

**BUILDING 'E'
EXPANSION AREA**

the **MALL** *at*
GREEN HILLS

**CONSTRUCTION
CRITERIA**

REV. 2/26/18

Construction Criteria

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Introduction

Information contained in this section has been assembled to assist the architect and the architect's consultants in preparation of Construction Documents and Specifications. The architect is responsible for adhering to the requirements outlined in the **Lease Criteria** as well as the following criteria.

The Mall at Green Hills will provide an opportunity for Tenant's to express their individual identity & branding through the use of high end, sophisticated and sustainable materials.

The following Construction Document Criteria and the Design Criteria, which are available on our website at <http://tenantcoordination.taubman.com>, were created to help define the Design Philosophy.

We encourage the use of sustainable design and construction practices for all aspects of Tenant improvements. Please reference the U.S. Green Building Council's website at **usgbc.org** for more information.

Architecture and Finishes

Storefront Work

1. Materials: All materials employed in Tenant's storefront shall be hard surface, durable, materials that require minimum maintenance. Wood employed decoratively within or at the storefront, or anywhere within the leased premises, must comply with code requirements.
2. Structural Support: All storefront work requiring structural support shall be floor supported and braced at their head sections by a structural steel framework secured to the existing building structure.
3. Security: Identify and specify any security system to be used. Door frame mounted or in-floor systems are acceptable provided they are incorporated into the Tenant's storefront design and subject to Landlord Approval. **No free standing-exposed pedestal systems are permitted.**
4. Mechanical Devices: Any mechanical device (time clocks, grille locks, grille controls, etc.) shall be concealed within Tenant's storefront construction.
5. Overhead Grills: Overhead Grills shall be concealed in an overhead or side storage pocket during shopping center hours. Side storage pockets shall have a door to cover the pocket in the open position. Overhead grill bottom tracks shall have a finish plate on the underside of the grill in the open position to cover gap in overhead pocket.
6. Transitions-U Channel: Tenant to provide 1" U-Channel transition at end of demising walls at the storefront. There are no Landlord provided neutral piers, only U-Channel transitions to the adjacent Tenant. See Attachment A.
7. Mirrors: No mirrors shall be visible from the common area facing the storefront.
8. Egress Path: A clear egress path of 10ft is required in front of the storefronts. Tables/Chairs, signage and other obstructions must not be located in this space.
9. Door Swing: All entry doors that swing outward must be setback into recessed openings and not impede the egress path. Entry doors shall not extend past the lease line.
10. Material Samples: **Tenant must provide an 11" x 17" material sample board** with their plan submittal (labels must be consistent with the plan submittal legend). In addition, Tenant must provide either photos of finishes from a comparable existing store or renderings of the finishes for the proposed store with their plan submittal.
11. Storefronts and Glazing: All exterior storefront systems must comply with all necessary codes.
12. Light Box Displays: Or equivalent illuminated displays, boxes, images are allowed however design subject to landlord approval.
 - a. Maximum size 4' x 8' or 32 SF
 - b. Only 1 per storefront side
 - c. No moving images or changes in illumination

13. Display Areas / Show Windows:

- a. All storefront glass shall be clear, safety plate or tempered float glass. No tinted glass will be allowed
- b. For exterior curbside storefronts the tenant shall provide a waterproof system storefront (typically a metal storefront system). Samples and shop drawings to be submitted to landlord for review and approval prior to fabrication.
- c. Direct visual exposure of incandescent lamps, fluorescent tubes, or LED to the exterior is prohibited. A time clock will be required for all lighting and illuminated signage in the display area or show window.

14. Television, LCD's and Security Equipment: Television, LCD screens and security equipment, and all conduits, wiring, and related items in the sales area are subject to Landlord review and approval.

- a. Television & LCD Screens: The installation of Televisions & LCD screens in Tenant sales area for marketing and advertising is subject to Landlord review and approval.
 - If approved, Television & LCD screens must be a minimum of five feet (5'-0") from the storefront leaseline
 - Content shall be lifestyle graphics only
 - No sales advertising or equivalent content
 - All content is subject to the decency standards per the lease
 - No light or color trespass into the mall common area or adjacent tenant space
 - Tenant shall control the light and color intensity electronically or relocate the LCD screen further into the tenant space, further from from the storefront
 - No movement trespass – all images must be static
 - All images, content, and formatting is subject to landlord review and approval prior to displaying
 - No flashing or strobing images.

15. Tenant space identity signage: Your space number will need to be on a small sign on your storefront. **See Attachment C for details.**

16. **Public Facilities Signage: The Tenant spaces which provide public facilities will indicate such on their storefront window using a Public Restroom decal provided by Landlord (installed by Tenant). This will ensure that occupants in the mall concourse are aware of the nearest facility. See Attachment E for further information. Also, within the Tenant spaces which provide facilities, signage will be provided by and installed by Tenant, indicating that the facilities are available within the space for public use.**

Walls, Partitions and Separations

Landlord Work

Demising Walls: Landlord will erect 2" x 6" metal stud partitions dividing the Tenant's premises from the adjacent tenant spaces or common areas at the Tenant's expense. **Tenant shall verify Landlord's placement of wall studs prior to space acceptance and advise Landlord in writing of any discrepancies immediately.** Failure to notify Landlord of discrepancies shall be regarded as acceptance by the Tenant.

Tenant Work

Wall Construction

1. Wall Construction: Tenant's interior partitions shall be constructed of metal stud framing with gypsum board finish on all sides with taped and spackled joints.
 - a. Tenant demising walls and steel columns shall receive a minimum of one layer of 5/8" fire Type 'X' code gypsum wallboard with taped and spackled joints from floor to underside of structure above.
 - b. Tenant shall provide and install non-combustible fire stops as may be required at separations from the adjacent leased premises and ceiling above mall areas.

Exit/Access/Doors and Corridors

1. Exit/access doors: shall be minimum 3'-0" x 7'-0" x 1-3/4" - 1 hour fire door or code permitted equivalent and frame with hardware in accordance with governing codes. Hardware must match existing building standards and keyways.
NOTE: Several Duct/Pipe risers are running along the back wall of tenant spaces. Exit door location needs to be approved by landlord prior to design.
2. Finishes: After installation of Tenant exit/access door, Tenant shall restore base building service corridor to original condition.
 - a. Corridor Vestibules: Where vestibules are constructed, extend adjacent corridor finishes into the vestibule and provide corner guards as per the Landlord's specifications.
 - b. Projections: Tenant door may not project when fully open into the exit passageway per code.
 - c. Exit/access door: Exit/access door shall be painted per color specified by Landlord and labeled with store name and number as specified by center management.
3. Wall Construction: Exit/access corridor walls shall receive one layer of 5/8" fire code Type 'X' gypsum wallboard on both sides from floor to underside of structure above. All joints must be taped and spackled.

Ceiling Work

1. Ceiling Heights: Tenant is responsible for field verification of the existing conditions. **Ceiling heights above the height shown on the Space Layout Drawing and listed below may be possible but Landlord does not guarantee clearances for such ceilings.** In some cases, existing utilities may be relocated by Tenant at Tenant's expense. Written approval from Landlord is required before proceeding with such work.
 - a. First to Second Level:
 - Allowable ceiling height: +/- 12'-0"
 - Clear height: +/- 13'-2"
 - Finished floor to finished floor: +/- 18'-0"
 - Storefront Height: 13'-4"
 - b. Second Level to Roof:
 - Allowable ceiling height: +/- 12'-0"
 - Clear height: +/- 13'-2"
 - Finished floor to Top of Steel: +/- 21'-9" (@ Low Point)
 - Storefront Height: 14'-3"
2. Metal suspension systems: **Metal suspension systems shall be used for all ceilings and shall be secured to Landlord's structural framing only. No connections to Landlord's metal roof/floor deck will be permitted.**
3. Gypsum Ceilings: Gypsum ceilings and soffits are required in the sales display area at the storefront (typically +/- 6'-0" from the lease line back into the store).
 - a. **When using an acoustical lay-in tile ceiling in the sales area, tiles must be 2' x 2'. All ceiling tiles in the sales area must have an exposed tegular edge.**
 - Provide a change in ceiling height for interest, so the entire ceiling is not completely flat.
 - Combustible materials of any sort may not be used or stored above the Tenant's ceilings.
 - b. All diffusers, grilles, tracks, speakers, etc., must be painted to match finish ceiling.
4. Hanging Marketing Displays: Tenant hanging marketing displays must provide a recessed track or equivalent discreet hanging method. Hanging grids or other surface mounted hanging methods are prohibited.
5. Access Panels: Provide access panels to permit servicing of all Tenant and Landlord Equipment located above the ceiling. Access panels in hard surface ceilings must be a **flush**

panel door with a tape-in drywall bead flange. Access panels should be installed on vertical ceiling soffits or located as inconspicuously as possible.

Interiors-General

1. Toilet Rooms: All Toilet Room floors above grade level shall have a Landlord approved **waterproof membrane** between the structural sub-floor and Tenant's finish floor. All Toilet Rooms shall have ceramic tile sanitary floors and base that extend a minimum of 4" above finish floor.
 - a. All bathrooms are to have an ADA complaint marble threshold (or equivalent) to help contain water in the event of a leak.
2. Rubbish Storage Rooms: Provide a storage area for rubbish in all food or beverage service operations. All storage area floors above grade level shall have a Landlord approved **waterproof membrane** between Landlord's structural sub-floor and Tenant's finish floor.
3. Cooking Oil Disposal: Food service Tenants must ensure the cleanliness of customer-facing areas of the business, back of the house, and external areas. Rendering tanks must be within the Tenant premises. Where possible, we recommend an automated oil management system (similar to www.rti-inc.com/oil-management/) for supply and disposal of cooking oil.
4. Food Preparation and Service Areas: All food preparation and service area floors above grade level shall have a Landlord approved **waterproof membrane** between the structural sub-floor and Tenant's finish floor. They also must have an adequate number of floor drains.
5. Health Code: All finishes shall be in compliance with Health Code Requirements (or approved by local health authority).
6. Stock Rooms: Tenants may exit through Stock Rooms if:
 - a. The Stock Room is of the same hazard classification as that found in the main retail area.
 - b. Not more than 50% of the exit access is through the Stock Room.
 - c. Stock Room is not subject to locking from egress side.
 - d. 44" clear aisle defined by full or partial height fixed walls and leads directly to the exit without obstructions.

Floor - General Requirements

1. Floor Material: All materials employed in Tenant's space shall be hard surface, durable, materials that require minimum maintenance. Wood employed anywhere within the leased premises, must comply with code requirements.
 - a. **Tenants storefront floor finish must extend to the leaseline**
 - Floor material must withstand regular contact with mall cleaning equipment.
 - Vinyl floor products are not acceptable in the sales area.
 - No vinyl or rubber base permitted in the sales area. Provide a hard surface-durable base material.
 - b. Polished Concrete: Polished Concrete floors are allowed on a case by case basis, if consistent with tenant prototype design
 - Prototype: Submit prototype design package as part of the approval process.
 - Pattern/Texture: Provide score, diamond grind and/or bead blast pattern.
 - Finish: Sealing the surface with clear acrylic, epoxy, or urethane sealer adds varied levels of sheen and depth, and protects the concrete from damage and staining.
 - Concrete floors must be sealed with a high quality, low-VOC clear acrylic, epoxy, or urethane sealer, level 2 (minimum) sheen finish.
 - Color: Artistic designs using pigments, paints, epoxy are acceptable if wear resistant and consistent with prototype.
 - c. Wood Flooring: Solid wood or Engineered wood flooring with veneers of 2mm thickness or more and commercial grade (10 year warranty) finish are acceptable. No laminate or vinyl wood products are allowed in the sales area.
 - d. Restrooms: All tenant public restrooms (see Plumbing Criteria) must have hard surface, durable flooring with waterproof membrane. No vct flooring.
 - e. No vinyl base permitted in the sales area. Provide a hard surface-durable base material.
2. Transitions: All floor finishes at the storefront lease line shall be the same finish floor elevation (flush) as the Landlord's mall floor and provide recessed Schluter Type or equivalent transition strips
 - a. All toilet rooms are to have an ADA compliant marble threshold (or equivalent) to contain water in the event of a leak.
3. Expansion Joints: Expansion joints in sales areas must be detailed and illustrated in the Construction Documents. Expansion joint material must be compatible with the floor finish materials.
4. Anti-Fracture Membrane - Floor Isolation: It is recommended to install an Anti-

FractureMembrane at the column lines, transitions between the structural slab and any shrinkage cracks that are evident.

Storefront Signage

Interior Dimensional and Location Requirements

1. The average height of sign letters or components shall **not exceed 12"**. **Letters are limited to 16" maximum height.**
2. Signs shall not project beyond the storefront more than 2" if less than 8ft above finished floor line, nor more than 4" above 8ft.
3. The extreme outer limits of the sign letters and components shall fall within a rectangular area that can be defined as follows:
 - a. The sides shall not fall closer than 24" to the side lease lines of the premises;
and
 - b. The top side of which shall fall no closer than 12" to the soffit of the mall fascia.

Prohibited Sign Types

1. Signs with exposed neon or other lamps or signs using flashing lights.
2. Sign manufacturer's name, stamps or decals, or registered trademarks.
3. Charge card decals shall not be affixed to any part of the storefront, nor shall any charge card identification be immediately visible from the public space
4. Sign company names or stamps and UL Labels shall be concealed and not be visible to public view
5. Signs with exposed raceways, ballast boxes or transformers.
6. Signs with painted letters.
7. Signs employing luminous, vacuum-formed plastic letters.
8. Signs of exposed box or cabinet-type design that employ transparent, translucent or luminous plastic background panels.
9. Shadow box type signs.
10. Signs employing un-edged or uncapped plastic letters with no returns.

11. Paper, plastic or cardboard signs. In addition, stickers or decals of any kind are not permitted on the storefront glass or in entry area, unless approved by Landlord.
12. Signs with exposed fasteners, vents or weep holes.
13. Signs with an orientation other than horizontal, that is, no vertical, perpendicular or diagonal signage, etc., unless approved by Landlord.
14. Light Box Displays or equivalent illuminated displays boxes/images
15. Non-illuminated signs

Structural

Modifications and Alterations: Modifications and alterations to Landlord's framing structure and floors will not be permitted without Landlord's prior written approval. In the event that Landlord approves Tenant's request, Tenant shall leave Landlord's structure as strong as or stronger than original design with finishes unimpaired. Conditions vary by location. Refer to Base Building Structural drawings for more information and Field verify all structural conditions:

- a. Landlord may elect to require that structural modifications be performed by Landlord's Contractor at Tenant's expense. Structural alterations or calculation of heavy loading will require the Tenant to hire, at Tenant's expense, Landlord's structural engineer who must review and approve the Tenant's structural engineer's drawings and calculations.
 - b. No welding to building structure shall be permitted without Landlord's prior approval.
1. Lower Level Floors: Landlord provided 3 1/4" thick concrete topping slab on (2) layers of 1 1/2" high compressed polystyrene (60 PSI) on post tensioned concrete slab. Approximate 3/4 " depression occurs within concrete slab in designated areas adjacent to the Tenant's storefront lease line.
 - a. Structural Design Loads: Second Level: 100 psf (non-reducible).

Post Tentioned Slabs:

LEVEL 1 - The mall level 1 built- up slab is supported on a post-tensioned concrete slab and beam floor system. Refer to the mall shell drawings for locations and extents of post-tensioned beams. The tenant shall plan their required slab penetrations for utilities so that any required cores will clear the edge of concrete beams by a minimum of 2" from edge of beam to edge of cored hold. No cores shall be permitted to extend vertically or horizontally through post-tensioned beams.

