

THE
University of Vermont
HEALTH NETWORK

By Electronic Mail

November 17, 2021

Donna Jerry
Senior Health Policy Analyst
Green Mountain Care Board
144 State Street
Montpelier, Vermont 05602
donna.jerry@vermont.gov

Re: Letter of Intent and Certificate of Need Application

Dear Donna:

Please find attached the following documents pertaining to The University of Vermont Medical Center Inc.'s Certificate of Need Application for outpatient pharmacy expansion and automation at Holly Court:

1. Letter of Intent, requesting expedited review; and
2. Certificate of Need Application.

A Verification under Oath, signed by Stephen Leffler, M.D. will be submitted under separate cover next week.

Since we are requesting expedited review, we understand that your office will provide public notice in accordance with 18 V.S.A. §§ 9440(c)(2)(B) and 9440(c)(5)(A).

We look forward to working with you during the review process. Please contact me if you have any questions concerning our application materials.

Sincerely,



Eric Miller, Esq.
Senior Vice President & General Counsel

cc: Stephen Leffler, M.D.

— THE —
University of Vermont
HEALTH NETWORK
—

By Electronic Mail

November 17, 2021

Donna Jerry
Senior Health Policy Analyst
Green Mountain Care Board
144 State Street
Montpelier, Vermont 05602
donna.jerry@vermont.gov

Re: Letter of Intent, CON application and Request for Expedited Review for Network Pharmacy Expansion and Automation at Holly Court

Dear Donna:

The University of Vermont Medical Center Inc. (“UVMCMC” or “the applicant”) files this Letter of Intent and Certificate of Need application seeking expedited approval without a hearing and with such other abbreviated process as the Green Mountain Care Board (the “Board” or “GMCB”) finds appropriate, for the expansion, consolidation and automation of Network pharmacy processing operations at 75 and 79 Holly Court in Williston (the “project”).

A request for expedited review may be granted if the project is (a) likely to be uncontested and (b) does not substantially alter services. 18 V.S.A. § 9440(c)(5); GMCB Rule 4.00, *Certificate of Need* (“Rule 4”). This project is likely to be uncontested and is intended to meet current and future growth in mail order and specialty pharmacy volumes for UVMCMC’s and other University of Vermont Health Network (“Network”) affiliates’ patients and staff.

A CON project does not “substantially alter services” if:

- (a) The project raises no significant health care policy or planning concerns; and
- (b) The expenditures associated with the proposed project do not have a significant impact on the services provided, the cost of health care, or the financial strength of the applicant.

Rule 4, § 4.304.

The project’s capital cost of \$5.8 million, relative to the applicant’s overall budget, will not have a significant impact on existing services or the applicant’s financial health. The project will automate and streamline outpatient pharmacy processing operations to meet current and projected patient need, promoting population health and improving outcomes, and raises no

significant health care policy or planning concern. The automated operations will be more efficient and will enable the applicant to meet current and projected volumes without hiring additional staff. As further explained in the application, absent this project, the applicant would need to hire five to six additional employees, and house them in a larger space than currently utilized, to meet volume projections.

We believe that the Board may declare this application uncontested and issue written notice granting a Certificate of Need without any further process, and we respectfully ask the Board to do so.

In accordance with 18 V.S.A. § 9440(c)(2) and Rule 4, we provide the following information about the project, which we further discuss in the enclosed application:

Project Scope and Expenditures: The application requests a CON approving the expansion and co-location of outpatient mail order and specialty pharmacy dispensing operations at 75 and 79 Holly Court in Williston, to include the purchase and installation of equipment to automate dispensing operations. The cost of the project is \$5.8M (\$3.4M in facility renovations and upgrades, \$2.4M in equipment, and \$29k in capitalized interest). The project will take approximately six months to complete, with no interruption in services. UVMMC will not provide retail services at the Holly Court location.

Project Rationale: Outpatient pharmacy volumes are projected to grow substantially over the next three years with (1) continued growth in UVMMC mail order and specialty prescription volumes, (2) the evolution of the Health Assistance Program (“HAP”), and (3) the development and expansion of an internal Pharmacy Benefits Program (“PBM”). The project will enable the applicant to meet current and future demand without incurring additional staffing costs. The project is also consistent with UVMMC’s Master Facility Plan, which calls for the transition of services out of leased space at 1 South Prospect Street in Burlington, which now houses specialty pharmacy services.

Need to be Addressed: The project will achieve major efficiency gains, permitting UVMMC to expand capacity to meet current and projected outpatient pharmacy volume demands without hiring additional staff. The outpatient pharmacy processing division is critical to UVMMC’s ability to provide high quality healthcare services to the communities it serves.

Cost, Access, Quality: The project will improve access and quality of care. Access and adherence to prescribed medications is a major factor in individuals’ health outcomes and overall for population health initiatives. The cost is reasonable because current and increased volumes can be met by consolidating and automating processing operations at a single, more productive facility, without the need to hire additional staff.

Location: The properties at 75 and 79 Holly Court in Williston will be combined into one suite.

Service Area: The service area includes Vermont and Northern New York.

We look forward to working with you in the review process for this application.

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric Miller".

Eric Miller
Senior Vice President & General Counsel

cc: Stephen Leffler, M.D.

**STATE OF VERMONT
GREEN MOUNTAIN CARE BOARD**

CERTIFICATE OF NEED APPLICATION
by
THE UNIVERSITY OF VERMONT MEDICAL CENTER
for
OUTPATIENT PHARMACY EXPANSION AND AUTOMATION AT HOLLY COURT
November 17, 2021
Docket no. GMCB-022-21con

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SECTION I: PROJECT NARRATIVE

A. OVERVIEW

The University of Vermont Medical Center Inc. (“UVMCM” or “the applicant”) submits this Certificate of Need (“CON”) application to the Green Mountain Care Board (“GMCB” or “the Board”) pursuant to 18 V.S.A. § 9434(b)(1) and GMCB Rule 4.000, § 4.302. The applicant requests a CON approving the expansion, automation and co-location of outpatient pharmacy dispensing operations at 75 and 79 Holly Court in Williston (“the Project”) to include the purchase and installation of equipment to automate drug dispensing operations.

UVMCM currently houses outpatient pharmacy mail order and retail dispensing operations in leased space at 1 South Prospect Street (“UHC”) in Burlington, and outpatient specialty pharmacy processing operations at the Holly Court site. The project will co-locate mail order and specialty processing operations at Holly Court. UVMCM will continue to offer limited retail pharmacy services at UHC. The Holly Court location will not include a retail space for prescription drop-off or pick-up.

There is a need for this project. The project will achieve major efficiency gains and permit UVMCM to expand capacity to meet current and projected outpatient pharmacy volume demands without hiring additional FTEs, thereby avoiding additional staffing costs and easing hiring pressures in an already strained workforce environment. The leased space at UHC cannot accommodate the projected increase in outpatient pharmacy volumes nor the equipment, upgrades, and co-location of services as proposed in this project. The proposed Holly Court site, which UVMCM owns, is large enough to accommodate additional equipment, staff and services. The project aligns with the most recent UVMCM Master Facility Plan, which includes the transition of services out of UHC. The project will directly augment the University of Vermont Health Network’s (“UVMHN” or “the Network”) ability to provide high quality healthcare services to the communities it serves.

The total capital cost of the project is \$5,810,888 and will be covered by available working capital in FY22 and FY23, without the need for borrowing. The project was included in UVMCM’s FY21 capital budget submission to the Board and its FY22 budget detail, submitted to the Board in August 2021. Construction is projected to begin, following issuance of a CON, in July 2022 and will require approximately six months to complete.

B. PROJECT NEED

This project is needed to meet current and future growth in outpatient pharmacy volumes. The applicant plans to meet the increased demand by growing its outpatient pharmacy capacity from the present six hundred prescriptions per day to 2,000 prescriptions per day, based on current hours of operation. The proposed consolidation and automation of dispensing operations will create an efficient high-volume production environment, allowing UVMCM to increase productivity without hiring additional pharmacy staff.

1. Pharmacy volumes are projected to increase

The UVMHC outpatient pharmacy predominately serves, and will continue to serve, UVMHN patients, and Network employees and their family members. Outpatient pharmacy volumes are expected to grow substantially over the next three years due to growth in mail order and specialty drug demand, the evolution of the Health Assistance Program (HAP), and the development and expansion of an internal Network Pharmacy Benefits Management program (PBM).

While outpatient pharmacy volumes are projected to rise based on the drivers outlined in this application, the proposed project will not itself drive any increased volume. Also, the applicant anticipates that the percentage of outpatient prescriptions that are 340B eligible will not change as a result of the project.

The volume estimates included at the end of this subsection provide an overview of the expected growth of pharmacy services through FY25. These volumes are not incremental but represent a full picture of outpatient pharmacy. Further detail is outlined in Section D and in the CON financial tables.

a. Growth in UVMHC mail order and specialty prescription demand

A linear regression analysis, using 18 months of historical dispensing data, was used to identify the trend that is the basis for UVMHC mail order future year projections. Mail order volumes are expected to continue to grow as a result of ongoing marketing campaigns and through employee adoption, which has increased over the last 24 months.¹ In addition to the growth in mail order volumes, specialty prescription volume continues to expand as the pharmacy presence has grown in specialty clinics and is expanding into primary care practices.

b. Health assistance program (HAP) expansion

There is an initiative to continue the expansion of the Health Assistance Program (HAP) to UVMHN affiliates. The HAP enables qualified low- and middle- income patients to receive their prescription medications at no cost, even if insured, and aligns with UVMHN's strategy to keep patients healthy, particularly those who are the most vulnerable, by delivering high value care and increasing medication compliance. The program's target volume is 27,000 mail order and 3,000 specialty prescriptions annually. These volume assumptions are based on the timeframe for implementation at each affiliate. A three-year growth model has been developed and is in the early stages of rollout.

c. PBM expansion

Prescription drug volumes will increase as employees at UVMHN affiliates continue to enroll in the Network's self-funded health care plan, already available to UVMHC employees. By offering a uniform, self-funded employer-sponsored health plan, UVMHN can provide its

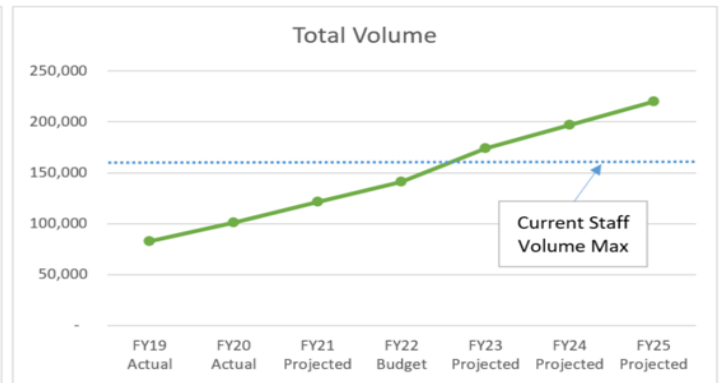
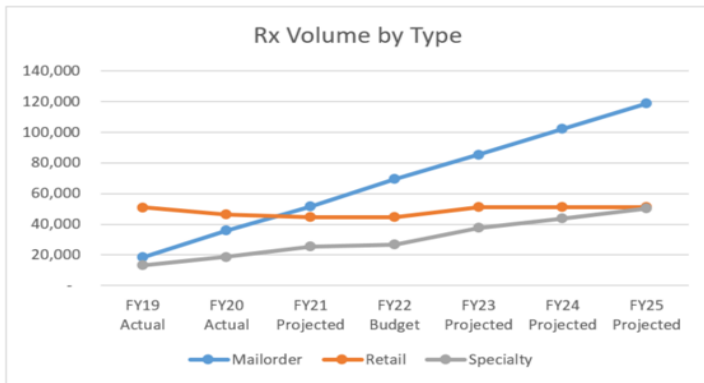
¹ UVMHC is not alone in experiencing the growth of mail order prescriptions. Nationally, there has been an upswing in mail order drug prescriptions attributable the Covid-19 pandemic, which is not expected to revert at pandemic's end. *See, e.g., Becker's Hospital Review, Mail-order drug delivery surges amid pandemic* (May 12, 2020).

employees with better health care coverage at a lower cost. The plan includes prescription drug coverage through pharmacy benefit manager Navitus, which incentivizes employees to fill their outpatient prescriptions by mail order and at Network pharmacies. For example, the PBM plan requires members to fill all specialty prescriptions with the UVMHC specialty pharmacy, and includes a zero-dollar copay for most generic prescriptions when filled by the UVMHC pharmacy. In addition to UVMHC, affiliates Porter Medical Center and Home Health & Hospice joined the plan at the start of 2021, and Central Vermont Medical Center and the non-union employees of Alice Hyde Medical Center, Elizabethtown Community Hospital and Champlain Valley Physicians Hospital will join in 2022. It is expected that the plan’s coverage will be expanded to the Network’s remaining workforce over the next several years.

To project employee prescription volumes, actual volume data was used from the 2019 plan year for each UVMHN affiliate. The total volume was then broken down between mail order, retail, and specialty prescriptions. Based on experience with similar plan incentives and requirements at UVMHC, it was assumed that the specialty requirement and zero-dollar copay incentive would shift 75% of all mail order and specialty volume to the Network pharmacy.

Volume Growth:

Volume	FY19	FY20	FY21 Projected	FY22 Budget	FY23	FY24	FY25
Mailorder	18,671	35,856	51,575	69,345	85,433	102,109	118,770
Retail	50,968	46,535	44,648	44,648	51,109	51,109	51,109
Specialty	13,218	18,708	25,469	26,969	37,755	43,970	50,180
Total Volume	82,857	101,099	121,692	140,962	174,297	197,188	220,059
Avg Scripts/day	326.21	398.03	479.10	554.97	686.21	776.33	866.37



2. UVMHC’s existing facility is inadequate to meet volume projections

The existing facility at 1 South Prospect Street (“UHC”), as currently configured, cannot support future pharmacy volume projections and is therefore unsuited for the co-location of Network outpatient pharmacy operations. The UHC facility cannot accommodate the automated drug dispensing equipment included in the project, which will modernize operations and increase

dispensing capacity. Nor can the UHC facility accommodate an increase in pharmacy staff as operations are consolidated in a single location.²

In addition, UVMMC rents the space at UHC, and its lease expires in 2024. Based on this factor and the need for a larger, more appropriate space to house operations that will meet current and projected pharmacy volumes, the UVMMC Master Facility Plan includes the timely relocation of all pharmacy dispensing activities now performed in the lower level (basement) of the UHC location.³

3. Modernization and automation of outpatient pharmacy operations is critical to the Network’s ongoing ability to provide the community high quality health care services

The outpatient pharmacy processing operation is a critical component of the applicant’s overall pharmacy program, which helps support a broad range of specialty health care services for patients and communities served by the Network. The project allows the applicant to meet current and future volume demands utilizing a highly efficient, automated system, without an increase in staffing, thus avoiding future staffing costs and reducing the potential for system disruptions due to workforce shortages. As the ongoing pandemic has markedly exacerbated worker shortages across many occupational fields—UVMMC, like many other hospitals, is facing chronic staffing shortages—job openings in the healthcare sector are projected to grow faster than any other occupational category through the end of the decade. The most recent data from the U.S. Bureau of Labor Statistics project a yearly average of 11,300 openings for pharmacists and 31,700 for pharmacy through 2030, as workers transfer to other occupations or leave the labor force. U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*, <https://www.bls.gov/ooh/healthcare/home.htm> (visited Oct. 21, 2021). The investment in an efficient, automated dispensing operation enables the applicant to increase productivity to meet demand without hiring additional FTEs in a tight and competitive labor market.

C. PROJECT DESCRIPTION

1. Proposed Facility

The Project will combine 75 and 79 Holly Court in Williston into a single 10,347 square foot suite. Because all outpatient pharmacy services that will be co-located at the property are mail-order services, there will continue to be no retail presence at the site. The property, a portion of which is currently used for specialty outpatient pharmacy processing operations, is owned by UVMMC and will require no tenant relocation.

² The project will consolidate the outpatient pharmacy dispensing services at UVMMC that support initiatives around the Network (e.g., mail order, specialty pharmacy, HAP, PBM) and for which UVMMC already has contracts in place with Network affiliates. The Network affiliates will continue to provide their own inpatient pharmacy services.

³ The lease on the South Prospect Street property expires June 3, 2024, with one remaining five-year extension that must be executed by December 30, 2023. As explained further in Section C of this application, the applicant plans to retain limited retail pharmacy operations on the first floor of the building.

a. Permitting

The applicant expects that the following permits will be required:

- Town of Williston Site Plan Permit
- Wastewater Disposal and Potable Water Supply Permit
- Act 250 Permit

The applicant has engaged in preliminary discussions with the Town of Williston and State of Vermont and expects to finalize and submit permit applications contemporaneously with the submission and review of the CON application.

b. Renovations and upgrades

Structural upgrades include:

- Reframing the north wall including infill of (1) pass door and overhead doors, and (2) reframing of the pass-door. The wall framing consists of cold formed steel girts and insulated panels.
- Foundation design for a new cooler structure outside the north wall.
- Foundation design for a new handling unit outside the north wall with removal of an existing retaining wall, and construction of a new one.

Other proposed renovations and upgrades are outlined below:

- Creation of a single suite spanning 75 and 79 Holly Court to create adequate workflow and operations.
- Installation of a single semi-automated outpatient pharmacy processing operations line. Licensed pharmacists and pharmacy techs will utilize the line to process outpatient pharmacy orders.
- Reconfiguration of the existing modular workstations and the addition of new stations to provide anticipated outpatient pharmacy support office functions.
- Addition of new offices to support the outpatient pharmacy director, manager and supervisor positions. Existing offices will be retained.
- Addition of a new conference room to provide adequate support space for anticipated staff counts.
- Construction of a staff breakroom.
- Addition of a reception space to provide visitor guidance and security.
- Reconfiguration of the facility entry points to meet new space layout requirements and separation between indoor and outdoor air to provide adequate airflow and staff comfort.
- Construction of a shipping and receiving area to support deliveries and shipments.
- Expansion of the existing IS/IT/network closet to meet new standards and demands. The work will include network site upgrades to ensure site redundancy and security.
- Inclusion of a wellness room to allow staff showers and meet current office support space guidelines.
- Upgrades to the existing janitorial closet to include features that will support the expanded site.

- Reconfiguration, upgrades and improvements to the restroom facilities to meet current Americans with Disabilities Act (ADA) male, female, and gender-neutral bathroom guidelines.
- Purchase and installation of an additional walk-in refrigerator and freezer to support the operations line and to provide redundancy to the individual single point of failure, on-site refrigeration and freezer equipment.
- Upgrades to the mechanical HVAC systems to meet strict outpatient pharmacy centralized prescription processing guidelines for temperature and relative humidity (below 40%) as outlined by United States Pharmacopeial Convention (USP) General Chapter 659, *Packaging and Storage Requirements*; URAC PHARM_OP 8, *Product Handling, Storage and Inventory*, and UVMVC Internal Policy PHARMSP06, *Specialty Pharmacy Operations*. Mechanical upgrades are also anticipated for the adjacent support spaces.
- Electrical upgrades to accommodate the proposed site layout and the addition of a back-up emergency power generator to support on-site pharmacy refrigeration and freezer equipment in the event of a normal power loss.
- Upgrades to plumbing to support the processing operations and surrounding support spaces.
- Installation of an expanded motion monitor sensor security system, and other security enhancements to meet all drug/controlled drug storage requirements.

The applicant also proposes a minor redesign of the existing retail pharmacy on the first floor of the facility at UHC. Currently, the retail pharmacy is supported by ground floor pharmacy processing operations in the same location; with processing operations moving to Holly Court, the existing pharmacy would be unsupported. To allow UVMVC to maintain a small retail presence at the UHC location to serve University of Vermont (“UVM”) staff and students on campus, including patients of UVM’s student health center, the applicant intends to add a nominal pharmacy processing operation within the first-floor retail space. The applicant plans to add a non-automated pharmacy processing line, drug storage and vaccination space, and perform only minimal mechanical, electrical and plumbing updates.

All proposed renovations, including existing and new support and circulation areas, have been reviewed to ensure regulatory compliance with the 2018 Edition of the Facility Guidelines Institute (FGI) guidelines. See Exhibit 1, attached.

c. Construction phasing plan

The project will be completed in five (5) distinct phases with the total construction duration expected to be 26 weeks.

Phase 1: The existing IS/IT/network closet will be expanded.

Phase 2: Phase 2 renovates the front of 79 Holly Court, and includes:

- Converting the existing gender-neutral bathrooms and multi-function room into an ADA-compliant women’s bathroom and gender-neutral bathroom.
- Removal of modular workstations and addition of an office and staff breakroom. (An existing office and conference room will remain.)

- Upgrades to HVAC, mechanical, electrical, plumbing, lighting, power, controls and security as needed.

Phase 3: Phase 3 renovates the front of 75 Holly Court, and includes:

- Converting the existing gender-neutral bathroom and multi-function room into an ADA-compliant men’s bathroom.
- Addition of a proper HVAC conditional control entry.
- Addition of a reception touchdown space near the entry.
- Addition of a wellness space.
- Updates to the existing janitorial closet.
- Upgrades to HVAC, mechanical electrical, plumbing, lighting, power, controls and security as needed.
- Existing modular workstations and offices will remain.

Phase 4: Phase 4 renovates the rear of 79 Holly Court, and includes:

- Assembly and utilization of a single semi-automated outpatient pharmacy processing operations line.
- Addition of interior mechanical and electrical rooms.
- Installation of new walk-in refrigerator and freezer assemblies.
- Upgrades to HVAC, mechanical, electrical, plumbing, lighting, power, controls and security as needed. HVAC upgrades will be designed to meet the strict outpatient pharmacy centralized prescription processing guidelines for temperature and relative humidity (below 40%).

Phase 5: Phase 5 renovates the rear of 75 Holly Court, and includes:

- Relocation of the existing specialty outpatient pharmacy to the completed rear of 79 Holly Court.
- Addition of modular workstations.
- Construction of offices, a conference/breakroom and shipping and receiving area.
- Upgrades to HVAC, mechanical, electrical, plumbing, lighting, power, controls and security as needed.

Facility floor and site plans are attached as Exhibit 2.

2. Equipment

This application does not include the purchase of any diagnostic and therapeutic equipment for use in direct patient care, as contemplated by the CON statute and rule. *See* 18 V.S.A. § 9434 (b)(2); (refers to “diagnostic and therapeutic equipment”); GMCB Rule 4.000, § 4.104.7 (defines equipment as medical equipment used in patient care). Rather, the equipment comprises a Parata single semi-automated outpatient pharmacy operations line that will automate dispensing activities that are now physically organized manually and completed in a software queue. The production line and two Parata Max+ robotic dispensing machines will physically organize the work in order of priority and route each task to the right person along the line, resulting in a highly efficient dispensing process that can accommodate a much higher volume with significantly lower labor input than would otherwise be required. In selecting this equipment, the applicant consulted with Vanderbilt University Medical Center’s pharmacy organization and

compared several options that are compatible with UVMMC's software and operations. The same Parata equipment as was chosen for this project is currently used by almost all academic health system specialty and mail order pharmacy operations nationwide. The cost of the equipment and service contract has been included in the capital budget projection.

3. Information technology

Resources from the Information Systems (IS) Network Infrastructure were engaged in the design development of the facilities portion of the project. This work identified infrastructure and hardware needs for the site and identified construction costs associated with these information technology (IT) elements. The capital and operating costs associated with the IS components have been included in the pro forma. *See* Section D (Project Finances). Additionally, Network IS reviewed this initiative and noted that there will be no cost or resource impacts related to cyber security and that a risk assessment will be completed on the automation line prior to implementation.

Proposed upgrades, listed below, include increased telecommunications connectivity to support the new computer workstations and expanded IS/IT/network closet with added network redundancy as necessary:

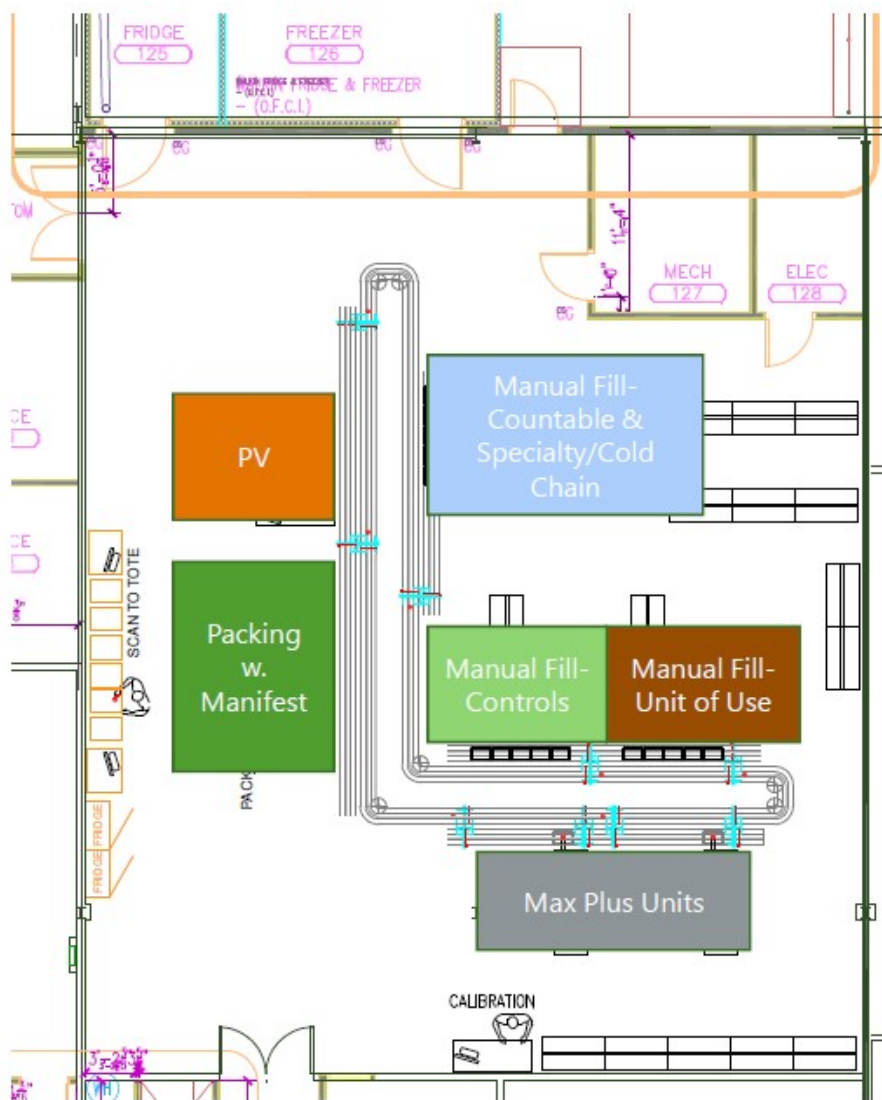
- New copper horizontal distribution cabling associated with the construction in both 75 and 79 Holly Court spaces, to include cabling pathway systems. This includes both office space workstations and workstations associated with the new pharmacy production line. The pharmacy line equipment shall operate over a unique data network, and not over the UVMMC data network.
- Fit-up of new wireless access point network cabling as directed by UVMMC.
- Expansion of the existing telecommunications room in 75 Holly Court to accommodate the new construction.
- Creation of a possible redundant fiber optic entrance cable into the 75 Holly Court telecommunications room.
- Telecommunications bonding and grounding system originating with the existing telecommunications room in 75 Holly Court, extending to the new electrical service entrance equipment. Currently, there is no telecommunications bonding and grounding system associated with the existing telecommunications room.

The existing telecommunications equipment located in the Holly Court location will remain as is, and active, during and after construction activities have been completed.

Last, although there will be a need for internal resources for the production line software integration and implementation and ongoing application support, additional FTE costs—use of a small percentage of a single FTE's time—are not included in the project cost. Instead, the support for this initiative will be included in a larger global review of application inventory as part of the annual FTE planning and budget development.

4. Operational impacts and human resources

The project will enable the applicant to meet growing volume projections by developing a high quality, highly efficient and automated production environment without the need to hire additional FTEs. As illustrated below, the project will utilize a high-speed production line including conveyor belts between each workstation and two Parata Max+ dispensing robots. The robots count pills and capsules, place them in amber vials and label the vials. The vials move throughout the dispensing process in totes tracked with radio-frequency identification (RFID) tags and are routed to the appropriate workstation based on the indicated stage of workflow. The automated process increases efficiency and streamlines pharmacy operations.



This high-speed workflow will allow the applicant to fill thousands of prescriptions per day; in contrast, it is estimated that it would take an additional five to six staff, in a very large space, to achieve the same results. (As discussed earlier in the application, the project will both produce savings in terms of labor costs and relieve hiring pressures as workforce shortages persist.) The applicant's analysis assumes a savings of five FTEs over a five-year period, starting with one FTE saving in Year One and building to a savings of five FTEs in Year Five. *See* Section D (Project Finances).

While the project will reduce costs by eliminating the need to hire additional staff to meet projected volumes, it is not anticipated that any staff will be required to transition to a new entity for employment, nor will overall Network pharmacy staffing be reduced. This project only consolidates drug dispensing at UVMMC, which already has contracts with other Network affiliates that include a proportional revenue and expense share for pharmacy services based on fill volumes.

D. PROJECT FINANCES

The projected capital expense for this project is approximately \$5.81 million. As illustrated below, a financial analysis including a capital and depreciation schedule, incremental pro forma P&L, cash flow and net present value calculation was performed. Note that the 'project only' incremental pro forma represents the costs to implement the automated production environment, including the cost avoidance related to the additional staffing that would be necessary if not for this investment.

Please note that the financial tables submitted as Exhibit 3 hereto do not include the cost avoidance related to the reduction in projected future staffing necessary to accommodate future volume growth. The Board's template for the Exhibit 3 financial tables asks the applicant to show incremental revenue and expense relative to a base budget year (in this case FY22). The staff cost avoidance results from the reduction in projected future staffing costs that UVMMC would incur in the absence of the project. The inclusion of this savings in the Exhibit 3 tables would not accurately represent the project's financial impact since the base year does not include these projected future staffing costs. The cash flow analysis below best represents the financial impact of this initiative, which delivers a positive cash flow to the organization in year two of operation.

Pro-Forma: Network Pharmacy Expansion and Automation

	FY23	FY24	FY25	FY26	FY27	5 Yr. Total
Project-Driven Incremental Volume (scripts processed)¹						
TOTAL	-	-	-	-	-	-
Project-Driven Incremental Net Revenue						
TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Incremental Expenses						
Equipment Service Contract ³	\$ 158,400	\$ 118,800	\$ 79,200	\$ 79,200	\$ 79,200	\$ 514,800
Salaries: Staff	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salaries: Staff Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Payroll Tax and Fringe	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation ⁴	\$ 564,391	\$ 564,391	\$ 564,391	\$ 564,391	\$ 564,391	\$ 2,821,957
Total Expenses	\$ 722,791	\$ 683,191	\$ 643,591	\$ 643,591	\$ 643,591	\$ 3,336,757
Incremental Contribution Margin						
Contribution Margin	\$ (722,791)	\$ (683,191)	\$ (643,591)	\$ (643,591)	\$ (643,591)	\$ (3,336,757)
Project Cost Avoidance						
Cost Avoidance related to future staffing ⁵	\$ 248,768	\$ 746,304	\$ 746,304	\$ 746,304	\$ 746,304	\$ 3,233,984
Total Cost Avoidance	\$ 248,768	\$ 746,304	\$ 746,304	\$ 746,304	\$ 746,304	\$ 3,233,984
Total Incremental Contribution plus Cost Avoidance	\$ (474,023)	\$ 63,113	\$ 102,713	\$ 102,713	\$ 102,713	\$ (102,773)

¹ This project alone is not projected to increase outpatient pharmacy volumes, instead adequately support the growth projections driven by other initiatives

² No incremental revenue being generated by this project. Outpatient Pharmacy services, however, generates a positive margin to help support the mission of the UVM Health Network

³ Service contract costs for the Parata Line Automation equipment

⁴ Depreciation in FY23 may be prorated depending when the renovations are complete

Project only Cash Flow and Net Present Value (NPV): Network Pharmacy Expansion and Automation

	FY22	FY23	FY24	FY25	FY26	FY27	6 Yr. Total
Incremental Margin	\$ -	\$ (474,023)	\$ 63,113	\$ 102,713	\$ 102,713	\$ 102,713	\$ (102,773)
Depreciation	\$ -	\$ 564,391	\$ 564,391	\$ 564,391	\$ 564,391	\$ 564,391	\$ 2,821,957
Capital Expense	\$ 2,905,444	\$ 2,905,444					\$ 5,810,888
Cash Flow	\$ (2,905,444)	\$ (2,815,076)	\$ 627,504	\$ 667,104	\$ 667,104	\$ 667,104	\$ (3,091,704)

Capital Expense Summary: Network Pharmacy Expansion and Automation

Capital Costs	
Facilities	\$ 3,009,400
Equipment	\$ 2,432,404
IT	\$ -
Other	\$ 319,873
Total	\$ 5,761,677

Capitalized Interest	
Interest	\$ 49,211
Total	\$ 49,211
Grand Total	\$ 5,810,888

Capital Expense Schedule	FY22	FY23	FY24	FY25	Total
Project Expense	2,905,444	2,905,444			\$ 5,810,888
Capitalization		\$ 5,810,888			\$ 5,810,888

Capital Expense Summary: Network Pharmacy Expansion and Automation

Depreciation Schedule	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY42	TOTAL
Facilities	\$ 152,931	\$ 152,931	\$ 152,931	\$ 152,931	\$ 152,931	\$ 152,931	\$ 152,931		\$ 152,931	\$ 3,058,611
Equipment	\$ 347,486	\$ 347,486	\$ 347,486	\$ 347,486	\$ 347,486	\$ 347,486	\$ 347,486		\$ -	\$ 2,432,404
IT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -
Other	\$ 63,975	\$ 63,975	\$ 63,975	\$ 63,975	\$ 63,975	\$ -	\$ -		\$ -	\$ 319,873
Total	\$ 564,391	\$ 564,391	\$ 564,391	\$ 564,391	\$ 564,391	\$ 500,417	\$ 500,417		\$ 152,931	\$ 5,810,888

CON financial tables are attached to this application as Exhibit 3.

SECTION II: CONSISTENCY WITH THE HRAP CON STANDARDS

As discussed below, the proposed project is consistent with the Health Resource Allocation Plan published on July 1, 2009 (“HRAP”) and the applicable HRAP CON standards.

CON STANDARD 1.3: To the extent neighboring health care facilities provide the services proposed by a new health care project, an applicant shall demonstrate that a collaborative approach to delivering the service has been taken or is not feasible or appropriate.

The project consolidates operations already performed by the applicant at a single location that can accommodate needed expansion as volumes outpace current facility capacity. Because the project generally serves Network affiliates’ patients and employees, it is appropriate that the services continue to be provided by the applicant, rather than by other health care facilities. This project is also an example of the way in which the Network is able to create savings across its six hospital affiliates by providing consolidated and shared services.

CON STANDARD 1.9: Applicants proposing construction projects shall show that costs and methods of the proposed construction are necessary and reasonable. Applicants shall show that the project is cost-effective and that reasonable energy conservation measures have been taken.

Renovating existing space owned by UVMMC is the most cost-effective option and is more feasible and less expensive than construction of a new facility, or expansion and renovation of the leased facility on South Prospect Street. The architectural, HVAC, mechanical, electrical and plumbing renovations proposed for the project are necessary and reasonable to accommodate the proposed services. All work proposed is essential to providing adequate and appropriate space for pharmacy operations and complies with strict outpatient pharmacy centralized prescription guidelines for temperature and relative humidity (below 40%), as outlined by United States Pharmacopeial Convention (USP) General Chapter 659, *Packaging and Storage Requirements*; URAC PHARM_OP 8, *Product Handling, Storage and Inventory*, and UVMMC Internal Policy PHARMSPO6, *Specialty Pharmacy Operations*. The newly renovated facility will accommodate projected outpatient pharmacy demand into the future.

CON STANDARD 1.10: Applicants proposing new health care projects requiring construction shall show such projects are energy efficient. As appropriate, applicants shall show that Efficiency Vermont, or an organization with similar expertise, has been consulted on the proposal.

The applicant will work with Efficiency Vermont to ensure that only energy efficient design, systems and products are selected for the project. The proposed mechanical HVAC equipment will use the best available technology to reduce energy consumption while ensuring a comfortable environment for staff and will be commissioned in accordance with requirements from the FGI Guidelines and the standards set forth by the American Association of Healthcare Engineers. The project will utilize energy efficient LED lighting to meet general illumination requirements.

CON STANDARD 1.12: New construction health care projects shall comply with the Guidelines for Design and Construction of Health Care Facilities as issued by the Facility Guidelines Institute (FGI), 2018 edition.

The project seeks to renovate space and does not involve new construction. It should be noted, however, that UVMMC is accredited by the Joint Commission and therefore required to follow the FGI Guidelines for Design and Construction of Outpatient Facilities as a condition of accreditation. The mechanical HVAC renovations will meet ANSI/AHRAE/ASHE standard 170-2017, *Ventilation of Health Care Facilities* (FGI Guidelines, Section 3). Exhibit 1, attached, contains a detailed table showing each relevant FGI Guideline and a description of how the project satisfies the relevant guideline.

CON STANDARD 3.4: Applicants subject to budget review shall demonstrate that a proposed project has been included in hospital budget submissions or explain why inclusion was not feasible.

The project was included in the applicant's FY21 capital budget, which was submitted with little detail due to the financial uncertainties attendant to the COVID-19 pandemic. It was included in the FY22 budget detail, submitted to the Board in August 2021.

SECTION III: CONSISTENCY WITH 18 V.S.A. § 9437 CRITERIA

The application is consistent with the statutory Certificate of Need criteria in 18 V.S.A. § 9437.

Section 18 V.S.A. § 9437 (1): This criterion requires that the project align with statewide health care reform goals and principles. The project meets this criterion by modernizing operations to make them more cost-effective and productive, allowing the applicant to meet a growing demand for specialty and mail order prescription medications. The Project will help ensure access to prescription medications that assist in the patient's recovery and management of illness and disease, in turn promoting overall population health and wellness in the communities served.

18 V.S.A. § 9437(2): The second criterion provides that an applicant must demonstrate that the cost of the proposed project is reasonable because: (A) the applicant can sustain the financial burden of the project; (B) the project will not cause an "undue increase" in the cost of care or "undue impact" on affordability; (C) less expensive alternatives are not available, unsatisfactory, or inappropriate, and (D) if applicable, the applicant has incorporated energy efficiency measures.

First, the applicant can sustain the project cost and expects to use available working capital in FY22 and FY23, without the need for borrowing. This project is projected to break even, given the staff cost avoidance, in just over five years. Second, the project will not unduly increase costs of care, but will instead enable the outpatient pharmacy division to meet rising volumes more efficiently. Last, the renovation of existing space in a building owned by UVMMC, incorporating energy efficient measures in consultation with Efficiency Vermont, aligns with the UVMMC Master Facility Plan and is the most feasible, cost-efficient alternative that can accommodate projected outpatient pharmacy volume demands.

18 V.S.A. § 9437 (3): The next criterion requires the applicant to demonstrate that there is a clear and identifiable need for the project. The South Prospect Street property that now houses specialty pharmacy dispensing cannot physically accommodate the project and co-location of services. The relocation of the outpatient pharmacy operations is included in the UVMMC Master Facility Plan as services are moved from the leased South Prospect Street location. The Holly Court facility, already owned by UVMMC, can accommodate the projected outpatient pharmacy volume growth and the equipment that will automate and modernize prescription processing operations. Importantly, this project can meet growth projections without an increase in staffing and its resultant costs, while minimizing the risk of operations slowdowns or disruptions associated with workforce shortages.

18 V.S.A. § 9437 (4): For reasons already stated, the project will help improve the quality of health care in the State by ensuring that the growing demand for specialty prescriptions and mail order delivery of medications can be met.

18 V.S.A. § 9437 (5): The project will not adversely impact any other existing services provided by the applicant. The project will not dislocate any other services, and there will be no interruption in outpatient pharmacy prescription dispensing operations.

The remainder of the criteria are not applicable to the project. *See* 18 V.S.A. § 9437 (6) (Repealed); (7) (transportation services); (8) (HIT); (9) (mental health care access).

CONCLUSION

Based on the information contained in this application, and for all the foregoing reasons, UVMMC respectfully requests expeditious approval of the application and issuance of a CON for the project.

INDEX OF EXHIBITS

- Exhibit 1: FGI Guidelines Chart
- Exhibit 2: Floor Plans and Site Plan
- Exhibit 3: CON Financial Tables

**CON Standard 1.12 – Compliance with 2018 FGI Guidelines for Design and Construction of Outpatient Facilities
Sections 2.1-4.2 Pharmacy Services**

FGI Guideline Section Number	FGI Guideline Section Title	FGI Requirement	How Addressed by the Proposed Project
2.1-4.2.1.1	Pharmacy Services General Application	(1) Where pharmacy services are provided in the outpatient facility, facilities shall be provided to accommodate the pharmacy services and associated equipment. (2) Pharmacy facilities shall be designed to address risks identified in the medication safety assessment and security risk assessment portions of the safety risk assessment. (3) Satellite pharmacy facilities shall be permitted.	This site is an outpatient pharmacy processing operations / dispensing facility which is permitted by the Guidelines. UVMMC’s safety and security assessments are being met. All processed orders will leave the facility via mail distribution. No pharmacy pick-up will be allowed at this site.
2.1-4.2.1.2	Pharmacy Services General Location	(1) Where clinical services being provided require on-site pharmacy services, a pharmacy room or suite shall be located in the same building. (2) Access to the room or suite shall be controlled.	No clinical services will be provided at this site.
2.1-4.2.1.3	Pharmacy Services General Medication safety zone design.	See Section 2.1-3.8.8 (Medication Safety Zones) for general	UVMMC’s safety and security assessments are being met at this new site. All new site features for

Support Areas for Patient Care and Diagnostic Areas
Medication Safety Zones
General
Work areas for preparing, dispensing, and administering medications

requirements for design of medication safety zones.
(1) Application. Where medication is prepared or dispensed, medication safety zones shall be provided as defined in this section for preparing, dispensing, storing, and administering medications.
(a) The number and location of medication safety zones shall be as determined in the medication safety risk assessment. See Section 1.2-4.5 (Medication Safety Assessment).
(b) A medication preparation room or area, self-contained medication dispensing unit, automated medication-dispensing station, or other system approved by the authority having jurisdiction (AHJ) shall be permitted to serve as a medication safety zone.
(2) Design requirements. Medication safety zones shall meet the following physical environment requirements that promote safe medication use:
(a) Medication safety zones shall be located out of circulation paths.
(b) Work space for medication safety zones shall be designed so

the outpatient pharmacy processing operations and support spaces meet lighting and operation Guidelines.

that staff can access information and perform required tasks. See Section 1.2-4.5 (Medication Safety Assessment).

(c) Work counters shall provide space to perform the tasks described in paragraph (b).

(d) Lighting. Task-specific lighting levels for health care settings recommended in the U.S. Pharmacopeia-National Formulary shall be used to design lighting.

(e) Where sharps containers are provided, they shall be placed at a height that allows users to see the top of the container.

(1) Medication preparation room
(a) The medication preparation room shall contain the following:

(i) Work counter

(ii) Hand-washing station

(iii) Lockable refrigerator

(iv) Locked storage for controlled drugs

(v) Sharps containers, where sharps are used

(b) Where a medication preparation room is used to store one or more self-contained medication dispensing units, the room shall be designed with space to prepare

medication when the self-contained medication-dispensing unit(s) is present.

(c) Where a medication preparation room is used to compound sterile preparations, it shall meet the requirements in USP-NF General Chapter <797> “Pharmaceutical Compounding-Sterile Preparations.”

(2) Self-contained medication-dispensing units, automated medication-dispensing stations, or other systems approved by the AHJ

(a) Use of units or stations shall be permitted in the following locations provided the unit or station can be locked to secure controlled drugs:

(i) At a nurse station

(ii) In a clean workroom

(iii) In an alcove

(b) A hand-washing station or hand sanitation dispenser shall be provided next to stationary medication-dispensing units or stations.

(c) A countertop or cart shall be provided adjacent to stationary medication-dispensing units or stations.

2.1-4.2.2.1	Pharmacy Services Pharmacy Areas Dispensing facilities.	<p>The following shall be provided where dispensing takes place:</p> <ul style="list-style-type: none"> (1) A room or area for receiving, unpacking, and inventory control of materials used in the pharmacy (2) Work counters and space for automated and/or manual dispensing activities (3) An extemporaneous compounding area, where compounding takes place. This shall include a sink and counter space for drug preparation. (4) An area for reviewing and recording (5) An area for temporary storage, exchange, and restocking of carts, where a cart system is used (6) Security Provisions for drugs and personnel in the dispensing counter area 	<p>Rooms for shipping and receiving, work counters, areas for reviewing and recording and needed storage are all provided at this re-designed site. Security enhancements for drug / controlled drugs are also included in the design.</p>
2.1-4.2.2.2	Pharmacy Services Pharmacy Areas Manufacturing facilities.	<p>The following shall be provided where drugs are compounded on-site:</p> <ul style="list-style-type: none"> (1) A bulk compounding area (2) Provisions for packaging and labeling (3) A quality control area 	<p>No drug compounding will occur at this site.</p>

2.1-4.2.2.3	Pharmacy Services Pharmacy Areas Storage.	Cabinets, shelves, and/or separate rooms or closets shall be provided for the following: (1) Bulk storage (2) Active storage (3) Refrigerated storage (4) Storage for volatile fluids and alcohol in accordance with applicable fire safety codes for the substances involved (5) Secured lockable storage for narcotics and controlled drugs (6) Equipment and supply storage for general supplies and equipment not in use	All required storage including secured lockable storage for narcotics and controlled drugs is included in this design.
2.1-4.2.3.1	Pharmacy Services Sterile Work Areas General.	Where sterile work areas are provided, they shall meet the requirements in this section. (1) Layout. The pharmacy shall be laid out to preclude unrelated traffic through the intravenous (IV) and hazardous drug IV preparation rooms. (2) Where robotic systems are used in the preparation of IV solutions in either the positive pressure IV preparation room or the negative pressure hazardous drug IV prep room, the robotics shall be separate	Hazardous drug IV preparation services will not occur at this site.

systems and shall not pass from one room to the other.

2.1-4.2.3.2	Pharmacy Services Sterile Work Areas IV Preparation area.	Where IV solutions are prepared in the pharmacy, a sterile work area with a laminar-flow workstation designed for product protection shall be provided. (1) The laminar-flow workstation shall include a nonhydroscopic filter rated at 99.97 percent (HEPA), as tested by dioctyl phthalate (DOP) tests. (2) The laminar-flow workstation shall have a visible pressure gauge for detection of filter leaks or defects.	IV solutions services will not occur at this site.
2.1-4.2.3.3	Pharmacy Services Sterile Work Areas Hazardous drug IV preparation room.	A separate room shall be provided for preparation of hazardous drug IV admixtures under a Class II (Type A2, B1, or B2) or Class III biological safety cabinet.	Hazardous drug IV admixture services will not occur at this site.
2.1-4.2.8.3	Pharmacy Services Support Areas for the Pharmacy Access to information	(1) Patient information. Provision shall be made for cross-checking medication and drug profiles of individual patients. (2) Pharmacological information. Provision shall be made for access to poison control, reaction data, and drug information.	The patient information and drug reaction data are included in UVMMC's policies, standards and guidelines.

2.1-4.2.8.4	Pharmacy Services Support Areas for the Pharmacy Office.	A separate room or area shall be provided for office functions.	Support spaces for office functions are included in the overall design.
2.1-4.2.8.7	Pharmacy Services Support Areas for the Pharmacy Hand-washing station.	A hand-washing station (s) shall be provided either in an anteroom or immediately outside the room where open medication (s) are prepared.	A hand-washing station (s) are included in the design layout.
2.1-4.2.8.8	Pharmacy Services Support Areas for the Pharmacy Outpatient medication consultation area.	If medication is dispensed directly to patients from the pharmacy, an area for consultation and patient education shall be provided.	All outpatient pharmacy processed prescriptions at this site will be shipped to destinations via mail services. No patient pick-up or interaction will occur at this site.
2.1-4.2.8.13	Pharmacy Services Support Areas for the Pharmacy Additional equipment and supply storage.	If a unit dose procedure is used, additional space and equipment shall be provided to accommodate supplies, packaging, labeling, and storage, including space for carts.	The overall project design includes spaces to accommodate supplies, packaging, labeling and storage, including space for carts.
2.1-4.2.9.1	Pharmacy Services Support Areas for Staff	Lounge, locker, and toilet facilities shall be readily accessible to the pharmacy staff.	Breakroom, lockers and toilet facilities are all included in the overall project design.
2.1-4.2.9.2	Pharmacy Services Support Areas for Staff	These areas shall be permitted to be outside the pharmacy area and shared with other departments.	Breakroom, lockers and toilet facilities are all included in the adjacent support spaces and included in the overall project design.

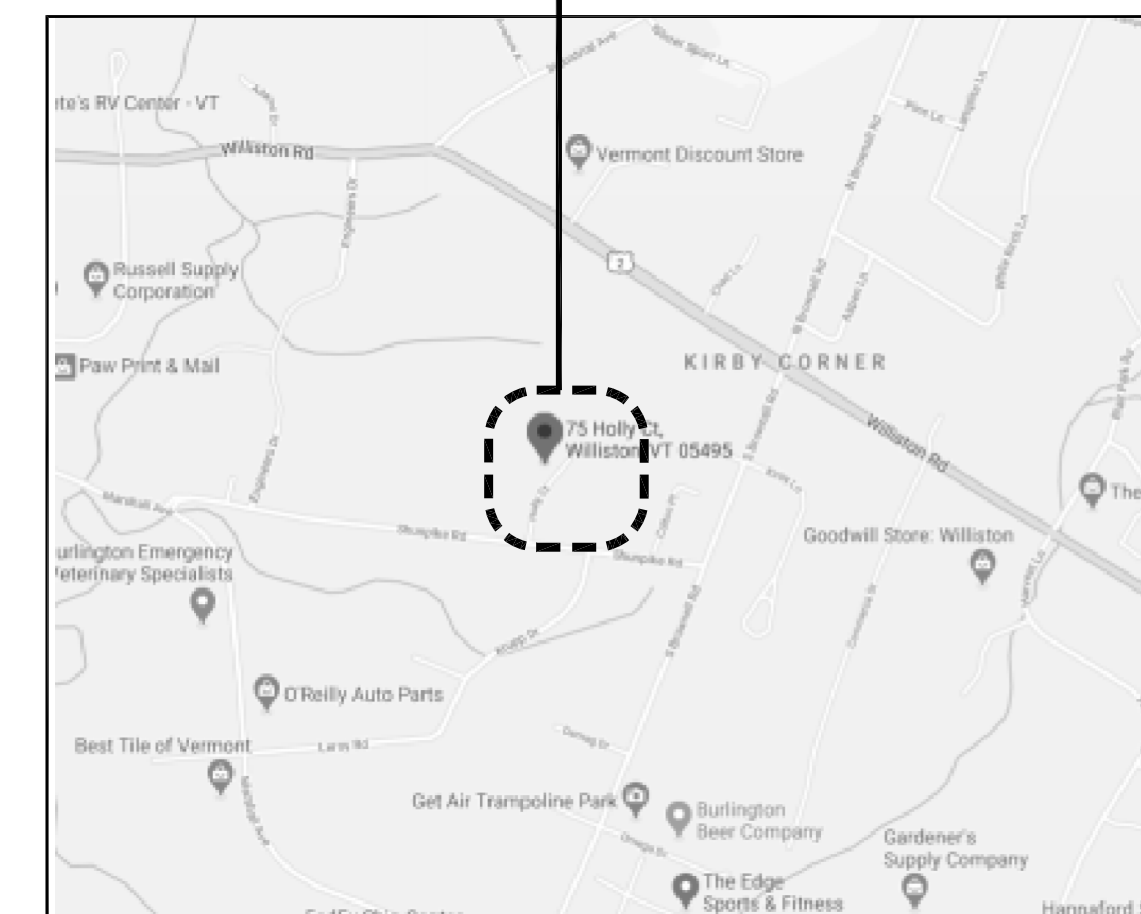
UVMCC - 75-79 HOLLY COURT

75 HOLLY COURT, WILLISTON, VT 05495

OWNER	GENERAL CONTRACTOR	ARCHITECT	CIVIL ENGINEER	STRUCTURAL ENGINEER	M/E/P SYSTEMS	TELECOM SYSTEMS
UVMCC 111 Colchester Ave. Burlington, VT 05431	K J Construction, Inc. 219 Pearl Street Essex Junction, VT 05452 802-879-2800	Joseph Architects, LLC 25 Crossroad Waterbury, Vermont 05676 802 . 244 . 5220	Krebs & Lansing Consulting Engineers, Inc. 164 Main St Suite 201 Colchester, VT 05446 802 . 878 . 0375	Engineering Ventures 208 Flynn Ave, Burlington, VT 05401 802 . 863 . 6225	LN Consulting, Inc. 208 Flynn Ave #2J, Burlington, VT 05401 802 . 655 . 1753	Kirick Engineering Associates, Inc. 5399 Williston Road Williston, VT 05495 802 . 655 . 5731

DOCUMENT PACKAGE RECORD BY ISSUE DATE >>>>		02 - 01 - 2021 ISSUED FOR CON PRICING					
LIST OF DRAWINGS :							
A-0	COVER SHEET, INDEX OF DRAWINGS, SITE LOCATION MAP	●					
A-0.1	CODE INFORMATION & LIFE SAFETY PLAN	●					
A-0.2	GENERAL INFORMATION	●					
CIVIL DRAWINGS >							
STRUCTURAL DRAWINGS >							
S-0.1	GENERAL NOTES	●					
S-1.0	PARTIAL FOUNDATION PLAN AND FRAMING ELEVATION	●					
S-2.0	SECTIONS	●					
ARCHITECTURAL DRAWINGS >							
A-0.3	FLOOR PLAN DEMOLITION	●					
A-1	FLOOR PLAN NEW WORK	●					
A-2	FLOOR PLAN EQUIPMENT COORDINATION	●					
A-3	REFLECTED CEILING PLAN	●					
A-4	EXTERIOR MODIFICATIONS	●					
A-5	SCHEDULES & DETAILS	●					
A-6	SCHEDULES & DETAILS	●					
PLUMBING >							
PO.1	PLUMBING - FIRST FLOOR DEMOLITION PLAN	●					
PO.2	PLUMBING - FIRST FLOOR DEMOLITION PLAN	●					
PI.1	PLUMBING - FIRST FLOOR NEW WORK PLAN	●					
PI.2	PLUMBING - FIRST FLOOR NEW WORK PLAN	●					
PS.1	PLUMBING - LEGEND & FIXTURE EQUIPMENT SCHEDULE, AND GEN. NOTES	●					
FIRE PROTECTION >							
FP0.1	FIRE PROTECTION - SUITE 75 & 79 FIRST FLOOR DEMOLITION PLAN	●					
FP0.2	FIRE PROTECTION - SUITE 75 & 79 FIRST FLOOR DEMOLITION PLAN	●					
FPI.1	FIRE PROTECTION - SUITE 75 FIRST FLOOR NEW WORK PLAN	●					
FPI.2	FIRE PROTECTION - SUITE 75 FIRST FLOOR NEW WORK PLAN	●					
FPI.3	FIRE PROTECTION - SERVICE ENTRANCE DEMOLITION & NEW WORK PLANS	●					

DOCUMENT PACKAGE RECORD BY ISSUE DATE >>>>		02 - 01 - 2021 ISSUED FOR CON PRICING					
LIST OF DRAWINGS :							
MECHANICAL >							
M0.1	MECHANICAL - FIRST FLOOR DEMOLITION PLAN	●					
M0.2	MECHANICAL - FIRST FLOOR DEMOLITION PLAN	●					
M1.1	MECHANICAL - SUITE 75, FIRST FLOOR NEW WORK PLAN	●					
M1.2	MECHANICAL - SUITE 79, FIRST FLOOR NEW WORK PLAN	●					
M1.3	MECHANICAL - ROOF LEVEL DEMOLITION & NEW WORK PLANS	●					
M3.1	MECHANICAL - CONTROLS, LEGEND, NOTES AND SCHEMATIC DIAGRAMS	●					
M3.2	MECHANICAL - CONTROLS, SCHEMATIC DIAGRAMS	●					
M3.3	MECHANICAL - CONTROLS, SCHEMATIC DIAGRAMS	●					
M3.4	MECHANICAL - CONTROLS, SCHEMATIC DIAGRAMS	●					
M5.1	MECHANICAL - EQUIPMENT SCHEDULES AND DETAILS	●					
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M5.3	MECHANICAL - EQUIPMENT SCHEDULES AND DETAILS	●					
ELECTRICAL >							
E0.1	ELECTRICAL - FIRST FLOOR SUITE 75, DEMOLITION PLANS	●					
E0.2	ELECTRICAL - FIRST FLOOR SUITE 79, DEMOLITION PLANS	●					
E1.1	ELECTRICAL - FIRST FLOOR SUITE 75, NEW WORK PLANS	●					
E1.2	ELECTRICAL - FIRST FLOOR SUITE 79, NEW WORK PLANS	●					
E3.1	ELECTRICAL - ONE-LINE AND TYPICAL WIRING DIAGRAMS	●					
E5.1	ELECTRICAL - LEGEND, NOTES, EQUIPMENT & PANEL SCHEDULES	●					
E6.1	ELECTRICAL - EQUIP. SCHEDULE, LIGHTING WIRING DIAGRAMS & DETAILS	●					
TELECOM >							
T0.0	TITLE SHEET, DRAWING LEGEND, DRAWING INDEX & GENERAL NOTES	●					
T1.0	INTER & INTRA-BUILDING SINGLE MODE FIBER OPTIC ONE-LINE LOGICAL DIAGRAMS	●					
T1.1	TELECOM BONDING & GROUNDING ONE-LINE LOGICAL DIAGRAM	●					
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T2.1	OUTSIDE PLANT (OSP) INFRASTRUCTURE BUILDING 327 TO BUILDING (SUITE) 75	●					
T2.2	BUILDING (SUITES 75 / 79) LEVEL 1 TELECOMMUNICATIONS PLAN	●					
T2.3	BUILDING (SUITES 83 / 87) LEVEL 1 TELECOMMUNICATIONS PLAN	●					
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T3.1	ENLARGED TELECOMMUNICATIONS ROOM 106 FLOOR PLAN & ELEVATION SHEET - PROPOSED	●					
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T5.0	TRENCH, EXTERIOR BUILDING PENETRATION & TELECOM FACEPLATE DETAILS	●					
T5.1	TYPICAL TELECOMMUNICATIONS DETAIL SHEET	●					
T5.2	27 0543 UNDERGROUND DUCTS & RACEWAYS FOR COMMUNICATIONS SYSTEMS SPECIFICATIONS	●					
T5.3	27 0543 UNDERGROUND DUCTS & RACEWAYS FOR COMMUNICATIONS SYSTEMS SPECIFICATIONS	●					



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REVISION

PROJECT NAME AND ADDRESS

**UVMCC
SPECIALTY
PHARMACY**
75/79 HOLLY COURT, WILLISTON, VT

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DRAWING NAME

Drawings Issued for
Preliminary Budgeting
Not for Construction
February 1, 2021

DRAWN BY	DATE
PROJECT NUMBER	SHEET

BUILDING CODES, RULES, STANDARDS

STATE OF VERMONT DEPARTMENT OF PUBLIC SAFETY
DIVISION OF FIRE SAFETY
FIRE PREVENTION / BUILDING CODES AND RULES >
2015 VERMONT FIRE & BUILDING SAFETY CODE (Oct. 10, 2016)
2015 VERMONT PLUMBING RULES (Aug 1, 2015)
2014 VERMONT ELECTRICAL SAFETY RULES (July, 1 2014)
2012 VERMONT ACCESS RULES (Amended Nov. 15, 2013)
2014 VERMONT ELEVATOR SAFETY RULES (July, 1 2014)

ADOPTED / REFERENCED NATIONAL CODES AND STANDARDS CONTINUED >

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
2015 NFPA 1 FIRE CODE
2013 NFPA 10 STANDARD FOR PORTABLE FIRE EXTINGUISHERS
2010 NFPA 11 STANDARD FOR LOW-, MEDIUM-, AND HIGH-PRESSURE FOAM
2013 NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
2010 NFPA 14 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS
2010 NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
2015 NFPA 30 FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE
2011 NFPA 31 STANDARD FOR THE INSTALLATION OF OIL BURNING EQUIPMENT
2015 NFPA 54 NATIONAL FUEL GAS CODE
2010 NFPA 55 COMPRESSED GASES AND CRYOGENIC FLUIDS CODE
2014 NFPA 58 LIQUIFIED PETROLEUM GAS CODE
2006 NFPA 61 STANDARD FOR THE PREVENTION OF FIRES AND DUST EXPLOSIONS
2014 NFPA 70 NATIONAL ELECTRICAL CODE
2012 NFPA 70E STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE
2013 NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE
2010 NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES
2011 NFPA 85 BOILER AND COMBUSTION SYSTEMS HAZARDS CODE
2011 NFPA 88A STANDARD FOR PARKING STRUCTURES
2015 NFPA 90A STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS
2012 NFPA 92 STANDARD FOR SMOKE CONTROL SYSTEMS
2009 NFPA 92B STANDARD FOR SMOKE MANAGEMENT SYSTEMS IN MALLS, ATRIUMS, AND LARGE SPACES
2012 NFPA 99 HEALTH CARE FACILITIES CODE
2005 NFPA 99C STANDARD ON GAS AND VACUUM SYSTEMS
2015 NFPA 101 LIFE SAFETY CODE
2010 NFPA 110 STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS
2009 NFPA 170 STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS
2013 NFPA 211 STANDARD FOR CHIMNEYS, FIREPLACES, VENTS, AND SOLID FUEL-BURNING APPLIANCES
2012 NFPA 220 STANDARD ON TYPES OF BUILDING CONSTRUCTION
2012 NFPA 221 STANDARD FOR HIGH CHALLENGE FIRE WALLS, FIRE WALLS, AND FIRE BARRIER WALLS
2009 NFPA 241 STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATIONS, AND DEMOLITION OPERATIONS
2010 NFPA 400 HAZARDOUS MATERIALS CODE
2006 NFPA 654 STANDARD FOR THE PREVENTION OF FIRE AND DUST EXPLOSIONS FROM THE MANUFACTURING, PROCESSING, AND HANDLING OF COMBUSTIBLE PARTICULATE SOLIDS
2012 NFPA 703 STANDARD FOR FIRE-RETARDANT TREATED WOOD AND FIRE-RETARDANT COATINGS FOR BUILDING MATERIALS
2010 NFPA 750 STANDARD ON WATER MIST FIRE PROTECTION SYSTEMS

BOILERS AND PRESSURE VESSELS STANDARDS >

2015 NBIC NATIONAL BOARD INSPECTION CODE, NATIONAL BOARD OF BOILER & PRESSURE VESSEL INSPECTORS

STRUCTURAL DESIGN STANDARDS >

2010 ASCE/SEI 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) >
2013 ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS
2011 ASME A17.3 SAFETY CODE FOR EXISTING ELEVATORS AND ESCALATORS
2011 ASME A18.1 SAFETY STANDARD FOR PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS

INTERNATIONAL CODE COUNCIL (ICC)

2015 INTERNATIONAL BUILDING CODE
2015 INTERNATIONAL PLUMBING CODE
2015 INTERNATIONAL EXISTING BUILDING CODE

ACCESSIBLE DESIGN STANDARDS >

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN SEPTEMBER 15, 2010
VERMONT ACCESSIBILITY STANDARDS STATUTE 20 V.S.A. CHAPTER 174 PROHIBITIVELY COSTLY POLICY (7/30/01)

VERMONT DEPARTMENT OF PUBLIC SERVICE ENERGY CONSERVATION STANDARDS >

2020 VERMONT COMMERCIAL BUILDING ENERGY STANDARDS

USE & OCCUPANCY CLASSIFICATION

NFPA 101 CHAPTER 3 DEFINITIONS: OCCUPANCY
ASSEMBLY MULTI-PURPOSE ASSEMBLY
BUSINESS AMBULATORY HEALTH CARE
EDUCATIONAL DAYCARE
INDUSTRIAL GENERAL SPECIAL PURPOSE
HIGH HAZARD
HEALTH CARE RESIDENTIAL BOARD & CARE DETENTION & CORRECTIONAL
MERCANTILE
RESIDENTIAL
STORAGE
MIXED-USE MULTIPLE SEPARATED

IBC CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION
ASSEMBLY A-1 A-2 A-3 A-4 A-5
BUSINESS B
EDUCATIONAL E
FACTORY F-1 F-2
HIGH HAZARD H-1 H-2 H-3 H-4 H-5
INSTITUTIONAL I-1 I-2 I-3 I-4
MERCANTILE M
RESIDENTIAL R-1 R-2 R-3 R-4
STORAGE S-1 S-2
UTILITY/MISC. U

IBC CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

SECTION 402 COVERED MALL AND OPEN MALL BUILDINGS
 SECTION 410 STAGES, PLATFORMS AND TECHNICAL PRODUCTION AREAS
 SECTION 403 HIGH RISE BUILDINGS
 SECTION 404 ATRIUMS
 SECTION 405 UNDERGROUND BUILDINGS
 SECTION 406 MOTOR VEHICLE - RELATED OCCUPANCIES
 SECTION 407 GROUP I-2
 SECTION 408 GROUP I-3
 SECTION 409 MOTION PICTURE PROJECTION ROOMS
 SECTION 411 SPECIAL AMUSEMENT BUILDINGS
 SECTION 412 AIRCRAFT - RELATED OCCUPANCIES
 SECTION 413 COMBUSTIBLE STORAGE
 SECTION 414 HAZARDOUS MATERIALS
 SECTION 415 GROUPS H-1, H-2, H-3, H-4 AND H-5
 SECTION 416 APPLICATION OF FLAMMABLE FINISHES
 SECTION 417 DRYING ROOMS
 SECTION 418 ORGANIC COATINGS
 SECTION 419 LIVE / WORK UNITS
 SECTION 420 GROUPS I-1, R-1, R-2, R-3
 SECTION 421 HYDROGEN CUTOFF ROOMS
 SECTION 422 AMBULATORY CARE FACILITIES
 SECTION 423 STORM SHELTERS
 SECTION 424 CHILDREN'S PLAY STRUCTURES

IBC CHAPTER 5 TABLE 502 INCIDENTAL USES

FURNACE ROOM WHERE ANY PIECE OF EQUIPMENT IS OVER 400,000 BTU PER HOUR INPUT
 ROOMS WITH BOILERS WHERE THE LARGEST PIECE OF EQUIPMENT IS OVER 15 PSI AND 10 HORSEPOWER
 REFRIGERATION MACHINERY ROOMS
 HYDROGEN CUT-OFF ROOMS, NOT CLASSIFIED AS GROUP H
 INCINERATOR ROOMS
 PAINT SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN OCCUPANCIES OTHER THAN GROUP F
 LABORATORIES AND VOCATIONAL SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN A GROUP E OR I-2 OCCUPANCY
 LAUNDRY ROOMS OVER 100 SQUARE FEET
 GROUP I-3 CELLS EQUIPPED WITH PADDED SURFACES
 WASTE AND LINEN COLLECTION ROOMS LOCATED IN EITHER GROUP I-2 OCCUPANCIES OR AMBULATORY CARE FACILITIES
 WASTE AND LINEN COLLECTION ROOMS OVER 100 SQUARE FEET
 STATIONARY STORAGE BATTERY SYSTEMS HAVING A LIQUID ELECTROLYTE CAPACITY OF MORE THAN 50 GALLONS FOR FLOODED LEAD-ACID, NICKEL CADMIUM OR VRLA OR MORE THAN 1,000 POUNDS FOR LITHIUM-ION AND LITHIUM METAL POLYMER USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTIBLE POWER SUPPLIES

FIRE PROTECTION SYSTEMS

IBC CHAPTER 9 SECTION 903 AUTOMATIC SPRINKLER SYSTEMS
NFPA 101 CHAPTER 9 SECTION 9.6 FIRE DETECTION, ALARM, COMMUNICATIONS SECTION 9.7 AUTOMATIC SPRINKLERS
NFPA 1 CHAPTER 13 FIRE PROTECTION SYSTEMS SECTION 13.2 STANDPIPE SYSTEMS SECTION 13.3 AUTOMATIC SPRINKLERS SECTION 13.4 FIRE PUMPS

SPRINKLER SYSTEM

NO SPRINKLER
 FULL SPRINKLER SYSTEM (NFPA 13 COMPLIANT)

FIRE PUMP

NFPA 1 / NFPA 20 COMPLIANT INSTALLATION

SPRINKLER SYSTEM REQUIRED : IBC 903.2 / NFPA 13

ASSEMBLY
 A-1 FIRE AREA > 12,000 S.F. FIRE AREA OCCUPANT LOAD > 300 FIRE AREA LOCATED ON A FLOOR OTHER THAN LEVEL OF EXIT DISCHARGE FIRE AREA CONTAINS MULTI-THEATER COMPLEX
 A-2 FIRE AREA > 5,000 S.F. FIRE AREA OCCUPANT LOAD > 100 FIRE AREA LOCATED ON A FLOOR OTHER THAN LEVEL OF EXIT DISCHARGE
 A-3 FIRE AREA > 12,000 S.F. FIRE AREA OCCUPANT LOAD > 300 FIRE AREA LOCATED ON A FLOOR OTHER THAN LEVEL OF EXIT DISCHARGE
 A-4 FIRE AREA > 12,000 S.F. FIRE AREA OCCUPANT LOAD > 300 FIRE AREA LOCATED ON A FLOOR OTHER THAN LEVEL OF EXIT DISCHARGE
 A-5 CONCESSION STANDS, RETAIL AREAS, PRESS BOXES, OTHER ACCESSORY AREAS > 1,000 S.F.

EDUCATIONAL
 E FIRE AREAS > 12,000 S.F. EVERY PORTION OF EDUCATIONAL BUILDINGS BELOW LEVEL OF EXIT DISCHARGE

FACTORY
 F-1 FIRE AREA > 12,000 S.F. GROUP F-1 FIRE AREA LOCATED > 3 STORIES ABOVE GRADE PLANE COMBINED AREA OF ALL F-1 FIRE AREAS ON ALL FLOORS/MEZZ > 24,000 S.F. MANUFACTURE OF UPHOLSTERED FURNITURE, MATTRESSES > 2,500 S.F.
 WOODWORKING OPERATIONS FIRE AREAS > 2,500 S.F. GENERATING FINELY DIVIDED COMBUSTIBLE WASTE OR USE FINELY DIVIDED COMBUSTIBLE MATERIALS.

HIGH HAZARD
 H-5 BUILDINGS OR PORTIONS OCCUPYING CELLULOSE NITRATE FILM OR PYROXYLIN PLASTICS ARE MANUFACTURED, STORED OR HANDLED IN QUANTITIES > 100 POUNDS.

INSTITUTIONAL
 I BUILDINGS WITH GROUP I (I-1 THRU I-4) FIRE AREA

MERCANTILE
 M FIRE AREA > 12,000 S.F. GROUP M FIRE AREA LOCATED > 3 STORIES ABOVE GRADE PLANE COMBINED AREA OF ALL M FIRE AREAS ON ALL FLOORS/MEZZ > 24,000 S.F. DISPLAY / SALE OF UPHOLSTERED FURNITURE OR MATTRESSES > 5,000 S.F. STORAGE OF MERCHANDISE IS IN HIGH PILED OR RACK STORAGE ARRAYS

RESIDENTIAL
 R BUILDINGS WITH A GROUP R FIRE AREA

STORAGE
 S-1 FIRE AREA > 12,000 S.F. GROUP S-1 FIRE AREA LOCATED > 3 STORIES ABOVE GRADE PLANE COMBINED AREA OF ALL S-1 FIRE AREAS ON ALL FLOORS/MEZZ > 24,000 S.F. STORAGE OF COMMERCIAL TRUCKS OR BUSES > 5,000 S.F. STORAGE OF UPHOLSTERED FURNITURE OR MATTRESSES > 2,500 S.F.
 REPAIR GARAGES BUILDINGS TWO OR MORE STORIES ABOVE GRADE PLANE, INCLUDING BASEMENTS WITH A FIRE AREA CONTAINING A REPAIR GARAGE > 10,000 S.F. BUILDINGS NO MORE THAN ONE STORY ABOVE GRADE PLANE, WITH A FIRE AREA CONTAINING A REPAIR GARAGE > 12,000 S.F. BUILDINGS WITH REPAIR GARAGES SERVING VEHICLES PARKED IN BASEMENTS
GROUP S-1 FIRE AREA USED FOR REPAIR OF COMMERCIAL TRUCKS OR BUSES > 5,000 S.F.
 BULK STORAGE OF TIRES BUILDINGS AND STRUCTURES WITH > 20,000 C.F. OF TIRE STORAGE.
 S-2 ENCLOSED PARKING GARAGES PARKING GARAGE FIRE AREA > 12,000 S.F. ENCLOSED PARKING GARAGE LOCATED BELOW OTHER OCCUPANCY GROUPS.
STORAGE OF COMMERCIAL TRUCKS OR BUSES FIRE AREA > 5,000 S.F.

CONSTRUCTION TYPE

TYPE I
 NFPA I-442
 IBC I-A NFPA I-332
 IBC I-B NFPA II-222

TYPE II
 IBC II-A NFPA II-III
 IBC II-B NFPA II-000

TYPE III
 IBC III-A NFPA III-211
 IBC III-B NFPA III-200

TYPE IV
 IBC IV NFPA IV-244

TYPE V
 IBC V-A NFPA V-III
 IBC V-B NFPA V-000

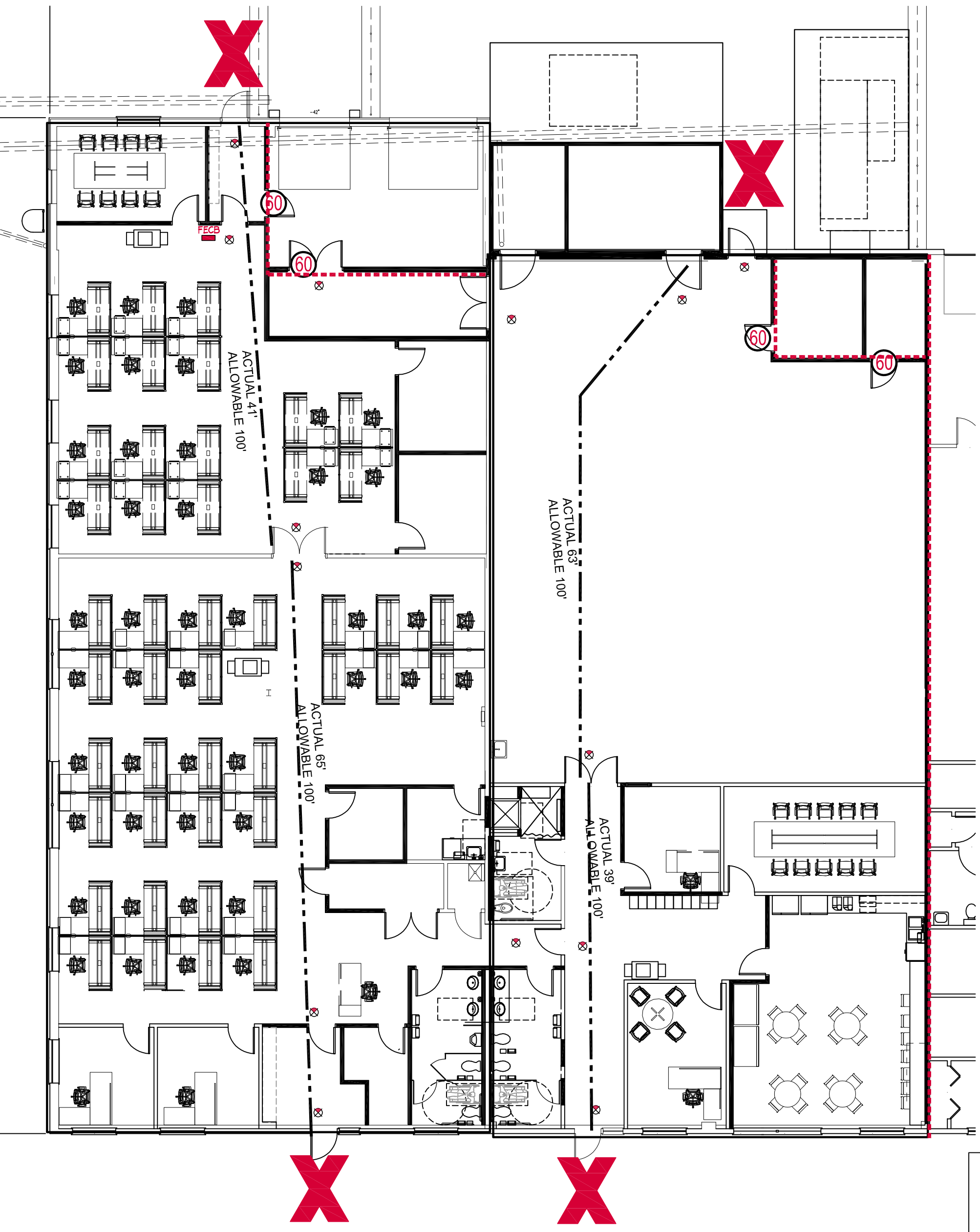
IBC CHAPTER 6 TYPES OF CONSTRUCTION

TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR THE BUILDING ELEMENTS

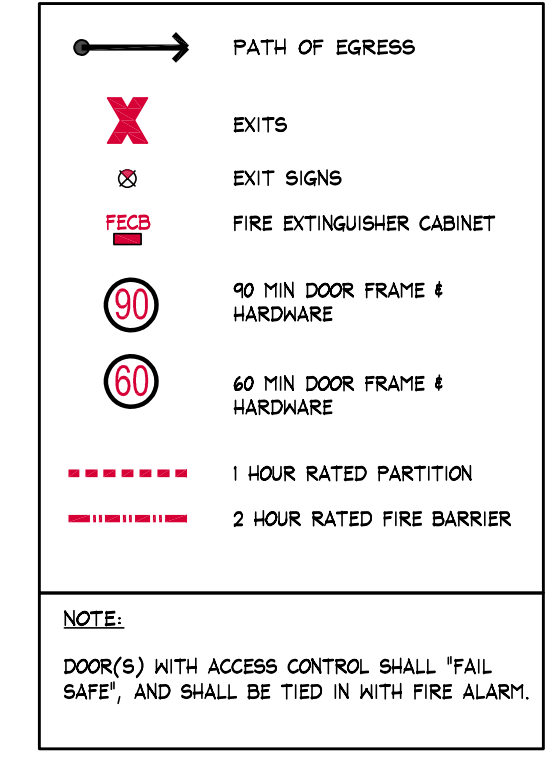
BUILDING ELEMENT	TYPE OF CONSTRUCTION								
	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
PRIMARY STRUCTURAL FRAME				0					
BEARING WALLS:									
EXTERIOR				0					
INTERIOR				0					
NON-BEARING WALLS & PARTITIONS - EXTERIOR	SEE TABLE 602								
NON-BEARING WALLS & PARTITIONS - INTERIOR				0					
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS				0					
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS				0					

IBC CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS

USE - OCCUPANCY	TABLE 503 ALLOWABLE BUILDING HEIGHTS AND AREAS (BASE)		EXISTING CONSTRUCTION	PROPOSED CONSTRUCTION	STREET FRONTAGE MODIFICATIONS / CALCULATIONS
	HEIGHT	TYPE OF CONSTRUCTION			
W/ SPRINKLER	HEIGHT	IIB	EXISTING BUILDING PROJECT DETAIL	NEW BUILDING PROJECT DETAIL	SECTION 506.2 AREA MODIFICATION FRONTAGE (50%)
	HEIGHT	75			
BUSINESS B W/ SPRINKLER (1 STORY)	STORIES	I	I	1 / 10'	+50 % (+54,000 S.F.)
	AREA	36,000 S.F.			



LIFE SAFETY PLAN LEGEND



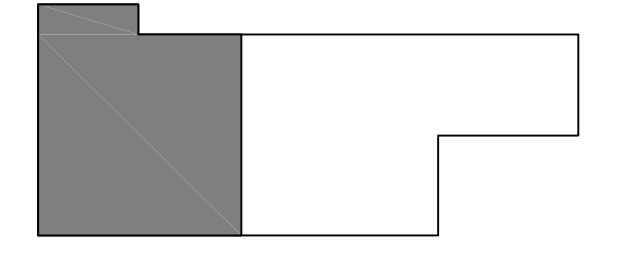
Drawings Issued for Preliminary Budgeting Not for Construction February 1, 2021

PROJECT GENERAL INFORMATION

NAME OF PROJECT: HOLLY COURT PHARMACY RENOVATIONS
OWNER: UNIVERSITY OF VERMONT MEDICAL CENTER
LOCATION: 75 HOLLY COURT, WILLISTON, VT 05498
CURRENT & PROPOSED USE(S): B - BUSINESS
CODE ENFORCEMENT JURISDICTION >
VERMONT DEPARTMENT OF PUBLIC SAFETY
DIVISION OF FIRE SAFETY
WILLISTON REGIONAL OFFICE
380 HURRICANE LN. SUITE 101
WILLISTON, VT 05498
802-879-2300
TOWN OF WILLISTON VERMONT
PLANNING & ZONING
7878 WILLISTON RD.
WILLISTON, VT 05498
802-878-6704

PROJECT DESCRIPTION

EXISTING 24,000 SF SINGLE STORY, SEPARATED, MIXED USE FACILITY
CURRENT & PROPOSED USE/OCCUPANCY B-BUSINESS
PROPOSED RENOVATIONS TO SUITES 75479 *10,500 S.F. INCLUDE; FINISHING OF EXISTING NON FINISHED AREAS FOR OPEN OFFICE WORK AREAS AND BATHROOM / SUPPORT SPACES - *2,500 S.F. FINISHING OF EXISTING NON FINISHED AREA FOR UVMHC RETAIL PHARMACY ORDER FULFILLMENT. *3,000 S.F.
EXTERIOR MECHANICAL EQUIPMENT TO SUPPORT RENOVATIONS TO BE ACCOMMODATE NEW CONCRETE HOUSEKEEPING PADS.
NEW EXTERIOR WALK-IN COOLER/FREEZER SHALL BE ADDED TO THE NORTH WALL OF EXISTING BUILDING. *950 S.F.
SCOPE OF WORK INCLUDES :
GENERAL CONSTRUCTION WORK.
SITE & UTILITY WORK.
MECHANICAL, PLUMBING & ELECTRICAL SYSTEMS.
MODIFICATIONS TO EXISTING NFPA 13 COMPLIANT SPRINKLER SYSTEM & FIRE ALARM.



IN ACCEPTING AND UTILIZING THESE DRAWINGS, REPORTS OR DATA, RECIPIENT ACKNOWLEDGES THAT THIS DOCUMENT WAS CREATED BASED ON FIELD OBSERVATIONS AND MEASUREMENTS. INFORMATION IS FOR BASE PLANNING PURPOSES ONLY AND ALL INFORMATION SHALL BE VERIFIED PRIOR TO THE COMMENCEMENT OF ANY RENOVATION/MODIFICATIONS, ETC.

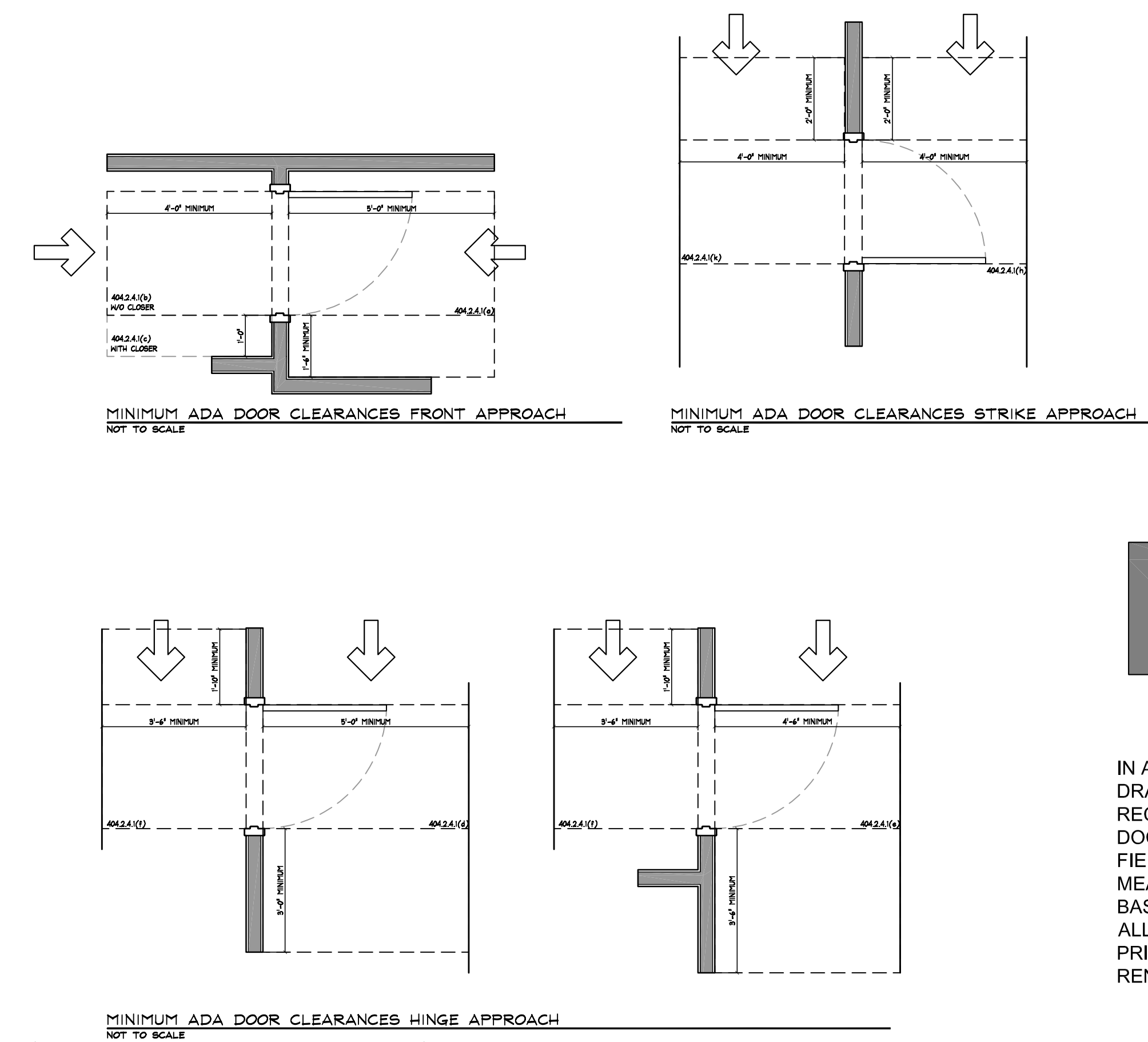
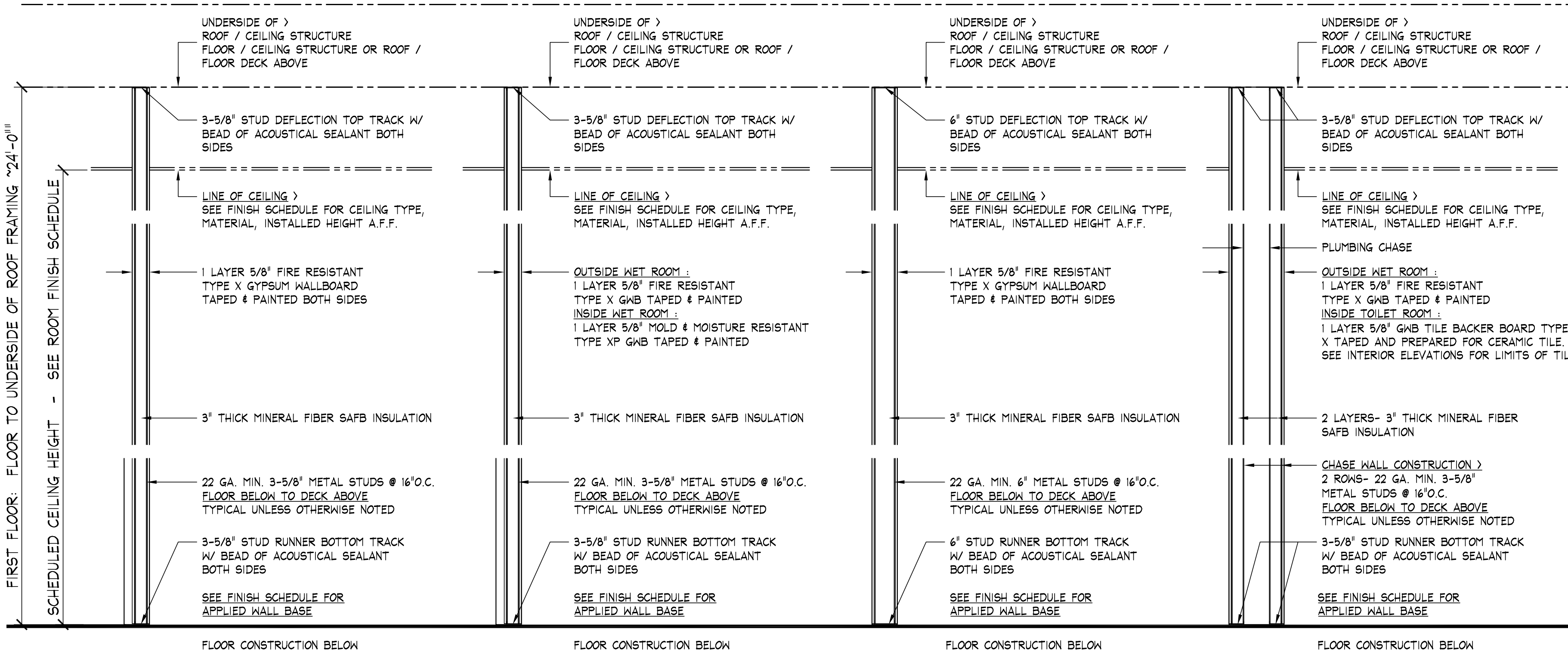
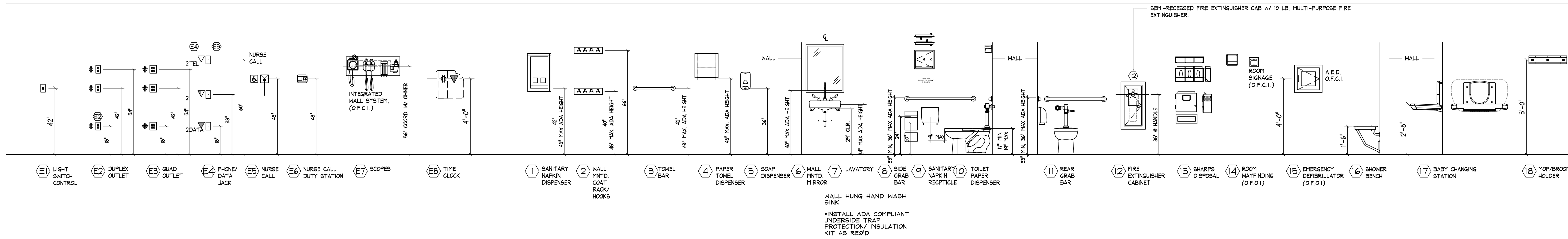
REVISION
Rev # _____

PROJECT NAME AND ADDRESS
UVMHC SPECIALTY PHARMACY
75/79 HOLLY COURT, WILLISTON, VT
CELEBRATING 20 YEARS! 2000 - 2020

Joseph Architects
25 Crossroad
Waterbury, Vermont 05676
Tel. 802-244-5220
Fax 802-806-1010
www.JosephArchitects.com
DRAWING NAME

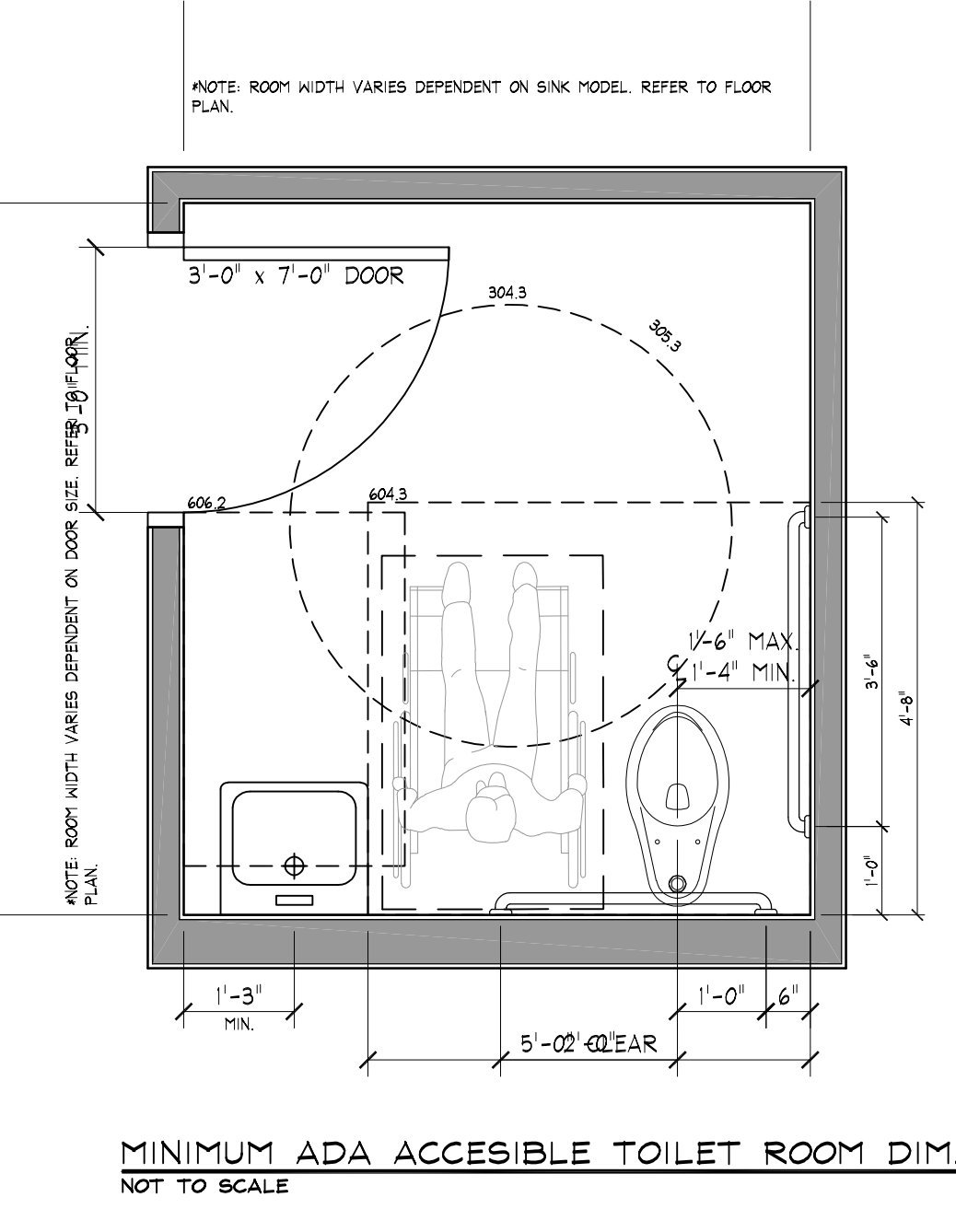
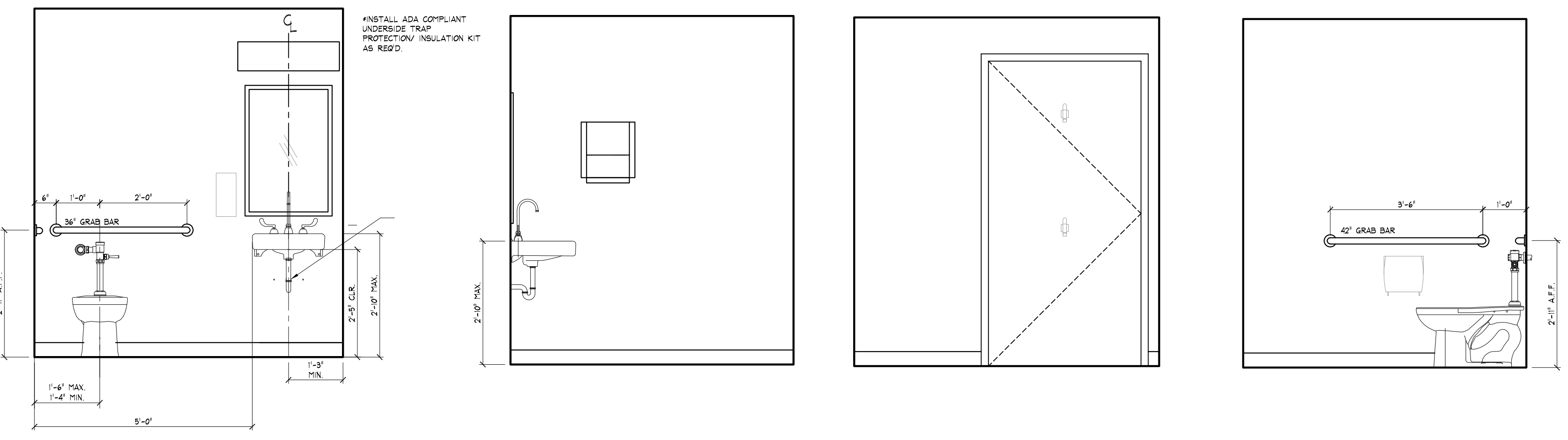
CODE INFORMATION & LIFE SAETY PLAN

J.G. DRAWN BY 2210202 DATE
20-170 PROJECT NUMBER SHEET



1	U.L. DESIGN NO.	N/A	2	J.C. & SOILED STORAGE ROOMS ONLY U.L. DESIGN NO.	UL-419	3	U.L. DESIGN NO.	N/A	4	U.L. DESIGN NO.	N/A
X	SMOKE BARRIER RATING	0 HR	X,MM	SMOKE BARRIER RATING	0 HR	X	SMOKE BARRIER RATING	0 HR	X,TB	SMOKE BARRIER RATING	0 HR
	FIRE BARRIER RATING	0 HR		FIRE BARRIER RATING	1 HR		FIRE BARRIER RATING	0 HR		FIRE BARRIER RATING	0 HR
			2	INSIDE TOILET ROOMS: 1 LAYER 5/8" GMB TILE BACKER BOARD TYPE X TAPED AND PREPARED FOR CERAMIC TILE. SEE INTERIOR ELEVATIONS FOR LIMITS OF TILE		3	INSIDE TOILET ROOMS: 1 LAYER 5/8" GMB TILE BACKER BOARD TYPE X TAPED AND PREPARED FOR CERAMIC TILE. SEE INTERIOR ELEVATIONS FOR LIMITS OF TILE				
			X,TB			X,TB					

IN ACCEPTING AND UTILIZING THESE DRAWINGS, REPORTS OR DATA, RECIPIENT ACKNOWLEDGES THAT THIS DOCUMENT WAS CREATED BASED ON FIELD OBSERVATIONS AND MEASUREMENTS. INFORMATION IS FOR BASE PLANNING PURPOSES ONLY AND ALL INFORMATION SHALL BE VERIFIED PRIOR TO THE COMMENCEMENT OF ANY RENOVATION/MODIFICATIONS, ETC.



NOTE: ROOM WIDTH VARIES DEPENDENT ON DOOR SIZE. REFER TO FLOOR PLAN.

NOTE: ROOM SIZE VARIES. REFER TO FLOOR PLAN FOR SPECIFIC ROOM DIMENSIONS.

NOTE: ROOM WIDTH VARIES DEPENDENT ON DOOR SIZE. REFER TO FLOOR PLAN.

NOTE: ROOM WIDTH VARIES DEPENDENT ON DOOR SIZE. REFER TO FLOOR PLAN.

MINIMUM ADA ACCESSIBLE TOILET ROOM DIMENSIONS
NOT TO SCALE

Drawings Issued for Preliminary Budgeting
Not for Construction
February 1, 2021

REVISION

PROJECT NAME AND ADDRESS

UVMC SPECIALTY PHARMACY
75/79 HOLLY COURT, WILLISTON, VT

CELEBRATING 20 YEARS! 2000 - 2020

Joseph Architects
25 Crossroad
Waterbury, Vermont 05676
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Fax 802-806-1010
www.JosephArchitects.com

DRAWING NAME

GENERAL INFORMATION

J.G. DRAWN BY 20210202 DATE
20-170 PROJECT NUMBER SHEET

A-0.2

A. EXISTING BUILDING NOTES

- 1. DIMENSIONS, ELEVATIONS, MEMBER SIZES, AND DETAILS OF EXISTING STRUCTURE SHOWN IN THE STRUCTURAL DRAWINGS HAVE BEEN EXTRACTED FROM RECORD DRAWINGS AND/OR LIMITED FIELD MEASUREMENTS...
2. TEMPORARY SHORING AND BRACING OF FLOORS, WALLS, AND OTHER STRUCTURAL ELEMENTS OF THE EXISTING BUILDINGS...
3. REPORT EXISTING CONDITIONS UNCOVERED, REVEALED, FOUND OR DEVELOPED DURING CONSTRUCTION INDICATIVE OF STRUCTURAL INTEGRITY LOSS OR DETERIORATION...

B. FOUNDATION RELATED EARTHWORK

- 1. FOOTINGS AND SLABS CAST DIRECTLY AGAINST THE EARTH SHALL BE SIDE-FORMED AS REQUIRED TO KEEP EARTH OUT OF THE CONCRETE...
2. UNLESS NOTED OTHERWISE, PLACE AND COMPACT BACKFILL IN EQUAL CONTINUOUS LAYERS NOT EXCEEDING A MAXIMUM OF 8" OF COMPACTED DEPTH...
3. AT EARTH RETAINING AND FOUNDATION WALLS, BACKFILL LIFTS TO NOT EXCEED 12 INCH DIFFERENCE IN ELEVATION...
4. BACKFILL REQUIREMENTS:
A. FILL WITHIN BUILDING ENVELOPE AND EXTENDING OUTWARD AT 1:1 SLOPE TO ACCEPTABLE NATIVE SOIL CONDITIONS...
B. BACKFILL BELOW PAVEMENT, WALKS, ENTRY SLABS IN VICINITY OF BUILDING...
C. BACKFILL BEHIND RETAINING WALLS AND BASEMENT WALLS, OUTSIDE BUILDING ENVELOPE AND UNDER PAVEMENT, WALKS, ENTRY SLABS...
D. BACKFILL ALONG EXTERIOR OF BUILDING AGAINST WALLS AND NOT UNDER PAVEMENT, WALKS, ENTRY SLABS...
5. BACKFILL MATERIALS: RECYCLED CONCRETE AGGREGATE TO BE USED IN WHOLE OR BLENDED WITH OTHER AGGREGATES TO ACHIEVE GRADATIONS BELOW...
6. GEOTEXTILE FABRIC: NON-WOVEN WITH 12 LAPPED SEAMS...
7. INSULATION AT EXTERIOR SLABS AND WALKS (NOT PAVEMENTS): EXTRUDED POLYSTYRENE...

C. CAST-IN-PLACE CONCRETE

- 1. CODES AND STANDARDS: COMPLY WITH THE PROVISIONS OF THE LATEST EDITIONS OF:
A. ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
B. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"
C. ACI 304 "GUIDE FOR MIXING, TRANSPORTING AND PLACING CONCRETE"
D. ACI 305 "HOT WEATHER CONCRETING"
E. ACI 306 "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING"
F. ACI 308 "STANDARD PRACTICE FOR CURING CONCRETE"
2. CONCRETE TESTING: THE CONTRACTOR SHALL PREPARE A SET OF 4 CYLINDERS/TEST SET TO BE TESTED AT AN INDEPENDENT LABORATORY...
3. SUBMIT MIX DESIGN AND EITHER TRIAL MIX DESIGNS OR HISTORIC FIELD DATA FOR APPROVAL...
4. COMPRESSIVE MIXTURES:
A. 28 DAY COMPRESSIVE STRENGTH: 4,000 PSI
B. SLUMP: 3"-5" BEFORE ADDITION OF WATER REDUCER...
5. MAXIMUM AGGREGATE SIZE IN ACCORDANCE WITH ACI 301; CLEARLY NOTE LOCATION WHERE AGGREGATES GREATER THAN 3/4" MAXIMUM SIZE ARE PROPOSED FOR USE...
6. NO CHLORIDE OR OTHER UNAUTHORIZED ADMIXTURES SHALL BE USED...
7. WHEN AMBIENT TEMPERATURE IS BELOW 40° FAHRENHEIT OR MORE THAN 90° FAHRENHEIT PLACE AND PROTECT CONCRETE IN ACCORDANCE WITH ACI STANDARDS LISTED ABOVE...
8. CONCRETE PLACEMENT MAY REQUIRE ADJUSTMENT OF REINFORCEMENT, EMBEDDED ITEMS OR ANCHOR BOLTS...
9. COMPLY WITH ACI CODES AND JOINT CONCRETE IN A CONTINUOUS OPERATION WITHIN PLANNED JOINTS OR SECTIONS...
10. CURING: COVER OR WET CURE ALL ELEMENTS. BEGIN INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM EXPOSED SURFACES...
11. PROVIDE CONTROL AND CONSTRUCTION JOINTS BY DETAIL AND SPECIFICATION REQUIREMENTS...
A. SLABS SAW-CUT CONTROL JOINTS AS SOON AS CONCRETE HAS HARDENED ENOUGH TO WALK ON SURFACE WITHOUT DAMAGING CONCRETE AND NO MORE THAN 4 HOURS AFTER FINAL TROWEL...
B. WALLS CONTROL JOINTS: NOT EXCEEDING 20 FEET AND AT EACH INTEGRAL PILASTER...
12. CURING: COVER OR WET CURE ALL ELEMENTS. BEGIN INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM EXPOSED SURFACES...

