER EXAMINATION BEEN MADE. ANY COSTS DUE TO THE LACK OF COOPERATION AMONG TRADES SHALL BE BORNE BY THE SUB-CONTRACTOR.

THE INFORMATION PRESENTED ON THESE DRAWINGS IS DIAGRAMMATIC IN NATURE. IT DOES NOT NECESSARILY REPRESENT ALL FITTINGS, HANGERS, ETC. FOR A COMPLETE WORKING SYSTEM. PROVIDE ALL MATERIALS AND LABOR FOR COMPLETELY FINISHED AND OPERATIONAL SYSTEMS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR: EXACT WALL LOCATIONS, DIMENSIONS, AND PLUMBING FIXTURE LOCATIONS AND REQUIREMENTS.

SUB-CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY ALTERATIONS REQUIRED BY THE OWNER, ARCHITECT, OR FIELD CONDITIONS.

ALL EQUIPMENT SHALL BE NEW, SHALL COMPLY WITH APPLICABLE INDUSTRY STANDARDS, WITH SPECIFICATIONS ON DRAWINGS, AND ENERGY CODE COMPLIANCE CERTIFICATION AS ADOPTED BY THE STATE, AS WELL AS LOCAL JURISDICTIONAL BUILDING DEPARTMENT. SUBMIT DATA FOR APPROVAL PRIOR TO ORDERING EQUIPMENT. SUBMITTAL SHALL INCLUDE ENERGY CODE COMPLIANCE CERTIFICATION.

SUB-CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT INCLUDING: FIXTURES SPECIFIED IN EQUIPMENT SCHEDULE ON DRAWINGS FOR REVIEW/APPROVAL (5) DAYS PRIOR TO BID. EQUIPMENT IS NOT TO BE ORDERED WITHOUT SUBMITTAL TO ARCHITECT/OWNER/ENGINEER.

ALL SPACE HEATING SUPPLY AIR DUCTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST S.M.A.C.N.A. DUCT CONSTRUCTION STANDARDS AND BE INSULATED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL JURISDICTIONAL ENERGY CONSER- VATION STANDARDS AND THE LATEST EDITION INTERNATIONAL MECHANICAL CODE.

ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. INCREASE LISTED DUCT SIZE TO ACCOMMODATE LINER.

FLEX SHALL NOT EXCEED 8 FT. IN LENGTH AND SHALL BE TYPE "1" FACTORY DUCT. PROVIDE WITH 1 IN. EXTERNAL INSULATION IF MAIN SUPPLY DUCT IS INSULATED.

ALL SUPPLY RUN-OUTS TO HAVE MANUALLY ADJUSTABLE VOLUME DAMPERS WITH ABILITY TO LOCK IN PLACE. THIS SUB-CONTRACTOR SHALL INCLUDE IN HIS/HER BID THE COMPLETE COST FOR THE ELECTRICAL CONTRACTOR TO INTERLOCK EXHAUST FANS AS REQUIRED BY EQUIPMENT SCHEDULE. THIS SUB-CONTRACTOR SHALL FIELD VERIFY 10 FT. MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKE AND ALL VENTS OR EXHAUST OUTLETS.

WALL THERMOSTATS FOR HEATING/COOLING UNITS TO BE AUTOMATIC CHANGEOVER TYPE AND INSTALLED 48 IN. ABOVE FINISHED FLOOR. HEATING/COOLING UNITS SHALL MAINTAIN MINIMUM OUTSIDE AIR AS SHOWN ON SCHEDULE OR SHOWN IN FRESH AIR CALCULATIONS.

ALL FURNACES OR ROOTOP UNITS SUPPLYING MORE THAN 2000 CFM OF AIR SHALL BE EQUIPPED WITH A SMOKE DETECTOR IN THE MAIN RETURN AIR DUCT WHICH WILL SHUT THE POWER OFF TO THE UNIT WHEN SMOKE IS DETECTED. THIS SMOKE DETECTOR SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR AND WIRED BY THE MECHANICAL CONTRACTOR. IN BUILDINGS WHERE FIRE DETECTION OR ALARM SYSTEMS ARE PROVIDED, THE SMOKE DETECTOR SHALL BE WIRED BY THE ELECTRICAL CONTRACTOR AND SHALL BE SUPERVISED BY FIRE ALARM SYSTEM. SEE LATEST EDITION INTERNATIONAL MECHANICAL CODE FOR ADDITIONAL REQUIREMENTS. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL REMOTE TEST SWITCH AND INDICATING LIGHT AT CEILING LOCATION NEAR FURNACE/ROOFTOP LOCATION.

MECHANICAL CONTRACTOR IS RESPONSIBLE TO HAVE ROOFTOP UNIT MANUFACTURERS TECHNICIAN START ALL ROOFTOP UNITS. PROVIDE WRITTEN REPORT FROM MANUFACTURER FOR START-UP COMMISSIONING.

DUCTWORK
- A. DUCTWORK SHALL BE GALVANIZED SHEET METAL INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS. INSTALL TURNING VANES IN ALL ELBOWS. ALL SPIN-IN FITTINGS AND RUNOUTS TO ANY REGISTERS, RETURN, OR EXHAUST TERMINAL SHALL BE PROVIDED WITH MANUAL VOLUME DAMPERS.
- B. ALL DUCTWORK SHALL BE SEALED IN ACCORDANCE WITH SMACNA STANDARDS. THE DUCT PRESSURE CLASS SHALL BE AS NOTED ON PLANS OR CORRESPONDING TO THE MAXIMUM EQUIPMENT ESP ON EACH SYSTEM. THE DUCTWORK SHALL BE SEALED TIGHT. LEAKAGE MAY NOT EXCEED 10% OF DESIGN AIRFLOW AT DESIGN PRESSURE. FOR SMOKE CONTROL SYSTEMS THE DUCT MUST BE TESTED AT 1.5 TIMES ITS DESIGN PRESSURE AND LEAKAGE MAY NOT EXCEED 5% OF DEIGN AIRFLOW.
- C. ALL EXPOSED ROUND DUCTWORK SHALL BE SPIRAL DUCT. NO JOISTS OR CONNECTIONS SHALL HAVE ANY VISIBLE SEALANT FROM THE EXTERIOR SO THE DUCTWORK HAS A CLEAN AND WORKMAN LIKE APPEARANCE.
- D. DUCT SIZES GIVEN ARE NET INSIDE FREE AREA.
- E. EQUIPMENT FLEXIBLE DUCTWORK CONNECTION NOT TO EXCEED 10 INCHES IN LENGTH WITH A MAX. 25 FLAME/50 SMOKE INDEX.
- F. FLEXIBLE DUCTWORK TO AIR DEVICES SHALL HAVE A MAXIMUM STRETCHED LENGTH OF 6 FEET. SUITABLE FOR RETURN AIR PLENUM.
- G. ALL EXHAUST TERMINALS MUST BE 3'-0" AWAY FROM IN ELEVATION FROM OPERABLE PORTION OF WINDOW AND DOORS. MC TO OFFSET AS REQUIRED.
- H. ALL DIRECT VENT VENT TERMINALS MUST BE 4'-0" AWAY IN ELEVATION HORIZONTALLY OR BELOW AND ATLEAST 1'-0" ABOVE ANY OPERABLE PORTION OF A WINDOW OR DOOR. MC TO OFFSET AS REQUIRED.

INSULATION
- A. ALL INSULATING VALUES ARE TO CONFORM TO THE LATEST VERSION OF THE INTERNATIONAL ENERGY CODE.
- B. ALL ROUND CONCEALED RIGID SUPPLY DUCTWORK SHALL BE EXTERNALLY WRAPPED WITH NOMINAL 1-1/2" THICK (MINIMUM R-6.0) FIBER GLASS INSULATION WITH FIRE RETARDANT VAPOR BARRIER.
- C. OUTDOOR AIR INTAKE DUCTS SHALL BE EXTERNALLY WRAPPED WITH NOMINAL 1-1/2" THICK (MINIMUM R-12.0) FIBER GLASS INSULATION WITH FIRE RETARDANT VAPOR BARRIER.
- D. WHEN LOCATED IN UNCONDITIONED SPACES ALL RECTANGULAR DUCTWORK SHALL BE LINED WITH 1" THICK 2 POUND DENSITY MINIMUM R-6.0 FIBER GLASS ACOUSTIC DUCT LINER.
- E. ALL DUCTWORK EXPOSED TO OUTDOOR AMBIENT TYPE CONDITIONS (UNCONDITIONED ATTICS, OUTSIDE AIR DUCTS, ETC) SHALL BE EXTERNALLY WRAPPED OR INTERNALLY LINED IN 2 – 2.5" NOMINAL INSULATION (MINIMUM R-12.0). ALL OUTDOOR DUCTWORK SHALL HAVE 2 – 2.5" DUCTLINER (MINIMUM R-12.0) AND THE DUCT BE SEALED WEATHERPROOF PER SMACNA GUIDELINES. RECTANGULAR DUCT WORK IN RETURN AIR PLENUM SHALL BE LINED WITH 1/2" THICK 2 POUND DENSITY (MINIMUM R2.1) MAT-LACED ACOUSTIC DUCT LINER.

AIR INLETS AND OUTLETS
- A. FURNISH AND INSTALL AIR INLETS AND OUTLETS AS SCHEDULED ON THE PLANS.
- B. OUTLETS SHALL HAVE A WHITE BAKED ENAMEL FINISH TO MATCH CEILING OR WALL.

EXHAUST FANS
- A. FURNISH AND INSTALL CENTRIFUGAL EXHAUST FANS AS SCHEDULED ON THE PLANS.
- B. FURNISH AND INSTALL ROOF CURBS AND BACKDRAFT DAMPERS.
- C. FURNISH AND INSTALL UNITS COMPLETE WITH ALL OPERATIONAL AND SAFETY CONTROL NECESSARY FOR PROPER OPERATION.

ROOFTOP HVAC UNITS
- A. FURNISH AND INSTALL ROOF TOP PACKAGED ELECTRIC A/C UNITS WITH NATURAL GAS HEATING SECTIONS AS SCHEDULED ON THE PLANS. ACCEPTABLE MANUFACTURERS ARE TRANE, CARRIER, CARRIER, OR YORK. ANY SUBSTITUTED MODELS MUST BE EQUAL IN CONTROLS, ACCESSORIES, AND PERFORMANCE TO SCHEDULED MODELS.
- B. FURNISH AND INSTALL UNITS COMPLETE WITH ALL OPERATIONAL AND SAFETY CONTROLS FOR SATISFACTORY OPERATION. PROVIDE PHASE REVERSAL PROTECTION ON ANY UNITS WITH SCROLL COMPRESSORS.
- C. FURNISH PROGRAMMABLE SPACE THERMOSTAT WITH NIGHT SETBACK OPERATION OR DIGITAL CONTROL SYSTEM FOR VAV APPLICATIONS AS APPLICABLE. MOUNT AT +42-INCHES AFF.
- D. FURNISH ALL UNITS WITH 100% OUTDOOR AIR ECONOMIZER PACKAGE UNLESS OTHERWISE NOTED.
- E. FURNISH ALL UNITS WITH 14-INCH ROOF CURBS.

RADIANT HEATING UNITS
- A. FURNISH AND INSTALL NATURAL GAS FIRED RADIANT HEATING UNITS AND ASSOCIATED ACCESSORIES AS SCHEDULED ON THE PLANS.
- B. UNITS SHALL BE COMPLETE WITH PLUGS FOR ELECTRICAL CONNECTION, SPACE THERMOSTATS, TUBE EXTENSIONS, FLUES, AND ROOF CAPS AS REQUIRED. UNITS SHALL BE UL AND AGA RATED.

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ROOFTOP HVAC UNIT SCHEDULE

PLAN MARK	MFR	MODEL NO.	CFM	MIN. OA CFM	BLWR BHP	ESP (IN)	GAS NAT/PROP	HEATING CAPACITY						NET COOLING CAPACITY						REFRIG	EFFICIENCY (STD/HI)	SEER2	WEIGHT	ELECTRICAL DATA					REMARKS
								INPUT MBH (SL)	OUTPUT MBH (ALT)	EAT (F)	LAT (F)	EFF	STG	TOTAL MBH	SENS MBH	EADB (F)	EAWB (F)	LADB (F)	LAWB (F)					VOLT	PH	FLA (LG MTR)	MCA	MOCP	
RTU-1	CARRIER	48GEDM06K2A3-0A1A0	1,925	300	0,90	0,70	NAT	65	53	56,7	82,7	81%	1	61,42	38,46	78,9	68,5	60,0	58,8	R-454B	HI	16,80	778	208	1	9,2	40	60	1 - 5

REMARKS:
1. REFERS TO COOLING CAPACITIES BASED ON 100F OADB @ 620 FT ELEV. AND 100F CONDENSING TEMPERATURE
2. PROVIDE 14" ROOF CURB, VANE AXIAL FAN, HAIL GUARDS, MICROPROCESSOR CONTROL, NON-FUSED DISCONNECT, AND 100% ECONOMIZER W/ BARO RELIEF.
3. PROVIDE WINTER START PACKAGE, UL APPROVED R-454B DISSAPATION BOARD AND LEAK SENSOR, UNPOWERED CONVENIENCE OUTLET AND MERV-8 FILTERS.
4. SEER RATING IS RATED AT ARI CONDITIONS AND IN ACCORDANCE WITH DOE TEST PROCEDURES.
5. PROVIDE 7-DAY, 24 HOUR PROGRAMMABLE THERMOSTAT.

GAS RADIANT TUBE HEATER

PLAN MARK	MFR	MODEL NO.	TOTAL TUBE LENGTH (FT)	ELEC V/PH	ELEC AMPS	FUEL	INPUT MBH (ALT)	OUTPUT MBH (ALT)	COM INLET (IN)	REMARKS
IR-1	REVERBERAY	HL3-40-175	41'-1"	120/1	5	NG	175	145	4	1 - 3

REMARKS
1. PERFORMANCE BASED ON LOCAL ALTITUDE.
2. PROVIDE FLUE SIZES PER MANUFACTERS INSTALATION INSTRUCTIONS TO MEET TOTAL LENGTH AND NUMBER OF ELBOW REQUIREMENTS FOR THE INSTALLED LENGTHS.
3. PROVIDE WALL MOUNTED 2 STAGE THERMOSTAT.

EXHAUST FAN SCHEDULE

PLAN MARK	MFR	MODEL NO.	LOCATION	STYLE	CFM	ESP (IN)	SONES	WEIGHT (LBS)	SPD	ELECTRICAL DATA				REMARKS
										VOLT	PH	HP	WATTS	
EF-1	GREENHECK	SP-A110	TOILET	CEILING	80	0.3	1,2	20	1	115	1	-	17	1, 2, 8
EF-2	GREENHECK	SP-A110	TOILET	CEILING	80	0.3	1,2	20	1	115	1	-	17	1, 2, 8
EF-3	GREENHECK	SBE-2H20	SERVICE AREA	WALL	3,200	0,4	21	100	1	115	1	3/4	13,8 AMPS	1, 3 - 7

REMARKS:
1. SELECTION BASED ON 5200 FT ELEVATION
2. INTERLOCK WITH LIGHT SWITCH
3. PROVIDE WALL MOUNTED SENSOR CONNECTED BY E.C.
4. PROVIDE VIBRATION ISOLATORS
5. FURNISH WITH WALL COLLAR (#C-20), MOTORIZED DAMPER, AND WEATHERHOOD
6. CO SENSOR ALARM PER PLANS. DAMPERS OPEN AT 50 PPM & FAN ENERGIZES. SHUTDOWN OPERATION - REVERSE SEQUENCE
7. PROVIDE STARTER SET BY M.C., USED FOR DAMPER MOTOR, THERMOSTAT AND CO SENSOR CONTROL
8. PROVIDE VIBRATION ISOLATION HANGING KIT.

AIR CIRCULATION FAN SCHEDULE

PLAN	MFR	MODEL NO.	LOCATION	STYLE	CFM	ESP (IN)	SPD	ELECTRICAL DATA				REMARKS
								VOLT	PH	HP	WATTS	
F-1	DAYTON	2RSDZ9	CEILING/WALL	PROP	7450/3450	0,25	1	115	1	1/4	-	1 - 4

REMARKS:
1. SELECTION BASED ON 5200 FT ELEVATION
2. PROVIDE SOFT START
3. OSCILLATING FAN: MEANT FOR AIR MOVEMENT ONLY
4. STRUCTURAL AND MOUNTING EQ. PER MANUFACTURER

AIR DEVICE SCHEDULE

PLAN MARK	STYLE	MATERIAL	FIN	FACE PATT.	DAMPER	NC (MAX)	NO SLOTS	SIZE	INLET DIA	REMARKS
CD-1	TMS	STL	WHT	LF	NONE	35	-	24"x24"	NOTED	1, 2
CD-2	TMS	STL	WHT	LF	NONE	35	-	12"x12"	NOTED	1,2
SG-1	300 RL	STL	WHT	LF	OP.BLD	35	-	NOTED	SAME	1
RG-1	PAR	STL	WHT	LF	NONE	35	-	24"x24"	SAME	1
RG-2	PAR	STL	WHT	LF	NONE	35	-	12"x"12	NOTED	1
RG-3	350RL	STL	WHT	LF	NONE	35	-	NOTED	SAME	1

REMARKS:
1. REFERS TO TITUS
2. PROVIDE BALANCING DAMPER ABOVE CEILING

MULTIPLE ZONE VENTILATION SCHEDULE (2018 IMC 403.3.3.1.1.3)

SYSTEM OR UNIT #	ROOM/ ZONE NAME	ZONE FLOOR AREA (SQ.FT.) Az	ZONE OCCUPANT DENSITY (PPL/1000 SQ.FT.)	OUTDOOR AIRFLOW REQUIRED (CFM/PERSON) Rp	ZONE POPULATION (PEOPLE) Pz	AREA OUTDOOR AIR RATE (CFM/SQ.FT.) Ra	BREATHING OUTDOOR AIR FLOW (CFM) Voz	ZONE AIR DISTRIBUTION EFFECTIVENESS Ez	MINIMUM ZONE OUTDOOR AIRFLOW (CFM) Voz	PRIMARY ROOM SUPPLY (CFM) Vpz	PRIMARY OUTDOOR AIR FRACTION Zp	MAX Zp	REQUIRED SYSTEM VENT EFFICIENCY Ev	UNCORRECTED OUTDOOR AIR INTAKE (CFM) Vou	REQUIRED OUTDOOR AIR (CFM) Vot
RTU-1	101-SALES	520	15	7.5	8	0.12	122	0,8	153	1125	0.14	<.35	0.80	221	276
	102-COFFEE	61	20	7.5	1	0.06	11	0,8	14	135	0.10				
	103-OFFICE	59	5	7,5	0	0,06	4	0,8	4	60	0,07				
	104-UNISEX B.R. 1	84	-	-	-	-	-	0,8	-	85	-				
	105-UNISEX B.R. 2	59	-	-	-	-	-	0,8	-	55	-				
	107-BREAK	113	25	7.5	3	0.06	29	0,8	37	140	0.26				
	108-INVENTORY	456	-	-	-	0,12	55	0,8	68	325	0,21				
													TOTAL OUTSIDE AIR REQUIRED (Vot)		276
													TOTAL OUTSIDE AIR PROVIDED		300

ABBREVIATIONS

(D)	DEMO
(E)	EXISTING
(N)	NEW
AAV	AIR ADMITTANCE VALVE
AD	AREA DRAIN
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
B	BOILER
BB	BASEBOARD
BF	BOOSTER FAN
BFP	BACKFLOW PREVENTER
BT	BATH TUB
BV	BALL VALVE
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CO	CLEANOUT
COTG	CLEANOUT TO GRADE
CU	CONDENSING UNIT
CV	CHECK VALVE
CUH	CABINET UNIT HEATER
DCW	DOMESTIC COLD WATER
DF	DRINKING FOUNTAIN
DHW	DOMESTIC HOT WATER
DSN	DOWN SPOUT NOZZLE
EC	ELECTRICAL CONTRACTOR
ECO	END OF LINE CLEANOUT
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FURN	FURNACE
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FS	FLOOR SINK
G	GAS
GC	GENERAL CONTRACTOR
GM	GAS METER
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GUH	GAS UNIT HEATER
GW	GREASE WASTE
GWH	GAS WATER HEATER
HB	HOSE BIB
HP	HEAT PUMP
HX	HEAT EXCHANGER
IM	ICE MAKER BOX
LAV	LAVATORY
LS	LAUNDRY SINK
MAU	MAKE-UP AIR UNIT
MC	MECHANICAL CONTRACTOR
MF	MEASURE FLOW
NIC	NOT IN CONTRACT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
ORD	OVER FLOW ROOF DRAIN
P	PUMP
PC	PLUMBING CONTRACTOR
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
RA	RETURN AIR
RAR	RETURN AIR REGISTER
RD	ROOF DRAIN
RH	RADIANT HEATER
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SAR	SUPPLY AIR REGISTER
SF	SUPPLY FAN
SFT	SERIES FAN TERMINAL
SH	SHOWER
SK	SINK
SOI	SAND/OIL INTERCEPTOR
SS	SERVICE SINK
T&P	TEMPERATURE & PRESSURE
TD	TRENCH DRAIN
TYP	TYPICAL
UR	URINAL
VAV	VARIABLE AIR VOLUME
VVT	VARI TRAC
WB	WASHER BOX
WCO	WALL CLEANOUT
WH	WALL HYDRANT

MECHANICAL LEGEND

- PROVIDE TURNING VANES AT ALL CORNER BENDS IN ACCORDANCE WITH S.M.A.C.N.A. LOW VELOCITY DUCT MANUAL.
- TYPICAL DUCT TAKE-OFF WITH MANUAL VOLUME DAMPER. MARK DAMPER POSITION AFTER AIR BALANCE.
- THERMOSTAT SHALL BE MOUNTED PER OWNER'S DIRECTION. DO NOT MOUNT IN DIRECT SUNLIGHT. THERMOSTAT SHALL BE MOUNTED NEAR RETURN AIR DUCT AT 48" AFF.
- MANUAL BALANCING DAMPER – PROVIDE WHERE SHOWN, AT ALL RUN-OUTS TO AIR OUTLETS, AND AT ALL MAIN DUCT SPLITS. DAMPERS SHALL BE "YOUNG REGULATOR CO" MODEL 820 OR EQUAL.
- POINT OF CONNECTION – NEW TO EXISTING
- INDICATES UNDERCUT DOOR FOR RETURN AIR

- SUPPLY UP
- SUPPLY DOWN
- RETURN UP
- RETURN DOWN
- EXHAUST UP
- EXHAUST DN
- FLEXIBLE DUCT
- (D)XX = DEMO
- MANUAL VOLUME DAMPER
- CEILING SUPPLY DIFFUSERS SEE SCHEDULES
- CEILING RETURN AIR REGISTER SEE SCHEDULES
- SIDEWALL SUPPLY/RETURN REGISTER, SEE SCHEDULES

- FIRE DAMPER
- SMOKE DAMPER
- FIRE SMOKE DAMPER
- TAG # — EQUIPMENT TAG
- (POC) POINT OF CONNECTION
- ROOFTOP UNIT
- FURNACE
- CONDENSING UNIIT
- PARALLEL FAN POWERED VAV BOX
- VAV/VVT BOX

- DCW — DOMESTIC COLD WATER
- 110° — DOMESTIC HOT WATER
- CND — CONDENSATE DRAIN
- G — GAS LINE
- SS — SANITARY SEWER BELOW FLOOR (SS)
- V — SANITARY VENT
- BALL VALVE
- CLEANOUT
- FLOOR DRAIN
- FLOOR SINK
- ELBOW – TURNED DOWN
- ELBOW – TURNED UP

COMMISSIONING NOTE

MECHANICAL SYSTEMS SHALL BE COMMISSIONED AND COMPLETED IN ACCORDANCE WITH SECTION C408.2 OF THE CURRENT IECC.

