



DASNY

SECTION A



BID NO.:618	PROJECT NAME & LOCATION	SUNY Downstate Medical New Academic Building 450 Clarkson Ave Brooklyn, NY 11203
Description: Furnish, Deliver and Install Lab Furniture		
Bid Open Location: DASNY 515 Broadway, Albany, New York		
Bid Open Date: October 11, 2018		
Bid Open Time: 2:30 p.m.		Contact: Kristen Costello (518) 257-3119

NOTICE TO BIDDERS

MAIL BIDS EARLY

Sealed bids will be received by DASNY at the above address for the items listed in the attached Bid Breakdown and Schedule. When submitting your bid you must:

1. Prepare your bid on the attached Bid Breakdown and Schedule. Return one signed original of the Bid Breakdown and Schedule
2. If your bid deviates from Specifications, explain such deviations or qualifications on your letterhead, setting forth therein such explanations, and attach them to the Bid Breakdown and Schedule.
3. Submission of a bid constitutes full knowledge and acceptance of all provisions of the Notice to Bidders, all information referenced in the Purchasing General Conditions, Supplemental and Detailed Specifications, the Bid Submission and any Supplemental General Requirements contained herein, as well as any addenda issued in relation to the Invitation for Bids.
4. Each bid shall bear on the outside of the envelope the name of the bidder, address, telephone number and designated as a bid for the following:
DASNY Bid No. 618 - Furnish, Deliver and Install Lab Furniture
Bid Opening Date: October 11, 2018 @ 2:30PM
Return to:
DASNY
Attn: Purchasing Unit
515 Broadway
Albany, NY 12207-2964



Bid No.: 618

When a sealed bid is placed inside another delivery jacket, the bid delivery jacket must be clearly marked on the outside “**BID ENCLOSED**” and “**ATTENTION: PURCHASING UNIT**”. The Dormitory Authority will not be responsible for receipt of bids which do not comply with these instructions.

5. Mail bid responses early in order for them to be received before the time of the bid opening. **Late bids will be automatically rejected.** Individuals submitting bids in person or by private delivery services should allow sufficient time for processing through building security to assure that the bids are received prior to the deadline for submitting bids. All individuals who plan to attend bid openings will be required to present government-issued picture identification to building security officials and obtain a visitor’s pass prior to attending the bid opening.

6. In accordance with State Finance Law § 139-j and 139-k, this solicitation includes and imposes certain restrictions on communications between Dormitory Authority personnel and an Offerer during this procurement process. Designated contact for this solicitation is: Kristen Costello, Sr. Purchasing Coordinator , at Dormitory Authority – State of New York, 515 Broadway, Albany, NY 12207,(518) 257-3119. Contacts made to other Dormitory Authority Personnel regarding this procurement may disqualify the Offerer and affect future procurements with governmental entities in the State of New York. Please refer to the Authority’s website www.dasny.org for Authority policy and procedures regarding this law, or the NYS office of General Services website www.ogs.ny.gov/BU/PC/ for more information about this law.



Bid No.: 618

If you are not submitting a bid it is requested that you complete and return the lower portion of this form

(Please check all that apply and provide comments in the space provided, if necessary)

- We are not Submitting a bid.
- We Request removal of our name from the mailing list.
- Location of the job site.
- Commodity is not carried by our company.
- Scope is too large.

Other/Additional Explanation: _____

NAME OF BIDDER: _____

ADDRESS : _____

Street Telephone	City	State	Zip
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Signature of Bidder

Official Title

CLAUSES PURSUANT TO THE OMNIBUS PROCUREMENT ACT OF 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and woman-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York subcontractors and supplies is available from:

Empire State Development
Small Business Division
30 South Pearl Street, 7th Floor
Albany, NY 12207
Phone: (800) 782-8369

A directory of minority and woman-owned business enterprises is available from:

Empire State Development
Division of Minority and Women Business Development
30 South Pearl Street
Albany, NY 12207
Phone: (518) 292-5250

Online Directory: <https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp>

DASNY maintains a directory of minority and women-owned business enterprises:
<http://www.dasny.org/construc/mwsberreg/index.php>

The contractor acknowledges notice that New York State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

DASNY encourages the use of recycled Materials in the manufacturing process. To that end, the recycled product must meet the same codes, specifications and standards the non-recycled materials do, including requirements for cost, installation, aesthetics, availability and maintenance.

The Omnibus Procurement Act of 1992 and § 2879 of the NYS Public Authorities Law require that by signing this bid, contractors certify that whenever the total bid amount is greater than \$1 million:

1. The contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and Subcontractors on this project, and has retained the documentation of these efforts to be provided upon request to the State. If the contractor determines that NYS business enterprises are not available to participate on the contract as subcontractors or suppliers, the contractor shall provide a statement indicating the method by which such determination was made. If the contractor does not intend to use subcontractors, contractor shall provide a statement verifying such;
2. The contractor has complied with the Federal Equal Opportunity Act of 1972 (PL 92-261), as amended;
3. The contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The contractor agrees to document these efforts and to provide said documentation to the State upon request;

DASNY is required by law to notify the NYS Department of Economic Development of any procurement contract for one million dollars or more that is to be awarded to an out-of-state vendor. This notice must be done simultaneous to the notification of award provided to the vendor. A purchase order or contract cannot be issued until fifteen (15) days after such notification is provided.