D. CONCRETE REINFORCEMENT

- 1. SHOP DRAWINGS SHALL BE PROVIDED PRIOR TO START OF CONCRETE PLACING AND BE IN ACCORDANCE WITH:
A. ACI 301
B. ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT"
C. ACI SP-66 "ACI DETAILING MANUAL"
D. CRSI MSP "MANUAL OF STANDARD PRACTICE"
SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SHOW ALL SLABS IN PLAN AND ALL WALLS IN ELEVATION WITH OPENINGS AND PENETRATIONS SHOWN BASED ON MEP COORDINATION SUBMITTALS AND ARCHITECTURAL REQUIREMENTS. SUBMIT PROPOSED CONTROL AND CONSTRUCTION JOINTS FOR REVIEW ON REINFORCING SUBMITTALS
2. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60, STEEL BARS PER ASTM A305, UNLESS NOTED OTHERWISE.
3. FIELD BENDING OR REINFORCEMENT SHALL CONFORM TO ACI 301, INCLUDING PRE-HEAT REQUIREMENTS.
4. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185 WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 70,000 PSI. LAP ONE CROSS WIRE SPACING PLUS 2". SUPPORT MESH ON CHAIRS PER CRSI WITH #4 AT 4'-0"OC, EACH WAY.
5. PROVIDE MINIMUM CONCRETE COVER TO REINFORCEMENT AS FOLLOWS, UNLESS OTHERWISE NOTED:
A. BOTTOM OF FOOTINGS, GRADE BEAMS, AND SLABS-ON-GRADE: 3"
B. SIDES OF FOOTINGS AND GRADE BEAMS: 2"
C. FOUNDATION WALLS, FROST WALLS, RETAINING WALLS, PIT WALLS: 2"
D. EXTERIOR WALLS (EXPOSED TO WEATHER): 2"
E. FACES OF WALLS OTHER THAN THOSE NOTED ABOVE: 3/4"
F. FOUNDATION PIERS: 2" TO TIES
G. TOPPING SLAB: 3/4"
6. ALL LAPS SHALL BE FULL TENSION LAPS (CLASS B SPLICE) UNLESS SPECIFICALLY NOTED OTHERWISE. DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT, UNLESS OTHERWISE NOTED.
7. CHAIRS AND SPACERS SHALL BE PLACED TO ADEQUATELY SUPPORT REINFORCING DURING PLACEMENT. FOREIGN MATERIALS SUCH AS WOOD, CLAY BRICK OR OTHER UNSUITABLE SUPPORTS SHALL NOT BE USED TO SUPPORT REINFORCING. SET WIRE TIES SO ENDS ARE DIRECTED INTO CONCRETE WHERE CONCRETE WILL BE EXPOSED. DO NOT USE CONCRETE SUPPORTS OR PUDDLING FOR SLABS UNLESS SUBMITTED AND ACCEPTABLY REVIEWED.

E. POST-INSTALLED ANCHORS

- 1. WHERE A MANUFACTURER'S ANCHORS IS SPECIFICALLY CALLED OUT ON THE DRAWINGS, IT SHALL BE CONSIDERED THE DESIGN BASIS FOR THE REQUIRED ANCHOR. ALTERNATES MEETING OR EXCEEDING ANCHOR SYSTEM DEMANDS, INCLUDING, BUT NOT LIMITED TO CAPACITY LOADING, EDGE DISTANCE, SUBSTRATE THICKNESS FOR CONNECTION ELEMENTS AND BASE MATERIAL SHALL BE SUBMITTED FOR PROPOSED USE PENDING ACCEPTABLE REVIEW. SUBMIT ICC-ES CODE REPORTS.
2. ADHESIVE ANCHORS, WHERE NOT SPECIFICALLY DETAILED, SHALL BE:
A. FOR CONCRETE AND CONCRETE MASONRY: HILTI HIT-HY-200
B. FOR EXISTING BRICK MASONRY: HILTI HIT-HY 270
INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.
3. EXPANSION ANCHORS, WHERE NOT SPECIFICALLY DETAILED, SHALL BE:
A. FOR CONCRETE: HILTI KWIK BOLT TZ
B. FOR MASONRY: HILTI KWIK BOLT Z
INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.
4. SCREW TYPE ANCHORS: WHERE NOT SPECIFICALLY DETAILED, SHALL, FOR CONCRETE AND MASONRY: SIMPSON TITEN-HD INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.

F. STRUCTURAL STEEL

- 1. UNLESS OTHERWISE NOTED, STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:
A. WIDE FLANGE SECTIONS: ASTM A572 GRADE 50 OR ASTM A992 (FY = 50 KSI)
B. ANGLES, CHANNELS, PLATE AND OTHER HOT-ROLLED SHAPES: ASTM A36 (FY = 36 KSI)
C. TUBES: ASTM A500 GRADE B (FY = 46 KSI)
D. PIPES: ASTM A53 GRADE B TYPE E OR S (FY = 35 KSI)
E. BASEPLATES, CONNECTION PLATES, STIFFENER PLATES: ASTM A572 GRADE 50 OR ASTM A992 (FY = 50 KSI)
F. THREADED RODS: ASTM A572 GRADE 50
G. STAINLESS STEEL (SS) BARS & PLATES: ASTM A304, FY = 30 KSI
H. ANCHOR BOLTS: ASTM F1554 GRADE 55, UNLESS NOTED OTHERWISE, WITH SUPPLEMENTARY REQUIREMENT S1 FOR WELDABILITY.
2. BOLTS, NUTS AND WASHERS: ASTM A325 TYPE 1 BOLTS (3/4" MINIMUM DIAMETER), ASTM A563 DH HEAVY HEX NUTS WITH ASTM F436 HARDENED WASHERS. PROVIDE BOLT ASSEMBLIES GALVANIZED TO ASTM A153 AT GALVANIZED STRUCTURAL MEMBERS. PROVIDE ASTM A490 BOLTS WHERE NOTED ON DRAWINGS OR WHERE NEEDED FOR SPECIFIED LOADS. DO NOT MIX BOLT SIZES BETWEEN A325 AND A490 BOLTS. HIGH STRENGTH LOAD INDICATOR BOLTS MAY BE USED AT THE CONTRACTOR'S OPTION.
3. DESIGN OF STEEL CONNECTIONS: CONTRACTOR IS RESPONSIBLE FOR DESIGN OF ALL STEEL CONNECTIONS OR PORTIONS OF CONNECTIONS NOT FULLY DETAILED IN THE CONTRACT DOCUMENTS. FOR THE SPECIFIED CONNECTION FORCES. SEE SPECIFICATIONS FOR DESIGN REQUIREMENTS. IN NO CASE SHALL LOADS BE LESS THAN 12 KIPS (WORKING).
4. SUBMITTALS FOR REVIEW
A. SHOP DRAWINGS: INDICATE PROFILES, SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, DECKING, OPENINGS, ATTACHMENTS, AND FASTENERS. SHOW ALL CONNECTION DETAILS. PROVIDE DESIGN OF CONNECTIONS NOT DETAILED ON DRAWINGS. INDICATE WELDED CONNECTIONS WITH AWS A2.0 WELDING SYMBOLS. INDICATE NET WELD LENGTHS
B. EACH SHOP DRAWING SHALL BE DATED AND IDENTIFIED WITH A UNIQUE DRAWING NUMBER AND REVISION NUMBER. RESUBMITTED SHOP DRAWINGS SHALL BE GIVEN A NEW REVISION NUMBER, AND ALL CHANGES/ADDITIONS/DELETIONS FROM THE PREVIOUS SUBMISSION SHALL BE CLEARLY IDENTIFIED.
C. ERECTION DRAWINGS SHALL INCLUDE DETAILS OF ALL FIELD WELDING AND ANY OTHER SPECIAL FIELD INSTRUCTIONS SEE SPECIFICATION SECTION 05120 AND NOTES BELOW FOR ADDITIONAL REQUIREMENTS
5. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STEEL CONSTRUCTION," 14TH EDITION, BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AND THE STRUCTURAL WELDING CODE (AWS D1.1) LATEST EDITION, BY THE AMERICAN WELDING SOCIETY.
6. STRUCTURAL STEEL CONNECTIONS SHALL BE AS FOLLOWS:
A. ALL CONNECTIONS UNLESS INDICATED OTHERWISE SHALL BE MADE WITH 3/4 INCH DIAMETER A325 BOLTS. AT MOMENT CONNECTIONS, 3/4" DIAMETER A325 BOLTS, DESIGNED AS TYPE "SC" SLIP CRITICAL CONNECTIONS, SHALL BE USED.
B. THE MINIMUM NUMBER OF BOLTS IN ANY CONNECTION SHALL BE TWO 3/4 INCH DIAMETER A325 BOLTS UNLESS INDICATED OTHERWISE.
C. SINGLE-ANGLE CONNECTIONS MAY NOT BE USED FOR BEAM CONNECTIONS.
7. ALL STRUCTURAL SHOP AND FIELD WELDING SHALL BE MADE WITH ELECTRODES DESIGNED BY E70XX LOW HYDROGEN, IN ACCORDANCE WITH AWS D1.1, PERFORMED BY CERTIFIED WELDERS.
8. THE MINIMUM THICKNESS OF GUSSET AND FIN PLATES SHALL BE 3/8".
9. GROUT: NON-SHRINK TYPE, PRE-MIXED COMPOUND CONSISTING OF NON-METALLIC AGGREGATE CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI AT 28 DAYS AS MANUFACTURED BY FIVE STAR PRODUCTS, INC., FAIRFIELD, CT, OR APPROVED EQUIVALENT.
10. TOUCH-UP PRIMER FOR GALVANIZED SURFACES: TNEC SERIES 37, ZINC RICH RED APPROVED EQUIVALENT.
11. FINISH: STRUCTURAL STEEL MEMBERS ARE TO BE GALVANIZED IN ACCORDANCE WITH ASTM A123. PROVIDE MINIMUM 1.25 OZ/SQ FT GALVANIZED COATING.
12. GROUT UNDER BASE PLATES WITH PRE-MIXED NON-SHRINK GROUT WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 7,000 PSI

MIX DESIGN TABLE HERE

BASIS OF DESIGN

Table with 2 columns: Building Code, Dead Loads, Live Loads, Roof Snow Load, Wind Design Data, Earthquake Design Data, Allowable Soil Bearing Pressure.

ABBREVIATIONS

Table mapping abbreviations to full names: AB ANCHOR BOLT, AFF ABOVE FINISH FLOOR, AL ALUMINUM, B.O.F. BOTTOM OF FOOTING, DWG DRAWING, E.F. EACH FACE, ELEV. ELEVATION, EP EMBED PLATE, EQ EQUAL, E.S. EACH SIDE, E.W. EACH WAY, EX. EXISTING, #F. FOOTING DESIGNATION, FND FOUNDATION, F.S. FAR SIDE, H.T. HEAVY TIMBER, MC. MOMENT CONNECTION, N.S. NEAR SIDE, oc ON CENTER, #P PIER DESIGNATION, PL PLATE, SS STAINLESS STEEL, STD STANDARD, T.O.C. TOP OF CONCRETE, T.O.S. TOP OF STEEL, T.O.SHELF TOP OF SHELF, T.O.W. TOP OF WALL, TYP. TYPICAL, U.N.O. UNLESS NOTED OTHERWISE, V.I.F. VERIFY IN FIELD.

DRAWING LEGEND

Table with 3 columns: Symbol, Description, Pattern. Includes symbols for North Arrow, Elevation, Section Number, Deck Span Direction, Slope Direction, Beam/Column Splice, Roof Pitch, Footing Step, Opening, Moment Connection, Guardrail/Railing, Beam Penetration, Concrete, Grout, Grating, Edge/Rock, 3/4" Crushed Stone, Compacted Granular Fill, Rigid Insulation, Wood, Undisturbed Subgrade, CMU Block, Brick.

Stamp

Date

Description

No.

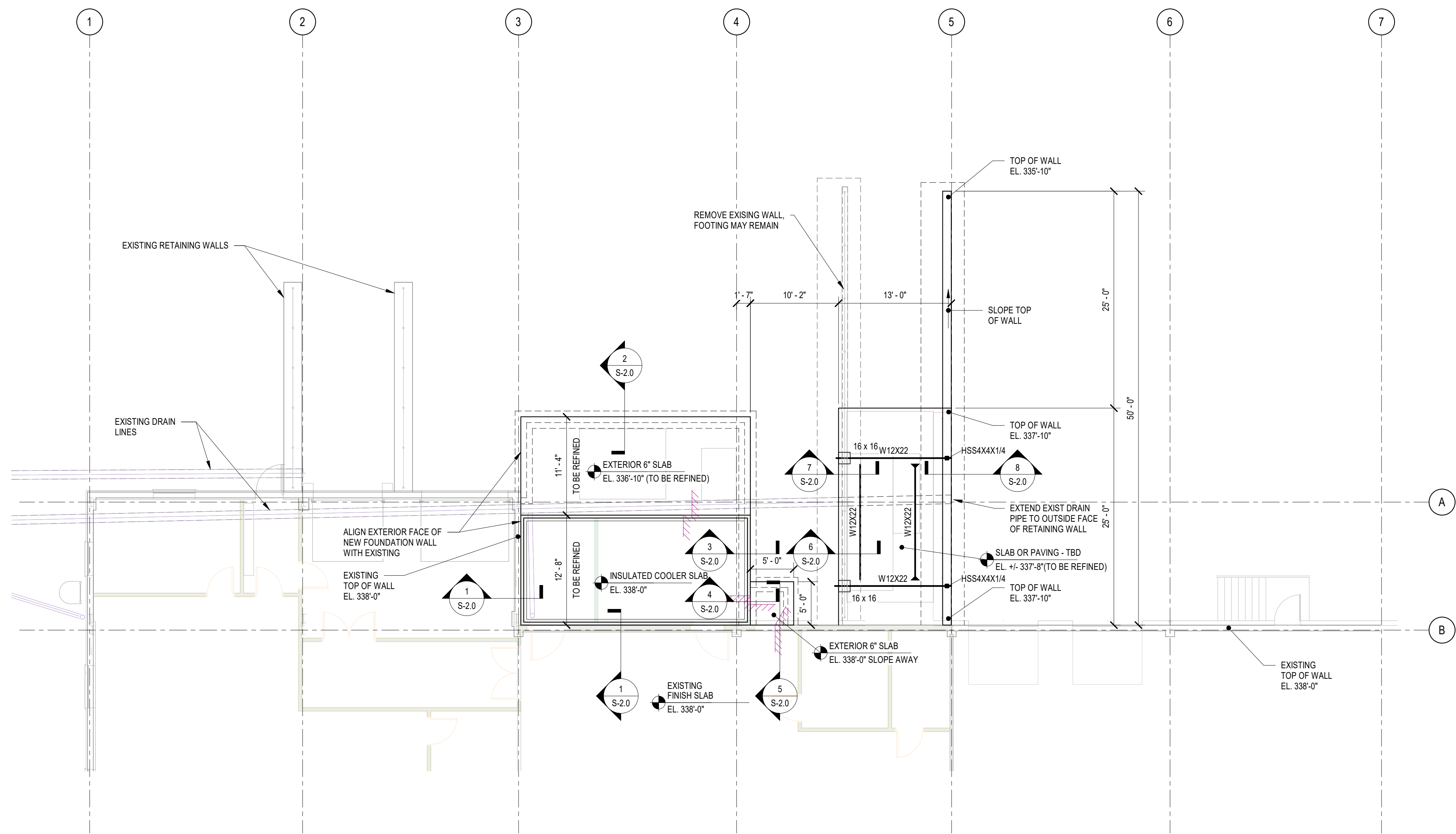
ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401
tel. 802-663-6225 fax. 802-663-6306
85 Mechanic Street, Suite B2-2, Lebanon, NH 03766
tel. 603-442-9333 fax. 603-442-9331
www.engineeringventures.com

Enter address here

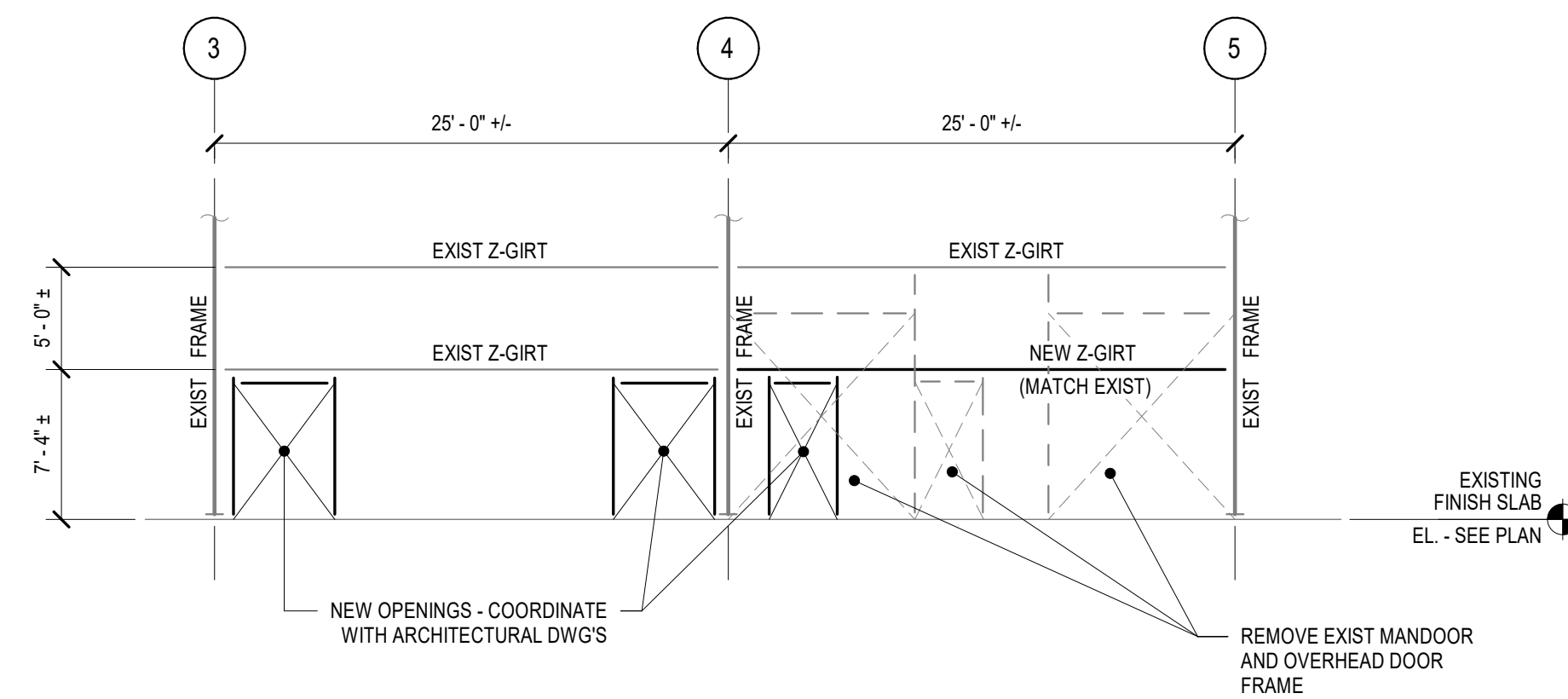
GENERAL NOTES
Project Name

Table with 2 columns: Field, Value. Includes fields for Sheet Title, Project Title, Designer, Checker, Author, Scale, Issue Date.

PROGRESS DRAWING NOT FOR CONSTRUCTION 01/29/20
S-0.1
EV Project #20574



1 PARTIAL FOUNDATION PLAN
1/8" = 1'-0"



2 PARTIAL FRAMING ELEVATION
1/8" = 1'-0"

Stamp

Date

Description

No.

ENGINEERING VENTURES PC
 208 Flynn Avenue, Suite 2A, Burlington, VT 05401
 tel. 802-863-6225 fax. 802-863-6306
 85 Mechanic Street, Suite B0-2, Lebanon, NH 03766
 tel. 603-442-9333 fax. 603-442-9331
 www.engineeringventures.com

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PARTIAL FOUNDATION PLAN AND FRAMING ELEVATION

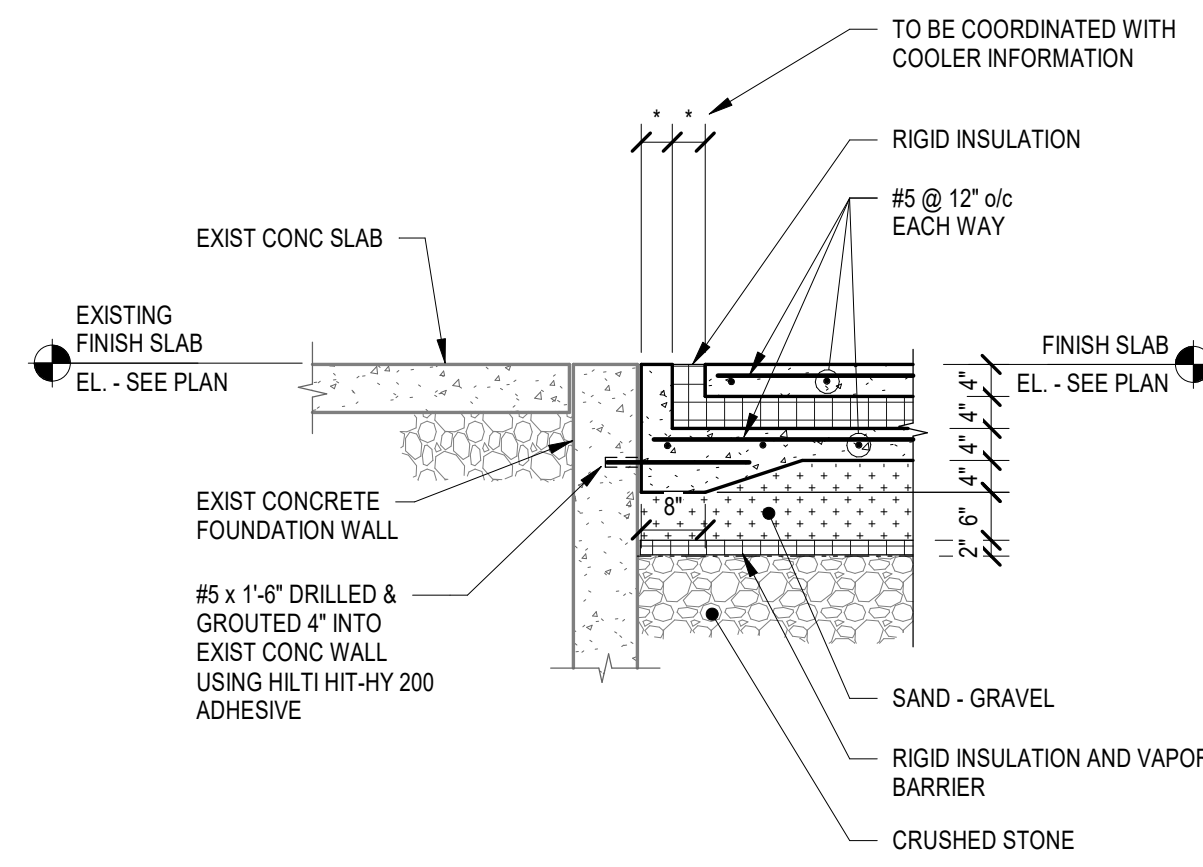
Sheet Title:
Project Title:

Designed By: Designer
 Checked By: Checker
 Drawn By: Author
 Scale: 1/8" = 1'-0"
 Date: Issue Date

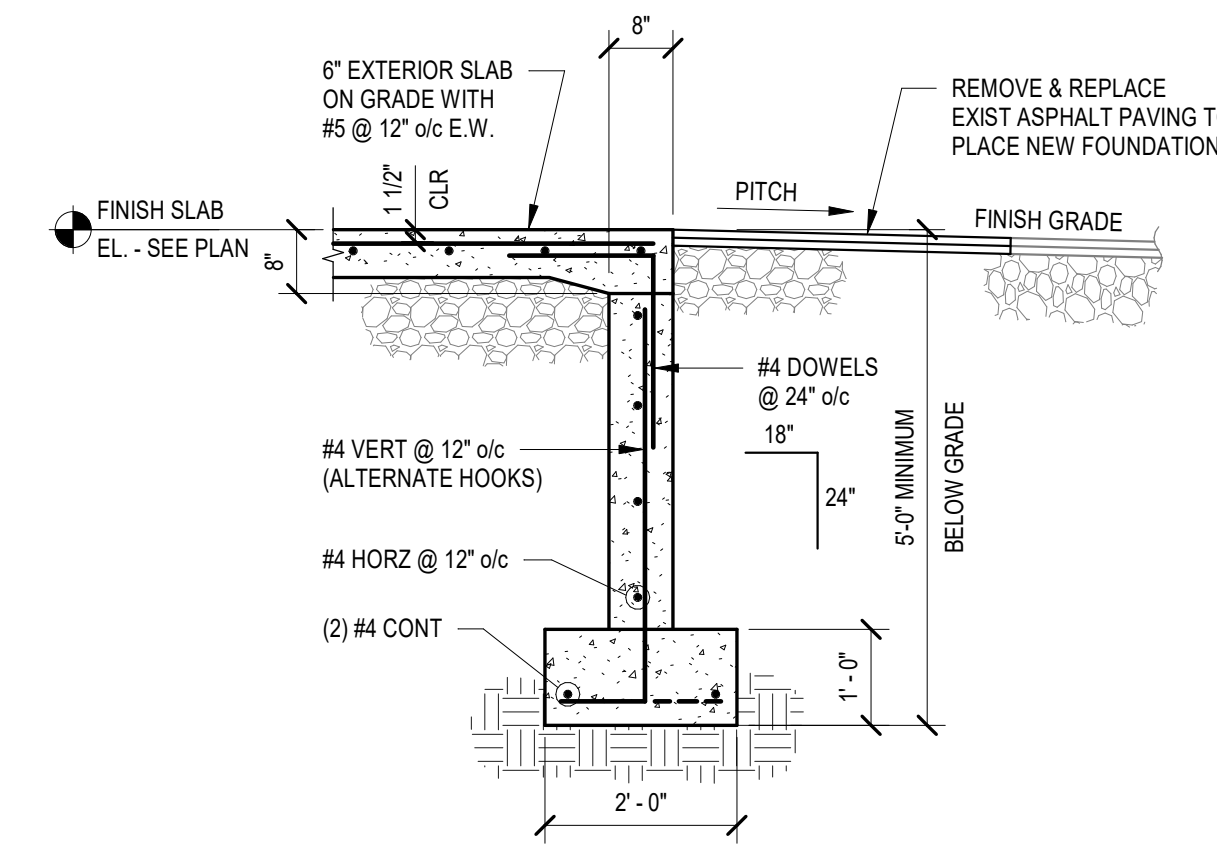
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EV Project #20574

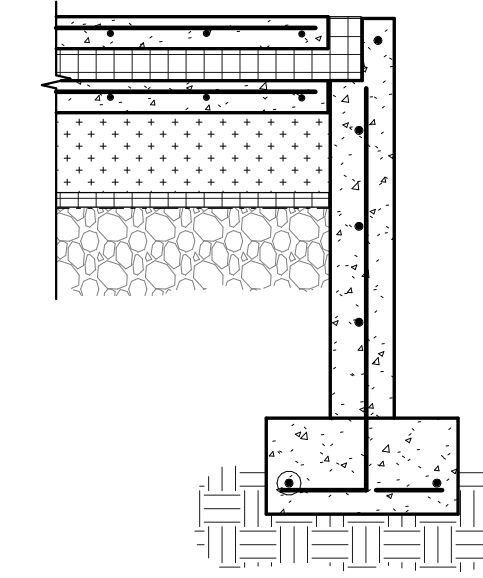
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NOT FOR CONSTRUCTION
01/29/20



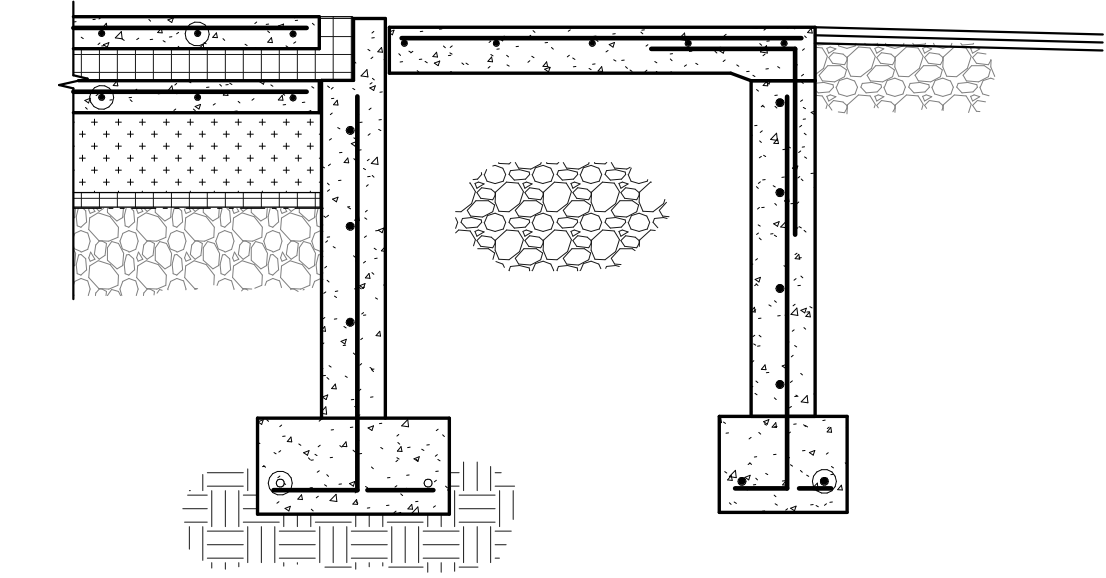
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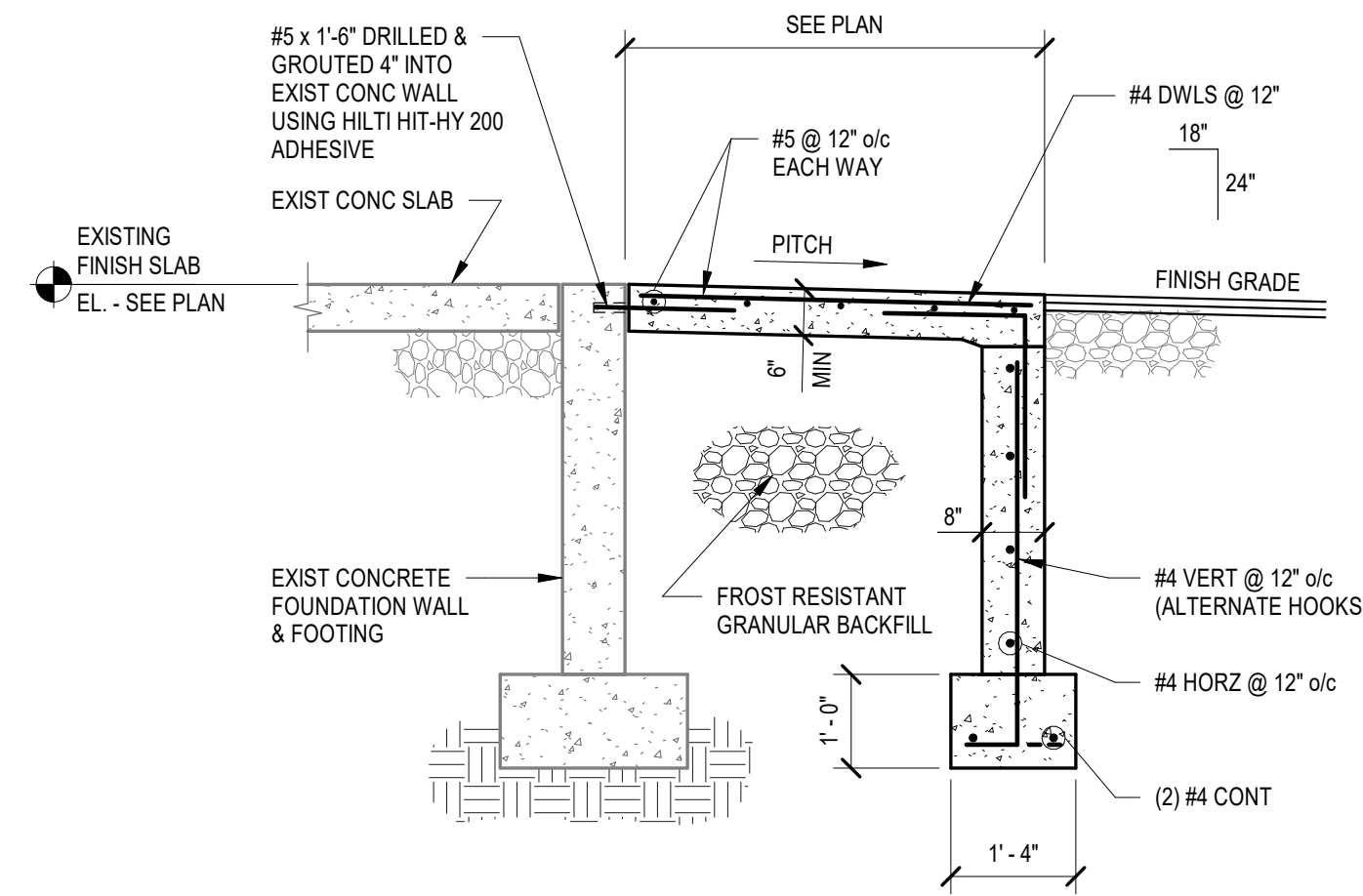
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1/2" = 1'-0"



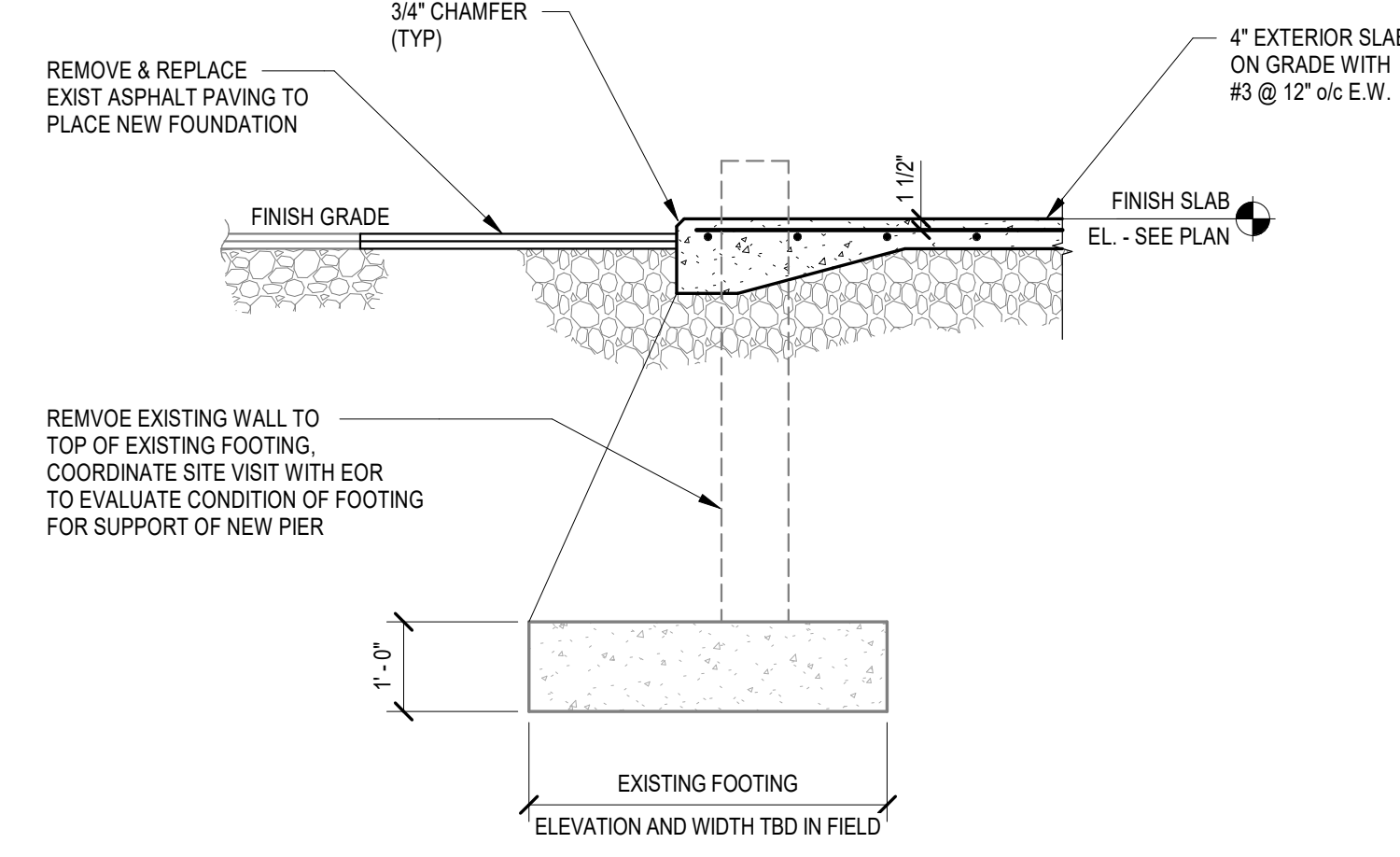
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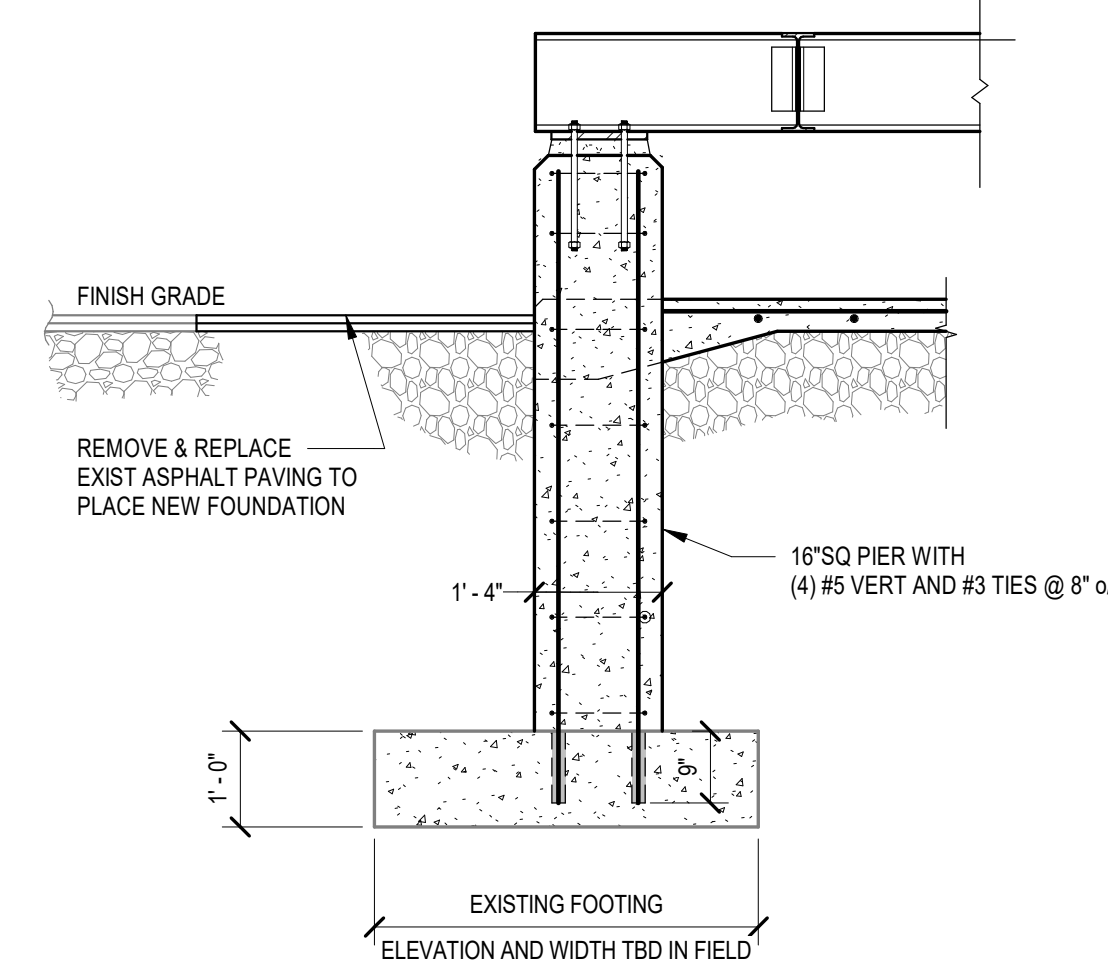
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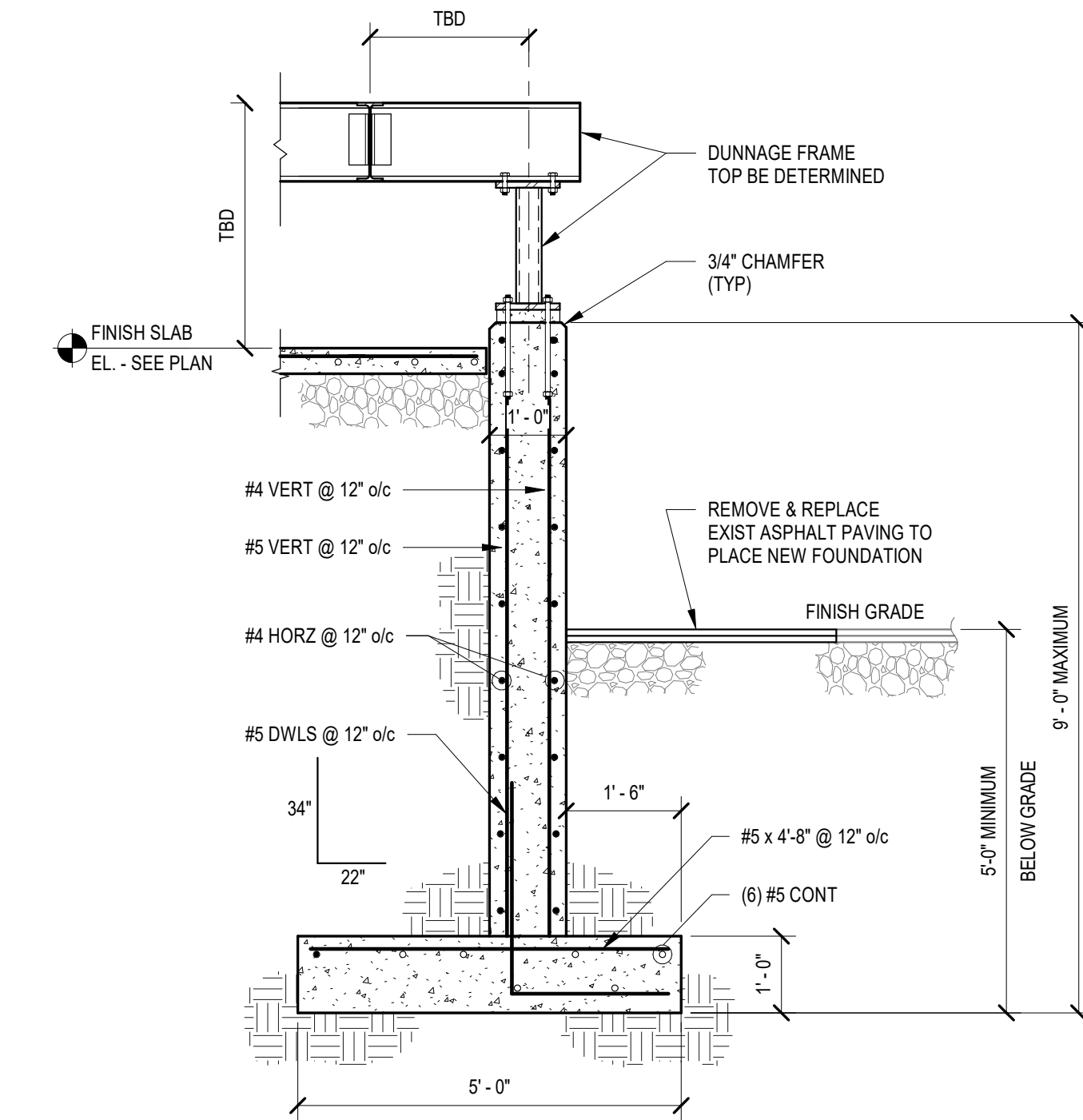
5 SECTION
1/2" = 1'-0"



6 SECTION
1/2" = 1'-0"



7 SECTION
1/2" = 1'-0"



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

Stamp
Date
Description
No.

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SECTIONS

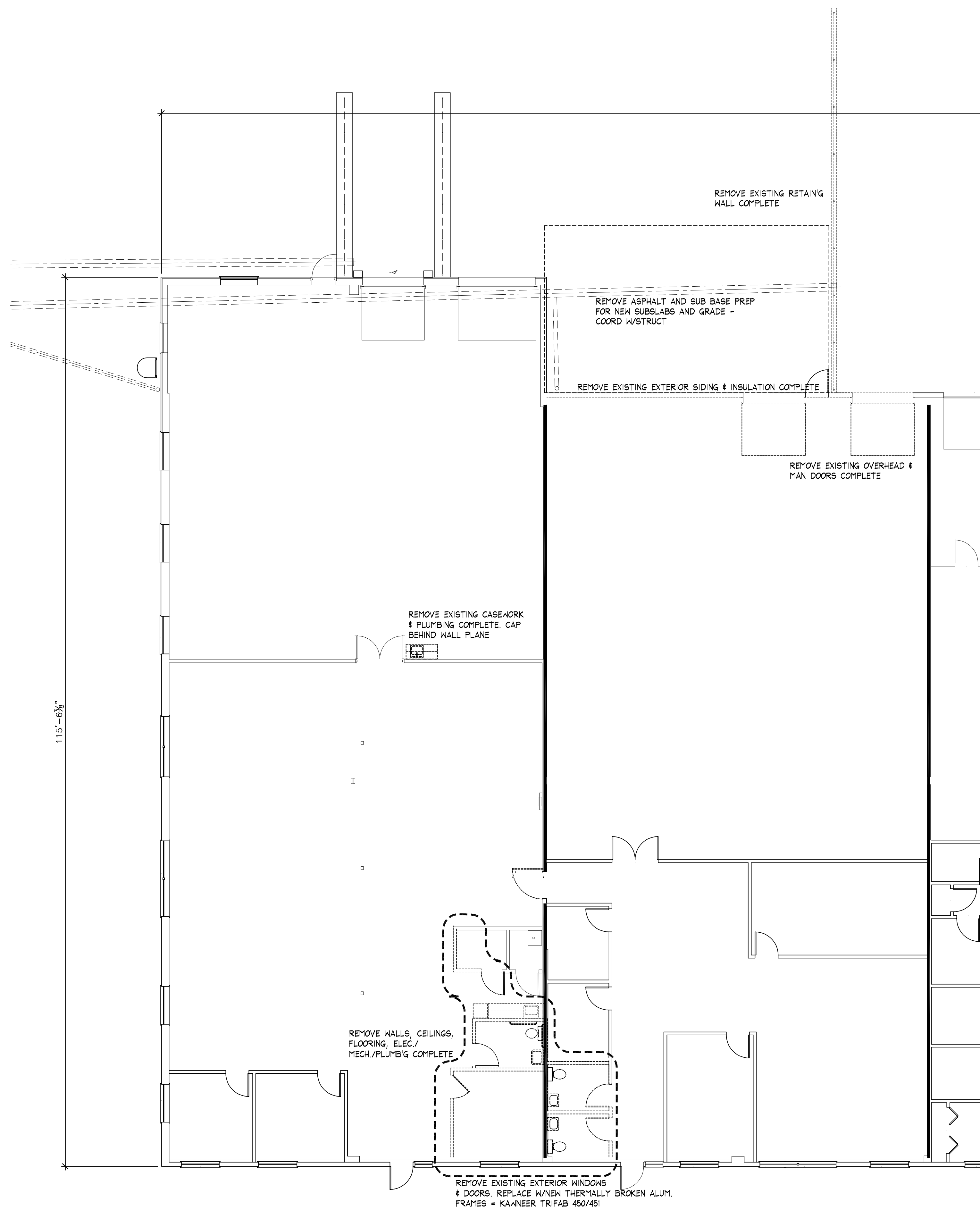
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Designed By:	Designer
Checked By:	Checker
Drawn By:	Author
Scale:	1/2" = 1'-0"
Date:	Issue Date

PROGRESS DRAWING
NOT FOR CONSTRUCTION
01/29/20

S-2.0

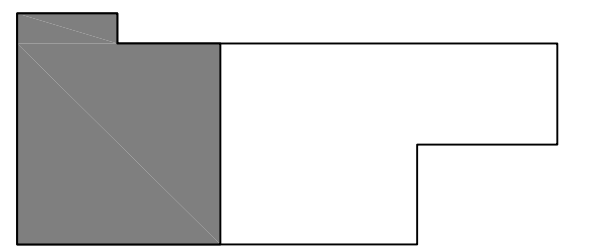
EV Project #20574



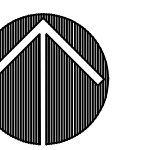
75 HOLLY COURT 79 HOLLY COURT

1 DEMOLITION FLOOR PLAN
SCALE - 1/8" = 1'-0"

Drawings Issued for
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Not for Construction
February 1, 2021



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Rev #

PROJECT NAME AND ADDRESS

**UVMHC
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PHARMACY**
75/79 HOLLY COURT, WILLISTON, VT

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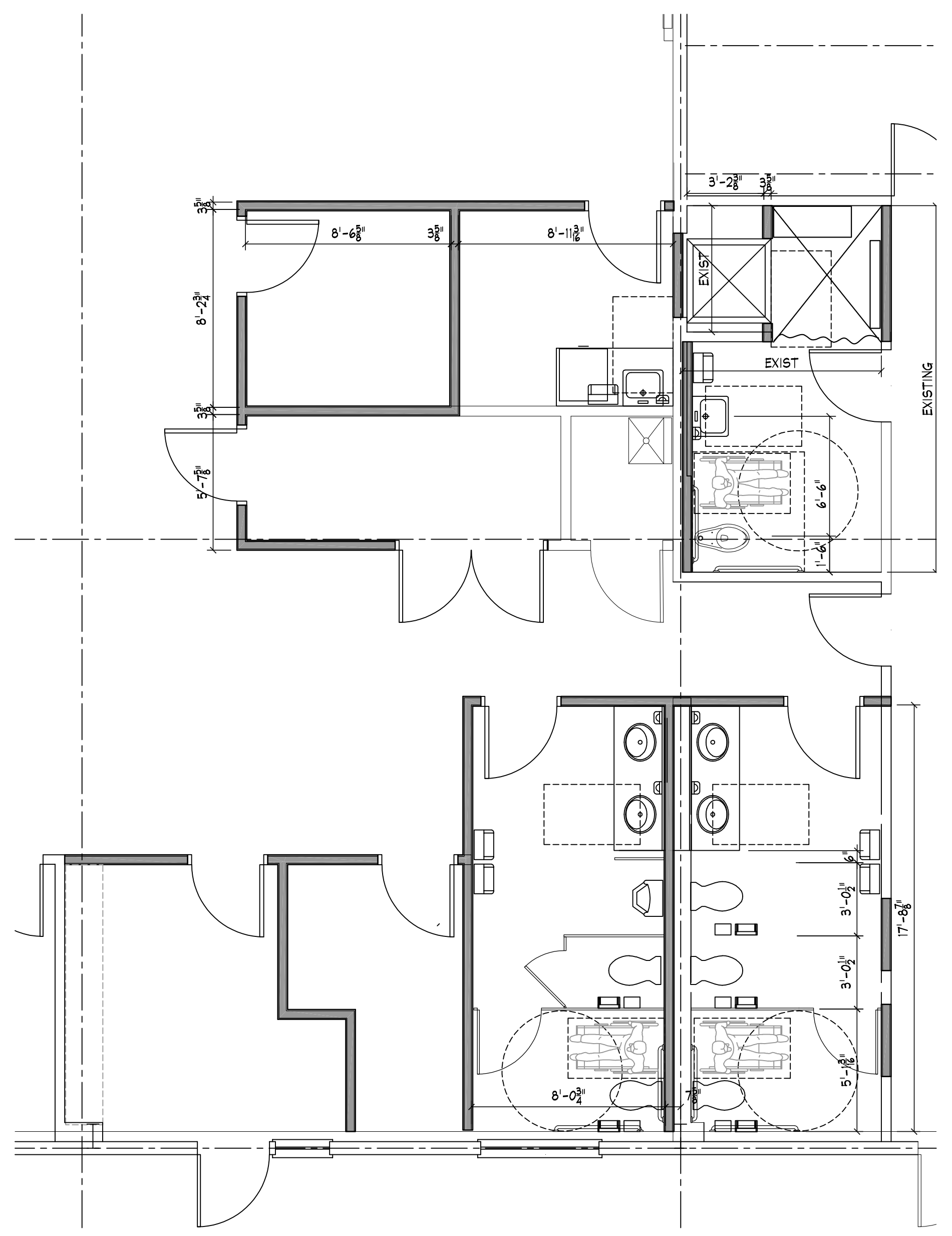
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Waterbury, Vermont 05676
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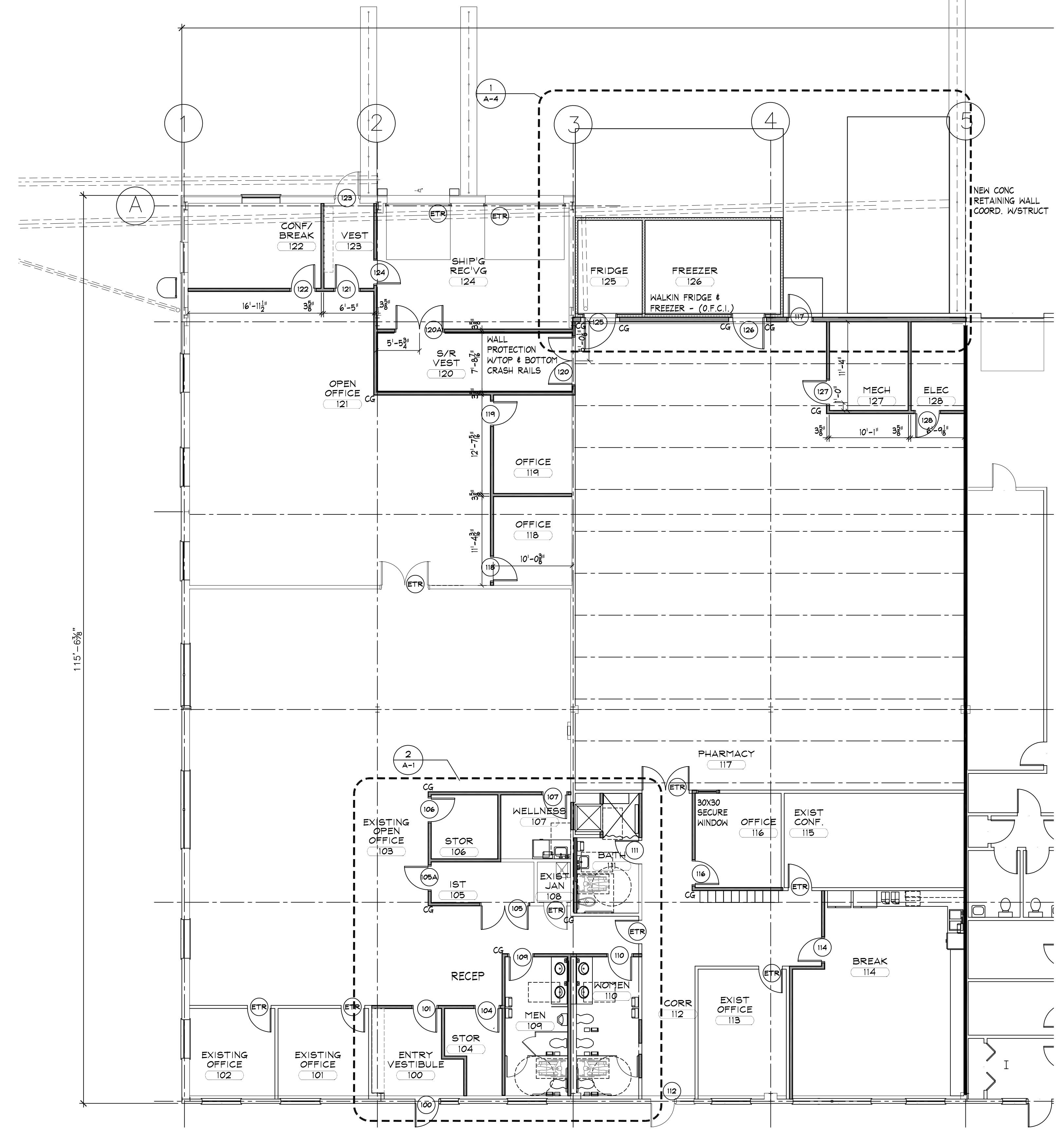
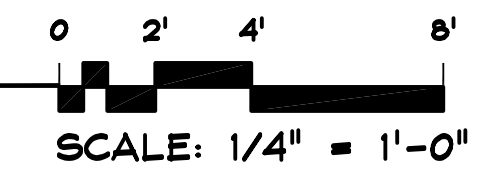
FLOOR PLAN
DEMOLITION

J.G. DRAWN BY 20210202 DATE
20-170 PROJECT NUMBER SHEET

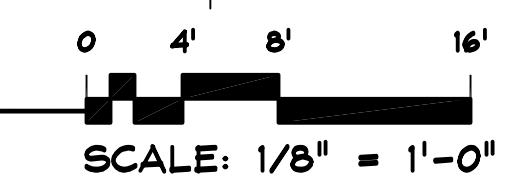
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2 ENLARGED FLOOR PLAN
SCALE - 1/4" = 1'-0"

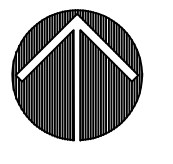


1 OVERALL FLOOR PLAN - NEW WORK
SCALE - 1/8" = 1'-0"



KEY PLAN
NTS

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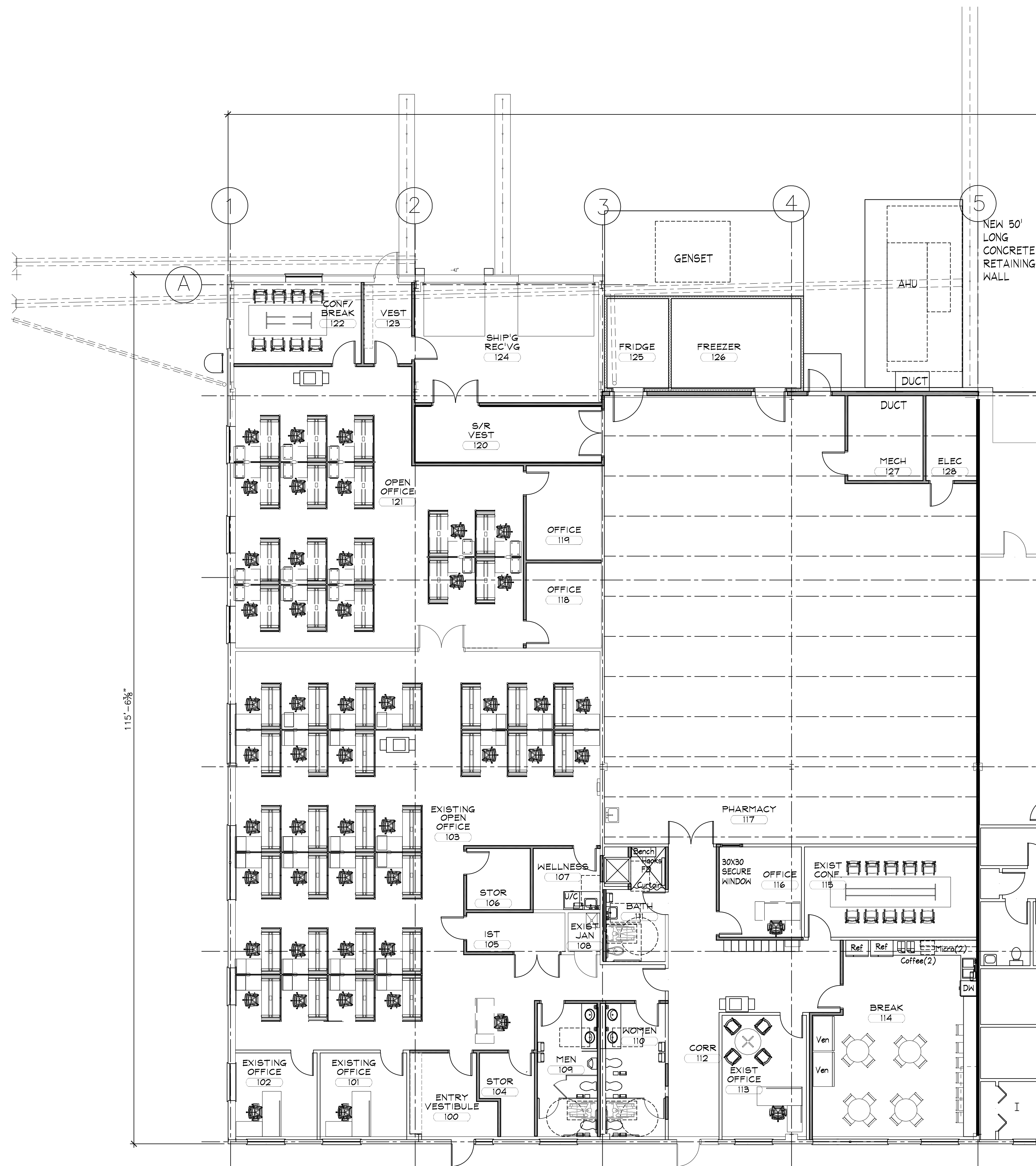
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**NEW WORK
FLOOR PLAN**

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115'-6 3/8"

75 HOLLY COURT 79 HOLLY COURT



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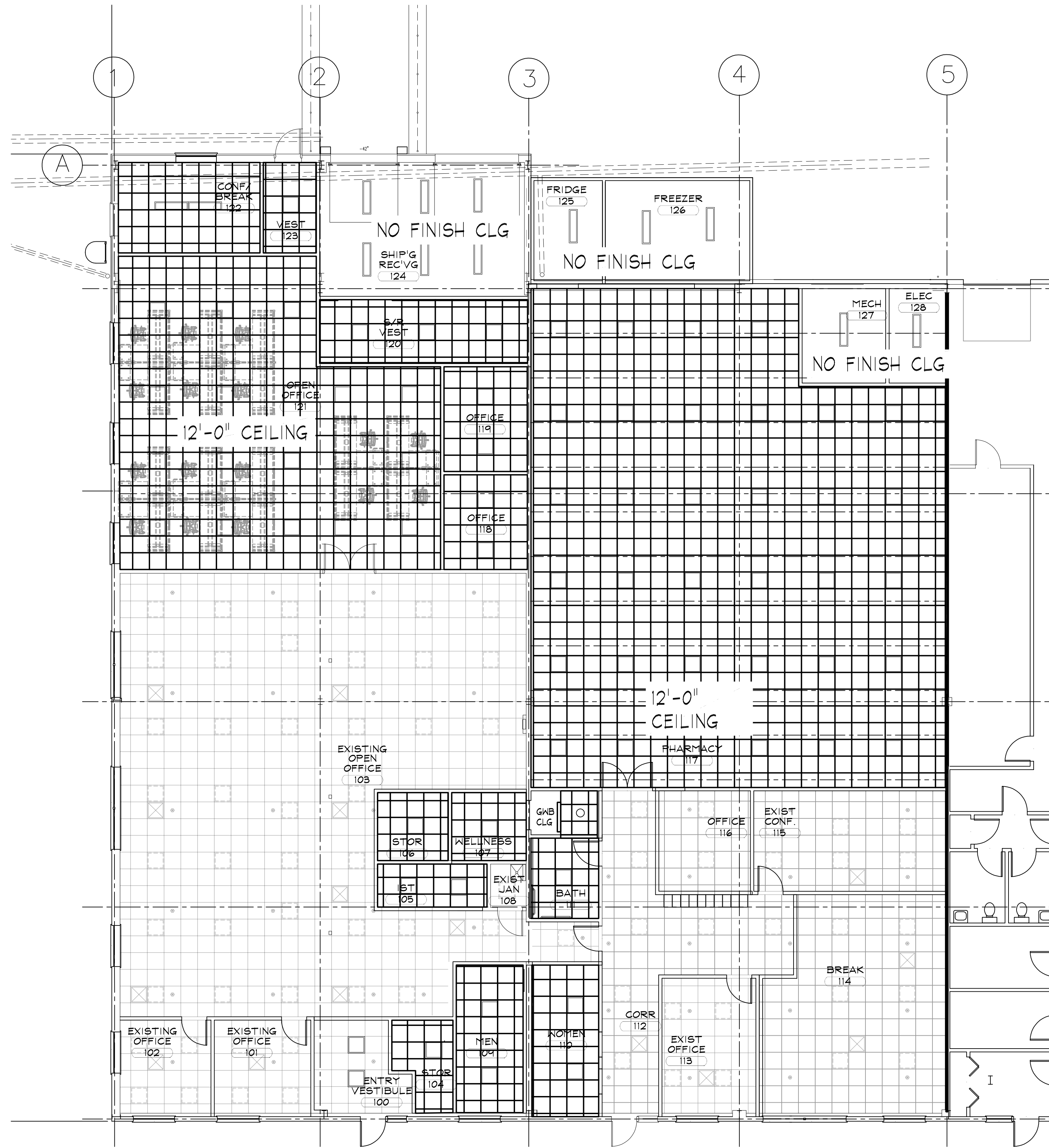
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**FIRST FLOOR
EQUIPMENT PLAN**

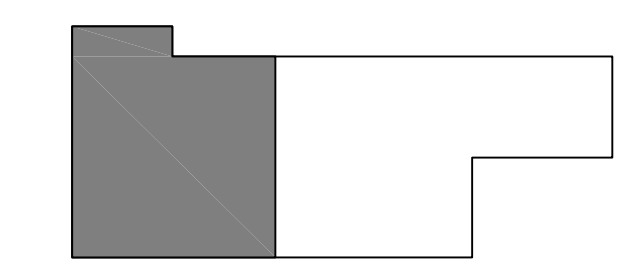
J.G. DRAWN BY 20210202 DATE
20-170 PROJECT NUMBER SHEET



LEGEND >>

	EXISTING CEILING & FIXTURES TO REMAIN / BE REWORKED
	NEW CEILING & FIXTURES
	2X2 LED
	6" CAN LIGHT
	1X4 PENDANT

FOR PRICING -
 PLAN OF CEILINGS EVERYWHERE U.O.N.
 ARMSTRONG OPTIMA HI NRC TILES IN
 PRODUCTION AND OPEN OFFICE AREAS
 ARMSTRONG STANDARD CIRRUS TILE TO
 MATCH EXISTING ALL OTHER SPACES



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1 REFLECTED CEILING PLAN
 SCALE 1/8" = 1'-0"

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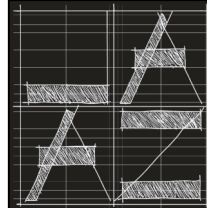
REVISION

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 PHARMACY**
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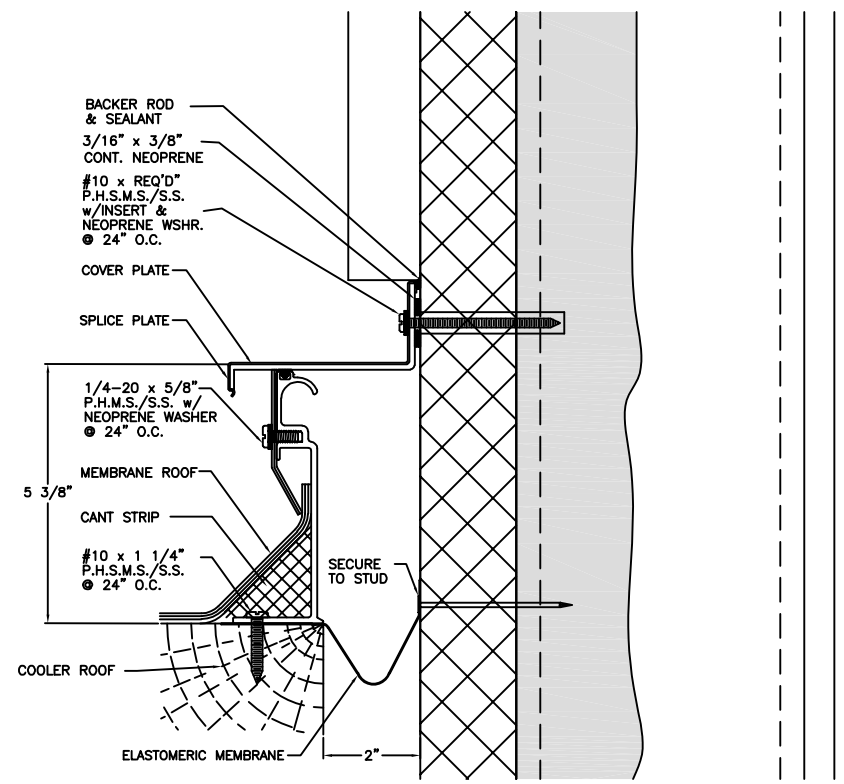
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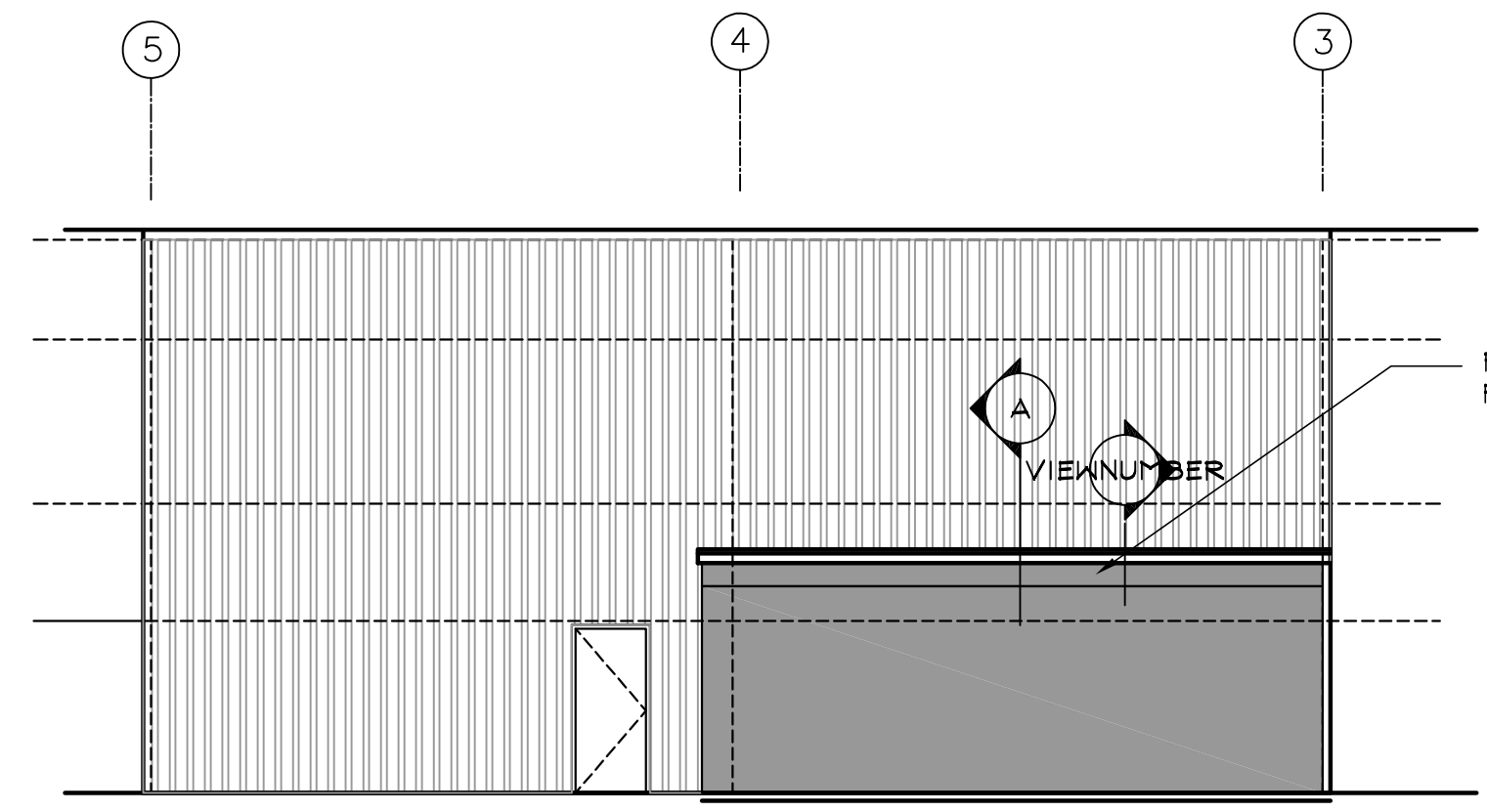
DRAWING NAME

**REFLECTED
 CEILING PLAN &
 LEGEND**

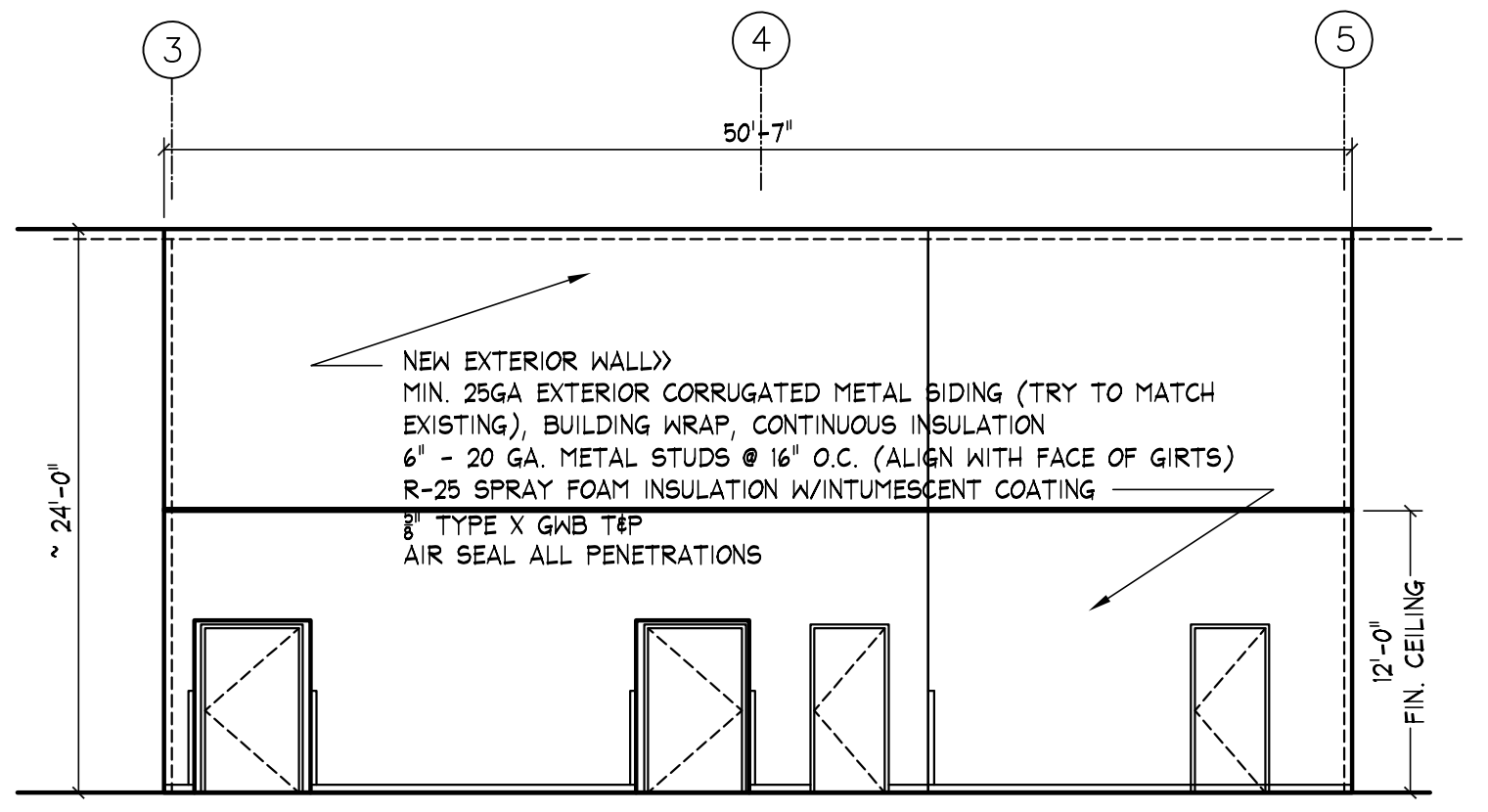
J.G.	DRAWN BY	2021/02/02	DATE
20-170	PROJECT NUMBER		SHEET



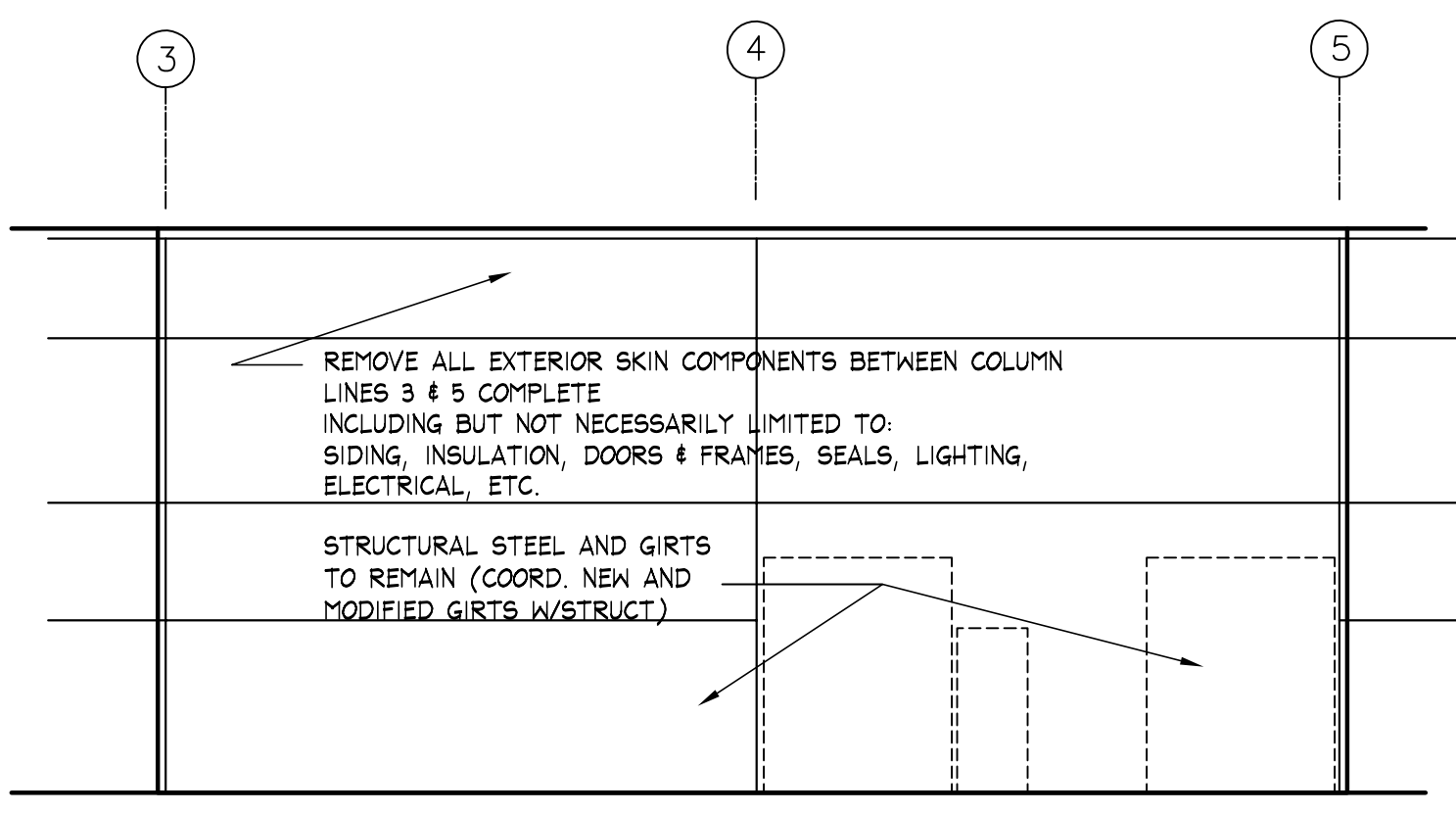
A WALL TO ROOF EXP JOINT
 SCALE - 3" = 1'-0"
 BASIS OF DESIGN: MM SYSTEMS - MM-RXW-2-1 ROO & WALL JOINT ASSEMBLY



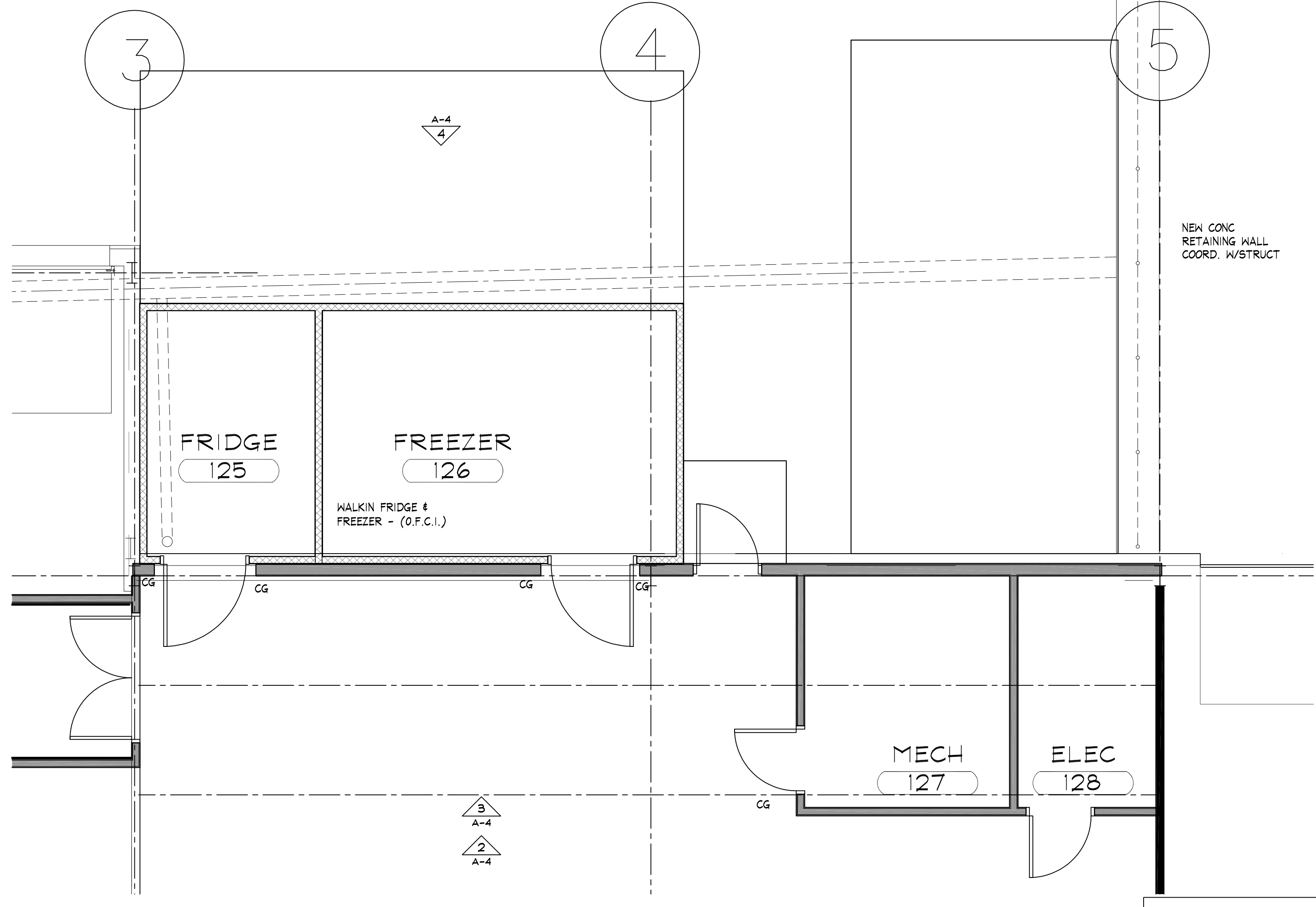
4 EXTERIOR IMPROVEMENTS
 SCALE - 1/8" = 1'-0"



3 EXTERIOR WALL - INTERIOR VIEW
 SCALE - 1/8" = 1'-0"



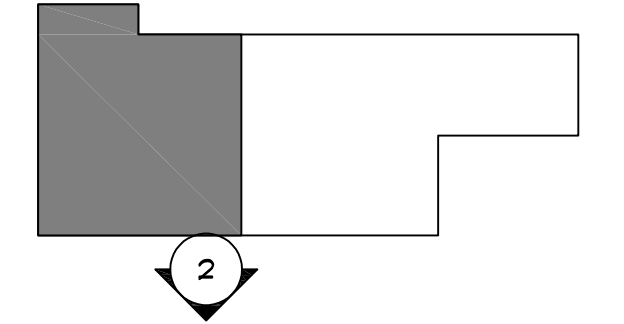
2 EXTERIOR SHELL DEMOLITION
 SCALE - 1/8" = 1'-0"



1 ENLARGED FLOOR PLAN
 SCALE - 1/4" = 1'-0"

0 2' 4' 8'
 SCALE: 1/4" = 1'-0"

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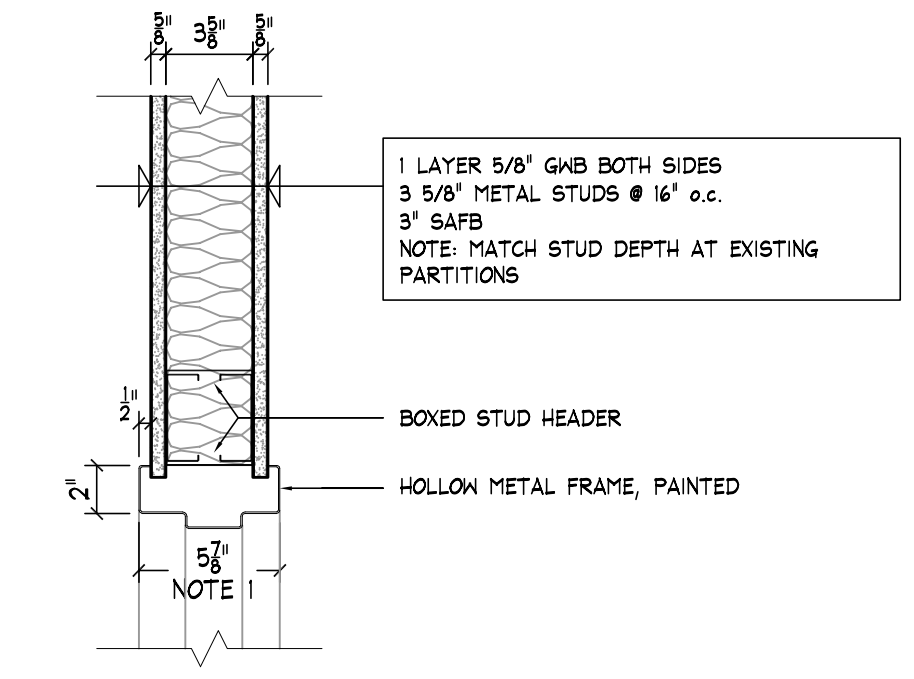
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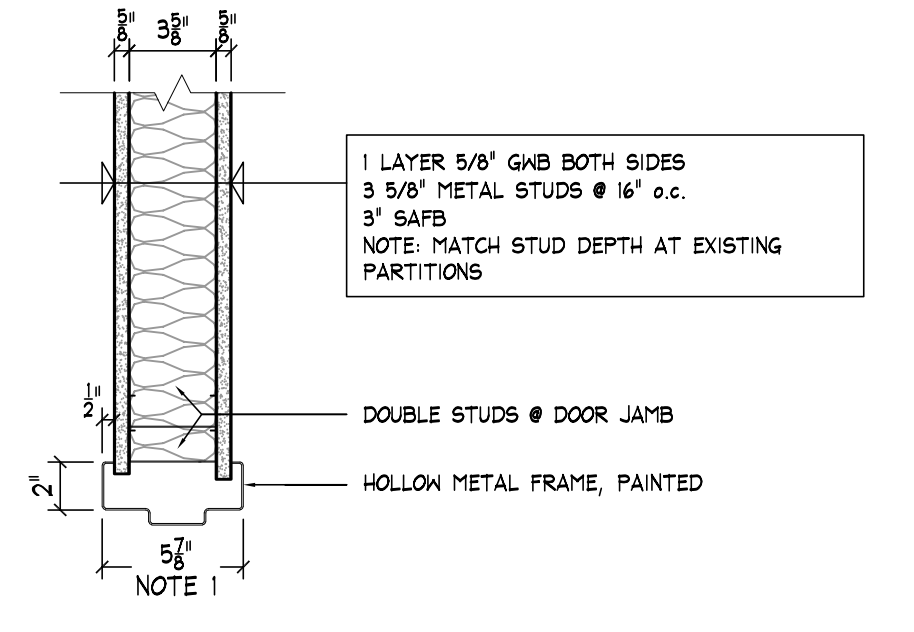
EXTERIOR BUILDING FACADE REWORK

J.G. DRAWN BY 20210202 DATE
 20-170 PROJECT NUMBER SHEET

DOOR . FRAME . HARDWARE SCHEDULE																												
DOOR					FRAME					LABEL	FUNCTION . FINISH . GROUP			HARDWARE SETS, ITEM or PART >>> ACCESSORY . PACKAGE . SPECIALTY										REMARKS . NOTES				
DOOR TAG NO.	LOCATION FLOOR/ DEPT.	DOOR TYPE ELEV.	DOOR MAT'L/ FIN.	OPENING SIZE W X H X T	DOOR GLAZ'G VENT'L	FRAME TYPE ELEV.	FRAME MAT'L/ FIN.	DETAILS			U.L. RATING MIN./HRS.	OPENING FUNCTION	HARDWARE FINISH	HARDWARE GROUP	EXIT - PANIC DEVICE	LOCKSET	ACCESS CONTROL	HINGES	SPRING HINGES	STOPS / BUMPERS	SILENCERS	WEATHER-STRIPPING	AUTO-DOOR BOTTOM	PUSH / PULLS	CLOSER	OCCUPANCY DEADBOLT	FLUSH BOLTS	REMARKS . NOTES
								HEAD	JAMB	SILL																		
100	LVL1	ALUM	ALUM ANOD	3'-0" X 7'-0" X 1 3/4"	1" INSUL	ALUM	ALUM ANOD	-	-	-	-	ENTRY/EXIT	US26D	-	EP	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	ALUM. DOOR REPLACEMENT TO MATCH EXIST'G	
101	LVL1	D.2WNL	WD FF	3'-0" X 7'-0" X 1 3/4"	1/4" TEMP	HM	PNT	H.1 A-5	J.1 A-5	-	-	ENTRY/EXIT	US26D	-	EP	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-	
104	LVL1	D.1WF	WD FF	3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	STORAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
105	LVL1	D.4WF2	WD FF	PR 3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	STORAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
105A	LVL1	D.1WF	WD FF	3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	STORAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
106	LVL1	D.1WF	WD FF	3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	STORAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
107	LVL1	D.1WF	WD FF	3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	PRIVACY	US26D	-	LK	AC	H	SH	B	S	WS	AD	PP	CL	OD	FB	-	
109	LVL1	D.1WF	WD FF	3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	PASSAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
110	LVL1	D.1WF	WD FF	3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	PASSAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
111	LVL1	D.1WF	WD FF	3'-0" X 7'-0" X 1 3/4"		HM	PNT	H.1 A-5	J.1 A-5	-	-	PRIVACY	US26D	-	LK	AC	H	SH	B	S	WS	AD	PP	CL	OD	FB	-	
114	LVL1	D.1WNL	WD FF	3'-0" X 7'-0" X 1 3/4"	1/4" TEMP	F.2 M	HM	H.1 A-5	J.1 A-5	-	-	PASSAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
116	LVL1	D.2WNL	WD FF	3'-0" X 7'-0" X 1 3/4"	1/4" TEMP	F.2 M	HM	H.1 A-5	J.1 A-5	-	-	OFFICE	US26D	-	LK	AC	H	SH	B	S	WS	AD	PP	CL	OD	FB	-	
118	LVL1	D.2WNL	WD FF	3'-0" X 7'-0" X 1 3/4"	1/4" TEMP	F.2 M	HM	H.1 A-5	J.1 A-5	-	-	OFFICE	US26D	-	LK	AC	H	SH	B	S	WS	AD	PP	CL	OD	FB	-	
119	LVL1	D.2WNL	WD FF	3'-0" X 7'-0" X 1 3/4"	1/4" TEMP	F.2 M	HM	H.1 A-5	J.1 A-5	-	-	OFFICE	US26D	-	LK	AC	H	SH	B	S	WS	AD	PP	CL	OD	FB	-	
120	LVL1	D.5HM2	MT PNT	PR 3'-0" X 7'-0" X 1 3/4"		F.3 M	HM	H.1 A-5	J.1 A-5	-	-	ENTRY/EXIT	US26D	-	EP	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-	
120A	LVL1	D.5HM2	MT PNT	PR 3'-0" X 7'-0" X 1 3/4"		F.3 M	HM	H.1 A-5	J.1 A-5	-	60	ENTRY/EXIT	US26D	-	EP	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-	
121	LVL1	D.2WNL	WD FF	3'-0" X 7'-0" X 1 3/4"	1/4" TEMP	F.2 M	HM	H.1 A-5	J.1 A-5	-	-	ENTRY/EXIT	US26D	-	EP	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-	
122	LVL1	D.2WNL	WD FF	3'-0" X 7'-0" X 1 3/4"	1/4" TEMP	F.2 M	HM	H.1 A-5	J.1 A-5	-	-	PASSAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
123	LVL1	D.5HMN	MT PNT	3'-0" X 7'-0" X 1 3/4"	1/2" INSUL	F.1 Mx	HM	H.1 A-5	J.1 A-5	-	-	ENTRY/EXIT	US26D	-	EP	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-	
124	LVL1	D.5HMN	MT PNT	3'-0" X 7'-0" X 1 3/4"	1/2" INSUL	F.1 Mx	HM	H.1 A-5	J.1 A-5	-	60	ENTRY/EXIT	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
125	LVL1																									INSULATED DOOR BY MANUFACTURER		
126	LVL1																										INSULATED DOOR BY MANUFACTURER	
127	LVL1	D.4HM	MT PNT	3'-0" X 7'-0" X 1 3/4"		F.2 M	HM	H.1 A-5	J.1 A-5	-	60	STORAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
128	LVL1	D.4HM	MT PNT	3'-0" X 7'-0" X 1 3/4"		F.2 M	HM	H.1 A-5	J.1 A-5	-	60	STORAGE	US26D	-	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-		
129	LVL1	D.5HMN	MT PNT	3'-0" X 7'-0" X 1 3/4"	1/2" INSUL	F.1 Mx	HM	H.1 A-5	J.1 A-5	-	-	ENTRY/EXIT	US26D	-	EP	LK	AC	H	B	S	WS	AD	PP	CL	OD	FB	-	



H.1 HOLLOW METAL DOOR FRAME HEAD
1 1/2" = 1' - 0"



J.1 HOLLOW METAL DOOR FRAME JAMB
1 1/2" = 1' - 0"



IN ACCEPTING AND UTILIZING THESE DRAWINGS, REPORTS OR DATA, RECIPIENT ACKNOWLEDGES THAT THIS DOCUMENT WAS CREATED BASED ON FIELD OBSERVATIONS AND MEASUREMENTS. INFORMATION IS FOR BASE PLANNING PURPOSES ONLY AND ALL INFORMATION SHALL BE VERIFIED PRIOR TO THE COMMENCEMENT OF ANY RENOVATION/MODIFICATIONS, ETC.