HVAC TESTING AND BALANCING REQUIREMENTS:

THE MECHANICAL CONTRACTOR SHALL EMPLOY THE SERVICES OF AN INDEPENDENT TEST AND BALANCE CONTRACTOR TO BALANCE THE HVAC SYSTEMS IN ACCORDANCE WITH THE DRAWINGS.

HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH THE LATEST NEBB PROCEDURAL STANDARDS. THE BALANCING CONTRACTOR SHALL HAVE AT LEAST (3) THREE YEARS OF EXPERIENCE IN TESTING AND BALANCING.

THE BALANCING REPORT SHALL CONTAIN ALL INFORMATION REQUIRED BY NEBB PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, AND BALANCING. THE REPORT SHALL INCLUDE, BUT MAY NOT BE LIMITED TO THE FOLLOWING:

A COMPLETE LIST OF BALANCING INSTRUMENTS AND THEIR LATEST CALIBRATION DATES IS TO BE INCLUDED IN THE FINAL REPORT.

BLOWER: MOTOR HP, VOLTAGE, AMPERAGE (NAMEPLATE AND ACTUAL) RPM, BELT MAKE/MODEL, SHEAVE MAKE/MODEL.

UNIT: MAKE/MODEL/SERIAL NUMBER, FILTER TYPE/SIZE/QUANTITY, FINAL BALANCED DAMPER POSITIONS.

AIR INLETS AND OUTLETS: DESIGN/PRELIMINARY/FINAL CFM'S (EXCLUDES RETURN GRILLES).

ALL MANUAL SINGLE BLADE DAMPERS SHALL BE SECURED IN THEIR FINAL BALANCED POSITIONS WITH A SHEET METAL SCREW THRU THE DAMPER HANDLE.

ALL COMPONENTS SHALL BE BALANCED TO WITHIN +/– 10% OF DESIGN CFM REQUIREMENTS.

CODES & DESIGN CRITERIA

JURISDICTION:	JENKS, OK
MECHANICAL CODE:	2018 IMC
ENERGY CODE:	2018 IECC
LOCAL ADDENDUMS:	YES
WINTER DESIGN DB:	9 F
SUMMER DESIGN TEMP DB / WB	100/76 F
INDOOR HEATING SET POINT:	70 F
INDOOR COOLING SET POINT:	75 F
ELEVATION:	620
NUMBER OF FLOORS:	1
BUILDING TOTAL AREA:	4,975

MECHANICAL SHEET LIST

SHEET #	SHEET TITLE
M0.1	MECHANICAL SPEC SCHEDULE & LEGEND
M0.2	SEQUENCE OF OPERATION
M1.1	MECHANICAL PLAN
M1.2	MECHANICAL ROOF PLAN
M2.0	MECHANICAL DETAILS
M3.1	MECHANICAL COMCHECK
M3.2	MECHANICAL COMCHECK

GEMINI ENGINEERING GROUP
101 Nightlinger Lane
Millsap, TX 76066
(817) 672-7562

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LICENSED PROFESSIONAL ENGINEER
RICARDO MEDRANO
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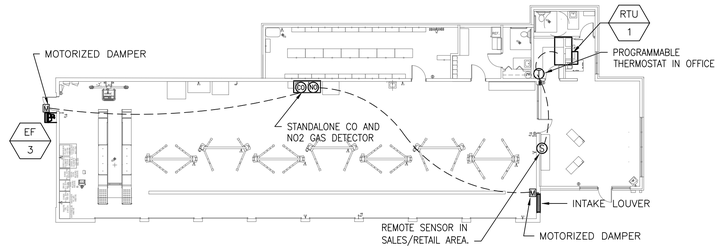
ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET
M0.1
MECHANICAL SPECS & LEGEND



1 OFFICE/RETAIL RTU CONTROL & SERVICE BAY GAS EXHAUST CONTROL

M0.2 N.T.S.

GAS DETECTION SYSTEM SEQUENCE OF OPERATION

THE SYSTEM SHALL SERVE THE SERVICE BAY.

EF-3 SHALL REMAIN OFF AND INTAKE LOUVER L-1 SHALL REMAIN CLOSED UNLESS A CALL FOR CO OR NO2 VENTING IS INITIATED.

STAGE 1:

WHENEVER A "LOW ALERT" CONDITION IS DETECTED (25 PPM CO) (0.5 PPM NO2), THE RESPECTIVE DRY CONTACT FOR THE LOW ALERT SHALL CLOSE AFTER A USER-ADJUSTABLE DELAY TIME TO OPEN THE INTAKE LOUVER L-1.

WHENEVER A "MEDIUM ALERT" CONDITION IS DETECTED (75 PPM CO) (1 PPM NO2), THE RESPECTIVE DRY CONTACTS FOR THE MEDIUM ALERT SHALL CLOSE TO OPEN THE INTAKE LOUVER L-1, AND ACTIVATE EXHAUST FAN EF-3 AND INTERLOCKED MOTORIZED DAMPER.

STAGE 2:

WHENEVER A "HIGH ALERT" CONDITION IS DETECTED (100 PPM CO) (5 PPM NO2), THE RESPECTIVE DRY CONTACTS FOR THE HIGH ALERT SHALL CLOSE TO OPEN THE INTAKE LOUVER L-1, ACTIVATE EXHAUST FAN EF-3 AND INTERLOCKED MOTORIZED DAMPER, AND AN AUDIBLE WARNING ALARM SHALL BE SOUNDED.

UPON AN "ALARM" CONDITION AT ANY SENSOR, ALR DRY CONTACT(S) FOR THE ALARM SHALL CLOSE. THE INTERNAL BUZZER WILL SOUND AND ANY EXTERNAL STROBE/HORN SHALL BE ACTIVATED.

ONCE THE GAS CONCENTRATION DROPS BELOW THE SETPOINT FOR EACH LEVEL, THE RESPECTIVE ZONED DRY CONTACT(S) WILL OPEN AND THE DETECTOR WILL RETURN TO THE NEXT LOWEST LEVEL.

THE DETECTOR SHALL BE EQUIPPED WITH AN OVERRIDE TO MANUALLY ENERGIZE THE LOW ALERT RELAY REGARDLESS OF GAS CONCENTRATIONS.

PRESSING THE "ALARM OFF" BUTTON ON THE FRONT COVER WILL CANCEL THE INTERNAL BUZZER WHILE ALLOWING THE EXTERNAL CIRCUIT(S) TO CONTINUE OPERATING AS LONG AS THE ALARM CONDITION PERSISTS. THE BUTTON HAS NO EFFECT ON THE DRY CONTACT(S).

SHOULD DATA TRANSMISSION BETWEEN THE DETECTOR AND A SENSOR FAIL, AN ERROR CODE WILL APPEAR AND THE DETECTOR WILL ENTER FAIL-SAFE MODE.

WHEN A SENSOR REACHES END-OF-LIFE, AN ERROR CODE WILL APPEAR AND THE DETECTOR WILL ENTER FAIL-SAFE MODE.

THE ALERT STATUS INDICATORS WILL BLINK SHORT-ON-LONG-OFF DURING DELAY, FLASH SLOWLY DURING LOW ALERT, AND FLASH QUICKLY DURING HIGH ALERT. THE ALARM STATUS INDICATOR WILL ILLUMINATE DURING AN ALARM CONDITION IN EITHER ZONE.

GAS DETECTION SYSTEM SYSTEM DESCRIPTION

THIS SYSTEM INCORPORATES A STANDALONE DETECTOR AND CO AND NO_2, SENSORS ARE TYPICALLY MOUNTED AT AVERAGE BREATHING HEIGHT.

THE DETECTOR POLLS EACH TRANSMITTER IN 5-SECOND INTERVALS IN A SEQUENTIAL MANNER, ACQUIRING DATA USING THE RS-485 COMMUNICATION PROTOCOL.

A 4X7-SEGMENT LCD DISPLAY PROVIDES A DIGITAL READ-OUT OF GAS CONCENTRATIONS AND OPERATIONAL STATUS OF EACH SENSOR.

SERVICE BAY GAS DETECTION SYSTEM SPECIFICATIONS:

A. PERFORMANCE REQUIREMENTS:
   1. STANDARDS COMPLIANCE:
      a. PERFORMANCE: ANSI/ISA 92.00.01-2010 (R2015)
      b. ELECTROMAGNETIC INTERFERENCE: EN 50270, FCC PART 15 SUBPART B.
      c. ENVIRONMENTAL: ROHS COMPLIANT.

B. GENERAL FEATURES: UNLESS SPECIFIED OTHERWISE.
   1. USER-ADJUSTABLE SETPOINTS, DELAYS, OUTPUTS, AND RELAYS.
   2. PRECONFIGURED WIRING
   3. FACTORY CALIBRATION
   4. CUSTOMIZED PROGRAMMING
   5. WORKS WITH NEW AND EXISTING BUILDING CONTROLS SYSTEMS
   6. FULLY BACKWARDS COMPATIBLE WITH GSE GENERATION 1
   7. POWER REQUIREMENTS: 120 VAC, 0.2 A, 50/60 HZ.
   8. POWER CONSUMPTION: 24 VA.
   9. CONTROL RELAYS: 6 RELAYS, 5A AT 125 VAC / 250 VA.
   10. ANALOG OUTPUTS:
      a. USER-SELECTABLE: 4 TO 20 MA, 0.2 TO 1 VDC, 1 TO 5 VDC, OR 2 TO 10 VDC.
   12. STORAGE TEMPERATURE: MINUS 58 TO 248 DEGREES F (MINUS 50 TO 120 DEGREES C).
   13. OPERATING TEMPERATURE: MINUS 4 TO 122 DEGREES F (MINUS 20 TO 50 DEGREES C).
   14. HUMIDITY: 10 TO 90 PERCENT, NON-CONDENSING.
   15. DISPLAY: 4 DIGITS, NUMERIC. COLOR: RED.
   16. FRONT PANEL INDICATORS: 10 LEDS.
      a. POWER: QUANTITY: 1 COLOR: GREEN.
      b. SENSORS: QUANTITY: 4. COLOR: YELLOW.
      c. ZONES: QUANTITY: 2. COLOR: YELLOW.
      d. ALERT: QUANTITY: 2. COLOR: RED.
      e. ALARM: QUANTITY: 1. COLOR: RED.
   17. ALARM: 106 DB AT 100 MM, 3.8 KHZ PIEZOELECTRIC ELEMENT.
   18. SENSOR LIFESPAN: UP TO 10 YEARS (VARIES BY GAS TYPE).
   19. SENSOR CAPACITY: UP TO 4 SENSORS. A MAXIMUM OF 2 LOCALLY MOUNTED SENSORS.
      a. COVERAGE: UP TO 36,000 SQ FT (3344.5 SQ M).
   20. DIMENSIONS (WXHXD): 8.72 X 10.50 X 2.90 INCH (221 X 267 X 74 MM).
   21. WEIGHT: 4.5 LBS (2.04 KG).
   22. HOUSING: GRAY, NEMA 3R, POLYCARBONATE PLASTIC.

C. BASIS OF DESIGN: CARBON MONOXIDE DETECTOR; GSE2-CM; AS MANUFACTURED BY BRASCH ENVIRONMENTAL TECHNOLOGIES.

D. BASIS OF DESIGN: NITROGEN DIOXIDE DETECTOR; GSE2-ND; AS MANUFACTURED BY BRASCH ENVIRONMENTAL TECHNOLOGIES.

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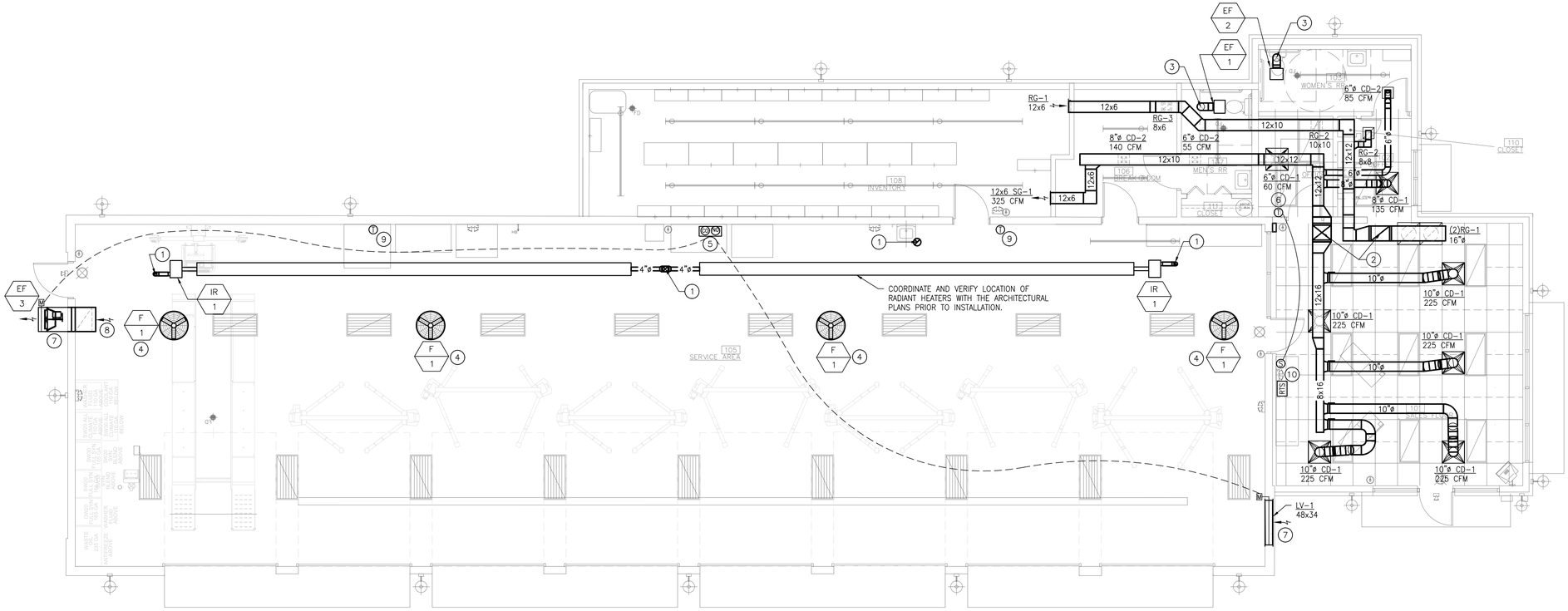
ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

M0.2

SEQUENCE OF OPERATION



1 MECHANICAL PLAN

M1.1

4' 2' 0 4' 8'

3/16"=1'-0"

NORTH

DRAWING NOTES:

1. FLUE/COMBUSTION AIR INTAKE UP THRU ROOF, PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS. PROVIDE WITH MANUFACTURER APPROVED VENT CAP TERMINATION.
2. 20"x16" SA/RA DUCTS UP AND THEN THRU WALL TO RTU-1 (RE: M1.2). PROVIDE FLEXIBLE CONNECTIONS AT RTU AS REQUIRED.
3. EXHAUST DUCT UP THRU ROOF TO APPROVED CAP OR GOOSENECK TERMINATION. SIZE AS INDICATED
4. FANS SHALL BE EITHER WALL OR CEILING MOUNTED AT 10'-0" AFF. REFERENCE ARCHITECTURAL PLANS FOR FINAL LOCATION. COORDINATE WITH OTHER HVAC/SHOP EQUIPMENT. SEE OWNER FOR EXACT LOCATION.
5. CONTROL WIRE FROM CO/NOX SENSORS BACK TO DETECTION SYSTEMS CONTROL PANEL. LOCATE AND INSTALL THE SENSORS BASED ON MANUFACTURERS INSTALLATION INSTRUCTIONS. COORDINATE FINAL LOCATION FOR CONTROL PANEL(S).
PROVIDE 7-DAY, 24 HOUR PROGRAMMABLE THERMOSTAT WITH SPACE SENSOR. THERMOSTAT AND SENSOR LOCATIONS ON WALL TO BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
6. PROVIDE 7-DAY PROGRAMMABLE T-STAT WITH SPACE SENSOR. BOTH SENSOR AND THERMOSTAT LOCATION SHALL BE COORDINATED WITH BUILDING OWNER.
7. COORDINATE EXTERIOR WALL LOUVER AND EXHAUST FAN WALL OPENING SIZES AND LOCATIONS PER ARCHITECTURAL PLANS FOR EXACT LOCATION AND ELEVATION.
8. PROVIDE 30x12 EXHAUST DUCT FROM EF-3, ROUTE UP INTERIOR WALL TO MIN. 18"BELOW STRUCTURE. PROVIDE HARDWARE MESH SCREEN AT OPENING. COORDINATE OPENINGS W/ ARCH PLANS AND OWNER.
9. PROVIDE HEATING-ONLY THERMOSTAT AT 4'-0" AFF. PROVIDE WITH METAL LOCKING COVER. EXTEND CONTROL WIRING TO RADIANT HEATER(S). WIRE PER THE RADIANT HEATER MANUFACTURER'S WRITTEN INSTRUCTIONS. COORDINATE THERMOSTAT SET POINT WITH OWNER.
10. RTU DUCT SMOKE DETECTOR REMOTE ANNUNCIATOR/TEST/RESET SWITCH AT 48" A.F.F. COORDINATE LOCATION W/ LOCAL AHJ PRIOR TO INSTALLATION.
11. FULL SIZE SA DUCT FROM EVAP COOLER ON ROOF. TERMINATE APPROXIMATELY 12" BELOW STRUCTURE. COORDINATE HEIGHT W/ ARCHITECTURAL EQUIPMENT PLANS AND LIGHT FIXTURES. REFER TO DUCT TERMINATION DETAIL ON DWG. M2.1.

SERVICE AREA HVAC INSTALLATION SHALL COMPLY WITH N.E.C. ARTICLE 511:

- ALL AREAS DESIGNATED AS HAZARDOUS (CLASSIFIED) LOCATIONS SHALL BE PROPERLY DOCUMENTED. THIS DOCUMENTATION SHALL BE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE ELECTRICAL EQUIPMENT AT THE LOCATION. PER N.E.C. ARTICLE 500.4 MAINTENANCE BAYS ARE MAJOR REPAIR GARAGE AND MUST COMPLY WITH N.E.C. ARTICLE 511.3.
- FLOOR AREAS ARE CLASS 1 DIVISION 2 CLASSIFIED UP TO A LEVEL OF 18" PER N.E.C. TABLE 511.3(C). THIS AREA SHALL COMPLY WITH ARTICLE 511.3(C) AND HAVE WIRING AND DEVICES INSTALLED PER N.E.C. ARTICLE 501.10(B)
- GARAGE AREA IS PROVIDED WITH VENTILATION OF AT LEAST 1 CUBIC FOOT PER MINUTE FOR EACH SQUARE FT OF FLOOR AREA, WITH SUCTION TAKEN FROM A POINT WITHIN 18" OF HIGHEST POINT IN THE CEILING. NO LIGHTER-THAN-AIR GASEOUS FUELS ARE UTILIZED IN THIS AREA. PER N.E.C. ARTICLE 511.3(D) THIS AREA IS UNCLASSIFIED.

