

- > The Drawings. Notes and Specification have been prepared as a comprehensive document, which represents the intent of the Work requested by the Owner for the proper execution and completion of Work by the Contractor. This document shall be considered complementary throughout. What is required by one is required by all, and shall be coordinated as such.
- > Arrangement and organization of drawings, details, specifications and notes shall not control the Contractor in dividing Work among Subcontractors, or in establishing the extent of Work to be performed by any trade. > The current addition of the AIA Document A201, General Conditions of the the Contract for Construction shall be incorporated as part of the binding

#### 3 - Concrete

- > Concrete materials, aggregates and reinforcing shall conform to the latest edition of the ACI code.
- > Concrete must have a minimum compressive strength of 3500 psi after 28 days. (4000 psi for flatwork). Reinforce all concrete walls and provide #5 @ 16" o.c. x 4'-0" hor. corner bars at all intersecting walls. Provide air-entrainment additives for all exposed finish concrete such as sidewalks
- > Reinforcing shall have a covering as follows: concrete deposited against soil - 3" concrete exposed to ground - 2" concrete in other locations - 1 1/2"
- > Reinforcing shall conform to ASTM A 325 and be installed in accordance
- > All concrete slabs to have a trowel finish with maximum tolerance
- > Welded wire fabric as shown on plans shall be place 2" from the top of slab, lapped 6" at the edges, and 12" at ends.
- > Provide control joints in concrete slabs so that no part is more than 12 ft. in any direction, inside corners, or penetrations thru slab.

#### 6 - Carpentry

- >Furnish and install all cold-formed metal framing including bracing, fasteners >Work shall include structural metals stud walls and soffits, and unistrut support. >All work shall be installed by specialists in the installation of the specified
- framing and in the erection of light steel framing > Each type of metal framing required, provide mfrs. standard steel runners, blocking, clip angles, shoes, reinforcements, fasteners, and accessories recommended by mfr. for the applications indicated, as needed to complete metal framing system including unistrut support.
- >Fastening of components shall be with self tapping screws or welding of sufficient size to insure the strenath of the connection >Framing shall be installed plumb, level and square in strict accordance
- >All dimensions shall be field verified by the respective contractor.
- > Portable fire extinguishers shall bear the label of an approved agency, be of an approved type, and be installed in a location visible and accessible to the occupants. Fire Prevention Bureau shall approve location. FPC-519.0
- > Provide blocking as required for all fixtures, cabinets, closet organizers, etc.
- > 2x framing as required for soffits, false ceilings, mechanical chases shall be included in scope of work and coordinated with other trades.
- > Firestop all penetrations with drywall compound, cementitious material, or approved firestop material (both sides).
- > Provide 2x blocking for handicap handrails at all toilets and showers. > Fire partitions shall be constructed of the types of materials shall have the minimum fireresistance rating as prescribed by Table 602 for the type of construction. FPC\_303.1

## 7c - Insulation / Vapor Barrier / Caulk / Fireblocking

- > All vapor barrier joints, edges, punctures and penetrations to be sealed with vapor tape to form continuous vapor barrier.
- > Insulate all walls and ceilings surrounding bathrooms for sound.
- > All insulation shall be free of moisture. Damaged or insulation which was. wet at one time, installed or stored, shall be not be used on this project.
- > Insulation shall have a flame-spread index not to exceed 25 w/ an accompanying smoke-developed index not to exceed 450 when tested in accordance with ASTM E 84.
- > All caulking shall be included in the base scope of work to prevent water/ air infiltration, as required.
- > Caulk joints shall not exceed 1/4". Otherwise, additional materials/work shall be required to modify condition. > Provide required fireblocking per local codes.

## 8 - Doors and Glazing

- > Properly identified safety glazing must be used at all hazardous locations
- > Hinges shall be 3/16"x1"x4" steel plate, drilled and tapped at factory for mortise. Lock Strike shall be 3/16"x1"x3" steel plate drilled and tapped

> Steel stud anchors shall be a maximum of 30 inches on center.