- a. Cores in post tensioned slabs: Refer to the following Attachment G Figures: Figure G-1 Typical Slab Core Detail at Mild-Reinforced Concrete Slab (Alt Plan Grids B.62-D.49 and J.12-K.99) and

- b. Figure G-2 Typical Post-Tensioned Slab Core Detail*, provided by landlord, which outlines slab coring requirements. Slab cores shall not exceed 6" in outside diameter of the cored hole. Slab reinforcing shall be located and cleared in strict accordance with the Typical Detail. Slab cores shall be spaced a minimum of 18" apart in any direction.
- c. Tenant shall X-Ray post-tension slab prior to making floor penetrations. Coordinate with Mall Facilities Team.

Floors: Tenant shall repair or replace any part of the existing concrete slab which may have been removed by Landlord or Tenant to allow for extension of underground and underfloor utilities. Backfill and compaction shall be provided by Tenant at utilities below grade. At level 1 floor, the tenant shall repair the existing built-up slab in strict accordance with Attachment G, Figure G-3 typical built-up slab repair detail* provided by the landlord. See also Demolition item 3, Post-Tentioned Slabs.

2. Upper Level Floors: Landlord provided concrete slab on composite metal deck (2 1/2" thick concrete on 3" metal deck - 5 1/2" thick total thickness). Approximate 1" depression occurs within concrete slab in designated areas adjacent to the Tenant's storefront lease line. (See B6/A-920)
 - a. Structural Design Loads: Second Level: 100 psf (non-reducible).
3. Mezzanines: Lower and Upper level floor framing has not been designed to support mezzanines.
4. Roof: Structural design loads subject to Landlord review and approval. Tenant shall submit loading, roof framing analysis and support details - prepared by a structural engineer registered in the State of Tennessee for Landlord's review and approval.
5. Concrete Floor Penetrations: Required by Tenant shall be coordinated with Landlord's Field Representative structural consultant and shall be engineered to fit existing conditions and installed according to the Standard Floor Penetrations on the website.
 - a. All floor penetrations in food service/preparation areas and toilet rooms shall have water tight sleeves extending a minimum of 4" above finish floor.
 - b. Refer to item 1 above for requirements at mall level 1 concrete slabs.
6. Vibration Isolation and Sound Attenuation: Vibration isolation requirements must be provided for all equipment (floor mounted and suspended).
 - a. Speaker systems must provide sound attenuation materials and installation methods so as not to infringe on adjacent tenants quiet enjoyment.
 - b. Speakers must be located +/- 20ft from store entry.**

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7. Safes: Provide structural information on safes load and path of travel for Landlord review and approval.

Heating, Ventilation and Air-Conditioning

*** All Tenants Shall Connect to the Centralized Condenser Water Plant System (U.N.O)

LANDLORD WORK

1. Centralized Condenser Water Plant: The Leased Premises are served from a Centralized Condenser Water Plant installed by Landlord which will deliver, during regular Shopping Center business hours, filtered, Condenser Water at a fixed temperature and variable volume. The system is designed to maintain the Leased Premises at 75°F. \pm 2°F. DB and 60% RH, when outdoor temperature is 90°F. DB and 73°F. WB, and latent heat gain does not exceed 23 BTU/hour per square foot of Leased Premises.
 - a. Condenser Water Loop: The Condenser Water Loop will provide Condenser Water Supply (CS) at a temperature of 88 degrees Fahrenheit, and Condenser Water Return (CS) at 103 degrees Fahrenheit (15 degree Fahrenheit delta t), for connection to Tenant's Water Source Heat Pump Unit(s). Tenants are allowed 2 GPM/Ton, based on the following Criteria: The above figures are averages only. Tenants are allowed a specific tonnage and GPM based on size of space, amount of storefront and orientation of the space. The specific Tenant Space allotments shall be as indicated on mechanical drawings.
 - b. Approximate capacity per level is as follows:
 - Level 1 Retail Tenants at 1 ton / 333 SF
 - Level 2 Retail Tenants at 1 ton / 300 SF
2. Outside Air: Outside air provided to the space will be unconditioned and must be accounted for in Tenant's load calculations for cooling requirements.
 - a. Outside Air Duct Main: Landlord will provide an OSA Main for Tenant's connection. See mechanical drawings for specific OA quantity allotted to each space. Food Service or Restaurant Tenants are required to provide their own OA Ventilation Unit and ductwork, similar to those provided by the Landlord for inline Retail Tenants.
3. BAS System: A control communications loop will be provided by Landlord in close proximity to the Tenant's premises. One junction box is provided for each Condenser Water Tap and shall be located within the Tenant space.
4. Toilet Exhaust: Toilet exhaust ducts stubbed into each Tenant space. Restaurants are required to provide their own toilet exhaust system based on the size and quantity of waste fixtures.

TENANT WORK

Tenant, at its sole cost and expense, shall prepare Construction Drawings and Specifications for and shall initially construct or provide all heating, ventilation, exhaust Equipment, including controls, ducts, insulation and all structural, plumbing and electrical for the leased premises. Each Tenant shall provide an individual system(s) as outlined below. All equipment shall bear UL labels. Please refer to the Tenant Interface Diagrams provided in Tenants Design Package.

Upon completion of Tenant build out, Tenant must provide one (1) pdf plan with as-built information for Mechanical, Electrical and Plumbing.

HVAC

1. Cooling Equipment: Tenant shall provide and install within its Leased Premises, Condenser Water Source Heat Pump Units with DDC Controllers that can be interfaced with the Landlord's Centralized BAS System. Tenant shall design and install the air distribution system for its Leased Premises in accordance with Tenant Mechanical Interface Details (TI-1) included in Tenant Design Package.
 - a. The Tenant's temperature sensor shall include an over-ride button for afterhours cooling operation. The programming features and requirements are to be coordinated with the Landlord.

2. Variable Air Volume (VAV's): Tenants will be required to provide a local VAV box between the Landlord's outside air duct and the Tenant's WSHP.

The landlord has a centralized system that supplies each tenant with an outside air connection at medium pressure. The outside air system has been sized to deliver. 4 CFM per square foot which will satisfy the cooling load during economizer conditions.

3. Drain Pans: Provide secondary drain pans below all Heat Pump Units/piping and properly drain to comply with all local codes.
4. Condenser Water Piping Connection: Condenser water piping systems are to include a suitable strainer on the supply side of the Tenant's fan coil unit and a flow control balancing valve on the return, 2-way shut-off valve and flexible piping connections. A 2-way modulating control valve interlocked with the fan coil shall also be provided by the Tenant. Piping materials are to comply and be compatible with Landlord's piping systems and suitable for a plenum installation.
5. Insulation: All ductwork and condensate piping shall be insulated. All ductwork and Condenser Water Piping on all levels shall be installed in concealed space above ceilings.
 - a. Engineered design of unit support including design of seismic bracing of mechanical equipment where required by the Building Code for seismic design category C. Submit details prepared by a qualified Hawaii-licensed engineer including information illustrating proposed loads imposed on the base building for all mechanical equipment weighing more than 400 pounds.

6. Scrubber units: Shall be installed bearing on the Tenant's floor or suspended from framing above. Locate suspended units within areas dedicated for mechanical equipment loading. See Structural Section, item 1 and 2, Structural Design Loads.

Ventilation

1. Outside Air: Tenant will connect to Landlord OSA duct stub. Retail Tenant is to design the OSA system for 7.5 CFM/Person and .12 CFM/S.F.; Restaurant Tenant shall provide their own dedicated outside/make-up air system independent of the Landlord system. Tenant will be required to provide a VAV box that will modulate the outside air for the water source heat pump based on mode (DCV, Economizer, Normal). Humidity (for economizer) and CO2 sensors (for DCV) will be installed in WSHP RA duct and will tie into VAV unitary controller. VAV unitary controller will be tied into Landlord BAS (By landlord at tenant's expense).
2. Toilet Rooms-Exhaust: Tenant shall provide exhaust fans to satisfy exhaust requirements for toilet rooms and for removal of heat or odors generated within the Leased Premises. Exhaust fans shall be located within the Leased Premises. Exhaust air discharge for inline Retail Tenants shall connect to the toilet exhaust system provided by Landlord. Toilet exhaust for Restaurant or Food Service Tenants shall be completely the responsibility of such tenant. Exhaust equipment shall be of ceiling or in-line type complete with backdraft damper and minimum 26 gauge sheet metal duct connection to Landlord's toilet exhaust system. Tenant's exhaust fan shall be controlled by a local switch provided by Tenant.
3. Pressure Relief System: Tenant shall provide a pressure relief system for the HVAC. The system shall consist of counter balanced backdraft damper, ductwork, relief grille/louver discharging to the exterior at a Landlord approved location. Discharge grille/louver shall be mounted in an inconspicuous location approved by leasing and the design architect. See Contract Drawings and Leasing Details for acceptable location and installation parameters.
4. Tenants are responsible for relief of their individual spaces. Relief shall be via entry doors, ductwork, dampers and louvers, grilles, etc. to a storefront location acceptable to the Landlord.

General Requirements (Applies to Each System)

1. Air Distribution System: Tenant shall furnish and install a standard distribution system to sales or dining areas of the leased premises. Tenant may elect to supply air to other than sales or dining areas with the understanding that temperature, as stated above, may not be maintained.
2. Ductwork: Design, fabricate and construct all ductwork from minimum 26 gauge sheet metal in accordance with the latest ASHRAE and SMACNA standards.
 - a. Fiberboard ductwork and flexible ductwork to air devices, other than short runs (8'-0" or less), are not permitted.

- b. Tenant's supply-air ductwork shall be insulated and all ductwork shall be installed in concealed space above ceilings. Space between Tenant's ceiling and structure shall be used as Tenant's return-air plenum as needed.
3. BAS System Temperature and Monitoring Controls: Final temperature, CO2, VAV and WSHP control wiring connections to the central BAS control communications loop and junction box will be made by Landlord's BAS contractor at Tenant's expense.
 - a. **The Landlord's BAS system will monitor Tenant's temperature, CO2 and OSA Delivery Temperature.**
4. Control Wiring: **Landlord shall furnish for Tenant installation (at Tenant's expense)** all code complying temperature control wiring as required per manufacturer's recommendations or the Landlord's review comments. All control wiring shall be in conduit.
5. Points of Connection: Verify points of connection to existing ducts, waste, vent and water stubs with Landlord's Field Representative.
6. Access: Equipment must be installed allowing clear access for servicing. Access must also be provided to Landlord Equipment as well (see access panel requirements).
7. Air Balancing: Tenant shall engage a separate temperature control contractor for final set-up of system(s) operations and a separate Testing & Balancing contractor for all air balancing. Tenant will provide the Air Balance report to the facility upon completion of the Tenant HVAC system (we recommend that the Tenant be required to use Landlord's BAS contractor).
8. Registers: All Tenants shall provide ceiling return-air registers or grilles.
9. Roof Work/Equipment: All Tenants' roof equipment must be reviewed and approved by Landlord.
 - a. Location: Tenants shall be located in areas designated by the Landlord to specified heights and according to Landlord's approval. Exception: Should weight or location of equipment by Tenant require supports, screens, catwalks or roof hatch and ladder, they shall be provided by Tenant according to Standard Project Details. Landlord will determine when and where the above shall be required.
 - b. Structural Design Loads: Subject to Landlord Review and Approval. Tenant shall submit loading, roof framing analysis and support details - prepared by a structural engineer registered in the AHJ for Landlord's review and approval.
 - c. Finish: All such equipment shall be factory-finish painted according to the Landlord's paint schedule and specifications.
 - d. Identification: Tenant's roof equipment shall be clearly identified with Tenant's name.

- e. Support: All equipment rails and curbs shall be positively anchored to the supporting structure and all equipment secured to the rails/curbs to resist the effects of **160 mph winds** (based on ultimate loads using ASCE7-10). Anchorage requirements shall be included on the Tenant's Mechanical plans.
 - f. Roof Walkway Pads and Grease Pads: Tenant shall provide walkway and grease pads per landlord roofing contractor's specs.
 - g. Cutting and Patching: Cutting and patching of roof openings, when approved by the Landlord, shall be done by the Landlord's roofing contractor at Tenant's expense.
 - h. Roof Screening of Tenant's Equipment: Rooftop equipment screening is required by local municipality.
10. Odors: Tenant shall not permit odors from within the leased premises to enter other areas of the center. If any Tenant or occupant of the center objects to odors from the leased premises, the Landlord may, at Landlord's discretion, instruct the Tenant to control such odors. Failure to correct the situation would be a material breach of the lease. If Tenant's mechanical system is unable to function in a manner to prevent odors from leaving the premises, Tenant shall make the necessary adjustments or additions to its present system to the satisfaction of the Landlord's Field Representative.

Plumbing

Landlord Work

1. Points of Connection: On-site water supply mains for domestic and fire protection, shut-off valves, and fire hydrants.
 - a. Water: 3/4" interior domestic water branch line stubbed into Retail Tenant's premises. Tenant shall determine if Booster Pump required if higher pressure is required.
 - b. Sanitary: 4" sanitary waste line and plumbing vent branch lines stubbed below and above Tenant's premises for Retail / Restaurant Tenants.
 - c. Gas: Gas Utility Company meter manifolds will be located in an area designated by Landlord.
 - d. Grease Waste: 6" grease waste line and plumbing vent branch lines stubbed below second level Tenant's premises for designated food and beverage service Tenant spaces.
 - e. Centralized Grease Interceptors: Four (4) 2,000 gallon centralized grease interceptors have been provided. Two are located in the North-west Mall Loading Dock and two are located near the South Mall Service Area.
2. Level 1 Retail / Restaurant Tenants:
 - a. All plumbing piping shall be installed with heat trace, as Level 1 is located over an exterior parking area.
 - b. The expansion building is not designed for restaurant tenant use on Level 1.

