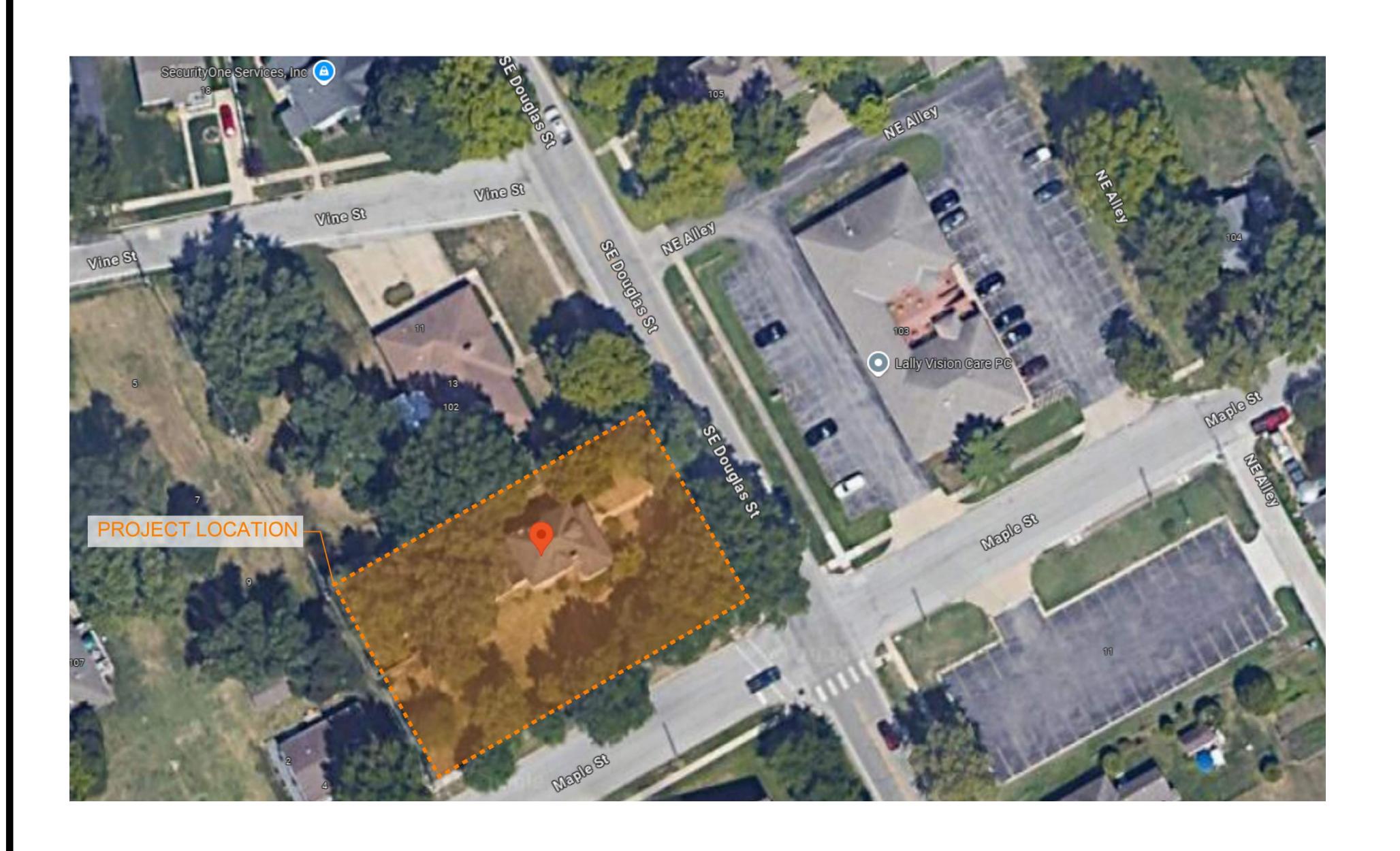
# HERITAGE ASSET MANAGEMENT

100 NE DOUGLAS ST. LEE'S SUMMIT, MO 64063

## PERMIT DOCUMENTS

24 JUNE 2025

COLLINS WEBB #: 24114



SHEET NUMBER	SHEET NAME
CS	COVER SHEET
G001	GENERAL INFORMATION
G002	ACCESSIBILITY GUIDELINES
G003	LIFE SAFETY PLANS AND PROJECT INFO.
G500	SPECIFICATIONS
G501	SPECIFICATIONS
CIVIL	
SHEET NUMBER	SHEET NAME
C.001	COVER SHEET
C.050	ESC PHASE 1 - PRE CLEARING PLAN
C.051	ESC PHASE 2 - INACTIVE AREA STABILIZATION PLAI
C.052	ESC PHASE 3 - FINAL RESTORATION PLAN
C.053	ESC - STANDARD DETAILS
C.101	SITE PLAN
C.200	GRADING PLAN
C.201	PRE DEVELOPMENT DRAINAGE PLAN
C.202	POST DEVELOPMENT DRAINAGE PLAN
C.300	UTILITY PLAN
C.301	STORM SEWER PLAN AND PROFILE
L.100	LANDSCAPE PLAN
L.101	LANDSCAPE PLAN DETAILS
<b>STRUC</b>	TURAL
SHEET NUMBER	SHEET NAME
S100	GENERAL NOTES
S101	STRUCTURAL PLANS
S200	SECTIONS
ARCHI	ΓECTURAL
SHEET NUMBER	SHEET NAME
A101	DEMO PLAN, FLOOR PLAN, AND ENLARGED PLAN
MEP	
SHEET NUMBER	SHEET NAME
MEP100	MEP COVERSHEET
MEP200	MEP SPECIFICATIONS
MEP300	MECHANICAL & ELECTRICAL FLOOR PLANS
MEP301	ELECTRICAL SITE PLAN



#### OWNER

\_\_\_

collins

HERITAGE ASSET MANAGEMENT 7926 E 171 ST. BELTON, MO 64102 P: 816.348.2061 www.heritage-kc.com

### CONTRACTOR

HERITAGE ASSET MANAGEMENT 7926 E 171 ST. BELTON, MO 64102 P: 816.348.2061 www.heritage-kc.com

#### ARCHITECT

COLLINS | WEBB ARCHITECTURE 307B SW MARKET STREET LEE'S SUMMIT, MO 64063 P: 816.249.2270 www.collinsandwebb.com

### CIVIL ENGINEER

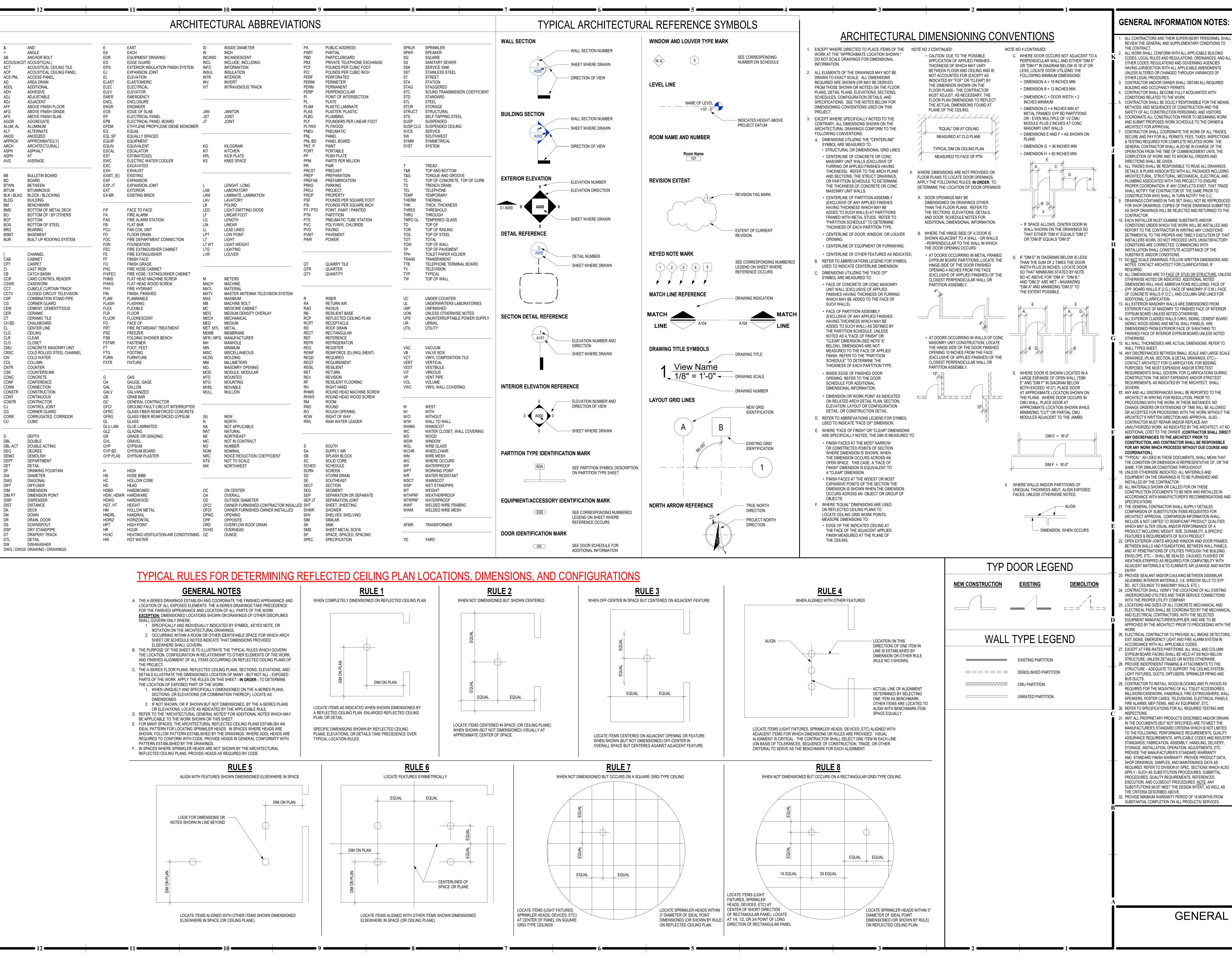
ENGINEERING SOLUTIONS 50 SE 30TH STREET LEE'S SUMMIT, MO 64082 P: 816.623.9888 www.es-kc.com

#### STRUCTURAL ENGINEER

LEIGH + O'KANE 250 NE MULBERRY | SUITE 201 LEE'S SUMMIT, MO 64086 P: 816.444.3144 www.leok.com

#### MEP ENGINEER

IMPRINT DESIGN + ENGINEERING
P: 816.686.5339
www.imprinteng.com



**GENERAL INFORMATION NOTES:** 

. ALL CONTRACTORS AND THEIR SUPERVISORY PERSONNEL SHALL REVIEW THE GENERAL AND SUPPLEMENTARY CONDITIONS TO ALL WORK SHALL CONFORM WITH ALL APPLICABLE BUILDING CODES, LOCAL RULES AND REGULATIONS, ORDINANCES, AND AL OTHER CODES, REGULATIONS AND GOVERNING AGENCIES HAVING JURISDICTION WITH ALL APPLICABLE AMENDMENTS

CONSTRUCTION As Noted on Plans Review

08/15/2025

UNLESS ALTERED OR CHANGED THROUGH VARIANCES OF OTHER LEGAL PRCEDURES. CONTRACTOR AND/OR OWNER SHALL OBTAIN ALL REQUIRED BUILDING AND OCCUPANCY PERMITS. CONTRACTOR SHALL BECOME FULLY ACQUAINTED WITH CONDITIONS RELATED TO THE WORK. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS. METHODS, AND SEQUENCES OF CONSTRUCTION AND THE SAFETY OF ALL CONSTRUCTION PERSONNEL AND VISITORS. COORDINATE ALL CONSTRUCTION PRIOR TO BEGINNING WORK AND SUBMIT PROPOSED WORK SCHEDULE TO THE OWNER & ARCHITECT FOR APPROVAL. CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES,

INCLUDE & NOT LIMITED TO SIGNIFICANT PRODUCT QUALITIES WHICH MAY ALTER VISUAL AND/OR PERFORMANCE OF A PRODUCT INCLUDING WEIGHT, SIZE, DURABILITY, & SPECIFIC FEATURES & REQUIREMENTS OF SUCH PRODUCT. OPEN EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALL PANELS AND AT PENETRATIONS OF UTILITIES THROUGH THE BUILDING ENVELOPE, ETC. – SHALL BE SEALED, CAULKED, FLASHED OR WEATHER-STRIPPED AS REQUIRED FOR COMPATIBILITY WITH ADJACENT MATERIALS & TO ELIMINATE AIR LEAKAGE AND WATER 3. PROVIDE SEALANT AND/OR CAULKING BETWEEN DISSIMILAR

ADJOINING INTERIOR MATERIALS. (I.E. WINDOW SILLS TO GYP. BD.. ACT CEILINGS TO MASONRY WALLS, ETC.) 4. CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AND THEIR SERVICE CONNECTIONS WITH THE PROPER UTILITY COMPANY. 5. LOCATIONS AND SIZES OF ALL CONCRETE MECHANICAL AND ELECTRICAL PADS SHALL BE COORDINATED BY THE MECHANICAL AND ELECTRICAL CONTRACTORS, WITH THE SELECTED EQUIPMENT MANUFACTURER/SUPPLIER; AND ARE TO BE

APPROVED BY THE ARCHITECT PRIOR TO PROCEEDING WITH THE 26. ELECTRICAL CONTRACTOR TO PROVIDE ALL SMOKE DETECTORS EXIT SIGNS, EMERGENCY LIGHT AND FIRE ALARM SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES. 27. EXCEPT AT FIRE-RATED PARTITIONS, ALL WALL AND COLUMN GYPSUM BOARD FACING SHALL BE HELD AT 5/8 INCH BELOW STRUCTURE, UNLESS DETAILED OR NOTED OTHERWISE. 28. PROVIDE INDEPENDENT FRAMING & ATTACHMENTS TO THE

STRUCTURE - ADEQUATE TO SUPPORT THE CEILING SYSTEM, LIGHT FIXTURES, DUCTS, DIFFUSERS, SPRINKLER PIPING AND 29. CONTRACTOR TO INSTALL WOOD BLOCKING AND PLYWOOD AS REQUIRED FOR THE MOUNTING OF ALL TOILET ACCESSORIES, MILLWORK/CASEWORK, HANDRAILS, FIRE EXTINGUISHERS, WAL SPEAKERS, POSTER CASES, TELEVISIONS, ELECTRICAL PANELS, FIRE ALARMS, MEP ITEMS, AND AV EQUIPMENT, ETC. 30. REFER TO SPECIFICATIONS FOR ALL REQUIRED TESTING AND

1. ANY/ ALL PROPRIETARY PRODUCTS DESCRIBED AND/OR DRAWN IN THE DOCUMENTS (BUT NOT SPECIFIED) ARE TO MEET THE MANUFACTURER'S STANDARD CRITERIA WHICH IS NOT LIMITED TO THE FOLLOWING: PERFORMANCE REQUIREMENTS, QUALITY ASSURANCE REQUIREMENTS, APPLICABLE CODES AND INDUSTRY STANDARDS, FABRICATION, ASSEMBLY, HANDLING, DELIVERY. STORAGE, INSTALLATION, OPERATION, ADJUSTMENTS, ETC. PROVIDE THE MANUFACTURER'S STANDARD WARRANTY AND STANDARD FINISH WARRANTY. PROVIDE PRODUCT DATA, SHOP DRAWINGS, SAMPLES, AND MAINTENANCE DATA AS REQUIRED. REFER TO DIVISION 01 SPEC. SECTIONS WHICH ALSO APPLY - SUCH AS SUBSTITUTION PROCEDURES, SUBMITTAL PROCEDURES, QUALITY REQUIREMENTS, REFERENCES, EXECUTION, AND CLOSEOUT PROCEDURES. NOTE: ANY SUBSTITUTIONS MUST MEET THE DESIGN INTENT, AS WELL AS

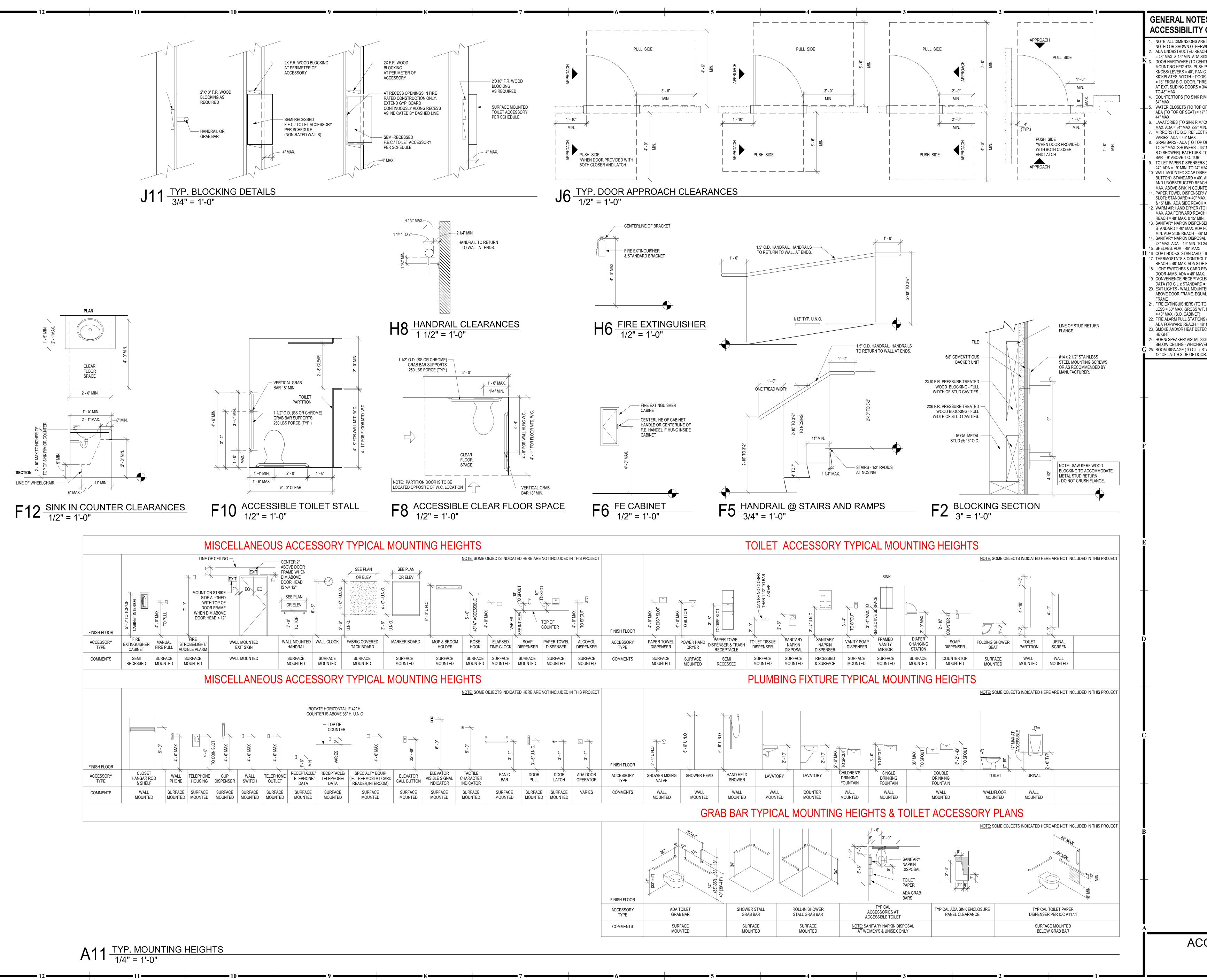
RUMBER

PROFESSIONAL SEAL

COLLINS WEBB #:

GENERAL INFORMATION

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 NOTE: ALL DIMENSIONS ARE MEASURED FROM FLOOR, UNLES NOTED OR SHOWN OTHERWISE. . ADA UNOBSTRUCTED REACH RANGES: ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN. 3. DOOR HARDWARE (TO CENTER OF HARDWARE): STANDARD MOUNTING HEIGHTS: PUSH PLATES = 42", PULL HANDLES = 42", KNOBS/ LEVERS = 40", PANIC EXIT = 42" CENTERLINE OF BAR, KICKPLATES: WIDTH = DOOR WIDTH MINUS 2", CENTER, HEIGHT = 16" FROM B.O. DOOR. THRESHOLDS: STANDARD = 1/2" MAX. AT EXT. SLIDING DOORS = 3/4" MAX., ADA HARDWARE = 34" MIN.

4. COUNTERTOPS (TO SINK RIM/ COUNTERTOP): ADA = 28" MIN. . WATER CLOSETS (TO TOP OF SEAT): STANDARD = 14" TO 15".

ADA (TO TOP OF SEAT) = 17" TO 19". ADA FLUSH CONTROLS = 6. LAVATORIES (TO SINK RIM/ COUNTERTOP): STANDARD = 36" MAX. ADA = 34" MAX. (29" MIN. CLEAR KNEE SPACE) MIRRORS (TO B.O. REFLECTIVE SURFACE): STANDARD = . GRAB BARS - ADA (TO TOP OF BAR): WATER CLOSETS = 33" MIN

TO 36" MAX. SHOWERS = 33" MIN. TO 36" MAX. (FROM B.O.SHOWER). BATHTUBS: TOP BAR = 33" MIN. TO 36" MAX. BOT TOILET PAPER DISPENSERS (TO C.L. OF OUTLET): STANDARD 24". ADA = 19" MIN. TO 24" MAX. 10. WALL MOUNTED SOAP DISPENSERS (TO C. L. OF PUSH BUTTON): STANDARD = 40". ADA = VARIES. RE: OBSTRUCTED AND UNÓBSTRUCTED REACH RANGES. ADA SIDE REACH = 46" MAX. ABOVE SINK IN COUNTER. 1. PAPER TOWEL DISPENSER/ WASTE RECEPTACLE (TO TOWEL

SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN. 2. WARM AIR HAND DRYER (TO PUSH SWITCH): STANDARD = 44" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE 13. SANITARY NAPKIN DISPENSER (TO C.L. OF COIN SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15"

MIN. ADA SIDE REACH = 48" MAX. & 15" MIN. 14. SANITARY NAPKIN DISPOSAL (TO TOP OF UNIT): STANDARD = 28" MAX. ADA = 19" MIN. TO 24" MAX. (TO OPNG.)  $\mathbf{H}$  16. COAT HOOKS: STANDARD = 68". ADA = 48" MAX. 17. THERMOSTATS & CONTROL DEVICES (TO TOP): ADA FORWARD

REACH = 48" MAX. ADA SIDE REACH = 48" MAX. 18. LIGHT SWITCHES & CARD READERS (TO C.L.): LOCATE 6" FROM 19. CONVENIENCE RECEPTACLES – ELECTRICAL/ TELEPHONE/ DATA (TO C.L.): STANDARD = 18". ADA = 15" MIN. 20. EXIT LIGHTS - WALL MOUNTED: 2" MIN. BELOW CEILING. 2" MIN ABOVE DOOR FRAME. EQUAL SPACE FROM CEILING TO TOP OF

21. FIRE EXTINGUISHERS (TO TOP, U.N.O.): GROSS WT. 40 LBS. OR LESS = 60" MAX. GROSS WT. MORE THAN 40 LBS. = 42" MAX. ADA 2. FIRE ALARM PULL STATIONS (TO LEVER): STANDARD = 48" MAX ADA FORWARD REACH = 48" MAX. ADA SIDE REACH = 48" MAX. 23. SMOKE AND/OR HEAT DETECTORS: STANDARD = CEILING 24. HORN/ SPEAKER/ VISUAL SIGNALS: STANDARD = 80" AFF. OR (

BELOW CEILING - WHICHEVER IS LOWER.  ${f G}$  25. ROOM SIGNAGE (TO C.L.): STANDARD = 60" HIGH AFF. & WITHIN 18" OF LATCH SIDE OF DOOR.

**GENERAL NOTES: ACCESSIBILITY GUIDELINES** 

CONSTRUCTION
As Noted on Plans Review

08/15/2025

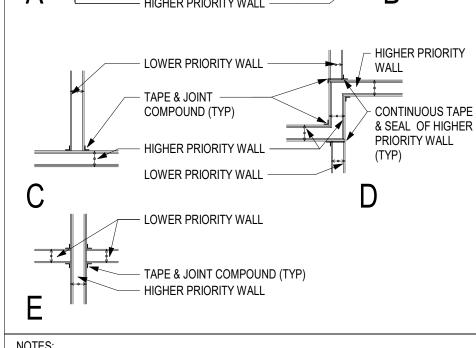
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00 NI EE'S **COLLINS WEBB** ARCHITECTURE, LLC **REVISION DATES:** 

ACCESSIBILITY GUIDELINES

WALL PRIORITY LEGEND

NOTE: THIS LEGEND IS FOR GRAPHIC REPRESENTATION ONLY.



FIRE & SMOKE RESISTIVE LEGEND DEFINITIONS FIRE WALLS (FW)

TO SEPARATE CONSTRUCTION INTO SEPARATE BUILDINGS.

FIRE WALLS SERVE TO CREATE SEPARATE BUILDINGS FOR THE FOLLOWING • CONSTRUCTION TYPE VARIES FROM ONE BUILDING TO ANOTHER. COMPLIANCE WITH MAXIMUM ALLOWABLE AREA REQUIREMENTS. • TO SEPARATE BUILDINGS WITH DIFFERENT LEVELS OF FIRE PROTECTION.

• TO ADDRESS A PROPERTY LINE DEFINING DIFFERENT OWNERSHIP.

<u>SPECIAL CONSIDERATIONS</u>
• THE FIRE WALL REQUIRES SUFFICIENT STRUCTURAL STABILITY UNDER FIRE CONDITIONS TO ALLOW THE COLLAPSE OF CONSTRUCTION ON EITHER SIDE WITHOUT COLLAPSE OF THE WALL. OPENINGS ARE REQUIRED TO BE PROTECTED • OPENINGS ARE LIMITED BASED ON A PERCENTAGE OF WALL LENGTH. • EXTENDING THE FIRE WALL THROUGH THE ROOF WITH A PARAPET IS REQUIRED FOR SOME CONSTRUCTION CLASSIFICATIONS. • THE REQUIRED FIRE RATING OF A FIRE WALL IS BASED ON OCCUPANCY GROUPS

### • HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER.

AND CLASS OF CONSTRUCTION.

A FIRE RATED WALL CONSTRUCTED TO RESTRICT THE SPREAD OF FIRE. A FIRE RATED WALL CONSTRUCTED TO RESTRICT THE SPREAD OF FIRE.

CONTINUITY SHALL BE MAINTAINED FROM TOP OF FLOOR TO UNDERSIDE OF THE

A VERTICAL, LOAD BEARING STRUCTURAL ELEMENT. FLOOR OR ROOF DECK ABOVE.

FIRE BARRIERS HAVE THE FOLLOWING APPLICATIONS. TO CREATE HORIZONTAL EXITS. TO SEPARATE EXIT PASSAGEWAYS.

 OCCUPANCY SEPARATIONS. TO SEPARATE INCIDENTAL USE AREAS. ISOLATION OF HAZARDS. • TO SEPARATE ROOMS WITH DIFFERENT LEVELS OF FIRE PROTECTION. TO SEPARATE ROOMS WITH DIFFERENT LEVELS OF FIRE PROTECTION.
 SMOKE BARRIERS AND SHAFT ENCLOSURES ARE FIRE BARRIERS. SEE ADDITIONAL REQUIREMENTS.

HOURLY FIRE RATING AS THE FIRE BARRIER, OR BETTER. • OPENINGS ARE REQUIRED TO BE PROTECTED. HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER.

#### **SHAFT ENCLOSURES (SE)**

PERIMETER SMOKE SEALS.

PROTECT OPENINGS IN FIRE RATED FLOOR/CEILING ASSEMBLIES.

FOR THE FUNCTION OF THE SHAFT. WHERE ALLOWED, OPENINGS ARE REQUIRED TO BE PROTECTED. • DUCT PENETRATIONS REQUIRE COMBINATION SMOKE AND FIRE DAMPERS EXCEPT FOR EXISTING CONDITIONS THAT ARE GRANDFATHERED. • HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH, CLOSER, AND

FIRE PARTITIONS (FP)

<u>DEFINITION</u>
A FIRE RATED WALL THAT IS CONTINUOUS VERTICALLY FROM FOUNDATION TO ROOF A FIRE RATED PARTITION THAT IS USED FOR THE APPLICATIONS LISTED BELOW. IT SHALL BE CONTINUOUS FROM TOP OF FLOOR TO UNDERSIDE OF A FIRE-RATED FLOOR/CEILING OR ROOF/CEILING ASSEMBLY. WHERE ALLOWED BY CODE EXCEPTION, A FIRE PARTITION SHALL BE ALLOWED TO TERMINATE AT THE UPPER MEMBRANE OF A FIRE RATED CEILING

> <u>USE</u> FIRE PARTITIONS ARE USED IN CERTAIN OCCUPANCIES TO DO THE FOLLOWING. SEPARATE DWELLING UNITS SEPARATE SLEEPING SPACES • SEPARATE CORRIDORS FROM ADJACENT SPACES

 SEPARATE ELEVATOR LOBBIES SEPARATE TENANT SPACES IN COVERED MALL BUILDINGS SPECIAL CONSIDERATIONSOPENINGS ARE REQUIRED TO BE PROTECTED.

#### • HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER. **BEARING WALLS (BW)**

<u>DEFINITION</u>
AN INTERIOR OR EXTERIOR WALL DESIGNED TO SUPPORT FLOOR OR ROOF LOADS. A BEARING WALL IS FIRE-RATED ONLY TO MAINTAIN THE INTEGRITY OF ITSELF AS A FIRE RATED STRUCTURAL ELEMENT. THE WALL DOES NOT SERVE AS A FIRE SEPARATION FROM ONE SIDE TO THE OTHER SIDE

 DOORS AND WINDOWS ARE NOT REQUIRED TO BE RATED. • HVAC DUCT PENETRATIONS ARE NOT REQUIRED TO BE FIRE-DAMPERED. • PLUMBING, ELECTRICAL, SPRINKLER SYSTEM, AND CABLE PENETRATIONS ARE REQUIRED TO BE FIRE-STOPPED WITH FIRE SEALANT AT BOTH SIDES, FOR WALLS CONSTRUCTED OF HOLLOW CMU OR STUD FRAMING.

1. THE FOLLOWING INFORMATION SERVES TO PROVIDE BUILDING OWNERS WITH SPECIAL CONSIDERATIONS

• WITHIN SOME CONSTRUCTION CLASSIFICATIONS, CONSTRUCTION THAT PROVIDES

CONCISE DEFINITIONS OF WALL TYPES RELATED TO LIFE SAFETY ISSUES. THIS INFORMATION IS NOT MEANT TO BE A SUBSTITUTE FOR APPLICABLE BUILDING CODES. STRUCTURAL SUPPORT OF A FIRE BARRIER IS REQUIRED TO BE OF THE SAME 2. WHEN A WALL HAS MORE THAN ONE CLASSIFICATION, THE MOST RESTRICTIVE REQUIREMENTS FOR EACH CLASSIFICATION SHALL APPLY. 3. FOR NEW CONSTRUCTION, PERIMETER SMOKE-SEALS MAY BE REQUIRED AT FIRE

**GENERAL DESCRIPTION** 

COLLINS | WEBB ARCHITECTURE

INTERNATIONAL BUILDING CODE - 2018 ED.

INTERNATIONAL PLUMBING CODE - 2018 ED.

INTERNATIONAL FUEL GAS CODE - 2018 ED.

INTERNATIONAL MECHANICAL CODE - 2018 ED

307B SW MARKET ST.

APPLICABLE CODE:

LEE'S SUMMIT, MO 64063

PROJECT NAME: HERITAGE ASSET MANAGEMENT **PROJECT DESCRIPTION:** PROJECT LOCATION: 100 NE DOUGLAS ST., LEE'S SUMMIT, MO 64063 **EXISTING RESIDENTIAL PROPERTY IS BEING CONVERTED INTO A** COUNTY: JACKSON

COMMERCIAL FINANCIAL PLANNING AND INVESTMENT MANAGING BUSINESS. THIS PROJECT CONSISTS OF THE FOLLOWING WORK: DEMO/NEW BUILD OF THE BACK DECK STRUCTURE ADDITION OF A NEW ADA LIFT FOR EASE OF ACCESS.

REMOVAL/ADDITION OF VEGETATION ADDITION OF A NEW ASPHALT PARKING LOT AND CONCRETE SIDEWALK ADDITION OF A NEW DETENTION BASIN REWORK OF EXISTING BATHROOM TO MEET ADA REQUIREMENTS

**IBC TABLE 601** 

**IBC TABLE 601** 

**IBC TABLE 1020.1** 

LAVATORIES:

SERVICE SINKS:

WATER CLOSETS:

DRINKING FOUNTAINS:

LAVATORIES:

SERVICE SINKS:

DRINKING FOUNTAINS:

= 1 REQUIRED

= 1 REQUIRED

= 1 REQUIRED

= 1 PROVIDED

= 2 PROVIDED (EXISTING UNISEX)

= 2 PROVIDED (1 EXISTING)

**= BOTTLED WATER PROVIDED** 

INTERNATIONAL FIRE CODE - 2018 ED. NATIONAL ELECTRICAL CODE - 2017 ED. ICC/ANSI A117.1-2009, ACCESSIBLE AND UABLE BUILDINGS AND FACILITIES

CODE INFORMATION TABLE / SECTION / REFERENCE BUILDING/PROJECT USE: BUSINESS **IBC SECTION 302** CONSTRUCTION TYPE TYPE VB (NON-SPRINKLERED) **IBC TABLE 601** OCCUPANCY CLASSIFICATION(S) **GROUP "B" BUSINESS IBC SECTION 303** WOOD FRAMED (EXISTING) BUILDING FRAME BASE ALLOWABLE AREA (B) 9,000 SQ. FT. **IBC SECTION 506.2** 

ACTUAL TENANT AREA (GROSS) 1,788 SQ. FT. +/- (EXISTING) LEVEL 1 1,038 SQ. FT. (EXISTING) LEVEL 2 750 SQ. FT. (EXISTING) LEVEL 3 N.I.C. (EXISTING)

ALLOWABLE STORIES 2 STORIES **IBC TABLE 504.4** 3 STORIES (TOP LEVEL TO BE CLOSED OFF AND ACTUAL NUMBER OF STORIES POSTED "NO STORAGE" PER CITY REQUIREMENTS. PLEASE REFERE TO THE CMR FORM AFFILIATED WITH THIS PROJECT PERMIT.)

ALLOWABLE HEIGHT IBC TABLE 504.3 < 40'-0" (EXISTING) ACTUAL HEIGHT IN FEET FIRE RESISTIVE REQUIREMENTS TABLE / SECTION / REFERENCE PRIMARY FRAME **IBC TABLE 601** NON-BEARING WALLS **IBC TABLE 601** BEARING WALLS INT./ EXT. 0 INT. / 0 EXT. HRS **IBC TABLE 601** 

#### FIRE EXTINGUISHERS

FLOOR CONSTRUCTION

CEILING/ROOF

1. PROVIDE PORTABLE FIRE EXTINGUISHERS IN OCCUPANCIES AND LOCATIONS AS REQUIRED BY THE LOCAL FIRE PREVENTION CODE. SEE PLANS FOR SUGGESTED LOCATIONS. NOTIFY ARCHITECT OF ANY PROPOSED RELOCATION OR IF A CONFLICT IS ENCOUNTERED. 2. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH NFPA 10, STANDARD FOR PORTABLE FIRE

EXTINGUISHERS. 3. PORTABLE FIRE EXTINGUISHERS SHALL BE LOCATED IN CONSPICUOUS LOCATIONS WHERE THEY WILL BE READILY ACCESSIBLE AND IMMEDIATELY AVAILABLE FOR USE. THESE LOCATIONS SHALL BE ALONG NORMAL PATHS OF TRAVEL, UNLESS THE FIRE CODE OFFICIAL DETERMINES THAT THE HAZARD

POSED INDICATES THE NEED FOR PLACEMENT AWAY FROM NORMAL PATHS OF TRAVEL.

CEILING HEIGHT NOTES: (IBC 1208)

1. ALL MEANS OF EGRESS TO HAVE A MINIMUM CEILING HEIGHT OF 7'-6" A.F.F., NOR SHALL HAVE ANY PROJECTION FROM THE CEILING BE LESS THAN 6'-8" A.F.F. 2. OCCUPIED SPACES, HABITABLE SPACES AND CORRIDORS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-6" A.F.F. 3. BATHROOMS, TOILET ROOMS, KITCHENS, STORAGE ROOMS AND LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0" A.F.F.

BUSINESS - GROUP "B"	MAX. FLAME SPREAD	TABLE / SECTION / REFERENCE
INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS	CLASS A	IBC 803.1.2, 803.13
CORRIDORS AND ENCLOSURES FOR EXIT ACCESS STAIRWAYS AND RAMPS	CLASS B	IBC 803.1.2, 803.13
ROOMS AND ENCLOSED SPACES	CLASS C	IBC 803.1.2, 803.13
NOTE: DECORATIVE MATERIALS AND TRIM (INCLUDING PLASTICS) MUST COMPLY WIT	TH IBC SECTION 806.	

GENERAL EXITING REQUIREMENTS TABLE / SECTION / REFERENCE EXIT TRAVEL DISTANCE **IBC SECTION 1017.2** DEAD END CORRIDOR **IBC SECTION 1020.4** 75 FEET IF OCC. < 50 COMMON PATH OF TRAVEL **IBC SECTION 1029.8** MIN. CORRIDOR WIDTH 44", OR 36" IF OCC. < 50 **IBC SECTION 1020.2** POSTING OF OCCUPANT LOAD EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE. NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT. **EXIT REQUIREMENTS** TABLE / SECTION / REFERENCE A. REQUIRED CAPACITY 1. STAIRS - 0.3" / PERSON **IBC SECTION 1005.3.1** 2. OTHER COMPONENTS - 0.2" / PERSON **IBC SECTION 1005.3.2** B. MINIMUM NUMBER 1. OCCUPANT LOAD OF 1-500 PERSONS - 2 EXITS PER STORY IBC TABLE 1006.3.2 SIGNAGE TABLE / SECTION / REFERENCE 1. EVACUATION DIAGRAM PROVIDED IN ACCORDANCE WITH IBC 1001.2. OCCUPANT LOAD TABLE / SECTION / REFERENCE OCCUPANT LOAD (1ST LEVEL) **IBC TABLE 1004.5** BUSINESS 5 OCC (667 SQ. FT. / 150 GROSS) KITCHEN/BREAK <u>2 OCC</u> (271 SQ. FT. / 200 GROSS) TOTAL OCCUPANT LOAD (1ST LEVEL) OCCUPANT LOAD (2ND LEVEL) 3 OCC (436 SQ. FT. / 150 GROSS) BUSINESS 1 OCC (68 SQ. FT. / 300 GROSS) TOTAL OCCUPANT LOAD (2ND LEVEL) TOTAL BUILDING OCCUPANTS <u>11 OCC</u>

2 EXITS IBC TABLE 1006.3.2 EXITS REQUIRED 2 EXITS EXITS PROVIDED PLUMBING FIXTURE REQUIREMENTS **IBC TABLE 2902.1** B OCC. WATER CLOSETS: = 1 PER 25 FOR THE FIRST 50, 1 PER 50 FOR THE REMAINDER B OCC. LAVATORIES: = 1 PER 40 FOR THE FIRST 80, 1 PER 80 FOR THE REMAINDER B OCC. DRINKING FOUNTAINS: = 1 PER 100 = 1 REQUIRED B OCC. SERVICE SINKS: PLUMBING FIXTURES REQUIRED WATER CLOSETS: = 1 REQUIRED

> RESTROOM CONFERENCE MEETING 106 RECEP./WAITING **ENTRY/FOYER**

A3 LIFE SAFETY - 1ST LEVEL 3/16" = 1'-0"

LIFE SAFETY PLANS AND

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CONSTRUCTION **As Noted on Plans Review** 

08/15/2025

FIRE RESISTIVE LEGEND

CALCULATED EXIT

AUDITION

MIN. WIDTH OF

MEANS OF EGRESS

COMPONENT (IN.)

DISTANCE

41' - 9"

23' - 7"

NUMBER OF OCCUPANTS EXITING 200

EXIT WIDTH -

KNOX BOX

COMPONENT

ACCESSIBLE EGRESS

INDICATES FIRE EXTINGUISHER CABINET(FE)

INDICATES KITCHEN/ BAR FIRE EXTINGUISHER

(FE) LOCATION WITH 75'-0" RADIUS COVERAGE

AREA. SEE SPECIFICATIONS FOR FE TYPE.

(FE-1) LOCATION WITH 75'-0" RADIUS COVERAGÈ AREA.

SEE SPECIFICATIONS FOR FE TYPE.

**EGRESS DISTANCE** 

WIDTH REQ'D (IN.)

PROVIDED (IN.)

**← ←** EGRESS PATH

TRAVEL DISTANCE - A

TRAVEL DISTANCE - B

ARCHITECTURE, LLC **REVISION DATES:** 

PROJECT INFO.

- TAPE & SEAL HIGHER PRIORITY -WALL BEHIND INTERSECTING LOWER PRIORITY WALL (TYP) HIGHER PRIORITY WALL -— TAPE & JOINT COMPOUND (TYP) — - HIGHER PRIORITY WALL -1. REFER TO WALL TYPES ON SHEET G121-TI FOR WALL COMPONENTS, NUMBER OF GYPSUM BOARD LAYERS, TYPE OF GYPSUM BOARD, AND OTHER SIMILAR INFO. 2. THE HIGHER PRIORITY WALL SHALL PASS THROUGH THE LOWER PRIORITY WALL. 3. TAPING AND SEALING OF HIGHER PRIORITY WALLS SHALL BE CONTINUOUS. 4. ALTERNATE LAYERS OF GYPSUM BOARD SHALL OVERLAP AT CORNER INTERSECTIONS OF MULTI-LAYERED RATED GYPSUM BOARD PARTITIONS.

<u>DEFINITION</u>
A SHAFT ENCLOSURE IS A FIRE BARRIER FORMING THE BOUNDARY OF A VERTICAL <u>SPECIAL CONSIDERATIONS</u>
• PENETRATIONS IN SHAFT ENCLOSURES ARE PROHIBITED UNLESS NECESSARY

RATED DOORS IN CERTAIN OCCUPANCIES.

A6 LIFE SAFETY - 2ND LEVEL NORTH NORTH NORTH

WORK/COPY

SEE ADMINISTRATIVE SPECIFICATION FOR GENERAL REQUIREMENTS RELATED TO ADMINISTATION OF THIS

THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED IN THE PROJECT SHALL BE REQUIRED TO OBTAIN AND PAY FOR ALL NECESSARY LICENSES AS REQUIRED BY ANY LAW OR AGENCIES HAVING JURISDICTION (AHJ) OVER

THE GENERAL CONTRACTOR WILL PAY FOR ALL PERMITS REQUIRED BY ANY AGENCY HAVING JURISDICTION (AHJ) OVER THE PROJECT FOR ALL WORK TO BE PREFORMED BY THE GENERAL CONTRACTOR.

