

BUILDING ADDRESS : 5416-26 LENA STREET, PHILADELPHIA PA 19144		
SCOPE OF WORK: PROPOSED NEW DEVELOPMENT EXISTING 3 STORY BUILDING; CHANGE OF USE TO MULTIFAMILY & INTERIOR ALTERATION; TOTAL OF 19 UNITS EXISTING STORAGE LOT AREA; CHANGE TO ACCESSORY PARKING FOR MULTIFAMILY TOTAL 16 PARKING SPACES		
ZONING DISTRICT I-2 MEDIUM INDUSTRIAL		
OVERLAYS INCA Neighborhood Commercial Area Overlay District -Lower and Central Germantown INIS Narcotics Injection Sites Overlay District IEDO Eighth District Overlay District		
LOT AREA	15,025.6 SF (AFTER LOT CONSOLIDATION)	
BUILDING FOOTPRINT	EXISTING +/- 7,597.5 SF (49.95%)	
USE	ALLOWED OR REQUIRED	PROPOSED
	MULTIFAMILY NOT ALLOWED	MULTIFAMILY 23 UNITS APPLYING FOR VARIANCE
14-701-4 DIMENSIONAL STANDARDS		
LOT DIMENSIONS	ALLOWED OR REQUIRED	PROPOSED
MAX. OCCUPIED AREA	100 %	EXISTING NO CHANGES
MIN. FRONT YARD	0	EXISTING NO CHANGES
MIN. SIDE YARD	8' IF USED [3]	0
MIN. REAR YARD	8' IF USED [3]	0
MAX. HEIGHT	50' IF ABUTTING A RESIDENTIAL OR SF-PO DISTRICT; OTHERWISE NO LIMIT	+L-49' HEIGHT EXISTING NO CHANGES
14-802-3 REQUIRED PARKING		
RESIDENTIAL UNIT #	REQUIRED	PROPOSED
23 UNITS	1 PER 2 UNITS 12 PARKING REQUIRED	16 PROVIDED
MIN. BICYCLE PARKING SPACES	1 PER 3 UNITS (CLASS 1A) 8 REQUIRED	8 PROVIDED
LANDSCAPING REQUIREMENTS		
SEE CIVIL DRAWINGS FOR DETAILS		

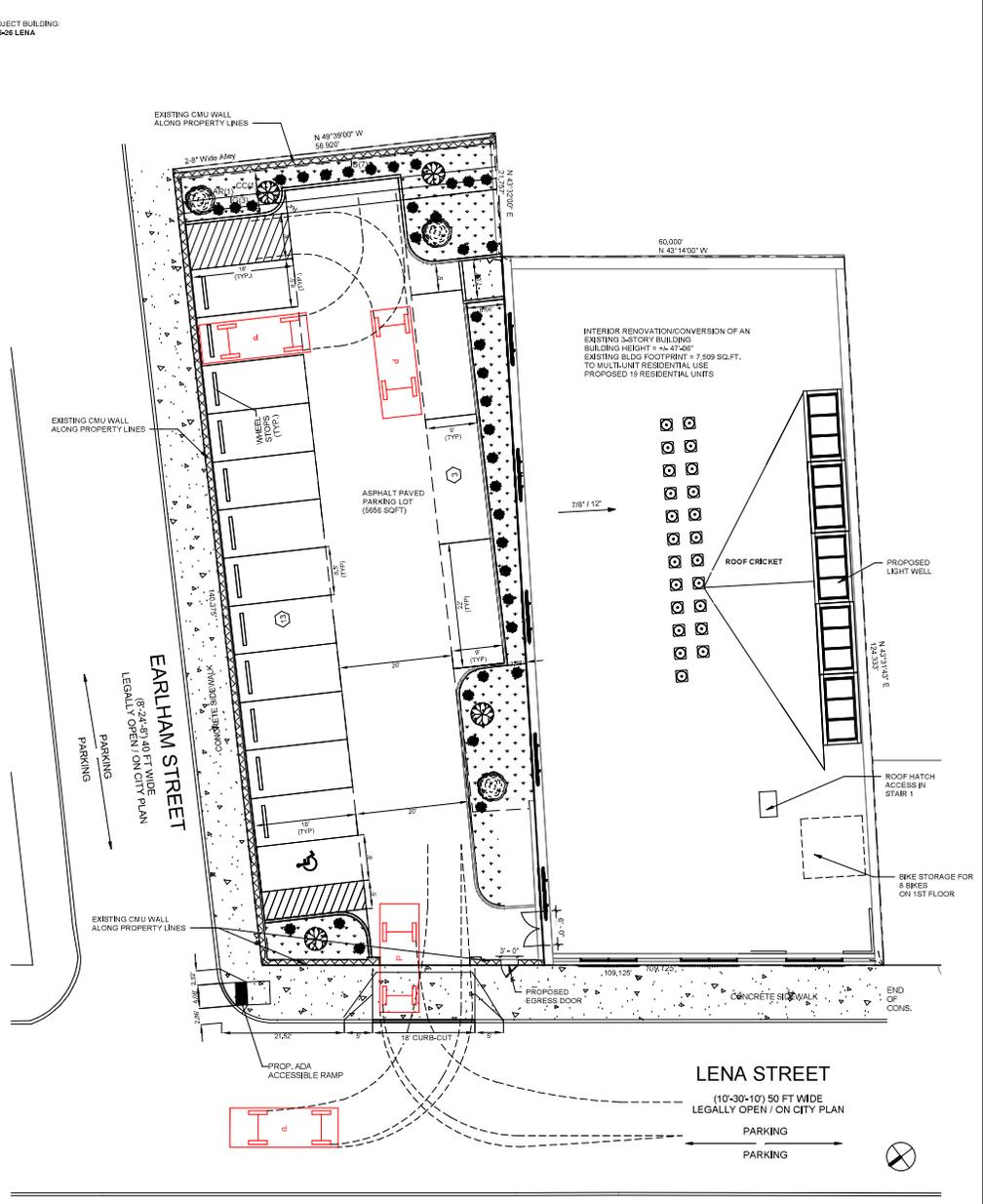


PROJECT LOCATION: 5416-26 LENA STREET

FLOOR	ROOM TYPE	UNIT AREA
LEVEL 3	3-1 THREE BEDROOM	1246 SF
	3-2 TWO BEDROOM	895 SF
	3-3 ONE BEDROOM	684 SF
	3-4 TWO BEDROOM	829 SF
LEVEL 2	2-1 THREE BEDROOM	1246 SF
	2-2 TWO BEDROOM	895 SF
	2-3 ONE BEDROOM	684 SF
	2-4 TWO BEDROOM	830 SF
LEVEL 1	1-1 ONE BEDROOM W/ LOFT	846 SF
	1-2 ONE BEDROOM W/ LOFT	688 SF
	1-3 ONE BEDROOM W/ LOFT	688 SF
	1-4 ONE BEDROOM W/ LOFT	688 SF
TOTAL 19 UNITS		

	1BD W LOFT	1BD	2BD	3BD	
1ST FLOOR :	7	0	0	0	= 7 UNITS
2ND FLOOR :	0	1	4	1	= 6 UNITS
3RD FLOOR :	0	2	3	1	= 6 UNITS
	7	3	7	2	TOTAL 19 UNITS

APPROVAL STAMPS



1 ZONING SITE
1" = 10'-0"

HYC ARCH

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PHILADELPHIA, PA 19144

OWNER

CONSULTANTS

SUBMISSION
ISSUED
2026.03.04

GENERAL NOTE
GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL PERMITS AND APPROVALS. THIS DRAWING IS FOR INFORMATION ONLY AND IS NOT TO BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THESE DRAWINGS AND SPECIFICATIONS COPIES OR REPRODUCTIONS FOR ANY PURPOSES WITHOUT THE WRITTEN CONSENT OF HYC ARCHITECT PC ARE STRICTLY PROHIBITED.

SEAL

DRAWING TITLE
ZONING

DRAWING NUMBER

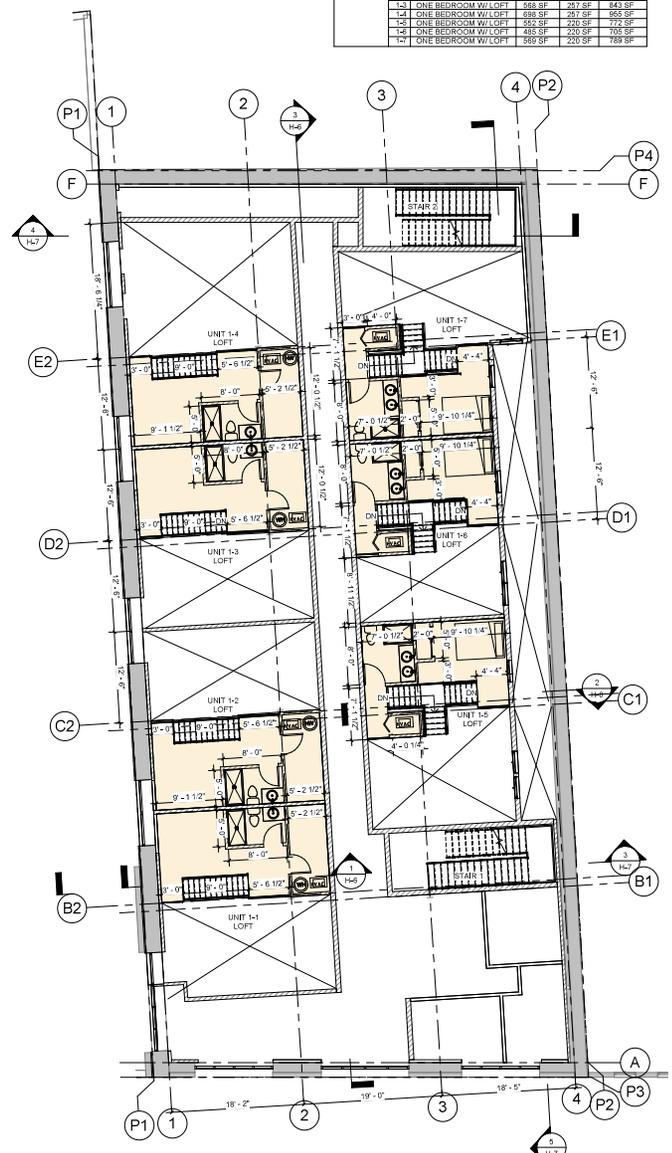
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GENERAL CONTRACTOR RESPONSIBLE FOR CHECKING FOR CONFLICTS BETWEEN THE ARCHITECT'S AND ENGINEER'S DRAWINGS. THE ARCHITECT AND ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED AND THE ARCHITECT'S AND ENGINEER'S COPIES OF THE DRAWINGS SHALL BE THE BASIS FOR CONSTRUCTION. FOR SCHEDULE OF MATERIALS, SEE THE GENERAL CONTRACTOR'S SCHEDULE OF MATERIALS.

FLOOR	ROOM TYPE	1ST FL.	LOFT	UNIT AREA
LEVEL 1	UNIT 1-1 ONE BEDROOM W/ LOFT	686 SF	267 SF	953 SF
	UNIT 1-2 ONE BEDROOM W/ LOFT	686 SF	267 SF	953 SF
	UNIT 1-3 ONE BEDROOM W/ LOFT	686 SF	267 SF	953 SF
	UNIT 1-4 ONE BEDROOM W/ LOFT	686 SF	267 SF	953 SF
	UNIT 1-5 ONE BEDROOM W/ LOFT	686 SF	267 SF	953 SF
	UNIT 1-6 ONE BEDROOM W/ LOFT	485 SF	200 SF	705 SF
	UNIT 1-7 ONE BEDROOM W/ LOFT	485 SF	200 SF	705 SF



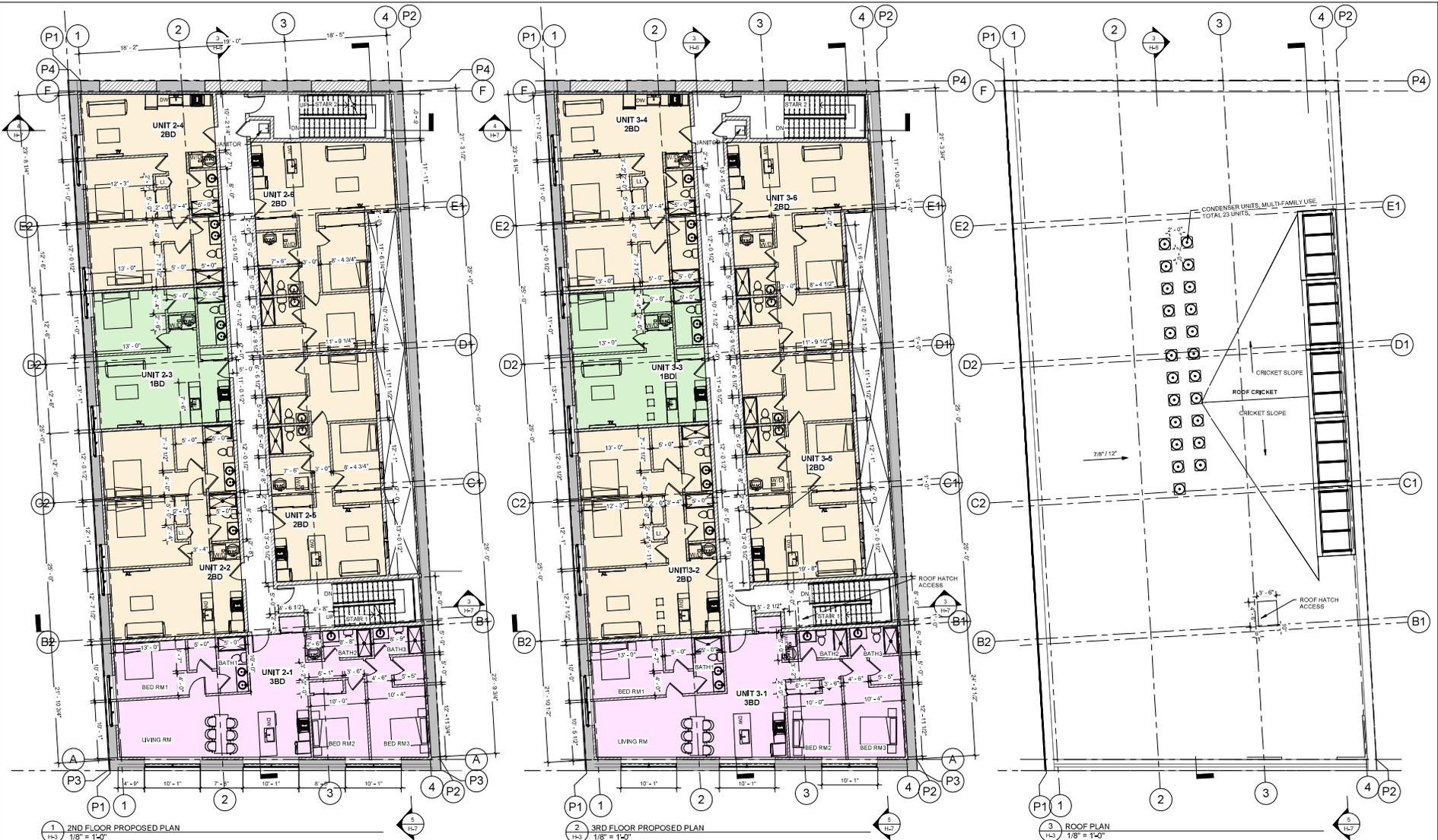
1 1ST FLOOR PROPOSED PLAN
 1/8" = 1'-0"