- > Floor clips shall be minimum 12 GA. angle clips drilled for anchor bolt to bottom of each jamb.
- > All door hardware shall be mortised
- > Wood doors shall meet or exceed ANSI/NWMA industry standards I.S. I-80, and AWI Quality Standard to Architectural Flush Doors. > Moisture content of wood shall average 6-8%.
- > Provide a two-year minimum mfrs. standard warranty, which covers the following defects; delamination, warp, twists of 1/4", telegraphing of any part of core through face. Warranty shall cover both materials and reinstallation costs.
- > Flush Doors shall ve 3-Ply hardwood veneer bonded to particle board core. Core shall be grade "I-L-I" particle board as described in ANSI-A208.1 "Matformed Wood Particle board".
- > All interior doors shall be a min. of 1 3/4" solid wood.
- > All door hardware shall be included for a properly functioning doorway.
- > All egress doors shall be openable from the side from which egress is to be made without the use of a key or special knowledge or effort at all times the building or area is occupied. FPC-608.1, BC 1017.4.1(6)
- > All required fireresistance rated doors and hardware shall be maintained as required for the proper operation. FPC-303.3, FPC-303.4, BC 701.0

## > Concealed spaces of soffits (walls & ceilings) shall be firestopped

- with aypsum board or plywood. > Provide moisture resistant drywall at all wet areas not to receive tile
- > All drywall shall be 5/8" type-x gypsum board.

> All drywall surfaces to be painted shall receive a minimum of

- three separate coats of taping mud, for a smooth final appearance. > The first layer of drywall of a rated wall assembly shall be inspected before the drywall is taped & middled. Contact the community development department to schedule both the building department and fire prevention bureau for the inspection. Approved design number shall be on site.
- > All wall paint is to be Benjamin Moore. The stain manufacturer is "Minwax" or equal.
- All wall painting to receive one (1) coat primer and Two (2) coat finish paint. All trim to be primed, caulked and two coats of enamel. All touch ups and re-rolling of walls due to construction are included. The bid to include cost for four (4) colors
- > All stained wood to receive One (1) coat stain, One (1) coat sealer, and one (1) coat varnish. Stairs to receive one (1) coat stain. One (1) coat sealer.
- > All drywall and wood surfaces to be painted shall receive a minimum of three separate coats of paint, for a consistent final appearance achieving the desired color/effect (1 primer, 2 finish coats).
- > All wood surfaces to be stained shall receive a minimum of three separate coats of stain and finish, for a consistent final appearance achieving the required color/effect (1 stain, 2 finish coats). > All interior finishes to have a Class I flame spread.

- > Installation of acoustical suspension system shall be according to ASTM- C-636 "Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels" and according to mfr. recommendations.
- > Suspension system shall be 12 ga. hanger wires space 4' o.c. ea. direction, and idditional hangers at ends, as required and at light fixtures. > Wall moldings shall be hemmed edge typical, with continuous ribbon of of acoustical adhesive or caulking compound on vertical web. > Vinyl wipeable A.C.T., fitted.

#### 10 - Specialties

- > Portable fire extinguishers shall bear the label of an approved agency, be of an approved type, and be installed in a location visible and accessible to the occupants. Fire Prevention Bureau shall approve location. FPC-519.0
- > The Owner or operator of any facility which currently has or shall be installing a fire detection system (automatic or manual) and/or a fire suppression system, shall provide a repository container (lock box) at the facility. FPC-113.0
- > The repository container (lock box) shall contain key(s) to access those portions of the facility that the code official deems necessary. Each key shall be labeled
- as to it area(s) of function FPC-113.2 > Submit fire protection and fire alarm shop drawings (5) sets. FPC-501.1, FPC-501.2,
- NFPA 13, and NFPA 72., if required.