DASNY

GENERAL SPECIFICATIONS

- (1) The enclosed Purchasing General Conditions are hereby incorporated by reference. Submission of a bid response shall constitute acceptance of such conditions. Any exceptions/clarifications/qualifications to these conditions or other specifications and/or requirements contained herein must be clearly stated in the bid response and, depending upon the nature of such, may be grounds for rejection of your bid.
- (2) Bids must be submitted in the bidder's full legal name, or the bidder's full legal name plus a registered assumed name, if any.
- (3) All NYS bidders are required to be registered to do business with the NYS Department of State or their local County Clerk, whichever is applicable.
- (4) All out-of-state bidders will be required to provide proof of registration to do business in their state. All out-of-state bidders that "do business in New York State" **MUST BE REGISTERED WITH THE NYS DEPARTMENT OF STATE**. Please contact the NYS Department of State at (518) 473-2492. Information is available at the DOS website: www.dos.ny.gov
- (5) DASNY is required by law to notify the Empire State Development of any procurement contract for one million dollars or more that is to be awarded to an out-of-state vendor. This notice must be done simultaneous to the notification of award provided to the vendor. A purchase order or contract cannot be issued until fifteen (15) days after such notification is provided.
- (6) Empire State Development is required by law to identify states and other jurisdictions that impose preferences or other penalties against New York bidders. DASNY is precluded from soliciting bids or entering into procurement contracts with companies that have their principal place of business located in one of the listed jurisdictions, unless the procurement is for a product that is substantially manufactured in New York State or the services are to be performed in New York State. Currently, this list of jurisdictions includes the states of Alaska, Hawaii, Louisiana, South Carolina, West Virginia and Wyoming.
- (7) Unless otherwise indicated, any reference to brands or model numbers is intended to establish a standard. Items of all manufacturers will be considered, provided the item is determined to meet or exceed the required specification. DASNY's decision as to whether a substitute item meets specification will be final. Your attention is directed to Article II-7, Page 5 of the General Conditions. In order to evaluate substitute items, detailed specifications must be submitted for any product that is other than the one(s) specified in the bid.



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GENERAL SPECIFICATIONS CONTINUED

- (8) Unless otherwise noted, guarantee on all items is to be one year as detailed in Article XVI of the General Conditions
- (9) All upholstered furniture and drapery panels and lining must meet strict flammability requirements. Standards applicable to this bid, if any, will be delineated in the Detailed Specifications.
- (10) LABOR/TRADES - Any labor, materials or means whose employment, or utilization during the course of this contract, shall not in any way cause or result in strike, work stoppages, delays, suspension of work; or similar troubles by workers employed by this contractor or his subcontractors, or by any of the trades working in or about the buildings and premises where work is being performed. Any violation by the contractor of this requirement may in the sole judgment of DASNY be considered as proper and sufficient cause for declaring the contractor to be in default, and for the owner to take action against him as set forth in the Purchasing General Conditions, Article VIII, "Termination", or such other action as DASNY may deem proper.
- (11) Bid results are available on the DASNY website (www.DASNY.org). Bid results will not be given over the phone.
- (12) If you are a NYS Certified Minority or Women Owned Business, please include a copy of your certification with the bid.



DASNY

ANDREW M. CUOMO
Governor

ALFONSO L. CARNEY, JR.
Chair

GERRARD P. BUSHELL, Ph.D.
President & CEO

SUPPLEMENTAL SPECIFICATIONS

The following items are attached for informational purposes. Referenced documents need not be returned with the proposal. These documents are only applicable to the successful bidder and the ensuing procurement contract. Documents are only applicable to the successful bidder and the ensuing procurement contract. Documents applicable to the procurement that will result from this Invitation for Bids are designated by a check box (☒). Unless otherwise indicated, the referenced documents are located at the end of this Invitation for Bids.

- ☒ **Purchasing General Conditions** – The DASNY Purchasing General Conditions contains terms and conditions of purchases made by DASNY. It is recommended that this document be reviewed fully.
- ☒ **M/WBE Utilization Plan and Request for Waiver** - Minority and Women-Owned Business Enterprise (M/WBE) goals for this project are 15% and 15%, respectively. The successful bidder shall be required to complete a Utilization Plan or Request for Waiver, to be approved by DASNY’s Opportunity Programs Group. Reference Purchasing General Conditions, Article XIX, Affirmative Action for Contracts Mr. Michael Clay, DASNY Opportunity Programs Group at (518) 257-3464, is available to assist all bidders in attaining these goals. *Reference the enclosed “Good Faith Efforts Guidelines”.*
- ☒ **Supplemental General Requirements** – Attached (if applicable) are the Supplemental General Requirements (SGRs) which provide important logistical information and additional conditions which govern this procurement. Please read these SGRs carefully.
- ☒ **Form of DASNY Contract** – The procurement resulting from the Invitation for Bids will be executed through a DASNY purchase order and a related contract. The contract executed with the successful bidder will be in the same substantial form as the attached “Form of Contract”. Note that this Invitation for Bids and any response to such will be annexed as binding terms of the purchase agreement.
- ☒ **Certificate of Insurance** (*sample enclosed*) – The successful bidder will be required to provide a Certificate of Insurance pursuant to Article XIV of the enclosed Purchasing General Conditions. The certificate shall name DASNY and other designated parties as additional insureds.

CORPORATE HEADQUARTERS
515 Broadway
Albany, NY 12207-2964

T 518-257-3000
F 518-257-3100

NEW YORK CITY OFFICE
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New York, NY 10119-0098

T 212-273-5000
F 212-273-5121

BUFFALO OFFICE
539 Franklin Street
Buffalo, NY 14202-1109

T 716-884-9780
F 716-884-9787

DORMITORY AUTHORITY STATE OF NEW YORK

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SUPPLEMENTAL SPECIFICATIONS CONTINUED

- Worker’s Compensation / Disability Insurance** – The successful proposer will be required to provide specific documentation with respect to Worker’s Compensation and Disability Insurance pursuant to Article XIV of the enclosed Purchasing General Conditions. Requirements are detailed in the enclosed “Workers’ Compensation and Disability Benefits Requirements” document.