Tenant Work

1. **Upon completion of Tenant build out, tenant must provide one (1) pdf plan with as-built information for Mechanical, Electrical and Plumbing.**
2. System: Plumbing fixtures and piping system including all rough-in and final connections for same. Installation of all hot and insulated cold water lines, drains, and vents, electrical water heaters, water meter, and final connections to Tenant's specialty equipment. All installed per governing codes.
3. Plumbing Fixture Travel Distance:
The information below is based alternate methods and materials granted by the City of Nashville:
 - a. Retail Tenants complying with the 300' travel distance to central facilities:
 - Tenants with GLA 1,000 SF or less:
 1. No facilities to be provided for public/customer or use.
 2. No drinking fountains to be provided.
 - Tenants with GLA greater than 1,000 SF:
 1. A single unisex toilet facility will be provided for employee use only (required by developer).
 2. No drinking fountains to be provided.
 - b. Retail Tenants NOT complying with the 300' travel distance to central facilities:
 - Tenants with GLA 1,000 SF or less:
 1. No facilities to be provided for public/customer or employee use.
 2. No drinking fountains to be provided.
 - Tenants with GLA greater than 1,000 SF up to 2,000 SF:
 1. A single unisex toilet facility will be provided for public/customer and employee use.
 2. No drinking fountains will be provided.
 - Tenants with GLA greater than 2,000 SF:
 1. Public/customer and employee toilet facilities will be provided within the tenant space as required by code (based on the number of occupants and use of the space).
 2. Drinking fountains/water coolers will be provided for public/customer and employee use as required by code.
 - c. Restaurant Tenants (regardless of travel distance and size):

- Public/customer and employee facilities will be provided within the Tenant space as required by code (based on the number of occupants and use of space).
 - Drinking fountains will be provided for public/customer and employee use as required by code.
- d. **Public Facilities Signage: The Tenant spaces which provide public facilities will indicate such on their storefront window using a Public Restroom decal provided by Landlord (installed by Tenant). This will ensure that occupants in the mall concourse are aware of the nearest facility. See Attachment E for further information. Also, within the Tenant spaces which provide facilities, signage will be provided by and installed by Tenant, indicating that the facilities are available within the space for public use.**
4. **Plumbing Fixtures and Accessories:** Shall be of commercial quality and shall be of water conserving type. Tenant tank type water closets to be equipped with Sloan "flushmate," or equal, pressure assisted flushing device.
- a. Water closets shall be limited to a maximum flow rate of 1.6 GPF.
 - b. Urinals shall be limited to a maximum flow rate of 1.0 GPF.
 - c. Lavatories shall be limited to a maximum flow rate of 0.5 GPM.
5. **Drains and Waterproofing:** Floor drains (4") and elastomeric **waterproof membranes** shall be provided in toilet rooms and kitchens, and/or other rooms with water supply or drainage. Food and beverage service Tenants on the second level shall be required to provide a Waterproof membrane in all wet areas at Tenant's expense.
6. **Hammer Arrestors:** Provide water hammer arrestor behind access panel in Tenant restrooms.
7. **Grease Waste:** Food and beverage service Tenants shall connect all grease laden waste to the common grease waste system designated for their space. Landlord is responsible for coordinating regularly scheduled servicing of the grease interceptor system at Tenants expense.
- a. In addition to connecting to the common grease waste system, each food and beverage service Tenants will be required to connect their three (3) compartment sinks to a **floor mounted grease trap** within their space. Cleaning/maintenance of the grease trap is the Tenant's responsibility.
8. **Floor Penetrations:** Pipe sleeves shall be installed in penetrations through floor slabs.
9. **Water Meter:** Water meter within the leased premises is provided by Landlord at Tenant expense. **Install meter near floor (preferably in Toilet Room and +/- 5ft AFF) in an easily accessible location.** Meter shall read in gallons. Install an electronic "pulse" type water meter near floor, in an accessible location, in accordance with Project Standard Details. Meter, transmitter, and address of meter will be provided by Landlord at Tenant's expense. Stamp manufacturer's meter serial number on outer case. Stamp

manufacturer's meter serial number on outside of register lid when provided. Manufacturer's serial number shall be individual and not duplicated.

- a. Water Meters - provide approved meters equipped with Tricon S register option (Meter needs to be capable of providing a pulse output to a standard building automation system) set for 10 gallon intervals per pulse.
 - b. Displacement Meters shall be: Neptune Model T-10 (5/8" thru 2"). {Equals accepted upon approval}.
 - c. Compound Meters shall be Neptune TRU/FLO Compound Meter (3" thru 6" and 6" x 8"). {Equals accepted upon approval}. Water Meter to be supplied with a Cast Iron Yoke or Meter Setter as shown on standard detail drawings.
10. Gas: Food and beverage service Tenants shall make gas service arrangements with the gas utility company. Routing of gas line shall be approved by Landlord prior to construction.
11. Drain Pans: Tenants located above any base building or Tenant mechanical/electrical rooms shall install drain pans below all piping installed by tenant (running through the rooms), properly drain and comply with all local and state codes.

Fire Protection – Sprinkler System

Landlord Work

1. Tenant Fire Service Main: Interior Tenant Fire Service Main (TFSM) routed to each Tenant space at a point to be determined by Landlord. TFSMs have been hydraulically calculated to provide a minimum of 750 gpm to the most remote Tenant on each level.
2. Monitoring: The TFSMs are monitored by the Landlord's fire alarm system.

Tenant Work

1. Design and Approval: Tenant fire sprinkler contractor shall provide a hydraulically calculated fire protection sprinkler system, fire extinguishers, and other equipment within Tenant's premises shall be in accordance with the **Landlord's Insurance Underwriters' Fire Rating Inspection Bureau (FM Global), NFPA 13, all applicable state/local code requirements**. Since the entire fire protection system for the project is required to be an inter-related, centrally controlled installation, Tenant shall cause to be designed and installed, by a qualified sprinkler contractor acceptable to Landlord, said system within Tenant's premises according to the Landlord's requirements; and shall submit for Landlord's review, shop drawings, specifications and hydraulic calculations for the sprinkler system that have been approved by the Fire Rating Inspection Bureau (FM Global). Landlord's approval of this shall not constitute the assumption of any responsibilities by

Landlord for the accuracy or sufficiency of the sprinkler system. Tenant shall be solely responsible for the system within the leased premises. See Submission procedures on our website.

- a. FM Global approval is needed prior to Tenant's start of construction.
2. Tap: Tenant fire sprinkler contractor's work shall begin at the six inch (6"). TFSM provided by the Landlord within the Tenant space. Tap into the TFSM shall be by the Landlord's sprinkler contractor at the Tenant's expense. The TFSM serving the Tenant space is not to be used as a cross main for the Tenant provided system. **Only one tap into the TFSM is allowed.**
 - a. Individual Tenant control valves are not allowed in the sprinkler system. Valving and alarm system is accomplished at source to building by Landlord.

Fire Protection Design Criteria

1. Fire Sprinkler System Design Criteria as Follows:
 - a. Tenant Lease Spaces: Density – 0.20 gpm / sq ft
 - b. Operating Area: Hydraulically most remote 2,500 sq ft (locations of partitions shall be ignored when choosing remote area).
 - c. Temperature Rating / Response Type: Ordinary / Quick Response.
 - d. K-Factor: 8.0 Minimum
 - e. Sprinkler Spacing: 130 sq ft maximum, with a maximum of 12ft between sprinklers.
 - f. Hose Stream Allowance: Hose stream allowances are not required within the Tenant calculations. A 250 gpm hose stream allowance has already been included in the calculations for the TFSM.
 - g. Where storage/merchandise is high piled and or hazard commodities are stored coordinate design criteria with NFPA 13 and FM Global.
 - h. TFSM's have been sized based on hydraulic calculations, to provide the above described water supply. Tenant sprinkler calculations need only to be taken back to the connection on the TFSM.
 - i. All sprinkler systems components shall be UL Listed and FM Global approved for fire protection.
 - j. Provide dry chemical fire protection for range hoods, etc.
2. Lease Space Level 1 – Available Water Supply
 - a. 84 psi static, 65 psi residual, while flowing 750 gpm to the hydraulically most remote point of the Tenant Fire Service Main.

3. Lease Space Level 2 – Available Water Supply
 - a. 77 psi static, 60 psi residual, while flowing 750 gpm to the most remote point of the Tenant Fire Service Main.
4. **Upon completion of Tenant build out, Tenant must provide one (1) pdf plan with as-built information for Fire Protection, Mechanical, Electrical and Plumbing.**

Fire Sprinklers

Sprinklers in finished ceilings may be fully pendent with flat or recessed escutchen. Fully pendent type sprinkler heads are permitted only in stock/storage areas. All sprinklers shall have a minimum K-Factor of 8.0.

Fire Alarm System

Landlord Work

1. Landlord will provide a fire alarm addressable Signaling Line Circuit (SLC), emergency voice evacuation system speaker circuit, and visual notification appliance synchronization circuit at the Tenant interface junction box location within each Tenant space. Base building Tenant interface junction boxes will be provided and installed by the Landlord.
2. Landlord will provide and install
 - a. one (1) addressable input module to monitor trouble conditions on the tenant auxiliary power supply.
 - b. one (1) addressable relay module to shutdown tenant background music sound systems.
 - c. one (1) addressable signal module to activate the tenant emergency voice evacuation system-and
 - d. one (1) Addressble signal module to activate and synchronize the tenant auxiliary power supply.

Tenant Work

1. Tenant will provide and install all initiating devices, notification appliances, and auxiliary power supplies as required by all applicable codes and standards and installed in accordance with NFPA 72. Tenant shall provide and install all necessary cabling and conduit within the Tenant's premises starting at the Landlord provided tenant interface junction boxes.
2. Tenant shall provide and install all code complying and Landlord approved notification appliances within the Tenant's premises. Tenant shall provide and install all necessary cabling and conduit within the Tenant's premises starting at the Landlord provided tenant interface junction boxes.

- a. There shall be a minimum of one (1) combination speaker / visual notification appliance per tenant premises. Tenant shall provide adequate audible and visual coverage within their premises in accordance with NFPA 72.
 - b. In accordance with the applicable building and fire codes and all visual notification appliances in Mall and Tenant shall be synchronized.
 - c. Tenant shall provide and install auxiliary power supplies (minimum one (1) per tenant space) as necessary for Tenant visual notification appliances. Tenant shall coordinate connection to a dedicated 120 VAC circuit and shall provide twenty four (24) hours, followed by fifteen (15) minutes of battery back up in each APS.
 - d. Visual notification appliance circuits shall not serve more than one (1) tenant space.
3. Tenant shall provide and install duct type smoke detection in the supply and return side of each individual air handling unit as required the applicable building and mechanical codes. Duct type smoke detection shall be addressable and connected to the Landlord's base building fire alarm system, at the Tenant's expense.
 4. Tenant shall provide and install addressable input modules to monitor tenant hood suppression systems as required. Restaurant Tenant kitchen hood suppression systems shall be provided and installed by the Tenant. Addressable input modules shall be connected to the Landlord's base building fire alarm system, at the Tenant's expense.
 5. Final connection of the Tenant's fire alarm system to the Landlord provided base building fire alarm system shall be provided by the Landlord's base building contractor, at the Tenant's expense.
 6. All tenant fire alarm wiring or cable shall be in rigid or EMT conduit. Flexible conduit is not acceptable. Tenant shall color code all conduits, backboxes, and fittings in accordance with the tenant coordination requirements.
 7. Final acceptance testing of the Tenant's premises fire alarm system shall be performed by the Landlord's base building contractor concurrent with the base building's fire alarm system final acceptance test, at the Tenant's expense.
 8. Entire installation shall confirm with the standard project details.

Electrical

Electrical

1. General Requirements:
 - a. Access: Equipment must be installed allowing clear access for servicing.
 - b. Electrical Data Tabulation Sheets: Must be filled out completely, certified by engineer of record, and submitted with Construction Document for Landlord Review Process.

- c. Tenant Electric Design Loads:
 - i. Retail (dry goods): 14 watts/sq ft
 - ii. Restaurant (sit down style): 30 watts/sq ft
 - d. Lighting Control: Utilize daylight sensors and dimmable ballasts to control light levels in day-lit zones of your space where appropriate and occupancy sensors for lighting in auxiliary spaces (non-sales areas).
2. Landlord Work:
- a. Electric Service Conduits: Landlord has provided 2.5" or 4" empty electric service conduits with pull cords from Tenant's leased premise stubbed into Landlord electrical room. Refer to Base Building Tenant Conduit Provision Plans.
 - b. Electric Service Characteristics: Power for the Leased Premises is available at 480/277 volts, 3 phase, 4 wire, 60 hertz. Maximum electric service size for tenants receiving 2.5" conduits shall be 200 amps. Where Tenant services are anticipated to be in excess of 200 amps, one or more 4" conduits have been provided. Refer to Base Building Tenant Conduit Provision Plans.
 - c. Tenant Metering Switchboard: Landlord has provided a Tenant Metering Switchboard located in a Landlord Electrical Room. All tenant circuit breakers in the Tenant Metering Switchboards are to be furnished by tenant and installed by Landlord contractor at tenant expense. **Meter will be provided by utility company.**
 - i. **For Tenants indicated to receive a 2.5" electrical service conduit, Landlord has provided an "In-Line Meter Compartment" and provisions for installation of circuit breaker sized up to 200 amps by Tenant.**
 - ii. **For Tenants indicated to receive one or more 4" electrical service conduits, Landlord has provided a "Large Tenant CT Section" and provisions for installation of a circuit breaker sized up to 800 amps by Tenant.**
 - d. Telecommunications Service Conduits: Landlord has provided **1.5" or 2"** empty telecommunications service conduits with pull cords from Tenant's leased premise to nearest Center Telecommunications Closet. Refer to Base Building Tenant Conduit Provision Plans.
3. Tenant Work
- a. Electrical Service Feeders and Other Equipment: Tenant shall provide electrical service feeders in existing conduit from Landlord provided Tenant Distribution Switchboard to tenant's premises. All conductors shall be insulated copper wire, type THHN/THWN.
 - b. Tenant Service Circuit Breakers: All tenant service circuit breakers in the Landlord provided Tenant Metering Switchboards are to be furnished by tenant and installed by Landlord's contractor at tenant expense.

- c. Tenant shall provide all panelboards, transformers, conduits, wiring, and final connections to all electrical devices, equipment, and appurtenances within the tenant's Leased Premises.
- d. Tenant shall provide all lighting fixtures, lamps, signs, controls, and all associated conduits and wiring within the tenant's Leased Premises.
- e. Panelboard Design: Panelboards shall be designed for 20% minimum spare ampacity (based on connected load) and 20% spare breaker space.
- f. Lighting Fixtures: Select high quality, energy efficient fixtures considering aesthetics and the visual comfort of occupants. All lighting fixtures in tenant's sales areas, other than decorative fixtures, shall be recessed. Fluorescent fixtures shall be direct/indirect type with perforated center basket diffusers. Track Lighting at the storefront display area shall be recessed or concealed. Track lighting outside the storefront display area may be surface mounted.
 - i. Lighting shall not spill outside premises and no direct glare shall be visible to public view.
 - ii. Bare lamp fluorescent or incandescent fixtures may not be used except in stockrooms or areas inaccessible to customers.
- g. Telecommunications Service Cabling: Tenant shall provide telecommunications service cabling in existing conduit from the Telecommunications Closet to the tenant's leased premise.
- h. Television, LCD's and Security Equipment: Television, LCD screens and security equipment, and all conduits, wiring, and related items in the sales area are subject to Landlord review and approval. The installation of Televisions & LCD screens in tenant sales area for marketing and advertising are subject to Landlord review and approval. Television & LCD screens must be a minimum of 10 ft from the storefront leaseline. The installation of any roof mounted antenna must be approved, in writing, by Landlord.
- i. Exit/Emergency Lighting System: Tenant shall provide exit/emergency lighting system functioning on a normal source or battery operated source for loss of power conditions (as required by governing codes).
- j. Emergency lighting: Tenant shall provide emergency lighting as required to illuminate stock, food preparation area or sales area and rear exit way during power outages. Said lighting shall be battery operated, recessed lights or twin-head light pack(s). In areas visible to customers, battery assembly for emergency and exit lights shall be concealed and remote type light fixtures used.
- k. Signage: Tenant shall provide transformers, ballasts, conduit, wiring, and related items for signs. Circuits serving sign(s) shall be connected by a time switch.
- l. Transformers: Transformers are to be mounted on the floor or structural wall, not from the building structure or demising wall.

- m. Three phase transformers (dry-type): Three phase dry-type transformers shall have six standard full capacity tap arrangements. Entire installation within tenant's premises shall be balanced to within 10% across all three phases.
- n. Service Call System: Tenant shall provide and install a buzzer call system and all related conduit and wire located at back service corridor and must not be audible in sales area.
- o. Codes and UL: Entire installation shall meet all requirements of national or local electrical codes. All equipment shall bear UL labels or labels from other third party testing agencies recognized by local code enforcement authority
- p. Conduit: All electrical wiring systems shall be in conduit. The use of "Bx" or "Romex" is not permitted. Speaker, security, or other low voltage wiring within the tenant's leased premise must be plenum rated or in conduit.