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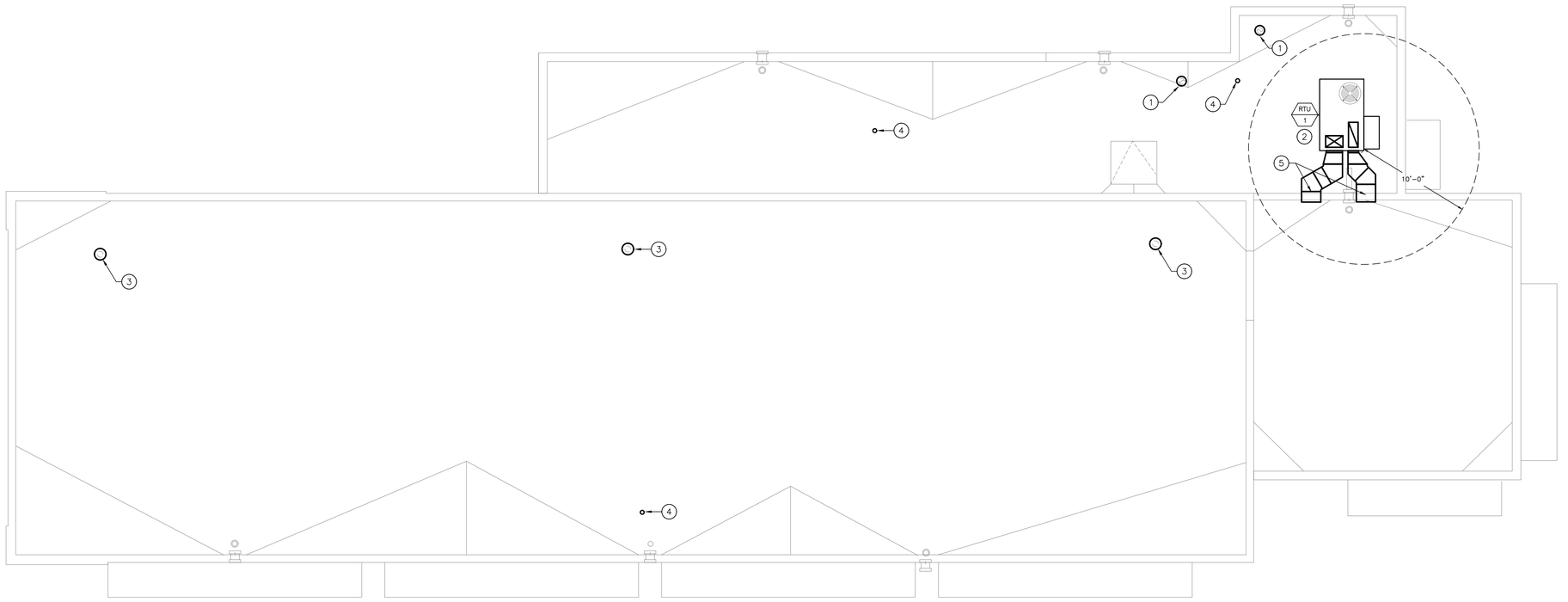
SHEET

M1.1

MECHANICAL PLAN



1 MECHANICAL ROOF PLAN

M1.2

4' 2' 0 4' 8'

3/16"=1'-0"

NORTH

DRAWING NOTES:

1. EXHAUST DUCT FROM RESTROOM BELOW. TERMINATE WITH APPROVED CAP.
2. NEW ROOFTOP UNIT: MAINTAIN 10'-0" FROM OUTSIDE AIR INTAKE.
3. GAS RADIANT TUBE HEATER FLUE TERMINATION. REFER TO DETAIL ON DWG. M2.0.
4. PLUMBING VENT TERMINAL. COORDINATE WITH P.C.
5. RTU-1 (SIDE DISCHARGE) SA & RA DUCTS ON ROOF. EXENT TO AND PENETRATE WALL INTO CEILING SPACE ABOVE THE SALES AREA BELOW. RE: M1.1 FOR CONTINUATION. REFER TO DETAILS ON M2.0 FOR EXTERIOR DUCTWORK DETAILS.

GEMINI ENGINEERING GROUP
101 Nightlinger Lane
Millsap, TX 76066
(817) 672-7562

–

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
RICARDO MEDRANO
36937
OKLAHOMA
07/24/2026
ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.08.26	FOR SUBMITTAL TO BUILDING DEPT.
	07.24.26	ISSUE FOR CONSTRUCTION

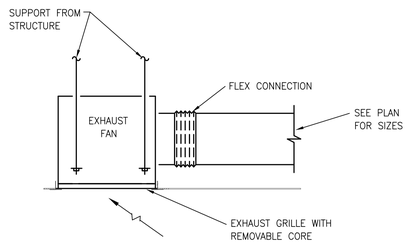
ARCODEV JOB #: –
CLIENTJOB #: –
DRAWN BY: JD
CHECKED BY: LP
DATE OF ISSUE: 06/08/2026

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

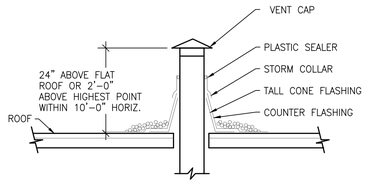
SHEET

M1.2

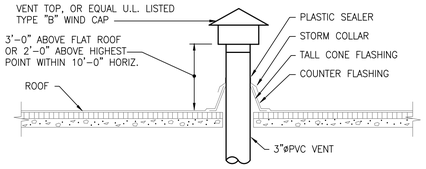
MECHANICAL ROOF PLAN



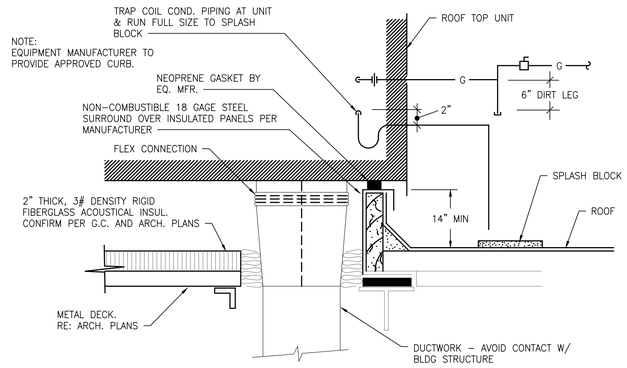
CEILING EXHAUST FAN DETAIL
NOT TO SCALE



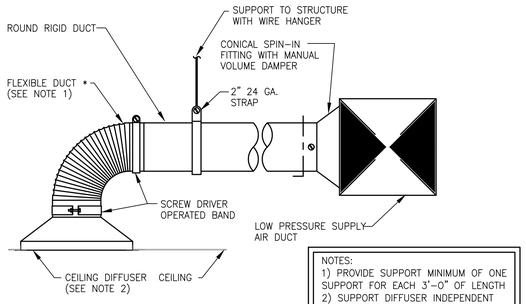
EXHAUST FAN DUCT THRU ROOF DETAIL
NOT TO SCALE



FLUE EXHAUST THRU ROOF DETAIL
NOT TO SCALE

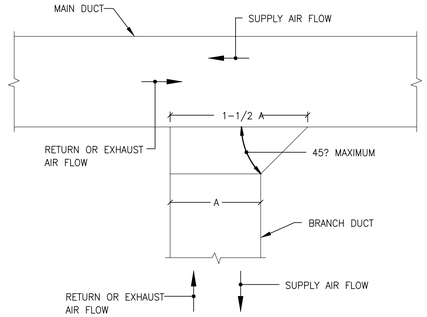


ROOFTOP UNIT INSTALLATION DETAIL
NOT TO SCALE

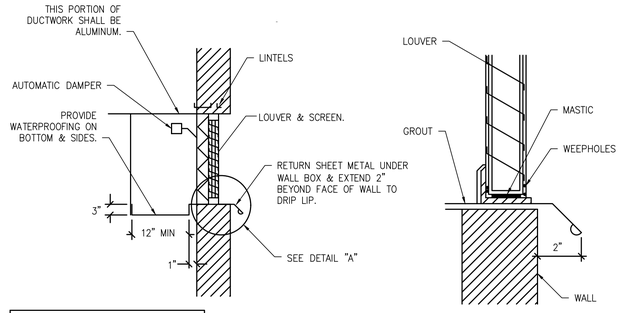


NOTES:
1) PROVIDE SUPPORT MINIMUM OF ONE SUPPORT FOR EACH 3'-0" OF LENGTH
2) SUPPORT DIFFUSER INDEPENDENT FROM DUCTWORK WITH WIRE HANGERS WHEN REQUIRED BY LOCAL CODE.

AIR DEVICE DETAIL
NOT TO SCALE



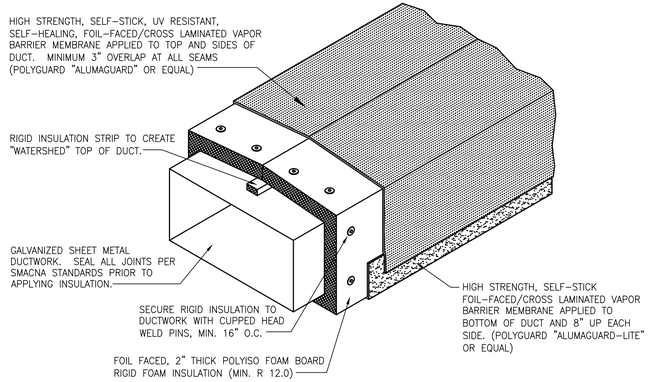
DUCT TAKE-OFF DETAIL
NOT TO SCALE



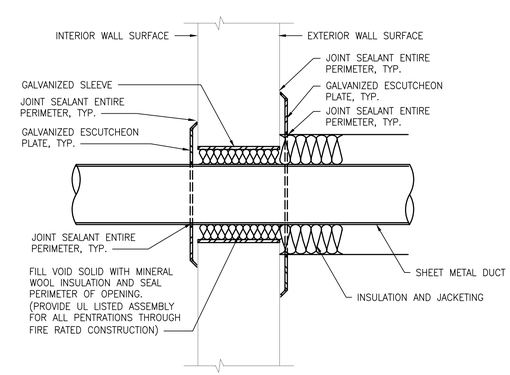
NOTE:
REFER TO MFR'S INSTURCTIONS FOR SPECIFIC MOUNTING DETAILS. COORDINATE WITH ARCHITECTURAL REQUIREMENTS.

DETAIL A
NOT TO SCALE

WATERTIGHT LOUVER CONNECTION DETAIL
NOT TO SCALE



EXTERIOR DUCTWORK INSULATION DETAIL
NOT TO SCALE



DUCT THRU EXTERIOR WALL DETAIL
NOT TO SCALE

–

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45 SPYGLASS DRIVE
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SHEET
M2.0
MECHANICAL DETAILS

GEMINI ENGINEERING GROUP
101 Nightlinger Lane
Millsap, TX 76066
(817) 672-7562

COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Brakes Plus Jenks OK
Location:	Jenks, Oklahoma
Climate Zone:	3a
Project Type:	New Construction

Construction Site:
West 101st Place & Elm Street
Jenks, Oklahoma

Owner/Agent:
Brakes Plus

Designer/Contractor:
Loren Priest
EE LLC
12005 Antelope Trail
Parker, Colorado 80138
303-748-1189
info@eeparker.com

Additional Efficiency Package(s)

Credits: 1.0 Required 0.0 Proposed

Mechanical Systems List

Quantity **System Type & Description**

1 RTU-1 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 65 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 55 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 14.00 SEER, Required Efficiency = 14.00 SEER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: FAN SYSTEM 1 | Office -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAM 1 Supply, Constant Volume, 1925 CFM, 2.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Part of code listed equipment

2 RH-1 (Single Zone w/ PerimeterSystem):
Heating: 2 each - Radiant Heater, Gas, Capacity = 175 kBtu/h
No minimum efficiency requirement applies

1 EWH-1:
Electric Storage Water Heater, Capacity: 20 gallons w/ Circulation Pump
No minimum efficiency requirement applies

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JAMES J. D'ARCY-MECHANICAL DESIGNER — Name - Title
Signature
6/5/26 — Date

COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C103.2 [PR3][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.12.2, C403.12.3 [FO9][1]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** P0.1, P4.0
C404.6.1, C404.6.2 [PL3][3]	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** P0.1, P3.1
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** P0.1, P3.1

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.11.3 [ME61][2]	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.8.1 [ME65][1]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.8.3 [ME117][2]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Fans integral to equipment listed under Section C403.2.3.
C403.8.4 [ME142][2]	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.8.5 [ME143][2]	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.12.1 [ME71][2]	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.5.5 [ME113][2]	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.2 [ME59][1]	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.7.1 [ME59][1]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.2 [ME115][3]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.7.6 [ME141][3]	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.4 [ME57][1]	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.5 [ME116][3]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.11.1, C403.11.2 [ME60][2]	HVAC ducts and plenums insulated in accordance with C403.11.1 and constructed in accordance with C403.11.2, verification may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.5, C403.5.1, C403.5.2 [ME62][1]	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.5.3.3 [ME124][1]	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.5.3.4 [ME125][1]	System capable of relieving excess outdoor air during air economizer operation to prevent overpressurizing the building. The relief air outlet located to avoid recirculation into the building.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.5.3.5 [ME126][1]	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.4.1.4 [ME63][2]	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.3.3 [ME35][1]	Hot gas bypass limited to: <=240 kBtu/h – 50% >240 kBtu/h – 25%	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881–8925

SHEET
M3.1
MECHANICAL COM CHECK

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C408.2.2.1 [ME53]³	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M1.1, M2.0
C403.5, C403.5.1, C403.5.2 [ME123]³	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26]²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.7 [EL27]²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.8.2, C405.8.2.1 [EL28]²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.9 [EL29]²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.3 [FI8]³	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.2 [FI27]³	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47]³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1, M1.1
C403.4.1.2 [FI38]³	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.2.4.1.3 [FI20]³	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.2.4.2 [FI39]³	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.2.4.2.1, C403.2.4.2.2 [FI40]³	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C403.2.4.2.3 [FI41]³	Systems include optimum start controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.3 [FI11]³	Heat traps installed on supply and discharge piping of non-circulating systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.4 [FI25]²	All piping insulated in accordance with section details and Table C403.11.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** P0.1
C404.6.1 [FI12]³	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** P0.1, P3.1

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.1.1 [FI57]¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.1 [FI28]¹	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C408.2.3.1 [FI31]¹	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C408.2.3.2 [FI10]¹	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.3 [FI32]¹	Economizers have been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C408.2.4 [FI29]¹	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C408.2.5.1 [FI7]¹	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.3 [FI43]¹	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1
C408.2.5.4 [FI30]¹	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** M0.1

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

–

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
RICARDO MEDRANO
36937
OKLAHOMA
07/24/2026

ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.08.26	FOR SUBMITTAL TO BUILDING DEPT.
	07.24.26	ISSUE FOR CONSTRUCTION

ARCODEV JOB #: --
CLIENTJOB #: --
DRAWN BY: JD
CHECKED BY: LP
DATE OF ISSUE: 06/08/2026

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET
M3.2
MECHANICAL
COM CHECK

GEMINI ENGINEERING GROUP
101 Nightlinger Lane
Millsap, TX 76066
(817) 672-7562

PLUMBING GENERAL NOTES AND SPECIFICATIONS

GENERAL CONSTRUCTION NOTES:

1. DRAWINGS ARE MEANT TO SHOW INTENT ONLY, NOT EXACT DETAIL. THESE DRAWINGS ARE A "BUILDERS SET" AND INTENDED FOR THE USE ON AN EXPERIENCED AND WELL QUALIFIED CONTRACTOR WHO MAY INFER REASONABLE INFORMATION BASED ON EXPERIENCE COMMON IN THE INDUSTRY AND TRADES, QUALITY LEVEL IS A REQUIRED STANDARD. DO NOT SCALE DRAWINGS. FIELD VERIFY ALL CONDITIONS OF WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER FOR CLARIFICATIONS BEFORE STARTING ANY WORK. CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL ERRORS IN HIS WORK, INCLUDING THE LACK OF FIELD VERIFICATION OF EXISTING CONDITIONS.
2. THE ARCHITECT AND PROFESSIONAL CONSULTANTS WILL NOT HAVE CONTROL, OF AND WILL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK ON THIS PROJECT OR FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK ON THIS SITE, NOR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE INTENT OF THE CONTRACT AND OR THESE CONSTRUCTION DOCUMENTS.

BASIC REQUIREMENTS:
PLUMBING DESIGN SHALL CONFORM TO THE 2018 INTERNATIONAL PLUMBING CODE, AS ADOPTED BY THE CITY OF JENKS, OK. PROJECT SHALL BE COORDINATED WITH THE EXISTING BUILDING SERVICES AND SHALL INCLUDE ALL ITEMS NECESSARY FOR COMPLETE AND FULLY OPERATIONAL TENANT PLUMBING SYSTEMS. MAKE CONNECTIONS TO AND EXTEND SYSTEMS INSTALLED BY OTHERS AND/OR FURNISHED BY OTHERS. PROVIDE ACCESSORIES AND INCIDENTAL ITEMS AS REQUIRED FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM WHETHER OR NOT SPECIFICALLY SPECIFIED AND/OR SHOWN ON THE PLANS.

DO NOT SCALE FROM THESE DRAWINGS. REFER TO ARCHITECTURAL OR CIVIL DRAWINGS BY OTHERS FOR DIMENSIONS AND FOR ESTIMATING DISTANCES. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS RELATING TO THE JOB WETHER OR NOT INDICATED ON THESE DRAWINGS. ANY SCALE, DIMENSION OR QUANTITIES SHOWN ON THE DRAWINGS ARE FOR ENGINEERING CALCULATION PURPOSES ONLY. THE PLUMBING CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ESTIMATING AND DETERMINING ALL DISTANCES AND QUANTITIES RELATED TO THE PROJECT. REFER TO ARCHITECTURAL OR CIVIL DRAWINGS BY OTHERS AND VERIFY EXISTING CONDITIONS ON SITE FOR ALL ESTIMATING PURPOSES.

COORDINATE WITH OTHER TRADES FOR A COORDINATED INSTALLATION WITHIN THE AVAILABLE SPACE. WHERE CROWDED CONDITIONS EXIST, PREPARE COORDINATION DRAWINGS SHOWING ALL TRADE CONFLICTS AND SUBMIT TO ARCHITECT FOR APPROVAL AND DIRECTION PRIOR TO ROUGH-IN AND/OR INSTALLATION. RELOCATION OF OUTLETS AND/OR DEVICES MADE PRIOR TO ROUGH-IN SHALL BE DONE AT NO ADDITIONAL COST.

ALL WORK SHALL BE PERFORMED BY PROPERLY LICENSED PLUMBERS OR UNDER THEIR DIRECT SUPERVISION. ALL MATERIALS AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE APPLICABLE STANDARDS OF UL AND SHALL BEAR THE UL LABEL AS EVIDENCE THAT THE MATERIAL AND/OR EQUIPMENT MEETS THIS REQUIREMENT.

INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND DETAILS UNLESS OTHERWISE NOTED IN THESE PLANS. IF ANY DISCREPANCIES EXIST CONTACT THE ENGINEER PRIOR TO ORDERING EQUIPMENT AND ROUGH-IN.

ALL EQUIPMENT START UP AND TESTING SHALL BE PERFORMED BY THE EQUIPMENT MANUFACTURER TRAINED SERVICE TECHNICIAN. SUBMIT MANUFACTURER'S LITERATURE (SHOP DRAWINGS) FOR MATERIALS AND EQUIPMENT. SUBMITTAL SHALL INCLUDE EQUIPMENT PERFORMANCE DATA AT ELEVATION AND/OR LOCAL CONDITIONS. EQUIPMENT CUTSHEETS OR CATALOG COPIES ARE NOT ACCEPTABLE. SUBMITTAL SHALL BEAR THE APPROVAL OF THE GENERAL CONTRACTOR FOR COMPLIANCE WITH COORDINATION AND THESE SPECIFICATIONS PRIOR TO SUBMITTAL TO ARCHITECT AND/OR HIS AGENCIES. ANY EQUIPMENT SUBSTITUTED FOR WHAT IS SCHEDULED SHALL BE EQUAL TO THAT SCHEDULED IN CONTROLS, ACCESSORIES, AND PERFORMANCE REGARDLESS OF MANUFACTURER.

FIELD LABEL ALL PLUMBING EQUIPMENT AND PIPING AS INDICATED ON THE PLANS PER PLUMBING AND LOCAL CODE REQUIREMENTS. INDICATE DIRECTION OF FLOW ON PIPING.

TAG ALL VALVES WITH CONSECUTIVE NUMBERING ON PERMANENT HARD PLASTIC OR METAL TAB AND PROVIDE SCHEDULE LISTING ITEMS, AREA SERVED, SIZE AND VALVE TYPE. SUBMIT FINAL VALVE SCHEDULE FOR REVIEW.

PROVIDE EXPANSION LOOPS, SWING JOINTS, OR MECHANICAL EXPANSION COMPENSATING DEVICES AS REQUIRED TO ACCOUNT FOR THERMAL EXPANSION OF ALL PIPING SYSTEMS. EXPANSION SYSTEM SIZING SHALL BE IN ACCORDANCE WITH MATERIALS DATA SHEETS AND MANUFACTURER RECOMMENDATIONS.

INSTALL ALL EQUIPMENT PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. IF PLAN DIFFERS FROM THESE INSTRUCTIONS THEN NOTIFY ENGINEER PRIOR TO ROUGH-IN. MANUFACTURERS INSTRUCTIONS SHALL PREVAIL. SPECIAL ATTENTION MUST BE PAID TO GAS FIRED EQUIPMENT FLUE/CA LENGTHS, SIZES, AND MATERIAL.

BASIC MATERIALS
PLUMBING CONTRACTOR TO PROVIDE PLUMBING SYSTEM CONTROLS, CONTROLLERS, CONTROL TRANSFORMER, DISCONNECTS, STARTERS, CONTROL WIRING, ASSOCIATED CONTROL POWER WIRING, AND ALL WORK NECESSARY FOR A COMPLETE AND OPERATIONAL PLUMBING SYSTEM. ALL ELECTRICAL ITEMS SHALL BE COORDINATED WITH ELECTRICAL DRAWINGS AND ELECTRICAL SUB-CONTRACTOR FOR INSTALLATION.