2 LOFT
 1/8" = 1'-0"

APPROVAL STAMPS

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1 2ND FLOOR PROPOSED PLAN
 1/8" = 1'-0"

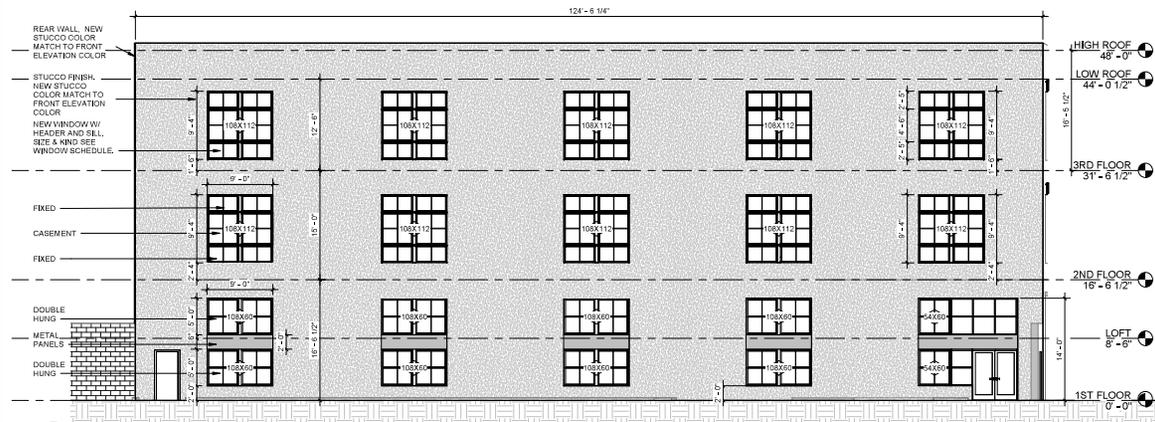
2 3RD FLOOR PROPOSED PLAN
 1/8" = 1'-0"

3 ROOF PLAN
 1/8" = 1'-0"

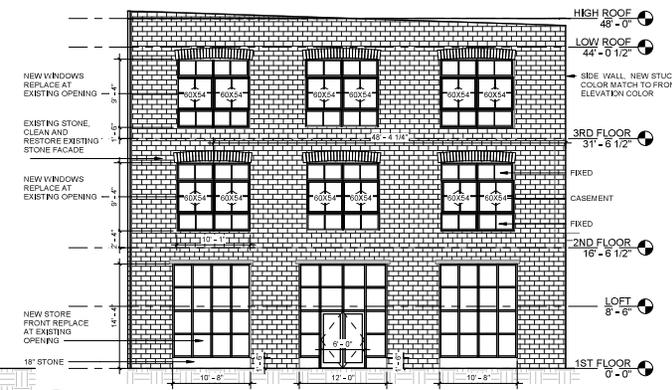
APPROVAL STAMPS

FLOOR	UNIT	ROOM TYPE	UNIT AREA
LEVEL 3	3-1	THREE BEDROOM	1246 SF
	3-2	TWO BEDROOM	896 SF
	3-3	ONE BEDROOM	554 SF
	3-4	TWO BEDROOM	830 SF
LEVEL 2	2-1	THREE BEDROOM	1246 SF
	2-2	TWO BEDROOM	896 SF
	2-3	ONE BEDROOM	554 SF
	2-4	TWO BEDROOM	830 SF
	2-5	TWO BEDROOM	798 SF
	2-6	TWO BEDROOM	812 SF

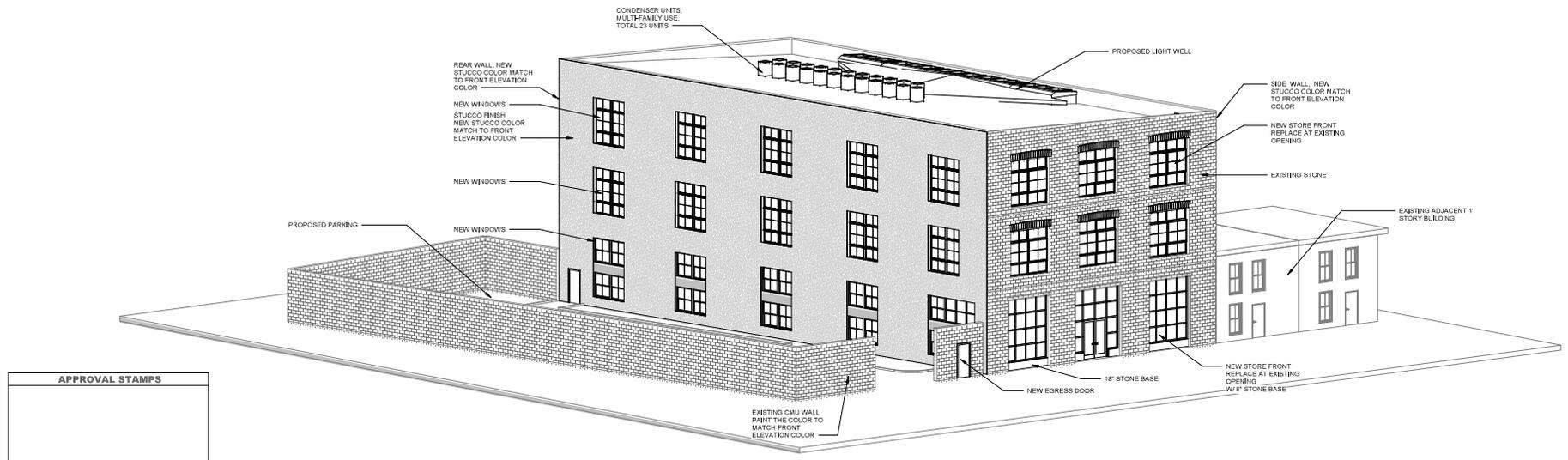
GENERAL CONTRACTOR RESPONSIBLE FOR CHECKING FOR COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ADDRESS OF ANY RECORDS REFERENCED HEREIN AND FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.



1 SIDE ELEVATION
 1/8" = 1'-0"

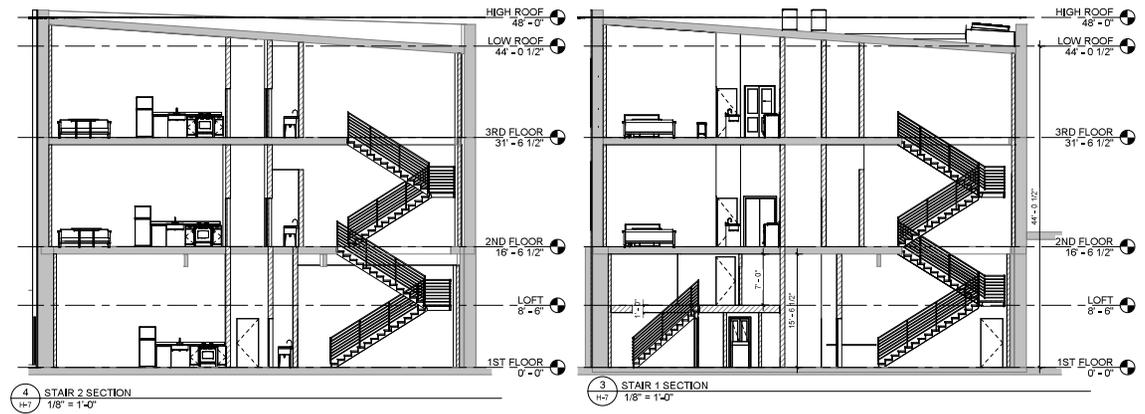


2 FRONT ELEVATION
 1/8" = 1'-0"



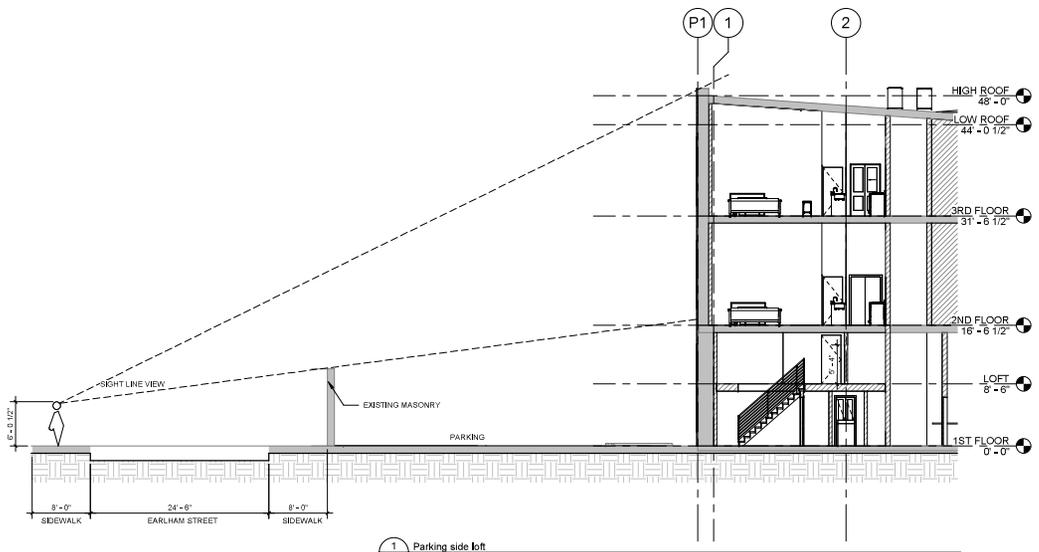
APPROVAL STAMPS

3 (3D)
 1/4" = 1'-0"

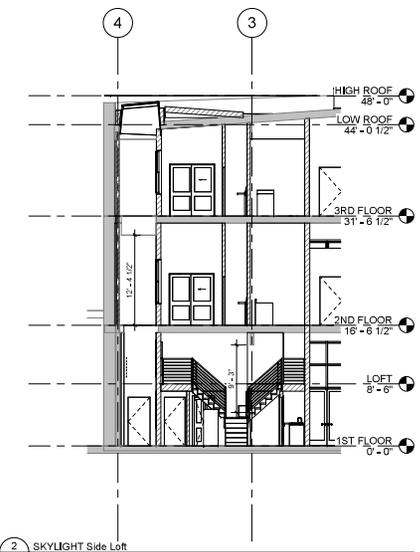


APPROVAL STAMPS

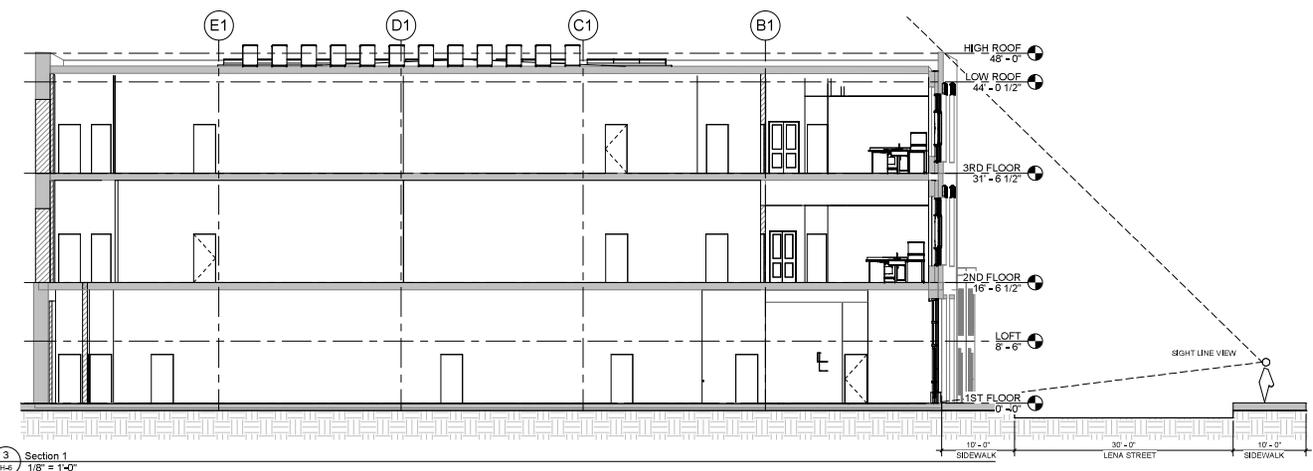
GENERAL CONTRACTOR RESPONSIBILITY FOR CHECKING CONTRACT DOCUMENTS FOR CONFLICTS AND OMISSIONS SHALL BE LIMITED TO THE CONTRACT DOCUMENTS AS SHOWN ON THE CONTRACT DOCUMENTS. HYC ARCHITECTS SHALL NOT BE RESPONSIBLE FOR ANY AND ALL ERRORS OR OMISSIONS IN THE CONTRACT DOCUMENTS OR ANY AND ALL CONFLICTS OR OMISSIONS IN THE CONTRACT DOCUMENTS OR ANY AND ALL CONFLICTS OR OMISSIONS IN THE CONTRACT DOCUMENTS OR ANY AND ALL CONFLICTS OR OMISSIONS IN THE CONTRACT DOCUMENTS.