General Requirements

- 1. Access: Equipment must be installed allowing clear access for servicing.
- 2. Electrical Data Tabulation Sheets: Must be filled out completely, certified by engineer of record, and submitted with Construction Document for Landlord review process.
- 3. **Tenant Electric Design Loads**:
 - a. **Retail (dry goods): 14 watts/sq ft**
 - b. **Restaurant (sit down style): 25 watts/sq ft**
- 4. Lighting Control: Utilize daylight sensors and dimmable ballasts to control light levels in day-lit zones of your space where appropriate and occupancy sensors for lighting in auxiliary spaces (non-sales areas).
 - a. Select high quality, energy efficient fixtures considering aesthetics and the visual comfort of occupants.

Landlord Work

- 1. Electric Service Conduits: Landlord has provided 2.5" or 4" empty electric service conduits with pull cords from Tenant's leased premise to nearest Center Tenant Metering Switchboard. Refer to Base Building Tenant Conduit Provision Plans. See Base Building Drawings page E-901 and E-902 for size and quantity.
- 2. Electric Service Characteristics: Power for the leased premises is available at 480/277 volts, 3 phase, 4 wire, 60 hertz. Maximum electric service size for Tenants receiving 2.5" conduits shall be 200 amps. Where Tenant services are anticipated to be in excess of 200 amps, one (1) or more 4" conduits have been provided as specified in the Base Building Tenant

Conduit Provision Plans. See Base Building Drawings page E-901 and E-902 for size and quantity.

3. Meter Compartment and Circuit Breaker: Landlord has made the following provisions in the Center's Tenant Metering Switchboards:
 - a. For Tenants indicated to receive a 2.5" electrical service conduit, Landlord has provided an "In-Line Meter Compartment" and provisions for installation of a circuit breaker sized up to 200 amps by Tenant.
 - b. For Tenants indicated to receive one or more 4" electrical service conduits, Landlord has provided a "Large Tenant CT Section" and provisions for installation of a circuit breaker sized up to 800 amps by Tenant.

All circuit breakers are to be furnished by Tenant and installed by Landlord contractor at tenant expense. **Meter provided by Utility Company.**

4. Telecommunications Service Conduits: Landlord has provided 1.5" or 2" empty telecommunications service conduits with pull cords from Tenant's leased premise to nearest Center Telecommunications Closet. Refer to Base Building Tenant Conduit Provision Plans. See Base Building Drawings page E-901 and E-902 for size and quantity.
5. Telecommunications Service Backbone: Landlord has provided the Telecommunications Service Backbone from the "Main Point of Entry (MPOE)" to the Telecommunications Closets distributed throughout the Center. Telecommunications service cabling from the Telecommunications Closet to the Tenant's leased premise shall be the responsibility of the Tenant in conjunction with the Telecommunications Service Provider.

Tenant Work

2. Upon completion of Tenant build out, tenant must provide one (1) pdf plan with as-built information for Mechanical, Electrical and Plumbing.

3. Electrical Service Feeders and Other Equipment: Tenant shall provide electrical service feeders in existing conduit from Landlord's metering switchboard to Tenant's premises. Tenant shall coordinate metering and power requirements with Utility Company and Landlord. All conductors shall be insulated copper wire, type THHN/THWN.
 - a. Tenant shall provide all panelboards, transformers, conduits, wiring, and final connections to all electrical devices, equipment, and appurtenances within the Tenant's leased premises.
 - b. Tenant shall provide all lighting fixtures, lamps, signs, controls, and all associated conduits and wiring within the Tenant's leased premises.
4. Panelboard Design: Panelboards shall be designed for 20% minimum spare ampacity (based on connected load) and 20% spare breaker space.
5. Lighting Fixtures: All lighting fixtures in Tenant's sales areas, other than decorative fixtures, **shall be recessed**. Fluorescent fixtures shall be 2' x 2' direct/indirect type with perforated

center basket diffusers.

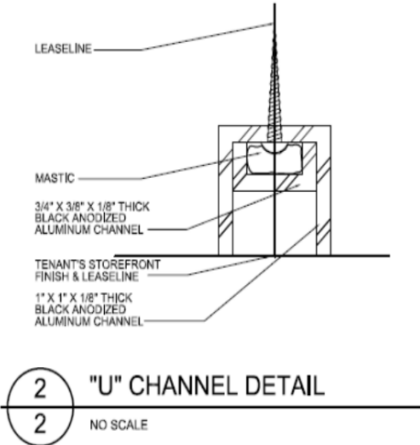
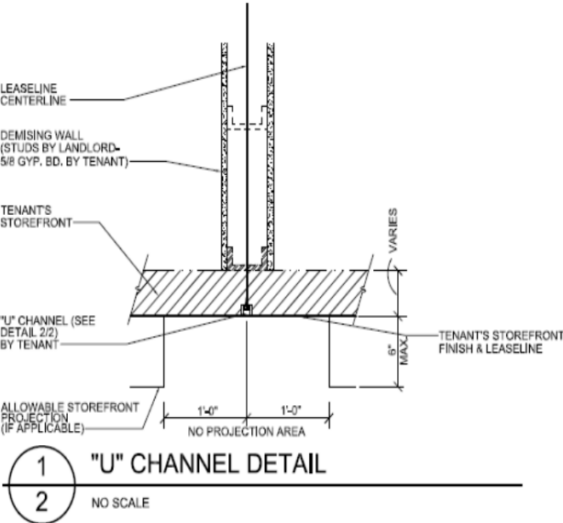
- a. Track lighting at the storefront display area shall be recessed. Track lighting outside the storefront display area may be surface mounted.
 - b. Lighting shall not spill outside premises and no direct glare shall be visible to public view.
 - c. Bare lamp fluorescent or incandescent fixtures may not be used except in stockrooms or areas inaccessible to customers.
6. Telecommunications Service Cabling: Tenant shall provide telecommunications service cabling in existing conduit from the Telecommunications Closet to the Tenant's leased premise.
 7. Television and Security Equipment: Tenant shall be responsible for providing television and security equipment, and all conduits, wiring, and related items for same. The installation of any roof mounted antenna must be approved, in writing, by Landlord.
 8. Antennas & Satellite Dishes: The installation of any roof mounted antenna/satellite must be approved, in writing, by Landlord and coordinated with Mall Facilities prior to install.
 9. Exit/Emergency Lighting System: Tenant shall provide exit/emergency lighting system functioning on a normal source or battery operated source for loss of power conditions (as required by governing codes).
 - a. Emergency lighting shall be provided by Tenant to illuminate stock, food preparation area or sales area and rear exit way during power outages. Said lighting shall be battery operated, recessed lights or twin-head light pack(s).
 - b. **In areas visible to customers, battery assembly for emergency and exit lights shall be concealed and remote type light fixtures used.**
 10. Signage: Tenant shall provide transformers, ballasts, conduit, wiring, and related items for signs. Circuits serving sign(s) shall be connected by a time switch.
 11. Transformers: Transformers are to be mounted on the floor or structural wall, not from the building structure or demising wall.
 - a. Three phase transformers (dry-type), for all Tenants, shall have six standard full capacity tap arrangements. Entire installation within Tenant's premises shall be balanced to within 10% across all three phases.
 12. Service Call System: Tenant shall provide and install a buzzer call system and all related conduit and wire located at back service corridor and must not be audible in sales area
 13. Codes and UL: Entire installation shall meet all requirements of national or local electrical codes. All equipment shall bear UL labels.

*the*MALL*at*
GREEN HILLS

14. Conduit: All electrical wiring systems shall be in conduit. The use of "Bx" or "Romex" is not permitted. Speaker, security, or other low voltage wiring within the Tenant's leased premise must be plenum rated or in conduit.
15. Roof Access: Unless approved otherwise in the Tenant's lease, a Roof Access Agreement is required prior to the installation

Attachment A

'U' Channel Details



A larger version of this drawing can be found in your Design Package, file name: MGH-2of2.dwg.

Attachment B

Tenant Space Identity Signage

STOREFRONT:

Backplate:	4 Characters = 4"x11" 3 Characters = 4"x7" 1/8" Thick Brushed (horizontal) Aluminum w/ 1/6" Chamfered Edge
2 Installation Options:	Use 4 ea. Countersunk Aluminum Flat Head Wood Screws OR: Silicon to Storefront Glass (No Screw Holes)
Numerals:	1/8" Thick Matte Black Anodized Aluminum (Returns & Face) Adhered to Backplate
Font:	Helvetica Bold Condensed
Location:	Lower Right Hand Storefront

SERVICE DOORS:

Tenants are required to provide space identity signage on rear exit (service doors). This signage should adhere to the following criteria:

- **3" Font Size**
- **Contrasting Color**

Attachment C

Public Restroom Decal

Decal provided by Landlord; installed by Tenant



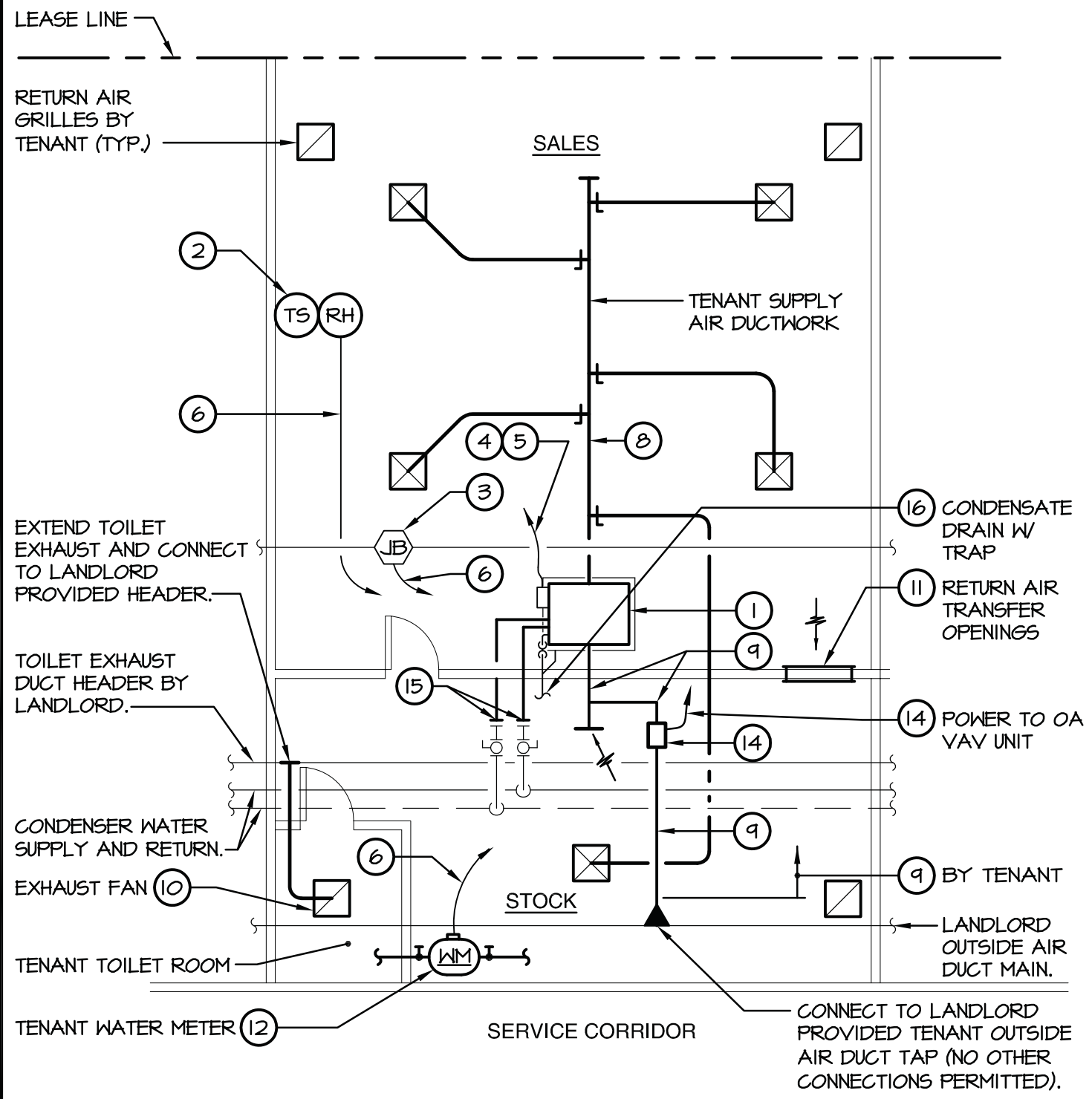
Decal Location

The decal must be located at the height between 40" and 50". The sign should be located on the storefront window. If the store does not have a storefront window, locate the decal on a wall nearest the store entrance.



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PROJECT	MALL OF GREEN HILLS (PHASE 3B)		
PROJECT NUMBER	15120	DATE	11/23/2017
BY	MFC	PAGE NUMBER	1 OF 12

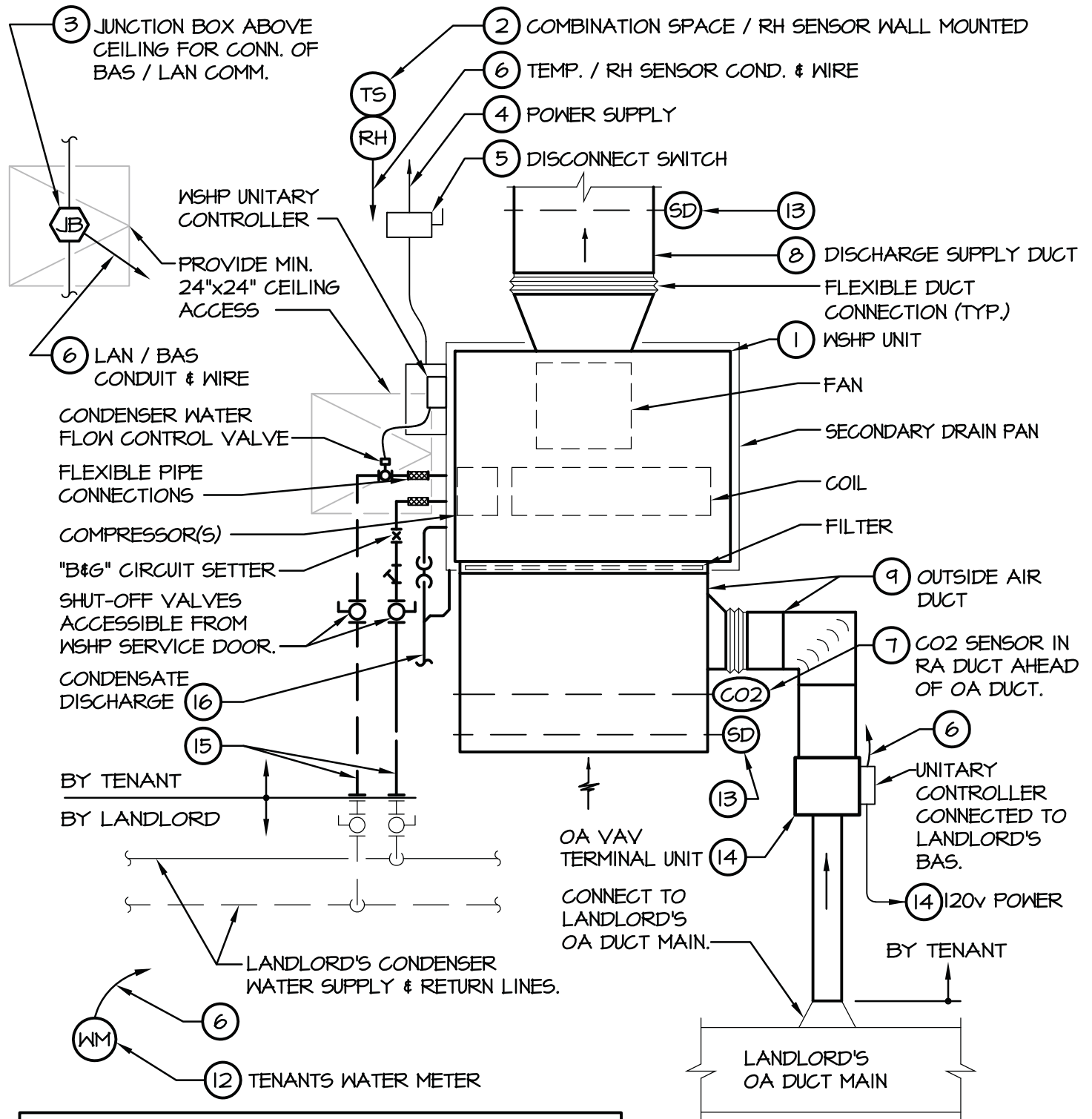


NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.