PROVIDE SUPPLEMENTAL STEEL AND SUPPORTS AS REQUIRED FOR INSTALLATION OF PLUMBING MATERIALS, EQUIPMENT, AND APPARATUS.

ALL WORK IN FINISHED AREAS SHALL BE CONCEALED UNLESS SPECIFICALLY NOTED AS EXPOSED ON THE PLANS. PRIOR TO THE INSTALLATION OF ANY EXPOSED WORK THIS CONTRACTOR SHALL VERIFY AND OBTAIN ARCHITECTURAL. APPROVAL OF LOCATION AND EXTENT.

PROVIDE PRESSURE REDUCING VALVE ASSEMBLY AT BUILDING WATER SERVICE ENTRY WHERE PRESSURE EXCEEDS 65 PSI. PRESSURE REDUCING VALVE TO BE SET TO 65 PSI.

PROVIDE SANITARY SEWER SYSTEM CLEANOUTS AS REQUIRED BY LOCAL CODES. PROVIDE BRANCH SHUT-OFF VALVES ON ALL WATER LINES EXTENDING FROM MAINS. THE CONTRACTOR SHALL LOCATE AND FURNISH FOR INSTALLATION BY OTHERS, ALL ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES, MOTORS, ETC. AND THE PROPER SERVICING OF EQUIPMENT AND LINES INSTALLED UNDER THIS CONTRACT.

PIPING
1. SANITARY, VENT, AND STORM PIPING ABOVE AND BELOW GRADE SHALL BE SOLID CORE PVC SCHEDULE 40 OR 80 PIPE AND SHALL BE IRON PIPE SIZE (IPS) CONFORMING TO ASTM D 1785 AND ASTM D 2665. INJECTION MOLDED PVC DWV FITTINGS SHALL CONFORM TO ASTM D 2665. FABRICATED PVC DWV FITTINGS SHALL CONFORM TO ASTM F 1866. PIPE AND FITTINGS SHALL BE MANUFACTURED AS A SYSTEM AND BE THE PRODUCT OF ONE MANUFACTURER. ALL PIPE AND FITTINGS SHALL BE MANUFACTURED IN THE UNITED STATES. ALL SYSTEMS SHALL UTILIZE A SEPARATE WASTE AND VENT SYSTEM. PIPE AND FITTINGS SHALL CONFORM TO NSF INTERNATIONAL STANDARD 14. INSTALLATION SHALL COMPLY WITH THE LATEST INSTALLATION INSTRUCTIONS PUBLISHED BY MANUFACTURER AND SHALL CONFORM TO ALL APPLICABLE PLUMBING, BUILDING, AND FIRE CODE REQUIREMENTS. BURIED PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D 2321 AND ASTM F 1668. SOLVENT CEMENT JOINTS SHALL BE MADE IN A TWO STEP PROCESS WITH PRIMER CONFORMING TO ASTM F 656 AND SOLVENT CEMENT CONFORMING TO ASTM D 2564. THE SYSTEM SHALL BE PROTECTED FROM CHEMICAL AGENTS, FIRE STOPPING MATERIALS, THREAD SEALANT, PLASTICIZED VINYL PRODUCTS, OR OTHER AGGRESSIVE CHEMICAL AGENTS NOT COMPATIBLE WITH PVC COMPOUNDS. SYSTEMS SHALL BE HYDROSTATICALLY TESTED AFTER INSTALLATION.
2. DOMESTIC WATER PIPING ABOVE GRADE: ASTM B 88, TYPE L COPPER WITH SOLDERED OR MECHANICALLY CRIMPED JOINTS (PRO PRESS)E.
3. DOMESTIC WATER PIPING BELOW GRADE SHALL BE TYPE K COPPER WITH SILVER SOLDERED JOINTS.
4. CONDENSATE DRAIN PIPING SHALL BE TYPE M COPPER WITH SOLDERED JOINTS, OR CPVC IF ALLOWED BY LOCAL AUTHORITY HAVING JURISDICTION.
5. GAS PIPING 3 INCHES AND LARGER SHALL BE SCHEDULE 40 STEEL WITH WELDED JOINTS. GAS PIPING 2-1/2 INCHES AND SMALLER SHALL BE SCHEDULE 40 STEEL. MALLEABLE THREADED FITTINGS OR MECHANICALLY CRIMPED JOINTS (PRO PRESS) MEETING ASTM A53.
6. GAS PIPING BELOW GRADE SHALL BE WRAPPED WITH PROTECTIVE PIPE COVERING AND VENTED IN ACCORDANCE WITH LOCAL JURISDICTIONS HAVING AUTHORITY.
7. ANY PIPING SYSTEM LOCATED IN A RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NO MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.
8. FIRE STOP ALL PIPING MATERIALS PASSING THROUGH FIRE RATED STRUCTURES OR FIRE RATED ASSEMBLIES IN ACCORDANCE WITH THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. USE CURRENTLY LISTED U.L. CLASSIFIED PRODUCTS, TESTED BY ASTM E814. USE FOR ALL APPLICABLE PIPE PENETRATIONS THROUGH FIRE RATED FLOORS, WALLS, OR FLOOR CEILING ASSEMBLIES IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.
9. COMPRESSED AIR PIPING: 1" AND SMALLER: TYPE K OR L (TYPE A OR B), COPPER TUBE; WROUGHT-COPPER FITTINGS; COPPER PRESSURE-SEAL-JOINT FITTINGS; COPPER-PUSH FITTINGS; AND BRAZED JOINTS.
10. COMPRESSED AIR PIPING: 2" DOWN TO 1-1/4" SHALL BE : TYPE K OR L (TYPE A OR B), COPPER TUBE; WROUGHT-COPPER FITTINGS; COPPER PRESSURE-SEAL-JOINT FITTINGS; AND BRAZED JOINTS.
11. COMPRESSED AIR PIPING: 2-1/2" TO 4" SHALL BE TYPE K OR L (TYPE A OR B), COPPER TUBE; WROUGHT-COPPER FITTINGS; COPPER PRESSURE-SEAL-JOINT FITTINGS; AND BRAZED JOINTS.
12. COMPRESSED AIR DRAIN PIPING SHALL BE TYPE M (TYPE C) COPPER TUBE; WROUGHT-COPPER FITTINGS; AND BRAZED OR SOLDERED JOINTS.

INSULATION
1. WATER PIPING IN UNCONDITIONED SPACE AND EXTERIOR WALLS SHALL BE 2" FIBERGLASS INSULATION.
2. HOT WATER PIPING 2" OR LESS SHALL BE 1-INCH FIBERGLASS INSULATION. HOT WATER PIPING GREATER THAN 2-INCHES SHALL BE 1 1/2" FIBERGLASS INSULATION. RUNOUTS, NOT EXCEEDING 12 FEET, UP TO 2-INCHES SHALL BE 1/2-INCH THICK FIBER GLASS INSULATION WITH AN ALL-SERVICE JACKET.
3. STORM DRAIN PIPING ABOVE GRADE SHALL BE 1/2-INCH THICK FIBER GLASS INSULATION WITH AN ALL-SERVICE JACKET.
4. HORIZONTAL SANITARY AND STORM PIPING EXPOSED TO OUTDOOR TYPE AMBIENT CONDITIONS INCLUDING COVERED PARKING AND CRAWL SPACES SHALL BE HEAT-TRACED AND INSULATED WITH 1-INCH FIBERGLASS INSULATION.
5. VERTICAL SANITARY AND STORM PIPING EXPOSED TO OUTDOOR TYPE AMBIENT CONDITIONS INCLUDING COVERED PARKING AND CRAWL SPACES SHALL BE INSULATED WITH 1-INCH FIBERGLASS INSULATION.
6. CONDENSATE DRAIN PIPING SHALL BE 1/2-INCH THICK INSULATION WITH AN ALL-SERVICE JACKET.
7. COLD WATER PIPING SHALL BE 1/2-INCH THICK FIBER GLASS INSULATION WITH AN ALL-SERVICE JACKET.
8. COLD WATER DISTRIBUTION PIPING SHALL NOT BE INSULATED UNLESS OTHERWISE NOTED.
9. COLD OR HOT WATER PIPING IN A WALL, CEILING, OR FLOOR THAT IS ADJACENT TO AN UNCONDITIONED SPACE SHALL HAVE 1-INCH THICK INSULATION. THE PIPING SHALL ALSO BE INSTALLED TO THE WARM SIDE OF THE BUILDING INSULATION.
10. RECIRULATING HOT WATER SYSTEM MAINS SHALL BE 1" THICK FIBER GLASS INSULATION WITH AN ALL SERVICE JACKET.
11. RECIRCULATING/HOT WATER PIPING LESS THAN 1-1/2" SHALL BE 1" FIBERGLASS INSULATION. RECIRCULATING/HOT WATER PIPING 1-1/2 TO 4" SHALL BE 1 1/2" FIBERGLASS INSULATION. INSULATION SHALL COMPLY WITH TABLE C404.4.1 OF THE 2018 IECC (REFERENCE TABLE ON THIS SHEET).

PLUMBING EQUIPMENT/FIXTURES
- FURNISH AND INSTALL PLUMBING FIXTURES AS SCHEDULED ON THE PLANS.
- PROVIDE CHROME PLATED ANGLE STOPS AND ESCUTCHEON PLATES ON ALL EXPOSED FIXTURE RUNOUTS
- PROVIDE INSULATION AND ROUGH IN AS REQUIRED FOR COMPLIANCE WITH ADA REQUIREMENTS.
- PROVIDE ALL ACCESSORIES AND SPECIALTY ITEMS AS REQUIRED FOR A COMPLETE FIXTURE INSTALLATION.

REDUCED PRESSURE BACKFLOW PREVENTER
FURNISH AND INSTALL LEADFREE REDUCED PRESSURE BACKFLOW PREVENTER FOR THE PRIMARY DOMESTIC COLD WATER SERVICE IN ACCORDANCE WITH STATE, LOCAL, AND JURISDICTIONAL WATER DISTRICT REQUIREMENTS.
FURNISH AND INSTALL REDUCED PRESSURE BACKFLOW PREVENTER FOR MECHANICAL EQUIPMENT REQUIRED OF THIS OR OTHER SECTIONS OF THESE SPECIFICATIONS.

NATURAL GAS FIRED WATER HEATERS
FURNISH AND INSTALL NATURAL GAS FIRED, GLASS LINED WATER HEATERS AS SCHEDULED ON THE PLANS. WATER HEATERS SHALL BE COMPLETE, SHALL BE AGA LABELED, AND MEET THE REQUIREMENTS OF LOCAL MUNICIPALITIES.

CIRCULATING PUMP
FURNISH AND INSTALL A DOMESTIC ALL BRONZE HOT WATER RETURN CIRCULATOR AS SCHEDULED ON THE PLANS. PROVIDE RETURN LINE AQUASTAT AND WIRE COMPLETE TO CYCLE CIRCULATOR TO PROVIDE 120 OR 140 DEGREES RETURN WATER TEMPERATURE (ADJUSTABLE).

ABBREVIATIONS

(D)	DEMO
(E)	EXISTING
(N)	NEW
AAV	AIR ADMITTANCE VALVE
AD	AREA DRAIN
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
B	BOILER
BB	BASEBOARD
BFG	BELOW FINISHED GRADE
BFP	BACKFLOW PREVENTER
BT	BATH TUB
BV	BALL VALVE
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CO	CLEANOUT
COTG	CLEANOUT TO GRADE
CU	CONDENSING UNIT
CV	CHECK VALVE
CUH	CABINET UNIT HEATER
DCW	DOMESTIC COLD WATER
DF	DRINKING FOUNTAIN
DHW	DOMESTIC HOT WATER
DSN	DOWN SPOUT NOZZLE
EC	ELECTRICAL CONTRACTOR
ECO	END OF LINE CLEANOUT
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FURN	FURNACE
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FS	FLOOR SINK
G	GAS
GC	GENERAL CONTRACTOR
GM	GAS METER
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GUH	GAS UNIT HEATER
GW	GREASE WASTE
GWH	GAS WATER HEATER
HB	HOSE BIB
HP	HEAT PUMP
HX	HEAT EXCHANGER
IM	ICE MAKER BOX
KS	KITCHEN SINK
LAV	LAVATORY
LS	LAUNDRY SINK
MAU	MAKE-UP AIR UNIT
MC	MECHANICAL CONTRACTOR
MF	MEASURE FLOW
NIC	NOT IN CONTRACT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
ORD	OVER FLOW ROOF DRAIN
P	PUMP
PC	PLUMBING CONTRACTOR
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
RA	RETURN AIR
RAR	RETURN AIR REGISTER
RD	ROOF DRAIN
RH	RADIANT HEATER
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SAR	SUPPLY AIR REGISTER
SF	SUPPLY FAN
SFT	SERIES FAN TERMINAL
SH	SHOWER
SOI	SAND/OIL INTERCEPTOR
SOV	SHUT OFF VALVE
SS	SERVICE SINK
T&P	TEMPERATURE & PRESSURE
TD	TRENCH DRAIN
TYP	TYPICAL
UR	URINAL
WB	WASHER BOX
WCO	WALL CLEANOUT
WH	WALL HYDRANT

PLUMBING LEGEND

- CND — CONDENSATE
- DCW — DOMESTIC COLD WATER
- 120 — DOMESTIC HOT WATER
- 120'R — DOMESTIC HOT WATER RECIRC
- GW — GREASE WASTE
- G — GAS
- RD — ROOF DRAIN
- ORD — OVERFLOW ROOF DRAIN
- SOI — SAND OIL
- SS — SANITARY SEWER
- V — VENT
- (A)XX — TYPICAL PIPE ABOVE/ON ROOF
- (B)XX — TYPICAL PIPE BELOW/UNDERGROUND
- (E)XX — TYPICAL PIPE EXISTING

VALVES

- BALL VALVE
- GATE VALVE
- CHECK VALVE
- PRESSURE REDUCING VALVE (PRV)
- MEASURE FLOW
- TEE UP
- TEE DOWN
- ELBOW UP
- ELBOW DOWN

MISC.

- POINT OF CONNECTION (POC)
- (D)XX = DEMO

FIXTURES

- WALL CLEAN OUT
- FLOOR CLEANOUT
- AREA DRAIN
- FLOOR DRAIN
- FLOOR SINK FULL COVER
- GAS METER
- HOSE BIB
- BATH TUB/MOP SINK
- SINK
- 2-COMPARTMENT SINK
- DRINKING FOUNTAIN/URINAL
- WASHER BOX
- ICE BOX
- WATER CLOSET STACK
- WATER CLOSET

GENERAL NOTES

1. ALL ITEMS CONNECTING TO POTABLE WATER SHALL MEET THE LEAD FREE STANDARD OF .25% OR LESS LEAD.
2. PLUMBING PLANS REFERENCE FINISHED FLOOR TO FINISHED FLOOR ABOVE. SANITARY SHOWN IS FOR FIXTURES ABOVE UNLESS NOTED OTHERWISE.
3. FIELD VERIFY ALL ROUTING OF PLUMBING LINES WITH OTHER TRADES. FIELD ADJUST ROUTING ACCORDINGLY TO MAKE SYSTEM WORK WITH OTHER TRADES.
4. PER SECTION 416.5 OF THE CURRENT PLUMBING CODE, PROVIDE WATTS MMV ASSE1070 MIXING VALVE AT ALL PUBLIC FIXTURES AS REQUIRED PER LOCAL CODE.
5. PC TO PROVIDE VACUUM BREAKERS AT LOCATIONS WHERE HOSES AND NOZZLES ARE USE, I.E. JANITOR SINKS, BEAUTY SINKS, KITCHEN SPRAYERS, DISHWASHERS, AND BATHS.
6. ALL DRAINAGE LINES 2-1/2" AND UNDER TO BE SLOPED AT MINIMUM 1/4" PER FOOT, AND 3" AND OVER TO BE SLOPED AT MINIMUM 1/8" PER FOOT UNLESS NOTED OTHERWISE.
7. START TRENCHING FOR NEW SANITARY LINE AT FURTHEST FIXTURE (HIGHEST POINT IN SYSTEM) FROM CIVIL CONNECTION POINT TO BUILDING.
8. FIELD ROUTE ALL CONDENSATE LINES, T&P VALVES, AND DRAIN VALVES FROM MECHANICAL AND PLUMBING EQUIPMENT TO SANITARY SEWER RECEPTOR OR STORM/GRADE PER LOCAL CODE AND JURISDICTION.

PLUMBING FIXTURE SCHEDULE

TAG	ADA	DESCRIPTION	CONNECTIONS DCW	DHW	WASTE	VENT	FIXTURE MANUFACTURER	MODEL NAME	MODEL #	FLOW RATE	DIMENSIONS	MOUNTING	RIM HEIGHT	FINISH	MISC.	REMARKS
WC-1	YES	WATER CLOSET-TANK	1/2"		3"	2"	AMER. STND.	CADET PRO	211AA.104	1.28 GPF	12" R.I./2-1/8" TRAP	FLOOR	16-1/2"	VITREOUS CHINA	ELONGATED	
		OPEN FRONT LESS COVER					BEEMIS	HEAVY DUTY	1955SSCT		ELONGATED	TOILET		PLASTIC	STAINLESS HINGES	
LAV-1	YES	WALL HUNG			1-1/2"	2"	AMER. STND.	LUCERNE	0355.012	-	21-1/4"X18-1/4"	WALL HANGER	31" TO 34"	VITREOUS CHINA	FRONT OVERFLOW 4" CENTERS	6W, WB
	YES	FAUCET	1/2"	1/2"			MOEN	CHATEAU	L64621	0.5 GPM		DECK MOUNT		POLISHED CHROME	4" CENTERS	PS, MV
SS-1	NO	SERVICE SINK			3"	2"	ELKAY	DEPENDABILT	E1C20X200X		25"X25-13/16"X43-3/4"	FLOOR	36"	STAINLESS STEEL		
	YES	FAUCET	1/2"	1/2"			CHICAGO FAUCET	MANUAL	540-LDL12ABCP	2.2 GPM	8" CENTERS	WALL		CHROME PLATED	ADJ. ARM, HOT/COLD PADDLE	
		MANUAL FOOT PEDAL VALVE	1/2"	1/2"			ZURN	FOOT VALVE	Z85500-XL			FLOOR		CHROME		
EWC-1	YES	BI-LEVEL	1/2"		2"	2"	ELKAY	EZH20	EZSTL8WSK		36-3/4"X19"X36-1/16"	WALL	ADA	STAINLESS STEEL	W/BOTTLE FILLER	6W, 7
		WALL HANGER					ZURN	SINGLE	Z1222			FLOOR		DURACOAT	CARRIER ONLY	
WB-1	-	WASHER WALL BOX	1/2"				SIOUX CHEF	OX BOX	696 (1F FRAME)			WALL	-	ABS	W/ WATER HAMMER ARRESTOR	
HB-1	N	INTERIOR WALL HYDRANT	3/4"	-	-	-	WOODFORD	ANTI-SIPHON	MODEL 101	-	VARIES W/ WALL DEPTH	INTERIOR ONLY	24"AFG	INTERIOR USE ONLY	W/ BACKFLOW PROTECTION	
AD-1		AREA DRAIN			2-4"		ZURN	-	Z-507-P	-	7" ROUND	FLOOR		CAST IRON BODY		
FD-1		FLOOR DRAIN			2-4"		ZURN	-	Z-415B	-	5-1/2" ROUND	FLOOR		NICKEL BRONZE FINISH, STAINLESS STRAINER	HEEL PROOF	TP
DSN-1		DOWNSPOUT NOZZLE			-		ZURN	-	Z199	-	-	EXTERIOR	-	NICKEL BRONZE	-	-
RD-1	-	ROOF DRAIN	-	-	-	-	ZURN		Z100	-	15" DIA	ROOF/EXTERIOR	-	DURA COATED CAST IRON	FLASH CLAMP/GRAVEL GUARD	
ORD-1	-	ROOF DRAIN	-	-	-	-	ZURN		Z100	-	15" DIA	ROOF/EXTERIOR	-	DURA COATED CAST IRON	FLASH CLAMP/GRAVEL GUARD	

ALTERNATE MFG: AMERICAN STANDARD, CRANE, DELTA, ELKAY, HAWS, HALSEY TAYLOR, J.R.SMITH, KOHLER, LASCO, MOEN, SIOUX CHIEF, STING RAY, SYMMONS, TOTO, WADE, ZURN.