1 Parking side loft
 1/8" = 1'-0"



2 SKYLIGHT Side Loft
 1/8" = 1'-0"



3 Section 1
 1/8" = 1'-0"

APPROVAL STAMPS



PROPOSED BUILDING PERSPECTIVE



EXISTING BUILDING PERSPECTIVE



EXISTING BUILDING FRONT ELEVATION



PROPOSED BUILDING SIDE ELEVATION



PROPOSED BUILDING FRONT ELEVATION

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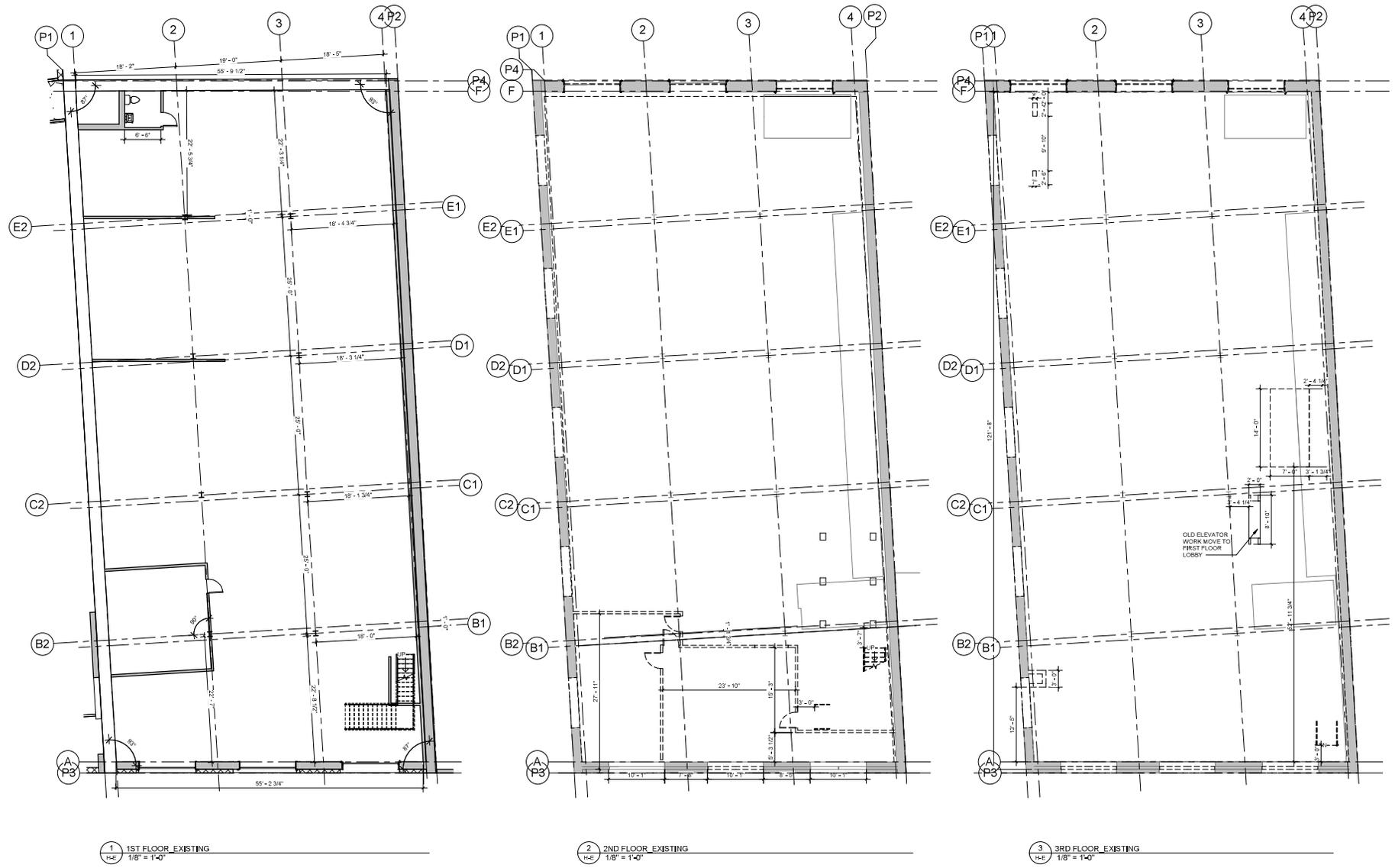
SUBMISSION
ISSUED
2026.03.04

GENERAL NOTE
GENERAL CONTRACTOR RESPONSIBILITY FOR CHECKING AND VERIFYING ALL DIMENSIONS AND CONDITIONS OF THE PROJECT BEFORE CONSTRUCTION. THE ARCHITECT IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THE DRAWINGS OR FOR ANY CONSTRUCTION DEFECTS OR DELAYS. THE ARCHITECT'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE BUILDING AS SHOWN ON THESE DRAWINGS AND TO THE EXTENT OF THE CONTRACT. THE ARCHITECT IS NOT RESPONSIBLE FOR ANY OTHER MATTERS RELATED TO THE PROJECT.

SEAL

DRAWING TITLE
ELEVATION-RENDERING

DRAWING NUMBER



1 1ST FLOOR EXISTING
1/8" = 1'-0"

2 2ND FLOOR EXISTING
1/8" = 1'-0"

3 3RD FLOOR EXISTING
1/8" = 1'-0"

GENERAL

THESE GENERAL NOTES SUPPLEMENT THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICT WITH THE SPECIFICATIONS, CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE SITE AND LOCAL CONDITIONS. CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL BUILDING CODES, CODES OF APPLICABLE REGULATORY AGENCIES, AND WITH PROJECT SPECIFICATIONS AND DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRADES' COORDINATION AND CHECKING ALL DIMENSIONS. REFERENCE TO THE DRAWINGS IS FOR CLARIFICATION PURPOSES ONLY. THE CONTRACTOR SHALL COMPLY WITH LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING UPON THE PERFORMANCE OF THE WORK. SUBJECT TO THE STRUCTURAL ENGINEER'S ACCEPTANCE, UTILITY DETAILS FOR SIMILAR CONDITIONS WHEN DETAILS FOR CONDITIONS ARE NOT INDICATED FOR A SPECIFIC CONDITION. DETAILS ON SHEETS TYPICALLY APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED. TYPICAL DETAILS ARE NOT NOTED AT EACH LOCATION AT WHICH THEY ARE APPLICABLE. WORK NOT INDICATED ON THE STRUCTURAL DRAWINGS, SEE THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND ANY OTHER DRAWINGS FOR:

- ELEVATIONS AND SLOPES.
SITE LOCATION AND EXTENT OF CURBS, FLOOR DEPRESSIONS AND TOPPING SLABS.
SEE AND LOCATION OF DRAINS, TRENCHES, FLOOR OPENINGS, AND WALL PENETRATIONS.
SEE TYPE AND LOCATION OF NONLOAD BEARING PARTITIONS.
CONCRETE AND STEEL DETAILS.
SITE AND LOCATION OF SLEEVES AND HANGERS.
ITEMS EMBEDDED IN THE STRUCTURE OR PENETRATING THE STRUCTURE.
CONNECTIONS OF ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND ANY OTHER ITEMS TO THE STRUCTURE AND CONNECTION OF ITEMS NOT TYPICALLY DETAILED ON THE STRUCTURAL DRAWINGS.
WATERPROOFING AND DRAIN FOOTINGS.
SITE AND SUBGRADE DRAINAGE SYSTEMS AND DETAILS.

CONNECTIONS OF ALL TRADES TO THE STRUCTURE SHALL BE DESIGNED AND DETAILED BY THE CONTRACTOR. CONNECTIONS TO BE MADE BY OTHER MEMBERS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. RESPONSIBILITY FOR THE PERFORMANCE OF THE SUPPLIED SYSTEM AND ASSOCIATED CONNECTIONS SHALL REMAIN THAT OF THE CONTRACTOR. ALL CONSTRUCTION SHALL BE DESIGNED BY AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED. OPENINGS AND PENETRATIONS THROUGH STRUCTURAL ELEMENTS AND ITEMS EMBEDDED IN STRUCTURAL ELEMENTS THAT ARE NOT INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE REVIEWED BY A STRUCTURAL ENGINEER BEFORE IMPLEMENTING WORK.

DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONAL INFORMATION.
DO NOT PLACE MATERIALS OR EQUIPMENT ON FINISHED FLOORS OR ROOFS IN EXCESS OF 20 PSF NOR ON FINISHED FLOORS OR ROOFS IN EXCESS OF THE DESIGN LIVE LOADS, AND/OR IMPACT LOADS.

THE STRUCTURE WAS DESIGNED FOR THE IN-SERVICE CONDITIONS ONLY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

DRAWINGS DO NOT INDICATE TEMPORARY REQUIREMENTS. NEED FOR TEMPORARY SHORING AND BRACING TEMPORARY DEWATERING, TEMPORARY EARTH RETENTION, TEMPORARY WATER CUTOFF, OR OTHER TEMPORARY MEASURES MAY BE INDICATED ON DRAWINGS AT VARIOUS AREAS AS NECESSARY FOR THE CONTRACTOR'S CONVENIENCE. THE DRAWINGS DO NOT IDENTIFY ALL AREAS OR CONDITIONS REQUIRING TEMPORARY MEASURES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL AREAS AND CONDITIONS ON THE DRAWINGS, IDENTIFY OTHER AREAS OR CONDITIONS REQUIRING TEMPORARY MEASURES, DETERMINE THE MOST EFFICIENT TEMPORARY SYSTEMS, AND DESIGN AND CONSTRUCT THE TEMPORARY MEASURES. ALL TEMPORARY SYSTEMS SHALL BE DESIGNED BY A LICENSED ENGINEER IN THE STATE IN WHICH THE PROJECT IS LOCATED.

INFORMATION RELATED TO EXISTING CONDITIONS REPRESENTS KNOWLEDGE BASED UPON INFORMATION PROVIDED BY THE CONTRACTOR WITHOUT WARRANTY. REPORT EXISTING CONDITIONS THAT VARY FROM THOSE SHOWN ON THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING CONSTRUCTION WHILE PERFORMING WORK. THE CONTRACTOR SHOULD REINSTATE EXISTING FINISHES, REFINISHING, OR ITEMS REMOVED OR DAMAGED WHILE PERFORMING WORK. UNLESS OTHERWISE INDICATED, ELEVATIONS ON THE DRAWINGS ARE RELATIVE TO THE ELEVATION OF THE FIRST FLOOR, WHICH IS PROJECT ELEVATION 90'.

DESIGN CRITERIA
ALL CONSTRUCTION SHALL CONFORM TO THE MORE RESTRICTIVE OF THE FOLLOWING CODES, THE MOST RECENT EDITIONS OF THE STANDARDS ADOPTED BY THE AUTHORITY HAVING JURISDICTION AS REFERENCED THROUGHOUT THE STRUCTURAL DRAWINGS AND THE REFERRED DRAWING CATEGORIES.

BUILDING CODE: IBC 2006 - BASED ON 2014 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS
BUILDING OCCUPANCY CATEGORY: (IBC TABLE 1004.5) II

DESIGN DEAD LOADS: SELF-WEIGHT OF MATERIALS AND SYSTEMS
DESIGN LIVE LOADS (REDUCIBLE WHERE ALLOWED PER BUILDING CODES):
FLOOR: 40 PSF
STAIRS: 40 PSF
ROOF: 20 PSF
ROOF DECK: 40 PSF
LOAD DECK: 40 PSF

DESIGN SNOW LOADS:
DESIGN SNOW LOAD, Pg: 20 PSF
SNOW EXPOSURE FACTOR: 0.8
NO ROOF OR EQUIPMENT OR PARAPETS: 1.0
ROOFTOP EQUIPMENT AND PARAPETS: 1.0
SNOW LOAD IMPORTANCE FACTOR: 1.0
THERMAL FACTOR: 1.0
FLAT-ROOF SNOW LOAD, Pp: 20PSF
SNOW DROPT: AS CALCULATED AS APPLICABLE AREAS

DESIGN WIND LOADS:
LATERAL LOAD RESISTANCE SYSTEM (BUILDING CODE): BRACE-WIND SPEED: 114 MPH FOR 1 HOUR
WIND IMPORTANCE FACTOR: Iw: 1.0
WIND EXPOSURE: C
INTERNAL PRESSURE COEFFICIENT: +0.18, -0.18
COMPONENTS AND CLADDING: SEE TYPICAL DETAIL

DESIGN SEISMIC LOADS:
SITE CLASS: D
SEISMIC IMPORTANCE FACTOR: Ie: 1.0
MAPPED SPECTRAL RESPONSE ACCELERATION: Sa: 0.183
MAPPED SPECTRAL RESPONSE ACCELERATION: S1: 0.048
SPECTRAL RESPONSE COEFFICIENT: Sm: 0.99
SEISMIC RESPONSE COEFFICIENT: SRS: 0.078
SEISMIC DESIGN CATEGORY: B
BASE ISOLATED SEISMIC RESISTIVE SYSTEM:
DETAILS FOR SEISMIC RESISTANCE:
SEISMIC RESPONSE COEFFICIENT: Cs: 0.7
DESIGN BASE SHEAR: Vb: 177 KIP
RESPONSE MODIFICATION FACTOR: R: 5
ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE (SECTION 7.2) B.8
NON-STRUCTURAL COMPONENTS: PER ADDED SEISMIC DESIGN CATEGORY OF B
EXISTS SEISMIC DESIGN REQUIREMENTS FOR MECHANICAL AND ELECTRICAL COMPONENTS AND FOR ARCHITECTURAL COMPONENTS WITH IMPORTANCE FACTORS OF 1.0. REFER TO RESPECTIVE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

DEFERRED SUBMITTALS
DEFERRED SUBMITTALS ARE DEFINED AS THOSE PORTIONS OF THE DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF THE PERMIT APPLICATION AND THAT ARE TO BE SUBMITTED TO THE BUILDING OFFICIAL WITH A SPECIFIED PERIOD.
DEFERRAL OF ANY SUBMITTAL ITEMS SHALL HAVE THE PRIOR APPROVAL OF THE BUILDING OFFICIAL. THE REGISTERED DESIGN PROFESSIONAL IS RESPONSIBLE TO CHARGE SHALL LIST THE DEFERRED SUBMITTALS ON THE CONSTRUCTION DOCUMENTS FOR REVIEW BY THE BUILDING OFFICIAL.
DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THE TIME DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING.
THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

ALL DEFERRED SUBMITTAL ITEMS ARE TO BE DESIGNED BY THE VENDOR AND SHALL BE DESIGNED BY AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

- DEFERRED SUBMITTAL ITEMS INCLUDE:
WOOD STAIRS
METAL STAIRS
SPRINKLER TUBE RAILINGS
HANGERS AND SUPPORTS FOR FLOOR DEPRESSIONS AND EQUIPMENT
HANGERS AND SUPPORTS FOR PLUMBING AND EQUIPMENT
HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT
HANGERS AND SUPPORTS FOR ELEVATOR WALKWAYS
HANGERS AND SUPPORTS FOR PROCESS SYSTEMS

MODIFICATIONS TO EXISTING CONSTRUCTION

THE EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS IS PROVIDED FOR REFERENCE ONLY. EXISTING CONSTRUCTION SHALL BE REMOVED OR MODIFIED AS SHOWN ON THE EXISTING CONSTRUCTION AND SECTION OF ALL NEW CONSTRUCTION. ANY EXISTING FINISHES REMOVED OR DAMAGED TO ACCOMPLISH ANY STRUCTURAL MODIFICATIONS SHALL BE REINTEGRATED AFTER MODIFICATION WORK. TYPICALLY UNLESS NOTED OTHERWISE:

ANY STRUCTURAL STEEL OR REINFORCING BARS THAT HAVE BEEN CUT AND GROUND FLUSH WITH A CONCRETE SURFACE SHALL BE REBUILT MEMORIO PAPER.
THE FACE OF ALL NEW PERMANENT CONCRETE SURFACES CUT FROM EXISTING CONCRETE SHALL BE CLEANED WITH A HIGH-PRESSURE WATER SPRAY, ALLOW SURFACES TO DRY THOROUGHLY, COAT THE CONCRETE SURFACES WITH A BONDING AGENT AND FINISH WITH AN ACCESSIBLE PATCHING COMPOUND. ALL EXPOSED REINFORCEMENT SHALL BE GROUND FLUSH WITH THE NEW CONCRETE SURFACE.

WHERE EXISTING CONCRETE REINFORCEMENT IS TO BE REMOVED/REPLACED, THE CONCRETE SHALL BE REMOVED IN A MANNER THAT MAINTAINS DRAINAGE TO THE REINFORCEMENT. DAMAGED REINFORCEMENT SHALL BE REPLACED BY A METHOD ACCEPTABLE TO THE STRUCTURAL ENGINEER.