- Prevailing Wage Schedule** – NYS Labor Law requires all wages paid by contractors and subcontractors on public work projects be paid at the prevailing wage rates. Enclosed is the current rate schedule for the appropriate county. Contractors and Subcontractors are responsible for obtaining current rates throughout the course of the project. The NYS Department of Labor (NYS DOL) updates these rates on July 1st of each year. Current rates can be obtained on the NYS DOL website (www.labor.state.ny.us) or by fax at (518) 485-1870. Note that an executed Contractor and Subcontractor Certification and certified payrolls, which include the hours and days worked by each workman, laborer or mechanic, the occupation at which he worked, the hourly wage rate paid and the supplements paid or provided, must be submitted with each and every payment requisition. **DASNY will not process an invoice without this information.** Forms are available on the DASNY website:
<http://www.dasny.org/construc/forms2/vendors.php>

- Labor and Material Payment Bond** – The successful bidder must be prepared to provide surety bonds prior to award in accordance with Article XIV of the DASNY Purchasing General Conditions. The costs of these bonds are to be separately stated in the total bid price as indicated on the Bid Breakdown and Schedule.

- Performance Bond** – The Successful bidder must be prepared to provide surety bonds prior to award in accordance with Article XIV of DASNY Purchasing General Conditions. The costs of these bonds are to be separately stated in the total bid price as indicated on the Bid Breakdown and Schedule.

- Standard Vendor Responsibility Questionnaire (SVRQ)** – The successful proposer, in accordance with Article XXII of DASNY Purchasing General Conditions, will be required to complete the enclosed SVRQ. The award of a contract will be subject to a review of the information contained in these forms.

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SUPPLEMENTAL SPECIFICATIONS CONTINUED

- NYS Uniform Contracting Questionnaire (UCQ)** – The successful proposer will be required to complete the enclosed UCQ. The award of a contract will be subject to a review of the information contained in these forms.

- DASNY Contractor and Consultant Questionnaire (CCQ)** – The successful proposer will be required to complete the enclosed CCQ. The award of a contract will be subject to a review of the information contained in these

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SUPPLEMENTAL GENERAL REQUIREMENTS

PRE-BID SITE VISIT and REQUESTS FOR INFORMATION

PRE-BID CONFERENCE:

DATE: Tuesday , October 2, 2018

TIME: 10:00 am

LOCATION: SUNY Downstate Medical - 450 Clarkson Ave., Brooklyn, NY - Contact Michelle Williams

ATTENDANCE AT THIS MEETING IS RECOMMENDED

For directions to the project site please contact Michelle Williams, 718-613-8328

Hardhats and proper footwear will be required to tour the site.

REQUESTS FOR INFORMATION:

DATE: All requests for information should be submitted to kcstell@dasny.org no later than **Friday, October 5, 2018**. The bid number must be referenced in the subject line.

All responses will be posted to www.dasny.org as an Addendum to Bid No. 618 no later than **Tuesday, October 9, 2018**. It is the responsibility of the bidder to obtain any and all Addenda issued.

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DETAILED SPECIFICATIONS

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SCOPE OF WORK AND SPECIFICATIONS

The following performance specification defines the Downstate requirements for selection of a flexible laboratory furniture for use on the 7th floor laboratory fit-out project. The objective is to select a furniture system that can be used without the need for customization of components and without any disruption or modification to existing systems and services already installed.

Long term flexibility as well as the ability to accommodate lab reconfigurations with in-house staff and without major renovations and cost are essential to this process.

The lab furniture system must meet the following requirements as defined in this specification. The following are the required criteria and details that the selected lab furniture must meet.;

- Lab furniture system must be adaptable to changing technical and user requirements after the initial installation without requiring disassembly of the system.
- Furniture system will be delivered to the site fully assembled, including lab table tops, with minimal on-site assembly of the major components.
- All components of the system will fully factory welded eliminating the need for various attachments and metal connectors.
 - Table frames will be fully welded at the factory requiring no on-site assembly.
 - Add on shelving adjustable units will be fully welded assemblies with bolt on connections to the tables pre-installed. Shelving units will be capable of accommodating 4 levels of adjustable shelving
 - Service units will have fully welded tubular base frames and welded metal service umbilicals requiring only bolted connections.
 - Service towers will have utility access doors mounted on full length piano hinges
- All lab tables will have 4 adjustable height legs variable from 29 to 40 inches AFF.
- All lab tables will have the ability to add adjustable shelving to the table without the need to modify the table using simple standardized connections. Shelving will be easily removable or added to any table without any disruption to the lab.
- The same furniture components will be used on all lab furniture conditions to avoid a mixture of conventional floor standing furniture against partitions and modular systems furniture on peninsulas and islands.
- Accommodate lab reconfigurations without disruption to laboratory operations.

Metal Laboratory Furniture Specification and Performance Standards

- Accommodate lab reconfigurations over night or over the weekend with in-house staff and without modification of components
- Must have the capability to add lab gas services after initial installation, up to a total of 6 separate gas services per utility umbilical, without any disassembly to the furniture or modifications to system components. adding gas services will be accommodated with in house personnel.
- Specialty gas service lines can be added to the service towers and connected to furniture mounted service fixtures in the same manner as house gas services.
- Each service unit will come with a minimum of 6 sections of UL listed 20 Amp electrical plug strips.
 - Each plug strip will have a minimum of 3 duplex outlets
 - Electrical outlets must be expandable by a minimum of 33% without any modifications to the system.
 - Number of plug strips will be expandable by a minimum of 33% without any modifications to the system.
 - Any plug strip will be capable of accommodating emergency power as required without modifications except to outlet coloring.
 - Each plug strip can be plugged into a single circuit or connected individually to separate circuits to accommodate dedicated equipment circuits as required by changing lab requirements.
 - Each plug strip will be provided with a sufficiently long pigtail and twist lock plug for connection to previously installed electrical services.
 - Each service unit will come with 4 installed standard electrical boxes capable of accommodating any combination of communications ports or specialty electrical service as required by the users.
- The complete lab furniture system will be a plug and play system that arrives on site with all plumbing and electrical systems installed, UL listed and ready to be plugged in to building system utility connections.
- A freestanding approach to the lab furniture, wall, peninsula and island configurations is the preferred system.
 - Sink cabinets against walls previously installed will be an exception.
- All lab benches, (excepting sink cabinets and Service unit umbilicals), will be manually adjustable height with a minimum range of 29” to 40” above finished floor.