THE CONTRACTOR SHALL PAY THE NECESSARY FEES TO CONNECT TO EXISTING UTILITIES AT THE PROPERTY LINE OR IN ADJACENT STREETS AND RIGHT OF WAY AS SPECIFIED, NECESSARY, AND/OR INCLUDED IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL PAY ALL UTILITY COSTS (BILLS) DURING CONSTRUCTION UNTIL OWNER TAKES POSSESSION OF THE FACILITY OR THE FACILITY IS CERTIFIED AS SUBSTANTIALLY

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT FINISHED SURFACES. PROTECTION FOR FINISHES SUCH AS DOORS, WALLS AND FLOORS SHOULD BE PROVIDED AS REQUIRED, ANY DAMAGES TO THESE AREAS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE.

ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN DRAWINGS AND ANY DISCREPANCY OR CONFLICT BETWEEN ANY DRAWING AND ANY SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. NOTWITHSTANDING, DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ARCHITECT'S AND/ OWNERS ATTENTION AND CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF THE WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH ARCHITECT'S INTERPRETATION. THE GENERAL CONTRACTOR SHALL KEEP A COMPLETE SET OF DOCUMENTS ON THE PROJECT SITE AT ALL TIMES FOR REFERENCE DURING CONSTRUCTION.

THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE CONTRACTOR'S BEST SKILLS AND ATTENTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT. . THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER ALL JOB SITE SAFETY PROCEDURES AND POLICIES. THE GENERAL CONTRACTOR SHALL HAVE A SAFETY COORDINATOR AND

BE RESPONSIBLE TO HOLD REGULARLY SCHEDULED SAFETY TRAINING WITH ALL JOB SITE PERSONNEL, INCLUDING ALL SUB CONTRACTOR PERSONNEL. NEITHER THE ARCHITECT'S OR THE OWNERS INSPECTION NOR FAILURE TO INSPECT SHALL RELIEVE THE CONTRACTOR OF ANY OBLIGATION HEREUNDER. IF ANY WORK FAILS TO CONFORM TO THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY REMEDY AND/OR REPLACE THE SAME AT THE CONTRACTOR'S EXPENSE. NO ACCEPTANCE OR PAYMENT BY THE OWNER OR ARCHITECT SHALL CONSTITUTE A WAIVER OF THE

FOREGOING AND NOTHING HEREIN SHALL EXCLUDE OR LIMIT ANY WARRANTIES IMPLIED BY LAW. THE GENERAL CONTRACTOR SHALL SO CONDUCT ITS OPERATIONS AS NOT TO UNREASONABLY INTERFERE WITH TRAFFIC ON PUBLIC THOROUGHFARES ADJACENT OR NEAR TO THE PROJECT SITE. DO NOT SCALE DRAWINGS.

THE GENERAL CONTRACTOR REPRESENTS THAT IT POSSESSES THE SKILLS REQUIRED FOR THE WORK, ASSUMES THE RESPONSIBILITIES OF AN EMPLOYER FOR PERFORMANCE OF THE WORK, AND ACTS AS AN EMPLOYER OF ONE OR MORE EMPLOYEES BY PAYING WAGES, DIRECTING ACTIVITIES AND PERFORMING OTHER SIMILAR FUNCTIONS. THE GENERAL CONTRACTOR IS AN INDEPENDENT CONTRACTOR, FREE TO DETERMINE THE MANNER IN WHICH THE WORK IS PERFORMED. THE GENERAL CONTRACTOR SHALL PROVIDE, AND MAINTAIN IN GOOD WORKING ORDER, THE FOLLOWING ITEMS FOR USE BY THE PROJECT SUPERINTENDENT DAILY DURING THE ENTIRE DURATION OF THE PROJECT:

A. LAPTOP WITH INTERNET ACCESS. B. DIGITAL CAMERA WITH 'DATE STAMP' CAPABILITY AND WITH PROPER CABLES TO ATTACH TO LAPTOP. C. EMAIL ACCESS THROUGH THE LAPTOP. D. A PRINTER/SCANNER/FAX MACHINE WITH PROPER CABLES TO ATTACH TO LAPTOP.

E. CELL PHONE. F. PROJECT INTERNET CLOUD BASED SITE FOR MANAGEMENT OF PROJECT INFORMATION. SITE WILL BE USED FOR SUBMITTAL OF SHOP DRAWINGS, RFI'S & PHOTOS. SITE SHALL BE PROCORE OR EQUAL

THE GENERAL CONTRACTOR SHALL HAVE A CONSTRUCTION SUPERINTENDENT ASSIGNED TO THIS PROJECT, AND THIS SUPERINTENDENT SHALL BE ON SITE EVERY DAY THERE IS ANY CONSTRUCTION ON THIS PROJECT. THE SUPERINTENDENT SHALL BE REACHABLE BY PHONE DURING NORMAL BUSINESS HOURS. ONCE ASSIGNED, THE SUPERINTENDENT SHALL NOT BE REMOVED OR REPLACED WITHOUT WRITTEN APPROVAL FROM OWNER &

4. THE SUPERINTENDENT WILL BE REQUIRED TO PROVIDE PHOTOGRAPHS (VIA EMAIL USING A DIGITAL CAMERA) TO THE OWNER & ARCHITECT EACH FRIDAY BY NOON CST, SHOWING THE PROGRESS OF CONSTRUCTION. THE GENERAL CONTRACTOR IS ENCOURAGED TO TAKE PHOTOS SEVERAL TIMES EACH WEEK TO HELP MAINTAIN PROOF OF CONSTRUCTION PROGRESS, RECORD UNCOVERED CONDITIONS, RECORD CONDITION AND AMOUNTS OF VENDOR GOODS UPON RECEIPT, AND RECORD CONSTRUCTION THAT VARIES FROM THE CD'S (AS PART OF THE AS-BUILTS). ALL PHOTOS WILL HAVE A 'DATE STAMP'.

ARCHITECT, UNLESS SPECIFICALLY REQUESTED TO BE REPLACED BY OWNER.

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OVERSEE CONSTRUCTION OF THE PROJECT

CONTINUALLY INSPECTING THE WORK, MATERIALS, AND WORKMANSHIP PROVIDED BY ALL OF HIS TRADESMEN, SUBCONTRACTORS, AND SUPPLIERS. EXCELLENCE IN QUALITY OF CONSTRUCTION CAN ONLY BE ACHIEVED IF THE CONTRACTOR ENFORCES HIGH STANDARDS OF ACCEPTABILITY. THE GENERAL CONTRACTOR CANNOT DELEGATE HIS RESPONSIBILITY TO THE SUBCONTRACTORS, BUT MUST CONTINUALLY MONITOR THE WORK OF . IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE AND SCHEDULE ALL AGENCIES HAVING JURISDICTION

(AHJ) INSPECTIONS NECESSARY TO OBTAIN THE CERTIFICATE OF OCCUPANCY (CERTIFICATE OF COMPLIANCE). PRIOR TO THE DATE OF THE AGENCY INSPECTION, THE GENERAL CONTRACTOR SHOULD INSPECT THE PROJECT TO INSURE THAT CONSTRUCTION COMPLIES WITH THE AGENCY REQUIREMENTS. SCHEDULING FINAL INSPECTIONS WITH AGENCY REPRESENTATIVES WHEN THE PROJECT IS NOT COMPLETE MUST BE AVOIDED. COPIES OF FINAL INSPECTIONS MUST BE PROVIDED TO OWNER & ARCHITECT AS THEY ARE AVAILABLE.

PRIOR TO REQUESTING THE SUBSTANTIAL COMPLETION INSPECTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OWN PRE-SUBSTANTIAL COMPLETION INSPECTION OF THE CONSTRUCTION FOR QUALITY OF CONSTRUCTION AND COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.

4. THE FOLLOWING PEOPLE SHOULD BE IN ATTENDANCE FOR THE SUBSTANTIAL COMPLETION INSPECTION: A. GENERAL CONTRACTOR

B. GENERAL CONTRACTOR SUPERINTENDENT C. MECHANICAL CONTRACTOR

D. ELECTRICAL CONTRACTOR E. PLUMBING CONTRACTOR

F. PAINTING CONTRACTOR G. FLOORING CONTRACTOR

. ITEMS TO BE SUBMITTED AS A PREREQUISITE TO THE REQUEST FOR THE CERTIFICATE OF SUBSTANTIAL COMPLETION AND OWNER / ARCHITECT OBSERVATION OF ITEMS TO BE COMPLETED AND CORRECTED. A. GENERAL CONTRACTOR'S PUNCH LISTS

B. HVAC TEST AND BALANCE REPORT C. SPRINKLER SYSTEM ACCEPTANCE INSPECTION REPORT

D. COPY OF VIDEO OF COMPLETED SEWER SYSTEM THE REVIEW TEAM SHOULD PROCEED IN AN ORGANIZED MANNER THROUGHOUT THE BUILDING INSPECTING EACH SPACE OR ROOM. THE PUNCH LIST GENERATED BY THE SUBSTANTIAL COMPLETION INSPECTION TOUR IS TO BE PREPARED BY THE CONTRACTOR. ALONG WITH THE PUNCH LIST, THE ARCHITECT SHALL PREPARE THE "CERTIFICATE OF SUBSTANTIAL COMPLETION." IMMEDIATELY AFTER RECEIPT OF THE PUNCH LIST, THE GENERAL CONTRACTOR AND SUBCONTRACTORS ARE EXPECTED TO BEGIN CORRECTION OF THE OUTSTANDING ITEMS. AFTER COMPLETION OF PUNCHLIST, THE CONTRACTOR SHALL NOTIFY OWNER & ARCHITECT IN WRITTING THAT FULL LIST OF ITEMMS TO BE COMPLETED AND OR CORRECT IS FINALIZED.

THE OWNER REQUIRES THE GENERAL CONTRACTOR AND SUBCONTRACTORS TO MAINTAIN AN ACCURATE. CURRENT SET OF RECORD DOCUMENTS (AS-BUILTS) AS CONSTRUCTION PROGRESSES. ALL PERTINENT INFORMATION RELATING TO THE PROJECT MUST BE TIMELY MAINTAINED ON THE AS-BUILTS. THE AS-BUILTS MUST BE MAINTAINED ON-SITE IN THE GENERAL CONTRACTOR'S OFFICE AND WILL NOT BE USED FOR ANY OTHER PURPOSE. SINCE THE OWNER WILL OWN AND OPERATE THE FACILITY, IT IS IMPERATIVE THAT ALL PARTIES MAINTAIN ACCURATE INFORMATION REGARDING THE ACTUAL CONSTRUCTION OF THE PROJECT.

ALL DEVIATIONS FROM THE CONTRACT SET OF DRAWINGS MUST BE NOTED ON THE AS-BUILTS IN RED WITH CLOUDS FOR CLEAR IDENTIFICATION. THE OWNER WILL REVIEW THE AS-BUILTS FOR ACCURACY AND COMPLETENESS MONTHLY, DURING THE PAYMENT APPLICATION REVIEW PROCESS. FAILURE TO POST CHANGES TO THE PROJECT ON THE AS BUILTS AS IDENTIFIED DURING THE ON-SITE MONTHLY REVIEW WILL BE CAUSE TO SUSPEND PAYMENT UNTIL RECTIFIED. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENFORCE THE TIMELY POSTING OF AS-BUILT CHANGES WITH THE SUBCONTRACTORS.

WITHIN THIRTY (30) CALENDAR DAYS AFTER THE FINAL PROJECT SUBSTANTIAL COMPLETION, THE GENERAL CONTRACTOR SHALL COMPILE ALL CLOSE-OUT DOCUMENTS AND SUBMIT THEM TO THE OWNER FOR REVIEW. IF THE CONTRACTOR FAILS TO COMPLETE ITS REQUIREMENTS WITHIN THIS TIMELINE NOTED ABOVE THE CONTRACTOR MAY BE SUBJECT TO ADDITONAL ADMINISTATION FEES.

THE CATEGORIES LISTED BELOW SHOULD BE SUBMITTED AT THE SAME TIME.

A. A DISK WITH ALL PHOTOS TAKEN DURING CONSTRUCTION. B. CHANGE ORDERS AND ALL ADDENDA ATTACHED AND POSTED TO THE AS-BUILT DRAWINGS. C. AS-BUILT DRAWINGS: ONE HARD COPY TO REMAIN ON SITE AND IN PLAN TUBE; ONE ELECTRONIC

COPY TO BE SENT WITH CLOSE-OUT PAPERWORK. D. MATERIALS SELECTION DATA - PROVIDE ALL APPROVED SUBMITTALS.

E. OPERATION AND MAINTENANCE MANUALS (O&M) - PROVIDE O&M MANUALS BOXED AND BOUND. THIS ITEM IS OF SIGNIFICANT IMPORTANCE TO MSI FUTURE MAINTENANCE ACTIVITIES. F. ALL HVAC TEST AND BALANCE REPORTS.

G. RELEASE OF LIEN (AIA FORM 706A), PAYMENT OF DEBT (AIA FORM 706),

1. WARRANTIES, CERTIFICATES, AFFIDAVITS: 2. ALL INFORMATION INCLUDED IN THIS CATEGORY WILL BE FURNISHED IN ONE (1) COPY AND BOUND IN A STURDY THREE-RING BINDER WITH A LABEL ON THE OUTSIDE READING "GENERAL CLOSE-OUT DOCUMENTS" TO INCLUDE AN INDEX OF THE CONTENTS. ALL AIA DOCUMENTS WILL BE ORIGINAL (WITH RED LETTERING ON THE BOTTOM OF THE FORM) AND NOTARIZED. IF THE FLECTRONIC VERSION IS USED A COPY WITH ORIGINAL SIGNATURES WILL BE SUBMITTED. THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR WILL HAVE SEPARATE TABS IDENTIFYING EACH BY NAME. THE GENERAL CONTRACTOR WILL LIST EACH SUBCONTRACTOR ALPHABETICALLY AND WILL CHECK TO INSURE THAT A "RELEASE OF LIEN" - AIA FORM G706A AND A "PAYMENT OF DEBT-AIA FORM G706 IS INCLUDED FOR HIMSELF AND EACH SUBCONTRACTOR. THE GENERAL CONTRACTOR WILL INCLUDE A "CONSENT OF SURETY" - AIA FORM G707. IN ADDITION. THE GENERAL CONTRACTOR WILL INCLUDE BEHIND HIS TAB THE FOLLOWING INFORMATION:

A. A LIST OF NAMES, BUISNESS ADDRESSES, PHONE NUMBERS AND EMAIL ADRESSES FOR THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR.

B. AN ANNOTATED COPY OF THE SUBSTANTIAL COMPLETION PUNCH LIST INDICATING ACTION TAKEN ON FACH ITEM

C. WARRANTIES. CERTIFICATES AND AFFIDAVITS SHALL BE INCLUDED FOR ANY EQUIPMENT. MATERIALS OR SYSTEMS, COMBINED WITH ALL OF THE ABOVE INFORMATION AND PLACED BEHIND THE TAB OF THE CONTRACTOR THAT ISSUED IT.

04 0500 - MASONRY RESTORATION & TUCKPOINTING

A. <u>REFERENCES</u> AMERICAN CONCRETE INSTITUTE (ACI): A. ACI 530.1-02 - SPECIFICATION FOR MASONRY STRUCTURES.

ASTM INTERNATIONAL (ASTM): A. ASTM C 144 - STANDARD SPECIFICATION FOR AGGREGATE FOR MASONRY MORTAR. B. ASTM C 150 - STANDARD SPECIFICATION FOR PORTLAND CEMENT. C. ASTM C 207 - STANDARD SPECIFICATION FOR HYDRATED LIME FOR MASONRY PURPOSES. D. ASTM C 260 - STANDARD SPECIFICATION FOR AIR-ENTRAINING ADMIXTURES FOR CONCRETE.

E. ASTM C 270 - STANDARD SPECIFICATION FOR MORTAR FOR UNIT MASONRY. F. ASTM C 595 - STANDARD SPECIFICATION FOR BLENDED HYDRAULIC CEMENTS. G. ASTM C 780 - STANDARD TEST METHOD FOR PRECONSTRUCTION AND CONSTRUCTION

EVALUATION OF MORTARS FOR PLAIN AND REINFORCED MASONRY. H. ASTM C 979 - STANDARD SPECIFICATION FOR PIGMENTS FOR INTEGRALLY COLORED CONCRETE. I. ASTM C 1093 - STANDARD PRACTICE FOR ACCREDITATION OF TESTING AGENCIES FOR UNIT

J. ASTM C 1157 - STANDARD PERFORMANCE SPECIFICATION FOR HYDRAULIC CEMENT. K. ASTM C 1314 - STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF MASONRY PRISMS. L. ASTM C 1586 - STANDARD GUIDE FOR QUALITY ASSURANCE OF MORTARS.

N. ASTM E 329 - SPECIFICATION FOR MINIMUM REQUIREMENTS FOR AGENCIES ENGAGED IN THE TESTING AND/OR INSPECTION OF MATERIALS USED IN CONSTRUCTION. O. ASTM E 514 - STANDARD TEST METHOD FOR WATER PENETRATION AND LEAKAGE THROUGH

M. ASTM C 1714 - STANDARD SPECIFICATION FOR PRE-BLENDED DRY MORTAR MIX FOR UNIT

3. INTERNATIONAL MASONRY INDUSTRY ALL-WEATHER COUNCIL (IMIAC): A. IMIAC - INTERNATIONAL MASONRY INDUSTRY ALL-WEATHER COUNCIL (IMIAC): RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR COLD WEATHER MASONRY CONSTRUCTION. B. IMIAC - INTERNATIONAL MASONRY INDUSTRY ALL-WEATHER COUNCIL (IMIAC): RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR HOT WEATHER MASONRY CONSTRUCTION. 4. THE BRICK INDUSTRY ASSOCIATION (BIA):

 A. BIA TECHNICAL NOTE 20 – CLEANING BRICK. PRODUCT DATA: SUBMIT MANUFACTURER'S PRODUCT DATA.

2. QUALITY ASSURANCE/CONTROL SUBMITTALS: A. SUBMIT MANUFACTURER'S CERTIFICATES THAT PRODUCTS MEET OR EXCEED SPECIFIED REQUIREMENTS. B. SUBMIT TEST RESULTS PREPARED BY A QUALIFIED INDEPENDENT TESTING LABORATORY.

MANUFACTURER QUALIFICATIONS: FIRM SPECIALIZING IN MANUFACTURE OF MASONRY INSTALLATION MATERIALS, INCLUDING MORTARS, WITH MINIMUM 10 YEARS EXPERIENCE. QUALITY ASSURANCE/CONTROL TESTING: TEST REPORTS PREPARED BY A QUALIFIED INDEPENDENT LABORATORY INDICATING COMPLIANCE WITH THE FOLLOWING PERFORMANCE REQUIREMENTS: 3. PRE-INSTALLATION MEETING: AT LEAST ONE WEEKS PRIOR TO COMMENCING MASONRY WORK CONDUCT A MEETING AT THE PROJECT SITE TO DISCUSS CONTRACT REQUIREMENTS AND JOB CONDITIONS;

REQUIRE THE ATTENDANCE OF MASONRY CONTRACTOR, AND INSTALLERS OF RELATED MATERIALS; NOTIFY ARCHITECT IN ADVANCE OF MEETING.REVIEW DETAILING AND SEQUENCE OF WORK TO BE 4. STORAGE AND PROTECTION: CEMENTITIOUS MATERIALS SHALL BE MANUFACTURED AND STORED OFF

THE GROUND, UNDER COVER AND SHALL BE KEPT DRY IN ACCORDANCE WITH ASTM C1714. MAINTAIN ENVIRONMENTAL CONDITIONS AND PROTECT WORK DURING AND AFTER INSTALLATION TO COMPLY WITH REFERENCED STANDARDS AND MANUFACTURER'S PRINTED RECOMMENDATIONS.

2. DO NOT BUILD OR APPLY MORTAR PRODUCTS ON FROZEN SUBSTRATES. A. REMOVE AND REPLACE MORTAR DAMAGED BY FROST OR BY FREEZING CONDITIONS. 3. VENT TEMPORARY HEATERS TO EXTERIOR TO PREVENT DAMAGE TO MASONRY WORK FROM CARBON

1. BASIS OF DESIGN: SPEC MIX®, INC. WEB: WWW.SPECMIX.COM" WWW.SPECMIX.COM 2. REQUESTS FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF

SUBSTITUTION PROCEDURES. 3. OBTAIN PRODUCTS FROM A SINGLE MANUFACTURER.

4. DESIGN AND PERFORMANCE REQUIREMENTS: PROVIDE MORTAR MIXES THAT HAVE BEEN SELECTED, MANUFACTURED, MIXED AND INSTALLED TO COMPLY WITH THE FOLLOWING: A. ASTM C 270. B. ASTM C 1714. A. TUCKPOINT MORTAR: SPEC MIX TUCKPOINT MORTAR. APPLICABLE STANDARDS: ASTM C 144, ASTM

C 150, ASTM C 207, ASTM C 270 FOR TUCKPOINT MORTAR, ASTM C 595, ASTM C 780, ASTM C 1093. ASTM C 1157, ASTM C 1314, ASTM C 1586, ASTM C 1714, ACI 530.1, IMIAC. F. EXECUTION: EXAMINE SURFACES TO RECEIVE MASONRY WORK AND CONDITIONS UNDER WHICH MASONRY WILL BE INSTALLED. DO NOT PROCEED WITH MASONRY WORK UNTIL SURFACES AND CONDITIONS COMPLY WITH REQUIREMENTS INDICATED IN REFERENCED MASONRY INSTALLATION STANDARD AND MANUFACTURER'S PRINTED INSTRUCTIONS.

 REMOVAL OF EXISTING MORTAR A. REMOVAL OF EXISTING MORTAR: CUT OUT EXISTING MORTAR JOINTS (BOTH BED AND HEAD JOINTS) AND REMOVE BY MEANS OF A TOOTHING CHISEL OR A SPECIAL POINTER'S GRINDER, TO A UNIFORM DEPTH OF TO 3/4-INCH (19 MM), OR UNTIL SOUND MORTAR IS REACHED. 1. TAKE CARE TO NOT DAMAGE EDGES OF EXISTING MASONRY UNITS TO REMAIN. B. REMOVE DUST AND DEBRIS FROM THE JOINTS BY BRUSHING, BLOWING WITH AIR OR RINSING WITH

WATER. DO NOT RINSE WHEN TEMPERATURE IS BELOW FREEZING. REPLACEMENT OF MASONRY UNITS A. REMOVE DAMAGED, SPALLED, LOOSE OR DETERIORATED MASONRY UNITS. CAREFULLY REMOVE ENTIRE UNITS FROM JOINT TO JOINT, WITHOUT DAMAGING SURROUNDING MASONRY, IN A MANNER THAT PERMITS REPLACEMENT WITH FULL SIZE UNITS. B. SUPPORT AND PROTECT REMAINING MASONRY THAT SURROUNDS REMOVAL AREA. MAINTAIN

FLASHING, REINFORCEMENT, LINTELS, AND ADJOINING CONSTRUCTION IN AN UNDAMAGED C. CLEAN MASONRY UNITS SURROUNDING REMOVAL AREAS BY REMOVING MORTAR, DUST, AND LOOSE PARTICLES IN PREPARATION FOR REPLACEMENT

D. REPLACE REMOVED UNITS WITH SALVAGED OR NEW UNITS THAT MATCH EXISTING SIZE AND TEXTURE. DO NOT USE BROKEN UNITS UNLESS THEY CAN BE CUT TO USABLE SIZE. E. INSTALL REPLACEMENT UNITS INTO BONDING AND COURSING PATTERN OF EXISTING UNITS. IF CUTTING IS REQUIRED, USE A MOTOR-DRIVEN SAW DESIGNED TO CUT MASONRY WITH CLEAN, SHARP, UNCHIPPED EDGES. UNITS MUST BE TOOTHED IN OR COURSING SHALL MATCH

SURROUNDING IN PLACE WORK. F. MAINTAIN JOINT WIDTH FOR REPLACEMENT UNITS TO MATCH EXISTING JOINTS. G. LAY REPLACEMENT UNITS WITH COMPLETELY FILLED BED, HEAD, AND COLLAR JOINTS. BUTTER ENDS WITH SUFFICIENT MORTAR TO FILL HEAD JOINTS AND SHOVE INTO PLACE.

A. AS RECOMMENDED BY MANUFACTURER. B. RETEMPERING: RETEMPER MORTAR AS RECOMMENDED BY MANUFACTURER

G. INSTALLATION OF TUCK POINTING MORTAR: INSTALL MORTAR IN ACCORDANCE WITH ACI/ASCE-530.1:

2. IMMEDIATELY PRIOR TO APPLICATION OF MORTAR, DAMPEN JOINTS TO BE TUCK POINTED. PRIOR TO APPLICATION OF POINTING MORTAR, ALLOW MASONRY UNITS TO ABSORB SURFACE WATER. 3. TIGHTLY PACK MORTAR INTO JOINTS IN THIN LAYERS, APPROXIMATELY 1/4-INCH (6 MM) THICK MAXIMUM.

I. ALLOW LAYER TO BECOME "THUMBPRINT HARD" BEFORE APPLYING NEXT LAYER. 5. PACK FINAL LAYER FLUSH WITH SURFACES OF MASONRY UNITS. WHEN MORTAR BECOMES "THUMBPRINT HARD". TOOL JOINTS.

6. HAIRLINE CRACKING WITHIN THE MORTAR OR MORTAR SEPARATION AT EDGE OF A JOINT IS UNACCEPTABLE. COMPLETELY REMOVE SUCH MORTAR AND REPOINT.

7. TOOL JOINTS IN PATCH WORK WITH A JOINTING TOOL TO MATCH THE EXISTING SURROUNDING JOINTS. A. COMPLY WITH CLEANING PROCEDURES AND RECOMMENDATIONS OF THE MANUFACTURERS OF BOTH THECLEANING SOLUTION AND THE UNIT MASONRY. B. REMOVE EFFLORESCENCE FROM MASONRY WALL EXPOSED IN THE FINISHED WORK IN

ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, NCMA TEK BULLETIN #8-3A AND/OR BIA TECHNICAL NOTE 20 - CLEANING BRICK. C. REMOVE DIRT OR STAINS FROM MASONRY WALLS EXPOSED IN THE FINISHED WORK IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NCMA TEK BULLETIN #8-2A

AND/OR BIA TECHNICAL NOTE 20 - CLEANING BRICK 1. AFTER MORTAR HAS FULLY HARDENED, THOROUGHLY CLEAN EXPOSED MASONRY

 D. COMPLY WITH APPLICABLE ENVIRONMENTAL LAWS AND RESTRICTIONS. SURFACES OF EXCESS MORTAR AND FOREIGN MATTER; USE WOOD SCRAPERS, STIFF-NYLON OR -FIBER BRUSHES, AND CLEAN WATER, SPRAY APPLIED AT LOW PRESSURE. 2. DO NOT USE METAL SCRAPERS OR BRUSHES.

3. DO NOT USE ACIDIC OR ALKALINE CLEANERS. PROTECTION: PROTECT NEWLY POINTED JOINTS FROM WEATHER AND ELEMENTS AS RECOMMENDED BY MANUFACTURER AND INDUSTRY STANDARDS, UNTIL POINTED JOINTS ARE SUFFICIENTLY HARD

2. PROTECT INSTALLED WORK FROM DAMAGE DUE TO SUBSEQUENT CONSTRUCTION ACTIVITY ON THE

<u>DIVISION 5 - METALS</u>

A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS WITH PLANS ELEVATIONS AND SEECTIONS INDICATING MEMBER SIZES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS, AND CONNECTION DETAILS. INCLUDE DETAILS OF EQUIPMENT ASSEMBLIES. INDICATE DIMENSIONS, WEIGHTS, LOADS, REQUIRED CLEARANCES, METHOD OF FIELD ASSEMBLY, COMPONENTS, AND LOCATION AND SIZE OF EACH FIELD

CONNECTION. SAMPLES FOR INITIAL SELECTION: FOR EACH TYPE OF EXPOSED FINISH. 1. DELEGATED-DESIGN SUBMITTAL: FOR HANDRAIL AND GUARDRAIL SYSTEMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR B. DESIGN: METAL RAILINGS SHALL BE DESIGNED BY FABRICATOR TO SUPPORT CODE-REQUIRED LOADING AND TO

MATCH THE CONFIGURATIONS INDICATED IN THE CONSTRUCTION DOCUMENTS. SEE DRAWINGS FOR REQUIRED WARRANTY: MANUFACTURER'S WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF HANDRAIL AND GUARD RAIL SYSTEM THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD. WARRANTY PERIOD OF 30 YEAR.

D. BASIS OF DESIGN: COORDINATE FINAL PRODUCT SELECTION AND SPEC. WITH THE CLIENT/OWNER PRIOR TO 1. GENERAL: PROVIDE MANUFACTURE'S STANDARD ACCESSORIES AS REQUIRED FOR COMPLETE RAILING

REQUIREMENTS. 1. GENERAL: TYPE 304 STAINLESS-STEEL FASTNERS. PROVIDE EXPOSED FASTENERS WITH FINISH MATCHING APPEARANCE, INCLUDING COLOR AND TEXTURE, OF RAILINGS.

1. GENERAL: FABRICATE RAILINGS TO COMPLY WITH REQUIREMENTS INDICATED FOR DESIGN, DIMENSIONS, MEMBER SIZES AND SPACING, DETAILS, FINISH, AND ANCHORAGE, BUT NOT LESS THAN THAT REQUIRED TO SUPPORT STRUCTURAL LOADS. 2. CUT, DRILL, AND PUNCH ALUMINUM CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A RADIUS OF APPROXIMATELY 1/32 INCH (1 MM) UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES. 3. FABRICATE CONNECTIONS THAT ARE EXPOSED TO WEATHER IN A MANNER THAT EXCLUDES WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.

SYSTEM AS INDICATED ON THE DRAWINGS AND AS REQUIRED TO COMPLY WITH PERFORMANCE

POWDER-COAT FINISH: AAMA 2605 EXCEPT WITH A MINIMUM DRY FILM THICKNESS OF 1.5 MILS (0.04 MM). COMPLY WITH COATING MANUFACTURER'S WRITTEN INSTRUCTIONS FOR CLEANING, CONVERSION COATING, AND APPLYING AND BAKING FINISH. 1. SUPPLY COMPONENTS REQUIRED FOR ANCHORAGE FABRICATED FROM SAME MATERIAL AND FINISH AS

FABRICATION UNLESS NOTED OTHERWISE. SHIM AND LEVEL FABRICATIONS AS NECESSARY. COAT CONCEALED SURFACES OF ALUMINUM FABRICATIONS IN CONTACT WITH CONCRETE, GROUT, MASONRY, WOOD, OR DISSIMILAR METALS WITH BITUMINOUS PAINT. 2. FIT EXPOSED CONNECTIONS TOGETHER TO FORM TIGHT, HAIRLINE JOINTS. 3. PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING RAILINGS. SET RAILINGS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; MEASURED FROM ESTABLISHED LINES AND

A. DO NOT WELD, CUT, OR ABRADE SURFACES OF RAILING COMPONENTS THAT ARE COATED OR FINISHED AFTER FABRICATION AND THAT ARE INTENDED FOR FIELD CONNECTION BY MECHANICAL OR OTHER MEANS WITHOUT FURTHER CUTTING OR FITTING. B. SET POSTS PLUMB WITHIN A TOLERANCE OF 1/16 INCH IN 3 FEET. 4. CONTROL OF CORROSION: PREVENT GALVANIC ACTION AND OTHER FORMS OF CORROSION BY

INSULATING METALS AND OTHER MATERIALS FROM DIRECT CONTACT WITH INCOMPATIBLE MATERIALS. ADJUST RAILINGS BEFORE ANCHORING TO ENSURE MATCHING ALIGNMENT AT ABUTTING JOINTS. 6. FASTENING TO IN-PLACE CONSTRUCTION: USE ANCHORAGE DEVICES AND FASTENERS WHERE NECESSARY FOR SECURING RAILINGS AND FOR PROPERLY TRANSFERRING LOADS TO IN-PLACE CONSTRUCTION. . PROTECT FINISHES OF RAILINGS FROM DAMAGE DURING CONSTRUCTION PERIOD WITH TEMPORARY

PROTECTIVE COVERINGS APPROVED BY RAILING MANUFACTURER. REMOVE PROTECTIVE COVERINGS AT

TIME OF SUBSTANTIAL COMPLETION.

A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS WITH PLANS ELEVATIONS AND SEECTIONS INDICATING MEMBER SIZES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS, AND CONNECTION DETAILS. INCLUDE DETAILS OF EQUIPMENT ASSEMBLIES. INDICATE DIMENSIONS, WEIGHTS, LOADS, REQUIRED CLEARANCES, METHOD OF FIELD ASSEMBLY, COMPONENTS, AND LOCATION AND SIZE OF EACH FIELD CONNECTION. SAMPLES FOR INITIAL SELECTION: FOR EACH TYPE OF EXPOSED FINISH. 1. DELEGATED-DESIGN SUBMITTAL: FOR HANDRAIL AND GUARDRAIL SYSTEMS, INCLUDING ANALYSIS DATA

SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR B. <u>DESIGN</u>: METAL TUBE RAILINGS SHALL BE DESIGNED BY FABRICATOR TO SUPPORT CODE-REQUIRED LOADING AND TO MATCH THE CONFIGURATIONS INDICATED IN THE CONSTRUCTION DOCUMENTS. SEE DRAWINGS FOR REQUIRED RAILING ELEVATIONS.

1. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH METAL FABRICATIONS BY FIELD MEASUREMENTS BEFORE FABRICATION. . PERFORMANCE REQUIREMENTS 1. DELEGATED DESIGN: ENGAGE A QUALIFIED PROFESSIONAL ENGINEER, TO DESIGN RAILINGS, INCLUDING ATTACHMENT TO BUILDING CONSTRUCTION.

2. STRUCTURAL PERFORMANCE: RAILINGS, INCLUDING ATTACHMENT TO BUILDING CONSTRUCTION, SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED: HANDRAILS AND TOP RAILS OF GUARDS A. UNIFORM LOAD OF 50 LBF/ FT. (0.73 KN/M) APPLIED IN ANY DIRECTION.

B. CONCENTRATED LOAD OF 200 LBF (0.89 KN) APPLIED IN ANY DIRECTION. C. UNIFORM AND CONCENTRATED LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY. 1. FASTENERS FOR ANCHORING RAILINGS TO OTHER CONSTRUCTION: SELECT FASTENERS OF TYPE GRADE, AND CLASS REQUIRED TO PRODUCE CONNECTIONS SUITABLE FOR ANCHORING RAILINGS TO

OTHER TYPES OF CONSTRUCTION INDICATED AND CAPABLE OF WITHSTANDING DESIGN LOADS. 1. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH SURFACES, WITHOUT SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, STAINS, DISCOLORATIONS, OR BLEMISHES. 2. BRACKETS, FLANGES, AND ANCHORS: CAST OR FORMED METAL OF SAME TYPE OF MATERIAL AND FINISH

AS SUPPORTED RAILS UNLESS OTHERWISE INDICATED. 3. PIPE: ASTM A 53/A 53M, TYPE F OR TYPE S, GRADE A, STANDARD WEIGHT (SCHEDULE 40), UNLESS ANOTHER GRADE AND WEIGHT ARE REQUIRED BY STRUCTURAL LOADS.

1. GENERAL: FABRICATE RAILINGS TO COMPLY WITH REQUIREMENTS INDICATED FOR DESIGN, DIMENSIONS, MEMBER SIZES AND SPACING, DETAILS, FINISH, AND ANCHORAGE, BUT NOT LESS THAN THAT REQUIRED TO SUPPORT STRUCTURAL LOADS. 2. CUT, DRILL, AND PUNCH ALUMINUM CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A RADIUS OF APPROXIMATELY 1/32 INCH (1 MM) UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES.

3. FABRICATE CONNECTIONS THAT ARE EXPOSED TO WEATHER IN A MANNER THAT EXCLUDES WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE. 4. WELDED CONNECTIONS: USE FULLY WELDED JOINTS FOR PERMANENTLY CONNECTING RAILING COMPONENTS. COMPLY WITH REQUIREMENTS FOR WELDED CONNECTIONS IN "FABRICATION" ARTICLE

WHETHER WELDING IS PERFORMED IN THE SHOP OR IN THE FIELD. FOR NONGALVANIZED-STEEL RAILINGS, PROVIDE NONGALVANIZED FERROUS-METAL FITTINGS, BRACKETS FASTENERS, AND SLEEVES; HOWEVER, GALVANIZE ANCHORS TO BE EMBEDDED IN EXTERIOR CONCRETE 2. PREPARATION FOR SHOP PRIMING: PREPARE UNCOATED FERROUS-METAL SURFACES TO COMPLY WITH SSPC-SP 3, "POWER TOOL CLEANING." 3. PRIMER APPLICATION: APPLY SHOP PRIMER TO PREPARED SURFACES OF RAILINGS UNLESS OTHERWISE INDICATED. COMPLY WITH REQUIREMENTS IN SSPC-PA 1, "SHOP, FIELD, AND MAINTENANCE PAINTING OF

STEEL," FOR SHOP PAINTING. PRIMER NEED NOT BE APPLIED TO SURFACES TO BE EMBEDDED IN CONCRETE OR MASONRY. 1. SUPPLY COMPONENTS REQUIRED FOR ANCHORAGE FABRICATED FROM SAME MATERIAL AND FINISH AS FABRICATION UNLESS NOTED OTHERWISE. SHIM AND LEVEL FABRICATIONS AS NECESSARY. COAT CONCEALED SURFACES OF FABRICATIONS IN CONTACT WITH CONCRETE, GROUT, MASONRY, WOOD, OR DISSIMILAR METALS WITH BITUMINOUS PAINT.

2. FIT EXPOSED CONNECTIONS TOGETHER TO FORM TIGHT, HAIRLINE JOINTS. 3. PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING RAILINGS. SET RAILINGS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; MEASURED FROM ESTABLISHED LINES AND LEVELS AND FREE OF RACK. A. DO NOT WELD, CUT, OR ABRADE SURFACES OF RAILING COMPONENTS THAT ARE COATED OR FINISHED AFTER FABRICATION AND THAT ARE INTENDED FOR FIELD CONNECTION BY MECHANICAL

OR OTHER MEANS WITHOUT FURTHER CUTTING OR FITTING. B. SET POSTS PLUMB WITHIN A TOLERANCE OF 1/16 INCH IN 3 FEET 4. CONTROL OF CORROSION: PREVENT GALVANIC ACTION AND OTHER FORMS OF CORROSION BY INSULATING METALS AND OTHER MATERIALS FROM DIRECT CONTACT WITH INCOMPATIBLE MATERIALS. ADJUST RAILINGS BEFORE ANCHORING TO ENSURE MATCHING ALIGNMENT AT ABUTTING JOINTS.

6. FASTENING TO IN-PLACE CONSTRUCTION: USE ANCHORAGE DEVICES AND FASTENERS WHERE NECESSARY FOR SECURING RAILINGS AND FOR PROPERLY TRANSFERRING LOADS TO IN-PLACE

7. PROTECT FINISHES OF RAILINGS FROM DAMAGE DURING CONSTRUCTION PERIOD WITH TEMPORARY

TIME OF SUBSTANTIAL COMPLETION.

PROTECTIVE COVERINGS APPROVED BY RAILING MANUFACTURER. REMOVE PROTECTIVE COVERINGS AT

A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS WITH PLANS ELEVATIONS AND SECTIONS INDICATING MEMBER SIZES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS, AND CONNECTION DETAILS. INDICATE RAILING SYSTEM ELEVATIONS AND SECTIONS, DETAILS OF PROFILE, DIMENSIONS, SIZES, CONNECTION ATTACHMENTS, ANCHORAGE, SIZE AND TYPE OF FASTENERS, AND ACCESSORIES. INDICATE ANCHOR AND JOINT LOCATIONS, BRAZED CONNECTIONS, TRANSITIONS, AND TERMINATIONS. 1. DELEGATED-DESIGN SUBMITTAL: FOR HANDRAIL AND GUARDRAIL SYSTEMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR

. DESIGN: METAL TUBE RAILINGS SHALL BE DESIGNED BY FABRICATOR TO SUPPORT CODE-REQUIRED LOADING AND TO MATCH THE CONFIGURATIONS INDICATED IN THE CONSTRUCTION DOCUMENTS. SEE DRAWINGS FOR REQUIRED RAILING ELEVATIONS.

1. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH METAL FABRICATIONS BY FIELD MEASUREMENTS BEFORE FABRICATION.

1. RAILING SYSTEMS - GENERAL: FACTORY- OR SHOP-FABRICATED IN DESIGN INDICATED, TO SUIT SPECIFIC PROJECT CONDITIONS, AND FOR PROPER CONNECTION TO BUILDING STRUCTURE, AND IN LARGEST PRACTICAL SIZES FOR DELIVERY TO SITE. A. PERFORMANCE REQUIREMENTS: DESIGN AND FABRICATE RAILINGS AND ANCHORAGES TO RESIST

> TO BE APPLIED SIMULTANEOUSLY. 1. LATERAL FORCE: 75 LB MINIMUM, AT ANY POINT, WHEN TESTED IN ACCORDANCE WITH ASTM F935 2. DISTRIBUTED LOAD: 50 LB/FT MINIMUM. APPLIED IN ANY DIRECTION AT THE TOP OF THE HANDRAIL, WHEN TESTED IN ACCORDANCE WITH ASTM E935.

THE FOLLOWING LOADS WITHOUT FAILURE, DAMAGE, OR PERMANENT SET; LOADS DO NOT NEED

3. CONCENTRATED LOADS ON INTERMEDIATE RAILS: 50 PSF, MINIMUM. 4. CONCENTRATED LOAD: 200 LBS MINIMUM, APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE HANDRAIL SYSTEM, WHEN TESTED IN ACCORDANCE WITH ASTM E935. B. ASSEMBLY: JOIN LENGTHS, SEAL OPEN ENDS, AND CONCEAL EXPOSED MOUNTING BOLTS AND NUTS USING SLIP-ON NON-WELD MECHANICAL FITTINGS, FLANGES, ESCUTCHEONS, AND WALL

C. JOINTS: TIGHTLY FITTED AND SECURED, MACHINED SMOOTH WITH HAIRLINE SEAMS. D. FIELD CONNECTIONS: PROVIDE SLEEVES TO ACCOMMODATE SITE ASSEMBLY AND INSTALLATION. 2. METAL TUBE RAILING: ENGINEERED, POST SUPPORTED RAILING SYSTEM WITH METAL INFILL. A. WALL MOUNTED COMPONENTS: COMPONENTS NECESSARY TO SUPPORT RAILING WITH 1-1/2 INCH CLEARANCE FROM WALL, AND AS FOLLOWS: 1. UNDERSLUNG SUPPORT BRACKETS: SUPPORTS AT 60 INCHES. MAXIMUM.

2. WALL RETURN WITHOUT SUPPORT: TERMINATES 1/4 INCH FROM SIDE WALL. B. HANDRAIL BRACKETS: SAME METAL AS RAILING. C. INFILL AT PICKET RAILINGS: VERTICAL PICKETS. HORIZONTAL SPACING: MAXIMUM 4 INCHES ON CENTER.

2. MATERIAL: SOLID STEEL BAR. SIZE: 3/4 INCH IPS / 1.05 INCH OD 4. TOP MOUNTING: MECHANICALLY ATTACHED BY INTERNAL FITTINGS. 5. BOTTOM MOUNTING: WELDED TO TOP SURFACE OF STRINGER.