- > All work shall be completed on a Design/Build bases. Design and layout shall be approved by Owner prior to commencement of any work. > Mechanical plans are schematic in nature, and is the contractor's responsibility
- for final verification of sizing, and coordination with existing conditions, new conditions, and work of other trades.
- > All routing, transitions and fittings shall be provided as required. > Verification, additional drawings and calculations required by local jurisdiction shall be considered part of this scope of work.
- Coordinate all ductwork with other trades.
- > All ductwork shall be installed to maximize head clearance and minimize requirement for soffits or chases. (All TJI's to be drilled per manufactures requirements)
- > Provide balancing dampers at each branch duct take-off with locking device. > All diffusers shall be fully adjustable and all return diffusers shall be ducted high and low (Return ducts to be sized for use of either high or low diffuser with the
- All ductwork shall be a metal closed system, of galvanized steel constructed in accordance with SMACNA standards and requirements of Chapter 16 IRC. "panning" is not permitted. > Flexible ducts shall be metal flex with a maximum length of 6 ft.
- > Contractor shall provide all air balancing work to obtain specified, or
- > Firestop all penetrations with drywall compound, cementitious material, or approved firestop material (both sides).
- > Provide min. R8 insulation around ducts installed inside the building but outside the
- Field verified code compliant firestopping shall be provided at the following locations: Openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor level, without noncombustible materials. Manufacturer's mechanical appliance installation instructions shall be on the jobsite at

- > This scope of work shall require Design/Build services as required by the Owner and shall comply with local jurisdictions. Design and layout shall be approved by Owner prior to commencement of any work.
- > All work shall comply to ASTM standards and pass final inspection
- > Contractor shall provide all excavation and backfill as required, and as specified in Excavation/Backfill section, if reqd.
- > Gas lines to be black steel, schedule 40, w/ 125 psi screw fittings. Provide final connections and shut-off valves to each gas equipment. Flexible gas piping shall bear U.L lable
- > Purple primer shall be used on all PVC joints > L type copper shall be used.
- nt terminal increasers required > Public Lavatories require the use of an automatic water-mixing device.
  > Water closets must have an open front seat and be of the elongated type. Flush lever shall be on the wide side of the room.
   All connections to the potable water shall be protected from backflow.
- · Field verified code compliant firestopping shall be provided at the following locations: Openings around vents, pipes, ducts, at ceiling and floor level,
- > No waste line or water pipe may be installed in an exterior wall without protection
- > All plumbing walls will be of substantial thickness to accommodate wast vent and water pipe without over-notching or boring of the studs. > Each applicance shall be provided with an approved shut-off valve from the appliance.
- Valve to be located six feet (6') within applicance > Piping slopes to be 1/4" per foot and/or as required by code.
- > Plumbing contractor to rough in and make final connections to
- > All plumbing fixtures to have 1/2" air chambers 12" long.
- > Provide shut off valves for all risers, branches, fixtures and appliances. All main water valves shall be 125 psi ball valve
- > Insulate all horizontal cold water lines and all plumbing lines in exterior walls or unheated spaces, and all horizontal PVC drain lines. with 1/2" thick 3-lb density fiberglass insulation with universal jacket. > All gas piping shall be included as part of this scope of work, w/ a shut-off valve and all appliances and equipment, within 6 feet
- > Provide all necessary Clevis hangers for all piping support. Provide half sleeve
- I 2" long galvanized steel sleeve under piping insulation at each hanger. > Provide cleanouts in any run with a bend more than 60 degrees, within 5'-0" of the building wall, at the base of stacks, and at changes of direction. and total of fittings between c.o. not to exceed 120 dea > All fixtures shall be verified with the Owner for final location and layout
- prior to the installation of any work. All access panels shall be arranged to accommodate future work, and in locations approved by the Owner: > Firestop all penetrations with drywall compound, cementitious material, or approved firestop material (both sides).
- > Provide required fireblocking in accordance w/ R302.11 of the 2009 international residential code.
- > Solder for joints shall not contain lead. > Provide gas fired domestic water heater, which shall be complete with 199% gas safety shut-off, draft hood, ASME T&P relief and drain valves. >Wet venting may be allowed by plumbing inspector only when a plumbing fixtgure canont be indiv. vented due to structure.