WHERE NEW CONCRETE IS TO BE CAST AGAINST EXISTING CONCRETE, THE CONTACT SURFACE SHALL BE ROUGHENED AND CLEANED WITH A HIGH-PRESSURE WATER SPRAY, ALLOW TO DRY THOROUGHLY BEFORE APPLICATION OF EPOXY BONDING AGENT.

ANY NEW STRUCTURAL STEEL REINFORCEMENT BEAMS ADJACENT TO NEW SLAB OPENINGS SHALL BE FULLY INSTALLED BEFORE THE OPENINGS ARE CUT.

BEFORE CUTTING OPENINGS IN EXISTING SLAB SPANS, ALL ADJACENT SPANS SHALL BE SHORED TEMPORARILY OR AS INDICATED. ANY EXISTING WALL OPENINGS TO BE SPILLED SHALL BE REINFORCED WITH BARS TO MATCH THOSE IN THE ADJACENT EXISTING CONCRETE. JOISTS FOR THOSE BARS SHALL BE PLACED INTO ADJACENT CONCRETE.

BEFORE CUTTING OPENINGS IN EXISTING WALLS, ANY ADJACENT IN-WALL WORK SHALL BE COMPLETED AND THE IN-WALL CONCRETE SHALL HAVE REACHED ITS REQUIRED 28-DAY COMPRESSIVE STRENGTH.

SAMCOUS FOR NEW WALL OPENINGS SHALL NOT EXCEED PAST THE REQUIRED DIMENSIONS FOR THE OPENING. CORE DRILL THE CORNERS AND EXTEND SAW CUTS INTO THE CORNER AREAS, AND NOT BEYOND IT, OR/UT THE REMAINERS AT THE CORNERS TO ACHIEVE A CLEAN 90 DEGREE CORNER.

THE CONTRACTOR SHALL SUBMIT COORDINATED SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR APPROVAL BEFORE CUTTING OR ERECTION OF ANY NEW STRUCTURAL STEEL.

VERIFY ACCESSIBILITY TO THE BUILDING AND MAXIMUM WORKABLE MEMBER LENGTHS BEFORE COMMENCING WITH FABRICATION. REMOVE THE NEW STRUCTURAL ELEMENTS CAN NOT BE SHIPPED AND INSTALLED AS CONTINUOUS MEMBERS. IN THAT CASE, ANY SPICES SHALL CONSIST OF COMPLETE PENETRATION WELDING OF THE FLANGES AND PARTIAL PENETRATION WELDING OF THE WEB OF THE NEW BEAM. THE CONTRACTOR SHALL SUBMIT PROPOSED SPICE DETAILS AND LOCATIONS TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL.

REMOVE ALL LOADS FROM THE SLAB DIRECTLY ABOVE THE AREAS WHERE NEW STEEL BEAMS ARE TO BE INSTALLED. PROVIDE SHORING UNDER EXISTING SLABS AND BEAMS BEFORE AND DURING CONSTRUCTION. ALL NEW STRUCTURAL STEEL SHALL BE IN PLACE BEFORE ANY EXISTING SLABS OR BEAMS ARE REMOVED OR BROKEN.

PROVIDE NON-SHRINKING GROUT AS REQUIRED FOR FULL BEARING OF THE EXISTING SLAB ON THE NEW BEAMS. UNLESS NOTED OTHERWISE.

REMOVE EXISTING REINFORCING LOCALLY AND CLEAN AREAS OF EXISTING STEEL TO BE WELDED. INSTALL NEW U/L REINFORCING AND WELDS TO THE EXISTING STEEL. REFER TO ARCHITECTURAL DOCUMENTS FOR REQUIRED FIRE RATINGS.

FOUNDATIONS-GENERAL

FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS INCLUDED IN THE INTERNATIONAL BUILDING CODE SECTION 1808 PRESUMPTIVE LOAD-BEARING VALUES FROM TABLE 1802.2.

ALL SUBGRADES AND EXCAVATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE PLACING REINFORCING AND CONCRETE. NOTIFY THE GEOTECHNICAL ENGINEER WHEN THE SUBGRADES AND EXCAVATIONS ARE READY FOR INSPECTION.

ALL SUBGRADES SHALL BE PREPARED AND ALL FILL SHALL BE COMPACTED AND MOISTURE-CONTROLLED AS SPECIFIED IN THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS.

ALL SLAB-GRADE AREAS SHALL BE INSPECTED BY A VULNERABILITY TESTING LABORATORY AND BE PROTECTED. ALL SPOT SPOTS ENCOUNTERED SHALL BE REMOVED AND REPLACED TO FINISHED GRADE WITH APPROVED FILL MATERIAL AS SPECIFIED IN THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS.

NO FOUNDATIONS SHALL BE PLACED ONTO OR AGAINST SUBGRADES CONTAINING FREE WATER, FROST OR ICE.

PLACE BACKFILL BEHIND RETAINING WALLS AFTER CONSTRUCTION. CONCRETE SHOULD HAVE ATTAINED FULL DESIGN STRENGTH. BRACE RETAINING WALLS UNTIL ATTACHED FLOORS AND SLABS ON GRADE ARE COMPLETE AND HAVE ATTAINED FULL DESIGN STRENGTH. NO HEAVY EQUIPMENT SHALL BE ALLOWED WITHIN A 10' HIGH SPACE AS MEASURED FROM THE BASE OF THE WALL.

THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF THE SOIL CONDITIONS ENCOUNTERED VARY FROM THOSE SHOWN ON THE SOIL LOGS OF THE GEOTECHNICAL ENGINEERING REPORT.

THE CONTRACTOR SHALL DESIGN AND CONSTRUCT ALL TEMPORARY CASING, PROTECTION, SHORING, BRACING, DEWATERING, AND UNDERPINNING NECESSARY TO COMPLETE THE WORK. ALL TEMPORARY SYSTEMS SHALL BE DESIGNED BY AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND AFTER CONSTRUCTION.

REMOVE ABANDONED FOUNDATIONS AND UTILITIES THAT INTERFERE WITH NEW CONSTRUCTION UNLESS OTHERWISE INDICATED.

CONCRETE WORK BELOW GRADE SHALL BE DETAILED AS WATERTIGHT CONSTRUCTION. CONSTRUCTION JOINTS BELOW GRADE SHALL BE WATER TIGHT.

SHALLOW FOUNDATIONS

ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL, HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 1500 PSF AT A MINIMUM DEPTH OF 36 INCHES BELOW FINISHED GRADE.

ALL FOUNDATIONS EXPOSED TO FROST SHALL BEAT AT A MINIMUM DEPTH OF 36 INCHES BELOW FINISHED GRADE.

FINISHED GRADE IS DEFINED AS THE SLAB TOP FOR INTERIOR FOOTINGS AND THE LOWEST ADJACENT GRADE WITHIN 5 FEET OF EXTERIOR FOOTINGS.

CONCRETE

ALL CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND WITH ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.

CONCRETE DETAILING SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL 08-8 AND ACI 315 DETAILS AND DETAILING OF CONCRETE REINFORCEMENT. SUBMIT SHOP DRAWINGS FOR REVIEW.

CONCRETE PLACEMENT AND CONSTRUCTION SHALL BE ACCORDING TO ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.

PROVIDE NORMAL-WEIGHT CONCRETE WITH 28-DAY COMPRESSIVE STRENGTHS AS INDICATED.

FOOTINGS: 3000 PSI
SLABS ON GRADE: 4000 PSI
CONCRETE WALLS: 3000 PSI

ALL CONCRETE REQUIRING LOW PERMEABILITY SHALL HAVE A MAXIMUM WATER-CEMENT-RATIO MATERIAL RATIO OF 0.45 AND A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI.

ALL CONCRETE SUBJECT TO FREEZING AND THAWING SHALL HAVE A MAXIMUM WATER-CEMENT-RATIO MATERIAL RATIO OF 0.42 AND A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI.

ALL CONCRETE SLABS ON GRADE SHALL HAVE A MAXIMUM WATER-CEMENT-RATIO MATERIAL RATIO OF 0.45.

CONCRETE SHALL HAVE AT THE POINT OF DELIVERY, A SLUMP OF 4 INCH AS DETERMINED BY ASTM C143/C143M. SLUMP TOLERANCES SHALL MEET THE REQUIREMENTS OF ACI 318. WHEN A PLASTICIZING ADMIXTURE OR HIGH-RANGE WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C494/C494M IS PERMITTED TO INCREASE THE SLUMP OF CONCRETE, CONCRETE SHALL HAVE BEEN PROPORTIONED TO A SLUMP OF 2 TO 4 INCH BEFORE THE ADMIXTURE IS ADDED AND A MAXIMUM SLUMP OF 8 INCH AT THE POINT OF DELIVERY AFTER THE ADMIXTURE IS ADDED.

ADDITION OF WATER TO A CONCRETE BATCH WITH INSUFFICIENT SLUMP WILL NOT BE PERMITTED. UNLESS THE SUPPLIER HAS SPECIFICALLY WITHHELD WATER FROM THE BATCH AT THE PLANT. IN SUCH CASE, THE MIX DESIGN AND TRUCK TICKET MUST CLEARLY STATE THE MAXIMUM AMOUNT OF WATER THAT CAN BE ADDED TO THE CONCRETE BATCH ON SITE. IN NO CASE SHALL THE MAXIMUM WATER-CEMENT-RATIO MATERIAL RATIO BE EXCEEDED.

ALL EXTERIOR CONCRETE SUBJECT TO FREEZING AND THAWING SHALL BE AIR ENTRAINED TO RESULT IN A TOTAL AIR CONTENT OF 6% +/- 0.2% FOR CONCRETE USING SANDHOL AND 10% MAXIMUM AGGREGATE SIZE.

COLD WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH ACI 308 'COLD WEATHER CONCRETING'. HOT WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH ACI 305 'HOT WEATHER CONCRETING'.

NO CHLORIDES AND/OR ADMIXTURES CONTAINING CHLORIDES SHALL BE USED IN ANY CONCRETE. UNLESS A GREATER CONCRETE COVER IS REQUIRED FOR FIRE RESISTANCE, THE MINIMUM CONCRETE COVER FOR CAST-IN-PLACE CONCRETE REINFORCING STEEL SHALL CONFORM TO THE COVER AS INDICATED:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES
CONCRETE EXPOSED TO EARTH OR WEATHER:
NO. 8 BARS AND LARGER: 2 INCHES
NO. 5 BAR AND SMALLER: 1-1/2 INCHES
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH AGGREGATE:
SLABS, WALLS, JOISTS:
NO. 14 AND NO. 18 BARS: 1-1/2 INCHES
NO. 11 BAR AND SMALLER: 3/4 INCHES
BEAMS, COLUMNS:
PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS: 1-1/2 INCHES

CHAMFER AND EXPOSED CORNERS WITH 45-DIGREE CHAMFERS.

PROVIDE FINISHES AS INDICATED IN THE PROJECT SPECIFICATIONS AND IN THE ARCHITECTURAL DRAWINGS.

JOINTS NOT INDICATED SHALL BE MADE AND LOCATED SO AS NOT TO IMPAIR THE STRENGTH AND APPEARANCE OF THE STRUCTURE. HORIZONTAL JOINTS ARE NOT PERMITTED IN CONCRETE EXCEPT WHERE NORMALLY OCCUR OR WHERE INDICATED. VERTICAL JOINTS SHALL OCCUR ONLY AT LOCATIONS ACCEPTED BY THE STRUCTURAL ENGINEER.

ROUGHENED CONCRETE SURFACES OF CONSTRUCTION JOINTS TO 1/4" HIGH AMPLITUDE AND GLEAM OF LAFRANCE. FOREIGN MATTER, AND LOOSE PARTICLES, LOCATE CONSTRUCTION JOINTS AS SHOWN ON THE DRAWINGS. SUBMIT ALTERNATE JOINT LOCATIONS OR JOINTS NOT SHOWN TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL BEFORE PROCEEDING WITH THE WORK.

AT LOCATIONS WHERE CONCRETE IS CAST AGAINST EXISTING CONCRETE, ROUGHEN CONTACT SURFACES TO 1/4" HIGH AMPLITUDE AND GLEAM OF LAFRANCE. REMOVE MATTER AND LOOSE PARTICLES.

AT LOCATIONS WHERE CONCRETE IS CAST AGAINST EXISTING MASONRY, THOROUGHLY ROUGHEN CONTACT SURFACES BY LIGHT SANDBLASTING OR OTHER SURFACE-TREATING AND GLEAM OF LAFRANCE. FOREIGN MATTER AND LOOSE PARTICLES.

CONTROL JOINTS FOR SLABS ON GRADE SHALL BE AS NOTED IN PLAN OR, IF NOT NOTED, IN A SQUARE PATTERN AND BE NOT SPACED TO BE GREATER THAN 12 FEET ON CENTER. IF CONTROL JOINTS ARE CUT, THEY SHALL BE CUT WITHIN 12 HOURS AFTER THE CONCRETE IS PLACED.

REINFORCE CONCRETE SLABS AS REQUIRED TO FLOOR DRAINS. SLAB ON GRADE MINIMUM THICKNESS SHALL BE MAINTAINED AT SPECIFIED SLABS.

THE CONCRETE CONTRACTOR SHALL REVIEW ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND CONSULT WITH OTHER CONTRACTORS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, INSERTS, SLAB DEPRESSIONS AND OTHER ITEMS RELATED TO THE CONCRETE WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR PROPER LOCATION. NO CORING OF CAST-IN-PLACE CONCRETE IS ALLOWED WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER.

REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PROCESS AND PLUMBING DRAWINGS FOR MISCELLANEOUS PADS, FURNISH AND INSTALL AS REQUIRED.

NO STRUCTURAL CONCRETE SHALL BE PLACED UNTIL THE CONCRETE DESIGN MIXES, THE CONCRETE PLACEMENT PROCEDURE, THE LOCATION OF CONSTRUCTION JOINTS AND THE SETTING OF REINFORCING STEEL IS REVIEWED BY THE STRUCTURAL ENGINEER AND ACCEPTED AS APPLICABLE.

NO ALUMINUM OR GALV. STEEL SHALL BE ALLOWED IN THE CONCRETE, UNLESS COATED TO PREVENT ALUMINUM-CONCRETE REACTION, AND INCLUDES PUMPING THROUGH ALUMINUM PIPE.

FORMWORK, SHORING, AND REINFORCING SHALL BE IN ACCORDANCE WITH ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE AND ALL APPLICABLE RECOMMENDATIONS FOR CONCRETE FORMWORK, SHORING AND BRACING AND DETAILING OF FORMWORK, SHORING, AND REINFORCING SYSTEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FORMWORK, SHORING, AND REINFORCING SYSTEMS SHALL BE DESIGNED BY AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

DO NOT REMOVE FORMWORK PRIOR TO CONCRETE BEING SUFFICIENTLY CURED TO PREVENT DAMAGE BY FORMWORK REMOVAL OR PRIOR TO CONCRETE ATTAINING 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH.