D. INFILL AT PIPE RAILINGS: PIPE OR TUBE RAILS SLOPED PARALLEL TO STAIR. 1. OUTSIDE DIAMETER: 1 INCH. 2. MATERIAL: STEEL PIPE OR TUBE, ROUND.

B. JOINTING: WELDED AND GROUND SMOOTH AND FLUSH. E. INFILL AT MESH RAILINGS: METAL MESH PANELS. 1. METAL INFILL PANELS: WELDED WIRE MESH; 0.120 INCH DIAMETER STEEL WIRE, 2 INCH BY 2 INCH PATTERN AND 0.125 INCH THICK STEEL SHEET HEM WITH MANUFACTURER'S STANDARD FACTORY APPLIED COATING. CARBON STEEL PANEL FINISH: MANUFACTURER'S STANDARD FACTORY FINISH; COMPLY

WITH AAMA 2604 F. INFILL AT CABLE RAILINGS: STAINLESS STEEL CABLE. MATERIAL: ASTM A666, TYPE 304. 2. MOUNTING: MECHANICALLY ATTACHED TO FRAME.

1. 1-1/2 INCH DIAMETER STAINLESS STEEL.

G. CUSTOM FABRICATED INFILL AT METAL TUBE RAILINGS:. 1. MATERIAL: SOLID STEEL BAR. MATERIAL: STEEL TUBE 3. TOP MOUNTING: WELDED TO UNDERSIDE OF TOP RAIL

4. BOTTOM MOUNTING: WELDED TO TOP SURFACE OF STRINGER. H. END AND INTERMEDIATE POSTS: AS SHOWN ON DRAWINGS. HORIZONTAL SPACING: AS INDICATED ON DRAWINGS. 2. MOUNTING: WELDED.

1. STEEL COMPONENTS:

WALL-MOUNTED HANDRAIL

A. SECTIONS, SHAPES, PLATE AND BAR: ASTM A36/A36M. B. TUBING: ASTM A501/A501M STRUCTURAL TUBING, ROUND AND SHAPES AS INDICATED. C. PIPE: ASTM A53/A53M GRADE B SCHEDULE 40, BLACK FINISH.

D. UNGALVANIZED STEEL SHEET: HOT- OR COLD-ROLLED, EXCEPT USE COLD-ROLLED WHERE FINISHED WORK WILL BE EXPOSED TO VIEW. E. GALVANIZED STEEL SHEET: ASTM A653/A653M, STRUCTURAL STEEL (SS) GRADE 33/230 WITH G40/Z120 COATING.

F. BOLTS, NUTS, AND WASHERS: ASTM F3125/F3125M, TYPE 1, AND GALVANIZED TO ASTM A153/A153M WHERE CONNECTING GALVANIZED COMPONENTS. G. WELDING MATERIALS: AWS D1.1/D1.1M; TYPE REQUIRED FOR MATERIALS BEING WELDED. 1. NON-WELD MECHANICAL FITTINGS FOR STAINLESS STEEL RAILINGS: SLIP-ON, GALVANIZED MALLEABLE IRON BOLTS OR SCREW FASTENERS. CASTINGS, FOR SCHEDULE 40 PIPE, WITH FLUSH SETSCREWS FOR

TIGHTENING BY STANDARD HEX WRENCH, NO 2. WELDING FITTINGS: FACTORY- OR SHOP-WELDED FROM MATCHING PIPE OR TUBE; JOINTS AND SEAMS 3. ANCHORS AND FASTENERS: PROVIDE ANCHORS AND OTHER MATERIALS AS REQUIRED TO ATTACH TO STRUCTURE, MADE OF SAME MATERIALS AS RAILING COMPONENTS UNLESS OTHERWISE INDICATED; WHERE EXPOSED FASTENERS ARE UNAVOIDABLE PROVIDE FLUSH COUNTERSUNK FASTENERS.

A. EXPOSED FASTENERS: NO EXPOSED BOLTS OR SCREWS. 1. COMPLY WITH ALL DRAWINGS AND WRITTEN INSTRUCTIONS. 2. INSTALL COMPONENTS PLUMB AND LEVEL, ACCURATELY FITTED, FREE FROM DISTORTION OR DEFECTS AND WITH TIGHT JOINTS, EXCEPT WHERE NECESSARY FOR EXPANSION.

<u>DIVISION 6 - WOOD AND PLASTICS</u>

3. ANCHOR SECURELY TO STRUCTURE.

06 1000 - ROUGH CARPENTRY 1. PROVIDE SUFFICIENT FIRE RETARDANT TREATED WOOD BLOCKING AT ALL STUDS FOR SECURING OF WALL & CEILING ITEMS, WHETHER FURNISHED BY OWNER OR CONTRACTOR.

CONCEALED WOOD IS TO BE FIRE RETARDANT TREATED UNLESS NOTED OTHERWISE. 3. PRESERVATIVE TREATED LUMBER IS REQUIRED FOR ALL ITEMS TO REMAIN IN CONTACT WITH CONCRETE OR MASONRY TO CONFORM TO AWPA STANDARD 5. 4. PLYWOOD SHALL BE CD GRADE APA FIR OR YELLOW PINE. ALL PLY-WOOD TO BE FIRE RATED WHERE WALLS ARE

INDICATED AS RATED CONSTRUCTION. 5. BLOCKING SHALL BE CLOSELY FITTED, ACCURATELY SET TO REQUIRED LINES & LEVELS, SECURELY CONNECTED & RIGIDLY FIXED IN PLACE, USING NAILS, SCREWS, &/OR BOLTS AS INDICATED OR REQUIRED BY GOOD PRACTICE AND MANUFACTURER'S RECOMMENDATIONS.

A. <u>SUBMITTALS</u>: SAMPLES OF FINISH MATERIALS, CATALOG CUTS OF HARDWARE, AND SHOP DRAWINGS INCLUDING DIMENSIONED PLANS, ELEVATIONS, AND SECTIONS. B. **QUALITY STANDARD**: ARCHITECTURAL WOODWORK INSTITUTE'S "ARCHITECTURAL WOODWORK QUALITY

 MATERIALS:
 SOFTWOOD LUMBER: MAXIMUM MOISTURE CONTENT OF 6 PERCENT; WITH VERTICAL GRAIN, OF QUALITY SUITABLE FOR SCHEDULED FINISH. 2. HARDWOOD LUMBER: MAXIMUM MOISTURE CONTENT OF 6 PERCENT; WITH VERTICAL GRAIN, OF QUALITY SUITABLE FOR SCHEDULED FINISH. 3. SHEET MATERIALS: SOFTWOOD PLYWOOD, EXPOSED TO VIEW: FACE SPECIES AS INDICATED, PLAIN

SAWN, MEDIUM DENSITY FIBERBOARD CORE; PS 1 GRADE A-B, GLUE TYPE AS RECOMMENDED FOR I. COMPLETE FABRICATION BEFORE SHIPPING TO PROJECT SITE TO MAXIMUM EXTENT FEASIBLE. DISASSEMBLE ONLY AS NEEDED FOR SHIPPING AND INSTALLING. WHERE NECESSARY FOR FITTING AT PROJECT SITE, PROVIDE FOR SCRIBING AND TRIMMING. 2. BACKOUT AND GROOVE BACKS OF FLAT MEMBERS, KERF BACKS OF OTHER WIDE, FLAT MEMBERS,

EXCEPT WHERE ENDS WILL BE EXPOSED IN FINISHED WORK. 1. DO NOT DELIVER OR INSTALL WOODWORK UNTIL BUILDING IS ENCLOSED, WET WORK IS COMPLETED, HVAC IS OPERATING, AND WOODWORK IS CONDITIONED TO PREVAILING CONDITIONS OF SPACE WHERE INSTALLED. MAINTAIN TEMPERATURE BETWEEN 55 F. AND 75 F. FOR 72 HOURS BEFORE BEGINNING INSTALLATION AND FOR DURATION OF PROJECT.

TOLERANCE OF 1 "/96" AND TO COMPLY WITH REFERENCED QUALITY STANDARD FOR GRADE SPECIFIED. 3. SCRIBE AND CUT WOODWORK TO FIT ADJOINING WORK, SEAL CUT SURFACES, AND REPAIR DAMAGED 4. INSTALL TRIM WITH MINIMUM NUMBER OF JOINTS POSSIBLE USING FULL-LENGTH PIECES TO GREATEST EXTENTPOSSIBLE, STAGGER JOINTS IN ADJACENT AND RELATED MEMBERS.

2. INSTALL WOODWORK LEVEL AND PLUMB AND SHIM AS REQUIRED WITH CONCEALED SHIMS TO 8

5. LUMBER FOR TRANSPARENT FINISH (STAINED OR CLEAR): USE PIECES MADE OF SOLID LUMBER STOCK. 6. LUMBER FOR PAINTED FINISH: AT CONTRACTOR'S OPTION, USE PIECES WHICH ARE EITHER GLUED-UP OR MADE OF SOLID LUMBER STOCK. 7. DISCARD UNITS OF MATERIAL WHICH ARE UNSOUND, WARPED, BOWED, TWISTED, IMPROPERLY TREATED, NOT ADEQUATELY SEASONED OR TOO SMALL TO FABRICATE WORK WITH MINIMUM OF JOINTS OR OPTIMUM JOINTING ARRANGEMENTS, OR WHICH ARE DEFECTIVELY MANUFACTURED WITH RESPECT TO

SURFACES, SIZES OR PATTERNS 8. INSTALL THE WORK PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS. SHIM AS REQUIRED USING CONCEALED SHIMS. 9. SCRIBE AND CUT WORK TO FIT ADJOINING WORK, AND REFINISH CUT SURFACES OR REPAIR DAMAGED

12. FINISH WORK SHALL BE SMOOTH, FREE FROM ABRASION, TOOL MARKS, RAISED GRAIN MARKINGS, OR

FINISH AT CUTS. 0. SAND WORK SMOOTH AND SET EXPOSED NAILS AND SCREWS 11. APPLY WOOD FILLER IN EXPOSED NAIL AND SCREW INDENTATIONS.

SIMILAR DEFECTS ON EXPOSED SURFACES.

06 4250 - INTERIOR ARCHITECTURAL WOODWORK

A. <u>SUBMITTALS</u>: SAMPLES OF FINISH MATERIALS, CATALOG CUTS OF HARDWARE, AND SHOP DRAWINGS INCLUDING DIMENSIONED PLANS, ELEVATIONS, AND SECTIONS. INDICATE COMPONENT PROFILES, FASTENING METHODS,

1. SCALE OF DRAWINGS: 1-1/2 INCH TO 1 FOOT, MINIMUM. PROVIDE THE INFORMATION REQUIRED BY AWI/AWMAC/WI (AWS) OR AWMAC/WI (NAAWS).

3. SAMPLES: SUBMIT ACTUAL SAMPLES OF ARCHITECTURAL CABINET CONSTRUCTION, MINIMUM 12 INCHES SQUARE, ILLUSTRATING PROPOSED CABINET, COUNTERTOP, AND SHELF UNIT SUBSTRATE AND FINISH. 4. SHOW LOCATIONS AND SIZES OF FURRING, BLOCKING, AND HANGING STRIPS, INCLUDING CONCEALED BLOCKING AND REINFORCEMENT SPECIFIED IN OTHER SECTIONS. B. QUALITY STANDARD: ARCHITECTURAL WOODWORK INSTITUTE'S "ARCHITECTURAL WOODWORK QUALITY

C. QUALITY ASSURANCE: FABRICATOR QUALIFICATIONS: COMPANY SPECIALIZING IN FABRICATING THE PRODUCTS SPECIFIED IN THIS SECTION WITH MINIMUM FIVE YEARS OF DOCUMENTED EXPERIENCE.

PROJECT CONDITIONS 1. ENVIRONMENTAL LIMITATIONS: DO NOT DELIVER OR INSTALL WOODWORK UNTIL BUILDING IS ENCLOSED, WET WORK IS COMPLETE, AND HVAC SYSTEM IS OPERATING AND MAINTAINING TEMPERATURE BETWEEN 60 AND 90 DEG F (16 AND 32 DEG C) AND RELATIVE HUMIDITY BETWEEN 25 AND 55 PERCENT DURING THE REMAINDER OF THE CONSTRUCTION PERIOD. 2. FIELD MEASUREMENTS: WHERE WOODWORK IS INDICATED TO FIT TO OTHER CONSTRUCTION, VERIFY DIMENSIONS OF OTHER CONSTRUCTION BY FIELD MEASUREMENTS BEFORE FABRICATION, AND INDICATE MEASUREMENTS ON SHOP DRAWINGS. COORDINATE FABRICATION SCHEDULE WITH CONSTRUCTION PROGRESS TO AVOID DELAYING THE WORK.

MEASUREMENTS BEFORE BEING ENCLOSED, AND INDICATE MEASUREMENTS ON SHOP DRAWINGS. 1. GENERAL: PROVIDE MATERIALS THAT COMPLY WITH REQUIREMENTS OF AWI'S QUALITY STANDARD FOR EACH TYPE OF WOODWORK AND QUALITY GRADE SPECIFIED, UNLESS OTHERWISE INDICATED. 2. INTERIOR WOODWORK GRADE: UNLESS OTHERWISE INDICATED, PROVIDE CUSTOM-GRADE INTERIOR

3. LOCATE CONCEALED FRAMING, BLOCKING, AND REINFORCEMENTS THAT SUPPORT WOODWORK BY FIELD

OODWORK COMPLYING WITH REFERENCED QUALITY STANDARD. 3. PRODUCTS: COMPLY WITH DRAWING DETAILS AND SPECIES OF WOOD OR LAMINATED PRODUCTS 4. COMPONENTS AND THEIR ASSEMBLY SHALL MEET STRUCTURAL PERFORMANCE OF INTENDED PRODUCT

5. IN THE ABSENCE OF SPECIFIED THICKNESS VALUES, ALL COMPONENTS AND ASSEMBLIES SHALL MEET THE MINIMUM THICKNESS AND MATERIAL REQUIREMENTS OF THOSE TESTED AND USED TO ESTABLISH THE STRUCTURAL PERFORMANCE VALUES. 6. FURRING, BLOCKING, SHIMS, AND HANGING STRIPS: SOFTWOOD OR HARDWOOD LUMBER, KILN DRIED TO LESS THAN 15 PERCENT MOISTURE CONTENT.

ANCHORS: SELECT MATERIAL, TYPE, SIZE, AND FINISH REQUIRED FOR EACH SUBSTRATE FOR SECURE ANCHORAGE.PROVIDE NONFERROUS-METAL OR HOT-DIP GALVANIZED ANCHORS AND INSERTS ON INSIDE FACE OF EXTERIOR WALLS AND ELSEWHERE AS REQUIRED FOR CORROSION RESISTANCE. PROVIDE TOOTHED-STEEL OR LEADEXPANSION SLEEVES FOR DRILLED-IN-PLACE ANCHORS. 8. ADHESIVES, GENERAL: ADHESIVES SHALL NOT CONTAIN UREA FORMALDEHYDE.

1. BEFORE INSTALLATION, CONDITION WOODWORK TO AVERAGE PREVAILING HUMIDITY CONDITIONS IN INSTALLATION AREAS. 2. VERIFY ADEQUACY OF BACKING AND SUPPORT FRAMING.

6. USE CONCEALED JOINT FASTENERS TO ALIGN AND SECURE ADJOINING CABINET UNITS.

INSTALL LEVEL AND PLUMB (INCLUDING TOPS) TO A TOLERANCE OF 1/8 INCH IN 96 INCHES (3 MM IN 2400 4. VERIFY LOCATION AND SIZES OF UTILITY ROUGH-IN ASSOCIATED WITH WORK OF THIS SECTION. USE FIXTURE ATTACHMENTS IN CONCEALED LOCATIONS FOR WALL MOUNTED COMPONENTS.

. CAREFULLY SCRIBE CASEWORK ABUTTING OTHER COMPONENTS, WITH MAXIMUM GAPS OF 1/32 INCH. DO

3. INSTALL WOODWORK LEVEL, PLUMB, TRUE, AND STRAIGHT. SHIM AS REQUIRED WITH CONCEALED SHIMS.

NOT USE ADDITIONAL OVERLAY TRIM FOR THIS PURPOSE. REFINISH CUT SURFACES, AND REPAIR DAMAGED FINISH AT CUTS. 8. ANCHOR WOODWORK TO ANCHORS OR BLOCKING BUILT IN OR DIRECTLY ATTACHED TO SUBSTRATES. SECURE WITH COUNTERSUNK, CONCEALED FASTENERS AND BLIND NAILING AS REQUIRED FOR COMPLETE INSTALLATION. USE FINE FINISHING NAILS OR FINISHING SCREWS FOR EXPOSED FASTENING, COUNTERSUNK AND FILLED FLUSH WITH WOODWORK AND MATCHING FINAL FINISH IF TRANSPARENT FINISH IS INDICATED

9. REPAIR DAMAGED AND DEFECTIVE WOODWORK, WHERE POSSIBLE, TO ELIMINATE FUNCTIONAL AND

VISUAL DEFECTS; WHERE NOT POSSIBLE TO REPAIR, REPLACE WOODWORK. ADJUST JOINERY FOR UNIFORM APPEARANCE 10. CLEAN WOODWORK ON EXPOSED AND SEMIEXPOSED SURFACES. TOUCH UP SHOP-APPLIED FINISHES TO RESTORE DAMAGED OR SOILED AREAS.

**DIVISION 7 - THERMAL AND MOISTURE PROTECTION** 

BECOME PART OF THE BUILT ASSEMBLY.

D. JOINT-SEALANT COLOR.

07 8400 - FIRESTOPPING A. SUBMITTALS: PRODUCT DATA: PROVIDE DATA ON PRODUCT CHARACTERISTICS, PERFORMANCE RATINGS, AND B. <u>MANUFACTURERS</u>

1. 3M FIRE PROTECTION PRODUCTS: HTTPS://WWW.3M.COM/3M/EN\_US/P/C/BUILDING-MATERIALS/FIREPROTECTION/ 2. HILTI, INC: HTTPS://WWW.HILTI.COM/C/CLS\_FIRESTOP\_PROTECTION\_7131 1. FIRESTOPPING MATERIALS: ANY MATERIALS MEETING REQUIREMENTS.

MATERIALS AS REQUIRED FOR TESTED FIRESTOPPING ASSEMBLY. 3. FIRE RATINGS: REFER TO DRAWINGS FOR REQUIRED SYSTEMS AND RATINGS. D. <u>ASSEMBLY REQUIREMENTS</u>: 1. HEAD-OF-WALL JOINT SYSTEM FIRESTOPPING AT JOINTS BETWEEN FIRE-RATED WALL ASSEMBLIES AND NON-RATED HORIZONTAL ASSEMBLIES: USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E2837 TO HAVE FIRE RESISTANCE F RATING EQUAL TO REQUIRED FIRE RATING OF FLOOR OR WALL, WHICHEVER

FIRE-RATED: USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E1966 OR UL 2079 TO HAVE FIRE

2. PRIMERS, SLEEVES, FORMS, INSULATION, PACKING, STUFFING, AND ACCESSORIES: PROVIDE TYPE OF

RESISTANCE "F" RATING EQUAL TO REQUIRED FIRE RATING OF THE ASSEMBLY IN WHICH THE JOINT 3. THROUGH PENETRATION FIRESTOPPING: USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E814 TO HAVE FIRE RESISTANCE F RATING EQUAL TO REQUIRED FIRE RATING OF PENETRATED ASSEMBLY.

1. INSTALLATIONS SHALL CONFORM TO UL REQUIREMENTS OF THE ASSEMBLY WHICH FIRESTOPPING IS TO

2. FLOOR-TO-FLOOR, WALL-TO-WALL, AND WALL-TO-FLOOR JOINTS, EXCEPT PERIMETER, WHERE BOTH ARE

A. <u>SUBMITTALS</u>: PRODUCT DATA, AND SCHEDULE OF LOCATIONS FOR EACH TYPE OF SEALANT SUBMITTED.

1. JOINT-SEALANT SCHEDULE: INCLUDE THE FOLLOWING INFORMATION: A. JOINT-SEALANT APPLICATION, JOINT LOCATION, AND DESIGNATION. B. JOINT-SEALANT MANUFACTURER AND PRODUCT NAME. C. JOINT-SEALANT FORMULATION.

ENVIRONMENTAL LIMITATIONS: DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR COMPATIBILITY: PROVIDE JOINT SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER SERVICE AND APPLICATION CONDITIONS.

1. COLORS OF EXPOSED JOINT SEALANTS: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE. INTERIOR JOINTS IN CERAMIC TILE AND OTHER HARD SURFACES IN KITCHENS, TOILET ROOMS, AND AROUND PLUMBING FIXTURES: SINGLE COMPONENT, MILDEW-RESISTANT SILICONE SEALANT, ASTM C 920, TYPE S; GRADE NS, CLASS 25; USES NT, G, A, AND O; FORMULATED WITH FUNGICIDE.

2. INTERIOR JOINTS AROUND PERIMETERS OF DOORS AND FRAMES: LATEX SEALANT, SINGLE COMPONENT, NONSAG, MILDEW-RESISTANT, PAINTABLE, ACRYLIC EMULSION SEALANT COMPLYING WITH ASTM C 834. ACOUSTICAL SEALANT FOR EXPOSED INTERIOR JOINTS: NONSAG, PAINTABLE, NONSTAINING, LATEX SEALANT COMPLYING WITH ASTM C 834. ACOUSTICAL SEALANT FOR CONCEALED JOINTS: NONDRYING, NONHARDENING, NONSKINNING, NONSTAINING. GUNNABLE, SYNTHETIC-RUBBER SEALANT RECOMMENDED FOR SEALING INTERIOR CONCEALED JOINTS TO

5. EXTERIOR CONCRETE PANELS, NATURAL STONES, MASONRY, ALUMINUM CURTAINWALLS, METAL PANELS AND WINDOW PERIMETERS. A. BASIS OF DESIGN PRODUCTS: TREMCO INCORPORATED; SPECTREM 1.

REDUCE TRANSMISSION OF AIRBORNE SOUND.

 DOW CORNING CORPORATION; 790. PECORA CORPORATION: 890NST 6. EXTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES. ISOLATION AND CONTRACTION JOINTS IN CAST-IN-PLACE CONCRETE SLABS. URETHANE JOINT SEALANT: MULTICOMPONENT, NONSAG, TRAFFIC GRADE, CLASS 7. FIRESTOP SEALANTS:INSTALL AT FIRE RATED ASSEMBLIES AND AS DIRECTED WITHIN UL REFERENCES

A. BASIS OF DESIGN PRODUCTS: HILTI

AT BACK OF JOINT.

GENERAL: PROVIDE SEALANT BACKINGS OF MATERIAL THAT ARE NONSTAINING: ARE COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS; AND ARE APPROVED FOR APPLICATIONS INDICATED BY SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING. 2. CYLINDRICAL SEALANT BACKINGS: ASTM C 1330, TYPE C (CLOSED-CELL MATERIAL WITH A SURFACE SKIN), AND OF SIZE AND DENSITY TO CONTROL SEALANT DEPTH AND OTHERWISE CONTRIBUTE TO PRODUCING

3. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT

4. MANUFACTURER FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT. PROVIDE SELF-ADHESIVE TAPE WHERE APPLICABLE. <u>MISCELLANEOUS MATERIALS</u> PRIMER: MATERIAL RECOMMENDED BY JOINT-SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION

SUBSTRATE TESTS AND FIELD TESTS. 2. CLEANERS FOR NONPOROUS SURFACES: CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR HARMING JOINT SUBSTRATES AND ADJACENT NONPOROUS SURFACES IN ANY WAY, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS TO JOINT SUBSTRATES. . BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MFR. FOR

PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES

OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT-SEALANT-

4. MASKING TAPE: NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS. INSTALLATION: COMPLY WITH ASTM C 1193; ASTM C 919 FOR ACOUSTICAL JOINTS; AND AS FOLLOWS: REMOVE ALL LOOSE MATERIAL, CLEAN AND PRIME JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, AND PROTECT ADJACENT SURFACES.

3. INSTALL SEALANT TOOLED CONCAVE, FREE OF AIR POCKETS, FOREIGN EMBEDDED MATTER, RIDGES, AND

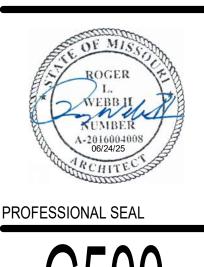
SAGS, AND PROTECT UNTIL FULLY CURED. SEALANT WITH DUST AND DEBRIS EMBEDDED IN SURFACE SHALL

2. INSTALL BOND-BREAKER TAPE WHERE JOINT BACKINGS ARE NOT USED.

CONSTRUCTION As Noted on Plans Review

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REVISION DATES:



**SPECIFICATIONS** 

COLLINS WEBB #: 24114

POSSIBLE DATE PARTICULARLY WHERE ACCEPTANCE OF HARDWARE SCHEDULE MUST PRECEDE FABRICATION OF OTHER WORK WHICH IS CRITICAL IN THE PROJECT CONSTRUCTION SCHEDULE. INCLUDE WITH SCHEDULE SHOP DRAWINGS OF OTHER WORK AFFECTED BY BUILDERS HARDWARE, AND OTHER INFORMATION ESSENTIAL TO THE COORDINATE REVIEW OF HARDWARE SCHEDULE. . KEYING SCHEDULE. SUBMIT SEPARATE DETAILED SCHEDULE INDICATING CLEARLY HOW THE OWNER'S FINAL INSTRUCTIONS ON KEYING OF LOCKS HAS BEEN FULFILLED. ALL KEYING SHALL BE COORDINATED

PRODUCTS: COORDINATE FINAL PRODUCT SELECTION AND SPEC. WITH THE CLIENT/OWNER PRIOR TO INSTALLATION.

INSTALLATION MOUNT HARDWARE UNITS AT HEIGHTS INDICATED IN "RECOMMENDED LOCATIONS FOR BUILDERS HARDWARE FOR STANDARD STEEL DOORS AND FRAMES" BY THE DOOR AND HARDWARE INSTITUTE,

EXCEPT AS SPECIFICALLY INDICATED OR REQUIRED TO COMPLY WITH GOVERNING REGULATIONS, AND EXCEPT AS MAY BE OTHERWISE DIRECTED BY ARCHITECT. MOUNT HARDWARE IN UNITS DESIGNATED FOR USE BY THE HANDICAPPED AT HEIGHTS RECOMMENDED FOR USE BY THE HANDICAPPED. 2. INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. WHEREVER CUTTING AND FITTING IS REQUIRED TO INSTALL HARDWARE ONTO OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY. COORDINATE REMOVAL, STORAGE AND REINSTALLATION OR APPLICATION OF SURFACE PROTECTIONS WITH FINISHING

WORK SPECIFIED IN THE DIVISION 9 SECTIONS. DO NOT INSTALL SURFACE MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE. 3. SET UNITS LEVEL, PLUMB AND TRUE TO LINE AND LOCATION. ADJUST AND REINFORCE THE ATTACHMENT SUBSTRATE AS NECESSARY FOR PROPER INSTALLATION AND OPERATION. 4. DRILL AND COUNTERSINK UNITS WHICH ARE NOT FACTORY PREPARED FOR ANCHORAGE FASTENERS.

SPACE FASTENERS AND ANCHORS IN ACCORDANCE WITH INDUSTRY STANDARDS. 5. METAL THRESHOLDS SHALL BE SET IN A SOLID BED OF NON STAINING THIOKOL BASE CAULKING. 6. ADJUST AND CHECK EACH OPERATING ITEM OF HARDWARE AND EACH DOOR, TO ENSURE PROPER

7. OR FUNCTION OF EVERY UNIT. REPLACE UNITS WHICH CANNOT BE ADJUSTED TO OPERATE FREELY AND SMOOTHLY AS INTENDED FOR THE APPLICATION MADE. 8. FINAL ADJUSTMENT: WHEREVER HARDWARE INSTALLATION IS MADE MORE THAN ONE MONTH PRIOR TO ACCEPTANCE OR OCCUPANCY OF A SPACE OR AREA, RETURN TO THE WORK DURING THE WEEK PRIOR TO ACCEPTANCE OR OCCUPANCY, AND MAKE FINAL CHECK AND ADJUSTMENT OF ALL HARDWARE ITEMS IN SUCH SPACE OR AREA. CLEAN OPERATING ITEMS AS NECESSARY TO RESTORE PROPER FUNCTION AND FINISH OF HARDWARE AND DOORS. ADJUST DOOR CONTROL DEVICES TO COMPENSATE FOR FINAL OPERATION OF HEATING AND VENTILATING EQUIPMENT.

08 1416 - FLUSH WOOD DOORS . SUBMITTALS: PRODUCT DATA, PREFINISHED DOOR SKIN SAMPLES, AND DOOR SCHEDULE INDICATING DOOR AND RAME SIZES. TYPES, ELEVATIONS, DETAILS, AND HARDWARE WITH DOOR AND HARDWARE NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS. BASIS OF DESIGN: COORDINATE FINAL SELECTION OF DOOR TYPE/MANUF. WITH THE CLIENT/OWNER PRIOR TO

C. <u>DOORS</u>: COORDINATE FINAL SELECTION OF DOOR TYPE/MANUF. WITH THE CLIENT/OWNER PRIOR TO INSTALLATION. 1. FACTORY FIT DOORS TO SUIT FRAME OPENINGS TO COMPLY WITH REFERENCED STANDARD. COMPLY

WITH NFPA 80 FOR FIRE-RESISTANCE RATED DOORS. 2. FACTORY MACHINE DOORS FOR HARDWARE THAT IS NOT SURFACE APPLIED. 3. CUT AND TRIM OPENINGS TO COMPLY WITH REFERENCED STANDARDS.

4. LITE KITS: MATCHING WOOD STOPS 5. FACTORY FINISH DOORS FOR TRANSPARENT FINISH WITH STAIN AND MANUFACTURER'S STANDARD FINISH COMPARABLE TO AWI, SYSTEM TR-4, CONVERSION VARNISH OR AWI SYSTEM TR-6, CATALYZED

1. COMPLY WITH WDMA'S "HOW TO STORE, HANDLE, FINISH, INSTALL, AND MAINTAIN WOOD DOORS" ALIGNED AND FITTED IN FRAMES WITH UNIFORM CLEARANCES. SET IN TWO PIECE W.P. SPLIT JAMB FRAMES WITH 1X4 WOOD CASING.

A. SUBMITTALS: FOR EACH TYPE OF PRODUCT INDICATED. THE CONTRACTOR SHALL PREPARE, AND SUBMIT TO THE ARCHITECT FOR APPROVAL, COMPLETE SHOP DRAWINGS: INCLUDE MIRROR ELEVATIONS, EDGE DETAILS, MIRROR HARDWARE, AND ATTACHMENTS TO OTHER WORK. WARRANTY: SAMPLE OF SPECIAL WARRANTY. B. QUALITY ASSURANCE: VINYL CASEMENT WINDOWS- BASIS OF DESIGN: MI 3500 VINYL SINGLE- HUNG WINDOWS. 1. GLAZING PUBLICATIONS: COMPLY WITH GANA'S "GLAZING MANUAL" AND "MIRRORS, HANDLE WITH

2. SAFETY GLAZING PRODUCTS: FOR MIRRORS, PROVIDE PRODUCTS COMPLYING WITH TESTING REQUIREMENTS IN 16 CFR 1201 FOR CATEGORY II MATERIALS. 3. PRECONSTRUCTION MIRROR MASTIC COMPATIBILITY TEST: SUBMIT MIRROR MASTIC PRODUCTS TO MIRROR MANUFACTURER FOR TESTING TO DETERMINE COMPATIBILITY OF MASTIC WITH MIRROR BACKING AND SUBSTRATES ON WHICH MIRRORS ARE INSTALLED.

WARRANTY: SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MIRROR MANUFACTURER AGREES TO REPLACE MIRRORS THAT DETERIORATE WITHIN SPECIFIED WARRANTY PERIOD. DETERIORATION OF MIRRORS IS DEFINED AS DEFECTS DEVELOPED FROM NORMAL USE THAT ARE NOT ATTRIBUTED TO MIRROR BREAKAGE OR TO MAINTAINING AND CLEANING MIRRORS CONTRARY TO MANUFACTURER'S WRITTEN INSTRUCTIONS. DEFECTS INCLUDE DISCOLORATION, BLACK SPOTS, AND CLOUDING OF THE SILVER FILM. 1. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION. BASIS OF DESIGN: COORDINATE FINAL SELECTION WITH THE CLIENT/OWNER. INSTALL PER ADA REQUIREMENTS.

MIRROR HARDWARE: TOP AND BOTTOM ALUMINUM J CHANNELS: ALUMINUM EXTRUSIONS WITH A RETURN DEEP ENOUGH TO PRODUCE A GLAZING CHANNEL TO ACCOMMODATE MIRRORS OF THICKNESS INDICATED AND IN LENGTHS REQUIRED TO COVER BOTTOM AND TOP EDGES OF EACH MIRROR IN A SINGLE PIECE. FINISH: CLEAR 1. TOP AND BOTTOM MIRROR MOUNTING CLIPS: #277 MIRROR CLIPS AS MANUFACTURED BY KNAPE & VOGT

2. FASTENERS: FABRICATED OF SAME BASIC METAL AND ALLOY AS FASTENED METAL AND MATCHING IT IN FINISHED COLOR AND TEXTURE WHERE FASTENERS ARE EXPOSED. INSTALLATION: GENERAL: EXAMINE SUBSTRATES, OVER WHICH MIRRORS ARE TO BE MOUNTED, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH INSTALLATION TOLERANCES, SUBSTRATE PREPARATION, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.

A. VERIFY COMPATIBILITY WITH AND SUITABILITY OF SUBSTRATES, INCLUDING COMPATIBILITY OF MIRROR MASTIC WITH EXISTING FINISHES OR PRIMERS. B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED INSTALL MIRRORS TO COMPLY WITH MIRROR MANUFACTURER'S WRITTEN INSTRUCTIONS AND WITH

REFERENCED GANA PUBLICATIONS. MOUNT MIRRORS ACCURATELY IN PLACE IN A MANNER THAT AVOIDS DISTORTING REFLECTED IMAGES INSTALL WALL MOUNTED ANNEALED GLASS MIRRORS IN THE APARTMENT UNITS WITH MIRROR CLIPS. ATTACH

MIRROR HARDWARE SECURELY TO MOUNTING SURFACES WITH MECHANICAL FASTENERS INSTALLED WITH ANCHORS OR INSERTS AS APPLICABLE. 3. INSTALL FASTENERS SO HEADS DO NOT IMPOSE POINT LOADS ON BACKS OF MIRRORS.

4. PROTECT MIRRORS FROM BREAKAGE AND CONTAMINATING SUBSTANCES RESULTING FROM CONSTRUCTION

5. MAINTAIN ENVIRONMENTAL CONDITIONS THAT WILL PREVENT MIRRORS FROM BEING EXPOSED TO MOISTURE FROM CONDENSATION OR OTHER SOURCES FOR CONTINUOUS PERIODS OF TIME. WASH EXPOSED SURFACE OF MIRRORS NOT MORE THAN FOUR DAYS BEFORE DATE SCHEDULED FOR INSPECTIONS THAT ESTABLISH DATE OF SUBSTANTIAL COMPLETION. WASH MIRRORS AS RECOMMENDED IN WRITING BY MIRROR MANUFACTURER.

<u>DIVISION 9 - FINISHES</u>

A. <u>STEEL FRAMING MEMBERS</u>: COMPLY WITH ASTM C754 IN DEPTHS AND GAGES AS INDICATED IN THE CONSTRUCTION DRAWINGS AND AS FOLLOWS: 1. STEEL SHEET COMPONENTS: COMPLY WITH ASTM C645 WITH MANUFACTURER'S STANDARD CORROSION-

RESISTANT ZINC COATING. 2. TIE WIRE: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER. .0625" DIAMETER OR DOUBLE STRAND OF .0475" DIAMETER WIRE. 3. WIRE HANGERS: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER. .0162" DIAMETER.

PANEL PRODUCTS: PROVIDE IN THICKNESS AND TYPE INDICATED IN THE CONSTRUCTION DRAWINGS IN MAXIMUM LENGTHS AVAILABLE TO MINIMIZE END-TO-END BUTT JOINTS AND AS FOLLOWS: 1. GYPSUM WALLBOARD: ASTM C 36, TYPE 'X' WITH TAPERED EDGES, SAG-RESISTANT TYPE FOR CEILING 2. WATER-RESISTANT GYPSUM BACKING BOARD: ASTM C 630, TYPE 'X' ON ALL TOILET ROOM AND SHOWER

ROOM WALLS, BEHIND ALL PLUMBING FIXTURES, AND AS INDICATED. 1. TRIM: ASTM 1047, FORMED FROM GALVANIZED OR ALUMINUM COATED STEEL SHEET, ROLLED ZINC, OR

A. OUTSIDE CORNERS: PROVIDE CORNER BEAD UNLESS NOTED OTHERWISE B. EXPOSED PANEL EDGES: PROVIDE LC-BEAD (J-BEAD) UNLESS NOTED OTHERWISE; USE TEAR-

AWAY BEAD WHERE GYP. BD. MEETS WINDOW FRAMES OR CEILING GRID. C. CONTROL JOINTS: PROVIDE WHERE INDICATED OR APPROXIMATELY 30'-0" MAX. CONTACT ARCHITECT FOR LOCATIONS IF NOT INDICATED. 2. SOUND-ATTENUATION BLANKETS: ASTM C 665, TYPE I (UNFACED)

3. ACOUSTICAL SEALANT: COMPLY WITH ASTM C 834, NONSAG, PAINTABLE, NONSTAINING LATEX. 1. FRAMING: COMPLY WITH ASTM C 754 AND ASTM C 840 AND WITH U.S. GYPSUM'S "GYPSUM CONSTRUCTION HANDBOOK" ISOLATE FRAMING FROM BUILDING STRUCTURE TO PREVENT TRANSFER OF LOADING IMPOSED BY STRUCTURAL MOVEMENT AND PROVIDE BRACING AS NECESSARY FOR PROPER SUPPORT

WHETHER INDICATED OR NOT. 2. GYPSUM PANELS AND FINISH: COMPLY WITH ASTM C 840 AND GA-216. ISOLATE GYPSUM BOARD ASSEMBLIES FROM ABUTTING STRUCTURAL AND MASONRY WORK AND FINISH AS FOLLOWS: A. LEVEL 1 (EMBED TAPE AT JOINTS): AT CONCEALED AREAS UNLESS A HIGHER LEVEL IS INDICATED OR REQUIRED FOR FIRE-RESISTANCE-RATED ASSEMBLY

B. LEVEL 2 (EMBED TAPE AND APPLY SEPARATE FIRST COAT OF JOINT COMPOUND TO TAPE FASTENERS, AND TRIM FLANGES AND SAND SMOOTH AFTER EACH COAT): AT SUBSTRATES BEHIND C. LEVEL 4 (EMBED TAPE AND APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE. FASTENERS. AND TRIM FLANGES AND SAND SMOOTH AFTER EACH COAT): AT ALL WALLS

RECEIVING FLAT, EGGSHELL, OR SATIN SHEEN PAINT OR WALLCOVERING) D. LEVEL 5 (EMBED TAPE, APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES, AND APPLY THIN SKIM COAT OF JOINT COMPOUND OVER ENTIRE SURFACE AND SAND SMOOTH AFTER EACH COAT): AT ALL WALLS RECEIVING SEMI-GLOSS OR GLOSS SHEEN PAINT, AND ALL GYPSUM BOARD CEILINGS)

09 9000 - PAINTING AND COATING A. SUBMITTALS: PRODUCT DATA AND THREE (3) DRAW-DOWN SAMPLES OF EACH COLOR AND SHEEN SPECIFIED. B. <u>ATTIC STOCK</u>: FURNISH ONE (1) GALLON OF EACH PAINT COLOR AND SHEEN, IN CONTAINERS, PROPERLY

C. PRODUCTS: PROVIDE MANUFACTURER'S BEST QUALITY PAINTS OF COLOR AND SHEEN AS INDICATED IN THE CONSTRUCTION DOCUMENTS THAT ARE FORMULATED AND RECOMMENDED BY MANUFACTURER FOR APPLICATION INDICATED. PROVIDE MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH SUBSTRATES.

1. ALL PAINT, STAIN, AND VARNISH SHALL BE PRODUCTS OF DEVOE, SHERWIN WILLIAMS, PPG INDUSTRIES, BENJAMIN MOORE OR APPROVED EQUAL. 2. ALL MATERIAL SHALL BE OF THE STANDARD COMMERCIAL GRADE OF THE TYPES DESIGNATED.

CONTAINERS. COLORS NOT SPECIFICALLY CALLED FOR IN THE PAINT SCHEDULE WILL BE SELECTED BY THE ARCHITECT. 1. EQUIPMENT: APPLY COATINGS BY BRUSH, ROLLER, SPRAY, OR OTHER APPLICATORS ACCORDING TO

3. ALL MATERIAL SHALL BE DELIVERED TO THE JOB SITE IN THE ORIGINAL, UNOPENED, LABELED

COATING MANUFACTURER'S WRITTEN INSTRUCTIONS. WHEN SPRAYED, EXTERIOR COATINGS SHALL BE BACK-ROLLED FOLLOWING SPRAY APPLICATION. USE ROLLERS FOR FINISH COAT ON INTERIOR WALLS AND CEILINGS.

2. PREPARE CONCRETE MASONRY BLOCK TO BE COATED. REMOVE EFFLORESCENCE, CHALK, DUST, DIRT, GREASE, OILS, AND RELEASE AGENTS. ROUGHEN AS REQUIRED TO REMOVE GLAZE. IF HARDENERS OR SEALERS HAVE BEEN USED TO IMPROVE CURING, USE MECHANICAL METHODS TO PREPARE SURFACES.

3. PIGMENTED (OPAQUE) FINISHES: COMPLETELY COVER SURFACES TO PROVIDE A SMOOTH, OPAQUE SURFACE OF UNIFORM APPEARANCE. PROVIDE A FINISH FREE OF CLOUDINESS, SPOTTING, HOLIDAYS. LAPS, BRUSH MARKS, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS. 4. APPLY PRODUCTS PER MANUFACTURER RECOMMENDED GUIDELINES. PRODUCT COVERAGE MINIMUM ONE COAT OF PRIMER AND TWO FINAL COATS ON MATERIALS. APPLY PRODUCTS TO MATERIALS

**INTERIOR WORK:** 

 GYPSUM BOARD WALLS EXCEPT IN KITCHENS, BATHROOMS, LAUNDRIES AND COMMON AREA CORRIDORS, UNLESS SCHEDULED FOR WALLCOVERING.

2. GYPSUM BOARD WALLS IN KITCHENS,

BATHROOMS, AND LAUNDRIES UNLESS

4. (CMU) - CONCRETE MASONRY UNIT WALLS.

PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.) ONE COAT OF EPOXY COMPATABLE PRIMER PAINT

ONE COAT OF PRIME LATEX PAINT AND

ONE FINISH COAT OF LATEX EGGSHELL WALL

SCHEDULED FOR WALLCOVERING OR TILE. PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.) 3. GYPSUM BOARD WALLS IN COMMON AREA

ONE COAT OF PRIME LATEX PAINT AND ONE FINISH COAT OF SCRUBABLE LATEX FLAT WALL PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL

BLOCK FILLER: PPG PAINTS: 6-15XI SPEEDHIDE

AND ONE FINISH COAT OF EPOXY EGGSHELL WALL

INTERIOR/EXTERIOR HI FILL ACRYLIC MASONRY BLOCK FILLER/PRIMER. APPLIED AT A DRY FILM THICKNESS OF NOT LESS THAN 7.0 MILS. TWO FINISH COATS ACRYLIC EGGSHELL FINISH OVER PRIMER

APPROVED BY MANUFCTURER PRODUCT DATA SHEETS.

TWO COATS OF LATEX FLAT PAINT. TWO COATS OF GYPSUM BOARD CEILINGS. CLASS II VAPOR RETARDER PAINT AT CEILINGS ADJACENT TO ATTICS.

ONE PRIME COAT OF LATEX PAINT, ONE 6. DOOR CASINGS, BASE, WOOD, MILL-WORK, ETC. (PRE-PRIMED.) COAT LATEX PAINT AND ONE FINISH COAT OF SEMI-GLOSS PAINT.

ONE COAT OF LATEX PAINT AND ONE FINISH COAT OF PRIMED HARDWOOD DOORS. LATEX SEMI-GLOSS PAINT. 8. ALL MISCELLANEOUS FERROUS METAL, TWO COATS METAL PAINT TO MATCH INCLUDING ADJACENT SURFACES UNLESS FACTORY GRILLES, REGISTERS, ETC. PREFINISHED WHITE.

ONE COAT APPLICABLE PRIMER FOR SURFACES TO 9. ANY OPEN STRUCTURE PAINTING. BE PAINTED UNLESS FACTORY PRIMED; TWO COATS OF DRYFALL PAINT SPRAY APPLIED.

FINISH TO MATCH SIMILAR CONDITIONS. 10. ANY OTHER PAINTING WORK REQUIRED BY

09 9600 HIGH PERFORMACE COATINGS

1. SUBMIT UNDER PROVISIONS OF SECTION 01300. 2. PRODUCT DATA: MANUFACTURER'S DATA SHEETS INCLUDING; A. INSTALLATION GUIDE

B. PRODUCT DATA SHEET

D. HPD (HEALTH PRODUCT DECLARATION)

 SELECTION SAMPLES: PROVIDE (2) SETS OF APPLICABLE COLOR CHARTS OR CHIPS REPRESENTING ALL STANDARD COLORS AVAILABLE FROM THE MANUFACTURER. 2. VERIFICATION SAMPLES: PROVIDE VERIFICATION SAMPLES OF EACH PRODUCT SPECIFIED ON A MINIMUM SIZE OF 6" SQUARE SHOWING ACTUAL PRODUCTS, COLORS, AND TEXTURE. 3. INSTALLER QUALIFICATIONS: SUBMIT LIST OF SUCCESSFULLY COMPLETED PROJECTS WITH REFERENCES OF SAME OR SIMILAR SCOPE OF WORK.

A. QUALIFICATIONS: SUCCESSFUL EXPERIENCE WITH OTHER PROJECTS OF THE SCOPE AND SCALE OF THE WORK DESCRIBED IN THIS SECTION. B. TRAINING: CONFIRMATION BY MANUFACTURER THAT THE INSTALLER HAS SUCCESSFULLY COMPLETED AN AUTHORIZED TRAINING WORKSHOP OF THE FLOORING SYSTEM(S). C. MOCK-UP: PROVIDE A MOCK-UP DEMONSTRATING ACTUAL SURFACE PREPARATION METHODS TO BE

USED THEN PRODUCE ACTUAL FINISHES TO CONFIRM ACCEPTABLE APPEARANCE AND WORKMANSHIP. D. AREA TO BE DETERMINED BY ARCHITECT.

E. APPROVALS OF EACH COMPLETED PHASE MUST BE ACCEPTED PRIOR TO PROCEEDING.

F. REFINISH, IF APPLICABLE TO RECEIVE FINAL APPROVALS. A. DELIVERY: DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMAGED CONTAINERS WITH IDENTIFICATION LABELS INTACT.

B. STORAGE & PROTECTION: STORE MATERIALS PROTECTED FROM EXPOSURE TO HARMFUL ENVIRONMENTAL CONDITIONS AND AT A MINIMUM TEMPERATURE OF 50 DEGREES F AND AT A MAXIMUM TEMPERATURE OF 90 DEGREES F. DO NOT FREEZE! C. HANDLING: ALL CONTAINERS MUST BE TIGHTLY CLOSED WHEN NOT IN USE TO PREVENT ACCIDENTAL CONTAMINATION BY FOREIGN ELEMENTS.

MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, VENTILATION) ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. DO NOT INSTALL AN EXTERIOR PROJECT WHEN RAIN IS IMMINENT WITHIN THE FIRST 24 HOURS.

A. PROJECT WARRANTY: REFER TO CONDITIONS OF THE CONTRACT FOR PROJECT WARRANTY B. MANUFACTURER'S WARRANTY: SUBMIT FOR OWNERS ACCEPTANCE, MANUFACTURER'S STANDARD LIMITED WARRANTY AGAINST MANUFACTURER DEFECTS EXECUTED BY AUTHORIZED COMPANY OFFICIAL. MANUFACTURER'S WARRANTY IS IN ADDITION TO, AND NOT A LIMITATION OF, OTHER RIGHTS OWNER MAY HAVE UNDER CONTRACT DOCUMENTS.

PART 2 PRODUCTS ACCEPTABLE MANUFACTURERS A. ECO SAFETY, INC. D/B/A ECO SAFETY PRODUCTS

2921 W CULVER STREET, #4B, PHOENIX, AZ. 85009 TELEPHONE: 602.305.9397 FAX: 602.305.6431 EMAIL: HYPERLINK "MAILTO:INFO@ECO-SAFETY.COM" INFO@ECO-SAFETY.COM WEBSITE: HYPERLINK "HTTP://WWW.ECOSAFETYPRODUCTS.COM"WWW.ECOSAFETYPRODUCTS.COM

PRODUCT SUBSTITUTIONS SUBSTITUTIONS: SUBMIT INFO ON ALTERNATE MANUFACTURERS FOR REVIEW BY ARCHITECT. 2.4 <u>W.B. BIO-BASED POLYURETHANE FLOOR COATING</u>: A. PRODUCT: ECO-TUFF FLOOR COATING

1. TEXTURE OPTIONS: FINE RECYCLED GLASS POWDER (NS-80) B. DESCRIPTION: A HIGH PERFORMANCE INTERIOR/EXTERIOR WATER-BASED ACRYLIC-URETHANE SAFETY COATING UTILIZING RENEWABLE RESOURCE AND RECYCLED INGREDIENTS. CONTAINS A GLASS POWDER FOR A SLIP RESISTANT, YET NON ABRASIVE TEXTURE. ENGINEERED FOR HIGH TRAFFIC AND EXTREME WEATHER ENVIRONMENTS.

: SURFACE PREPARATION: REMOVE ALL BOND BREAKERS AND PREPARE SUBSTRATE FOR OPTIMUM BONDING AND PENETRATION BY MECHANICAL GRINDING AND/OR CHEMICAL ETCHING AND CLEANING. A MINIMUM SURFACE PROFILE OF CSP-1 TO CSP-3 IS REQUIRED AS WITH ANY HIGH TRAFFIC TEXTURED 1. COLOR PIGMENT OPTIONS: STANDARD AND I.R. (INFRARED REFLECTIVE)

D. ECO-TUFF SYSTEM PRODUCTS & SURFACE PREPARATION CLEANERS (FOR CLEAR CONCRETE WITH

1. SURFACE PREP 1: EE3-8000 ECO-ETCH PRO ETCHER & CLEANER 2. SURFACE PREP 2: EF-500 ECOFAST 500 DEGREASER/CLEANER CONCENTRATE 3. PRIMER COAT: ET-6900 ECO-TUFF QUICK PRIME PRIMER SEALER 4. 1ST COAT:

ET-6900 ECO-TUFF CLEAR COAT RECYCLED GLASS FINE POWDER: NS-RG80 5. FINISH COAT: ET-6900 ECO-TUFF CLEAR COAT

E. ECO-TUFF SYSTEM PRODUCTS & SURFACE PREPARATION CLEANERS (FOR CLEAR CONCRETE. SMOOTH TEXTURE) 1. SURFACE PREP 1: EE3-8000 ECO-ETCH PRO ETCHER & CLEANER 2. SURFACE PREP 2: EF-500 ECOFAST 500 DEGREASER/CLEANER CONCENTRATE

3. PRIMER COAT: ET-6900 ECO-TUFF QUICK PRIME PRIMER SEALER 4. 1ST COAT: ET-6900 ECO-TUFF CLEAR COAT 5. FINISH COAT: ET-6900 ECO-TUFF CLEAR COAT F. ECO-TUFF SYSTEM PRODUCTS & SURFACE PREPARATION CLEANERS (FOR COLOR WITH AGGREGATE

TEXTURE. MATTE FINISH) 1. SURFACE PREP 1: EE3-8000 ECO-ETCH PRO ETCHER & CLEANER 2. SURFACE PREP 2: EF-500 ECOFAST 500 DEGREASER/CLEANER CONCENTRATE 3. PRIMER COAT: ET-7007 ECO-TUFF WHITE PRIMECOAT

 ET-6800 ECO-TUFF FLOOR COATING RUBBER AGGREGATE: NS-RBR-F RECYCLED GLASS FINE POWDER: NS-RG80 5. FINISH MATERIAL: ET-6800 ECO-TUFF FLOOR COATING

4. 1ST COAT:

G. ECO-TUFF SYSTEM PRODUCTS & SURFACE PREPARATION CLEANERS (FOR COLOR WITH AGGREGATE TEXTURE, GLOSS FINISH

1. SURFACE PREP 1: EE3-8000 ECO-ETCH PRO ETCHER & CLEANER . SURFACE PREP 2: EF-500 ECOFAST 500 DEGREASER/CLEANER CONCENTRATE 3. PRIMER COAT: ET-7007 ECO-TUFF WHITE PRIMECOAT

4. 1ST COAT: ET-6800 ECO-TUFF FLOOR COATING RUBBER AGGREGATE: NS-RBR-F

RECYCLED GLASS FINE POWDER: NS-RG80 5. 2ND COAT: ET-6800 ECO-TUFF FLOOR COATING

4. 1ST COAT: ET-6800 ECO-TUFF FLOOR COATING

5. FINISH MATERIAL: ET-6800 ECO-TUFF FLOOR COATING

6. FINISH MATERIAL: ET-6900 ECO-TUFF CLEAR COAT H. ECO-TUFF SYSTEM PRODUCTS & SURFACE PREPARATION CLEANERS (FOR COLOR WITH SMOOTH TEXTURE. MATTE FINISH)

1. SURFACE PREP 1: EE3-8000 ECO-ETCH PRO ETCHER & CLEANER 2. SURFACE PREP 2: EF-500 ECOFAST 500 DEGREASER/CLEANER CONCENTRATE 3. PRIMER COAT: ET-7007 ECO-TUFF WHITE PRIMECOAT

PART 3 EXECUTION A. COMPLY WITH THE INSTRUCTIONS AND RECOMMENDATIONS OF THE FLOORING SURFACE MANUFACTURER.

A. SITE VERIFICATION OF CONDITIONS: VERIFY THAT SUBSTRATE CONDITIONS ARE SUITABLE FOR INSTALLATION OF THE FLOORING SURFACE SYSTEM. B. DO NOT PROCEED WITH INSTALLATION UNTIL UNSUITABLE CONDITIONS ARE CORRECTED.

A. DEGREASING: IT IS VERY IMPORTANT WHEN USING A DEGREASER THAT THE CLEAN-UP IS ABSOLUTELY THOROUGH AND COMPLETE AND THAT NO DISSOLVED RESIDUE, FAT, OILS, GREASE, DUST, ETC. IS LEFT ON THE SURFACE. THIS IS FURTHER ACHIEVED BY REPEATING RINSES OF WATER. 1. EF-500 ECO-FAST 500 DEGREASER CONCENTRATE 2. EE3-8000 ECO-ETCH PRO ETCH & CLEAN CONCENTRATE B. CONCRETE: THE CONCRETE SURFACE SHOULD BE HAND TROWELED OR WITH A BRUSH/BROOM FINISH

TO ENSURE OPTIMUM POROSITY FOR ADHESION. OTHERWISE PROPER SURFACE PROFILING IS REQUIRED. NEW CONCRETE NEEDS AT LEAST 28 DAYS TO CURE PROPERLY, PRIOR TO PRIMER APPLICATION. UNLESS THE NEW CONCRETE IS DRY, ADHESION PROBLEMS WILL BE EXPERIENCED. 1. PROFILE AND CLEAN THE CONCRETE FOR MAXIMUM BONDING AND PENETRATION BY USING ECO ETCH PRO CONCENTRATE IN FULL STRENGTH OR 1:1. IF PERFORMING MECHANICAL ABRASION, BE SURE THE SURFACE TEXTURE DOES NOT ALTER EXPECTED RESULTS. VERY DENSE SURFACE STILL MAY REQUIRE AN ECO ETCH PRO APPLICATION TO OPEN THE PORES ADEQUATELY. TEST FOR OPTIMUM POROSITY PRIOR TO PROCEEDING. A CSP-1 TO CSP-3

2. CONCRETE SHOULD BE COMPLETELY CLEAN AND DRY. TEST FOR PROPER PH LEVELS AND MOISTURE VAPOR TRANSMISSION PER INDUSTRY STANDARDS FOR COATING APPLICATIONS. 3. PATCH ALL IMPERFECTIONS. CRACKS, ETC WITH CONCRETE PATCH FILLER AND FLEXIBLE JOINT FILLERS. DO NOT USE SILICONE PRODUCTS. THE PRODUCT WILL NOT ADHERE TO SILICONE.

SURFACE PROFILE IS REQUIRED DEPENDENT UPON SURFACE TEXTURE, FINISH, AND

4. PRIME WITH ET-6900 OR ET-7007 AS PER MANUFACTURER INSTRUCTIONS. WHEN PRIMER HAS PROPERLY CURED, PERFORM TEST PATCH TO ENSURE ADHESION. C. WOOD: INSPECT THOROUGHLY FOR EXCESSIVE MOISTURE AND TANNIN BLEED. ALL WOOD SPECIES MUST BE COMPLETELY DRY AND FREE FROM BLEED. 1. SAND WOOD IF NECESSARY TO REMOVE ALL BOND BREAKERS, LOOSE PARTICLES AND OTHER

SURFACE CONTAMINANTS. 2. DEGREASE WITH SOY-IT DEGREASER TO REMOVE SURFACE OILS, GRIME. ENSURE THAT ALL RESIDUE AND DUST IS COMPLETELY REMOVED. WOOD SHOULD BE COMPLETELY CLEAN AND DRY BEFORE APPLYING COATING MATERIALS. D. METAL: PRIME METALS WITH AN APPLICABLE STANDARD WATER-BASED RUST INHIBITING PRIMER TO INHIBIT RUST AND CORROSION PRIOR TO COATING APPLICATION. HIGH TRAFFIC AREAS WITH STEEL GRATES, DIAMOND PLATE RAMPS, ETC. SHOULD BE ACID WASHED AND/OR GRIND TO PROVIDE

OPTIMUM PROFILE FOR COATING ADHESION PRIOR TO A PRIME COAT.

A. TYPES OF APPLICATIONS ROLLER APPLICATION

ENVIRONMENT.

3.2 EXAMINATION:

A. USE A 3/8" NAP ROLLER WHEN APPLYING THE PRIMER, FLOOR COATING, OR CLEAR COATING, USE A FOAM TEXTURED ROLLER WHEN APPLYING THE ECO-TUFF FLOOR COATING WITH RUBBER AGGREGATE. OTHER ROLLERS MAY NOT PICK UP AND SPREAD THE PRODUCT EVENLY. THE FOAM TEXTURED ROLLER MUST BE CAPABLE OF LIFTING THE RUBBER CRUMB WITHIN THE PRODUCT TO THE SURFACE. ALL OTHER PRODUCTS ARE SUITABLE USE TRADITIONAL AND APPLICABLE SIZED NAP FOR THE INTENDED SUBSTRATE AND TEXTURE.

B. SOAK ROLLER IN WATER - REMOVE EXCESS WATER PRIOR TO APPLICATION. C. POUR PRODUCT INTO PAINT TRAY OR HANG ROLLER GRID INTO 5 GALLON BUCKE MAKE SURE TO COMPLETELY SATURATE ROLLER WITH PRODUCT, LEAVING NO BARE SPOTS ON ROLLER. D. APPLY THE PRIMER COAT AS A THIN COAT AND ALLOW TO DRY TO BE TACK FREE USUALLY WITHIN 1 HOUR AND NOT TO EXCEED 24 HOURS.

E. RESATURATE ROLLER AFTER EACH PASS. MAKE 4-5 CONSECUTIVE PASSES IN THE SAME DIRECTION, WITH EACH PASS RIGHT NEXT TO THE OTHER, WHEN APPLYING, ROLL IN ONE DIRECTION FIRST, THEN ROLL IN THE OPPOSITE DIRECTION IN ORDER TO PROPERLY BLEND THE PRODUCT AND CREATE A UNIFORM SURFACE. F. ONCE AN AREA IS COVERED. RUN THE ROLLER VERY LIGHTLY OVER IT TO ENSURE EVEN DISTRIBUTION OF COLOR AND RUBBER CRUMB IF APPLICABLE. G. WHEN DRY TO THE TOUCH, APPLY 2ND COAT. IF INSTALLING NON SKID AGGREGATE, APPLY THE ECOTUFF FLOOR COATING WITHOUT AGGREGATE OR APPLY THE ECOTUFF CLEAR COAT AS THE FINISH COAT TO HELP ENCAPSULATE OR REGULATE THE FINAL TEXTURE. REPEAT IF A 3RD COAT IS DESIRED. 2. SPRAY APPLICATIONS

A. MASK OFF AREAS AS NEEDED 1. WHEN SPRAY APPLYING ECO-TUFF FLOOR COATING WITH RUBBER AGGREGATE MIXED, USE A HOPPER TYPE GRACO BRAND "TEX-SPRAY COMPACT" OR 2. WHEN SPRAY APPLYING ECO-TUFF CLEAR COATING USE A STANDARD AIRLESS

WITH A #12-#15 TIP AS APPLICABLE TO THE FINISH AND MIL THICKNESS B. ATTACH SPRAY GUN TO A COMPRESSOR AIRLINE GIVING PRESSURE OF AT LEAST 40

C. SPRAY ALL WATER OUT OF THE GUN TO PRIME. D. BEFORE STARTING THE JOB, SPRAY A FEW SHORT BURSTS AWAY FROM THE SURFACE TO TEST THAT EVERYTHING IS WORKING PROPERLY E. HOLDING GUN APPROXIMATELY 12-24" AWAY FROM SURFACE, SPRAY AN EVEN, LIGHT COAT OVER THE ENTIRE SURFACE. DO NOT APPLY TOO THICK. F. KEEP SPRAY GUN AT A 90 DEGREE ANGLE TO THE SURFACE. G. IF USING THE HOPPER SPRAY GUN FOR THE NON-SKID COATING, IT SHOULD MAKE A

SLIGHT "SPITTING" SOUND. THIS IS A CHARACTERISTIC OF THE GUNS AND IS NECESSARY FOR AN EVEN TEXTURE. THE PRODUCT WILL SELF LEVEL TO A CERTAIN EXTEND, BUT DO NOT ALLOW TO PUDDLE. H. WHEN SURFACE BECOMES TOUCH DRY, SPRAY SUBSEQUENT COATS. I. WHILE SPRAYING THE ECO-TUFF FLOOR COATING WITH RUBBER AGGREGATE, BE CAREFUL NOT TO BLOW RUBBER CRUMB AWAY FROM THE AREA YOU ARE WORKING ON

AS THIS CAN ACCUMULATE IN OTHER AREAS OF THE JOB THAT WILL PREVENT THE COATING FROM BONDING WITH THE SUBSTRATE. J. IF THE RUBBER CRUMB IS BOUNCING BACK AT YOU, LOWER THE PRESSURE OR HOLD GUN FURTHER FROM THE SURFACE. THE FURTHER AWAY FROM THE SURFACE YOU HOLD THE GUN, THE GREATER THE TEXTURE, THE CLOSER, THE FINER. K. REMOVE ANY OVER SPRAY <u>IMMEDIATELY</u> WITH CLOTH AND WATER. B. APPLICATION TEMPERATURE AND CURING TIME

1. UNDER NORMAL WORKING CONDITIONS, THE PRODUCT WILL BE DRY TO THE TOUCH WITHIN 1 HOUR AND CAN BE SUBJECTED TO LIGHT FOOT TRAFFIC WITHIN 24 HOURS. FULL CURING TIME ONLY AFFECTS THE AMOUNT OF TIME REQUIRED TO WAIT BEFORE SUBJECTING THE SURFACE TO CLEANING, HEAVY LOADS AND CHEMICAL EXPOSURE. SURFACE CAN BE SUBJECTED TO NORMAL LOADS WELL BEFORE THIS MINIMUM TIME REQUIREMENT. THE COATING SHOULD NOT BE SUBJECTED TO CLEANING, HEAVY LOADS, OR CHEMICAL EXPOSURE UNTIL FULLY CURED AFTER 7 DAYS, LESS IN HOT-HUMID CONDITIONS, MORE IN

COLD, DRY WEATHER. SUBMERSED APPLICATIONS SHOULD ALLOW A 7-14 DAYS. DRY TIMES IN THIS MANUAL ARE BASED ON A TEMPERATURE OF 77 DEGREES F AND 50% HUMIDITY. THE PRODUCT SHOULD NOT BE USED UNDER 40 DEGREES F. DO NOT ALLOW PRODUCT TO FREEZE. 3. DO NOT USE ANY SOLVENTS, SOLVENT BASED ALCOHOLS, THINNERS OR LACQUERS TO THIN

PROTECT THE INSTALLED SURFACE FROM DAMAGE RESULTING FROM SUBSEQUENT CONSTRUCTION ACTIVITY ON THE SITE. A. TO STORE PARTIALLY USED CANS, SEAL CAN WELL (AIRTIGHT) AND PLACE IN COOL, DRY PLACE. THE

CONTENTS SHOULD BE USEABLE FOR AT LEAST 12 MONTHS. B. THE EVAPORATION OF THE WATER WITHIN THE PRODUCT WILL CAUSE THE PRODUCT TO CURE. IF SOME WATER CONTENT HAS EVAPORATED, RECONSTITUTION WITH CLEAN WATER MAY RESTORE PRODUCT VIABILITY IF THE CURING PROCESS WITHIN THE CAN IS NOT TOO ADVANCED. IN THE EVENT THAT THE PRODUCT IS DAMAGED, IT CAN EASILY BE REPAIRED OR OVER-COATED, DUE TO

A. REMOVE ALL DAMAGED PRODUCT. USE A SHARP KNIFE SUCH AS A UTILITY KNIFE TO MAKE A WELL-DEFINED AREA SUCH AS A SQUARE AND ELIMINATE UNEVEN EDGES. B. SAND AREA WITH 36 OR 40 GRIT SANDPAPER SO THAT THE NEW APPLICATION CAN GET A GOOD GRIP. SLIGHTLY BEVEL THE EDGES OF THE EXISTING PRODUCT SO THAT THE NEW PRODUCT CAN FILL IN THE

CUTOUT AREA AND GO SLIGHTLY ONTO THE EXISTING. CLEAN AREA WITH WATER. D. TEST FOR ADHESION FIRST, BEFORE COMPLETING JOB. THEN APPLY THE PRODUCT TO THE AFFECTED

A. MOST GENERAL NEUTRAL PH FLOOR CLEANERS HAVE BEEN TESTED AND WILL WORK WELL. WE RECOMMEND ECOFAST 500 DEGREASER CONCENTRATE DO NOT USE CONCENTRATED BLEACH OR CAUSTICS. FOR BEST RESULTS ON THE ECO-TUFF FLOOR COATING WITH TEXTURED AGGREGATES. USE A STIFF BRISTLE DECK BRUSH TO AGITATE CLEANER ON THE SURFACE. RINSE THOROUGHLY TO REMOVE ALL

E. HEAVY SCRUBBING WILL NEGATIVELY AFFECT THE COATED SURFACE OVER TIME.

MAKE LIGHT CONTACT WITH THE FLOOR.

RESIDUE. ALL OTHERS USE A WET/DRY MICROFIBER MOP. D. SURFACES CAN ALSO BE CLEANED WITH THE USE OF AUTOMATIC SCRUBBERS. THESE ARE MACHINES WHICH, IN ONE PASS, PUT DOWN THE WASHING SOLUTION, SCRUB THE FLOOR WITH A LIGHT PAD OR BRUSH ATTACHMENT AND EXTRACT THE DIRTY WATER IT SHOULD BE POINTED OUT THAT THE PAD PRESSURE USED IN THE SCRUBBER MUST BE LIGHT AND NEED ONLY BE SUFFICIENT FOR THE PAD TO **DIVISION 10 - SPECIALTIES** 

10 2800 - TOILET AND BATH ACCESSORIES A. REFERENCE CONSTRUCTION DRAWINGS & SCHEDULES FOR TYPE, QUANTITY, AND LOCATIONS OF TOILET AND

BATH ACCESSORIES. 2. PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.

PRODUCT DATA: MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING: . STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS. 4. INSTALLATION METHODS.

1. INSTALLER MUST EXAMINE SUBSTRATES, PREVIOUSLY INSTALLED INSERTS AND ANCHORAGES NECESSARY FOR MOUNTING OF TOILET ACCESSORIES, AND OTHER CONDITIONS UNDER WHICH INSTALLATION IS TO OCCUR. AND MUST NOTIFY CONTRACTOR IN WRITING OF CONDITIONS DETRIMENTAL TO PROPER AND TIMELY COMPLETION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN MANNER ACCEPTABLE TO INSTALLER. INSTALL ACCESSORIES ACCORDING TO RESPECTIVE MANUFACTURERS' WRITTEN INSTRUCTIONS. USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER.

INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED. ADHESIVE INSTALLATIONS ARE NOT PERMITTED. 3. MOUNTING HEIGHTS SHALL BE AS RECOMMENDED BY THE ACCESSORY MANUFACTURER AND AT HEIGHTS RECOMMENDED BY USE FOR PHYSICALLY HANDICAPPED TO COMPLY WITH THE AMERICANS WITH

4. GRAB BARS: INSTALL TO WITHSTAND A DOWNWARD LOAD OF AT LEAST 250 LBF, WHEN TESTED ACCORDING TO ASTM F 446. 5. ADJUST ACCESSORIES FOR PROPER OPERATION AND VERIFY THAT MECHANISMS FUNCTION SMOOTHLY. CLEAN AND POLISH ALL EXPOSED SURFACES AFTER REMOVING PROTECTIVE COATINGS.

10 4400 - FIRE PROTECTION SPECIALTIES A. REFERENCE CONSTRUCTION DRAWINGS FOR TYPE, SIZE AND LOCATIONS OF FIRE EXTINGUISHERS AND

C. FIELD CONDITIONS: DO NOT INSTALL EXTINGUISHERS WHEN AMBIENT TEMPERATURE MAY DROP BELOW 40 DEGREES FAHRENHEIT.

> A. ANSUL, A TYPO BUSINESS: WWW.ANSUL.COM/. B. KIDDE, A UNIT OF UNITED TECHNOLOGIES CORP.: WWW.KIDDE.COM/. C. NYSTROM. INC.: WWW.NYSTROM.COM/.

FIRE EXTINGUISHERS

D. SUBSTITUTIONS: SEE SECTION 106000 - PRODUCT REQUIREMENTS. 2. FIRE EXTINGUISHER CABINETS AND ACCESSORIES: A. ACTIVAR CONSTRUCTION PRODUCTS GROUP - JL INDUSTRIES: WWW.ACTIVARCPG.COM B. ANSUL, A TYCO BUSINESS: WWW.ANSUL.COM

C. LARSEN'S MANUFACTURING CO.: WWW.LARSENSMFG.COM D. NYSTROM, INC.: WWW.NYSTROM.COM . PYRO-CHEM, A TYCO BUSINESS: WWW.PYROCHEM.COM F. SUBSTITUTIONS: SEE SECTION 106000 - PRODUCT REQUIREMENTS

1. FIRE EXTINGUISHERS - GENERAL: COMPLY WITH PRODUCT REQUIREMENTS OF NFPA 10 AND APPLICABLE CODES. WHICHEVER IS MORE STRINGENT. 2. MULTIPURPOSE DRY CHEMICAL TYPE FIRE EXTINGUISHERS: CARBON STEEL TANK, WITH PRESSURE A. CLASS: A:B:C TYPE.

B. SIZE: 10 POUND (4.54 kg) FINISH: BAKED POLYESTER POWDER COAT, COLOR AS SELECTED D. TEMPERATURE RANGE: MINUS 40 DEGREES F TO 120 DEGREES F.

3. DRY CHEMICAL TYPE FIRE EXTINGUISHERS: STAINLESS STEEL TANK, WITH PRESSURE GAUGE. A. CLASS: K TYPE B. SIZE: 2.5 POUND (1.13 kg)

C. FINISH: POLISHED STAINELSS STEEL D. TEMPERATURE RANGE: MINUS 20 DEGREES F TO 120 DEGREES F.

FIRE RATING: LISTED AND LABELED IN ACCORDANCE WITH ASTM E814 REQUIREMENTS FOR FIRE RESISTANCE REATING OF WALLS WHERE BEING INSTALLED.

2. CABINET CONSTRUCTION: NON-FIRE RATED. A. FORMED STAINELSS STEEL SHEET; 0.036 INCH THICK BASE METAL. 3. FIRE RATED CABINET CONSTRUCTION: ONE-HOUR FIRE RATED.

A. SIZE TO ACCOMMODATE ACCESSORIES. C. PROVIDE CABINET ENCLOSURE WITH RIGHT ANGLE INSIDE CORNERS AND SEAMS, AND WITH FORMED PERIMETER TRIM AND DOOR STILES.

A. STEEL; DOUBLE WALL OR OUTER ADN INNER BOXES WITH 5/8 INCH THICK FIRE BARRIER MATERIAL.

DOOR: 0.036 INCH METAL THICKNESS, REINFORCED FOR FLATNESS AND RIGIDITY WITH NYLON CATCH HINGE DOORS FOR 180 DEGREE OPENING WITH TWO BUTT HINGE. 6. DOOR GLAZING: ACRYLIC PLASTIC, CLEAR, 1/8 INCH THCK, FLAT SHAPE AND SET IN RESILIENT CHANNEL 7. CABINET MOUNTING HARDWARE: APPROPRIATE TO CABINET, WITH PRE-DRILLED HOLES FOR PLACEMENT

8. FINISH OF CABINET EXTERIOR TRIM AND DOOR: NO. 4 - BRUSHED STAINLESS STEEL. 9. FINISH OF CABINET INTERIOR: WHITE COLORED ENAMEL.

1. EXTINGUISHER BRACKETS: FORMED STEEL, CHROME-PLATED INSTALL IN ACCORDANCE WITH MFG'S INSTRUCTIONS.

4. CABINET CONFIGURATION: RECESSED TYPE.

**DIVISION 11 - EQUIPMENT** 

<u>DIVISION 12 - FURNISHINGS</u>

SECURE RIGIDLY IN PLACE.

A. REFERENCE CONSTRUCTION DRAWINGS FOR QUANTITY, AND LOCATION OF APPLIANCES TO BE FURNISHED BY

A. REFERENCE CONSTRUCTION DRAWINGS & SCHEDULES FOR TYPE, QUANTITY, AND LOCATIONS OF TOILET AND

BATH ACCESSORIES B. SUBMITTALS: INCLUDE PLANS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK: PRODUCT DATA :FOR EACH STONE, STONE ACCESSORY, AND MANUFACTURED PRODUCT. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS. SAMPLES: FOR EACH STONE TYPE INDICATED.

1. FIELD MEASUREMENTS: VERIFY DIMENSIONS OF CONSTRUCTION TO RECEIVE STONE COUNTERTOPS BY FIELD MEASUREMENTS BEFORE FABRICATION. SOURCE LIMITATIONS FOR STONE: OBTAIN FROM A SINGLE SOURCE TO PROVIDE MATERIALS OF

CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES. 1. QUALITY STANDARD: PREMIUM GRADE, IN ACCORDANCE WITH AWI/AWMAC/WI (AWS) OR AWMAC/WI (NAAWS), UNLESS NOTED OTHERWISE . QUALITY STANDARD: SEFA 3 FOR LABORATORY WORKSURFACES.

3. PLASTIC LAMINATE COUNTERTOPS: HIGH-PRESSURE DECORATIVE LAMINATE (HPDL) SHEET BONDED TO A. LAMINATE SHEET: NEMA LD 3, GRADE HGS, 0.048 INCH NOMINAL THICKNESS. B. EXPOSED EDGE TREATMENT: AS NOTED, SUBSTRATE BUILT UP TO MINIMUM 1-1/4 INCH THICK;

C. BACK AND END SPLASHES: SAME MATERIAL, SAME CONSTRUCTION. D. FABRICATE IN ACCORDANCE WITH AWI/AWMAC/WI (AWS) OR AWMAC/WI (NAAWS), SECTION 11 -COUNTERTOPS, CUSTOM GRADE. E. MANUFACTURERS:

COVERED WITH MATCHING LAMINATE.

C. FINISH ON EXPOSED SURFACES: POLISHED.

GROUT UNIFORMLY AND SMOOTHLY WITH PLASTIC TOOL.

A. REFER TO FINISH LEGEND. 4. NATURAL QUARTZ AND RESIN COMPOSITE COUNTERTOPS: SHEET OR SLAB OF NATURAL QUARTZ AND PLASTIC RESIN OVER CONTINUOUS SUBSTRATE. A. FLAT SHEET THICKNESS: 1-1/4 INCH, MINIMUM. B. NATURAL QUARTZ AND RESIN COMPOSITE SHEETS, SLABS AND CASTINGS: COMPLYING WITH ISFA

3-01 AND NEMA LD 3; ORTHOPHTHALIC POLYESTER RESIN, MINERAL FILLER, AND PIGMENTS;

HOMOGENOUS, NON-POROUS AND CAPABLE OF BEING WORKED AND REPAIRED USING STANDARD WOODWORKING TOOLS; NO SURFACE COATING; COLOR AND PATTERN CONSISTENT THROUGHOUT THICKNESS. A. REFER TO FINISH LEGEND FOR SOLID SURFACE AND CORIAN QUARTZ DESCRIPTIONS, MANUFACTURERS, PRODUCT NUMBERS, COLORS, SIZES AND CONTACT INFORMATION.

D. FACTORY FABRICATE COMPONENTS TO THE GREATEST EXTENT PRACTICAL IN SIZES AND SHAPES

POLYESTER RESIN, MINERAL FILLER, AND PIGMENTS; HOMOGENOUS, NON-POROUS AND CAPABLE

INDICATED; COMPLY WITH THE MIA DIMENSION STONE DESIGN MANUAL. E. FINISH ON EXPOSED SURFACES: POLISHED. F. COLOR AND PATTERN: AS INDICATED ON DRAWINGS. 5. CULTURED MARBLE AND RESIN COMPOSITE VANITY COUNTERTOP WITH INEGRATED BOWL OVER A. CULTURED MARBLE AND RESIN COMPOSITE SHEETS, SLABS AND CASTINGS: ORTHOPHTHALIC

OF BEING WORKED AND REPAIRED USING STANDARD WOODWORKING TOOLS; NO SURFACE COATING; COLOR AND PATTERN CONSISTENT THROUGHOUT THICKNESS. A. REFER TO FINISH LEGEND FOR DESCRIPTIONS, MANUFACTURERS, PRODUCT NUMBERS, COLORS, SIZES AND CONTACT INFORMATION.

D. COLOR AND PATTERN: AS INDICATED ON DRAWINGS. 1. SECURELY ATTACH COUNTERTOPS TO CABINETS OR SUPPORTS USING CONCEALED FASTENERS. MAKE FLAT SURFACES LEVEL; SHIM WHERE REQUIRED.

2. ATTACH PLASTIC LAMINATE COUNTERTOPS USING SCREWS WITH MINIMUM PENETRATION INTO SUBSTRATE BOARD OF 5/8 INCH. 3. SEAL JOINT BETWEEN BACK/END SPLASHES AND VERTICAL SURFACES. 4. GENERAL: INSTALL COUNTERTOPS OVER PLYWOOD SUBTOPS WITH FULL SPREAD OF WATER CLEANABLE EPOXY ADHESIVE.

5. GENERAL: INSTALL COUNTERTOPS BY ADHERING TO SUPPORTS WITH WATER CLEANABLE EPOXY 6. SET STONE TO COMPLY WITH REQUIREMENTS INDICATED. SHIM AND ADJUST STONE TO LOCATIONS INDICATED, WITH UNIFORM JOINTS OF WIDTHS INDICATED AND WITH EDGES AND FACES ALIGNED ACCORDING TO ESTABLISHED RELATIONSHIPS.

UNIFORM SPACING. CLAMP UNITS TO TEMPORARY BRACING, SUPPORTS, OR EACH OTHER TO ENSURE THAT COUNTERTOPS ARE PROPERLY ALIGNED AND JOINTS ARE OF SPECIFIED WIDTH. 8. COMPLETE CUTOUTS NOT FINISHED IN SHOP. MASK AREAS OF COUNTERTOPS ADJACENT TO CUTOUTS TO PREVENT DAMAGE WHILE CUTTING. USE POWER SAWS WITH DIAMOND BLADES TO CUT STONE. MAKE CUTOUTS TO ACCURATELY FIT ITEMS TO BE INSTALLED, AND AT RIGHT ANGLES TO FINISHED SURFACES

UNLESS BEVELING IS REQUIRED FOR CLEARANCE. EASE EDGES SLIGHTLY TO PREVENT SNIPPING.

7. SPACE JOINTS WITH 1/16 INCH GAP FOR FILLING WITH SEALANT. USE TEMPORARY SHIMS TO ENSURE

9. INSTALL BACKSPLASHES AND END SPLASHES BY ADHERING TO WALL WITH WATER. CLEANABLE EPOXY ADHESIVE. LEAVE 1/16 INCH GAP BETWEEN COUNTERTOP AND SPLASHES FOR FILLING WITH SEALANT. USE TEMPORARY SHIMS TO ENSURE UNIFORM SPACING. 10. GROUT JOINTS TO COMPLY WITH ANSI A108.10. REMOVE TEMPORARY SHIMS BEFORE GROUTING. TOOL

COMPLETION OF INSTALLATION, USING CLEAN WATER AND SOFT RAGS. DO NOT USE WIRE BRUSHES, ACID TYPE CLEANING AGENTS, CLEANING COMPOUNDS WITH CAUSTIC OR HARSH FILLERS, OR OTHER

11. APPLY SEALANT TO JOINTS AND GAPS SPECIFIED FOR FILLING WITH SEALANT; COMPLY WITH SECTION 079200 "JOINT SEALANTS." REMOVE TEMPORARY SHIMS BEFORE APPLYING SEALANT. 12. ASSURE THAT SEAMS ARE SMOOTH, LEVEL AND TIGHT. SEAMS SHALL BE FILLED ENTIRELY SO FLUSH WITH COUNTERTOP. POLISH SURFACE AT SEAM. ASSURE THAT FILLER IS "NON. YELLOWING." 13. CLEANING: CLEAN COUNTERTOPS AS WORK PROGRESSES. REMOVE ADHESIVE, GROUT, MORTAR, AND SEALANT SMEARS IMMEDIATELY. CLEAN STONE COUNTERTOPS NO FEWER THAN SIX DAYS AFTER

MATERIALS OR METHODS THAT COULD DAMAGE STONE. 14. SEALER APPLICATION: APPLY STONE SEALER TO COMPLY WITH STONE PRODUCER'S AND SEALER MANUFACTURER'S WRITTEN INSTRUCTIONS.

CONSTRUCTION As Noted on Plans Review

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**REVISION DATES:** 

Lan Musi PROFESSIONAL SEAL

COLLINS WEBB #: 24114 SPECIFICATIONS

REVISIONS

Final Development Plan 100 NE Douglas Street

Section 6, Township 47 North, Range 31 West Lee's Summit, Jackson County, Missouri

#### PROPERTY DESCRIPTION

ALL PAVING ON THE PRIVATE PARKING LOT WILL COMPLY WITH THE UNIFIED DEVELOPMENT ORDINANCE ARTICLE 8 IN TERMS OF PAVING THICKNESS AND BASE

#### OIL - GAS WELLS

ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

#### **SURVEY AND PLAT NOTES:**

THE SUBJECT PROPERTY SURVEYED LIES WITHIN A FLOOD ZONE DESIGNATED ZONE (X), AREAS LOCATED OUTSIDE THE 100 YEAR FLOOD PLAIN, PER F.E.M.A. MAP, COMMUNITY PANEL NO. 29095C0417G EFFECTIVE DATE: JANUARY 20, 2017.

#### **UTILITY COMPANIES:**

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS.

EVERGY ~ 298-1196 MISSOURI GAS ENERGY ~ 756-5261 SOUTHWESTERN BELL TELEPHONE ~ 761-5011

COMCAST CABLE ~ 795-1100

WILLIAMS PIPELINE ~ 422-6300 CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800

CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTIONS ~ 969-1800

CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900 MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

#### GENERAL NOTES:

1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE

2 ~ ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED BY SEPARATE DOCUMENT

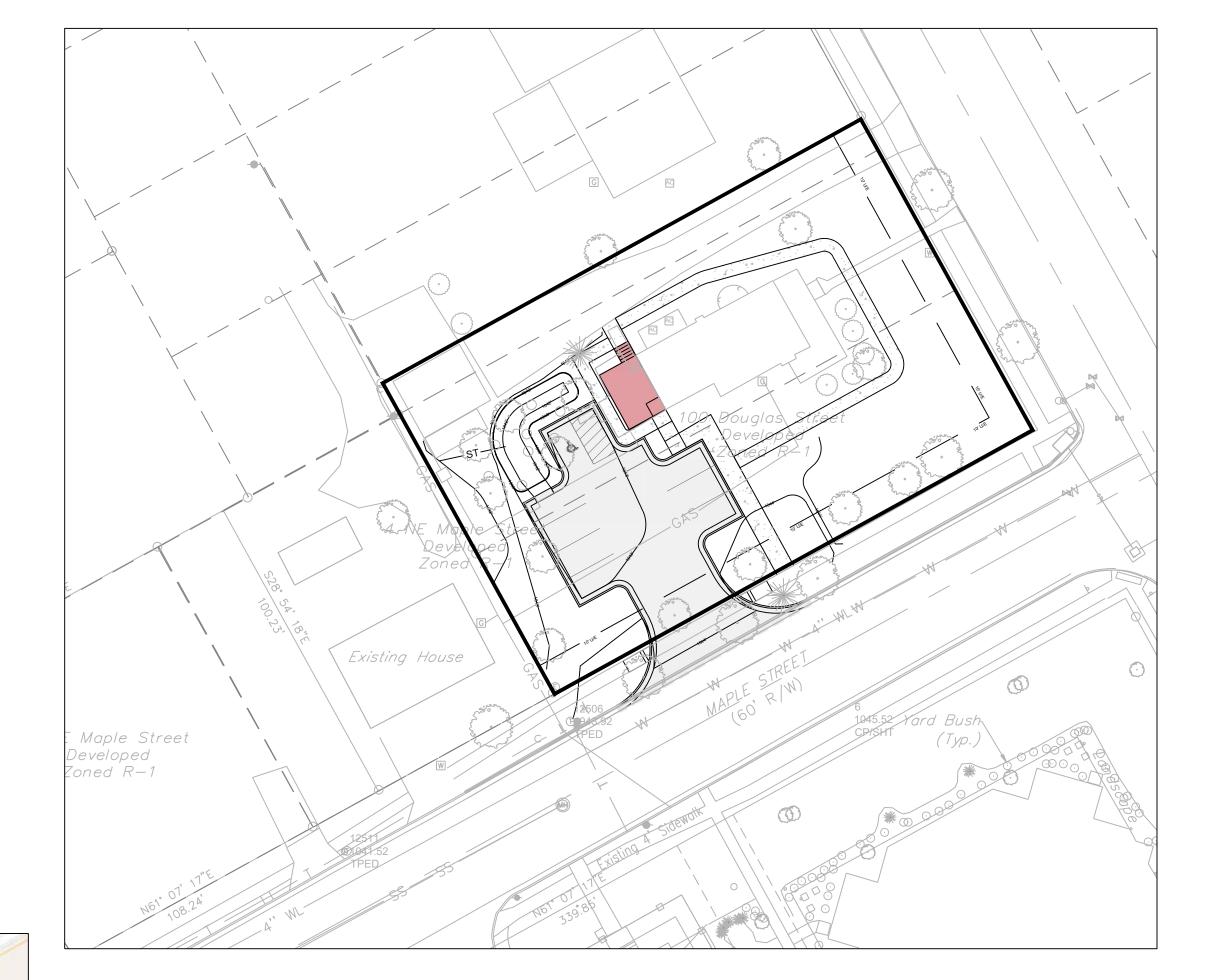
3 ~ ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.