REMARKS:
MV-ASSE 1070/ASME 112.107 MIXING VALVE (110 DEG. F MAX TEMP.)
PS-POP UP STRAINER
TP-ASSE 1018 OR 1044 TRAP PRIMER
WB-WALL BRACKET
6W-6" WALL REQUIRED

GENERAL NOTES:
1. ALL PUBLIC SINKS TO HAVE OPEN GRID STRAINERS.
2. ALL NON-PUBLIC SINKS TO HAVE POP-UP STRAINERS.
3. ALL FIXTURES TO BE PROVIDED W/ FLEXIBLE WATER LINES, ANGLE STOPS (INCLUDING DISHWASHER CONNECTIONS), TRAP WRAP, ESCUTCHEON PLATES AS REQUIRED PER FIXTURE INSTALL AND CODE.
4. ALL INSTALLATIONS SHALL COMPLY WITH MANUFACTURER'S INSTRUCTIONS, AND STATE AND LOCAL CODES.
5. PROVIDE BACKFLOW PROTECTION ON FIXTURES AS REQUIRED PER LOCAL CODE.
6. TRIP LEVERS SHAL BE TO WIDE/OPEN SIDE OF TOILET.
7. 120V/1ph.-5 FLA, 370 WATTS

IPC WASTE AND WATER FIXTURE UNIT CALCULATION

PROJECT: BRAKES PLUS - JENKS, OK
BUILDING: 1 **CODE:** 2018 IPC **DATE:** 6/5/2026

FIXTURE TOTAL	FIXTURE TYPE	OCC.	SUPPLY TYPE	WATER FIXTURE UNITS COLD WATER	COLD TOTAL	HOT WATER	HOT TOTAL	COLD & HOT	COMBINED TOTAL	WASTE FIXTURES UNITS FIXTURE VALUES	TOTAL VALUES	REMARKS
1	HOSE BIBBS	PRIVATE	1/2" VALVE	2.50	2.5		0.0	2.50	2.5		0.0	
2	HOSE BIBBS ADDITIIONAL	PRIVATE	1/2" VALVE	1.00	2.0		0.0	1.00	2.0		0.0	
1	DRINKING FOUNTAIN	OFFICES	3/8" VALVE	0.25	0.3		0.0	0.25	0.3	0.50	0.5	
2	LAVATORY	PUBLIC	FAUCET	1.50	3.0	1.50	3.0	2.00	4.0	1.00	2.0	
1	SERVICE SINK	OFFICES	FAUCET	2.25	2.3	2.25	2.3	3.00	3.0	2.00	2.0	
2	WATER CLOSET	PUBLIC	FLUSH TANK	5.00	10.0		0.0	5.00	10.0	4.00	8.0	
			TOTAL FIXT. UNITS		20.00		5.25		**21.8**		**12.5**	***TOTAL FIXTURE UNITS***
			GPM						20.3		4"	***BUILDING MAIN SIZE***
			PIPE SIZE						1"		1/8"	***BUILDING MAIN SLOPE***

	WATER SERVICE LINE SIZE	*FT/SEC*	*PSI/100FT*	*NOTES*
TAP & METER	1"	-	-	
BFP & BLDG MAIN	1"	7.93	10.23	

ELECTRIC WATER HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NO.	TANK GALLONS	ELECTRICAL VOLT	PH	KW	GPH RISE	RISE (F)	REMARKS
EWH-1	STATE	PCE-20-10MSA	20	120	1	1.5	8	80	1

REMARKS:
1. PROVDE 2 1/2" DEEP DRAIN PAN. ROUTE 3/4"DRAIN TO LAV TRAP OR FLOOR DRAIN.

PUMP SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NO.	GPM	HEAD (FT)	RPM	HP	ELECTRICAL VOLT	PHASE	REMARKS
CP-1	B & G	NBF-18S	3	12	3300	1/25	120	1	1, 2

REMARKS:
1. PROVIDE AQUASTAT AND TIMER KIT.
2. PROVIDE LEAD-FREE BRONZE OR SS PUMP.

CODES & DESIGN CRITERIA

JURISDICTION:	JENKS, OK
PLUMBING CODE:	2018 IPC
FUEL GAS CODE:	2018 IFCG
ENERGY CODE:	2018 IECC
LOCAL ADDENDUMS:	YES
PEAK RAINFALL RATE:	3.8 IN./HR
S-O-I DISCHARGES TO:	SANITARY
GAS DELIVERY PRESSURE	2 PSI
NUMBER OF FLOORS:	1

PIPE INSULATION (TABLE C404.4.1 2018 IECC)

FLUID OPERATING TEMPERATURE AND USAGE (F)	MINIMUM PIPE INSULATION THICKNESS (IN INCHES) a: INSULATION CONDUCTIVITY Btu*in./(h*ft2*F)	MEAN RATING TEMPERATURE (F)	NOMINAL PIPE OR TUBE SIZE (INCHES): <1	1 TO <1-1/2	1-1/2 TO < 4	4 TO < 8	>/= 8
105 - 140	0.22 - 0.28	100	1.0	1.0	1.5	1.5	1.5
>140 - 200	0.25 - 0.29	125	1.0	1.0	2.0	2.0	2.0
>200	0.27 - 0.30	150	1.5	1.5	2.5	3.0	3.0

a. These thicknesses are based on energy efficiency considerations only. Additional insulation may be necessary for safety.

PLUMBING SHEET LIST

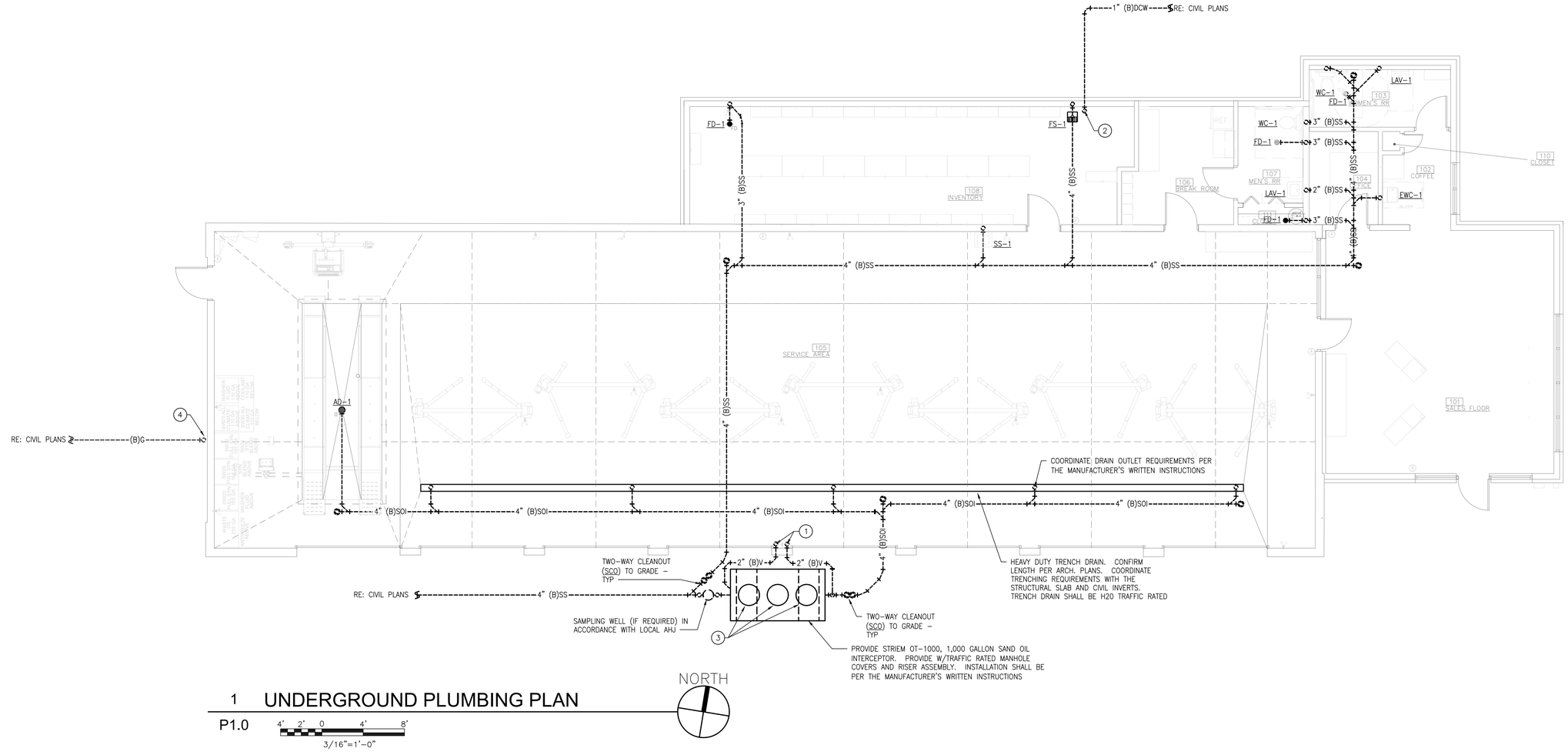
SHEET #	SHEET TITLE
P0.1	PLUMING SPECS, SCHEDULES & LEGEND
P1.0	UNDERGROUND PLUMBING PLAN
P1.1	PLUMBING PLAN
P2.1	PLUMBING ROOF PLAN
P3.1	PLUMBING DETAILS
P4.0	PLUMBING ISOMETRICS

PIPE HANGER SPACING

TABLE 305.4 (IMC) & 308.5 (IPC)

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)	REMARKS
ABS	4	10	B
PVC	4	10	B
COPPER OR COPPER ALLOY	12	10	
COPPER 1-1/4" AND SMALLER	6	10	
COPPER 1-1/2" AND LARGER	10	10	
CROSS LINK PE (PEX)	2.67' (32")	10	B
CAST IRON	5	15	A
STAINLESS STEEL	10	10	B

A. THE MAXIMUM HORIZONTAL SPACING OF CAST IRON PIPE HANGERS SHALL BE INCREASED TO 10 FEET WHERE 10 FOOT LENGTHS OF P



1 UNDERGROUND PLUMBING PLAN

P1.0 — 4' 2' 0 4' 8' — 3/16"=1'-0"

GENERAL NOTES:

1. BUILDING SEWERS SHALL BE PROVIDED WITH CLEANOUTS LOCATED NOT MORE THAT 100'-0" APART, IPC SECTION 708.3.2
2. CLEANOUTS SHALL BE INSTALLED AT EACH CHANGE OF DIRECTION GREATER THAN 45 DEGREES FOR BUILDING SEWER. FOR BUILDING DRAINS WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE CLEANOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH OF THE DRAINAGE PIPING, IPC SECTION 708.3.3
3. REFER AND COORDINATE W/ CIVIL PLANS FOR SANITARY, GAS AND WATER EXIT/ENTRY LOCATIONS.
4. PROVIDE TRAP PRIMERS (OR BARRIER TYPE TRAP SEAL DEVICE PER IPC SEC. 1002.4.1.4) ON ALL FLOOR DRAINS, RE: DETAIL ON SHEET P3.1,

DRAWING NOTES:

1. (2) 2"VENT UP THROUGH SLAB, COMBINE INTO (1) 3"V, ROUTE AS INDICATED. TERMINATE 3"V TO 3"VTR.
2. 1" DOMESTIC WATER TAP & METER ON SITE PROVIDE A 1"BACKFLOW PREVENTER IN BUILDING. COORDINATE PER CIVIL PLANS.
3. H20 TRAFFIC RATED MANHOLE ASSEMBLY, ACCESS COVERS, MANHOLE RING EXTENTIONS AS REQUIRED FOR DEPTH OF INTERCEPTOR.
4. NATURAL GAS SERVICE LINE FROM UTILITY CO. MAIN, PER THE UTILITY CO. STANDARDS. COORDINATE WITH UTILITY CO.

SAND AND OIL INTERCEPTOR SIZING
SIZING CRITERIA: 6 CUBIC FEET FOR THE FIRST 100 SQ.FT. AND 1 CUBIC FOOT FOR EACH ADDITONAL SQUARE FEET.
SERVICE AREA SQUARE FOOTAGE = 3,270
(3,270-100) SQ.FT. / 100 = 32 CUBIC FEET
+ 6 CUBIC FEET
=38 CUBIC FEET
38 CU.FT. X 7.48 GAL/CU.FT= 285 GALLON REQUIRED.
PROVIDING A 1,000 GALLON INTERCEPTOR

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
RICARDO MEDRANO
36937
OKLAHOMA
07/24/2026
ARCHITECT OF RECORD

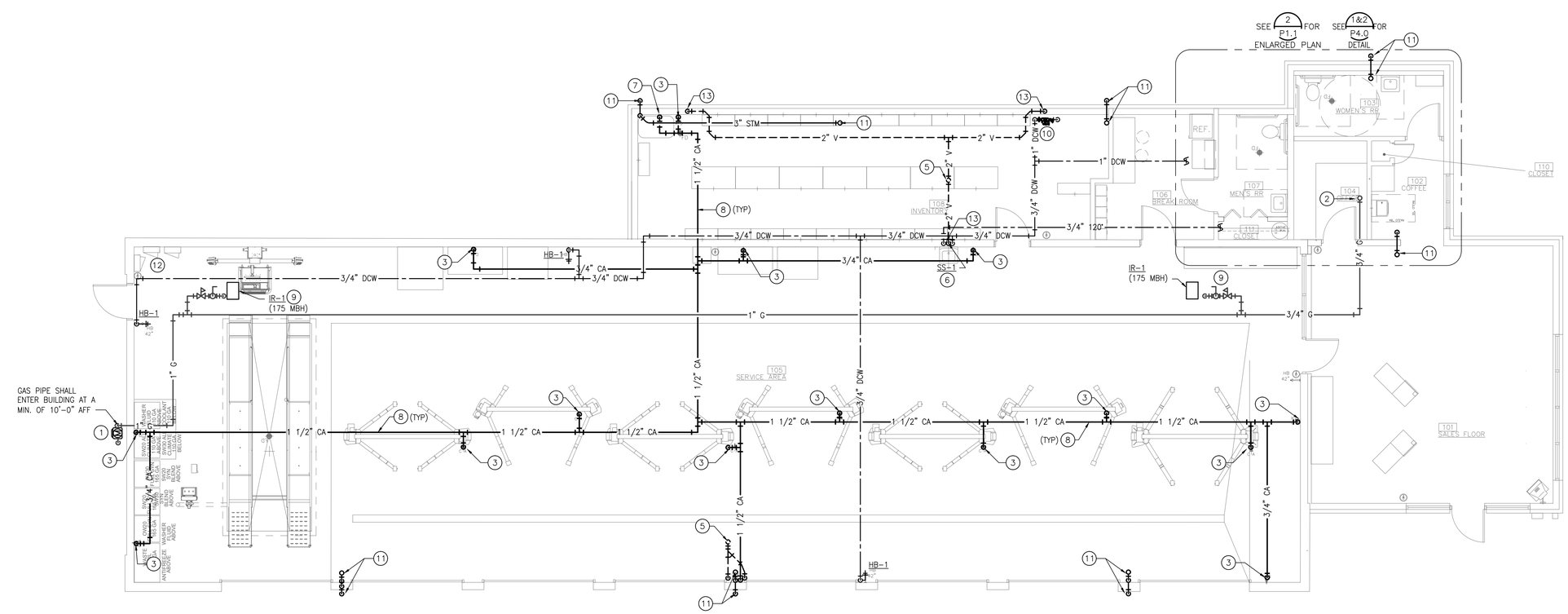
REVISION	DATE	COMMENTS
	06.08.26	FOR SUBMITTAL TO BUILDING DEPT.
	07.24.26	ISSUE FOR CONSTRUCTION

ARCODEV JOB #: --
CLIENTJOB #: --
DRAWN BY: JD
CHECKED BY: LP
DATE OF ISSUE: 06/08/2026

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOCE: 303.881-8925

SHEET
P1.0
UNDERGROND PLUMBING PLAN

GEMINI ENGINEERING GROUP
101 Nightlinger Lane
Millsap, TX 76066
(817) 672-7562



1 PLUMBING PLAN

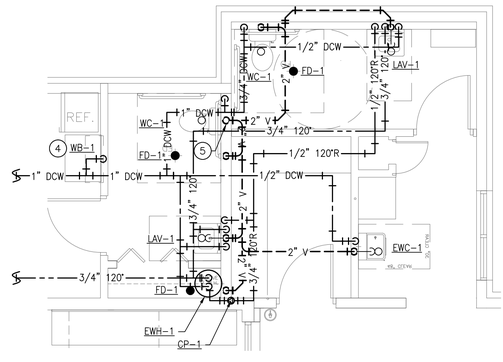
P1.1

4' 2' 0 4' 8'

3/16"=1'-0"

DRAWING NOTES:

1. GAS METER: SIZING BASED ON 200'-0" AT 2.0 PSI GAS PRESSURE. TOTAL CONNECTED GAS LOAD = 415 MBH. CONFIRM GAS PRESSURE WITH LOCAL GAS COMPANY SERVICE.
2. 3/4"G UP THRU ROOF FOR RTU-1, 65 MBH
3. 3/4"CA DROP, TERMINATE PER DETAIL. CONFIRM HEIGHT REQUIREMENT WITH EQUIPMENT SERVED. CONTRACTOR TO VERIFY SIZE IS ADEQUATE FOR EQUIPMENT USE.
4. 1/2"DCW DN IN WALL TO RECESSED WALL OUTLET VALVE BOX, PROVIDE W/ INLINE BACKFLOW PREVENTER. ROUGH-IN FOR COFFEE MAKER.
5. 3"V UP TO 3"VTR.
6. 3/4"DCW/DHW DN AT WALL, OFFSET 1/2"DCW/DHW TO FAUCET AND 1/2"DCW/DHW TO FOOT PEDALS.
7. COMPRESSED AIR MAIN FROM COMPRESSOR OUTLET. INSTALL PER MANUFACTURERS INSTRUCTIONS. PROVIDE ONE DISCONNECT AT AIR COMPRESSOR.
8. SLOPE COMPRESSED AIR DOWN IN DIRECTION OF SLOPE AT 1/8" PER FOOT, TYPICAL.
9. TERMINATE W/ SHUT-OFF VALVE, PRV AND DIRT LEG. PRV SHALL BE CAPABLE OF REDUCING FROM 2 PSI GAS TO 7"W.C. AT MBH AS INDICATED. PROVIDE VENTLESS REGULATOR IS LOCAL AHJ ALLOWS. IF NOT, VENT SHALL EXIT TO ATMOSPHERE, FULL SIZE.
10. 1" LEADFREE DOMESTIC WATER BACKFLOW DEVICE, FEBCO LF825Y (OR EQUAL). RELIEF DRAIN PIPING FROM AIR GAP FITTING TO TERMINATE AT FLOOR SINK VIA MINIMUM 2" AIR GAP
11. 3"RD FROM ABOVE AND DOWN. EXTEND TO EXTERIOR WALL, TERMINATE AT SPLASHBLOCK PER ARCHITECTURAL PLANS.
12. PIPING SHALL NOTE BE LOCATED IN THE WORKING SPACE IN FRONT OF, OR THE DEDICATED SPACE ABOVE THE ELECTRICAL PANELS. COORDINATE WITH THE E.C.
13. 2"V DOWN IN WALL CAVITY.



2 ENLARGED PART PLAN

P1.1

4' 2' 0 4' 8'

1/4"=1'-0"

BRAKES PLUS

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45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

P1.1

PLUMBING PLAN

GEMINI ENGINEERING GROUP
101 Nightlinger Lane
Millsap, TX 76066
(817) 672-7562

ROOF DRAIN CALCULATION					
MAX. RAINFALL RATE:		3.8	INCHES/HR		
ROOF AREA AR (SF)	PARAPET AREA AP (SF)	TOTAL AREA (AR+1/2*AP)	QTY. ROOF DRAINS	GPM (PER RD)	ROOF DRAIN SIZE (IN)
1,423	725	1,786	3	24	3"
INCLUDES AREAS FROM UPPER ROOF THAT SPILLS ONTO THIS ROOF					

ROOF DRAIN CALCULATION					
MAX. RAINFALL RATE:		3.8	INCHES/HR		
ROOF AREA AR (SF)	PARAPET AREA AP (SF)	TOTAL AREA (AR+1/2*AP)	QTY. ROOF DRAINS	GPM (PER RD)	ROOF DRAIN SIZE (IN)
3,271	1,369	3,956	3	52	3"

ROOF DRAIN CALCULATION					
MAX. RAINFALL RATE:		3.8	INCHES/HR		
ROOF AREA AR (SF)	PARAPET AREA AP (SF)	TOTAL AREA (AR+1/2*AP)	QTY. ROOF DRAINS	GPM (PER RD)	ROOF DRAIN SIZE (IN)
527	920	987	1	39	3"

RTU-1
65 MBH
(PER MECH. PLANS)

3" RD-1

1 PLUMBING ROOF PLAN

P2.1

4' 2' 0 4' 8'
3/16"=1'-0"

NORTH

DRAWING NOTES:

1. 3" PLUMBING VENT UP THRU ROOF FROM BELOW, RE: PLUMBING PLANS.
2. GAS PIPING UP FROM BELOW, ROUTE AND TERMINATE W/ SHUT-OFF VALVE, PRV AND DIRT LEG AT ROOFTOP UNIT. PRV SHALL BE CAPABLE OF REDUCING FROM 2 PSI GAS PRESSURE TO 7"W.C. AT MBH AS INDICATED.
3. OVERFLOW SCUPPER, SIZE PER ARCHITECTURAL PLANS, DETAIL 1/A2-4.
4. GAS-FIRED RADIANT TUBE HEATER FLUE TERMINAL, BY H.V.A.C.
5. TOILET EXHAUST ROOF TERMINAL, BY H.V.A.C.
6. SPLASH BLOCK FOR UPPER ROOF DRAIN DISCHARGE VIA WALL NOZZLE (DSN-1).