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PROJECT NUMBER	15120	DATE	11/23/2017
BY	MFC	PAGE NUMBER	2 OF 12



NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.

SCHEMATIC DIAGRAM TENANT WATER SOURCE HEAT PUMP UNIT & WATER METER CONNECTION

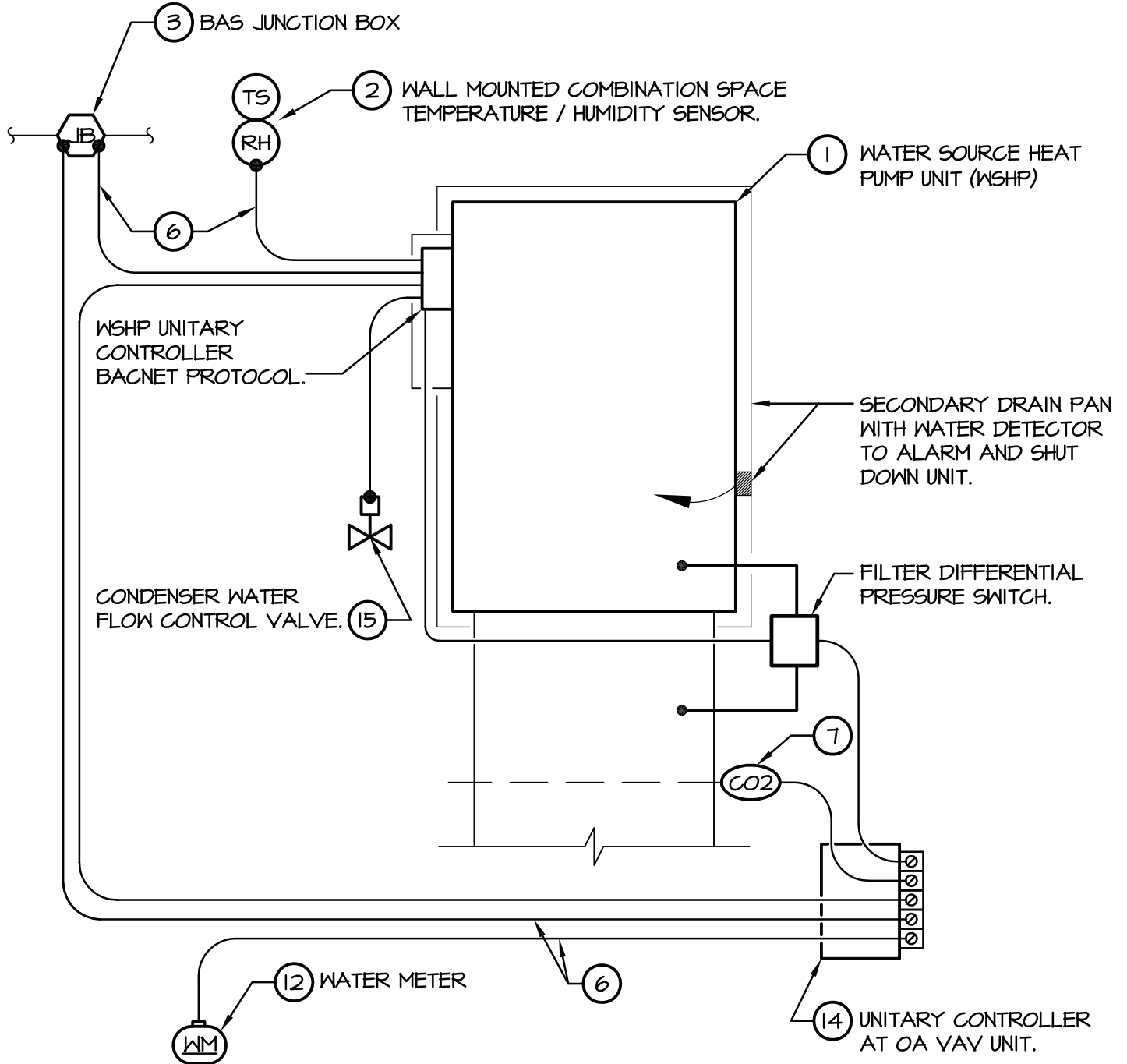
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TI-2

NO SCALE



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BY	MFC	PAGE NUMBER	3 OF 12



NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.

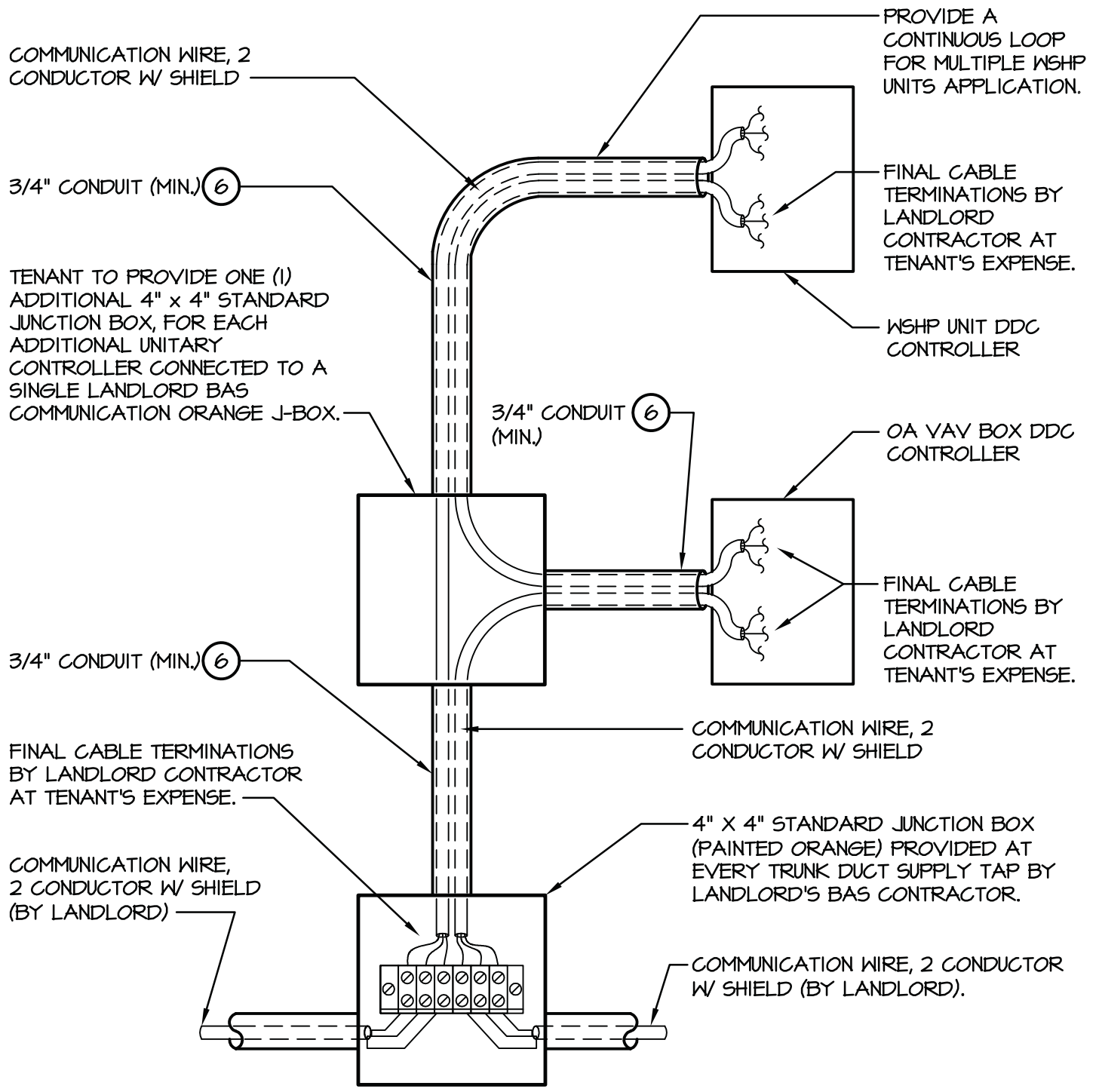
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TI-3

SCHEMATIC WIRING / CONTROL DIAGRAM
NO SCALE



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PROJECT NUMBER	15120	DATE	11/23/2017
BY	MFC	PAGE NUMBER	4 OF 12



NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.

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TI-4

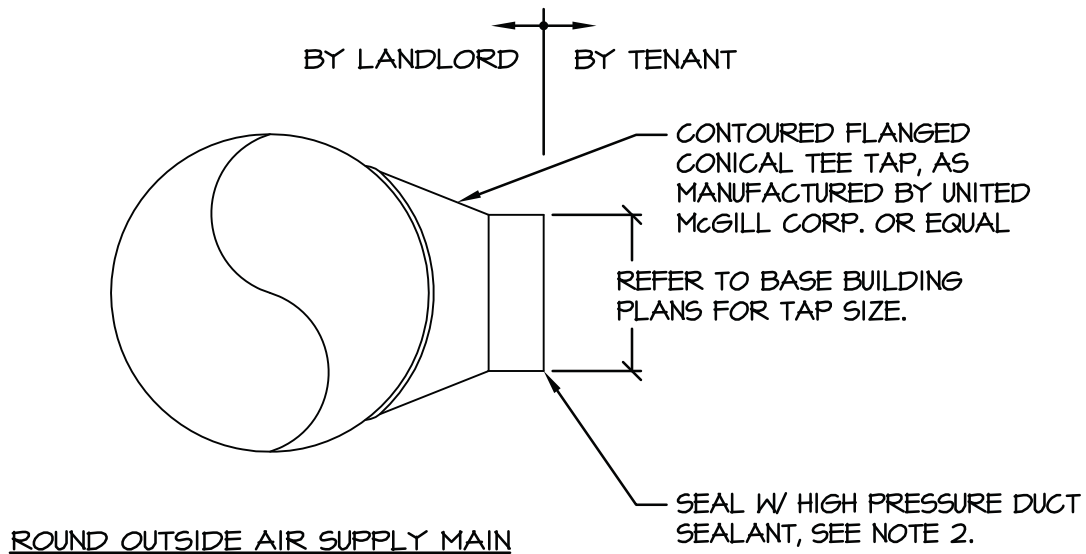
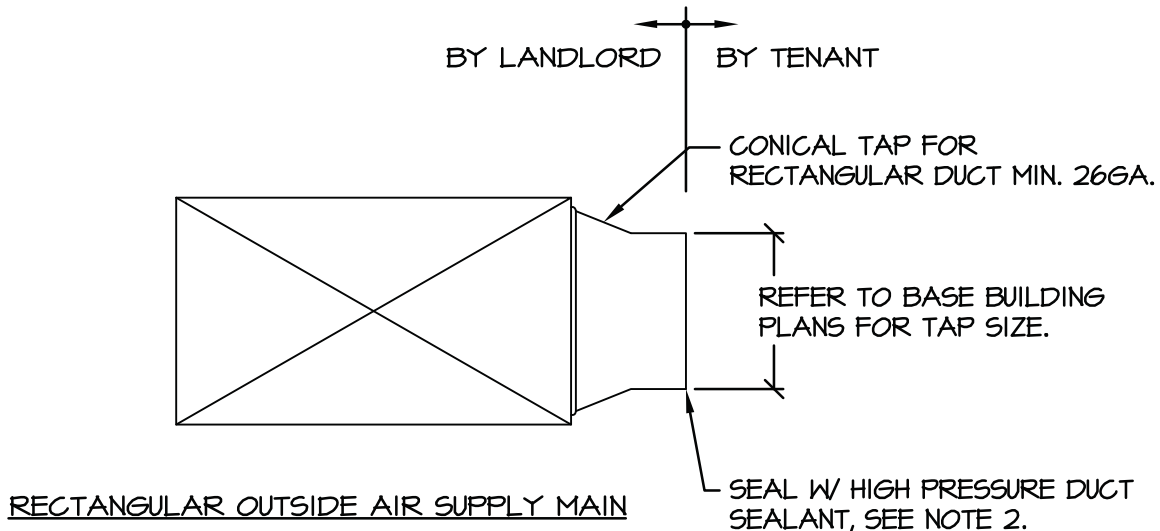
COMMUNICATION CABLE WIRE INSTALLATION DETAIL

NO SCALE



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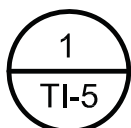
PROJECT	MALL OF GREEN HILLS (PHASE 3B)		
PROJECT NUMBER	15120	DATE	11/23/2017
BY	MFC	PAGE NUMBER	5 OF 12



NOTES:

1. PROVIDE DUCT CONNECTIONS TO OUTSIDE AIR SUPPLY DUCT MAIN IN ACCORDANCE WITH THIS DETAIL.
2. DUCT SEALANT SHALL BE UNITED MCGILL SEALER, UNI-WEATHER HARD CAST IRON ALL WEATHER SEALER, OR EQUAL. SEALANT SHALL BE UL LISTED AND HAVE FIRE HAZARD CLASSIFICATION RATING NOT EXCEED 25 FLAME SPREAD AND 50 SMOKE DEVELOPED.

NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.