Coordination

Successful bidder shall conduct a coordination meeting shortly after the issuance of a contract to ensure the following requirements associated with the system are fulfilled:

- Installation of the required 3/8” female NPT fittings at all applicable service connection points will be provided by the vendor to contractor and installed by the plumbing contractor. This applies to all services that will be connected to the building services by NTP fittings instead of quick disconnect fittings. This applies to water and specialty gas services.
- All quick disconnect fittings and fixtures will be color coded and coordinated with the building systems service distribution.
- Prime contractor will be responsible for installing adequate blocking to install the casework where required. Successful Bidder will provide blocking drawings to the contractor if required.
- Coordinate with the contractor to ensure that the hold-to/guaranteed dimensions are maintained.
- Conduct a shop drawing review and approval meeting scheduled by the installation contractor
- Field dimensions to be coordinated prior to manufacturing begins with the General Contractor.
- It is the responsibility of the General Contractor to communicate design and field changes.

Quality Assurance

The following referenced standards will define part of the specification to the extend stated.

The quality and performance requirements for the *Service Fittings and Fixtures* as part of this system will be fabricated in accordance to the recommended practices defined by the Scientific Equipment and

Metal Laboratory Furniture Specification and Performance Standards

Furniture Association (SEFA 7-2010) for Laboratory Fixtures. The quality and performance requirements for the Metal Casework as part of this system will be fabricated in accordance with the quality and performance requirements for the *Metal Casework* as part of this system will be fabricated to the recommended practices defined by Scientific Equipment and Furniture Association (SEFA 8M-2014) for Laboratory Grade Metal Casework.

Compliance

- Building codes and regulations are to be directed by the design professional and are not the responsibility of the manufacturer.

Flammable liquid storage cabinets

- Metal flammable storage cabinet to be complaint with the International fire code section 3404.3.2 to 3404.3.2.1.4

Electrical Service Fixtures

- Underwriters Laboratories certification for all electrical components are required

Plumbing Fixtures

- Water
 - CSA approved and or ETL approved
- Gasses
 - CSA approved

References

Service Fixtures

- ANSI-A112.18.1m-1989: for fixtures.
- ANSI Z359.1-1998: for safety eyewashes and equipment.
- ASSE Standard 1001: for vacuum breakers
- ASTM B88 and ANSI/NSF 61: for plumbing.
- CAN/CSA b.125.M89 Canadian Standards: for fixtures and water service.

Wire Raceway systems:

- ASTM International (ASTM):
- ASTM B317 / B317M Standard Specification for Aluminum-Alloy Extruded Bar, Rod, Tube, Pipe, Structural Profiles, and Profiles for Electrical Purposes (Bus Conductor).

Metal Laboratory Furniture Specification and Performance Standards

- American National Standards Institute (ANSI) / Underwriters Laboratories (UL)
- ANSI/UL 5, Surface Metal Raceways and Fittings.
- ANSI/UL 5, Multi Outlet Assemblies

Flammable liquid storage cabinets

- Comply with all New York State and New York City fire code requirements.

Submittal Requirements

- Fabrication or purchase of any items prior to approvals of the shop drawings will be at the manufacture's risk

Finish samples

- All sets of approved finish samples are to be signed and dated by the owner or owners representative. One approved signed set is to be returned to Vendor prior to the commencement of fabrication and will constitute the finishes to be used standard

Service fixtures

- Product Data: Provide catalogue illustrations of fixtures, sizes, rough in dimensions, utility sizes and trim

Metal Casework

- 3"x 3" inch samples of finish for metal casework

Shop Drawings

- Successful Bidder must submit shop drawings for approval, 14 weeks prior to the scheduled delivery date, in the following format:
- Indicate on the floor plans; the locations of and clearances from adjacent walls, doors, windows, other building components, and other laboratory equipment. Include the locations of the all of the applicable components, to be referenced to a component library presenting detailed views and quantities required for the project
- Include a set of applicable typical detailed elevations showing assembly configurations and blocking reinforcements required for installing the system.
- Indicate on a separate set of floor plans the locations and types of service fittings, together with associated service supply connection required.
- Include isometric details of utility spaces showing available rough in areas.

Metal Laboratory Furniture Specification and Performance Standards

- Field Measurements: In instances in which casework is indicated to fit to other construction, dimensions are to be verified by field measurements before fabrication and reflected on shop drawings.
- Submit drawings in a 11 x17 PDF format to the Installation Contractor for distribution to the Owner, Architect, Lab designer and General Contractor

Product Data

Bidder must provide manufacturer specifications, certificates, installation instructions and warranties for each manufactured product specified.

Mockups

Provide mockup of a typical 30” x 72” mobile adjustable height bench with shelving. If an instrument cart is the design basis of your submission, plumbing and electrical fixtures should be included.