REVISION

Rev #

PROJECT NAME AND ADDRESS

UVMC
SPECIALTY
PHARMACY
75/79 HOLLY COURT, WILLISTON, VT

CELEBRATING 20 YEARS! 2000 - 2020
Joseph Architects
25 Crossroad
Waterbury, Vermont 05676
Tel. 802-244-5220
Fax 802-806-1010
www.JosephArchitects.com

DRAWING NAME

1 DOOR FRAME & HARDWARE SCHEDULE

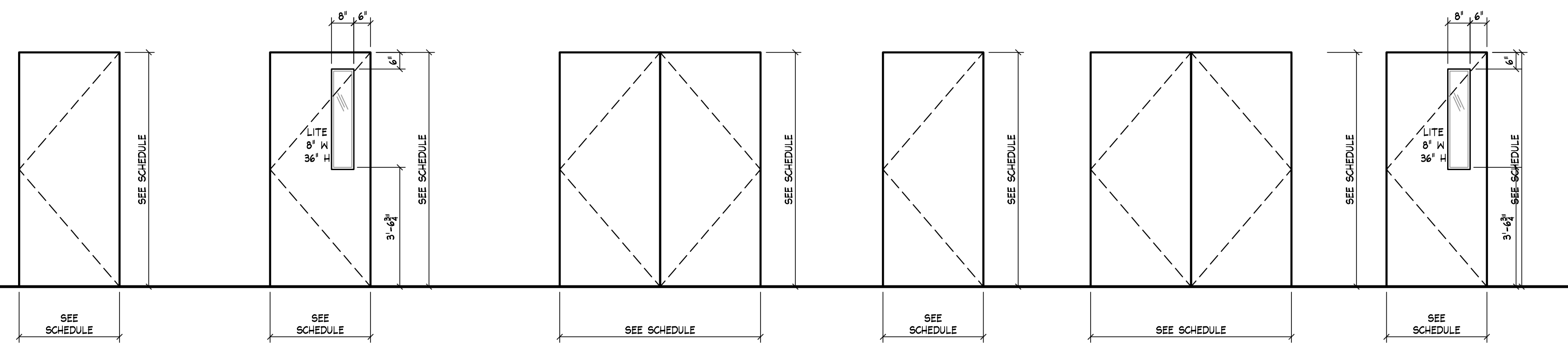
Drawings Issued for
Preliminary Budgeting
Not for Construction
February 1, 2021

SCHEDULES &
DETAILS

J.G. DRAWN BY 22110202 DATE
20-170 PROJECT NUMBER SHEET

A-5

DOOR PROFILE ELEVATIONS >
3/8" = 1'-0"



D.1KWF SOLID CORE FLUSH WOOD

D.2NWL NARROW LITE

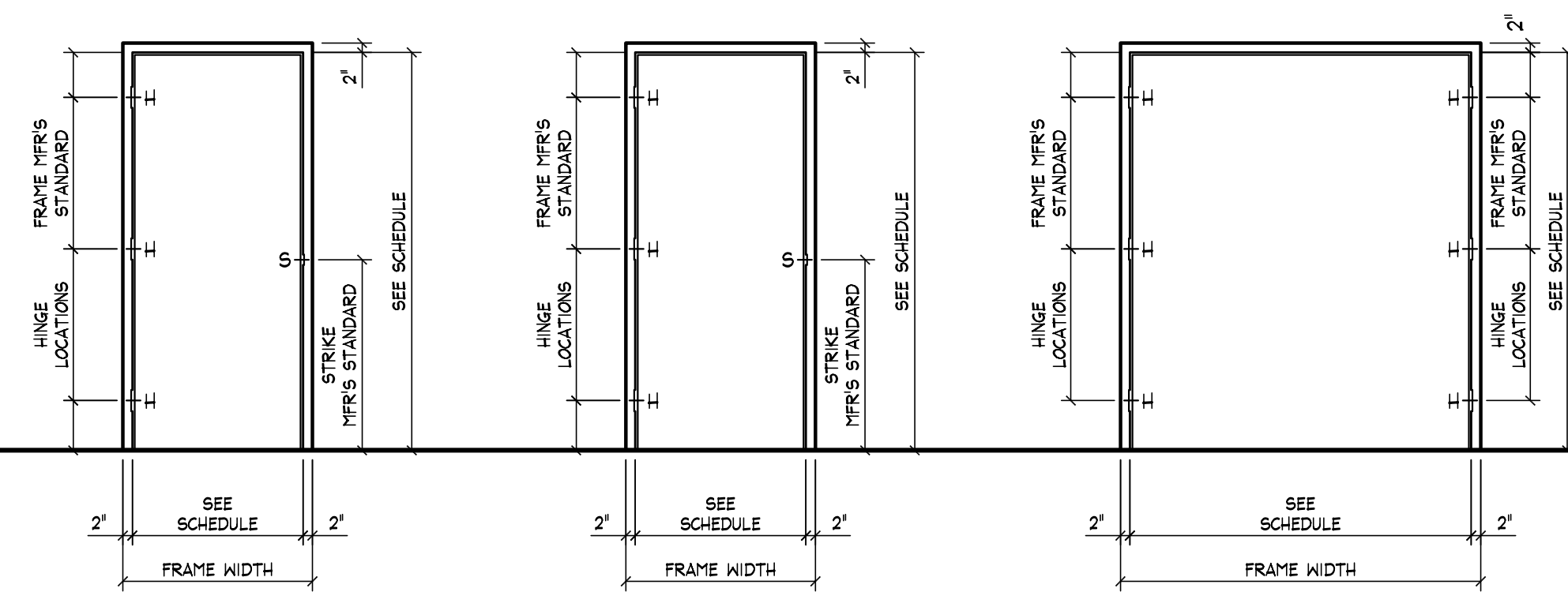
D.3WPF2 SOLID CORE WOOD

D.4HM HOLLOW METAL

D.5HM2 HOLLOW METAL PAIR

D.5HMN HOLLOW METAL NARROW LITE

FRAME TYPES ELEVATIONS >
3/8" = 1'-0"

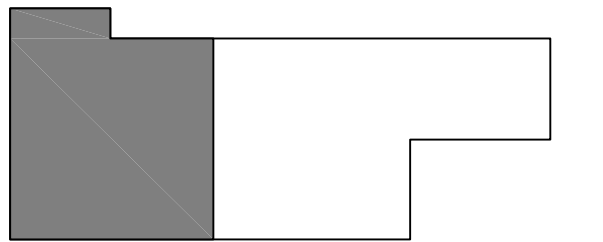


F.1 IM INSULATED HOLLOW METAL

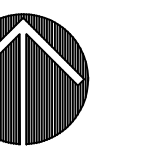
F.2 M HOLLOW METAL

F.3 M HOLLOW METAL

Drawings Issued for Preliminary Budgeting
Not for Construction
February 1, 2021



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REVISION

Rev #

PROJECT NAME AND ADDRESS

UVMHC SPECIALTY PHARMACY
75/79 HOLLY COURT, WILLISTON, VT

CELEBRATING 20 YEARS! 2000 - 2020

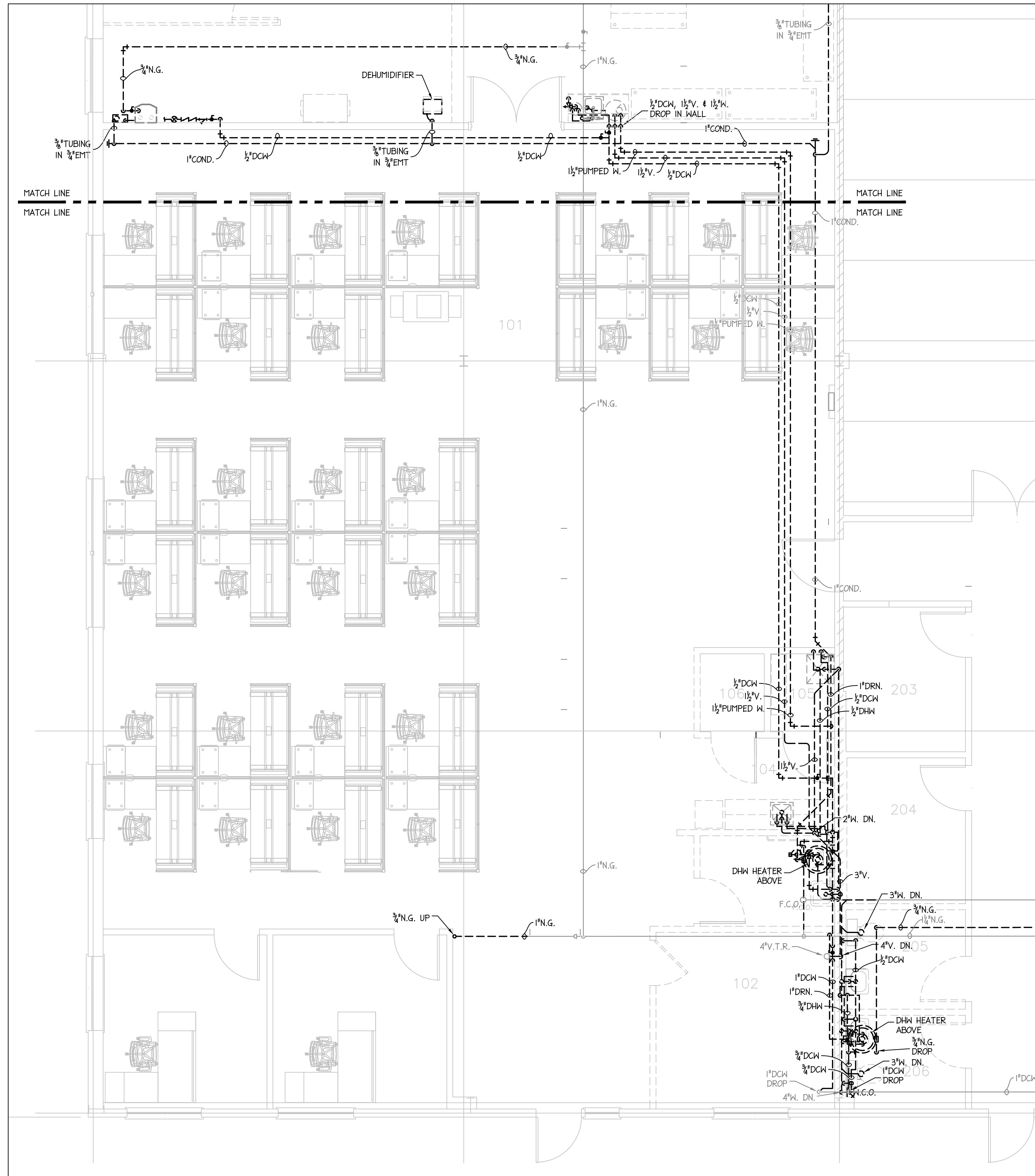
Joseph Architects
25 Crossroad
Waterbury, Vermont 05676
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www.JosephArchitects.com

DRAWING NAME

SCHEDULES & DETAILS

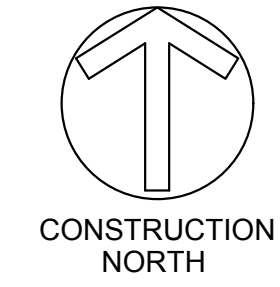
J.G. DRAWN BY 20210202 DATE
20-170 PROJECT NUMBER SHEET

A-6



1 PLUMBING - FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"

PLUMBING DEMOLITION LEGEND	
	PLUMBING WORK TO BE DEMOLISHED
	EXISTING PLUMBING WORK TO REMAIN



PLUMBING SPECIFIC DEMOLITION NOTES:
1. XXXX

LN
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Tel: 802.655.1753
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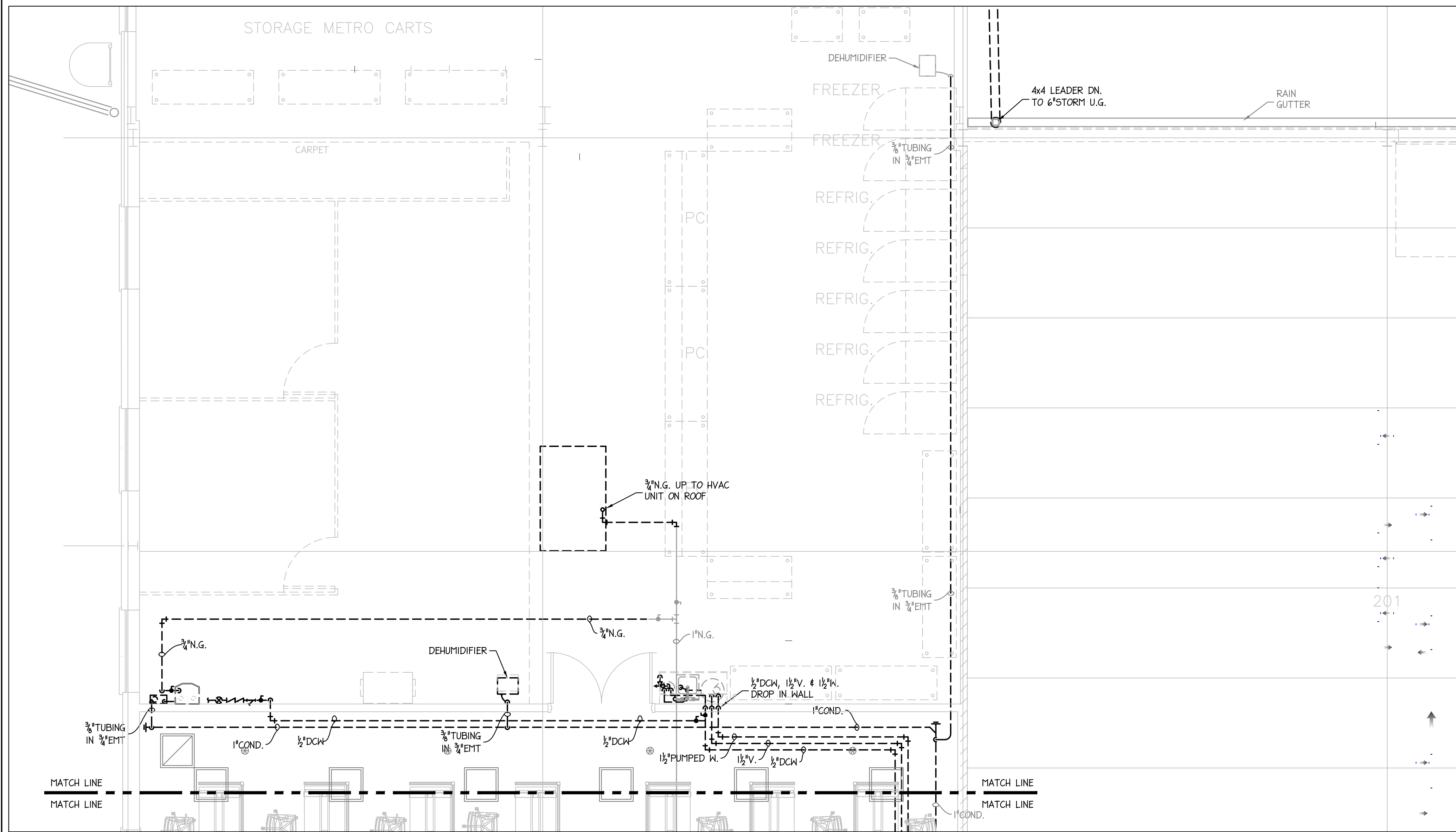
DRAWN	L.N.C.	
APPROVED		
DATE	FEB. 01, 2021	
0 FEB. 01, 2021	ISSUE FOR BUDGET PRICING	
NO.	DATE	REVISION

PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
PLUMBING - FIRST FLOOR
DEMOLITION PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

P0.1



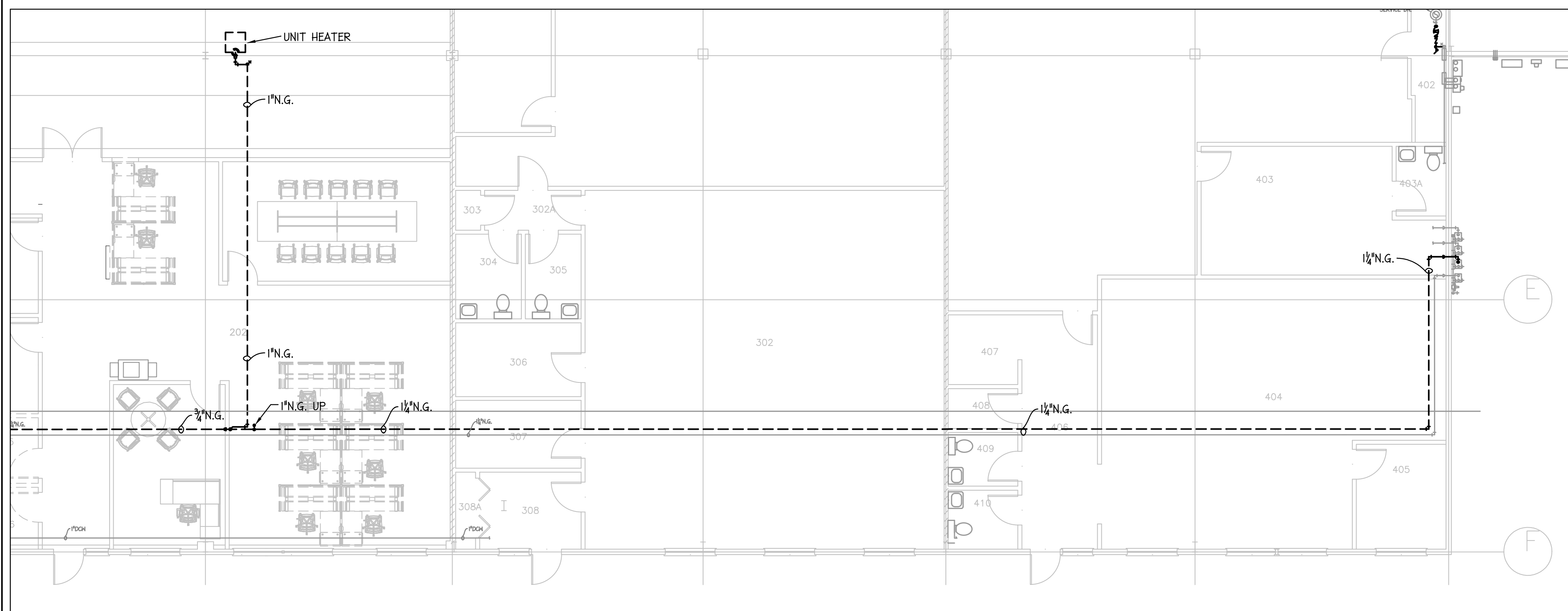
1 PLUMBING - FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"

PLUMBING DEMOLITION LEGEND	
---	PLUMBING WORK TO BE DEMOLISHED
---	EXISTING PLUMBING WORK TO REMAIN



PLUMBING SPECIFIC DEMOLITION NOTES:

1. XXXX



1 PLUMBING - FIRST FLOOR DEMOLITION PLAN
1/8"=1'-0"



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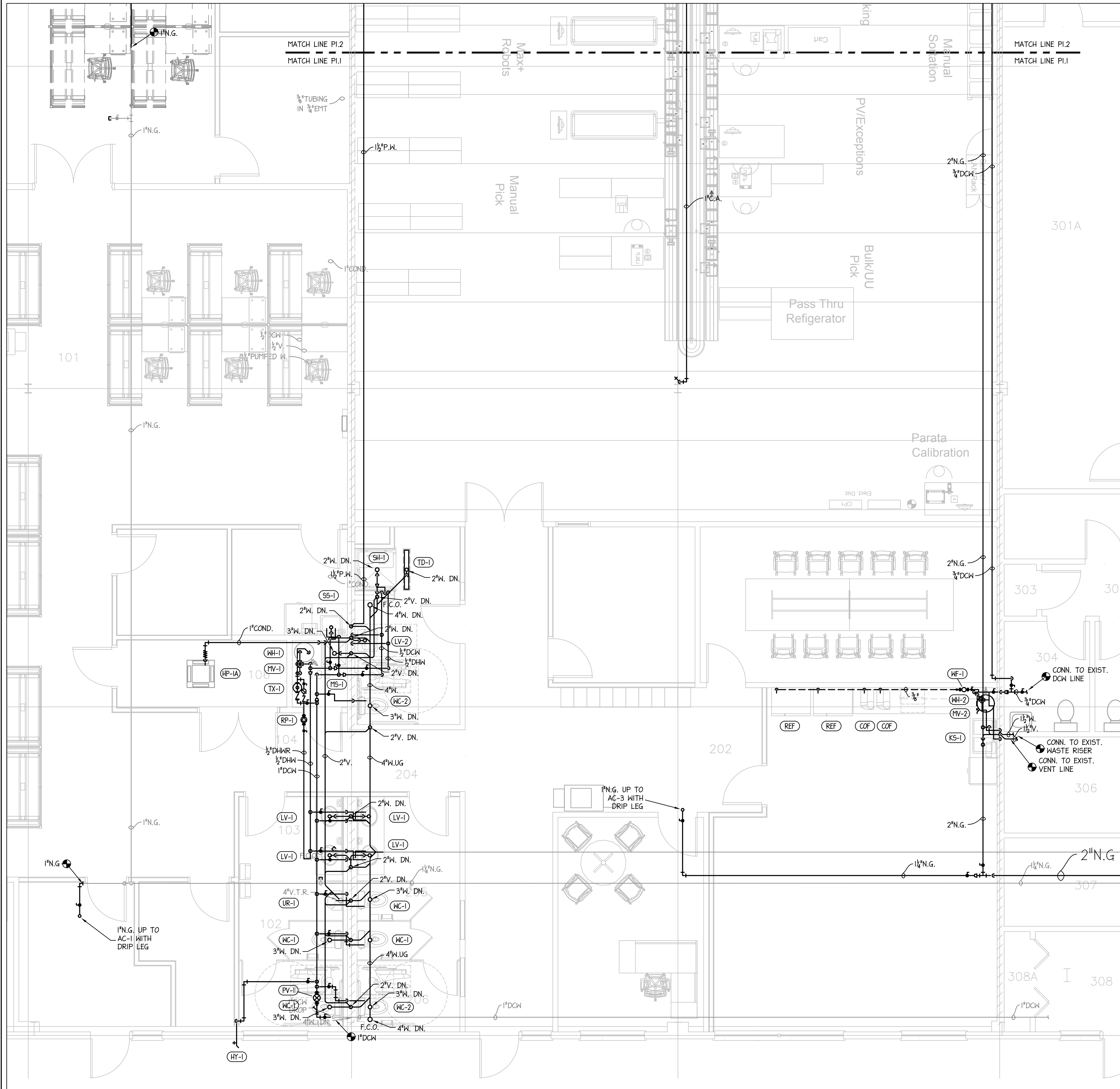
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NO.	DATE
	REVISION

PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
PLUMBING - FIRST FLOOR
DEMOLITION PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

P0.2



PLUMBING NEW WORK LEGEND	
	NEW PLUMBING TO BE FURNISHED AND INSTALLED
	EXISTING PLUMBING TO REMAIN

MECHANICAL SPECIFIC NEW WORK NOTES:
 1. XXXX



1 PLUMBING - FIRST FLOOR NEW WORK PLAN
 1/4"=1'-0"



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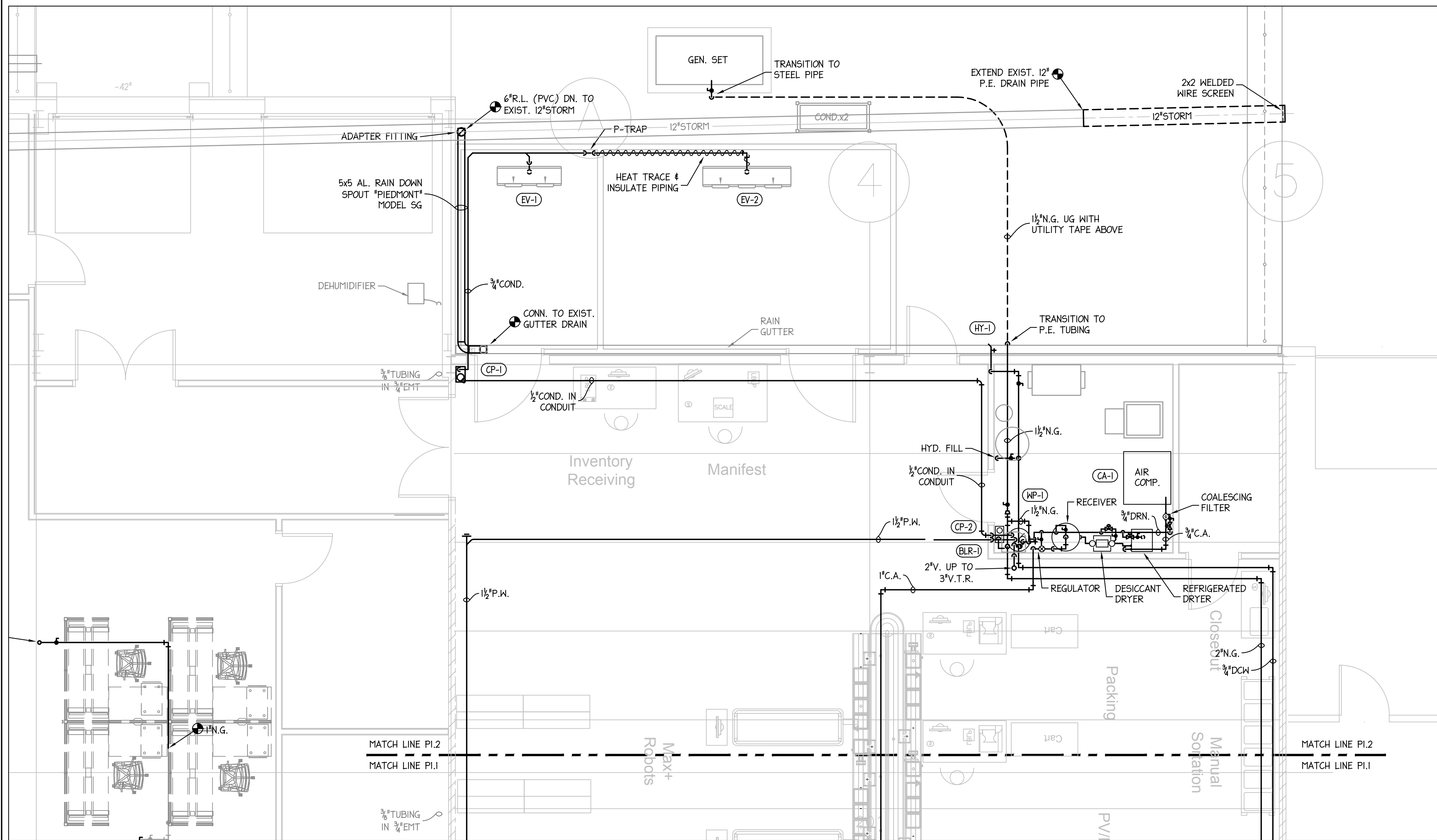
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0	FEB. 01, 2021	ISSUE FOR BUDGET PRICING

PROJECT TITLE
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 PHARMACY EXPANSION PROJECT

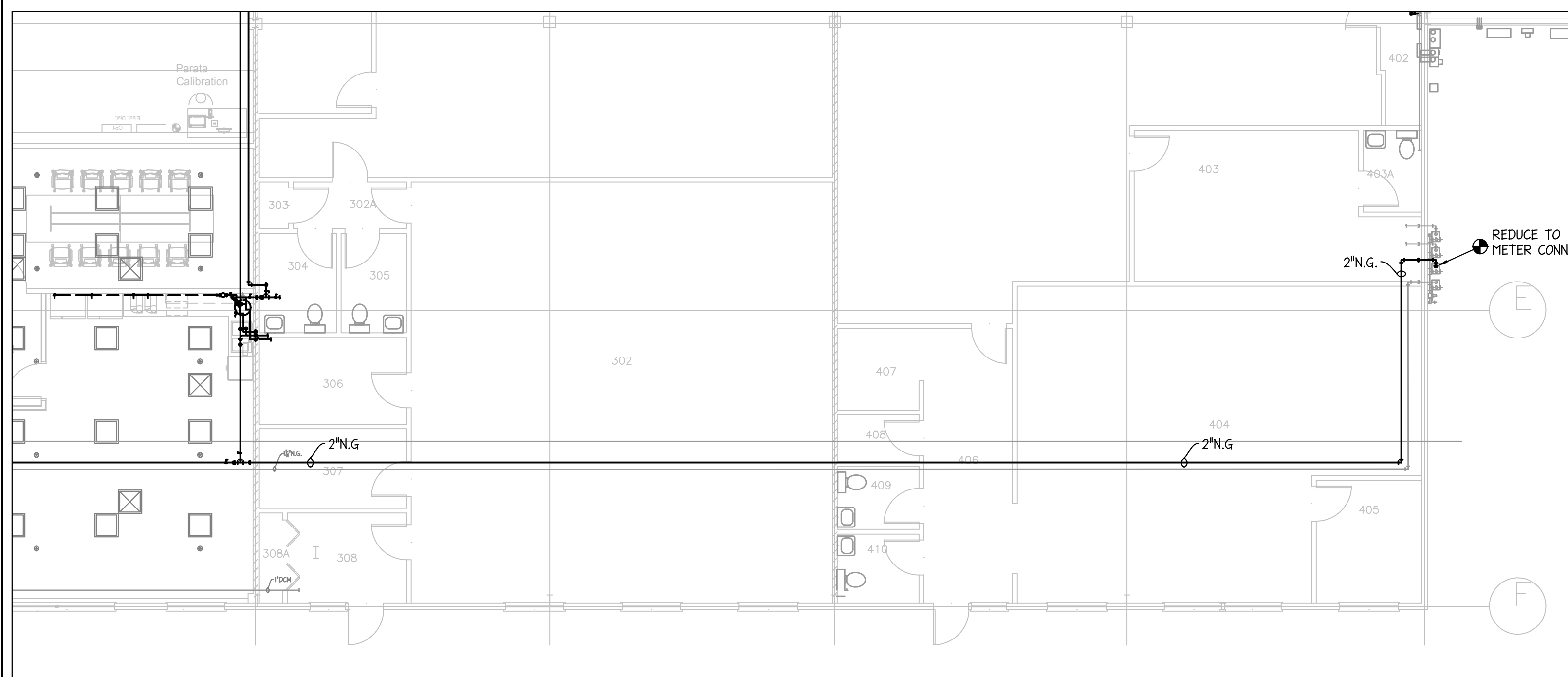
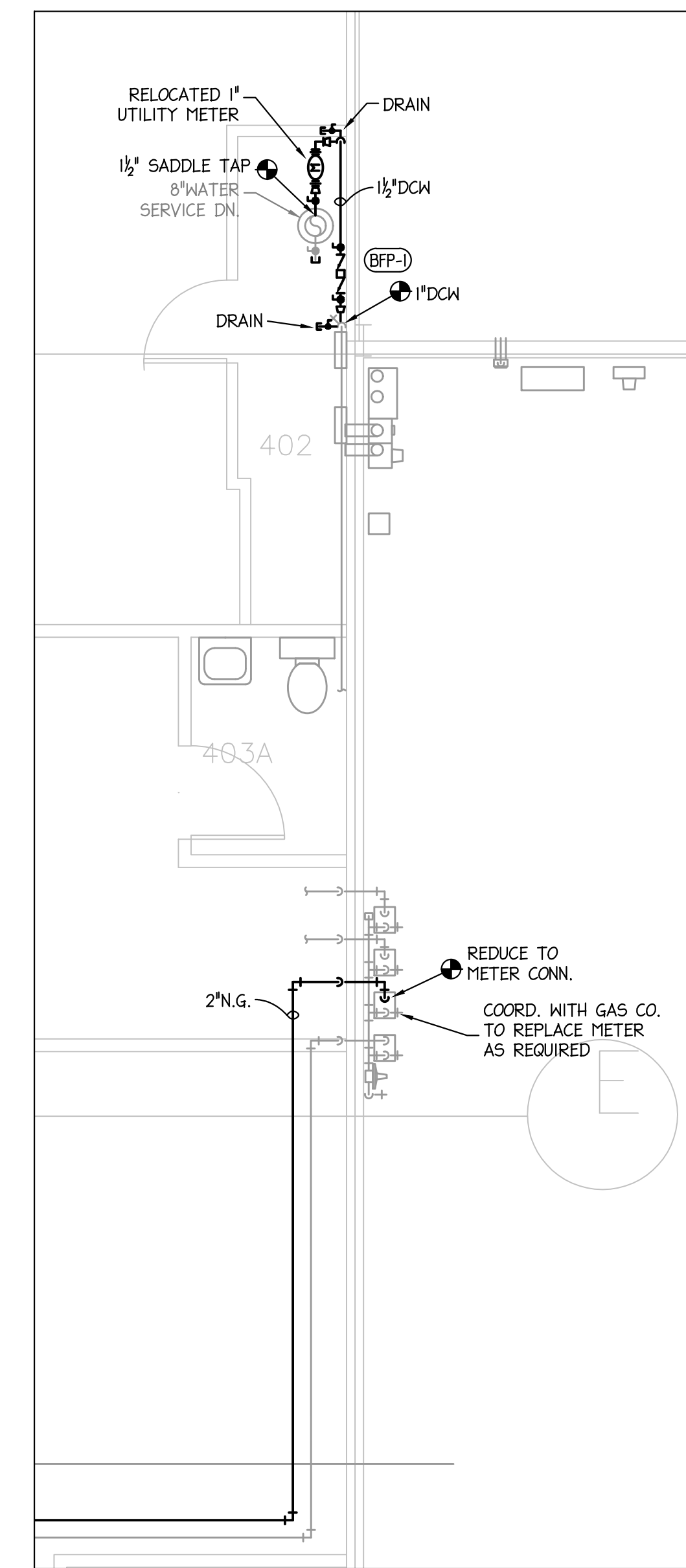
SHEET TITLE
 PLUMBING - FIRST FLOOR
 NEW WORK PLAN

SCALE: 1/4"=1'-0"
 PROJECT NO. 20258
 SHEET NO. -

P1.1



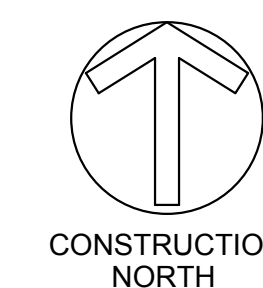
1 PLUMBING - FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"



1 PLUMBING - FIRST FLOOR NEW WORK PLAN
1/8"=1'-0"

MECHANICAL SPECIFIC NEW WORK NOTES:
1. XXXX

PLUMBING NEW WORK LEGEND	
	NEW PLUMBING TO BE FURNISHED AND INSTALLED
	EXISTING PLUMBING TO REMAIN



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PHARMACY EXPANSION PROJECT

SHEET TITLE
PLUMBING - FIRST FLOOR
NEW WORK PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO. -

P1.2

PLUMBING LEGEND	
SYMBOL	DESCRIPTION
6	BRASS BODY, STAINLESS STEEL BALL, BALL VALVE
6	BUTTERFLY VALVE
6	GATE VALVE
6	SWING CHECK VALVE
→	PIPE DROP/DN.
→	PIPE RISE/UP
→	PIPE CAP
→	PIPE CONTINUATION
→	PIPE CLEANOUT
⊕	CONNECT TO EXISTING
∅	BALANCE VALVE
⊙	FLOOR CLEANOUT
⊕	THREE WAY REGULATING VALVE
⊕	REGULATING VALVE OR SOLENOID VALVE
⊕	RELIEF VALVE
+	HOSE BIB
↑	AIR VENT
⊙	FLOOR DRAIN
⊕	P-TRAP WASTE
↘	PIPE PITCH
D	PIPE REDUCER
↘	PIPE STRAINER
⊕	PIPE TEE DOWN
↑	PIPE TEE
⊕	PIPE UNION
⊕	TEMPERATURE GAUGE
⊕	PRESSURE GAUGE
⊕	PUMP
#	ROOM NUMBER
⊕	SPECIFIC PLUMBING DEMOLITION NOTES
⊕	SPECIFIC PLUMBING INSTALLATION NOTES
#	PLUMBING EQUIPMENT TAG
DHW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHW	DOMESTIC HOT WATER RETURN
DN.	DOWN
IW	INDIRECT WASTE
LPG	LIQUIFIED PROPANE GAS
NG	NATURAL GAS
RL	RAIN LEADER
SS	STAINLESS STEEL
V	SANITARY VENT
VTR	VENT THROUGH ROOF
W	SANITARY WASTE
TP	TRAP PRIMER
THW	TEMPERED WATER SUPPLY
THW	RECIRCULATING TEMPERED WATER

PLUMBING EQUIPMENT SCHEDULE							
TAG	DESCRIPTION	MAKE # MODEL (OR EQUAL)	C.W.	H.W.	WASTE	VENT	REMARKS
(WC-1)	STAFF TOILET, FLOOR MTD., A.D.A. LEFT HAND	AMERICAN STANDARD CADET FLOWISE #2467.100	1/2"	-	3"	2"	WITH AMERICAN STANDARD #. OPEN FRONT SEAT #9501.0095.020.
(WC-1)	STAFF TOILET, FLOOR MTD., A.D.A. RIGHT HAND	AMERICAN STANDARD CADET FLOWISE #2467.100	1/2"	-	3"	2"	PROVIDE WITH #4142.801 TANK ASSEMBLY (RIGHT HAND TRIP LEVER) AND WITH AMERICAN STANDARD #. OPEN FRONT SEAT #9501.0095.020.
(LV-1)	TOILET ROOM LAVATORY, UNDER COUNTER MOUNTED	AMERICAN STANDARD OVALYN #9482.000.020	1/2"	1/2"	1 1/2"	1 1/2"	PROVIDE WITH "CHICAGO" #EG-C11A-13ABCP, GRID DRAIN, 17 GA. CP P-PTRAP AND LOOSE KEY STOPS.
(LV-1)	TOILET ROOM LAVATORY, WALL MOUNTED	AMERICAN STANDARD DECORUM #9134001EC.020	1/2"	1/2"	1 1/2"	1 1/2"	PROVIDE WITH "CHICAGO" #EG-C11A-13ABCP, GRID DRAIN, "ZURN" #Z-1231 CARRIER, 17 GA. CP P-PTRAP AND LOOSE KEY STOPS.
(UR-1)	STAFF TOILET URINAL, A.D.A.	AMERICAN STANDARD WASHBROOK #6590001EC.020	3/4"	-	2"	1 1/2"	PROVIDE WITH "SLOAN" #G2 886-0.5 GPF FLUSH VALVE.
(SH-1)	PATIENT SHOWER MODULAR UNIT, A.D.A.	AQUABATH #C4136BF-OT-FUS 3/4"	-	-	2"	2"	WITH NON-SLIP BOTTOM, GRAB BARS AND FOLD UP SEAT. PROVIDE HAND OF UNITS AS INDICATED ON PLAN. COORD. WITH G.C. FOR SLAB RECESS AS REQ'D. SEE NOTES..
		SYMONS SAFETYMIX #1-117FSB30	1/2"	1/2"	-	-	WITH OPTIONS XCHK5-NU-OD-1.5, 30" SLIDE BAR, CHECK STOPS, "NU" SHOWER HEAD ARM AND QUICK DISCONNECT.
(TD-1)	TRENCH DRAIN, A.D.A.	OATEY QUICK DRN. PLD36-N WITH 2" VERT. OUTLET.	1/2"	1/2"	2"	1 1/2"	PROVIDE WITH COMPLETE PROLINE DRAIN SYSTEM WITH "LINES" DRAIN GRATE.
(MS-1)	MOP SERVICE BASIN MOLDED STONE	FIAT PRODUCTS MODEL #15B-2424	1/2"	1/2"	3"	1 1/2"	PROVIDE WITH #1453-BB FLAT STRAINER, #889-CC MOP BRACKET, #E-77-AA BUMPER AND STAINLESS STEEL WALL GUARD KIT AND "CHICAGO" #847-CP FAUCET.
(SS-1)	UNDER COUNTER MTD. HAND WASH/UTILITY SINK	ELKAY PRODUCTS ELUHAD1414	1/2"	1/2"	1 1/2"	1 1/2"	WITH #LK-LK18B GRID DRAIN, "CHICAGO" #50-GN2FC317XKABCP FAUCET, 1.5 GPM LAMINAR FLOW, CP 17 GA. P-TRAP AND LOOSE KEY STOPS.
(KS-1)	UNDER COUNTER MTD. DBL. BOWL S.S. SINK	ELKAY PRODUCTS ELUHAD3118	1/2"	1/2"	2-1/2"	1 1/2"	WITH #LK35 304 S.S. STRAINER BASKET AND SEAL (2 REQ'D), "CHICAGO" #430-ABCP FAUCET, 1.5 GPM, CP 17 GA. P-TRAP AND LOOSE KEY STOPS.
(HY-1)	FREEZE PROOF WALL HYDRANT	WOODFORD MODEL #65-P-CH	3/4"	-	-	-	FIELD DETERMINE WALL THICKNESS FOR SHANK LENGTH.
(WH-1)	ELECTRIC STANDARD UPRIGHT WATER HEATER	A.O. SMITH PROLINE STANDARD #ENT-40	3/4"	3/4"	-	-	36 GAL. STORAGE, DUAL 4.5 KW ELEMENTS, 208 VOLT, 1 PH, 21 GPH @ 90° RISE, WITH T&P RELIEF VALVE, PIPE RELIEF TO DRAIN.
(MV-1)	THERMOSTATIC MIXING VALVE	WATTS/POWERS HYDROGUARD #FLM41-2	3/4"	3/4"	-	-	THERMOSTATIC MIXING VALVE, ADJUST TO 120 SUPPLY TEMPERATURE.
(TX-1)	THERMAL EXPANSION TANK	WATTS POTABLE WATER EXP. TANK #PLT-5-M1	3/4"	-	-	-	THERMAL EXPANSION, ADJUST PRE-CHARGE TO NEAR SYSTEM PRESSURE.
(RP-1)	DHW RECIRCULATION PUMP	TACO PUMPS #HL5-2	-	1/2"	-	-	WITH INTEGRAL TIMER, RATED FOR 2.0 GPM @ 8.0' HD., 120 VOLT.
(WH-2)	ELECTRIC POINT OF USE WATER HEATER	A.O. SMITH PROLINE SPECIALTY #EJC-10	1/2"	1/2"	-	-	10 GALLON NOMINAL STORAGE, 2.5 KW ELEMENT, 208 VOLT, 11.4 GPH @ 90° RISE WITH T&P RELIEF VALVE, PIPE TO DRAIN, MOUNT UNDER SINK.
(MV-2)	THERMOSTATIC MIXING VALVE	WATTS/POWERS HYDROGUARD #FLM45-2	1/2"	1/2"	-	-	THERMOSTATIC MIXING VALVE, ADJUST TO 115 SUPPLY TEMPERATURE.
(PV-1)	PRESSURE REDUCING VALVE	WATTS #LP223-S, 3/4" SIZE	1"	-	-	-	PROVIDE WITH STRAINER, SET TO 50 PSIG SUPPLY PRESSURE.
(CP-1)	CONDENSATE PUMP	LITTLE GIANT #VCHX-200L5	-	-	3/8"	-	RATED FOR 10 GPH @ 20' HD, 120 VOLT, WITH OVERFLOW SWITCH AND WALL MOUNTING BRACKET. RUN DISCHARGE TUBING IN CONDUIT.
(CP-2)	COMBINATION NEUTRALIZER AND CONDENSATE PUMP	AXIOM NEUTRA PUMP #NTI-P	-	-	3/8"	-	RATED FOR 1.9 GPH @ 20' HD, 120 VOLT, WITH 1.0 RECEIVER. RUN DISCHARGE TUBING IN CONDUIT.
(WP-1)	DRAIN WATER TRANSFER PUMP UNIT	GOULDS MODEL #SD52	-	-	1 1/2"	1 1/2"	WITH 7 GALLON RECEIVER, 1/3 HP PUMP, RATED FOR 8.0 GPM @ 25' HD, 120 VOLT WITH CORD AND PLUG CONNECTION.
(BFP-1)	DOMESTIC WATER BACK FLOW PREVENTER	WATTS MODEL #009M2-GT-S-5H	1 1/2"	-	-	-	1 1/2" SIZE, UNIT TO BE LEAD FREE CONSTRUCTION TO COMPLY WITH STATE STATUTES, WITH STRAINER AND QUARTER TURN BALL VALVES WITH S.S. HANDLES.
(BLR-1)	GAS FIRED CONDENSING HYDRONIC BOILER	SEE MECHANICAL	1/2"	-	-	-	BOILER FILL - WITH ISOLATION VALVE, STRAINER, "WATTS" #RD BACK FLOW PREVENTER AND #156F REGULATOR, 1/2" SIZE.
(EV-1)	WALK-IN COOLER EVAPORATOR	OWNER PROVIDED EQUIPMENT	-	-	3/4"	-	PIPE CONDENSATE FROM THE EVAPORATOR UNIT WITH P-TRAP. ROUTE ALONG COOLER WALL TO THE PROPOSED CONDENSATE PUMP RESERVOIR. CAREFULLY SEAL COOLER WALL PENETRATION.
(EV-2)	WALK-IN FREEZER EVAPORATOR	OWNER PROVIDED EQUIPMENT	-	-	3/4"	-	PIPE COND. FROM THE EVAP. UNIT WITH P-TRAP REMOTE IN THE COOLER. PROVIDE "CHROMALOX" (CP10-ICR-10W/FT), (512161) 120V SELF REGULATING HEAT TRACE CABLE. INSULATE PIPING.
(CA-1)	COMPRESSED AIR SYSTEM	INGERSOLL RAND #W7.51e-A116	-	-	-	-	PACKAGED AIR COMPRESSOR WITH MICROPROCESSOR CONTROLS, SOUND ENCLOSURE, 10.0 HP, RATED FOR 30.4 SCFM, 116 PSIG MAX. PRESSURE.
	COALESCING FILTER	INGERSOLL RAND #FA75IH	-	-	-	-	3/4" 0.01 MICRON COALESCING AIR FILTER, PROVIDE WITH AUTO DRAIN, 120 VOLT, PIPE TO DRAIN MANIFOLD.
	REFRIGERATED AIR DRYER	HANKISON #HFR35	-	-	-	-	NON-CYCLING REFRIGERATED AIR DRYER, RATED FOR 35 SCFM @ 38" DENPOINT, 120 VOLT. PROVIDE WITH AUTO DRAIN, 120 VOLT, PIPE TO DRAIN MANIFOLD.
	DESICCANT AIR DRYER	PARKER ZANDER #K6/16D2-1115M	-	-	-	-	CONTINUOUS DUTY DESICCANT AIR DRYER WITH INTEGRAL CONTROLS, RATED FOR 33.0 SCFM @ -13" F DENPOINT, 120 VOLT, WITH #GL5ZLDH PRE-FILTER, #GL5XLD AFTER FILTER AND #ZH100 DENPOINT SENSOR. PROVIDE WITH AUTO DRAIN ON PRE-FILTER, 120 VOLT, PIPE TO DRAIN MANIFOLD.
	COMPRESSED AIR RECEIVER TANK	INGERSOLL RAND #38020036	-	-	-	-	60 GALLON VERTICAL RECEIVER TANK, WITH LEGS AND STANDARD TAPPINGS.
	COMPRESSED AIR SUPPLY REGULATOR	PARKER ZANDER #06R318AC	-	-	-	-	GENERAL PURPOSE AIR REGULATOR WITH GAUGE, 1/2" SIZE, 0-125 PSIG RANGE, RATED FOR 75 SCFM MAXIMUM FLOW.
	AUTOMATIC COMPRESSED AIR SYSTEM DRAINS	INGERSOLL RAND #ENL2 (38445420)	-	-	-	-	ELECTRONIC FILTER AND TANK DRAINS, 120 VOLT, PROVIDE FOR ALL EQUIPMENT AS NOTED ABOVE, PIPE TO DRAIN MANIFOLD.
(WF-1)	WATER FILTER UNIT	AQUA PURE #API01T & API17	1/2"	-	-	-	PIPE WATER SUPPLY WITH "AQUAPURE" #API01T HOUSING AND #API17 WATER FILTER CARTRIDGE, MOUNT IN ACCESSIBLE CABINET SPACE, SEE PLANS.
(COF)	COFFEE BREWERS	OWNER SUPPLIED EQUIPMENT	3/8"	-	-	-	INSTALL 3/8" FOOD GRADE TUBING FROM THE WATER FILTER UNIT TO EACH COFFEE BREWER, PROVIDE FITTINGS AND ADAPTERS AS REQUIRED, ROUTE TUBING CONCEALED IN CABINETS.
(REF)	REFRIGERATORS (ICE MAKERS)	OWNER SUPPLIED EQUIPMENT	3/8"	-	-	-	INSTALL 3/8" FOOD GRADE TUBING FROM THE WATER FILTER UNIT TO EACH REFRIGERATOR CONNECTION, PROVIDE FITTINGS AND ADAPTERS AS REQUIRED, ROUTE TUBING CONCEALED IN CABINETS.
NOTES: 1. --.							

GENERAL PLUMBING NOTES:

- ALL WASTE PIPING SHALL BE INSTALLED AT A SLOPE OF 1/4" PER 1'-0"
- COORDINATE ALL WORK WITH OTHER UTILITIES PROVIDE COORDINATION DRAWING TO ENGINEER, CONSTRUCTION MANAGER, AND OTHER TRADES FOR REVIEW.
- ARCHITECTURAL DRAWINGS TAKE PRECEDENCE FOR EQUIPMENT AND DEVICE LOCATIONS
- ALL NEW PIPING WORK THROUGH OCCUPIED PORTIONS OF THE BUILDING SHALL BE SCHEDULED THROUGH THE PROJECT MANAGER AND BE ACCOMPLISHED DURING "OFF HOURS" WHEN REQUIRED. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING SPACE AFTER WORK IS COMPLETE, AND REPAIRING ANY DAMAGE CAUSED DURING CONSTRUCTION THE PLUMBING CONTRACTOR SHALL REPLACE ANY CEILING TILES AND GRIDS REMOVED DURING CONSTRUCTION AND INSTALL NEW TO MATCH EXISTING. THE TERM "OFF HOURS" SHALL PERTAIN TO ANY DAY BETWEEN THE HOURS OF 8 P.M. AND 4 A.M.
- CONTRACTOR SHALL APPROPRIATELY FILL IN VOIDS LEFT IN FLOORS AND WALLS DUE TO DEMOLISHED OR RELOCATED PIPING LINES, ETC. INTEGRITY OF FIRE RATED WALLS AND FLOORS SHALL REMAIN UPON COMPLETION OF THIS PROJECT.
- PRIOR TO DEMOLITION, ASBESTOS TESTING AND ABATEMENT SHALL BE PERFORMED IN THE AREAS OF WORK. ASBESTOS ABATEMENT GENERALLY SHALL BE PERFORMED BY OTHERS. THIS CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER OF ANY SUSPECT MATERIAL AND NOT DISTURB THE MATERIAL UNTIL VERIFIED OR ABATED AS REQUIRED.
- THE DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL MATERIAL AND WORK NECESSARY TO PROVIDE A COMPLETE SYSTEM OF WASTE, VENT AND SUPPLIES TO ALL FIXTURES AND RECONNECT ALL EXISTING SERVICES AFFECTED BY WORK OF THIS PROJECT. ANY ISSUES UNCOVERED IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER AND DESIGN ENGINEER FOR RESOLUTION.
- ALL PLUMBING SYSTEMS, EQUIPMENT, ETC., SHALL HAVE SEISMIC RESTRAINT DESIGNED, CERTIFIED AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS, SECTION #130541 AND THE STANDARDS REFERENCED THEREIN.



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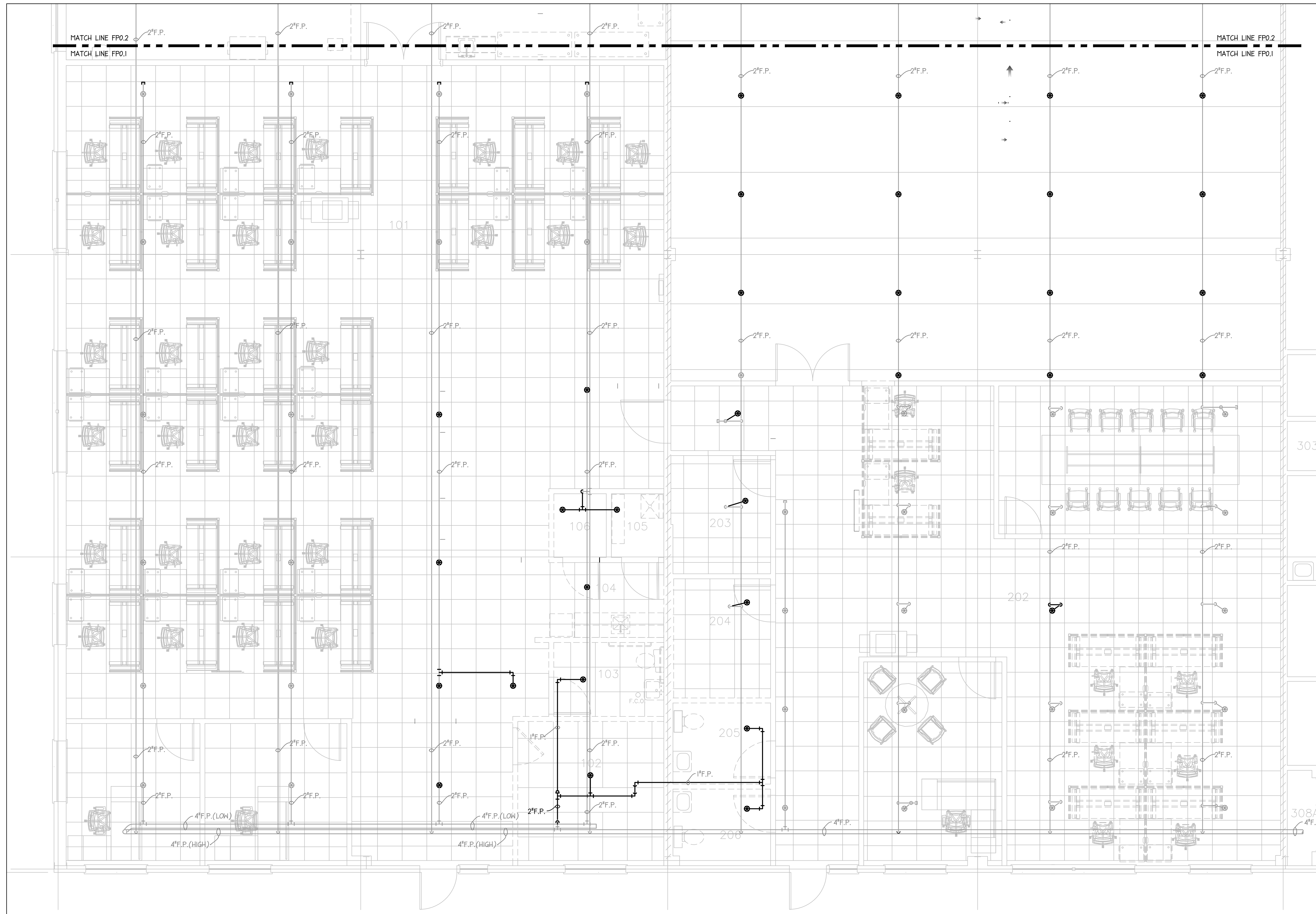


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NO. DATE	REVISION

PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
PLUMBING - LEGEND, FIXTURE &
EQUIPMENT SCHEDULE, AND GEN. NOTES

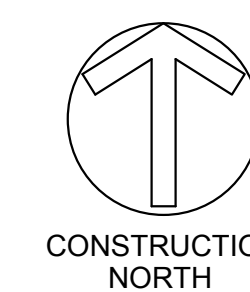
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PROJECT NO. 20258
SHEET NO. -



◆ FIRE PROTECTION SPECIFIC DEMOLITION NOTES:

1. XXXX

① FIRE PROT. - SUITE 75 & 79, FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"



FIRE PROTECTION DEMOLITION LEGEND	
---	FIRE PROTECTION TO BE DEMOLISHED
—	EXISTING FIRE PROTECTION TO REMAIN



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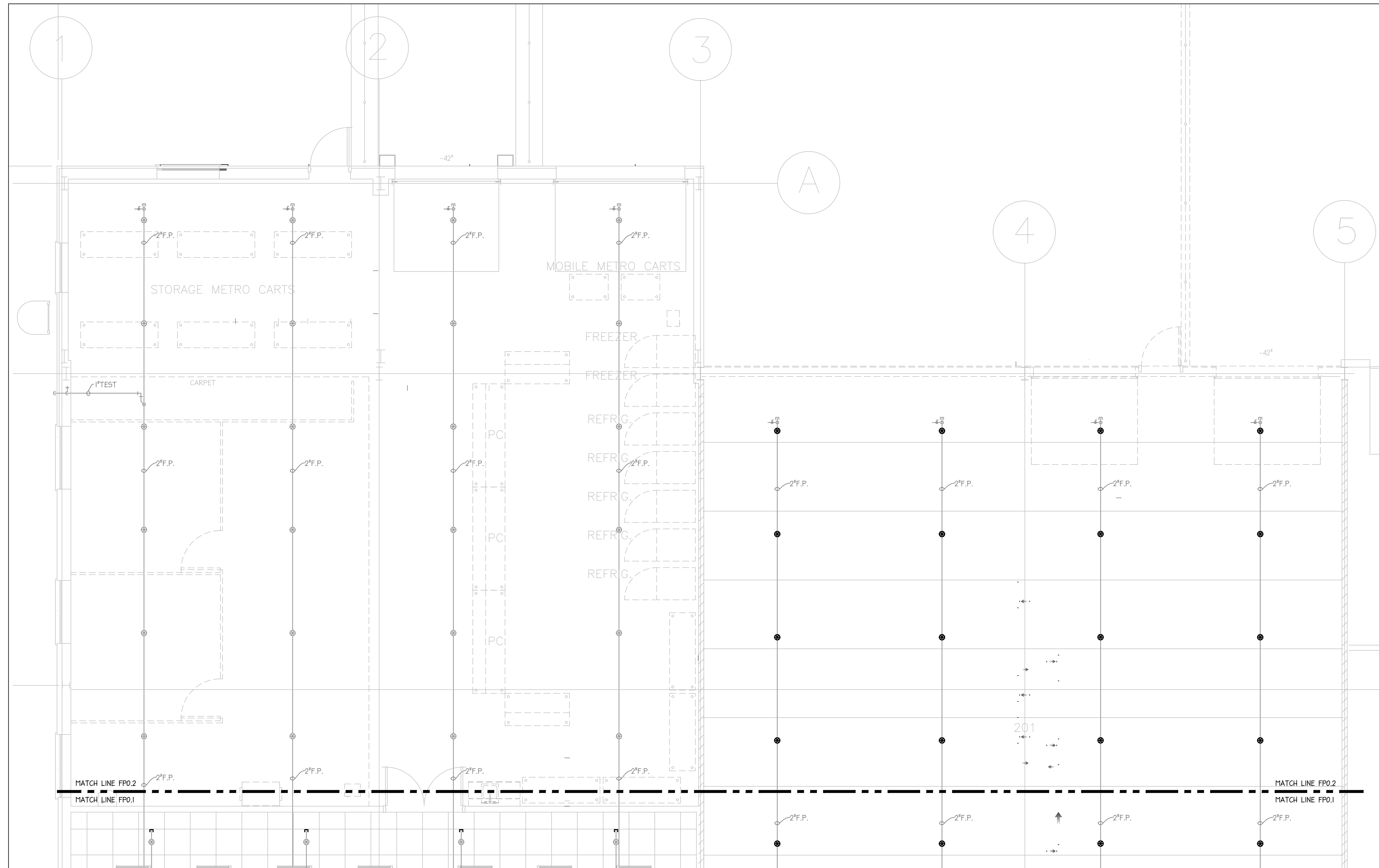
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
FIRE PROTECTION - SUITE 75 & 79,
FIRST FLOOR DEMOLITION PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO. -

FP0.1



1 FIRE PROT. - SUITE 75 & 79, FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"

◆ FIRE PROTECTION SPECIFIC DEMOLITION NOTES:
1. XXXX



FIRE PROTECTION DEMOLITION LEGEND	
---	FIRE PROTECTION TO BE DEMOLISHED
—	EXISTING FIRE PROTECTION TO REMAIN

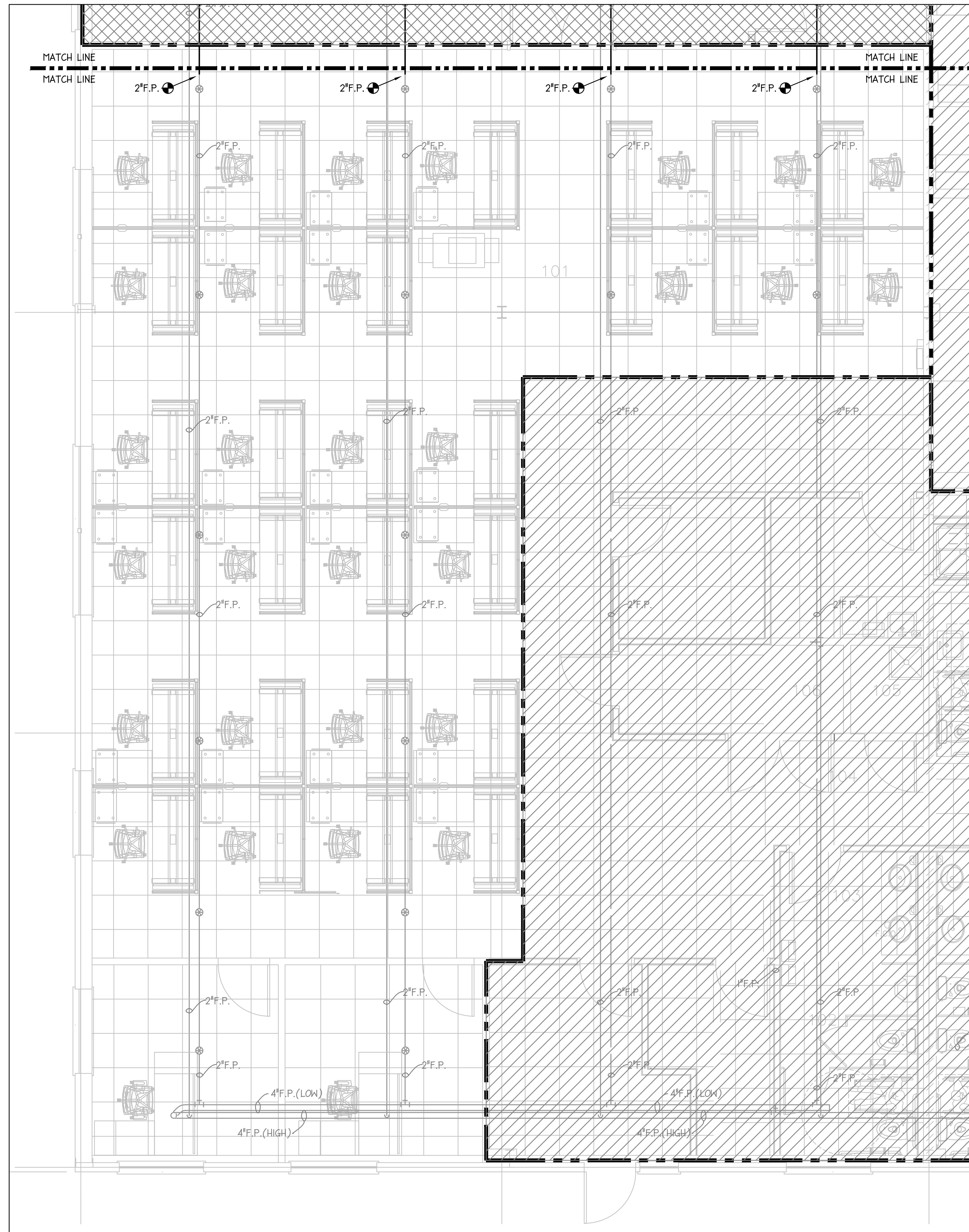
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

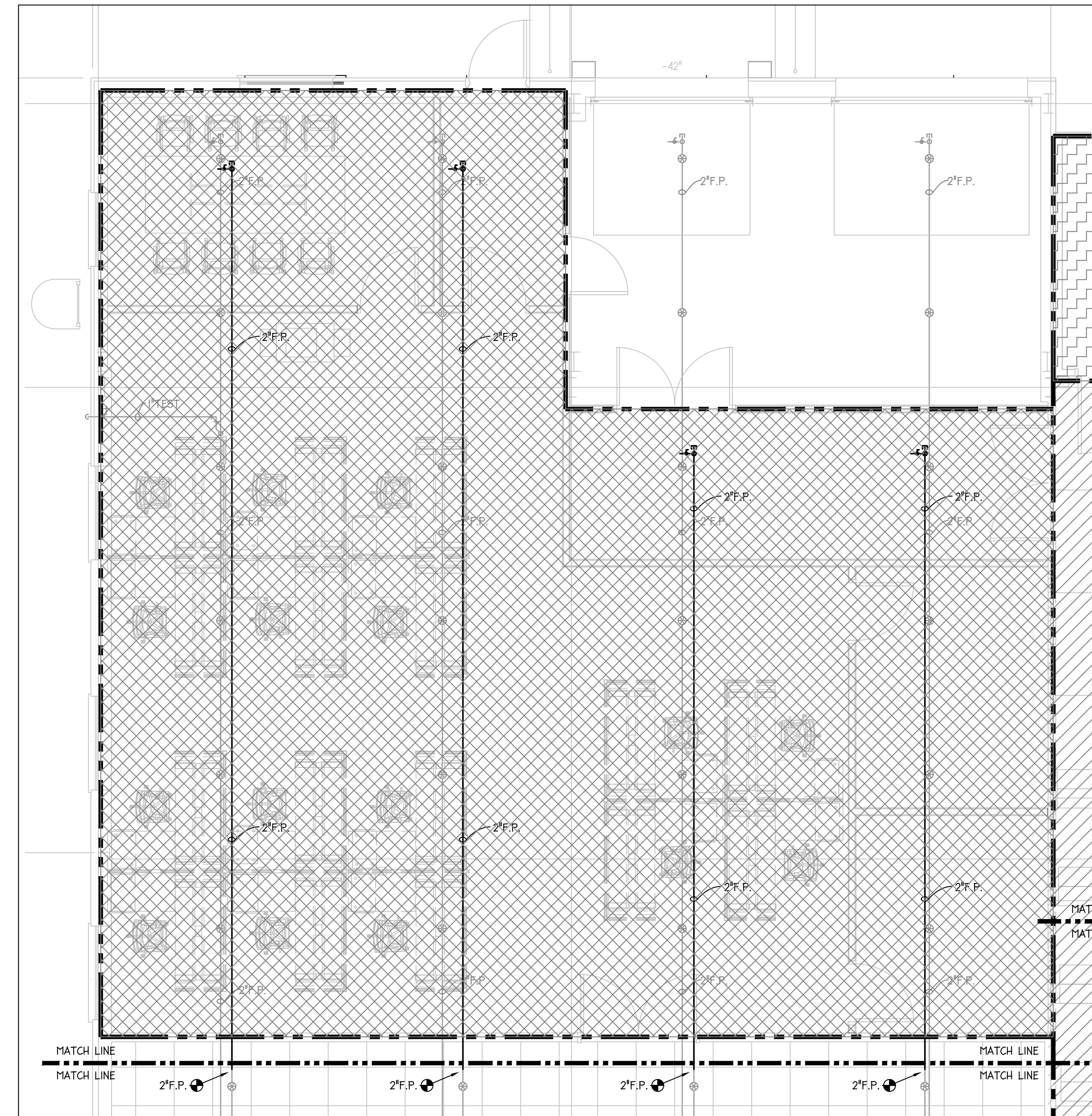
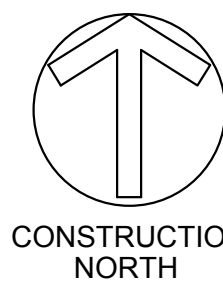
SHEET TITLE
FIRE PROTECTION - SUITE 75 & 79,
FIRST FLOOR DEMOLITION PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

FP0.2



1 FIRE PROT. - SUITE 75, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"



FIRE PROTECTION NEW WORK GRAPHIC LEGEND	
HATCH PATTERN	DESCRIPTION
	FURNISH AND INSTALL NEW FIRE PROT. PIPING AND HEADS TO PROVIDE COMPLETE COVERAGE OF ALL INDICATED SPACES FROM THE EXISTING PIPING. CAREFULLY COORDINATE PIPE ROUTING WITH EXISTING AND PROPOSED SERVICES. HAZARD CLASS TO BE LIGHT HAZARD - 0.10 GPM/1500 SQFT + 250 GPM HOSE
	EXTEND EXISTING LOWER LEVEL MAINS AND INSTALL NEW FIRE PROT. PIPING AND HEADS TO PROVIDE COMPLETE COVERAGE OF ALL INDICATED SPACES. CAREFULLY COORDINATE PIPE ROUTING WITH EXISTING AND PROPOSED SERVICES. HAZARD CLASS TO BE LIGHT HAZARD - 0.10 GPM/1500 SQFT + 250 GPM HOSE
	COOLERS, FREEZERS, ETC. - PROVIDE DRY TYPE FIRE PROTECTION SPRINKLER SYSTEM COVERAGE FOR ALL SPACES. SPRINKLER HEADS TO BE DRY SIDE WALL TYPE. HAZARD CLASS TO BE ORDINARY HAZARD, GROUP 1, DENSITY: 0.15 GPM/1500 SQFT + 250 GPM HOSE

FIRE PROTECTION GENERAL NOTES:

- FIRE PROTECTION SYSTEM AND SPRINKLER HEAD CONFIGURATION SHALL CONFORM TO NFPA 13, CURRENT EDITION, REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION, LOCAL BUILDING CODE, AND OWNER'S INSURANCE COMPANY.
- GENERALLY ALL SPRINKLER HEADS INSTALLED IN OCCUPIED AREAS SHALL BE QUICK RESPONSE. PROVIDE HEAD TYPE TO SUIT THE BUILDING CONSTRUCTION. HEADS IN AREAS WITH FINISHED CEILINGS TO BE SEMI-RECESSED PENDANT TYPE, UNLESS OTHERWISE INDICATED. FINISH COLOR TO BE AS SELECTED BY THE ARCHITECT. SUBMIT A SAMPLE OF EACH TYPE OF HEAD PROPOSED FOR USE FOR REVIEW AND APPROVAL.
- ALL PIPING SHALL BE SCHEDULE 40 BLACK STEEL COATED, PER THE SPECIFICATIONS. RUN PIPING CONCEALED WITHIN THE CEILING SPACE UNLESS OTHERWISE INDICATED. GROOVED TYPE PIPE AND COUPLINGS ARE ALLOWED FOR PIPING SIZES 2 1/2" AND ABOVE. MECHANICAL TEES ARE ALLOWED FOR CONNECTIONS TO THE MAIN ONLY.
- THE FIRE PROTECTION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND SHOULD NOT BE UTILIZED FOR FIRE PROTECTION DESIGN. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE SPRINKLER SYSTEM DESIGN AND SPRINKLER HEAD LAYOUT. THIS SHALL BE COMPLETED BY A NICET LEVEL (3) THREE CERTIFIED TECHNICIAN OR PROFESSIONAL ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL.
- FURNISH AND INSTALL NEW SPRINKLER HEADS IN ALL DESIGNATED PROJECT AREAS. THE REUSE OF EXISTING HEADS IS NOT PERMITTED.
- WHERE APPLICABLE, ALL NEW SPRINKLER HEAD INSTALLATIONS SHALL BE CENTERED IN CEILING TILE.
- PROVIDE FIRE AND SMOKE PROOF CAULKING FOR ALL WALL PENETRATIONS. COORDINATE ALL FIRE AND SMOKE PROOFING WITH THE CONSTRUCTION SUPERVISOR.
- PROVIDE SEISMIC BRACING FOR SPRINKLER PIPING INSTALLATION PER NFPA 13 AND THE BUILDING CODES.
- WHERE APPLICABLE, ALL NEW SPRINKLER HEADS SHALL HAVE REMOVABLE ESCUTCHEONS TO ALLOW CEILING TILE REPLACEMENT.
- PROVIDE A 10 PSI CUSHION BETWEEN FIRE PROTECTION SYSTEM DEMAND AND FIRE PROTECTION SYSTEM WATER SUPPLY.
- THE FIRE PROTECTION CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MECHANICAL, ELECTRICAL, PLUMBING AND GENERAL TRADES CONTRACTORS. THE FIRE PROTECTION CONTRACTOR SHALL INDICATE ON THE MECHANICAL/ELECTRICAL COORDINATION DRAWINGS THE LOCATION, ROUTING AND ELEVATIONS OF ALL EXISTING FIRE PROTECTION PIPING TO REMAIN AND NEW FIRE PROTECTION PIPING TO BE INSTALLED. THE FIRE PROTECTION CONTRACTOR SHALL NOT START WORK UNTIL THE COORDINATION DRAWINGS ARE REVIEWED AND ACCEPTED BY THE ENGINEER. THE FIRE PROTECTION SUBMITTAL DRAWINGS ARE NOT ACCEPTABLE FOR COORDINATION DRAWINGS.



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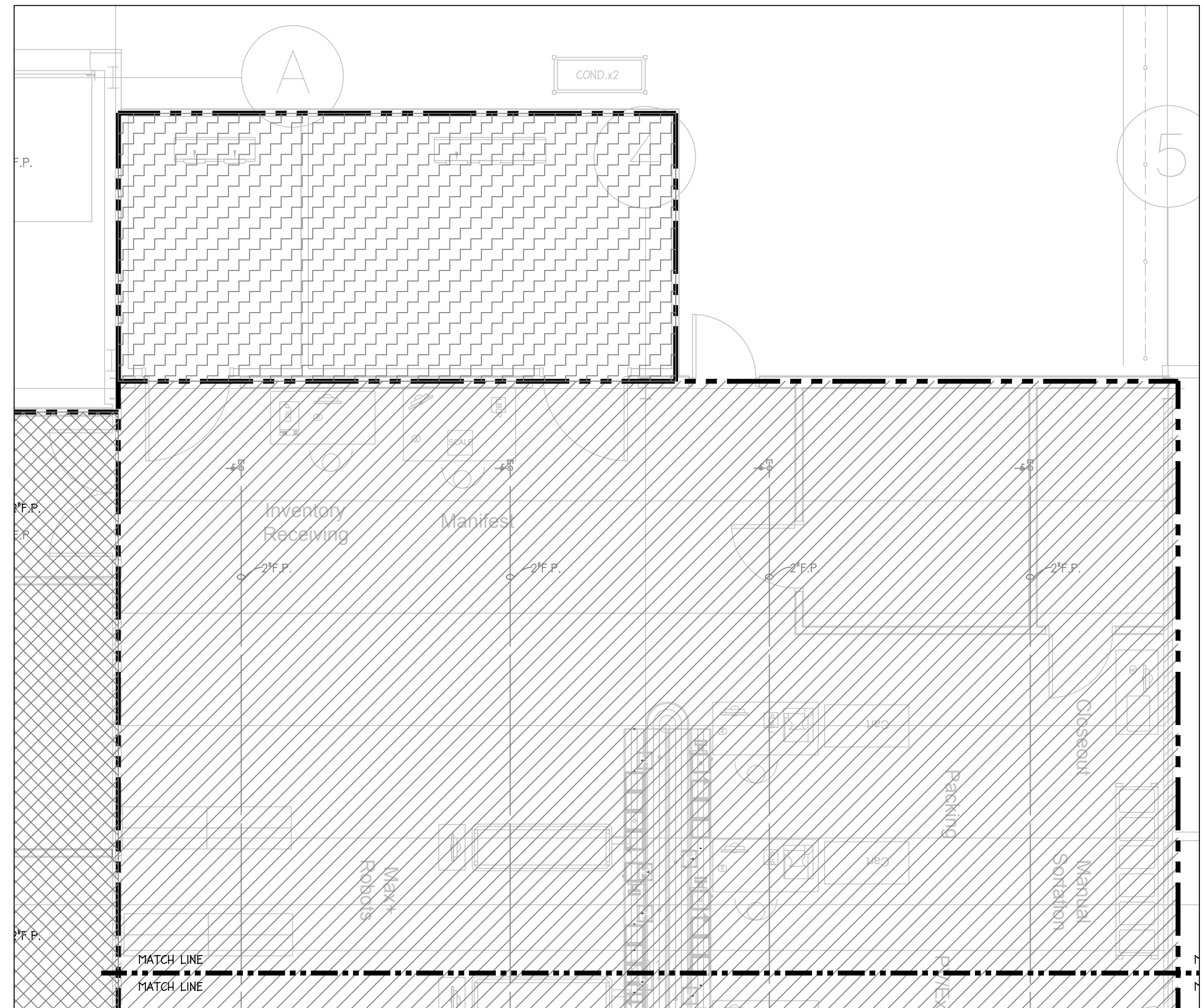
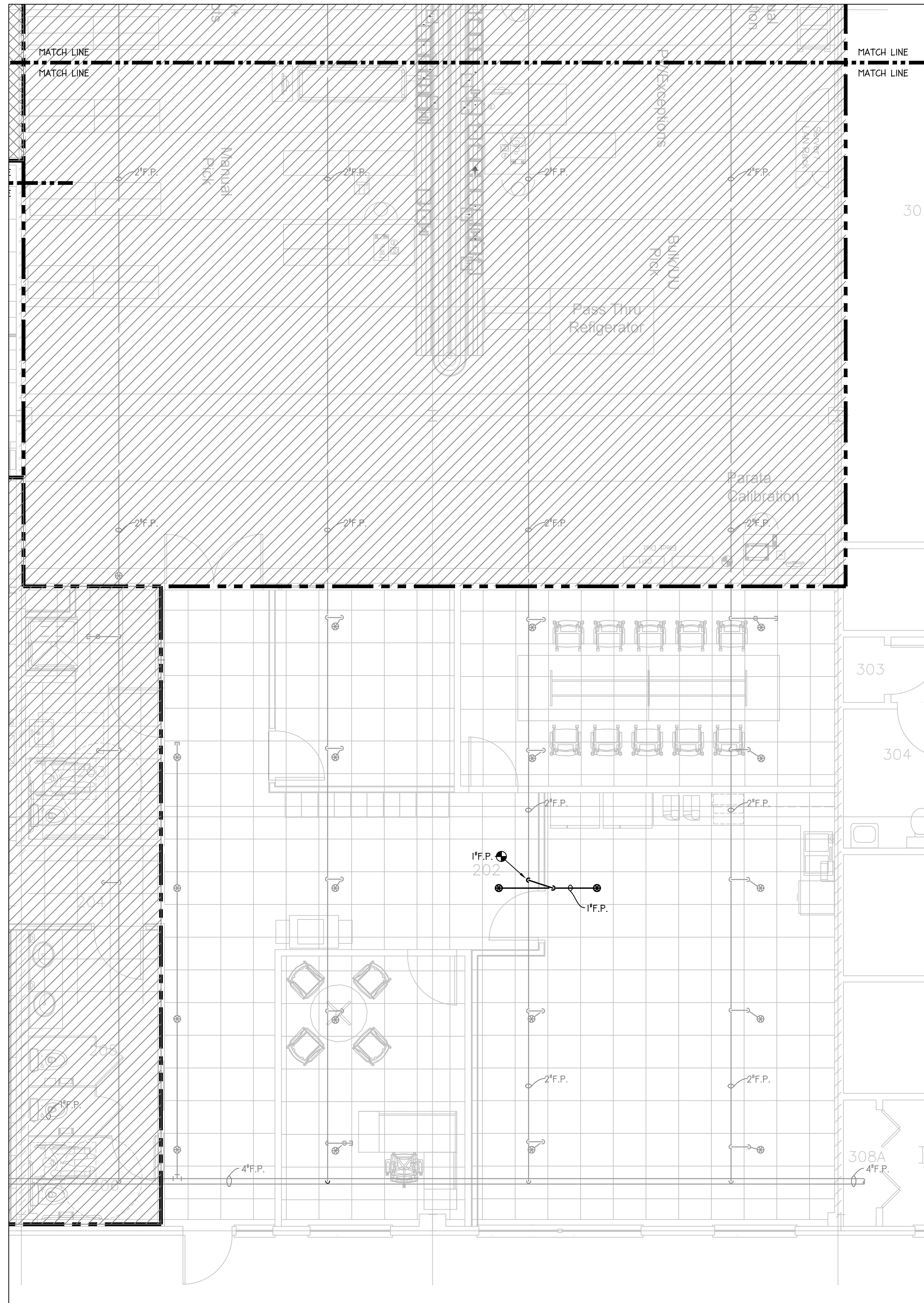
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
FIRE PROTECTION - SUITE 75,
FIRST FLOOR NEW WORK PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO. -

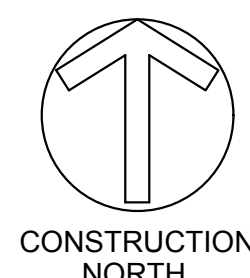
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FIRE PROTECTION NEW WORK GRAPHIC LEGEND	
HATCH PATTERN	DESCRIPTION
	FURNISH AND INSTALL NEW FIRE PROT. PIPING AND HEADS TO PROVIDE COMPLETE COVERAGE OF ALL INDICATED SPACES FROM THE EXISTING PIPING. CAREFULLY COORDINATE PIPE ROUTING WITH EXISTING AND PROPOSED SERVICES. HAZARD CLASS TO BE LIGHT HAZARD - 0.10 GPM/1500 SQFT + 250 GPM HOSE
	EXTEND EXISTING LOWER LEVEL MAINS AND INSTALL NEW FIRE PROT. PIPING AND HEADS TO PROVIDE COMPLETE COVERAGE OF ALL INDICATED SPACES. CAREFULLY COORDINATE PIPE ROUTING WITH EXISTING AND PROPOSED SERVICES. HAZARD CLASS TO BE LIGHT HAZARD - 0.10 GPM/1500 SQFT + 250 GPM HOSE
	COOLERS, FREEZERS, ETC. - PROVIDE DRY TYPE FIRE PROTECTION SPRINKLER SYSTEM COVERAGE FOR ALL SPACES. SPRINKLER HEADS TO BE DRY SIDE WALL TYPE. HAZARD CLASS TO BE ORDINARY HAZARD, GROUP 1, DENSITY: 0.15 GPM/1500 SQFT + 250 GPM HOSE

FIRE PROTECTION GENERAL NOTES:

1. FIRE PROTECTION SYSTEM AND SPRINKLER HEAD CONFIGURATION SHALL CONFORM TO NFPA 13, CURRENT EDITION, REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION, LOCAL BUILDING CODE, AND OWNER'S INSURANCE COMPANY.
2. GENERALLY ALL SPRINKLER HEADS INSTALLED IN OCCUPIED AREAS SHALL BE QUICK RESPONSE. PROVIDE HEAD TYPE TO SUIT THE BUILDING CONSTRUCTION. HEADS IN AREAS WITH FINISHED CEILINGS TO BE SEMI-RECESSED PENDANT TYPE, UNLESS OTHERWISE INDICATED. FINISH COLOR TO BE AS SELECTED BY THE ARCHITECT. SUBMIT A SAMPLE OF EACH TYPE OF HEAD PROPOSED FOR USE FOR REVIEW AND APPROVAL.
3. ALL PIPING SHALL BE SCHEDULE 40 BLACK STEEL COATED, PER THE SPECIFICATIONS. RUN PIPING CONCEALED WITHIN THE CEILING SPACE UNLESS OTHERWISE INDICATED. GROOVED TYPE PIPE AND COUPLINGS ARE ALLOWED FOR PIPING SIZES 2 1/2" AND ABOVE. MECHANICAL TEES ARE ALLOWED FOR CONNECTIONS TO THE MAIN ONLY.
4. THE FIRE PROTECTION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND SHOULD NOT BE UTILIZED FOR FIRE PROTECTION DESIGN. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE SPRINKLER SYSTEM DESIGN AND SPRINKLER HEAD LAYOUT. THIS SHALL BE COMPLETED BY A NICET LEVEL (5) THREE CERTIFIED TECHNICIAN OR PROFESSIONAL ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL.
5. FURNISH AND INSTALL NEW SPRINKLER HEADS IN ALL DESIGNATED PROJECT AREAS. THE REUSE OF EXISTING HEADS IS NOT PERMITTED.
6. WHERE APPLICABLE, ALL NEW SPRINKLER HEAD INSTALLATIONS SHALL BE CENTERED IN CEILING TILE.
7. PROVIDE FIRE AND SMOKE PROOF CAULKING FOR ALL WALL PENETRATIONS. COORDINATE ALL FIRE AND SMOKE PROOFING WITH THE CONSTRUCTION SUPERVISOR.
8. PROVIDE SEISMIC BRACING FOR SPRINKLER PIPING INSTALLATION PER NFPA 13 AND THE BUILDING CODES.
9. WHERE APPLICABLE, ALL NEW SPRINKLER HEADS SHALL HAVE REMOVABLE ESCUTCHEONS TO ALLOW CEILING TILE REPLACEMENT.
10. PROVIDE A 10 PSI CUSHION BETWEEN FIRE PROTECTION SYSTEM DEMAND AND FIRE PROTECTION SYSTEM WATER SUPPLY.
11. THE FIRE PROTECTION CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MECHANICAL, ELECTRICAL, PLUMBING AND GENERAL TRADES CONTRACTORS. THE FIRE PROTECTION CONTRACTOR SHALL INDICATE ON THE MECHANICAL/ELECTRICAL COORDINATION DRAWINGS THE LOCATION, ROUTING AND ELEVATIONS OF ALL EXISTING FIRE PROTECTION PIPING TO REMAIN AND NEW FIRE PROTECTION PIPING TO BE INSTALLED. THE FIRE PROTECTION CONTRACTOR SHALL NOT START WORK UNTIL THE COORDINATION DRAWINGS ARE REVIEWED AND ACCEPTED BY THE ENGINEER. THE FIRE PROTECTION SUBMITTAL DRAWINGS ARE NOT ACCEPTABLE FOR COORDINATION DRAWINGS.

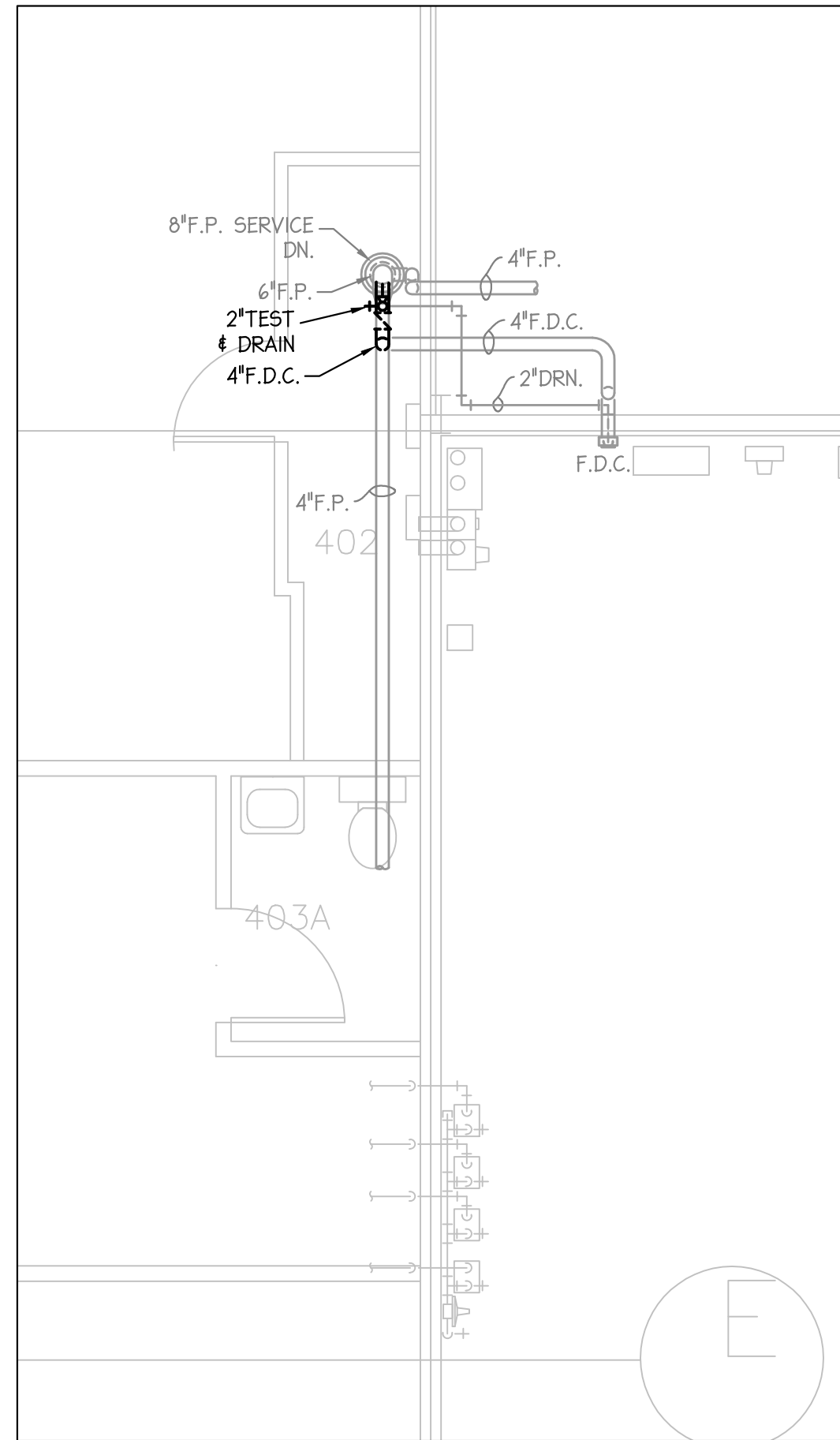


1 FIRE PROT. - SUITE 79, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"

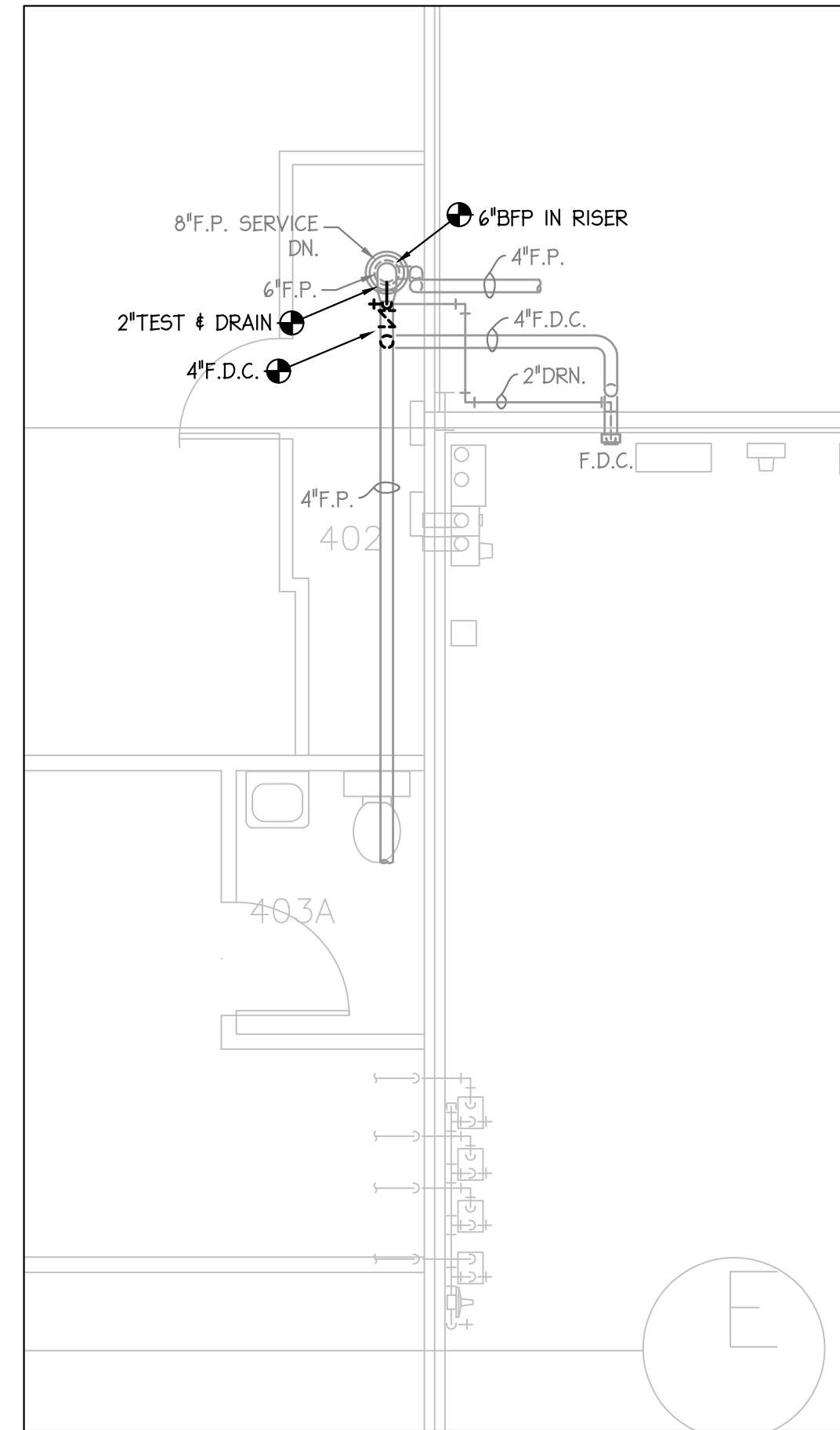
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DATE	FEB. 01, 2021
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	REVISION

PROJECT TITLE: U.V.M.C. 75 HOLLY COURT PHARMACY EXPANSION PROJECT
SHEET TITLE: FIRE PROTECTION - SUITE 79, FIRST FLOOR NEW WORK PLAN

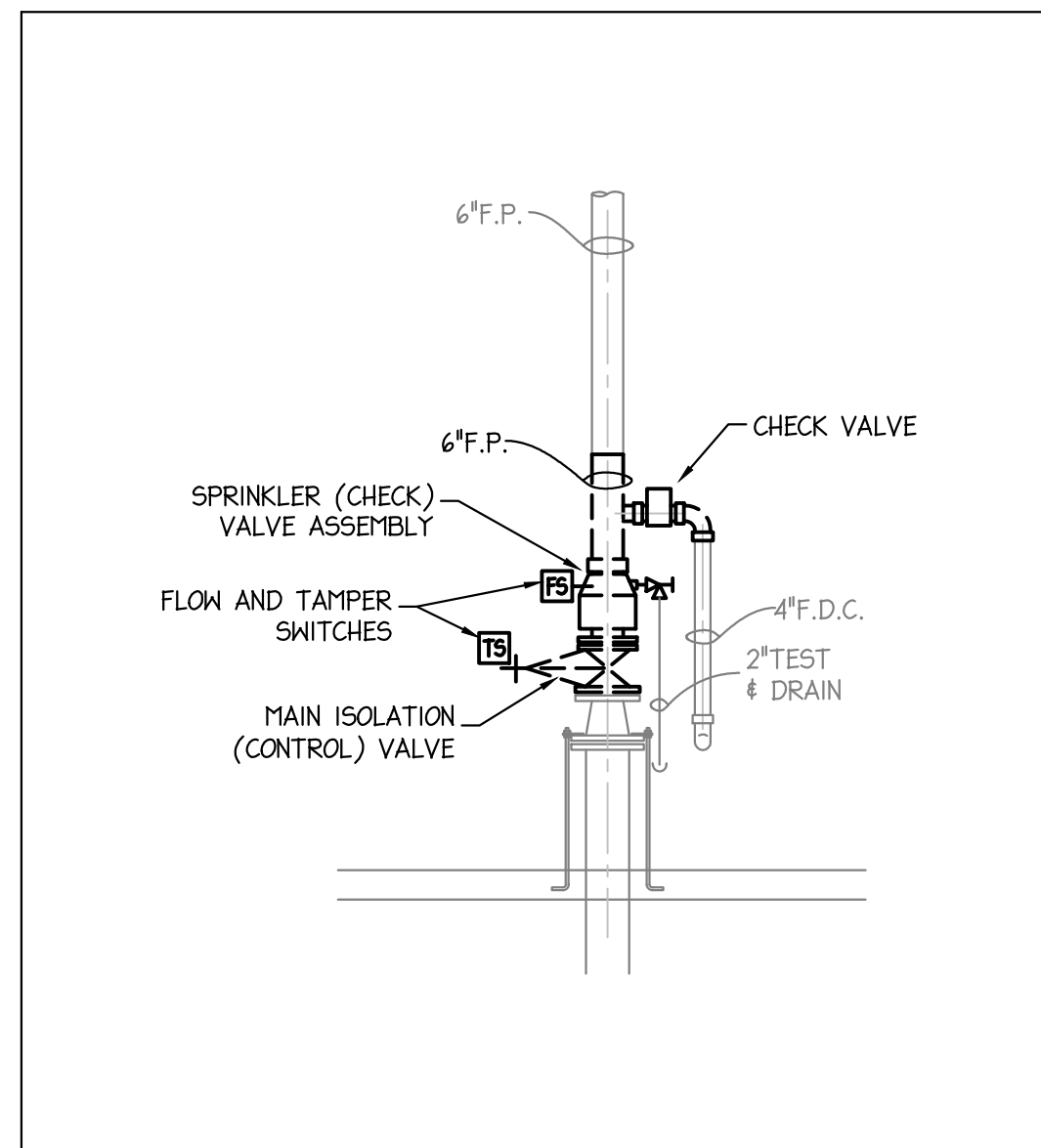
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PROJECT NO. 20258
SHEET NO.



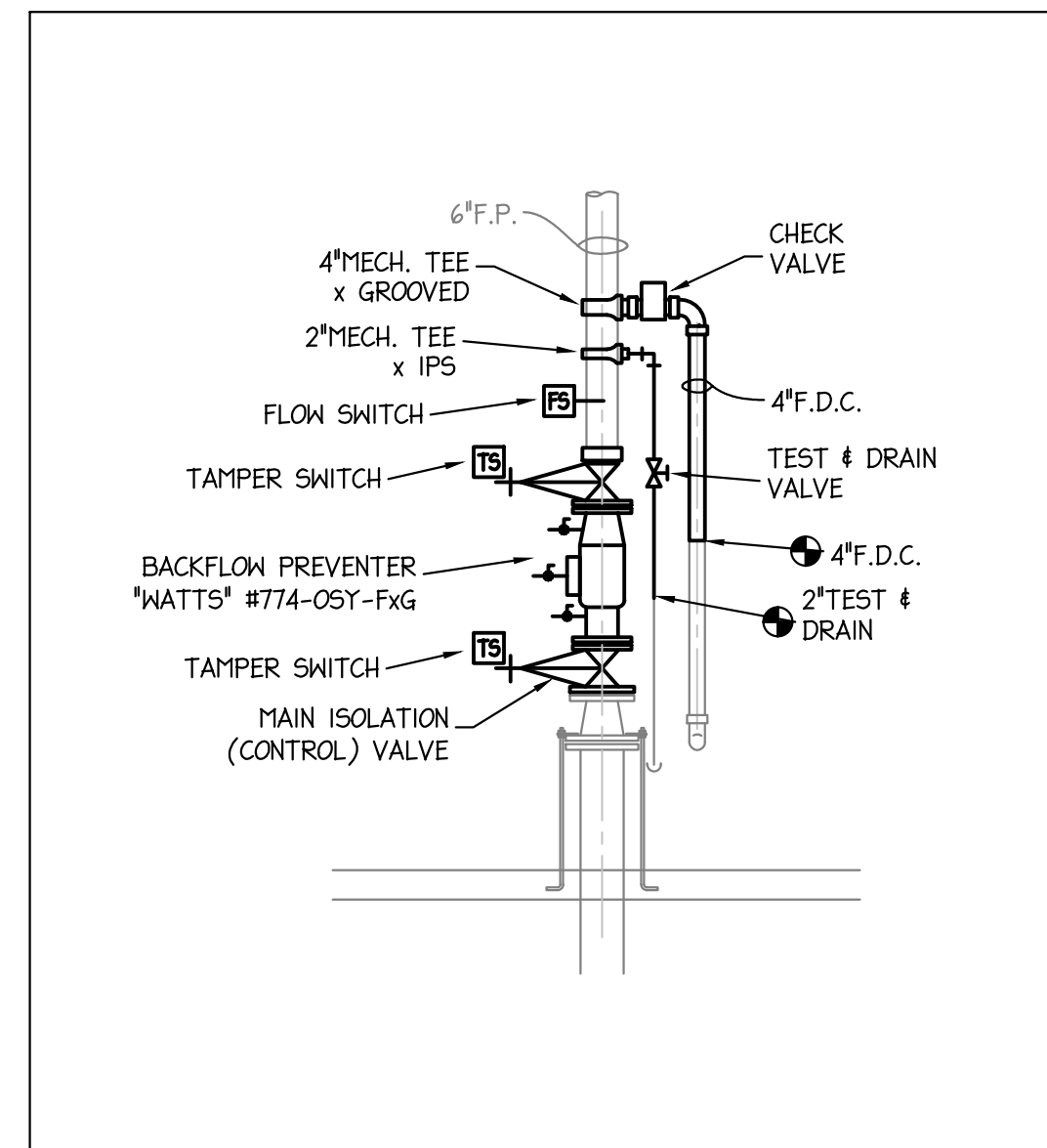
① FIRE PROT. - SERVICE ROOM DEMO. PLAN
1/4"=1'-0"



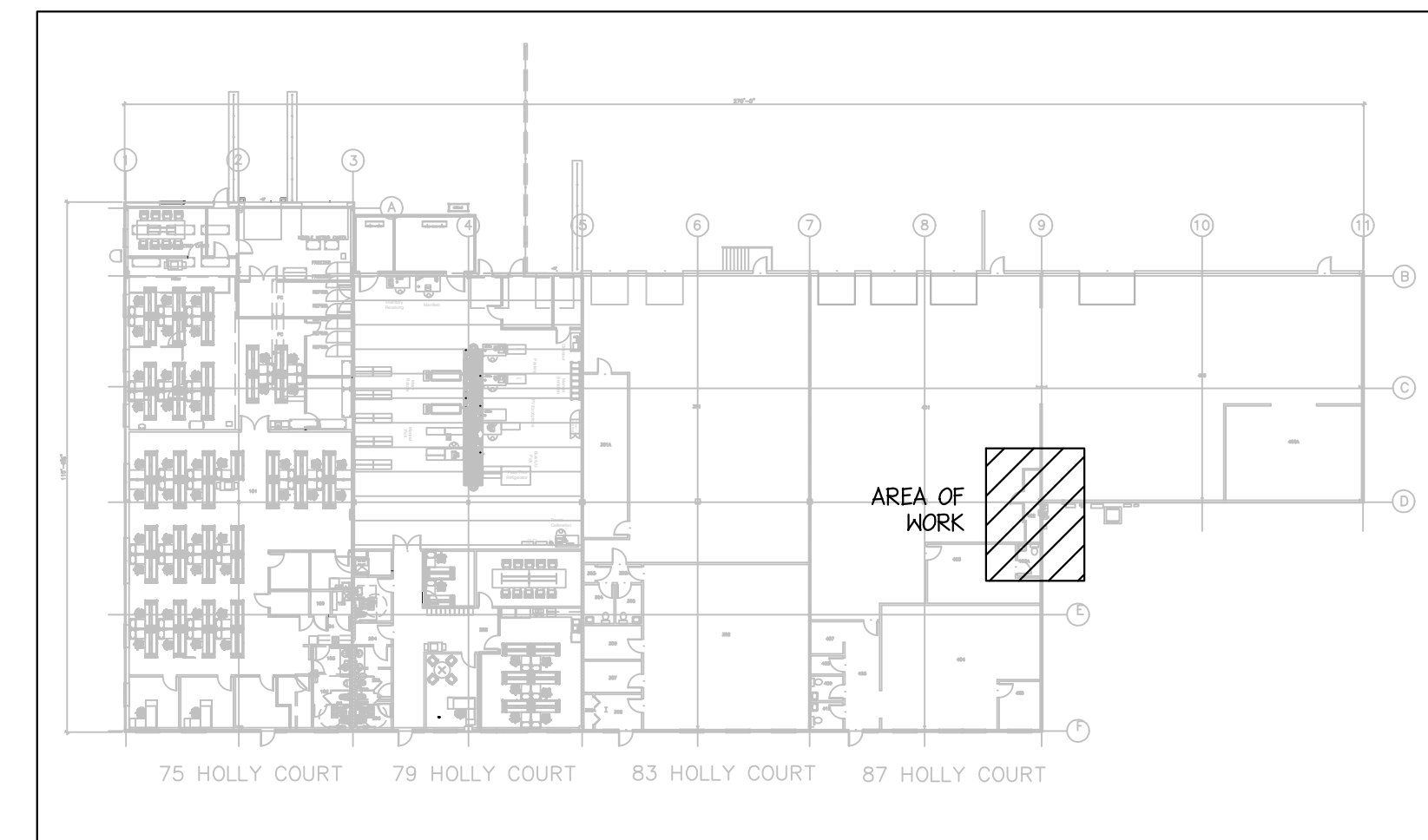
③ FIRE PROT. - SERVICE ROOM NEW WORK PLAN
1/4"=1'-0"



② FIRE PROT. - SERVICE RISER DEMO. DIA.
1/4"=1'-0"



④ FIRE PROT. - SERVICE RISER NEW WORK DIA.
1/4"=1'-0"



⑤ FIRE PROT. - KEY PLAN
NOT TO SCALE



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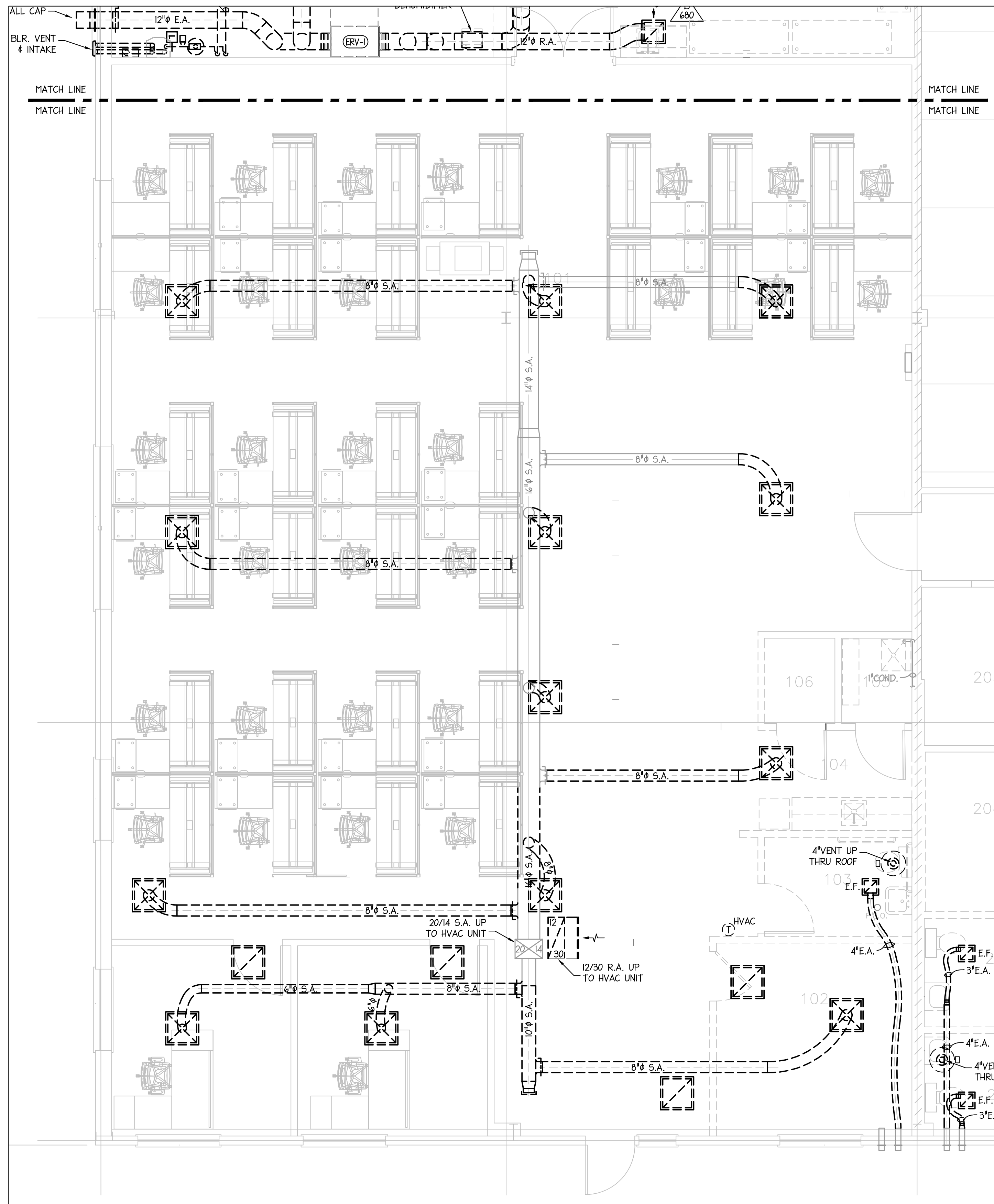
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

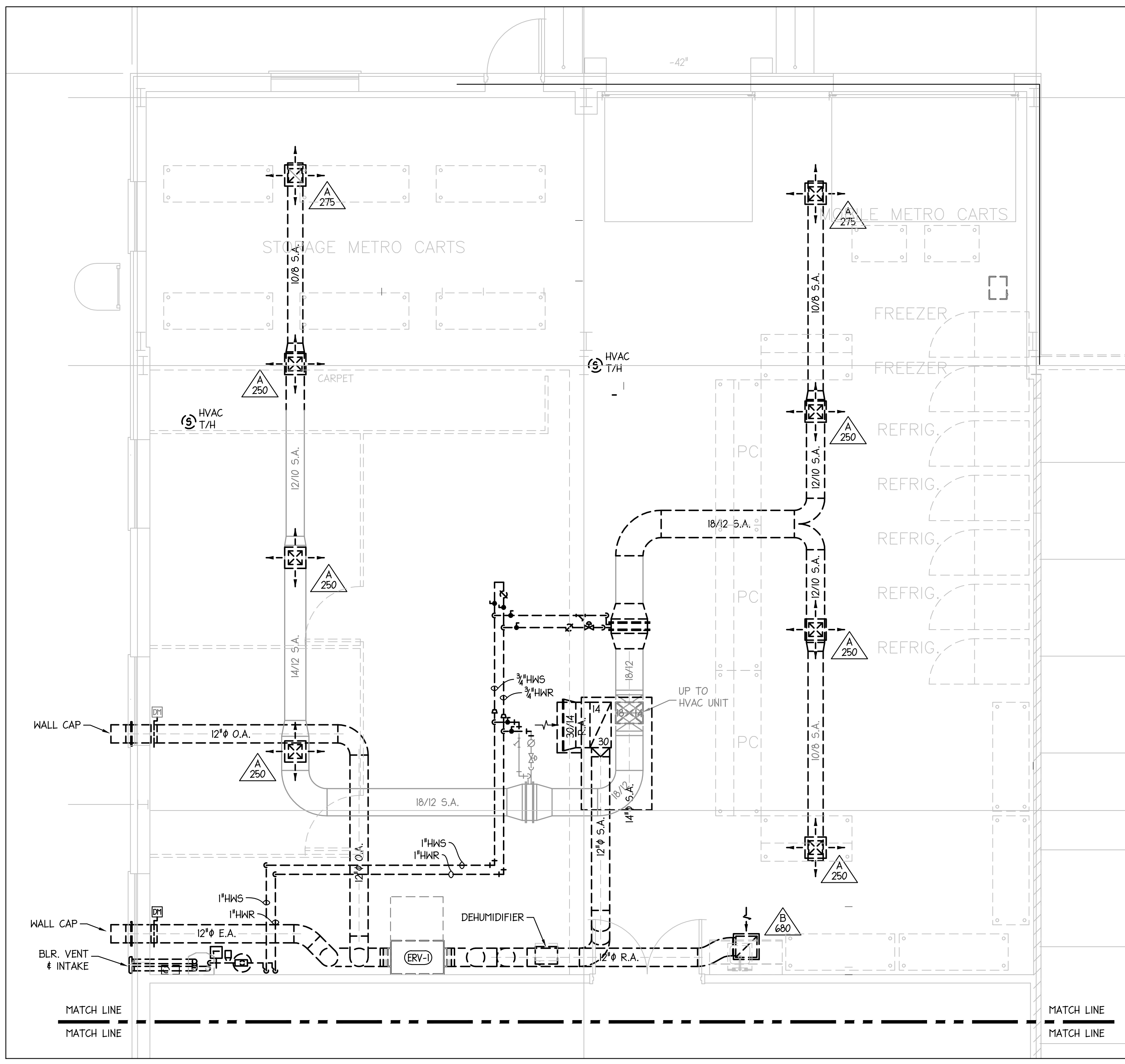
SHEET TITLE
FIRE PROTECTION - SERVICE ENTRANCE
DEMOLITION & NEW WORK PLANS

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO. -

FP1.3



① MECHANICAL - SUITE 75, FIRST FLOOR DEMO. PLAN
1/4"=1'-0"



② MECHANICAL - SUITE 75, FIRST FLOOR DEMO. PLAN
1/4"=1'-0"

MECHANICAL SPECIFIC DEMOLITION NOTES:

- 1. XXXX



MECHANICAL DEMOLITION LEGEND	
	MECHANICAL WORK TO BE DEMOLISHED
	EXISTING MECHANICAL WORK TO REMAIN



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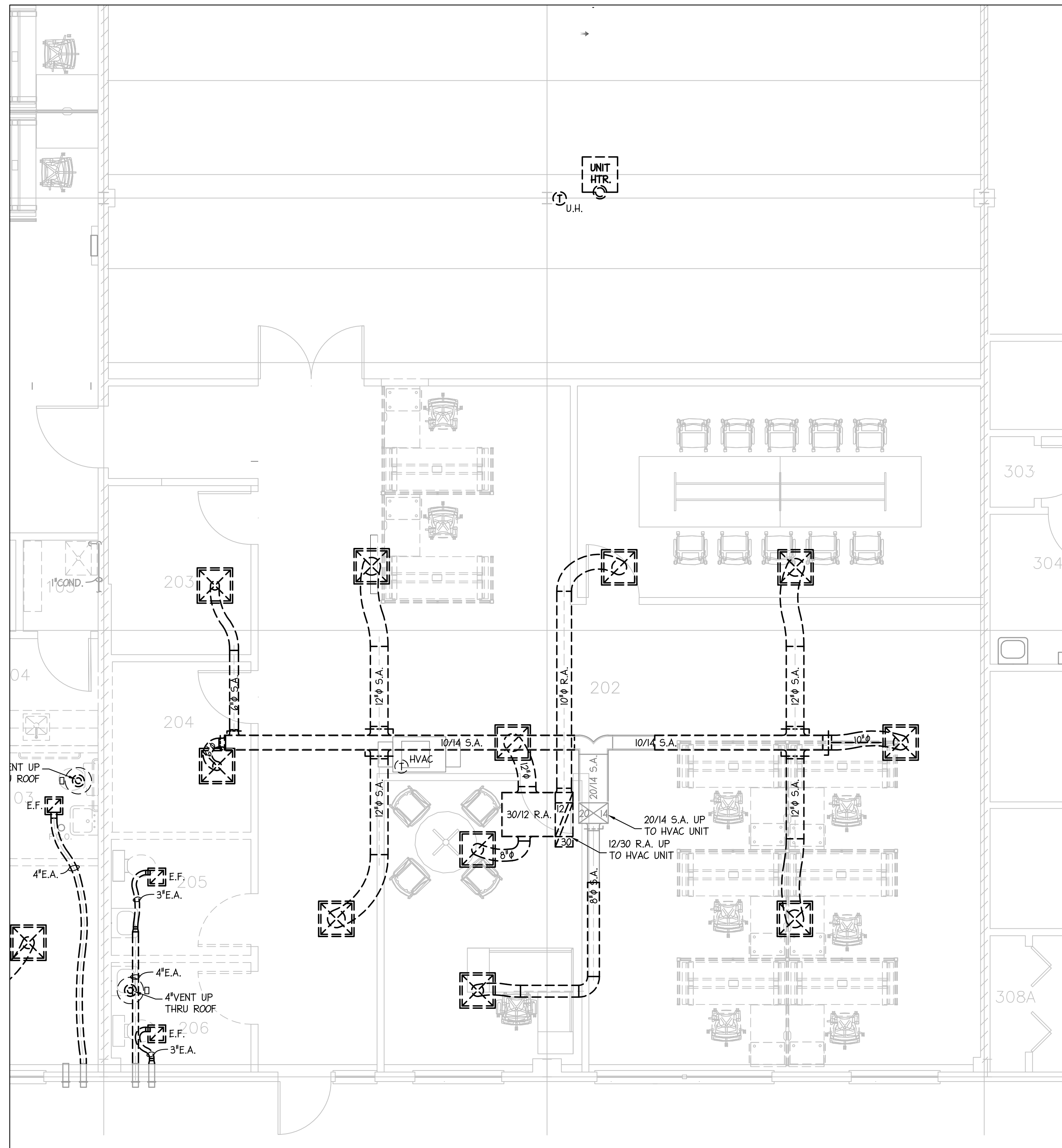
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - FIRST FLOOR
DEMOLITION PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

M0.1



1 MECHANICAL - SUITE 79, FIRST FLOOR DEMO. PLAN
1/4"=1'-0"

MECHANICAL DEMOLITION LEGEND	
	MECHANICAL WORK TO BE DEMOLISHED
	EXISTING MECHANICAL WORK TO REMAIN



MECHANICAL SPECIFIC DEMOLITION NOTES:

- XXXX



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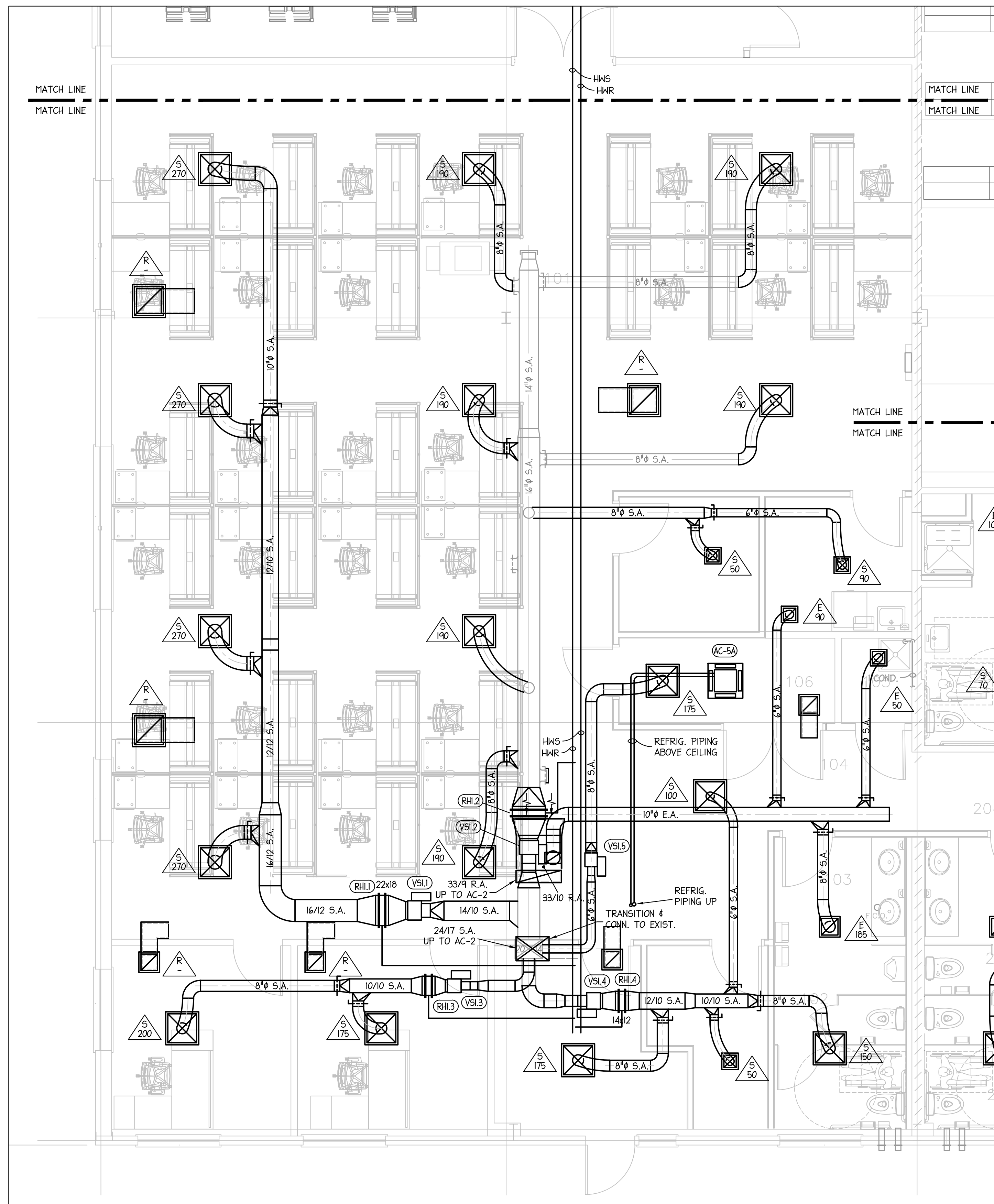
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PROJECT TITLE
U.V.M.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

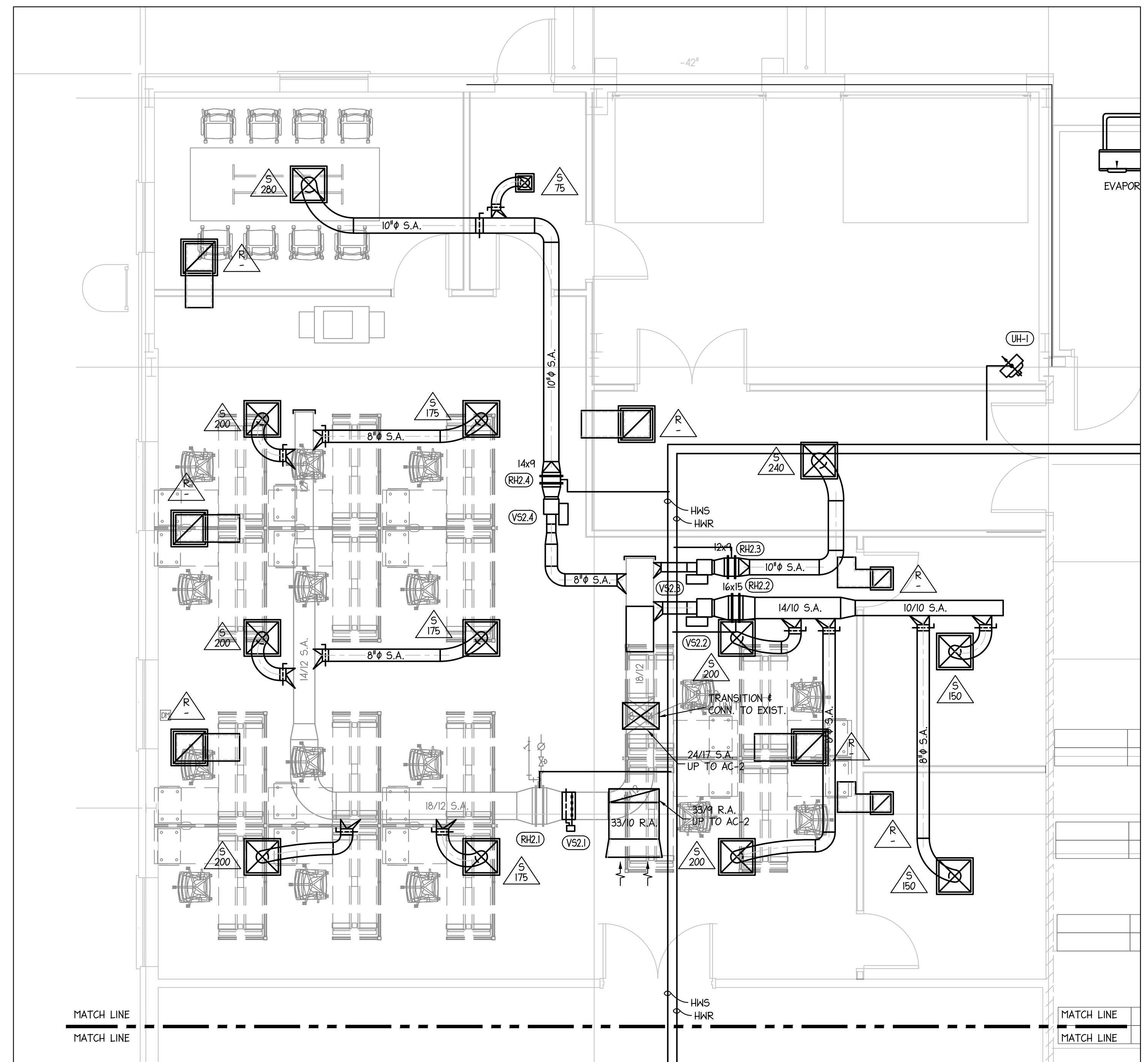
SHEET TITLE
MECHANICAL - FIRST FLOOR
DEMOLITION PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

M0.2



① MECHANICAL - SUITE 75, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"



② MECHANICAL - SUITE 75, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"

MECHANICAL SPECIFIC NEW WORK NOTES:

- 1. xxxxx



MECHANICAL NEW WORK LEGEND	
	NEW MECHANICAL TO BE FURNISHED AND INSTALLED
	EXISTING MECHANICAL TO REMAIN



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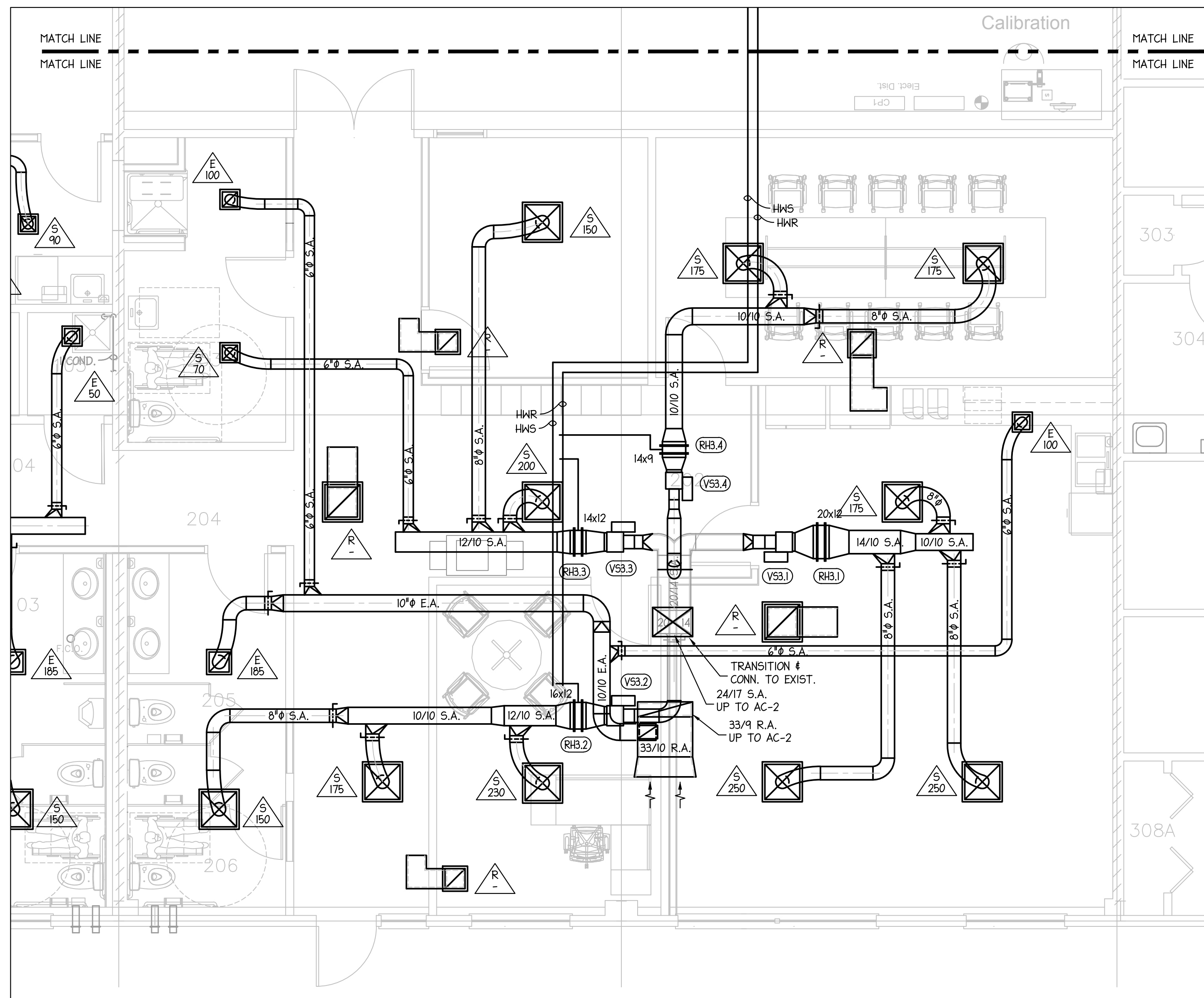
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - SUITE 75,
FIRST FLOOR NEW WORK PLAN

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

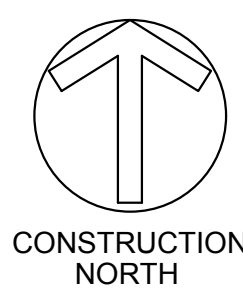
M1.1



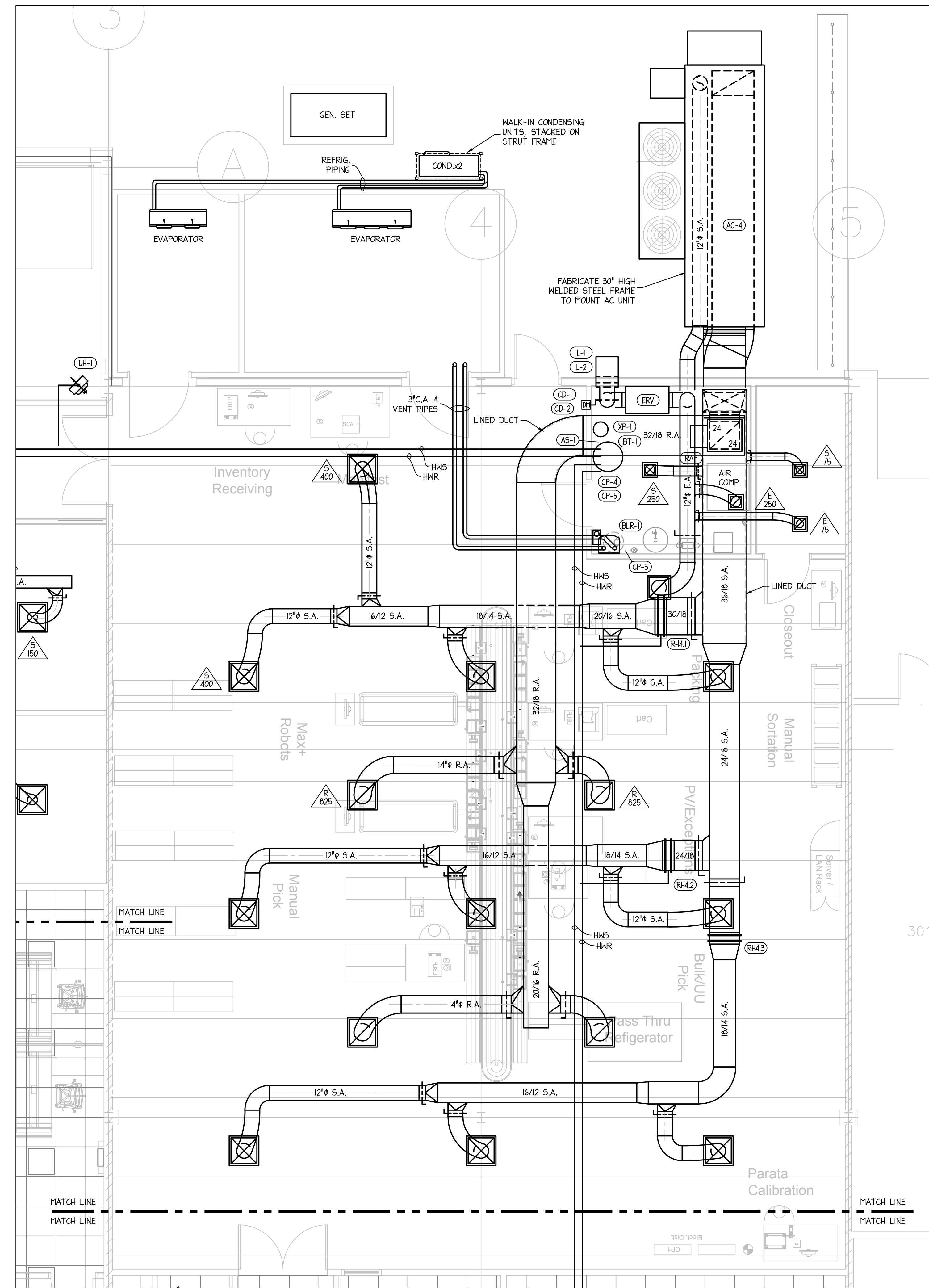
MECHANICAL - SUITE 79, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"

MECHANICAL SPECIFIC NEW WORK NOTES:

- 1. XXXXX



MECHANICAL NEW WORK LEGEND	
	NEW MECHANICAL TO BE FURNISHED AND INSTALLED
	EXISTING MECHANICAL TO REMAIN



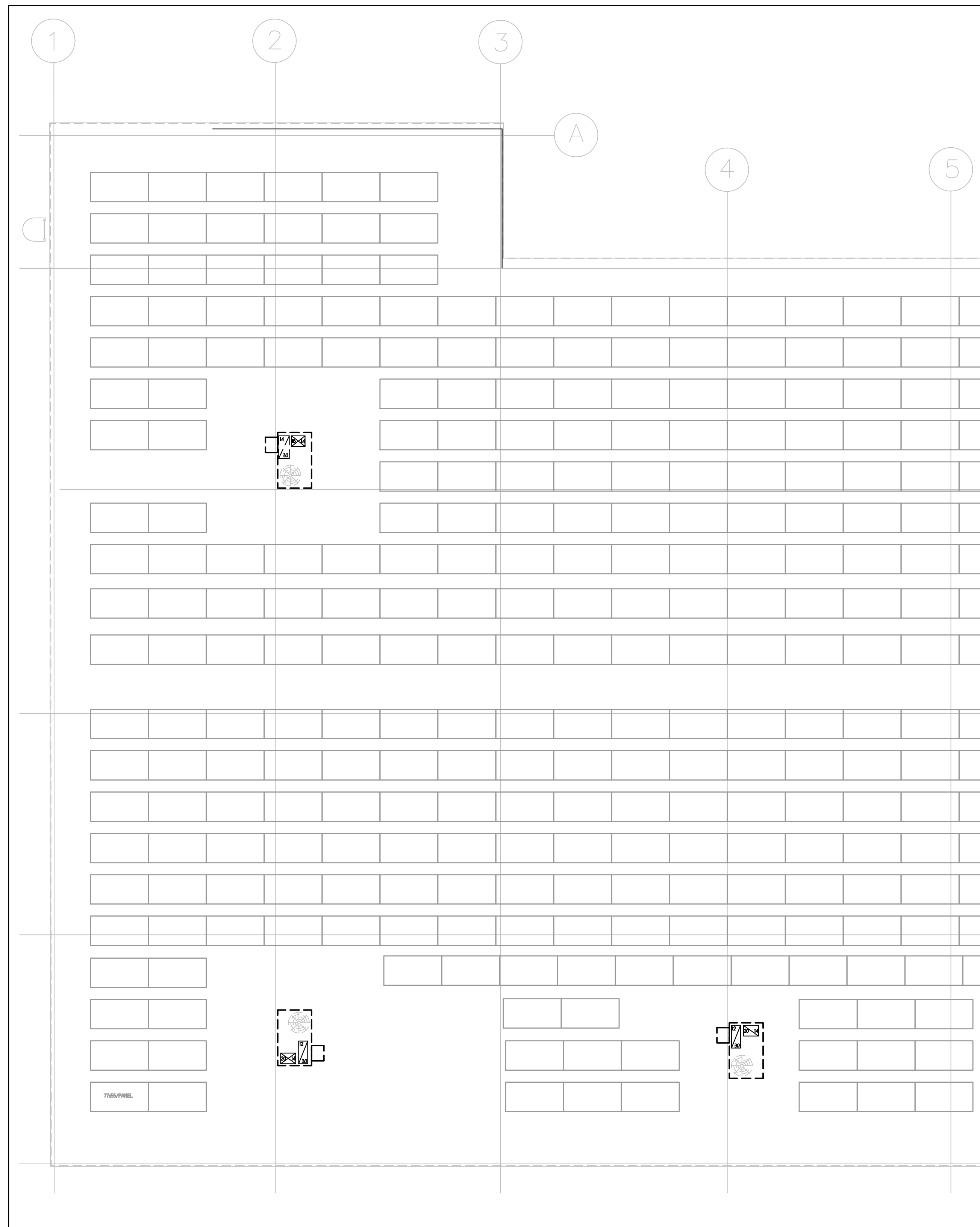
MECHANICAL - SUITE 79, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"

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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - SUITE 79,
FIRST FLOOR NEW WORK PLAN

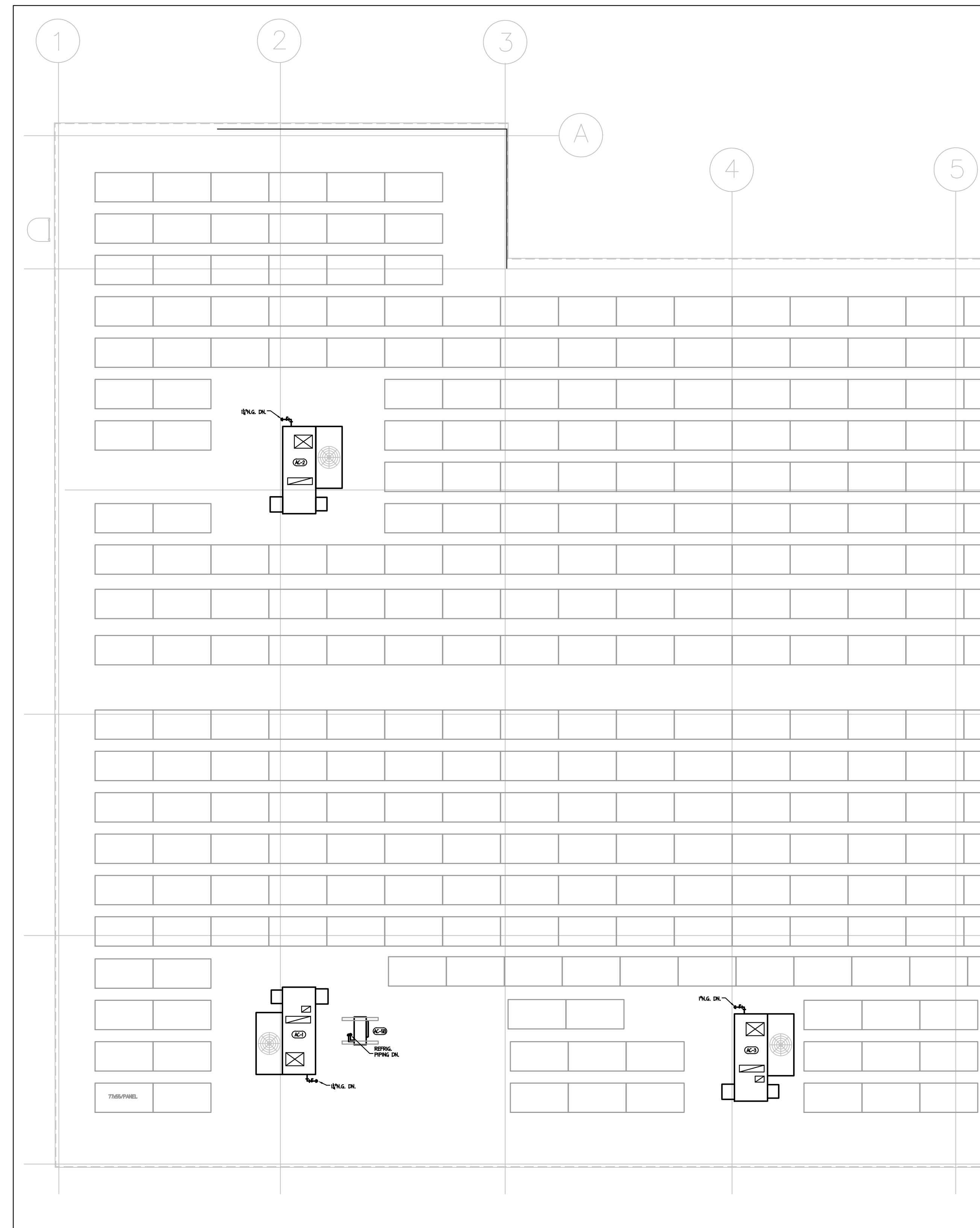
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PROJECT NO. 20258
SHEET NO.



① MECHANICAL - ROOF LEVEL DEMOLITION PLAN
1/4"=1'-0"

MECHANICAL SPECIFIC DEMO. # NEW WORK NOTES:

1. XXXXX



② MECHANICAL - ROOF LEVEL NEW WORK PLAN
1/4"=1'-0"

MECHANICAL NEW WORK LEGEND	
	NEW MECHANICAL TO BE FURNISHED AND INSTALLED
	EXISTING MECHANICAL TO REMAIN



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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - ROOF LEVEL
DEMOLITION AND NEW WORK PLANS

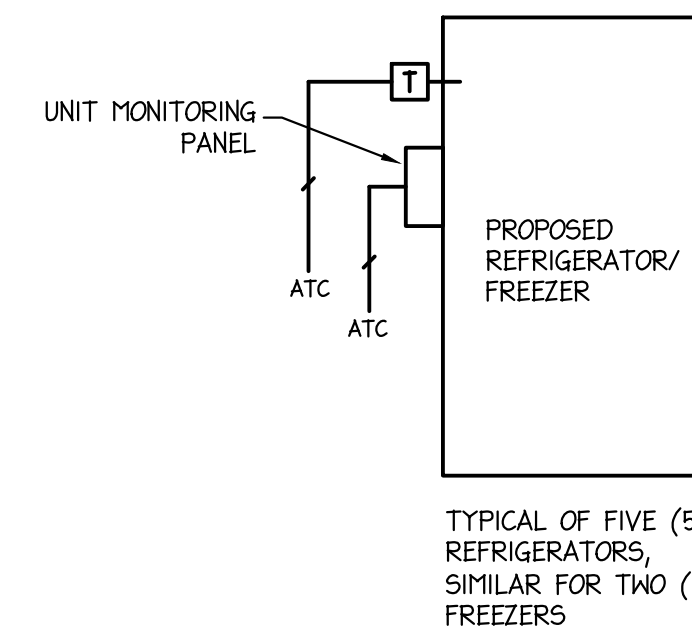
SCALE: 1/8"=1'-0"
PROJECT NO. 20258
SHEET NO. -

M1.3

LEGEND	
SYMBOL	DESCRIPTION
[AFS]	AIR FLOW STATION
[CS]	CURRENT SENSOR
[DM]	DAMPER MOTOR ACTUATOR
[DPT]	DIFFERENTIAL PRESSURE TRANSMITTER
[DD]	DUCT SMOKE DETECTOR (FURNISHED BY OTHERS)
[DP]	DIFFERENTIAL PRESSURE TRANSMITTER
[ES]	END SWITCH
[FC]	FLOAT CONTROLLER
[FM]	FLOW METER
[FS]	FREEZE STAT
[FT]	TOTAL FLOW
[HL]	HUMIDITY HIGH LIMIT SWITCH
[LS]	LEVEL SENSOR
[PH]	PHOTO-HELIC
[PT]	PRESSURE TRANSMITTER
[SP]	STATIC PRESSURE TRANSMITTER
[RH]	RELATIVE HUMIDITY SENSOR
[T]	TEMPERATURE SENSOR
[TF]	TOTALIZED FLOW
[V]	VALVE ACTUATOR
[VPT]	VELOCITY PRESSURE TRANSMITTER
[◇]	SPECIFIC NOTE
[]	THERMOMETER WELL
[]	MOTORIZED BUTTERFLY VALVE
ATC	AUTOMATIC TEMPERATURE CONTROLS
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CF	CARBON FILTER
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
EA	EXHAUST AIR
EAD	EXHAUST AIR DAMPER
FF	FINAL FILTER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NSR	NON-SPRING RETURN
OA	OUTDOOR AIR
OAD	OUTDOOR AIR DAMPER
PF	PRE-FILTER
PHC	PRE-HEAT COIL
RA	RETURN AIR
RAF	RETURN AIR FAN
RHC	RE-HEAT COIL
SA	SUPPLY AIR
SAF	SUPPLY AIR FAN
SR	SPRING RETURN
VAV	VARIABLE AIR VOLUME

DIRECT DIGITAL CONTROLS GENERAL NOTES

- THE CONTROLS CONTRACTOR SHALL PROVIDE ALL THE NECESSARY MATERIALS, LABOR AND ACCESSORIES IN ORDER TO PROVIDE A COMPLETE WORKING DIRECT DIGITAL CONTROLS SYSTEM.
- PROVIDE A COMPLETE AND OPERATIONAL DIRECT DIGITAL CONTROLS SYSTEM INCLUDING ALL REQUIRED WIRING, PROGRAMMING, DEVICES, AND OPERATIONS MANUALS. THE CONTROLS CONTRACTOR'S WORK SHALL INCLUDE BUT NOT BE LIMITED TO: PROVIDING SENSORS FOR THE CONTROLS SYSTEM, AUTOMATIC CONTROL VALVES AND ACTUATORS, CONTROL MODULE(S), CONDUCTORS, CONDUIT, "FRONT END" GRAPHICS, PROGRAMMING, CONNECTION TO THE COMMUNICATIONS BUS, WEB ACCESS AND WEB PORTAL.
- THE CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROLS CONDUIT. ALL CONTROLS CONDUCTORS SHALL BE INSTALLED WITHIN E.M.T. OR FLEXIBLE METAL CONDUIT. THE CONTROLS CONDUIT SHALL BE A MINIMUM OF 3/4" EMT. FINAL DROPS TO TEMPERATURE SENSORS MAY BE IN 1/2" EMT. ALL CONTROL WIRING SHALL BE IN CONDUIT.
- EXTEND TEMPERATURE CONTROLS COMMUNICATION BUS TO CONTROL MODULE LOCATIONS IN E.M.T.
- A MAXIMUM DISTANCE OF 6'-0" SHALL BE PERMITTED FOR UTILIZING FLEXIBLE METAL CONDUIT OR SEAL TIGHT CONDUIT.
- PROVIDE CONTROLS TO ACCOMMODATE CONTROLS POINTS LIST AND SEQUENCE OF OPERATIONS.
- ALL CONTROLS CONDUCTORS SHALL BE EXTENDED TO THE TEMPERATURE CONTROLS PANELS.
- ALL CONTROLS MODULES SHALL BE MOUNTED IN A PROTECTIVE ENCLOSURE.
- PROVIDE TIME CLOCK PROGRAM FOR THE CONTROL SYSTEM.
- THE CONTROLS CONTRACTOR SHALL BE PRESENT DURING THE FINAL BALANCE OF THE AIR HANDLING SYSTEMS.
- COORDINATE LOCATION OF ALL THERMOSTATS, TEMPERATURE SENSORS, CO2 SENSORS, AND CONTROL VALVES IN FIELD. VERIFY LOCATION WITH ENGINEER PRIOR TO INSTALLATION.
- THE TEMPERATURE CONTROLS CONTRACTOR IS RESPONSIBLE FOR ASSISTING THE COMMISSIONING AGENT DURING THE COMMISSIONING PROCESS. THE TEMPERATURE CONTROLS CONTRACTOR SHALL WORK IN CONJUNCTION WITH THE COMMISSIONING AGENT TO COMPLETE THE PRE-FUNCTIONAL TEST SHEETS FOR ALL EQUIPMENT AND SYSTEMS TO BE COMMISSIONED. THE TEMPERATURE CONTROLS CONTRACTOR SHALL BE PRESENT TO ASSIST THE COMMISSIONING AGENT DURING THE SYSTEM AND EQUIPMENT FUNCTIONAL TESTING PERIOD.
- THE TEMPERATURE CONTROLS CONTRACTOR IS RESPONSIBLE FOR ASSISTING THE TESTING AND BALANCE AGENT DURING THE BALANCING PROCESS. THE TEMPERATURE CONTROLS CONTRACTOR SHALL WORK IN CONJUNCTION WITH THE TESTING AND BALANCE AGENT TO COMPLETE THE BALANCE AND CALIBRATION OF ALL SYSTEMS.
- ALL NEW CONTROLS SHALL BE FULLY COMPATIBLE THE EXISTING BUILDING CONTROLS SYSTEM AND FULLY INTEGRATED. PROVIDE COMPLETE SYSTEM GRAPHICS AND INTERFACE ON THE OWNERS OPERATING STATION.
- SUBMIT COMPLETE SHOP DRAWINGS FOR ALL CONTROLS AND DEVICES TO BE PROVIDED AND INSTALLED UNDER WORK OF THIS PROJECT. OBTAIN APPROVAL PRIOR TO ORDER OR PURCHASE OF ANY MATERIALS OR DEVICES.



① REFRIGERATION MONITORING CONTROL SCHEMATIC
N.T.S.

SEQUENCE OF OPERATION

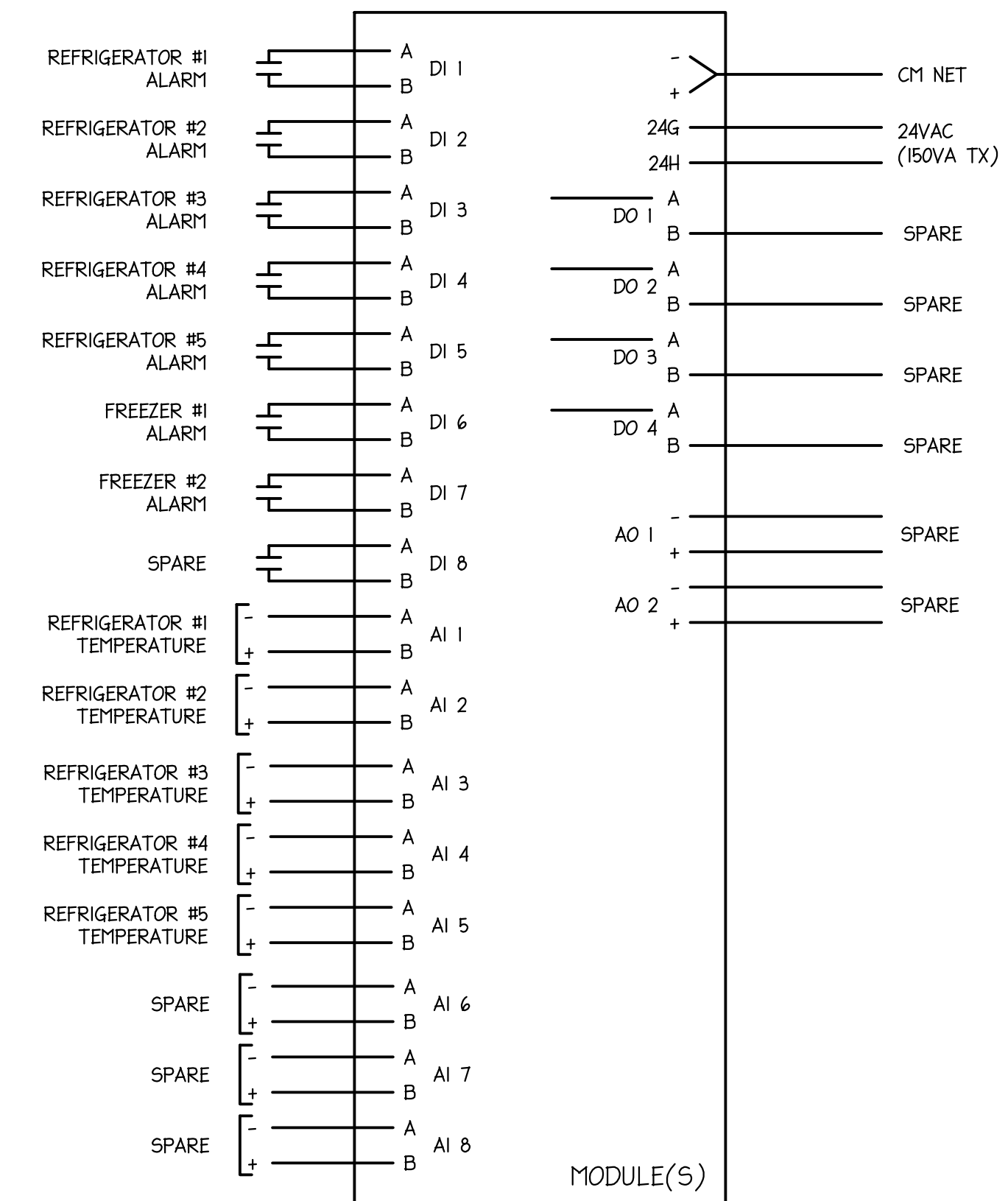
MONITOR THE FACTORY INSTALLED REFRIGERATION ALARM PANEL OUTPUT. ON ALARM STATUS TRANSMIT THIS STATUS TO THE BUILDING AUTOMATION SYSTEM. PROGRAM TEMPERATURE RANGES FOR THE REFRIGERATORS. UNITS OUT OF RANGE SHALL ALARM THE SYSTEM. PROVIDE PROGRAMMED PAGING PROTOCOLS AS DIRECTED BY THE OWNER. ALARM STATUS TO INITIATE PAGING PROTOCOLS

ALARM POINTS

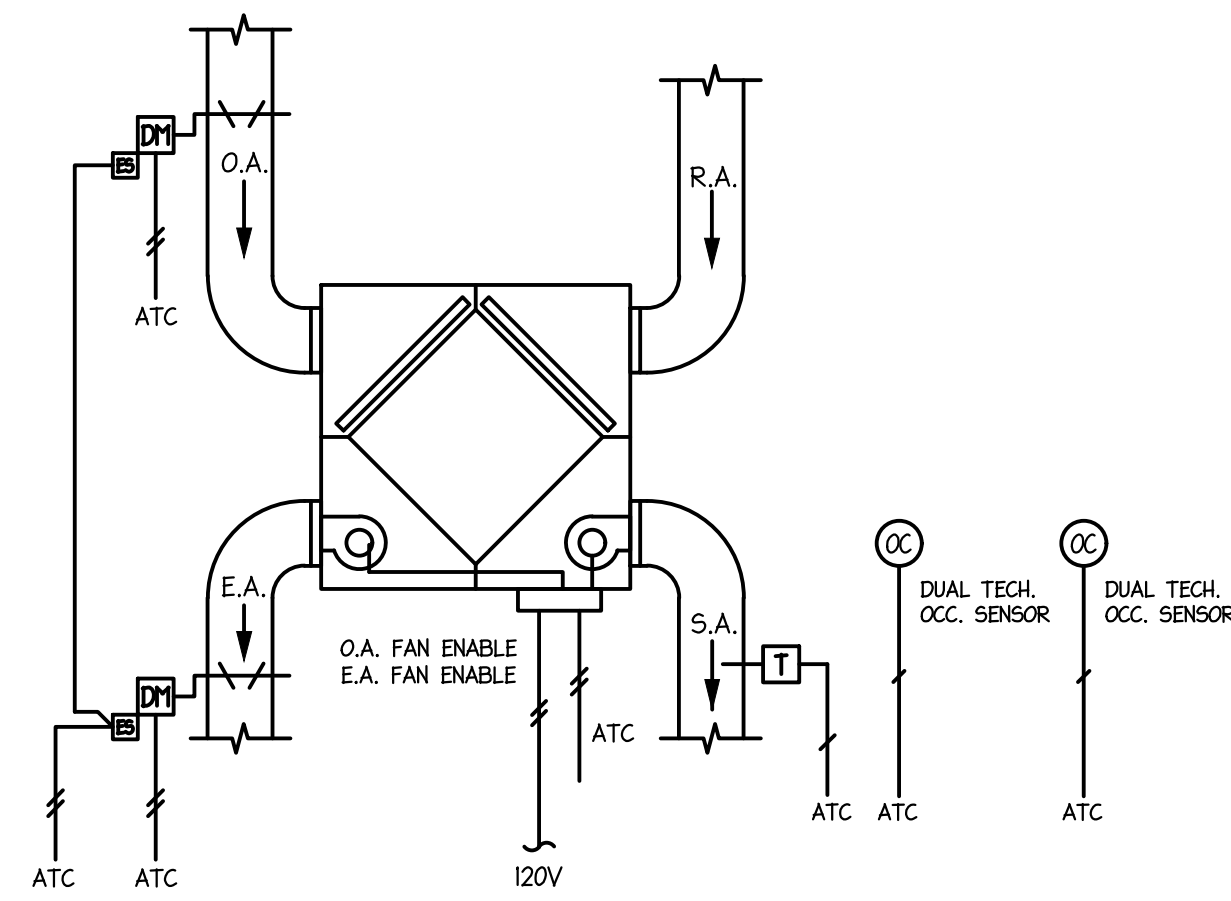
- REFRIG./FREEZER ALARM STATUS
- REFRIGERATOR TEMP. OUT OF RANGE

◆ NOTES

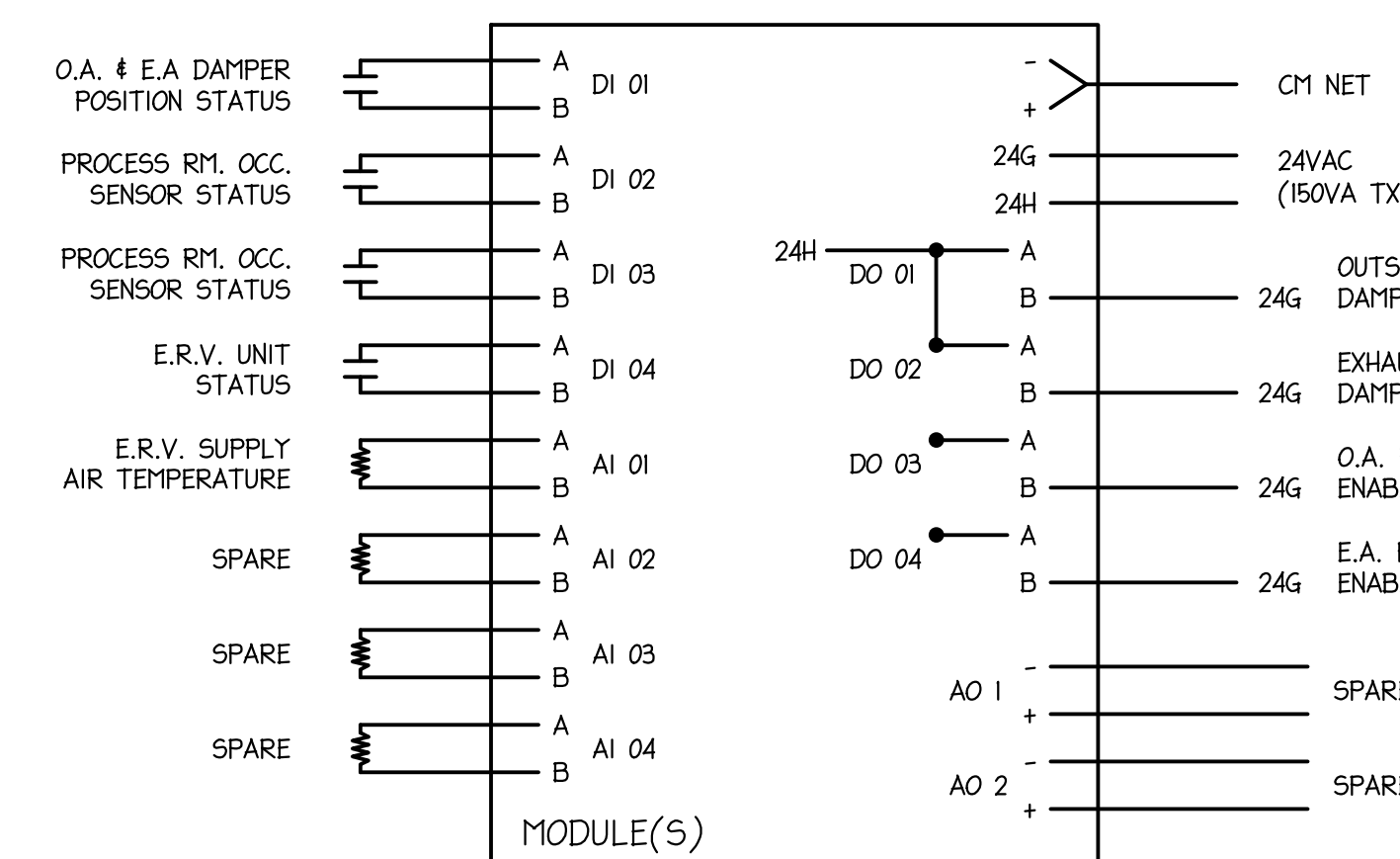
- FIELD VERIFY OUTPUT TYPE PROVIDED WITH UNITS. PROVIDE RELAYS FOR ISOLATION AS REQUIRED.
- PROVIDE AND INSTALL A TEMPERATURE PROBE IN THE FACTORY PROVIDED SENSOR OPENINGS. PROVIDE PROBE LENGTH AS REQUIRED AND CAREFULLY SEAL.
- RUN WIRING CONCEALED IN RACEWAY.



② REFRIG. MONITORING CONTROL POINTS SCHEMATIC
N.T.S.



③ ERV CONTROLS SCHEMATIC
N.T.S.



④ ERV-I CONTROL POINTS SCHEMATIC
N.T.S.

SEQUENCE OF OPERATIONS

START-UP:
PROVIDE A PROGRAMMED TIME SCHEDULE TO REFLECT THE OWNER'S OCCUPIED AND UNOCCUPIED TIME PERIODS FOR THE PROCESSING AREA, INCLUDE WEEKENDS AND HOLIDAYS. DURING OCCUPIED PERIODS THE E.R.V. UNIT SHALL BE CALLED TO OPERATE. ON COMMAND TO START THE OUTSIDE AIR AND EXHAUST AIR DAMPERS SHALL BE CALLED TO OPEN. AFTER PROVING OPEN THE E.R.V. UNIT FANS SHALL BE STARTED AND RUN AT THEIR MANUALLY SET OPERATING SPEED AS DETERMINED BY THE AIR BALANCER. DURING UNOCCUPIED PERIODS THE UNIT FANS SHALL STOP AND THE O.A. AND E.A. DAMPERS ALLOWED TO SPRING CLOSED. FAILURE OF THE DAMPERS OR UNIT FANS SHALL INITIATE AN ALARM TO THE SYSTEM. MONITOR UNIT SUPPLY AIR TEMPERATURE TO THE SYSTEM.

NOTES:

- RELOCATE THE EXISTING DAMPER ACTUATORS AND PROVIDE NEW CONNECTIONS TO THE CONTROLS SYSTEM.
- WORK WITH THE AIR BALANCE CONTRACTOR TO DETERMINE REQUIRED E.R.V. FAN SPEEDS FOR THE O.A. AND E.A. BLOWERS.

ALARM POINTS

- O.A. OR E.A. DAMPER FAIL
- E.R.U. O.A. FAN FAIL
- E.R.U. E.A. FAN FAIL



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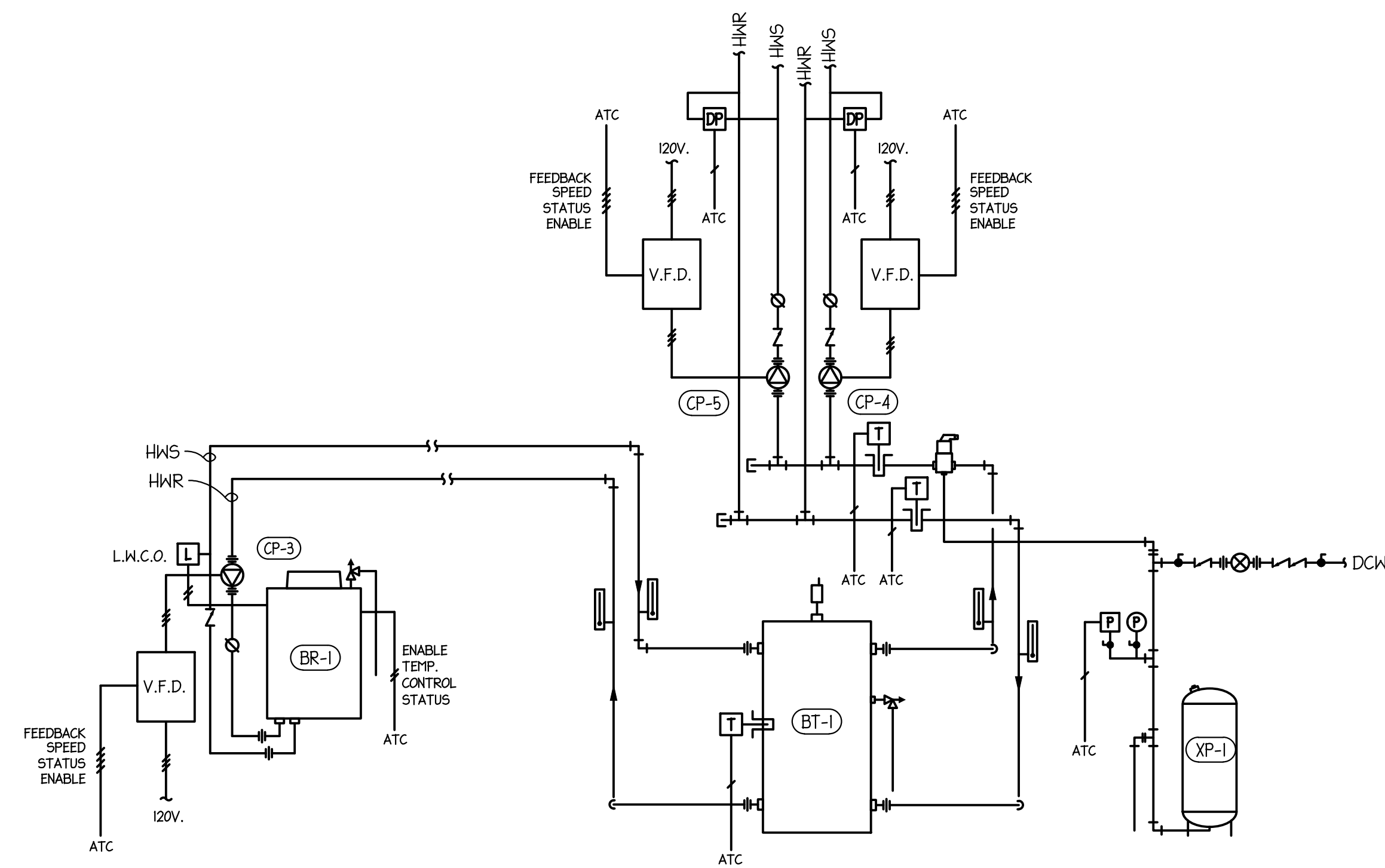
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

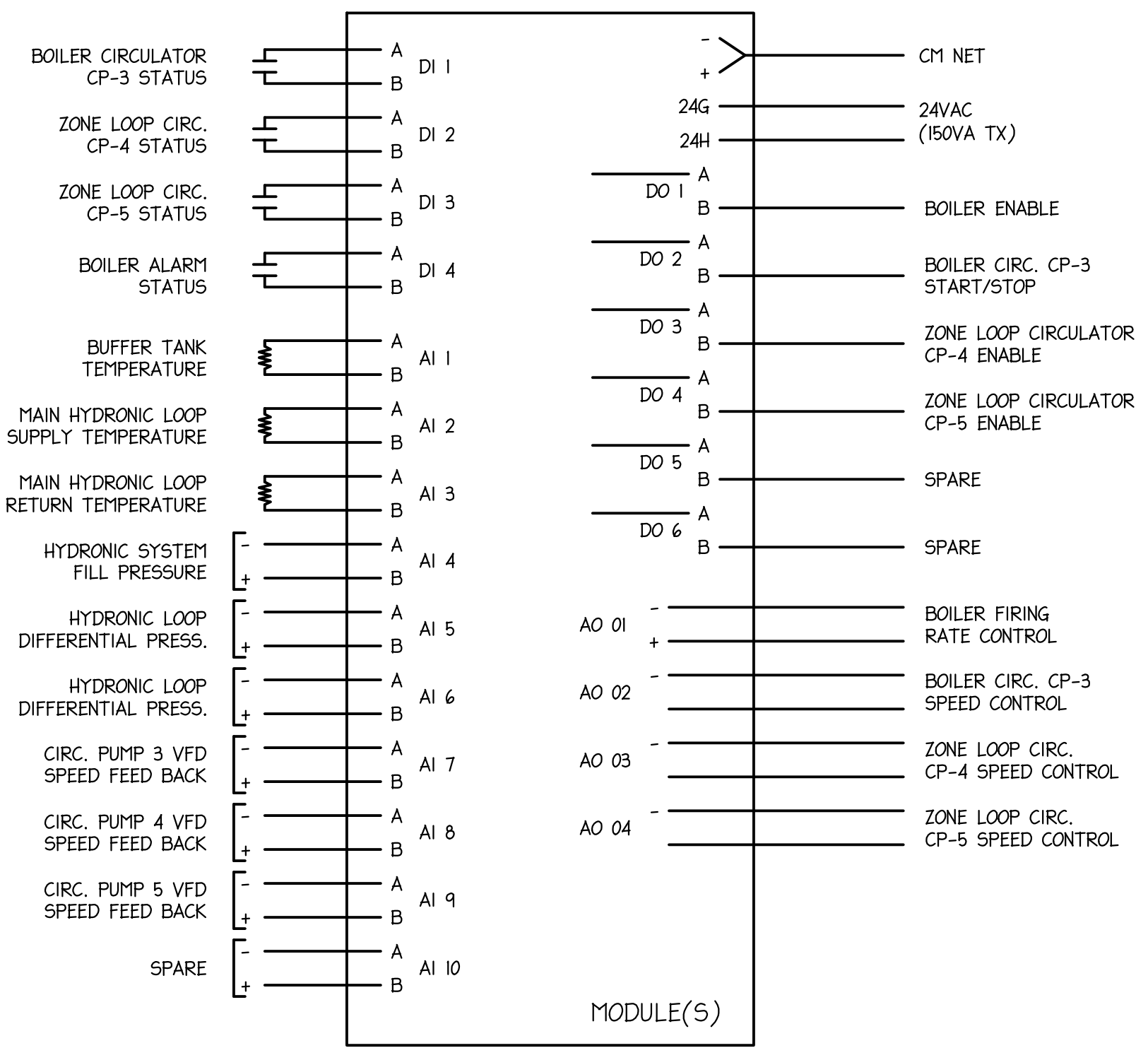
SHEET TITLE
MECHANICAL - CONTROLS, LEGEND,
NOTES AND SCHEMATIC DIAGRAMS

SCALE: NO SCALE
PROJECT NO. 20258
SHEET NO. -

M3.1



1 MAIN HYDRONIC SYSTEM CONTROL SCHEMATIC
N.T.S.



2 MAIN HYDRONIC SYSTEM CONTROL POINTS SCHEMATIC
N.T.S.

SEQUENCE OF OPERATIONS

START-UP
THE HEATING WATER SYSTEM SHALL BE ON-LINE AT ALL TIMES. THE BOILER SHALL BE STARTED BASED ON BUFFER TANK TEMPERATURE DROPPING TO BELOW A PROGRAMMED SET POINT. LOW PRESSURE IN THE SYSTEM SHALL SHUT-DOWN THE SYSTEM. A FURTHER DROP IN SYSTEM PRESSURE SHALL SHUT-DOWN THE BOILER AND PUMPS. LOW WATER LEVEL IN THE SYSTEM SHALL BE HARD WIRED TO SHUT-DOWN THE BOILER. THE BOILER FIRING RATE SHALL BE MODULATED BASED ON DEVIATION BELOW SET POINT IN THE BUFFER TANK. THE BOILER CIRCULATOR SPEED SHALL BE MODULATED IN SEQUENCE WITH THE BOILER FIRING RATE. PROVIDE A PROGRAMMED DIFFERENTIAL TO MINIMIZE CYCLING.

THE SYSTEM SHALL OPERATE AS A PRIMARY/SECONDARY PUMPING SYSTEM.

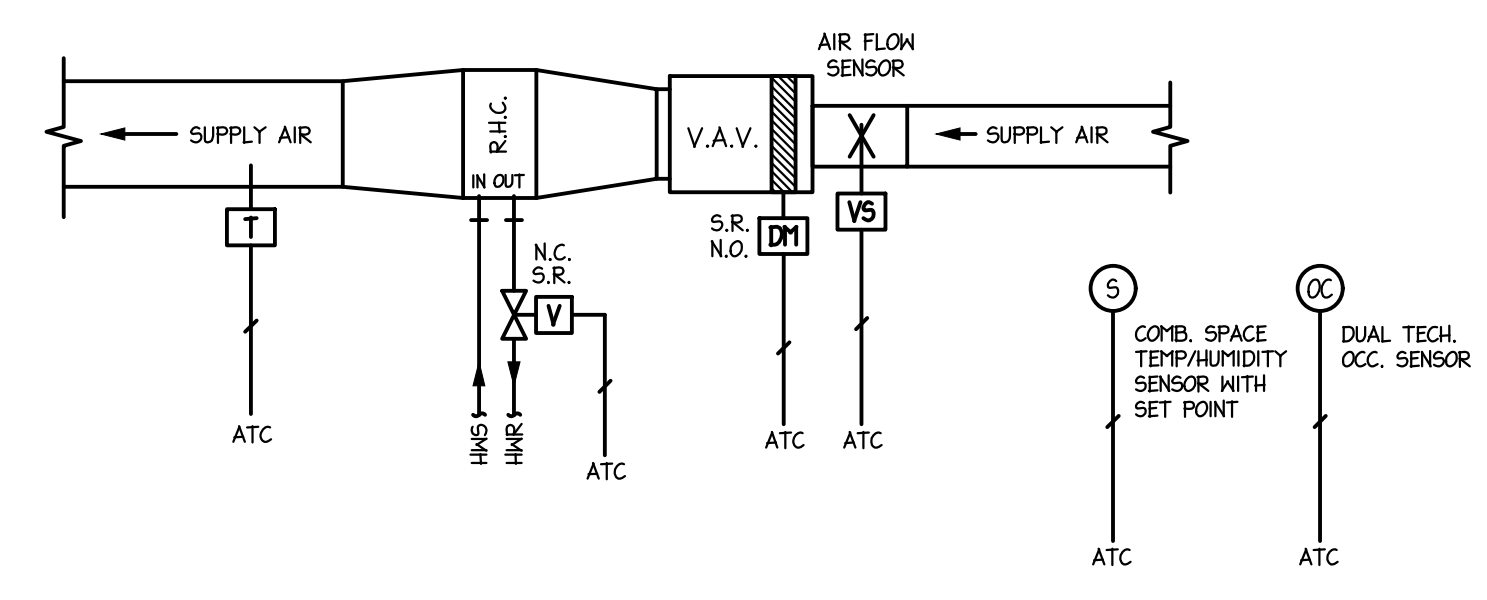
THE ZONE HYDRONIC LOOP CIRCULATORS SHALL BE CALLED TO OPERATE ON DEMAND FROM ANY ZONE (REHEAT COIL). ON COMMAND TO START THE RESPECTIVE CIRCULATOR SPEED SHALL MODULATE UP TO THE PROGRAMMED DIFFERENTIAL PRESSURE SET POINT. FAILURE OF THE PUMP SHALL INITIATE AN ALARM TO THE SYSTEM.

NOTES

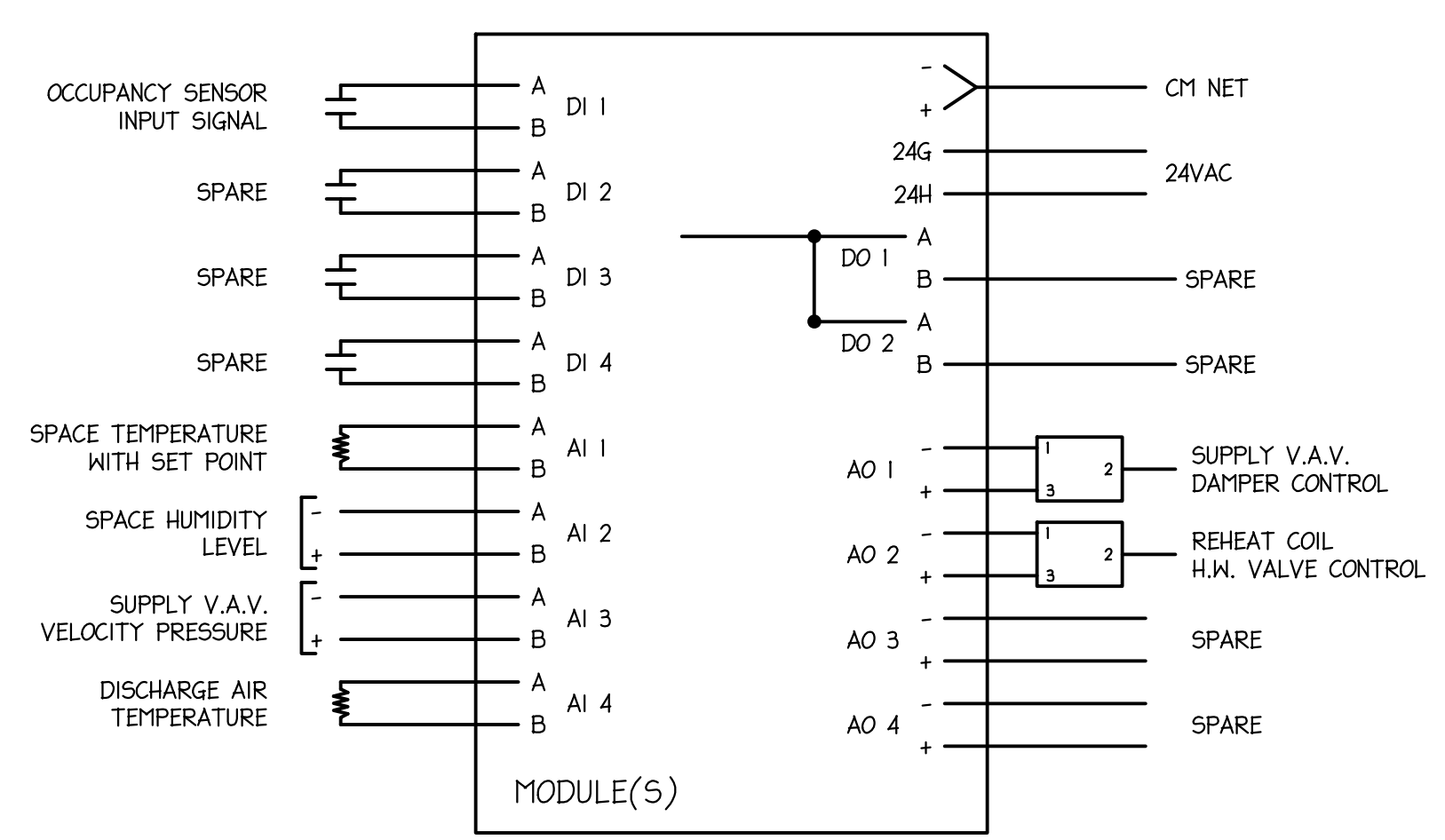
- PROVIDE TEMPERATURE SENSOR THERMAL WELLS TO THE MECHANICAL CONTRACTOR FOR INSTALLATION.
- COORDINATE WITH THE MECHANICAL CONTRACTOR TO INSTALL BRANCH TAPS FOR THE DIFFERENTIAL PRESSURE AND PRESSURE SENSORS.
- NOTE: THE INDICATED VFD'S GENERALLY WILL BE INTEGRAL WITH THE PUMPS. PROVIDE PROPER COMMUNICATION PROTOCOL AND HARDWARE AS REQUIRED TO PROPERLY CONTROL PUMPS. IT IS ACCEPTABLE TO CONTROL PUMPS VIA BACNET NETWORK. PROVIDE ALL PROGRAMMING REQUIRED AND MAP POINTS TO THE BMS. SET UP PUMPS FOR SPEED CONTROL FROM THE BMS.

ALARM POINTS

- HYDRONIC SYS. SUPPLY TEMP. LOW
- HYDRONIC SYS. SUPPLY TEMP. HIGH
- HYDRONIC SYS. PRESSURE LOW
- BOILER CIRC. CP-3 FAIL
- BOILER FAIL
- ZONE LOOP CIRC. CP-4 FAIL
- ZONE LOOP CIRC. CP-5 FAIL



3 TYPICAL SUPPLY V.A.V. ZONE WITH REHEAT CONTROL SCHEMATIC
N.T.S.



4 TYP. SUPPLY V.A.V. ZONE WITH R.H. CONTROL POINTS SCHEMATIC
N.T.S.

SEQUENCE OF OPERATIONS

START UP:
PROVIDE A PROGRAMMED OCCUPANCY SCHEDULE FOR ALL AREAS BASED ON THE USERS SCHEDULE. THE SUPPLY VARIABLE AIR VOLUME CONTROL BOXES SHALL OPERATE AS PRESSURE INDEPENDENT CONSTANT OR VARIABLE AIR VOLUME BOXES (PER SCHEDULE) WITH OCCUPIED AND UNOCCUPIED MODES. DURING OCCUPIED HOURS THE V.A.V. BOXES SHALL OPERATE AT DESIGN MINIMUM AIR VOLUMES AS INDICATED IN THE EQUIPMENT SCHEDULES. DURING UNOCCUPIED HOURS THE V.A.V. BOXES SHALL OPERATE AT DESIGN MINIMUM AIR VOLUMES. ACTIVATION OF THE OVERRIDE SWITCH AT THE ZONE ROOM SENSOR SHALL RETURN SYSTEM TO OCCUPIED MODE FOR A ONE HOUR (ADJ.) PERIOD. INDICATION OF OCCUPANCY BY AN OCCUPANCY SENSOR SHALL RETURN THAT ZONE TO OCCUPIED STATUS, PROGRAM WITH A 5 MINUTE DELAY.

TEMPERATURE CONTROL;
COOLING - IF SPACE TEMPERATURE RISES ABOVE SET POINT THE V.A.V. BOX SHALL MODULATE OPEN, UP TO DESIGN MAXIMUM, TO MAINTAIN SET POINT.
HEATING - IF SPACE TEMPERATURE DROPS BELOW SET POINT AS COMMAND SHALL BE INITIATED TO START THE HYDRONIC ZONE PUMP AND THE RESPECTIVE ZONE REHEAT COIL VALVE MODULATED OPEN AS REQUIRED TO MAINTAIN SET POINT. IF DISCHARGE AIR TEMPERATURE RISES TO 95° F (ADJ.), THE V.A.V. SHALL MODULATE OPEN TO HOLD A CONSTANT DISCHARGE TEMPERATURE. AS SPACE TEMPERATURE APPROACHES SET POINT, REVERSE SEQUENCE. PROVIDE PROGRAMMED SET POINT DIFFERENTIALS TO MINIMIZE 'HUNTING'.

ALARM POINTS

- V.A.V. SUPPLY VOLUME LOW
- V.A.V. SUPPLY VOLUME HIGH
- DISCHARGE AIR TEMP. HIGH
- ROOM TEMPERATURE LOW
- ROOM TEMPERATURE HIGH

NOTES

- PROVIDE COMBINATION TEMPERATURE/HUMIDITY SENSORS FOR ALL ZONES. SENSORS TO HAVE LIMITED USER ADJUSTABLE SET POINT, DIGITAL TEMPERATURE READ OUT AND OCCUPIED OVERRIDE SWITCH.
- PROVIDE DUAL TECHNOLOGY OCCUPANCY SENSOR, CEILING MOUNTED STYLE, FOR ALL ZONES.
- PROVIDE CONTROL VALVES TO THE MECHANICAL CONTRACTOR FOR INSTALLATION. ALL VALVES TO BE CHARACTERIZED BALL TYPE WITH STAINLESS STEEL TRIM.



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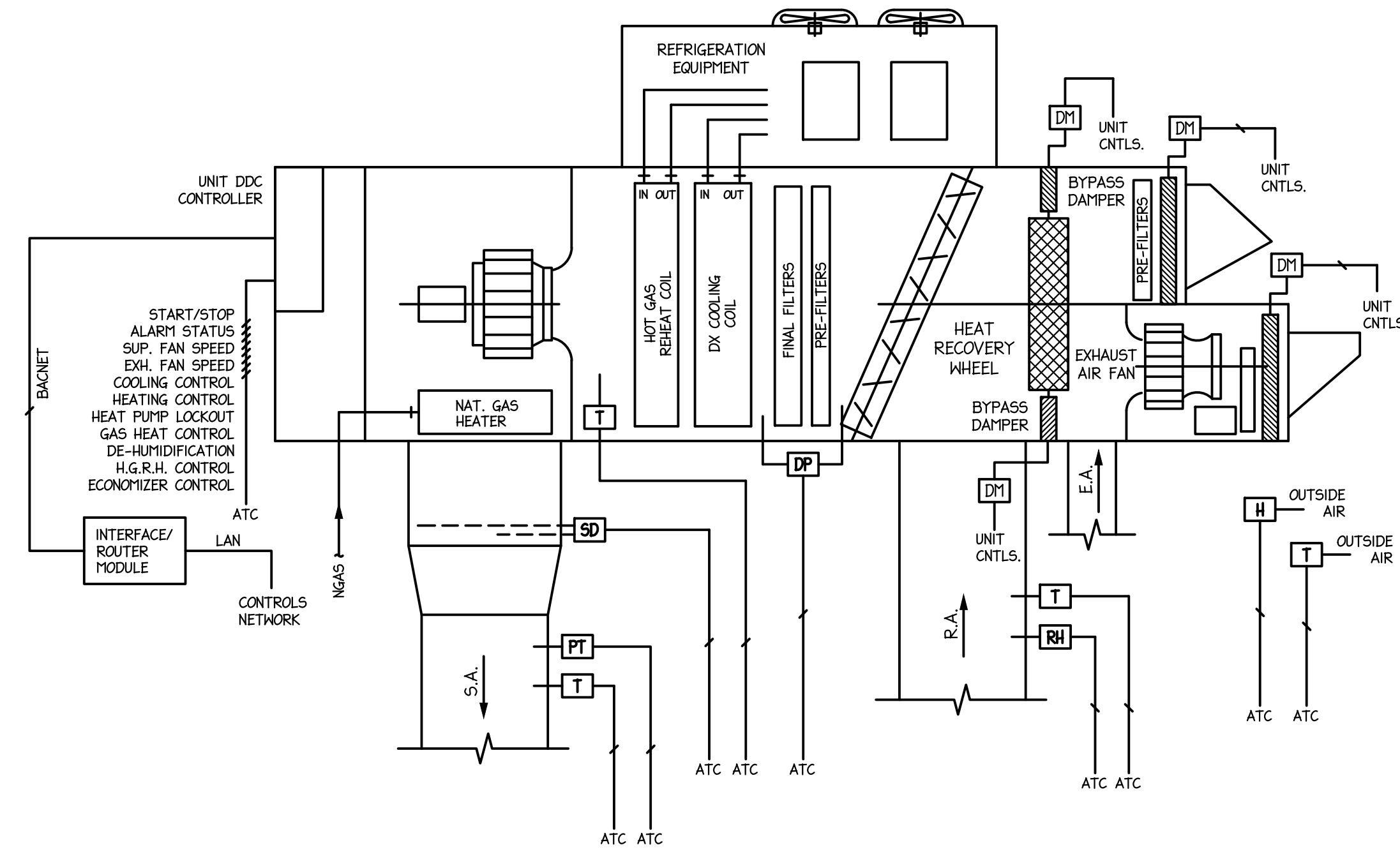
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - CONTROLS
SCHEMATIC DIAGRAMS

SCALE: NO SCALE
PROJECT NO. 20258
SHEET NO. -

M3.2



① HVAC UNIT WITH ENERGY REC. CONTROLS SCHEMATIC
N.T.S.

SEQUENCE OF OPERATIONS

THE UNIT SHALL PRIMARILY OPERATE FROM ITS OWN CONTROLS SYSTEM WITH OPERATING INPUTS FROM THE DDC SYSTEM, VIA THE BAGNET INTERFACE. THE CONTROLS CONTRACTOR SHALL SET UP CONTROL AND OPERATING PARAMETERS AND SET POINTS TO SUIT THE SITE CONDITIONS.

STARTUP:
PROVIDE A PROGRAMMED OCCUPIED/UNOCCUPIED TIME CLOCK SCHEDULE TO REFLECT OWNER'S OPERATING SCHEDULE. USE THE SCHEDULE TO CONTROL OPERATION OF THE UNIT. UNIT SHALL OPERATE AT ALL TIMES DURING OCCUPIED PERIODS AND CYCLE DURING UNOCCUPIED PERIODS.

ON COMMAND TO START THE SUPPLY AIR AND EXHAUST AIR ISOLATION DAMPERS SHALL BE OPENED. WHEN PROVEN OPEN THE UNIT SHALL BE STARTED. UNIT SUPPLY FAN SHALL BE MODULATED TO MAINTAIN A SUPPLY AIR DISCHARGE AIR STATIC PRESSURE SET POINT. RESET STATIC PRESSURE SET POINT BASED ON V.A.V. BOX POSITION. THE EXHAUST FAN SPEED SHALL BE MODULATED TO PROVIDE THE REQUIRED EXHAUST AIR VOLUME. TEMPERATURE CONTROL:

PROVIDE A PROGRAMMED SUPPLY AIR TEMPERATURE RESET SCHEDULE BASED ON OUTDOOR AIR TEMPERATURE. THIS VALUE SHALL BE THE OPERATING INPUT TO THE UNIT CONTROLS. UNIT SHALL OPERATE IN HEAT PUMP MODE FOR HEATING AND COOLING. PROVIDE A "COMPRESSOR LOCK-OUT" CONTROL SIGNAL TO DISABLE THE HEAT PUMP FUNCTION OF THE UNIT BASED ON OUTDOOR AIR TEMPERATURES, INITIAL SET POINT TO BE 35 DEG F. PROVIDE CONTROL OF THE UNIT GAS FIRED HEATER. ENABLE AND MODULATE HEATER CAPACITY AS REQUIRED TO MAINTAIN THE DISCHARGE TEMPERATURE RESET SCHEDULE. DEHUMIDIFICATION:

PROVIDE A "DEHUMIDIFICATION" SIGNAL TO THE UNIT TO OVERRIDE THE COOLING CAPACITY UPWARD AND ACTIVATE THE HOT GAS REHEAT SYSTEM. COOLING SHALL BE MODULATED UP AS REQUIRED TO MAINTAIN SPACE HUMIDITY SET POINT. HOT GAS REHEAT SHALL BE MODULATED TO MAINTAIN DISCHARGE AIR SET POINT.

ECONOMIZER:
WHEN COOLING IS REQUIRED AND OUTDOOR AIR ENTHALPY IS LOWER THAN THE RETURN AIR ENTHALPY THE UNIT SHALL GO INTO ECONOMIZER MODE. THE ENERGY RECOVERY WHEEL BYPASS DAMPERS SHALL BE OPENED AND THE EXHAUST FAN SPEED MODULATED UP AS REQUIRED TO MAINTAIN SET POINT. HEAT RECOVERY:

THE ENERGY WHEEL SHALL BE CONTROLLED BY THE UNIT CONTROLS. THE WHEEL SHALL OPERATE AT ALL TIMES DURING OCCUPIED HOURS, EXCEPT WHEN THE UNIT IS IN ECONOMIZER MODE.

MAP THE FOLLOWING UNIT CONTROLLER DATA AND ALARMS TO THE BUILDING AUTOMATION SYSTEM AND THE OPERATOR STATION:

- UNIT OPERATING STATUS
- COOLING STATUS
- HEATING STATUS
- DEHUMIDIFICATION STATUS
- CHANGE OVER TEMPERATURE
- ACTIVE ALARMS
- SUPPLY FAN SPEED
- EXHAUST FAN SPEED
- PRE-FILTER ALARM

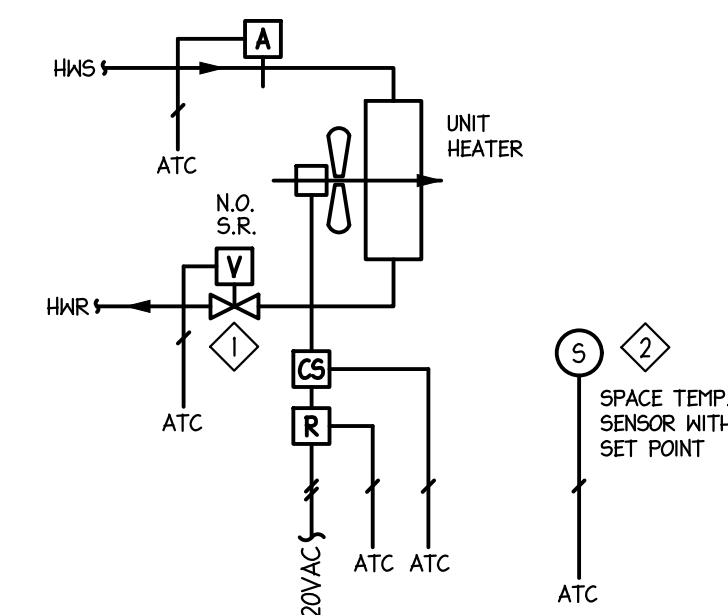
MAP ALL USER ADJUSTABLE SET POINTS TO THE B.A.S. AND OPERATOR STATION.

NOTES

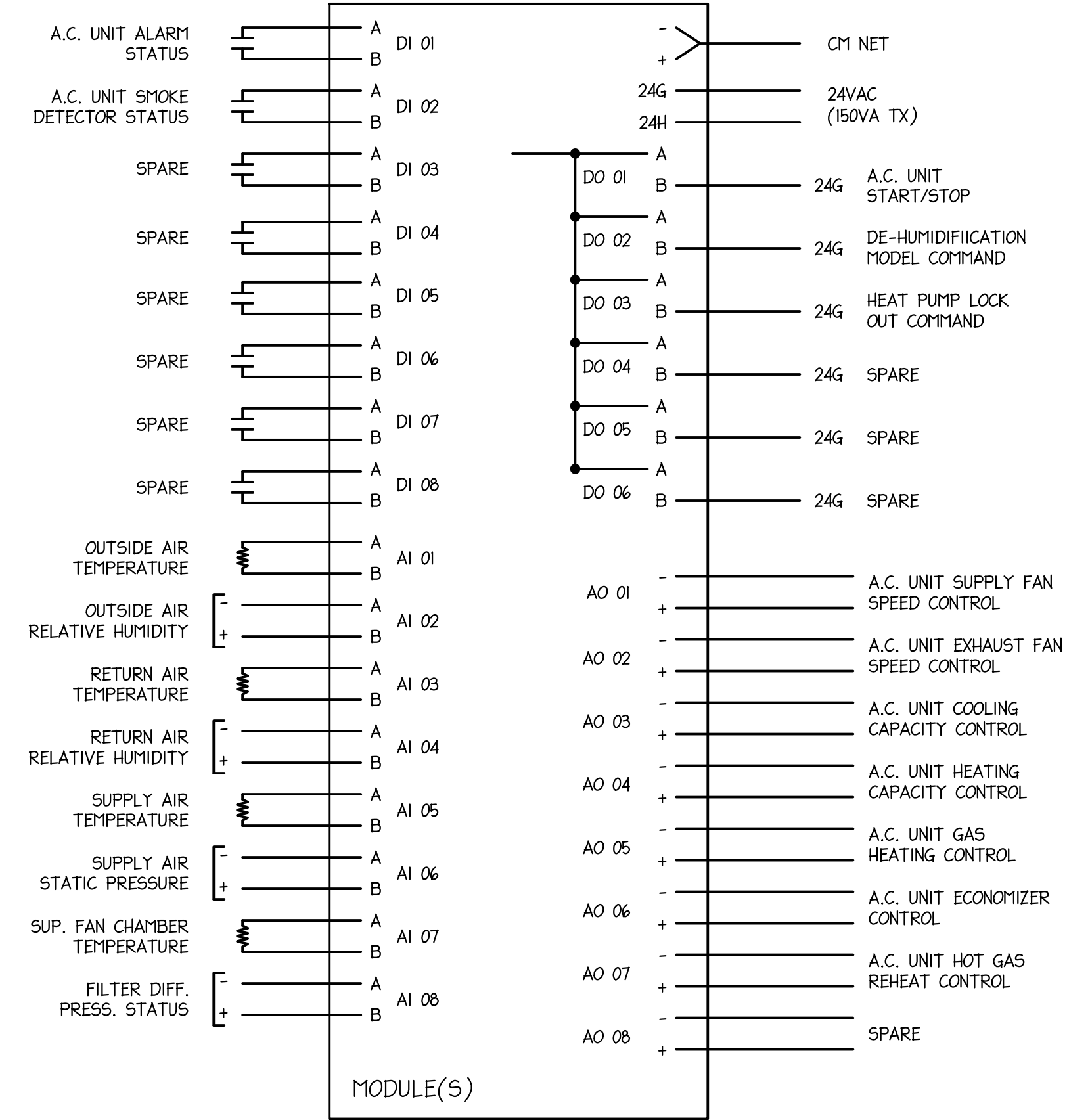
- PROVIDE A COMMUNICATIONS MODULE TO INTERFACE THE PACKAGED UNIT BAGNET DDC CONTROLS WITH THE BUILDING AUTOMATION SYSTEM.
- WORK WITH THE AIR BALANCE CONTRACTOR TO ESTABLISH DESIGN DISCHARGE AND RETURN INLET PRESSURES.

ALARM POINTS

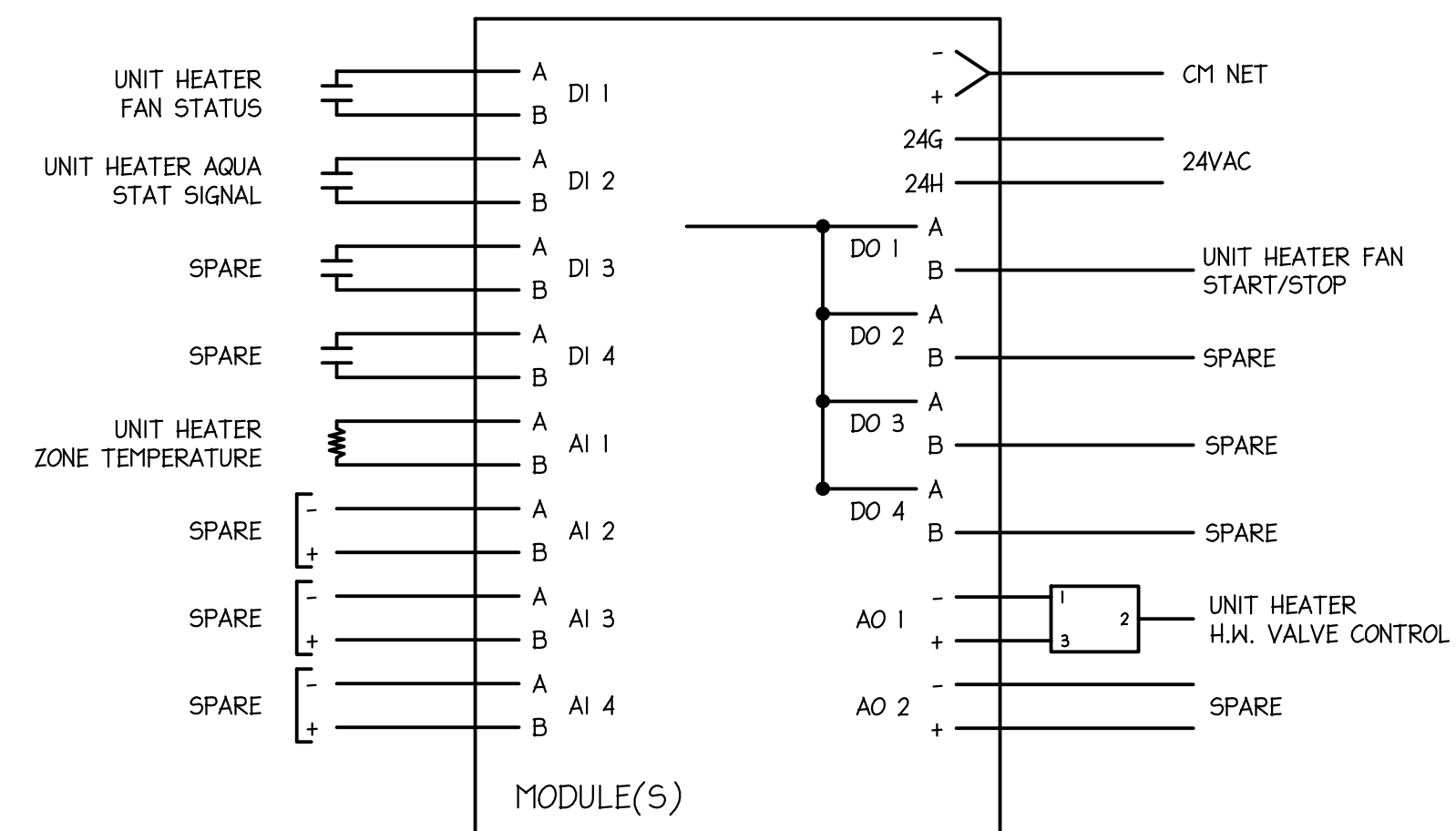
- A.C. UNIT ALARM STATUS
- FILTERS D.P. HIGH
- SPACE HUMIDITY HIGH
- DISCHARGE AIR TEMPERATURE HIGH
- DISCHARGE AIR TEMPERATURE LOW
- DISCHARGE STATIC OUT OF RANGE
- HEAT RECOVERY WHEEL FAIL



③ TYP. UNIT HEATER CONTROL SCHEMATIC
N.T.S.



② HVAC UNIT WITH ENERGY REC. CONTROL POINTS SCHEMATIC
N.T.S.



④ TYP. UNIT HEATER CONTROL POINTS SCHEMATIC
N.T.S.

SEQUENCE OF OPERATIONS

UNIT HEATER:
ON A DROP IN SPACE TEMPERATURE BELOW SET POINT THE HEATING WATER CONTROL VALVE SHALL BE MODULATED OPEN BASED ON DEVIATION BELOW SET POINT. PROVIDE A PROGRAMMED DIFFERENTIAL. WHEN TEMPERATURE AT THE AQUASTAT REACHES 120° F (ADJ.), THE UNIT BLOWER SHALL BE STARTED. WHEN SET POINT IS REACHED THE CONTROL VALVE SHALL BE CLOSED AND THE BLOWER SHALL BE STOPPED AFTER A 1 MINUTE DELAY (ADJ.).

ALARM POINTS

- SPACE TEMPERATURE LOW
- UNIT FAN/BLOWER FAIL

NOTES

- PROVIDE CONTROL VALVE TO THE MECHANICAL CONTRACTOR FOR INSTALLATION. VALVE TO BE AS NOTED ABOVE FOR REHEAT COILS.
- PROVIDE TEMPERATURE SENSOR FOR THE ZONE. SENSOR DIGITAL TEMPERATURE READ OUT AND CONCEALED TEMPERATURE SET POINT.



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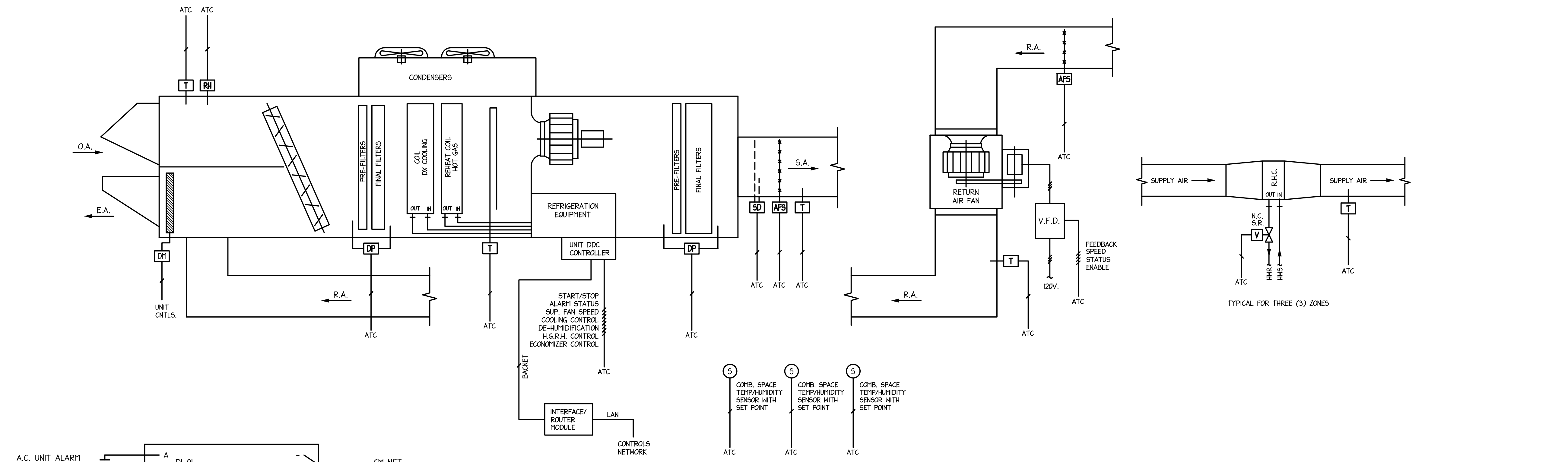
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - CONTROLS SCHEMATIC DIAGRAMS

SCALE: NO SCALE
PROJECT NO. 20258
SHEET NO. -

M3.3



① PHARMACY PROCESSING AREA HVAC UNIT CONTROLS SCHEMATIC
N.T.S.

SEQUENCE OF OPERATIONS

THE UNIT SHALL PRIMARILY OPERATE FROM ITS OWN CONTROLS SYSTEM WITH OPERATING INPUTS FROM THE DDC SYSTEM, VIA THE BACNET INTERFACE. THE CONTROLS CONTRACTOR SHALL SET UP CONTROL AND OPERATING PARAMETERS AND SET POINTS TO SUIT THE SITE CONDITIONS.

STARTUP:
 PROVIDE A PROGRAMMED OCCUPIED/UNOCCUPIED TIME CLOCK SCHEDULE TO REFLECT OWNER'S OPERATING SCHEDULE. USE THE SCHEDULE TO CONTROL OPERATION OF THE UNIT. UNIT SHALL OPERATE AT ALL TIMES DURING OCCUPIED PERIODS AND CYCLE DURING UNOCCUPIED PERIODS. PROVIDE A PROGRAMMED DIFFERENTIAL TO LIMIT UNIT CYCLING DURING UN-OCCUPIED HOURS. NOTE: SPACE HUMIDITY SET POINT TO BE MAINTAINED AT ALL TIMES. PROVIDE UN-OCCUPIED HEATING AND COOLING SET POINTS (NO MORE THAN 4' FROM OCC. VALUES).

ON COMMAND TO START THE UNIT MIXED AIR DAMPER SHALL BE IN THE FULL RETURN AIR POSITION. DURING OCCUPIED HOURS THE ASSOCIATED ENERGY RECOVERY UNIT SHALL BE STARTED. THE UNIT SUPPLY FAN SHALL BE STARTED AND SPEED MODULATED UP TO MAINTAIN 80% OF DESIGN SUPPLY AIR VOLUME. THE RETURN AIR FAN SHALL BE STARTED AND SPEED MODULATED UP TO THE SUPPLY AIR VOLUME LESS THE O.A. VOLUME. DURING UNOCCUPIED PERIODS THE UNIT SHALL START WITHOUT THE E.R.V. UNIT ON AND THE RETURN FAN AIR VOLUME SHALL EQUAL THE SUPPLY.

DEHUMIDIFICATION:
 PROVIDE A "DEHUMIDIFICATION" SIGNAL TO THE UNIT TO OVERRIDE THE COOLING CAPACITY UPWARD AND ACTIVATE THE HOT GAS REHEAT SYSTEM. COOLING SHALL BE MODULATED UP AS REQUIRED TO MAINTAIN SPACE HUMIDITY SET POINT. HOT GAS REHEAT SHALL BE MODULATED TO MAINTAIN DISCHARGE AIR SET POINT. IF SPACE HUMIDITY DOES NOT RECOVER TO SET POINT WITHIN 15 MINUTES (ADJ.), MODULATE AIR VOLUME UP TO TO DESIGN VALUES.

TEMPERATURE CONTROL:
 DURING DE-HUMIDIFICATION MODULATE THE HOT GAS REHEAT COIL CAPACITY TO MAINTAIN A DISCHARGE ARE TEMPERATURE OF 57° F (ADJ.). WHEN SPACE TEMPERATURE AT ANY ZONE SENSOR DROPS BELOW SET POINT, THE RESPECTIVE REHEAT COIL CONTROL VALVE SHALL BE MODULATED OPEN AS REQUIRED TO MAINTAIN SET POINT. IF TEMPERATURE DOES NOT RECOVER TO SET POINT WITHIN 15 MINUTES (ADJ.) MODULATE AIR VOLUME UP TO DESIGN VALUES.

ECONOMIZER:
 WHEN COOLING IS REQUIRED AND OUTDOOR AIR ENTHALPY IS LOWER THAN THE RETURN AIR ENTHALPY THE UNIT SHALL GO INTO ECONOMIZER MODE. THE ASSOCIATED ENERGY RECOVERY UNIT SHALL BE STOPPED. THE RELIEF AIR DAMPER SHALL BE OPENED AND THE MIXED AIR DAMPER MODULATED AS REQUIRED TO MAINTAIN SET POINT.

MAP THE FOLLOWING UNIT CONTROLLER DATA AND ALARMS TO THE BUILDING AUTOMATION SYSTEM AND THE OPERATOR STATION:

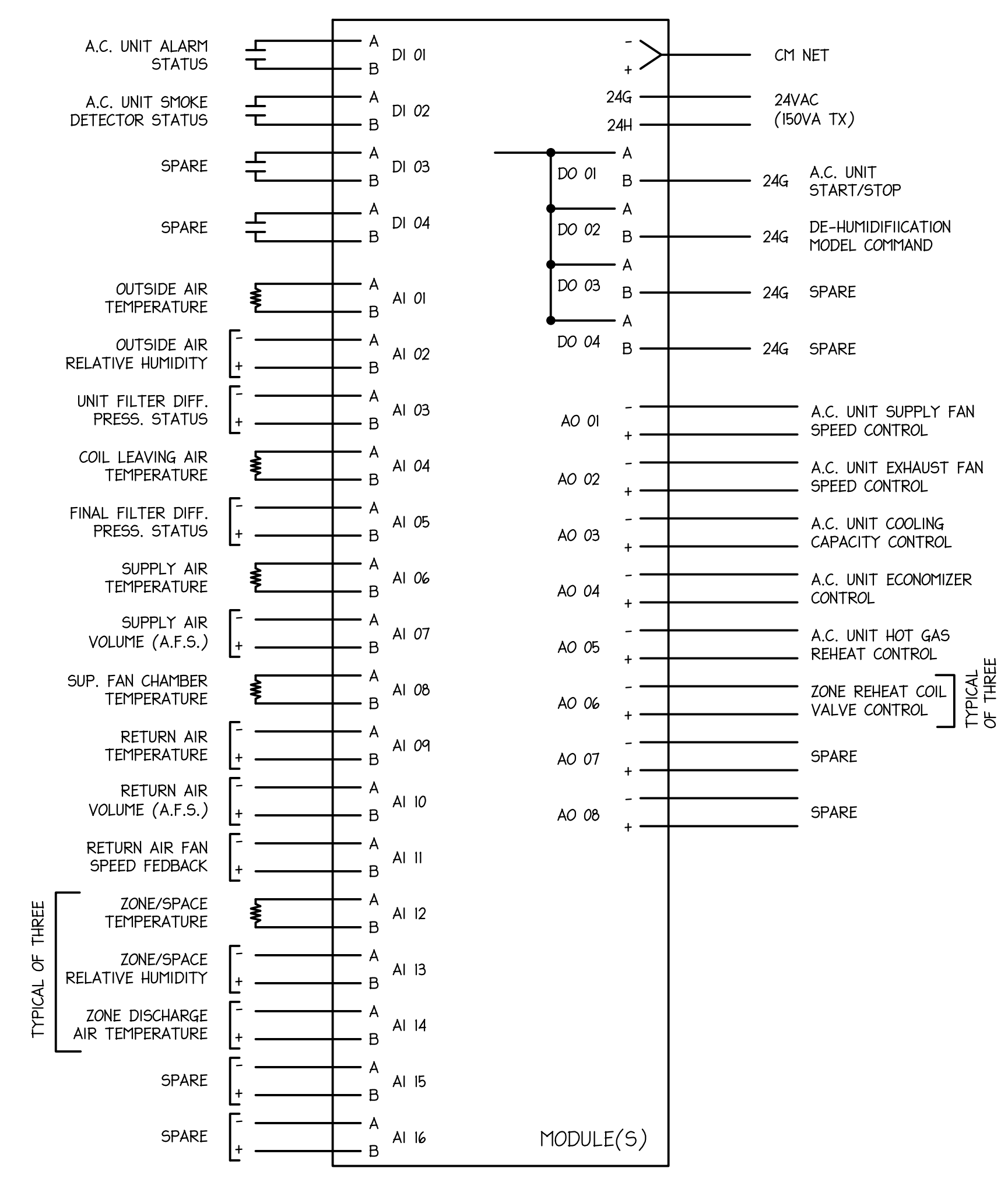
UNIT OPERATING STATUS
 COOLING STATUS
 DEHUMIDIFICATION STATUS
 ACTIVE ALARMS
 SUPPLY FAN SPEED
 MAP ALL USER ADJUSTABLE SET POINTS TO THE B.A.S. AND OPERATOR STATION.

NOTES

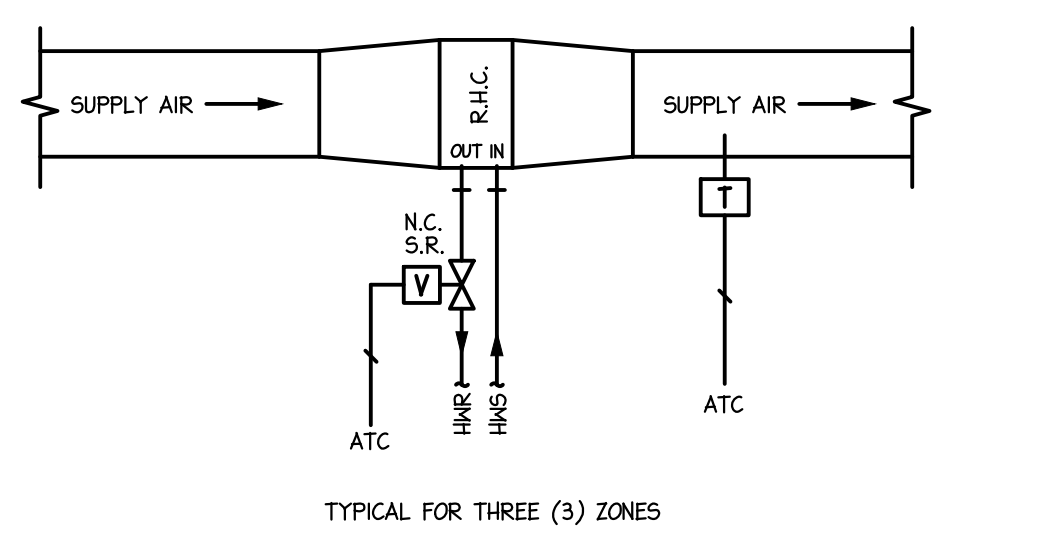
1. PROVIDE A COMMUNICATIONS MODULE TO INTERFACE THE PACKAGED UNIT BACNET DDC CONTROLS WITH THE BUILDING AUTOMATION SYSTEM.
2. WORK WITH THE AIR BALANCE CONTRACTOR TO ESTABLISH VERIFY AND CALIBRATE DESIGN SUPPLY AIR AND RETURN AIR VOLUMES.

ALARM POINTS

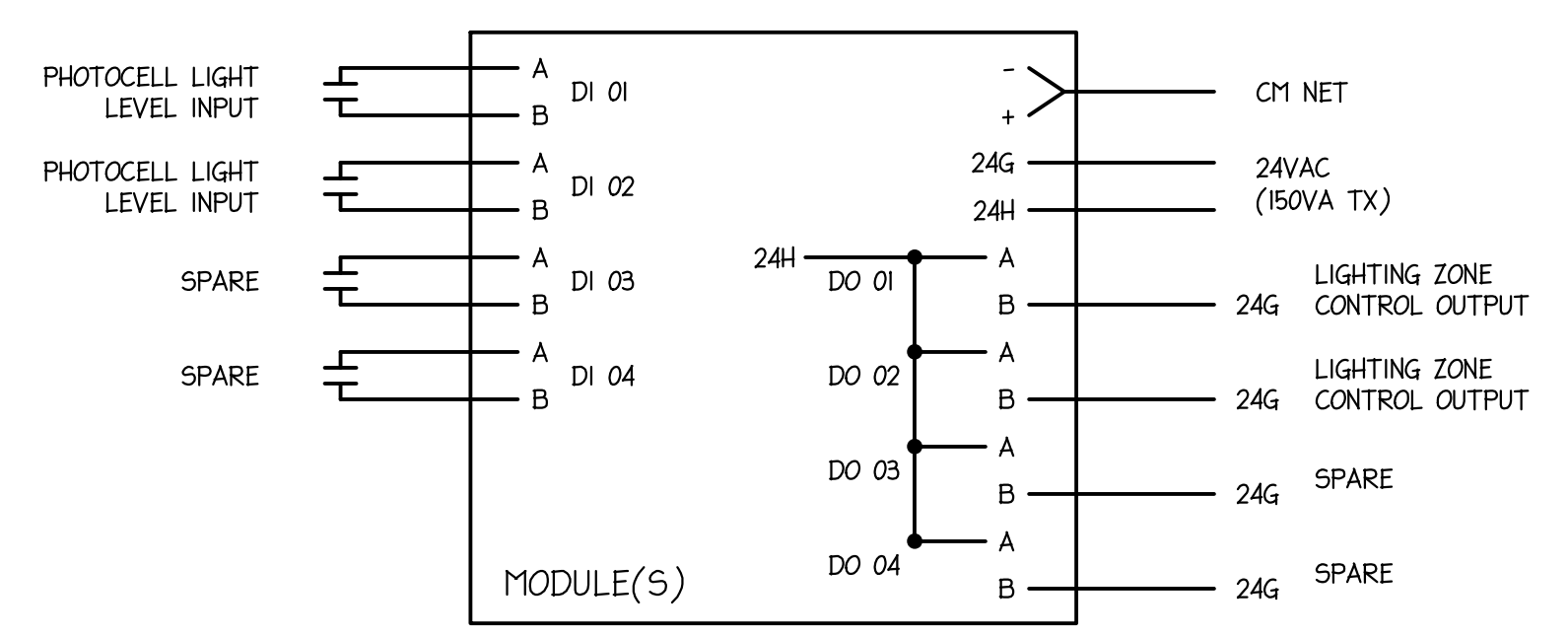
- A.C. UNIT ALARM STATUS
- FILTERS D.P. HIGH
- SPACE HUMIDITY HIGH
- DISCHARGE AIR TEMPERATURE HIGH
- DISCHARGE AIR TEMPERATURE LOW
- DISCHARGE STATIC OUT OF RANGE
- HEAT RECOVERY WHEEL FAIL



② PHARM. PROCESSING AREA HVAC UNIT CONTROL POINTS SCHEMATIC
N.T.S.



③ OUTDOOR LIGHTING CONTROL SCHEMATIC
N.T.S.



④ OUTDOOR LIGHTING CONTROL POINTS SCHEMATIC
N.T.S.

SEQUENCE OF OPERATIONS

PROVIDE A PROGRAMMED TIME CLOCK SCHEDULE TO CONTROL THE OUTDOOR LIGHTING. OUTDOOR SCHEDULE SHALL CORRECT FOR LENGTH OF DAYS (ASTRONOMICAL). GENERALLY OUTDOOR LIGHTS SHALL BE ON WHENEVER AMBIENT LIGHT LEVELS ARE BELOW A PRESET LEVEL.

NOTES

1. PROVIDE PHOTOCCELL LIGHT LEVEL SENSORS. FIELD DETERMINE MOUNTING LOCATIONS. ADJUST LIGHT SENSITIVITY. LOCATE ONE ON EACH SIDE OF BUILDING (FRONT & BACK).