OUTSIDE AIR DUCT CONNECTION DETAIL

NO SCALE



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PROJECT

MALL OF GREEN HILLS (PHASE 3B)

PROJECT
NUMBER

15120

DATE

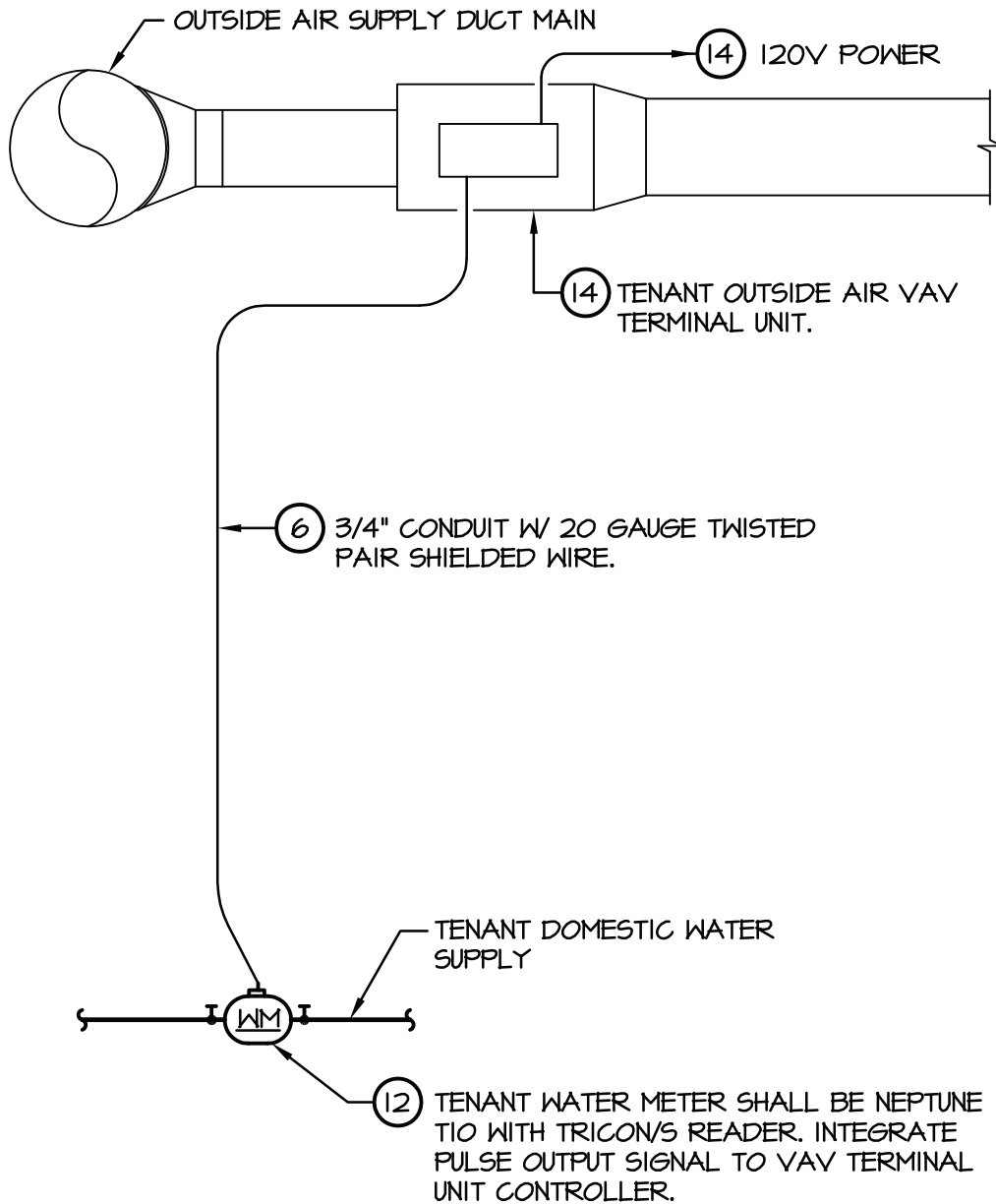
11/23/2017

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MFC

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NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.

1
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TENANT WATER METER DETAIL

NO SCALE



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PROJECT

MALL OF GREEN HILLS (PHASE 3B)

PROJECT
NUMBER

15120

DATE

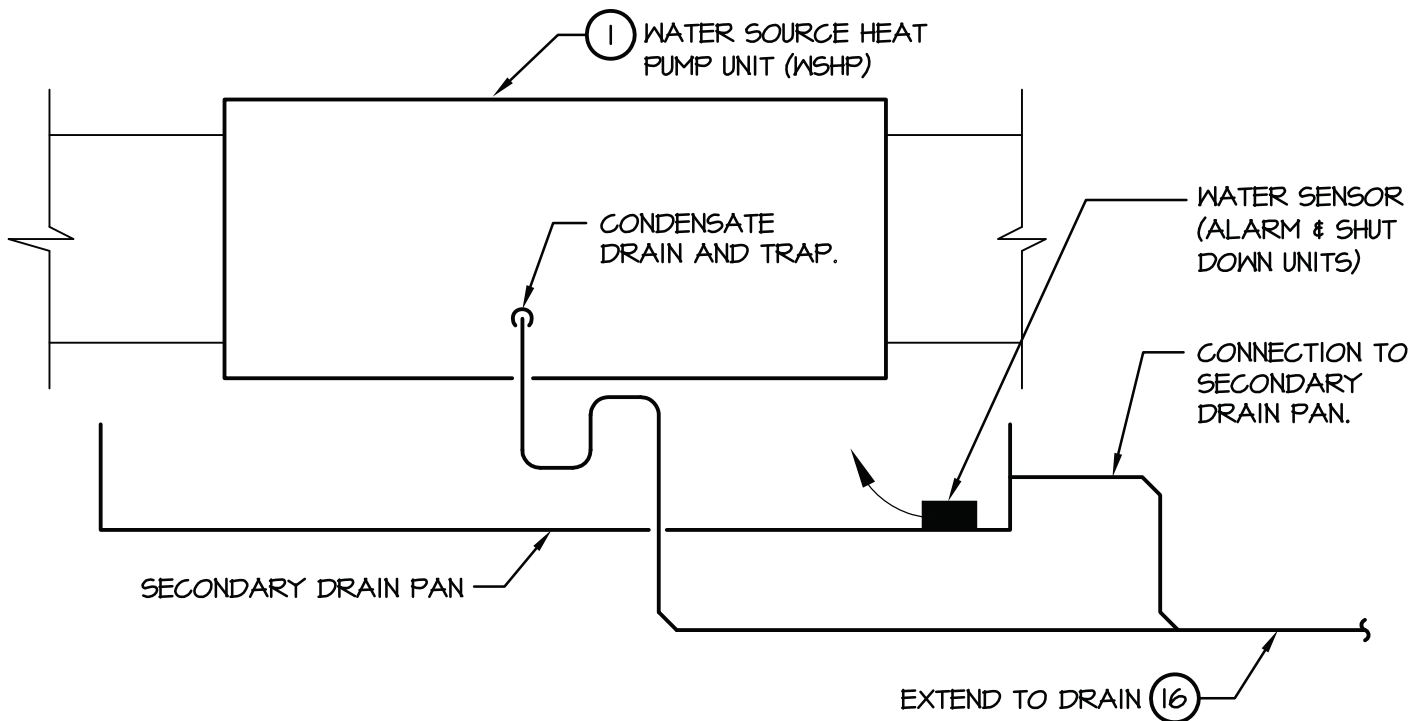
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NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.

1
TI-7

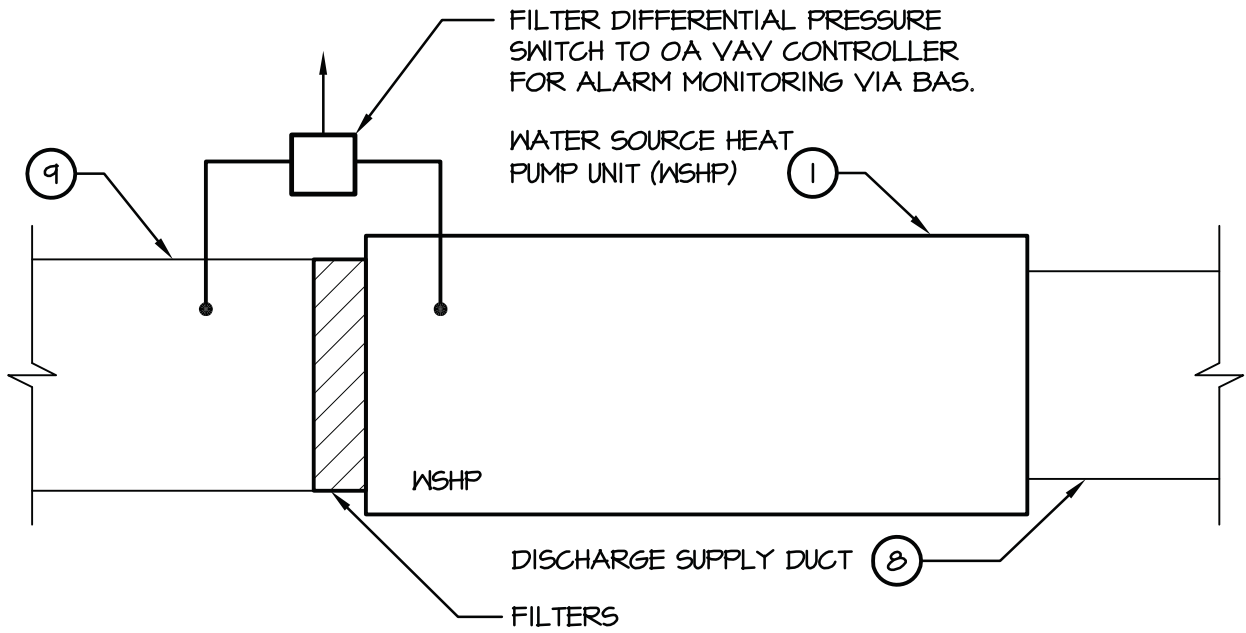
CONDENSATE DRAIN CONNECTION DETAIL

NO SCALE

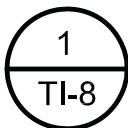


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NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.



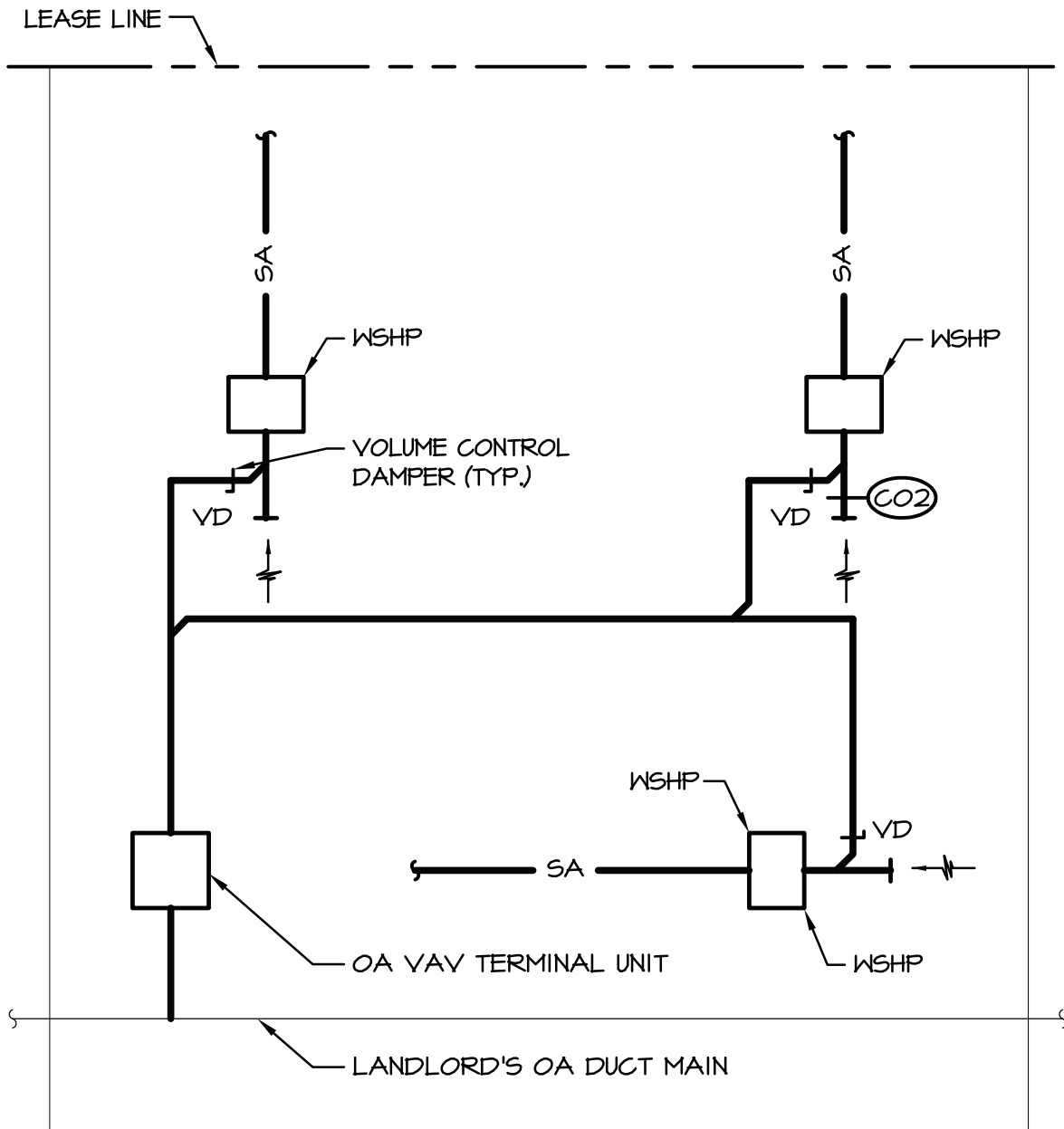
FILTER DIFFERENTIAL PRESSURE DETAIL

NO SCALE



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NOTE:
THE PURPOSE OF THIS DETAIL IS TO CLARIFY, WHEN MULTIPLE WSHP UNITS ARE BEING USED, A SINGLE OA VAV UNIT IS TO BE USED FOR REGULATING OUTSIDE AIR QUANTITY.

NOTE: REFER TO PAGES 10, 11, & 12 FOR KEYED NOTES.