SYSTEM COMPONENTS

MATERIALS and CONSTRUCTION – Metal Casework

<u>Table legs</u>	<u>TS 2’ x 2’ x .109’ thickness metal tubing</u>
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Metal Laboratory Furniture Specification and Performance Standards

<u>Table Leg manual extensions</u>	<u>TS 1- 3/4" x 1 3/4"</u>
<u>Table leg levelers</u>	<u>LLD-ND 304 levelers</u>
<u>Table Aprons</u>	<u>14 gauge bent steel channel</u>
<u>Mounting angle for shelving uprights</u>	<u>3 x 3 1/4" steel angle</u>
<u>Black plastic end caps</u>	<u>SQR-2 1-14 LPE</u>
<u>Hydraulic pump w/ 4 leg posts and switching</u>	<u>Dyna Lift Elec 4E-D1A-08-S</u>
<u>Leg Mounting screws</u>	<u>1/4" 20 x 1"</u>
<u>Pump mounting plate</u>	<u>22-15/16 x 4" x 1/4"</u>
<u>Upright shelving assemblies</u>	<u>TS 2 x 2 metal tubing</u>
<u>Welded stud posts</u>	<u>3/4 " - 10 x 3" HCS</u>
<u>Stud washers</u>	<u>3/4" modified fender washer</u>
<u>Joiner plate</u>	<u>8" x 2" x 1/8" steel FB</u>
<u>Shelf brackets</u>	<u>TS 2 x 2 metal tubing + end cap & hooks</u>
<u>Seismic shelf rods</u>	<u>1/4 "T304 SS rods bent and smooth & polished</u>

<u>Seismic shelf lips</u>	<u>6ga bent steel w/ mounting hardware. Seismic lips should be easily removable to accommodate large equipment when required.</u>
<u>Adjustable shelving</u>	Painted metal, same gauge as shelving brackets.

Adjustable Height Table

A steel, fully welded component system with powdered finish as follows.

Tables will be constructed of 2” tubular steel legs with adjustable height from 30” to 39”

- Manually adjustable height tables will have a slip tube construction with manual adjustment secured by easily assessable bolts in the exterior frame. Each leg will have a leveling foot at its base.
- Table frames will be constructed of 2 x 2 x .109” steel tubing with a 6” deep front and side table frame constructed of as an open metal channel. The open channel will provide for cable management on the underside of the table.
- All tables, (except 21” and 24” wide tables will have a 3” x 3” x .25” metal angle welded to the table frame for the addition of table mounted shelving uprights as required on the drawings.

Table mounted shelving units – Removable metal shelving units will be constructed of 2” x 2” welded tubing and attached to the rear of any table as indicated on the drawings.

- Vertical uprights will include double slotted holes on the front and the back for mounting shelving brackets.
- A plastic cap will cover the exposed top of the shelving unit uprights.
- Shelving units will be attached to the table using ¾” bolts welded into the base of each leg.
- Each shelving will include 2 levels of metal shelves comprised of 4 metal shelves with removable seismic retaining rails. Additional shelves can be added as options.

Metal Laboratory Furniture Specification and Performance Standards

- All exposed metal surfaces will be powder coated in Appliance White unless indicated on the drawings and approved by the owner.

Lab furniture utility system approach

- This section requires each vendor to clearly describe the approach they are proposing to provide lab gas and electrical services to the lab benches. This bid specification allows each vendor to propose the system / approach that best meets Downstate's objectives. Provide drawings, photos, details and specifications required to adequately describe the system you are proposing.
- Vendors should describe in detail which category their system most closely follows from the following basic approaches.
- Please note that we are interested in where the division line is between your systems utility distribution approach and where and how it meets the plumbing and electrical contractors building systems.

Mobile furniture system utilizing overhead utility panels

- Under this system approach, describe how utilities are distributed within the furniture and how they are connected to building systems. Who supplies the ceiling utility panels and are they field installed / assembled or prefabricated, pre-piped and prewired at the factory? How many panels are required per typical bench? What is the max capacity of utilities in the panel you propose and what is required to add additional services to the panel for provision of services not identified in the initial design? How are plumbing and electrical services handled on lab benches against partitions? What is the maximum utility capacity of plumbing and electrical utility services your proposed system can accommodate without customization?

Mobile furniture system utilizing overhead service carriers

- If this is your recommended approach, describe how utilities are distributed within the furniture and how they are connected to building systems. Who supplies the ceiling overhead service carrier and are they field installed / assembled or prefabricated, pre-piped and pre-wired at the factory? How many linear feet of utility carrier are required per typical bench? What is the max capacity of utilities in the carrier you propose and what is required to add additional services to the carrier for provision of services not identified in the initial design? How are plumbing and electrical services handled on lab

benches against partitions? What is the maximum utility capacity of plumbing and electrical utility services your proposed system can accommodate without customization?

Mobile furniture system utilizing a service ledge or service bridge

- Under this system approach, describe how utilities are distributed within the service ledge and how they are connected to building systems. Are the services within the service ledge prefabricated and preinstalled at the factory or installed by plumbing and electrical trades on site? How are plumbing and electrical services handled on lab benches against partitions? What is the maximum utility capacity of plumbing and electrical utility services your proposed system can accommodate without customization?

Mobile furniture system utilizing a service unit concept.

- Describe in detail your approach to a lab furniture service unit system. Is the unit pre-wired and pre-piped at the factory or field assembled? How are additional services added to the service unit, not identified in the initial design? What is the maximum utility capacity of plumbing and electrical utility services your proposed system can accommodate without customization?

Casework body, interior shelving and doors/drawer faces

- All cabinets will be full flush overlay construction
- Fully welded metal construction
- All surfaces powder coated
- Door and drawer hardware will be continuous aluminum extrusion
- Locks optional

HARDWARE

Pulls

Finger pulls to be continuous Aluminum Extruded Handle.

- All factory cut edges to be de burred, sharp edges will not be acceptable

Hinges

Cabinets shall be institutional type 2 3/4", 5-knuckle steel hinge, wrap around design.

Finish to be stainless steel.

- Two hinges on doors up to 36" in height, three hinges on doors over 36" in height, four hinges on doors over 60" in height
- Umbilical access panel to use a full height continuous hinge

Door catches

- Adjustable type, spring activated nylon roller catches.
- Drawer slides: shall be full extension, 100 lbs. rated ball bearing type equal to Accuride model #3832, full extension series

Framed Glass Hinged Doors

- Tempered Glass
- Shelf Supports
- Adjustable seismic shall be double pin, plastic locking type – casework shelving
- Adjustable steel, bright zinc plated angle type, ½” wide. Pin shall be ¼” x ⅜” long pin. – umbilical shelving

WORK SURFACES

General - Phenolic Resin

- Work surfaces to be manufactured of one piece and cut to the maximum lengths possible. Installation should take place without any field cutting.
- Holes and cutouts to be provided as necessary for equipment, service fittings and fixtures. Size of openings should be verified prior to making openings.
- Edges shall be factory prepared having no need for in-field finishing.