DRAWN	L.N.C.
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PROJECT TITLE
**U.V.M.C. 75 HOLLY COURT
 PHARMACY EXPANSION PROJECT**

SHEET TITLE
**MECHANICAL - CONTROLS
 SCHEMATIC DIAGRAMS**

SCALE:	NO SCALE
PROJECT NO.	20258
SHEET NO.	-

NEW ROOF TOP PACKAGED HVAC ENERGY RECOVERY UNIT SCHEDULE																																							
SUPPLY FAN														EXHAUST FAN										DX COOLING/HEATING COIL				AIR SOURCE H.P. COOLING PERFORMANCE, 93.0 DEG F AMBIENT				AIR SOURCE H.P. HEATING PERFORMANCE, 42.0 DEG F AMBIENT							
TAG	DESCRIPTION	LOCATION	MAKE # MODEL	SUPPLY CFM	RETURN CFM	OUTDOOR CFM	EXH. CFM	ELECTRICAL	QTY	MIN E.S.P.	MOTOR	VOLTS	Ø	MTR. HP	RPM	QTY	MIN E.S.P.	MOTOR	VOLTS	Ø	MTR. HP	RPM	AREA	ROW(S)	FPI	FACE VELOCITY	EAT 'F	LAT 'F	SENSIBLE CAP.	TOTAL CAP.	EAT 'F	LAT 'F	TOTAL CAP.						
(AC-1)	HEAT PUMP BASED HVAC & ERU	ROOF	AAON RN-008	3,200 CFM	3,200 CFM	400 CFM	400 CFM	208V-3Ø-57.0 MCA	1-18.5'Ø	1.25"	ODP	208	3	3.0	1,773	1-15'Ø	0.50"	ODP	208	3	2.0	1,929	8.5 SQFT	3	14	376.2 FPM	75.7' DB 62.6' WB	54.2' DB 52.6' WB	67.7 MBH	82.7 MBH	69.0' DB	95.6' DB	92.1 MBH						
HOT GAS REHEAT COIL														SUMMER HEAT WHEEL DESIGN										WINTER HEAT WHEEL DESIGN															
GAS FIRED HEATING SECTION														COMBO FILTER										ENTERING O.A.				LEAVING SUPPLY				ENTERING EXHAUST				RECOVERED BTU/HR			
FACE AREA														FACE AREA										FACE AREA				FACE AREA				FACE AREA							
FACE VEL.														FACE VEL.										FACE VEL.				FACE VEL.				FACE VEL.							
EAT 'F														EAT 'F										EAT 'F				EAT 'F				EAT 'F							
LAT 'F														LAT 'F										LAT 'F				LAT 'F				LAT 'F							
FUEL TYPE														FUEL TYPE										FUEL TYPE				FUEL TYPE				FUEL TYPE							
GAS PRESS.														GAS PRESS.										GAS PRESS.				GAS PRESS.				GAS PRESS.							
NOM. INPUT														NOM. INPUT										NOM. INPUT				NOM. INPUT				NOM. INPUT							
EAT 'F														EAT 'F										EAT 'F				EAT 'F				EAT 'F							
LAT 'F														LAT 'F										LAT 'F				LAT 'F				LAT 'F							
A.P.D.														A.P.D.										A.P.D.				A.P.D.				A.P.D.							
TOTAL CAP.														TOTAL CAP.										TOTAL CAP.				TOTAL CAP.				TOTAL CAP.							
MODULATION														MODULATION										MODULATION				MODULATION				MODULATION							
FACE AREA														FACE AREA										FACE AREA				FACE AREA				FACE AREA							
FACE VEL.														FACE VEL.										FACE VEL.				FACE VEL.				FACE VEL.							
PRE-FILTER														PRE-FILTER										PRE-FILTER				PRE-FILTER				PRE-FILTER							
FINAL														FINAL										FINAL				FINAL				FINAL							
8.5 SF														8.5 SF										8.5 SF				8.5 SF				8.5 SF							
376.2 FPM														376.2 FPM										376.2 FPM				376.2 FPM				376.2 FPM							
54.2' DB 52.6' WB														54.2' DB 52.6' WB										54.2' DB 52.6' WB				54.2' DB 52.6' WB				54.2' DB 52.6' WB							
70.0' DB 58.9' WB														70.0' DB 58.9' WB										70.0' DB 58.9' WB				70.0' DB 58.9' WB				70.0' DB 58.9' WB							
NAT. GAS														NAT. GAS										NAT. GAS				NAT. GAS				NAT. GAS							
7-14" W.C.														7-14" W.C.										7-14" W.C.				7-14" W.C.				7-14" W.C.							
150.0 MBH														150.0 MBH										150.0 MBH				150.0 MBH				150.0 MBH							
66.8' DB														66.8' DB										66.8' DB				66.8' DB				66.8' DB							
101.5' DB														101.5' DB										101.5' DB				101.5' DB				101.5' DB							
0.08" W.C.														0.08" W.C.										0.08" W.C.				0.08" W.C.				0.08" W.C.							
120.0 MBH														120.0 MBH										120.0 MBH				120.0 MBH				120.0 MBH							
8:1 TURNDOWN														8:1 TURNDOWN										8:1 TURNDOWN				8:1 TURNDOWN				8:1 TURNDOWN							
8.9 SF														8.9 SF										8.9 SF				8.9 SF				8.9 SF							
360 FPM														360 FPM										360 FPM				360 FPM				360 FPM							
2" MERV 8														2" MERV 8										2" MERV 8				2" MERV 8				2" MERV 8							
4" MERV 13														4" MERV 13										4" MERV 13				4" MERV 13				4" MERV 13							
74.0' F														74.0' F										74.0' F				74.0' F				74.0' F							
65.3 F														65.3 F										65.3 F				65.3 F				65.3 F							
62.0' F														62.0' F										62.0' F				62.0' F				62.0' F							
WB														WB										WB				WB				WB							
-16' F														-16' F										-16' F				-16' F				-16' F							
41.9 F														41.9 F										41.9 F				41.9 F				41.9 F							
52.0' F														52.0' F										52.0' F				52.0' F				52.0' F							

NEW BUILT-UP AIR HANDLER SCHEDULE																																	
SUPPLY AIR FAN														RETURN AIR FAN										DX COOLING COIL (2 CIRCUITS, INTERTWINED)				HOT GAS REHEAT COIL (2 CIRCUIT)					
TAG	DESCRIPTION	BASIS OF DESIGN	LOCATION	SUPPLY CFM	RET. CFM	EXH. CFM	OA. CFM	ELECTRICAL	QTY	MIN E.S.P.	MOTOR	VOLTS	Ø	MTR. HP	RPM	QTY.	MIN E.S.P.	MOTOR	VOLTS	Ø	MTR. HP	RPM	AREA	ROW(S)	FPI	FACE VELOCITY	A.P.D.	EAT 'F	LAT 'F	S.S.T.	REFRIG.	SENSIBLE CAP.	TOTAL CAP.
(AC-4)	AIR HANDLER UNIT	AAON RNA SERIES	GROUND MOUNT	4,000 CFM	3,250 CFM	-0- CFM	750 CFM	208V-3Ø-98MCA	1-27.0'Ø	2.50"	ODP	208	3	5.0	1,260	-	-	-	-	-	-	-	19.9 SQFT	6	12	201.4 FPM	0.19"	74.0' DB 61.52' WB	41.0' DB 40.9' WB	-' F	R-410A	131.1 MBH	196.1 MBH
HOT GAS REHEAT COIL (2 CIRCUIT)														PERFORMANCE																			
AREA														AREA										AREA				AREA					
FACE VEL.														FACE VEL.										FACE VEL.				FACE VEL.					
A.P.D.														A.P.D.										A.P.D.				A.P.D.					
EAT 'F														EAT 'F										EAT 'F				EAT 'F					
LAT 'F														LAT 'F										LAT 'F				LAT 'F					
S.S.T.														S.S.T.										S.S.T.				S.S.T.					
REFRIG.														REFRIG.										REFRIG.				REFRIG.					
SENSIBLE CAP.														SENSIBLE CAP.										SENSIBLE CAP.				SENSIBLE CAP.					
TOTAL CAP.														TOTAL CAP.										TOTAL CAP.				TOTAL CAP.					
19.9 SQFT														19.9 SQFT										19.9 SQFT				19.9 SQFT					
201.4 FPM														201.4 FPM										201.4 FPM				201.4 FPM					
0.01														0.01										0.01				0.01					
41.0' DB 40.9' WB														41.0' DB 40.9' WB										41.0' DB 40.9' WB				41.0' DB 40.9' WB					
68.0' DB 53.4' WB														68.0' DB 53.4' WB										68.0' DB 53.4' WB				68.0' DB 53.4' WB					

VARIABLE CAPACITY SPLIT SYSTEM A/C SCHEDULE													
TAG	DESCRIPTION	AREAS SERVED	BASIS OF DESIGN	CFM	REFRIGERANT	COOLING CAP.	HEATING CAP.	COOLING CONDITIONS	HEATING CONDITIONS	ELECTRICAL	M.C.A.	OUTDOOR UNIT	NOTES
(AP-2A)	INDOOR CEILING CASSETTE H.P. UNIT	I.T.S. ROOM 106	MISUBISHI PLA-A18EA7	600	R-410A	18,000 BTU/HR	-	70'F DB/59'F WB	-	208V/1P	-	(AC-5B)	-
NOTES:													
1. PROVIDE WITH WALL MOUNTED WIRED CONTROLLER.													
2. PROVIDE FRAMING AS REQUIRED TO MOUNT UNIT FROM THE BUILDING STRUCTURE.													
3. COORDINATE WITH THE CONTROLS CONTRACTOR FOR WIRING FROM THE CONTROLLER TO THE INDOOR UNIT.													
TAG DESCRIPTION BASIS OF DESIGN REFRIGERANT CAPACITY BTU/HR AMBIENT 'F ELECTRICAL M.C.A. MAX BRK. NOTES													
(AC-5B)	OUTDOOR UNIT	MISUBISHI MUY-GL18NA	R-410A	18,000 COOLING HEATING	93db/80db (COOLING) (HEATING)	208V/1P	14.0 AMP	20 AMP					
NOTES:													
1. COORDINATE WITH THE ELECTRICAL CONTRACTOR TO PROVIDE THE REQUIRED NUMBER OF CONDUCTORS BETWEEN THE OUTDOOR UNIT AND INDOOR UNIT, SEE MFR'S WIRING DIAGRAMS.													
2. MOUNT UNIT ON P.T. SLEEPERS WITH TYPE ND MOUNTS.													



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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - EQUIPMENT
SCHEDULES AND DETAILS

SCALE: NO SCALE
PROJECT NO. 2025B
SHEET NO. -

M5.1

FAN SCHEDULE									
TAG	DESCRIPTION	BASIS OF DESIGN	CFM	S.P.	BHP	RPM	ELECTRICAL	NOTES:	
(RAF)	PHARMACY PROCESS AREA AC-4 RETURN AIR FAN	GREENHECK B5Q-180	3,250	1.25" W.G.	1.27	1,224	208V-3Ø-2.0HP	1 2 3	
NOTES: 1. PROVIDE BELT DRIVE WITH MOTOR LOCATED PER PLANS. 2. FAN MOTOR TO BE PREMIUM EFFICIENT SUITABLE FOR VFD OPERATION.									

ENERGY RECOVERY VENTILATOR SCHEDULE																												
												SUPPLY FAN						EXHAUST FAN				RETURN AIR PRE-FILTER			OUTDOOR AIR PRE-FILTER			
TAG	BASIS OF DESIGN	LOCATION	SUPPLY AIR	EXHAUST AIR	TYPE	BLADE TYPE	MIN E.S.P.	MOTOR	RPM	VOLTS	Ø	MTR. HP	B.H.P.	TYPE	BLADE TYPE	MIN E.S.P.	MOTOR	RPM	VOLTS	Ø	MTR. HP	B.H.P.	TYPE	EFF.	OPTIONS	TYPE	EFF.	OPTIONS
(ERV)	EXISTING TO BE RELOCATED	MECHANICAL ROOM	750 CFM	750 CFM	CENT.	FORWARD CURVED	0.50"	ODP	-	120	1	0.5	-	CENT.	FORWARD CURVED	0.50"	ODP	-	120	1	0.5	-	2" RIGID	MERV 8	-	2" RIGID	MERV 8	-
GENERAL NOTES: 1. PROVIDE UNIT WITH DOUBLE WALL, INSULATED CONSTRUCTION. 2. PROVIDE UNIT WITH DIRECT DRIVE E.C. MOTORS AND POTENTIOMETER SPEED CONTROLLERS.																												

DAMPER SCHEDULE						
TAG	DESCRIPTION	MAKE & MODEL	SIZE	FRAME	BLADES	OPTIONS
(CD-1)	EXHAUST AIR ISOLATION DAMPER	EXIST. RELOCATED	12"Ø	22 GAUGE GALV. STEEL	2-22 GA. GALV. STEEL	WITH OILITE BRONZE BEARING.
(CD-2)	OUTSIDE AIR ISOLATION DAMPER	EXIST. RELOCATED	12"Ø	22 GAUGE GALV. STEEL	2-22 GA. GALV. STEEL	WITH OILITE BRONZE BEARING.
NOTES: 1. --						

LOUVER SCHEDULE							
TAG	DESCRIPTION	MAKE & MODEL	FREE AREA %	OPENING SIZE	DEPTH	NOTES	
(L-1)	LOUVER	RUSKIN #ELF81530	43%	20 x 24	4"	1 2 3 4	
(L-2)	LOUVER	RUSKIN #ELF81530	43%	20 x 24	4"	1 2 3 4	
NOTES: 1. PROVIDE LOUVERS WITH BIRD SCREEN. 2. COLOR SELECTION BY ARCHITECT. COORDINATE FINAL SIZES WITH ARCHITECTURAL PLANS. 3. PROVIDE CONNECTION FROM LOUVER TO PLENUM AS PER DETAIL DRAWINGS. 4. LOUVERS TO HAVE KYNAR FINISH.							

BOILER SCHEDULE										
TAG	DESCRIPTION	INPUT MIN/MAX	HEATING CAPACITY	FIRING SEQUENCE OPERATION	BASIS OF DESIGN	PRESSURE	RELIEF VALVE SETTING	FUEL	ELEC.	NOTES:
(BLR-1)	CONDENSING GAS FIRED BOILER	MIN: 17 MBH MAX: 60 MBH	56.0 MBH	FULL MODULATION	NY THERMAL TFL 60	--	30 PSIG	NAT GAS	120V-1Ø	1,2,3,4,5,6
NOTES: 1. BOILER HEAT EXCHANGER TO BE OF STAINLESS STEEL CONSTRUCTION, ASME RATED. 2. PROVIDE CONDENSATE NEUTRALIZER, SEE MECHANICAL PLANS. 3. PROVIDE REMOTE ENABLING OF BOILER THROUGH BUILDING AUTOMATION SYSTEM. 4. PROVIDE HIGH LIMIT, LOW WATER CUT-OFF AND DIGITAL CONTROLS INTERCONNECTS. 5. PROVIDE AUXILIARY LOW WATER CUT-OFF, FIELD INSTALLED, WIRED INTO BOILER CONTROL CIRCUIT. 6. PROVIDE PVC COMBINATION BOILER FLUE EXHAUST AND AIR INTAKE THROUGH THE WALL, PER MANUFACTURER REQUIREMENTS.										

PUMP SCHEDULE								
TAG	DESCRIPTION	BASIS OF DESIGN	GPM	HEAD	RPM	CONN.	ELEC. DATA	NOTES:
(CP-3)	PRIMARY HYDRONIC BOILER CIRCULATOR PUMP	GRUNDFOS MAGNA 32-100F-40	30	15	3000	1 1/2" SIZE FLANGE	120V-1Ø-1/2HP	1 2 3
(CP-4)	HYDRONIC ZONE (SUITE 75) CIRCULATOR PUMP	GRUNDFOS ALPHA2 26-99F SE	16	20	3000	1 1/2" SIZE FLANGE	120V-1Ø-1/4HP	1 2 3
(CP-5)	HYDRONIC ZONE (SUITE 79) CIRCULATOR PUMP	GRUNDFOS ALPHA2 26-99F	20	20	3000	1 1/2" SIZE FLANGE	120V-1Ø-1/4HP	1 2 3
NOTES: 1. PROVIDE AUXILIARY SUPPORT FOR THE PUMPS. 2. PUMPS TO INTEGRAL SPEED CONTROL. 3. SET UP PUMPS FOR CONSTANT DIFF. PRESSURE OPERATION, AS REQUIRED.								

HYDRONIC BUFFER TANK SCHEDULE					
TAG	DESCRIPTION	MAKE & MODEL	TANK VOL.	DIMENSIONS	REMARKS:
(BT-1)	HYDRONIC SYSTEM WATER BUFFER TANK	LOCHINVAR COMPANY MODEL #5BT080	80 GAL.	24"Ø x 70"H	SEE NOTES
NOTES: 1. FURNISH AND INSTALL STAINLESS STEEL BUFFER TANK. 2. PROVIDE TANK WITH STANDARD TAPPINGS AS ILLUSTRATED IN THE MANUFACTURER'S LITERATURE. 3. TANK TO BE FACTORY INSULATED AND JACKETED. 4. PROVIDE SEISMIC BRACING STRAP TO SECURE TANK TO WALL.					

AIR SEPARATOR SCHEDULE				
TAG	DESCRIPTION	BASIS OF DESIGN	GPM	REMARKS:
(AS-1)	HOT WATER HEATING LOOP AIR SEPARATOR	SPIROTHERM VJR200TH	35.0	2" THREADED PIPE CONNECTIONS.
NOTES: 1. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.				

EXPANSION TANK SCHEDULE						
TAG	DESCRIPTION	BASIS OF DESIGN	TANK VOLUME	ACC. VOLUME	DIMENSIONS	REMARKS:
(XP-1)	HEATING WATER EXPANSION TANK	AMTROL AX20V	10.9 GAL.	2.4 GAL.	12"DIA. x 26.5"H	FLOOR MOUNT UNIT.
NOTES: 1. ADJUST FACTORY PRESSURE SETTINGS TO EQUAL SYSTEM FILL REQUIREMENTS.						

HOT WATER UNIT HEATER SCHEDULE										
TAG	DESCRIPTION	MAKE & MODEL	CFM	SPEED	GPM	OUTPUT	E.A.T.	E.W.T.	ELEC. DATA	REMARKS:
(UH-1)	HYDRONIC UNIT HEATER	VULCAN HV-60	700	LOW	4.0	33.3 MBH	60° F	180° F	120 V/1Ø/ 1/4HP	1 2 3 4
NOTES: 1. PROVIDE EQUIPMENT SUPPORT FROM STRUCTURE, MOUNT AT 8'+/- ABOVE FLOOR.										



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PROJECT TITLE
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 PHARMACY EXPANSION PROJECT

SHEET TITLE
 MECHANICAL - EQUIPMENT
 SCHEDULES AND DETAILS

SCALE: NO SCALE
 PROJECT NO. 20258
 SHEET NO. -

M5.2

SUPPLY AIR VAV SCHEDULE								
TAG	AREA SERVED	MAKE & MODEL	SIZE	MAX. CFM	MIN. CFM	INLET SIZE	INLET SP.	RE-HEAT COIL
VS-11	SUITE 75, OPEN OFFICE PERIMETER AREAS	ENVIRO-TEC MODEL SDR	10"	1,080	720	10"	0.50"	RH-11
VS-12	SUITE 75, OPEN OFFICE INTERIOR AREAS	ENVIRO-TEC MODEL SDR	10"	1,280	854	10"	0.50"	RH-12
VS-13	SUITE 75, PRIVATE OFFICES	ENVIRO-TEC MODEL SDR	6"	375	250	6"	0.50"	RH-13
VS-14	SUITE 75, ENTRANCE AND TOILET ROOM AREAS	ENVIRO-TEC MODEL SDR	8"	475	320	8"	0.50"	RH-14
VS-15	SUITE 75, I.T.S. ROOM	ENVIRO-TEC MODEL SDR	5"	200	100	5"	0.50"	
VS-21	SUITE 75, OPEN OFFICE PERIMETER AREAS	EBTRON AIR 102 GTx16-P	18x12	1,125	750	8"	0.50"	W/BACNET/MODBUS COMM. & TAMCO #1000 DAMPER
VS-22	SUITE 75, OPEN & PRIVATE OFFICE AREAS	ENVIRO-TEC MODEL SDR	8"	700	467	8"	0.50"	RH-22
VS-23	SUITE 75, MATERIALS HOLDING CORRIDOR	ENVIRO-TEC MODEL SDR	6"	240	160	6"	0.50"	RH-23
VS-24	SUITE 75, CONFERENCE ROOM	ENVIRO-TEC MODEL SDR	6"	355	240	6"	0.50"	RH-24
VS-31	SUITE 79, BREAK ROOM	ENVIRO-TEC MODEL SDR	8"	675	450	8"	0.50"	RH-31
VS-32	SUITE 79, PRIVATE OFFICE, ENTRANCE & TOILET RM.	ENVIRO-TEC MODEL SDR	8"	575	385	8"	0.50"	RH-32
VS-33	SUITE 79, PRIVATE OFFICE, INTERIOR SPACES	ENVIRO-TEC MODEL SDR	8"	420	280	8"	0.50"	RH-33
VS-34	SUITE 79, CONFERENCE ROOM	ENVIRO-TEC MODEL SDR	6"	350	250	6"	0.50"	RH-34

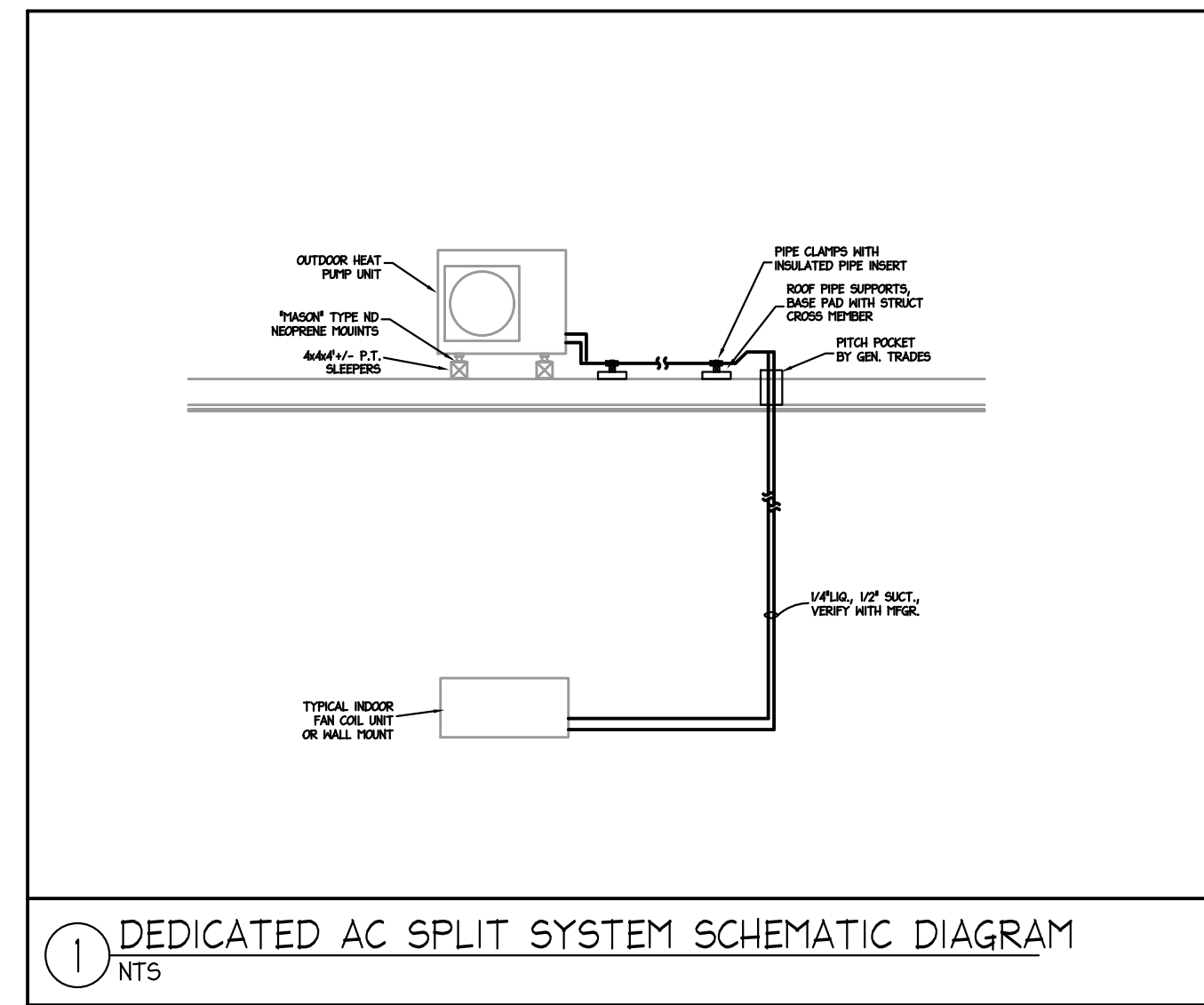
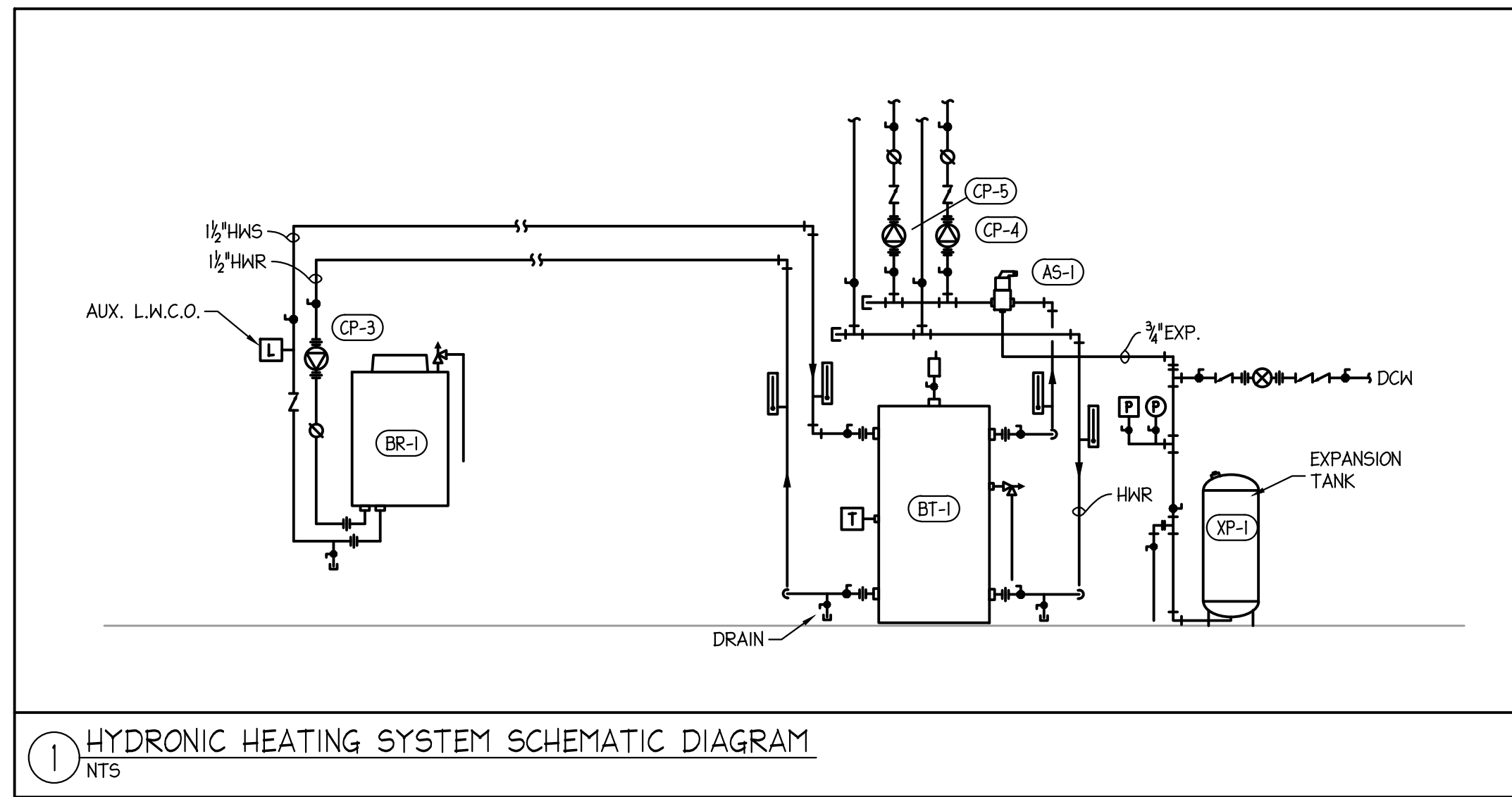
NOTES:

- V.A.V. BOXES SHALL BE INTERNALLY INSULATED WITH ELASTOMERIC INSULATION, MIN. 3/4" THICK, FULLY ADHERED. ALL EDGES TO BE COVERED WITH METAL LINER.
- FLEXIBLE DUCT IS NOT PERMITTED ON INLET AND/OR OUTLET OF V.A.V. BOXES.
- PROVIDE ALL UNITS SET UP FOR FIELD INSTALLED DDC CONTROLLER/ACTUATOR.

REHEAT COIL SCHEDULE												
TAG	SIZE	V.A.V. ZONE	AIR FLOW	E.A.T.	L.A.T.	E.W.T.	GPM	RATING	MAX. A.P.D.	NOTES:		
RH-11	22x18	VS-1.1	1,080	57° F	77° F	170° F	2.0	23.3 MBH	0.11" W.C.	--		
RH-12	24x18	VS-1.2	1,280	57° F	77° F	170° F	2.0	27.6 MBH	0.11" W.C.	--		
RH-13	14x9	VS-1.3	375	57° F	77° F	170° F	0.75	8.1 MBH	0.11" W.C.	--		
RH-14	14x12	VS-1.4	475	57° F	77° F	170° F	1.0	10.3 MBH	0.11" W.C.	--		
RH-21	24x18 EXISTING	VS-2.1	1,125	57° F	77° F	170° F	2.0	24.3 MBH	0.11" W.C.	--		
RH-22	16x15	VS-2.2	700	57° F	77° F	170° F	1.1	15.1 MBH	0.11" W.C.	--		
RH-23	12x9	VS-2.3	240	57° F	77° F	170° F	0.5	5.2 MBH	0.11" W.C.	--		
RH-24	14x9	VS-2.4	355	57° F	77° F	170° F	0.6	7.7 MBH	0.11" W.C.	--		
RH-31	20x12	VS-3.1	675	57° F	77° F	170° F	1.1	14.6 MBH	0.11" W.C.	--		
RH-32	16x12	VS-3.2	575	57° F	77° F	170° F	1.0	12.4 MBH	0.11" W.C.	--		
RH-33	14x12	VS-3.3	420	57° F	77° F	170° F	0.7	9.1 MBH	0.11" W.C.	--		
RH-34	14x9	VS-3.4	350	57° F	77° F	170° F	0.6	7.6 MBH	0.11" W.C.	--		
RH-41	30x18	-	1,600	57° F	97° F	170° F	5.8	69.1 MBH	0.12" W.C.	--		
RH-42	24x18	-	1,200	57° F	97° F	170° F	4.3	51.8 MBH	0.12" W.C.	--		
RH-43	24x18	-	1,200	57° F	97° F	170° F	4.3	51.8 MBH	0.12" W.C.	--		

REMARKS:

- ALL COILS TO BE FLANGED TYPE, .0035" THICK CU TUBES MIN., .009" THICK AL. FINS MIN.
- PROVIDE ACCESS DOOR IN AIR DUCT UPSTREAM AND DOWN STREAM OF REHEAT COIL.
- EACH ACCESS DOOR SHALL BE DOUBLE WALL, INSULATED, HINGED WITH CAM LOCKS.
- PROVIDE PIPING CONNECTIONS TO RE-HEAT COIL AS PER DETAIL DRAWINGS.
- INSTALL RE-HEAT COIL IN AIR DUCT AS PER DETAIL DRAWINGS.
- SEAL RE-HEAT COIL DUCT CONNECTIONS WITH AN APPROVED SEALANT.
- RE-HEAT COIL AIR LEAKAGE SHALL NOT EXCEED 1.0% OF BRANCH AIR FLOW AT 4.0" W.C.
- COILS SHALL BE FLANGED TYPE, INSTALLED WITH THE "DUCT MATE" SYSTEM.



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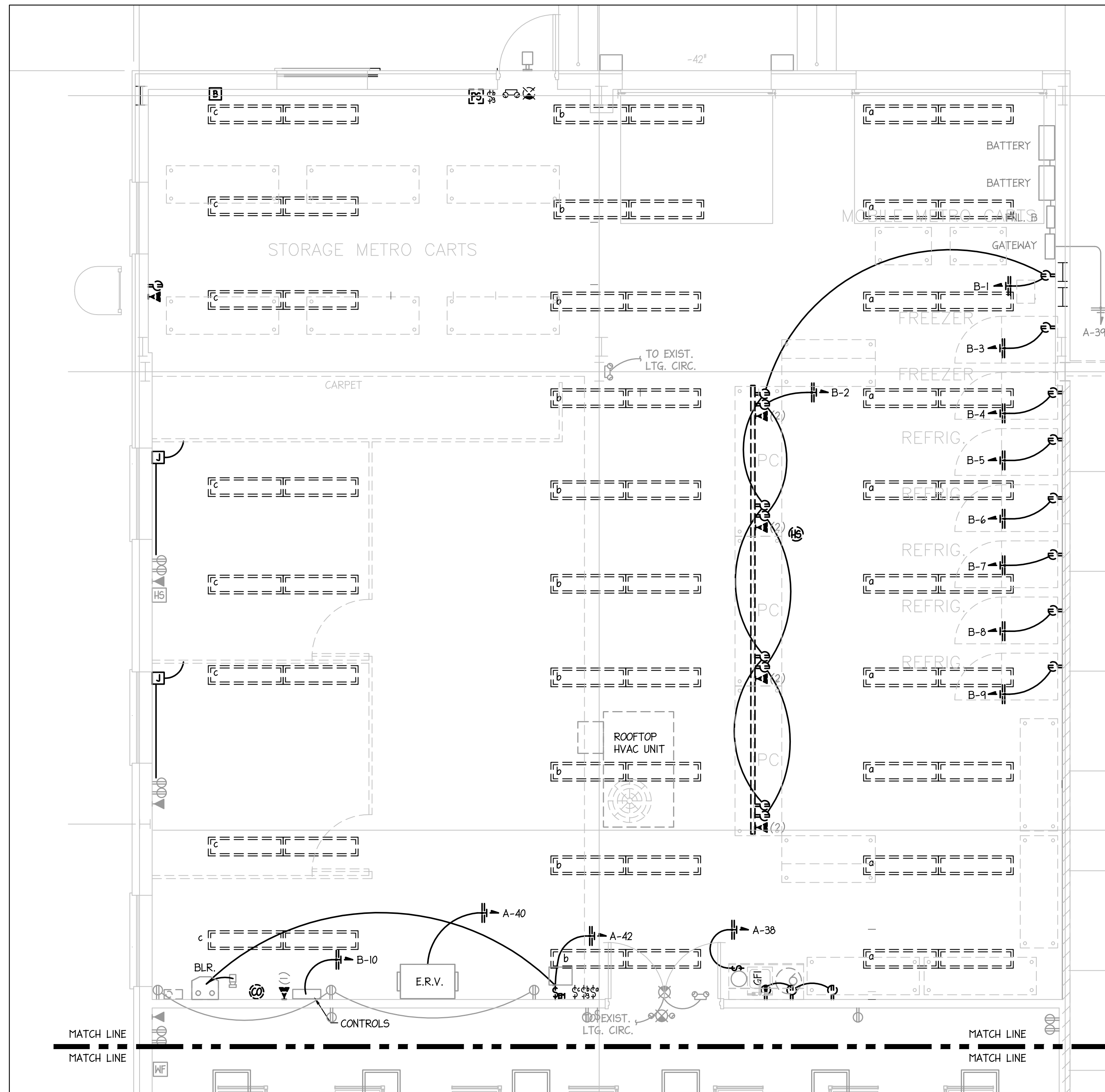
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APPROVED	-
DATE	FEB. 01, 2021
NO.	DATE
0	FEB. 01, 2021
	ISSUE FOR BUDGET PRICING
NO.	DATE
	REVISION

PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
MECHANICAL - EQUIPMENT
SCHEDULES AND DETAILS

SCALE: NO SCALE
PROJECT NO. 20258
SHEET NO. -

M5.3

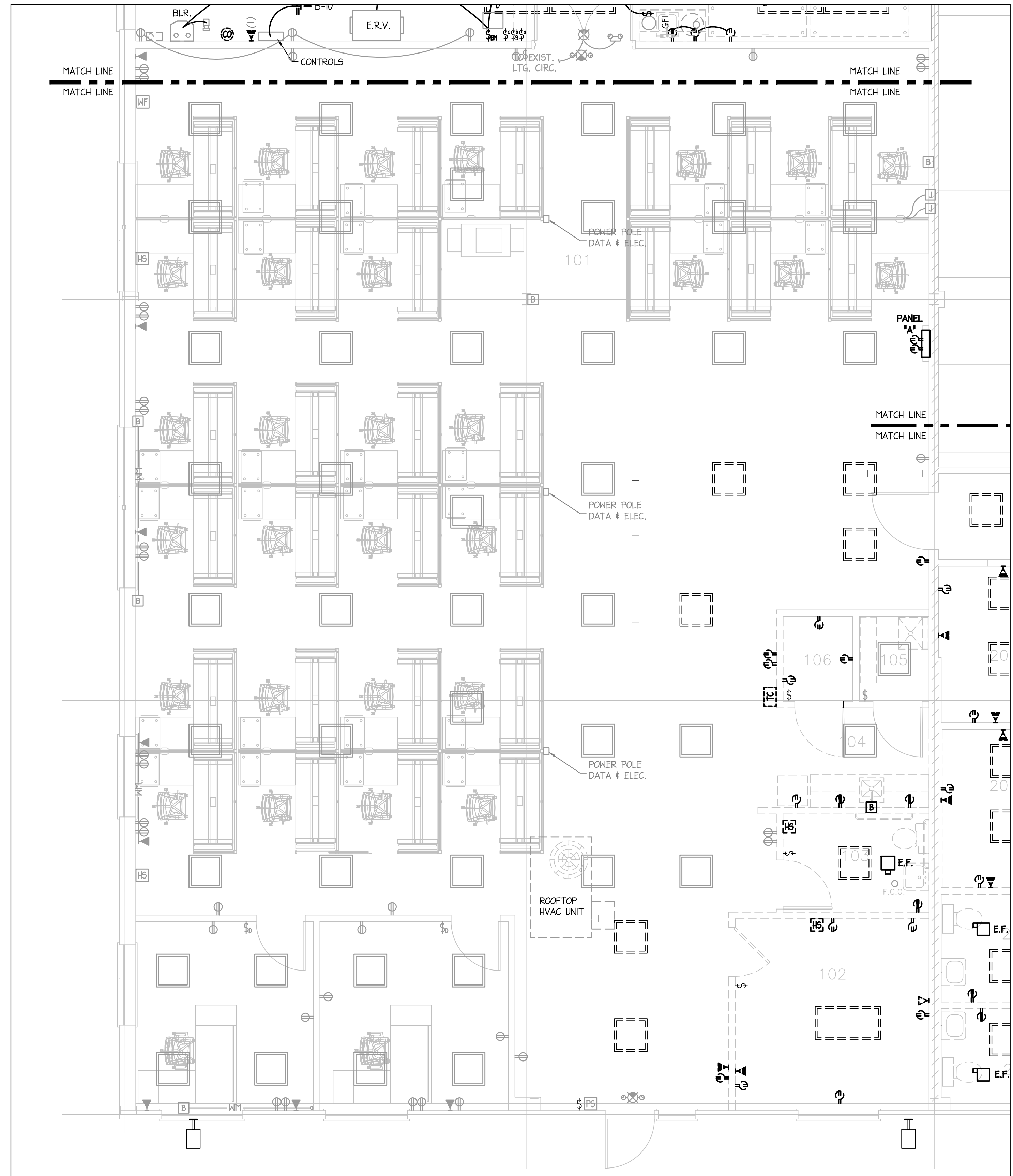
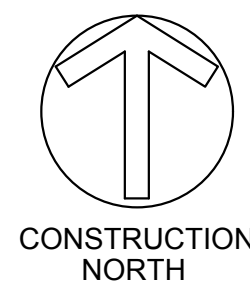


1 ELECTRICAL - SUITE 75, FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"

◆ ELECTRICAL SPECIFIC DEMOLITION NOTES:

1. XXXXX

ELECTRICAL DEMOLITION LEGEND	
	ELECTRICAL WORK TO BE DEMOLISHED
	EXISTING ELECTRICAL WORK TO REMAIN



2 ELECTRICAL - SUITE 75, FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"



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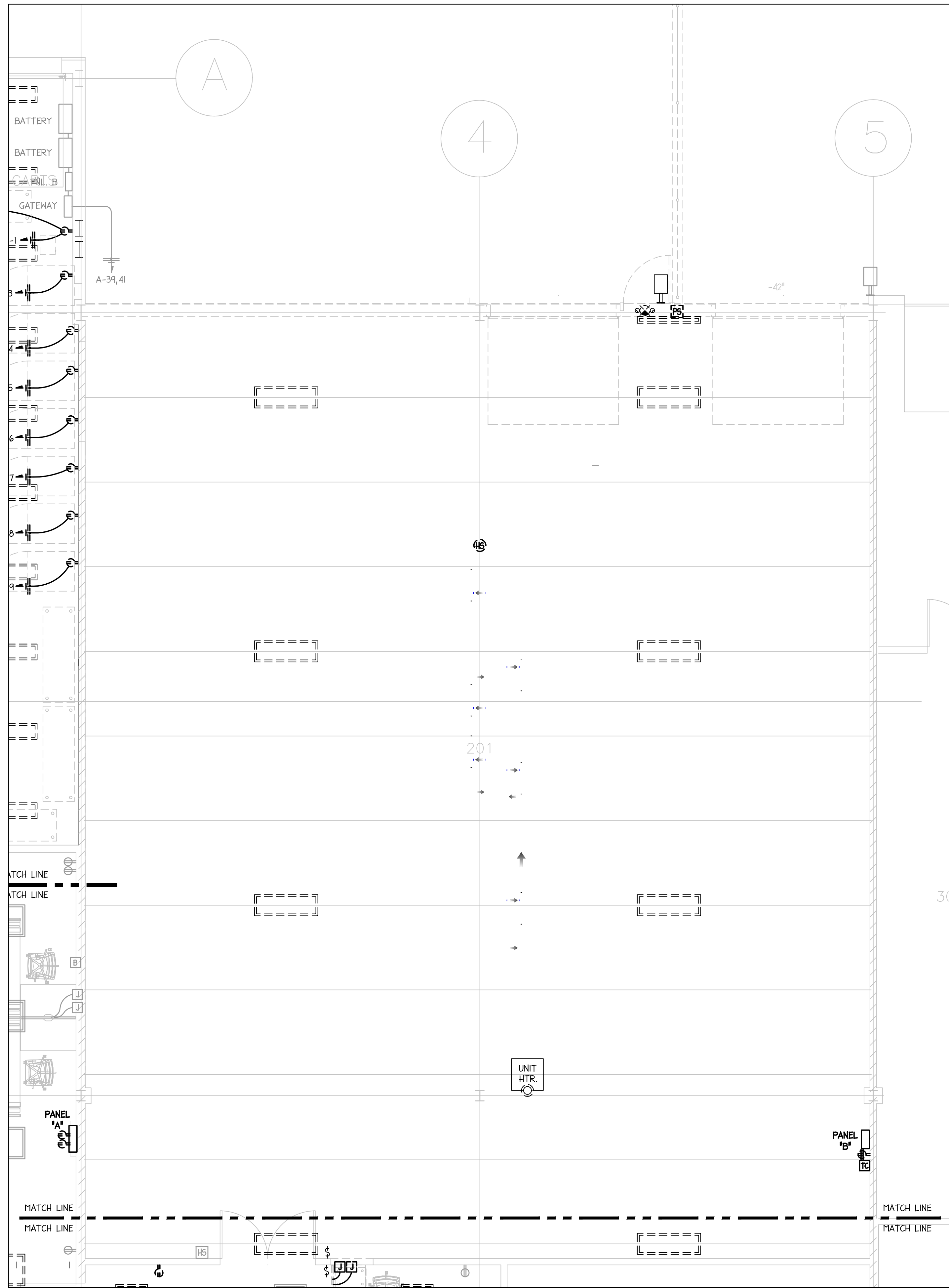
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

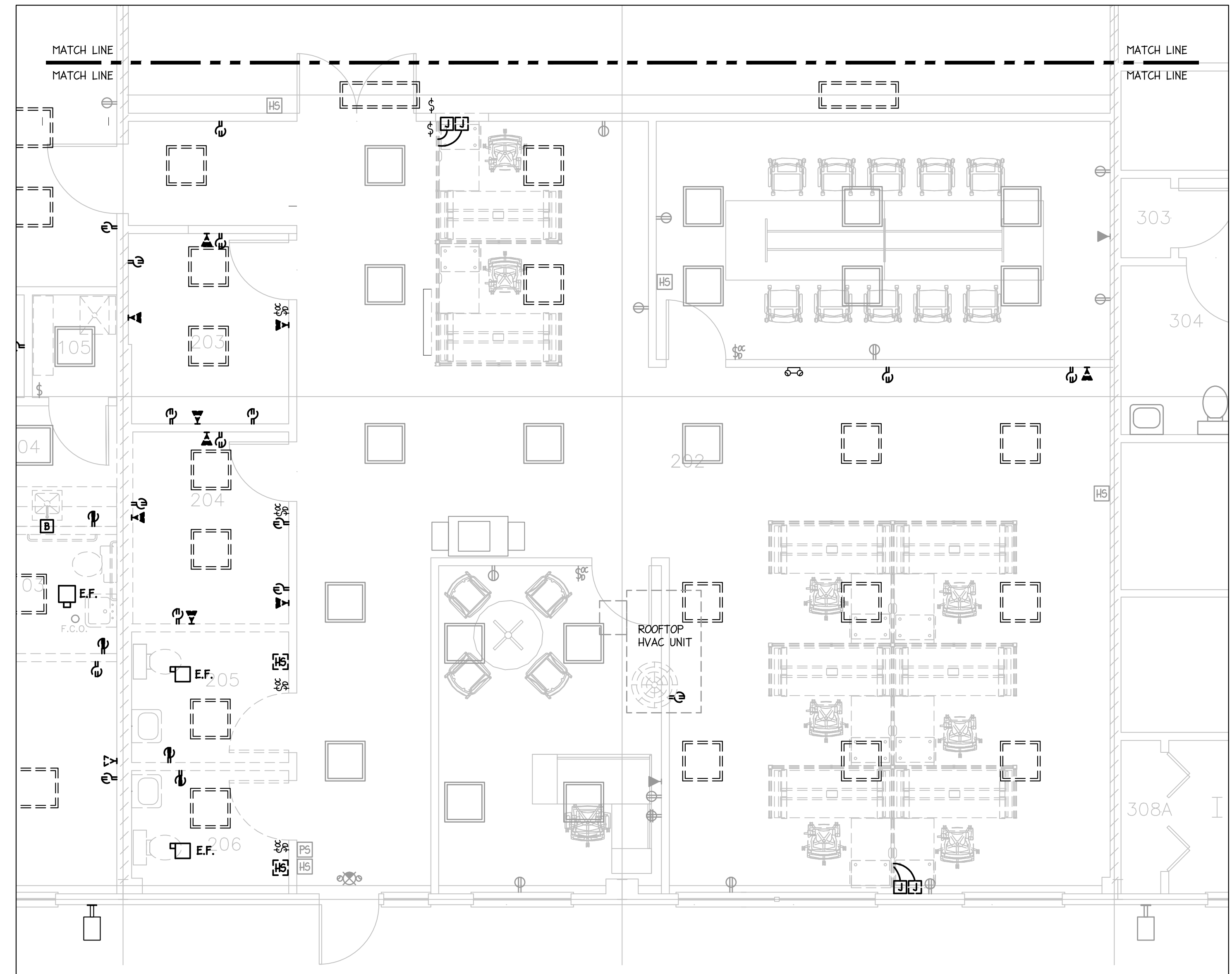
SHEET TITLE
ELECTRICAL - FIRST FLOOR
SUITE 75, DEMOLITION PLANS

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO. -

E0.1



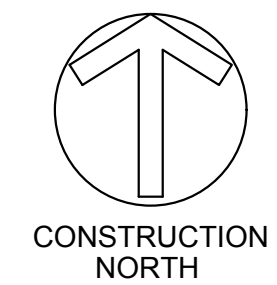
1 ELECTRICAL - SUITE 79, FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"



2 ELECTRICAL - SUITE 79, FIRST FLOOR DEMOLITION PLAN
1/4"=1'-0"

◇ ELECTRICAL SPECIFIC DEMOLITION NOTES:
1. XXXX

ELECTRICAL DEMOLITION LEGEND	
	ELECTRICAL WORK TO BE DEMOLISHED
	EXISTING ELECTRICAL WORK TO REMAIN



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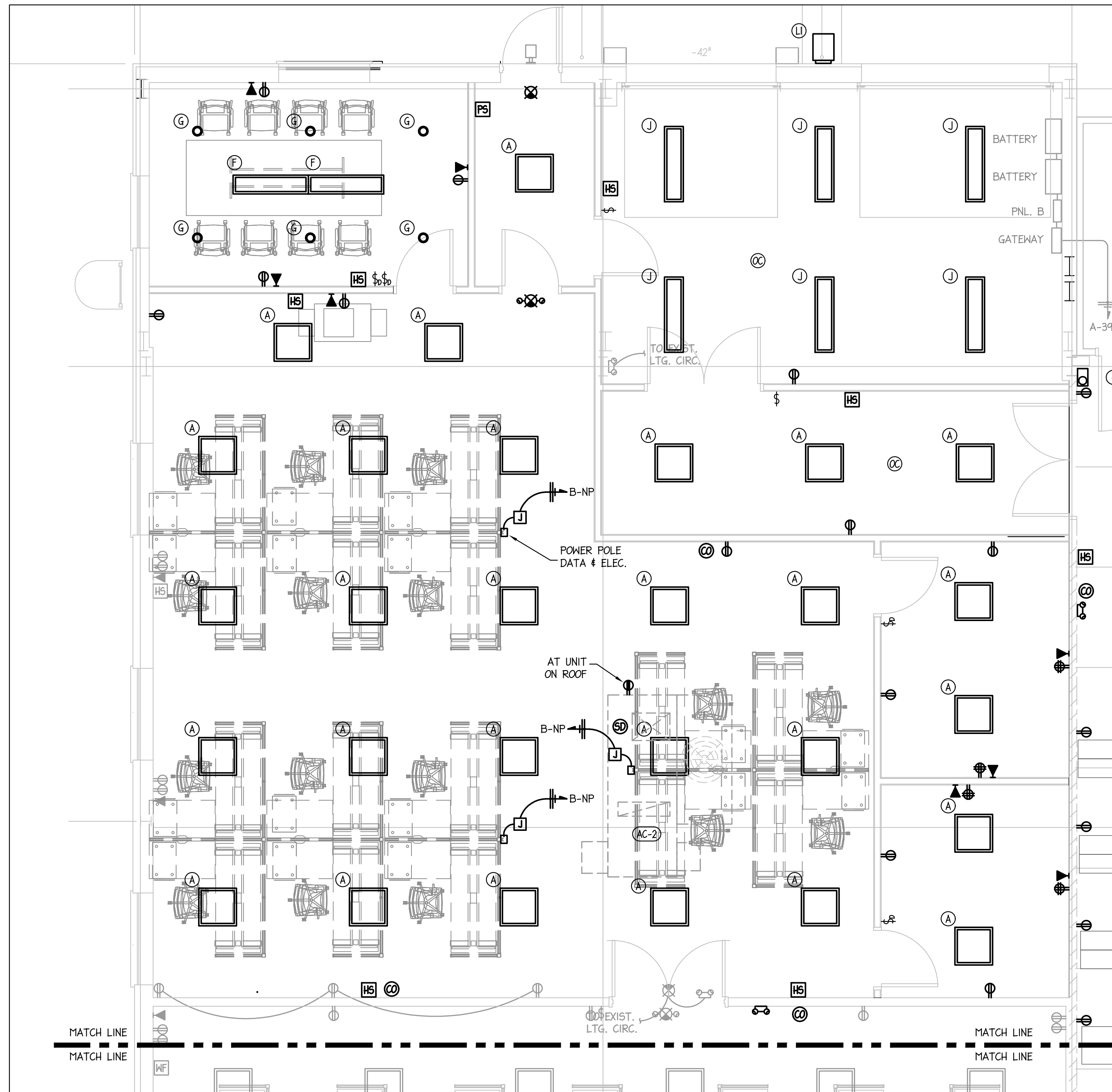
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
ELECTRICAL - FIRST FLOOR
SUITE 79, DEMOLITION PLANS

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

E0.2

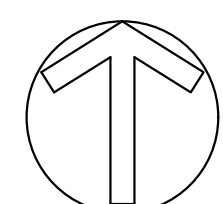


1 ELECTRICAL - SUITE 75, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"

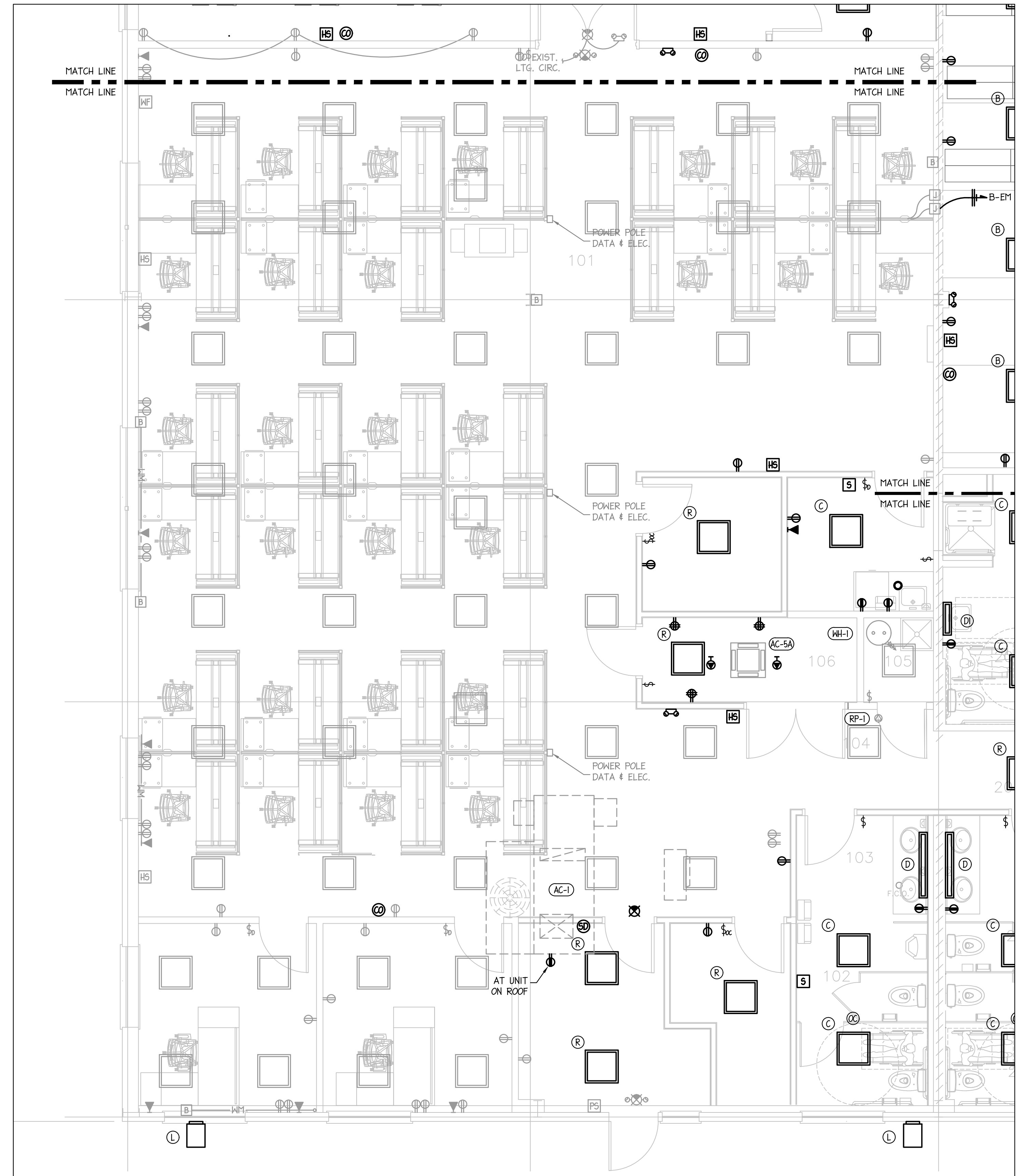
ELECTRICAL SPECIFIC NEW WORK NOTES:

1. XXXX

ELECTRICAL NEW WORK LEGEND	
	ELECTRICAL NEW WORK TO BE INSTALLED
	EXISTING ELECTRICAL WORK TO REMAIN



CONSTRUCTION
NORTH



2 ELECTRICAL - SUITE 75, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"



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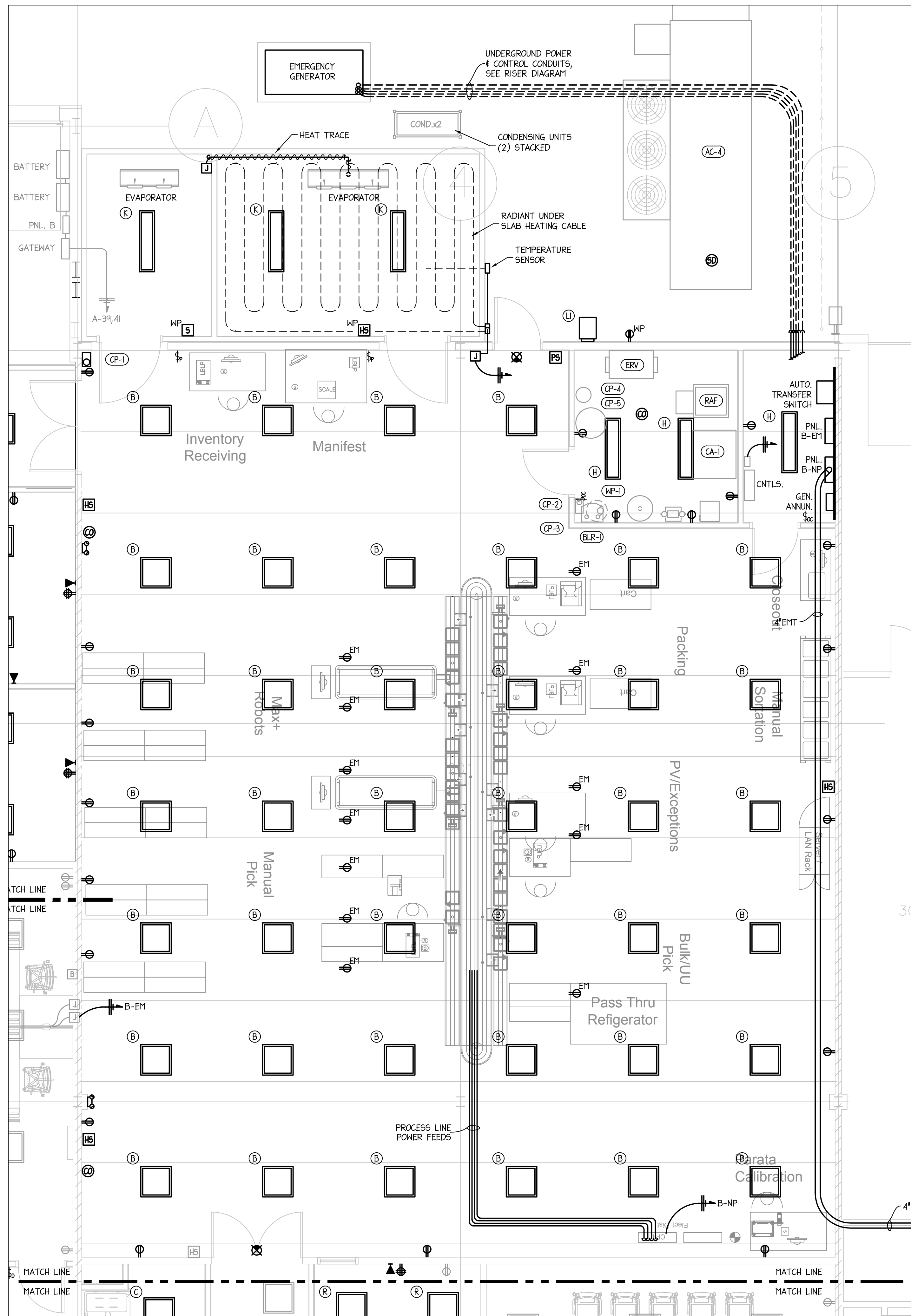
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PHARMACY EXPANSION PROJECT

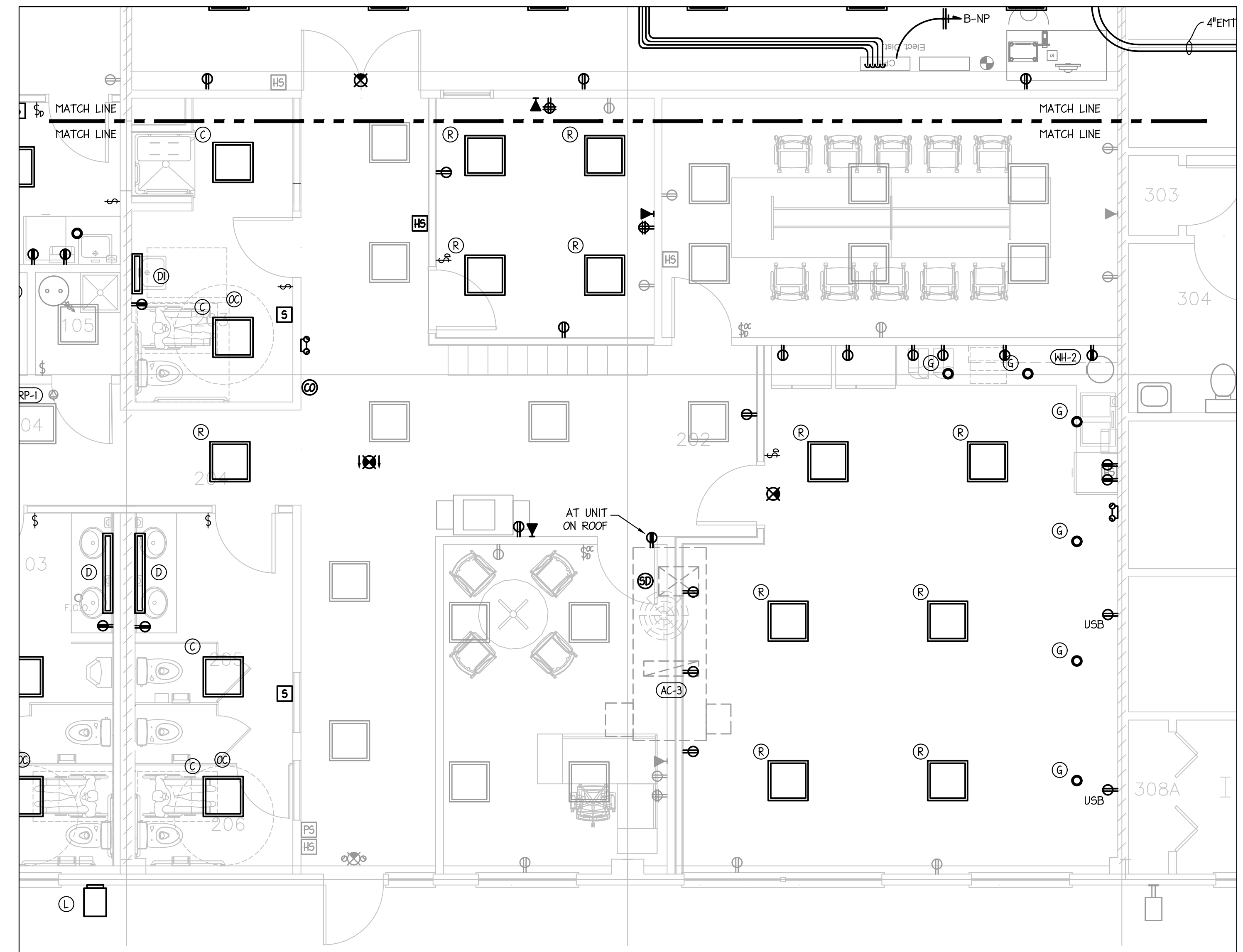
SHEET TITLE
ELECTRICAL - FIRST FLOOR
SUITE 75, NEW WORK PLANS

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

E1.1



1 ELECTRICAL - SUITE 79, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"



2 ELECTRICAL - SUITE 79, FIRST FLOOR NEW WORK PLAN
1/4"=1'-0"

1 ELECTRICAL SPECIFIC NEW WORK NOTES:

- 1. XXXX

ELECTRICAL NEW WORK LEGEND	
	ELECTRICAL NEW WORK TO BE INSTALLED
	EXISTING ELECTRICAL WORK TO REMAIN



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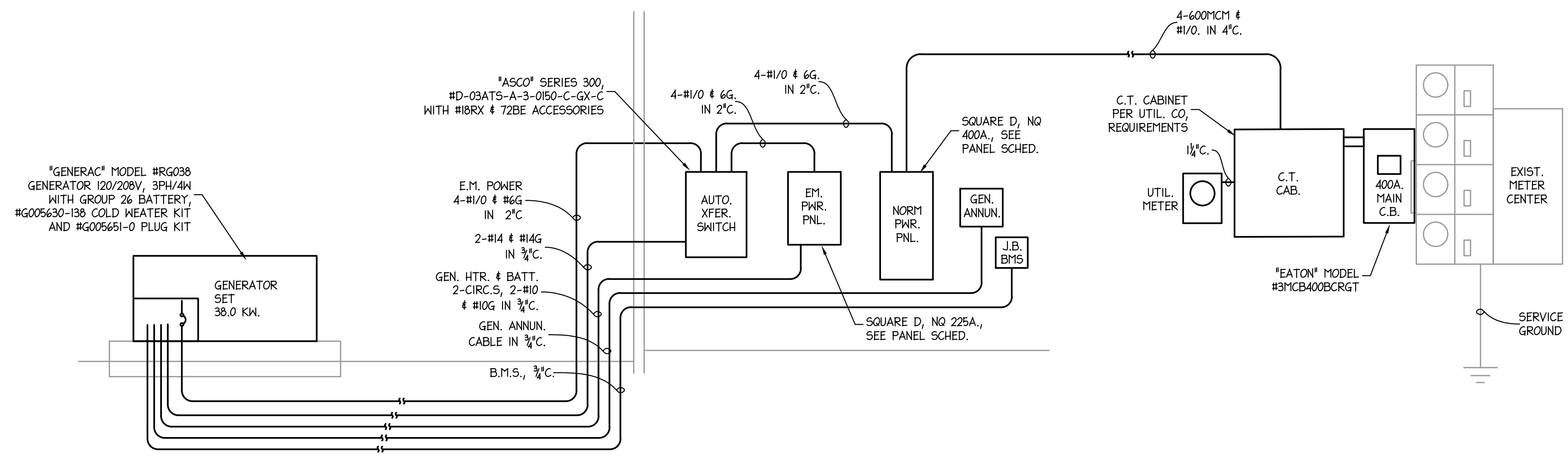
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PHARMACY EXPANSION PROJECT

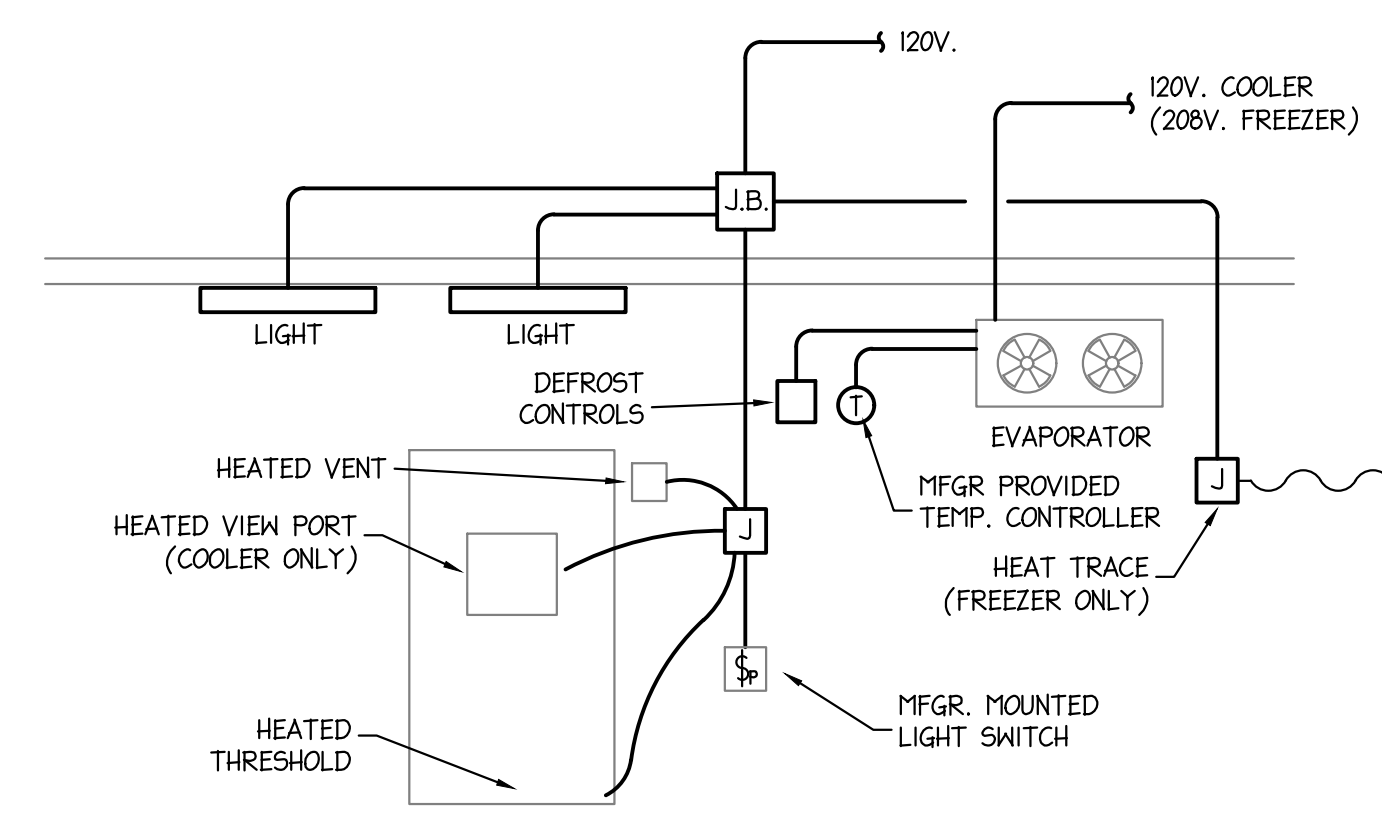
SHEET TITLE
ELECTRICAL - FIRST FLOOR
SUITE 79, NEW WORK PLANS

SCALE: 1/4"=1'-0"
PROJECT NO. 20258
SHEET NO.

E1.2



1 ELECTRICAL ONE LINE POWER SYSTEM DIAGRAM
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2 WALK-IN COOLER/FREEZER WIRING DIAGRAM
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PROJECT TITLE
U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT

SHEET TITLE
ELECTRICAL - ONE-LINE AND
TYPICAL WIRING DIAGRAMS

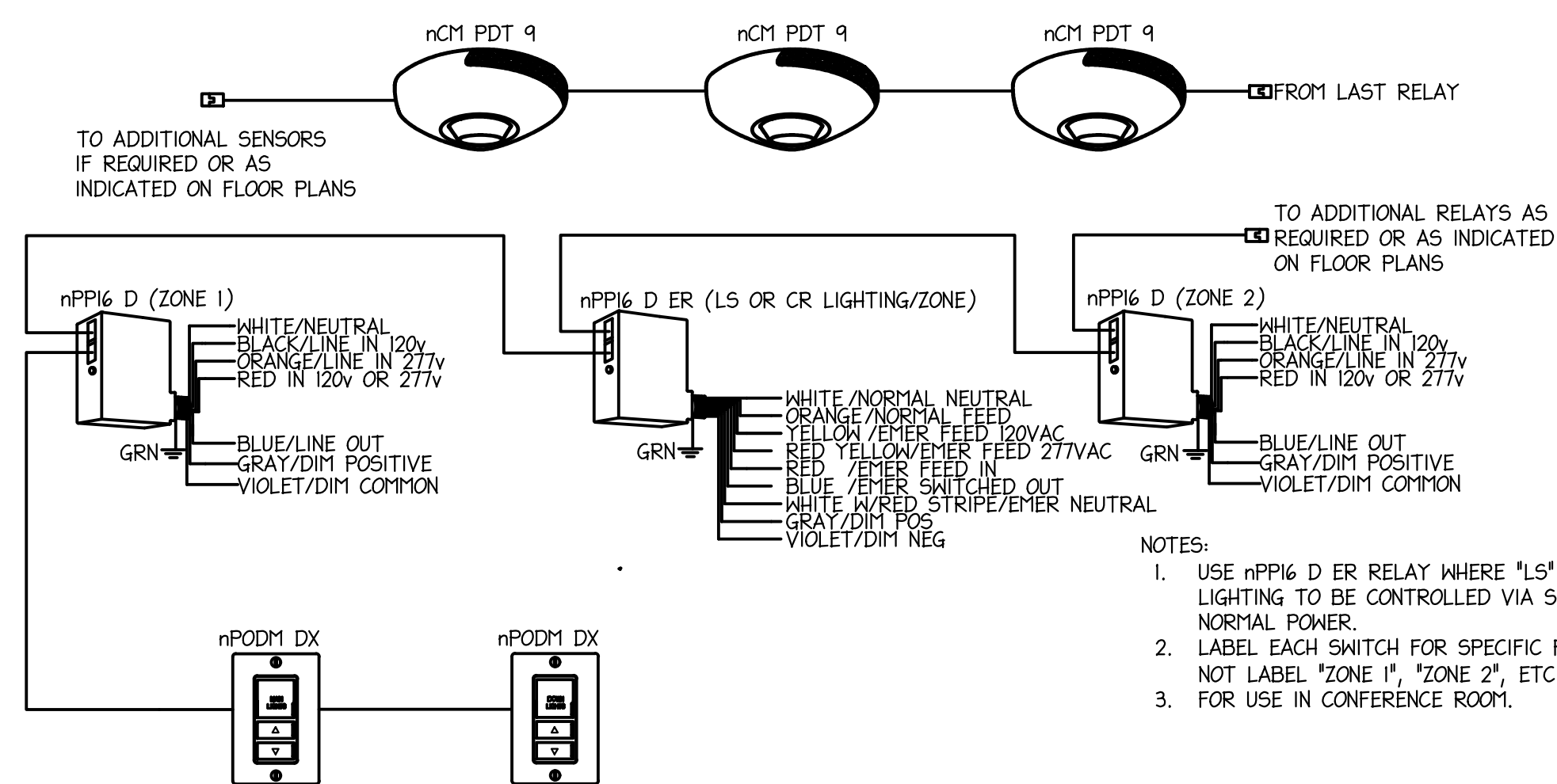
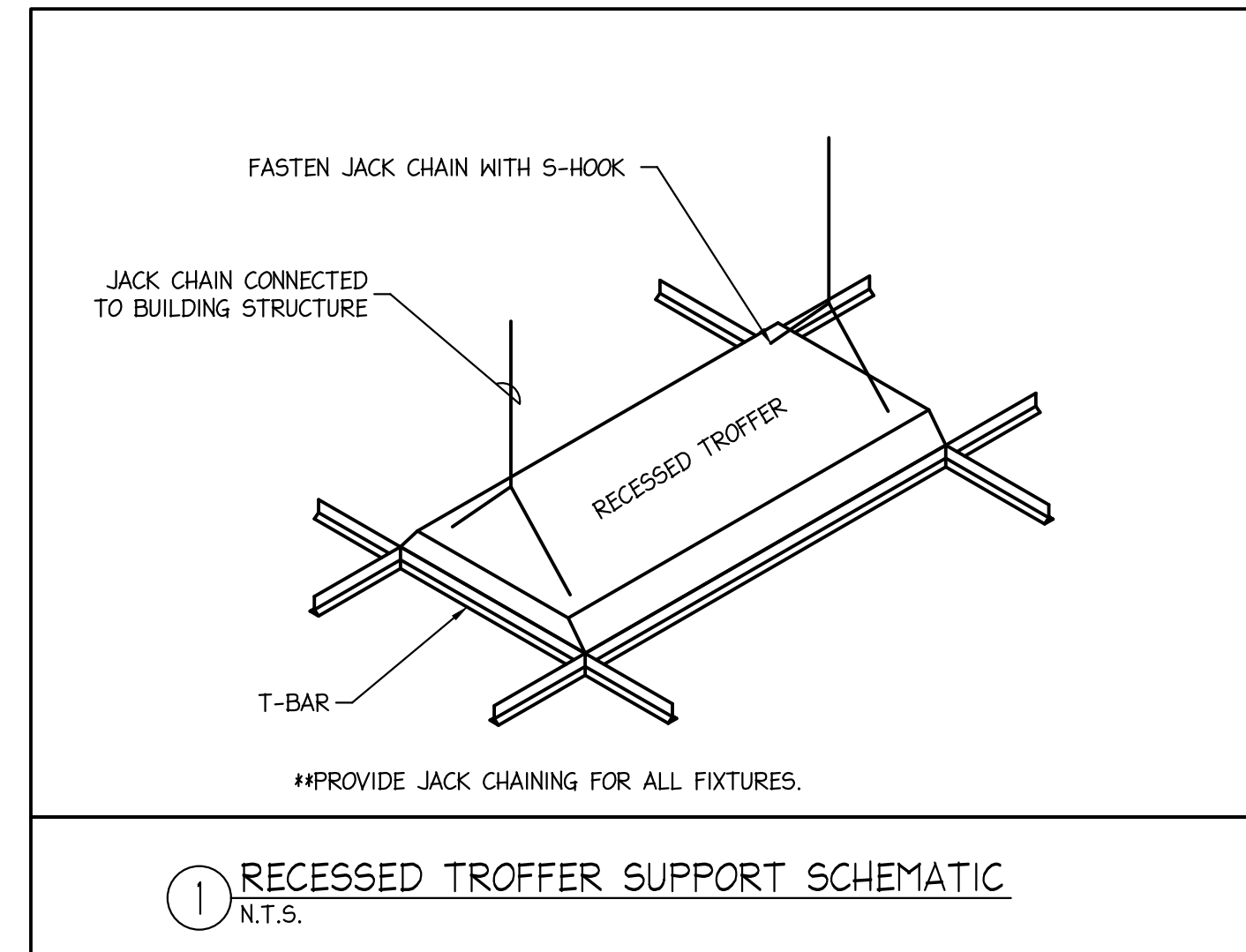
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EQUIPMENT SCHEDULE														
TAG	DESCRIPTION	LOC./SERVES	HP	KW	FLA/MCA	V	PH	CONDUCTORS	GROUND	CONDUIT	STARTER TYPE	BREAKER SIZE	PANEL FEED	NOTES
AC-1	ROOFTOP HVAC H.P. ENERGY RECOVERY UNIT	SUITE 75 SOUTH ROOF	-	-	57.0	208	3Ø	3-#6	1-#8	1"	-	80A	PNL. "A"	1,2,3,4
AC-2	ROOFTOP HVAC H.P. ENERGY RECOVERY UNIT	SUITE 75 NORTH ROOF	-	-	42.0	208	3Ø	3-#8	1-#10	3/4"	-	60A	PNL. "A"	1,2,3,4
AC-3	ROOFTOP HVAC H.P. ENERGY RECOVERY UNIT	SUITE 79 SOUTH ROOF	-	-	42.0	208	3Ø	3-#8	1-#10	3/4"	-	60A	PNL. "B-NP"	1,2,3,4
AC-4	GROUND MOUNT HVAC UNIT	SITE, BEHIND SUITE 79	-	-	98.0	208	3Ø	3-#11	1-#6	1 1/2"	-	125A	PNL. "B-NP"	1,2,3,4
AC-5A	INDOOR HEAT PUMP AIR SUPPLY UNIT	I.S.T. RM. 106	-	-										1,2,3,4
AC-5B	OUTDOOR HEAT PUMP COMPRESSOR UNIT	SUITE 75 SOUTH ROOF	-	-										1,2,3,4
ERV	AIR TO AIR ENERGY RECOVERY UNIT	MECHANICAL RM.	-	-										1,2,3,4
RAF	RETURN AIR FAN (AC-4 SYSTEM)	MECHANICAL RM.	-	-										1,2,3,4
UH-1	HYDRONIC UNIT HEATER	LOADING DOCK	-	-										
BLR-1	HYDRONIC SYSTEM GAS FIRED BOILER	MECHANICAL RM.	-	-										
CP-3	HYDRONIC BOILER CIRCULATOR PUMP	MECHANICAL RM.	-	-										
CP-4	HYDRONIC ZONE LOOP CIRCULATOR PUMP	MECHANICAL RM.	-	-										
CP-5	HYDRONIC ZONE LOOP CIRCULATOR PUMP	MECHANICAL RM.	-	-										
CA-1	AIR COMPRESSOR	MECHANICAL RM.	10.0	-	32.0	208	3Ø	3-#8	1-#10	3/4"	-	60A	PNL. "B-NP"	
NH-1	DOMESTIC WATER HEATER UNIT	SUITE 75 CUSTODIAL RM.	-	4.5	21.6	208	1Ø	2-#10	1-#10	3/4"	-	30A	PNL. "A"	
NH-2	DOMESTIC WATER HEATER UNIT	SUITE 79 BREAK RM. CASEWORK	-	2.5	12.0	208	1Ø	2-#12	1-#12	1/2"	-	20A	PNL. "B-NP"	
RP-1	DOM. HOT WATER RECIRCULATION PUMP	SUITE 75 CUSTODIAL RM.	-	-										
-	PHARMACY PROCESS LINE EQUIPMENT PANEL	SUITE 79 NORTH AREA	-	-	100.0	208	3Ø	4-#3	1-#8	1 1/2"	-	100A	PNL. "B-NP"	

- NOTES:
- PROVIDE AND INSTALL NEW BREAKERS IN THE EXISTING PANELS. MATCH EXISTING BREAKER TYPE AND AIC RATING.
 - COORDINATE DISCONNECT OR BREAKER SIZE WITH APPROVED SHOP DRAWINGS PRIOR TO PURCHASE.
 - PROVIDE AND INSTALL A LOCAL DISCONNECT SWITCH FOR EACH PIECE OF EQUIPMENT NOT WITHIN SITE OF THE PANELS. INDOOR UNIT SWITCHES MAY BE TOGGLE TYPE.
 - FINAL CONNECTIONS TO UNITS TO BE IN SEALIGHT.

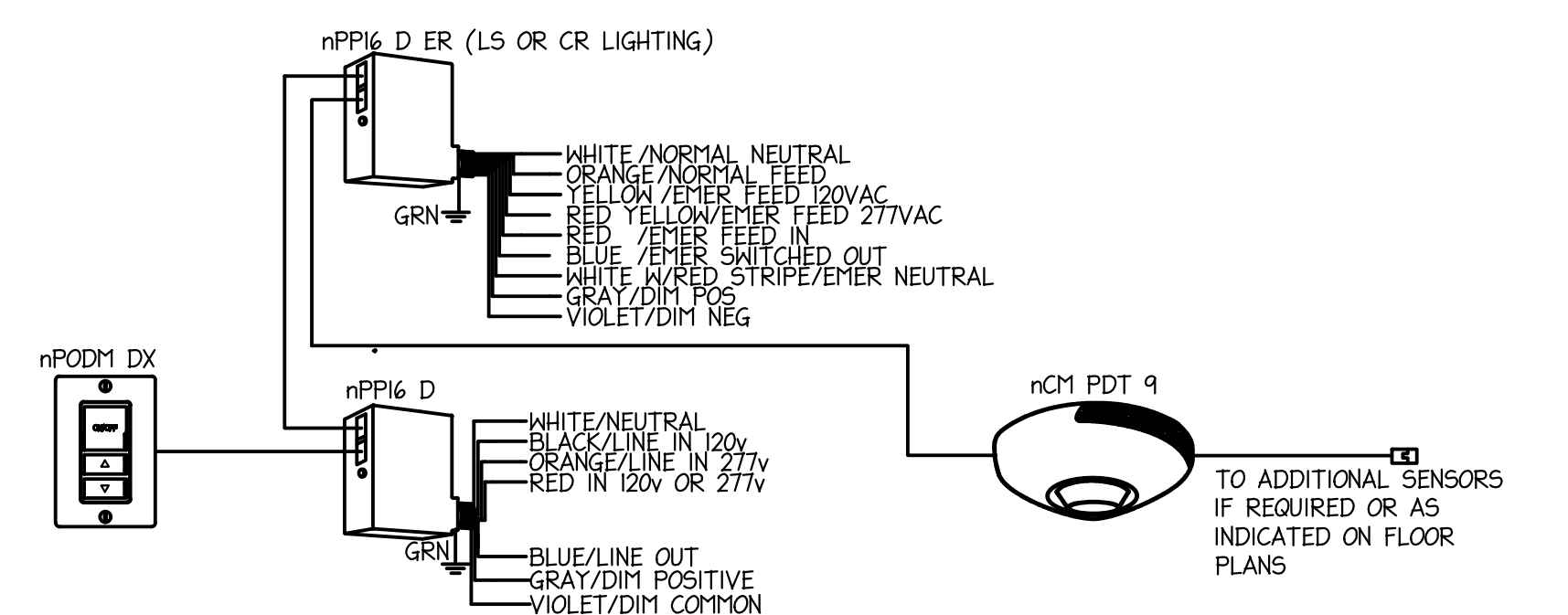
- GENERAL NOTES:
- REFER TO ALL EQUIPMENT SUBMITTALS FOR FINAL CIRCUITING AND CONNECTION REQUIREMENTS.



TYPICAL MULTIPLE ZONE w/ DIMMING

NOTES:

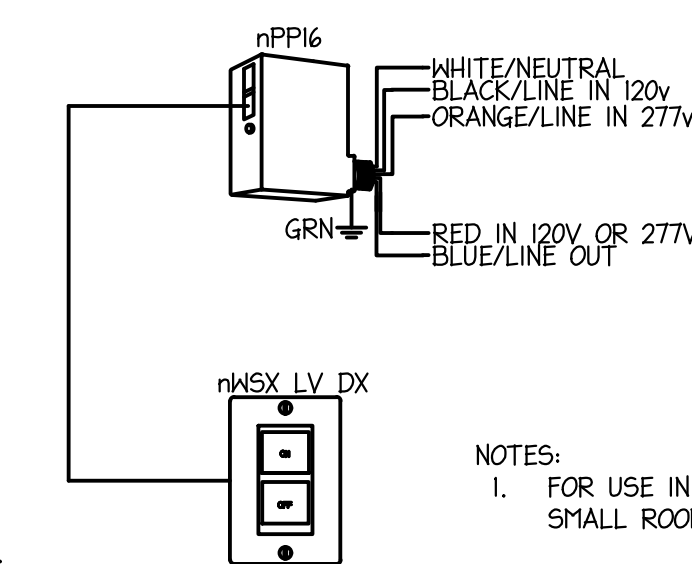
- BASIS OF DESIGN: ACUITY nLIGHT. APPROVED EQUALS ACCEPTABLE PER SPECIFICATIONS.
- NO 120V OR 277V WALL SWITCHES OR DEVICES SHALL BE PERMITTED EXCEPT FOR ON/OFF SWITCH FOR NORMAL POWER CORRIDOR LIGHTING.
- CORRIDOR/EGRESS PATH LIFE SAFETY LIGHTING (LS) SHALL BE UNSWITCHED AND ON 24/7, UNLESS NOTED OTHERWISE.
- CIRCUITING SHOWN ON FLOOR PLANS CONNECTING SWITCHES IS DIAGRAMMATIC AND INTENDED TO INDICATE POWER TO ASSOCIATED RELAY DEVICE(S).
- ALL LIGHTING ZONES EXCEPT CLOSETS, STAIRWELLS, RESTROOMS, MECH/ELEC/ELEV/SPRINKLER ROOMS, STORAGE AREAS AND JANITOR CLOSETS SHALL BE PROVIDED WITH DIMMING FUNCTIONALITY.
- UNLESS NOTED OTHERWISE, EXAM ROOMS, TEAM STATIONS AND CORRIDORS SHALL NOT BE PROVIDED WITH OCCUPANCY SENSORS.
- LABELS ON SWITCHES TO BE VERIFIED IN FIELD BASED ON LOCATION. DO NOT LABEL "ZONE 1", ETC.
- nPPDM DX CONTROLLERS TO BE PROVIDED WITH ON/OFF/DIMMING CONTROL OF EACH ZONE.
- ALL CABLING BETWEEN SWITCHES, OCCUPANCY SENSORS, PHOTOCELLS AND RELAYS IS CAT 5E.
- nSP5, nPP16 D AND nPP16 D ER ARE RELAYS. nPP16 D ER RELAYS ARE UL LISTED EMERGENCY RELAYS THAT SHALL ALLOW "LS" FIXTURES TO GO 100% ON WHEN LOSS OF NORMAL POWER. FINAL SEQUENCE OF OPERATION OF LIGHTING CONTROLS TO BE VERIFIED WITH OWNER DURING CONSTRUCTION PHASE.



TYPICAL SINGLE ZONE WITH DIMMING

NOTES:

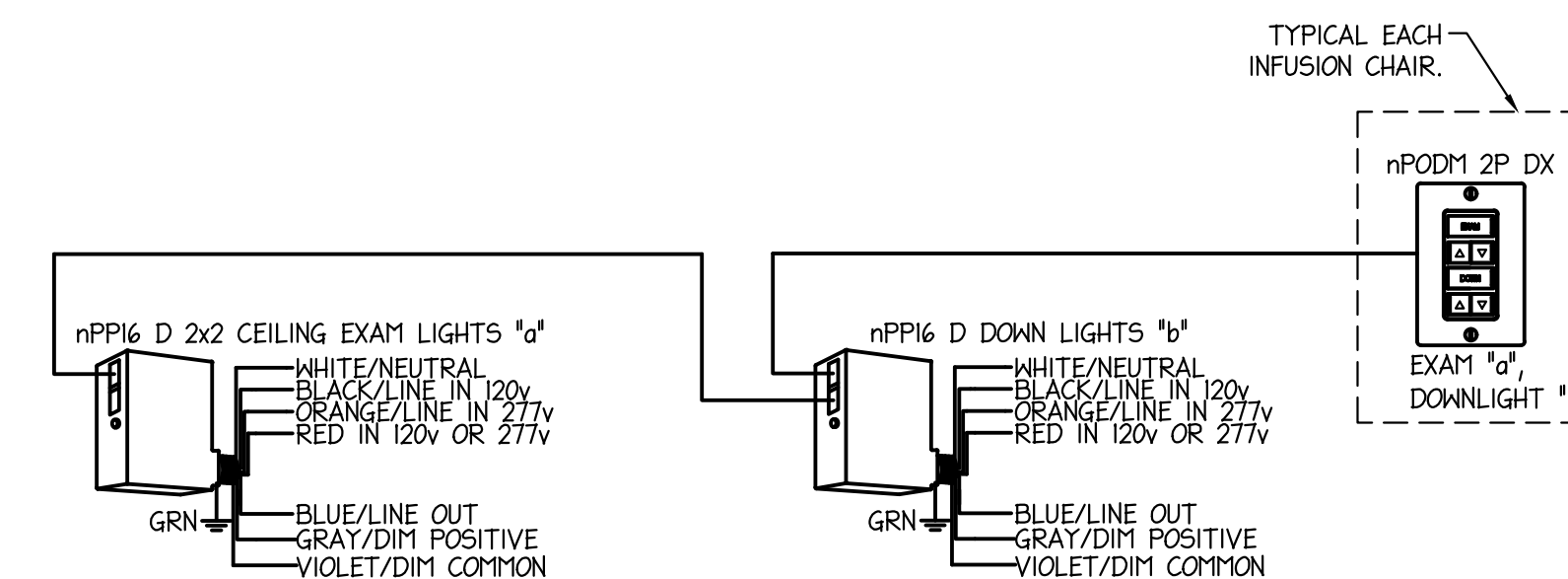
- USE nPP16 D ER RELAY WHERE "CR" OR "LS" LIGHTING TO BE CONTROLLED VIA SAME SWITCH AS NORMAL POWER.
- FOR USE IN OFFICES AND OTHER SINGLE ZONE ROOMS WITH DIMMING.
- FOR USE ALSO AT COMMON SPACE IN NEW INFUSION SUITE (cor3) AND CORRIDOR IN EC SPACE (cor4). "LS" AND NORMAL POWERED LIGHT FIXTURES SHALL BE CONTROLLED AS ONE.



TYPICAL SMALL ROOM MANUAL ON/OFF w/ LOCAL OCCUPANCY SWITCH

NOTES:

- FOR USE IN RESTROOMS, CLEAN SUPPLY AND OTHER SMALL ROOMS WITH NO DIMMING.



NOTES:

- 2X2 CEILING LIGHTS FED FROM CRITICAL POWER PANEL. DOWN LIGHTS FED FROM NORMAL POWER PANEL.

TYPICAL INFUSION CHAIR

② BASIS OF DESIGN TYPICAL ROOM LIGHTING CONTROL RISERS (OR APPROVED EQUAL)
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U.V.M.C. 75 HOLLY COURT
PHARMACY EXPANSION PROJECT
ELECTRICAL - EQUIP. SCHEDULE, LIGHTING
WIRING DIAGRAMS & DETAILS

PROJECT TITLE	U.V.M.C. 75 HOLLY COURT PHARMACY EXPANSION PROJECT
SHEET TITLE	ELECTRICAL - EQUIP. SCHEDULE, LIGHTING WIRING DIAGRAMS & DETAILS
SCALE	AS NOTED
PROJECT NO.	20258
SHEET NO.	

E6.1

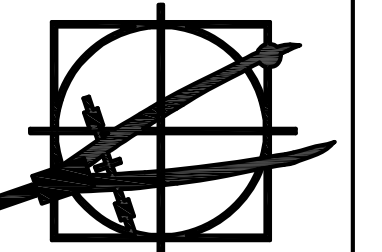
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KIRICK ENGINEERING ASSOCIATES, P.C.
Electrical / Telecom Consulting

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WILLISTON VERMONT
REORGANIZATION PROJECT

SCALE:	AS NOTED
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DRAWN BY:	TPB
CHECKED BY:	MPK
PROJECT:	2025

SHEET TITLE:
Title Sheet,
Drawing Legend,
Drawing Index &
General Notes

DRAWING NO.
T0.0

TELECOMMUNICATIONS	
TYPE	DESCRIPTION
WAP UVMC	PROPOSED UVMC NETWORK WIRELESS ACCESS POINT DEVICE (WAP) LOCATION. EACH PROPOSED WAP SHALL RECEIVE TWO (2) COPPER HORIZONTAL DISTRIBUTION CABLES. REFER TO THE SPECIFICATIONS FOR THE CABLE TYPE THAT SHALL BE INSTALLED. THE CONTRACTOR SHALL COORDINATE EXACT MOUNTING LOCATION OF PROPOSED WAP WITH THE OWNER PRIOR TO ROUGH-IN. C - DESIGNATES A CEILING MOUNTED DEVICE. W - DESIGNATES A WALL-MOUNTED DEVICE.
	REPRESENTS A PROPOSED VIDEO SURVEILLANCE CAMERA LOCATION. THE CONTRACTOR SHALL FURNISH AND INSTALL THE PROPOSED DATA CABLING TO THE CAMERA LOCATION. CAMERA AND CAMERA INSTALLATION BY OTHERS. COORDINATE THE EXACT CAMERA LOCATION WITH THE SECURITY PLANS AND SECURITY VENDOR PRIOR TO ROUGH-IN. EACH PROPOSED CAMERA SHALL RECEIVE (1) COPPER HORIZONTAL DISTRIBUTION CABLE.
	PROPOSED UVMC NETWORK TELECOMMUNICATIONS DATA DROP LOCATION (WALL-MOUNTED). NO SUBSCRIPT DENOTES MOUNTING HEIGHT OF 18" AFF TO CENTER OF FACEPLATE. "AB" DENOTES MOUNTING ABOVE COUNTER TOP. "X" DENOTES SPECIFIC MOUNTING HEIGHT AFF. REFER TO FLOOR PLANS FOR REQUIRED QUANTITY OF COPPER HORIZONTAL DISTRIBUTION CABLING TO BE INSTALLED AT EACH PROPOSED TELECOM OUTLET LOCATION. 2D, FOR EXAMPLE - DESIGNATES THE QUANTITY OF DATA CABLES REQUIRED. THE TYPICAL OUTLET INSTALLATION SHALL BE CONCEALED WITHIN EXISTING WALLS. "S" DESIGNATES A SURFACE MOUNTED OUTLET LOCATION.
	PROPOSED PHARMACY LINE NETWORK TELECOMMUNICATIONS DATA DROP LOCATION (WALL-MOUNTED). NO SUBSCRIPT DENOTES MOUNTING HEIGHT OF 18" AFF TO CENTER OF FACEPLATE. "AB" DENOTES MOUNTING ABOVE COUNTER TOP. "X" DENOTES SPECIFIC MOUNTING HEIGHT AFF. REFER TO FLOOR PLANS FOR REQUIRED QUANTITY OF COPPER HORIZONTAL DISTRIBUTION CABLING TO BE INSTALLED AT EACH PROPOSED TELECOM OUTLET LOCATION. 2D, FOR EXAMPLE - DESIGNATES THE QUANTITY OF DATA CABLES REQUIRED. THE TYPICAL OUTLET INSTALLATION SHALL BE CONCEALED WITHIN EXISTING WALLS. "S" DESIGNATES A SURFACE MOUNTED OUTLET LOCATION.
	PROPOSED UVMC NETWORK WALL-MOUNTED TELEPHONE. EACH NEW WALL PHONE LOCATION SHALL RECEIVE ONE (1) NEW COPPER HORIZONTAL DISTRIBUTION CABLE. REFER TO SPECIFICATIONS FOR CABLE TYPE THAT SHALL BE INSTALLED. MOUNT SO THE CENTER OF THE FACEPLATE IS 52 INCHES AFF.
	PROPOSED CONDUIT PATHWAY.
	PROPOSED PULL BOX. REFER TO THE FLOOR PLANS FOR REQUIREMENTS
	PROPOSED OUTSIDE PLANT CONDUIT DUCT BANK. REFER TO SITE AND FLOOR PLANS.
	PROPOSED CONDUIT SWEEP DOWN
	PROPOSED CONDUIT SWEEP UP
	REPRESENTS A TELECOMMUNICATIONS CABLE ONLY FURNITURE SYSTEM UTILITY POLE THAT SHALL BE FURNISHED AND INSTALLED BY THE FURNITURE VENDOR. THE POLE SHALL BE USED TO PROVIDE DATA CABLING ACCESS INTO THE NEW OPEN OFFICE FURNITURE SYSTEM POD GROUPINGS. THE TELECOMMUNICATIONS ONLY UTILITY POLES ARE SHOWN ON THESE PLANS FOR CLARITY AND COORDINATION PURPOSES. THE CONTRACTOR SHALL COORDINATE WITH FURNITURE VENDOR AS IT PERTAINS TO CABLE PULLING INTO THE FURNITURE PODS.
	PROPOSED FIRESTOP DEVICE
	PROPOSED HANDHOLE
	PROPOSED CONCRETE ENCASEMENT
	PROPOSED FLOOR-MOUNTED EQUIPMENT RACK
	EXISTING FLOOR-MOUNTED EQUIPMENT RACK
	EXISTING WIRELESS ACCESS POINT (WAP) DEVICE
	EXISTING TELECOM OUTLET LOCATION. D - DESIGNATES DATA CABLE, V - DESIGNATES VOICE CABLE, 2 FOR EXAMPLE - DESIGNATES THE QUANTITY OF EACH CABLE TYPE.
	EXISTING CONDUIT PATHWAY
	EXISTING PULLBOX

GENERAL CONSTRUCTION NOTES:	
A. THE CONTRACTOR SHALL REFER TO THE DESIGN DRAWINGS AND SPECIFICATIONS FOR SPECIFIC WALL PENETRATION AND PATHWAY INFORMATION.	H. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL PATHWAY SUPPORT STRUCTURES (I.E. CONDUIT, CABLE TRAY, FREE AIR CABLING SUPPORTS, ETC.) FOR THE INSTALLATION OF BOTH HORIZONTAL AND VERTICAL PATHWAY RUNS. SUPPORT STRUCTURE MAY INCLUDE, BUT IS NOT LIMITED TO UNISTRUT, THREADED ROD, CONDUIT CLAMPS, AND OTHER INDUSTRY STANDARD AND CODE COMPLIANT SUPPORT HARDWARE.
B. ALL INTERIOR WALLS ARE GYPSUM BOARD IN 75/79 SUITES. INTERIOR WALLS THAT EXTEND UP TO THE ROOF ARE NOTED ON THE PLAN VIA A FIRESTOP KEYED NOTE. ALL OTHER INTERIOR WALLS TERMINATE JUST ABOVE THE ACCESSIBLE CEILINGS.	I. ALL NEW NETWORK SYSTEM CABLING AS INDICATED ON THESE DESIGN DRAWINGS AND SPECIFICATIONS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO INCLUDE ALL CABLE TERMINATIONS AND TESTING, AS WELL AS FURNISHING AND INSTALLING ALL CABLE TERMINATION HARDWARE.
C. THE CONTRACTOR SHALL FURNISH AND INSTALL PROPOSED HORIZONTAL DISTRIBUTION DATA CABLING, AND ASSOCIATED COMPONENTS, TO INCLUDE BUT NOT BE LIMITED TO CABLE SUPPORT SYSTEMS, TERMINATION HARDWARE AND THE BONDING & GROUNDING SYSTEM HARDWARE IN APPROPRIATE QUANTITIES.	J. REGARDING CONDUIT AND PULL BOX INSTALLATION, THE CONTRACTOR SHALL FURNISH AND INSTALL UNISTRUT OR SIMILAR SUPPORT SYSTEM TO INCLUDE PIPE CLAMPS, CONDUIT, CABLE TRAY AND PULL BOX SUPPORT SYSTEMS SHALL BE HUNG FROM THE BUILDING STRUCTURAL SUPPORT SYSTEMS IN A TRAPZIE STYLE INSTALLATION. PERTAINING TO THE CONDUIT INSTALLATION, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL HARDWARE AND FITTINGS FOR A COMPLETE INSTALLATION AS REQUIRED TO INCLUDE HORIZONTAL AND VERTICAL FITTINGS TO ACCOMMODATE HORIZONTAL AND VERTICAL TRANSITIONS THAT MAY BE REQUIRED IN THE CONDUIT RUN FROM SOURCE TO DESTINATION. REFER TO TYPICAL DETAIL SHEETS AND TELECOMMUNICATIONS SPECIFICATIONS.
D. THE MAJORITY OF THE PROPOSED COPPER HORIZONTAL DISTRIBUTION CABLING SHALL ROUTE "FREE AIR" ABOVE THE ACT CEILINGS FROM SOURCE TO DESTINATION AND SHALL BE SUPPORTED WITH J-HOOKS, DEPENDING ON THE CABLE ROUTE. J-HOOKS MAY BE MOUNTED TO THE WALL, ABOVE THE ACT CEILINGS, OR MOUNTED TO THE BUILDING STRUCTURAL SUPPORT SYSTEMS AT THE ROOF LEVEL. ANY CABLING THAT IS REQUIRED TO BE INSTALLED IN PATHWAYS, SHALL BE IDENTIFIED ON THE DESIGN DRAWINGS VIA KEYED NOTES.	K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING THE APPROPRIATE QUANTITIES OF ALL THE PROPOSED COMPONENTS FOR THIS PROJECT. TO INCLUDE, BUT NOT BE LIMITED TO CABLING, INNERDUCT, CONDUIT, CONDUIT SUPPORT SYSTEMS, CABLE TERMINATION HARDWARE, J-HOOKS, BONDING & GROUNDING CONDUCTORS AND FASTENERS. REFER TO THE DESIGN DRAWINGS TO DETERMINE THE QUANTITY OF COMPONENTS REQUIRED FOR THIS PROJECT.
E. THE TYPICAL HEIGHT OF THE BUILDING FROM FINISHED FLOOR TO THE ROOF LEVEL IS APPROXIMATELY 18'-10".	L. THE CONTRACTOR SHALL REPLACE EACH EXISTING ACOUSTICAL CEILING TILE THAT NEEDS TO BE REMOVED DURING INSTALLATION. ANY CEILING TILES THAT ARE DAMAGED BY THE CONTRACTOR DURING THE REMOVAL OR REPLACEMENT PROCESS, SHALL BE REPLACED IN KIND, WITH A NEW APPROPRIATELY SIZED CEILING TILE THAT MATCHES THE OTHER ACOUSTICAL CEILING TILES WITHIN THE IMMEDIATE VICINITY OF THE CEILING TILE BEING REPLACED. THE CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING NEW CEILING TILES AS REQUIRED.
F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORING REQUIRED TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ROUTING OF THE NEW HORIZONTAL DISTRIBUTION DATA CABLING THROUGH EXISTING WALLS AND CEILINGS. THE FLOOR PLANS IDENTIFY THE SOURCE LOCATION FOR EACH PROPOSED HORIZONTAL DISTRIBUTION DATA CABLE, AND PROVIDE THE RECOMMENDED CABLE ROUTE FROM THE SOURCE TO THE DESTINATION LOCATION. THE CONTRACTOR SHALL FURNISH AND INSTALL AN APPROPRIATE QUANTITY OF WALL AND CEILING PENETRATIONS AS REQUIRED FOR A COMPLETE INSTALLATION. ALL NEW PENETRATIONS SHALL BE COORDINATED IN THE FIELD BY THE CONTRACTOR. ALL NEW PENETRATIONS SHALL BE FIRE CALKED, REGARDLESS OF THE WALL OR CEILING RATING WITH APPROPRIATE CODE COMPLIANT METHODS AND MEASURES.	
G. THE NEW WIRELESS ACCESS POINT DEVICES WILL BE PROVIDED TO THE CONTRACTOR BY THE OWNER. THE CONTRACTOR SHALL INSTALL EACH PROPOSED WIRELESS ACCESS POINT DEVICE AND ITS ASSOCIATED MOUNTING HARDWARE, EACH WIRELESS ACCESS POINT DEVICE WILL CONTAIN THE PROPER IDENTIFICATION SO THAT THE CONTRACTOR CAN CORRECTLY MOUNT EACH OF THE PROPOSED WIRELESS ACCESS POINT DEVICES AT THE APPROPRIATE LOCATIONS. THE CONTRACTOR SHALL COORDINATE WITH UVMC'S INFORMATION SERVICES GROUP TO OBTAIN THE PROPOSED WIRELESS ACCESS POINT DEVICES AS NEEDED DURING CONSTRUCTION. REFER TO THE FLOOR PLANS REGARDING INFORMATION ASSOCIATED WITH THE TYPE OF MOUNTING HARDWARE THAT THE CONTRACTOR SHALL FURNISH AND INSTALL AT EACH PROPOSED WIRELESS ACCESS POINT DEVICE LOCATION. IN ADDITION, THE CONTRACTOR SHALL PLUG THE NEW COPPER HORIZONTAL DISTRIBUTION CABLE INTO THE NEW WIRELESS ACCESS POINT DEVICE AT ALL PROPOSED WIRELESS ACCESS POINT LOCATIONS. AT EACH OF THE PROPOSED WIRELESS ACCESS POINT LOCATIONS, THE NEW CABLING SHALL TERMINATE VIA "DIRECT CONNECTION".	

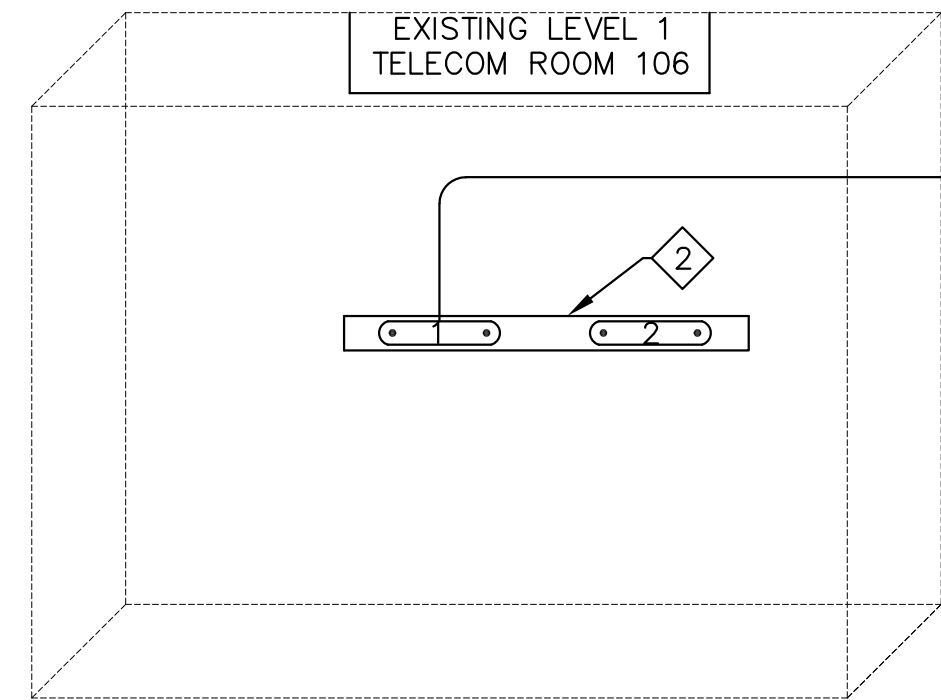
DRAWING INDEX	
SHEET NUMBER	SHEET NAME
T0.0	TITLE SHEET, DRAWING LEGEND, DRAWING INDEX AND GENERAL NOTES
T1.0	INTER & INTRA-BUILDING SINGLE MODE FIBER OPTIC ONE-LINE LOGICAL DIAGRAMS
T1.1	TELECOM BONDING & GROUNDING ONE-LINE LOGICAL DIAGRAM
T2.0	BUILDING 327 LEVEL 1 TELECOMMUNICATIONS PLAN
T2.1	OUTSIDE PLANT (OSP) INFRASTRUCTURE BUILDING 327 TO BUILDING (SUITE) 75
T2.2	BUILDING (SUITE) 75/79 LEVEL 1 TELECOMMUNICATIONS PLAN
T2.3	BUILDING (SUITE) 83/87 LEVEL 1 TELECOMMUNICATIONS PLAN
T3.0	TELECOMMUNICATIONS ROOM 106 - EXISTING CONDITIONS
T3.1	ENLARGED TELECOMMUNICATIONS ROOM 106 FLOOR PLAN & ELEVATION SHEET - PROPOSED
T4.0	PROJECT PHOTOS
T5.0	TRENCH, EXTERIOR BUILDING PENETRATION & TELECOM FACEPLATE DETAILS
T5.1	TYPICAL TELECOMMUNICATIONS DETAIL SHEET
T5.2	27 0543 UNDERGROUND DUCTS & RACEWAY FOR COMMUNICATIONS SYSTEMS SPECIFICATIONS
T5.3	27 0543 UNDERGROUND DUCTS & RACEWAY FOR COMMUNICATIONS SYSTEMS SPECIFICATIONS

75 HOLLY COURT

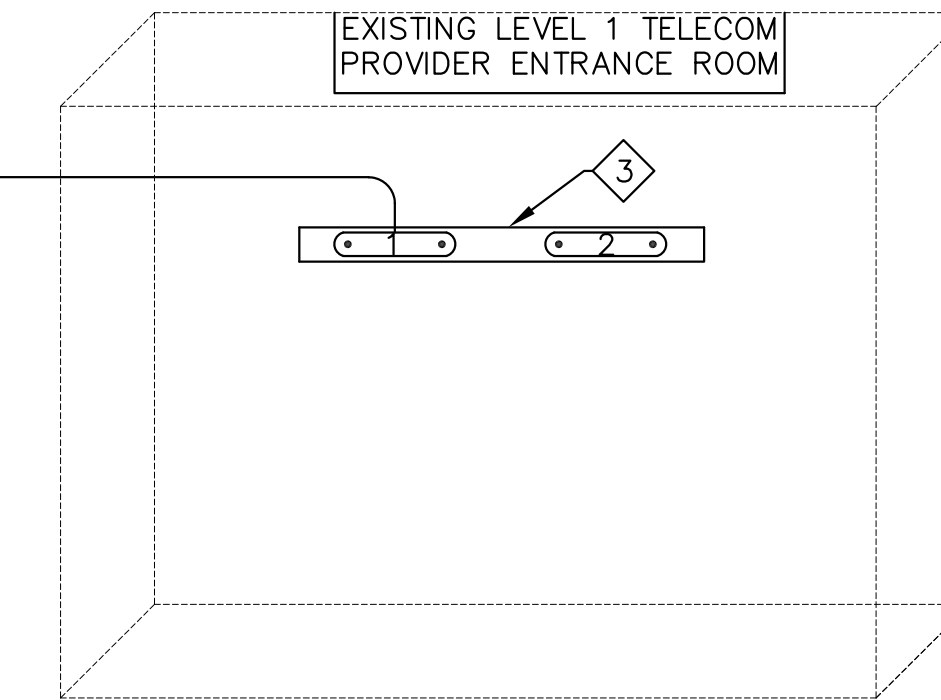
79 HOLLY COURT

83 HOLLY COURT

87 HOLLY COURT



Intra-Building Backbone Fiber Optic One-line Diagram Media Table			
From:	Fiber	Route	To:
87 Holly Court Telecom Provider Entrance Room	12-Strand SMF	Building Interior	75 Holly Court Telecommunications Room 106



12-STRAND INDOOR/OUTDOOR RISER RATED FIBER (1)
(REDUNDANT)

GENERAL NOTES THIS DETAIL:

- A. THIS LOGICAL DIAGRAM PROVIDES AN OVERVIEW OF THE PROPOSED REDUNDANT INTRA-BUILDING BACKBONE FIBER OPTIC CABLE THAT SHALL BE INSTALLED ON THE PROJECT. THIS PLAN SHALL BE USED IN CONJUNCTION WITH THE PROPOSED TELECOMMUNICATIONS FLOOR PLANS.
- B. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLE, HARDWARE AND ACCESSORIES NECESSARY TO INSTALL, TERMINATE, TEST AND LABEL EACH STRAND OF THE INTRA-BUILDING FIBER OPTIC BACKBONE CABLE PROPOSED FOR THE PROJECT.
- C. REFER TO SPECIFICATIONS FOR COMPONENT MANUFACTURER AND PART NUMBERS.