## All new connections to the eixting plumbing system will be made in accordance with the current Illinois Plumbing Code adopted and field verified by inspector. 16 - Electrical

- > This scope of work shall require Design/Build services as required by the Owner and shall comply with local jurisdictions. Design and layout shall be approved by Owner prior to commencement of any work. > The contractor shall submit to the Owner for review the following: drawings, product specifications and wiring connection diagrams, with
- installation instructions, operating and maintenance manuals. > Provide a disconnect switch and wiring for all mechanical equipment. > Provide a minimum of 15% free panel space for future expansion
- > Wall switches and outlets shall be rated 125 volts- single phase, 15 AMP or 20 AMP as required. All kitchen outlets to be GFI protected.
- > All outlets shall be mounted at 15" A.F.F., unless noted otherwise > All opening locations to be verified with owner prior to final placement.
- > All electrical work coordinated for other trade's work shall be required as part of this scope of work.
- > All electrical conductors shall be copper. All wiring shall be #14 gauge. (Aluminum is not permitted).
- > Rigid galvanized conduit must be used in, through or under all interior concrete slab construction and through all foundation wall penetrations. > All outlets and switches must be connected to wires using screw-type erminals and not the push-type terminals
- > All wiring 25 volts or greater in new construction shall be conveyed through rigid metal conduit. PVC is not allowed. > Firestop all penetrations with drywall compound, cementitious material, or
- approved firestop material (both sides) > Provide required fireblocking in accordance w/ current codes > The integrity of all firestopping shall be continuously maintained. BC721.4
- Firestopping shall not be concealed from view until inspected and approved > Field verified code compliant firestopping shall be provided at the following locations: Openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor level,
- > All electrical components shall conform to the applicable requirements of NEMA standards, shall be U.L. listed and shall comply with the requirements of the National Electrical Code.
- > Firestop all penetrations with drywall compound, cementitious material, or approved firestop material (both sides). Provide required fireblocking in accordance w/R302.11 of the 2009 international residential code or current codes
- > Electrician shall be responsible for the installation of all light fixtures (provided by owner). > Water pipes and gas pipe of the water heater shall be properly bonded
- > The following appliances and equipment shall have a disconnect switch: eahc furnace,

### 18 - General Requirements

- > All work shall comply with local jurisdiction and ordinances > Contractors are to familiarize themselves with the site and all existing conditions and are to notify the Architect of any
- discrepancies with the drawings before proceeding with any work > All contractors and Subcontractors shall furnish Workers Compensation and General Liability Insurance Certificates prior to the start of any work.
- > All trades shall comply with OSHA, State and Local requirements for the safety of the workers on the 10b and passers by.

> Contractors shall procure all Local and State permits. The Owner

- shall reimburse permit fees on proof of payment > Any additional diagrams or information pertaining to plumbing,
- HVAC and Electrical necessary for obtaining permits shall be the requirement and submitted by the respective trade.
- > All trades to coordinate their work with other trades in advance and to cooperate in the expeditious completion of the Project.
- > All work shall be installed in a neat and workmanlike manner > All work shall be installed in strict accordance with the mfr.'s
- specifications and recommendations > The contractor is to notify utility companies prior to any excavation work. as part of the contractual documents.
- > All fixtures, materials and equipment shall be new and of first quality. > Provide address on the front and rear doors. Each building to which a street number has been assigned shall have such number displayed in a position easily observed and readable from the public right-of-way. All numbers shall be in arabic numerals at least 3 inches high and 1/2" inch stroke. PM-302.2
- > All firestopping shall consist of approved noncombustible materials securely fastened in place FPC-303.2. Contractor to submit manufacturer specifications on the firestopping
- material that is to be used. > Provide effective firestops to prevent the free passage of flame and products of combustion
- through concealed spaces or openings in the event of fire. >Contractor must submit information and show compliance to the 1996 BOCA National Building Code section 1705.0, Special Inspections.
- > The entire jobsite is to be kept free from the accumulation of debris each day. Each trade is responsible for the daily removal and cleanup of its' debris. The Owner reserves the right to hire labor directly for trash removal, and back charge the contractor
- > The Owner or operator of any facility which currently has or shall be installing a fire detection system (automatic or manual) and/or a fire suppression system, shall provide a repository container (lock box) at the facility. FPC-113.0
- > All firestopping shall consist of approved noncombustible materials securely fastened in place FPC-303.2. Contractor to
- submit manufacturer specifications on the firestopping material that is to be used. > Provide effective firestops to prevent the free passage
- of flame and products of combustion through concealed spaces or openings in the event of fire.