CONCRETE WALL THICKNESS SHOWN ON THE DRAWINGS IS THE MINIMUM THICKNESS. NO ALLOWANCES HAVE BEEN SHOWN FOR ADDITIONAL CONCRETE REQUIRED TO COMPENSATE FOR CURING, SESS, OR FORMWORK DEFLECTION TO MAINTAIN SURFACE TOLERANCES SPECIFIED.

HEADED CONCRETE ANCHORS SHALL BE MANUFACTURED BY NELSON STUD WELDING CO., LOHAR, OHIO, OR OTHER APPROVED MANUFACTURER. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ANCHORS FOR QUANTITY AND NOMINAL LENGTH. INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MATERIAL SHALL BE TESTED TO ASTM A108.

DEFORMED BAR ANCHORS SHALL BE MANUFACTURED BY NELSON STUD WELDING CO., LOHAR, OHIO, OR OTHER MANUFACTURER ACCEPTABLE TO THE STRUCTURAL ENGINEER. INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MATERIAL SHALL CONFORM TO ASTM A618.

MECHANICALLY WREATH ALL CONCRETE WHEN PLACED. ENSURE FULL CONSOLIDATION OF CONCRETE AROUND REINFORCING STEEL. POST-TENSIONING STEEL, DOWELS, ANCHOR BOLTS, DEFORMED BAR ANCHORS, HEADED CONCRETE ANCHORS, AND OTHER ITEMS SHALL BE FULLY CURED DURING CONCRETE PLACEMENT.

CONCRETE SLABS ON GRADE AND CONCRETE TOPPING SLABS SHALL BE CONSTRUCTED PER ACI 302.1R 'GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION' AND ACI 302.2R 'GUIDE FOR CONCRETE SLABS THAT RECEIVE MOISTURE-SENSITIVE TOPFINISHES'. THE SLABS SHALL BE PLACED IN STIFF FORMWORK. CONCRETE AGGREGATE MATERIALS SHALL BE SUFFICIENTLY GRADED, AND CONCRETE SLABS-ON-GRADE SHALL BE CURED AS REQUIRED TO MAXIMIZE THE POSSIBILITY OF FULL CURING.

CONTINUOUSLY MOIST CURE CONCRETE SLABS ON GRADE FOR 7 DAYS MINIMUM. WATER FOG SPRAYS, PONDING, SATURATED ABSORPTIVE COVERS, OR MIXTURE RETAINING COVERS MAY BE USED. CURING COMPOUNDS ARE NOT ACCEPTABLE.

TEST CYLINDERS SHALL BE MADE AND TESTED AS OUTLINED IN THE PROJECT SPECIFICATIONS.

CONCRETE REINFORCING STEEL

FABRICATE AND PLACE REINFORCING STEEL IN ACCORDANCE WITH ACI 315 DETAILS AND DETAILING OF CONCRETE REINFORCEMENT AND ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.

UNLESS NOTED OTHERWISE, REINFORCING STEEL SHALL CONFORM TO ASTM A618, GRADE 60. REINFORCING STEEL THAT WILL BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60.

WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A108 AND SHALL BE PLAIN WIRE. SUPPLY IN FLAT SHEETS. ROLLS SHALL NOT BE PERMITTED. UNLESS NOTED OTHERWISE, LAPS OF WELDED WIRE REINFORCEMENT SHALL BE A MINIMUM OF TWO WIRE SPACES.

SMOOTH STEEL DOWELS IN SLABS ON GRADE SHALL CONFORM TO ASTM A36. ALL FIELD BENDING OF REINFORCING SHALL BE PERMITTED.

UNLESS NOTED OTHERWISE, CONTINUOUS REINFORCING SHALL HAVE A MINIMUM TENSION LAP OF CLASS 'B' PER ACI 318 (SPICES AND SHALL HOOK AT DISCONTINUOUS ENDS. REINFORCEMENT SPECIFIED AS CONTINUOUS SHALL BE CONTINUOUS THROUGH THE ENTIRE RUN. HOOKS AT OTHER INTERESTING ELEMENTS, ALTERNATELY, REINFORCEMENT SHALL BE SPECIFIED AS CONTINUOUS SHALL BE LAP SPICES WITH A CLEAR LAP SPACE TO DEVELOP THE FULL YIELD STRENGTH OF THE CONTINUOUS REINFORCEMENT. FOR REFERRED LAP SPICE LENGTHS, SEE TYPICAL DETAIL.

REINFORCEMENT SHALL BE CONTINUOUS ACROSS JOINTS AND AROUND CORNERS, OR SPICE BARS SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318 OR ACI 319. CORNER BARS SHALL BE PROVIDED AT ALL WALL CORNERS. EQUAL TO THE PERPENDICULAR WALL REINFORCEMENT.

DO NOT CUT OR WELD REINFORCING STEEL WITHOUT PRIOR ACCEPTANCE OF A STRUCTURAL ENGINEER. WHEN WELDING IS INDICATED ON THE DRAWINGS, PROCEDURES SHALL BE IN WITH AWS D14.

PROVIDE REBAR CHAIRS FOR REINFORCING STEEL. PROVIDE ADDITIONAL LONGITUDINAL SUPPORT BARS AS REQUIRED TO ASSURE PROPER SUPPORT FOR REINFORCING STEEL AND WELDED WIRE REINFORCEMENT.

PROVIDE ALL ACCESSORIES TO SUPPORT REINFORCEMENT AT POSITIONS SHOWN ON THE PLANS AND DETAILS. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE WORK.

NON-SHRINKING GROUT

ALL GROUT AT COLUMN BASE PLATES, BEAM BEARING PLATES, AND EQUIPMENT BASE PLATES SHALL BE NONSHRINKABLE, SHRINKAGE-RESISTANT GROUT CONFORMING TO ASTM C 1109, 1100M.

GROUT SHALL BE FACTORY-PACKAGED WITH NONMETALLIC AGGREGATE, NONCORROSIVE AND NONSTAINING, MIXED WITH WATER TO CONSISTENCY SUITABLE FOR APPLICATION AND A 3-MINUTE WORKING TIME.

COPY/RY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR SHRINKAGE-RESISTANT GROUTS.

NONSHRINKABLE, SHRINKAGE-RESISTANT GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF TWO TIMES THE COMPRESSIVE STRENGTH OF THE SUPPORTING CONCRETE FOUNDATIONS. DOWELS SHALL BE 1/2" DIA.

NONSHRINKABLE, SHRINKAGE-RESISTANT GROUT SHALL BE INSTALLED AT COLUMN BASE PLATES, BEAM BEARING PLATES, AND EQUIPMENT BASE PLATES PRIOR TO LOAD BEING APPLIED.

POST-TENSIONED ANCHORS

CONCRETE ADHESIVE ANCHORS SHALL BE WEDGE EXPANSION TYPE, MADE OF STEEL, HILTI KIMBROK-TZ EXPANSION ANCHORS OR MANUFACTURED BY HILTI INC. (SEE ESTER-100) OR APPROVED EQUIVALENT.

CONCRETE ADHESIVE ANCHORS SHALL BE HILTI HIR-500 V3 ADHESIVE ANCHORAGE SYSTEMS AS MANUFACTURED BY HILTI INC. (SEE ESTER-100) OR APPROVED EQUIVALENT. TYPICAL UNLESS NOTED OTHERWISE, TREATED RODS USED IN ADHESIVE ANCHORAGE SYSTEMS SHALL BE ASTM A193, GRADE 80 REINFORCING BARS. REMOVE GREASE, OIL, RUST, AND OTHER LANTACE PRODUCTS AND CONTAMINANTS FROM THE SURFACE OF THE ANCHORS OR DOWELS. WIRE SHALL BE AS NOTED.

CONCRETE ADHESIVE ANCHORS SHALL BE INSTALLED IN GROUTED/BLIND CONCRETE BLOCK SHALL BE HILTI HIR-700 V3 ADHESIVE ANCHORAGE SYSTEMS AS MANUFACTURED BY HILTI INC. (SEE ESTER-100) OR APPROVED EQUIVALENT.

ADHESIVE ANCHORAGE SYSTEMS SHALL MEET THE REQUIREMENTS OF ASTM A193, GRADE 80. REINFORCING BARS USED IN ADHESIVE ANCHORAGE SYSTEMS SHALL BE ASTM A193, GRADE 80 REINFORCING BARS. REMOVE GREASE, OIL, RUST, AND OTHER LANTACE PRODUCTS AND CONTAMINANTS FROM THE SURFACE OF THE ANCHORS OR DOWELS. WIRE SHALL BE AS NOTED.

PROVIDE STAINLESS STEEL FASTENERS FOR EXTERIOR USE OR WHEN EXPOSED TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.

IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2" CLEARANCE FROM REINFORCEMENT. IF REINFORCEMENT IS FOUND, DRILL THROUGH THE DOWEL AND THE ABANDONED-HOLE FILL. THE ABANDONED-HOLE WITH NON-SHRINK GROUT. THE ENGINEER WILL DETERMINE A NEW HOLE LOCATION. THE LOCATION OF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED.

LOCATE REINFORCEMENT AND CORNER PLANT ANCHOR LOCATIONS BEFORE FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.

ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE APPLICABLE IBC EVALUATION SERVICE REPORT.

EXPOSED ITEMS IN CONCRETE

INSTALL ANCHOR RODS ACCURATELY LOCATED, TO ELEVATIONS REQUIRED AND COMPLYING WITH TOLERANCES IN SECTION 7.5 OF AISC 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES'.

EMBEDMENTS, CONDUITS, PIPES, SLEEVES, ETC. OF ANY MATERIAL NOT HARMFUL TO CONCRETE AND WITH NO LIMITATIONS NOTED BELOW, SHALL BE PERMITTED IN CONCRETE WITH APPROVAL OF THE STRUCTURAL ENGINEER. PROVIDED THEY ARE NOT CONSIDERED TO REPLACE OR SUPPLANT CONCRETE STRUCTURALLY.

ANY ALUMINUM EMBEDMENTS IN STRUCTURAL CONCRETE SHALL BE COATED OR COVERED TO PREVENT ALUMINUM-CONCRETE REACTION OR ELECTROLYTIC ACTION BETWEEN ALUMINUM AND STEEL.

CONDUITS, PIPES, AND SLEEVES PASSING THROUGH A SLAB, WALL, OR BEAM SHALL NOT IMPAIR SIGNIFICANTLY THE CONSTRUCTION STRENGTH. CONDUITS AND PIPES EMBEDDED WITHIN A SLAB, WALL, OR BEAM, OTHER THAN THOSE MERELY PASSING THROUGH, SHALL SATISFY THE FOLLOWING:

THEY SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN 1/3 THE OVERALL THICKNESS OF SLAB, WALL, OR BEAM IN WHICH THEY ARE EMBEDDED. THEY SHALL NOT BE SPACED CLOSER THAN THREE (3) DIAMETERS OR WIDTHS ON CENTER. THEY SHALL NOT IMPAIR SIGNIFICANTLY THE STRENGTH OF THE CONSTRUCTION.

NO ELECTRICAL CONDUIT SHALL BE PLACED ABOVE THE WELDED WIRE REINFORCEMENT IN SLABS ON GRADE.

NO LEAD, GAS, OR VAPOR, EXCEPT WATER, NOT EXCEEDING 90 DEGREES FAHRENHEIT NOR 50 PSF PRESSURE, SHALL BE PLACED IN THE PIPES UNTIL THE CONCRETE HAS ATTAINED ITS DESIGN STRENGTH.

IN SLOPED SLABS, PIPING, EXCEPT FOR RAINWATER HEATING OR SNOW MELTING, SHALL BE PLACED BETWEEN TOP AND BOTTOM REINFORCEMENT.

CONCRETE COVER OVER PIPES, CONDUITS, AND FITTINGS SHALL NOT BE LESS THAN 1-1/2 INCH FROM ANY EXPOSED SURFACE EXPOSED TO EARTH OR WEATHER, NOR LESS THAN 3/4 INCH FOR CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND.

16. SPECIAL INSPECTIONS AND TESTS

THE OWNER OR THE OWNER'S AUTHORIZED AGENT, OTHER THAN THE CONTRACTOR, SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PROVIDE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION ON THE TYPES OF WORK SPECIFIED IN SECTIONS NOTED BELOW AND DESCRIBE THE APPROVED AGENCIES TO THE BUILDING OFFICIAL.

16.176A.2.1 SPECIAL INSPECTOR QUALIFICATIONS

PRIOR TO THE START OF THE CONSTRUCTION, THE APPROVED AGENCIES SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING THE COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION. EXPERIENCE OR TRAINING SHALL BE CONSIDERED RELEVANT WHERE THE DOCUMENTED EXPERIENCE OR TRAINING IS RELATED IN COMPLIMENT TO THE SAME TYPE OF SPECIAL INSPECTION OR TESTING ACTIVITIES FOR PROJECTS OF SIMILAR COMPLEXITY AND MATERIAL QUALITIES. THESE QUALIFICATIONS ARE IN ACCORD WITH THE QUALIFICATIONS SPECIFIED IN OTHER SECTIONS OF THIS CODE.

17.24.2.4 REPORT REQUIREMENT

APPROVED AGENCIES SHALL KEEP RECORDS OF SPECIAL INSPECTIONS AND TESTS. A APPROVED AGENCY SHALL SUBMIT REPORTS OF SPECIAL INSPECTIONS AND TESTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED OR TESTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND TESTS, AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS OR TESTS, SHALL BE SUBMITTED AT A POINT IN THE AGREED UPON PRIORITY TO THE START OF WORK BY THE OWNER OR THE OWNER'S AUTHORIZED AGENT TO THE BUILDING OFFICIAL.

16.176A.2.5 SPECIAL INSPECTION OF FABRICATED ITEMS

WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS OF THE FABRICATED ITEMS SHALL BE CONDUCTED DURING FABRICATION.

17.24.2.5.1 FABRICATOR APPROVAL

SPECIAL INSPECTIONS DURING FABRICATION ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED ON REVIEW OF THE FABRICATOR'S WRITTEN FABRICATION PROCEDURES AND QUALITY CONTROL MANUALS THAT PROVIDE A BASIS FOR CONTROL OF MATERIALS AND WORKMANSHIP WITH RESPECT TO ALL TYPES OF FABRICATION AND QUALITY CONTROL PROCEDURES BY AN APPROVED AGENCY OR THE BUILDING OFFICIAL AT COMPLETION OF FABRICATION. THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER OR THE OWNER'S AUTHORIZED AGENT FOR SUBMITTAL TO THE BUILDING OFFICIAL AS SPECIFIED IN SECTION 17.04.2.5.1.1. THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

Table with 5 columns: MEMBER SIZE, FB (PSI), FW (PSI), E (PSI), FC (PSI), SPECIES AND GRADE. Rows include SOUTHERN PINE #2.

SEE PROJECT SPECIFICATIONS AND REFERENCED STANDARDS FOR FREQUENCY OF TESTING.

AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES SHALL BE SUBMITTED.

THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.