BRAKES PLUS

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P2.1
PLUMBING ROOF PLAN

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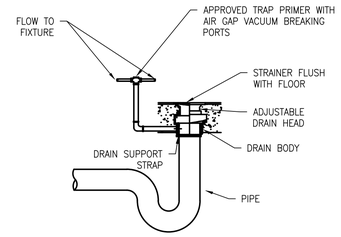
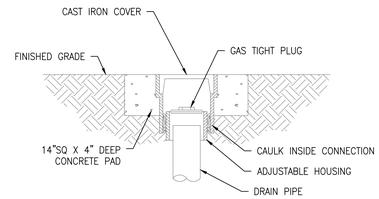


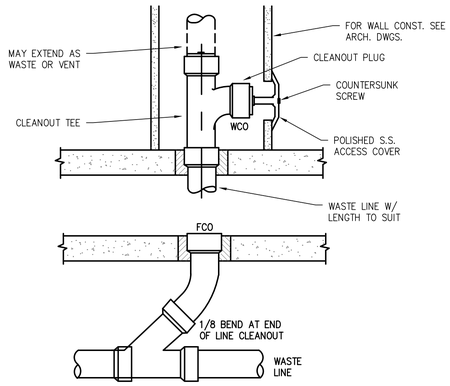
FLOOR DRAIN W/ TRAP PRIMER DETAIL

NOT TO SCALE



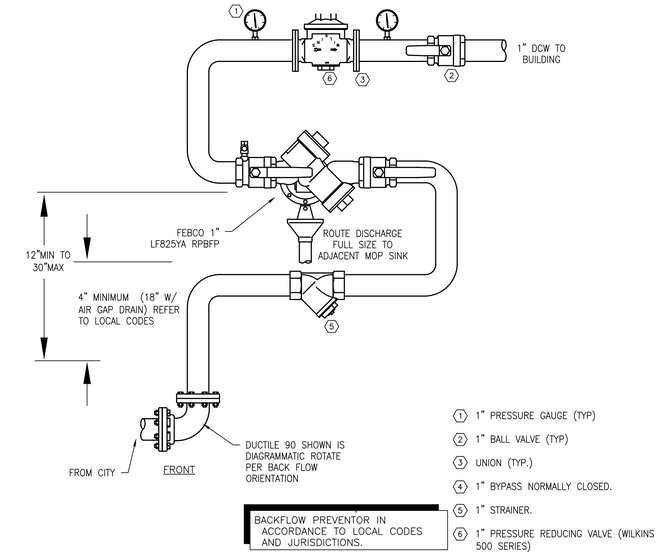
OUTSIDE CLEANOUT TO GRADE

NOT TO SCALE



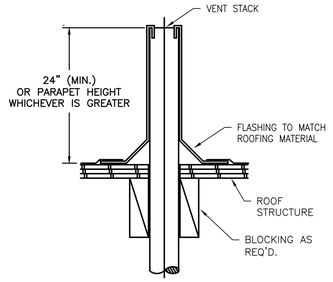
CLEANOUT DETAILS

NOT TO SCALE



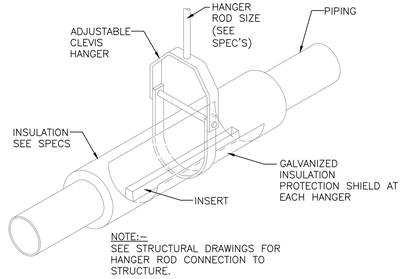
DOMESTIC WATER ENTRY BACKFLOW DETAIL

NOT TO SCALE



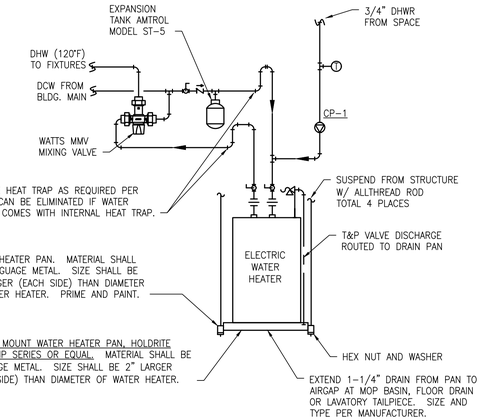
PIPE THRU ROOF DETAIL

NOT TO SCALE



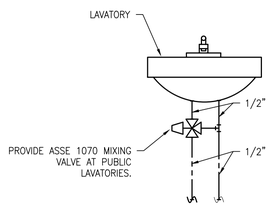
PIPE HANGER AND INSULATION DETAIL

NOT TO SCALE



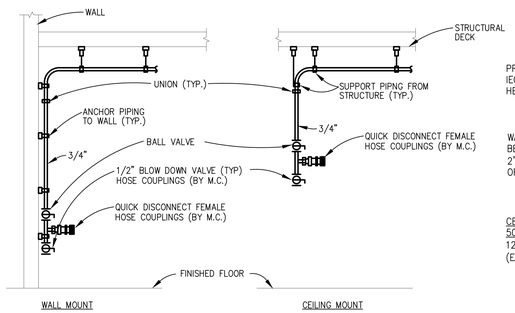
ELECTRIC WATER HEATER DETAIL-ABOVE CEILING

NOT TO SCALE



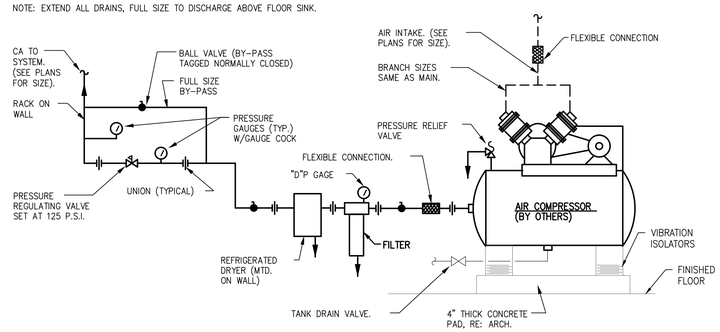
THERMOSTATIC MIXING VALVE DETAIL

NOT TO SCALE



COMPRESSED AIR CONNECTION DETAILS

NOT TO SCALE



AIR COMPRESSOR PIPING DETAIL

NOT TO SCALE

GEMINI ENGINEERING GROUP
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Millsap, TX 76066
(817) 672-7562

–

BRAKES PLUS

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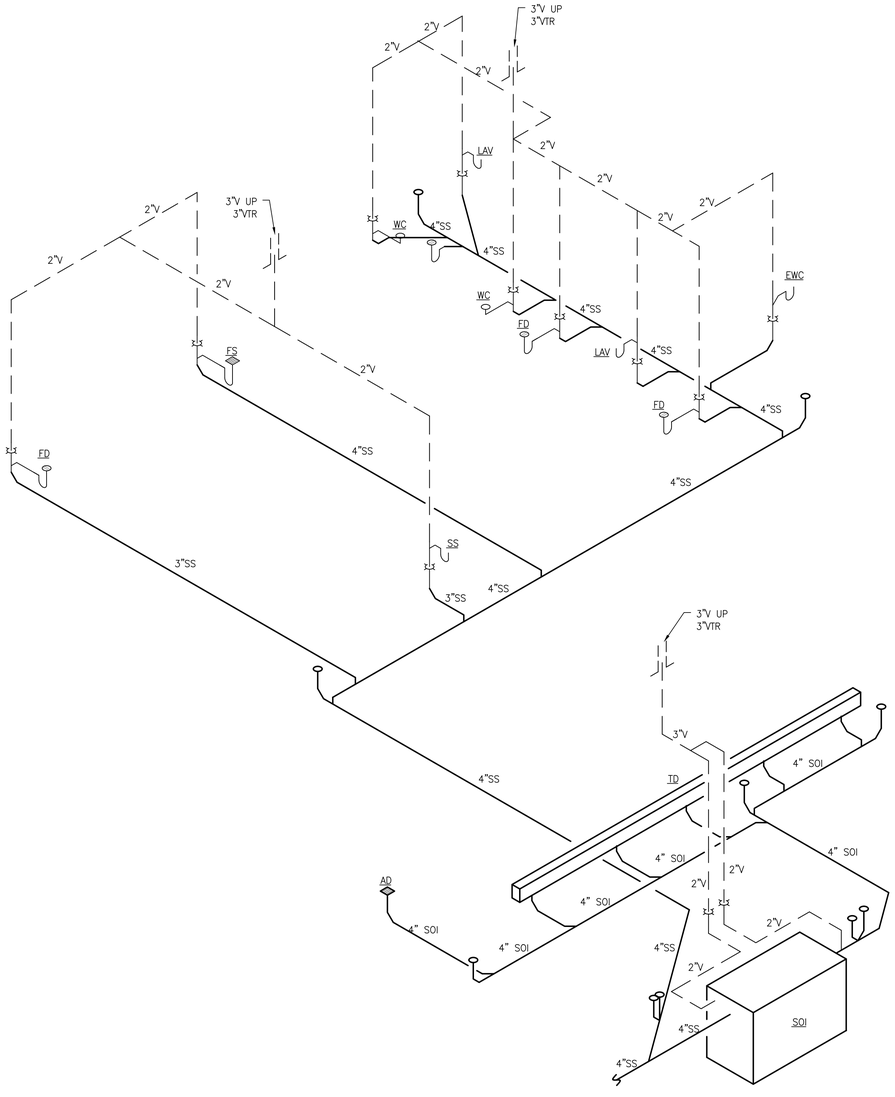
ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

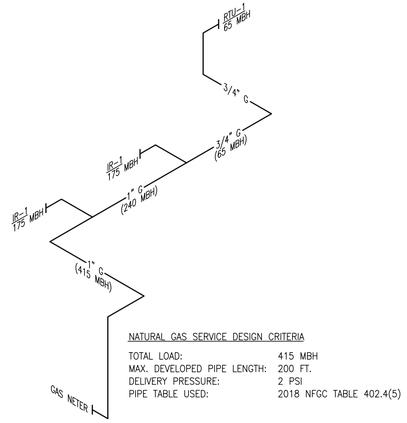
P2.0

PLUMBING DETAILS



SANITARY WASTE & VENT ISOMETRIC

NOT TO SCALE

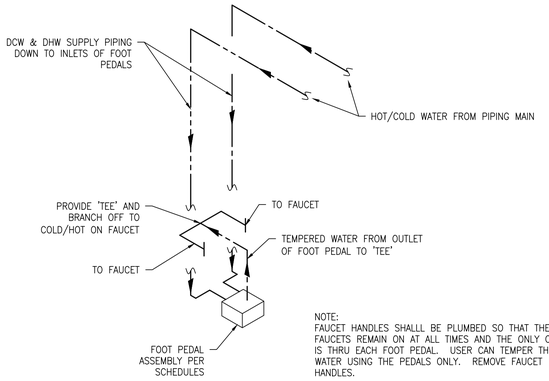


NATURAL GAS SERVICE DESIGN CRITERIA

TOTAL LOAD:	415 MBH
MAX. DEVELOPED PIPE LENGTH:	200 FT.
DELIVERY PRESSURE:	2 PSI
PIPE TABLE USED:	2018 NFGC TABLE 402.4(5)

NATURAL GAS ISOMETRIC

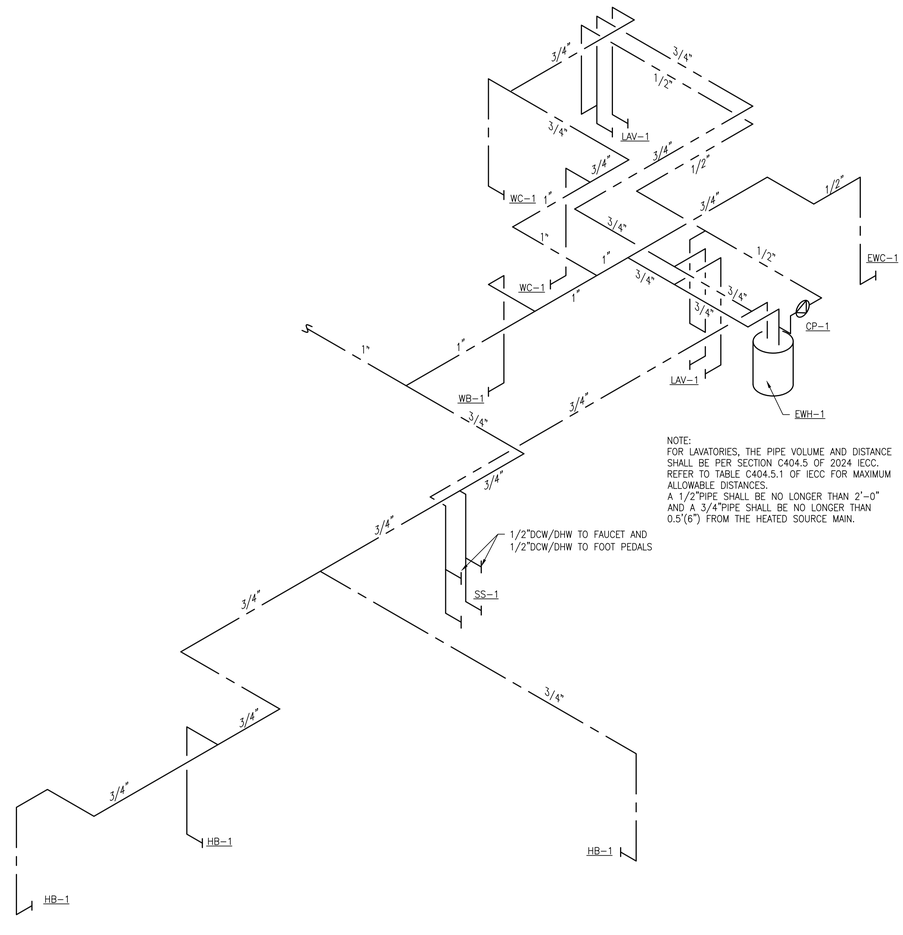
NOT TO SCALE



NOTE:
FAUCET HANDLES SHALLL BE PLUMBED SO THAT THE FAUCETS REMAIN ON AT ALL TIMES AND THE ONLY CONTROL IS THRU EACH FOOT PEDAL. USER CAN TEMPER THE WATER USING THE PEDALS ONLY. REMOVE FAUCET HANDLES.

DOMESTIC WATER AT SERICE SINK

NOT TO SCALE



NOTE:
FOR LAVATORIES, THE PIPE VOLUME AND DISTANCE SHALL BE PER SECTION C404.5 OF 2024 IECC. REFER TO TABLE C404.5.1 OF IECC FOR MAXIMUM ALLOWABLE DISTANCES.
A 1/2"PIPE SHALL BE NO LONGER THAN 2'-0" AND A 3/4"PIPE SHALL BE NO LONGER THAN 0.5'(6") FROM THE HEATED SOURCE MAIN.

DOMESTIC WATER ISOMETRIC

NOT TO SCALE

GEMINI ENGINEERING GROUP
101 Nightlinger Lane
Millsap, TX 76066
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BRAKES PLUS

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SHEET

P3.0

PLUMBING ISOMETRICS

ELECTRICAL GENERAL NOTES

1. DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK.
2. FINAL CONNECTIONS & ROUGH-IN REQUIREMENTS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
3. CONTRACTOR SHALL REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL AND OTHER DRAWINGS PRIOR TO BID.
4. CONTRACTOR SHALL VISIT SITE PRIOR TO BID AND VERIFY THAT CONDITIONS ARE AS INDICATED. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN HIS BID ALL COSTS REQUIRED TO MAKE HIS WORK MEET EXISTING CONDITIONS.
5. PROPOSED SUBSTITUTIONS OF ELECTRICAL EQUIPMENT OR REQUEST FOR "OR EQUAL" OR "APPROVED EQUAL" LISTING SHALL BE SUBMITTED TO ARCHITECT NOT LESS THAN TEN (10) WORKING DAYS PRIOR TO BID.
6. WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE ARCHITECT.
7. WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF LOCAL, STATE, AND NATIONAL CODES AND ORDINANCES.
8. PROVIDE PERMITS AND INSPECTIONS REQUIRED.
9. PROVIDE RECORD DRAWINGS TO ARCHITECT. DRAWINGS SHALL INCLUDE ALL ADDENDUM ITEMS, CHANGE ORDERS, ALTERATIONS, REROUTINGS, ETC.
10. VERIFY EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
11. SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, CONTRACTOR SHALL MAKE CORRECTIONS NECESSARY AT NO COST TO OWNER.
12. WIRE SHALL BE COPPER, 75 DEGREE C RATED FOR GENERAL USE. FOR HID FIXTURES AND WIRING WITHIN 3 INCHES OF FLUORESCENT BALLASTS, WIRE SHALL BE COPPER, MINIMUM 90 DEGREE C RATED. SIZES INDICATED ARE FOR INSTALLATION IN A MAXIMUM 30 DEGREE C AMBIENT. CONDUCTOR AMPACITY SHALL BE DERATED FOR HIGHER AMBIENT INSTALLATIONS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING PROVIDED UNDER THIS SECTION OR FACTORY WIRING IN EQUIPMENT PROVIDED UNDER THIS SECTION.
14. CONTRACTOR'S FAILURE TO ORDER OR RELEASE ORDER FOR MATERIALS AND/OR EQUIPMENT WILL NOT BE ACCEPTED AS A REASON TO SUBSTITUTE ALTERNATE MATERIALS OR EQUIPMENT.
15. SYSTEMS SHALL BE COMPLETE, OPERABLE AND READY FOR CONTINUOUS OPERATION. LIGHTS, SWITCHES, RECEPTACLES, MOTORS, ETC., SHALL BE CONNECTED AND OPERABLE.
16. VERIFY EXACT LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, PIPING AND RACEWAY SYSTEMS PRIOR TO TRENCHING. PROVIDE NECESSARY TRENCHING, BACKFILL, EXCAVATION SUPPORTS, SERVICE FEEDERS (CONDUIT AND/OR WIRE), PULLBOXES, TRANSFORMER PADS, SAWCUTTING AND PATCHING, CONCRETE/PAVING, ETC., REQUIRED. BACKFILL TRENCHES TO 90% COMPACTION AND PATCH TO MATCH EXISTING. CONTRACTOR SHALL OBTAIN AND VERIFY EXACT UTILITY COMPANY DRAWINGS AND REQUIREMENTS.
17. PROVIDE MAINTENANCE RECEPTACLE WITHIN 25'-0" OF ALL MECHANICAL OR MOTORIZED EQUIPMENT.
18. SEE MECHANICAL DRAWINGS FOR LOCATION OF MECHANICAL EQUIPMENT. PROVIDE SERVICE TO AND CONNECT EQUIPMENT AS REQUIRED. PROVIDE FUSES OR HACR-TYPE CIRCUIT BREAKERS FOR ALL AIR CONDITIONING EQUIPMENT SIZED IN ACCORDANCE WITH MANUFACTURER'S NAMEPLATE.
19. PROVIDE ENGRAVED NAMEPLATES ON PANELBOARDS, DISCONNECT SWITCHES, ETC. INDICATING EQUIPMENT DESIGNATION (OR DESIGNATION OF EQUIPMENT SERVED) AND VOLTAGE. NAMEPLATES TO BE MECHANICALLY FASTENED.
20. PANEL DIRECTORIES SHALL BE TYPED AND INSTALLED UNDER CLEAR PLASTIC COVERS.
21. ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC RACEWAYS. RACEWAYS IN SLAB-ON-GRADE OR BELOW GRADE SHALL BE SCHEDULE 40 PVC. TRANSITIONS FROM BELOW TO ABOVE GRADE SHALL BE WITH RIGID STEEL ELBOWS WITH P.V.C. JACKET OR APPROVED EQUAL PROTECTION.
22. EMT, NON-METALLIC AND FLEXIBLE METAL CONDUITS SHALL HAVE A CODE SIZED COPPER GROUNDING CONDUCTOR. INCREASE CONDUIT SIZE AS REQUIRED.
23. FIRE ALARM, SOUND, TELEPHONE, COMPUTER, AND SIMILAR SYSTEMS CONDUITS LARGER THAN 1" SHALL HAVE LONG RADIUS SWEEPS (12 TIMES THE DIAMETER).
24. ALL ELECTRICAL SYSTEMS COMPONENTS SHALL BE LISTED OR LABELED BY U.L.
25. WIRE TERMINATION PROVISIONS FOR PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES, AND ALL OTHER ELECTRICAL APPARATUS SHALL BE LISTED AS SUITABLE FOR 75 DEGREE C.
26. RECEPTACLES INSTALLED OUTSIDE, ON THE BUILDING EXTERIOR OR ROOF, WITHIN 6' OF A SINK OR WATER COOLER CONNECTION, VENDING MACHINES, AND KITCHEN AREAS SHALL BE GFCI TYPE OR PROTECTED BY GFCI CIRCUIT BREAKER PER NEC 511.12.
27. ALL NEW EQUIPMENT SUCH AS SWITCHBOARDS, DISTRIBUTION PANELS, DISCONNECT SWITCHES, TRANSFORMERS, AND PANELBOARDS SHALL BE BY THE SAME MANUFACTURER.
28. ELECTRICAL CONTRACTOR SHALL SUBMIT 5 COPIES OF ALL ELECTRICAL EQUIPMENT AND LIGHT FIXTURES TO ENGINEER VIA GENERAL CONTRACTOR FOR APPROVAL PRIOR TO ORDERING.
29. ELECTRICAL CONTRACTOR TO PROVIDE FINAL CONNECTION OF OWNER FURNISHED EQUIPMENT. VERIFY EXACT REQUIREMENTS PRIOR TO ROUGH-IN.
30. HANDLE TIES SHALL BE PROVIDED FOR ALL MULTI-WIRED BRANCH CIRCUITS UNLESS INDIVIDUAL NEUTRAL CONDUCTORS ARE PROVIDED PER NEC 210.4(B).
31. FURNISH ALL MECHANICAL EQUIPMENT WITH FUSIBLE DISCONNECTS. THESE DISCONNECTS SHALL BE EQUIPED WITH CLASS "R" FUSES.