4 ~ THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTORS 48 HOURS PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

5 ~ THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.

6 ~ THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND OBTAIN THE APPROPRIATE BLASTING PERMITS FOR A REQUIRED BLASTING. IF BLASTING IS ALLOWED, ALL BLASTING SHALL CONFORM TO STATE REGULATIONS AND LOCAL ORDINANCES.

Vicinity Map





ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
GEOGRID	S.Y.	432.00
MoDOT Type 5 Base	S.Y.	432.00
ASPHALT PAVING	S.Y.	336.00
CURBING	FT	280.00
CLEARING, GRADING & GRUBBING	LS	1
SILT FENCE	FT	425.00
INLET PROTECTION	UNIT	-
SEEDING / MULCHING/ FERTILIZING	AC	0.20
PRIVATE SIDEWALK	S.F.	808.00
ADA SIDEWALK RAMP	UNIT	2

#### **Summary of Quantities:**

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
GEOGRID	S.Y.	432.00
MoDOT Type 5 Base	S.Y.	432.00
ASPHALT PAVING	S.Y.	336.00
CURBING	FT	280.00
CLEARING, GRADING & GRUBBING	LS	1
SILT FENCE	FT	425.00
INLET PROTECTION	UNIT	-
SEEDING / MULCHING/ FERTILIZING	AC	0.20
PRIVATE SIDEWALK	S.F.	808.00
ADA SIDEWALK RAMP	UNIT	2



INDEX OF SHEETS: C.001 ~ COVER SHEET

C.050 ~ ESC PHASE 1 - PRE CLEARING PLAN

C.051 ~ ESC PHASE 2 - INACTIVE AREA STABILIZATION PLAN C.052 ~ ESC PHASE 3 - FINAL RESTORATION PLAN

C.053 ~ ESC - STANDARD DETAILS C.100 ~ SITE PLAN

C.200 ~ GRADING PLAN

C.300 ~ UTILITY PLAN

C.301 ~ STORM SEWER PLAN AND PROFILE L.100 ~ LANDSCAPE PLAN

L.101 ~ LANDSCAPE PLAN DETAILS

#### Land Use Schedule

a. Total floor area 1,102 sq. ft. b. Number of dwelling units

18,948.60 sq. ft. 0.44 acres c. Land area

7 Standard / 1 Handicap d. Number of required and 7 Standard / 1 Handicap proposed parking spaces

e. Impervious coverage Parking/Sidewalk

f. Floor Area Ratio (FAR)

1,102 sq. ft. 5,364 sq. ft. (28.3% of Site) 5.8**%** 

4,262 sq. ft.

Dwelling units per acre, with and without common area;

h. The range of land uses to be permitted in each designated area of the development.

Current Zoning: R-1 TSO

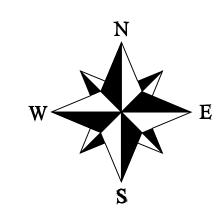
Proposed Zoning: R-1 TSO

Sanitary Sewer Service Existing Sanitary Sewer service from south of property.

Water Service

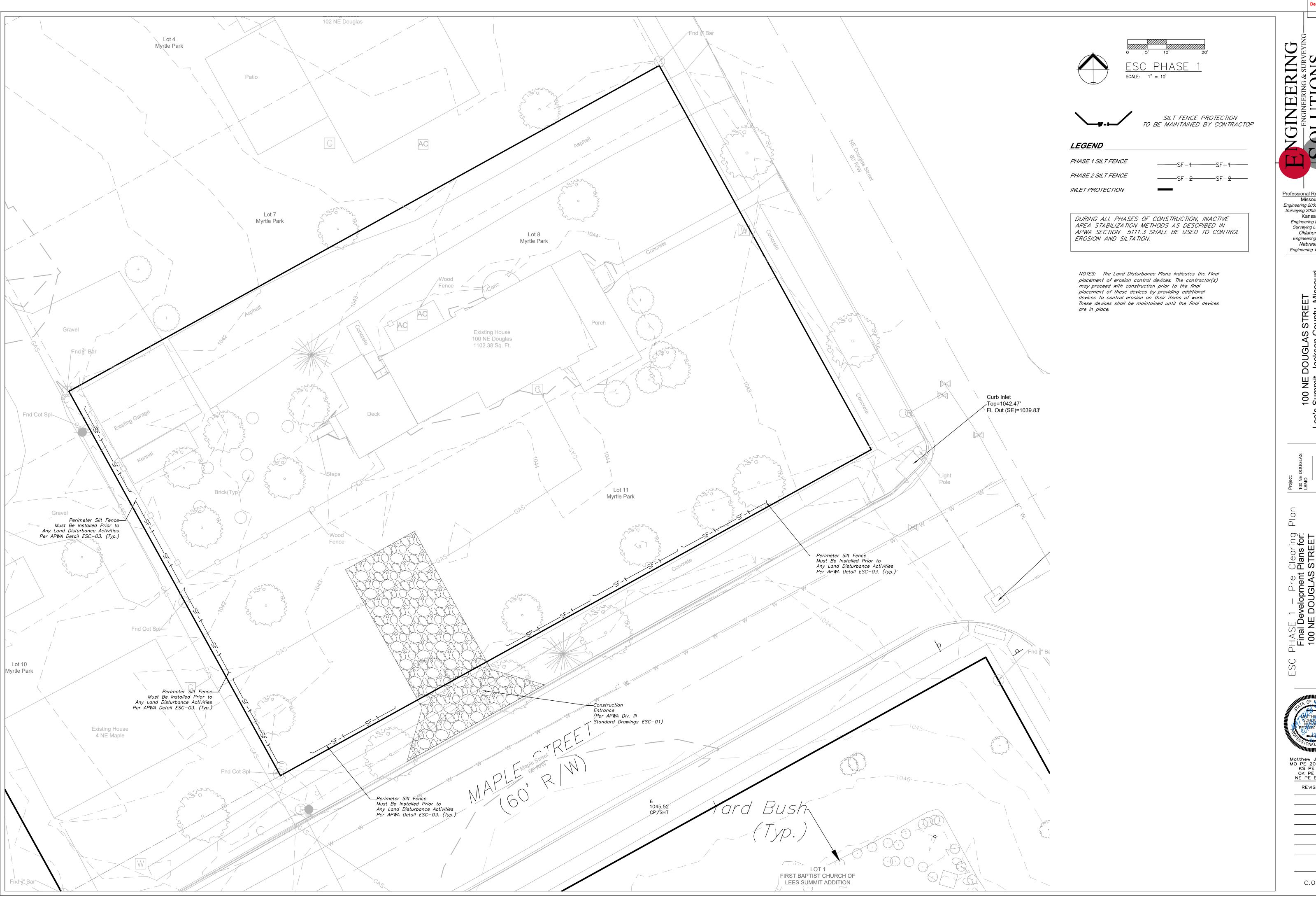
Proposed Electrical Service

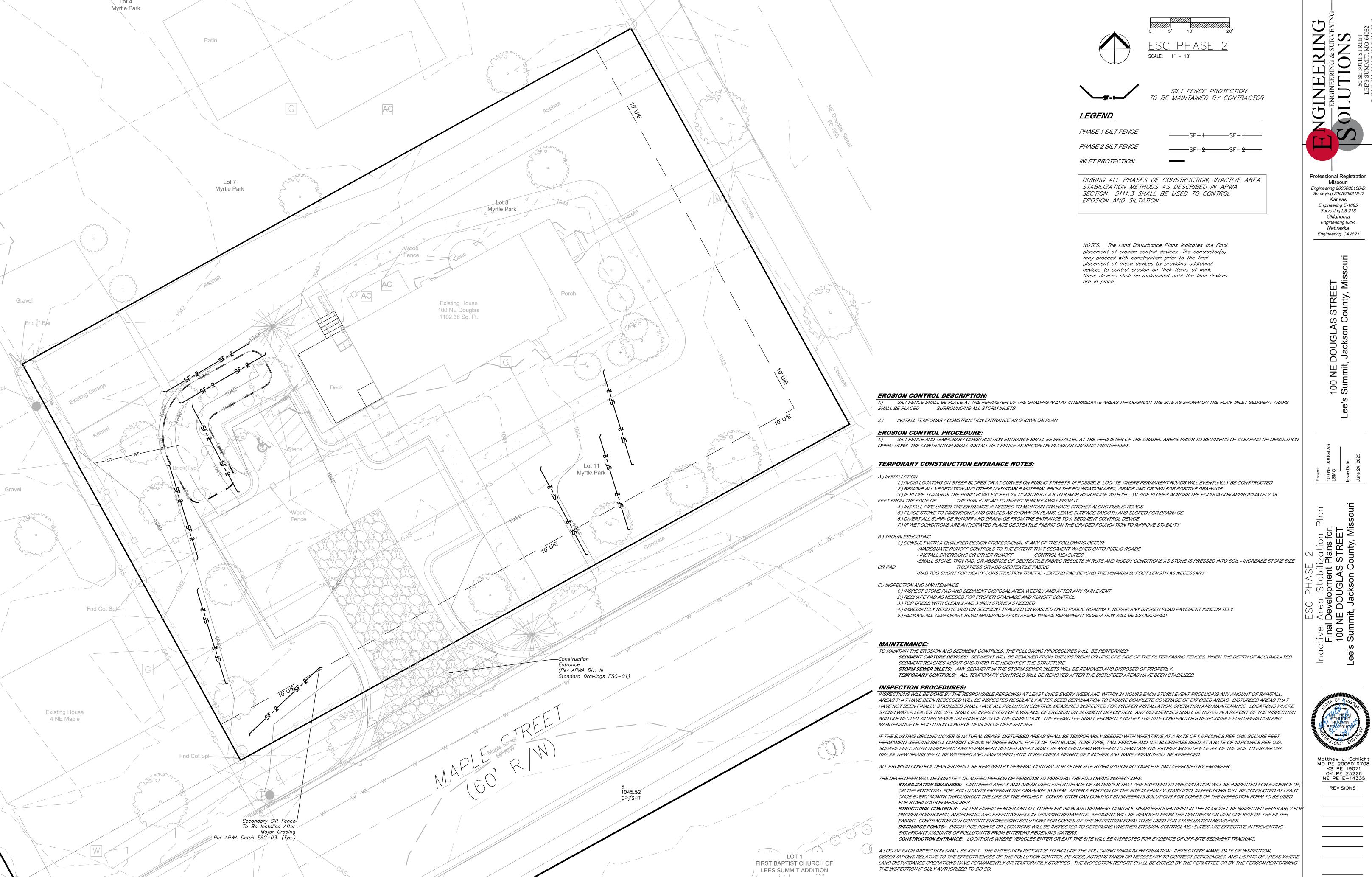
New storm line and detention.



LEGEND:		
Existing Underground Power	UGP-	UGP
Existing Conc. Curb & Gutter		
Existing Wood Fence	X_	X
Existing Gas Main	——— GAS -	——— GAS ———
Existing Water Main	-X-W/M	X-W/M
Existing Storm Sewer	-X-STM- — —	X-STM
Existing Sanitary Sewer	-X-SAN- — —	X-SAN
Existing Underground Telephon	eUGT	——UGT——
Existing Overhead Power		- OHE-
Proposed Storm Sewer	ST	—STST
Proposed Sanitary Sewer	ss	ss
Proposed Underground Power	UGT	UGT
Proposed Gas Service		- GAS —
Proposed 8" D.I.P. Water		— W———

C.001





C.051



SOLUTIONS

SO SE 30TH STREET

LEE'S SUMMIT, MO 64082

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

100 NE DOUGLAS STREET Summit, Jackson County, Missouri

100 NE DOUGLAS
LSMO
Issue Date:

ASE 3 - Final Restoration Plans Binal Development Plans for:
100 NE DOUGLAS STREET
s Summit, Jackson County, Missouri

ESC PHASE Final 100 N



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C.052

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Professional Registration Engineering 2005002186-D Surveying 2005008319-D Kansas Engineering E-1695 Surveying LS-218 Oklahoma Engineering 6254 Nebraska Engineering CA2821

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CONSTRUCTION ENTRANCE

AND CONCRETE WASHOUT

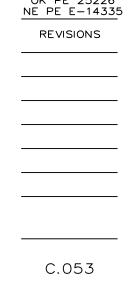
NUMBER ESC-01

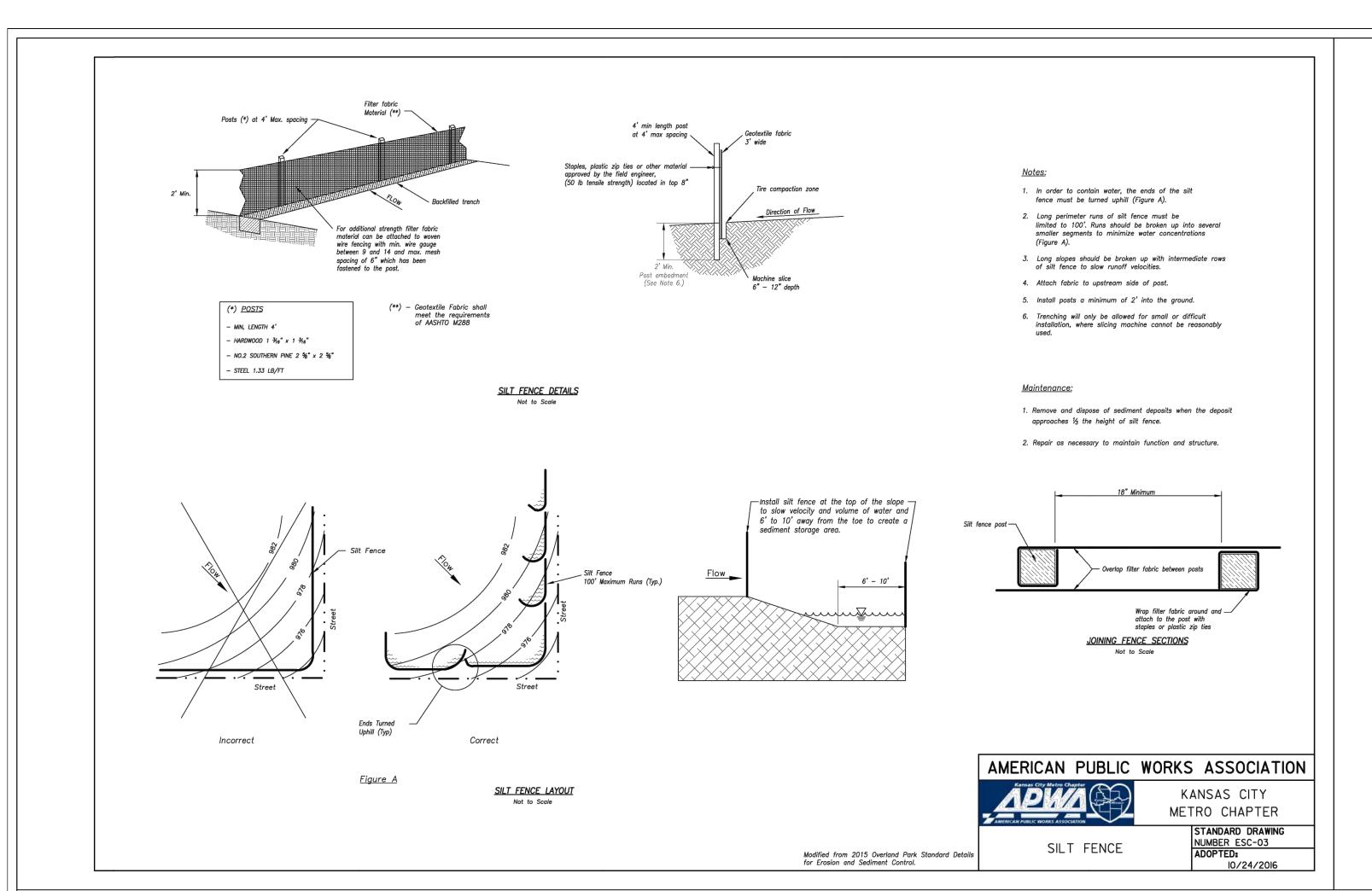
10/24/2016

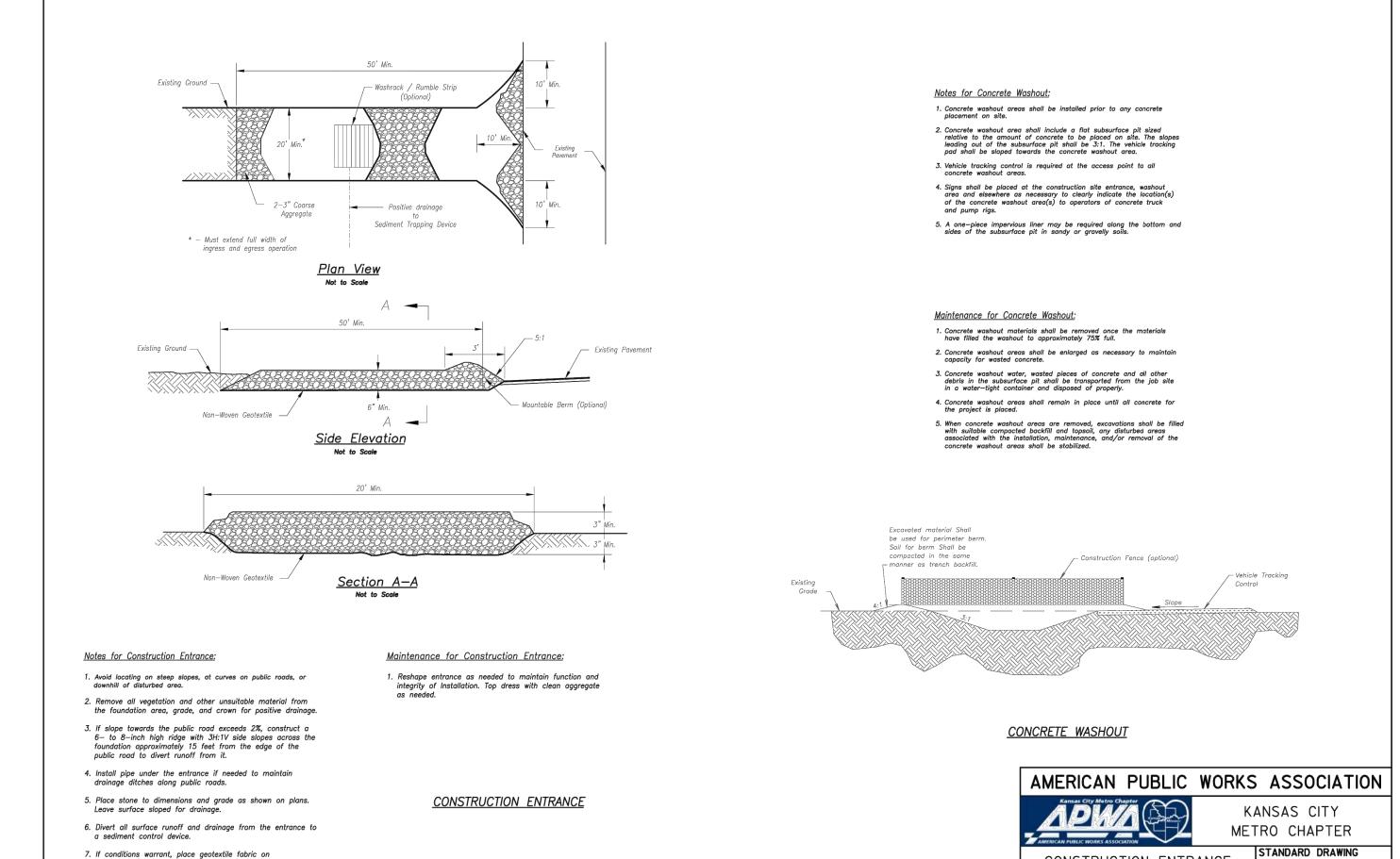
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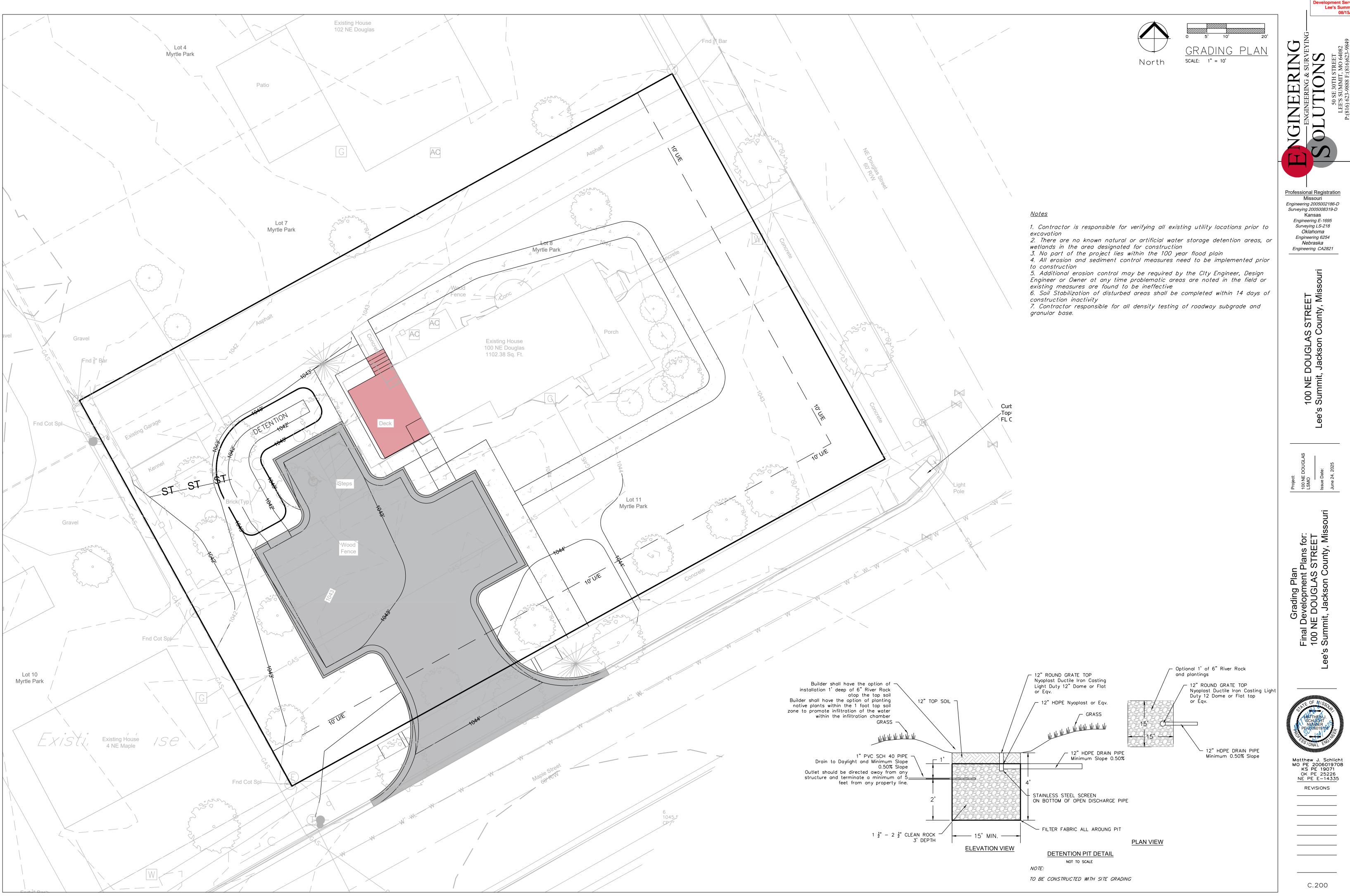






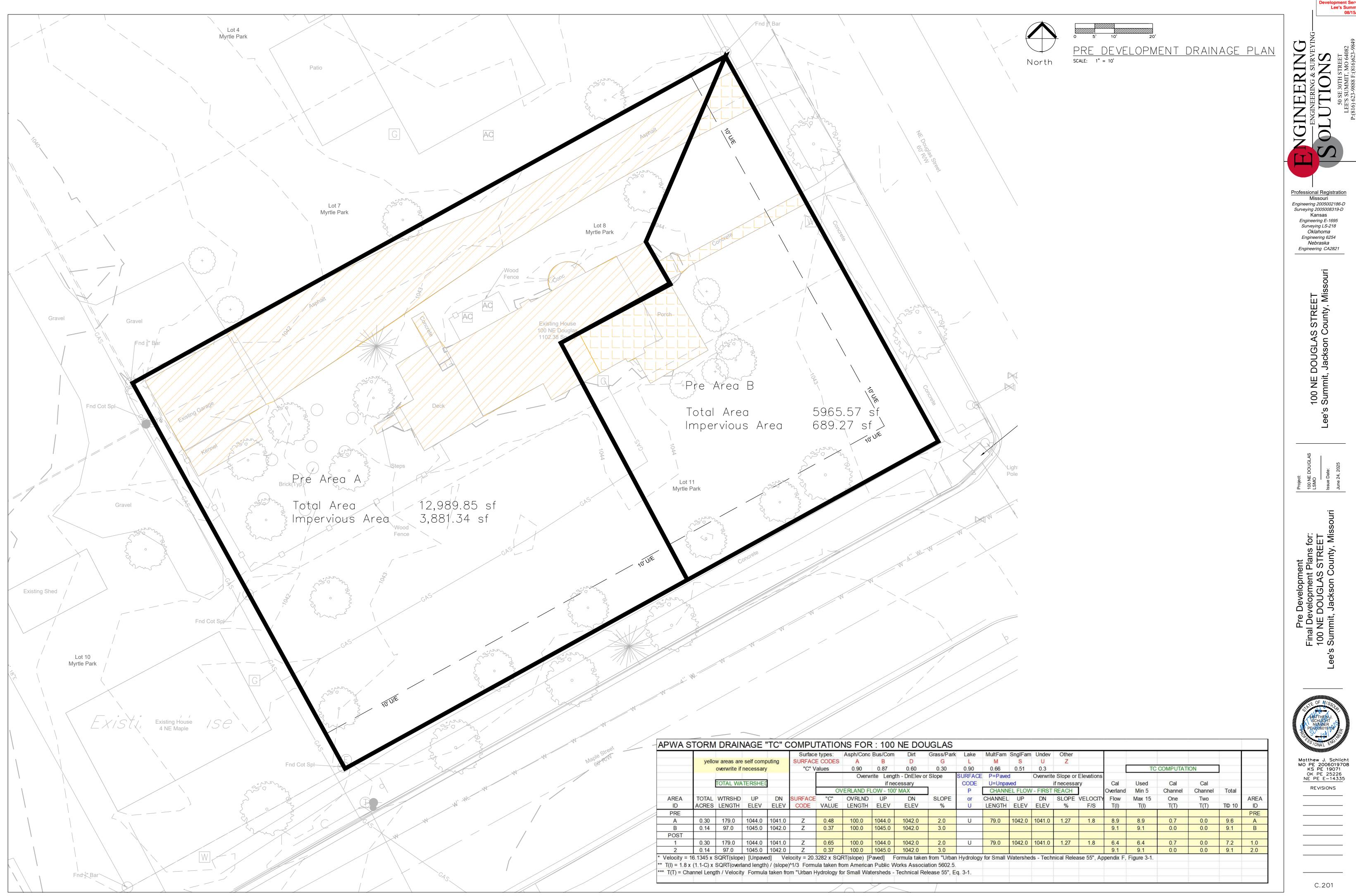
the graded foundation to improve stability.

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

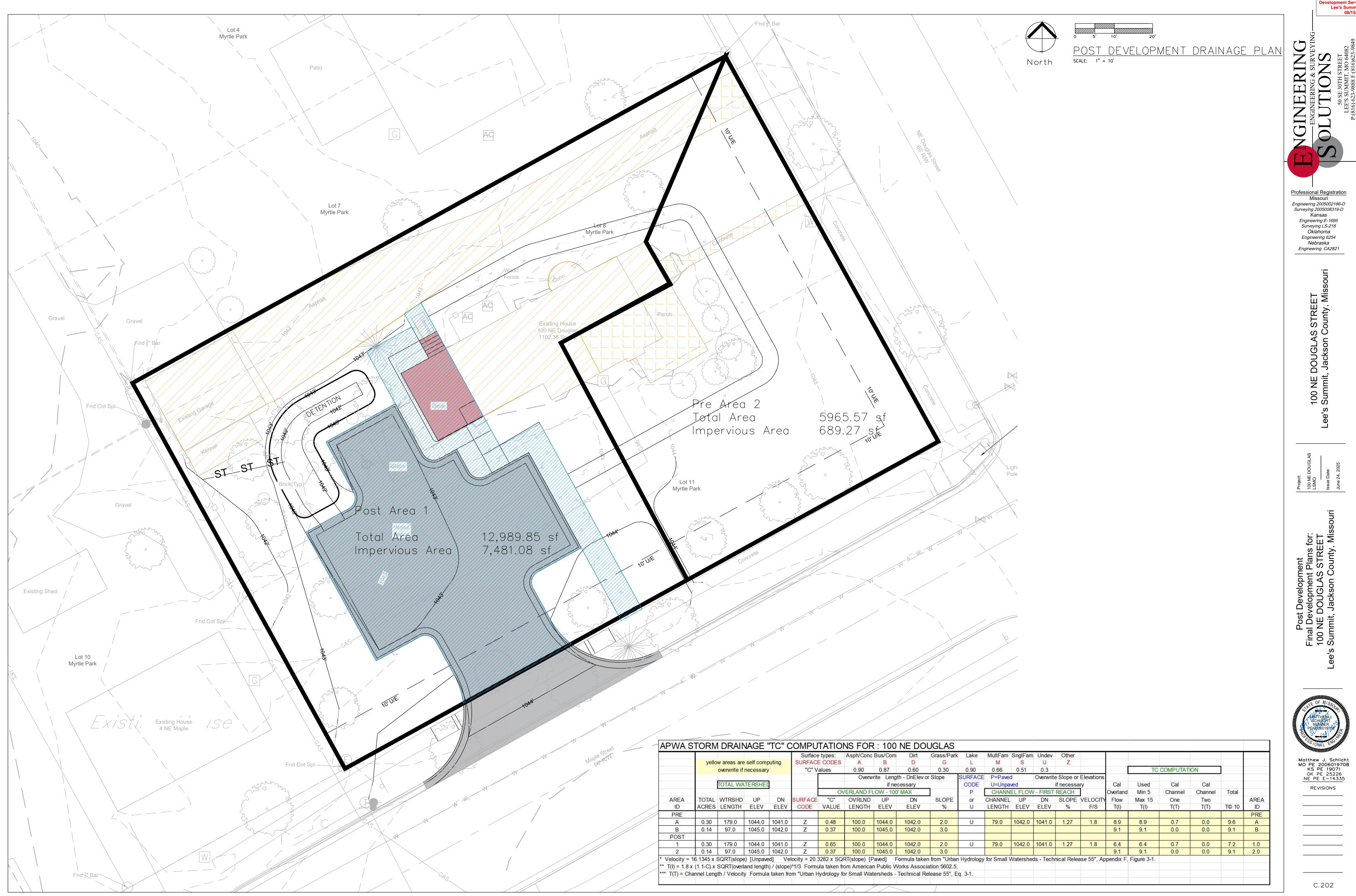


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As Noted on Plans Review

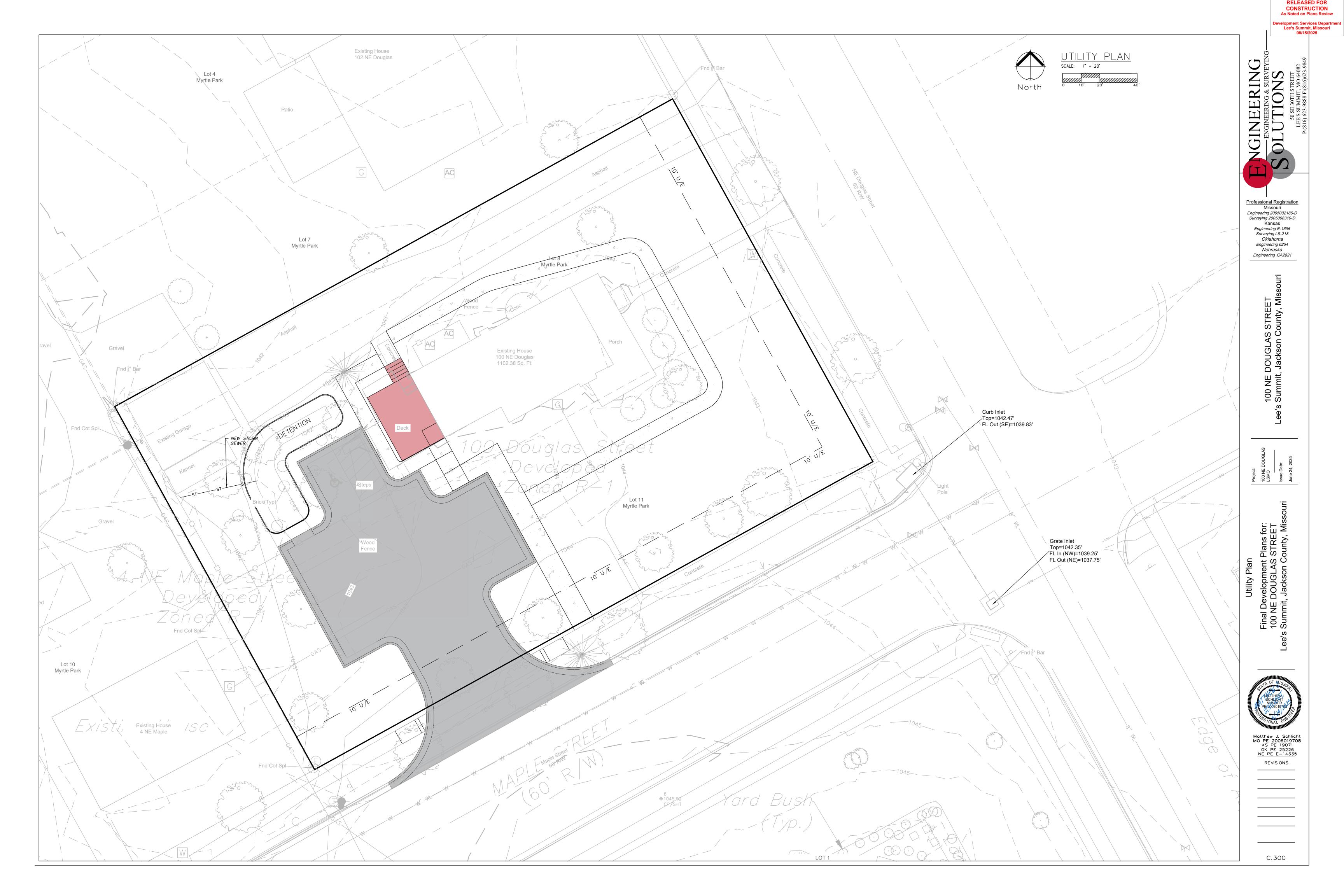
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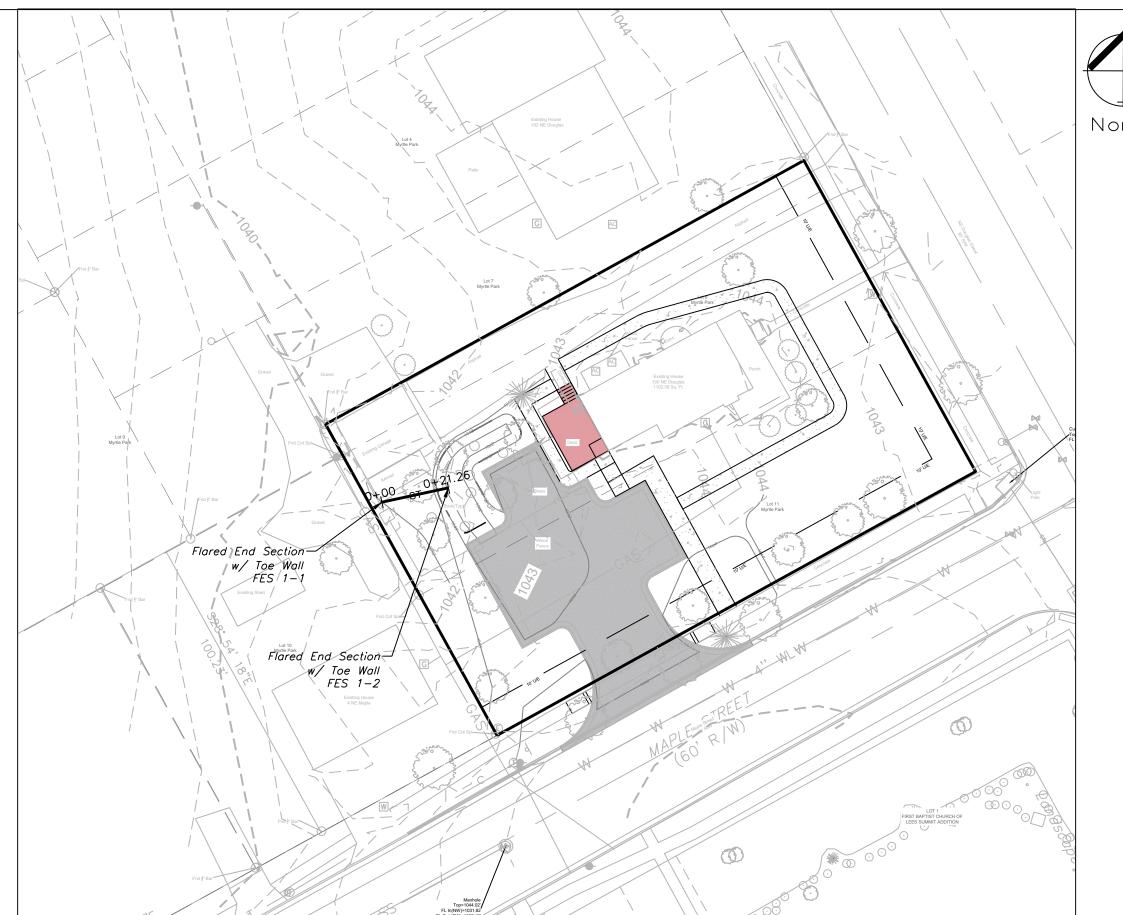


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### STORM SEWER PLAN AND PROFILE SCALE: 1" = 30'

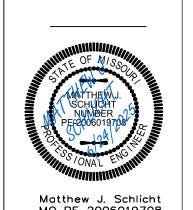
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Professional Registration
Missouri
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Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

100 NE DOUGLAS STREET e's Summit, Jackson County, Misso

Project:
100 NE DOUGLAS
LSMO
Issue Date:
June 24, 2025

Storm Sewer Plan and Profile Final Development Plans for: 100 NE DOUGLAS STREET Lee's Summit, Jackson County, Missou

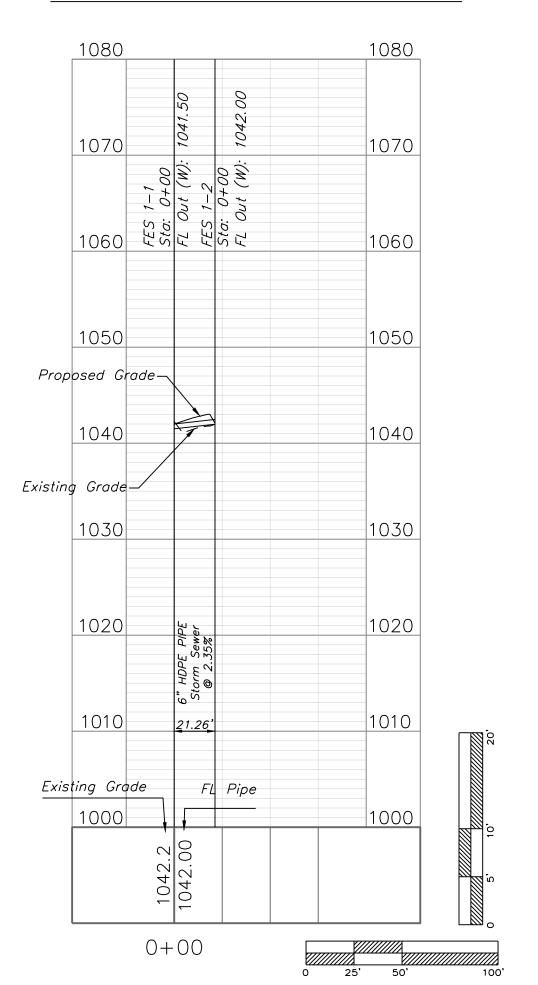


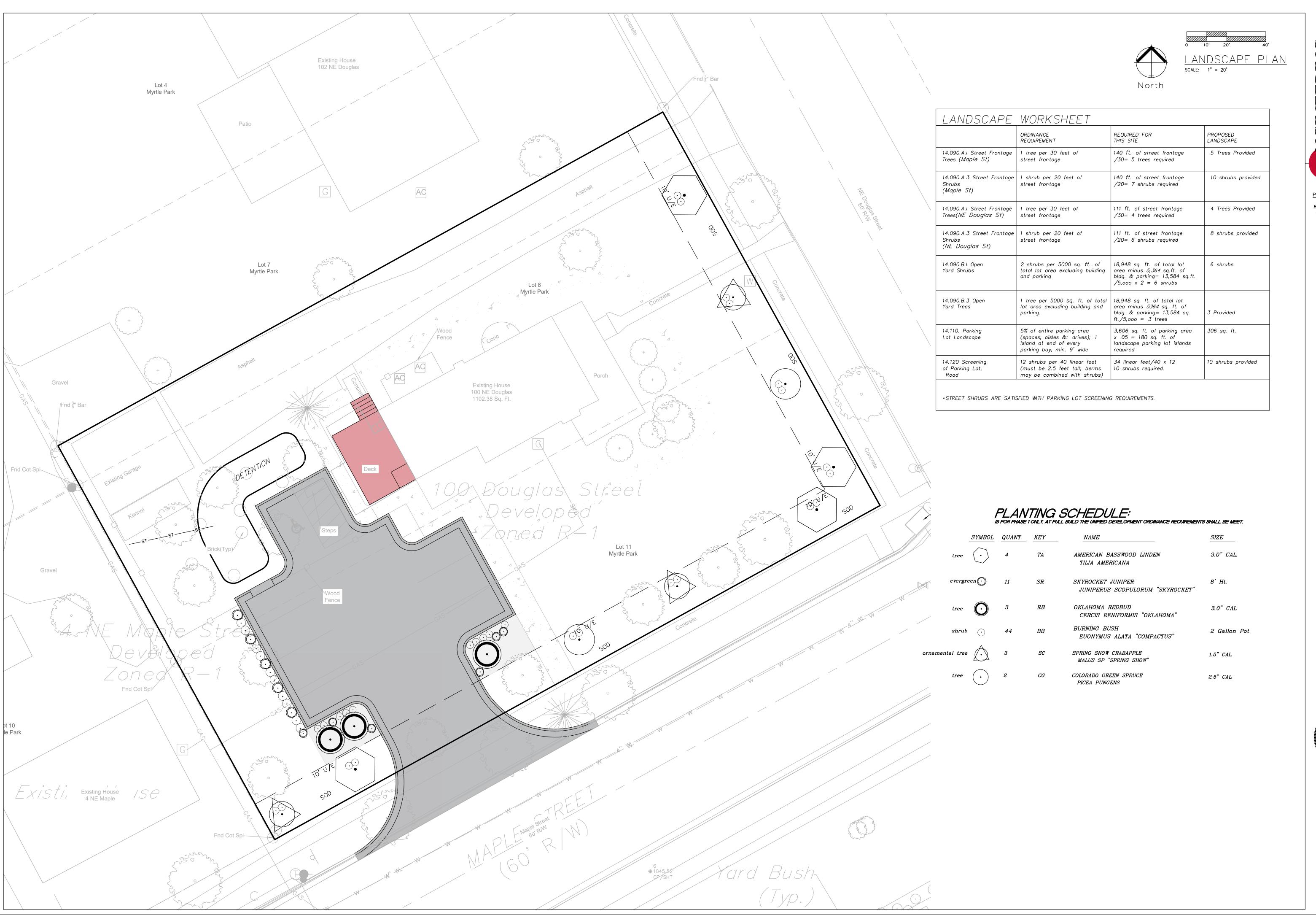
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

KS PE 19071
OK PE 25226
NE PE E-14335
REVISIONS

C.301

STORM LINE 1





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Professional Registration
Missouri

Engineering 2005002186-D Surveying 2005008319-D Kansas Engineering E-1695 Surveying LS-218 Oklahoma Engineering 6254 Nebraska Engineering CA2821

> DOUGLAS STREET , Jackson County, Mi 100 NE I Summit,

Project: 100 NE D LSMO Issue Date June 24, 2

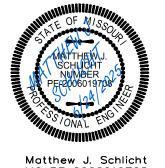
*LANDSCAPE H*Final Development
100 NE DOUGLAS
Summit, Jackson (



Motthew J. Schlicht MO PE 2006019708 KS PE 19071 OK PE 25226 NE PE E-14335 REVISIONS

L.100

REVISIONS



MO PE 2006019708 KS PE 19071 OK PE 25226 NE PE E-14335

Project:
100 NE
LSMO
Issue Di

L.101

### GENERAL LANDSCAPE NOTES: PLANT MATERIAL

ALL PLANT MATERIAL SHALL BE FIRST CLASS REPRESENTATIVES OF SPECIFIED SPECIES, VARIETY OR CULTIVAR, IN HEALTHY CONDITION WITH NORMAL WELL DEVELOPED BRANCHES AND ROOT PATTERNS. PLANT MATERIAL MUST BE FREE OF OBJECTIONABLE FEATURES. PLANTS SHALL COMPLY IN ALL APPLICABLE RESPECTS WITH PROPER STANDARDS AS SET FORTH IN THE AMERICAN ASSOCIATION OF NURSERYMEN'S "AMERICAN STANDARD OF NURSERY STOCK", ANSI Z60.1-2004. SHRUBS SHALL BE CONTAINER GROWN AND WILL BE FREE OF DISEASE AND PESTS. NO BARE ROOT. ALL PLANT BEDS TO BE MULCHED TO A DEPTH OF 3" WITH DARK BROWN, HARDWOOD MULCH. PLANTING BEDS ARE TO

E FREE OF WEEDS AND GRASS. TREAT BEDS WITH A PRE-EMERGENT HERBICIDE PRIOR TO PLANTING AND MULCH PLACEMENT. APPLY IN ACCORDANCE WITH STANDARD TRADE PRACTICE. HOLE AREA FOR TREE TO BE TWICE (2x) THE DIAMETER OF THE ROOT BALL AND ROOT BALL SHALL BE SLIGHTLY MOUNDED FOR WATER RUN-OFF. ALL PLANT MATERIALS SHALL BE PROTECTED FROM THE DRYING ACTION OF THE SUN AND WIND AFTER BEING DUG, WHILE BEING TRANSPORTED, AND WHILE AWAITING PLANTING. BALLS OF PLANTS WHICH CANNOT BE - LOOSEN TOP 8" OF SOIL 3' DIA. AROUND PIT WITH PITCH FORK. PLANTED IMMEDIATELY SHALL BE PROTECTED FROM DRYING ACTION BY COVERING THEM WITH MOIST MULCH.