THE FOLLOWING TYPES OF WORK SHALL BE INSPECTED BY A SPECIAL INSPECTOR IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE:

Table with 5 columns: MEMBER SIZE, FB (PSI), FW (PSI), E (PSI), FC (PSI), SPECIES & TYPE. Rows include JOISTS, BEAMS, POSTS, LEDGERS, TOP PLATES, BEAMS 3 X 5 AND LARGER, POSTS 3 X 5 AND LARGER, CONCRETE REINFORCEMENT STEEL, LVL AND PSL PROPERTIES.

AT WOOD STUD WALLS, WOOD PLATE ANCHOR RODS SHALL BE 1/2" DIAMETER PLACED NOT TO EXCEED 4" O.C. UNLESS NOTED OTHERWISE. ANCHOR RODS SHALL BE PLACED AT ALL JAMBES, CORNERS, INTERSECTIONS, AND WALL ENDS. ALL BOTTOM PLATES SHALL HAVE A MINIMUM OF 3 ANCHOR RODS. ALL FOUNDATION PLATES OR SILL AND SLEEPERS ON A CONCRETE SLAB, WHICH IS IN DIRECT CONTACT WITH EARTH, AND SILL WHICH REST ON CONCRETE OR MASONRY FOUNDATIONS, SHALL BE THE WOOD AND NAILING OR BRANCHED BY AN APPROVED AGENCY.

JOIST HANDERS AND OTHER MISCELLANEOUS WALL ANCHORS SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR OTHER MANUFACTURER WITH I.C.C. APPROVAL. ALL NAIL HOLES IN JOIST HANDERS AND MISCELLANEOUS FRAMING ANCHORS SHALL BE FILLED WITH NAILS PER MANUFACTURER'S PUBLISHED NAIL SIZES.

DO NOT NOTCH OR DRILL JOISTS, BEAMS, OR LOAD-BEARING STUDS WITHOUT PRIOR APPROVAL OF A STRUCTURAL ENGINEER. DOUBLE OR FLOOR CRESTS UNDER PARTITIONS, PROVIDE 3 X 3 OR METAL CROSS BRACING AT MIDSPAN AT ALL FLOOR JOISTS. PROVIDE 2" SOLID BLOCKING AT THE SUPPORT OF ALL JOISTS, DOUBLE UP STUDS AT JAMBS AND UNDER BEAMS IN BEARING WALLS. PROVIDE 2 X 2 SOLID BLOCKING AT MID-HEIGHT OF BEARING STUD WALLS. ALL NAILING NOT NOTED SHALL BE IN ACCORDANCE TO TABLE 23-B-8 (1-8) OR TABLE 23A-3.1 (1-8).

PREFABRICATED WOOD JOISTS SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH A CURRENT I.C.C. REPORT. WOOD JOIST SEES ARE AS INDICATED ON PLANS. TYPICAL CALLOUTS ARE AS FOLLOWS:

- EXAMPLE: 14" WOOD JOIST 704036
14" INDICATES JOIST DEPTH
70 (INDICATES TOTAL LOAD UPLIFT)
40 (INDICATES LIVE LOAD UPLIFT)
36 (INDICATES NET WIND UPLIFT (PLF)) (00 (INDICATES NO NET WIND UPLIFT))

ALL WOOD JOISTS WITH SLOPES GREATER THAN 1:12 SHALL BE CARRIED TO A MAXIMUM RADIUS OF 2.250 FEET.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SEALED CALCULATIONS FOR ALL WOOD JOISTS FOR REVIEW PRIOR TO MANUFACTURE.

ALL WOOD JOISTS SHALL BE DESIGNED FOR AN ADDITIONAL 200 LB. POINT LOAD ANYWHERE ALONG THE SPAN. ADDITIONAL WOOD JOISTS WILL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT.

LIVE LOAD DEFLECTIONS OF WOOD JOISTS SHALL BE LIMITED TO SPAN/60 AT SIMPLE SPAN FLOOR MEMBERS, 2X SPAN/60 AT CANTILEVER FLOOR MEMBERS, SPAN/40 AT SIMPLE SPAN ROOF MEMBERS AND 2X SPAN/40 AT CANTILEVER ROOF MEMBERS.

WOOD JOISTS ARE DEFERRED SUBMITTAL ITEM.

PREFABRICATED OPEN WEB WOODSTEEL JOISTS SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH A CURRENT I.C.C. REPORT, CONNECTIONS AND BEARING MATERIAL TO BE SHOP CONNECTED TO JOISTS AND DESIGNED AND FURNISHED BY JOIST FABRICATOR.

WOODSTEEL JOIST SEES ARE AS INDICATED ON PLANS. TYPICAL CALLOUTS ARE AS FOLLOWS:

- EXAMPLE: 24" WOODSTEEL JOIST 704036
24" INDICATES JOIST DEPTH
70 (INDICATES TOTAL LOAD UPLIFT)
40 (INDICATES LIVE LOAD UPLIFT)
36 (INDICATES NET WIND UPLIFT (PLF)) (00 (INDICATES NO NET WIND UPLIFT))

ALL WOODSTEEL JOISTS SHALL BE CARRIED TO A MAXIMUM RADIUS OF 2.500 FEET.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SEALED CALCULATIONS FOR ALL WOODSTEEL JOISTS FOR REVIEW PRIOR TO MANUFACTURE.

ALL WOODSTEEL JOISTS SHALL BE DESIGNED FOR AN ADDITIONAL 200 LB. POINT LOAD ANYWHERE ALONG THE SPAN. ADDITIONAL WOODSTEEL JOISTS WILL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT.

LIVE LOAD DEFLECTIONS OF WOODSTEEL JOISTS SHALL BE LIMITED TO SPAN/60 AT SIMPLE SPAN FLOOR MEMBERS, 2X SPAN/60 AT CANTILEVER FLOOR MEMBERS, SPAN/40 AT SIMPLE SPAN ROOF MEMBERS AND 2X SPAN/40 AT CANTILEVER ROOF MEMBERS.

WOODSTEEL JOISTS ARE A DEFERRED SUBMITTAL ITEM.

WOOD

PLYWOOD SHALL BE APA RATED SHEATHING, WITH AN EXTERIOR OR EXPOSURE 1 DURABILITY CLASSIFICATION AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY. LAY UP FLOOR AND ROOF WITH THE FACE GRAIN PERPENDICULAR TO SUPPORTS, STAGGER JAMBS, PROVIDE PLY CLIPS AT MIDSPAN OF ALL UNSUPPORTED PLYWOOD EDGES. ALL NAILING SHALL BE DONE COMMON. IF GOR NAILS ARE USED IN LIEU OF COMMON NAILS, REDUCE NAIL SPACING TO 4" AT EDGE NAILING AND 8" AT INTERMEDIATE NAILING.

PLYWOOD PROPERTIES AND ATTACHMENT

Table with 4 columns: THICKNESS, SPAN/INCH RATIO, INTERMEDIATE NAILING, (COMMON NAILS), INTERMEDIATE NAILING, (COMMON NAILS).

THE FIRST SHEET OF PLYWOOD SHEATHING ADJACENT AND PARALLEL TO WALLS, PERIMETER MEMBERS OR MEMBERS IDENTIFIED AS CHORD, COLLECTOR OR BRAG MEMBERS (ON ONE OR BOTH SIDES AS APPLICABLE) SHALL BE TULLAMETH SHEETS, ELSEWHERE MINIMUM SHEET WIDTH 2'-0".

SAVN FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION OR THE WEST COAST LUMBER INSPECTIONS BUREAU. ALL SPAN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED GRADING AGENCY.

ENGINEERED WOOD PRODUCTS, INCLUDING LAMINATED VENEER LUMBER (LVL) AND PARALLEL STRAND LUMBER (PSL), SHALL COMPLY WITH THE LATEST EDITION OF ASTM OR THE ENGINEERED WOOD ASSOCIATION OR AN APPROVED EQUIVALENT EVALUATION STANDARD IN ACCORDANCE WITH ASTM D5456. ALL LVL AND PSL MEMBERS SHALL BE IDENTIFIED BY THE MANUFACTURER'S GRADE MARK OR IDENTIFICATION LABEL, INDICATING COMPLIANCE WITH THE APPLICABLE APA OR ICC REPORT AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND DESIGN REQUIREMENTS.

SAVN LUMBER PROPERTIES

Table with 5 columns: MEMBER SIZE, FB (PSI), FW (PSI), E (PSI), FC (PSI), SPECIES AND GRADE. Rows include JOISTS, BEAMS, POSTS, LEDGERS, TOP PLATES, BEAMS 3 X 5 AND LARGER, POSTS 3 X 5 AND LARGER, CONCRETE REINFORCEMENT STEEL, LVL AND PSL PROPERTIES.

Table with 5 columns: MEMBER SIZE, FB (PSI), FW (PSI), E (PSI), FC (PSI), SPECIES & TYPE. Rows include JOISTS, BEAMS, POSTS, LEDGERS, TOP PLATES, BEAMS 3 X 5 AND LARGER, POSTS 3 X 5 AND LARGER, CONCRETE REINFORCEMENT STEEL, LVL AND PSL PROPERTIES.

AT WOOD STUD WALLS, WOOD PLATE ANCHOR RODS SHALL BE 1/2" DIAMETER PLACED NOT TO EXCEED 4" O.C. UNLESS NOTED OTHERWISE. ANCHOR RODS SHALL BE PLACED AT ALL JAMBS, CORNERS, INTERSECTIONS, AND WALL ENDS. ALL BOTTOM PLATES SHALL HAVE A MINIMUM OF 3 ANCHOR RODS. ALL FOUNDATION PLATES OR SILL AND SLEEPERS ON A CONCRETE SLAB, WHICH IS IN DIRECT CONTACT WITH EARTH, AND SILL WHICH REST ON CONCRETE OR MASONRY FOUNDATIONS, SHALL BE THE WOOD AND NAILING OR BRANCHED BY AN APPROVED AGENCY.

JOIST HANDERS AND OTHER MISCELLANEOUS WALL ANCHORS SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR OTHER MANUFACTURER WITH I.C.C. APPROVAL. ALL NAIL HOLES IN JOIST HANDERS AND MISCELLANEOUS FRAMING ANCHORS SHALL BE FILLED WITH NAILS PER MANUFACTURER'S PUBLISHED NAIL SIZES.

DO NOT NOTCH OR DRILL JOISTS, BEAMS, OR LOAD-BEARING STUDS WITHOUT PRIOR APPROVAL OF A STRUCTURAL ENGINEER. DOUBLE OR FLOOR CRESTS UNDER PARTITIONS, PROVIDE 3 X 3 OR METAL CROSS BRACING AT MIDSPAN AT ALL FLOOR JOISTS. PROVIDE 2" SOLID BLOCKING AT THE SUPPORT OF ALL JOISTS, DOUBLE UP STUDS AT JAMBS AND UNDER BEAMS IN BEARING WALLS. PROVIDE 2 X 2 SOLID BLOCKING AT MID-HEIGHT OF BEARING STUD WALLS. ALL NAILING NOT NOTED SHALL BE IN ACCORDANCE TO TABLE 23-B-8 (1-8) OR TABLE 23A-3.1 (1-8).

PREFABRICATED WOOD JOISTS SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH A CURRENT I.C.C. REPORT. WOOD JOIST SEES ARE AS INDICATED ON PLANS. TYPICAL CALLOUTS ARE AS FOLLOWS:

- EXAMPLE: 14" WOOD JOIST 704036
14" INDICATES JOIST DEPTH
70 (INDICATES TOTAL LOAD UPLIFT)
40 (INDICATES LIVE LOAD UPLIFT)
36 (INDICATES NET WIND UPLIFT (PLF)) (00 (INDICATES NO NET WIND UPLIFT))

ALL WOOD JOISTS WITH SLOPES GREATER THAN 1:12 SHALL BE CARRIED TO A MAXIMUM RADIUS OF 2.250 FEET.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SEALED CALCULATIONS FOR ALL WOOD JOISTS FOR REVIEW PRIOR TO MANUFACTURE.

ALL WOOD JOISTS SHALL BE DESIGNED FOR AN ADDITIONAL 200 LB. POINT LOAD ANYWHERE ALONG THE SPAN. ADDITIONAL WOOD JOISTS WILL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT.

LIVE LOAD DEFLECTIONS OF WOOD JOISTS SHALL BE LIMITED TO SPAN/60 AT SIMPLE SPAN FLOOR MEMBERS, 2X SPAN/60 AT CANTILEVER FLOOR MEMBERS, SPAN/40 AT SIMPLE SPAN ROOF MEMBERS AND 2X SPAN/40 AT CANTILEVER ROOF MEMBERS.

WOOD JOISTS ARE DEFERRED SUBMITTAL ITEM.

PREFABRICATED OPEN WEB WOODSTEEL JOISTS SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH A CURRENT I.C.C. REPORT, CONNECTIONS AND BEARING MATERIAL TO BE SHOP CONNECTED TO JOISTS AND DESIGNED AND FURNISHED BY JOIST FABRICATOR.

WOODSTEEL JOIST SEES ARE AS INDICATED ON PLANS. TYPICAL CALLOUTS ARE AS FOLLOWS:

- EXAMPLE: 24" WOODSTEEL JOIST 704036
24" INDICATES JOIST DEPTH
70 (INDICATES TOTAL LOAD UPLIFT)
40 (INDICATES LIVE LOAD UPLIFT)
36 (INDICATES NET WIND UPLIFT (PLF)) (00 (INDICATES NO NET WIND UPLIFT))

ALL WOODSTEEL JOISTS SHALL BE CARRIED TO A MAXIMUM RADIUS OF 2.500 FEET.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SEALED CALCULATIONS FOR ALL WOODSTEEL JOISTS FOR REVIEW PRIOR TO MANUFACTURE.

ALL WOODSTEEL JOISTS SHALL BE DESIGNED FOR AN ADDITIONAL 200 LB. POINT LOAD ANYWHERE ALONG THE SPAN. ADDITIONAL WOODSTEEL JOISTS WILL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT.

LIVE LOAD DEFLECTIONS OF WOODSTEEL JOISTS SHALL BE LIMITED TO SPAN/60 AT SIMPLE SPAN FLOOR MEMBERS, 2X SPAN/60 AT CANTILEVER FLOOR MEMBERS, SPAN/40 AT SIMPLE SPAN ROOF MEMBERS AND 2X SPAN/40 AT CANTILEVER ROOF MEMBERS.

WOODSTEEL JOISTS ARE A DEFERRED SUBMITTAL ITEM.

ABBREVIATIONS

Table with 3 columns: SYMBOL, DESCRIPTION, SYMBOL. Lists abbreviations for ANCHOR BOLTS, CONCRETE, STEEL, WOOD, etc.

BEAM HANGER SCHEDULE

Table with 4 columns: MEMBER, CONNECTION, HANGER. Lists beam hanger specifications.

BEAM HANGER SCHEDULE

Table with 4 columns: MEMBER, CONNECTION, HANGER. Lists beam hanger specifications.

BEAM HANGER SCHEDULE

Table with 4 columns: MEMBER, CONNECTION, HANGER. Lists beam hanger specifications.

TYPICAL NAILING SCHEDULE (U.S.O. INTERNATIONAL BUILDING CODE)

Table with 3 columns: DESCRIPTION OF BUILDING ELEMENTS, CONNECTION, COMMENTS. Lists nailing requirements for various building elements.