KEYED NOTES THIS SHEET:

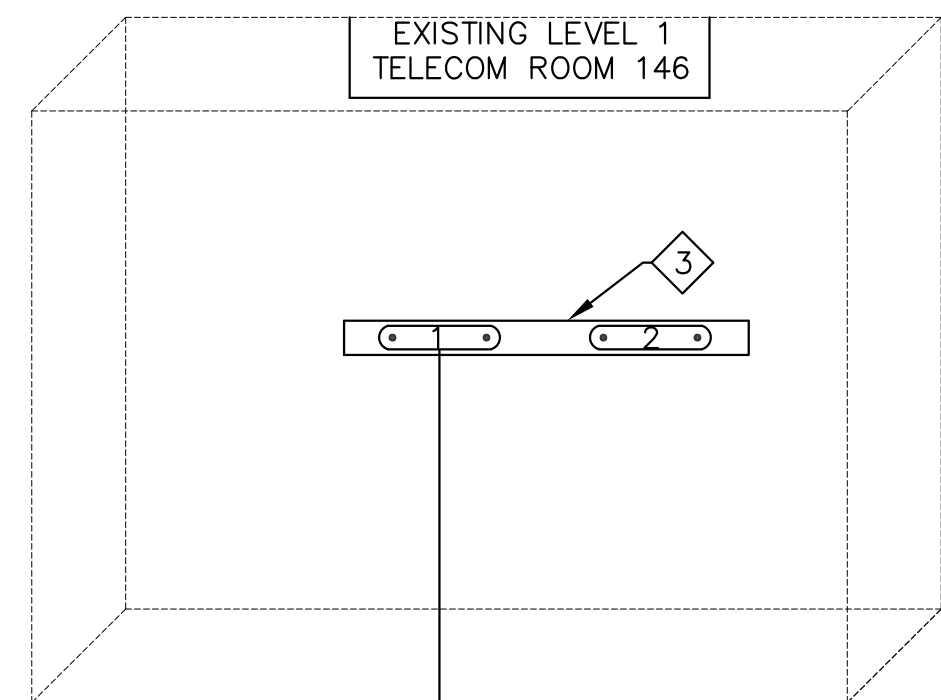
- 1. THE PROPOSED INTRA-BUILDING BACKBONE CABLE SHALL ROUTE INTERIOR WITHIN THE BUILDING FROM SOURCE TO DESTINATION. THE CABLE SHALL BE INSTALLED WITHIN A CONDUIT PATHWAY FROM SOURCE TO DESTINATION. THE MAJORITY OF THIS PATHWAY IS EXISTING. REFER TO THE FLOOR PLANS FOR ADDITIONAL INFORMATION.
- 2. REPRESENTS A NEW RACK-MOUNTED FIBER OPTIC CLOSET CONNECTOR HOUSING. THE HOUSING SHALL BE MOUNTED ONTO A NEW FLOOR-MOUNTED EQUIPMENT RACK. REFER TO SHEET T3.1.
- 3. REPRESENTS A NEW WALL-MOUNTABLE CLOSET CONNECTOR HOUSING. THE CONTRACTOR SHALL COORDINATE THE MOUNTING LOCATION WITH THE TELECOMMUNICATIONS SERVICE PROVIDER WHO WILL BE PROVIDING THE REDUNDANT CIRCUIT FROM THIS LOCATION INTO THE SUITE 75 UVMHC TELECOMMUNICATIONS ROOM VIA THIS BACKBONE CABLE THAT SHALL EXTEND THE SERVICE PROVIDER'S DEMARK INTO THE UVMHC TELECOMMUNICATIONS ROOM.

INTRA-BUILDING FIBER OPTIC ONE-LINE LOGICAL DIAGRAM

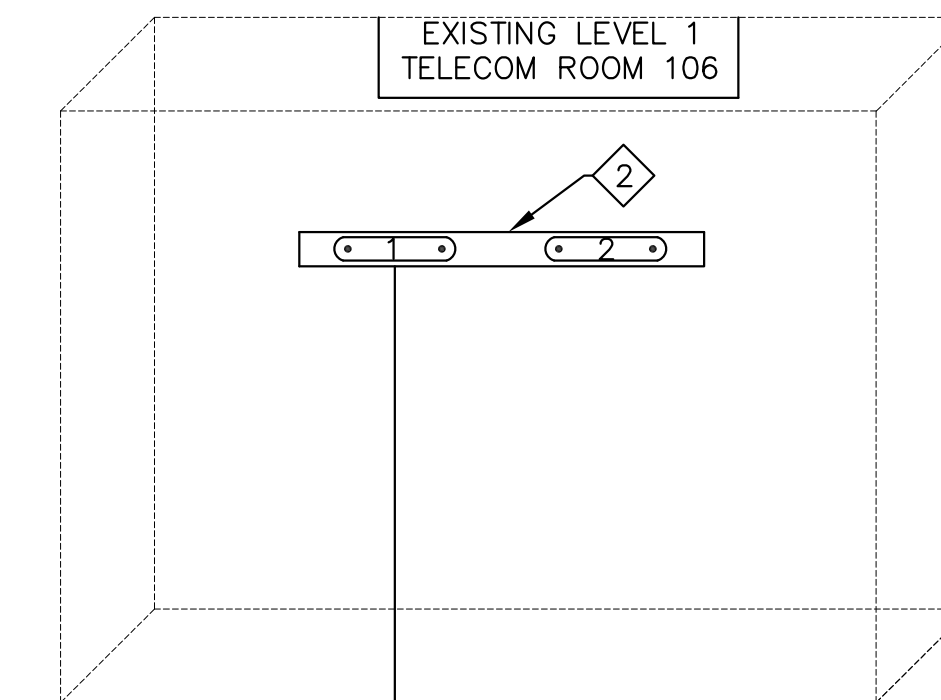
SCALE: NTS

327 HOLLY COURT

75 HOLLY COURT



Inter-Building Backbone Fiber Optic One-line Diagram Media Table			
From:	Fiber	Route	To:
327 Holly Court Telecommunications Room 146	12-Strand SMF	Building interior & Outside Plant	75 Holly Court Telecommunications Room 106



12-STRAND INDOOR/OUTDOOR RISER RATED FIBER (1)
(REDUNDANT)

GENERAL NOTES THIS DETAIL:

- A. THIS LOGICAL DIAGRAM PROVIDES AN OVERVIEW OF THE PROPOSED REDUNDANT INTER-BUILDING BACKBONE FIBER OPTIC CABLE THAT SHALL BE INSTALLED ON THE PROJECT. THIS PLAN SHALL BE USED IN CONJUNCTION WITH THE PROPOSED TELECOMMUNICATIONS FLOOR AND SITE PLANS.
- B. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLE, HARDWARE AND ACCESSORIES NECESSARY TO INSTALL, TERMINATE, TEST AND LABEL EACH STRAND OF THE INTER-BUILDING FIBER OPTIC BACKBONE CABLE PROPOSED FOR THE PROJECT.
- C. REFER TO SPECIFICATIONS FOR COMPONENT MANUFACTURER AND PART NUMBERS.

KEYED NOTES THIS SHEET:

- 1. THE PROPOSED INTER-BUILDING BACKBONE CABLE SHALL ROUTE INTERIOR WITHIN 327 HOLLY COURT FROM THE SOURCE LOCATION TO THE EXTERIOR WALL OF THE BUILDING, THEN TRANSITION TO AN OUTSIDE PLANT INFRASTRUCTURE IN ORDER TO GAIN ACCESS INTO 75 HOLLY COURT. ONCE INSIDE OF 75 HOLLY COURT, THE CABLE SHALL ROUTE INTERIOR WITHIN THE BUILDING TO THE DESTINATION LOCATION. THE CABLE SHALL BE INSTALLED WITHIN A CONDUIT PATHWAY FROM SOURCE TO DESTINATION.
- 2. REPRESENTS A NEW RACK-MOUNTED FIBER OPTIC CLOSET CONNECTOR HOUSING. THE HOUSING SHALL BE MOUNTED ONTO A NEW FLOOR-MOUNTED EQUIPMENT RACK. REFER TO SHEET T3.1.
- 3. REPRESENTS A NEW RACK-MOUNTED FIBER OPTIC CLOSET CONNECTOR HOUSING. THE HOUSING SHALL BE MOUNTED ONTO AN EXISTING FLOOR-MOUNTED EQUIPMENT RACK. REFER TO SHEET T2.0.

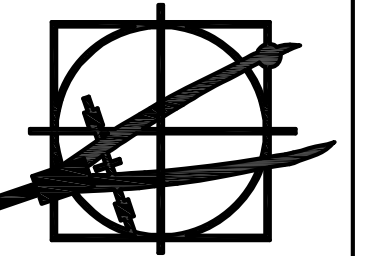
INTER-BUILDING FIBER OPTIC ONE-LINE LOGICAL DIAGRAM

SCALE: NTS

PROGRESS
DRAWINGS. FOR
PRICING ONLY.

KIRICK ENGINEERING ASSOCIATES, P.C.
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NO.	DATE	REVISION

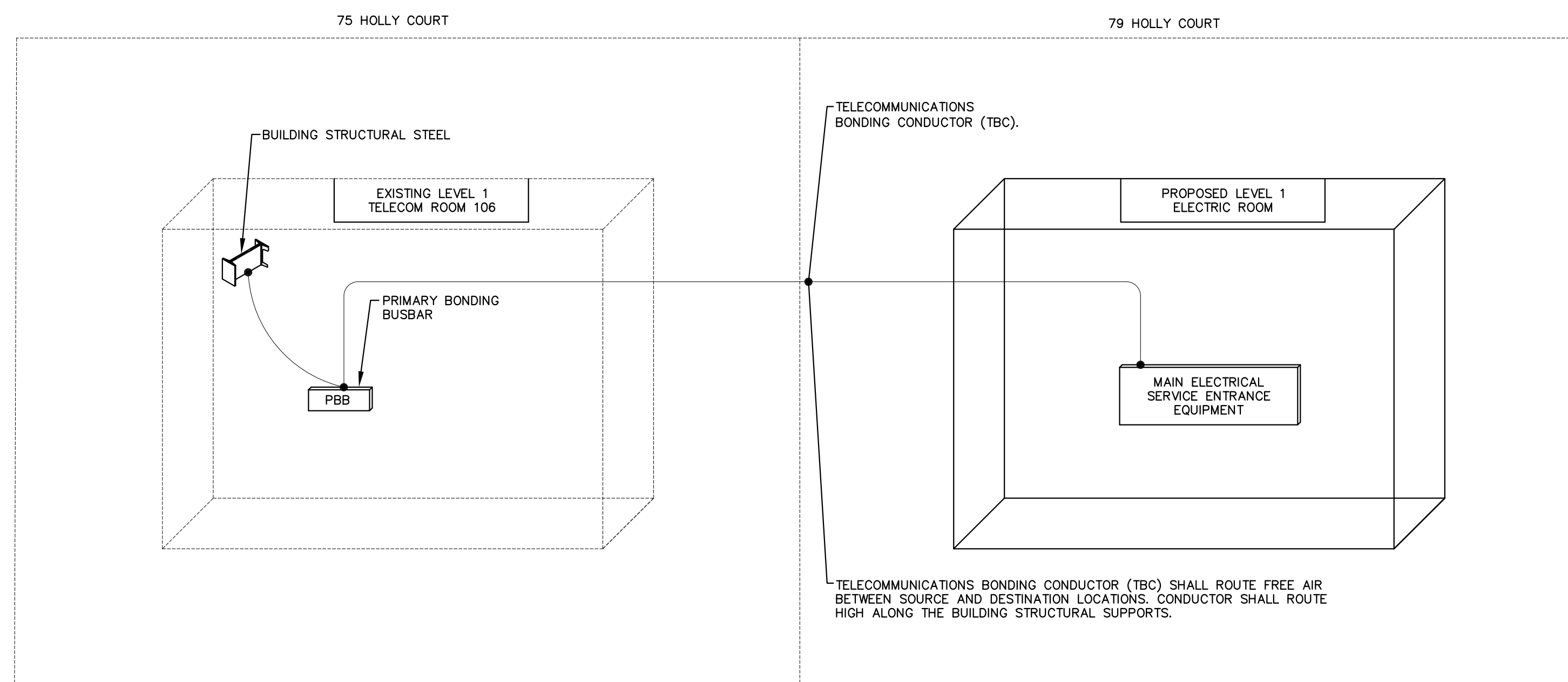
THE UNIVERSITY OF VERMONT MEDICAL CENTER
(75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
WILLISTON VERMONT

REORGANIZATION PROJECT

SCALE:	AS NOTED
DATE:	02/01/21
DRAWN BY:	TPB
CHECKED BY:	MPK
PROJECT:	2025

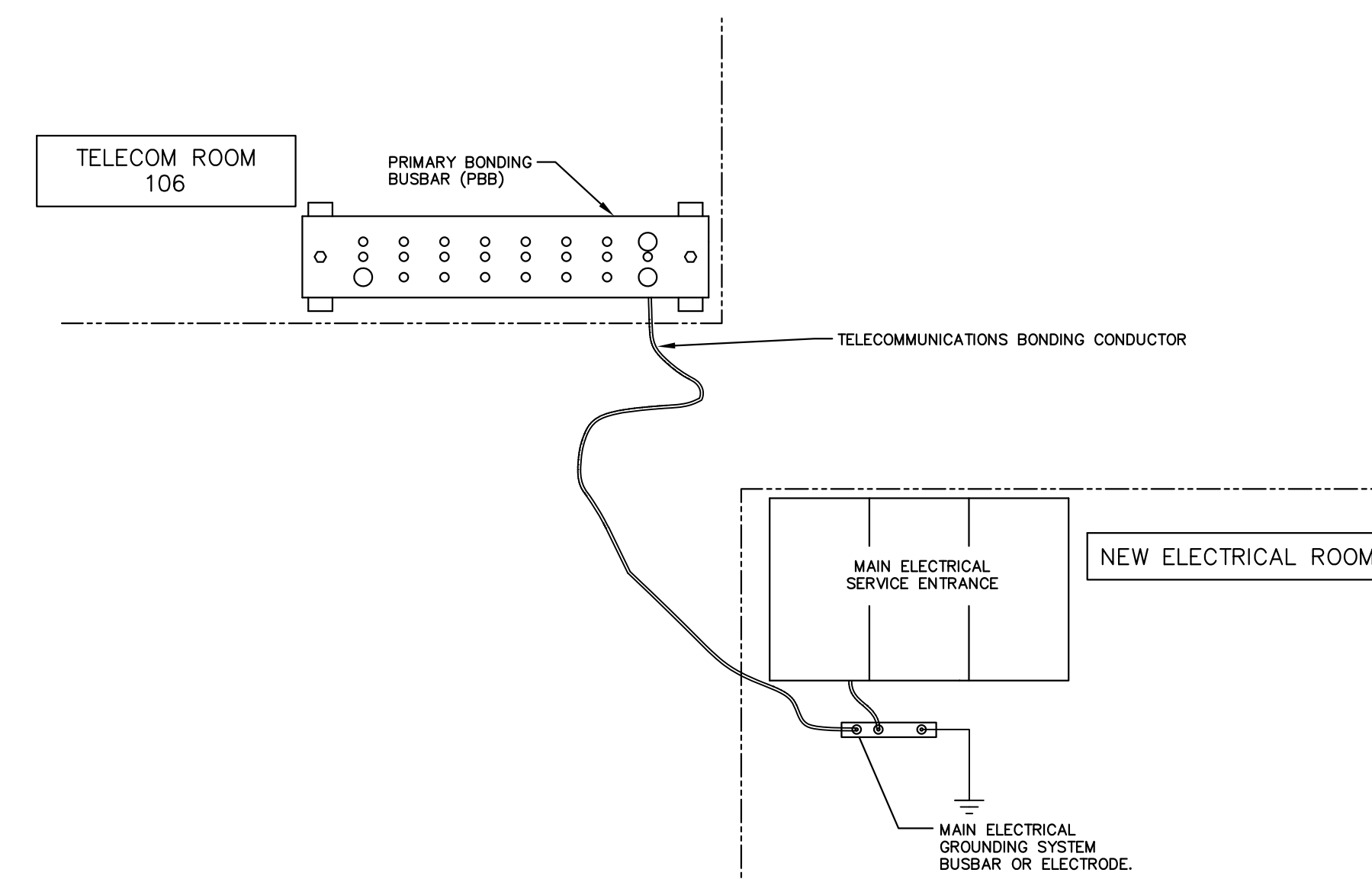
SHEET TITLE:
Inter & Intra-Building
Single Mode
Fiber Optic
One-Line Logical
Diagrams

DRAWING NO.
T1.0



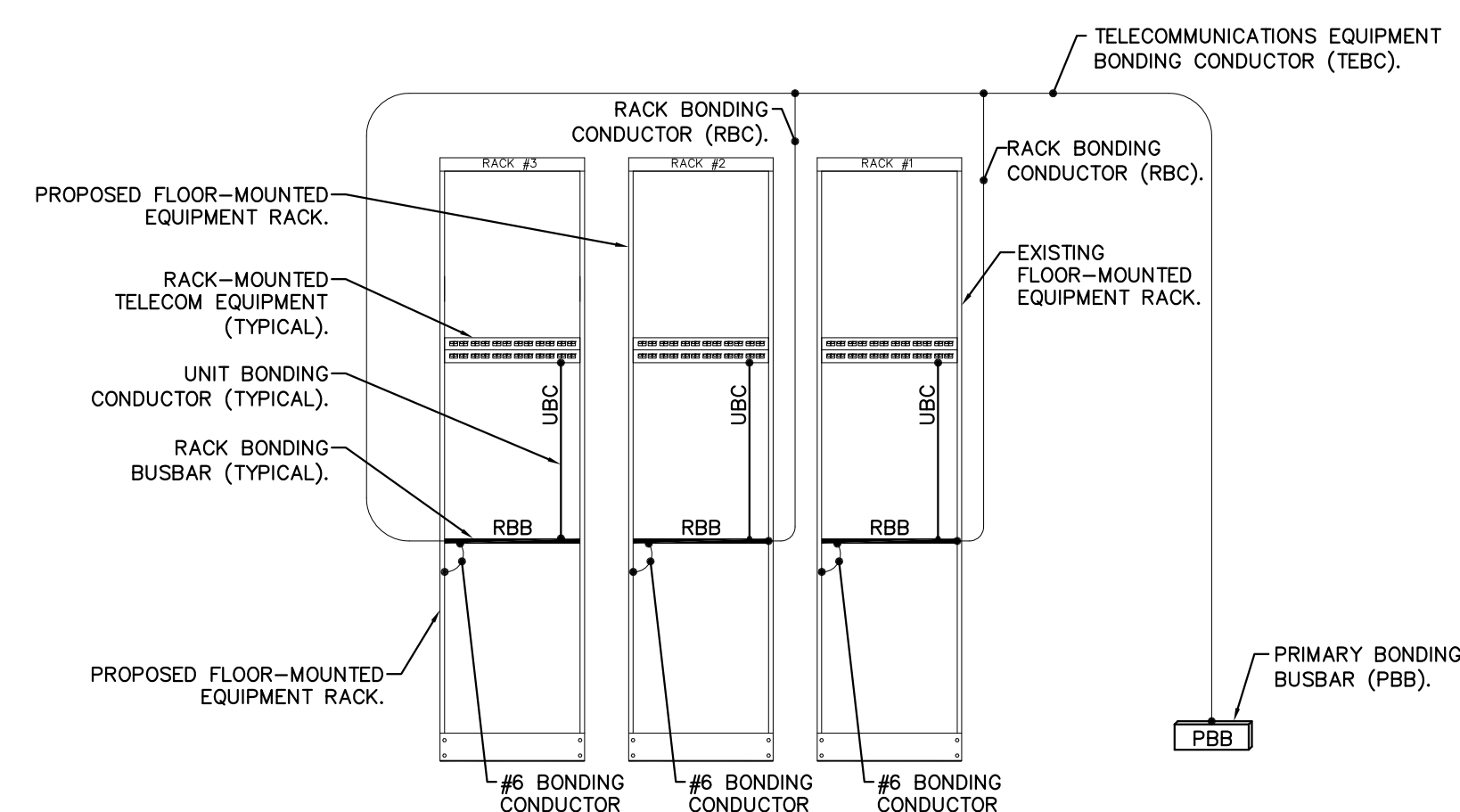
TELECOMMUNICATIONS BONDING AND GROUNDING ONE-LINE LOGICAL DIAGRAM

SCALE: NTS



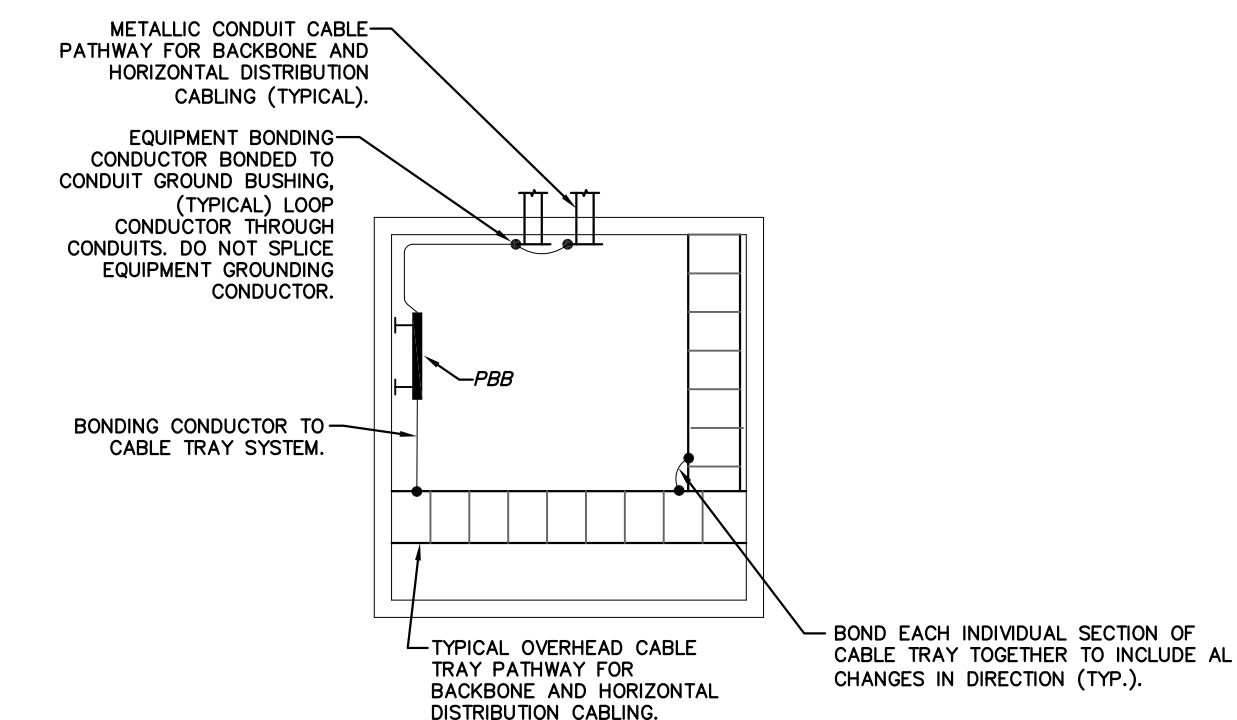
PBB & MAIN ELECTRICAL SERVICE ENTRANCE BONDING CONNECTION DETAIL

SCALE: NTS



RBB TO PBB BONDING CONNECTION DETAIL

SCALE: NTS



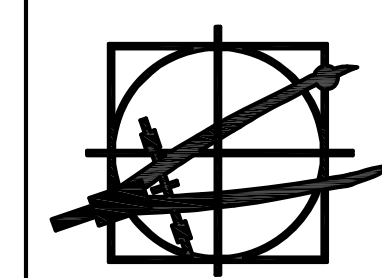
CABLE SUPPORT OR PBB BONDING CONNECTION DETAIL

SCALE: NTS

GENERAL NOTES THIS SHEET:
 A. WITH REGARDS TO THE INSTALLATION OF THE TELECOMMUNICATIONS BONDING AND GROUNDING SYSTEM, THE CONTRACTOR SHALL USE THIS ONE-LINE LOGICAL DIAGRAM AND DETAIL SHEET IN CONJUNCTION WITH TELECOM SPECIFICATIONS SECTION 27 0526 (BONDING AND GROUNDING FOR COMMUNICATIONS SYSTEMS) TO ENSURE A COMPLETE INSTALLATION.

PROGRESS DRAWINGS FOR PRICING ONLY.

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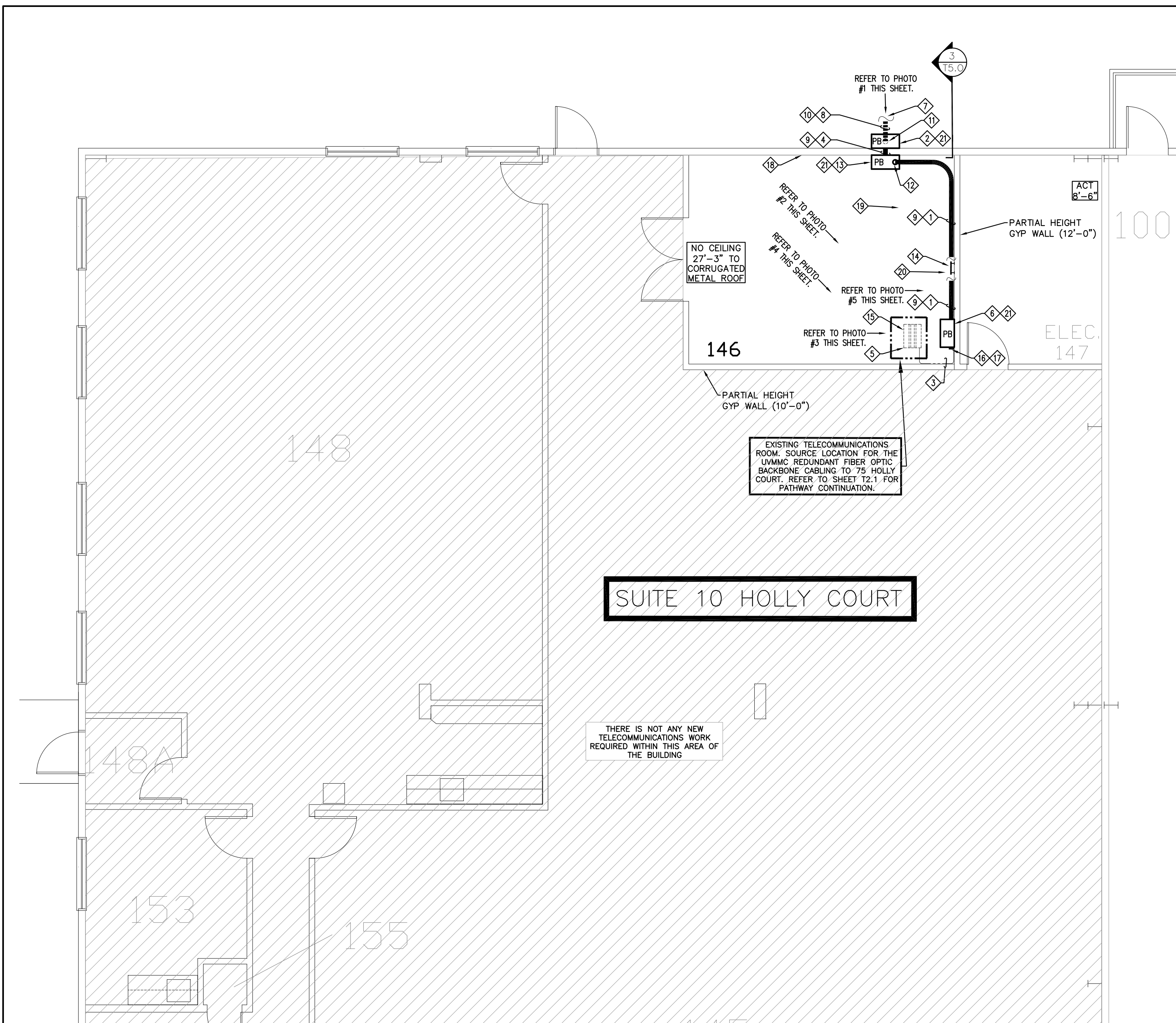
NO.	DATE	REVISION

THE UNIVERSITY OF VERMONT MEDICAL CENTER
 (75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
 WILLISTON VERMONT
 REORGANIZATION PROJECT

SCALE:	AS NOTED
DATE:	02/01/21
DRAWN BY:	TPB
CHECKED BY:	MPK
PROJECT:	2025

SHEET TITLE:
Telecom Bonding & Grounding One-Line Logical Diagram

DRAWING NO.
T1.1



- ◇ KEYED NOTES THIS SHEET:
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 4-INCH DIAMETER EMT CONDUIT TO ROUTE THE NEW INTER-BUILDING REDUNDANT FIBER OPTIC CABLE FROM THE EXISTING EQUIPMENT RACK IN ROOM 146 TO THE WEST EXTERIOR WALL OF THE SPACE. THE NEW CONDUIT SHALL ROUTE ALONG THE EXISTING WALLS APPROXIMATELY AS SHOWN. THE CONTRACTOR SHALL SUPPORT THE NEW CONDUIT TO THE WALL WITH UNISTRUT OR SIMILAR SUPPORTS, TO INCLUDE PIPE CLAMPS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE CONDUIT SUPPORTS TO THE WALL OF THE BUILDING, INCLUDING ANY WALL BLOCKING THAT MAY BE REQUIRED. THE CONDUIT SHALL BE MOUNTED AT APPROXIMATELY 7'-0" ABOVE FINISHED FLOOR. CONDUIT SUPPORTS MUST BE PLACED AT MAXIMUM 4'-FT. INTERVALS ALONG THE ENTIRE LENGTH OF THE INSTALLATION. THIS PATHWAY SHALL BE USED TO ROUTE THE PROPOSED REDUNDANT FIBER OPTIC INTER-BUILDING BACKBONE CABLE FROM 327 HOLLY COURT TELECOMMUNICATIONS ROOM 146 TO THE 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 24"(L)X24"(W)X12"(H) WEATHERPROOF PULL BOX MOUNTED EXTERIOR TO THE BUILDING. THE PULL BOX SHALL BE USED AS A PULLING LOCATION FOR CABLING INSTALLATION. MOUNT THE PULL BOX TO THE EXTERIOR OF THE BUILDING WITH A MINIMUM OF (2) UNISTRUT SUPPORTS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS TO THE EXTERIOR OF THE BUILDING. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE COVER TO ALLOW ACCESS INTO THE BOX FROM THE EXTERIOR OF THE BUILDING.
 - THE CONTRACTOR SHALL ROUTE THE INTER-BUILDING REDUNDANT FIBER OPTIC CABLING WITHIN A PLASTIC INNERDUCT (PLENUM-GUARD) AT THE POINT THAT THE CABLING EDGES THE WALL CONDUIT TO THE EXISTING EQUIPMENT RACK. THE CONTRACTOR SHALL FURNISH AND INSTALL CABLE SUPPORT (U-HOOKS) AS REQUIRED TO SUPPORT THE CABLE AND PATHWAY FROM THE WALL SLEEVE TO THE EXISTING EQUIPMENT RACK.
 - THE CONTRACTOR SHALL CORE THROUGH THE EXISTING EXTERIOR WALL OF THE BUILDING, AND FURNISH AND INSTALL A 4-INCH DIAMETER RIGID GALVANIZED CONDUIT SLEEVE. THE NEW CABLING SHALL ROUTE THROUGH THE SLEEVE TO ENTER INTO THE EXTERIOR MOUNTED PULL BOX. THE BUILDING PENETRATION SHALL BE MADE WATER TIGHT WITH THE USE OF LINK SEAL OR EQUIVALENT WATERPROOFING MATERIAL.
 - REPRESENTS THE APPROXIMATE LOCATION OF AN EXISTING FLOOR-MOUNTED TELECOMMUNICATIONS EQUIPMENT RACK.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 24"(L)X24"(W)X12"(H) PULL BOX MOUNTED TO THE WALL APPROXIMATELY AS SHOWN. THE PULL BOX SHALL BE USED AS A PULLING LOCATION FOR CABLING INSTALLATION. MOUNT THE PULL BOX WITH A MINIMUM OF (2) UNISTRUT SUPPORTS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS TO THE EXTERIOR OF THE BUILDING. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE FRONT COVER TO ALLOW ACCESS INTO THE BOX. MOUNT BOX SO THAT THE BOTTOM OF THE BOX IS 6'-0" ABOVE FINISHED FLOOR.
 - REFER TO SHEET T2.1 FOR PATHWAY CONTINUATION.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL (1) NEW 4-INCH DIAMETER CONDUIT TO ROUTE FROM THE EXTERIOR PULL BOX MOUNTED TO 327 HOLLY COURT AND TERMINATING INTO A HANDHOLE "A" THAT IS LOCATED TO THE WEST OF THE WESTERLY BUILDING 327 PARKING LOT. THE CONDUIT SHALL EGRESS FROM THE BOTTOM OF THE EXTERIOR MOUNTED PULL BOX AND EXTEND BELOW GRADE PRIOR TO TRANSITIONING HORIZONTALLY AND THEN ROUTING BELOW GRADE TO THE HANDHOLE. BEGINNING AT EXIT POINT OF THE PULL BOX, AND EXTENDING THROUGH THE VERTICAL AND HORIZONTAL BELOW GRADE TRANSITIONAL SWEEP THE CONDUIT TYPE SHALL BE RIGID GALVANIZED. THE CONTRACTOR SHALL SUPPORT THE NEW CONDUIT TO THE EXTERIOR OF THE BUILDING WITH UNISTRUT OR SIMILAR SUPPORTS, TO INCLUDE PIPE CLAMPS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE CONDUIT SUPPORTS TO THE EXTERIOR OF THE BUILDING. THE CONDUIT SUPPORTS MUST BE PLACED AT MAXIMUM 4'-FT. INTERVALS, ONCE BELOW FINISHED GRADE, THE CONTRACTOR SHALL FURNISH AND INSTALL A COUPLING TO TRANSITION THE CONDUIT FROM RIGID GALVANIZED TO SCHEDULE 40 PVC. THE SCHEDULE 40 PVC MATERIAL SHALL BE INSTALLED TO THE HANDHOLE "A". THIS PATHWAY SHALL BE USED TO ROUTE THE PROPOSED INTER-BUILDING FIBER OPTIC BACKBONE CABLE FROM THE 327 HOLLY COURT TELECOMMUNICATIONS ROOM 146 TO THE 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL MAXCELL FABRIC INNERDUCTS ORIGINATING AT THE WALL-MOUNTED PULL BOX IDENTIFIED IN KEYED NOTE #6 AND EXTENDING INTO THE EXTERIOR MOUNTED PULL BOX IDENTIFIED IN KEYED NOTE #2 THIS SHEET. THE INNERDUCTS SHALL NOT EXTEND THROUGH ANY PULL BOXES THAT ARE PART OF THIS CABLE PATHWAY. INSTEAD THE INNERDUCTS WILL TERMINATE SEVERAL INCHES INTO EACH PULL BOX (BOTH ENTERING AND EXITING) CREATING A GAP IN THE INNERDUCTS WITHIN EACH PULL BOX TO ALLOW FOR A CABLE SERVICE LOOP TO BE INSTALLED WITHIN THE PULL BOX. PROVIDE A SERVICE LOOP LENGTH OF (3) CABLE LOOPS AROUND THE INTERIOR PERIMETER OF THE PULL BOX. THE CONTRACTOR SHALL FURNISH AND INSTALL (2) 4" 3-CELL PREMISE FABRIC INNERDUCTS AS MANUFACTURED BY MAXCELL, PART NUMBER MXP4003. EACH OF THE TWO 3-CELL FABRIC INNERDUCTS SHALL HAVE A UNIQUE THREAD IDENTIFICATION COLOR FOR EASY IDENTIFICATION AT EACH END OF THE INNERDUCT RUN. INNERDUCT ORDER LENGTH REQUIREMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. PROVIDE ALL REQUIRED INSTALLATION ACCESSORIES TO INSTALL THE MAXCELL PRODUCT AS REQUIRED.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL MAXCELL FABRIC INNERDUCTS ORIGINATING AT THE PULL BOX THAT IS MOUNTED EXTERIOR TO THE BUILDING OF 327 HOLLY COURT (REFER TO KEYED NOTE #2 THIS SHEET) AND EXTENDING INTO HANDHOLE "A". TERMINATE THE INNERDUCTS SEVERAL INCHES INTO THE PULL BOX AND SEVERAL INCHES BEYOND THE CONDUIT TERMINATION LOCATION WITHIN HANDHOLE "A". THE INNERDUCTS SHALL TERMINATE WITHIN THE PULL BOX AND HANDHOLE TO ALLOW FOR A CABLE SERVICE LOOP TO BE INSTALLED WITHIN EACH PULL POINT. PROVIDE (3) CABLE LOOPS AROUND THE PULL BOX TO SERVE AS A SERVICE LOOP WITHIN THE PULL BOX. THE CONTRACTOR SHALL FURNISH AND INSTALL (2) 4" 3-CELL EDGE DETECTABLE FABRIC INNERDUCTS AS MANUFACTURED BY MAXCELL, PART NUMBER MXP8363. EACH OF THE TWO 3-CELL FABRIC INNERDUCTS SHALL HAVE A UNIQUE THREAD IDENTIFICATION COLOR FOR EASY IDENTIFICATION AT EACH END OF THE INNERDUCT RUN. INNERDUCT ORDER LENGTH REQUIREMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. PROVIDE ALL REQUIRED INSTALLATION ACCESSORIES TO INSTALL THE MAXCELL PRODUCT AS REQUIRED.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL FOAM DUCT-SEALING SYSTEM FOR A 4-INCH DIAMETER CONDUIT AS MANUFACTURED BY POLYWATER FST DUCT SEALANT, PART NUMBER FST-250KIT. THE CONTRACTOR SHALL INSTALL THE SEALANT PER MANUFACTURER'S INSTRUCTIONS IN ORDER TO MEET NEC CODE REQUIREMENTS.
 - SWEEP THE CONDUIT DOWN INTO THE PULL BOX AT THIS APPROXIMATE LOCATION.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 24"(L)X24"(W)X12"(H) PULL BOX MOUNTED TO THE WALL APPROXIMATELY AS SHOWN. THE PULL BOX SHALL BE USED AS A PULLING LOCATION FOR CABLING INSTALLATION. MOUNT THE PULL BOX WITH A MINIMUM OF (2) UNISTRUT SUPPORTS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS TO THE EXTERIOR OF THE BUILDING. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE FRONT COVER TO ALLOW ACCESS INTO THE BOX.
 - REPRESENTS AND EXISTING TELECOMMUNICATIONS PRIMARY BONDING BUSBAR (PBB). THIS PBB IS MOUNTED NEAR THE FINISHED FLOOR ELEVATION.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL A RACK-MOUNTED BUSBAR (RBB) AND INSULATOR BLOCKS ONTO THIS EXISTING FLOOR-MOUNTED EQUIPMENT RACK. THE BUSBAR AND INSULATOR BLOCKS SHALL BE AS MANUFACTURED BY CPI, PART NUMBERS 10610-019 AND 40157-001. MOUNT THE BUSBAR APPROXIMATELY 15 RACK UNITS UP FROM THE BOTTOM OF THE EQUIPMENT RACK. IN ADDITION, THE CONTRACTOR SHALL FURNISH AND INSTALL A TELECOMMUNICATIONS EQUIPMENT BONDING CONDUCTOR (TEBC) FROM THE RACK BONDING BUSBAR TO THE PRIMARY BONDING BUSBAR LOCATED WITHIN THE TELECOMMUNICATIONS ROOM THAT IS IDENTIFIED IN KEYED NOTE #14. REFER TO SHEET T2.1 FOR THE TELECOMMUNICATIONS SPECIFICATIONS SECTION 27 0526, BONDING AND GROUNDING FOR COMMUNICATIONS SYSTEMS FOR THE INSTALLATION REQUIREMENTS OF THE RBB AND TEBC.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL A 4-INCH DIAMETER EMT CONDUIT STUB OUT OF THE PULL BOX. EXTEND STUB 6 INCHES BEYOND THE PULL BOX AND TERMINATE.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL A GROUND BUSHING AND #6 BONDING CONDUCTOR FROM THE EMT CONDUIT SLEEVE TO THE EXISTING PRIMARY BONDING BUSBAR THAT IS IDENTIFIED IN KEYED NOTE #14.
 - AT THE TIME OF OUR SITE VISIT, THE WEST WALL OF THE SPACE HAS AVAILABLE WALL SPACE FOR THE MOUNTING OF THE PROPOSED CONDUIT PATHWAY.
 - AT THE TIME OF OUR SITE VISIT, THE NORTH WALL OF THE SPACE HAS AVAILABLE WALL SPACE FOR THE MOUNTING OF THE PROPOSED CONDUIT PATHWAY.
 - THE CONDUIT IS SHOWN BROKEN FOR CLARITY PURPOSES ONLY TO SHOW THE APPROXIMATE LOCATION OF THE EXISTING PRIMARY BONDING BUSBAR. THE CONDUIT PATHWAY IS A COMPLETE PATHWAY, WITHOUT INTERRUPTION FROM PULL BOX TO PULL BOX.
 - FURNISH AND INSTALL #6 BONDING CONDUCTOR TO BOND CONDUITS AND PULL BOX TOGETHER.

BUILDING 327 HOLLY COURT - PARTIAL LEVEL 1 TELECOMMUNICATIONS PLAN
 SCALE: 3/16" = 1'-0"

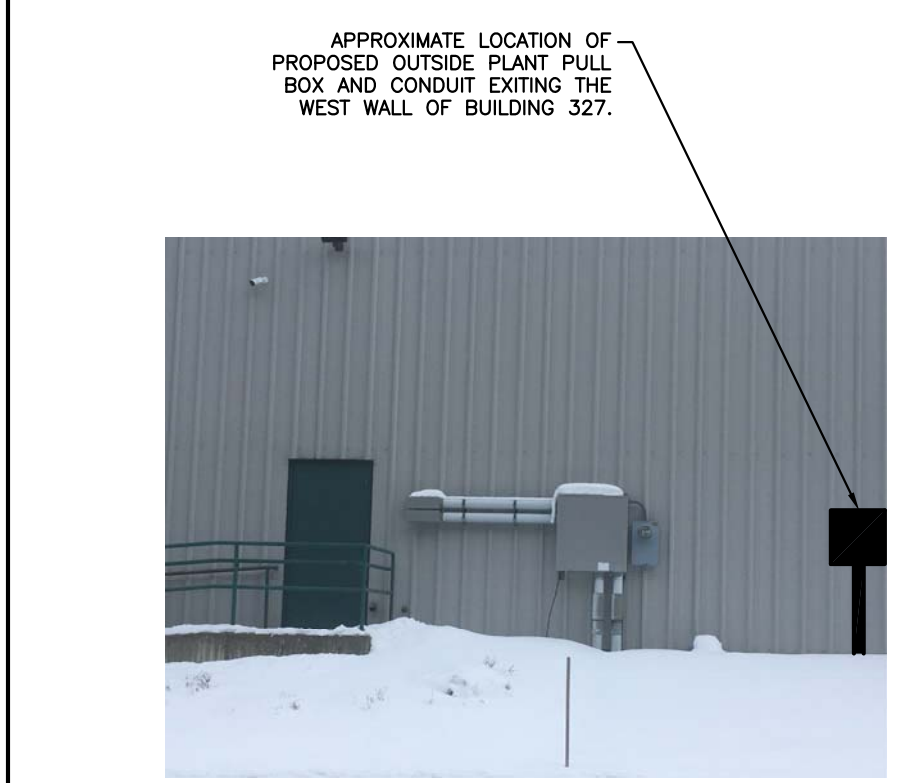


PHOTO #1
SCALE: NTS

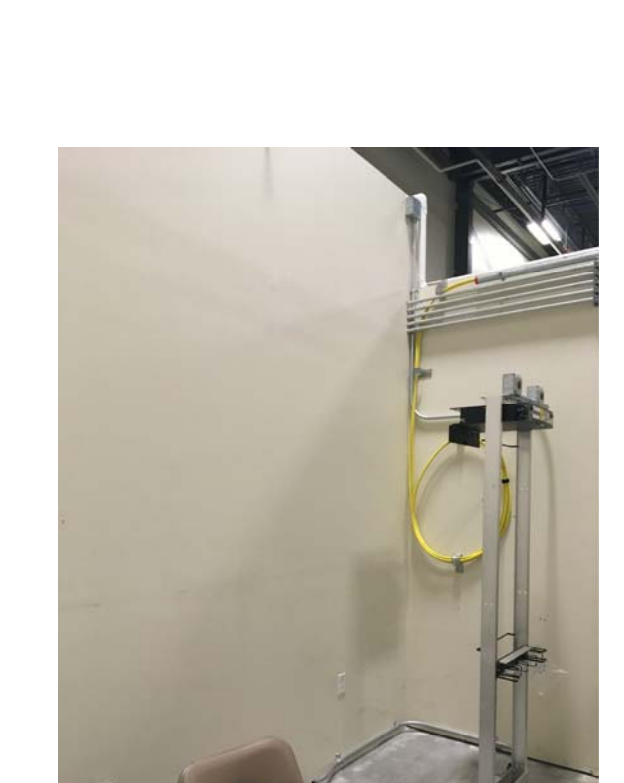


PHOTO #2
SCALE: NTS

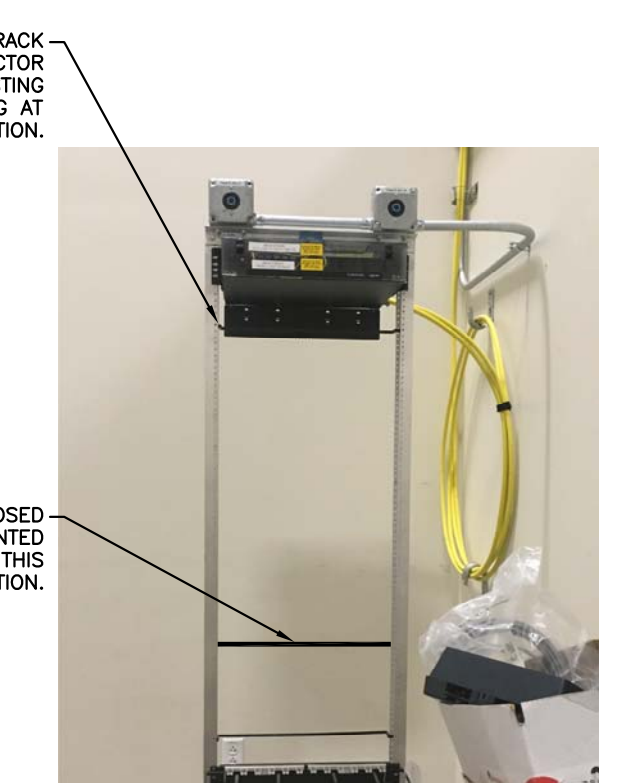


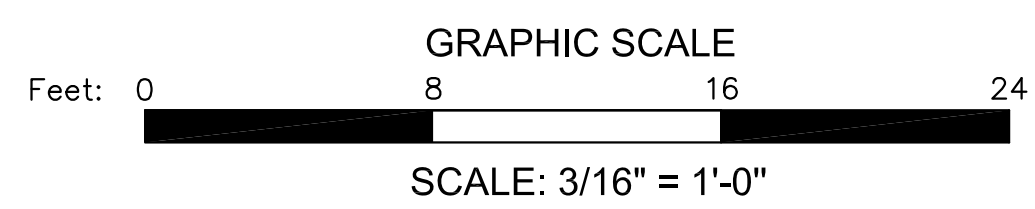
PHOTO #3
SCALE: NTS



PHOTO #4
SCALE: NTS

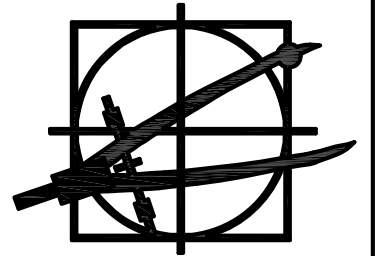


PHOTO #5
SCALE: NTS



PROGRESS DRAWINGS. FOR PRICING ONLY.

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 5399 Williston Road
 Suite 103
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 Phone 802-655-5731 Fax 888-844-7172



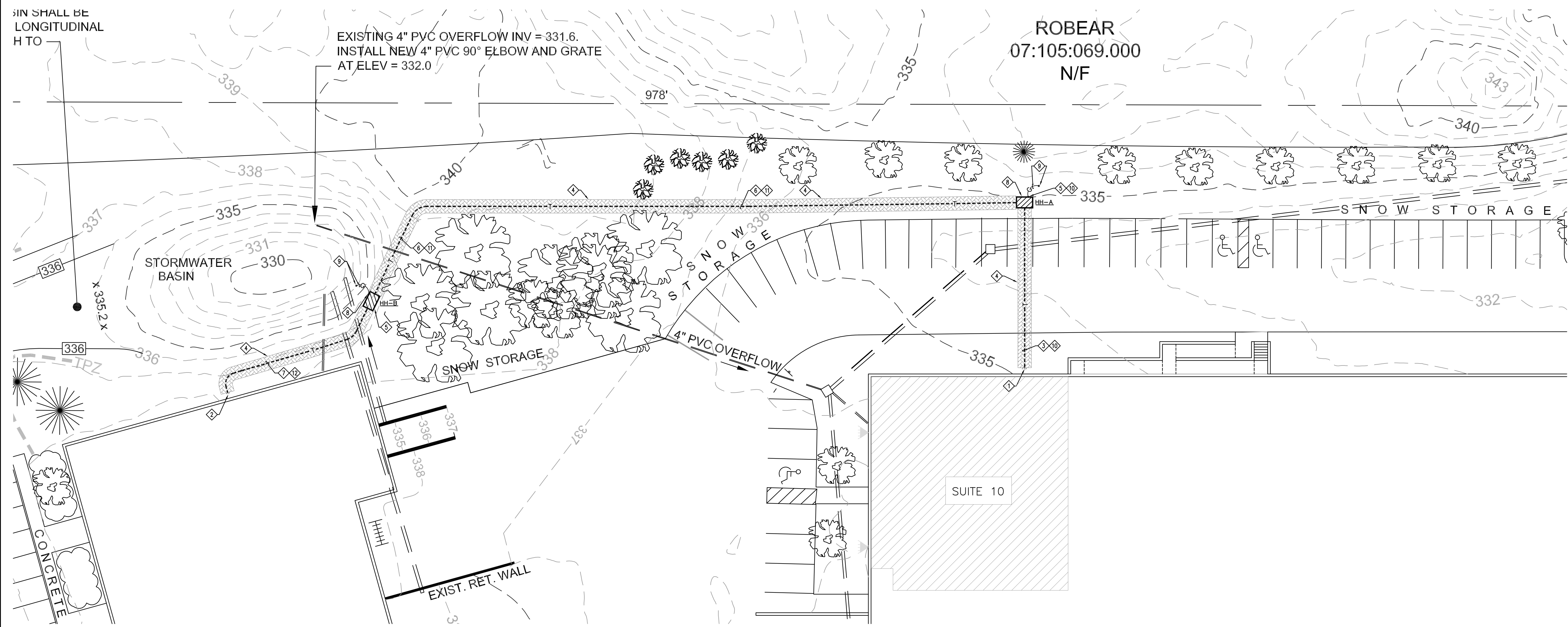
NO.	DATE	REVISION

THE UNIVERSITY OF VERMONT MEDICAL CENTER
 (75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
 VERMONT
 REORGANIZATION PROJECT

SCALE:	AS NOTED
DATE:	02/01/21
DRAWN BY:	TPB
CHECKED BY:	MPK
PROJECT:	2025

SHEET TITLE:
 Building 327
 Level 1
 Telecommunications
 Plan

DRAWING NO.
T2.0



IN SHALL BE
LONGITUDINAL
H TO

EXISTING 4" PVC OVERFLOW INV = 331.6.
INSTALL NEW 4" PVC 90° ELBOW AND GRATE
AT ELEV = 332.0

ROBEAR
07:105:069.000
N/F

STORMWATER
BASIN

SNOW STORAGE

SNOW STORAGE

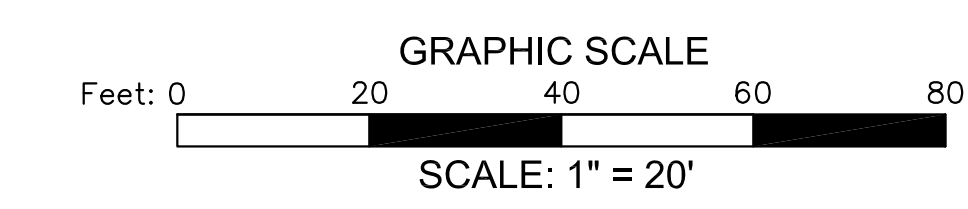
EXIST. RET. WALL

SUITE 10

TELECOMMUNICATIONS SITE PLAN
SCALE: 1" = 20'

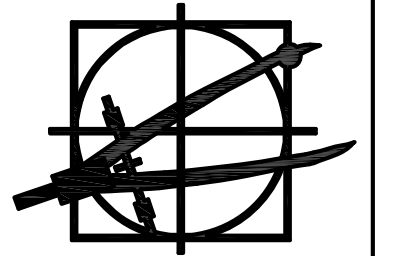
KEYED NOTES THIS SHEET:

1. THE CONTRACTOR SHALL REFER TO SHEET T2.0 FOR PATHWAY CONTINUATION.
2. THE CONTRACTOR SHALL REFER TO SHEET T2.2 FOR PATHWAY CONTINUATION.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 4-INCH DIAMETER SCHEDULE 40 PVC CONDUIT FROM BUILDING 327 TO HANDHOLE "A". REFER TO THE T5 SERIES SHEETS FOR INSTALLATION DETAILS. THIS PATHWAY SHALL BE USED TO ROUTE THE PROPOSED REDUNDANT INTER-BUILDING FIBER OPTIC BACKBONE CABLE FROM THE 327 HOLLY COURT TELECOMMUNICATIONS ROOM 146 TO THE 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106.
4. THE HATCHED AREA OF THE DUCT BANK REPRESENTS A SECTION OF THE DUCT BANK THAT SHALL BE CONCRETE ENCASED. REFER TO THE T5 SERIES SHEETS FOR INSTALLATION DETAILS.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL AN OPEN BOTTOMED BELOW GRADE HANDHOLE WITH TOP EXTENSIONS AS REQUIRED. TO SET THE HAND HOLE COVER AT FINISHED GRADE. THE COVER SHALL COME WITH A LOGO INDICATING "COMMUNICATIONS". THE PROPOSED CONDUITS THAT ENTER INTO AND EXIT FROM THE HANDHOLE SHALL SWEEP 90 DEGREES UP INTO THE ENCLOSURE AND EXTEND APPROXIMATELY 6-INCHES INTO THE BOX PRIOR TO TERMINATION. THE CONTRACTOR SHALL PLACE HANDHOLE ONTO A MINIMUM 12-INCH DEPTH OF GRAVEL BEDDING. THE CONTRACTOR SHALL FURNISH AND INSTALL CABLE RACKS AND CABLE RACK HOOKS. RACK AND HOOKS SHALL BE MOUNTED TO EACH SIDE WALL OF THE HANDHOLE. INSTALL RACKS PER MANUFACTURER RECOMMENDATIONS. IN ADDITION, THE CONTRACTOR SHALL PROVIDE PULLING EYES AS REQUIRED. REFER TO THE T5 SERIES SHEETS FOR HANDHOLE PART NUMBERS AND INSTALLATION REQUIREMENTS.
6. THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 4-INCH DIAMETER SCHEDULE 40 PVC CONDUIT BEGINNING WITHIN HANDHOLE "A" AND TERMINATING WITHIN HANDHOLE "B". REFER TO THE T5 SERIES SHEETS FOR INSTALLATION DETAILS. THIS PATHWAY SHALL BE USED TO ROUTE THE PROPOSED REDUNDANT INTER-BUILDING FIBER OPTIC BACKBONE CABLE FROM THE 327 HOLLY COURT TELECOMMUNICATIONS ROOM 146 TO THE 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106.
7. THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 4-INCH DIAMETER SCHEDULE 40 PVC CONDUIT FROM HANDHOLE "B" TO SUITE 75. REFER TO THE T5 SERIES SHEETS FOR INSTALLATION DETAILS. THIS PATHWAY SHALL BE USED TO ROUTE THE PROPOSED REDUNDANT INTER-BUILDING FIBER OPTIC BACKBONE CABLE FROM THE 327 HOLLY COURT TELECOMMUNICATIONS ROOM 146 TO THE 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106.
8. THE CONTRACTOR SHALL ORDER THE HANDHOLE TO COME WITH A GROUNDING RIBBON OR BONDING STRAP.
9. THE CONTRACTOR SHALL FURNISH AND INSTALL A (1) GROUND ROD. PLACE THE GROUND ROD ADJACENT TO THE HANDHOLE AND DRIVE GROUND SO THE TOP OF THE GROUND ROD IS BELOW FINISHED GRADE. THE GROUND ROD SHALL BE A MINIMUM OF 10 FEET IN LENGTH AND NOT LESS THAN 1/4 INCH IN DIAMETER. IN ADDITION, THE CONTRACTOR SHALL FURNISH AND INSTALL A #6 GROUNDING CONDUCTOR FROM THE HANDHOLE'S GROUNDING RIBBON OR BONDING STRAP TO THE GROUND ROD. THE GROUNDING CONDUCTOR SHALL BE WELDED TO THE GROUND ROD.
10. THE CONTRACTOR SHALL FURNISH AND INSTALL MAXCELL FABRIC INNERDUCTS ORIGINATING AT THE PULL BOX THAT IS MOUNTED EXTERIOR TO THE BUILDING OF 327 HOLLY COURT (REFER TO KEYED NOTE #2, SHEET T2.0) AND EXTENDING INTO HANDHOLE "A". THE INNERDUCTS SHALL NOT EXTEND THROUGH HANDHOLE "A". INSTEAD THE INNERDUCTS WILL TERMINATE SEVERAL INCHES BEYOND THE CONDUIT TERMINATION LOCATION WITHIN THE HANDHOLE CREATING A GAP IN THE INNERDUCTS TO ALLOW FOR A CABLE SERVICE LOOP TO BE INSTALLED. PROVIDE A SERVICE LOOP EQUAL TO (2) REVOLUTIONS AROUND THE PERIMETER OF THE HANDHOLE. THE CONTRACTOR SHALL FURNISH AND INSTALL (2) 4" 3-CELL EDGE DETECTABLE FABRIC INNERDUCTS AS MANUFACTURED BY MAXCELL. PART NUMBER MWD86383. EACH OF THE TWO 3-CELL FABRIC INNERDUCTS SHALL HAVE A UNIQUE THREAD IDENTIFICATION COLOR FOR EASY IDENTIFICATION AT EACH END OF THE INNERDUCT RUN. INNERDUCT ORDER LENGTH REQUIREMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. PROVIDE ALL REQUIRED INSTALLATION ACCESSORIES TO INSTALL THE MAXCELL PRODUCT AS REQUIRED.
11. THE CONTRACTOR SHALL FURNISH AND INSTALL MAXCELL FABRIC INNERDUCTS ORIGINATING WITHIN HANDHOLE "A" AND EXTENDING INTO HANDHOLE "B". THE INNERDUCTS SHALL NOT EXTEND THROUGH THE HANDHOLES. INSTEAD THE INNERDUCTS WILL TERMINATE SEVERAL INCHES BEYOND THE CONDUIT TERMINATION LOCATION WITHIN EACH HANDHOLE CREATING A GAP IN THE INNERDUCTS TO ALLOW FOR A CABLE SERVICE LOOP TO BE INSTALLED. PROVIDE A SERVICE LOOP EQUAL TO (2) REVOLUTIONS AROUND THE PERIMETER OF THE HANDHOLE. THE CONTRACTOR SHALL FURNISH AND INSTALL (2) 4" 3-CELL EDGE DETECTABLE FABRIC INNERDUCTS AS MANUFACTURED BY MAXCELL. PART NUMBER MWD86383. EACH OF THE TWO 3-CELL FABRIC INNERDUCTS SHALL HAVE A UNIQUE THREAD IDENTIFICATION COLOR FOR EASY IDENTIFICATION AT EACH END OF THE INNERDUCT RUN. INNERDUCT ORDER LENGTH REQUIREMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. PROVIDE ALL REQUIRED INSTALLATION ACCESSORIES TO INSTALL THE MAXCELL PRODUCT AS REQUIRED.
12. THE CONTRACTOR SHALL FURNISH AND INSTALL MAXCELL FABRIC INNERDUCTS ORIGINATING AT THE PULL BOX THAT IS MOUNTED EXTERIOR TO THE BUILDING OF 75 HOLLY COURT (REFER TO KEYED NOTE #1, SHEET T2.2) AND EXTENDING INTO HANDHOLE "B". THE INNERDUCTS SHALL NOT EXTEND THROUGH HANDHOLE "B". INSTEAD THE INNERDUCTS WILL TERMINATE SEVERAL INCHES BEYOND THE CONDUIT TERMINATION LOCATION WITHIN THE HANDHOLE CREATING A GAP IN THE INNERDUCTS TO ALLOW FOR A CABLE SERVICE LOOP TO BE INSTALLED. PROVIDE A SERVICE LOOP EQUAL TO (2) REVOLUTIONS AROUND THE PERIMETER OF THE HANDHOLE. THE CONTRACTOR SHALL FURNISH AND INSTALL (2) 4" 3-CELL EDGE DETECTABLE FABRIC INNERDUCTS AS MANUFACTURED BY MAXCELL. PART NUMBER MWD86383. EACH OF THE TWO 3-CELL FABRIC INNERDUCTS SHALL HAVE A UNIQUE THREAD IDENTIFICATION COLOR FOR EASY IDENTIFICATION AT EACH END OF THE INNERDUCT RUN. INNERDUCT ORDER LENGTH REQUIREMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. PROVIDE ALL REQUIRED INSTALLATION ACCESSORIES TO INSTALL THE MAXCELL PRODUCT AS REQUIRED.



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NO.	DATE	REVISION

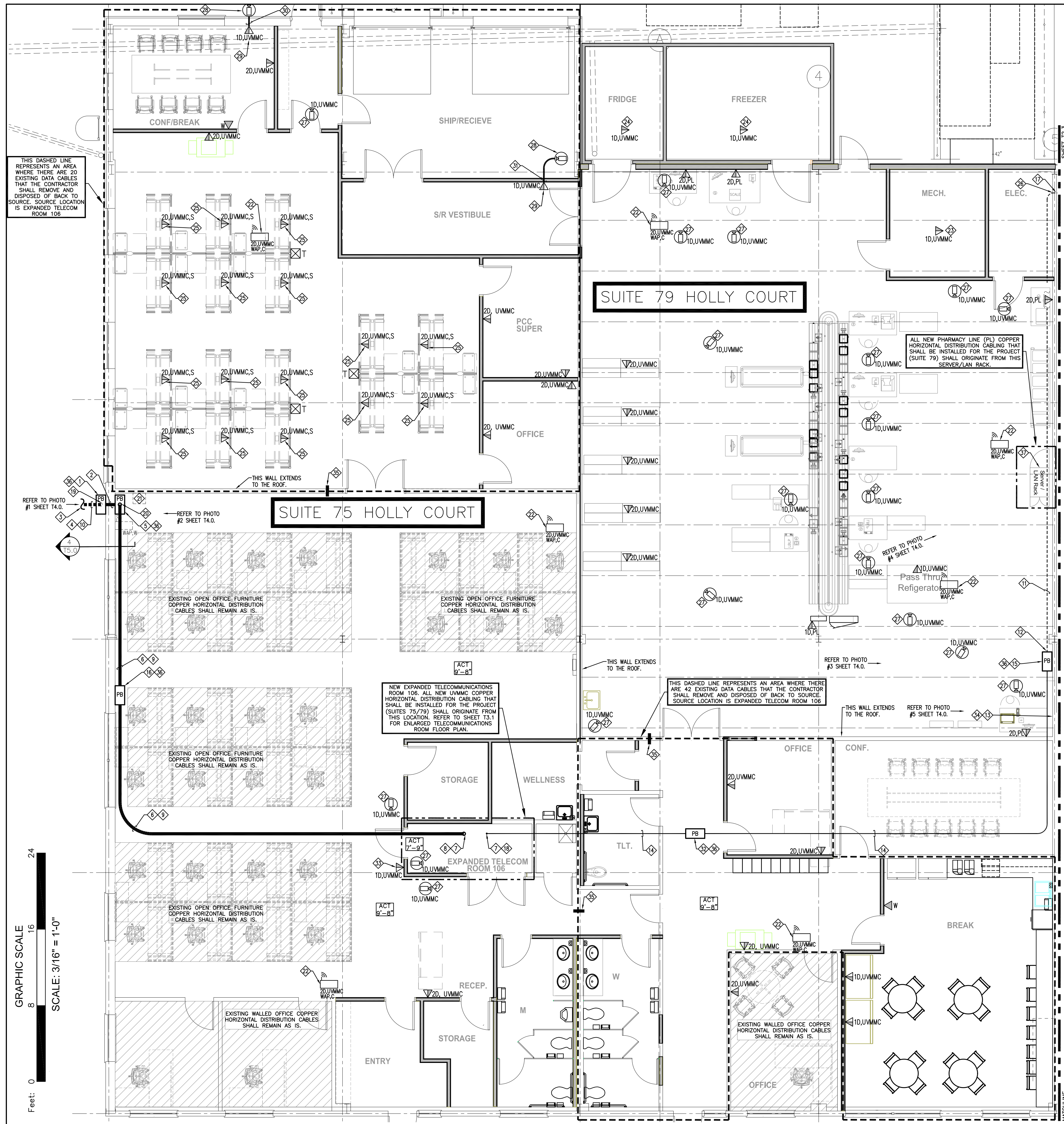
THE UNIVERSITY OF VERMONT MEDICAL CENTER
VERMONT
(75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
WILLISTON

REORGANIZATION PROJECT

SCALE: AS NOTED
DATE: 02/01/21
DRAWN BY: TPB
CHECKED BY: MPK
PROJECT: 2025

SHEET TITLE:
Outside Plant (OSP)
Infrastructure
Building 327 to
Building (Suite) 75

DRAWING NO.
T2.1



KEYED NOTES THIS SHEET:

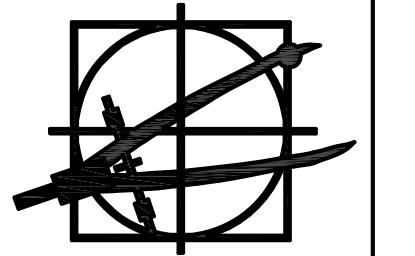
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 24" (LX24" (WX12" (H) WEATHERPROOF PULL BOX MOUNTED TO THE BUILDING STRUCTURAL SUPPORTS APPROXIMATELY AS SHOWN. THE BOX SHALL BE MOUNTED HIGH IN THE SPACE TO ALLOW FOR THE INTERCONNECTION INTO THE EXISTING EMT CONDUIT PATHWAY IDENTIFIED IN KEYED NOTE #11. THIS SHEET SHALL BE USED AS A PULLING LOCATION FOR CABLEING AND AS A TRANSITION POINT FOR EXTENDING THE EXISTING CONDUIT PATHWAY FROM THIS LOCATION INTO THE EXPANDED 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106. MOUNT THE PULL BOX WITH A MINIMUM OF (2) UNISTRUT SUPPORTS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE COVER TO ALLOW ACCESS INTO THE BOX FROM THE EXTERIOR OF THE BUILDING.
- THE CONTRACTOR SHALL CORE THROUGH THE EXISTING EXTERIOR WALL OF THE BUILDING AND FURNISH AND INSTALL A 4-INCH DIAMETER RIGID GALVANIZED CONDUIT TO THE NEW PULL BOX LOCATION. THE CONDUIT SHALL BE RIGID GALVANIZED TO THE EXTERIOR MOUNTED PULL BOX. THE BUILDING PENETRATION SHALL BE MADE WATER TIGHT WITH THE USE OF LINK SEAL OR EQUIVALENT WATERPROOFING MATERIAL.
- REFER TO SHEET T2.1 FOR PATHWAY CONTINUATION.
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 4-INCH DIAMETER CONDUIT TO ROUTE FROM THE EXTERIOR PULL BOX MOUNTED TO 75 HOLLY COURT AND TERMINATING INTO A HANDHOLE "B" THAT IS LOCATED TO THE WEST OF 75 HOLLY COURT. THE CONDUIT SHALL EGRESS FROM THE BOTTOM OF THE EXTERIOR MOUNTED PULL BOX AND EXTEND BELOW GRADE PRIOR TO TRANSITIONING HORIZONTALLY AND THEN ROUTING BELOW GRADE TO THE HANDHOLE, BEGINNING AT EXIT POINT OF THE PULL BOX, AND EXTENDING THROUGH THE VERTICAL TO THE EXTERIOR OF THE BUILDING WITH UNISTRUT OR SIMILAR SUPPORTS. TO INCLUDE PIPE CLAMPS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE FRONT COVER TO ALLOW ACCESS INTO THE BOX.
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 24" (LX24" (WX12" (H) PULL BOX MOUNTED TO THE WALL APPROXIMATELY AS SHOWN. THE PULL BOX SHALL BE USED AS A PULLING LOCATION FOR CABLEING INSTALLATION. MOUNT THE PULL BOX WITH A MINIMUM OF (2) UNISTRUT SUPPORTS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE FRONT COVER TO ALLOW ACCESS INTO THE BOX.
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 4-INCH DIAMETER EMT CONDUIT TO ROUTE THE NEW INTER-BUILDING REDUNDANT FIBER OPTIC CABLE FROM THE EXPANDED TELECOMMUNICATIONS ROOM TO THE WEST EXTERIOR WALL OF THE OFFICE SPACE IN SUITE 75. THE NEW CONDUIT SHALL RISE VERTICALLY UP FROM THE PULL BOX IDENTIFIED IN KEYED NOTE #11. THIS SHEET HIGH UP INTO THE SPACE TO THE SUPPLEMENT AS IT SUPPORTS. THE CONTRACTOR SHALL SUPPORT THE NEW CONDUIT TO THE WALL FOR THE VERTICAL PORTION OF THE RUN AND BUILDING STRUCTURAL SUPPORTS ONCE THE CONDUIT TRANSITS TO THE SUPPLEMENT AS IT EXTENDS TO EXPANDED TELECOMMUNICATIONS ROOM 106. THE CONTRACTOR SHALL SUPPORT THE CONDUIT WITH UNISTRUT OR SIMILAR SUPPORTS. TO INCLUDE PIPE CLAMPS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE CONDUIT SUPPORTS TO THE WALL. PRE-STRUCTURAL SUPPORT COMPONENTS OF THE BUILDING SHALL BE USED TO SUPPORT THE CONDUIT. CONDUIT SUPPORTS MUST BE PLACED AT MAXIMUM 4-FT. INTERVALS ALONG THE ENTIRE LENGTH OF THE INSTALLATION. THIS PATHWAY SHALL BE USED TO ROUTE THE PROPOSED REDUNDANT FIBER OPTIC INTER-BUILDING BACKBONE CABLE FROM 327 HOLLY COURT TELECOMMUNICATIONS ROOM 146 TO THE 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106.
- AT THIS APPROXIMATE LOCATION, THE CONTRACTOR SHALL SWEEP THE CONDUIT DOWN INTO THE EXPANDED TELECOMMUNICATIONS ROOM. EXTEND THE CONDUIT BELOW THE ACCESSIBLE TELECOMMUNICATIONS ROOM. PROVIDE A CONDUIT GROUND BUSHING AT THE CONDUIT TERMINATION POINT.
- THE CONTRACTOR SHALL ROUTE THE REDUNDANT INTER-BUILDING FIBER OPTIC CABLE WITHIN INNERDUCT FROM THE TERMINATION LOCATION OF THE CONDUIT TO THE FLOOR-MOUNTED EQUIPMENT RACK WITHIN THE EXPANDED TELECOMMUNICATIONS ROOM. THE CONTRACTOR SHALL FURNISH AND INSTALL PATHWAY SUPPORT AS REQUIRED TO EXTEND THE CABLE FROM THE CONDUIT TERMINATION AT THE CEILING LEVEL TO THE EQUIPMENT RACK.
- THE CONTRACTOR SHALL FURNISH AND INSTALL MAXCELL FABRIC INNERDUCTS ORIGINATING WITHIN THE EXPANDED TELECOMMUNICATIONS ROOM 106 AND EXTENDING INTO THE EXTERIOR PULL BOX IDENTIFIED IN KEYED NOTE #11 THIS SHEET. THE INNERDUCTS SHALL NOT EXTEND THROUGH ANY INCHES INTO THE PULL BOX AND SEVERAL INCHES INTO THE EXTERIOR PULL BOX TO ALLOW FOR A CABLE SERVICE LOOP TO BE INSTALLED WITHIN THE PULL BOX. PROVIDE A SERVICE LOOP LENGTH OF (3) CABLE LOOPS AROUND THE INTERIOR PERIMETER OF THE PULL BOX. THE CONTRACTOR SHALL FURNISH AND INSTALL (2) 3-CELL PREMIERE FABRIC INNERDUCTS AS MANUFACTURED BY MAXCELL. PART NUMBER MXP4003. EACH OF THE TWO 3-CELL FABRIC INNERDUCTS SHALL HAVE A UNIQUE THREAD IDENTIFICATION COLOR FOR EASY IDENTIFICATION AT EACH END. THE INNERDUCT RUN, INNERDUCT ORDER LENGTH REQUIREMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. PROVIDE ALL REQUIRED INSTALLATION ACCESSORIES TO INSTALL THE MAXCELL PRODUCT AS REQUIRED.
- THE CONTRACTOR SHALL FURNISH AND INSTALL MAXCELL FABRIC INNERDUCTS ORIGINATING AT THE PULLER BOX IDENTIFIED IN KEYED NOTE #11 THIS SHEET AND EXTENDING INTO HANDHOLE "B". THE INNERDUCTS SHALL TERMINATE WITHIN THE PULL BOX AND HANDHOLE TO ALLOW FOR A CABLE SERVICE LOOP TO BE INSTALLED WITHIN EACH PULL BOX. PROVIDE A SERVICE LOOP LENGTH OF (3) CABLE LOOPS AROUND THE PULL BOX TO SERVE AS A SERVICE LOOP WITHIN THE PULL BOX. THE CONTRACTOR SHALL FURNISH AND INSTALL (2) 3-CELL EDGE DETECTABLE FABRIC INNERDUCTS AS MANUFACTURED BY MAXCELL. PART NUMBER MXP6383. EACH OF THE TWO 3-CELL FABRIC INNERDUCTS SHALL HAVE A UNIQUE THREAD IDENTIFICATION COLOR FOR EASY IDENTIFICATION AT EACH END OF THE INNERDUCT RUN. INNERDUCT ORDER LENGTH REQUIREMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. PROVIDE ALL REQUIRED INSTALLATION ACCESSORIES TO INSTALL THE MAXCELL PRODUCT AS REQUIRED.
- REPRESENTS AN AREA WHERE THERE ARE 42 EXISTING DATA CABLES THAT THE CONTRACTOR SHALL REMOVE AND DISPOSED OF BACK TO SOURCE. SOURCE LOCATION IS EXPANDED TELECOM ROOM 106.
- FROM THE NEW PULL BOX LOCATION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING EMT CONDUIT IN ITS ENTIRETY SOUTH OF THE NEW PULL BOX LOCATION. REFER TO PHOTO #3 SHEET T4.0.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING FIBER OPTIC BACKBONE CABLE THAT ORIGINATES IN SUITE 87 AND TERMINATES INTO A WALL-MOUNTED FIBER OPTIC TERMINATION HOUSING AT THIS APPROXIMATE LOCATION. REFER TO SHEET T2.3 FOR THE REMAINDER OF THE EXISTING FIBER RUN BACK TO 87 HOLLY COURT.
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 1-INCH DIAMETER CONDUIT ORIGINATING AT THE NEW PULL BOX IDENTIFIED IN KEYED NOTE #11 THIS SHEET AND EXTENDING INTO THE EXPANDED TELECOMMUNICATIONS ROOM 106 AND EXTENDING INTO THE EXPANDED TELECOMMUNICATIONS ROOM 106. THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 1-INCH DIAMETER CONDUIT TO ROUTE FROM THE EXTERIOR PULL BOX MOUNTED TO 75 HOLLY COURT AND TERMINATING INTO A HANDHOLE "B" THAT IS LOCATED TO THE WEST OF 75 HOLLY COURT. THE CONDUIT SHALL EGRESS FROM THE BOTTOM OF THE EXTERIOR MOUNTED PULL BOX AND EXTEND BELOW GRADE PRIOR TO TRANSITIONING HORIZONTALLY AND THEN ROUTING BELOW GRADE TO THE HANDHOLE, BEGINNING AT EXIT POINT OF THE PULL BOX, AND EXTENDING THROUGH THE VERTICAL TO THE EXTERIOR OF THE BUILDING WITH UNISTRUT OR SIMILAR SUPPORTS. TO INCLUDE PIPE CLAMPS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE FRONT COVER TO ALLOW ACCESS INTO THE BOX.
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 24" (LX24" (WX12" (H) PULL BOX MOUNTED TO THE BUILDING STRUCTURAL SUPPORTS APPROXIMATELY AS SHOWN. THE BOX SHALL BE MOUNTED HIGH IN THE SPACE TO ALLOW FOR THE INTERCONNECTION INTO THE EXISTING EMT CONDUIT PATHWAY IDENTIFIED IN KEYED NOTE #11. THIS SHEET SHALL BE USED AS A PULLING LOCATION FOR CABLEING AND AS A TRANSITION POINT FOR EXTENDING THE EXISTING CONDUIT PATHWAY FROM THIS LOCATION INTO THE EXPANDED 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106. MOUNT THE PULL BOX WITH A MINIMUM OF (2) UNISTRUT SUPPORTS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE BOTTOM COVER TO ALLOW ACCESS INTO THE BOX.
- REFER TO SHEET T2.3 FOR EXISTING CONDUIT PATHWAY CONTINUATION.
- THE CONTRACTOR SHALL ROUTE THE INTRA-BUILDING FIBER OPTIC REDUNDANT FIBER OPTIC CABLE (TELECOMMUNICATIONS SERVICE PROVIDER DEMARCATION EXTENSION) WITHIN INNERDUCT FROM THE TERMINATION LOCATION OF THE EMT CONDUIT PATHWAY TO THE FLOOR-MOUNTED EQUIPMENT RACK WITHIN THE EXPANDED TELECOMMUNICATIONS ROOM. THE CONTRACTOR SHALL FURNISH AND INSTALL CABLE SUPPORT AS REQUIRED TO EXTEND THE CABLE FROM THE CONDUIT TERMINATION LOCATION AT THE CEILING LEVEL TO THE EQUIPMENT RACK.
- THE CONTRACTOR SHALL FURNISH AND INSTALL FOAM DUCT-SEALING SYSTEM FOR A 4-INCH DIAMETER CONDUIT AS MANUFACTURED BY POLY WATER FST DUCT SEALANT, PART NUMBER FST-3500. THE CONTRACTOR SHALL INSTALL THE SEALANT PER MANUFACTURER'S INSTRUCTIONS IN ORDER TO MEET NEC CODE REQUIREMENTS.
- SWEEP THE CONDUIT DOWN INTO THE PULL BOX AT THIS APPROXIMATE LOCATION.
- AT THIS APPROXIMATE LOCATION THERE IS A TABLE AND SMALL DESKTOP MONITOR. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE INSTALLATION OF THE PROPOSED PULL BOX. ASSUME THE NEW TABLE AND MONITOR LOCATION SHALL BE JUST TO THE EAST OF THE CURRENT LOCATION. THE PRINTER SHALL BE SERVED FROM THE EXISTING TELECOMMUNICATIONS OUTLET THAT IS LOCATED ON THE EXTERIOR WEST WALL IN THE NORTHWEST CORNER OF THE ROOM.
- THE PROPOSED WIRELESS ACCESS POINT (WAP) DEVICE SHALL BE CEILING MOUNTED AT THIS LOCATION. THE CONTRACTOR SHALL MOUNT THE DEVICE TO THE ACCESSIBLE CEILING TILE GRID SUPPORT SYSTEM. THE DEVICE SHALL BE MOUNTED SUCH THAT IT IS NOT DIRECTLY ABOVE THE CEILING TILE GRID SUPPORT SYSTEM. THE WAP DEVICE SUPPORT BRACKET AND CEILING GRID CLIP ARE INCLUDED WITH THE PURCHASE OF THE WIRELESS ACCESS POINT DEVICE, WHICH WILL BE PROVIDED BY UVMCM.
- REFER TO SPECIFICATION SECTION 27.3216, SECTION 3.01, A.1 FOR A DESCRIPTION OF THE PROPOSED INSTALLATION.
- THE CONTRACTOR SHALL ASSUME THAT THIS IS BAS CONTROL PANEL.
- THE CONTRACTOR SHALL COORDINATE THE EXACT HORIZONTAL AND VERTICAL MOUNTING LOCATION OF THIS PROPOSED TELECOMMUNICATIONS OUTLET WITH THE UNIT MANUFACTURER. ASSUME A CABLE TERMINATION ONTO A BACK BOX.
- THE COPPER HORIZONTAL DISTRIBUTION CABLE FOR THIS OPEN OFFICE FURNITURE SHALL TERMINATE INTO A 2-PORT SURFACE MOUNT BOX. THE CONTRACTOR SHALL FURNISH AND INSTALL SURFACE BOX ONTO FURNITURE.
- THE EXISTING CONDUIT PATHWAY IDENTIFIED IN KEYED NOTE #11 IS NOT FIRESTOPPED AT THIS WALL PENETRATION. THE CONTRACTOR SHALL FIRESTOP AT THIS LOCATION AT THIS LOCATION IN A CODE COMPLIANT MANNER THAT MATCHES THE FIRE RATING OF THE WALL. THE PENETRATION IS HIGH ON THE WALL.
- THE CONTRACTOR SHALL TERMINATE THE TELECOMMUNICATIONS HORIZONTAL DISTRIBUTION CABLES DIRECTLY INTO THE VIDEO SURVEILLANCE CAMERA VIA A MODULAR PLUG TERMINATED LINK (DIRECT CONNECTION). PROVIDE A 20-FT. SERVICE LOOP. CAMERA LOCATION SHOWN IS APPROXIMATE. REFER TO THE SECURITY PLAN FOR EXACT DEVICE LOCATIONS. THE CONTRACTOR SHALL FURNISH AND INSTALL COPPER HORIZONTAL DISTRIBUTION CABLEING TO THE CAMERA. THE VIDEO SURVEILLANCE CAMERA DEVICE AND INSTALLATION SHALL BE BY OTHERS.
- THE CONTRACTOR SHALL CONFIRM EXACT HORIZONTAL AND VERTICAL MOUNTING LOCATION WITH THE OWNER PRIOR TO ROUGH-IN. LOCATION SHOWN IS APPROXIMATE ONLY.
- THIS TELECOMMUNICATIONS HORIZONTAL DISTRIBUTION CABLE IS ASSOCIATED WITH THE EXTERIOR VIDEO SURVEILLANCE CAMERA LOCATION. THE CABLE SHALL TERMINATE ONTO A 1-PORT SURFACE MOUNTED BOX THAT SHALL BE LOCATED IN THE ABOVE CEILING SPACE. AT APPROXIMATELY THE CAMERA MOUNTING LOCATION. THE OWNER WILL PROVIDE AN OUTDOOR RATED PATCH CORD FOR CONNECTION TO THE EXTERIOR MOUNTED VIDEO SURVEILLANCE CAMERA.
- THE CONTRACTOR SHALL FURNISH AND INSTALL A 3/4-INCH DIAMETER RIGID GALVANIZED CONDUIT TO ROUTE THROUGH THE EXTERIOR WALL OF THE BUILDING PROVIDING A CABLE PATHWAY TO THE EXTERIOR CAMERA LOCATION. ONCE THE PATCH CORD HAS BEEN INSTALLED, THE BUILDING PENETRATION SHALL BE MADE WATER TIGHT WITH THE USE OF LINK SEAL OR EQUIVALENT WATERPROOFING MATERIAL.
- THE CONTRACTOR SHALL FURNISH AND INSTALL A 3/4-INCH DIAMETER EMT CONDUIT THROUGH THE WALL TO THE SHIP/RECEIVING CAMERA LOCATION PROVIDING A CABLE PATHWAY.
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) 24" (LX24" (WX12" (H) PULL BOX MOUNTED FROM THE BUILDING STRUCTURAL SUPPORTS. THE BOX SHALL BE MOUNTED HIGH IN THE SPACE. THE PULL BOX SHALL BE USED AS A PULLING LOCATION FOR CABLEING AND AS A TRANSITION POINT FOR EXTENDING THE EXISTING CONDUIT PATHWAY FROM THIS LOCATION INTO THE EXPANDED 75 HOLLY COURT TELECOMMUNICATIONS ROOM 106. MOUNT THE PULL BOX WITH A MINIMUM OF (2) UNISTRUT SUPPORTS. SUPPORTS SHALL BE SIZED TO CARRY THE WEIGHT OF THE INSTALLATION, AND MEET ALL FEDERAL, STATE AND LOCAL CODES. A MINIMUM 1-5/8"X1-5/8" STRUT SHALL BE USED. FURNISH AND INSTALL ALL FASTENERS AS REQUIRED TO MOUNT THE SUPPORTS. PULL BOX LOCATION SHOWN IS APPROXIMATE. THE PULL BOX MUST HAVE A REMOVABLE BOTTOM COVER TO ALLOW ACCESS INTO THE BOX.
- THERE IS AN EXISTING KRONOS TIME CLOCK ON THE EXISTING WEST WALL OF THE TELECOMMUNICATIONS ROOM THAT SHALL BE RELOCATED TO ACCOMMODATE THE EXPANSION OF THIS TELECOMMUNICATIONS ROOM TO THE WEST. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING DATA CABLE TO THIS MACHINE AND FURNISH AND INSTALL A NEW DATA CABLE TO THE NEW LOCATION OF THIS MACHINE. ASSUME A BACK BOX AND JACK TERMINATION FOR FRONING. HOWEVER, COORDINATE THE TERMINATION REQUIREMENTS AT THE KRONOS MACHINE IN THE FIELD.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF TWO EXISTING 50-PAIR DISCONNECT BLOCKS AND ALL ASSOCIATED CABLEING. THERE ARE NO SERVICES ORIGINATING FROM THESE TERMINAL BLOCKS. IN ADDITION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE 50-PAIR COPPER CATEGORY 3 INTRA-BUILDING BACKBONE CABLE. THIS INTRA-BUILDING BACKBONE CABLE ORIGINATES IN THE SUITE 87 TELECOMMUNICATIONS PROVIDER ENTRANCE ROOM.
- THE CONTRACTOR SHALL FURNISH AND INSTALL (1) E2-PATH SERIES 44+ E2-PATH PATHWAY KIT AS MANUFACTURED BY STI, PART NUMBER E2P2. THE CONTRACTOR SHALL FURNISH AND INSTALL APPROPRIATE FASTENERS AS REQUIRED TO MOUNT THE BRACKET WITHIN THE WALL. WALL PLATE BRACKETS MUST BE SECURED TO THE WALL'S INTERNAL STUD SYSTEM. THE VERTICAL LOCATION OF THE DEVICE SHALL BE ABOVE THE WALL CEILING.
- FURNISH AND INSTALL #6 BONDING CONDUCTOR TO BOND CONDUITS AND PULL BOX TOGETHER.
- THE CONTRACTOR SHALL FURNISH AND INSTALL A H3 SERIES NETWORK CABINET AS MANUFACTURED BY HUBBELL. PART NUMBER HANF472. EQUIPMENT CABINET THAT SHALL HOUSE THE PHARMACY DATA NETWORKING MEDIA TERMINATION HARDWARE AND ELECTRONICS. INCLUDE A VERTICAL MANAGER BAR, 18" HORIZONTAL GROUND BAR, HUBBELL PART NUMBERS H30M47 AND HBBH19K1. IN ADDITION, THE CONTRACTOR SHALL FURNISH AND INSTALL VERTICAL CABLE SUPPORTS ONTO THE VERTICAL MANAGER BARS.
- THE CONTRACTOR SHALL FURNISH AND INSTALL A 1-INCH DIAMETER EMT CONDUIT FROM THE SUITE 75 TELECOMMUNICATIONS ROOM 106 TO THIS CABINET. TERMINATE FIBER ONTO A CLOSET CONNECTOR HOUSING ON EACH END. REFER TO THE TELECOMMUNICATIONS SPECIFICATIONS SECTION 23.1533 FOR REQUIRED FIBER CABLE AND TERMINATION HARDWARE COMPONENTS.
- IN ADDITION, FURNISH AND INSTALL A 1-INCH DIAMETER EMT CONDUIT FROM SOURCE TO DESTINATION. CONDUIT PATHWAY IS NOT SHOWN ON THE PLANS. GROUND CONDUIT IN TELECOM ROOM 106. FURNISH AND INSTALL A #10 BONDING CONDUCTOR TO BOND THE BUSBAR IN THE CABINET TO THE ELECTRICAL SERVICE ENTRANCE EQUIPMENT LOCATED IN THE NEW ELECTRICAL ROOM IN SUITE 79.
- FURNISH AND INSTALL (1) 48-PORT CATEGORY 6 PATCH PANEL & (2) HORIZONTAL CABLE MANAGERS.

LEVEL 1 TELECOMMUNICATIONS PLAN

SCALE: 3/16" = 1'-0"

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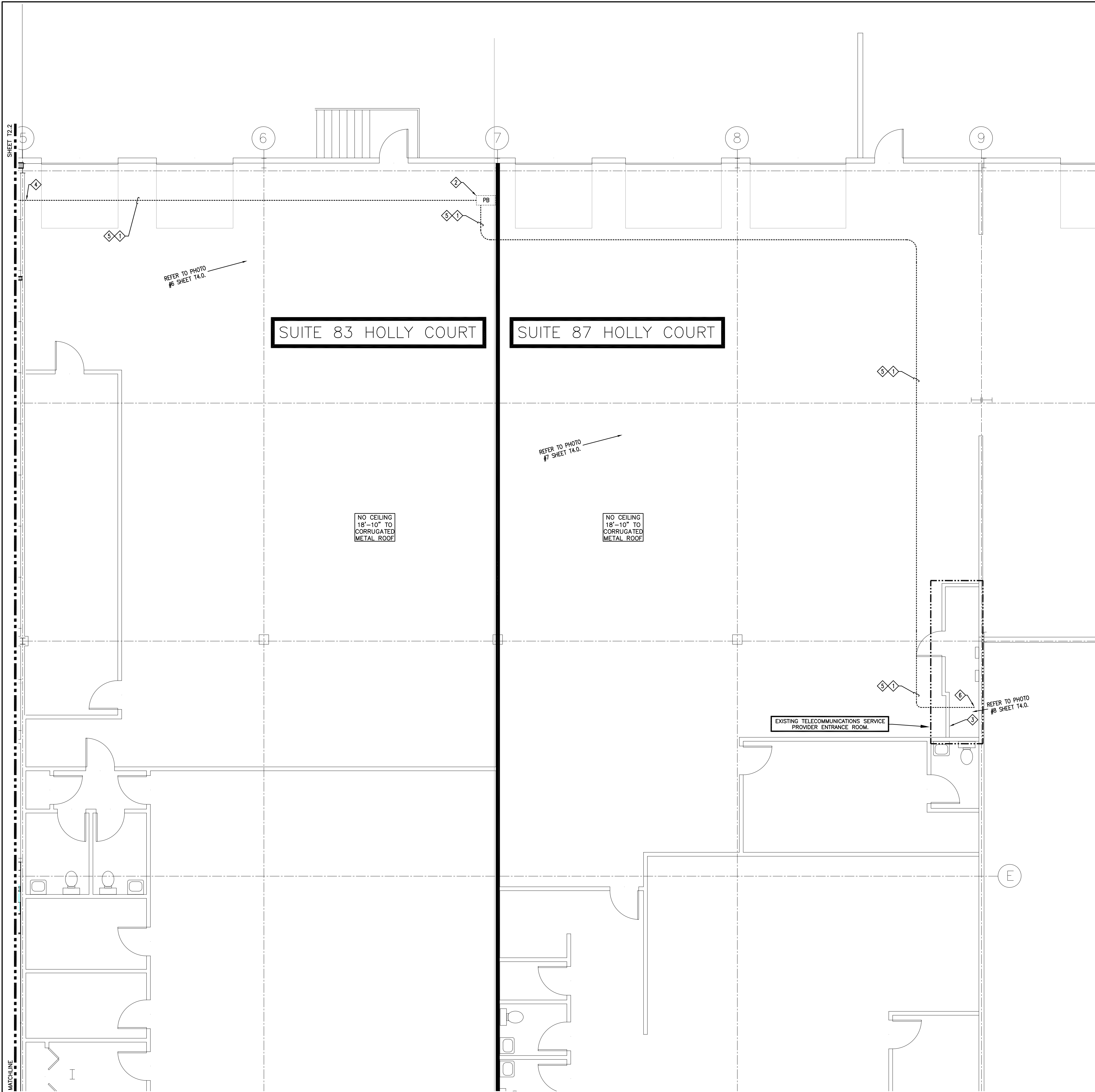


NO.	DATE	REVISION

THE UNIVERSITY OF VERMONT MEDICAL CENTER
(75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
VERMONT
WILLISTON

SCALE:	AS NOTED
DATE:	02/01/21
DRAWN BY:	TPB
CHECKED BY:	MPK
PROJECT:	2025
SHEET TITLE:	Building (Suites 75/79) Level 1 Telecommunications Plan
DRAWING NO.	T2.2

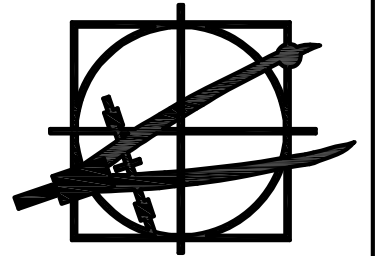
REORGANIZATION PROJECT



- ◇ KEYED NOTES THIS SHEET:
1. REPRESENTS THE APPROXIMATE LOCATION OF THE EXISTING 1-INCH DIAMETER EMT CONDUIT THAT EXTENDS FROM THE EXISTING TELECOMMUNICATIONS SERVICE PROVIDER ENTRANCE ROOM IN SUITE 87 TO SUITE 79. REFER TO KEYED NOTE #13 ON SHEET T2.2 TO THE TERMINATION LOCATION OF THE CONDUIT PATHWAY IN SUITE 79. THE CONDUIT PATHWAY ROUTES HIGH WITHIN THE SPACE AND IS SUPPORTED FROM THE BUILDING STRUCTURAL SUPPORT COMPONENTS.
 2. REPRESENTS THE APPROXIMATE LOCATION OF AN EXISTING PULL BOX. THIS IS THE ONLY PULL POINT IN THE EXISTING CONDUIT PATHWAY BETWEEN THE TELECOMMUNICATIONS SERVICE PROVIDER ENTRANCE ROOM IN SUITE 87 AND SUITE 79. SHOWN FOR CLARITY PURPOSES ONLY. THE NEXT CABLE PULLING LOCATION WILL BE A NEW PULL BOX THAT SHALL BE INSTALLED IN SUITE 79. REFER TO SHEET T2.2.
 3. REPRESENTS THE APPROXIMATE MOUNTING LOCATION OF THE NEW WALL-MOUNTED CLOSET CONNECTOR HOUSING AND SLACK STORAGE UNIT. THIS IS THE ORIGIN POINT OF THE NEW INTRA-BUILDING FIBER OPTIC CABLE THAT WILL EXTEND THE TELECOMMUNICATIONS SERVICE PROVIDER DEMARCATION POINT FROM THE ENTRANCE ROOM TO SUITE 79.
 4. REFER TO SHEET T2.2 FOR EXISTING CONDUIT PATHWAY CONTINUATION.
 5. THIS EXISTING CONDUIT PATHWAY SHALL BE USED BY THE CONTRACTOR TO ROUTE THE PROPOSED INTRA-BUILDING FIBER OPTIC BACKBONE CABLE THAT SHALL ORIGINATE IN THE SUITE 87 TELECOMMUNICATIONS SERVICE PROVIDER ENTRANCE ROOM AND TERMINATE WITHIN THE EXPANDED TELECOMMUNICATIONS ROOM 106 IN SUITE 75.
 6. AT THIS APPROXIMATE LOCATION, THE CONDUIT SWEEPS DOWN INTO THE TELECOMMUNICATIONS SERVICE PROVIDER ENTRANCE ROOM.