PERIODICALLY, APPLY WATER TO MULCH-COVERED BALLS TO KEEP MOIST. IF PLANTING SHOULD OCCUR DURING GROWING SEASON, APPLY ANTI-DESICCANT TO LEAVES BEFORE TRANSPORT TO REDUCE THE LIKELIHOOD OF WINDBURN. REAPPLY ANTI- DESICCANT AFTER PLANTING TO REDUCE TRANSPIRATION. REMOVE TWINE AND BURLAP FROM ROOT BALLS. SOIL ON TOP OF CONTAINERIZED OR BALLED PLANTS IS TO BE REMOVED UNTIL ALL PLANTS' ROOT FLARES ARE EXPOSED. THIS IS THE NATIVE SOIL LINE AT WHICH PLANTING DEPTHS SHOULD BE MEASURED. AFTER PLANTING IS COMPLETED, PRUNE MINIMALLY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES. PRUNE IN SUCH A MANNER AS NOT TO CHANGE THE NATURAL HABIT OR SHAPE OF THE PLANT. MAKE CUTS BACK TO BRANCH COLLAR, NOT FLUSH. DO NOT PAINT ANY CUTS WITH WITH TREE PAINT. CENTRAL LEADERS SHALL NOT BE REMOVED.

6. GUARANTEE TREES, SHRUBS, GROUND COVER PLANTS FOR ONE CALENDAR YEAR FOLLOWING PROVISIONAL ACCEPTANCE OF THE OVERALL PROJECT. DURING THE GUARANTEE PERIOD, PLANTS THAT DIE DUE TO NATURAL CAUSES OR THAT ARE UNHEALTHY OR UNSIGHTLY IN CONDITION, SHALL BE REPLACED BY THE CONTRACTOR.

#### LAWN AND TURF AREAS

7. ALL LAWN AREAS TO BE SODDED AS SHOWN ON PLANS. SOD SHALL COMPLY WITH US DEPT. OF

TURF-TYPE TALL FESCUE KENTUCKY BLUEGRASS

CITY OF LEE'S SUMMIT, MO. AND LANDSCAPE INDUSTRY STANDARDS. 10. ALL LANDSCAPE AREAS TO BE FREE OF ALL BUILDING DEBRIS AND TRASH, BACK FILLED WITH CLEAN FILL ORGANIC MATERIAL MINIMUM, ASTM D5268.

1. PLANT BEDS TO BE "MOUNDED". ALL PLANT MATERIAL, PLANT BEDS, MULCH AND DUG EDGE ARE TO BE INSTALLED PER LANDSCAPE PLANS, DETAILS, AND MANUFACTURER'S RECOMMENDATIONS. REESTABLISH FINISH GRADES TO WITHIN ALLOWABLE TOLERANCES ALLOWING 3/4" FOR SOD AND 3" FOR MULCH IN PLANT BEDS. HAND RAKE ALL AREAS TO SMOOTH EVEN SURFACES FREE OF DEBRIS, CLODS, ROCKS, AND VEGETATIVE MATTER GREATER THAN 1".

CONTROL FABRIC IN PLANT BEDS ONLY. 14. CONTRACTOR IS RESPONSIBLE FOR INITIAL WATERING UPON INSTALLATION.

16. THE EXACT LOCATION OF ALL UTILITIES, STRUCTURES, AND UNDERGROUND UTILITIES SHALL BE DETERMINED AND VERIFIED ON SITE BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION OF THE MATERIALS. DAMAGE TO CONTRACTOR AT NO COST TO THE OWNER. 17. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND APPROVALS AND REO'D INSPECTIONS BY LEGAL AUTHORITIES. AREAS INCLUDING ALL PLANT BEDS, INDIVIDUAL TREES, AND TURF AREAS. ALL LAWN AREAS (AS SHOWN ON PLANS) WILL BE IRRIGATED BY AN AUTOMATIC SPRINKLER SYSTEM. THE LANDSCAPE CONTRACTOR IS REVIEW AND APPROVAL PRIOR TO INSTALLATION. 19. ANY SUBSTITUTIONS OR DEVIATIONS SHALL BE REQUESTED IN WRITING BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIALS. ALL PLANTS ARE TO BE LOCATED AS SPECIFIED ON DRAWINGS.

AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT AND EQUAL IN QUALITY TO STANDARDS FOR CERTIFIED SEED. SOD SHALL BE HEALTHY, THICK TURF HAVING UNDERGONE A PROGRAM OF REGULAR FERTILIZING, MOWING AND WEED CONTROL. SEED AND SOD SHALL BE A TURF-TYPE TALL FESCUE (3 WAY) BLEND. SEED BLEND SHALL CONSIST OF THE FOLLOWING:

8. ALL AREAS DISTURBED SHALL BE SODDED.

INSTALLATION

- EXCAVATE HOLE 2 X DIA. OF

ROOT BALL TO BE ELEVATED SO EXCESS WATER DRAINS AWAY.

- EXISTING SUB-GRADE

THE INSTALLATION OF ALL PLANT MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE

SOIL AND TOP DRESSED WITH 4" OF TOPSOIL. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 7 AND A 4%

13. ALL PLANT BEDS, SHRUBS AND TREES SHALL BE MULCHED WITH 3" OF DARK BROWN, HARDWOOD MULCH, EXCEPT IF NOTED AS ROCK. DARK BROWN, HARDWOOD MULCH SHALL BE INSTALLED OVER DEWITT PRO 5 WEED 15. DUG EDGES ARE TO BE DUG WHERE MULCH BEDS ARE ADJACENT TO TURF AREAS. NO EDGING IS REQUIRED

EXISTING UTILITIES AND OR STRUCTURES SHALL BE REPLACED TO THEIR ORIGINAL CONDITION BY THE LANDSCAPE 8. PROVISIONS SHALL BE MADE FOR READILY ACCESSIBLE IRRIGATION WITHIN 100' MAX. OF ALL LANDSCAPED RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL IRRIGATION COMPONENTS, SLEEVING, PIPE AND CONTROL. DESIGN DRAWINGS OF IRRIGATION SYSTEM SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT AND OWNER FOR

MAINTENANCE BY OWNER

. ALL SHRUBS ARE TO BE MAINTAINED IN THEIR NATURAL SHAPE TO ALLOW EVENTUAL GROWTH INTO A HEDGE. 21. MAINTAIN NATURAL HABIT OF ALL SPECIFIED PLANT MATERIAL. 22. NEW SOD TO BE THOROUGHLY WATERED UNTIL ROOTS "TAKE HOLD" OF SOD BED. CONTINUE WATERING AS REQUIRED, UNTIL COMPLETELY ESTABISHED.

IRRIGATION PERFORMANCE SPECIFICATION: THE FOLLOWING CRITERIA SHALL BE CONSIDERED MINIMUM STANDARDS FOR DESIGN AND INSTALLATIONOF LANDSCAPE IRRIGATION SYSTEM:

1. GENERAL - IRRIGATION SYSTEM TO INCLUDE DRIP IRTRIGATION OF SHRUB BEDS ADJACENT TO BUILDINGS, SPRAY HEADS IN THE PARKING ISLANDS, AND ROTORS AROUND THE PERIMETER OF THE PARKING LOTS. HEADS SHALL THROW AWAY FROM BUILDING AND ACOID SPRAYING OVER SIDEWALKS.

2. IRRIGATION SYSTEM SHALL CONFORM TO ALL INDUSTRY STANDARDS AND ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING DESIGN AND INSTALLATION.

B. WATERLINE TYPW, SIZE LOCATION, PRESSURE AND FLOW SHALL BE FIELD VERIFIED PRIOR TO SYSTEM DESIGN AND INSTALLATION. 4. ALL MATERIALS SHALL BE FROM NEW STOCK FREE OF DEFECTS AND CARRY A MINIMUM ONE YEAR WARRANTY FROM THE DATE OF

5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED IN SUCH A WAY THAT ALL SYSTEM COMPONENTS OPERATE WITHIN THE GUIDELINES ESTABLISHED BY THE MANUFACTURER.

6. LAWN AREA AND SHRUB BEDS SHALLBE ON SEPARATE CIRCUITS. 7. PROVIDE WATER TAP, METER SET, METER VAULT AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER FOR IRRIGATION SHALL

CONFORM TO LOCAL WATER GOVERNING AUTHORITY CUIDELINES AND STANDARDS.

8. BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH STATE AND LOCAL REQULATIONS. 9. IRRIGATION CONTROLLER TO BE LOCATED IN UTILITY ROOM INSIDE BUILDING, AS IDENTIFIED BY OWNER.

10. IRRIGATION CONTROLLER STATIONS SHALL BE LABELED TO CORRESPOND WITH THE CIRCUIT IT CONTROLS. 11. CONTRACTOR SHALL PROVIDE TO THE OWNER WRITTEN OPERATION INFORMATION FOR ALL SYSTEM COMPONENTS.

12. CONTRACTOR SHALL PROVIDE O THE OWNER ALL KEYS, ACCESS TOOLS, WRENCHES AND ADJUSTING TOOLS NECESSARY TO GAIN ACCESS, ADJUST AND CONTROL THE SYSTEM.

13. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

15. INSTALL SCHEDULE 40 PVC SLEEVES UNDER ALL CURBS, PAVING AND SIDEWALKS. SLEEVES TO BE TWICE THE SIZE OF THE LINE IT HOUSES.

16. INSTALL MANUAL DRAIN BALBES AT LOWEST POSSIBLE ELEVATION ON IRRIGATION MAIN TO ALLOW GRAVITY DRAINING OF MAIN DURING WINTER MONTHS. PROVIE QUICK COUPLERS AT MULTIPLE LOCATIONS TO ALLOW FOR EASY "BLOWING OUT" OF LATERAL AND MAIN

17. ZONES OR NOZZLES SHALL BE DESIGNED WITH MATCHED PRECIPITATION RATES.

14. AN AUTOMATIC RAIN SHUT-OFF OR MOISTURE DEVICE SHALL BE INSTALLED.

18. MINIMUM LATERAL DEPTH IS 15" AND MAIN DEPTH IS 18".

19. SUBMIT DESGN DRAWING WITH BID TO ALLOW OWNER TO EVALUATE SYSTEM. INCLUDE CUT SHEETS OF ALL COMPONENTS AND ZONE TABLE ILLUSTRATING FLOWS AND ANTICIPATED PRESSURE AT FURTHEST HEAD. 20. AN "AS-BUILT" SCALED DRAWING SHALL BE PROVIDED TO THE OWNER BY THE CONTRACTOR AND SHALL INCLUDE UT NOT BE LIMITED TO

THE FOLLOWING: a. AS CONSTRUCTED LOCATION OF ALL COMPONENTS

b. COMPONENT NAME, MANUFACTURER, MODEL INFORMATION, SIZE AND QUANTITY

c. PIPE SIZE AND QUANTITY d. INDICATION OF SPRINKLER HEAD SPRAY PATTERN

e. CIRCUIT IDENTIFICATION SYSTEM

f. DETAILED METHOD OF WINTERIZED SYSTEM

SUBMIT AS-BUILT DRAWING IN FULL SIZE DRAWING FORM AS WELL AS PDF ELECTRONIC FORMAT. (SCANNING FULL SIZE COPY OF PLAN IS ACCEPTABLE IF IT CAN BE PRINTED TO SCALE.

EVERGREEN TREE PLANTING NEVER CUT LEADER. PRUNE -ONLY DEAD OR DAMAGED BRANCHES-DO NOT LEAVE STUBS. SET TOP OF ROOT CROWN -3" ABOVE FINISH GRADE. - EXCAVATE HOLE 2 X DIA. OF 3" MULCH. — 4" SAUCER EXCESS WATER DRAINS AWAY. BASKETS FROM TOP AND SIDES OF BALL. FINISH GRADE BACKFILL SOIL ONLY -SCARIFY SIDES OF PIT. - EXISTING SUB-GRADE. DECIDUOUS TREE PLANTING

3" ABOVE FINISH GRADE.

3" MULCH.

REMOVE BURLAP AND WIRE

BASKETS FROM TOP AND SIDES OF BALL.

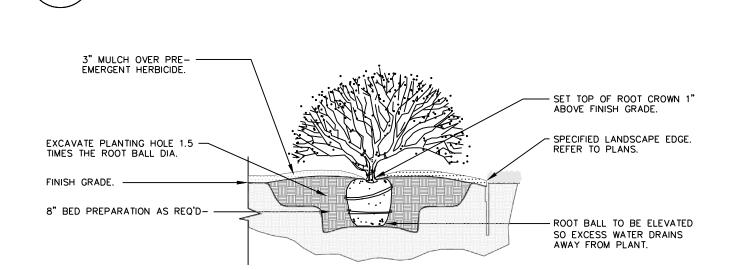
4" SAUCER

FINISH GRADE

BACKFILL SOIL ONLY. SCARIFY SIDES OF PIT.

EFFECT IS CREATED(TYP. 3" MULCH OVER WEED — PREVENTION BARRIER. - FINISH GRADE MOUND BED AND LEAVE 3.5" AT SIDEWALK SO THAT THE MULCH SETTLES BELOW TOP OF SIDEWALK.

SIDEWALK EDGE AT PLANT BED



SHRUB PLANTING

N.T.S.

N.T.S.

Collins | webb Architecture

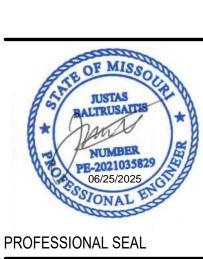
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CONSTRUCTION
As Noted on Plans Review

08/15/2025

100 NE DOUGLAS ST. LEE'S SUMMIT, MO 64063

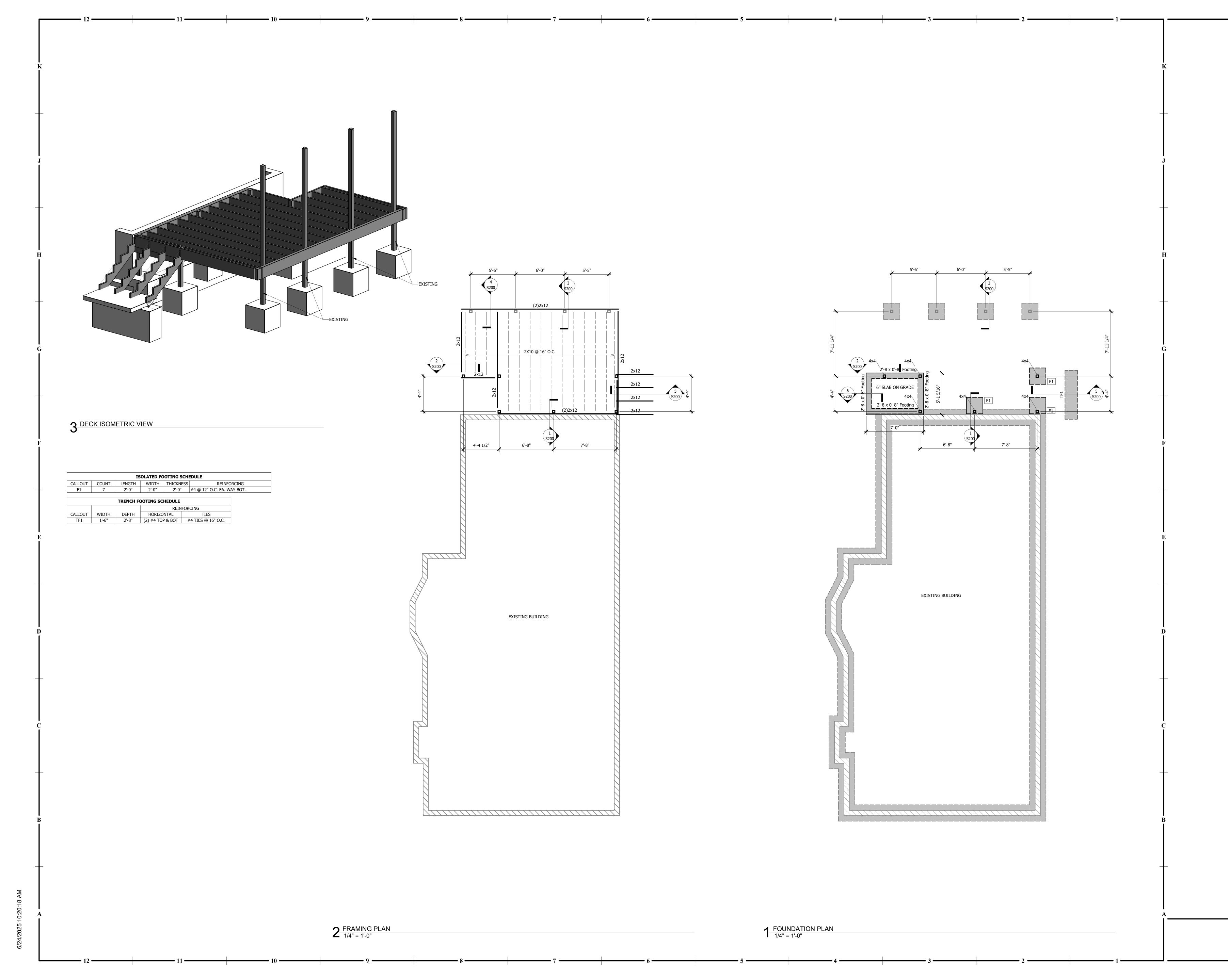
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S100

ISSUE DATE: 24 JUNE 2025
COLLINS WEBB #: 24114

**GENERAL NOTES** 



HERITAGE ASSET MANAGEMENT

AND REDOUGLAS ST.

I FE'S SUMMIT MO 64063

LEF'S SUMMIT MO 64063

ISSUE DATE: 24 JUNE 2025 COLLINS WEBB #: 24114

STRUCTURAL PLANS

Webb Architecture

Webb Architecture

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Webb Architecture

Mebb Architecture

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Mebb Architecture

Meb Architecture

Mebb Architecture

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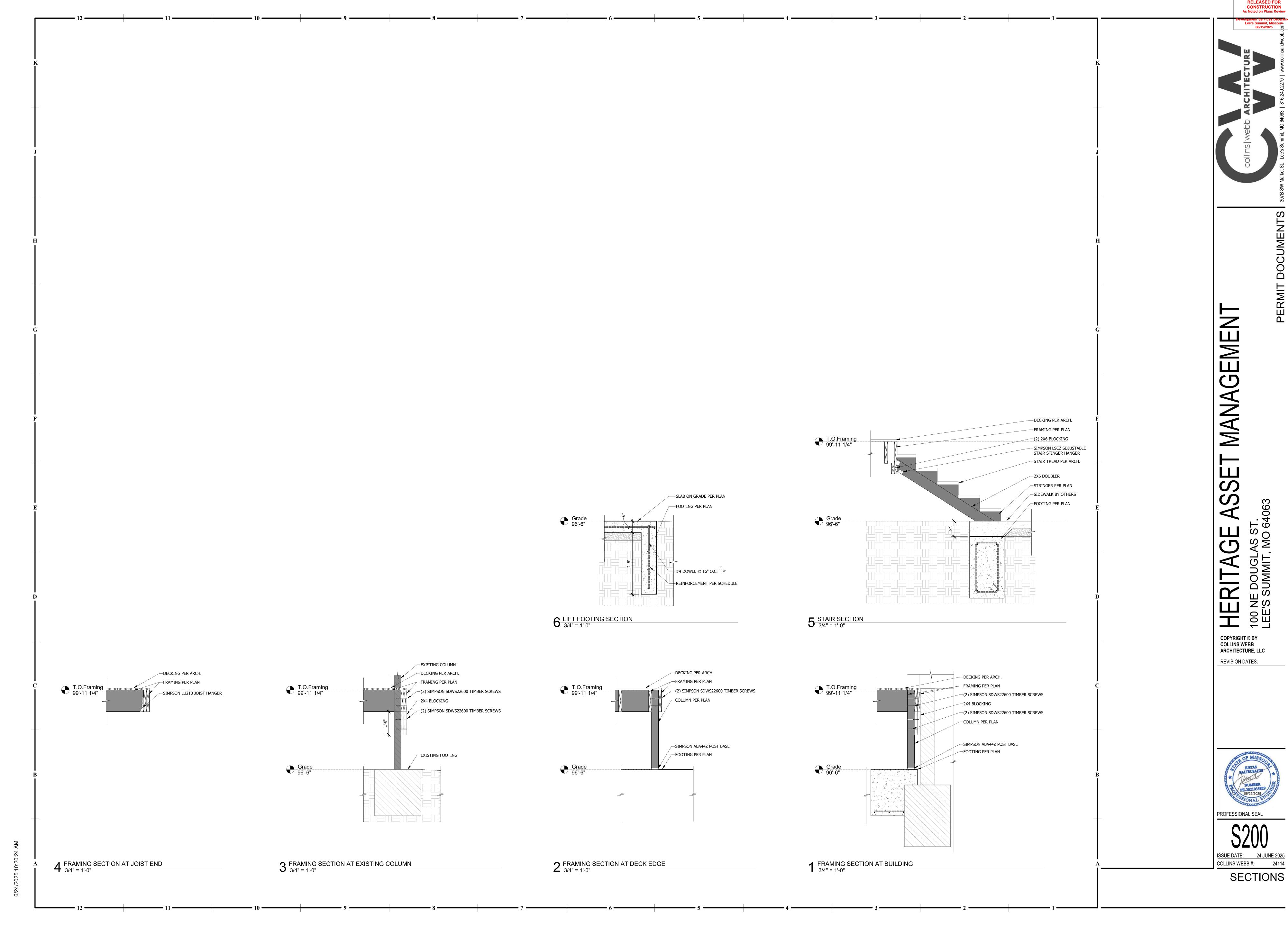
Mebb Architecture

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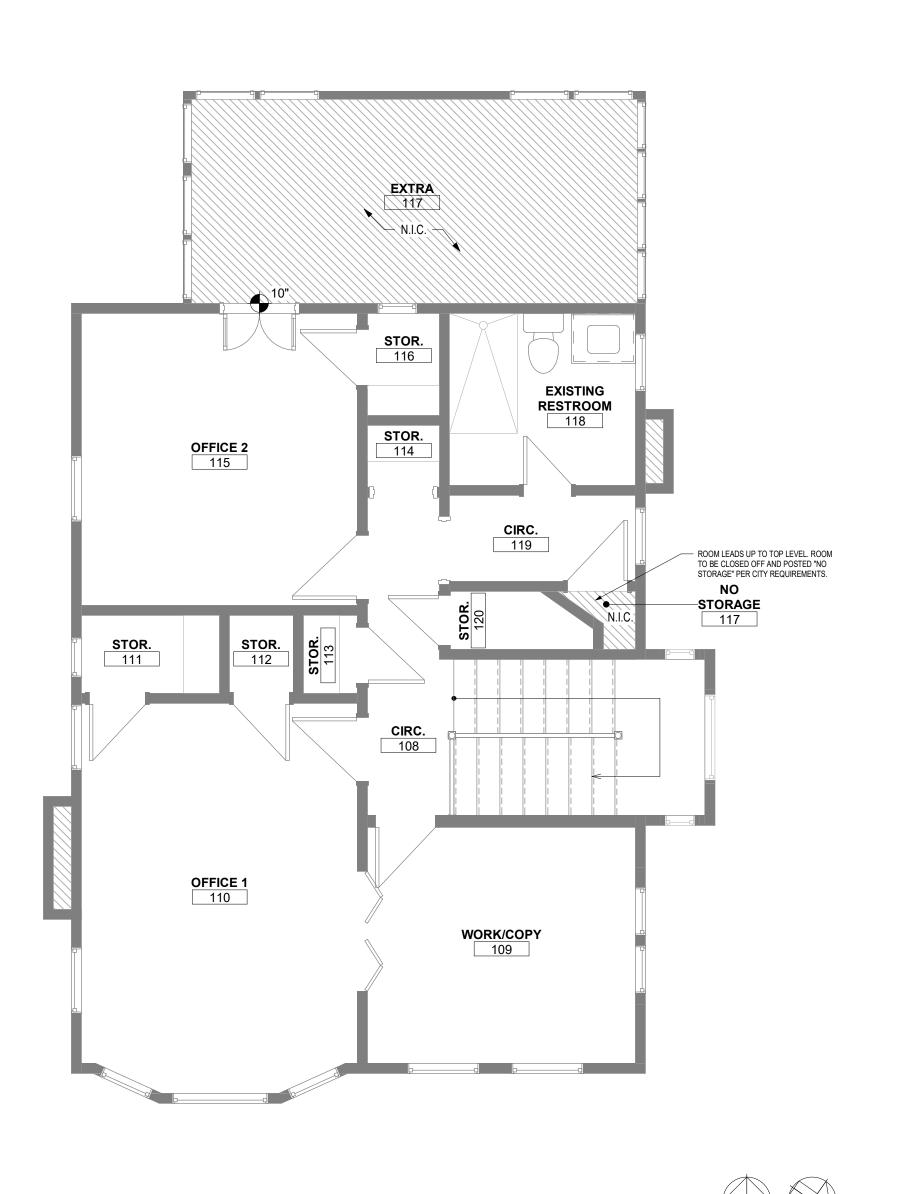
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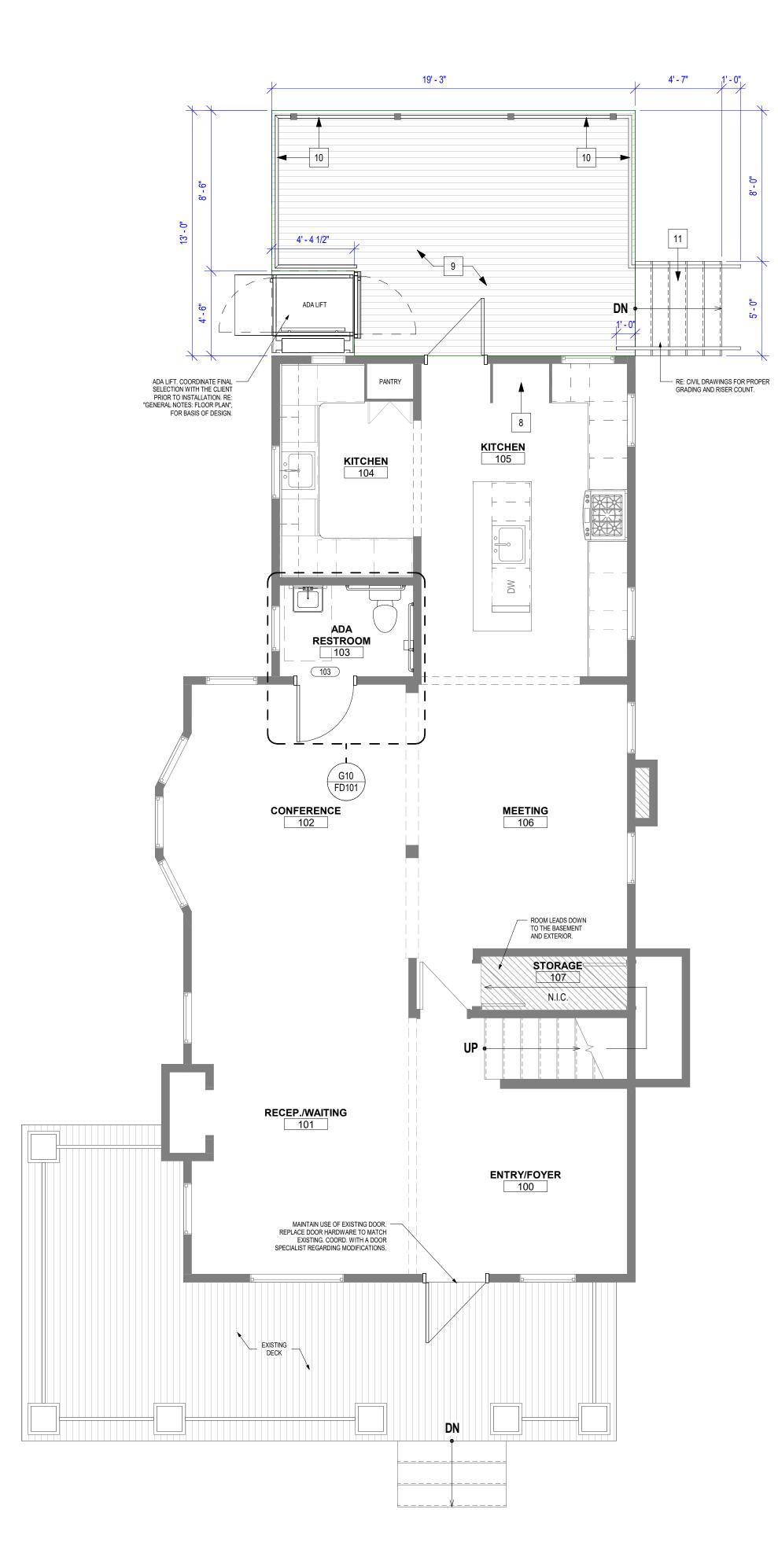


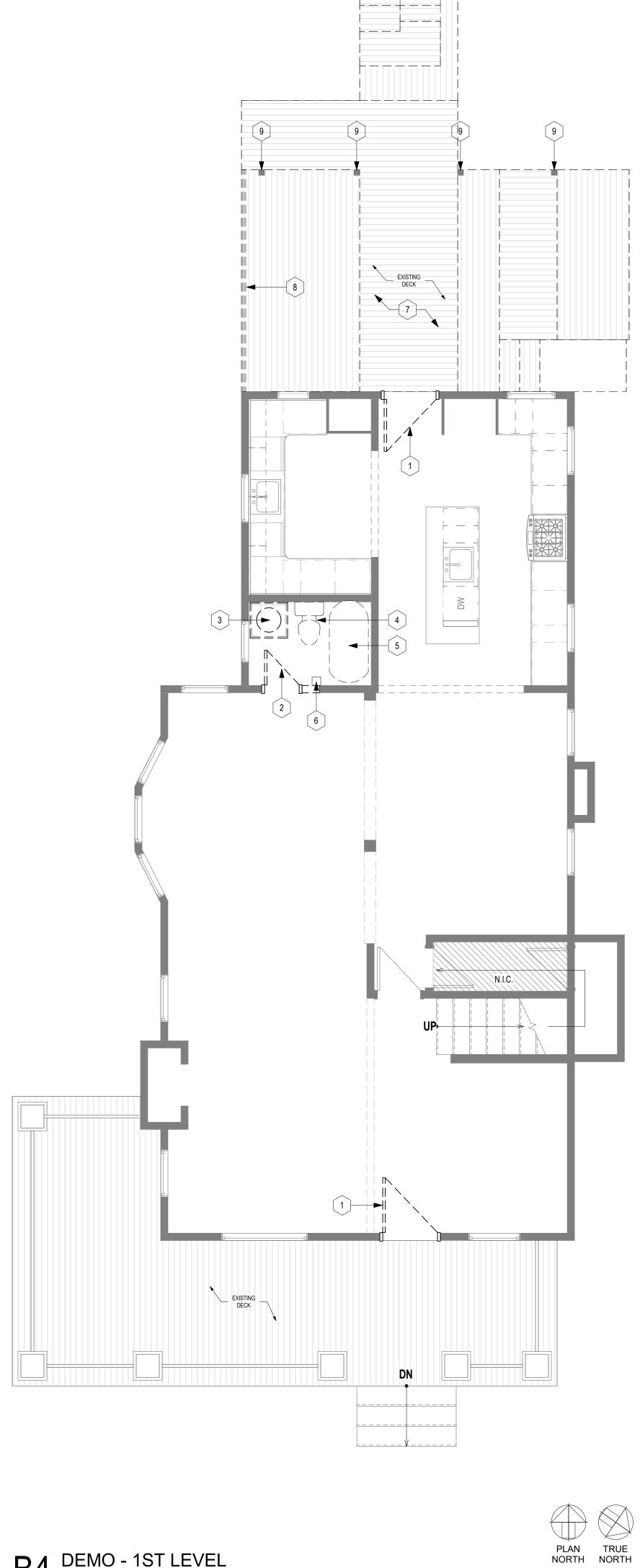
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SECTIONS

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**GENERAL NOTES:** Lee's Summit, Misso 08/15/2025 **DEMOLITION PLANS** 1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE. 2. CONTRACTOR TO VISIT PROJECT SITE AND BUILDING PRIOR TO BID. 3. BUILDING AND SITE TO REMAIN SECURE DURING DEMOLITION AND CONSTRUCTION. 4. PROTECT ALL ITEMS TO REMAIN (WALLS, PLUMBING FIXTURES, PIPING, HVAC UNITS, COLUMNS, ETC). 5. CONTRACTOR TO PROTECT EXISTING FINISHES ADJACENT TO DEMOLITION WORK. 6. CONTRACTOR TO PATCH AND REPAIR ALL WORK, ESPECIALLY WORK ADJACENT TO EXISTING AREAS, AS CONTRACTOR TO REPAIR ANY AREAS DAMAGED DURING DEMOLITION. 8. CONTRACTOR TO REPAIR ANY PUNCTURES OR TEARS TO THE VAPOR BARRIER AT THE EXTERIOR WALLS. 9. CONTRACTOR TO COORDINATE DEMOLITION OPENINGS WITH NEW PLANS AND ELEVATIONS. 10. REMOVE EXISTING GYP BOARD OR PLASTER AS NECESSARY, TO PROVIDE NEW BLOCKING IN EXISTING WALLS FOR NEW CASEWORK AND EQUIPMENT. . PROTECT EXISTING CONDITIONS AND MAINTAIN WEATHER TIGHTNESS FOR ALL OCCUPIED/UNOCCUPIED SPACES. **BOTH VERTICALLY AND HORIZONTALLY FOR THE ENTIRE** DURATION THAT THE BUILDING IS EXPOSED TO THE **ELEMENTS. PATCH/REPAIR/REPLACE AS REQUIRED KEYED NOTES: DEMO FLOOR PLAN** REUSE EXISTING DOOR. RECONFIGURE DOOR HARDWARE AND FRAME FOR NEW SWING DIRECTION. RE: DETAIL B8 FOR CLARIFICATION. REMOVE EXISTING DOOR, HARDWARE, AND TRIM. PREPARE OPENING FOR NEW DOOR, HARDWARE, REMOVE EXISTING SINK AND CASEWORK. CLIENT/GO

CONSTRUCTION As Noted on Plans Review

TO SELECT AND INSTALL NEW ADA COMPLIANT SINK RELOCATE EXISTING TOILET FIXTURE. SEE DETAIL

INFILL NICHE IN WALL. COORD. WITH MEP ON

B8 AND G12 FOR CLARIFICATION. REMOVE EXISTING BATH TUB. PATCH, REPAIR, AND

PLUMBING FIXTURE CONNECTION. RELOCATE EXISTING TOILET PAPER DISPENSER.

REMOVE EXISTING DECK AND STAIR MATERIAL/STRUCTURE. PREPARE SITE FOR NEW DECK CONSTRUCTION.

REMOVE PORTION OF EXISTING DECK RAILING.

EXISTING COLUMN TO REMAIN.

**■ GENERAL NOTES:** 

### **FLOOR PLANS**

. SEE GENERAL ARCHITECTURAL SHEETS FOR ADDITIONAL NOTES AND DETAILS THAT ARE APPLICABLE. ARCHITECTURAL ELEVATION 100'-0" DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF STUD (FOS), FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), COLUMN GRID LINES, AND FACE OF GYP. BOARD/WALL (FOG) FOR EXISTING BUILDINGS ONLY. UNLESS NOTED OR SHOWN OTHERWISE. 4. ALL DIMENSIONS ON ENLARGED RESTROOM PLANS ARE TO

FACE OF GYP. OR FACE OF FINISH, UNLESS OTHERWISE NOTED OR INDICATED. ADDITIONAL NOTED DIMENSIONS WIL HAVE ABBREVIATIONS INCLUDING: FACE OF STUD (F.O.S.), FACE OF MASONRY (F.O.M.), FACE OF CONCRETE WALLS (F.O.C.), AND COLUMN GRID LINES FOR ADDITIONAL CLARIFICATION.

RESTROOM ACCESSORIES ARE DIMENSIONED FROM FACE OF GYP. OR FACE OF FINISH, NOT FACE OF STUD. 6. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS AND PER WALL TYPES. SEE GENERAL SHEETS. 7. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO HINGE SIDE OF THE DOOR, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER PROTRUDING OBJECTS.

3. COORDINATE WITH THE CLIENT ON THE FINAL DOOR/DOOR FRAME HARDWARE SELECTION TYPE, COLOR, AND MANUF. INSTALL PER MANUF. RECOMMENDATIONS. 9. MAINTAIN AND PROTECT EXISTING EXPANSION JOINTS DURING CONSTRUCTION. PATCH/REPAIR/REPLACE TO MATCH EXISTING RATINGS AS REQUIRED ON THE SHELL PORTION OF 10. ALL WOOD PRODUCTS TO BE FIRE-RETARDANT, INCLUDING

BLOCKING AND PLYWOOD. 11. ALL EXISTING RESTROOMS TO BE PAINTED WITH AN EPOXY PAINT. COORDINATE WITH THE CLIENT ON FINAL PAINT COLOR, TYPE, AND SPECS. 12. CLIENT TO SELECT FINAL PLUMBING FIXTURES, APPLIANCES, AND SPECS. 13. ALL EGRESS DOORS TO HAVE AN INTERIOR SIGN, TYP. 14. EXIT PATHS TO HAVE EXIT SIGNS AS REQUIRED BY CODE, TY

15. RE: MEP DRAWINGS FOR NEW AND REUSED EQUIPMENT, POWER, AND PLUMBING LINES. 16. ADA LIFT BASIS OF DESIGN: - AMERIGLIDE - NANO VERTICAL PLATFORM LIFT. - CONFIRM FINAL SELECTION WITH THE CLIENT PRIOR TO INSTALLATION. INSTALL PER MANUF. RECOMMENDATIONS.