LINTEL SCHEDULE

Table with 4 columns: WIDTH OF OPENING, STEEL LINTEL, MIN BRG, REMARKS. Lists lintel specifications.

SHEAR WALL SCHEDULE

Table with 8 columns: MARK, SHEATHING MATERIAL, MATERIAL THICKNESS, FASTENER, SPACING, CHORD, ANCHOR BOLT, CLEAR SPAN TIE / HOLD-DOWN ANCHOR, STRIP TIE, HOLD-DOWN ANCHOR (COR & CHL ANCHOR, STRIP ANCHOR). Lists shear wall specifications.

NOTES: 1. Shear wall location and maximum length... 2. Shear wall height... 3. Shear wall width... 4. Shear wall thickness... 5. Shear wall reinforcement... 6. Shear wall connections... 7. Shear wall details... 8. Shear wall materials...



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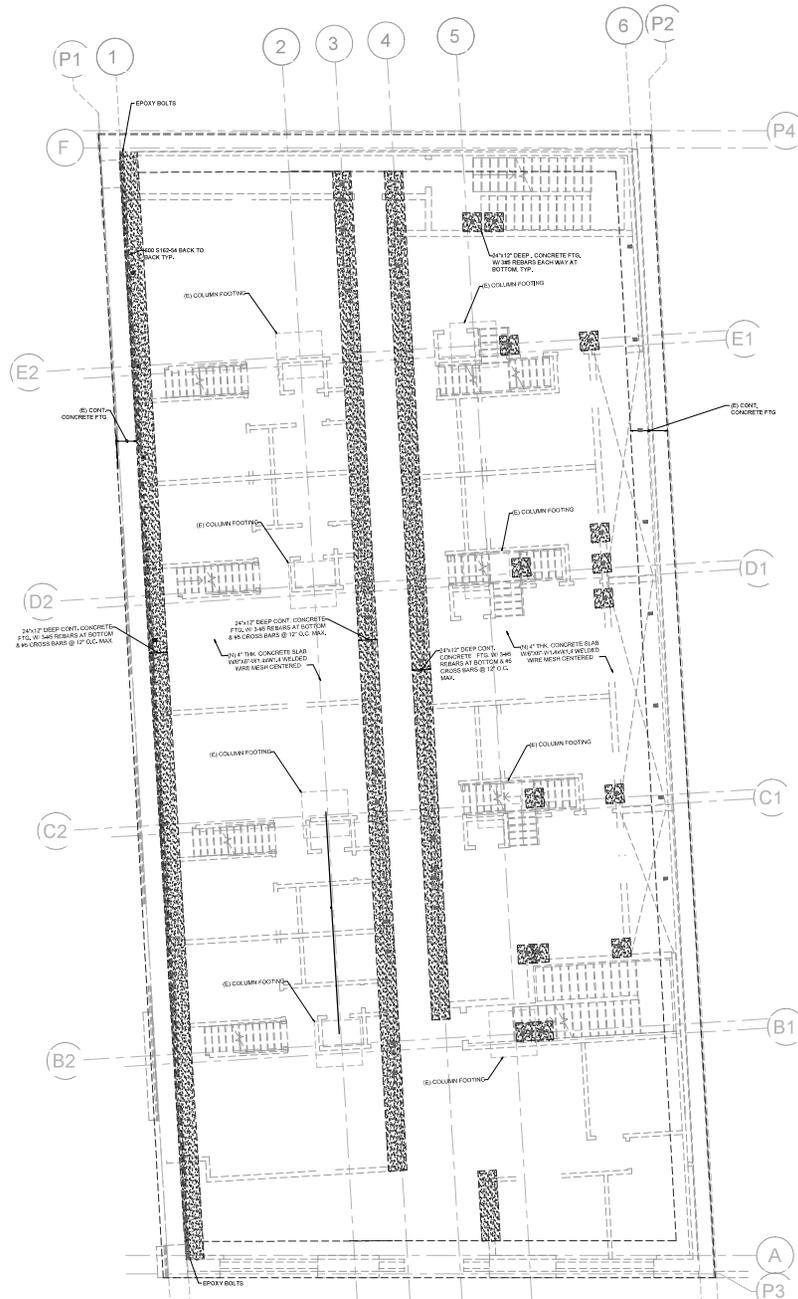
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Alex Bruno

ISSUE DATE
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FOUNDATION PLAN
SCALE: 3/8" = 1'-0"

SHEET NOTES

- A. STRUCTURAL REFERENCE ELEVATION = +0.00' (66.00') WHICH IS THE TOP OF FINISHED SLAB ELEVATION FOR LEVELS. VERIFY WITH CIVIL DRAWINGS. ALL ELEVATION NOTED ON PLANS ARE WITH RESPECT TO REFERENCE DATUM ELEVATION UNLESS NOTED OTHERWISE.
- B. THE ARCHITECT FURNISHES ALL ELEVATIONS AND DIMENSIONS. RESOLVE ANY DISCREPANCY WITH ARCHITECT OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN BY THIS DRAWINGS.
- C. ALL OPENINGS THROUGH FLOORS, WALLS OR ROOF ARE NOT SHOWN ON PLANS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. COORDINATE ADDITIONAL FRAMING REQUIREMENTS OR REINFORCING WITH TYPICAL DETAILS.
- D. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ALL FIRE ROOFING AND FIRE RATING REQUIREMENTS.
- E. EXISTING CONDITIONS SHOWN ARE BASED UPON INFORMATION FURNISHED BY THE OWNER, WHERE CONDITIONS DIFFER FROM THOSE SHOWN NOTIFY LEAKE ENGINEERING, LLC THROUGH ARCHITECT. DIMENSIONS AND LOCATIONS OF EXISTING ELEMENTS SHALL BE VERIFIED WHERE NECESSARY FOR CONDITIONS TO NEW CONSTRUCTION.
- F. P.A. DENOTES POST ABOVE.
- G. PROVIDE MIN. (3) 3/4" POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
- H. PROVIDE MIN. (3) 3/4" POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN INTERNAL WALLS.
- I. PROVIDE MIN. 3x24 POST SFF STUD GRADE OR BETTER UNDER EACH OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
- K. ALL EXTERIOR PSLL SHOULD BE TREATED RALLAM PLUS PSLL.



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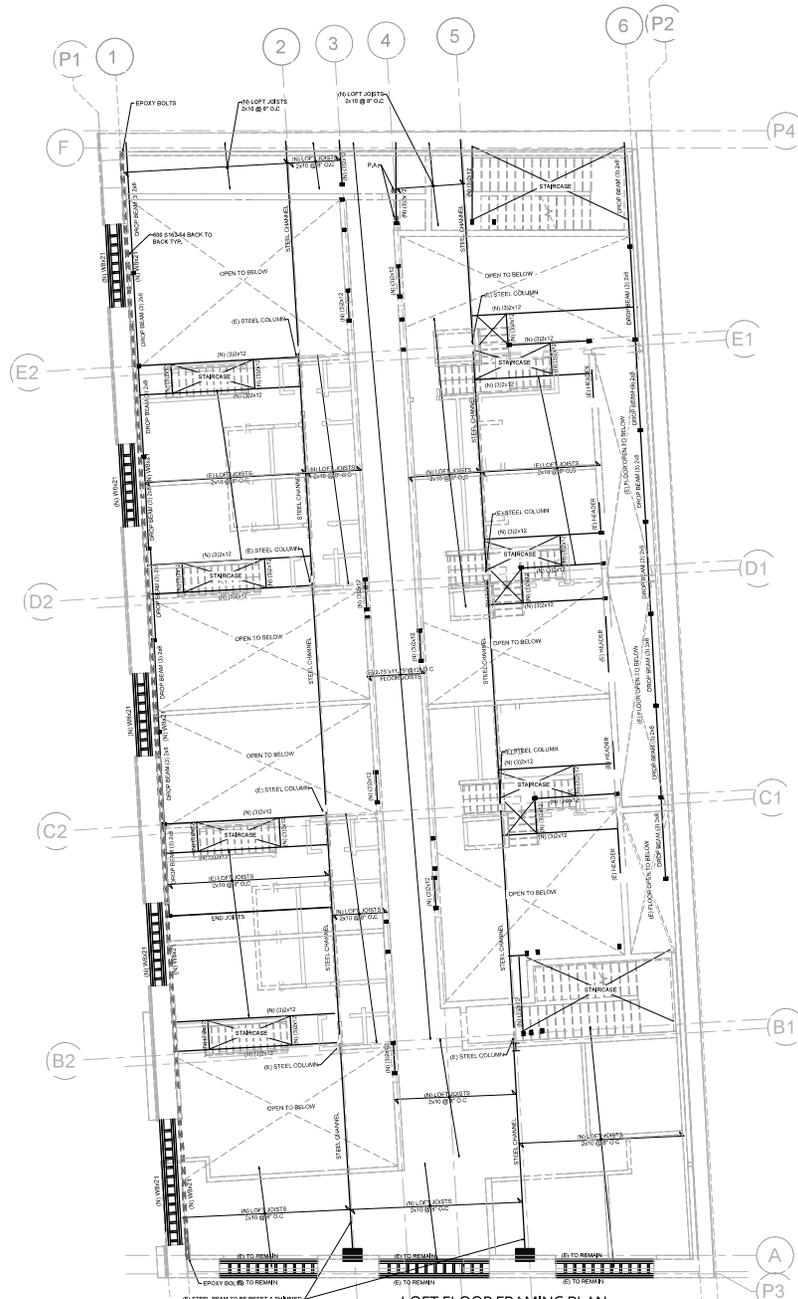
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- SHEET NOTES:**
- STRUCTURAL REFERENCE ELEVATION = +0'-0" (100-00) WHICH IS THE TOP OF FINISHED SLAB ELEVATION FOR LEVEL. VERIFY WITH CIVIL DRAWINGS. ALL ELEVATION NOTED ON PLANS ARE WITH RESPECT TO REFERENCE DATUM ELEVATION UNLESS NOTED OTHERWISE.
 - THE ARCHITECT FURNISHES ALL ELEVATIONS AND DIMENSIONS. RESOLVE ANY DISCREPANCY WITH ARCHITECT OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN BY THE DRAWINGS.
 - ALL OPENINGS THROUGH FLOORS, WALLS OR ROOF ARE NOT SHOWN ON PLANS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. COORDINATE ADDITIONAL FRAMING REQUIREMENTS OR REINFORCING WITH TYPICAL DETAILS.
 - REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ALL FIRE ROOFING AND FIRE RATING REQUIREMENTS.
 - EXISTING CONDITIONS SHOWN ARE BASED UPON INFORMATION FURNISHED BY THE OWNER, WHERE CONDITIONS DIFFER FROM THOSE SHOWN NOTIFY LEAKE ENGINEERING, LLC THROUGH ARCHITECT. DIMENSIONS AND LOCATIONS OF EXISTING ELEMENTS SHALL BE VERIFIED WHERE NECESSARY FOR CONDITIONS TO NEW CONSTRUCTION.
 - P.A. DENOTES POST ABOVE.
 - PROVIDE MIN. (3) 3/4" POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
 - PROVIDE MIN. (3) 3/4" POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN INTERNAL WALLS.
 - PROVIDE MIN. 3x3x4 POST SFF STUD GRADE OR BETTER UNDER EACH OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
 - ALL EXTERIOR PSLs SHOULD BE TREATED RALLAM PLUS/PUL.



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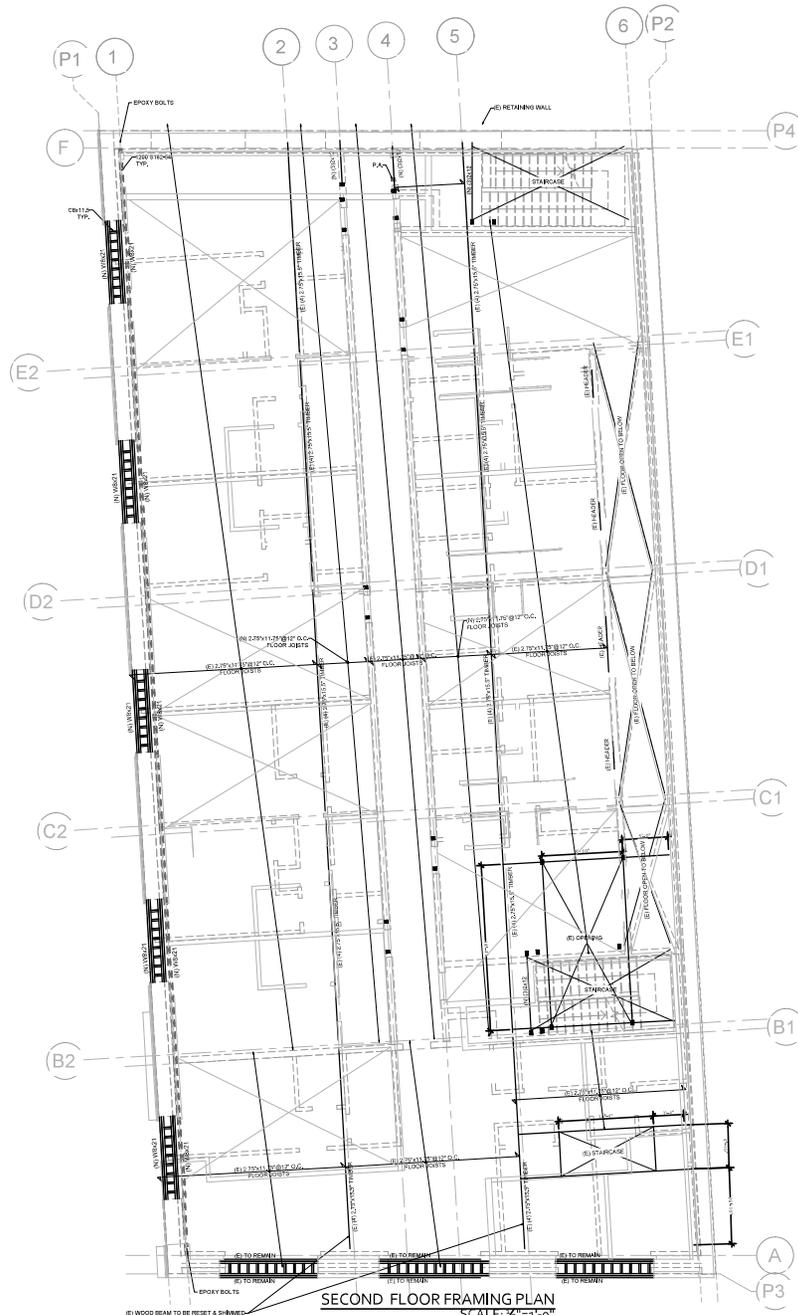
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SECOND FLOOR FRAMING PLAN
SCALE: 1/8"=1'-0"

- SHEET NOTES:**
- A. STRUCTURAL REFERENCE ELEVATION = 0'-0" (see 007) WHICH IS THE TOP OF FINISHED SLAB ELEVATION FOR LEVEL 0. VERIFY WITH CIVIL DRAWINGS. ALL ELEVATION NOTED ON PLANS ARE WITH RESPECT TO REFERENCE DATUM ELEVATION UNLESS NOTED OTHERWISE.
 - B. THE ARCHITECT FURNISHES ALL ELEVATIONS AND DIMENSIONS. RESOLVE ANY CONCERN WITH ARCHITECT OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN BY THE DRAWINGS.
 - C. ALL OPENINGS THROUGH FLOORS, WALLS OR ROOF ARE NOT SHOWN ON PLANS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. COORDINATE ADDITIONAL FRAMING REQUIREMENTS OR REINFORCING WITH TYPICAL DETAILS.
 - D. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ALL FIRE ROOFING AND FIRE RATING REQUIREMENTS.
 - E. EXISTING CONDITIONS SHOWN ARE BASED UPON INFORMATION FURNISHED BY THE OWNER. WHERE CONDITIONS DIFFER FROM THOSE SHOWN NOTIFY LEAKE ENGINEERING, LLC THROUGH ARCHITECT. DIMENSIONS AND LOCATIONS OF EXISTING ELEMENTS SHALL BE VERIFIED WHERE NECESSARY FOR CONDITIONS TO NEW CONSTRUCTION.
 - F. P.A. DENOTES POST ABOVE.
 - G. PROVIDE MN 1 1/2x6 POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
 - H. PROVIDE MN 1 1/2x6 POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN INTERNAL WALLS.
 - I. PROVIDE MN 1 1/2x4 POST SFF STUD GRADE OR BETTER UNDER EACH OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
 - K. ALL EXTERIOR PSLs SHOULD BE TREATED RALLAM FLOORPSL.