1
TI-9

TENANT WITH MULTIPLE WSHP UNITS

NO SCALE



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PROJECT	MALL OF GREEN HILLS (PHASE 3B)		
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KEYED NOTES:

- ① WATER SOURCE HEAT PUMP "WSHP"
TENANT WSHP UNITS SHALL INCLUDE SUPPLY FAN, EVAPORATOR COIL, COMPRESSOR(S), HEAT EXCHANGER, HOT GAS REHEAT COIL, BACNET UNITARY CONTROLLER, COMBINATION TEMPERATURE AND HUMIDITY SPACE SENSOR, HIGH CONDENSATE SENSOR WITH AUTO SHUT-DOWN, FILTERS AND ALL NECESSARY SAFETIES. PROVIDE ADEQUATE CLEARANCES FOR SERVICING THE EQUIPMENT WHICH SHALL INCLUDE A MINIMUM OF 3 FEET CLEARANCE ON BOTH SIDES. ACCESS TO WSHP UNIT MUST BE PROVIDED AND MAINTAINED. TENANT'S CONTRACTOR SHALL PROVIDE A SECONDARY DRAIN PAN UNDER ALL WSHP UNITS. UPON DETECTION OF HIGH CONDENSATE THE UNIT SHALL BE DISABLED.
- ② COMBINATION TEMPERATURE AND HUMIDITY SENSOR
SENSOR SHALL BE WALL MOUNTED AND LOCATED IN AN AREA UNOBSTRUCTED FOR PROPER ROOM AIR CIRCULATION. SENSOR SHALL BE PREPURCHASED AND INSTALLED BY THE LANDLORD AT TENANTS' EXPENSE.
- ③ JUNCTION BOX (LANDLORD'S BAS CONNECTION POINT)
JUNCTION BOX SHALL BE PAINTED ORANGE AND LOCATED ABOVE TENANT'S CEILING FOR TERMINATION POINT OF TENANTS' EQUIPMENT. REFER TO PAGE 3 DETAIL "1/TI-3" FOR CONNECTION OF OUTSIDE AIR VAV & WSHP UNITS. ACCESS TO JUNCTION BOX MUST BE PROVIDED AND MAINTAINED.
- ④ POWER TO WSHP UNIT
TENANT TO PROVIDE POWER TO WSHP UNITS. THE POWER FEED SHALL BE DEDICATED TO THE WSHP UNIT(S) ONLY AND SHALL INCLUDE A LOCKING MECHANISM ON CIRCUIT BREAKER TO ELIMINATE UNINTENDED SHUT DOWN OF EQUIPMENT. COORDINATE POWER REQUIREMENTS WITH EQUIPMENT PREPURCHASED BY LANDLORD.
- ⑤ DISCONNECT SWITCH AT WSHP UNIT
PROVIDE ELECTRICAL SERVICE DISCONNECT SWITCH ADJACENT TO THE WSHP UNIT FOR SERVICING OF EQUIPMENT. ACCESS TO THE DISCONNECT SWITCH MUST BE PROVIDED AND MAINTAINED..
- ⑥ LAN / BAS CONDUIT AND WIRING
ALL BAS COMMUNICATION WIRING SHALL BE INSTALLED IN 3/4" CONDUIT. ALL BAS WIRING & ASSOCIATED CONDUIT SHALL BE INSTALLED BY LANDLORD CONTRACTOR AT TENANT'S EXPENSE.
- ⑦ RETURN AIR CO2 SENSOR
CO2 SENSOR SHALL BE FURNISHED AND INSTALLED BY LANDLORD'S BAS CONTRACTOR AT TENANT'S EXPENSE IN RETURN AIR DUCT. SENSOR WILL BE UTILIZED FOR DEMAND CONTROL VENTILATION TO REGULATE THE DAMPER IN THE OA VAV TERMINAL UNIT.
- ⑧ DISCHARGE SUPPLY DUCTWORK
DISCHARGE SUPPLY DUCTWORK SHALL BE RIGID GALVANIZED SHEET METAL. ALL SUPPLY DUCTWORK SHALL BE EXTERNALLY INSULATED WITH A CONTINUOUS VAPOR BARRIER. PROVIDE FLEXIBLE DUCT CONNECTION AT WSHP.



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KEYED NOTES: (CONTINUED)

- 9 OUTSIDE AIR & MIXED AIR DUCT PLENUM
OUTSIDE AND MIXED AIR DUCTWORK SHALL BE RIGID GALVANIZED SHEET METAL. ALL OUTSIDE AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH A CONTINUOUS VAPOR BARRIER. INLET DUCT TO OA VAV UNIT MUST BE 3 TO 5 FEET OF STRAIGHT DUCT AT INLET AND SHALL BE FULL SIZE OF UNIT CONNECTION. PROVIDE FLEXIBLE DUCT CONNECTIONS AT EQUIPMENT CONNECTIONS.
- 10 TENANT TOILET EXHAUST
TOILET EXHAUST FAN OR COMBINATION FAN / LIGHT WITH EXHAUST DUCTWORK SHALL BE PROVIDED BY THE TENANT'S CONTRACTOR. EXHAUST DUCTWORK SHALL BE RIGID SHEET METAL AND EXTENDED AND CONNECTED TO LANDLORD'S PROVIDED HEADER DUCT SYSTEM.
- 11 RETURN AIR TRANSFER OPENINGS
RETURN AIR TRANSFER OPENINGS IN TENANT WALLS SHALL BE PROVIDED BY THE TENANT AT TENANT'S EXPENSE. OPENINGS SHALL BE SIZED TO ALLOW THE CONVEYANCE OF RETURN AIR TO THE WSHP UNITS USING THE CRITERIA OF A MAXIMUM PRESSURE DROP OF 0.05" W.G.
- 12 TENANT'S DOMESTIC WATER METER
TENANT'S DOMESTIC WATER METER SHALL BE CONNECTED TO THE OUTSIDE AIR VAV UNIT CONTROLLER FOR REMOTE READING THROUGH THE LANDLORD'S BAS. TENANT WATER METERS SHALL BE FURNISHED BY THE LANDLORD AT TENANT'S EXPENSE AND INSTALLED BY THE TENANT'S CONTRACTOR. ALL WIRING SHALL BE IN 3/4" CONDUIT.
- 13 DUCT DETECTOR
WHERE REQUIRED DUCT MOUNTED SMOKE DETECTOR SHALL SHUTDOWN UNIT UPON DETECTION OF SMOKE.
- 14 OUTSIDE AIR VAV TERMINAL UNIT
TENANT SHALL INSTALL A SINGLE DUCT VAV UNIT WITH UNITARY CONTROLLER FOR REGULATION OF OUTSIDE AIR QUANTITIES. THE TENANT CONTRACTOR SHALL PROVIDE A 120V POWER SOURCE WITH DISCONNECT SWITCH AT THE UNIT. CIRCUIT BREAKER SHALL HAVE A LOCKING MECHANISM TO PREVENT UNINTENDED SHUTDOWN OF EQUIPMENT. REFER TO PAGE 9 DETAIL "I/1I-9" FOR TENANT WHICH USES MULTIPLE WSHP UNITS.
- 15 CONDENSER WATER PIPING & REQUIREMENTS
THE TENANT'S CONTRACTOR SHALL PROVIDE CONDENSER WATER PIPING FROM THE LANDLORD CONNECTIONS TO THE WSHP UNITS. TENANT CONDENSER WATER SYSTEMS SHALL BE FILLED BY LANDLORD CONTRACTOR AT TENANT'S EXPENSE.
THE ACCESSORIES SHALL INCLUDE SHUT-OFF VALVES ADJACENT TO THE UNIT, FLEXIBLE PIPE CONNECTIONS OR BRAIDED HOSES, FLOW CONTROL VALVE, STRAINER AND A "B&G" CIRCUIT SETTER FOR BALANCING CONDENSER WATER FLOW RATES.
THE TENANT'S PIPING AND EQUIPMENT SHALL BE DESIGNED NOT TO EXCEED A MAXIMUM PRESSURE DROP OF 25 FEET OF HEAD.



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KEYED NOTES: (CONTINUED)

16 CONDENSATE DRAINAGE

THE TENANT'S CONTRACTOR SHALL PROVIDE CONDENSATE TRAP AND CONDENSATE DRAIN PIPING. PIPING SHALL BE EXTENDED FOR DISCHARGE INTO AN INDIRECT WASTE CONNECTION AS PART OF THE SANITARY DRAINAGE SYSTEM. A DRAIN CONNECTION FROM THE SECONDARY DRAIN PAN SHALL BE PROVIDED. IN THE EVENT THE CONDENSATE CAN NOT BE DRAINED BY GRAVITY PROVIDE A CONDENSATE PUMPING SYSTEM COMPLETE WITH PUMP FAILURE / HIGH WATER ALARMS.

DESIGN CRITERIA:

OUTSIDE AIR:

0.4 CFM PER SF (MEDIUM PRESSURE)

EXHAUST AIR:

75 CFM PER TOILET (APPROXIMATE)

COOLING:

LOWER LEVEL = 333 SF PER TON (2 GPM PER TON)

UPPER LEVEL = 300 SF PER TON (2 GPM PER TON)

CONDENSER WATER LOOP TEMPERATURE:

88°F ENTERING, 103°F LEAVING

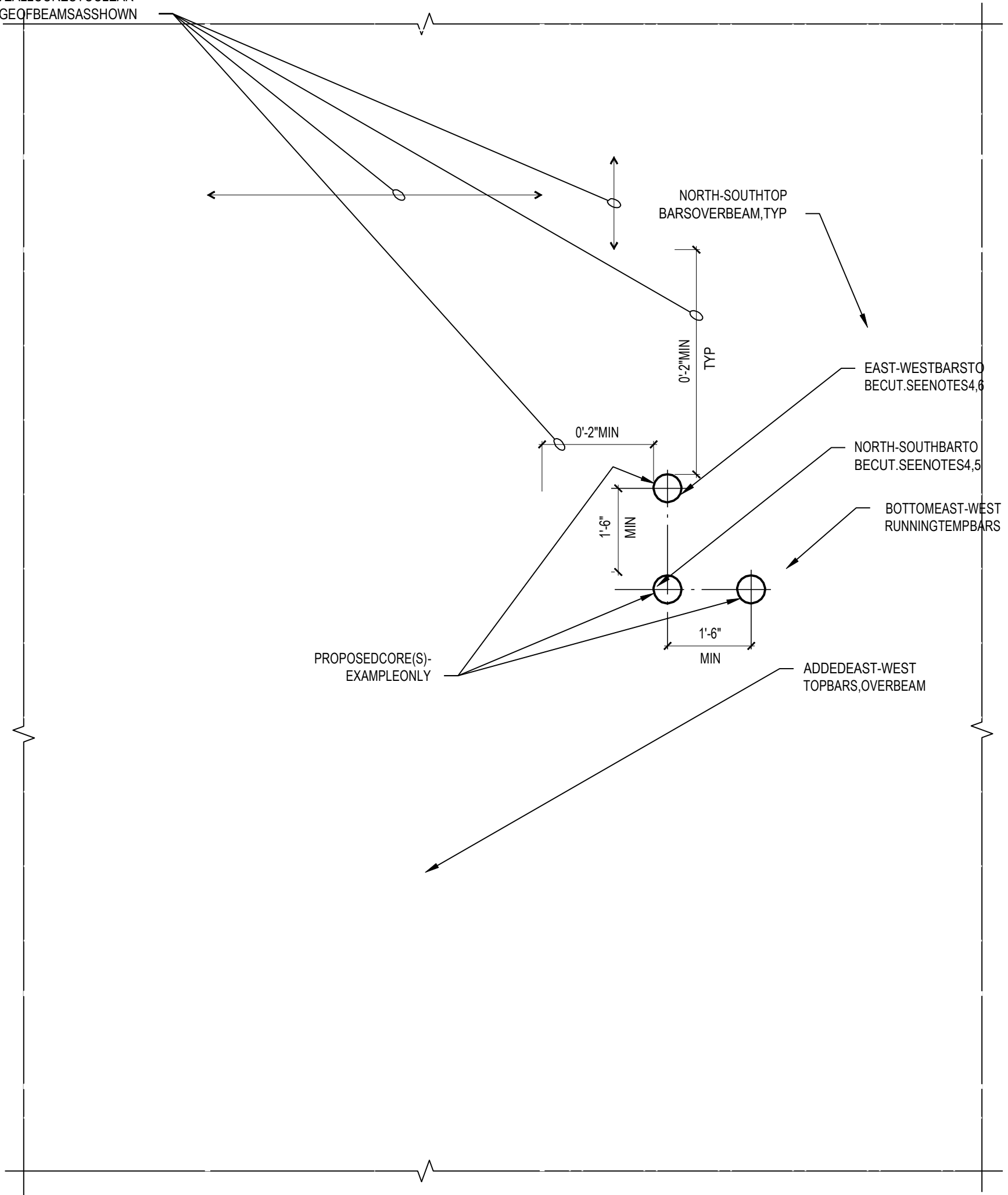
NOTE:

LANDLORD BAS IS BACNET COMMUNICATION PROTOCOL.
ALL TENANT CONTROLLERS MUST BE INTEGRATED INTO
LANDLORD BAS VIA BACNET MS/TP LAN.

EXHIBIT G

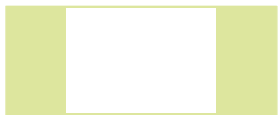
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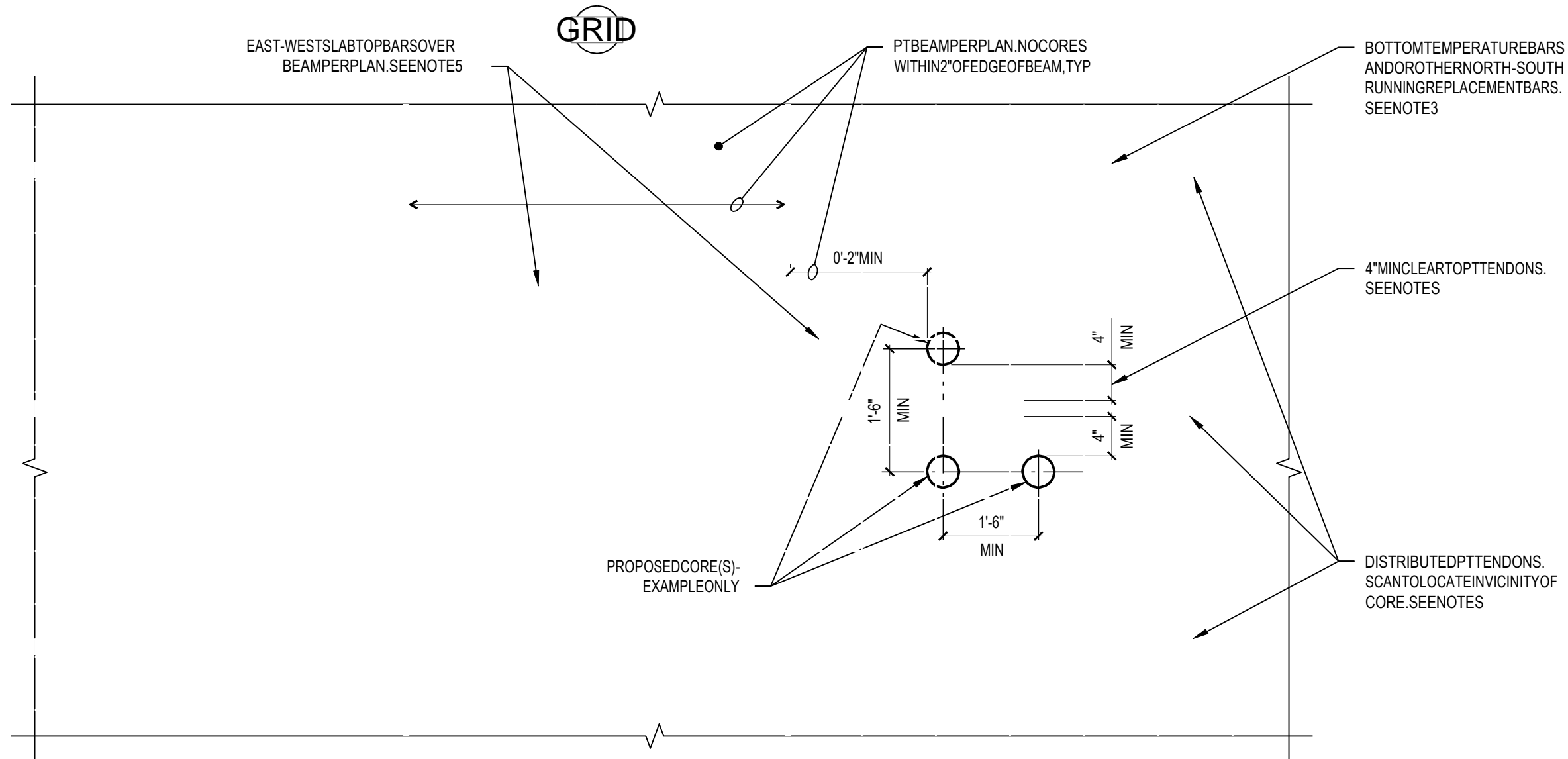
(E) POST-TENSIONED AND
NON-POST-TENSIONED BEAMS PER
PLAN. LOCATE ALL CORES TO CLEAR
EDGE OF BEAMS AS SHOWN



ALTERNATE PLAN-GRIDS B.62-D.49 AND J.12-K.99 MILD REINFLAB CORE NOTES :

1. This detail pertains to construction in accordance with the Alternate plan, where a mild-reinforced slab is constructed between grids B.62-D.49 and grids J.12-K.99. Refer to X-xxx for areas between D.49-J.12.
2. All cores shall be located to clear the edge of concrete beams below per the landlord's shell drawings.
3. Scan the top and bottom surface of the slab using ground-penetrating-radar (GPR) or other NDT scanning equipment capable of detecting and locating existing reinforcing at depth. Locate all top and bottom bars present in each direction within the vicinity of the proposed slab core.
4. Locate all bar stop plan for and prevent damage to existing reinforcing within the limits outlined below. All cores shall be located so that the core clears reinforcing by a minimum of 2" except where bar damage is planned for within these limitations.
5. It is permissible to cut one north-south running top bar and/or one north-south running bottom bar within a 10 foot width of slab measured east-west.
6. It is permissible to cut one east-running top bar and/or bottom bar within a 5 foot width of slab measured north-south.
7. The maximum slab core size is 6 inches outside core diameter. Slab cores shall be spaced a minimum of 1'-6" o.c. Move planned core locations as required to provide clearance to reinforcing bars, other cores, and beam edges as shown and noted above.