>Contractor must submit information and show compliance to the 2003 IBC,

- Special Inspections, per section 106.1. > Fire partitions shall be constructed of the types of materials shall have the minimum
- fireresistance rating as prescribed by Table 602 for the type of construction. FPC\_303.1 > All firestopping shall consist of approved noncombustible materials securely fastened in place FPC-303.2. Contractor to submit manufacturer specifications on the firestopping
- material that is to be used. > Portable fire extinguishers shall bear the label of an approved agency, be of an approved type, and be installed in a location visible and accessible to the
- occupants. Fire Prevention Bureau shall approve location, FPC-519.0 > Submit fire protection and fire alarm shop drawings (5) sets. FPC-501.1, FPC-501.2, NFPA 13, and NFPA 72.
- > All fire protection systems shall be tested by the Owner or an authorized representative and in the presence of the Fire Prevention Bureau. CONTACT THE FIRE PREVENTION BUREAU 48 HOURS IN ADVANCE OF THE TEST. FPC-501.3, NFPA 72 Section 7-1 NFPA 13, Section 8-1 > All structural design and drawing utilize the current code as required. Locations and types of all joints, concrete pours and mechanical openings shall be coordinated by the
- All existing conditions shall be jobsite measured and surveyed prior to any new > All wall hung items may not protrude more than four inches (4") into adajecnt.walks. halls, corridors, passagewyas or aisles if the leading edge is between twenty-seven inches (27")
- and eighty inches (80") above the finished floor. Objects with their leading edges below twentyseven (27") can protrude any amount. Section: IAC-400.310 a10.

General Contractor for review by the Architect and Structural engineer

> Life safety systems shall remain in service at all times during construction.

Smoke detectors in HVAC ductwork shall be accessible.

vailable on site for confirmation.

- > Emergency egress shall be maintained at all times. > A seperate permit is required for work on the fire alarm system. > During inspection process, changes or additional equipment may be required.
- > Keys for the new occupancy will be required to be added to key safe. > All materials usad as interior, other than foam plastic, shall have a min. Class C flame spread and smoke-developed indices, when tested in accordance with ASTM E 84 or UL 723, as described inSection 803.1.1 of the IFC. Material data sheets of products installed shall be
- > Proper location and effectiveness of emergency lighting and fire extinguishers where applicable will be verified during the inspection process. Changes or additional equipment may be required. > Main return aire duct and eshaust air plenum of each unit have a greater capacity of 2,000cfm

shall be provided with a smoke detector, serviceable in an area downstream of the last duct inlet.

> Contractor shall provide mfr. cut sheets for door hardware to be used on egress doors.

#### COMMENTS FLOORING BASE WALLS CEILING IDENTIFICATION EAST SOUTH WEST HEIGHT EXISTG. VESTIBULE EXISTG EXISTG. OFFICE VINYL FACED A.C.T. NEW WASH AREA EXISTG EXISTG. WAREHOUSE EXISTG

# Room Finish Schedule

scale:(none)

scale:(none)

DOOR SCHEDULE:						Hardware Schedule:		
MARK	LOC. S	SIZE THK	STYLE FIN	GLASS HDW	COMMENT	#1	3 butt hinges. Lockset Lever - Passage Wall stop. Closer	
DE	EXISTG EX	(ISTG EXISTG	EXISTG EXISTG	EXISTG EXISTG		#2	3 butt hinges. Lockset Lever - Storage Wall stop. Closer. Tight fitting.	
(DI)	OFF 35	x6'-8"   1 3/4"	FLUSH STAIN	NONE			•	
(D2)	OFF 35	x6'-8" [	FLUSH STAIN	NONE			·	

#### Door Notes:

- ' Door hardware shall be capable of operation with the use of one (1) hand and shall not require tight pinching, tight grasping or twisting of the wirst to operate. Thumb turn deadbolts are prohibited, lever or paddle deadbolt releases are acceptable. Door threshold shall not exceed one-half inch (1/2") in hieght, thresholds exceeding one-quarter inch (1/4") in hieght shall have a 1:2 bevel. Door closers shall meet opening force and sweep period requirements. Per Section IAC-400.310 17,8,9,10°
- ' Door hardware to be paddle or lever type, no thumb turns, ' All egress doors to swing out in the direction of travel, if it is determined that the

## occupancy will be over 50 people.

# Door Schedule

FROM EXIST'G. SERVICE

# \*\* General Plumbing Notes \*\*

- \* Contractor shall supply all plumbing fixtures to be installed by respective contractor.
- \* All fixtures shall be trimmed and caulked for final appearance.

operating system as required by the new work shall be included.