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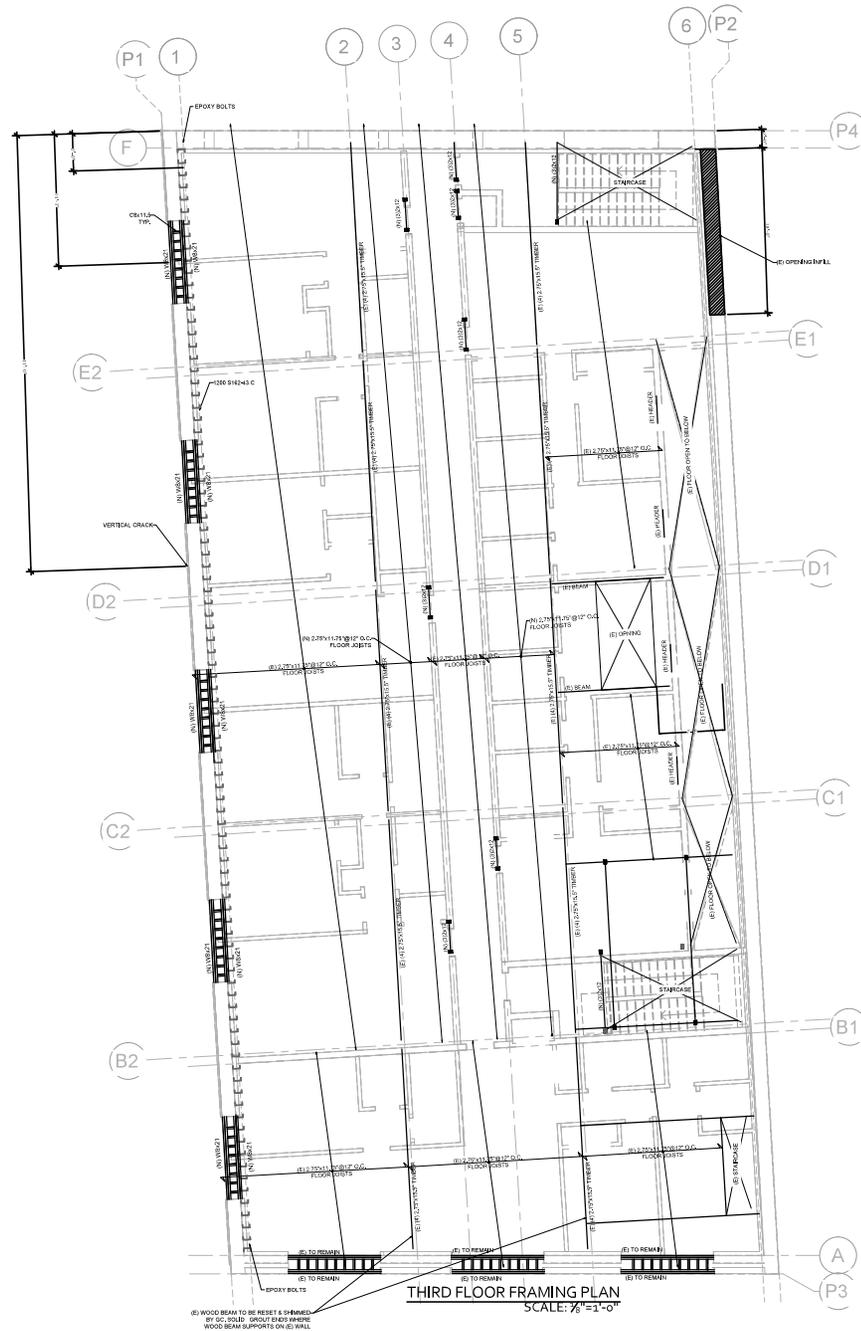
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- SHEET NOTES**
- A. STRUCTURAL REFERENCE ELEVATION = +0.00' (100.00') WHICH IS THE TOP OF FINISHED SLAB ELEVATION FOR LEVEL. VERIFY WITH CIVIL DRAWINGS. ALL ELEVATION NOTED ON PLANS ARE WITH RESPECT TO REFERENCE DATUM ELEVATION UNLESS NOTED OTHERWISE.
 - B. THE ARCHITECT FURNISHES ALL ELEVATIONS AND DIMENSIONS. RESOLVE ANY DISCREPANCY WITH ARCHITECT OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN BY THE DRAWINGS.
 - C. ALL OPENINGS THROUGH FLOORS, WALLS OR ROOF ARE NOT SHOWN ON PLANS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. COORDINATE ADDITIONAL FRAMING REQUIREMENTS OR REINFORCING WITH TYPICAL DETAILS.
 - D. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ALL FIRE ROOFING AND FIRE RATING REQUIREMENTS.
 - E. EXISTING CONDITIONS SHOWN ARE BASED UPON INFORMATION FURNISHED BY THE OWNER, WHERE CONDITIONS DIFFER FROM THOSE SHOWN, NOTIFY LEAKE ENGINEERING, LLC THROUGH ARCHITECT. DIMENSIONS AND LOCATIONS OF EXISTING ELEMENTS SHALL BE VERIFIED WHERE NECESSARY FOR CONDITIONS TO NEW CONSTRUCTION.
 - F. P.A. DENOTES POST ABOVE.
 - G. PROVIDE MIN. 1/2" x 6" POST S-P-F STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
 - H. PROVIDE MIN. 1/2" x 4" POST S-P-F STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U.N.O. IN INTERNAL WALLS.
 - I. PROVIDE MIN. 3/4" x 4" POST S-P-F STUD GRADE OR BETTER UNDER EACH OF ALL HEADERS/BEAMS U.N.O. IN EXTERNAL WALLS.
 - K. ALL EXTERIOR PSL'S SHOULD BE TREATED RALLAM PLUS PSL.



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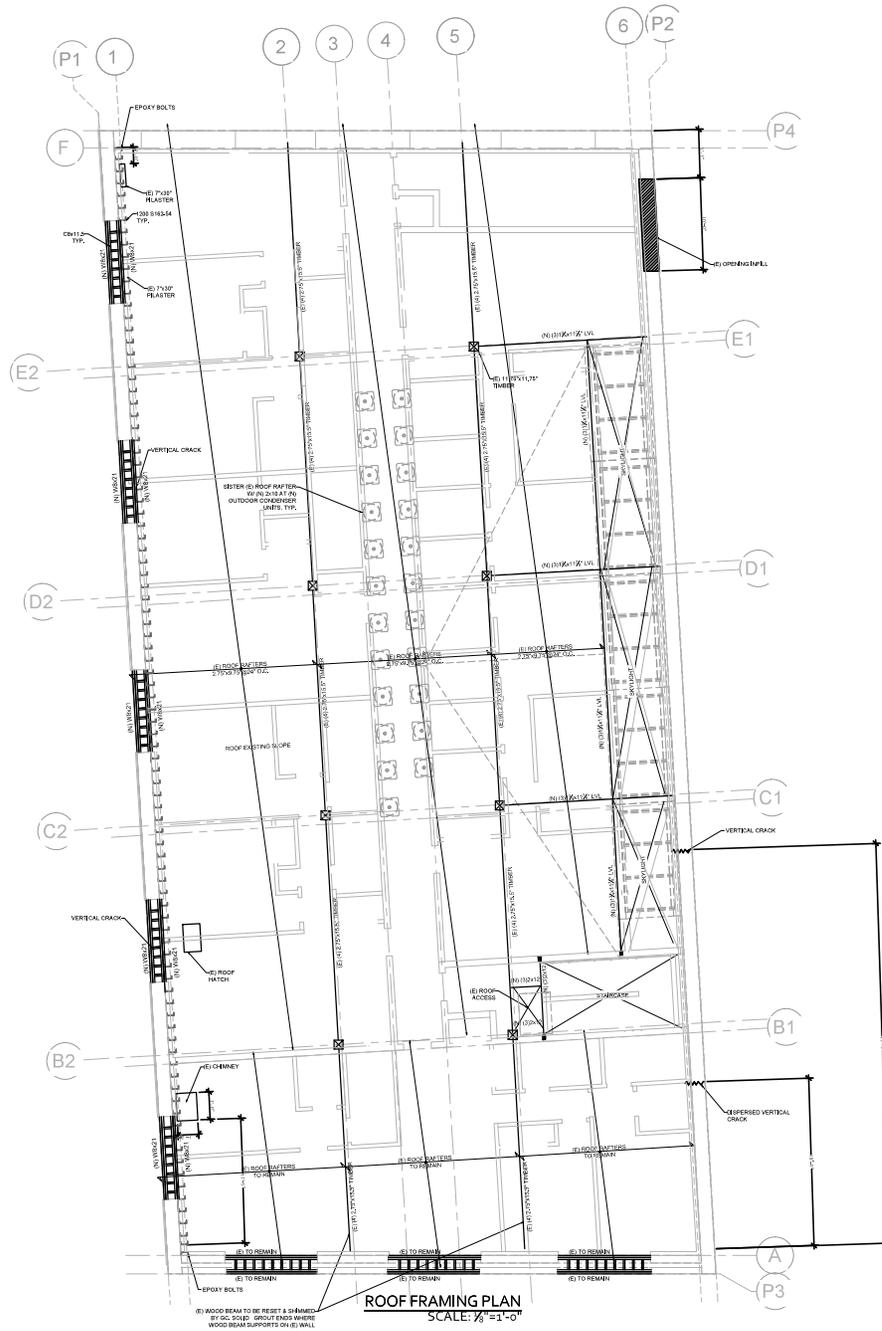
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- SHEET NOTES:**
- A. (A) STRUCTURAL REFERENCE ELEVATION = 0'-0" (500.00') WHICH IS THE TOP OF FINISHED SLAB ELEVATION FOR LEVEL 0L. VERIFY WITH CIVIL DRAWINGS. ALL ELEVATION NOTED ON PLANS ARE WITH RESPECT TO REFERENCE DATUM ELEVATION UNLESS NOTED OTHERWISE.
 - B. THE ARCHITECT FURNISHES ALL ELEVATIONS AND DIMENSIONS. RESOLVE ANY DISCREPANCY WITH ARCHITECT OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN IN THE DRAWINGS.
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 - F. P.A. DENOTES POST ABOVE.
 - G. PROVIDE MIN. 3x4 POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U/L/O IN EXTERNAL WALLS.
 - H. PROVIDE MIN. 3x4 POST SFF STUD GRADE OR BETTER UNDER EACH END OF ALL HEADERS/BEAMS U/L/O IN INTERNAL WALLS.
 - J. PROVIDE MIN. 3x4 POST SFF STUD GRADE OR BETTER UNDER EACH OF ALL HEADERS/BEAMS U/L/O IN EXTERNAL WALLS.
 - K. ALL EXTERIOR PSLs SHOULD BE TREATED RAL/LAM PLUS PSL.



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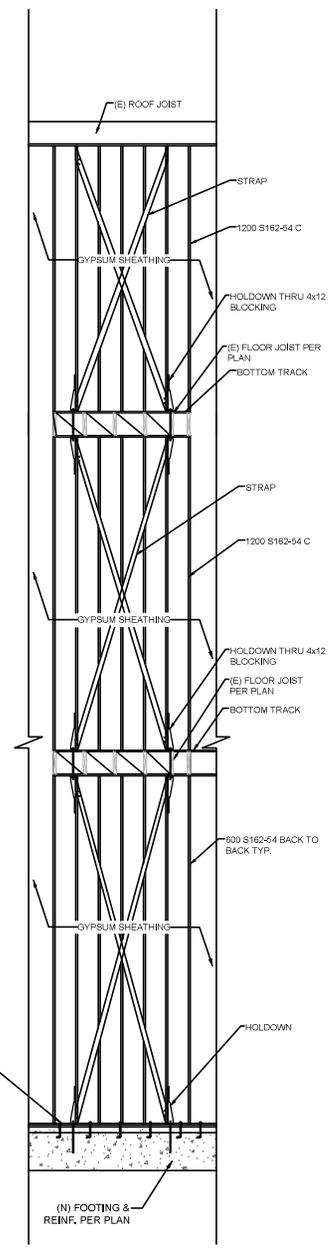
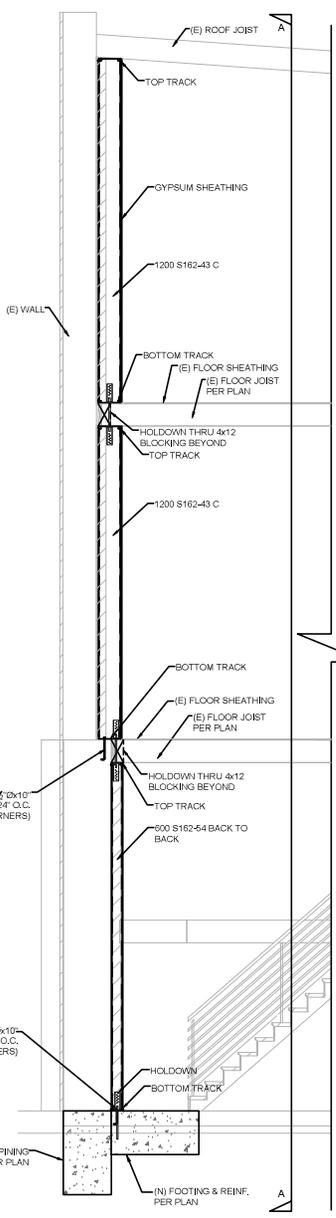
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9 TYP. METAL STUD SHEAR WALL DETAIL

SCALE: N.T.S.



View of west facade from Lena St

View of west and south facades from Church Ln



Aerial view showing west and south facades