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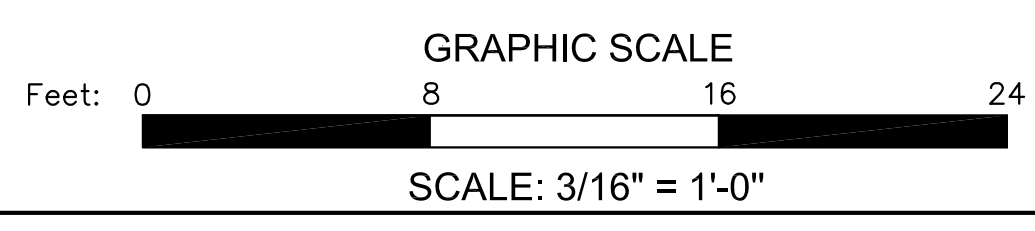
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 WILLISTON VERMONT
 REORGANIZATION PROJECT

SCALE:	AS NOTED
DATE:	02/01/21
DRAWN BY:	TPB
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PROJECT:	2025

SHEET TITLE:
Building
 (suites 83/87)
 Level 1
 Telecommunications
 Plan

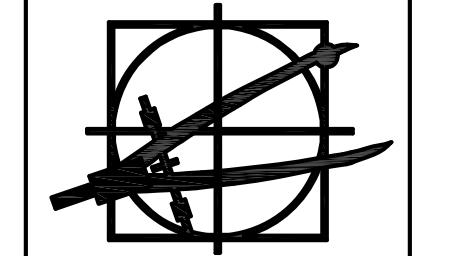
DRAWING NO.
T2.3

LEVEL 1 TELECOMMUNICATIONS PLAN
 SCALE: 3/16" = 1'-0"



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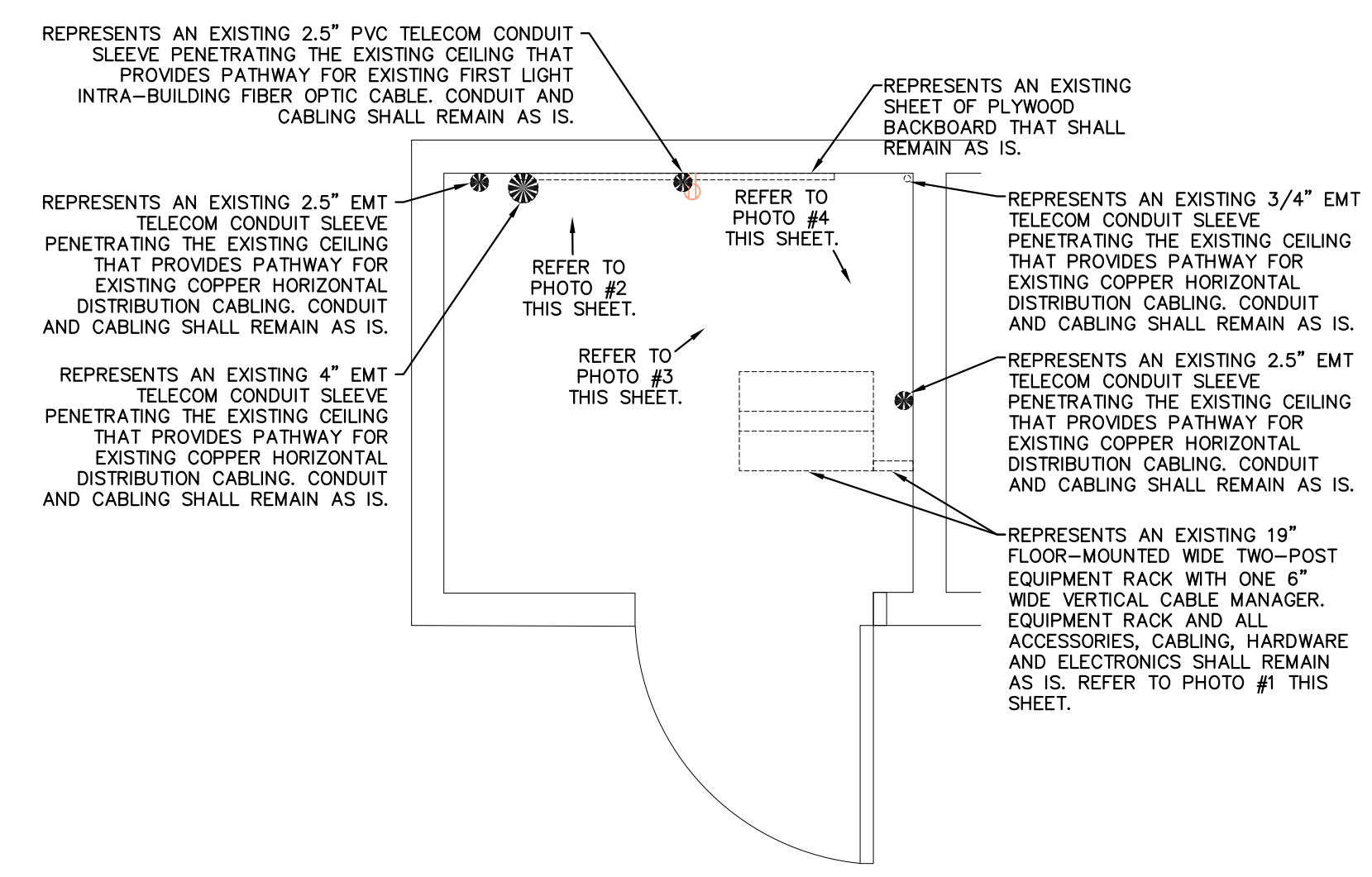
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THE UNIVERSITY OF VERMONT MEDICAL CENTER
 (75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
WILLISTON VERMONT
 REORGANIZATION PROJECT

SCALE:	AS NOTED
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DRAWN BY:	TPB
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PROJECT:	2025

SHEET TITLE:
Telecommunications Room 106 - Existing Conditions

DRAWING NO.
T3.0



TELECOMMUNICATIONS ROOM (106) - EXISTING CONDITIONS

SCALE: 1/2" = 1'-0"



PHOTO #1

SCALE: NTS

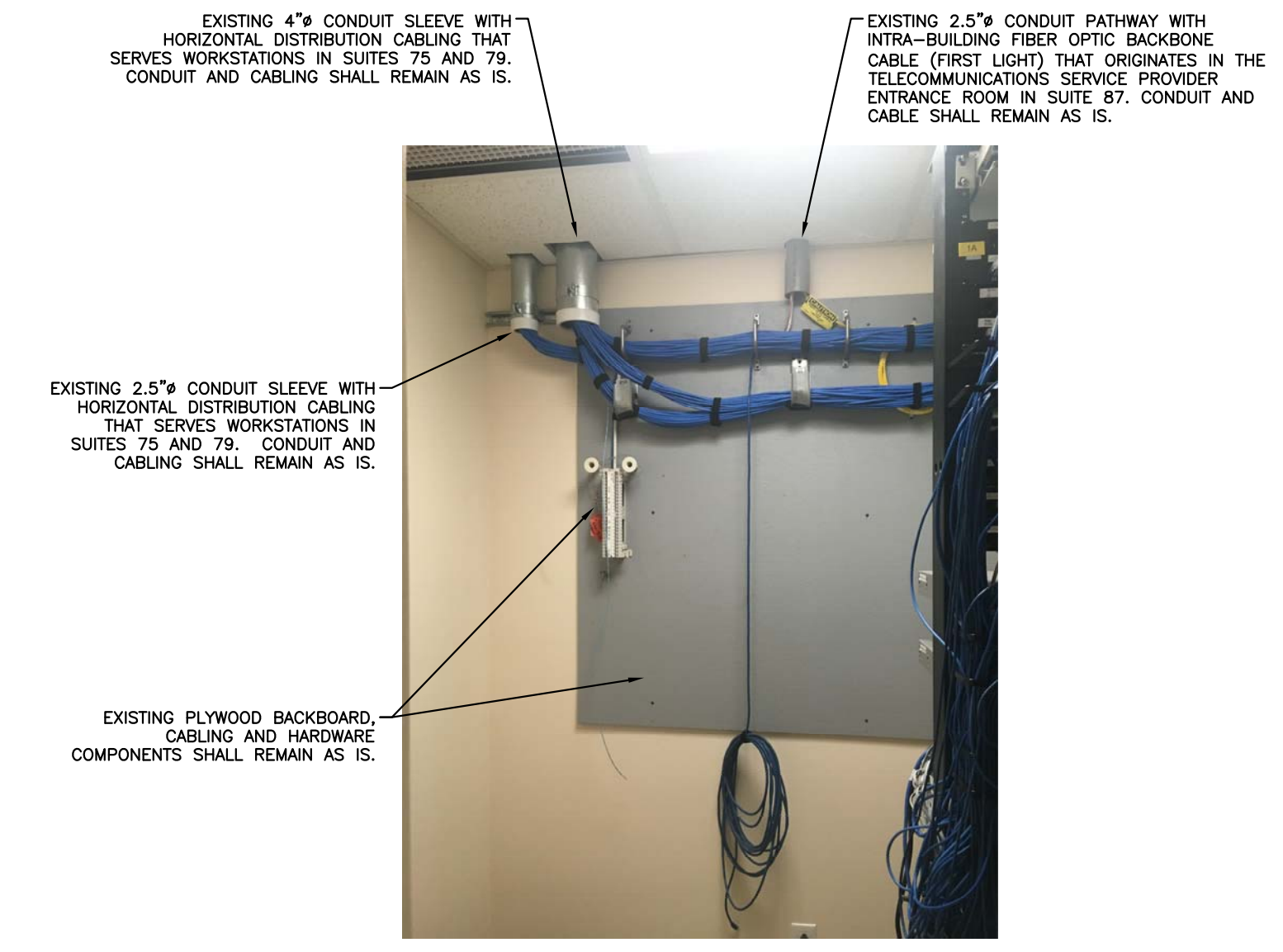


PHOTO #2

SCALE: NTS



PHOTO #3

SCALE: NTS

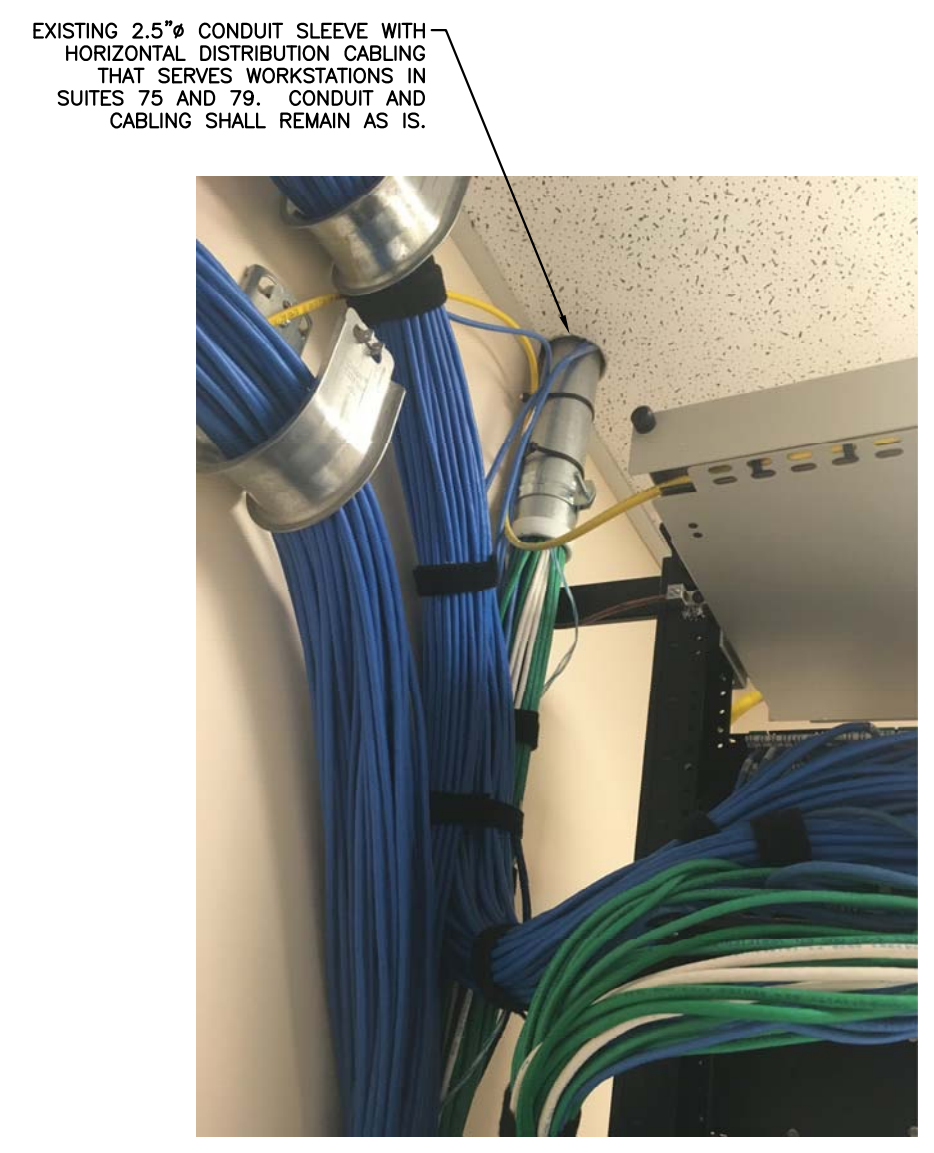


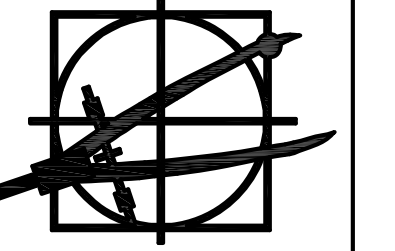
PHOTO #4

SCALE: NTS

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WILLISTON VERMONT

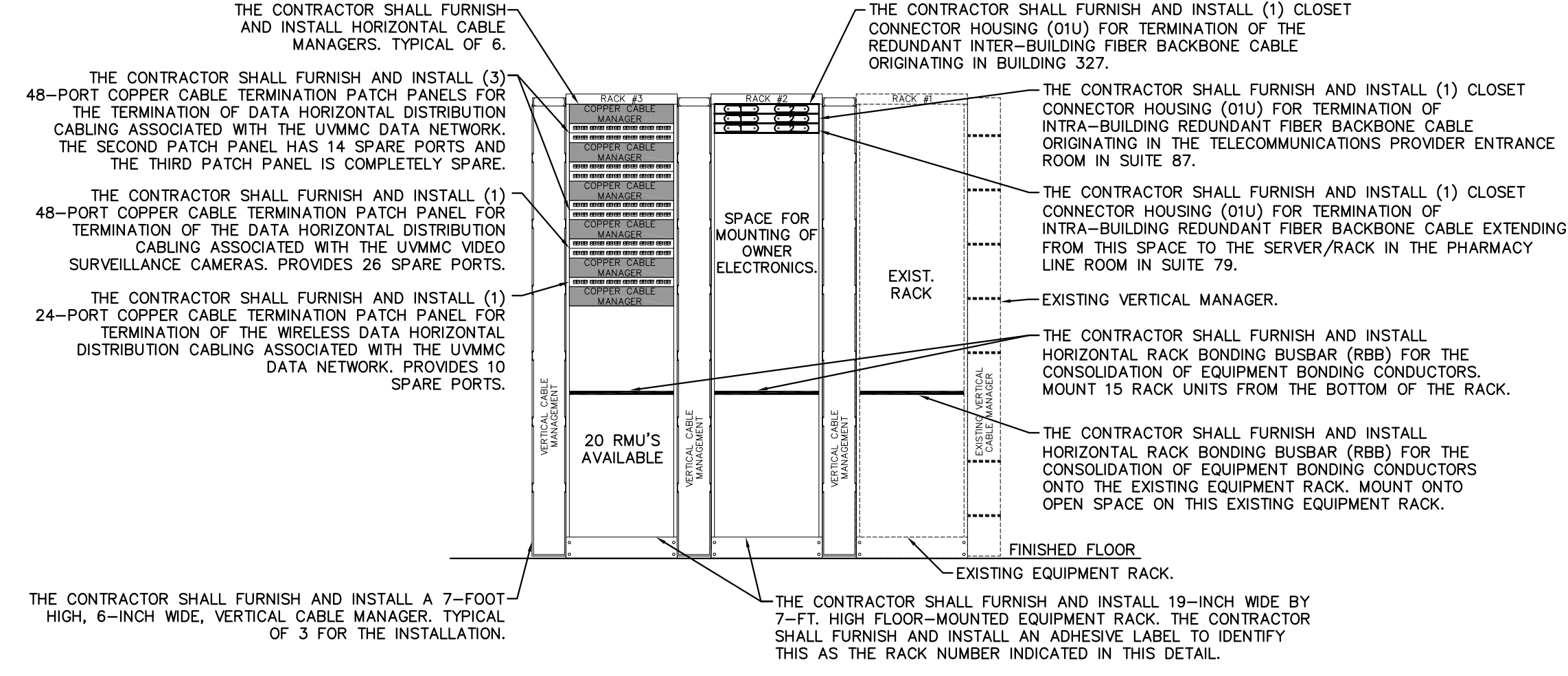
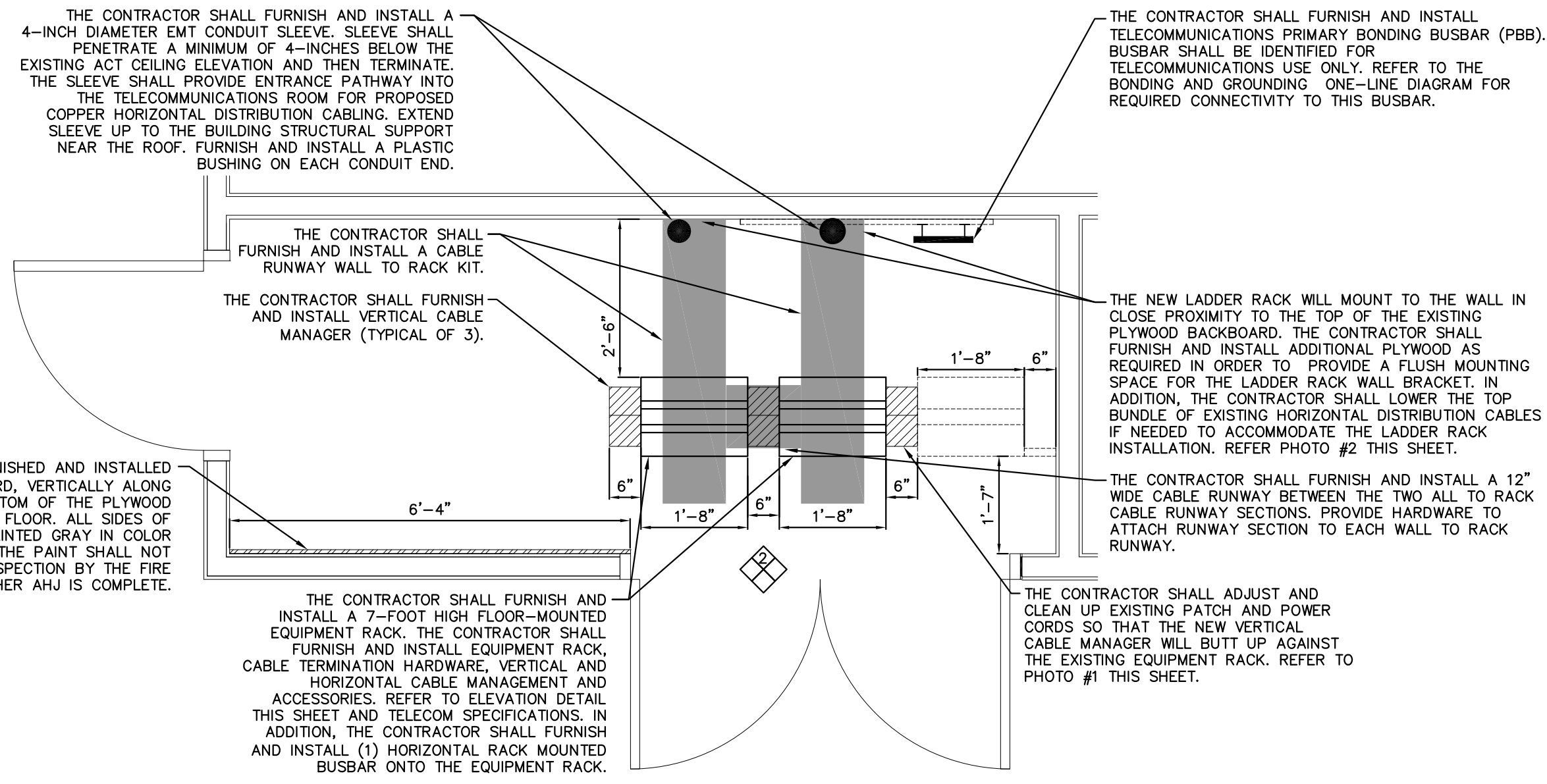
REORGANIZATION PROJECT

SCALE:	AS NOTED
DATE:	02/01/21
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CHECKED BY:	MPK
PROJECT:	2025

SHEET TITLE:
**Enlarged
Telecommunications
Room 106 Floor Plan
& Elevation Sheet -
Proposed**

DRAWING NO.

T3.1



1 ENLARGED EXPANDED TELECOMMUNICATIONS ROOM (106) FLOOR PLAN
SCALE: 1/2" = 1'-0"

2 ELEVATION - EQUIPMENT RACK ELEVATION DETAIL
SCALE: 1/2" = 1'-0"



PHOTO #1
SCALE: NTS

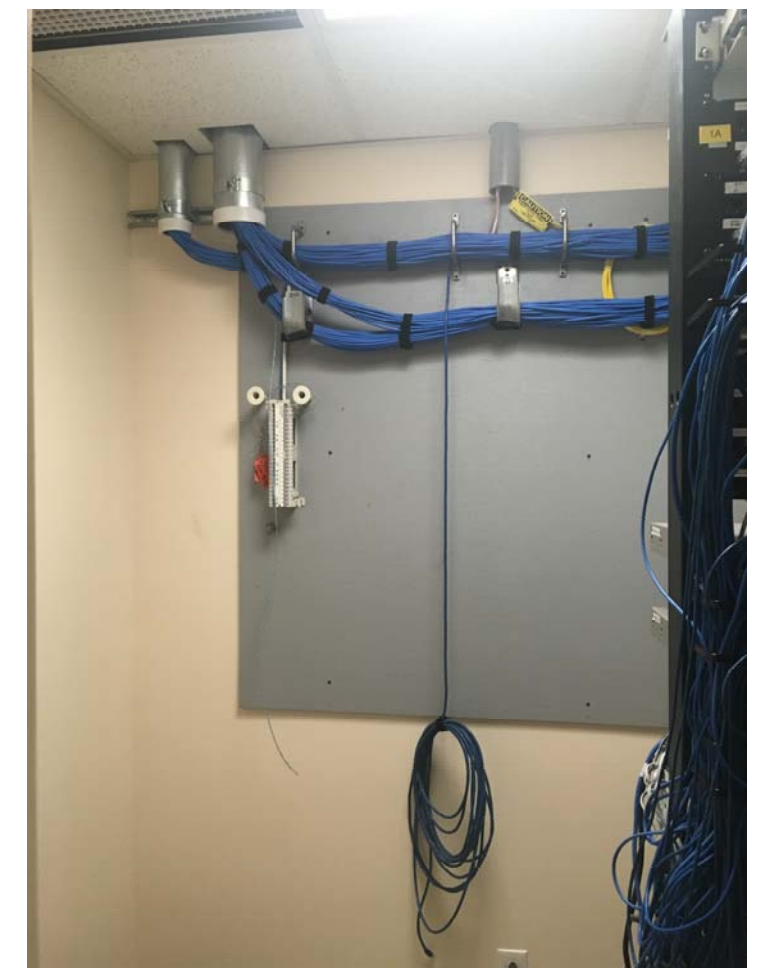


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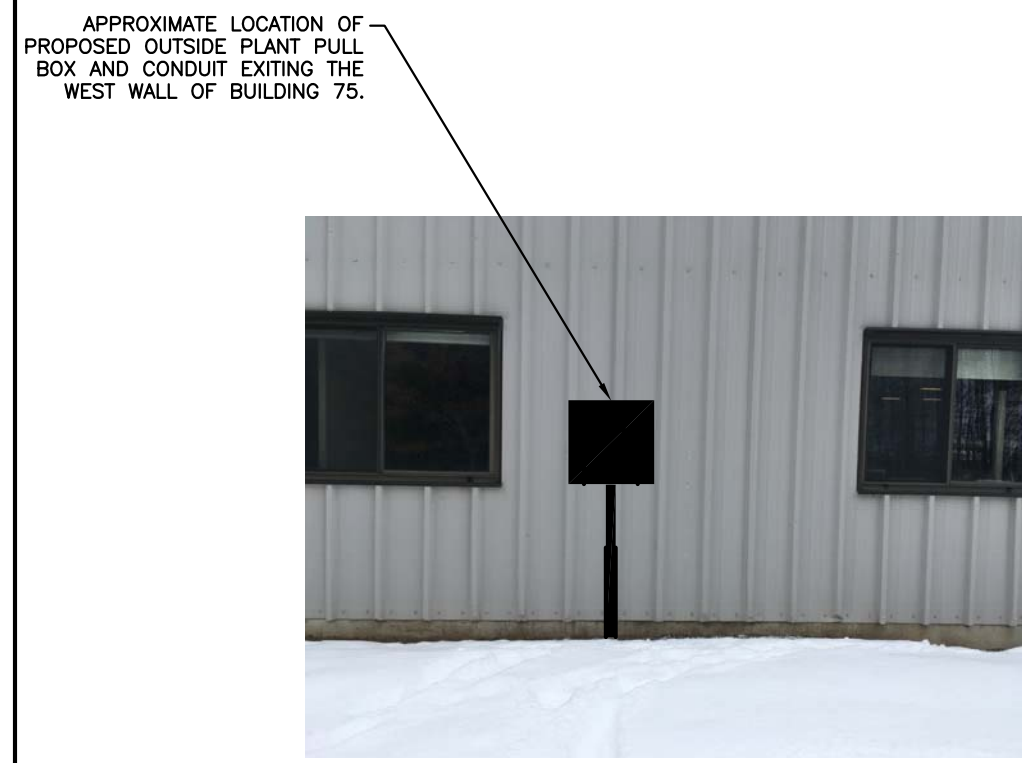


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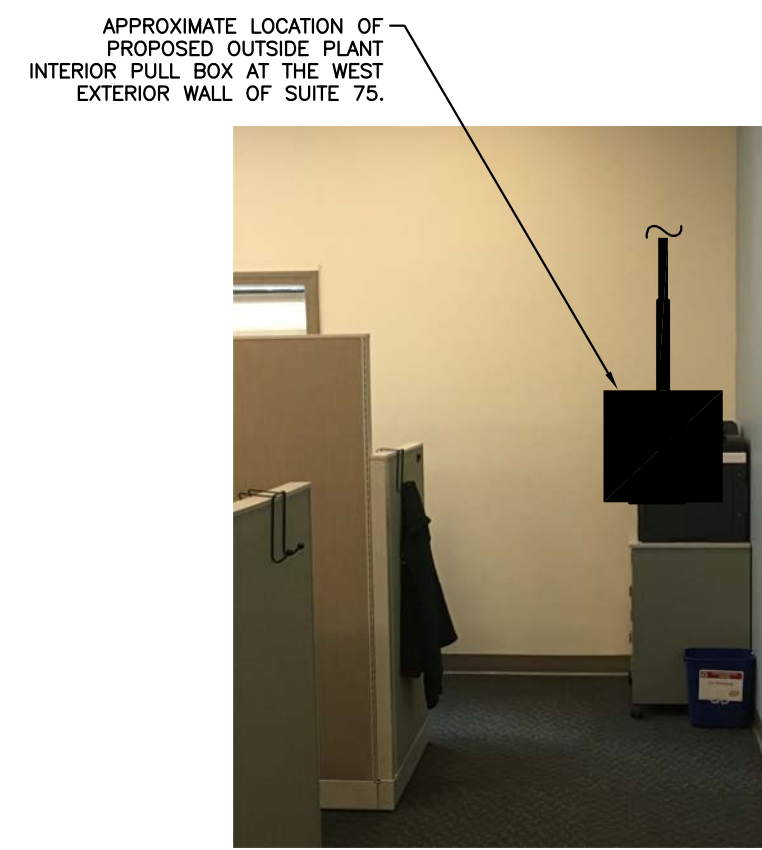


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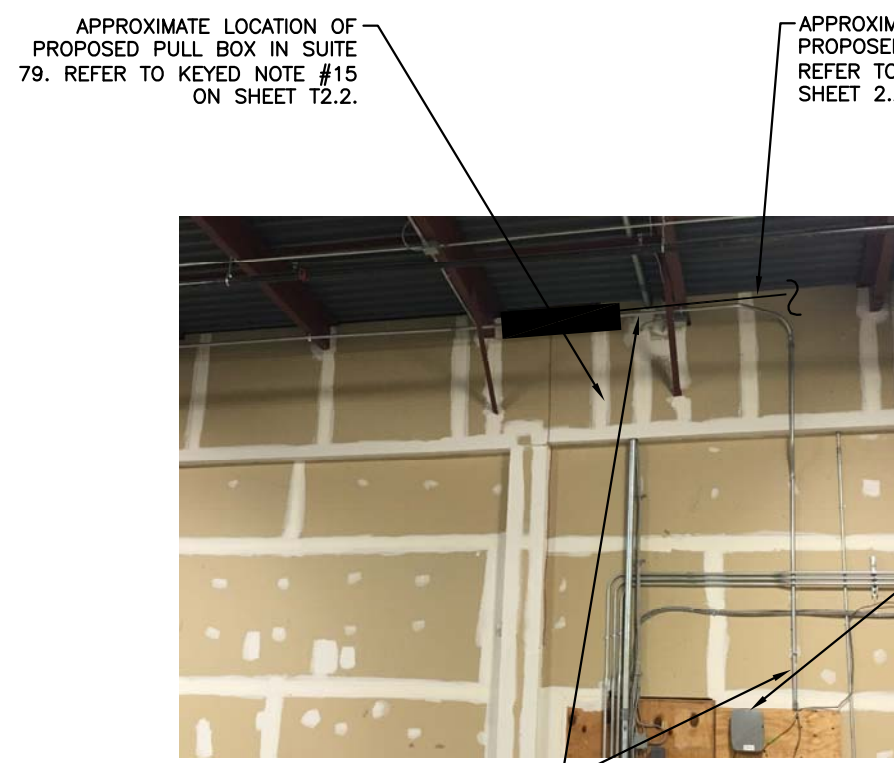


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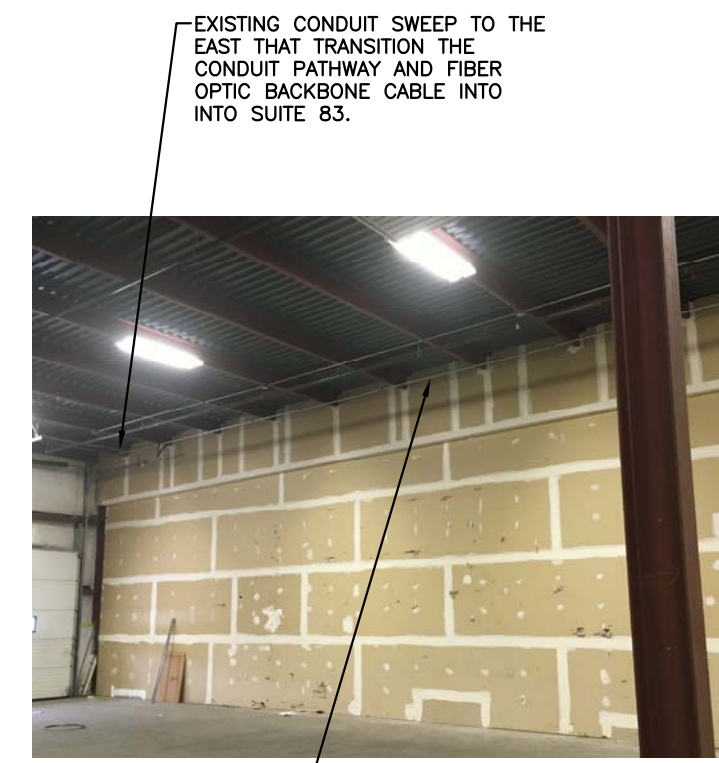


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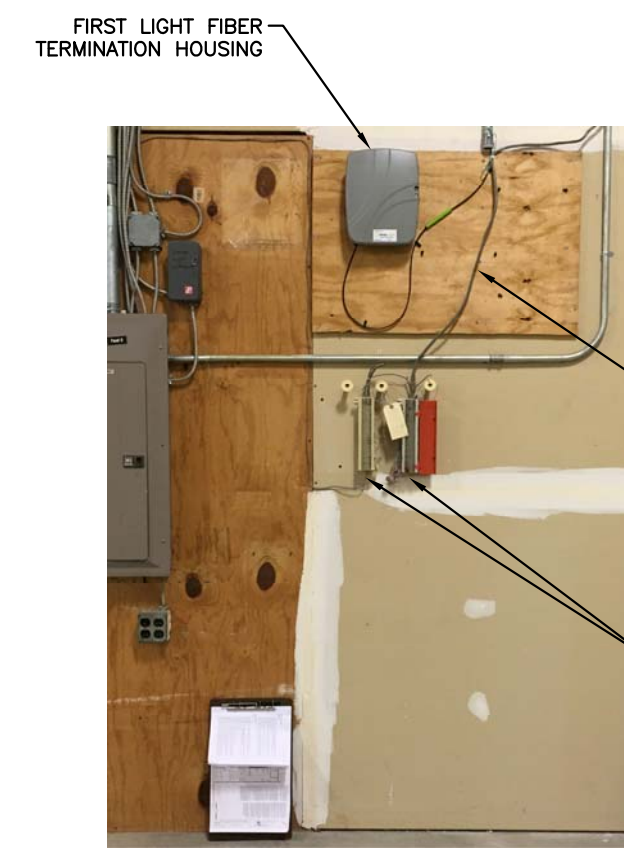


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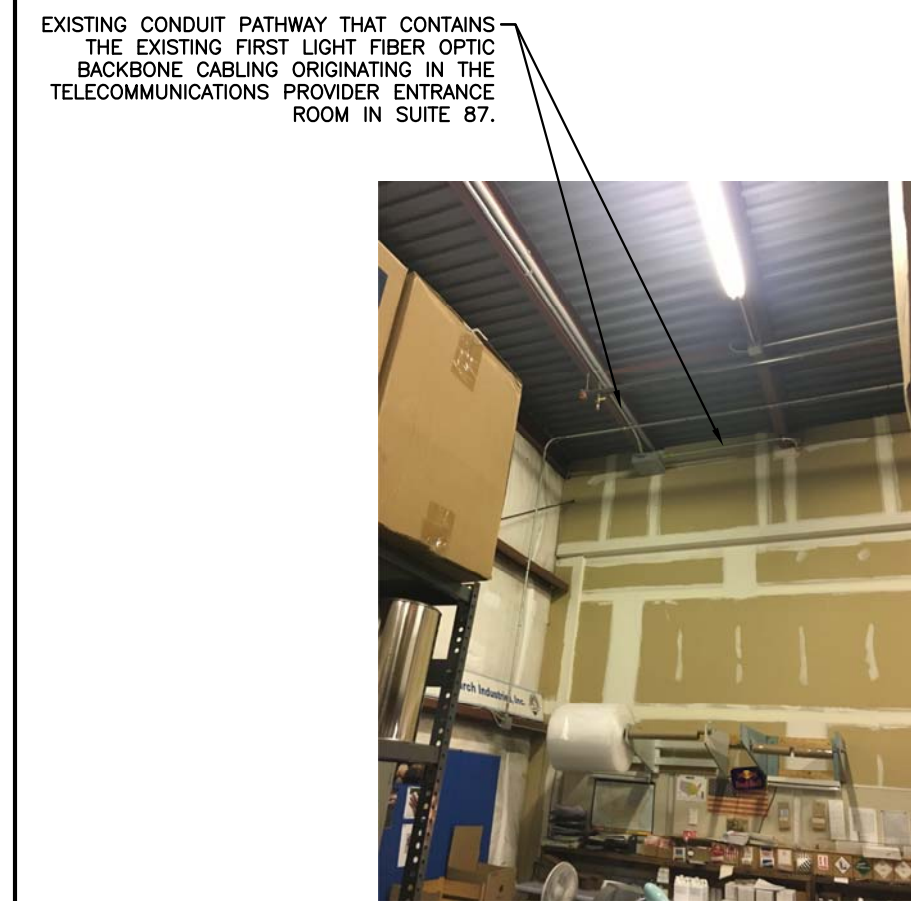


PHOTO #6

SCALE: NTS



PHOTO #7

SCALE: NTS



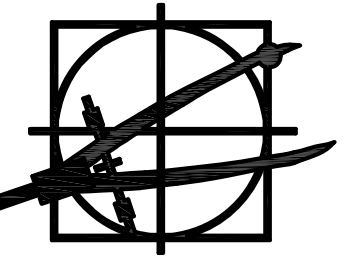
PHOTO #8

SCALE: NTS

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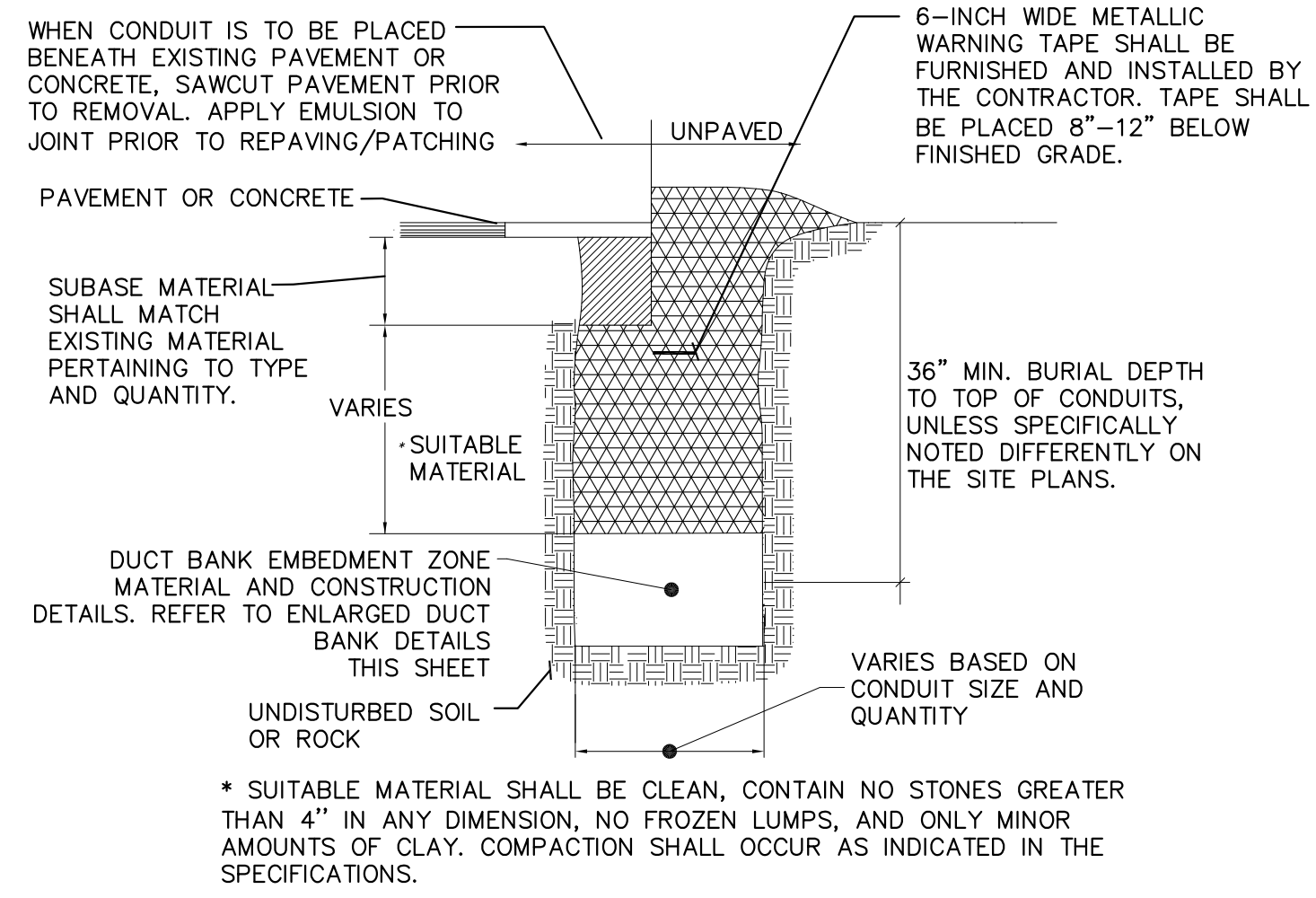
THE UNIVERSITY OF VERMONT MEDICAL CENTER
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 WILLISTON VERMONT

REORGANIZATION PROJECT

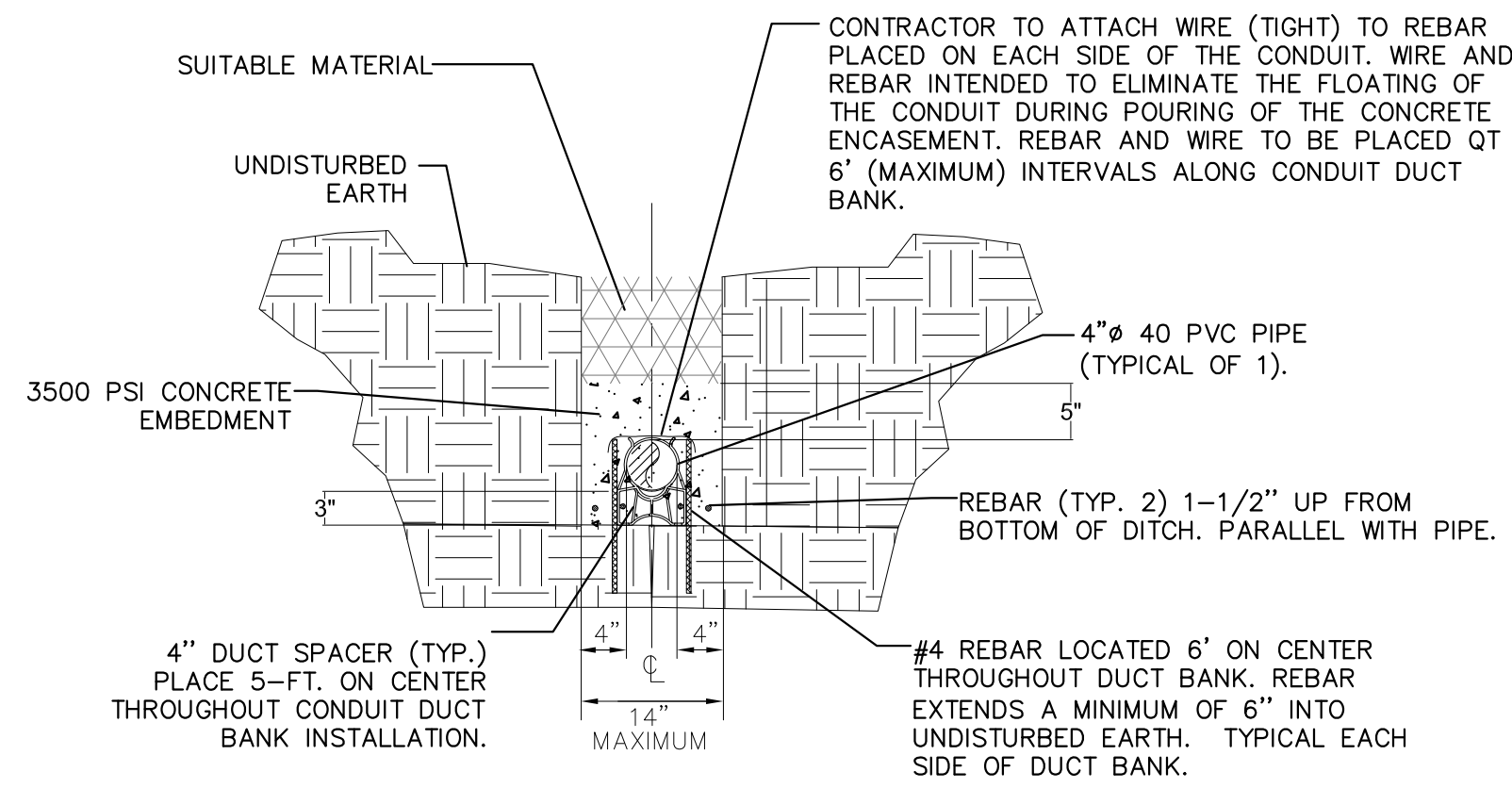
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SHEET TITLE:
Project Photos

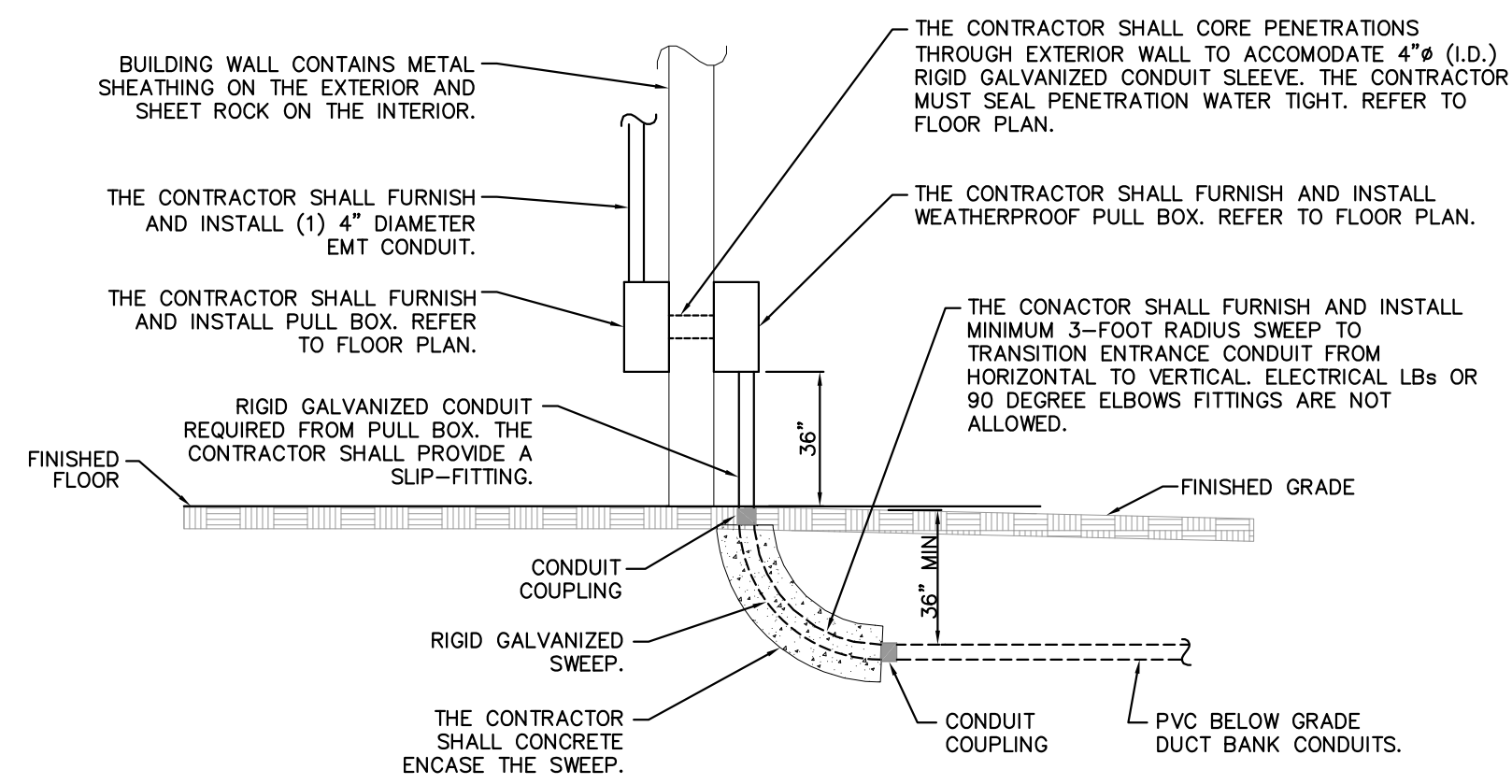
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T4.0



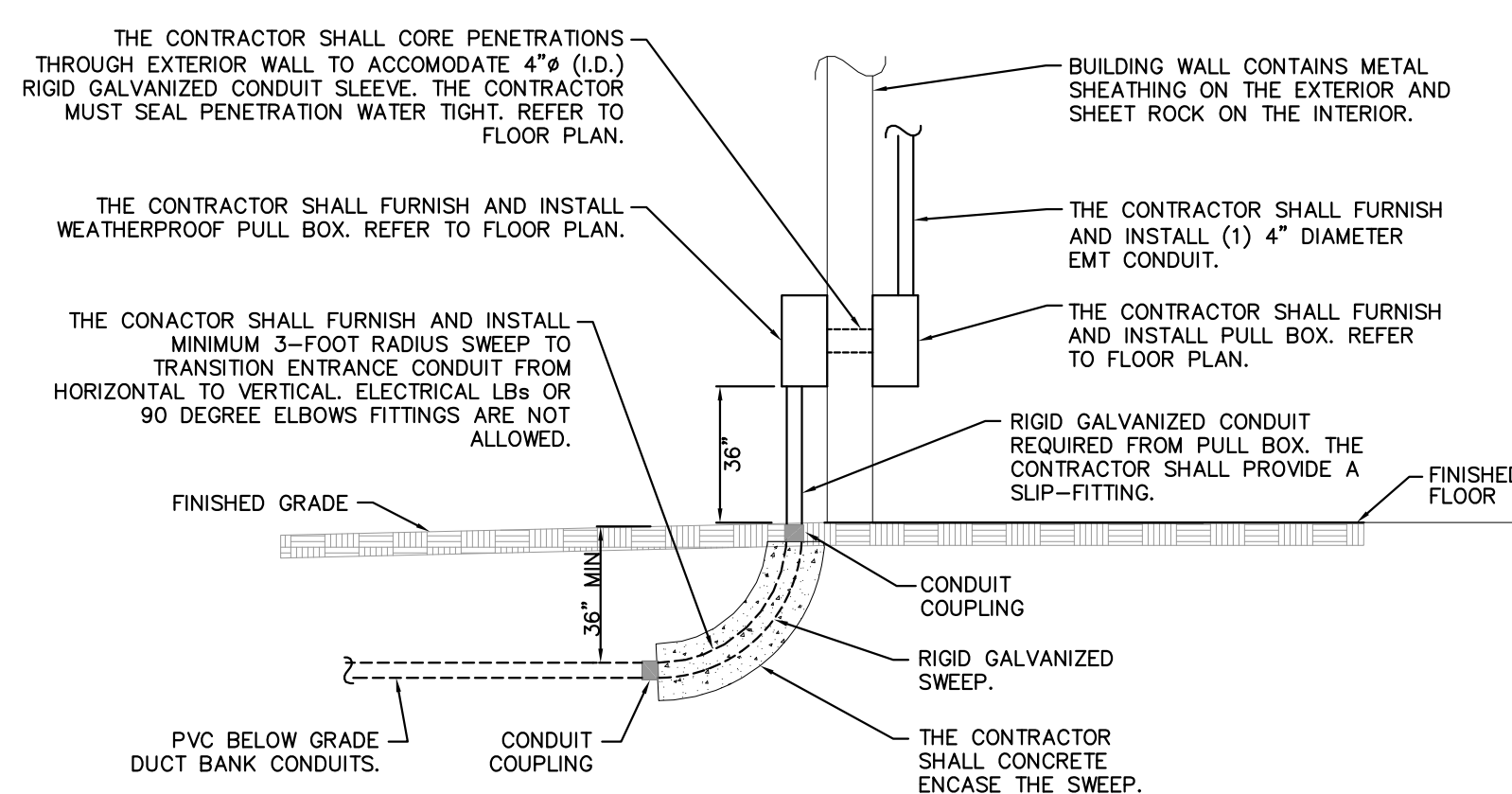
1 TYPICAL TRENCH DETAIL
SCALE: NTS



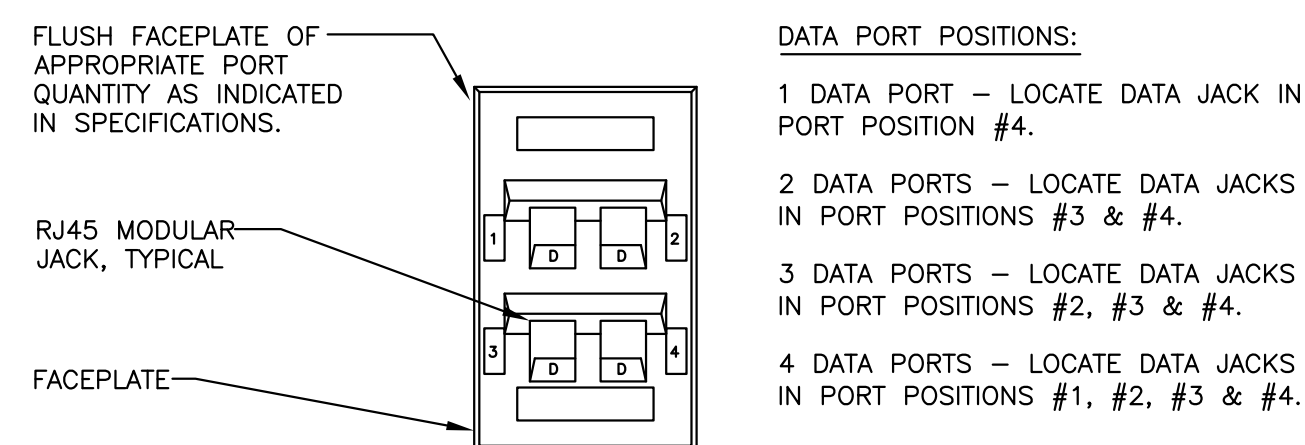
2 TYPICAL ENCASED DUCT BANK DETAIL - (1) 4" CONDUIT
SCALE: NTS



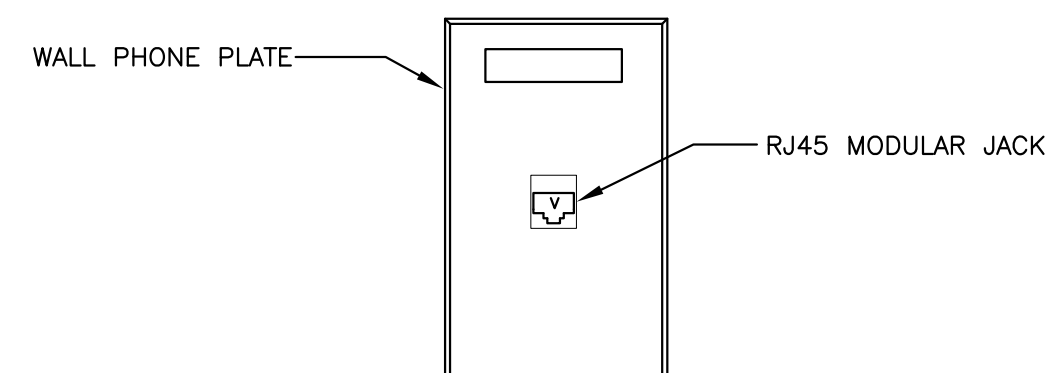
3 SECTION VIEW - BUILDING 327 CONDUIT ENTRANCE
SCALE: 1/4" = 1'0"



4 SECTION VIEW - SUITE 75 CONDUIT ENTRANCE
SCALE: 1/4" = 1'0"



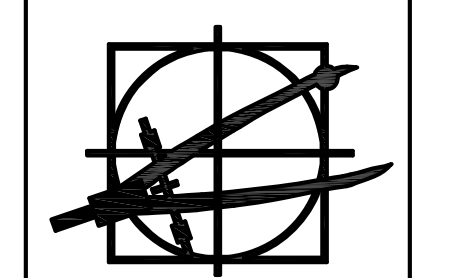
5 TYPICAL TELECOM OUTLET FACEPLATE CONFIGURATION
SCALE: NTS



6 TYPICAL TELECOM WALL PHONE FACEPLATE CONFIGURATION
SCALE: NTS

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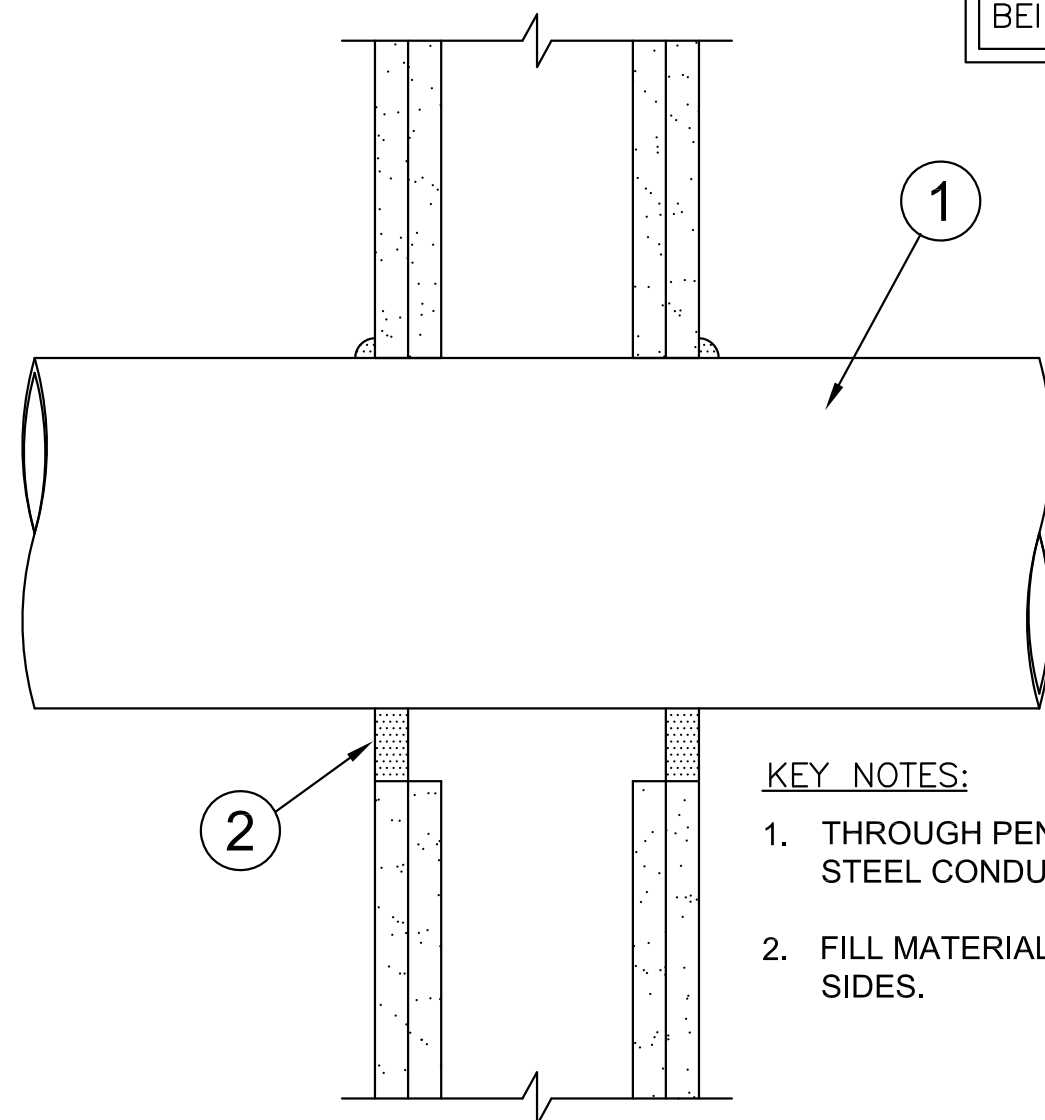
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VERMONT
REORGANIZATION PROJECT

SCALE:	AS NOTED
DATE:	02/01/21
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PROJECT:	2025

SHEET TITLE:
Trench, Exterior Building Penetration & Telecom Faceplate Details

DRAWING NO.
T5.0

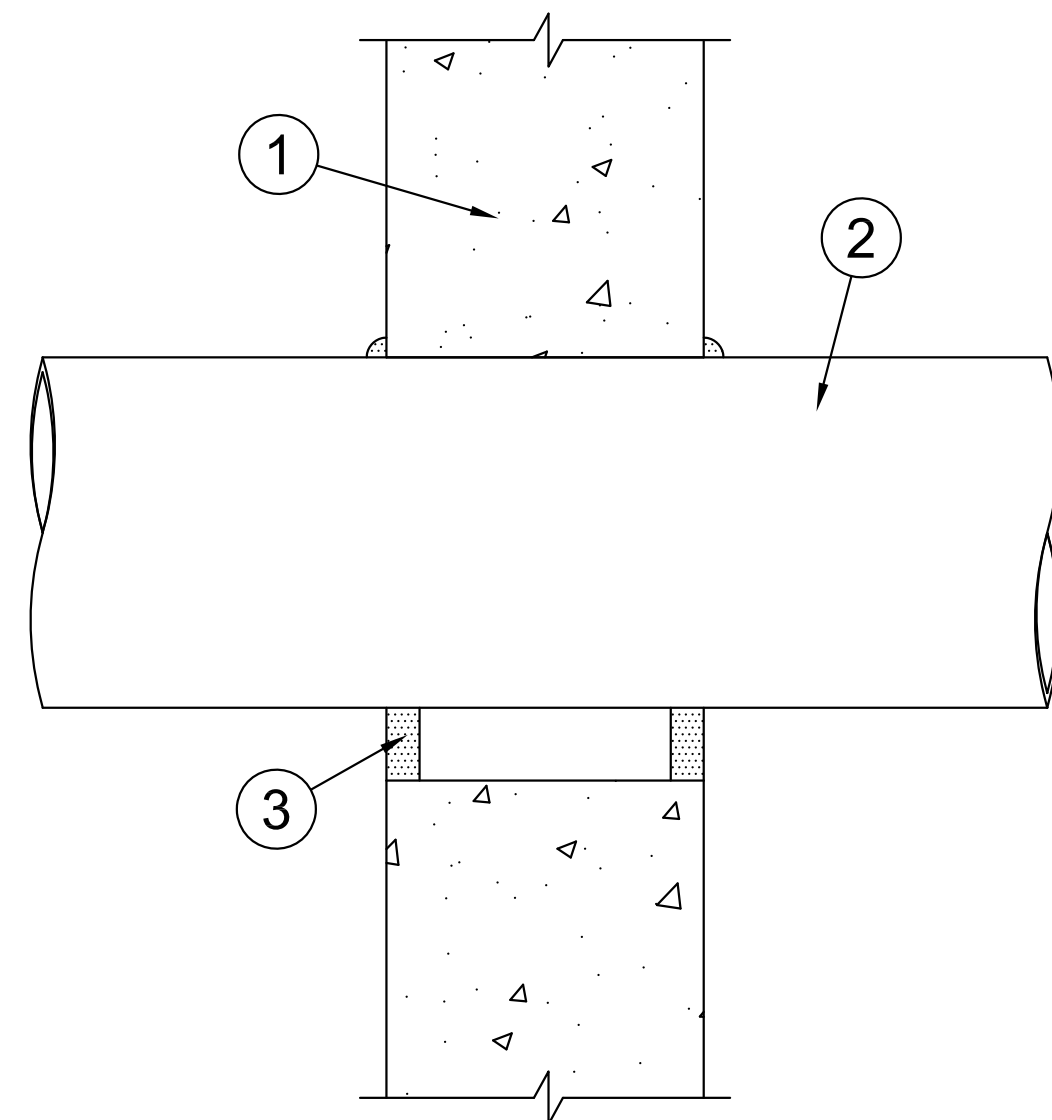
CONTRACTOR TO MATCH
FIRE RATING OF WALL
BEING PENETRATED



- KEY NOTES:**
1. THROUGH PENETRANT: MAX 6" STEEL CONDUIT, 4" EMT.
 2. FILL MATERIAL: 5/8" SEALANT BOTH SIDES.

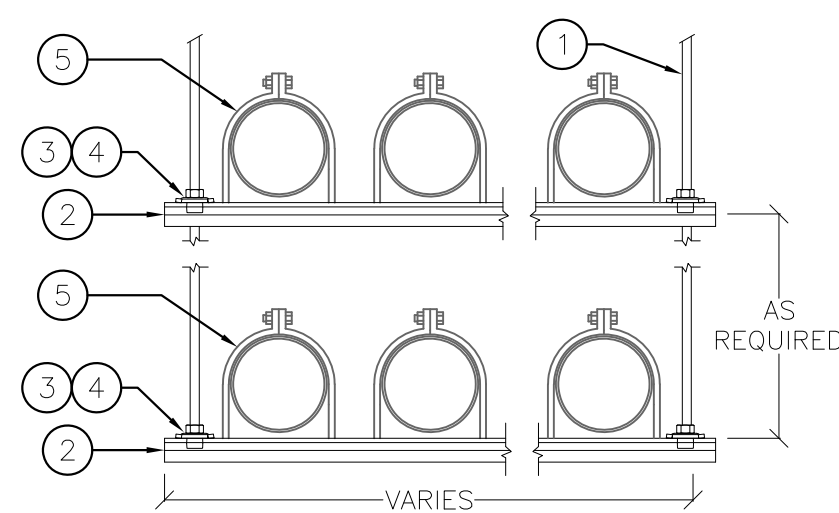
1 FIRESTOP CONDUIT THROUGH GYPSUM BOARD WALL
SCALE: NTS

CONTRACTOR TO MATCH
FIRE RATING OF WALL
BEING PENETRATED



- KEY NOTES:**
1. WALL ASSEMBLY: CONCRETE OR CONCRETE BLOCK WALL MAX OPENING 26"
 2. THROUGH PENETRANT: MAX 4" EMT.
 3. FILL MATERIAL: 5/8" SEALANT BOTH SIDES.

2 FIRESTOP CONDUIT THROUGH CONCRETE WALL
SCALE: NTS

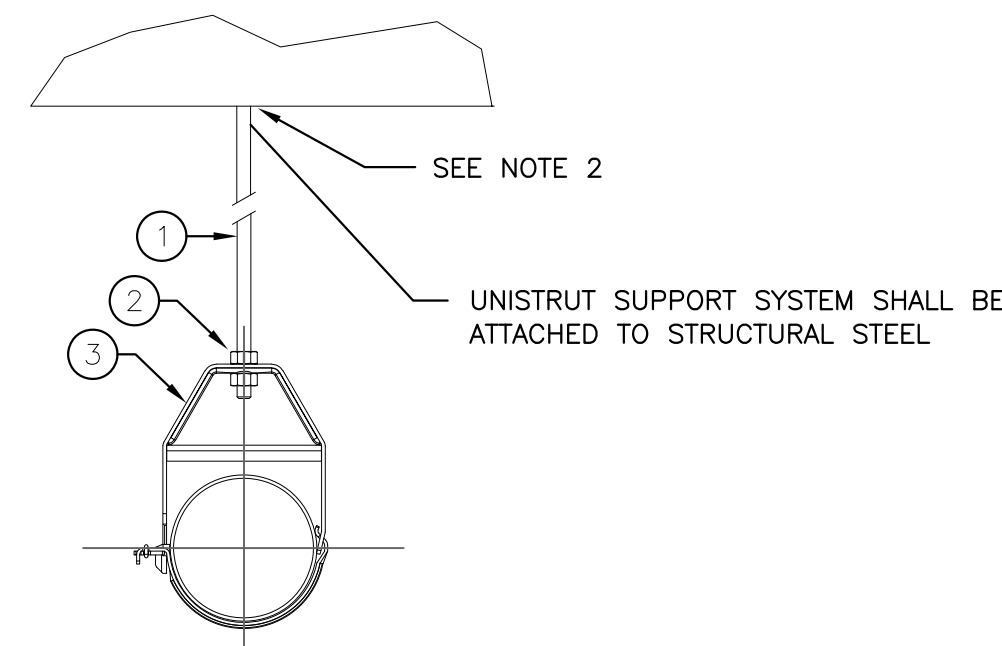


# OF ROWS	# OF CONDUITS/ROW	REQUIRED CHANNEL LENGTH
1	2	14-INCHES
1	3	24-INCHES
1	4	34-INCHES
2	2	14-INCHES
2	3	24-INCHES
2	4	34-INCHES
2	5	40-INCHES

MARK No.	DESCRIPTION	PART NUMBER
1	B-LINE - ALL THREADED ROD *	ATR 1/2 X 60
2	B-LINE - SH TYPE CHANNEL *	B-22-SH GALV **
3	B-LINE - CHANNEL NUTS & SQUARE WASHERS *	N225 & B202D
4	B-LINE - HEAVY HEX NUT *	1/2 HHN
5	B-LINE - CONDUIT CLAMPS *	B 2017

- * OR EQUIVALENT HARDWARE COMPONENTS
** REFER TO CHANNEL LENGTH TABLE
- NOTES:**
1. SPACING FOR CONDUIT SUPPORTS IS NOT TO EXCEED 5 FEET.
 2. CONTRACTOR TO FIELD VERIFY MATERIAL SUBSTRATES THAT THE ANCHOR WILL BE FASTENED INTO. ANCHOR DIAMETER SHALL BE DETERMINED BY THE DIAMETER OF THE THREADED ROD OF WHICH IT ATTACHES TO. FOR ANCHORAGE POINTS THAT ARE NOT SIZED BY THREADED ROD ATTACHMENTS UTILIZE 1/2" DIAMETER ANCHORS UNLESS OTHERWISE STATED WITHIN THE DRAWING SECTIONS AND DETAILS. REFER TO MANUFACTURERS RECOMMENDATIONS FOR ANCHORING SYSTEM BASED ON FOUND FIELD CONDITIONS.

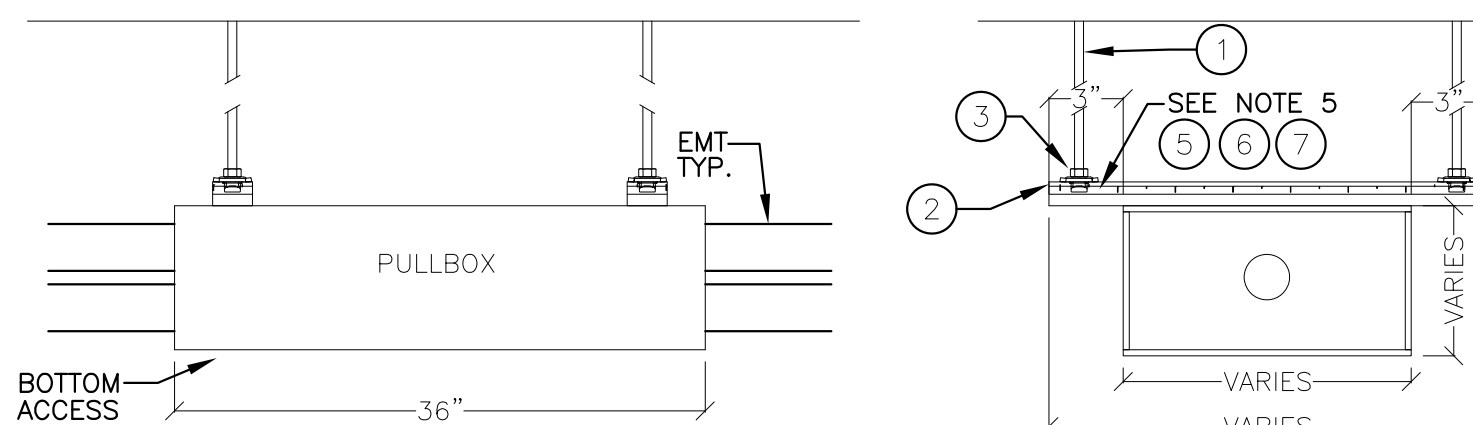
3 MULTIPLE CONDUIT MOUNTING
SCALE: NTS



MARK No.	DESCRIPTION	PART NUMBER
1	B-LINE ALL THREADED ROD *	ATR 5/8 X 60
2	B LINE HEAVY HEX NUT *	5/8 HHN
3	B LINE STANDARD CLEVIS HANGER *	B3100C-4

- * OR EQUIVALENT HARDWARE COMPONENTS
- NOTES:**
1. SPACING FOR THE 4" CONDUIT HANGERS IS NOT TO EXCEED 5 FEET.
 2. CONTRACTOR TO FIELD VERIFY MATERIAL SUBSTRATES THAT THE ANCHOR WILL BE FASTENED INTO. ANCHOR DIAMETER SHALL BE DETERMINED BY THE DIAMETER OF THE THREADED ROD OF WHICH IT ATTACHES TO. FOR ANCHORAGE POINTS THAT ARE NOT SIZED BY THREADED ROD ATTACHMENTS UTILIZE 1/2" DIAMETER ANCHORS UNLESS OTHERWISE STATED WITHIN THE DRAWING SECTIONS AND DETAILS. REFER TO MANUFACTURERS RECOMMENDATIONS FOR ANCHORING SYSTEM BASED ON FOUND FIELD CONDITIONS.

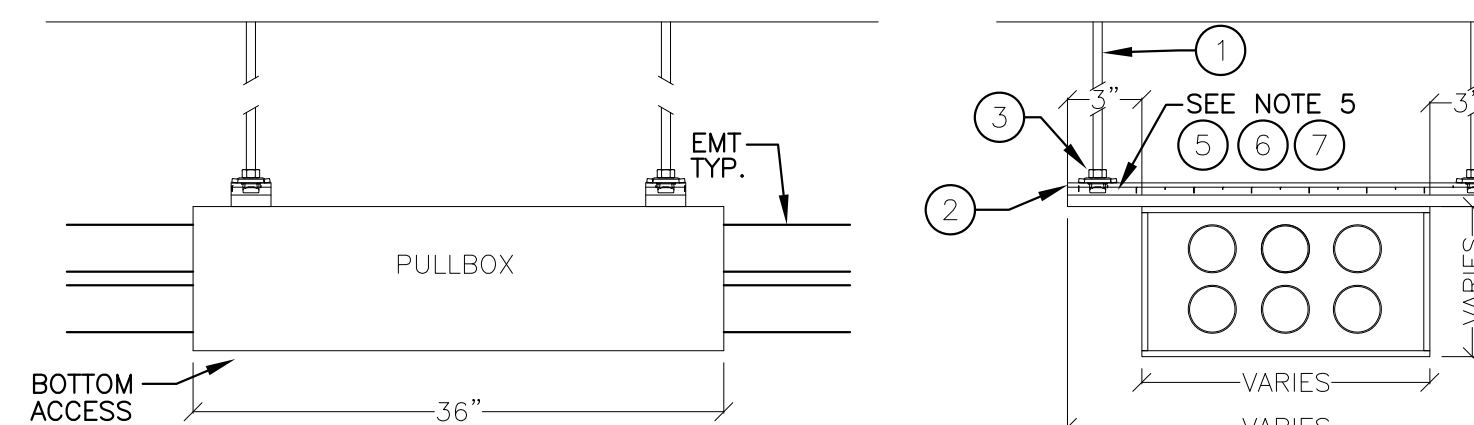
4 SINGLE CONDUIT ROUTING
SCALE: NTS



MARK No.	DESCRIPTION	ITEM CODE NUMBER
1	B-LINE - ALL THREADED ROD*	ATR 1/2 X 60
2	B-LINE - SH TYPE CHANNEL*	B-22-SH-GALV (LENGTH VARIES)
3	B-LINE - CHANNEL NUTS & SQUARE WASHERS*	N225 & B202D
4	B-LINE - HEAVY HEX NUT*	1/2 HHN
5	B-LINE - CHANNEL NUTS *	N225
6	B-LINE - HEX HEAD CAP SCREW*	1/2 X 1-1/4 HHCS
7	B-LINE - FLAT WASHER *	1/2 FW

* OR EQUIVALENT HARDWARE COMPONENTS

5 PULL BOX SUPPORT (SINGLE CONDUIT)
SCALE: NTS



MARK No.	DESCRIPTION	ITEM CODE NUMBER
1	B-LINE - ALL THREADED ROD*	ATR 1/2 X 60
2	B-LINE - SH TYPE CHANNEL *	B-22-SH-GALV (LENGTH VARIES)
3	B-LINE - CHANNEL NUTS & SQUARE WASHERS*	N225 & B202D
4	B-LINE - HEAVY HEX NUT *	1/2 HHN
5	B-LINE - CHANNEL NUTS *	N225
6	B-LINE - HEX HEAD CAP SCREW *	1/2 X 1-1/4 HHCS
7	B-LINE - FLAT WASHER *	1/2 FW

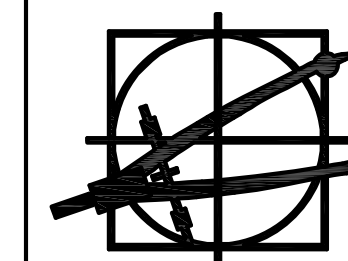
* OR EQUIVALENT HARDWARE COMPONENTS

6 PULL BOX SUPPORT (MULTIPLE CONDUIT)
SCALE: NTS

- NOTES:**
1. TWO TRAPEZE SUPPORTS ARE REQUIRED TO SUPPORT EACH PULL BOX
 2. ATTACH THREADED ROD TO BASE MATERIAL WITH AN APPROPRIATE ANCHOR.
 3. CONTRACTOR TO FIELD VERIFY MATERIAL SUBSTRATES THAT THE ANCHOR WILL BE FASTENED INTO. ANCHOR DIAMETER SHALL BE DETERMINED BY THE DIAMETER OF THE THREADED ROD OF WHICH IT ATTACHES TO. FOR ANCHORAGE POINTS THAT ARE NOT SIZED BY THREADED ROD ATTACHMENTS UTILIZE 1/2" DIAMETER ANCHORS UNLESS OTHERWISE STATED WITHIN THE DRAWING SECTIONS AND DETAILS. REFER TO MANUFACTURERS RECOMMENDATIONS FOR ANCHORING SYSTEM BASED ON FOUND FIELD CONDITIONS.
 4. SUPPORT CONDUITS WITHIN 36" OF PULLBOX
 5. ATTACH PULLBOX TO CHANNEL WITH B-LINE MARK NO. ITEMS 5, 6 & 7
 6. DO NOT USE PULL BOX FOR VERTICAL TRANSITIONS.

PROGRESS
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NO.	DATE	REVISION

THE UNIVERSITY OF VERMONT MEDICAL CENTER
(75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
VERMONT
REORGANIZATION PROJECT

SCALE: AS NOTED
DATE: 02/01/21
DRAWN BY: TPB
CHECKED BY: MPK
PROJECT: 2025

SHEET TITLE:
Typical
Telecommunications
Detail Sheet

DRAWING NO.
T5.1

27 0543 UNDERGROUND DUCTS AND RACEWAYS FOR COMMUNICATIONS SYSTEMS

GENERAL:

BACKRONE PATHWAY COMPOSITION:

THE UNDERGROUND PATHWAY SYSTEM FOR THIS PROJECT CONSISTS OF A SERIES OF HAND HOLES CONNECTED BY DUCT BANKS. AT ALL LOCATIONS, THE DUCT BANK SHALL BE CONCRETE ENCASED. THE DUCT BANK SHALL BE COMPRISED OF 4-INCH DIAMETER UNDERGROUND CONDUIT(S) OF CORROSIVE RESISTANT POLYVINYL CHLORIDE (PVC). REFER TO THE SITE PLAN AND TRENCH DETAILS.

SUMMARY:

PROVIDE ALL MATERIALS AND LABOR FOR THE INSTALLATION OF A CUSTOMER-OWNED OUTSIDE PLANT COMMUNICATIONS CABLING SYSTEM. FURNISH AND INSTALL ALL MATERIALS, DEVICES, AND NECESSARY APPURTENANCES TO PROVIDE A COMPLETE TIA AND ISO/IEC COMPLIANT COMMUNICATIONS OUTSIDE PLANT (OSP) AS SPECIFIED SHOWN ON THE CONTRACT DOCUMENTS.

THE WORK SHALL INCLUDE ALL MATERIALS, EQUIPMENT AND APPARATUS NOT SPECIFICALLY MENTIONED HEREIN OR NOTED ON THE PLANS BUT WHICH ARE NECESSARY TO MAKE A COMPLETE WORKING TIA AND ISO/IEC COMPLIANT.

REFERENCES:

THE WORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATION AND CODES THAT ARE APPLICABLE TO OUTSIDE PLANT COMMUNICATIONS SYSTEM INSTALLATION AS REFERENCED BELOW. AS EACH DOCUMENT REFERENCED ARE MODIFIED OVER TIME, THE LATEST EDITION AND ADDENDA TO EACH OF THESE DOCUMENTS IS CONSIDERED TO BE DEFINITIVE. THE BUILDING INDUSTRIES CONSULTING SERVICES INTERNATIONAL (BICS) OUTSIDE PLANT DESIGN REFERENCE MANUAL; TIA 758- CUSTOMER-OWNED OUTSIDE PLANT STANDARD; NATIONAL ELECTRIC CODE (NEC), NFPA, NATIONAL ELECTRIC SAFETY CODE (NESC) AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION CODES (OSHA) AS WELL AS ALL MANUFACTURER'S RECOMMENDATIONS.

ALSO REFER TO TELECOMMUNICATIONS SPECIFICATIONS SECTIONS 27 0000 THAT ARE INCLUDING IN THESE BID DOCUMENTS.

MATERIALS:

CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS REQUIRED FOR A COMPLETE INFRASTRUCTURE INSTALLATION. ALL MATERIALS IDENTIFIED BELOW AND WITHIN THE 27 0000 TELECOMMUNICATIONS SPECIFICATIONS CONSTITUTE THE MAJOR COMPONENTS REQUIRED FOR THIS WORK, BUT IS NOT INTENDED TO BE A COMPLETE LIST OF MATERIALS THAT MAY BE REQUIRED BY THE CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION. THE CONTRACTOR SHALL PHYSICALLY VERIFY EXISTING SITE CONDITIONS PRIOR TO PURCHASING AND DELIVERY OF MATERIALS, INCLUDING BUT NOT LIMITED TO LENGTHS OF PROPOSED PATHWAYS REQUIRED FOR THE PROJECT. PRE-CUT MATERIAL OF INSUFFICIENT LENGTH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR MUST COORDINATE CONSTRUCTION STAGING ZONES AND CONSTRUCTION MATERIAL DROP SITES WITH UVMCM. THE CONTRACTOR MUST RECEIVE WRITTEN APPROVAL FROM VTARNG OF PROPOSED STAGING AREAS AND/OR DROP ZONES PRIOR TO BEGINNING WORK ON THE SITE.

* **HANDHOLES** – 48"x72" PG STYLE, POLYMER CONCRETE OPEN BOTTOM, (STACKABLE) ASSEMBLY AS MANUFACTURED BY QUIZITE TO INCLUDE COVER AND EXTENSIONS SECTIONS AS REQUIRED. COVER – PG4872HH00, BOX – PG4872BA–XX. THE MINIMUM BURIAL DEPTH TO THE TOP OF THE NEW DUCT BANK CONDUITS SHALL BE 36 INCHES. THE QUIZITE BOX SECTION IS AVAILABLE IN BOTH 36 INCH AND 48 INCH HEIGHTS. THE CONTRACTOR MAY USE EITHER BOX HEIGHT IN COMBINATION WITH EXTENSION SECTIONS AS THEY DETERMINE IN THE FIELD THE APPROPRIATE HEIGHT TO CONSTRUCT THE ENCLOSURE TO MEET THE MINIMUM BURIAL DEPTH OF THE CONDUIT DUCT BANK AND TO ENSURE THAT THE HANDHOLE COVER IS SET TO BE JUST ABOVE THE EXISTING FINISH GRADE ELEVATION. THE USE OF BOX EXTENSION SECTIONS (PG4872EA12) IS ACCEPTABLE IN ORDER TO PROVIDE ADDITIONAL DEPTH IF REQUIRED AT EACH OF THE PROPOSED HANDHOLE LOCATIONS. THE REQUIREMENT AND QUANTITY OF BOX EXTENSION SECTION(S) MAY VARY PER HANDHOLE LOCATION, AND SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

EACH HANDHOLE SHALL BE EQUIPPED WITH CABLE RACKS MOUNTED TO EACH SIDE WALL. THE MINIMUM LENGTH OF THE CABLE RACK SHALL BE 24 INCHES. THE CONTRACTOR SHALL MOUNT CABLE RACKS TO BOX PER MANUFACTURER RECOMMENDATIONS. IN ADDITION, FOUR CABLE RACK HOOKS SHALL BE PROVIDED FOR EACH HANDHOLE, TWO 7.5" AND TWO 10" LENGTH CABLE HOOKS ARE REQUIRED FOR EACH HAND HOLE. (10" LENGTH CABLE HOOK PART NUMBER – 80907, 7.5" CABLE HOOK PART NUMBER – 80905).

EACH BOX SHALL BE ORDERED WITH PULLING EYES RATED TO 3,000 POUNDS. THE CONTRACTOR SHALL COORDINATE WITH DISTRIBUTOR THE PULLING EYE REQUIREMENT AND INSTALL FULL PULL EYES PER MANUFACTURER RECOMMENDATIONS.

THE COVER SHALL BE CAST WITH A "TELECOMMUNICATIONS" ELECTRONIC MARKER, FREQUENCY 101.4 kHz. IN ADDITION, THE COVER SHALL BE ORDERED WITH A LOGO THAT READS "COMMUNICATIONS". COVER PART NUMBER IS PG4872HH012.

THE CONTRACTOR SHALL REQUEST THAT EACH BOX IS MANUFACTURED WITH A GROUNDING RIBBON OR BONDING STRAP ATTACHMENT THAT SHALL BE LOCATED WITHIN THE INTERIOR OF THE BOX.

* **CONDUIT** – 4-INCH INSIDE DIAMETER CONDUIT IS REQUIRED FOR EACH SECTION OF PROPOSED CONDUIT DUCT BANK. THE FOLLOWING CONDUIT DUCT BANK MATERIAL TYPES ARE REQUIRED BASED ON USAGE AND ARE INDICATED AS FOLLOWS:

- SCHEDULE 40 PVC – CONCRETE ENCASED CONDUIT DUCT BANK.
- RIGID GALVANIZED STEEL – EXPOSED LOCATIONS, TYPICALLY BUILDING ENTRANCES REFER TO PLANS.

CONDUIT DUCT SPACERS: 4-INCH WUNPEECE DUCT SPACER FOR A SINGLE 4-INCH INSIDE DIAMETER CONDUIT AS MANUFACTURED BY UNDERGROUND DEVICES, PART NUMBER 4W10-1. LOCATE DUCT SPACERS 5-FEET ON CENTER THROUGHOUT ENTIRE CONDUIT DUCT BANK INSTALLATION.

MAXCELL FABRIC INNERDUCT – FABRIC INNERDUCT SHALL BE INSTALLED AS INDICATED ON THE TELECOMMUNICATIONS SITE AND FLOOR PLANS. THE CONTRACTOR SHALL FIELD DETERMINE APPROPRIATE LENGTHS OF MATERIAL THAT SHALL BE ORDERED. THE CONTRACTOR SHALL PROVIDE INSTALLATION KITS AS APPROPRIATE TO ACCOMMODATE THE INSTALLATION OF ALL PROPOSED SECTIONS OF FABRIC INNERDUCT.

* **WARNING TAPE** – 6-INCH WIDE DETECTABLE WARNING TAPE AS MANUFACTURED BY STRANCO INC. OR APPROVED EQUAL. TAPE SHALL BE ORANGE IN COLOR AND READ "CAUTION BURIED FIBER OPTIC". INSTALL PER TRENCH DETAILS.

* **MULE TAPE** – 2500 LBS. AVERAGE BREAKING STRENGTH PER CONDUIT.

HANDHOLE INSTALLATION

CONTRACTOR SCOPE: THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO INSTALL PROPOSED HAND HOLES. MATERIALS SHALL BE AS INDICATED ABOVE. HAND HOLES SHALL BE INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND MANUFACTURER RECOMMENDATIONS.

BASE MATERIAL: EACH HAND HOLE SHALL HAVE A MINIMUM OF 12-INCHES OF GRAVEL BEDDING PLACED DIRECTLY BENEATH THE STRUCTURE. THE CONTRACTOR SHALL EXCAVATE THE HOLE FOR THE BOX A MINIMUM OF 2 FEET LONGER AND 2 FEET WIDER THAN THE BOX SIZE BEING INSTALLED, AS WELL AS A MINIMUM OF 12 INCHES DEEPER THEN THE BOTTOM ELEVATION THAT THE BOX SHALL BE SET TO. THE GRAVEL BEDDING SHALL EXTEND BEYOND THE BOX A MINIMUM OF 2 FEET IN LENGTH AND 2 FEET IN WIDTH BEYOND THE PERIMETER OF THE BOX. REGARDING THE GRAVEL BEDDING THAT SHALL BE PLACED BENEATH THE BOX, AS WELL AS THE GRAVEL BACKFILL THAT SHALL BE PLACED AROUND THE PERIMETER OF THE BOX IN THE MINIMUM DIMENSIONS AS NOTED, THE CONTRACTOR SHALL FURNISH AND INSTALL GRAVEL BACKFILL AROUND THE PERIMETER OF THE BOX FROM THE BOTTOM OF THE BOX UP TO WITHIN 4 INCHES OF FINISHED GRADE. THE BACKFILL SHALL BE INSTALLED AND COMPACTED IN 6 TO 8 INCH LIFTS OR LAYERS OF MATERIAL FOR BOTH THE BOX BEDDING AND BACKFILL. A LIFT OF BACKFILL IS PLACED, THEN COMPACTED BEFORE THE NEXT LIFT IS PLACED. THE COMPACTION SHALL BE DONE WITH VIBRATORY COMPACTORS OR SIMILAR, HOWEVER, CARE MUST BE EXERCISED TO PREVENT DAMAGE TO THE NEWLY INSTALLED DUCTS. A MINIMUM OF 6 INCHES OF BACKFILL SHALL BE REQUIRED ABOVE THE DUCTS WHEN USING SMALL MECHANICAL COMPACTORS SO AS NOT TO DAMAGE THE DUCTS. ALL BOX BEDDING AND BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DENSITY USING THE MODIFIED PROCTOR METHOD.

BECAUSE THE BACKFILL AROUND THE PERIMETER OF THE BOX SHALL BE COMPACTED TO 95% THE CONTRACTOR MUST PROVIDE INTERNAL BRACING FOR THE BOX DURING THE BACKFILLING OPERATION TO MINIMIZE BOX SIDEWALL DEFLECTION. THE BRACING SHALL BE 2X4's OR SIMILAR MATERIAL SIZED TO HOLD AT MID-DEPTH. REFER TO MANUFACTURER RECOMMENDATIONS FOR BRACING CONFIGURATION FOR THE BOX SIZE BEING INSTALLED.

CLEANLINESS: CONTRACTOR SHALL REMOVE ANY CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN EACH HAND HOLE DURING THE PROJECT PRIOR TO TURNING THE DUCT BANK SYSTEM OVER TO UVMCM.

DUCT BANK SEPARATIONS WITH OTHER UTILITIES

ALL COMMUNICATIONS DUCTS SHALL BE PLACED SO AS TO CONTAIN A MINIMUM OF 18-INCHES OF NATIVE SOIL BETWEEN THE POWER DUCT BANK AND/OR CABLES (I.E BASE HIGH VOLTAGE – 5KV –12KV). SHOULD AN 18-INCH SEPARATION WITH NATIVE SOIL BE UNATTAINABLE, THE FOLLOWING SEPARATIONS ARE AN ACCEPTABLE ALTERNATIVE BETWEEN COMMUNICATIONS AND POWER UTILITIES:

- * 3-INCHES OF CONCRETE
- * 4-INCHES OF MASONRY
- * 12-INCHES TAMPED EARTH

ALL COMMUNICATIONS DUCTS SHALL BE LOCATED A MINIMUM OF 24-INCHES FROM STEAM PIPES AND CONDENSATE LINES IF CROSSING PERPENDICULAR. WHEN COMMUNICATIONS DUCTS RUN PARALLEL TO STEAM LINES A MINIMUM OF 5 (6) FOOT SEPARATION IS REQUIRED TO AVOID CONDUCTION OF HEAT.

WHEN COMMUNICATIONS DUCTS ROUTE IN THE VICINITY OF OTHER UNDERGROUND UTILITIES SUCH AS GAS, WATER, OR SEWER, A SEPARATION OF 6-INCHES CROSSING AND 12-INCHES PARALLEL SHALL BE MAINTAINED. ALL OTHER DUCT SEPARATIONS MUST COMPLY WITH THE NATIONAL ELECTRIC CODE.

DUCT BANK CONSTRUCTION

PRE-TRENCHING: AS REQUIRED BY VERMONT STATE LAW, PRIOR TO ANY EXCAVATION ACTIVITY, THE CONTRACTOR SHALL HAVE EXISTING UNDERGROUND UTILITIES LOCATED AND MARKED. NO EXCAVATION SHALL OCCUR UNTIL ALL UTILITIES IN THE AREAS OF PROPOSED CONSTRUCTION HAVE BEEN LOCATED AND MARKED. THIS IS THE SOLE RESPONSIBILITY OF THE EXCAVATION CONTRACTOR.

ASPHALT AND CONCRETE SURFACES SHALL BE SAWCUT ALONG THE CONDUIT DUCT BANK ROUTE AND AT HANDHOLE LOCATIONS. REMOVED ASPHALT AND CONCRETE MATERIAL SHALL BE DISPOSED LEGALLY.

TRENCHING: THE CONTRACTOR SHALL FOLLOW ALL OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS. UNSUITABLE MATERIALS SHALL BE DISPOSED LEGALLY. THESE MATERIALS SHALL BE PROMPTLY REMOVED FROM THE PROJECT SITE, WITHOUT SIGNIFICANT ON-SITE STOCKPILING.

CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER FOR UVMCM IMMEDIATELY IF ANY EXISTING UTILITIES ARE DAMAGED DURING THE COURSE OF THIS PROJECT. ANY EXISTING UTILITIES DAMAGED SHALL BE REPAIRED BY THE CONTRACTOR (OR THE OWNING UTILITY, PAID FOR BY THE CONTRACTOR). REPAIRS SHALL BE MADE EXPEDITIOUSLY TO MINIMIZE INCONVENIENCE AND WITH METHODS AND MATERIALS OF THE SAME OR BETTER QUALITY THAN THE EXISTING.

THE WIDTH OF THE TRENCH SHALL BE AS INDICATED VIA THE TRENCH DETAILS. WHERE REQUIRED BY REGULATIONS OR SOIL CONDITIONS, THE TRENCH WALLS SHOULD BE ADEQUATELY SHORED. CARE SHOULD BE TAKEN THAT THE CONDUIT INSTALLATION IS NOT DISTURBED BY THE REMOVAL OF SHORING MATERIALS.

THE TRENCH BOTTOM SHOULD BE SMOOTH AND FREE OF ANY DEBRIS THAT MAY BE DETRIMENTAL TO CONDUIT PLACEMENT. COMPACTABLE BEDDING MATERIAL SHALL BE INSTALLED VIA THE TRENCH DETAILS AND UNIFORMLY GRADED TO PROVIDE CONTINUOUS SUPPORT. UNDER NO CIRCUMSTANCES SHOULD BLOCKING OR MOUNDING BE USED TO RAISE THE DUCT TO GRADE. LOCATIONS OF WHERE AN UNSTABLE TRENCH BOTTOM IS ENCOUNTERED, THE CONTRACTOR MUST STABILIZE THE TRENCH BOTTOM PRIOR TO LAYING CONDUIT. WHERE REQUIRED, UNSTABLE TRENCH BOTTOMS SHALL BE STABILIZED BY OVER-EXCAVATING THE TRENCH AND PROVIDING A BEDDING OF CRUSHED STONE OR GRAVEL TO PROVIDE A STABLE BASE. CARE MUST BE TAKEN TO PREVENT ROCKS, HARD LUMPS, FROZEN CLODS, ORGANIC MATTER, AND OTHER FOREIGN MATERIAL FROM FALLING INTO THE TRENCH.

CONDUIT INSTALLATION: ALL CONDUIT INSTALLED SHALL BE OF THE NOMINAL DIAMETER AND MATERIAL AS INDICATED ON THE TELECOMMUNICATIONS SITE PLAN AND IN THE CONDUIT MATERIALS SECTION NOTED ABOVE.

THE FIRST LENGTHS OF CONDUIT STARTING AT THE HAND HOLE SHALL BE BELL ENDS. THE NEXT LENGTH OF CONDUIT IS JOINED TO THE FIRST LENGTH. AS THE CONDUIT PATHWAY APPROACHES THE NEXT HAND HOLE, A FULL LENGTH OF CONDUIT SHALL BE INSTALLED PRIOR TO THE SWEEP UP INTO THE HAND HOLE. THUS THE CONTRACTOR SHALL CUT LENGTHS OF CONDUIT AS REQUIRED TO FILL IN THE DIFFERENCE TO ALLOW A FULL LENGTH SECTION OF DUCT TO BE INSTALLED AT THE HAND HOLE. A SLEEVE COUPLING SHALL BE SLIPPED ONTO EACH CONDUIT IN THE MAIN DUCT RUN AT LOCATIONS OF THE CUTS.

JOINING: ALL WEATHER SOLVENT CEMENT SHALL BE APPLIED ON BOTH THE RECEIVING BELL END AND INSERTED CONDUIT SECTIONS. CONDUIT SHALL BE SEATED TO THE DEPTH OF THE PREMARK INDICATED ON THE NON-BELLED END. THE SOLVENT CEMENT THAT SHALL BE USED ON THE PROJECT FOR ASSEMBLING CONDUIT AND SHALL MEET ALL THE APPLICABLE REQUIREMENTS OF ASTM D 2564, "SOLVENT CEMENTS FOR POLY(VINYL CHLORIDE) (PVC) PLASTIC PIPING SYSTEMS. THE CONTRACTOR SHALL SELECT BETWEEN A REGULAR, MEDIUM OR HEAVY-BODIED CEMENT BASED ON MANUFACTURER RECOMMENDATIONS. PVC SOLVENT CEMENTS HAVE A LIMITED SHELF LIFE AND THE CONTRACTOR SHALL NOT USE A SOLVENT CEMENT THAT EXHIBITS ANY SIGN OF GELATION. FURTHER, SHOULD SOLVENT CEMENT SHOW SIGNS OF GELATION DO NOT TRY TO RESTORE THE VISCOSITY BY ADDING SOLVENTS OR THINNERS. ANY SOLVENT SHOWING SIGNS OF GELATION SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED AND A FRESH SUPPLY OF THE SOLVENT SHALL BE OBTAINED.

SURFACES BEING JOINED MUST BE FREE OF DIRT, MOISTURE, OIL AND OTHER FOREIGN MATERIAL. SURFACES SHALL BE WIPED CLEAN WITH A DRY CLOTH. SHOULD FURTHER CLEANING BE REQUIRED, A PRIMER OR CHEMICAL CLEANER MAY BE USED OR MECHANICAL CLEANERS SUCH AN A 180 GRIT OR FINER ABRASIVE PAPER OR CLOTH. ANY CHEMICAL CLEANER OR PRIMER USED MUST BE OF A TYPE AS RECOMMENDED BY THE CONDUIT OR CEMENT MANUFACTURER. ALL SOLVENT CEMENTS SHALL BE APPLIED PER MANUFACTURER RECOMMENDATIONS TO INCLUDE SETTING TIME OF ASSEMBLED SECTIONS OF DUCT.

BENDS: CONTINUOUS LENGTHS OF STRAIGHT INDIVIDUAL PLASTIC CONDUIT CAN BE FORMED INTO SHALLOW CURVES IF THE CURVATURE RADIUS IS 40- FEET OR GREATER. THE HEATING OF THE SCHEDULE 40 CONDUIT TO ALLOW THE FORMATION OF LONG SWEEPING BENDS TO ACCOMMODATE CHANGES IN DIRECTION OF THE DUCT BANK MAY BE REQUIRED. IN INSTANCES WHERE THE CURVATURE RADIUS IS LESS THEN 40- FEET, THE CONTRACTOR MUST FURNISH AND INSTALL FACTORY BENDS. FOR FIELD BENDS OF GREATER THAN 40- FEET, CAUTION MUST BE TAKEN TO ALLOW SUFFICIENT DRYING TIME FOR ALL JOINTS IN THE RADIUS OF BEND.

ANY FITTINGS THAT MUST BE USED SHALL BE UTILITY ELBOWS; USE OF PLUMBING FITTINGS IS NOT ACCEPTABLE.

DUCT LABELING: EACH CONDUIT SHALL BE LABELED AT BOTH ENDS. CONTRACTOR SHALL FURNISH AND INSTALL A PLASTIC PLATE THAT MOUNTS DIRECTLY TO THE SIDE WALLS OF THE HAND HOLE AT EACH LOCATION WERE THE DUCT BANK ENTERS INTO THE ENCLOSURE. DUCT IDENTIFICATION SHALL BE MOUNTED TO THE PLATE. PLATE SHALL BE MOUNTED WITH SCREWS AND INDICATE THE SOURCE AND DESTINATION OF THE SECTION OF CONDUIT DUCT BANK. THE CONTRACTOR SHALL FURNISH AND INSTALL LABELS.

BACKFILL: A MINIMUM OF 36 INCHES OF COVER IS REQUIRED ABOVE THE TOP OF THE CONDUITS. THIS IS MEASURED TO THE TOP OF THE FINAL GRADE, AND INCLUDES ASPHALT, CONCRETE SIDEWALK, BRICK PAVER, SEEDED TOPSOIL, AND CORRESPONDING SUBGRADE BASE LAYERS.

COMPACTATION OF EARTH BACKFILL SHALL BE AT LEAST 95% MAXIMUM DENSITY, USING THE MODIFIED PROCTOR METHOD AT ALL LOCATIONS. THE BACKFILL SHALL BE INSTALLED AND COMPACTED IN 6 TO 8 INCH LIFTS OR LAYERS OF MATERIAL FOR BOTH THE BOX BEDDING AND BACKFILL. A LIFT OF BACKFILL IS PLACED, THEN COMPACTED BEFORE THE NEXT LIFT IS PLACED. THE COMPACTATION SHALL BE DONE WITH VIBRATORY COMPACTORS OR SIMILAR, HOWEVER, CARE MUST BE EXERCISED TO PREVENT DAMAGE TO THE NEWLY INSTALLED DUCTS. A MINIMUM OF 6 INCHES OF BACKFILL SHALL BE REQUIRED ABOVE THE DUCTS WHEN USING SMALL MECHANICAL COMPACTORS SO AS NOT TO DAMAGE THE DUCTS. ALL BOX BEDDING AND BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DENSITY USING THE MODIFIED PROCTOR METHOD.

PROTECTION: EACH CONDUIT SHALL BE CAPPED DURING INSTALLATION IN ORDER TO ELIMINATE FOREIGN MATERIALS FROM ENTERING INTO THE CONDUIT.

INSPECTION: ALL CONDUIT DUCT BANK INSTALLATION SHALL BE INSPECTED AND APPROVED BY UVMCM OR THEIR APPOINTED REPRESENTATIVE PRIOR TO BACKFILLING OF THE TRENCH. AT LEAST 48 HOURS NOTICE SHALL BE GIVEN IN ORDER TO FULFILL THIS REQUIREMENT. FAILURE OF THE CONTRACTOR TO SCHEDULE AN INSPECTION AND OBTAIN APPROVAL IN WRITING PRIOR TO THE BACKFILLING OPERATION WILL RESULT IN THE CONTRACTOR HAVING TO EXCAVATE AND EXPOSE THE SECTION OF CONDUIT DUCT BANK IN QUESTION. ONCE UVMCM APPROVAL HAS BEEN RECEIVED REGARDING THE CONDUIT DUCT BANK INSTALLATION, THE CONTRACTOR SHALL REINSTALL THE BACKFILL MATERIAL IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THESE SPECIFICATIONS.

FINAL CONSTRUCTION ITEMS:

ALL NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR DURING CONSTRUCTION TO PREVENT THE LODGING OF DIRT OR OTHER FOREIGN MATERIAL WITHIN THE CONDUIT SECTIONS AND HANDHOLES. FOLLOWING THE CONDUIT DUCT BANK INSTALLATION, ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE HANDHOLES. AFTER INSTALLATION, ALL CONDUITS SHALL BE VERIFIED CLEAN, DRY AND UNOBSTRUCTED. TO VERIFY NO OBSTRUCTIONS EXIST IN EACH DUCT, THE CONTRACTOR SHALL PULL A MANDREL THROUGH EACH DUCT IN THE PRESENCE OF UVMCM OR THEIR REPRESENTATIVE.

THE CONTRACTOR SHALL CLEAN EACH CONDUIT WITH A WIRE BRUSH AND SWAB WITH CLEAN RAGS A MINIMUM OF TWO TIMES IN THE SAME DIRECTION UNTIL THE RAG COMES OUT OF THE CONDUIT CLEAN AND DRY. SWAB AWAY FROM BUILDINGS FOR CONDUIT SECTIONS CONNECTED TO BUILDINGS. PROVE OUT EACH CONDUIT WITH A MINIMUM 16 INCH LONG TEST MANDREL THAT IS 1/4 INCH SMALLER THAN THE INSIDE DIAMETER OF THE DUCT.

MULE TAPE: CONTRACTOR SHALL FURNISH AND INSTALL HIGH STRENGTH (2500 LBS), CONDUIT MEASURING TAPE OF NONDETERIORATING MATERIAL, WITH FOOTAGE MARKERS, ALONG WITH TRACER WIRE. MULE TAPE SHALL BE INSTALLED ONLY AFTER ALL REQUIRED CABLE PULLING OPERATIONS ARE COMPLETED FOR THE PROJECT. THEN MULE TAPE SHALL BE INSTALLED IN ALL REMAINING OPEN DUCTS. MULE TAPE SHALL BE SECURED TO CABLE RACKS IN EACH HAND HOLE.

SITE RESTORATION:

ASPHALT PAVEMENT:

ALL ASPHALT PAVEMENT SURFACES CUT OR DAMAGED BY THE CONSTRUCTION OF THE CONDUIT DUCT BANK INFRASTRUCTURE SHALL BE RESTORED TO PRE-PROJECT CONDITIONS. ALL PAVED AREAS SHALL BE RESTORED TO THE SAME DEPTH AS THE EXISTING USING HOT MIX PAVEMENT. PAVEMENT SHALL BE CUT BACK A MINIMUM OF 1-FOOT EACH SIDE OF DUCT BANK TRENCH. PAVEMENT SHALL BE SAWCUT PRIOR TO REMOVAL. IN ADDITION, ALL SUBBASE AND BASE MATERIALS BENEATH PAVED AREAS SHALL MATCH EXISTING REGARDING TYPE AND DEPTHS.

ASPHALT EMULSION SHALL BE APPLIED TO EDGES OF EXISTING PAVEMENT TO ENSURE PROPER BONDING, AND ALL PAVEMENT MARKINGS DISTURBED BY THE DUCT BANK CONSTRUCTION SHALL BE REPLACED TO MATCH EXISTING.

CONCRETE CURBS, GUTTERS AND SIDEWALK:

CURB AND GUTTERS DISTURBED BY THE CONDUIT DUCT BANK CONSTRUCTION SHALL BE RECONSTRUCTED TO MATCH PRE- CONSTRUCTION CONDITIONS. PRESENT ALIGNMENT AND GRADE SHALL BE MAINTAINED TO PROMOTE DRAINAGE TO EXISTING CURB INLETS. IN AREAS THAT EXISTING CURBS SHALL BE REMOVED, THE CONTRACTOR SHALL REMOVE THE EXISTING CURB SECTIONS SO AS TO PRESERVE THE ENTIRE CURB SECTION INTACT SO THAT THE REMOVED SECTION OF CURB CAN BE REINSTALLED IN THE SAME LOCATION THAT IT WAS REMOVED FROM. THE INTENT IS TO NOT HAVE TO POUR ANY NEW CURB SECTIONS FOR THE PROJECT.

CONCRETE SIDEWALKS DISTURBED BY THE DUCT BANK CONSTRUCTION SHALL BE RECONSTRUCTED OR REPAIRED TO MATCH PRE-CONSTRUCTION CONDITIONS. SIDEWALKS SHALL BE RESTORED TO THEIR ORIGINAL THICKNESS, MATCHING ALL EXISTING PATTERNS AND FINISHES. IN ADDITION, SIDEWALKS SHALL HAVE CONTRACTION JOINTS SPACED EQUAL TO WIDTH OF THE WALK. A 1/2" EXPANSION JOINT SHALL BE PLACED AT ALL INTERSECTIONS AND AT LOCATIONS WHERE THE WALK ABUTS STRUCTURES OR OTHER WALKS.

GRASSED AREAS:

THE CONTRACTOR SHALL ENSURE A UNIFORM STAND OF SPECIFIED TURF NO LESS THAN 30 DAYS AFTER GERMINATION. CONTRACTOR SHALL VERIFY THE REQUIRED SEED MIX WITH VTARNG AND SHALL PROVIDE THE MANUFACTURER'S TAG TO THE PHYSICAL PLANT'S GROUNDS MANAGER PRIOR TO PURCHASING SEED FOR APPROVAL. RESTORATION OF GRASSED AREAS SHALL INCLUDE APPROPRIATE FERTILIZER, LIME, SEED, MULCH AND TACIFER.

- A. FERTILIZER: 19-19-19 75 LBS. PER 1,000 GALLONS OF WATER.
- B. LIME: 100 LBS. PER 1,000 GALLONS OF WATER.
- C. MULCH: 300 LBS. PER 1,000 GALLONS OF WATER.
- D. TACIFER: 5 LBS. PER 1,000 GALLONS OF WATER.

ALL AREAS SHALL BE SUBSOILED TO A DEPTH OF SIX (6) INCHES. SUBSOILS SHALL BE CLOSELY RELATED TO EXISTING SOILS IN THE AREA AND BE COMPACTED TO A DENSITY OF 85 PERCENT. SUBSOILS SHALL NOT BE WORKED OVER UNDER FROZEN, MUDDY OR SATURATED CONDITIONS. IMMEDIATELY PRIOR TO DUMPING AND SPREADING OF THE TOPSOIL, AT LEAST TWO (2) INCHES OF THE SUBSOIL SHALL BE LOOSENEED OR SCARIFIED TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL.

TOPSOIL SHALL BE PLACED WITH A MINIMUM DEPTH OF FOUR (4) INCHES. EXISTING TOPSOIL REMOVED DURING CONSTRUCTION MAY BE REUSED. ANY NEW TOPSOIL REQUIRED SHALL NOT CONTAIN STONES, STICKS, ROOTS, TRASH OR OTHER EXTRANEEOUS MATERIALS LARGER THAN 1 INCH IN DIAMETER OR LENGTH. TOPSOIL SHALL BE A NATURAL, FERTILE, FRIABLE REPRESENTATION OF LOCAL SOIL. IT SHALL ALSO BE FREE OF PLANTS OR PLANT PARTS.

AREAS HAVING SOIL COMPACTION AS A RESULT OF CONSTRUCTION SHALL BE ROTO-TILLED PRIOR TO SEEDING.

THE TOPSOIL SHALL BE GRADED TO MATCH THE SURROUNDING DRAINAGE SCHEME. GRADE EVENLY WITH WALKWAYS, CURBS AND LAMPOST BASES. UPON COMPLETION OF GRADING, THE AREA SHALL BE CLEARED OF ALL GRADE STAKES, SURFACE TRASH, OR ANY OTHER OBJECTS WHICH WOULD HINDER THE MAINTENANCE OF THE SEEDED AREAS.

SEED SHALL BE LIGHTLY DISCED OR RAKED INTO TOP ONE (1) INCH OF TOPSOIL. CLEAN STRAW SHALL BE APPLIED AS MULCH AT A RATE OF 45 LBS. PER 1000 SQ. FT.

ANY SEEDING REQUIRING CORRECTION SHALL BE RESEED BY THE CONTRACTOR UP TO ONE YEAR FOLLOWING THE COMPLETION OF THE PROJECT AT NO EXPENSE TO THE UVMCM.

SITE EQUIPMENT:

ALL FENCING DAMAGED OR REMOVED AS PART OF THE DUCT BANK INFRASTRUCTURE CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION.

OTHER ON SITE EQUIPMENT DAMAGED OR RELOCATED DURING THE DUCT BANK CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITIONS. SUCH ITEMS MAY INCLUDE, BUT NOT BE LIMITED TO SIGNS, OUTDOOR FURNITURE, PLANTERS AND OTHER SIMILAR ITEMS.

SITE PROTECTION:

CLEANLINESS: CONTRACTOR WILL BE REQUIRED TO MAINTAIN A CLEAN WORK SITE AT ALL TIMES DURING, AND UPON COMPLETION OF CONSTRUCTION. SITES SHALL REMAIN CLEAR OF EXCESS DEBRIS, SURPLUS MATERIALS AND TOOLS AND EQUIPMENT NOT IN ACTIVE USE. CONTRACTORS WILL BE RESPONSIBLE FOR CLEANING STREETS AND WALKS OF ANY DEBRIS, DIRT OR MUD RESULTING FROM CONSTRUCTION AND CONTRACTOR'S VEHICLE TRAFFIC.

CATCH BASINS SHALL BE PROTECTED OR COVERED TO ELIMINATE DIRT AND MUD FROM ENTERING INTO THEM. ANY MATERIAL THAT DOES ENTER INTO CATCH BASINS SHALL BE CLEANED OUT BY THE CONTRACTOR.

VEHICULAR TRAFFIC: CONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATING ANY CLOSING OF PARKING LOTS OR STREETS. CONTRACTORS WILL BE REQUIRED TO MAKE ARRANGEMENTS FOR CLOSINGS AT LEAST TWO FULL DAY PRIOR TO CLOSURE. ANY CLOSURES SHALL ALSO REQUIRE NOTIFICATION TO PUBLIC SAFETY IN ORDER THAT EMERGENCY VEHICLES MAY BE PROPERLY ROUTED. CONTRACTOR SHALL MAINTAIN CONTINUOUS, SAFE VEHICULAR TRAFFIC FLOW THROUGH AND ADJACENT TO PROJECT SITE. THIS INCLUDES, BUT NOT LIMITED TO THE USE OF FLAGMEN, SIGNAGE, BARRICADES, CONES, AND LIGHTING. CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE ALL SUCH EQUIPMENT.

AREA OF SAWCUT ASPHALT MAY NOT BE LEFT OPEN FOR VEHICLE TRAFFIC UNLESS BACKFILLED WITH PROPER SUBBASE AND BASE MATERIAL.