ALL ELECTRICAL WORK SHALL COMPLY WITH N.E.C. REQUIREMENTS

ELECTRICAL SHEET INDEX

ISSUE FOR CONSTRUCTION 7-24-26	PERMIT 6-8-26	SHEET NO.	SHEET DESCRIPTION
●	●	E0.1	ELECTRICAL COVER SHEET
●	●	ES1.1	ELECTRICAL SITE PLAN
●	●	E1.1	ELECTRICAL LIGHTING PLAN
●	●	E2.1	ELECTRICAL POWER PLAN
●	●	E3.1	ELECTRICAL ROOF PLAN
●	●	E4.1	ELECTRICAL ONE LINE DIAGRAM
●	●	E5.1	LIGHTING COMPLIANCE CERTIFICATES

ELECTRICAL LEGEND

- DUPLEX OUTLET
- D — DEDICATED DUPLEX OUTLET
- AUTOCLAVE RECEPTACLE
- FOUR-PLEX OUTLET
- 220-VOLT OUTLET
- FLOOR OUTLET
- TELEPHONE JACK
- W — TELEPHONE JACK +60"
- DATA JACK
- PLUGMOLD
- AC — ABOVE COUNTER
- LIGHT SWITCH @ 48" AFF
- 3 — THREE-WAY LIGHT SWITCH @48" AFF
- TELEPHONE BACKBOARD W/ OUTLET
- ELEC. PANEL — ELECTRICAL PANEL
- TIME CLOCK
- CT — SIGN OUTLET
- JUNCTION BOX
- THERMOSTAT

VERIFY ELECTRICAL REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION

-

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
CLAYTON LUCAS
36099
OKLAHOMA
07/24/2026

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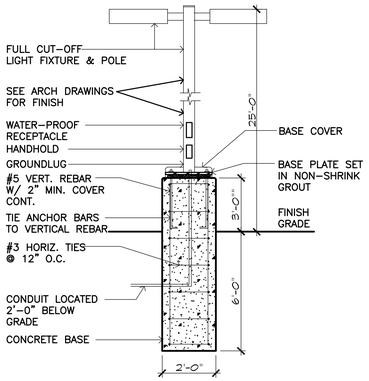
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

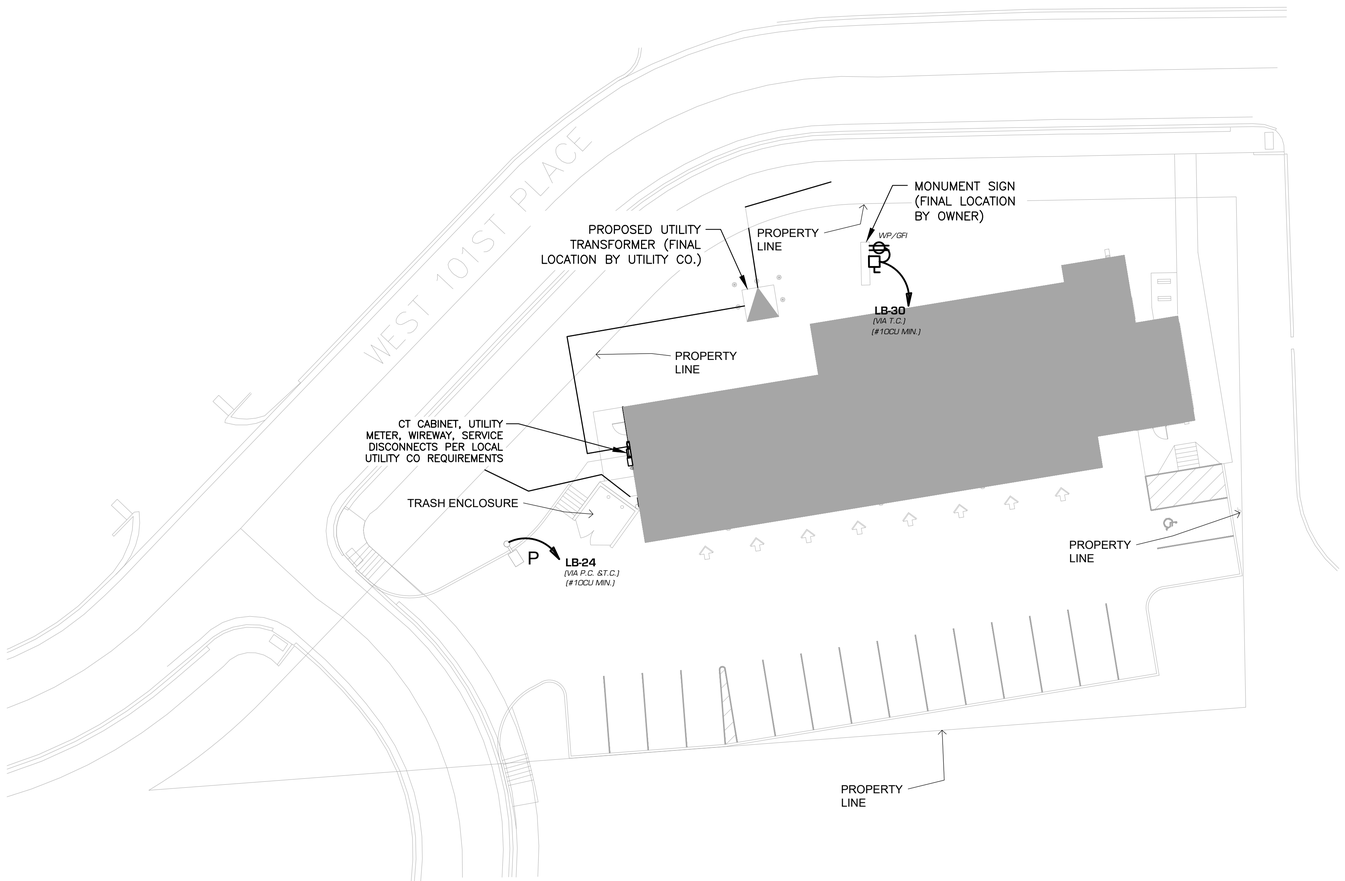
E0.1

ELECTRICAL COVER SHEET

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LANE
MILLSAP, TX 76066
817-901-5191



2 POLE BASE DETAIL
NOT TO SCALE



1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

N

EXTERIOR LUMINAIRE SCHEDULE

FIXTURE TYPE	MANUFACTURER NAME	MANUFACTURER CATALOG NUMBER	VOLT AMPS	MOUNTING	LAMPS/ACCESSORY QTY, TYPE	DESCRIPTION	QUANTITY	VOLTS
P	COOPER LIGHTING	PRV-PA1A-730-U-T3	54	25'-0" AFG UNLESS OTHERWISE NOTED	LED	LED AREA LIGHT ON 22'-6"(VERIFY) POLE	1	120

GENERAL REMARKS:

ALL FIXTURES FURNISHED AND INSTALLED BY GENERAL CONTRACTOR

SPECIFIC REMARKS:

1. COORDINATE FINISH COLOR WITH ARCHITECT.
2. PROVIDE 4-INCH SQUARE POLE FOR LUMINAIRE TYPE "P". E.C. TO VERIFY LIGHT POLE TYPE PRIOR TO ORDERING.

NOTE:

1. EXTERIOR LIGHTING SHALL COMPLY WITH THE 2024 IECC. EXTERIOR LIGHTING SHALL BE CONTROLLED BY A COMBINATION OF A PHOTOSENSOR AND A TIME CLOCK. ALL TIME SWITCHES SHALL BE CAPABLE OF RETAINING PROGRAMMING AND THE TIME SETTING DURING LOSS OF POWER FOR A PERIOD OF AT LEAST 10 HOURS. REFER TO SHEET E5.1 FOR EXTERIOR LIGHTING COMPLIANCE CERTIFICATE.

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LANE
MILLSAP, TX 76066
817-901-5191

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JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
CLAYTON LUCAS
36099
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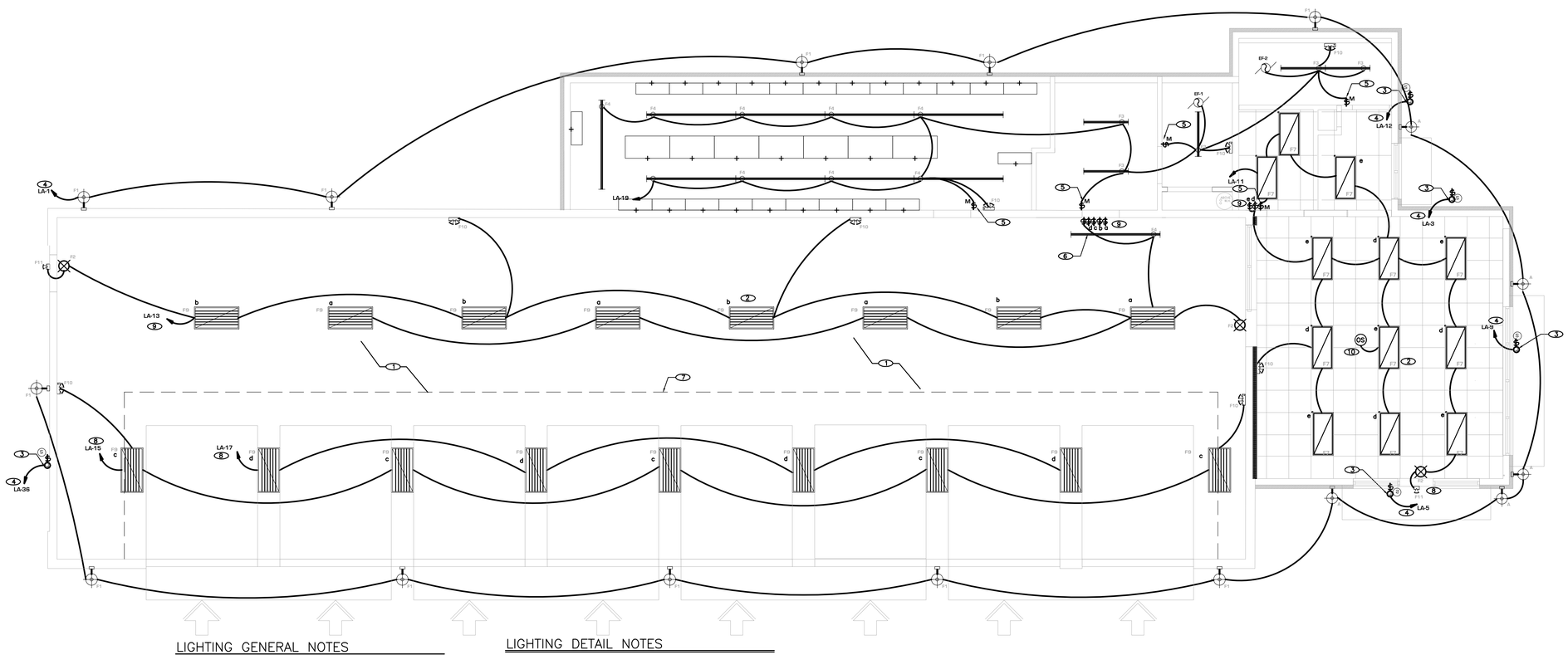
SHEET
ES1.1
ELECTRICAL SITE PLAN



LIGHTING GENERAL NOTES

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LUMINAIRE LOCATIONS.
2. COORDINATE LUMINAIRE LOCATION WITH MECHANICAL PIPING, DUCTWORK, ETC. TO AVOID CONFLICTS.
3. ALL CONDUIT SHALL BE INSTALLED CONCEALED IN FINISHED AREAS UNLESS OTHERWISE NOTED.
4. EACH MULTIWIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT.
5. CONNECT EXTERIOR LUMINAIRES WITH MINIMUM #10 AWG CONDUCTOR.
6. FUNCTIONAL TESTING OF THE LIGHTING SYSTEM SHALL COMPLY WITH SECTION C408.3.1 OF THE 2018 IECC

LIGHTING DETAIL NOTES

(1) MOUNT TYPE 'F9' LUMINAIRES LOCATED IN GARAGE AREA CHAIN HUNG FROM STRUCTURE AT 12'-0" A.F.F. MOUNT TYPE 'F9' LUMINAIRES LOCATED BETWEEN OVERHEAD DOORS AT 2" BELOW OVERHEAD GRILLE GUIDES.

(2) NIGHT LIGHT UNSWITCHED FIXTURE. CONNECT AHEAD OF LOCAL SWITCHING OR LIGHT CONTROLS.

(3) JUNCTION BOX / DISCONNECTING MEANS FOR CONNECTION TO OWNER PROVIDED ILLUMINATED BUILDING SIGNAGE. COORDINATE EXACT LOCATION WITH SIGN CONTRACTOR PRIOR TO ROUGH-IN.

(4) LUMINAIRE OR SIGN BRANCH CIRCUIT CONTROLLED THROUGH PHOTOCELL ON/TIMECLOCK OFF.

(5) PROVIDED OCCUPANCY SENSOR ON/OFF SWITCH FOR CONTROL OF LIGHTING WITHIN THIS ROOM. SWITCH TO BE MANUFACTURED BY WATT STOPPER #LMPW-100.

(6) CENTER FIXTURE OVER SERVICE MANAGER'S DESK.

(7) DASHED LINE INDICATES DAYLIGHT ZONE.

(8) CIRCUIT SWITCHED VIA DAYLIGHT PHOTOCELL SENSORS (DAYLIGHT RESPONSIVE CONTROLS) CONFIGURED TO COMPLETELY SHUT OFF ALL CONTROLLED LIGHT FIXTURES, IN ACCORDANCE WITH THE 2018 IECC.

(9) PROVIDED BI-LEVEL SWITCHING LIGHT-REDUCTION CONTROLS, IN ACCORDANCE WITH THE 2018 IECC.

(10) CEILING MOUNTED OCCUPANCY SENSOR.

1 ELECTRICAL LIGHTING PLAN

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

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LANE
MILLSAP, TX 76066
817-901-5191

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APPROX. WEST 101ST PLACE & SOUTH ELM STREET
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LICENSED PROFESSIONAL ENGINEER
CLAYTON LUCAS
36099
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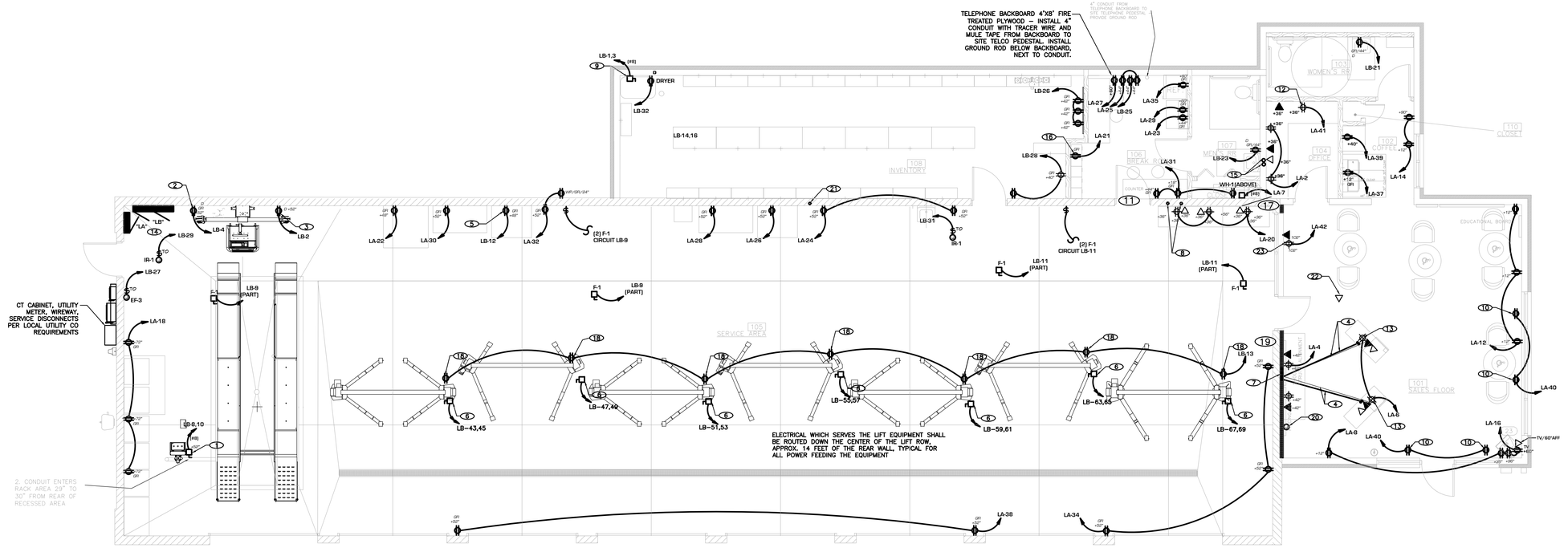
E1.1

ELECTRICAL LIGHTING PLAN



POWER GENERAL NOTES

1. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND/OR LOCATION OF DEVICES PRIOR TO ROUGH–IN.
2. COORDINATE REQUIREMENTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR PRIOR TO ROUGH–IN.
3. MAKE ALL FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT.
4. ALL CONDUIT SHALL BE INSTALLED CONCEALED IN FINISHED AREAS UNLESS OTHERWISE NOTED.
5. EACH MULTIWIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT.
6. COORDINATE REQUIREMENTS AND LOCATIONS OF OWNER SUPPLIED EQUIPMENT WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO ROUGH–IN.
7. PROVIDE GFCI PROTECTION FOR ALL 125V, 15–20A RECEPTACLES INSTALLED IN THE SERVICE BAY AREAS WHERE DIAGONOSTIC EQUIPMENT, POWER TOOLS, OR LIGHTING EQUIPMENT IS USED PER N.E.C. ARTICLE 511.12.
8. **ELECTRICAL INSTALLATION SHALL COMPLY WITH N.E.C. ARTICLE 511:**
   - ALL AREAS DESIGNATED AS HAZARDOUS (CLASSIFIED) LOCATIONS SHALL BE PROPERLY DOCUMENTED. THIS DOCUMENTATION SHALL BE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE ELECTRICAL EQUIPMENT AT THE LOCATION. PER N.E.C. ARTICLE 500.4 MAINTENANCE BAYS ARE MAJOR REPAIR GARAGE AND MUST COMPLY WITH N.E.C. ARTICLE 511.3.
   - FLOOR AREAS ARE CLASS 1 DIVISION 2 CLASSIFIED UP TO A LEVEL OF 18" PER N.E.C. TABLE 511.3(C). THIS AREA SHALL COMPLY WITH ARTICLE 511.3(C) AND HAVE WIRING AND DEVICES INSTALLED PER N.E.C. ARTICLE 501.10(B)
   - GARAGE AREA IS PROVIDED WITH VENTILATION OF AT LEAST 1 CUBIC FOOT PER MINUTE FOR EACH SQUARE FT OF FLOOR AREA, WITH SUCTION TAKEN FROM A POINT WITHIN 18" OF HIGHEST POINT IN THE CEILING. NO LIGHTER–THAN–AIR GASEOUS FUELS ARE UTILIZED IN THIS AREA. PER N.E.C. ARTICLE 511.3(D) THIS AREA IS UNCLASSIFIED.

POWER DETAIL NOTES

1. ALIGNMENT RACK. PROVIDE 40A/2P DISCONNECT SWITCH AS REQUIRED FOR CONNECTION TO EQUIPMENT. CONNECT TO BRANCH BREAKER AS INDICATED VIA 2#8, 1#10G – 1"C.
2. ALIGNMENT MACHINE. PROVIDE 20 AMP, 120 VOLT GFI DUPLEX RECEPTACLE AS REQUIRED FOR CONNECTION TO EQUIPMENT. CONNECT TO BRANCH BREAKER AS INDICATED VIA 2#12, 1#12G – 1/2"C.
3. ALIGNMENT SENSORS. PROVIDE 20 AMP, 120 VOLT GFI DUPLEX RECEPTACLE AS REQUIRED FOR CONNECTION TO EQUIPMENT. CONNECT TO BRANCH BREAKER AS INDICATED VIA 2#12, 1#12G – 1/2"C.
4. PROVIDE (2) 1" ELECTRICAL CONDUITS FROM JUST ABOVE CEILING, THROUGH THE WALL, AND UNDER FLOOR SLAB TO EACH KIOSK. CONDUIT #1 (FOR POWER) SHALL BE 7'–0" FROM REAR WALL AND 2'–6" FROM CENTERLINE OF FRONT DOOR. CONDUIT #2 (FOR DATA) WILL BE JUST TO THE OUTSIDE OF CONDUIT #1 AND SLIGHTLY BACK TO ALLOW FOR ANGLE MOUNTING OF KIOSK.
5. BRAKE LATHE. PROVIDE 20 AMP, 120 VOLT GFI DUPLEX RECEPTACLE AS REQUIRED FOR CONNECTION TO EQUIPMENT. CONNECT TO BRANCH BREAKER AS INDICATED VIA 2#12, 1#12G – 1/2"C.
6. PROVIDE POWER FOR LIFTS, 208V, 1PH, 25A CIRCUIT, 17FLA. VERIFY EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH–IN AND INSTALLATION.
7. PROVIDE TWO 1" EMPTY CONDUITS WITH PULL STRINGS FROM THE PRINTER DESK WALL BOX TO THE CEILING PLENUM.
8. PROVIDE TWO 1" EMPTY CONDUITS WITH PULL STRINGS AT THE SERVICE MANAGER'S DESK FROM THE WALL BOX UP TO THE CEILING PLENUM.
9. AIR COMPRESSOR. PROVIDE (1) 60A/2P DISCONNECT SWITCH AS REQUIRED FOR CONNECTION TO EACH MOTOR. CONNECT TO BRANCH BREAKER AS INDICATED VIA 2#8, 1#10G – 3/4"C.
10. PROVIDE FLUSH MOUNTED DUPLEX RECEPTACLE LOCATED IN CEILING FOR SHOW WINDOW RECEPTACLES.
11. PROVIDE CONDUIT FROM COUNTER TO CUSTOMER SERVICE COUNTER
12. PROVIDE FOUR–PLEX RECEPTACLE FOR CONNECTION TO OWNER SUPPLIED COMPUTER SERVER. COORDINATE LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH–IN.
13. COORDINATE LOCATION OF DUPLEX RECEPTACLE AND DATA OUTLET IN MILLWORK PRIOR TO ROUGH–IN.
14. MAINTAIN NEC REQUIRED CLEARANCES AT PANELS.
15. PROVIDE 1" EMPTY CONDUIT WITH PULL STRING IN MANAGER'S OFFICE AT EACH WORK STATION FROM THE WALL BOX TO THE CEILING PLENUM.
16. PROVIDE DUPLEX RECEPTACLE FOR CONNECTION TO IRRIGATION CONTROLLER. COORDINATE EXACT LOCATION WITH LANDSCAPE CONTRACTOR.
17. 1" CONDUIT PENETRATES MASONRY WALL ABOVE CEILING IN SALES AREA
18. GFI DUPLEX RECEPTACLE PROVIDED WITH LIFT. CONNECT 120 VOLT RECEPTACLE TO BRANCH CIRCUIT SERVING LIFT.
19. 1" CONDUIT FOR PRINTER STATION
20. ALARM PAD – PROVIDE 3/4" EMPTY CONDUIT STUBBED ABOVE CEILING. VERIFY EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH–IN AND INSTALLATION.
21. PROVIDE 1" EMPTY CONDUIT WITH PULL STRING FROM TECH PERSON COMPUTER LOCATION WALL BOX TO THE CEILING PLENUM.
22. DATA OUTLET ABOVE CEILING FOR WIRELESS ROUTER. VERIFY EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH–IN AND INSTALLATION.
23. DUPLEX RECEPTACLE AND DATA OUTLET FOR MENU TV. VERIFY EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH–IN AND INSTALLATION.