Phenolic Resin

- 1” inch thick
- 1” thick, 4” high curbs (unless otherwise noted), constructed of the same material and located at the rear of worksurface at perimeter sink units only.
- Overhangs should be equal to 1” at cabinet fronts and Exposed ends with a drip groove on the underside 1/2 “from the edge.
- Work surfaces should be manufactured of one piece and cut to the maximum lengths possible.
- At all wet benches, fixture holes to be factory drilled for H/W faucet, eyewash/drench hose and Pure water faucet
- Grommet holes for wire raceways and access to emergency power to be factory drilled
- Mounting holes for wire raceways to be factory drilled

WIRE WAY's

All wire raceways to be 20 Amp factory assembled UL listed units.

- All wire raceways on any bench within 6 feet of a water fixture location to be GFCI protected
- Molded plug ends will be factory installed and included in the UL listing for the entire raceway unit.
- Plug types:
 - Ceiling mounted plug connections will be 20-amp R5-20R twist lock plugs.
 - Wall mounted plug connections will be 20-amp blade type plugs.

Plumbing Fixtures

Water fixtures

- All fixtures, where indicated on the drawings, shall meet the requirements of ADA
- Powder coated brass
- Color to be **selected by owner.**

Sinks

- Molded Epoxy Resin Drop-In Sinks
- Color to match the graphite gray phenolic resin tops
- Sink Sizes
- End and wall counter sinks - 28 long" x 15 wide" x 10 deep" for 24" deep casework.
- Counter Reactions CDR 59 or equivalent

Gas fixtures

- Powder coated brass
- Needle valve construction
- Color indexing to meet north American standards for distinguishing gas types finishes

Metal Components Finish

- All surfaces are to be powder coated

Testing

- Finishes must pass the following tests or they will be rejected.
- 20 cycle Cold Check Test.

Metal Laboratory Furniture Specification and Performance Standards

- Test ASTM D2091
 - Visual Tests Applicable to Exposed Surfaces only
 - Finished surfaces are to be view in the ambient conditions in which they will be installed and used.
 - Compliance shall be evaluated (by comparison to the approved panel, which has been signed and dated). Finished surfaces are to be view in the ambient conditions in which they will be installed and used.

Sheen to match sample	
Surface Condition	No visible defects
Exposed metal	Not permitted
Orange peel	Not permitted
Runs	Not permitted
Sags	Not permitted
Blistering	Not permitted
Checking, crazing	Not permitted
Cracking	Not permitted
Field repairs and touch-ups	Inconspicuous

FABRICATION - Metal Casework

GENERAL

Fixed connections – fully welded

Doors, drawer fronts, and false fronts reveals to be full flush overlay

Drawer boxes – all types of finishes

Drawer box, back, front and sides to be of folded and welded metal construction

Sink cabinets to be floor mounted units with 4” kick space.

Rear cabinet panel to have appropriate cutouts for plumbing requirements

Mobile Cabinets to include 4 casters, 2 lockable casters at the front and 2 swivel casters at the rear.

Adjustable shelves

- Shall be metal and set on four pin seismic shelf supports at 1¼” spacing. All four edges of shelves to be finished.
- All shelving to be 1” thick

Metal Laboratory Furniture Specification and Performance Standards

- Interior fixed shelves to be 1” thick and edged one front edge

SINK BASE UNITS – Factory assembled with the worksurface, fixtures and sink shipped loose for site installation

Configurations

30” Deep- for island end wet bench assemblies with worksurface mounted stainless steel backsplash/pegboard unit

60”wide- 2 door sink cabinet/24”- 1 door cabinet

60”wide- 2 door sink cabinet/24”- 1 door /drawer cabinet

66”wide- 2 door sink cabinet/24”- 1 door cabinet

66”wide- 2 door sink cabinet/24”- 1 door /drawer cabinet

30” Deep-for perimeter wet bench assemblies

36”- 2 door sink cabinet/36” - 2 door 2 drawer cabinet

48”- 2 door sink cabinet/ 24” dishwasher opening with end panel

72”- 3 door sink cabinet

Water Service fixtures included with each sink unit

H/W faucet - *BT414 or BT414BH (ADA)*

Eyewash/drench hose – *EW1022VB*

Thermostatic mixing valve – *AP3600 (OPTIONAL)*

Pure water faucet *BT7833 (OPTIONAL)*

Full fixed back with service access opening factory cut

Finger pulls to be mounted horizontally

MOBILE CABINETS

- Sizes - Width 24”
- Heights 32” and 29” for ADA locations
- Depths - 21” for 30” depth locations and 24” for 21” deep locations
- Full integral top panels to be ¾” thick
- Matching finish/material of case body
- Casters to be full swivel locking type at the front and fixed at the rear
- Counter weight plate to be used on all mobile units
- Finger pulls to be mounted horizontally

**MOBILE TABLES -factory assembled worksurface including wire raceways,
grommet caps**

Sizes

72" x 21"

72" x 24"

72" x 30"

72" x 36"

48" x 30"

60" x 30"

72" x 30"

84"x 30"

96"x30"

WALL SHELVING-Factory assembled shelves except bookends wall standards

Shelves shall be:

- Powder coated metal
- 12" deep and 1" thick, unless otherwise noted on the drawings not to exceed 36" in width equipped with a ¼ inch diameter, 1-1/4" inch high stainless steel rail at the front end of the shelf
- Equipped with a 2" high full width metal rear lip

SYSTEM COMPONENTS – Related Equipment (Not part of this bid)

Fume Hoods

General

Fume hoods shall function as ventilated, enclosed workspaces, designed to capture, confine and exhaust fumes, vapors and particulate matter produced or generated within the enclosure.