PEDESTRIAN TRAFFIC: CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL SITES ARE PROPERLY EQUIPPED WITH WARNING AND BARRICADE EQUIPMENT AT ALL TIMES. DETOURS FOR PEDESTRIAN WALKWAYS ARE TO BE PROPERLY PLANNED WITH CONSIDERATIONS GIVEN TO HANDICAPPED ACCESS. DETOURS ARE TO BE APPROVED BY UVMCM, AND CLEARLY MARKED AND BARRICADED. NO HOME MADE SIGNS WILL BE ALLOWED.

TREE PROTECTION: CONTRACTOR WILL NOT STOCKPILE DEBRIS OR SURPLUS MATERIALS, OR PARK VEHICLES OR EQUIPMENT UNDER TREES. CARE SHALL BE TAKEN TO ENSURE TREE LIMBS ARE NOT DAMAGED BY VEHICLES OR EQUIPMENT. NO EXCAVATION SHALL BE PERFORMED UNDER THE DRIP LINE OF TREES. NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT PRIOR VTARNG APPROVAL.

DAMAGE CAUSED TO SPECIMENS DUE TO CONTRACTOR NEGLIGENCE SHALL BE REPLACED AT THE COST OF THE CONTRACTOR. REPLACEMENT VALUE AND CONDITION OF EACH SPECIMEN IS TO BE DETERMINED BY THE PHYSICAL PLANT'S GROUNDS MANAGER.

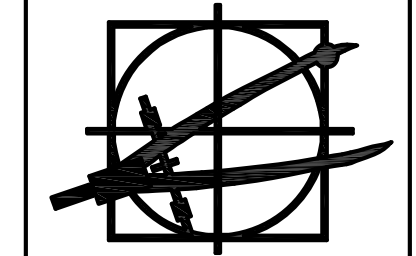
ALL TREES WITHIN 30' OF THE CONSTRUCTION ZONE SHALL BE PROTECTED BY NO LESS THAN 4' HIGH PLASTIC FENCING AT THE DRIP LINE.

WHERE EQUIPMENT MUST PASS OVER A TREE'S ROOT ZONE, 8 INCHES OF WOOD CHIPS SHALL BE LAID AND MAINTAINED BY THE CONTRACTOR.

WHERE AN EXISTING TREE MEETS NEW LANDSCAPING, GRADE TOPSOIL AT A DEPTH OF 6" (SIX INCHES) FROM THE DRIP LINE TO 0" (ZERO INCHES) AT THE BASE OF THE TREE.

PROGRESS DRAWINGS FOR PRICING ONLY.

KIRICK ENGINEERING ASSOCIATES, P.C.
Electrical / Telecom Consulting



NO.	DATE	REVISION

THE UNIVERSITY OF VERMONT MEDICAL CENTER
(75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
VERMONT
WILLISTON

REORGANIZATION PROJECT

SCALE:	AS NOTED
DATE:	02/01/21
DRAWN BY:	TPB
CHECKED BY:	MPK
PROJECT:	2025

SHEET TITLE:
27 0543 Underground
Ducts & Raceway for
Communications
Systems
Specifications

DRAWING NO.
T5.2

27 0543 UNDERGROUND DUCTS AND RACEWAYS FOR COMMUNICATIONS SYSTEMS CONTINUED

SITE CONDITIONS:

THE CONTRACTOR SHALL PHYSICALLY VERIFY EXISTING SITE CONDITIONS PRIOR TO PURCHASE AND DELIVERY OF THE MATERIALS, INCLUDING BUT NOT LIMITED TO LENGTHS OF PROPOSED CONDUIT PATHWAYS (INCLUDING HANDHOLES) THAT SHALL BE USED FOR ROUTING BACKBONE CABLING. PRE-CUT MATERIALS OF INSUFFICIENT LENGTH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL PROVIDE ALL INCIDENTAL AND/OR MISCELLANEOUS HARDWARE NOTE EXPLICITLY SPECIFIED OR SHOWN ON THE CONTRACT DOCUMENTS THAT IS REQUIRED FOR A FULLY OPERATIONAL, TESTED, CERTIFIED AND WARRANTED SYSTEM.

FIBER OPTIC INTER-BUILDING BACKBONE CABLE:

THE CONTRACTOR SHALL FURNISH AND INSTALL FIBER OPTIC CABLE IN QUANTITIES, STAND COUNTS, AND TYPES AS INDICATED IN THE TELECOMMUNICATIONS SPECIFICATIONS SECTION 27 1323, COMMUNICATIONS OPTICAL FIBER BACKBONE CABLING.

THE CONTRACTOR SHALL REFER TO THE TELECOMMUNICATIONS SPECIFICATIONS SECTION 27 0171, OPTICAL FIBER CABLE TESTING FOR CABLE TESTING REQUIREMENTS.

PROVIDE LABELS AT EACH END OF THE EACH CABLE WITHIN 24 INCHES OF BUILDING ENTRANCE AND AGAIN WITHIN 24 INCHES OF THE TERMINATION POINT. PROVIDE LABELS IN EACH HANDHOLE THROUGH WHICH THE A CABLE PASSES. LABEL A CABLE IMMEDIATELY AS IT ENTERS A HANDHOLE AND AGAIN JUST PRIOR TO EXITING THE HANDHOLE. AT LOCATIONS WHERE CABLE ROUTES IN CONDUIT AT ANY LOCATION BETWEEN THE SOURCE AND DESTINATION, PROVIDE LABELS ON THE EXTERIOR OF THE CONDUIT PATHWAY INDICATING CONTENTS OF RACEWAY. REFER TO TELECOMMUNICATIONS SPECIFICATIONS SECTION 27 0553, IDENTIFICATION FOR COMMUNICATIONS SYSTEMS.

FIBER OPTIC CABLE INSTALLATION REQUIREMENTS:

— INSTALL CABLES IN COMPLIANCE WITH TIA REQUIREMENTS, BICSI BEST PRACTICES AND MANUFACTURER RECOMMENDATIONS. ADHERE TO THE REQUIREMENTS DETAILED IN THE MANUFACTURER RECOMMENDATIONS AND TIA STANDARDS RELATING TO BEND RADIUS, PULLING TENSION, OTHER MECHANICAL STRESSES AND PULLING SPEED PER MANUFACTURER RECOMMENDATIONS.

— ALTHOUGH TYPICAL MAXIMUM PULLING TENSION IS 2700 N (608 lbf) DURING INSTALLATION (SHORT TERM) AND 890 N (200 lbf) LONG TERM INSTALLED, AT NO TIME SHALL MORE THAN 400 POUNDS OF TENSION BE PLACED ON ANY FIBER CABLE WHILE IT IS BEING PULLED THROUGH A CONDUIT. THE MONITORING OF PULLING TENSION IS REQUIRED ON ALL RUNS OF 300 FEET OR LONGER TO INSURE THAT TENSION REQUIREMENTS ARE NOT EXCEEDED. ACCEPTABLE MONITORING DEVICES ARE WINCH WITH A CALIBRATED MAXIMUM TENSION, BREAKAWAY LINK (SWIVEL) AND AN IN-LINE TENSIO METER. TORSION SHALL BE AVOIDED BY THE USE OF A SWIVEL AT THE CABLE END. WHILE UNDER TENSION, A MINIMUM BEND RADIUS OF 20 TIMES THE OUTSIDE CABLE DIAMETER WILL BE MAINTAINED THROUGH THE USE OF PULLEYS AND SHEAVES WHERE REQUIRED. AFTER PULLING, NO BEND MAY HAVE A RADIUS, AT REST, OF LESS THAN 10 TIMES THE OUTSIDE CABLE DIAMETER.

— THE CONTRACTOR SHALL SET UP CABLE REELS ON THE SAME SIDES OF HANDHOLES AS THE CONDUIT SECTIONS IN WHICH THE CABLES ARE TO BE PLACED. LEVEL AND ALIGN REELS WITH CONDUIT SECTIONS TO PREVENT TWISTING OF CABLES DURING INSTALLATION INTO CONDUITS. PULL CABLES INTO CONDUITS FROM THE TOPS OF REELS IN LONG SMOOTH BENDS. DO NOT PULL CABLES INTO CONDUITS FROM THE BOTTOMS OF REELS. USE A CABLE FEEDER GUIDE (SHOE) OF SUITABLE DIMENSIONS BETWEEN CABLE REEL AND THE FACE OF THE DUCT TO PROTECT THE CABLE AND TO GUIDE IT INTO THE DUCT. CAREFULLY INSPECT THE CABLES FOR SHEATH DEFECTS AS THE CABLE ARE PAYED OFF THE REEL. IF DEFECTS ARE FOUND DURING THE PULLING OPERATION OR IF THE CABLE ON THE REEL BINDS, TWISTS, OR DOES NOT PAY OFF FREELY, STOP THE PULLING OPERATION IMMEDIATELY AND NOTIFY UVMWC OR THEIR REPRESENTATIVE.

— CABLES OF 1-1/4 INCH DIAMETER OR GREATER SHALL BE EQUIPPED WITH FACTORY INSTALLED PULLING EYES, OR INSTALL A CORE HITCH ON SITE. THE USE OF PULLING GRIPS IS REQUIRED FOR CABLE SMALLER THAN 1-1/4 INCHES IN DIAMETER. DO NOT POUND GRIPS INTO THE CABLE SHEATH TO PREVENT THE GRIPS FROM SLIPPING. USE A BALL-BEARING BASED SWIVEL BETWEEN THE PULLING-EYES AND THE PULLING STRAND.

— ONCE PULLING BEGINS, AND TENSION IS APPLIED TO THE CABLE, CONTINUE THE PULL AT A STEADY RATE. IF IT IS NECESSARY TO STOP THE PULL AT ANY POINT, THE TENSION SHALL NOT BE RELEASED UNLESS IT IS NECESSARY TO DO SO.

— THERE SHALL NOT BE ANY CABLE SPLICES ON THIS PROJECT.

— WHEN PULLING CABLE THROUGH A HANDHOLE, SELECT THE SAME DUCT AT BOTH ENDS OF THE ENCLOSURE UNLESS SPECIFICALLY NOTED DIFFERENTLY ON THE PLANS. AVOID CHANGE IN DUCT SELECTIONS TO ENSURE THAT NO DAMAGE OCCURS TO THE CABLE SHEATHS AND THAT PULLING TENSIONS ARE KEPT LOW AS POSSIBLE.

— IN EACH HANDHOLE, THE CONTRACTOR SHALL PROVIDE A SERVICE LOOP EQUAL TO A MINIMUM OF TWO REVOLUTIONS OF CABLE SO AS TO PROPERLY RACK THE CABLE IN THE ENCLOSURE. THE SERVICE LOOPS SHALL BE PLACED A MINIMUM OF 6-INCHES ABOVE THE FLOOR OF THE HANDHOLE AND SHALL BE RACKED AS SOON AS PRACTICABLE, BUT WITHIN ONE WEEK AFTER CABLE INSTALLATION. ROUTE CABLES IN HANDHOLES IN A MANNER TO AVOID BLOCKING CONDUIT ACCESS.

— WHEN MORE THAN ONE CABLE IS BEING INSTALLED IN A CONDUIT, PULL ALL CABLES THROUGH THE CONDUIT SIMULTANEOUSLY.

— WHERE PRACTICAL, FEED CABLES INTO CONDUITS FROM THE END OF THE CONDUIT THAT CREATES THE LEAST SIDEWALL PRESSURE ON A BEND DURING INSTALLATION. (FEED THE CABLE FROM THE END CLOSEST TO THE BEND).

— THE USE OF PULLING LUBRICANTS ARE ACCEPTABLE WHERE NECESSARY. HOWEVER, THE LUBRICANTS MUST BE COMPATIBLE WITH THE CABLE JACKET MATERIAL AND USED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. THE USE OF SOAP-BASED LUBRICANTS IS NOT ACCEPTABLE. WHERE THE CABLE IS PULLED THROUGH A HANDHOLE, RE-LUBRICATE THE CABLE PRIOR TO FEEDING INTO THE NEXT CONDUIT. IMMEDIATELY AFTER CABLES HAVE BEEN INSTALLED, CLEAN LUBRICANT FROM EXPOSED CABLES IN HAND HOLES AND AT TERMINATION POINTS USING DRY RAGS.

— SEAL CABLE ENDS WITH END CAPS IMMEDIATELY AFTER INSTALLATION AND UNTIL TERMINATED INTO A CLOSET CONNECTOR HOUSING TO PREVENT MOISTURE FROM ENTERING INTO THE CORE OF THE CABLE.

— AT THE TERMINATION LOCATIONS IN BOTH THE SOURCE AND DESTINATION LOCATIONS, THE CONTRACTOR SHALL PROVIDE A SERVICE LOOP. REFER TO TELECOMMUNICATIONS SPECIFICATIONS SECTION 27 1323, COMMUNICATIONS OPTICAL FIBER BACKBONE CABLE.

PULL CORDS: NEW PULL CORDS SHALL BE INSTALLED WITH ALL CABLES PULLS IN THERE ENTIRETY AS REQUIRED ON THIS PROJECT. THE CONTRACTOR SHALL INSTALL A PULL CORD ALONG WITH THE CABLES BEING PULLED. CONTRACTOR SHALL FURNISH AND INSTALL ALL PULL CORDS.

RACEWAY:

AS SHOWN ON THE INDIVIDUAL BUILDING FLOOR PLANS THAT ARE PART OF THE DESIGN DRAWINGS, THE CONTRACTOR SHALL FURNISH AND INSTALL INTRA-BUILDING CABLE PATHWAYS. THESE PATHWAYS SHALL BE AS DESCRIBED ON THE BUILDING FLOOR PLANS FROM THE PROPOSED CABLE TERMINATION LOCATIONS WITHIN EACH BUILDING TO THE OUTSIDE PLANT CONDUIT ENTRANCE LOCATIONS WITHIN EACH BUILDING.

AS-BUILTS:

AT THE COMPLETION OF THE PROJECT, OSP-SCS "AS-BUILT" INFORMATION PROVIDED IN AUTOCAD 2020 FORMAT. THE AS-BUILT INFORMATION SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING INFORMATION:

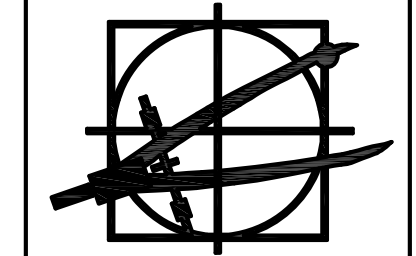
- * AS-BUILT DRAWINGS SHALL INDICATE THE APPROPRIATE PULLING DIRECTION FOR FUTURE CABLING IN EACH SECTION OF DUCT BANK INSTALLED FOR THIS PROJECT.
- * AS-BUILT DRAWINGS SHALL INDICATE DUCT BANK DISTANCES BETWEEN HANDHOLES.
- * AS-BUILT DRAWINGS SHALL INDICATE A MINIMUM OF THREE (3) FIELD TIES TO THE CENTER OF EACH HAND HOLE. EACH TIE SHALL BE TAKEN FROM A MAJOR, PERMANENT OBJECT LOCATED WITHIN 150-FT. OF THE TELECOMMUNICATIONS STRUCTURE. THIS MAY INCLUDE, BUT NOT BE LIMITED TO BUILDINGS, LIGHT POSTS AND POWER TRANSFORMERS TO NAME A FEW.
- * AS-BUILT DRAWINGS SHALL INDICATE THE VERTICAL ELEVATION TAKEN AT THE TOP OF THE EACH HANDHOLE.
- * AS-BUILTS SHALL INDICATE THE VERTICAL ELEVATION AT THE TOP OF THE DUCT BANK FOR EACH DUCT BANK SECTION TERMINATING AT EACH HANDHOLE PRIOR TO BACKFILLING OPERATIONS.

GENERAL INSTALLATION

1. IF CONSTRUCTION OF THIS DUCT BANK SYSTEM WILL BE PERFORMED DURING THE WINTER MONTHS, FROZEN GROUND WILL NOT BE USED FOR BACKFILL. CONCRETE MUST BE PROTECTED FROM FREEZING. ALL COSTS ASSOCIATED WITH WINTER CONDITIONS, INCLUDING FURNISHING OF FROST-FREE BACKFILL, SHALL BE INCLUDED IN THE BASE PRICE.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING ALL OF THE DIMENSIONS AND LENGTHS SHOWN ON THIS PROJECT. NO EXTRAS WILL BE ALLOWED UNLESS THE SCOPE OF WORK IS EXPANDED BEYOND THAT SHOWN AND DETAILED ON THE PLANS.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING DIG-SAFE OR OTHER UTILITY MARKING AUTHORITIES PRIOR TO EXCAVATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATION ALL UTILITIES WHETHER MARKED OR NOT.
4. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OF ANY EXISTING UTILITIES/FACILITIES THAT ARE DAMAGED DURING THIS PROJECT.
5. ALL LAWN AREAS DISTURBED DURING CONSTRUCTION WILL BE RESTORED WITH A MINIMUM OF 4" OF SCREENED TOPSOIL AND GRADED TO ORIGINAL CONTOURS. LAWNS WILL BE SEEDED AND MULCHED.
6. WALKWAYS AND ROAD CROSSINGS THAT ARE TO BE LEFT OVERNIGHT WILL BE COLD PATCHED. TRENCHES THAT ARE TO BE LEFT OVERNIGHT WILL HAVE SNOW FENCING AND BARRICADES.
7. ALL GRAVEL AND PAVEMENTS DISTURBED DURING CONSTRUCTION WILL BE RESTORED TO MATCH THE PRE-EXISTING THICKNESS AND FINISH CONDITIONS. CONCRETE SIDEWALKS AND CURBING THAT MAY BE REQUIRED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST JOINTS.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF THE PUBLIC AND WORKERS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS, BUILDING CODES AND ORDINANCES.
10. ALL WORK SHALL COMPLY WITH APPLICABLE SAFETY RULES AND REGULATIONS INCLUDING OSHA. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL SAFETY CODE (NEC) AND THE NEC EXCEPT WHERE LOCAL CODES AND/OR REGULATIONS ARE MORE STRINGENT, IN WHICH CASE THE LOCAL CODES AND/OR REGULATIONS SHALL PREVAIL.
11. ALL WORK SHALL COMPLY WITH THE STANDARDS, REFERENCES AND CODES LISTED IN THESE SPECIFICATIONS. WHERE QUESTIONS ARISE REGARDING WHICH STANDARDS, REFERENCES, OR CODES APPLY, THE MORE STRINGENT REQUIREMENT SHALL PREVAIL.
12. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS AND RECOMMENDATIONS OF THE PRODUCT MANUFACTURERS. WHERE QUESTIONS ARISE REGARDING WHICH REQUIREMENTS AND RECOMMENDATIONS APPLY, THE MORE STRINGENT SHALL PREVAIL.
13. REPLACE AND/OR REPAIR ORIGINAL (OR BETTER) CONDITION ANY EXISTING STRUCTURES, MATERIALS, EQUIPMENT, ETC. INADVERTENTLY DAMAGED BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
14. STORE ALL MATERIALS SO AS TO BE PROTECTED FROM THE ELEMENTS. PATHWAY MATERIAL (CONDUITS, FITTINGS, HAND HOLES, ETC.) ARE PERMITTED TO BE STORED OUTDOORS, BUT SHALL BE STACKED ON BOARDS TO AVOID DIRECT CONTACT WITH THE GROUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DETERIORATING EFFECTS ON THE MATERIALS DUE TO IMPROPER STORAGE PRIOR TO INSTALLATION, INCLUDING DAMAGE CAUSED BY PREVAILING WEATHER CONDITIONS.
15. THE CONTRACTOR SHALL COORDINATE MATERIAL DROP SITES AND MATERIAL STORAGE LOCATIONS WITH UVMWC PRIOR TO WORK BEGINNING AT THE SITE.
16. REMOVE SURPLUS MATERIAL AND DEBRIS FROM THE JOB SITE AND DISPOSE OF LEGALLY OFF-SITE.

PROGRESS DRAWINGS FOR PRICING ONLY.

KIRICK ENGINEERING ASSOCIATES, P.C.
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Suite 103
Williston, Vermont 05495
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NO.	DATE	REVISION

THE UNIVERSITY OF VERMONT MEDICAL CENTER
(75/79 HOLLY COURT PHARMACY RETAIL DISPENSING)
WILLISTON VERMONT
REORGANIZATION PROJECT

SCALE: AS NOTED
DATE: 02/01/21
DRAWN BY: TPB
CHECKED BY: MPK
PROJECT: 2025

SHEET TITLE:
27 0543 Underground
Ducts & Raceway for
Communications
Systems
Specifications

DRAWING NO.
T5.3

PLEASE PROVIDE ASSUMPTIONS
The University of Vermont Medical Center
Outpatient Pharmacy Expansion and Automation at Holly Court

Proposed Proposed Proposed
Yr 1 Yr 2 Yr 3

Table 1

Table 2

INCOME STATEMENT

BALANCE SHEET

CASH FLOW

REVENUE SOURCE-PAYER

UTILIZATION

STAFFING

STATISTICS

Notes to Support Assumptions:

NOTE: When completing this table make entries in the shaded fields only.

**The University of Vermont Medical Center
Outpatient Pharmacy Expansion and Automation at Holly Court**

TABLE 1
PROJECT COSTS

Construction Costs	
1. New Construction	-
2. Renovation	\$2,149,570
3. Site Work	-
4. Fixed Equipment	-
5. Design/Bidding Contingency	\$429,910
6. Construction Contingency	\$429,920
7. Construction Manager Fee	-
8. Other (please specify)	-
Subtotal	\$ 3,009,400
Related Project Costs	
1. Major Moveable Equipment	\$ 1,980,000
2. Furnishings, Fixtures & Other Equip.	\$452,404
3. Architectural/Engineering Fees	\$255,705
4. Land Acquisition	-
5. Purchase of Buildings	-
6. Administrative Expenses & Permits	\$64,168
7. Debt Financing Expenses (see below)	-
8. Debt Service Reserve Fund	-
9. Working Capital	-
10. Other (Capitalized Interest)	49,211
Subtotal	\$ 2,801,488
Total Project Costs	\$ 5,810,888

Debt Financing Expenses	
1. Capital Interest	\$ -
2. Bond Discount or Placement Fee	-
3. Misc. Financing Fees & Exp. (issuance costs)	-
4. Other	-
Subtotal	\$ -
Less Interest Earnings on Funds	
1. Debt Service Reserve Funds	\$ -
2. Capitalized Interest Account	-
3. Construction Fund	-
4. Other	-
Subtotal	\$ -
Total Debt Financing Expenses	\$ -
feeds to line 7 above	

NOTE: When completing this table make entries in the shaded fields only.

The University of Vermont Medical Center
Outpatient Pharmacy Expansion and Automation at Holly Court
TABLE 2
DEBT FINANCING ARRANGEMENT, SOURCES & USES OF FUNDS

Sources of Funds			
1. Financing Instrument	Bond		
a. Interest Rate	0.0%		
b. Loan Period		To:	
c. Amount Financed			\$ -
2. Equity Contribution			-
3. Other Sources			
a. Working Capital			5,810,888
b. Fundraising			-
c. Grants			-
d. Other			-
Total Required Funds			\$ 5,810,888

Uses of Funds		
<u>Project Costs (feeds from Table 1)</u>		
1. New Construction		\$ -
2. Renovation		2,149,570
3. Site Work		-
4. Fixed Equipment		-
5. Design/Bidding Contingency		429,910
6. Construction Contingency		429,920
7. Construction Manager Fee		-
8. Major Moveable Equipment		1,980,000
9. Furnishings, Fixtures & Other Equip.		452,404
10. Architectural/Engineering Fees		255,705
11. Land Acquisition		-
12. Purchase of Buildings		-
13. Administrative Expenses & Permits		64,168
14. Debt Financing Expenses		-
15. Debt Service Reserve Fund		-
16. Working Capital		-
17. Other (Capitalized Interest)		49,211
Total Uses of Funds		\$ 5,810,888

Total sources should equal total uses of funds.

THE UNIVERSITY OF VERMONT MEDICAL CENTER

Outpatient Pharmacy Expansion and Automation at Holly Court

INCOME STATEMENT													
Table 3A													
WITHOUT PROJECT													
	2020 Actual	2021 Budget	% change	2021 Projection	% change	2022 Budget	% change	Proposed Yr 1		Proposed Yr 2		Proposed Yr 3	
								YYYY	% change	YYYY	% change	YYYY	% change
REVENUES													
INPATIENT CARI	961,991,066	-	-100.0%	987,667,855	#DIV/0!	1,139,480,429	15.4%	1,139,480,429	0.0%	1,139,480,429	0.0%	1,139,480,429	0.0%
OUTPATIENT CA	1,199,832,825	3,266,603,970	172.3%	1,473,369,737	-54.9%	1,608,905,587	9.2%	1,608,905,587	0.0%	1,608,905,587	0.0%	1,608,905,587	0.0%
OUTPATIENT CA	534,405,279	-	-100.0%	573,834,762	#DIV/0!	701,663,177	22.3%	701,663,177	0.0%	701,663,177	0.0%	701,663,177	0.0%
CHRONIC/SNF P	22,840,995	-	-100.0%	18,965,090	#DIV/0!	35,633,122	87.9%	35,633,122	0.0%	35,633,122	0.0%	35,633,122	0.0%
SWING BEDS PT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
GROSS PATIENT	2,719,070,165	3,266,603,970	20.1%	3,053,837,444	-6.5%	3,485,682,315	14.1%	3,485,682,315	0.0%	3,485,682,315	0.0%	3,485,682,315	0.0%
DISPROPORTIOI	11,260,268	11,214,283	-0.4%	11,223,480	0.1%	11,214,283	-0.1%	11,214,283	0.0%	11,214,283	0.0%	11,214,283	0.0%
BAD DEBT FREE	(46,435,209)	(59,260,462)	27.6%	(44,297,609)	-25.2%	(62,334,502)	40.7%	(62,334,502)	0.0%	(62,334,502)	0.0%	(62,334,502)	0.0%
DEDUCTIONS FF	(1,650,456,761)	(2,031,322,732)	23.1%	(1,896,942,492)	-6.6%	(2,118,848,558)	11.7%	(2,118,848,558)	0.0%	(2,118,848,558)	0.0%	(2,118,848,558)	0.0%
NET PATIENT CA	1,033,438,463	1,187,235,059	14.9%	1,123,820,823	-5.3%	1,315,713,538	17.1%	1,315,713,538	0.0%	1,315,713,538	0.0%	1,315,713,538	0.0%
FIXED PROSPEC	166,289,772	228,421,374	37.4%	171,967,015	-24.7%	184,880,390	7.5%	184,880,390	0.0%	184,880,390	0.0%	184,880,390	0.0%
NET PATIENT CA	1,199,728,235	1,415,656,433	18.0%	1,295,787,839	-8.5%	1,500,593,928	15.8%	1,500,593,928	0.0%	1,500,593,928	0.0%	1,500,593,928	0.0%
OTHER OPERATIO	258,366,310	186,051,743	-28.0%	281,949,621	51.5%	213,583,061	-24.2%	213,583,061	0.0%	213,583,061	0.0%	213,583,061	0.0%
TOTAL OPERATIO	1,458,094,545	1,601,708,176	9.8%	1,577,737,460	-1.5%	1,714,176,988	8.6%	1,714,176,988	0.0%	1,714,176,988	0.0%	1,714,176,988	0.0%
OPERATING EXPENSE													
SALARIES NON I	490,345,065	889,402,666	81.4%	523,224,792	-41.2%	551,773,862	5.5%	551,773,862	0.0%	551,773,862	0.0%	551,773,862	0.0%
FRINGE BENEFIT	120,434,942	-	-100.0%	129,907,527	#DIV/0!	151,565,883	16.7%	151,565,883	0.0%	151,565,883	0.0%	151,565,883	0.0%
PHYSICIAN FEE	194,141,108	-	-100.0%	190,968,928	#DIV/0!	205,922,158	7.8%	205,922,158	0.0%	205,922,158	0.0%	205,922,158	0.0%
FRINGE BENEFIT	29,930,947	-	-100.0%	40,860,089	#DIV/0!	40,408,673	-1.1%	40,408,673	0.0%	40,408,673	0.0%	40,408,673	0.0%
HEALTH CARE P	68,693,127	80,937,888	17.8%	76,329,409	-5.7%	85,942,735	12.6%	85,942,735	0.0%	85,942,735	0.0%	85,942,735	0.0%
DEPRECIATION	65,902,262	64,112,613	-2.7%	62,586,568	-2.4%	70,212,839	12.2%	70,212,839	0.0%	70,212,839	0.0%	70,212,839	0.0%
INTEREST - LON	17,501,651	17,109,699	-2.2%	16,343,755	-4.5%	16,569,123	1.4%	16,569,123	0.0%	16,569,123	0.0%	16,569,123	0.0%
OTHER OPERATIO	475,152,716	510,102,604	7.4%	484,645,233	-5.0%	540,356,407	11.5%	540,356,407	0.0%	540,356,407	0.0%	540,356,407	0.0%
TOTAL OPERATIO	1,462,101,819	1,561,665,470	6.8%	1,524,866,301	-2.4%	1,662,751,679	9.0%	1,662,751,679	0.0%	1,662,751,679	0.0%	1,662,751,679	0.0%
NET OPERATING	(4,007,273)	40,042,705	-1099.3%	52,871,159	32.0%	51,425,310	-2.7%	51,425,310	0.0%	51,425,310	0.0%	51,425,310	0.0%
NON-OPERATING	(13,736,029)	13,823,608	-200.6%	74,201,402	436.8%	20,981,262	-71.7%	20,981,262	0.0%	20,981,262	0.0%	20,981,262	0.0%
EXCESS (DEFICIT)	(17,743,303)	53,866,313	-403.6%	127,072,561	135.9%	72,406,572	-43.0%	72,406,572	0.0%	72,406,572	0.0%	72,406,572	0.0%
Operating Margin %	-0.3%	2.5%		3.4%		3.0%		3.0%		3.0%		3.0%	
Bad Debt & Free C	1.7%	1.8%		1.5%		1.8%		1.8%		1.8%		1.8%	
Compensation Rat	57.1%	57.0%		58.0%		57.1%		57.1%		57.1%		57.1%	
Capital Cost % of I	5.7%	5.2%		5.2%		5.2%		5.2%		5.2%		5.2%	

THE UNIVERSITY OF VERMONT MEDICAL CENTER

Outpatient Pharmacy Expansion and Automation at Holly Court

INCOME STATEMENT													
Table 3B													
PROJECT ONLY													
	2020	2021		2021		2022		Proposed Yr 2		Proposed Yr 2		Proposed Yr 3	
	Actual	Budget	% change	Projection	% change	Budget	% change	YYYY	% change	YYYY	% change	YYYY	% change
REVENUES													
INPATIENT CARE REVENUE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
OUTPATIENT CARE REVENUE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
OUTPATIENT CARE REVENUE - PHYSICIAN			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
CHRONIC/SNF PT CARE REVENUE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
SWING BEDS PT CARE REVENUE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
GROSS PATIENT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
DISPROPORTIONATE SHARE PAYMENTS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
BAD DEBT FREE CARE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
DEDUCTIONS FROM REVENUE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
NET PATIENT CA	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
FIXED PROSPEC	166,289,772	228,421,374	37.4%		-100.0%								
NET PATIENT CARE REV & FIXED PAYMENTS & RES			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
OTHER OPERATING REVENUE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL OPERATI	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
OPERATING EXPENSE													
SALARIES NON MD			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
FRINGE BENEFITS NON MD			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
FRINGE BENEFITS MD			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
PHYSICIAN FEES & SALARIES			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
HEALTH CARE PROVIDER TAX			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
DEPRECIATION AMORTIZATION			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
INTEREST - LONG/SHORT TERM			#DIV/0!		#DIV/0!		#DIV/0!	564,391	#DIV/0!	564,391	0.0%	564,391	0.0%
OTHER OPERATING EXPENSE			#DIV/0!		#DIV/0!		#DIV/0!	158,400	#DIV/0!	118,800	-25.0%	79,200	-33.3%
TOTAL OPERATI	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	722,791	#DIV/0!	683,191	-5.5%	643,591	-5.8%
NET OPERATING	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	(722,791)	#DIV/0!	(683,191)	-5.5%	(643,591)	-5.8%
NON-OPERATING REVENUE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
EXCESS (DEFICIT)	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	(722,791)	#DIV/0!	(683,191)	-5.5%	(643,591)	-5.8%

THE UNIVERSITY OF VERMONT MEDICAL CENTER

Outpatient Pharmacy Expansion and Automation at Holly Court

Note: This table requires no "fill-in" as it is populated automatically

INCOME STATEMENT

Table 3C

WITH PROJECT

	2020	2021		2021		2022		Proposed Yr 2		Proposed Yr 2		Proposed Yr 3	
	Actual	Budget	% change	Projection	% change	Budget	% change	YYYY	% change	YYYY	% change	YYYY	% change
REVENUES													
INPATIENT CARI	961,991,066	-	-100.0%	987,667,855	#DIV/0!	1,139,480,429	15.4%	1,139,480,429	0.0%	1,139,480,429	0.0%	1,139,480,429	0.0%
OUTPATIENT CA	1,199,832,825	3,266,603,970	172.3%	1,473,369,737	-54.9%	1,608,905,587	9.2%	1,608,905,587	0.0%	1,608,905,587	0.0%	1,608,905,587	0.0%
OUTPATIENT CA	534,405,279	-	-100.0%	573,834,762	#DIV/0!	701,663,177	22.3%	701,663,177	0.0%	701,663,177	0.0%	701,663,177	0.0%
CHRONIC/SNF P	22,840,995	-	-100.0%	18,965,090	#DIV/0!	35,633,122	87.9%	35,633,122	0.0%	35,633,122	0.0%	35,633,122	0.0%
SWING BEDS PT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
GROSS PATIENT	2,719,070,165	3,266,603,970	20.1%	3,053,837,444	-6.5%	3,485,682,315	14.1%	3,485,682,315	0.0%	3,485,682,315	0.0%	3,485,682,315	0.0%
DISPROPORTIOI	11,260,268	11,214,283	-0.4%	11,223,480	0.1%	11,214,283	-0.1%	11,214,283	0.0%	11,214,283	0.0%	11,214,283	0.0%
BAD DEBT FREE	(46,435,209)	(59,260,462)	27.6%	(44,297,609)	-25.2%	(62,334,502)	40.7%	(62,334,502)	0.0%	(62,334,502)	0.0%	(62,334,502)	0.0%
DEDUCTIONS FF	(1,650,456,761)	(2,031,322,732)	23.1%	(1,896,942,492)	-6.6%	(2,118,848,558)	11.7%	(2,118,848,558)	0.0%	(2,118,848,558)	0.0%	(2,118,848,558)	0.0%
	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
NET PATIENT CA	1,033,438,463	1,187,235,059	14.9%	1,123,820,823	-5.3%	1,315,713,538	17.1%	1,315,713,538	0.0%	1,315,713,538	0.0%	1,315,713,538	0.0%
FIXED PROSPEC	332,579,544	456,842,748	37.4%	171,967,015	-62.4%	184,880,390	7.5%	184,880,390	0.0%	184,880,390	0.0%	184,880,390	0.0%
NET PATIENT CA	1,199,728,235	1,415,656,433	18.0%	1,295,787,839	-8.5%	1,500,593,928	15.8%	1,500,593,928	0.0%	1,500,593,928	0.0%	1,500,593,928	0.0%
OTHER OPERATIO	258,366,310	186,051,743	-28.0%	281,949,621	51.5%	213,583,061	-24.2%	213,583,061	0.0%	213,583,061	0.0%	213,583,061	0.0%
TOTAL OPERATIO	1,458,094,545	1,601,708,176	9.8%	1,577,737,460	-1.5%	1,714,176,988	8.6%	1,714,176,988	0.0%	1,714,176,988	0.0%	1,714,176,988	0.0%
OPERATING EXPENSE													
SALARIES NON I	490,345,065	889,402,666	81.4%	523,224,792	-41.2%	551,773,862	5.5%	551,773,862	0.0%	551,773,862	0.0%	551,773,862	0.0%
FRINGE BENEFIT	120,434,942	-	-100.0%	129,907,527	#DIV/0!	151,565,883	16.7%	151,565,883	0.0%	151,565,883	0.0%	151,565,883	0.0%
FRINGE BENEFIT	194,141,108	-	-100.0%	190,968,928	#DIV/0!	205,922,158	7.8%	205,922,158	0.0%	205,922,158	0.0%	205,922,158	0.0%
PHYSICIAN FEE!	29,930,947	-	-100.0%	40,860,089	#DIV/0!	40,408,673	-1.1%	40,408,673	0.0%	40,408,673	0.0%	40,408,673	0.0%
HEALTH CARE P	68,693,127	80,937,888	17.8%	76,329,409	-5.7%	85,942,735	12.6%	85,942,735	0.0%	85,942,735	0.0%	85,942,735	0.0%
DEPRECIATION	65,902,262	64,112,613	-2.7%	62,586,568	-2.4%	70,212,839	12.2%	70,777,230	-0.8%	70,777,230	0.0%	70,777,230	0.0%
INTEREST - LON	17,501,651	17,109,699	-2.2%	16,343,755	-4.5%	16,569,123	1.4%	16,569,123	0.0%	16,569,123	0.0%	16,569,123	0.0%
OTHER OPERATIO	475,152,716	510,102,604	7.4%	484,645,233	-5.0%	540,356,407	11.5%	540,514,807	0.0%	540,475,207	0.0%	540,435,607	0.0%
TOTAL OPERATIO	1,462,101,819	1,561,665,470	6.8%	1,524,866,301	-2.4%	1,662,751,679	9.0%	1,663,474,470	0.0%	1,663,434,870	0.0%	1,663,395,270	0.0%
NET OPERATING	(4,007,273)	40,042,705	-1099.3%	52,871,159	32.0%	51,425,310	-2.7%	50,702,519	-1.4%	50,742,119	0.1%	50,781,719	0.1%
NON-OPERATING	(13,736,029)	13,823,608	-200.6%	74,201,402	436.8%	20,981,262	-71.7%	20,981,262	0.0%	20,981,262	0.0%	20,981,262	0.0%
EXCESS (DEFICIT)	(17,743,303)	53,866,313	-403.6%	127,072,561	135.9%	72,406,572	-43.0%	71,683,781	-1.0%	71,723,381	0.1%	71,762,981	0.1%

Operating Margin %	-0.3%	2.5%	3.4%	3.0%	3.0%	3.0%
Bad Debt & Free C	1.7%	1.8%	1.5%	1.8%	1.8%	1.8%
Compensation Rat	57.1%	57.0%	58.0%	57.1%	57.1%	57.1%
Capital Cost % of I	5.7%	5.2%	5.2%	5.2%	5.3%	5.3%

Accounts	2020 Actuals	2021 Budget 2021 Approved	Budget 2022 Projection 2021	2022 Budget 2022 Projection 2021
Gross Revenue				
Hospital				
Inpatient Care Revenue	961,991,066	0	987,667,855	1,139,480,429
Outpatient Care Revenue	1,199,832,825	3,266,603,970	1,473,369,737	1,608,905,587
Chronic/SNF PT Care Revenue	22,840,995	0	18,965,090	35,633,122
Swing Beds PT Care Revenue	0	0	0	0
Total Hospital	2,184,664,886	3,266,603,970	2,480,002,682	2,784,019,138
Physician				
Outpatient Care Revenue - Physician	534,405,279	0	573,834,762	701,663,177
Total Physician	534,405,279	0	573,834,762	701,663,177
Net Revenue Deductions				
Disproportionate Share Payments	11,260,268	11,214,283	11,223,480	11,214,283
Bad Debt Free Care	-46,435,209	-59,260,462	-44,297,609	-62,334,502
Deductions from Revenue	-1,680,456,761	-2,061,322,732	-1,926,942,492	-2,148,848,558
Graduate Medical Education	30,000,000	30,000,000	30,000,000	30,000,000
Total Net Revenue Deductions	-1,685,631,702	-2,079,368,911	-1,930,016,620	-2,169,968,777
Net Patient Care Revenue	1,033,438,463	1,187,235,059	1,123,820,823	1,315,713,538
Fixed Prospective Payments and Reserves	166,289,772	228,421,374	171,967,015	184,880,390
Net Patient Care Rev & Fixed Payments & Reserv	1,199,728,235	1,415,656,433	1,295,787,839	1,500,593,928
Other Operating Revenue				
Community Foundation Revenue	0	0	0	0
Grant Income	7,514,709	0	8,589,635	7,296,280
Cafeteria & Parking	5,898,524	0	5,057,563	7,483,253
Employee Sales Pharmacy	0	0	0	0
Employee Sales Med Surg Supplies	0	0	0	0
Sale of Services to Other Organizations	0	0	0	0
Physician Office and Other Rentals	1,161,424	0	1,211,331	1,224,568
Meaningful Use	0	0	0	0
340B Retail Pharmacy Programs	31,247,528	0	23,087,872	30,262,112
COVID-19 Stimulus and Other Grant Funding	79,892,957	0	73,529,512	0
Miscellaneous/Contract Income	8,441,279	0	451,127	6,174,119
Premium Revenue and Payer Incentives	5,505,983	0	4,020,321	1,913,357
Specialty Pharmacy	83,753,726	186,051,743	109,979,525	119,677,224
Outpatient Pharmacy Revenue	17,498,454	0	14,034,083	10,146,378
Reference Lab Revenue	0	0	0	0
Institutional Services Revenue	8,890,231	0	15,871,367	11,863,215
Reimbursed Expenses	2,567,035	0	7,957,130	8,648,858
Other	5,994,461	0	18,160,154	8,893,695
Total Other Operating Revenue	258,366,310	186,051,743	281,949,621	213,583,061
Total Operating Revenue	1,458,094,545	1,601,708,176	1,577,737,460	1,714,176,988
Operating Expense				
Salaries Non MD	490,345,065	889,402,666	523,224,792	551,773,862
Fringe Benefits Non MD	120,434,942	0	129,907,527	151,565,883
Physician Fees & Salaries	194,141,108	0	190,968,928	205,922,158
Fringe Benefits MD	29,930,947	0	40,860,089	40,408,673
Health Care Provider Tax	68,693,127	80,937,888	76,329,409	85,942,735
Depreciation Amortization	65,902,262	64,112,613	62,586,568	70,212,839
Interest - Short Term	0	0	0	0
Interest - Long Term	17,501,651	17,109,699	16,343,755	16,569,123
Other Operating Expense	475,152,716	510,102,604	484,645,233	540,356,407
Bad Debt (pre 2012)	0	0	0	0
Total Operating Expense	1,462,101,819	1,561,665,470	1,524,866,301	1,662,751,679
Net Operating Income (Loss)	-4,007,273	40,042,705	52,871,159	51,425,310
Non-Operating Revenue	-13,736,029	13,823,608	74,201,402	20,981,262
Excess (Deficit) of Revenue Over Expense	-17,743,303	53,866,313	127,072,561	72,406,572

Income Statement

Descriptor Tables 3A, 3B and 3C

Levels: The University of Vermont Medical Center

Currency: United States of America, Dollars

PLEASE PROVIDE ASSUMPTIONS

PROJECT NAME
BALANCE SHEET PROJECTIONS--TABLE 4

Proposed Yr 1 Proposed Yr 2 Proposed Yr 3
YYYY YYYY YYYY

ASSETS

CURRENT ASSETS

CASH & INVESTMENTS
PATIENT ACCOUNTS RECEIVABLE, GROSS
LESS: ALLOWANCE FOR UNCOLLECTIBLE ACCTS
DUE FROM THIRD PARTIES
OTHER CURRENT ASSETS

TOTAL CURRENT ASSETS

BOARD DESIGNATED ASSETS

FUNDED DEPRECIATION
ESCROWED BOND FUNDS
OTHER

TOTAL BOARD DESIGNATED ASSETS

PROPERTY, PLANT, AND EQUIPMENT
LAND, BUILDINGS & IMPROVEMENTS
CONSTRUCTION IN PROGRESS
MAJOR MOVABLE EQUIPMENT
FIXED EQUIPMENT

TOTAL PROPERTY, PLANT AND EQUIPMENT

LESS: ACCUMULATED DEPRECIATION
LAND, BUILDINGS & IMPROVEMENTS
EQUIPMENT - FIXED
EQUIPMENT - MAJOR MOVEABLE

TOTAL ACCUMULATED DEPRECIATION

TOTAL PROPERTY, PLANT AND EQUIPMENT, NET

OTHER LONG-TERM ASSETS

TOTAL ASSETS

LIABILITIES AND FUND BALANCE

CURRENT LIABILITIES

ACCOUNTS PAYABLE
SALARIES, WAGES AND PAYROLL TAXES PAYABLE
ESTIMATED THIRD-PARTY SETTLEMENTS
OTHER CURRENT LIABILITIES
CURRENT PORTION OF LONG-TERM DEBT

TOTAL CURRENT LIABILITIES

LONG-TERM DEBT

BONDS & MORTGAGES PAYABLE
CAPITAL LEASE OBLIGATIONS
OTHER LONG-TERM DEBT

TOTAL LONG-TERM DEBT

OTHER NONCURRENT LIABILITIES

TOTAL LIABILITIES

FUND BALANCE

TOTAL LIABILITIES AND FUND BALANCE

NOTES:

THE UNIVERSITY OF VERMONT MEDICAL CENTER

Outpatient Pharmacy Expansion and Automation at Holly Court

Balance Sheet

WITHOUT PROJECT

	2020	2021	%	2021	%	2022	%	YYYY	%	YYYY	%	YYYY	%
	Actual	Budget	change	Projection	change	Budget	change	Proposed Year 1	change	Proposed Year 2	change	Proposed Year 3	change
ASSETS													
CURRENT ASSETS													
CASH & INVESTMENTS	194,792,429	244,783,431	25.7%	224,688,488	-8.2%	172,991,275	-23.0%	172,991,275	0.0%	172,991,275	0.0%	172,991,275	0.0%
PATIENT ACCOUNTS RECEIVABLE, GROSS	204,170,809	160,188,263	-21.5%	214,224,870	33.7%	214,224,870	0.0%	214,224,870	0.0%	214,224,870	0.0%	214,224,870	0.0%
LESS: ALLOWANCE FOR UNCOLLECTIBLE ACCTS	(42,065,964)	-	-100.0%	(37,057,939)	#DIV/0!	(37,057,939)	0.0%	(37,057,939)	0.0%	(37,057,939)	0.0%	(37,057,939)	0.0%
DUE FROM THIRD PARTIES	32,009,063	-	-100.0%	37,425,396	#DIV/0!	37,425,396	0.0%	37,425,396	0.0%	37,425,396	0.0%	37,425,396	0.0%
ACO RISK RESERVE/SETTLEMENT RECEIVABLE	6,442,700	-	-100.0%	3,798,677	#DIV/0!	5,000,000	31.6%	5,000,000	0.0%	5,000,000	0.0%	5,000,000	0.0%
OTHER CURRENT ASSETS	109,419,193	116,307,813	6.3%	106,016,163	-8.8%	106,016,163	0.0%	106,016,163	0.0%	106,016,163	0.0%	106,016,163	0.0%
TOTAL CURRENT ASSETS	504,768,230	521,279,507	3.3%	549,095,655	5.3%	498,599,766	-9.2%	498,599,766	0.0%	498,599,766	0.0%	498,599,766	0.0%
BOARD DESIGNATED ASSETS													
FUNDED DEPRECIATION	544,279,307	516,577,841	-5.1%	612,315,947	18.5%	633,297,209	3.4%	633,297,209	0.0%	633,297,209	0.0%	633,297,209	0.0%
ESCROWED BOND FUNDS	72,243,481	-	-100.0%	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
OTHER	-	-	#DIV/0!	87,880,000	#DIV/0!	87,880,000	0.0%	87,880,000	0.0%	87,880,000	0.0%	87,880,000	0.0%
TOTAL BOARD DESIGNATED ASSETS	616,522,788	516,577,841	-16.2%	700,195,946	35.5%	721,177,208	3.0%	721,177,208	0.0%	721,177,208	0.0%	721,177,208	0.0%
PROPERTY, PLANT, AND EQUIPMENT													
LAND, BUILDINGS & IMPROVEMENTS	913,207,548	646,684,466	-29.2%	923,177,459	42.8%	957,180,476	3.7%	957,180,476	0.0%	957,180,476	0.0%	957,180,476	0.0%
CONSTRUCTION IN PROGRESS	25,321,642	-	-100.0%	36,289,707	#DIV/0!	36,289,707	0.0%	36,289,707	0.0%	36,289,707	0.0%	36,289,707	0.0%
MAJOR MOVABLE EQUIPMENT	485,492,437	-	-100.0%	491,436,173	#DIV/0!	525,773,537	7.0%	525,773,537	0.0%	525,773,537	0.0%	525,773,537	0.0%
FIXED EQUIPMENT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
TOTAL PROPERTY, PLANT AND EQUIPMENT	1,424,021,627	646,684,466	-54.6%	1,450,903,339	124.4%	1,519,243,720	4.7%	1,519,243,720	0.0%	1,519,243,720	0.0%	1,519,243,720	0.0%
LESS: ACCUMULATED DEPRECIATION													
LAND, BUILDINGS & IMPROVEMENTS	(422,526,056)	-	-100.0%	(455,118,426)	#DIV/0!	(492,874,419)	8.3%	(492,874,419)	0.0%	(492,874,419)	0.0%	(492,874,419)	0.0%
EQUIPMENT - FIXED	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
EQUIPMENT - MAJOR MOVEABLE	(361,372,990)	-	-100.0%	(391,241,433)	#DIV/0!	(423,698,279)	8.3%	(423,698,279)	0.0%	(423,698,279)	0.0%	(423,698,279)	0.0%
TOTAL ACCUMULATED DEPRECIATION	(783,899,046)	-	-100.0%	(846,359,859)	#DIV/0!	(916,572,698)	8.3%	(916,572,698)	0.0%	(916,572,698)	0.0%	(916,572,698)	0.0%
TOTAL PROPERTY, PLANT AND EQUIPMENT, NET	640,122,581	646,684,466	1.0%	604,543,480	-6.5%	602,671,022	-0.3%	602,671,022	0.0%	602,671,022	0.0%	602,671,022	0.0%
OTHER LONG-TERM ASSETS	65,559,813	142,233,196	117.0%	65,947,792	-53.6%	65,947,792	0.0%	65,947,792	0.0%	65,947,792	0.0%	65,947,792	0.0%
TOTAL ASSETS	1,826,973,412	1,826,775,010	0.0%	1,919,782,873	5.1%	1,888,395,787	-1.6%	1,888,395,787	0.0%	1,888,395,787	0.0%	1,888,395,787	0.0%
LIABILITIES AND FUND BALANCE													
CURRENT LIABILITIES													
ACCOUNTS PAYABLE	27,779,653	35,717,005	28.6%	42,892,632	20.1%	42,892,632	0.0%	42,892,632	0.0%	42,892,632	0.0%	42,892,632	0.0%
CURRENT LIABILITIES COVID-19	76,060,696	21,500,000	-71.7%	60,190,837	180.0%	-	-100.0%	-	-100.0%	-	#DIV/0!	-	#DIV/0!
SALARIES, WAGES AND PAYROLL TAXES PAYABLE	97,282,786	88,103,110	-9.4%	83,759,092	-4.9%	83,759,092	0.0%	83,759,092	0.0%	83,759,092	0.0%	83,759,092	0.0%
ESTIMATED THIRD-PARTY SETTLEMENTS	19,230,660	-	-100.0%	23,462,235	#DIV/0!	3,165,681	-86.5%	3,165,681	-86.5%	3,165,681	0.0%	3,165,681	0.0%
OTHER CURRENT LIABILITIES	53,997,052	67,936,249	25.8%	54,494,848	-19.8%	54,494,848	0.0%	54,494,848	0.0%	54,494,848	0.0%	54,494,848	0.0%
CURRENT PORTION OF LONG-TERM DEBT	19,783,625	-	-100.0%	19,833,768	#DIV/0!	22,322,022	12.5%	22,322,022	12.5%	22,322,022	0.0%	22,322,022	0.0%
TOTAL CURRENT LIABILITIES	294,134,472	213,256,364	-27.5%	284,633,412	33.5%	206,634,275	-27.4%	206,634,275	-27.4%	206,634,275	0.0%	206,634,275	0.0%
LONG-TERM DEBT													

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LONG TERM LIABILITIES COVID-19	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
BONDS & MORTGAGES PAYABLE	438,669,100	418,647,828	-4.6%	418,831,254	0.0%	394,909,193	-5.7%	394,909,193	-5.7%	394,909,193	0.0%	394,909,193	0.0%
CAPITAL LEASE OBLIGATIONS	-	-	#DIV/0!	1,162,611	#DIV/0!	1,162,611	0.0%	1,162,611	0.0%	1,162,611	0.0%	1,162,611	0.0%
OTHER LONG-TERM DEBT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
TOTAL LONG-TERM DEBT	438,669,100	418,647,828	-4.6%	419,993,865	0.3%	396,071,804	-5.7%	396,071,804	-5.7%	396,071,804	0.0%	396,071,804	0.0%
OTHER NONCURRENT LIABILITIES	71,693,432	69,469,463	-3.1%	67,303,398	-3.1%	67,303,398	0.0%	67,303,398	0.0%	67,303,398	0.0%	67,303,398	0.0%
TOTAL LIABILITIES	804,497,004	701,373,655	-12.8%	771,930,676	10.1%	670,009,478	-13.2%	670,009,478	-13.2%	670,009,478	0.0%	670,009,478	0.0%
FUND BALANCE	1,022,476,409	1,125,401,355	10.1%	1,147,852,197	2.0%	1,218,386,310	6.1%	1,218,386,310	6.1%	1,218,386,310	0.0%	1,218,386,310	0.0%
TOTAL LIABILITIES AND FUND BALANCE	1,826,973,413	1,826,775,010	0.0%	1,919,782,873	5.1%	1,888,395,787	-1.6%	1,888,395,787	-1.6%	1,888,395,787	0.0%	1,888,395,787	0.0%

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Outpatient Pharmacy Expansion and Automation at Holly Court

Balance Sheet													
PROJECT ONLY													
	2020	2021		2021		2022		YYYY		YYYY		YYYY	
	Actual	Budget	% change	Projection	% change	Budget	% change	Proposed Year 1	% change	Proposed Year 2	% change	Proposed Year 3	% change
ASSETS													
CURRENT ASSETS													
CASH & INVESTMENTS			#DIV/0!		#DIV/0!		#DIV/0!	(5,920,077)	#DIV/0!	(118,800)	-98.0%	(79,200)	-33.3%
PATIENT ACCOUNTS RECEIVABLE, GROSS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
LESS: ALLOWANCE FOR UNCOLLECTIBLE ACCTS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
DUE FROM THIRD PARTIES			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
ACO RISK RESERVE/SETTLEMENT RECEIVABLE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
OTHER CURRENT ASSETS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL CURRENT ASSETS	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	(5,920,077)	#DIV/0!	(118,800)	-98.0%	(79,200)	-33.3%
BOARD DESIGNATED ASSETS													
FUNDED DEPRECIATION			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
ESCROWED BOND FUNDS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
OTHER			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL BOARD DESIGNATED ASSETS	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
PROPERTY, PLANT, AND EQUIPMENT													
LAND, BUILDINGS & IMPROVEMENTS			#DIV/0!		#DIV/0!		#DIV/0!	3,358,693	#DIV/0!		-100.0%		#DIV/0!
CONSTRUCTION IN PROGRESS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
MAJOR MOVABLE EQUIPMENT			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
FIXED EQUIPMENT			#DIV/0!		#DIV/0!		#DIV/0!	2,452,195	#DIV/0!		-100.0%		#DIV/0!
TOTAL PROPERTY, PLANT AND EQUIPMENT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	5,810,888	#DIV/0!	-	-100.0%	-	#DIV/0!
LESS: ACCUMULATED DEPRECIATION													
LAND, BUILDINGS & IMPROVEMENTS			#DIV/0!		#DIV/0!		#DIV/0!	(216,905)	#DIV/0!	(216,905)	0.0%	(216,905)	0.0%
EQUIPMENT - FIXED			#DIV/0!		#DIV/0!		#DIV/0!	(347,486)	#DIV/0!	(347,486)	0.0%	(347,486)	0.0%
EQUIPMENT - MAJOR MOVEABLE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL ACCUMULATED DEPRECIATION	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	(564,391)	#DIV/0!	(564,391)	0.0%	(564,391)	0.0%
TOTAL PROPERTY, PLANT AND EQUIPMENT, NET	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	5,246,497	#DIV/0!	(564,391)	-110.8%	(564,391)	0.0%
OTHER LONG-TERM ASSETS													
			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL ASSETS	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	(673,580)	#DIV/0!	(683,191)	1.4%	(643,591)	-5.8%
LIABILITIES AND FUND BALANCE													
CURRENT LIABILITIES													
ACCOUNTS PAYABLE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
CURRENT LIABILITIES COVID-19			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
SALARIES, WAGES AND PAYROLL TAXES PAYABLE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
ESTIMATED THIRD-PARTY SETTLEMENTS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
OTHER CURRENT LIABILITIES			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
CURRENT PORTION OF LONG-TERM DEBT			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

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TOTAL CURRENT LIABILITIES	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
LONG-TERM DEBT											
LONG TERM LIABILITIES COVID-19			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
BONDS & MORTGAGES PAYABLE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
CAPITAL LEASE OBLIGATIONS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
OTHER LONG-TERM DEBT			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL LONG-TERM DEBT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
OTHER NONCURRENT LIABILITIES			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL LIABILITIES	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
FUND BALANCE			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TOTAL LIABILITIES AND FUND BALANCE	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!

THE UNIVERSITY OF VERMONT MEDICAL CENTER

Outpatient Pharmacy Expansion and Automation at Holly Court

Note: This table requires no "fill-in" as it is populated automatically

Balance Sheet

WITH PROJECT

	2020	2021	%	2021	%	2022	%	YYYY	%	YYYY	%	YYYY	%
	Actual	Budget	change	Projection	change	Budget	change	Proposed Year 1	change	Proposed Year 2	change	Proposed Year 3	change
ASSETS													
CURRENT ASSETS													
CASH & INVESTMENTS	194,792,429	244,783,431	25.7%	224,688,488	-8.2%	172,991,275	-23.0%	167,071,198	-3.4%	172,872,475	3.5%	172,912,075	0.0%
PATIENT ACCOUNTS RECEIVABLE, GROSS	204,170,809	160,188,263	-21.5%	214,224,870	33.7%	214,224,870	0.0%	214,224,870	0.0%	214,224,870	0.0%	214,224,870	0.0%
LESS: ALLOWANCE FOR UNCOLLECTIBLE ACCTS	(42,065,964)	-	-100.0%	(37,057,939)	#DIV/0!	(37,057,939)	0.0%	(37,057,939)	0.0%	(37,057,939)	0.0%	(37,057,939)	0.0%
DUE FROM THIRD PARTIES	32,009,063	-	-100.0%	37,425,396	#DIV/0!	37,425,396	0.0%	37,425,396	0.0%	37,425,396	0.0%	37,425,396	0.0%
ACO RISK RESERVE/SETTLEMENT RECEIVABLE	6,442,700	-	-100.0%	3,798,677	#DIV/0!	5,000,000	31.6%	5,000,000	0.0%	5,000,000	0.0%	5,000,000	0.0%
OTHER CURRENT ASSETS	109,419,193	116,307,813	6.3%	106,016,163	-8.8%	106,016,163	0.0%	106,016,163	0.0%	106,016,163	0.0%	106,016,163	0.0%
TOTAL CURRENT ASSETS	504,768,230	521,279,507	3.3%	549,095,655	5.3%	498,599,766	-9.2%	492,679,689	-1.2%	498,480,966	1.2%	498,520,566	0.0%
BOARD DESIGNATED ASSETS													
FUNDED DEPRECIATION	544,279,307	516,577,841	-5.1%	612,315,947	18.5%	633,297,209	3.4%	633,297,209	0.0%	633,297,209	0.0%	633,297,209	0.0%
ESCROWED BOND FUNDS	72,243,481	-	-100.0%	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
OTHER	-	-	#DIV/0!	87,880,000	#DIV/0!	87,880,000	0.0%	87,880,000	0.0%	87,880,000	0.0%	87,880,000	0.0%
TOTAL BOARD DESIGNATED ASSETS	616,522,788	516,577,841	-16.2%	700,195,946	35.5%	721,177,208	3.0%	721,177,208	0.0%	721,177,208	0.0%	721,177,208	0.0%
PROPERTY, PLANT, AND EQUIPMENT													
LAND, BUILDINGS & IMPROVEMENTS	913,207,548	646,684,466	-29.2%	923,177,459	42.8%	957,180,476	3.7%	960,539,169	0.4%	957,180,476	-0.3%	957,180,476	0.0%
CONSTRUCTION IN PROGRESS	25,321,642	-	-100.0%	36,289,707	#DIV/0!	36,289,707	0.0%	36,289,707	0.0%	36,289,707	0.0%	36,289,707	0.0%
MAJOR MOVABLE EQUIPMENT	485,492,437	-	-100.0%	491,436,173	#DIV/0!	525,773,537	7.0%	525,773,537	0.0%	525,773,537	0.0%	525,773,537	0.0%
FIXED EQUIPMENT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	2,452,195	#DIV/0!	-	-100.0%	-	#DIV/0!
TOTAL PROPERTY, PLANT AND EQUIPMENT	1,424,021,627	646,684,466	-54.6%	1,450,903,339	124.4%	1,519,243,720	4.7%	1,525,054,608	0.4%	1,519,243,720	-0.4%	1,519,243,720	0.0%
LESS: ACCUMULATED DEPRECIATION													
LAND, BUILDINGS & IMPROVEMENTS	(422,526,056)	-	-100.0%	(455,118,426)	#DIV/0!	(492,874,419)	8.3%	(493,091,324)	0.0%	(493,091,324)	0.0%	(493,091,324)	0.0%
EQUIPMENT - FIXED	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	(347,486)	#DIV/0!	(347,486)	0.0%	(347,486)	0.0%
EQUIPMENT - MAJOR MOVEABLE	(361,372,990)	-	-100.0%	(391,241,433)	#DIV/0!	(423,698,279)	8.3%	(423,698,279)	0.0%	(423,698,279)	0.0%	(423,698,279)	0.0%
TOTAL ACCUMULATED DEPRECIATION	(783,899,046)	-	-100.0%	(846,359,859)	#DIV/0!	(916,572,698)	8.3%	(917,137,089)	0.1%	(917,137,089)	0.0%	(917,137,089)	0.0%
TOTAL PROPERTY, PLANT AND EQUIPMENT, NET	640,122,581	646,684,466	1.0%	604,543,480	-6.5%	602,671,022	-0.3%	607,917,519	0.9%	602,106,631	-1.0%	602,106,631	0.0%
OTHER LONG-TERM ASSETS	65,559,813	142,233,196	117.0%	65,947,792	-53.6%	65,947,792	0.0%	65,947,792	0.0%	65,947,792	0.0%	65,947,792	0.0%
TOTAL ASSETS	1,826,973,412	1,826,775,010	0.0%	1,919,782,873	5.1%	1,888,395,787	-1.6%	1,887,722,207	0.0%	1,887,712,596	0.0%	1,887,752,196	0.0%
LIABILITIES AND FUND BALANCE													
CURRENT LIABILITIES													
ACCOUNTS PAYABLE	27,779,653	35,717,005	28.6%	42,892,632	20.1%	42,892,632	0.0%	42,892,632	0.0%	42,892,632	0.0%	42,892,632	0.0%
CURRENT LIABILITIES COVID-19	76,060,696	21,500,000	-71.7%	60,190,837	180.0%	-	-100.0%	-	-100.0%	-	#DIV/0!	-	#DIV/0!
SALARIES, WAGES AND PAYROLL TAXES PAYABLE	97,282,786	88,103,110	-9.4%	83,759,092	-4.9%	83,759,092	0.0%	83,759,092	0.0%	83,759,092	0.0%	83,759,092	0.0%
ESTIMATED THIRD-PARTY SETTLEMENTS	19,230,660	-	-100.0%	23,462,235	#DIV/0!	3,165,681	-86.5%	3,165,681	-86.5%	3,165,681	0.0%	3,165,681	0.0%
OTHER CURRENT LIABILITIES	53,997,052	67,936,249	25.8%	54,494,848	-19.8%	54,494,848	0.0%	54,494,848	0.0%	54,494,848	0.0%	54,494,848	0.0%
CURRENT PORTION OF LONG-TERM DEBT	19,783,625	-	-100.0%	19,833,768	#DIV/0!	22,322,022	12.5%	22,322,022	12.5%	22,322,022	0.0%	22,322,022	0.0%

THE UNIVERSITY OF VERMONT MEDICAL CENTER

TOTAL CURRENT LIABILITIES	294,134,472	213,256,364	-27.5%	284,633,412	33.5%	206,634,275	-27.4%	206,634,275	-27.4%	206,634,275	0.0%	206,634,275	0.0%
LONG-TERM DEBT													
LONG TERM LIABILITIES COVID-19	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
BONDS & MORTGAGES PAYABLE	438,669,100	418,647,828	-4.6%	418,831,254	0.0%	394,909,193	-5.7%	394,909,193	-5.7%	394,909,193	0.0%	394,909,193	0.0%
CAPITAL LEASE OBLIGATIONS	-	-	#DIV/0!	1,162,611	#DIV/0!	1,162,611	0.0%	1,162,611	0.0%	1,162,611	0.0%	1,162,611	0.0%
OTHER LONG-TERM DEBT	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
TOTAL LONG-TERM DEBT	438,669,100	418,647,828	-4.6%	419,993,865	0.3%	396,071,804	-5.7%	396,071,804	-5.7%	396,071,804	0.0%	396,071,804	0.0%
OTHER NONCURRENT LIABILITIES	71,693,432	69,469,463	-3.1%	67,303,398	-3.1%	67,303,398	0.0%	67,303,398	0.0%	67,303,398	0.0%	67,303,398	0.0%
TOTAL LIABILITIES	804,497,004	701,373,655	-12.8%	771,930,676	10.1%	670,009,478	-13.2%	670,009,478	-13.2%	670,009,478	0.0%	670,009,478	0.0%
FUND BALANCE	1,022,476,409	1,125,401,355	10.1%	1,147,852,197	2.0%	1,218,386,310	6.1%	1,218,386,310	6.1%	1,218,386,310	0.0%	1,218,386,310	0.0%
TOTAL LIABILITIES AND FUND BALANCE	1,826,973,413	1,826,775,010	0.0%	1,919,782,873	5.1%	1,888,395,787	-1.6%	1,888,395,787	-1.6%	1,888,395,787	0.0%	1,888,395,787	0.0%

Accounts	2020 Actuals	2021 Budget 2021 Approved	Budget 2022 Projection 2021	2022 Budget 2022 Projection 2021
[Assets] Assets				
[Current_Assets] Current Assets				
[Cash_Investments] Cash & Investments	194,792,429	244,783,431		224,688,488
[Patient_Accts_Rec_Gross] Patient Accounts R	204,170,809	160,188,263		214,224,870
[Less_Allowance_For_Uncollectible_Accts] Less	-42,065,964	0		-37,057,939
[Due_From_Third_Parties] Due From Third Part	32,009,063	0		37,425,396
[Risk_Reserve_Receivable] ACO Risk Reserve/	6,442,700	0		3,798,677
[Other_Current_Assets] Other Current Assets	109,419,193	116,307,813		106,016,163
[Current_Assets] Total Current Assets	504,768,230	521,279,507		549,095,655
[Fixed_Assets] Fixed Assets	0	0		0
[Board_Designated_Assets] Board Designated Assets				
[Funded_Depr] Funded Depreciation	544,279,307	516,577,841		612,315,947
[Escrowed_Bond_Funds] Escrowed Bond Funds:	72,243,481	0		0
[Other] Other	0	0		87,880,000
[Board_Designated_Assets] Total Board Designa	616,522,788	516,577,841		700,195,946
[LongTerm_Assets] Long Term Assets				
[Net_Property_Plant_And_Equip] Net, Property, Plant And Equipment				
[Gross_Property_Plant_And_Equip] Gross, Property, Plant And Equipment				
[Land_Buildings_Improvements] Land, Buildir	913,207,548	646,684,466		923,177,459
[Construction_In_Progress] Construction In P	25,321,642	0		36,289,707
[Major_Movable_Equip] Major Movable Equip	485,492,437	0		491,436,173
[Fixed_Equip] Fixed Equipment	0	0		0
[Gross_Property_Plant_And_Equip] Total Gros	1,424,021,627	646,684,466		1,450,903,339
[Accumulated_Depr] Accumulated Depreciation				
[Depr_Land_Buildings_Improvements] Land,	-422,526,056	0		-455,118,426
[Equip_Fixed] Equipment - Fixed	0	0		0
[Equip_Major_Moveable] Equipment - Major M	-361,372,990	0		-391,241,433
[Accumulated_Depr] Total Accumulated Depre	-783,899,046	0		-846,359,859
[Net_Property_Plant_And_Equip] Total Net, Pro	640,122,581	646,684,466		604,543,480
[LongTerm_Assets] Total Long Term Assets	640,122,581	646,684,466		604,543,480
[Other_LT_Assets] Other Long-Term Assets	65,559,813	142,233,196		65,947,792
[Assets] Total Assets	1,826,973,412	1,826,775,010		1,919,782,873
[Liabilities_Equities] Liabilities and Equities				
[Liabilities] Liabilities				
[Current_Liabilities] Current Liabilities				
[Accts_Payable] Accounts Payable	27,779,653	35,717,005		42,892,632
[Current_Liab_COVID] Current Liabilities COVI	76,060,696	21,500,000		60,190,837
[Salaries_Wages_Payroll_Taxes_Payable] Sal	97,282,786	88,103,110		83,759,092
[Est_3rd_Party_Settlements] Estimated Third-f	19,230,660	0		23,462,235
[Other_Current_Liabilities] Other Current Liabil	53,997,052	67,936,249		54,494,848
[Current_Portion_Of_LT_Debt] Current Portion	19,783,625	0		19,833,768
[Current_Liabilities] Total Current Liabilities	294,134,472	213,256,364		284,633,412
[LongTerm_Liabilities] Long Term Liabilities				
[Long_Liab_COVID] Long Term Liabilities COV	0	0		0
[LT_Debt] Long-Term Debt				
[Bonds_Mortgages_Payable] Bonds & Mortgag	438,669,100	418,647,828		418,831,254
[Capital_Lease_Obligations] Capital Lease Ol	0	0		1,162,611
[Other_LT_Debt] Other Long-Term Debt	0	0		0
[LT_Debt] Total Long-Term Debt	438,669,100	418,647,828		419,993,865
[LongTerm_Liabilities] Total Long Term Liabilitie	438,669,100	418,647,828		419,993,865
[Other_Noncurrent_Liabilities] Other Noncurrent	71,693,432	69,469,463		67,303,398
[Liabilities] Total Liabilities	804,497,004	701,373,655		771,930,676
[Fund_Balance] Fund Balance	1,022,476,409	1,125,401,355		1,147,852,197
[Liabilities_Equities] Total Liabilities and Equities	1,826,973,413	1,826,775,010		1,919,782,873

Balance Sheet
Descriptor Table 4A, 4B & 4C

Levels: The University of Vermont Medical Center
Currency: United States of America, Dollars

PLEASE PROVIDE ASSUMPTIONS

PROJECT NAME
PAYER PROJECTIONS--TABLE 6

Proposed Yr 1 Proposed Yr 2 Proposed Yr 3
YYYY YYYY YYYY

Commercial

Hospital
Physician
Total Revenue

Allowances - Hospital
Allowances - Physicians
Free Care
Bad Debt
Net Payer Revenue

Medicaid

Hospital
Physician
Total Revenue

Allowances - Hospital
Allowances - Physicians
Free Care
Bad Debt
Graduate Medical Education Payments_Phys.
Graduate Medical Education Payments-Hosp
Net Payer Revenue

Medicare

Hospital
Physician
Total Revenue

Allowances - Hospital
Allowances - Physicians
Free Care
Bad Debt
Net Payer Revenue

Disproportionate Share Payments

Total Payer Revenue

Hospital
Physician
Total Revenue

Allowances - Hospital
Allowances - Physicians
Free Care
Bad Debt
Disproportionate Share Payments
Graduate Medical Education Payments_Phys.
Graduate Medical Education Payments-Hosp

Net Payer Revenue

NOTES:

THE UNIVERSITY OF VERMONT MEDICAL CENTER

PROJECT NAME													
PAYER REVENUE REPORT													
PROJECT ONLY													
	2020	2021	% change	2021	% change	2022	% change	YYYY	% change	YYYY	% change	YYYY	% change
	Actual	Budget		Projection		Budget		Proposed Year 1		Proposed Year 2		Proposed Year 3	
Commercial													
Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Physician			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Total Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Allowances - Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Allowances - Physicians			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Free Care							#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Bad Debt							#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Net Payer Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Fixed Prospective Payment & Reserves													
Total Net Payer Revenue & Fixed Prospective Payment													
Reimbursement Rate - Commercial	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	
Payer Mix - Commercial	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	
Medicaid													
Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Physician			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Total Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Allowances - Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Allowances - Physicians			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Free Care							#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Bad Debt							#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Graduate Medical Education Payments-Phys			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Graduate Medical Education Payments-Hosp			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Net Payer Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Fixed Prospective Payment & Reserves													
Total Net Payer Revenue & Fixed Prospective Payment													
Reimbursement Rate - Medicaid	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	
Payer Mix - Medicaid	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	
Medicare													
Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Physician			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Total Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Allowances - Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Allowances - Physicians			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Free Care							#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Bad Debt							#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Net Payer Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Fixed Prospective Payment & Reserves													
Total Net Payer Revenue & Fixed Prospective Payment													
Reimbursement Rate - Medicare	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	
Payer Mix - Medicare	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	
Disproportionate Share Payments			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Total Payer Revenue													
Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Physician			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Total Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Allowances - Hospital			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Allowances - Physicians			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Free Care			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Bad Debt			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Disproportionate Share Payments			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Graduate Medical Education Payments-Phys			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Graduate Medical Education Payments-Hosp			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Net Payer Revenue			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Fixed Prospective Payment & Reserves													
Total Net Payer Revenue & Fixed Prospective Payment													
Reimbursement Rate - All Payers	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	



Green Mountain Care Board

PAYER REVENUE

Description: REPORT 6

Levels: **The University of Vermont Medical Center**

Currency: United States of America, Dollars

PLEASE PROVIDE ASSUMPTIONS

Outpatient Pharmacy Expansion and Automation at Holly Court
UTILIZATION PROJECTIONS--TABLE 7

Proposed Proposed Proposed Yr 3
YYYY YYYY YYYY

- Inpatient Utilization
 - Acute Beds (Staffed)
 - Acute Admissions
 - Acute Patient Days
 - Acute Average Length Of Stay
- Outpatient
 - All Outpatient Visits
 - Operating Room Procedure
 - Operating Room Cases
 - Physician Office Visits
- Ancillary
 - All Operating Room Procedure
 - Emergency Room Visits
 - Cat Scan Procedures
 - Magnetic Resonance Image Exams
 - Nuclear Medicine Procedures
 - Radiology - Diagnostic Procedures
 - Laboratory Tests
- Adjusted Statistics
 - Adjusted Admissions
 - Adjusted Days

NOTES:

The University of Vermont Medical Center

Outpatient Pharmacy Expansion and Automation at Holly Court

UTILIZATION PROJECTIONS--TABLE 7

WITHOUT PROJECT													
	2020	2021		2021		2022		Proposed Yr 1		Proposed Yr 2		Proposed Yr 3	
	Actual	Budget	% change	Projection	% change	Budget	% change	YYYY	% change	YYYY	% change	YYYY	% change
Inpatient Utilization													
Acute Beds (Staffed)	433	-	-100.0%	450	#DIV/0!	450	0.0%	450	0.0%	450	0.0%	450	0.0%
Acute Admissions	19,812	-	-100.0%	19,140	#DIV/0!	21,231	10.9%	21,231	0.0%	21,231	0.0%	21,231	0.0%
Acute Patient Days	118,878	-	-100.0%	119,160	#DIV/0!	124,288	4.3%	124,288	0.0%	124,288	0.0%	124,288	0.0%
Acute Average Length Of Stay	6.01	-	-100.0%	6.23	#DIV/0!	5.85	-6.0%	5.85	0.0%	5.85	0.0%	5.85	0.0%
Outpatient													
All Outpatient Visits	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Physician Office Visits	624,305	-	-100.0%	588,612	#DIV/0!	647,412	10.0%	647,412	0.0%	647,412	0.0%	647,412	0.0%
Ancillary													
All Operating Room Procedure	37,976	-	-100.0%	42,392	#DIV/0!	47,413	11.8%	47,413	0.0%	47,413	0.0%	47,413	0.0%
All Operating Room Cases	15,758	-	-100.0%	32,220	#DIV/0!	39,616	23.0%	39,616	0.0%	39,616	0.0%	39,616	0.0%
Emergency Room Visits	54,022	-	-100.0%	46,217	#DIV/0!	57,000	23.3%	57,000	0.0%	57,000	0.0%	57,000	0.0%
Cat Scan Procedures	50,744	-	-100.0%	51,439	#DIV/0!	58,869	14.4%	58,869	0.0%	58,869	0.0%	58,869	0.0%
Magnetic Resonance Image Exams	16,967	-	-100.0%	15,991	#DIV/0!	21,174	32.4%	21,174	0.0%	21,174	0.0%	21,174	0.0%
Nuclear Medicine Procedures	6,029	-	-100.0%	5,904	#DIV/0!	7,043	19.3%	7,043	0.0%	7,043	0.0%	7,043	0.0%
Radiology - Diagnostic Procedures	150,785	-	-100.0%	141,516	#DIV/0!	182,671	29.1%	182,671	0.0%	182,671	0.0%	182,671	0.0%
Laboratory Tests	2,207,075	-	-100.0%	2,367,185	#DIV/0!	2,448,931	3.5%	2,448,931	0.0%	2,448,931	0.0%	2,448,931	0.0%
			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adjusted Statistics													
Adjusted Admissions	56,679	-	-100.0%	-	#DIV/0!	-	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Adjusted Days	339,751	-	-100.0%	-	#DIV/0!	-	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

The University of Vermont Medical Center

Outpatient Pharmacy Expansion and Automation at Holly Court

UTILIZATION PROJECTIONS--TABLE 7

PROJECT ONLY													
	2020 Actual	2021 Budget	% change	2021 Projection	% change	2022 Budget	% change	Proposed Yr 1		Proposed Yr 2		Proposed Yr 3	
								YYYY	% change	YYYY	% change	YYYY	% change
Inpatient Utilization													
Acute Beds (Staffed)			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Acute Admissions			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Acute Patient Days			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Acute Average Length Of Stay			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Outpatient													
All Outpatient Visits			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Physician Office Visits			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Ancillary													
All Operating Room Procedure			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
All Operating Room Cases			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Emergency Room Visits			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Cat Scan Procedures			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Magnetic Resonance Image Exams			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Nuclear Medicine Procedures			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Radiology - Diagnostic Procedures			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Laboratory Tests			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Adjusted Statistics													
Adjusted Admissions			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Adjusted Days			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!

The University of Vermont Medical Center

Outpatient Pharmacy Expansion and Automation at Holly Court

UTILIZATION PROJECTIONS--TABLE 7

Note: This table requires no "fill-in" as it is populated automatically

WITH PROJECT

	2020 Actual	2021 Budget	% change	2021 Projection	% change	2022 Budget	% change	Proposed Yr 1 YYYY	% change	Proposed Yr 2 YYYY	% change	Proposed Yr 3 YYYY	% change
Inpatient Utilization													
Acute Beds (Staffed)	433	-	-100.0%	450	#DIV/0!	450	0.0%	450	0.0%	450	0.0%	450	0.0%
Acute Admissions	19,812	-	-100.0%	19,140	#DIV/0!	21,231	10.9%	21,231	0.0%	21,231	0.0%	21,231	0.0%
Acute Patient Days	118,878	-	-100.0%	119,160	#DIV/0!	124,288	4.3%	124,288	0.0%	124,288	0.0%	124,288	0.0%
Acute Average Length Of Stay	6	-	-100.0%	6	#DIV/0!	6	-6.0%	6	0.0%	6	0.0%	6	0.0%
Outpatient													
All Outpatient Visits	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Physician Office Visits	624,305	-	-100.0%	588,612	#DIV/0!	647,412	10.0%	647,412	0.0%	647,412	0.0%	647,412	0.0%
Ancillary													
All Operating Room Procedure	37,976	-	-100.0%	42,392	#DIV/0!	47,413	11.8%	47,413	0.0%	47,413	0.0%	47,413	0.0%
All Operating Room Cases	15,758	-	-100.0%	32,220	#DIV/0!	39,616	23.0%	39,616	0.0%	39,616	0.0%	39,616	0.0%
Emergency Room Visits	54,022	-	-100.0%	46,217	#DIV/0!	57,000	23.3%	57,000	0.0%	57,000	0.0%	57,000	0.0%
Cat Scan Procedures	50,744	-	-100.0%	51,439	#DIV/0!	58,869	14.4%	58,869	0.0%	58,869	0.0%	58,869	0.0%
Magnetic Resonance Image Exams	16,967	-	-100.0%	15,991	#DIV/0!	21,174	32.4%	21,174	0.0%	21,174	0.0%	21,174	0.0%
Nuclear Medicine Procedures	6,029	-	-100.0%	5,904	#DIV/0!	7,043	19.3%	7,043	0.0%	7,043	0.0%	7,043	0.0%
Radiology - Diagnostic Procedures	150,785	-	-100.0%	141,516	#DIV/0!	182,671	29.1%	182,671	0.0%	182,671	0.0%	182,671	0.0%
Laboratory Tests	2,207,075	-	-100.0%	2,367,185	#DIV/0!	2,448,931	3.5%	2,448,931	0.0%	2,448,931	0.0%	2,448,931	0.0%
	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Adjusted Statistics													
Adjusted Admissions	56,679	-	-100.0%	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Adjusted Days	339,751	-	-100.0%	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!

	2020 Actuals	2021 Budget 2021 Approved	Budget 2022 Projection 2021	2022 Budget 2022 Projection 2021	
Accounts					
Utilization					
Inpatient					
Acute					
[Util_Acute_Beds] Acute Beds (Staffed)	433	0		450	450
[Util_Acute_OccupancyPct] Acute Occupancy % (Staffed Beds)	75.0%	0.0%		72.6%	75.7%
[Util_Acute_Admissions] Acute Admissions	19,812	0		19,140	21,231
[Util_Acute_Days] Acute Patient Days	118,878	0		119,150	124,288
[Util_Acute_AvgStay] Acute Average Length Of Stay	6.01	0.00		6.23	5.85
Chronic/Rehab	0	0		0	0
[Util_ChronicRehab_Beds] Chronic Rehab Beds (Staffed)	35	0		35	35
[Util_ChronicRehab_Admissions] Chronic Rehab Admissions	363	0		362	715
[Util_ChronicRehab_Days] Chronic Rehab Patient Days	6,250	0		5,446	9,855
[Util_ChronicRehab_AvgStay] Chronic Rehab Average Length Of Stay	11.61	0.00		15.06	13.78
SNF/ECF	0	0		0	0
[Util_SNFECF_Beds] SNF/ECF Beds (Staffed)	0	0		0	0
[Util_SNFECF_Admissions] SNF/ECF Admissions	0	0		0	0
[Util_SNFECF_Days] SNF/ECF Patient Days	0	0		0	0
[Util_SNFECF_AvgStay] SNF/ECF Average Length Of Stay	0.00	0.00		0.00	0.00
Nursery	0	0		0	0
[Util_Nursery_Beds] Nursery Beds (Staffed)	31	0		31	31
[Util_Nursery_Admissions] Nursery Admissions	2,014	0		1,855	2,016
[Util_Nursery_Days] Nursery Patient Days	4,468	0		4,073	4,796
[Util_Nursery_AvgStay] Nursery Average Length Of Stay	2.24	0.00		2.20	2.38
Swing Beds	0	0		0	0
[Util_SwingBeds_Beds] Swing Beds (Staffed)	0	0		0	0
[Util_SwingBeds_Admissions] Swing Admissions	0	0		0	0
[Util_SwingBeds_Days] Swing Patient Days	0	0		0	0
[Util_SwingBeds_AvgStay] Swing Average Length Of Stay	0.00	0.00		0.00	0.00
Total	0	0		0	0
[Util_Total_Beds] Total Beds (Staffed)	499	0		516	516
[Util_Total_Admissions] Total Admissions	22,189	0	21,357	21,995	23,962
[Util_Total_Days] Total Patient Days	129,616	0		128,679	138,939
[Util_Total_AvgStay] Total Average Length Of Stay	5.86	0.00		6.03	5.80
Outpatient	0	0		0	0
[Util_Outpatient_OutpatientVisits] All Outpatient Visits	0	0		0	0
[Util_Outpatient_OPRoomProcedure] Operating Room Procedure	21,065	0		24,771	27,648
[Util_Outpatient_ObservationUnits] Observation Units	0	0		0	0
[Util_Outpatient_PhysOfficeVisits] Physician Office Visits	624,305	0		588,612	647,412
[Util_Outpatient_OPRoomCases] Operating Room Cases	10,785	0		13,245	14,400
[Util_Outpatient_RVU] Provider Work RVU	0	0		0	0
Ancillary	0	0		0	0
[Util_Ancillary_OpRoomProcedure] All Operating Room Procedure	37,976	0		42,392	47,413
[Util_Ancillary_OpRoomCases] All Operating Room Cases	15,758	0		32,220	39,616
[Util_Ancillary_ERVisits] Emergency Room Visits	54,022	0		46,217	57,000
Adjusted Statistics-monthly only	0	0		0	0
[Util_AdjStat_AdAdmissions_monthly] Adjusted Admissions-monthly only	56,679	0		0	0
[Util_AdjStat_AdDays_monthly] Adjusted Days-monthly only	330,751	0		0	0
Department					
Accounts					
Cat Scan					
[UnitOfMeasure.Procedures] Procedures	50,744	0		51,439	58,869
[UnitOfMeasure.Tests] Tests	0	0		0	0
Cat Scan					
[UnitOfMeasure.Treatments] Treatments	0	0		0	0
[UnitOfMeasure.Visits] Visits	0	0		0	0
Cat Scan					
[UnitOfMeasure.Exams] Exams	0	0		0	0
Magnetic Resonance Image					
[UnitOfMeasure.Procedures] Procedures	0	0		0	0
[UnitOfMeasure.Tests] Tests	0	0		0	0
Magnetic Resonance Image					
[UnitOfMeasure.Treatments] Treatments	0	0		0	0
[UnitOfMeasure.Visits] Visits	0	0		0	0
Magnetic Resonance Image					
[UnitOfMeasure.Exams] Exams	16,967	0		15,991	21,174
Nuclear Medicine					
[UnitOfMeasure.Procedures] Procedures	6,029	0		5,904	7,043
[UnitOfMeasure.Tests] Tests	0	0		0	0
Nuclear Medicine					
[UnitOfMeasure.Treatments] Treatments	0	0		0	0
[UnitOfMeasure.Visits] Visits	0	0		0	0
Nuclear Medicine					
[UnitOfMeasure.Exams] Exams	0	0		0	0
Radiology - Diagnostic					
[UnitOfMeasure.Procedures] Procedures	150,785	0	141,516	0	182,671
[UnitOfMeasure.Tests] Tests	0	0		0	0
Radiology - Diagnostic					
[UnitOfMeasure.Treatments] Treatments	0	0		0	0
[UnitOfMeasure.Visits] Visits	0	0		0	0
Radiology - Diagnostic					
[UnitOfMeasure.Exams] Exams	0	0		0	0
Laboratory					
[UnitOfMeasure.Procedures] Procedures	2,207,075	0		2,367,185	2,448,931
[UnitOfMeasure.Tests] Tests	0	0		0	0
[UnitOfMeasure.Treatments] Treatments	0	0		0	0
[UnitOfMeasure.Visits] Visits	0	0		0	0
[UnitOfMeasure.Exams] Exams	0	0		0	0

	2020 Actuals	2021 Budget 2021 Approved	Budget 2022 Projection 2021	2022 Budget 2022 Projection 2021	
Accounts					
Utilization					
Inpatient					
Acute					
[Util_Acute_Beds] Acute Beds (Staffed)	433	0		450	450
[Util_Acute_OccupancyPct] Acute Occupancy % (Staffed Beds)	75.0%	0.0%		72.6%	75.7%
[Util_Acute_Admissions] Acute Admissions	19,812	0		19,140	
[Util_Acute_Days] Acute Patient Days	118,878	0		119,160	21,231
[Util_Acute_AvgStay] Acute Average Length Of Stay	6.01	0.00		6.23	5.85
Chronic/Rehab					
[Util_ChronicRehab_Beds] Chronic Rehab Beds (Staffed)	35	0		35	
[Util_ChronicRehab_Admissions] Chronic Rehab Admissions	363	0		362	715
[Util_ChronicRehab_Days] Chronic Rehab Patient Days	6,250	0		5,446	9,855
[Util_ChronicRehab_AvgStay] Chronic Rehab Average Length Of Stay	11.61	0.00		15.06	13.78
SNF/ECF					
[Util_SNFECF_Beds] SNF/ECF Beds (Staffed)	0	0		0	0
[Util_SNFECF_Admissions] SNF/ECF Admissions	0	0		0	0
[Util_SNFECF_Days] SNF/ECF Patient Days	0	0		0	0
[Util_SNFECF_AvgStay] SNF/ECF Average Length Of Stay	0.00	0.00		0.00	0.00
Nursery					
[Util_Nursery_Beds] Nursery Beds (Staffed)	31	0		31	31
[Util_Nursery_Admissions] Nursery Admissions	2,014	0		1,855	2,016
[Util_Nursery_Days] Nursery Patient Days	4,488	0		4,073	4,796
[Util_Nursery_AvgStay] Nursery Average Length Of Stay	2.24	0.00		2.20	2.38
Swing Beds					
[Util_SwingBeds_Beds] Swing Beds (Staffed)	0	0		0	0
[Util_SwingBeds_Admissions] Swing Admissions	0	0		0	0
[Util_SwingBeds_Days] Swing Patient Days	0	0		0	0
[Util_SwingBeds_AvgStay] Swing Average Length Of Stay	0.00	0.00		0.00	0.00
Total					
[Util_Total_Beds] Total Beds (Staffed)	499	0		516	516
[Util_Total_Admissions] Total Admissions	22,189	0	21,357		23,962
[Util_Total_Days] Total Patient Days	129,616	0		128,679	138,939
[Util_Total_AvgStay] Total Average Length Of Stay	5.86	0.00		6.03	5.80
Outpatient					
[Util_Outpatient_OutpatientVisits] All Outpatient Visits	0	0		0	0
[Util_Outpatient_OPRoomProcedure] Operating Room Procedure	21,065	0		24,771	27,648
[Util_Outpatient_ObservationUnits] Observation Units	0	0		0	0
[Util_Outpatient_PhysOfficeVisits] Physician Office Visits	624,305	0		588,612	647,412
[Util_Outpatient_OPRoomCases] Operating Room Cases	10,785	0		13,245	14,400
[Util_Outpatient_RVU] Provider Work RVU	0	0		0	0
Ancillary					
[Util_Ancillary_OpRoomProcedure] All Operating Room Procedure	37,876	0		42,392	47,413
[Util_Ancillary_OPRoomCases] All Operating Room Cases	15,758	0		32,220	39,616
[Util_Ancillary_ERVisits] Emergency Room Visits	54,022	0		46,217	57,000
Adjusted Statistics-monthly only					
[Util_AdjStat_AdjAdmissions_monthly] Adjusted Admissions-monthly only	56,679	0		0	0
[Util_AdjStat_AdjDays_monthly] Adjusted Days-monthly only	339,751	0		0	0
Department					
Cat Scan					
[UnitMeasure.Procedures] Procedures	50,744	0		51,439	58,869
[UnitMeasure.Tests] Tests	0	0		0	0
[UnitMeasure.Treatments] Treatments	0	0		0	0
[UnitMeasure.Visits] Visits	0	0		0	0
[UnitMeasure.Exams] Exams	0	0		0	0
Magnetic Resonance Image					
[UnitMeasure.Procedures] Procedures	0	0		0	0
[UnitMeasure.Tests] Tests	0	0		0	0
[UnitMeasure.Treatments] Treatments	0	0		0	0
[UnitMeasure.Visits] Visits	0	0		0	0
[UnitMeasure.Exams] Exams	0	0		0	0
Nuclear Medicine					
[UnitMeasure.Procedures] Procedures	6,029	0		5,904	7,043
[UnitMeasure.Tests] Tests	0	0		0	0
[UnitMeasure.Treatments] Treatments	0	0		0	0
[UnitMeasure.Visits] Visits	0	0		0	0
[UnitMeasure.Exams] Exams	16,967	0		15,991	21,174
Radiology - Diagnostic					
[UnitMeasure.Procedures] Procedures	150,785	0	161,516		182,671
[UnitMeasure.Tests] Tests	0	0		0	0
[UnitMeasure.Treatments] Treatments	0	0		0	0
[UnitMeasure.Visits] Visits	0	0		0	0
[UnitMeasure.Exams] Exams	0	0		0	0
Laboratory					
[UnitMeasure.Procedures] Procedures	0	0		0	0
[UnitMeasure.Tests] Tests	2,207,075	0		2,367,185	2,448,931
[UnitMeasure.Treatments] Treatments	0	0		0	0
[UnitMeasure.Visits] Visits	0	0		0	0
[UnitMeasure.Exams] Exams	0	0		0	0



Green Mountain Care Board

Utilization Statistics

Levels:

Currency:

The University of Vermont Medical Center

United States of America, Dollars

PLEASE PROVIDE ASSUMPTIONS

PROJECT NAME

STAFFING REPORT--TABLE 8

Proposed Yr 1 YYYY	Proposed Yr 2 YYYY	Proposed Yr 3 YYYY
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PHYSICIAN FTEs	0	
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TRAVELERS

Residents & Fellows

MLPs

Non-MD FTEs

TOTAL NON-MD FTEs

NOTES:

THE UNIVERSITY OF VERMONT MEDICAL CENTER

Outpatient Pharmacy Expansion and Automation at Holly Court

STAFFING REPORT - TABLE 8

WITHOUT PROJECT

	2020	2021	% change	2021	% change	2022	% change	Proposed	% change	Proposed	% change	Proposed	% change
	Actual	Budget		Projection		Budget		Year 1		Year 2		Year 3	
								YYYY		YYYY		YYYY	
PHYSICIAN FTEs	623.9	647.5	3.8%	631.6	-2.5%	648.3	2.6%	648.3	0.0%	648.3	0.0%	648.3	0.0%
TRAVELERS	135.7	-	-100.0%	164.2	#DIV/0!	80.0	-51.3%	80.0	0.0%	80.0	0.0%	80.0	0.0%
Residents & Fellows	348.3	-	-100.0%	350.9	#DIV/0!	369.2	5.2%	369.2	0.0%	369.2	0.0%	369.2	0.0%
MLPs	230.9	-	-100.0%	235.7	#DIV/0!	260.1	10.4%	260.1	0.0%	260.1	0.0%	260.1	0.0%
Non-MD FTEs	5,862.0	6,834.4	16.6%	5,983.0	-12.5%	6,933.1	15.9%	6,933.1	0.0%	6,933.1	0.0%	6,933.1	0.0%
TOTAL NON-MD FTEs	6,441.1	6,834.4	6.1%	6,569.6	-3.9%	7,562.4	15.1%	7,562.4	0.0%	7,562.4	0.0%	7,562.4	0.0%

Note: Mid-Level Providers and Residents are now included in Non-MD Employees, prior to 2013 Actual they were included in Physician FTEs

STAFFING REPORT - TABLE 8

PROJECT ONLY

	2020	2021	% change	2021	% change	2022	% change	Proposed	% change	Proposed	% change	Proposed	% change
	Actual	Budget		Projection		Budget		Year 1		Year 2		Year 3	
								YYYY		YYYY		YYYY	
PHYSICIAN FTEs			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
TRAVELERS			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Residents & Fellows			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
MLPs			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Non-MD FTEs			#DIV/0!		#DIV/0!		#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
TOTAL NON-MD FTEs	-	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!

Note: Mid-Level Providers and Residents are now included in Non-MD Employees, prior to 2013 Actual they were included in Physician FTEs

Note: This table requires no "fill-in" as it is populated automatically

STAFFING REPORT - TABLE 8

WITH PROJECT

	2020	2021	% change	2021	% change	2022	% change	Proposed	% change	Proposed	% change	Proposed	% change
	Actual	Budget		Projection		Budget		Year 1		Year 2		Year 3	
								YYYY		YYYY		YYYY	
PHYSICIAN FTEs	623.9	647.5	3.8%	631.6	-2.5%	648.3	2.6%	648.3	0.0%	648.3	0.0%	648.3	0.0%
TRAVELERS	135.7	-	-100.0%	164.2	#DIV/0!	80.0	-51.3%	80.0	0.0%	80.0	0.0%	80.0	0.0%
Residents & Fellows	348.3	-	-100.0%	350.9	#DIV/0!	369.2	5.2%	369.2	0.0%	369.2	0.0%	369.2	0.0%
MLPs	230.9	-	-100.0%	235.7	#DIV/0!	260.1	10.4%	260.1	0.0%	260.1	0.0%	260.1	0.0%
Non-MD FTEs	5,862.0	6,834.4	16.6%	5,983.0	-12.5%	6,933.1	15.9%	6,933.1	0.0%	6,933.1	0.0%	6,933.1	0.0%
TOTAL NON-MD FTEs	6,441.1	6,834.4	6.1%	6,569.6	-3.9%	7,562.4	15.1%	7,562.4	0.0%	7,562.4	0.0%	7,562.4	0.0%

Note: Mid-Level Providers and Residents are now included in Non-MD Employees, prior to 2013 Actual they were included in Physician FTEs

	2020 Actuals	2021 Budget 2021 Approved	Budget 2022 Projection 2021	2022 Budget 2022 Projection 2021	
FTE Class					
Physician FTEs		2.1	0.0	2.8	2.0
Physician FTEs		0.0	0.0	0.0	0.0
Physician FTEs		0.0	0.0	0.0	0.0
Physician FTEs		0.0	0.0	0.0	0.0
Physician FTEs		0.0	0.0	0.0	0.0
Physician FTEs	621.8	647.5	647.5	628.8	646.3
Physician FTEs	0.0	0.0	0.0	0.0	0.0
Physician FTEs	623.9	647.5	647.5	631.6	648.3
FTE Class					
Travelers		9.7	0.0	6.3	0.0
Travelers		71.5	0.0	88.6	50.0
Travelers		2.1	0.0	2.8	0.0
Travelers		51.0	0.0	63.1	30.0
Travelers		0.0	0.0	0.0	0.0
Travelers		1.4	0.0	3.4	0.0
Travelers		0.0	0.0	0.0	0.0
Travelers	135.7	0.0	0.0	164.2	80.0
FTE Class					
Residents & Fellows	339.7	0.0	0.0	341.3	357.2
Residents & Fellows	0.0	0.0	0.0	0.0	0.0
Residents & Fellows	0.0	0.0	0.0	0.0	0.0
Residents & Fellows	0.0	0.0	0.0	0.0	0.0
Residents & Fellows	0.0	0.0	0.0	0.0	0.0
Residents & Fellows	8.5	0.0	0.0	9.6	12.0
Residents & Fellows	0.0	0.0	0.0	0.0	0.0
Residents & Fellows	348.3	0.0	0.0	350.9	369.2
FTE Class					
MLPs	7.0	0.0	0.0	5.5	5.8
MLPs	0.1	0.0	0.0	0.0	0.0
MLPs	0.0	0.0	0.0	0.0	0.0
MLPs	6.5	0.0	0.0	7.3	6.3
MLPs	0.0	0.0	0.0	0.0	0.0
MLPs	217.2	0.0	0.0	222.9	248.0
MLPs	0.0	0.0	0.0	0.0	0.0
MLPs	230.9	0.0	0.0	235.7	260.1
FTE Class					
Non-MD FTEs (Rollup)	2,425.8	6,834.4	6,834.4	2,370.8	2,535.6
Non-MD FTEs (Rollup)	1,162.8	0.0	0.0	1,176.5	1,290.9
Non-MD FTEs (Rollup)	30.0	0.0	0.0	33.0	40.5
Non-MD FTEs (Rollup)	1,502.5	0.0	0.0	1,663.7	1,590.3
Non-MD FTEs (Rollup)	0.0	0.0	0.0	0.0	0.0
Non-MD FTEs (Rollup)	1,320.0	0.0	0.0	1,325.6	1,475.8
Non-MD FTEs (Rollup)	0.0	0.0	0.0	0.0	0.0
Non-MD FTEs (Rollup)	6,441.1	6,834.4	6,834.4	6,569.6	6,933.1
Accounts					
Staff Wages					
[NonMD_Wages] Non-MD Wages					
[General_Services_Wage	192,708,007	0	0	0	0
[Inpatient_Routine_Wage	83,955,742	0	0	0	0
[Outpatient_Routine_Wa	2,341,943	0	0	0	0
[Ancillary_Wages] Total A	115,240,902	0	0	0	0
[Other_Wages] Total Oth	2,176,552	0	0	0	0
[Physician_Office_Practic	93,921,920	0	0	0	0
[NonMD_Wages] Total No	490,345,065	0	0	0	0
[Non_MD_per_FTE] Non-MD \$ Per FTE					
[General_Services_Per_f	79,440	0	0	0	0
[Inpatient_Routine_Per_F	72,200	0	0	0	0
[Outpatient_Routine_Per	78,037	0	0	0	0
[Ancillary_Per_FTE] Tota	76,701	0	0	0	0
[Other_Per_FTE] Total O	0	0	0	0	0
[Physician_Office_Servic	71,154	0	0	0	0
[Non_MD_per_FTE] Total	377,532	0	0	0	0
[NONMD_SalaryPerFTE] Tr	76,127	0	0	0	0

STAFFING REPORT
Descriptor REPORT 8

Levels: The University of Vermont Medical Center
Currency: United States of America, Dollars

The University of Vermont Medical Center

Key Indicators

Flex Monitoring/Fitch Solutions 2019

	Northeast CAH	U.S. CAH	Fitch Solutions- Northern NE	Fitch Solutions- Northeast	2020 Actuals	2021 Actuals	2022 Projection	2022 Budget
Liquidity								
Days Cash on Hand					193	0	185	185
Operating Margin %					-0.3%	3.4%	3.0%	3.0%
Debt								
Long Term Debt to Capitalization					30.0%	0.0%	24.6%	24.6%
Age of Plant					11.6	0.0	12.8	12.8
Capital Expenditures to Depreciation	N/A	N/A	N/A	N/A	21%	0%	78%	78%
Utilization								
All Outpatient Visits	N/A	N/A	N/A	N/A	0	0	0	0
Physician Office Visits	N/A	N/A	N/A	N/A	624,305	0	647,412	647,412
Clinic Visits	N/A	N/A	N/A	N/A	0	0	0	0
Adjusted Admissions	N/A	N/A	N/A	N/A	56,645	0	0	0
Acute Admissions	N/A	N/A	N/A	N/A	19,812	0	21,231	21,231
Total Admissions	N/A	N/A	N/A	N/A	22,189	0	23,962	23,962
Cost								
Capital Cost % of Total Expense					5.7%	5.1%	5.2%	5.2%
Cost per Adjusted Admission	N/A				\$25,812	\$0	\$0	\$0
Cost Per Adjusted Admissions Increase						-100.0%	#DIV/0!	#DIV/0!
Employed								
Non-MD FTEs	N/A	N/A	N/A	N/A	6,441	0	6,933	6,933
Physician FTEs	N/A	N/A	N/A	N/A	624	0	648	648
Productivity								
FTEs per 100 Adj Discharges	N/A	N/A	N/A	N/A	11.4	0.0	0.0	0.0
Overhead Expense w/ fringe, as a % of Total Operating Exp	N/A	N/A	N/A	N/A	40.7%	0.0%	0.0%	0.0%
Bad Debt % of Gross Revenue	N/A	N/A	N/A	N/A	1.0%	0.0%	1.1%	1.1%
Free Care % of Gross Revenue	N/A	N/A	N/A	N/A	0.7%	0.0%	0.7%	0.7%

		2020 Actuals	2021 Actuals	2022 Budget 2022 Projection 2021	2022 Budget 2022 Approved Projection 2021
Levels	<u>Accounts</u>				
	<u>[Net_Patient_Care_Rev] Net Patient Care Revenue</u>	<u>1,033,438,463</u>	<u>1,023,567,696</u>	<u>1,315,713,538</u>	<u>1,315,713,538</u>
	[YrV_Rate_Change_OLD] Old Annual Year Over Year Rate Change	0.00%	0.00%	0.00%	0.00%
Levels	<u>Accounts</u>				
The University of Vermont Medical Center	<u>Liquidity</u>				
	[YrV_Cash_on_Hand_Metric] Days Cash on Hand	193.2	0.0	184.8	184.8
	[Operating_Margin_pct_Metric] Operating Margin %	-0.3%	3.4%	3.0%	3.0%
	<u>Debt</u>				
	[Long_Term_Debt_Cap_Metric] Long Term Debt to Capitalization	30.0%	0.0%	24.0%	24.0%
	[Age_of_Plant_Metric] Age of Plant	11.6	0.0	12.8	12.8
	[Cap_Expenditures_to_Depreciation_Metric] Capital Expenditures to Depreciation	21.5%	0.0%	77.9%	77.9%
	<u>Utilization</u>				
	[Util_Outpatient_OutpatientVisits] All Outpatient Visits	0	0	0	0
	[Util_Outpatient_PhysOfficeVisits] Physician Office Visits	624,305	0	647,412	647,412
	<u>Acute Admissions</u>				
	Total Admissions	22,189	0	23,962	23,962
	[Adj_Admits_Metric] Adjusted Admissions	56,645	0	0	0
	<u>Cost</u>				
	[Cap_Cost_pct_of_Total_Expense_Metric] Capital Cost % of Total Expense	5.7%	5.1%	5.2%	5.2%
	[Cost_per_Adj_Admits_Metric] Cost per Adjusted Admission	25,852	0	0	0
	Cost Per Adjusted Admissions Increase				
Levels	<u>Accounts</u>				
The University of Vermont Medical Center	<u>[StaffFTE_FT_Equiv] FT Equivalents (Heads)</u>				
	FTE Class				
	Employed				
	Non-MD FTEs (Roll-up)	6,441.1	0.0	6,933.1	6,933.1
	Physician FTEs	623.9	0.0	648.3	648.3
	Travelers	135.7	0.0	80.0	80.0
	Residents & Fellows	348.3	0.0	369.2	369.2
	M&P's	230.9	0.0	260.1	260.1
Levels	<u>Accounts</u>				
The University of Vermont Medical Center	<u>Productivity</u>				
	[FTEs_per_100_Adj_Discharges_Metric] FTEs per 100 Adj Discharges	11.4	0.0	0.0	0.0
	[OH_Exp_w_fringe_pct_of_TTL_OPEX_Metric] Overhead Expense w/ fringe, as a % of Total Operating Exp	40.7%	0.0%	0.0%	0.0%
	[Bad_Debt_pct_Metric] Bad Debt %	1.0%	0.0%	1.1%	1.1%
	[Free_Care_pct_Metric] Free Care %	0.7%	0.0%	0.7%	0.7%
Levels	<u>Accounts</u>				
The University of Vermont Medical Center	<u>Department</u>				
	Clinics	0	0	0	0



Green Mountain Care Board

Hospital & Peer Stats

Currency:

United States of America, Dollars