- \* All new piping shall be installed and coordinated with the existing conditions as required. All modifications of the existing piping for a complete and properly
- Any modifications required to other systems, including but not limited to: carpentry, drywall, electrical and mechanical, shall be included in the Base scope of work.

routing, and sequencing of new fixtures as it relates to fixture units, and current

\* Any and all work which is required, but not specifically depicted on the plans, that modifies the proposed design shall be verified and approved by Owner. Any work installed without the Owner's approval is subject to be relocated at the contractor's expense.

\* Plumbing contractor shall verify final sizes of all piping in relation to final

- codes. The existing water service shall be verified for its conformance to current requirements, and ability to service proposed work. All work associated with providing a complete installation shall be included as part of the base bid.
- There are no dead ends in the water system greater than two feet (2') where water in the pipir may become stagnant (future fixtures).
- \* Unvented dead ends in the drain and waste piping are not approved (future fixtures). \* No uninstalled copper piping shall be left on job site overnight. \* Any and all work which is required, but not specifically depicted on the plans, that modifies the proposed design shall be verified and approved by Owner.
- Any work installed without the Owner's approval is subject to be relocated at the contractor's expense. \* Plumbing contractor shall verify final sizes of all piping in relation to final routing, and sequencing of new fixtures as it relates to fixture units, and current codes. The existing water service shall be verified for its conformance to current requirements, and ability to service proposed work. All work associated with providing
- a complete installation shall be included as part of the base bid. \* Contractor shall supply all plumbing fixtures to be installed by respective contractor.
- \* Provide Hot Water Return Line as required per code. \* 3-Compartment sink to have (2) integral drain boards, w/ sinks large enought to submerge largest container to wash.
- \* Ice machine to have dual check valve. largest container to wash.

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Doing so shall result in reimbursement for; filing costs, legal fees,

architectural fees and all other expenses to Lira & Associates.

#### MISCELLANEOUS NOTE:

> All demolition required shall include wall framing and all associated material, including but not limited to: Electrical, Mechanical, Plumbing · All work to be demolished shall be the responsibility of each individual contractor to make the necessary adjustments, temporary/permanent as required to complete work required.

- All demolition work required is to be verified with existing conditions prior to any work performed. Should any trade require additional information regarding demolition work, the contractor is to contact the Architect immediately prior to any work beginning. Should the trade not receive a written directive from the Architect prior to the beginning of work, the contractor shall bear all responsibility for that portion of work, and any work affected.
- > Each trade understands that the Owner has requested permit plans, only, from the Architect. Typical construction details and designs are not provided as per the Owner. Should the contractor require additional information than provided on the plans, he shall contact the Architect immediately prior to any work beginning. Should the trade not receive a written directive from the Architect prior to the beginning of work, the contractor shall bear all responsibility for that portion of work, and any work affected.
- > All new work shall be as required by the Owner, and applicable to all codes. Demolished/Relocated systems are to be rerouted as required to provide a complete and properly operating system. · All notes depicted in the documents shall be considered typical throughout. Discrepancies within the documents or related to the

work shall be verified by the Contractor. Should the contractor

the contractor shall bear full responsibility for that portion,

proceed without receiving a written directive from the Owner, then

Certification

and any work effected by it.

Cremation By Water L&A #220 - Cremation By Water

Arlington Heights, IL 60004

11 W. College Dr Unit K

Minor Tenant Improvement HEET INDEX: Owner 5/A1 - Certification Review

30 June 2020 PERMY

6/A1 - Door Schedule 8/A1 - Plb. Riser 16/A1 - Specifications

existg 3x5 inc. ROOF

1/2" H. (TYP.) ,

(8) Plumbing Riser Diagram

16) Specifications

scale:(none)