### **KEYED NOTES: FLOOR PLAN**

OWNER TO SELECT AND INSTALL NEW SINK UNIT. INSTALL TO MEET ADA REQUIREMENTS. RELOCATE EXISTING MIRROR OVER NEW SINK UNIT. INSTALL TO MEET ADA REQUIREMENTS. INSTALL NEW 36" REAR WALL GRAB BAR. INSTALL PER ADA REQUIREMENTS. RELOCATE EXISTING TOILET. COORD. WITH MEP ON PLUMBING FIXTURE CONNECTIONS.

INSTALL NEW 18" VERTICAL GRAB BAR. INSTALL PER ADA REQUIREMENTS. INSTALL NEW 42" SIDE WALL GRAB BAR. INSTALL

RELOCATE EXISTING TOILET PAPER DISPENSER.

PER ADA REQUIREMENTS. REFRIGERATOR LOCATION. CLIENT TO PROVIDE.

NEW DECK. RE: STRUCTURAL DRAWINGS FOR DETAIL COORD. WITH THE CLIENT ON FINAL DECK MANUF./MATERIAL TYPE.

NEW DECK RAILINGS. COORD. WITH THE CLIENT ON FINAL RAILING MANUF./MATERIAL TYPE. RAILINGS TO MEET ALL FALL PROTECTION REQUIREMENTS. NEW STAIR AND HANDRAILS. COORD. WITH THE CLIENT ON FINAL HANDRAIL MANUF./MATERIAL TYPE HANDRAILS TO MEET ADA REQUIREMENTS. RE:

STRUCTURAL DRAWINGS FOR STAIR DETAIL. NEW DECK POSTS, TYP.; RE: STRUCTURAL DRAWING FOR DETAIL.



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**REVISION DATES:** 

ISSUE DATE: 2
COLLINS WEBB #: DEMO PLAN, FLOOR PLAN, AND ENLARGED PLAN

B12 2ND LEVEL 1/4" = 1'-0"

B8 1ST LEVEL 1/4" = 1'-0"

PLAN TRUE NORTH NORTH

PLAN TRUE NORTH

B4 DEMO - 1ST LEVEL 1/4" = 1'-0"

# JASON M. REYNOLDS NUMBER PE-2022042419 PROFESSIONAL SEAL

COLLINS WEBB #:

MEP COVERSHEET

1. THESE GENERAL NOTES APPLY TO ALL PLUMBING DRAWINGS. REFER TO DIVISION 22 SPECIFICATIONS FOR ADDITIONAL PLUMBING SYSTEMS SPECIFICATIONS AND REQUIREMENTS.

2. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF ALL MATERIALS, PIPING AND EQUIPMENT, DO NOT SCALE DRAWINGS, THE EXACT LOCATION AND/OR ROUTING OF EQUIPMENT, PLUMBING, SANITARY PIPING, ETC., SHALL BE FOLLOWED AS CLOSELY INDICATED.

AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT. MATERIALS AND EQUIPMENT SHALL BE NEW AND INSTALLED AS INDICATED ON THE DRAWINGS LIGHTING DEVICES, SWITCHES, RECEPTACLES, ETC. WITH ARCHITECT PRIOR TO ROUGH-IN. AND/OR SPECIFICATIONS. THEY SHALL BE INSTALLED PLUMB, LEVEL AND TRUE-TO-LINE WITH ADJACENT WORK. WHERE INSTALLATION METHODS ARE NOT SPECIFICALLY COVERED BY THE DRAWINGS AND/OR SPECIFICATIONS, FIRST CLASS TRADE PRACTICES AND MANUFACTURER'S

4. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION, BUILDING DEPARTMENTS, APPLICABLE TO THE LATEST EDITION OF THE APPLICABLE BUILDING CODE, PROVINCIAL FIRE CODE, APPLICABLE OSHA AND NFPA STANDARDS, COUNTY AND CITY BUILDING REGULATIONS AND CODES.

PLUMBING GENERAL NOTES:

INSTRUCTIONS AND RECOMMENDATIONS SHALL GOVERN.

5. CAREFULLY EXAMINE ALL ARCHITECTURAL, STRUCTURAL, PLUMBING, HVAC, FIRE PROTECTION, AND ELECTRICAL DRAWINGS PERTAINING TO CONSTRUCTION. COOPERATE WITH OTHER TRADES IN LOCATING DUCTWORK, PIPING, EQUIPMENT, ETC., IN ORDER TO AVOID CONFLICT WITH OTHER TRADE'S WORK. NO CLAIM FOR COSTS WILL BE ALLOWED FOR RELOCATING EQUIPMENT, PIPING, DUCTWORK, ETC., WHICH INTERFERES WITH OTHER TRADES WORK.

6. VERIFY ALL ROUGH-IN LOCATION AND COORDINATE PIPING AND EQUIPMENT LOCATIONS WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID CONFLICTS. CONTRACTOR MUST COORDINATE WITH OTHER TRADES FOR ALL STRUCTURES, PIPING, CONDUIT, DUCTWORK, LIGHTING, ETC. TO PROPERLY BE INSTALLED. ANY CONFLICTS SHALL BE RESOLVED AT NO EXPENSE TO THE OWNER.

7. LABEL ALL PLUMBING PIPING WITH ADHESIVE PIPE LABELS INDICATING SERVICE AND DIRECTION OF FLOW. PIPE LABELS SHALL BE LOCATED NEAR ALL BRANCH CONNECTIONS, NEAR ALL FLOOR AND WALL PENETRATIONS, AND AT MAXIMUM INTERVALS OF 10 FEET ALONG EACH RUN.

8. PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: a. PLUMBING FIXTURES AND EQUIPMENT b. FIRE STOPPING c. DOMESTIC WATER SYSTEM d. SANITARY WASTE AND VENT SYSTEM 8. PROVIDE COMPLETE FIXTURES AND INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAILPIECES, ESCUTCHEONS, ETC. EXPOSED COPPER OR BRASS MATERIALS SHALL BE

9. SEAL ALL EDGES OF PLUMBING FIXTURES IN CONTACT WITH FLOORS, WALLS OR COUNTERTOPS USING SANITARY-TYPE, ONE-PART, MILDEW RESISTANT SILICONE SEALANT. MATCH SEALANT COLOR TO FIXTURE COLOR.

10. FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS, AND PARTITIONS. PROVIDE DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.

11. FURNISH AND INSTALL A COMPLETE SYSTEM OF DOMESTIC HOT AND COLD WATER FROM EXISTING SUPPLIES TO ALL FIXTURES AND/OR EQUIPMENT REQUIRING DOMESTIC WATER SUPPLIES. VERIFY

LOCATION OF BEGINNING POINTS.

12. ALL PIPE INSULATION SHALL RUN CONTINUOUSLY THROUGH WALLS AND PARTITIONS. 13. SHUT-OFF VALVES SHALL BE NIBCO TWO-PIECE, BRONZE, FULL PORT, BALL-TYPE. PROVIDE SHUT-OFF VALVES WHERE INDICATED ON THE SCHEDULES. INSTALL VALVES IN A LOCATION THAT

PERMITS ACCESS FOR SERVICE AND OPERATION WITHOUT DAMAGE TO THE BUILDING OR FINISHED

14. PROTECT COPPER PLATING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGARS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER-PLATED.

MATERIALS. PROVIDE ACCESS DOORS IF REQUIRED.

15. FURNISH AND INSTALL COMPLETE SYSTEMS OF SANITARY WASTE AND VENT PIPING FROM ALL PLUMBING FIXTURES AND/OR FOUIPMENT REQUIRING WASTE AND VENT CONNECTIONS. ALL WASTE AND VENT PIPING SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION WHERE

16. INVERTS ELEVATIONS SHALL BE ESTABLISHED AND VERIFIED BEFORE SANITARY PIPING IS INSTALLED IN ORDER THAT PROPER SLOPES WILL BE MAINTAINED.

17. INSTALL CLEANOUTS IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS. CLEANOUT PLUGS SHALL BE IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS.

18. PROVIDE WATER HAMMER ARRESTORS CONFORMING TO PDI-WH201 OR ASSE 1010, INSTALLED PER MANUFACTURER'S SPECIFICATIONS, WHERE QUICK CLOSING VALVES ARE UTILIZED. A QUICK CLOSING VALVE IS A VALVE OR FAUCET THAT CLOSES AUTOMATICALLY WHEN RELEASED, OR THAT IS CONTROLLED BY MECHANICAL MEANS FOR FAST-ACTION CLOSING, REFER TO WATER HAMMER ARRESTOR SCHEDULE.

19. PROVIDE FIRE RATED FINISHES OR FIRE-WRAP FOR ANY COMBUSTIBLE OR NON-PLENUM RATED MATERIALS IN RETURN AIR PLENUMS FOR NEW WORK OR EXISTING WORK TO REMAIN.

VOLTAGE DROP

ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR UPSIZING ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS AS REQUIRED TO COMPLY WITH

UPSIZE WIRE ON 120V CIRCUIT HOMERUNS AS LISTED BELOW UNLESS OTHERWISE SHOWN ON PLANS:

VOLTAGE DROP REQUIREMENTS AS OUTLINED IN THE NEC.

1. LESS THAN 100 FEET IN CONDUCTOR LENGTH:

#12 PHASE/NEUTRAL CONDUCTORS & #12 GROUND

2. 100 TO 150 FEET IN CONDUCTOR LENGTH: #10 PHASE/NEUTRAL CONDUCTORS & #10 GROUND

3. GREATER THAN 150 FEET IN CONDUCTOR LENGTH: #8 PHASE/NEUTRAL CONDUCTORS & #8 GROUND

**ELECTRICAL GENERAL NOTES:** 

1. THESE GENERAL NOTES APPLY TO ALL ELECTRICAL AND SPECIAL SYSTEMS DRAWINGS. REFER TO DIVISION 26 SPECIFICATIONS FOR ADDITIONAL ELECTRICAL AND SPECIAL SYSTEMS SPECIFICATIONS AND REQUIREMENTS.

2. PROVIDE PULL BOXES AS REQUIRED TO PROPERLY INSTALL THE RACEWAYS AND CIRCUITS

3. REFER TO ARCHITECTURAL DRAWINGS FOR TYPICAL ROOM INTERIOR ELEVATIONS. COORDINATE EXACT DIMENSIONED DEVICE LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHT FIXTURES.

4. COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES, AND REQUIREMENTS OF THE AHJ.

ALL CONDUITS SHALL BE PROVIDED WITH PLASTIC BUSHINGS WHERE TERMINATED OPEN-ENDED. 6. COORDINATE ALL WIRING DEVICE LOCATIONS SHOWN AT MILLWORK LOCATIONS WITH THE MILLWORK CONTRACTOR AND GENERAL CONTRACTOR PRIOR TO ANY ROUGH-IN OR INSTALLATION. ALL WIRING DEVICES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS AND SHALL

ALL EMPTY CONDUITS SHALL BE PROVIDED WITH ROT-PROOF PULL-TAPE, LABELED AT EACH END.

7. CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE

8. SEAL ALL PENETRATIONS THROUGH FIRE-RATED ASSEMBLIES AS NECESSARY TO RESTORE FIRE-RESISTANCE RATING OF ASSEMBLY. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS OR RATED ASSEMBLIES FIRE STOPPING MATERIALS AND REQUIREMENTS. WHERE ANY DEVICE JUNCTION BOXES ARE RECESSED WITHIN OPPOSITE SIDES OF A FIRE RATED WALL AND ARE WITHIN 24" OF EACH OTHER MEASURED HORIZONTALLY, PROVIDE AN INTUMESCENT MOLDABLE FIRE STOP PUTTY PAD AROUND EACH JUNCTION BOX.

9. EACH CONTRACTOR AND SUB-CONTRACTOR OR TRADE IS REQUIRED TO REVIEW THE CONSTRUCTION DOCUMENTS AS A WHOLE, INCLUDING ALL OTHER TRADES' DRAWINGS AND PROVIDE ANY MISC. MATERIALS, WORK, ETC. REQUIRED TO COMPLETE THE WORK AS SHOWN ON ALL DOCUMENTS. THIS REQUIREMENT APPLIES TO ALL TRADES. STRUCTURAL. MECHANICAL. ELECTRICAL, PLUMBING, CIVIL, EQUIPMENT VENDORS, ETC. REQUIREMENTS AND RELATED WORK ARE INDICATED THROUGHOUT THE DOCUMENTS AND SHOULD BE REVIEWED WITH THE SPECIFIC MEP, STRUCTURAL, ARCHITECTURAL, EQUIPMENT DRAWINGS FOR OVERALL SCOPE OF WORK.

10. REFER TO THE MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND QUANTITY OF ALL MECHANICAL EQUIPMENT AND FIRE/SMOKE AND/OR SMOKE DAMPERS. LOCATIONS AND QUANTITY SHOWN ON THE ELECTRICAL DRAWINGS ARE APPROXIMATE AND MAY NOT REFLECT FINAL POSITION OR QUANTITY.

11. ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL CONNECTION TO ALL MECHANICAL & PLUMBING EQUIPMENT, WHERE EQUIPMENT IS SHOWN ON THE MECHANICAL PLANS, BUT NOT SHOWN ON THE ELECTRICAL PLANS, ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO THE EQUIPMENT BASED ON EQUIPMENT REQUIREMENTS AND INCLUDE ALL COSTS IN THE BASE BID.

12. LOCATION SHOWN OF ELECTRICAL CONNECTION TO MECHANICAL & PLUMBING EQUIPMENT IS SCHEMATIC AND MAY NOT REFLECT ACTUAL CONNECTION POINTS. ROUGH-IN AND CONNECTION TO EQUIPMENT SHALL BE PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS AND THE NATIONAL ELECTRICAL CODE. PROVIDE STRUCTURAL SUPPORTS AS REQUIRED FOR MOUNTING OF DISCONNECTING MEANS. VERIFY ALL ROUGH-IN REQUIREMENTS WITH THE MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ANY ROUGH-IN.

13. PROVIDE FINAL CONNECTION TO ALL EQUIPMENT, INCLUDING ANY CORD AND PLUG SETS FOR EQUIPMENT NOT PROVIDED WITH IT (WHETHER SPECIFICALLY NOTED OR NOT). COORDINATE ALL WORK WITH THE EQUIPMENT SUPPLIER AND OWNER; AND VERIFY ALL ROUGH-IN LOCATIONS AND REQUIREMENTS PRIOR TO ANY ROUGH-IN.

14. ALL HVAC CONTROL WIRING IS PROVIDED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.

15. WHERE DEVICES ARE LOCATED ADJACENT TO EACH OTHER ON PLANS, DEVICES SHALL BE INSTALLED AS CLOSE TOGETHER AS POSSIBLE

16. REFER TO MOUNTING HEIGHTS DETAIL FOR MOUNTING HEIGHTS OF ALL DEVICES NOT INDICATED

17. COORDINATE THE MOUNTING OF SUSPENDED LIGHT FIXTURES UTILIZING INDIRECT LIGHT SO THAT CONDUIT, DUCTWORK, STRUCTURAL MEMBERS, ETC. ARE NOT LOCATED DIRECTLY ABOVE THE LIGHT FIXTURE. MAINTAIN A MINIMUM OF 24" CLEARANCE FROM THESE ITEMS WHENEVER

18. ANY ELECTRICAL AND LOW VOLTAGE DEVICES THAT ARE SHOWN AS EXISTING TO REMAIN SHALL BE REPLACED WITH NEW DEVICES AND NEW FACEPLATES OF THE SAME TYPE AND COLOR AS THE NEW DEVICES TO BE INSTALLED AND RECONNECTED TO THE SAME CIRCUIT UNLESS OTHERWISE NOTED. DEVICE AND FACEPLATE TYPE AND COLOR SHALL BE COORDINATED WITH THE ARCHITECT PRIOR

19. DEVICES SHOWN TO BE DEMOLISHED SHALL HAVE THE WALL PATCHED AND REPAIRED. BLANK FACEPLATES ARE NOT ALLOWED FOR DEVICES TO BE REMOVED.

**COORDINATION NOTES:** 

TO FURNISHING.

1. COORDINATE WITH LOCAL UTILITY PROVIDERS FOR THEIR REQUIREMENTS FOR SERVICE CONNECTIONS AND PROVIDE ALL NECESSARY PAYMENTS, MATERIALS, LABOR AND TESTING TO

2. COORDINATE REQUIREMENTS FOR INSTALLATION OF SYSTEMS AND EQUIPMENT WITH ALL OTHER

3. THE CONTRACTOR SHALL COORDINATE THE ROUTING AND PATH OF ALL SYSTEMS, CONDUITS, PIPES, DUCTS, ETC WITH THE POSITION AND LAYOUT OF THE STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY OFFSETS, TURNS, RISES AND DROPS FOR SYSTEMS AND COMPONENTS AS NEEDED TO INSTALL THE MEP SYSTEMS TO CLEAR STRUCTURE, CEILINGS, ETC AND OTHER SYSTEMS IN POTENTIAL CONFLICT WITH ROUTING.

4. WHEREVER THE WORK IS OF SUFFICIENT COMPLEXITY, PREPARE ADDITIONAL COORDINATION DRAWINGS AND ORGANIZE ON-SITE MEETINGS WITH ALL RELATED SUBCONTRACTORS TO COORDINATE THE WORK BETWEEN TRADES . DRAWINGS SHALL CLEARLY SHOW THE WORK AND ITS RELATION TO THE WORK OF OTHER TRADES, AND BE SUBMITTED FOR REVIEW PRIOR TO COMMENCING SHOP FABRICATION OR ERECTION IN THE FIELD.

. COORDINATE WORK WITH OTHER TRADES TO INSTALL SYSTEMS ABOVE CEILING HEIGHTS INDICATED ON ARCHITECTURAL PLANS.

6. CHECK SPACE REQUIREMENTS WITH OTHER TRADES AND STRUCTURE/CONSTRUCTION TO ENSURE THAT ALL MATERIALS AND EQUIPMENT CAN BE INSTALLED IN THE SPACE ALLOTTED INCLUDING FINISHED SUSPENDED CEILINGS AND OTHER SPACES, CHASES, ETC WITHIN THE BUILDING. MAKE MODIFICATIONS THERETO AS REQUIRED AND APPROVED.

7. ADJUST LOCATION OF PIPING, DUCTWORK, ETC. TO PREVENT INTERFERENCES, BOTH ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH ITEM PRIOR TO FABRICATION. MAKE OFFSETS, TRANSITIONS AND CHANGES IN DIRECTION IN SYSTEMS AS REQUIRED TO MAINTAIN ADEQUATE CLEARANCES AND HEADROOM.

8. DRAWINGS SHOW THE GENERAL RUNS OF CONDUITS, PIPING AND DUCTWORK AND APPROXIMATE LOCATION OF OUTLETS. ANY SIGNIFICANT CHANGES IN LOCATION OF ITEMS NECESSARY IN ORDER TO MEET FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER AND RECEIVE HIS APPROVAL BEFORE SUCH ALTERATIONS ARE MADE. ALL SUCH MODIFICATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.

9. COORDINATE, PROJECT AND SCHEDULE WORK WITH OTHER TRADES IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE.

10. WHEREVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO ENSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT. IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT THE CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND PANELS.

11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR OF SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.

12. TRANSMIT TO OTHER TRADES ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR INSTALLATION.

13. CONTRACTOR TO PROVIDE FIRESTOPPING AT ALL FIRE RATED ASSEMBLIES MEETING THE MANUFACTURER'S FIRESTOPPING U.L. LISTED DETAILS AND INSTRUCTIONS PER LOCAL CODES AND JURISDICTIONS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATIONS WITH ARCHITECTURAL FIRE RATINGS ON PLANS OR AS REQUIRED.

**ELECTRICAL SYMBOLS** 

DENOTES SHARED (PARTIAL) CIRCUIT DENOTES THREE SEPARATE CIRCUITS NOTE: ALL WIRES ARE MINIMUM #12 UNLESS NOTED OTHERWISE AND/OR UPSIZED AS REQUIRED — PHASE CONDUCTORS PER VOLTAGE DROP TABLE. NEUTRAL CONDUCTOR ——— GROUND CONDUCTOR LP1-10 PANEL - BREAKER NUMBER (IDENTIFICATION) 1,3 / 1,3,5 INDICATES X/X=2-POLE C.B., X/X/X=3-POLE C.B.

COMBINATION EXIT / EMERGENCY LIGHT (WALL / CEILING)

DISTRIBUTION PANEL (SURFACE OR FLOOR MOUNTED).

1-PHASE; 1-NEUTRAL; 1-GROUND WIRE, MINIMUM NO.12 WIRE UNLESS OTHERWISE SPECIFIED ON DRAWINGS. ---- CONDUIT RUN UNDERGROUND OR CONCEALED IN FLOOR SLAB. EXIT LIGHT, WALL OR CEILING AS INDICATED. BATTERY-OPERATED EMERGENCY LIGHT (WALL / CEILING)

GRID-MOUNTED TROFFER LIGHT FIXTURE (DIAGONAL SHADING DENOTES EMERGENCY BATTERY) STRIP LIGHT FIXTURE (DIAGONAL SHADING DENOTES EMERGENCY BATTERY) SQUARE / ROUND DOWNLIGHT DÍAGONAL SHADING DENOTES EMERGENCY BATTERY) WALL-MOUNTED LIGHT FIXTURE (DIAGONAL SHADING DENOTES EMERGENCY BATTERY)

PANELBOARD (SURFACE OR FLUSH) TOP MOUNTED 6'-0" AFF SWITCHBOARD, NUMBER OF SECTIONS AS INDICATED.

CONDUIT UP / CONDUIT DOWN CONDUIT STUBBED THRU WALL WITH BUSHINGS ON BOTH ENDS

DISCONNECT SWITCH, SIZE AND TYPE AS NOTED TOP MOUNTED 5'-0" AFF WALL MOUNTED OR CEILING MOUNTED JUNCTION BOX SINGLE POLE SWITCH

POWER CONNECTION POINT

3, 4, M, T 3-WAY / 4-WAY / MOTION / TIMER SWITCH TYPE AS SCHEDULED ել L2, LD, Sa LOW VOLTAGE SWITCH, ON/OFF, DIMMING, SCENE SELECTOR, TYPE AS SCHEDULED

SWITCH ZONE DESIGNATION

DIGITAL LIGHTING ROOM CONTROLLERS, TYPE AS INDICATED WALL / CEILING MOUNTED MOTION DETECTOR, TYPE AS INDICATED WALL / CEILING MOUNTED DAYLIGHT SENSOR, TYPE AS INDICATED

SIMPLEX RECEPTACLE DUPLEX RECEPTACLE  $\Phi_{ ext{(WP, GFI, IG, ETC.)}}$  Special duplex receptacle, type as indicated

DOUBLE DUPLEX RECEPTACLE (STRIKETHROUGH DENOTES ABOVE COUNTER) SPECIAL NEMA RECEPTACLE, TYPE AS INDICATED ON PLANS. RECESSED STYLE POKE THRU DEVICE.

POWER AND DATA OR AS SPECIFIED RECESSED STYLE ON-GRADE FLOOR BOX, POWER AND DATA OR AS SPECIFIED LOW VOLTAGE OUTLET, DOUBLE GANG BOX WITH SINGLE GANG PLASTER RING. INSTALL 1" CONDUIT STUBBED UP OUT OF TOP OF BOX TO ABOVE AN ACCESSIBLE CEILING.

MULTI-SERVICE POWER / LOW VOLTAGE AUDIO VISUAL BOX WITH RECEPTACLE POWER AND MINIMUM 2 LOW VOLTAGE GANGS, MANUFACTURER MAKE/MODEL AS SPECIFIED

USB TYPE DEVICE WITH BOTH A & C TYPE CHARGING PORTS

**ELECTRICAL NOTATIONS** 

ELECTRICAL PLAN NOTE MECHANICAL/PLUMBING EQUIPMENT TAG HEIGHT TO CENTERLINE OF OUTLET BOX ABOVE FINISHED FLOOR ABOVE FINISH FLOOR

FIRE ALARM **GROUND FAULT INTERRUPTER** UNDERGROUND ELECTRICAL

OVERHEAD ELECTRICAL RELOCATED FIXTURE / DEVICE NIGHT LIGHT (24/7 OPERATION) LINEWORK LEGEND:

SHEET INDEX

MEP100 MEP COVER SHEET

MEP200 MEP SPECIFICATIONS

MEP301 ELECTRICAL SITE PLAN

MEP300 MECHANICAL & ELECTRICAL FLOOR PLANS

**————** DEMOLISH / REMOVE EXISTING TO REMAIN — — — — — — EXISTING TO REMAIN (ROOF / ABOVE) ----- NEW WORK

MECHANICAL SYMBOLS

OR — DUCTWORK SUPPLY DUCT RETURN DUCT **EXHAUST DUCT** SUPPLY DIFFUSER RETURN GRILLE **EXHAUST GRILLE** RISE OR DROP IN DUCT THERMOSTAT MANUAL VOLUME DAMPER \_\_\_\_ SUPPLY DUCT DOWN SUPPLY DUCT UP RETURN DUCT DOWN RETURN DUCT UP **EXHAUST DUCT DOWN** EXHAUST DUCT UP WALL MOUNTED DIFFUSER/GRILLE FLEXIBLE DUCT CONNECTION EQUIPMENT TYPE AND DESIGNATION

MECHANICAL PLAN NOTE

PLUMBING SYMBOLS FLOW ARROW COLD WATER ——HW —— HOT WATER SANITARY VENT ABOVE GROUND/FLOOR — V— — SANITARY VENT BELOW GROUND/FLOOR SANITARY WASTE BELOW GROUND/FLOOR SHUT OFF VALVE FLANGE CONNECTION

CONNECT TO EXISTING

——MARK NO. SUPPLY (S\_), RETURN (R\_), EXHAUST (E\_)

FLOOR DRAIN OR EQMT FLOOR DRAIN PIPE DROP/PIPE RISE BOTTOM OUTLET TEE TOP OUTLET TEE wco **⊢** WALL CLEAN OUT FINISHED FLOOR CLEANOUT **EQUIPMENT TYPE AND DESIGNATION** PLUMBING FIXTURE DESIGNATION

CONNECT TO EXISTING

PLUMBING PLAN NOTE

7817 Caenen Lake Rd, Shawnee, KS 66216 816-686-5339



B. Specifications and drawings are complementary and what is called for in one shall be as binding as is called for by both.

C. All work performed under this section shall be done in a neat and workmanlike manner by experienced mechanics of the proper trade

2. COORDINATION, MEASUREMENTS AND LAYOUTS A. The contractor shall inspect the site where this work is to be performed and fully

familiarize himself with all conditions related to this project. B. The contractor shall employ a competent foreman on the job to see that work is done in accordance with the best practices and in a satisfactory and workmanlike manner. The foreman shall keep informed as to the work of other trades engaged in the construction of the project, and shall execute their work in such a manner as not to interfere with or delay the work of other trades.

C. Drawings show the general arrangement of all systems and components covered under this section. Where local conditions necessitate a rearrangement, the contractor shall prepare, and submit for approval, drawings of the proposed rearrangement. Because of the small scale of the drawings, it is not possible to indicate all offsets. fittings, and accessories that may be required. The contractor shall carefully investigate the structural and finish conditions affecting all of their work and shall arrange such work accordingly, furnishing such offsets, fittings and accessories as may be required to meet such conditions at no additional cost to the owner. The contractor shall verify all dimensions. Drawings shall not be scaled to determine dimension.

3. PERMITS AND FEES

A. The contractor shall obtain and pay for all required permits and licenses and shall make all deposits and pay all fees required for the performance of work under this section, other than those deposits or fees which are fully refundable to the owner. 4. SUBMITTALS, MATERIALS AND EQUIPMENT

A. All items of materials and equipment shall be new unless otherwise specified herein. free from defects and of the best quality normally used for the purpose in good

B. As soon as possible after the award of the contract, the contractor shall submit for review digital shop drawings for all equipment to be furnished for this project. Submittals shall include manufacturer's name, model number, descriptive engineering data and all necessary information as to finish, material gauges and accessories. After such shop drawings are processed, they will be returned to the contractor. The contractor shall, upon receipt of reviewed shop drawings proceed with the procurement and installation of such equipment.

CODES, LAWS, AND STANDARDS

A. All work shall be installed in compliance with all governing codes, applicable local laws, regulations, ordinances or statutes of regulatory bodies having jurisdiction. The work shall be executed in accordance with said laws, regulations, ordinances, statues or codes, without increased cost to the owner. Any point in question shall be referred to the engineer for approval. Work indicated on the documents that is in excess of code requirements shall not be reduced in quality and/or quantity.

B. Comply with rules and regulations of public utilities and municipal departments affected by connections of services. 6. RECORD DOCUMENTS

A. Operating and Maintenance Brochure:

1) On completion of the project, the Contractor shall provide project manuals electronically (PDF format unless otherwise instructed) containing complete product information for all installed or provided equipment and components including cut sheets, parts lists, wiring and installation diagrams, operating, service and lubrication instructions. Provide manufacturer guarantee and warranty certificates.

1) On completion of the project, the Contractor shall provide record drawings with all field changes clearly and neatly noted. The original routing and layout shall be clearly marked out. References to other documents, drawings, addenda, RFI's or otherwise for additional information shall not be accepted. 2) The Contractor shall submit record drawings electronically in PDF format

(unless otherwise instructed). . GUARANTEES AND WARRANTIES

A. The contractor shall guarantee complete system operation and that the material and equipment furnished and installed will be free from defects in workmanship and materials and will give satisfactory service under the specified operating conditions. The contractor agrees to replace, without expense to the owner, any part of the apparatus which proves or becomes defective within one year after the system is accepted. No equipment warranty or guarantee shall start until the time of building

B. All warranties issued by equipment manufacturers shall be filled out in the owner's name and given to the owner prior to final acceptance of work performed under this

A. After completion of the entire project the contractor shall request final inspection of this project in written form addressed to the architect along with a statement to the effect that all installations have been completed, checked, adjusted and balanced in accordance with requirements of this project. Upon receipt of written notification of completion and request for final inspection the engineer will perform a final inspection of this work and, if all installations are as represented by the contractor, the engineer will submit written recommendation of acceptance

A. Dirt and refuse resulting from the performance of the work shall be removed to keep

B. After completion of the work described in this specification and shown on the drawings, the contractor shall thoroughly clean all exposed surfaces and equipment, remove all dirt, debris, crating, cartons, etc., and leave all installations finished and ready for operation.

10. OPENINGS AND SLEEVES

A. In fire-rated walls: caulking shall be a pure ceramic fiber made of alumina-silica, "Cerafiber-fs" by johns-Manville. Sealant shall be gun grade. An acrylic 2-part gun applied, fire retardant elastic sealant, "Dymeric" by Tremco or equal by Permatite no.

1) Limit the size of the space between the wall or floor and the outside of the pipe or duct to 1 inch maximum. This space is sufficient to allow some movement of the pipes or duct without cracking the caulking or sealant. 2) For openings in walls, the caulking shall be applied to a minimum of 3 inch total

depth. Sealant shall then be applied on both sides of the wall opening a

minimum of 1/2 inch in depth, finished flush with the wall. D. B. For openings in floors, the caulking shall be applied from the upper side to a minimum of 3 inch total depth recessed 1/2 inch below the finished floor. This 1/2 inch recess shall then be filled with sealant to flush with finished floor.

A. The contractor shall be responsible for any cutting of walls, floors, ceilings and roofs required for performance of their work.

B. No structural member shall be cut without permission from the architect.

C. Patch all openings to match adjacent construction in both material and finish. D. All cutting of existing concrete floors/slabs on grade in the interior of the building shall

be performed by "saw cutting" and shall be performed by this contractor. 12. <u>DEMOLITION AND NEW WORK</u>

11. CUTTING AND PATCHING

A. The contractor shall do all demolition, alterations and rework indicated and/or required to maintain the operation of all existing systems and to integrate the new systems in the renovated building as required. The contractor shall include all work which may be required to alterations and demolition work. This shall include all removal, relocation and reworking of piping, items of equipment, etc. Existing systems and new systems shall be completely integrated as intended and as indicated on the plans and in the specifications.

B. The contractor shall remove from the premises and dispose of properly all existing material and equipment which no longer serves a purpose in altered areas. The contractor shall remove unused ductwork and piping. Remove piping connected to equipment back to main and cap. Unless otherwise noted, the contractor shall maintain services to all existing areas requiring such services. The contractor shall reroute as required such services where are disrupted due to architectural changes in the existing structure. Any equipment which is designated to be reused and which is damaged in the process shall be replaced by the contractor with new equipment of like kind at no cost to the owner.

C. The contractor shall replace any existing devices including air devices, thermostats and electrical devices to match new devices unless instructed otherwise.

13. INTERRUPTION OF SERVICES

A. The contractor shall schedule any service interruptions to the existing building with the owner's representative. Such interruptions shall be planned so as to be at times to cause the least inconvenience and interruption to the facility's schedule.

14. EXISTING CONDITIONS

A. All existing conditions shown on the drawings and described in the specifications for this project have been determined from available drawings and field investigations. Contractors making proposals for this work shall investigate all existing conditions and base their proposals on their observations to provide complete and functioning installations in accordance with the intent of the drawing and specifications for this project and all applicable governing codes, rules, regulations and ordinances. Failure to determine existing conditions which cause additional work will not constitute grounds for additional compensation.

END OF GENERAL MEP REQUIREMENTS

**DIVISION 22000 - PLUMBING** 1. GENERAL

A. The work included under this contract consists of providing all labor, materials, tools,

complete working systems of the Plumbing Systems, including hot and cold water, waste and vent, storm drainage, fixtures, equipment and other items described in these specifications, as illustrated in the accompanying drawings or as directed by the Architect/Engineer.

A. All floor drains and fixtures with waste connections shall be separately trapped with a water sealed trap placed as close to the fixture or drain as possible. The contractor shall furnish and install all traps required including traps not furnished in combination with fixtures and equipment. All exposed traps in finished spaces shall be chromium

plated brass. Provide deep seal traps and running traps where required. B. In lieu of deep seat traps, floor drains can be provided with Proset systems trap guard

. PIPING INSTALLATION A. Ends of pipe shall be reamed and all burrs removed before installation. Piping shall be cut accurately to measurements taken on the job and shall be installed with ample clearance for installation of coverings

B. Piping passing through walls or floor shall be run free, using pipe sleeves and shall not be grouted in place. Sleeves for piping to be insulated shall be sized to allow for insulation thickness. Piping shall be installed concealed in finished rooms and wherever possible. Exposed pipes, where passing through floors, finished wall, or finished ceilings shall be fitted with chromium plated escutcheon plates. Plates shall be large enough to completely close the holes around the pipes and shall be round, not less than 1-1/2" larger than the diameter of the pipe. Plates shall be securely fastened

C. At least one pipe union shall be installed adjacent to all valves that are screwed. Ho and cold supplies to each fixture and water heater shall be valved separately at the fixture. All supply pipes terminating at valves or fixtures shall be provided with a water

hammer arrestor of sufficient capacity to prevent water hammer. D. All hot and cold-water branch lines shall be valved in an accessible location.

E. All hot and cold-water piping shall be arranged to drain the lowest point and drain valves with hose threads shall be provided so that the entire system can be emptied.

A. Threaded joints shall be cut full and clean, with not more than three threads exposed beyond fittings. Joints shall be made up tight with graphite base pipe joint compound applied to male threads only. Exposed threads of ferrous pipe shall be painted with acid-resisting paint after piping has been tested and proven tight. No caulking, lamp wick or other material will be allowed for correction of defective joints.

B. Sweat or soldered joints in copper water piping shall be made by the appropriate use of approved brass water fittings properly sweated or soldered together. Flared joints where specified for soft copper tubing shall be made with fittings meeting approved standards. Surfaces to be soldered or sweat shall be cleaned bright, properly fluxed with approved noncorrosive paste type flux and made with 95-5 or 94-6 solder. The use of self-cleaning fluxes. 50-50 solder or paste type solder is prohibited. Flared joints shall be made by expanding the tube with a proper flaring tool. All tubes shall be

C. Joints in bell and spigot cast iron soil pipe shall be of soft pig lead and oakum with lead not less than 1" deep, and installed in one pour or Tyler ty-seal gaskets underground

D. Joints for no-hub pipe shall be neoprene with stainless steel bands. E. Joints for plastic pipe, when permitted, shall be solvent welded in accordance with the pipe manufacturer's recommendations

DOMESTIC HOT AND COLD-WATER PIPING

A. All domestic hot and cold-water piping within the building shall be copper. Underground water service outside of the building may be type "k" soft temper copper or ductile iron or cast iron pipe with super bell-tite, mechanical or flanged joints. B. Copper piping installed underground shall be soft temper type "k" and installed without joints.

to astm-b-88 requirements. Service piping of cast iron of ductile iron pipe shall conform to USAIA, AWWA and federal specifications D. Fittings for use with type "k" and "I" copper piping shall be wrought copper solder-joint. Unions shall be ground joint type and shall be installed where necessary

C. All other copper piping shall be hard temper type "I". All copper piping shall conform

to provide ease of disconnection of the piping system. Press fittings for copper water

cold-water distribution system shall consist of 1/2" faucet with hose threads. Drains

shall be installed at low points in the hot and cold-water piping and all piping shall

piping are acceptable where permitted by governing codes. E. When a connection between copper pipe and ferrous pipe is necessary, said connection shall be made by using brass converter fitting. F. Drains indicated on the drawings and at low points in connection with the hot and

G. Water piping may be cross-linked high density 100% virgin polyethylene, PEX-a, flexible tubing. Piping shall be tested and certified by UL and NSF for potable water use. PEX-a piping shall be rated at 180F at 100 PSIG. Provide with all required fittings, manifolds, accessories and supports including those required for fire rated listings installed in 14.

strict accordance with manufacturer's requirements. 1) Piping within 18" of water heaters shall be copper.

2) PEX-a systems shall be insulated throughout as specified for copper systems. 3) PEX-a piping shall be Uponor AquaPEX or acceptable equal by Viega or Rehau.

A. For piping 1/2" - 2": Milwaukee ba-150 ball vale, bronze, Teflon seats and packing, 400 lbs w.o.g., solder end.

B. For piping 2-1/2" and larger: Milwaukee ml224e butterfly valve, full lug body, EPDM seats, stainless steel disc, lever operator

A. No installation shall be made of plumbing fixture, device or piping that will provide a cross connection or interconnection between a distributing water supply for drinking or domestic purposes and a polluted supply such as a drainage system or a soil or waste pipe that will permit or make possible a backflow of sewage, polluted water or waste into the water supply system.

A. Underground soil, waste, drain and vent pipe and fittings, throughout the building below the base slab to the locations noted outside of the building, shall be coated hub-and- spigot service weight cast iron. Schedule 40 PVC solid plastic pipe may be used where permitted by governing codes. No-hub pipe will not be permitted

B. Soil, waste, drain, vent pipe, and fittings above ground inside of the building shall be service weight hub-and- spigot or no-hub cast iron pipe. Schedule 40 PVC solid plastic pipe may be used where permitted by governing codes. PVC piping run in return air plenum space shall be installed with a 1 hour rated covering over all pipe, fittings and

C. Changes in pipe size on soil, waste, and drain lines shall be made with reducing fittings. Changes in direction in drainage piping shall be made by the appropriate use of 45 degree y's, long or short sweep quarter bends, sixth, eighth, or sixteenth bends, or by a combination of these or equivalent fittings. Single and double sanitary tees and short quarter bends may be used in drainage lines only where the direction of flow is from

the horizontal to the vertical. Quarter bends may be used in soil and waste lines on the discharge from water closets in slab on grade areas. D. Sewer lines shall be located in general as shown on the drawings. The exact locations

shall be determined by the contractor in such a manner as to maintain proper clearances and sufficient slope to insure drainage.

E. Horizontal soil, waste, and drain pipes shall be given a grade of not less than 1/4" per foot for sizes up to 3" unless otherwise shown on the drawings or approved in writing by the engineer. Horizontal soil, waste, and drain pipes shall be given a grade of not less than 1/8" per foot for sizes 4" and larger when first approved by the administrative authority.

F. Vent stacks shall be extended full size through the roof and flashed with 4 pound lead sheets turned down into the stack at least 2" and extended 12" in all directions from the pipe at the roof line. Vents through roof shall not be less than 3". PVC piping shall not be used for vent piping through the roof.

G. Where applicable for the roofing system used, provide flashing via pleated EPDM cone in lieu of lead.

I. Vent connections shall be installed on all fixtures and equipment connected to soil and waste systems and all floor drains shall be vented or connected to a vented line as shown on the drawings and as required by code. J. All vent stacks in or at outside walls shall be offset 1'-6" minimum from outside walls

before going through the roof, to facilitate flashing. K. Risers shall be installed absolutely plumb and straight. Branches shall be run in straight lines and pitch uniformly to mains. .. Risers, branches and mains shall be concealed in the construction except where shown

otherwise. Branches for closets shall be finished at the wall line with proper flange to receive the fixture when set, and they shall be true and level so that closet base will have full bearing on the wall. M.All soil and vent stacks shall offset where required to miss obstructions and as

required to clear floor beams and spandrel beams at floor lines and hug wall N. Prohibited fittings. The drilling and tapping of building drains, soil, waste or vent pip

an enlargement chamber or recess with a ledge, shoulder or reduction of the pipe area that offers an obstruction to the flow is prohibited. O. Prohibited connections. No fixtures, devices or construction shall be installed which would allow a backflow connection between a distribution system of water for

and the use of saddle hubs or bands is prohibited. Any fitting or connection which has

drinking and domestic purposes to the drainage system, soil or waste piping so as to permit or make possible the backflow of sewage or waste into the water system.

tested and approved before the insulation is applied.

A. All cold-water piping shall be insulated with certain-teed 1/2" thick glass fiber pipe insulation in molded sections with factory applied all service vapor barrier jacket or approved equal. The end joint strips and overlap seams shall be sealed with a vapor barrier mastic and stapled with outward clinching staples spaced not to exceed 4" centers. Staples and seams shall be sealed with a coat of vapor barrier mastic. Joints

shall be covered by joint tape. B. All domestic hot water piping shall be insulated with 1" thick certain-teed glass fiber pipe insulation in molded sections with factory applied all service jacket or approved equal. This insulation shall be closely butted together and secured by joint tape matching the insulation cover.

grounding detail as described on the drawings. C. All piping surfaces to be insulated shall be clean and dry and piping shall have been C. Provide individual separate equipment grounding conductors for branch circuit home runs shown on drawings and terminate at branch circuit panelboard, switchboard, or other distribution equipment

D. Single phase branch circuits for lighting and power shall consist of phase and neutral conductors and green ground conductor installed in common conduit which shall serve as grounding conductor.

A.Disconnect (safety) switches: Square D, Siemens, Cutler Hammer, or General

Electric fused or non-fused (as indicated on drawings or required). B. Switches shall be NEMA KS1, heavy duty, externally operated, visible-blade safety switches; NEMA enclosure type indicated on drawings or suitable for environment in which installed.

C. Provide switches where not furnished with starting equipment, motors, at all other points required by NFPA 70, and where indicated on drawings.