Design fume hoods for consistent and safe air flow through the hood face.

Negative variations of face velocity shall not exceed 20% of the average face velocity at any designated measuring point as defined in this section.

Bypass - Type 100

Constant volume type: with built-in automatic compensating bypass to maintain relatively constant exhaust volume regardless of sash position.

Metal Laboratory Furniture Specification and Performance Standards

Bypass: Positive in action and controlled by the sash operation.

Down draft bypass for airflow into the hood from the top front of the superstructure.

As sash is lowered, bypass design shall limit the increase in face velocity to maximum of four times the average face velocity with the sash full open.

Restricted Bypass -Type 200 [OPTIONAL]

Bypass shall be restricted allowing air to enter the hood only through the face opening and below the lower airfoil.

Average illumination of work area: Minimum 80 foot candles. Work area shall be defined as the area inside the superstructure from side-to-side and from face of baffle to the inside face of the sash, and from the working surface to a height of 28 inches.

Sizes

Widths: 48" 60" 72" 96"

Fumehood Materials (Informational purposes only)

Worksurface

1 – ¼" dished epoxy resin

Color – Appliance white unless otherwise noted on the drawings

Gas services

- Gas services to terminate 10' above ceiling via flexible hose with a 3/8" NPT fitting
- Final connections by Division 22
- Vacuum
- Compressed Air

Steel

- High quality, cold rolled mild steel meeting requirements of ASTM A366; gauges U.S. Standard.

Stainless steel

- Type 304; gauges U.S. Standard

Safety glass

- 7/32" thick laminated safety glass.

FABRICATION

- **Superstructure:** Rigid, self-supporting assembly of double wall construction, maximum 5" thick.
- **Walls:** consists of a sheet steel outer shell and a corrosion resistant inner liner, and houses and conceals steel framing members, attaching brackets and remote operating service fixture mechanisms and services. Panels must be attached to a frame both welded and bolted into a self-supporting structure. Panels and brackets attached to eliminate screw heads and metallic bracketry from hood interior.
 - Access to fixture valves concealed in wall provided by removable exterior side panels and gasketed access panels on the inside liner walls.
- **Exhaust outlet:** Round or rectangular, 18 gauge stainless steel.
- **Sashes**
 - Combination sash
- **Service fixtures and fittings:**
 - Gas services to terminate above ceiling via flexible hose with a 3/8" NPT fitting
 - All service fixtures outlets must terminate to a single outlet located on the right side of the fume hood

Final connections by Division 22

- Vacuum
- Compressed Air
- Color coded hose nozzle outlets mounted inside the fume hood and controlled from the exterior with color coded index handles.
- Valves: Needle-point type with self-centering cone tip and seat of hardened stainless steel. Tip and seat shall be removable and replaceable.
- Provide piping for all service fixtures from valve to outlet: Copper for water, air and vacuum and black iron for gas services.

Hood light fixture:

- Two lamp/T8, instant start, UL listed fluorescent light fixture with sound rated ballast installed on exterior of roof. Provide safety glass panel cemented and sealed to the hood roof.

Metal Laboratory Furniture Specification and Performance Standards

- Interior of fixture: White, high reflecting plastic enamel.
- Size of fixture: Largest possible up to 48" for hoods with superstructures up to six feet. Provide two 24" fixtures for hoods with eight foot superstructures.
- Include lamps with fixtures.

Electrical services:

- Provide a single junction box on top of fume hood for final connection by Division 26
- Two three wire GFCI type receptacles rated at 120 V.A.C. at 20 amperes.

Work surfaces: 1-1/4" thick epoxy resin, dished a nominal one-half inch to contain spills.

Safety Monitor/Alarm System

- Provide low flow Monitor/alarm system
- Where shown or specified provide a Safety Monitor/Alarm System which monitors face velocity and provides audible and visual alarm if face velocity drops below safe levels. The technology used will be thermally compensated thermistor based in the alarm module. As the internal fume hood pressure changes as the sash opening is closed and opened, the flow passing over the thermistor is calibrated to a face velocity which is displayed on the front of the monitor.
- Safety monitor: UL listed, tamper proof, with all alarm circuits, electric components, external tubing, and manifolds furnished complete and factory installed. The monitor shall have light emitting diode display which provides clear indication of airflow conditions.
- Airflow sensor: Thermally compensated glass-beaded thermistor, factory connected to a sidewall port on the interior of the fume hood.
- Alarm Signal: Audible signal and a visual, red large light emitting diode:
- Silence push button, which disables the audible alarm, shall be accessible on the front of the safety monitor.
- Provide alternate mode in which audible alarm is silenced indefinitely but visual alarm remains activated until the alarm condition is corrected.

Metal Laboratory Furniture Specification and Performance Standards

- When alarm condition is corrected and face velocity and volume return to specified levels, the safety monitor will automatically reset and begin routine monitoring.
- Electrical rating: Maximum 12 VDC, and maximum current rating of 200MA.

Note: Calibration is the responsibility of the vendor and is required once the hood is stationed and the hood exhaust and room supply systems are balanced. A secondary calibration has been factory set into the alarm's memory only to determine that the alarm is functional and ready for shipment. The primary calibration must be completed in the field.

FUME HOOD METAL CASEWORK

Include end filler panels

Acid Storage

- Sizes -Widths: 24", 30" and 36"
- Include vent kit of sufficient length to connect to exhaust ducting above ceiling

Flammable storage

- Color to be [color]
- Sizes - Widths: 24", 30"and 36"
- Self-closing and latching type doors

Base storage

Color to be appliance white unless otherwise noted on the drawings.