SHEET NO.: Figure G-1	PROJECT: The Mall at Green Hills, Expansion Area E Construction Criteria - Attachment G			 810 THIRD AVENUE, STE 308 SEATTLE, WA 98116 TEL 206.402.4290
	DESCRIPTION: Typical Slab Core Detail at Mild-Reinforced Concrete Slab (Alt Plan Grids B.62-D.49 and J.12-K.99)			
PROJECT NO.:	ISSUE TYPE: Ref: x	ISSUE DATE: 10/10/2017	DRAWN BY: CAL	



POSTENSIONED (PT) SLAB CORE NOTES :

1. No PT slab tendons may be cut or damaged during installation of slab cores. The following minimum precautions and procedures shall be used to prevent this from occurring. Damaged slab tendons shall be repaired at the Tenant's expense.
2. Scan the top and bottom surface of the PT slab using ground-penetrating-radar (GPR) or other NDT scanning equipment capable of detecting and locating existing reinforcing at depth. Locate all top and bottom bars present in each direction within the vicinity of the proposed slab core.
3. All cores shall be located so that they clear PT tendons by a minimum of 4". The top of slab may have been marked during construction to approximately locate the PT tendons. These marks shall be verified confirmed by scanning the slab. The Tenant shall not rely solely upon these marks as verification of PT tendon locations.
4. It is permissible to cut north-south running slab temperature bottom bars. Up to one bar may be cut in any given five foot width of slab measured east-west.
5. It is permissible to cut an east-west PT slab top bar. Only one bar of this type may be cut or damaged in any given 10 foot width of slab measured north-south.
6. The maximum slab core size is 6 inch outside core diameter. Slab cores shall be spaced min 1'-6" o.c. Move planned core locations as required to provide clearance to reinforcing tendons, bars, other cores, and beam edges as shown and noted above.
7. Where the Alternate mild-reinforced slab has been constructed, refer to Figure G-1.

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PROJECT: The Mall at Green Hills, Expansion Area E Construction Criteria - Attachment G

DESCRIPTION: Typical Post-Tensioned Slab Core Detail

PROJECT NO.:

ISSUE TYPE:
Ref: x

ISSUE DATE:

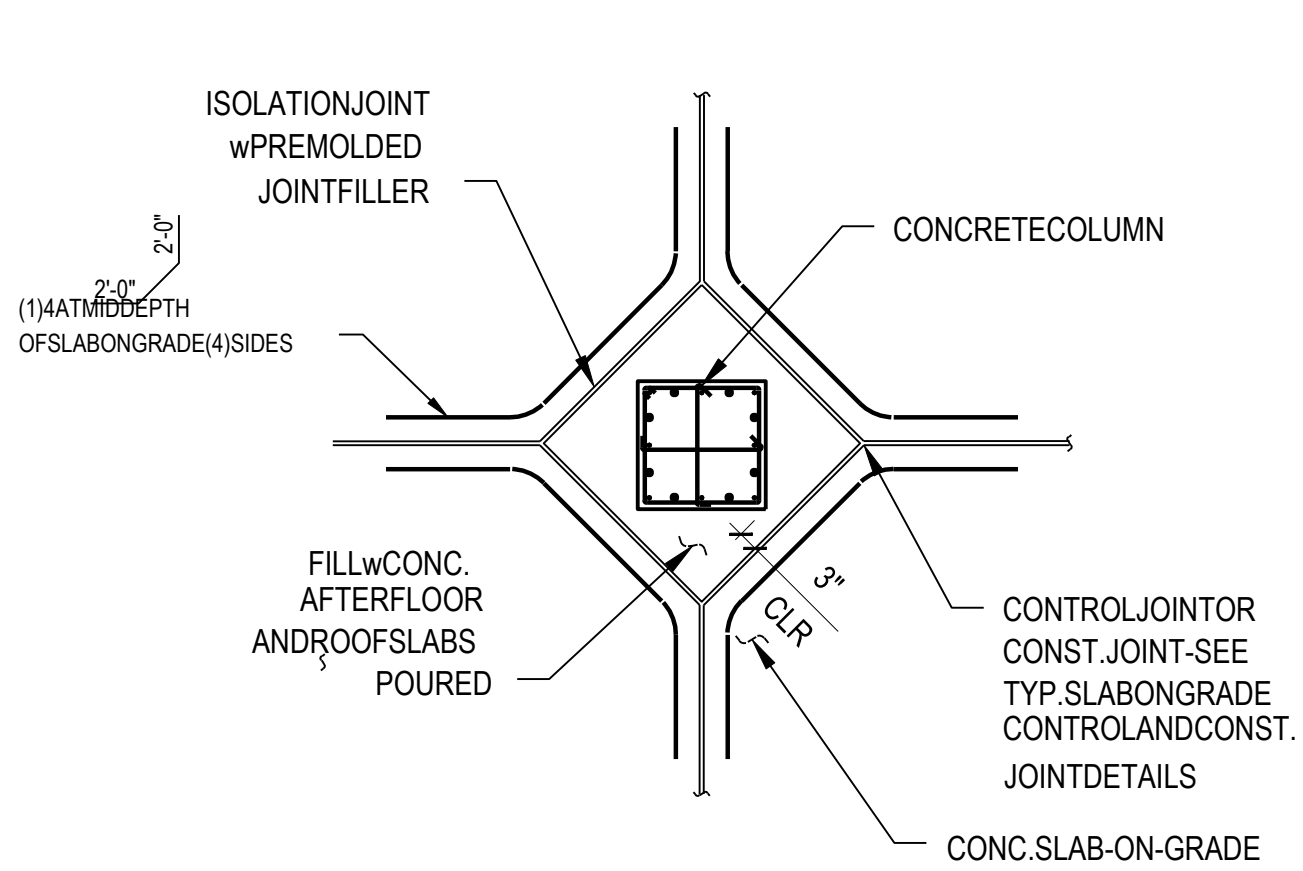
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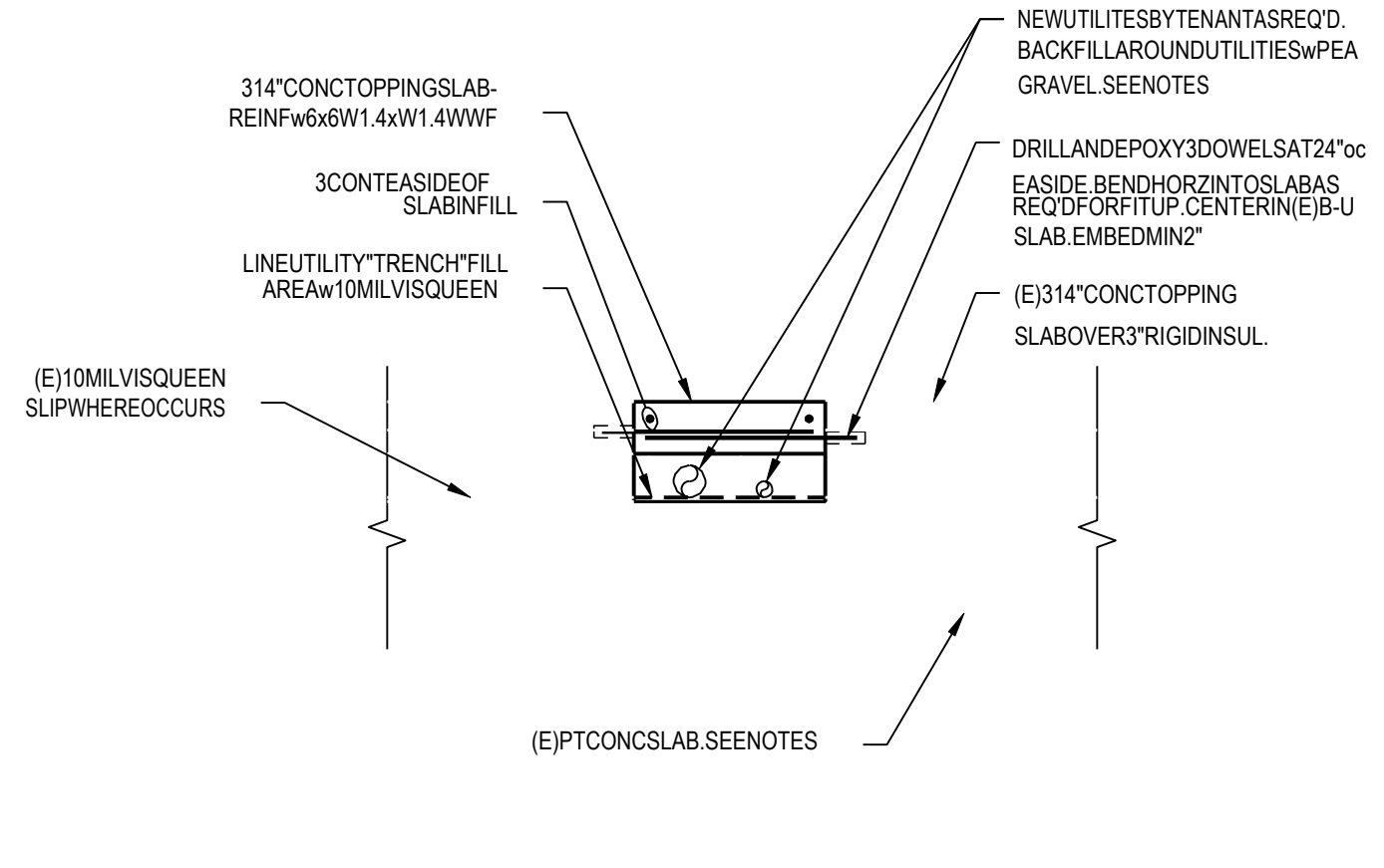
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Figure G-2

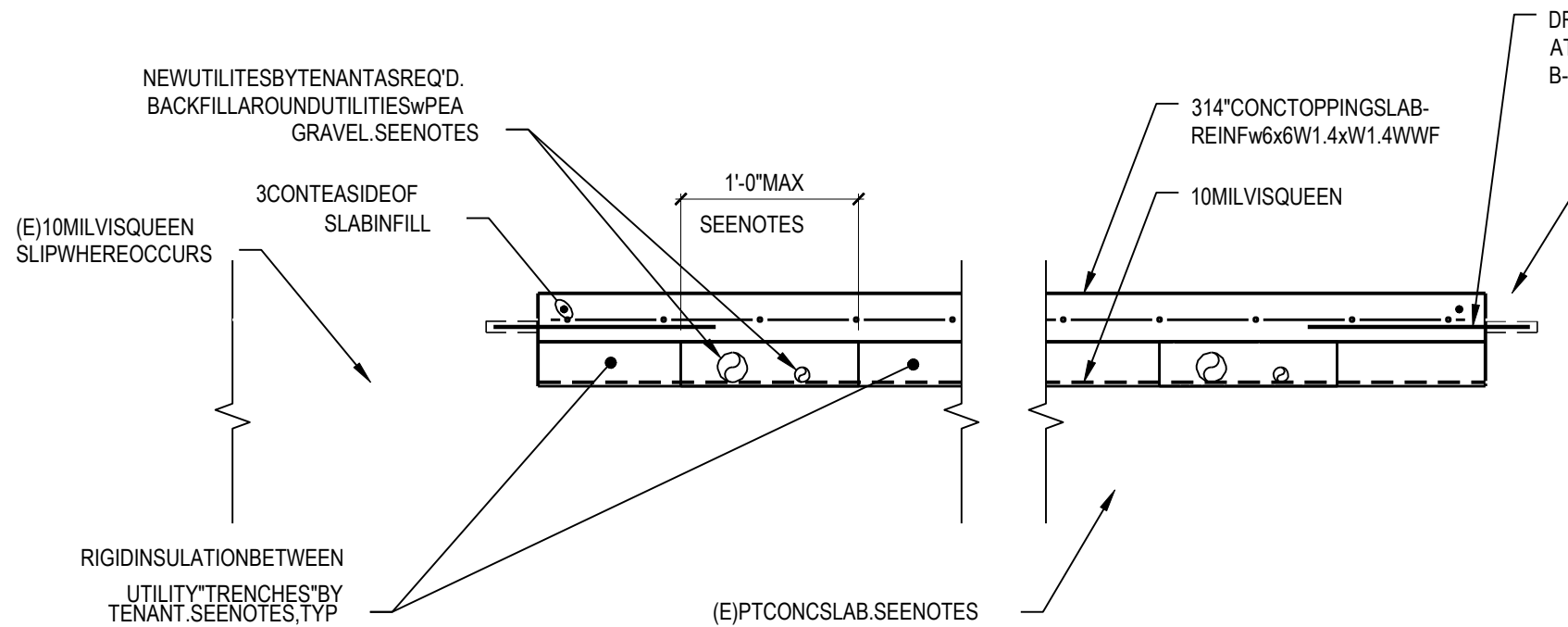
SHEET NO.:



REINFORCING AT STEEL COLUMN



DETAIL AT TRENCH-TYPE BUILT-UP SLAB REPAIR



DETAIL AT LARGE AREA BUILT-UP SLAB REPAIR

- NOTES:**
1. Pea-gravel type fill is permitted over max 12" width that new electrical or mechanical conduit or pipe trenches. Where removal of existing slab exceeds this width, refer to "Detail at Large Area BUS Slab Repair."
 2. Infill slab f'c = 4,000 psi min.
 3. Polystyrene insulation shall have 60 psi compression strength at 5 percent deformation and shall conform to ASTM D6817.
 4. Provide 3/4" deep saw cut or tooled control joints at maximum spacing of 10'-0" o.c. each way. Provide control joints with supplemental corner reinforcing at all re-entrant corners. Provide diamond-shaped blockouts with supplemental reinforcing at all column locations per "Reinforcing at Steel Column" detail.
 5. PT slab shall not be cut or damaged during toppings slab removal work. Refer to "Typical Post-Tensioned Slab core Detail" for new mechanical penetrations through the existing structural PT slab.

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PROJECT: The Mall at Green Hills, Expansion Area E Construction Criteria - Attachment G	
DESCRIPTION: Typical Built-Up Slab Repair Details	DRAWN BY: CAL
ISSUE DATE: 10/10/2017	ISSUE TYPE: Ref: x
PROJECT NO.:	

SHEET NO.: Figure G-3