D. All valves, fittings and flanges shall be insulated with certain-teed glass fiber pipe

E. All pipe insulation shall be installed in a neat and workmanlike manner by an insulation

F. Provide heavy density rigid foam inserts at all hanger locations on lines 2" and larger to

A. Water hammer arrestors shall be provided for all quick closing valves including but not

limited to drinking fountains, dishwashers, faucets, flushometer valves, ice makers

self-closing valves, spring loaded valves, and washing machines and as required by the

B. Water hammer arrestors shall be installed per manufactures specifications and shall

C. Water hammer arrestor shall be Sioux chief model or approved equal. Air chambers

A. All non-insulated copper piping shall be supported by Anvil figure CT65 copper plated

B. Non-insulated steel piping 2" and smaller shall be supported by anvil figure 108 split

pipe ring hanger with figure 114 turnbuckle adjuster. Non-insulated steel piping 2-1/2'

C. All cast iron pipe shall be supported with Anvil figure 260 clevis hangers with

D. All schedule 40 solid plastic PVC piping shall be supported with anvil figure 260

E. All insulated piping shall be provided with anyil figure 260 adjustable clevis hanger

with #168 shield. Hanger shall be installed exterior to insulation unless otherwise

F. All hangers shall utilize threaded rods. No perforated strap iron hangers or wire

3) Cast iron pipe: all sizes - 5 feet. (10 feet with 10' lengths of pipe. Minimum one

H. Provide anvil figure ct-121 riser clamp for copper piping up through 4". Provide vertical

. Steel and cast iron pipe provide Anvil figure 261 riser clamp for piping 1-1/2" and

A. All plumbing systems installed under this section of these specifications shall be tested

and approved as herein described and as required by the local inspection authority

B. The new drainage and vent system shall be tested by plugging all openings with test

plugs, except those at the tops of stacks, and filling the system with water. Test results

will be satisfactory if the water level remains stationary for not less than one hour

when all parts of the system are subjected to a pressure of at least 10 feet of water.

C. The water system test procedure shall consist of charging the entire system to

operating pressure and then isolating the system from its source. The system shall

remain closed for a period of 24 hours with no fixture being used. The pressure

D. The inspection authority having jurisdiction and the architect shall be notified at least

E. All plumbing fixtures and accessories shall be tested, adjusted and made free of leaks.

A. Immediately upon completion of the new water distribution system and prior to

3. This system shall be filled with water slowly and carefully so that air may readily

escape through open drains and fixture valves. All drains and fixture valves shall be

A. The plumbing contractor shall be responsible for reviewing the architectural plans/

specifications and advising the general contractor prior to bidding of the need for

access doors in sheetrock or plastered ceilings and walls and all other locations where

B. Access doors shall be flush-mounted of a style specifically suited for the type of

construction in which they are to be used, and sizes and colors shall be submitted to

the architect for approval. In areas where there are removable ceilings, access doors

may be omitted, provided ceiling panels used for access are clearly marked. The type

C. Access doors shall be furnished by the plumbing contractor for installation by the

D. In the event that the plumbing contractor fails to advise the general contractor of

A. All fixtures shown or scheduled on the drawings shall be furnished and installed, set

B. All exposed fittings and piping at the fixtures shall be chrome plated. Supply piping

C. All China fixtures shall be new, of the best grade vitreous ware, without pit holes or

blemishes, and the outlines shall be generally true. All fixtures of the same type shall

be of one manufacturer throughout the entire installation. The engineer reserves the

right to reject any equipment which, in their opinion, is faulty. All fixtures and flanges

on soil pipe shall be made absolutely gastight and watertight. Rubber gaskets or putty

will not be permitted for this connection. Closet bolts shall be stainless steel and not

less than 1/4" in diameter and shall be equipped with chromium plated nuts and

washers. Fixtures with outlet flanges shall be set at the proper distance from floor or

wall to make a first-class joint with the closet setting compound or gasket and the

D. Plumbing fixtures shall be as specified, or equivalent products manufactured by Eljer,

Crane, or American standard. All water closets, lavatories, urinals and sinks shall be

products of one manufacturer. Fixtures shall be installed complete with all necessary

accessories and trim. Installation of countertop sinks shall be coordinated with the

E. Drains and accessories shall be as specified or equivalent products of wade, Jay R

F. Insulate exposed lavatory "p" trap on ADA listed fixtures with Plumberex trap gear or

B. Equipment which has damaged finish shall be repainted to match the original factory

C. All exposed ferrous metal furnished under this contract, such as hangers, struts,

A. Refer to GENERAL MECHANICAL, ELECTRICAL and PLUMBING requirements.

A. All cabinets, safety switches, panelboards, transformers, and other apparatus

B. All receptacles and switches to have printed tape style label indicating Panel

C. Panels to have typewritten panel schedules. Where electrical equipment is

(RMS SYM), as indicated on the drawings, Whether or not equipment is fully or

series-rated, Available Fault Current in Amps. Contractor shall perform available

fault current calculation to obtain available fault at Service Equipment,

D. Identify each circuit branch circuit with wire markers when enclosure label and

wire colors do not provide enough information to identify each circuit without

tracing. Identify feeders and branch circuit home runs with wire marker with

panel and circuit number. Box covers above lay-in ceilings neatly marked with

A. Grounding system, including all conductors, motor frames, raceways, cabinets,

etc. that require grounding, shall comply with article 250 of the national

electrical code, drawings, those of the serving utility and local authorities

having jurisdiction, and as specified. Grounding conductors shall be as shown

on plans or if not specifically shown shall be no smaller than that required by

B. For service entrances, install per article 250 of the NEC and per service entrance

installed as service entrance equipment, contractor shall furnish and install

nameplate listing the following: Equip Short-Circuit Current Rating in Amps

used for operation and control of circuits, appliances, and equipment shall be

identified by means of manufactured engraved plastic plates, black with white

A. Painting, except as specified herein, shall be done by others.

structural steel, etc. Shall be given one coat of Tnemec gray primer.

firm and true, connected to all required piping services, thoroughly cleaned, and left

required access doors prior to bidding, the cost to furnish and install access doors shall

opened, starting with valves nearest the water service entry, and water run until it has

placing this system in service, the entire new system shall be flushed and sterilized.

24 hours prior to performance of all tests so that the tests may be witnessed if deemed

differential for this 24-hour period shall not exceed 5 psig.

WATER SYSTEM FLUSHING AND STERILIZATION

run clear from all outlets for not less than 10 minutes.

of access door used shall be Milcor, or an approved equal.

access is required for plumbing components

be the responsibility of the plumbing contractor.

PLUMBING FIXTURES

countertop supplier.

**END OF DIVISION 22000** 

SECTION 26000 - ELECTRICAL

indelible marker.

1. GENERAL ELECTRICAL REQUIREMENTS

. IDENTIFICATION OF ELECTRICAL EQUIPMENT

Date fault current calculations were performed.

leaks develop, they shall be remedied and the test repeated after the system is made

smaller and figure 40 riser clamp for piping above 2". Provide vertical support every 15

1) Copper pipe: 1-1/4" and smaller - 6 feet, 1-1/2" and larger - 10 feet,

2) Steel pipe: 1" and smaller - 8 feet, 1-1/4" and larger - 10 feet.

and larger shall be supported by Anvil 260 hangers with turnbuckle adjusters.

fiberglass insulation inserts.

WATER HAMMER ARRESTORS

PIPE HANGERS AND SUPPORTS

adjustable clevis hangers with #168 shield.

G. Hangers and supports shall be spaces as follows:

hanger at each joint.)

4) PVC pipe: 4 feet.

support every 10 feet.

12. TESTING

are not permitted

carbon steel hangers

turnbuckle adjusters.

hangers will be allowed.

contractor regularly engaged in insulation work.

be insulated, unless otherwise noted or specified.

local inspection authority having jurisdiction.

conform to asse 1010 and per standard PDI-WH-201

insulation, or approved equal. Insulation shall be securely held in place and covered

with Zeston pre-molded PVC fitting covers. Fitting covers may be provided with

A. All electrical wiring, including low voltage wiring, shall be installed in conduit as herein specified. All conduit shall be minimum 3/4" trade size. B. Underground conduit shall be schedule 40 EPC-40-PVC. All conduits shall be

C. Conduit installed in concrete slabs or above ground shall be galvanized rigid steel or EPC-40-PVC D. When PVC conduits penetrate concrete floor construction, contractor shall use

installed with minimum 24 inch cover.

rigid steel or IMC elbows and extension. PVC conduit/fittings shall not be permitted to be exposed above the floor E. Thinwall tubing shall be EMT.

F. Conduit installed below grade shall be Schd. 80 PVC heavy wall plastic conduit meeting NEMA standards and UL listed for underground and exposed use. Provide GRS radius bends and risers as conduits rise above grade or above floor

G.Provide GRS for all conduits run exposed to weather or exposed to other hazardous conditions. Provide any GRS installed below grade with corrosion resistant bonded-plastic or approved mastic coating. This shall include 90-degree elbow below grade and entire vertical transition to above grade.

H. All other raceway may be EMT where approved by local code. Use compression type fittings for EMT, with all fittings UL listed for environment in which they are used.

. All fittings shall be of the compression type and watertight for underground and in slab locations. Compression or screwed fittings for indoor.

J. Use FMC for final connection to each motor and transformer, and to any device that would otherwise transmit motion, vibration, or noise. Use LFMC where exposed to liquids, vapors or sunlight. Provide all FMC and LFMC with an insulated bonding conductor. K. Conduit for interior wiring, in general, shall be thinwall tubing unless otherwise

L. Conduits shall be protected during construction; plug and keep clean and dry.

Conduit ends shall be butted in centers of couplings. No cracks or flattened sections will be permitted at bends or elsewhere. All ends of conduit shall be reamed to remove rough edges. Running threads will not be permitted. M. Conduits shall be concealed within the walls, ceilings, and floors where possible and unless otherwise noted. Exposed conduit shall be run parallel to or

at right angles with the building lines. N. Wire shall be in non-flexible metallic conduit (EMT, IMC or RMC) for:

1) All circuits and feeders greater than 30A. Kitchen circuits

. MC cable acceptable for branch convenience circuits and lighting circuits, whips only to devices from junction box. Do not daisy chain light fixtures.

Provide cable whips of sufficient lengths to allow for relocating each light fixture within 5-foot radius of its installed location, but not exceeding 6 feet in 1) Do not use MC cable for following: homeruns to panelboards, where exposed to view or damage, hazardous locations, in concrete, block

A. All wiring, cabling, and conductors shall be copper unless noted otherwise.

walls or wet locations, and when disallowed by local AHJ or landlord.

B. No. 10 AWG and smaller conductors shall be solid and no. 8 AWG and larger conductors shall be stranded. C. Lighting and receptacle circuit conductors shall be copper THHN-THWN-2 600 volt, 75 deg c, color coded as described under applicable codes. No romex, plastic flex tubing etc permitted unless expressly noted on the drawings for R-2 applications. Light fixture wire insulation shall have temp rating not less than

D. Circuits with no. 8 or larger conductors, motor circuits, power and feeder circuits and building service feeders shall be copper THHN-THWN-2 600 volt, 75

E. Wire size indicated on home runs shall be run throughout the entire circuit. 7. RACEWAY INSTALLATION

A. Install raceways parallel and perpendicular to building lines.

individual fixture manufacturers recommended rating.

B. Install all conductors and cable in raceways continuous without taps or splices. Splice or tap only in approved boxes and enclosures with approved solderless connectors, or crimp connectors and terminal blocks for control wiring, and

C. Install all circular raceways concealed above suspended ceilings or concealed in walls or floors wherever possible except where otherwise indicated.

keep to minimum required. Insulate all splices, taps, and joints as required by

1) All conduit, junction boxes, etc. Above ceilings shall be supported from structure. Pipe sleeves, hangers and supports shall be furnished and set and contractor shall be responsible for proper and permanent locations. 2) Support all conductors and cables in vertical installations, as required by NFPA 70, by installing cable supports or plug-type conduit riser supports, or wire-mesh safety grips.

D.Install raceways to requirements of structure and to requirements of all other work on project. Install raceway to clear all openings, depressions, pipes, ducts, einforcing steel, and other immovable obstacles. Install raceways set in forms for concrete structure in such manner that installation will not affect strength

E. Install raceways continuous between connections to outlets, boxes and cabinets with minimum possible number of bends and not more than equivalent of four 90-degree bends between connections. Use manufactured elbows for all 45- and 90-degree bends, unless approved by engineer in advance. Make other bends smooth and even and without flattening raceway or flaking galvanizing or enamel. Radii of bends shall be as long as possible and never shorter than corresponding trade elbow. Use long radius elbows where necessary, indicated, or both.

F. Securely fasten raceways in place with approved straps, hangers and steel supports as required. Attach raceway supports to building structure. Hang single raceways for feeders with malleable split ring hangers with rod and turnbuckle suspension from inserts spaced not over 10 feet apart in construction above. G.Clamp groups of horizontal feeder raceways to steel channels that are suspended from inserts spaced not over 10 feet apart in construction above.

Securely clamp vertical feeder raceways to structural steel members attached

to structure. Install cable clamps for support of vertical feeders where required. Add raceway supports within 12 inches of all bends, on both sides of bends. Do not support raceways from suspended ceiling components. H. Align and install true and plumb all raceway terminations at panelboards,

switchboards, motor control equipment and junction boxes. I. Install approved expansion/deflection fittings where raceways pass through (if

embedded) or across (if exposed) expansion joints.

J. Install pull wire in each empty raceway that is left for installation of conductors or cables under other divisions or contracts. Use polypropylene or monofilament plastic line. Leave min. 24" slack at each end. K. Effectively seal raceways, by installing conduit fitting at boundary of two spaces, and filling it with an approved pliable material, after conductors or

cables have been installed and tested, whenever raceways pass from

non-cooled to cooled spaces or transition from outside facility or enclosure to

inside, whether buried or exposed.

knockout type.

8. BUSHINGS and LOCKNUTS A.Rigidly terminate conduits entering sheet metal enclosures to enclosure wit bushing and locknut on inside and locknut or an approved hub on outside. Conduit shall enter enclosure squarely.

B. Provide bushings and locknuts made of galvanized malleable iron with sharp.

clean-cut threads. Where EMT enters box, provide approved EMT compression

C. Use insulated, grounding, or combination, bushings wherever connection is subject to vibration or moisture when required by NFPA 70, or both. 9. JUNCTION and OUTLET BOXES

A. All boxes including light fixture, switch, receptacle, and similar outlet boxes: National Electrical, Appleton, Steel City, Raco, or approved equal, galvanized steel knockout boxes, suitable in design to purpose they serve and space they occupy. Size as required for specific function or as required by NFPA 70, whichever is larger. 1) Lighting fixture boxes in ceilings shall not be less than 4" octagonal

B. Set all outlet boxes in walls, columns, floors, or ceilings so they are flush with finished surface, accurately set, and rigidly secured in position. Provide plaster rings, extension rings and/or masonry rings as required for flush mounting. Provide approved cast outlet boxes, with hubs and weatherproof covers, in all

areas subject to damp, wet, or harsh conditions.

C. Coordinate locations of outlet boxes. Outlets are only approx located on small scale drawings. Use great care in actual location by consulting various large scale detailed drawings used by other division trades, and by securing definite locations from architect.

D. All outlets, shall be mounted with bottom at 18" AFF and switches with bottom at 44" AFF floor unless noted otherwise on plans. Refer to arch for other required elevations and cabinetry coordination.

. MECHANICAL AND PLUMBING EQUIPMENT WIRING AND CONTROL WIRING

A. Provide all raceways and power wiring for all mechanical and plumbing equipment requiring electrical connections, and all line voltage control and interlock wiring not provided under division 22/23. Connect per manufacturers' wiring diagrams. Coordinate with division 22/23 for disconnects furnished with equipment, and provide all disconnect switches as required. After installing wiring, verify that each motor load has correct phase rotation.

B. Verify actual MOCP device ratings and MCA conductor sizing for mechanical equipment from equipment nameplate. Reduction of wire sizes based on equipment provided that is smaller than what the drawings indicate shall not be allowed without engineer review. Wiring that varies due to equipment provided versus the equipment specified shall be provided without extra cost to owner. Notify engineer of all changes required in electrical installation due to equipment variances so that effects on feeders, branch circuits, panelboards, fuses and circuit breakers can be checked prior to purchasing and installation.

C. Provide all raceways, power wiring, and line-voltage control and interlock wiring not provided under division 23, for all thermostats, temperature control devices, and controls, including, but not limited to, night-stats, water heater interlocks, time switches and override timers. See mechanical drawings for locations and temperature control diagrams.

L. CIRCUIT BREAKERS IN EXISTING PANELBOARDS

D. Provide new circuit breakers, for installation in existing panelboards, of same manufacturer, type and short circuit current interrupting ratings as existing panelboard circuit breakers.

WIRING DEVICES

B. Convenience outlets:

1) Light switches - spec grade 20 amp toggle switches with stainless steel

2) Wall motion switches - spec grade, PIR, override.

3) Wall motion switches (bathroom) - dual relay, spec grade, PIR, 2nd relay

for operation of exhaust fan delav 4) Dimmer Switches: Modular, full-wave, solid-state units with integral, quiet on-off switches, with audible frequency and EMI/RFI suppression filters. Continuously adjustable slider; with single-pole or three-way switching. Comply with UL 1472. 600W or 1200W as required by load. LED Dimmers: Universal type; compatible with dimming drivers in fixture(s); if other than 0-10V dimming is provided, verify dimmer is

5) Equivalent devices by Leviton, Bryant, Hubbell, Wattstopper, Lithonia, Sensor Switch.

compatible with driver for full range of dimming (100-10%).

1) Spec grade 20 amp duplex with ground and WHITE wall plates. Other outlets shall be verified with equipment suppliers for proper NEMA configurations. Provide GFCI rated devices where indicated and as required per code.

2) Equivalent devices by Cooper/Eaton, Hubbell, Leviton, Pass and Seymour/Legrand C. Color of devices and associated wall plates as directed by architect.

A. Refer to lighting fixture schedule plans for fixture types.

B. Equivalent luminaires by Hubbell, Acuity Brands, Williams, Eaton [Cooper], Signify [Philips]. C. LED Fixtures:

1) Lamps and modules: Philips, General Electric, Osram/Sylvania, Cree,

2) LED components, lamps, drivers, and fixtures shall comply with: PCC 47

CFR Part 15; UL 8750; ANSI/NEMA Standards C78.377, NEMA SSL-1, C82.77, IESNA Standards TM-16-05, RP-16, LM-79, LM-80 and TM-21. 3) Drivers shall be integral to the fixture unless otherwise shown or

D.Emergency drivers/batteries/inverters - shall be Bodine, lota. Coordinate voltages and outputs for min. 90 minute operation with fixtures scheduled and controls indicated and provided. E. Provide lighting fixtures with lamps and accessories required for hanging. Coord mounting of lighting fixtures with architect and G/C. Additional fixture

NEC. Provide lighting fixture securing clips as required. Consult arch plans for ceiling types and provide surface and recessed lighting fixtures with appropriate mounting components and accessories. F. Fixtures mounted in fire rated ceilings shall be provided and installed with fire rated enclosures to maintain ceiling integrity.

supports shall be provided by E/C. Supports shall comply with latest edition of

G.Poles and support components: comply with AASHTO LTS-4. Provide steel poles in color as specified or selected by architect. Provide bolt covers. Provide concrete base for pole and ground rod.

. DIGITAL LIGHTING CONTROLS A.Provide DLM systems consisting of lighting control panels, room controllers, motion sensors, daylight sensors, and other other controls as necessary to achieve lighting switching and dimming control indicated on the drawings. B. Provide all interconnecting wiring, controls, programming and owner training

C. Provide systems by: Hubbell (NX), Watt Stopper (DLM), Lutron (Athena), Acuity

1) Calibrate all sensor time delays and sensitivity for proper detection of occupants and energy savings. Adjust time delays. 2) Provide documentation of room by room system configuration including:

the architect / owner of post start-up activity.

sensor parameters, time delays, sensitivities, and daylighting setpoints, sequence of operation, load parameters. 3) Post start-up tuning - 30 days after occupancy contractor shall adjust sensors to meet the owner's requirements. Provide a detailed report to

ADJUSTING. ALIGNING and TESTING A. Adjust, align, and test all electrical equipment on this project provided under this division and all electrical equipment furnished by others for installation or wiring under this division for proper operation. Test all systems and equipment according to requirements in NETA ATS (latest edition) and all additional requirements specified in this specification.

B. Lighting Controls Commissioning: Electrical contractor to engage the lighting

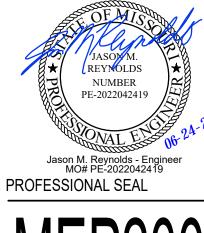
Design + Engineering

7817 Caenen Lake Rd, Shawnee, KS 66216

816-686-5339

control rep agency as a third party testing agency to test all controls and ensure all controls are as specified and compliant per IECC 2021. Lighting control rep agency to provide final written report showing conformance and nonconformance of each room and how to resolve any deficiencies. END OF DIVISION 26000

ARCHITECTURE, LLC **REVISION DATES:** 



MEP SPECIFICATIONS

CONSTRUCTION As Noted on Plans Review

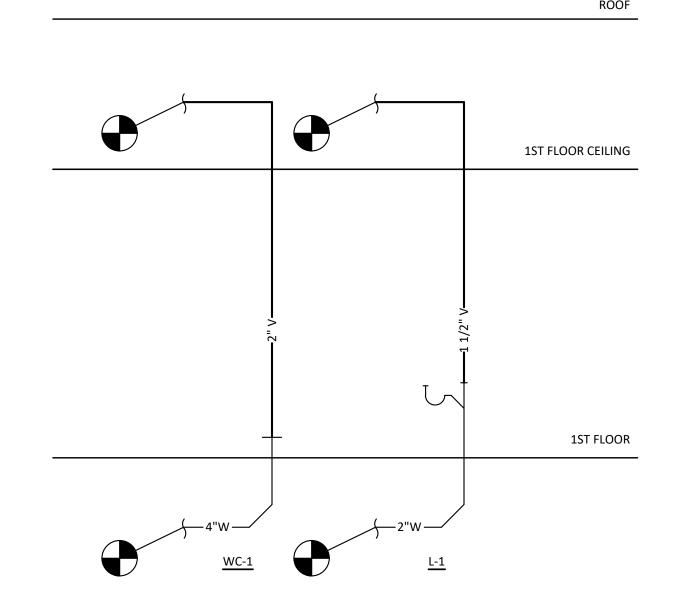
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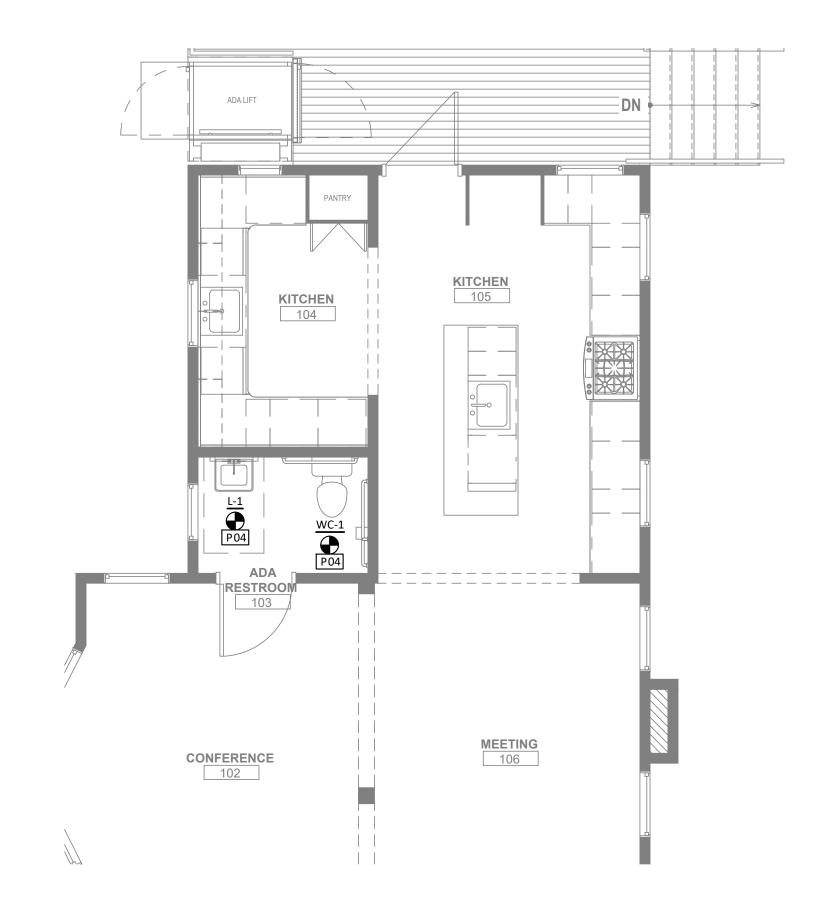
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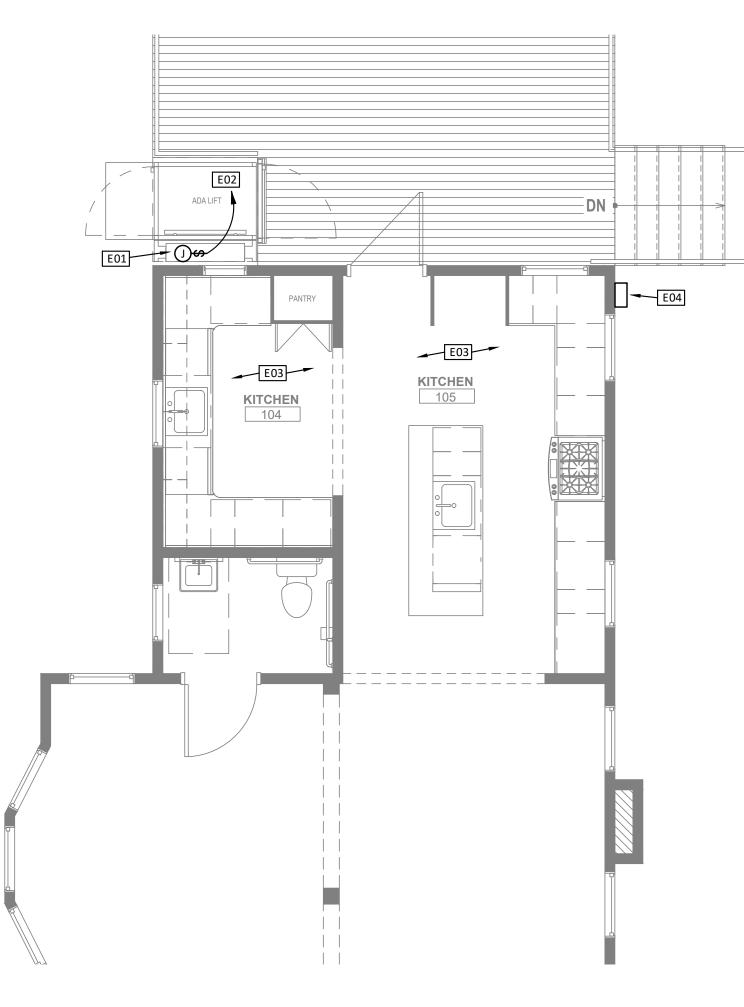
			F	PLUI	<b>VIBIN</b>	NG FI	XTU	RE SCHEDULE
MARK NO.	FIXTURE TYPE	MANUFACTURER	MODEL NO.	М	IN IMUM CO	NNECTION SI	ZE	DESCRIPTION
maille 140.	THE THE	MANOFACIONEN	MODEL NO.	cw	HW	WASTE	VENT	DESCRIPTION .
WC-1	WATER CLOSET (ADA)	AMERI CAN-STANDARD	215AA.004 (LEFT HANDLE) 4188A.005 (RIGHT HANDLE) "CADET PRO" COORDINATE FINAL FIXTURE SELECTION WITH OWNER PRIOR TO	1/2"	-	4"	2"	FLOOR MOUNTED FLUSH TANK, WHITE VITREOUS CHINA, HIGH EFFICIENCY (1.6 GPF), ELONGATED POWER WASH BOWL, FULLY GLAZED 2" TRAP WAY, CLOSE-COUPLED TANK, 16-1/2" RIM HEIGHT.  ACCESSORIES: CHURCH 95005SCT WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING CHECK HINGES, BOLTS AND CAPS, LOOSE KEY ANGLE STOP AND CHROME-PLATED RISER.
			PURCHASING.	***************************************				NOTE: HANDLE TO BE ON WIDE SIDE OF FIXTURE.
L-1	LAVATORY (ADA)	AMERICAN-STANDARD	0355.012 (4" CENTERS)  "LUCERNE"  COORDINATE FINAL  FIXTURE SELECTION WITH  OWNER PRIOR TO  PURCHASING.	1/2"	1/2"	1-1/2"	1-1/2"	VITREOUS CHINA, 20" X 18", FRONT OVERFLOW, INTEGRAL BACK.  CHICAGO FAUCETS MODEL 802-XKABCP FAUCET WITH CERAMIC OPERATING CARTRIDGE, 4" CENTERS, 4" INTEGRAL SPOUT, LEVER HANDLES.  ACCESSORIES: PROVIDE LEONARD 170-LF LEAD FREE BRONZE THERMOSTATIC MIXING VALVE WITH 0.25 GPM MINIMUM FLOW RATE, INTEGRAL CHECK VALVES, DISCHARGE SET AT 105 F, MOUNTED DOWNSTREAM OF FIXTURE STOPS, WITH HOT AND COLD WATER PIPED TO VALVE, TEMPERED WATER TO LAVATORY. CHICAGO FAUCETS MODEL 327-XCP GRID DRAIN, 1-1/4" X 1-1/2" 17 GA. SEMI-CAST BRASS PTRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH LOOSE KEY ANGLE STOPS AND J.R. SMITH CONCEALED ARM LAVATORY SUPPORT. PROVIDE WITH FULLY MOLDED FLEXIBLE VINYL INSULATION KIT COVER TRAP, SUPPLIES AND STOPS, TRUEBRO E-Z LAV GUARD. NOTE: MOUNT FIXTURE RIM 34" ABOVE FINISHED FLOOR.



PLUMBING WASTE & VENT RISER DIAGRAM
NO SCALE



FLOOR PLAN - PLUMBING



FLOOR PLAN - ELECTRICAL

1/4" = 1'-0"



#### PLAN NOTES

- 1. NO WORK IN THIS AREA.
- 2. REMOVE PLUMBING FIXTURE AND PREPARE PIPING
- FOR CONNECTION TO NEW WORK.

  3. EXISTING PLUMBING FIXTURE TO REMAIN.
- 4. PROVIDE NEW PLUMBING FIXTURE AND CONNECT TO EXISTING COLD & HOT WATER, WASTE, AND VENT PIPING. MODIFY EXISTING PIPING AS REQUIRED.

#### **PLAN NOTES**

ELECTRICAL CONNECTION TO ADA LIFT.
 COORDINATE EXACT ELECTRICAL
 REQUIREMENTS WITH OWNER PRIOR TO WORK.
 BASIS OF DESIGN IS A 1HP 120V 20A-1P
 CONNECTION. INSTALL A COMPLETE WORKING
 SYSTEM

- CONNECT TO SPARE 20A-1P BREAKER IN EXISTING 120/240V PANEL. PROVIDE NEW BREAKER AS REQUIRED. FIELD VERIFY.
- 3. NO ELECTRICAL WORK THIS AREA.
- 4. ELECTRICAL METER / WEATHERHEAD
  RELOCATED AS REQUIRED FOR NEW DECK
  CONSTRUCTION. COORDINATE EXACT LOCATION
  WITH OWNER PRIOR TO WORK. CONTRACTOR
  TO COORDINATE ALL WORK WITH LOCAL
  UTILITY COMPANY PRIOR TO WORK AND
  ENSURE THAT OVERHEAD FEEDER PATHWAYS
  CONFORM TO HEIGHTS AND DISTANCES PER

NEC ARTICLE 230 PART II. CONTRACTOR TO EXTEND SERVICE FEEDERS AS REQUIRED TO MAIN ELECTRICAL PANEL. CONTRACTOR TO PROVIDE MAIN FUSED DISCONNECTING MEANS AS REQUIRED TO ENSURE NO UNPROTECTED FEEDERS ENTER THE BUILDING AHEAD OF THE

MAIN ELECTRICAL PANEL.

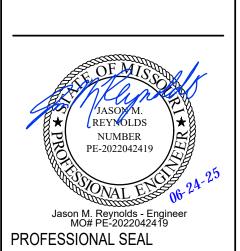
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MANAGEMENT

NE DOUGLAS ST.

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MECHANICAL & ELECTRICAL FLOOR PLANS

		·	LIGHT FIXTURE S	CHED	ULE							
MARK	MANUFACTURER	SERIES DESCRIPTION MOUNTING FINISH LED MODULE / DRIVER VOLTS VA						LED MODULE / DRIVER				REMARKS
IVIAIN	MANOFACTORER	SENIES	DESCRIPTION	WOONTING	FINISH	LUMENS	CRI	CCT DIMMING			IS VA	KEIVIARKS
A4	HOLOPHANE	AUCL3 SERIES	DECORATIVE POST TOP TRANSITIONAL STYLE LED FIXTURE WITH FULL CUTOFF OPTICS. TYPE IV IES DISTRIBUTION. MOUNTED ON ROUND 12FT POLE ON CONCRETE BASE.	POST TOP ON CONCRETE BASE	RE: ARCH	4267	80	2700K	N/A	120V	39	1
REMARK 1. FUF	_	ALL NECESSARY HARDW.	ARE AND MOUNTING BRACKETS.									
<u>GENERA</u>	NOTES (APPLICABLE TO A	ALL FIXTURES):										
A) REF	ER TO ARCHITECTURAL DI	RAWINGS AND DETAILS I	OR EXACT LOCATIONS, MOUNTING HEIGHTS AND ADDITIONAL MOUNTING INFO	ORMATION.								
	IFY QUANTITIES, MODEL	NUMBERS AND DESCRIP	TIONS WITH MANUFACTURER PRIOR TO PLACING ORDER.									
B) VEF												
	IENS LISTED FOR LED FIX	TURES ARE GENERALLY D	ELIVERED LUMENS UNLESS NOTED OTHERWISE.									

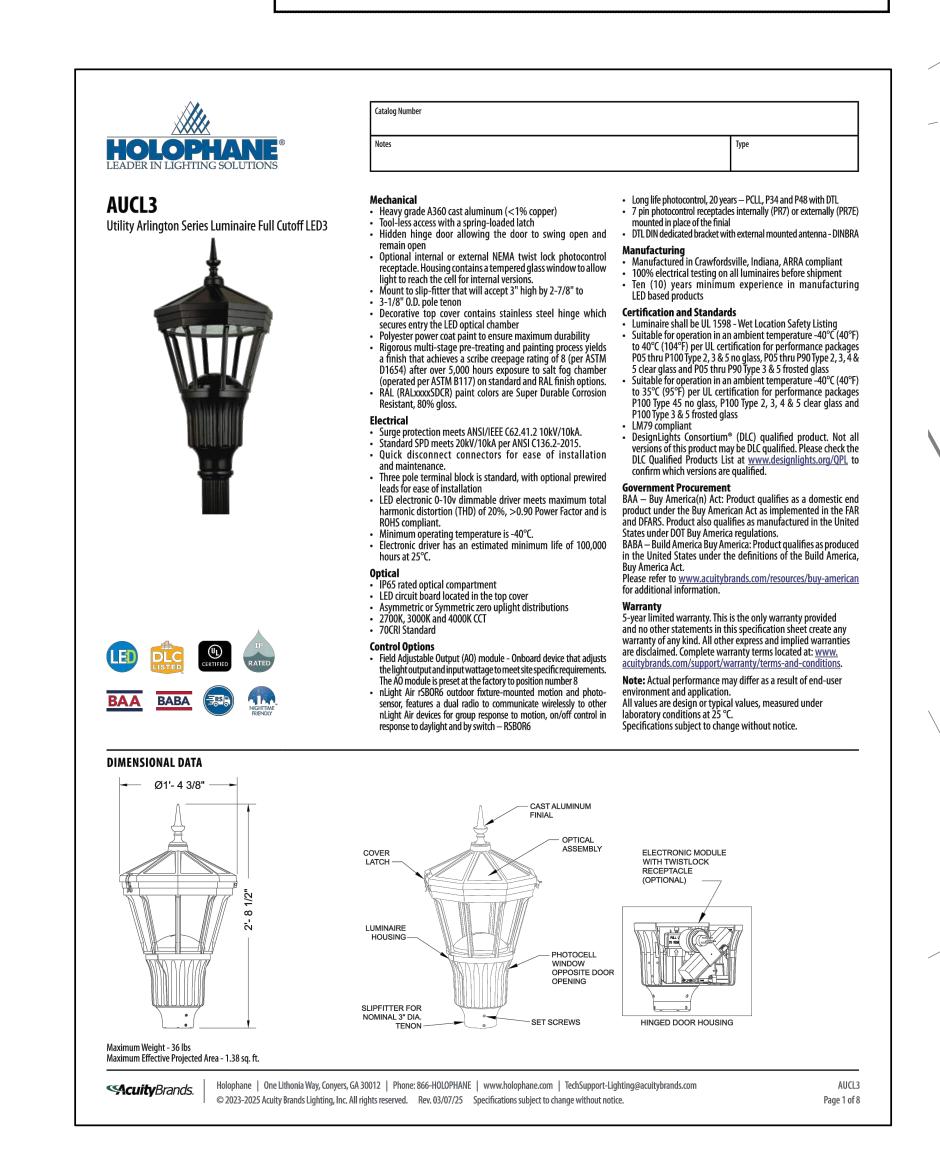
E) USE THIS TABLE IN CONJUNCTION WITH THE LIGHTING PLANS AND SPECIFICATIONS TO DETERMINE THE EXACT ORDERING NUMBERS FOR FIXTURES, LAMPS AND ACCESSORIES.

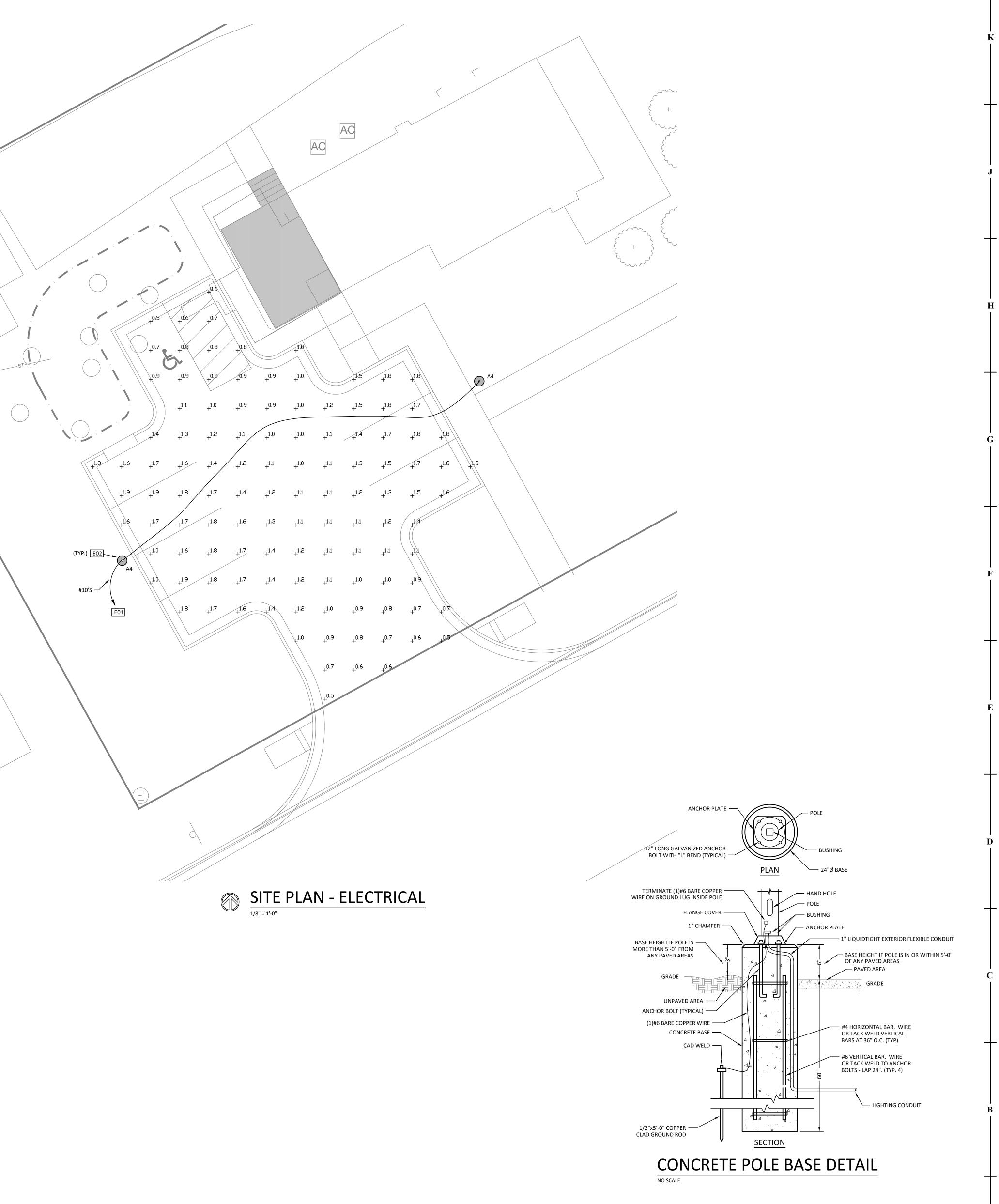
f) ALL DRIVERS ARE INTEGRAL TO FIXTURE UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR ADDITIONAL FIXTURE/DRIVER/BALLAST REQUIREMENTS.

G) ALL FIXTURES WITH PAINTED METAL PARTS SHALL BE PAINTED AFTER FABRICATION.

H) ALL EXTERIOR LED FIXTURES ARE FULL CUTOFF UNLESS NOTED OTHERWISE.

AREA	AVG (FC)	MAX (FC)	MIN (FC)	MAX:MIN RATIO	AVG: MIN RATIO
ANLA	Avd(rc)	WAX (I C)	iville (i C)	WAX.WIN KATIO	AVG. WINE NATIO
PARKING LOT	1.2	1.9	0.5	3.8:1	2.4:!







ROUTE THROUGH NEW SINGLE POLE ASTRONOMICAL TIME CLOCK, MOUNTED ADJACENT TO EXISTING
BUILDING ELECTRICAL PANEL. HOMERUN TO SPARE 20A-1P 120V BREAKER IN EXISTING PANEL.

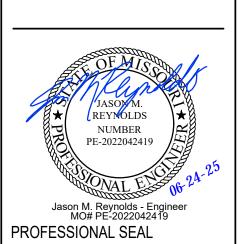
REFER TO POLE BASE DETAIL FOR MORE INFORMATION.



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**COLLINS WEBB** ARCHITECTURE, LLC **REVISION DATES:** 



ISSUE DATE: <u>24 JUNE 2025</u> COLLINS WEBB #: 24114

ELECTRICAL SITE PLAN

7817 Caenen Lake Rd, Shawnee, KS 66216 816-686-5339