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LANE
MILLSAP, TX 76066
817–901–5191

-

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JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
CLAYTON LUCAS
36099
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45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

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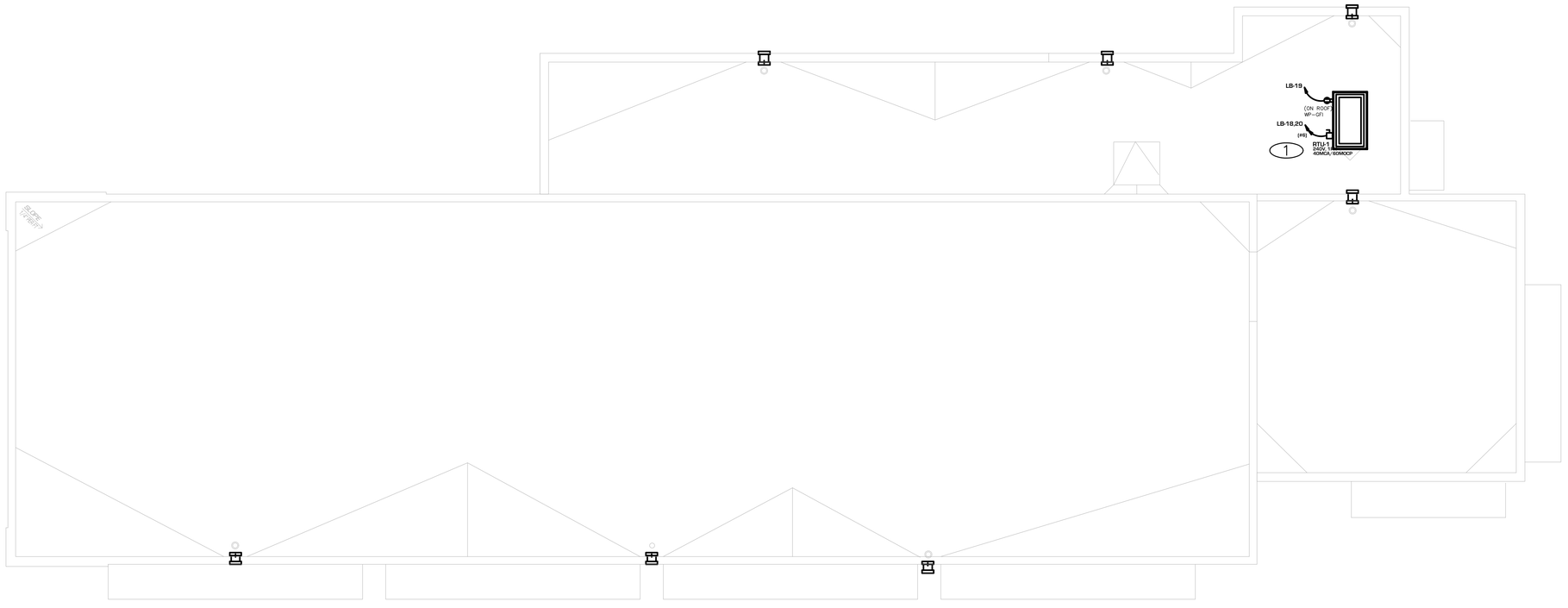
E2.1

ELECTRICAL POWER PLAN



1 ELECTRICAL ROOF PLAN
SCALE: 1/4" = 1'-0"

POWER DETAIL NOTES

1. PROVIDE WEATHERPROOF GFCI RECEPTACLE AT ROOF TOP UNIT, E.C. TO INSTALL.

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LANE
MILLSAP, TX 76066
817-901-5191

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E3.1

ELECTRICAL ROOF PLAN

MECHANICAL EQUIPMENT SCHEDULE

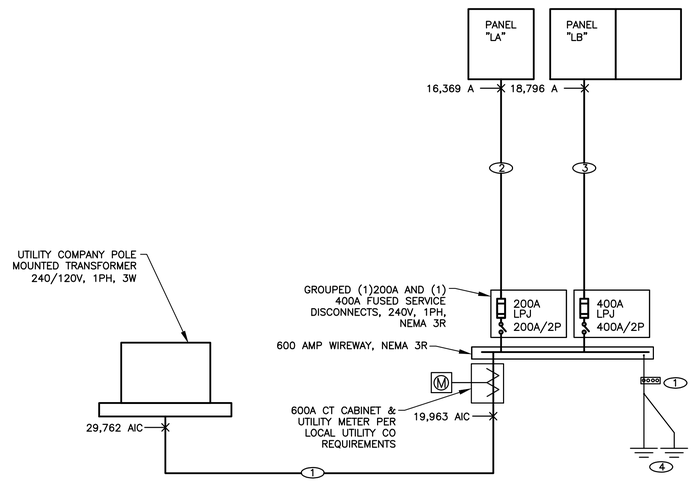
DESIGNATION	DESCRIPTION	LOAD				VOLTAGE	PHASE	DISCONNECT SIZE	FUSE SIZE	FEEDER SIZE	REMARKS
		HP	KVA	FLA	MCA						
RTU–1	ROOF TOP UNIT				40.0	240	1	60A/2P	60A FRN–R	(2#6, 1#10G, 1–1/4"C)	
EF–1	EXHAUST FAN		17W			120	1	SMTO	–	(2#12, 1#12G, 3/4"C)	
EF–2	EXHAUST FAN		17W			120	1	SMTO	–	(2#12, 1#12G, 3/4"C)	
EF–3	EXHAUST FAN	3/4		13.8		120	1	SMTO	–	(2#12, 1#12G, 3/4"C)	
F–1	AIR CIRCULATION FAN	1/4	696W	5.8		120	1	30A/1P	9A FRN–R	(2#12, 1#12G, 3/4"C)	
IR–1	GAS RADIANT TUBE HEATER			5.0		120	1	SMTO	–	(2#12, 1#12G, 3/4"C)	
EWH–1	WATER HEATER		1.5KW			120	1	–	–	(2#12, 1#12G, 3/4"C)	

REMARKS
1. UNIT FURNISHED WITH INTEGRAL DISCONNECT.
1. PROVIDE MOTOR RATED SWITCH WITH THERMAL OVERLOAD.

LIGHT FIXTURE SCHEDULE

ALL FIXTURES FURNISHED AND INSTALLED BY GENERAL CONTRACTOR

SYMBOL	MARK	QUANTITY	DESCRIPTION	MANUF.	CAT. NO.	LAMP	MOUNTING	VOLTAGE	REMARKS
	A	4	EXTERIOR DECORATIVE LIGHT FIXTURE	COOPER LIGHTING	303–W1–LEDB2–3000–UNV–T4–DIM10	16W LED	WALL	120	REFER TO ELEVATIONS FOR MOUNTING LOCATIONS – DARK BRONZE FINISH
	F1	10	EXTERIOR DECORATIVE LIGHT FIXTURE	MCGRAW EDISON	IST–SA1F–730–U–T4FT	25W LED	WALL	120	REFER TO ELEVATIONS FOR MOUNTING LOCATIONS – DARK BRONZE FINISH
	F2	3	EXIT SIGN	COOPER LIGHTING	APC7 G	LED	WALL/CENTER ON DOOR	120	PROVIDE EMERGENCY BATTERY PACK (90 MINUTE MIN.)
	F3	3	4'–0" STRIP LED	COOPER LIGHTING	4SNLED LD5 UNV	38W LED	UNIVERSAL	120	MOUNT AT 12'–0" AFF
	F4	11	8'–0" STRIP LED	COOPER LIGHTING	8TSNLED LD5 UNV	61W LED	UNIVERSAL	120	MOUNT AT 12'–0" AFF
	F7	12	2x4 RECESSED LED TROFFER	COOPER LIGHTING	24CGT 4540C	39W LED	GRID MOUNT	120	
	F9	17	4' – LED HIGHBAY	COOPER LIGHTING	LHB 18 UNV	87W LED	HUNG FROM STRUCT.	120	
	F10	8	EMERGENCY LIGHT W/ BATTERY BACKUP	COOPER LIGHTING	SEL 25	LED	WALL MOUNTED	120	PROVIDE EMERGENCY BATTERY PACK (90 MINUTE MIN.) AND TIME DELAY RELAY
	F11	2	EMERGENCY EGRESS LIGHT – EXTERIOR	COOPER LIGHTING	AEL 246	LED	SURFACE	120	PROVIDE EMERGENCY BATTERY PACK (90 MINUTE MIN.)



① ELECTRICAL ONE LINE DIAGRAM
N.T.S.

FEEDER SCHEDULE

① 2 RUNS OF 3#350 MCM CU 3"C

② 3#250 MCM AL, 1#4 AL GND, 2"C

③ 2 RUNS OF 3#250 MCM AL, 1#1 AL GND, 2"C

④ #2/0 CU GND TO BLDG. STEEL & COLD WATER BOND, #6 CU GND TO DRIVEN ROD, & #4 TO CONCRETE ENCASED ELECTRODE (UFER).

ONE–LINE DIAGRAM DETAIL NOTES

① PROVIDE AN INTERSYSTEM BONDING TERMINATION (IBT) AS REQUIRED BY N.E.C. ARTICLE 250.94.

NOTES:

1. THE SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKINGS SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED, PER N.E.C. ARTICLE 110.24.
2. ALL FIRST MEANS OF DISCONNECT AND OVERCURRENT PROTECTION MUST BE MINIMALLY RATED FOR AVAILABLE FAULT CURRENT CALCULATED AT THE SERVICE TAP CAN.

LOAD CALCULATIONS

LIGHTING	9.1	@ 125%	=	11.4 kVA
RECEPTACLE	10.0	@ 100%	=	10.0 kVA
BALANCE	3.8	@ 50%	=	1.9 kVA
MECHANICAL	12.7	@ 100%	=	12.7 kVA
25% OF LARGEST			=	1.9 kVA
SPECIAL	55.7	@ 100%	=	55.7 kVA
TOTAL			=	93.6 kVA (390 A)

SHORT CIRCUIT CALCULATIONS

POINT TO POINT METHOD FOR SHORT CIRCUIT CALCULATIONS ILLUSTRATED IN BUSSMAN MANUFACTURING PUBLICATION FORM SPD90.

SERVICE: 120/240 V., 1–PHASE, 3W

$$I \text{ f.l.} = \frac{100 \times 1000}{240} = 416.67$$

$$\text{MULTIPLIER} = \frac{100}{1.4} = 71.43$$

AVAILABLE SHORT CIRCUIT CURRENT FROM UTILITY = 29,762 A.

FIND FACTOR f = 2.0 x (length in feet) x (short circuit current) / (constant from Table C) x (line–to–line voltage)

$$f = \frac{2.0 \times 90 \times 29{,}762}{2 \times 22{,}737 \times 240} = 1.491$$

$$\text{FIND FACTOR M} = \frac{1}{1 + f} \qquad M = 0.6708$$

SHORT CIRCUIT CURRENT AT CT/GUTTER = M x AVAILABLE S.C. CURRENT

I = 19,963 A.

LENGTH IN FEET = 16, FACTOR f = 0.22, FACTOR M = 0.82

$$f = \frac{2.0 \times 20 \times 19{,}963}{1 \times 12{,}122 \times 240} = 0.22$$

SHORT CIRCUIT CURRENT AT PANEL "LA" = 16,369 A.

LENGTH IN FEET = 14, FACTOR f = 0.062, FACTOR M = 0.9415

$$f = \frac{2.0 \times 16 \times 19{,}963}{2 \times 12{,}122 \times 240} = 0.062$$

SHORT CIRCUIT CURRENT AT PANEL "LB" = 18,796 A.

SCHEDULE – PANEL **LA**

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG. AS APPROVED
TYPE PANELBOARD
LUG LOC. TOP
AMPS 200A, MLO
VOLTAGE 120/240V, 1ph, 3W
MOUNTING SURFACE
BRACING 22,000 A.I.C.

LIGHT. 7.9 KVA @ 125% = 9.8 KVA
RECEPT. 11.7 KVA @ 100% = 11.7 KVA
MECH. KVA @ 100% = KVA
25% LARGEST MOTOR KVA
SPECIAL 6.3 KVA @ 100% = 6.3 KVA
SPARE KVA
TOTAL 27.8 KVA (116A)

EXTERIOR LIGHTING	404	1	2	720	OFFICE RECEPTS
EXTERIOR SIGN	1200	3	4	800	SALES AREA COUNTER RECEPTS
EXTERIOR SIGN	1200	5	6	1000	KIOSK RECEPTS
EWH–1	1500	7	8	360	SALES AREA RECEPTS
EXTERIOR SIGN	1200	9	10	1200	EXTERIOR SIGN
SALES, COFFEE, OFFICE LIGHTING	528	11	12	1800	SHOW WINDOW RECEPTS
SERVICE AREA LIGHTING	1144	13	14	360	SALES AREA RECEPTS
SERVICE AREA LIGHTING	660	15	16	500	TELEVISION
SERVICE AREA LIGHTING	528	17	18	360	SERVICE AREA RECEPTS
INVENTORY, BREAK, RESTROOM LTG	1012	19	20	500	GARAGE A/C RECEPTS
IRRIGATION CONTROLS	500	21	22	540	GARAGE RECEPT
BREAK RM	180	23	24	360	GARAGE RECEPT
BURGLER ALARM	400	25	26	200	COMPUTER
TELEPHONE SYSTEM	400	27	28	500	BENCH RECEPT
MICROWAVE	900	29	30	180	GARAGE RECEPT
BREAK RECEPTS	360	31	32	360	GARAGE RECEPT
SPARE		33	34	540	SERVICE AREA RECEPTS
REFRIGERATOR	1200	35	36	1200	EXTERIOR SIGN
RECEPT – WATER FOUNTAIN	370	37	38	360	GARAGE RECEPT
COFFEE UNIT	1000	39	40	1200	SHOW WINDOW RECEPTS
OFFICE RECEPTS	360	41	42	300	MENU TV

A phase = 11,526 VA | B phase = 14,420 VA | Total = 25,946 VA

SCHEDULE – PANEL **LB**

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG. AS APPROVED
TYPE PANELBOARD 2–SECTION
LUG LOC. TOP
AMPS 400A, MLO
VOLTAGE 120/240V, 1ph, 3W
MOUNTING SURFACE
BRACING 22,000 A.I.C.

LIGHT. 12 KVA @ 125% = 15 KVA
RECEPT. 2.1 KVA @ 100% = 2.1 KVA
MECH. 12.7 KVA @ 100% = 12.7 KVA
25% LARGEST MOTOR 1.9 KVA
SPECIAL 44.4 KVA @ 100% = 44.4 KVA
SPARE KVA
TOTAL 67.6 KVA (282A)

AIR COMPRESSOR	3360	1	2	1800	ALIGNMENT SENSORS
–––	3360	3	4	1800	ALIGNMENT MACHINE
SPARE		5	6		SPARE
SPARE		7	8	3120	ALIGNMENT RACK
AIR CIRCULATION FANS	1392	9	10	3120	–––
AIR CIRCULATION FANS	1392	11	12	1800	BRAKE LATHE
SHOP EQUIPMENT RECEPTS	1440	13	14		SPARE
SPARE		15	16		SPARE
SPARE		17	18	3840	RTU–1
ROOF RECEPT	180	19	20	3840	–––
RECEPT – RESTROOM	180	21	22		SPARE
RECEPT – RESTROOM	180	23	24	54	LIGHTING – SITE
RECEPT – INVENTORY	180	25	26	540	INVENTORY RECEPTS
EF–3	1660	27	28	720	INVENTORY RECEPTS
IR–1	500	29	30	1200	SITE SIGN
IR–1	500	31	32	1000	DRYER
SPARE		33	34		SPARE
SPARE		35	36		SPARE
SPARE		37	38		SPARE
SPARE		39	40		SPARE
SPARE		41	42		SPARE
SECTION TWO					
LIFT	2040	43	44		SPACE
–––	2040	45	46		SPACE
LIFT	2040	47	48		SPACE
–––	2040	49	50		SPACE
LIFT	2040	51	52		SPACE
–––	2040	53	54		SPACE
LIFT	2040	55	56		SPACE
–––	2040	57	58		SPACE
LIFT	2040	59	60		SPACE
–––	2040	61	62		SPACE
LIFT	2040	63	64		SPACE
–––	2040	65	66		SPACE
LIFT	2040	67	68		SPACE
–––	2040	69	70		SPACE
SPACE		71	72		SPACE
SPACE		73	74		SPACE
SPACE		75	76		SPACE
SPACE		77	78		SPACE
SPACE		79	80		SPACE
SPACE		81	82		SPACE
SPACE		83	84		SPACE

A phase = 31,832 VA | B phase = 33,518 VA | Total = 65,350 VA

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LANE
MILLSAP, TX 76066
817–901–5191

-

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
CLAYTON LUCAS
36099
OKLAHOMA
07/24/2026

ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.08.26	FOR SUBMITTAL TO BUILDING DEPT.
	07.24.26	ISSUE FOR CONSTRUCTION

ARCODEV JOB #: -
CLIENTJOB #: -
DRAWN BY: SB
CHECKED BY: LRP
DATE OF ISSUE: 06.08.26

ARCODEV
45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8825

SHEET

E4.1

ELECTRICAL ONE LINE DIAGRAM

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Brakes Plus - Jenks, OK
Project Type: New Construction

Construction Site:
West 101st Place & South Elm Street
Jenks, Oklahoma

Owner/Agent:

Designer/Contractor:
Loren Priest
EE,LLC
12005 Antelope Trail
Parker, Colorado 80138
303-748-1189
info@eeparker.com

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Sales Area (Retail:Sales Area)	985	1.10	1084
2-Service/Repair/Inventory (Automotive:Vehicular Maintenance Area)	3730	0.50	1865
		Total Allowed Watts =	2948

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Sales Area (Retail:Sales Area)				
LED: F3: 4' LED Strip: LED Linear 22W:	2	3	38	114
LED: F4: 8' LED Strip: LED Linear 22W:	4	10	61	610
LED: F7: 2x4 LED Troffer: LED Panel 19W:	1	12	39	468
2-Service/Repair/Inventory (Automotive:Vehicular Maintenance Area)				
LED: F9: 4' LED Highbay: LED Panel 80W:	1	17	87	1479
LED: F4: 8' LED Strip: LED Linear 22W:	4	1	61	61
			Total Proposed Watts =	2732

Interior Lighting PASSES: Design 7% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Stan Bentley – Electrical Designer — Signature — 6–8–26

Name - Title — Signature — Date

COMcheck Software Version COMcheckWeb

Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Brakes Plus - Jenks, OK
Project Type: New Construction
Exterior Lighting Zone 2 (Light industrial area with limited nighttime use (LZ2))

Construction Site:
West 101st Place & South Elm Street
Jenks, Oklahoma

Owner/Agent:

Designer/Contractor:
Loren Priest
EE,LLC
12005 Antelope Trail
Parker, Colorado 80138
303-748-1189
info@eeparker.com

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Wall area (Illuminated area of facade wall or surface)	3000 ft2	0.07	No	225
Parking (Parking area)	8927 ft2	0.04	Yes	357
			Total Tradable Watts (a) =	357
			Total Allowed Watts =	582
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Wall area (Illuminated area of facade wall or surface, 3000 ft2): Non-tradable Wattage				
LED: F1: LED Wall Pack: LED A Lamp 25W:	1	10	25	250
LED: A: LED Decorative Wall Lt: LED A Lamp 25W:	1	4	16	64
Parking (Parking area, 8927 ft2): Tradable Wattage				
LED: P: LED Pole Light: LED Panel 110W:	1	1	54	54
			Total Tradable Proposed Watts =	54

Exterior Lighting PASSES: Design 92% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Stan Bentley – Electrical Designer — Signature — 6–8–26

Name - Title — Signature — Date

COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL26][1]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL27][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.5 [EL28][1][2]	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.6 [EL30][1][2]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.9 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.4.1 [FI18][1]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

-

BRAKES PLUS

APPROX. WEST 101ST PLACE & SOUTH ELM STREET
JENKS, OKLAHOMA

LICENSED PROFESSIONAL ENGINEER
CLAYTON LUCAS
36099
OKLAHOMA
07/24/2026

ARCHITECT OF RECORD

REVISION	DATE	COMMENTS
	06.08.26	FOR SUBMITTAL TO BUILDING DEPT.
	07.24.26	ISSUE FOR CONSTRUCTION

ARCODEV

ARCODEV JOB #: -
CLIENTJOB #: -
DRAWN BY: SB
CHECKED BY: LRP
DATE OF ISSUE: 06.08.26

45 SPYGLASS DRIVE
LITTLETON, CO 80123
VOICE: 303.881-8925

SHEET

E5.1

LIGHTING COMPLIANCE CERTIFICATES

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LANE
MILLSAP, TX 76066
817–901–5191