EXECUTION

Site Verification of Conditions (see also Site Logistics document)

Casework will not be delivered or installed until the following conditions have been met:

1. Building must be enclosed (windows and doors sealed and weather-tight)
2. An operational HVAC system that maintains temperature and humidity at occupancy levels must be in place; Relative humidity must be regulated and stable between 25% and 55% before products are brought on site, throughout project completion and with the site moving forward while the building is in use by the owner.

Metal Laboratory Furniture Specification and Performance Standards

3. Ceiling grid, overhead ductwork and lighting must be installed; prior to the delivery and installation of the casework.
4. Site must be free of any further construction such as “wet work.”
5. Required backing and reinforcements must be installed accurately and the project must be ready for casework installation.

NOTE: In the event that any of the specified requirements for installation are not present at the time of requested delivery, the general contractor or owner must provide the casework manufacturer with a letter of deviation that releases the manufacturer from any responsibility or liability from any damage to the products resulting from the unfavorable building conditions.

Delivery, Storage and Handling

- Packaging, Shipping, Handling and Unloading Packaging: Products should have packaging adequate enough to protect finished surfaces from soiling or damage during shipping, delivery and installation.
- Acceptance at Site: Casework will not be delivered or installed until the conditions in this document have been met.
- Delivery: Casework delivery should only take place after painting, utility rough-ins and related activities are completed that could otherwise damage, soil or deteriorate casework in installation areas.
- Handling: Care, such as the use of proper moving equipment, experienced movers, etc., should be used at all times to avoid damaging the casework. Until installation takes place, any wrapping, insulation or other method of protection applied to products from the factory should be left in place to avoid accidental damage.
- Storage: Casework should be stored in the area of installation. If, prior to installation, it is necessary for casework to be temporarily stored in an area other than the installation area, the environmental conditions shall meet the environmental requirements specified under the 3.1. *Site Verification of conditions* article of this section.

INSTALLATION

Component Installation

Metal Casework

Metal Laboratory Furniture Specification and Performance Standards

- Components should be set with components plumb, straight and square, securely anchored to building structure with not distortion. Concealed shims should be used as required.
- Components in continuous runs should be fastened together with joints flush, uniform and tight with and alignment of adjacent units not to exceed 1/16 of an inch.
- Wall casework should be secured to solid backing material. Vendor to coordinate with contractor to insure required blocking is installed.
- Top edge surfaces should be abutted in one true plane. Joints are to be flush and should not exceed 1/8 of an inch between tops units.
- Casework and hardware shall be adjusted and aligned to allow for accurate connection of contact points and efficient operation of doors and drawers without any warping or binding.

Worksurface Installation

- Tops will be anchored to base casework in a single true plane with ends abutting at hairline joints with no raised edges at joints.
- Surface scratches removed.
- Work surfaces should be protected with 1/4 inch ribbed cardboard or plastic covering of 6mm thickness.

Cleaning and Make Ready for Use

Cleaning

- Wipe all surfaces down with a mild general purpose cleaner. Do not use Ammonia based products.
- Ensure all components are unsoiled and match factory finish. Remove or repair damaged or defective units.
- Clean all finished surfaces, including drawers and cabinet shelves, and touch up as necessary.
- Countertops should be cleaned and free of grease or streaks.

Maintenance manuals must be provided to be include in close out documents for each component of the system

END OF SECTION

Room No.	Furniture Unit	Quantity
Lab 7-010-A	MT-72-30-Wse	1
Lab 7-010-A	MC-24-20-3d	1
Lab 7-010-A	MC-2422-1d1dr	2
Lab 7-010-A	MC-24-22-3d	1
Lab 7-010-A	MT-48-30-WS	1
Lab 7-010-A	MT-72-21	1
Lab 7-010-A	MT-72-30-WS	1
Lab 7-010-A	TS-36-22	2
Lab 7-010-B	MT-48-30-WS	2
Lab 7-010-B	MC-24-20-1d1dr	1
Lab 7-010-B	MC-24-22-1d1dr	1
Lab 7-010-B	MT-72-21	2
Lab 7-010-B	SU-72-18	2
Lab 7-010-B	MT-72-30-WS	2
Lab 7-010-B	MC-24-20-3d	1
Lab 7-010-B	MC-24-22-3d	1
Lab 7-010-B	TS-36-22	1
Lab 7-010-C	MT-48-30-WS	2
Lab 7-010-C	MC-24-20-1d1dr	1
Lab 7-010-C	MT-72-21	2
Lab 7-010-C	MT-72-30-WS	2
Lab 7-010-C	MC-24-20-3d	1
Lab 7-010-C	MC-24-22-3d	1
Lab 7-010-C	MC-24-22-1d1dr	1
Lab 7-010-C	TS-36-22	1
Lab 7-010-D	MT-48-30-WS	2
Lab 7-010-D	MC-24-20-1d1dr	1
Lab 7-010-D	MT-72-21	2
Lab 7-010-D	MT-72-30-WS	2
Lab 7-010-D	MC-24-20-3d	1
Lab 7-010-D	MC-24-22-3d	1
Lab 7-010-D	MC-24-22-1d1dr	1
Lab 7-010-D	TS-36-22	1
Lab 7-010-D	SU-72-18	2
Lab 7-010-E	MT-48-30-WS	2
Lab 7-010-E	MC-24-20-1d1dr	1
Lab 7-010-E	MT-72-21	2
Lab 7-010-E	MT-72-30-WS	2
Lab 7-010-E	MC-24-20-3d	1
Lab 7-010-E	MC-24-22-3d	1
Lab 7-010-E	MC-24-22-1d1dr	1
Lab 7-010-E	TS-36-22	1
Lab 7-010-F	MT-48-30-WS	2
Lab 7-010-F	MC-24-20-1d1dr	1
Lab 7-010-F	MT-72-21	2
Lab 7-010-F	MT-72-30-WS	2
Lab 7-010-F	MC-24-20-3d	1
Lab 7-010-F	MC-24-22-3d	1
Lab 7-010-F	MC-24-22-1d1dr	1
Lab 7-010-F	TS-36-22	1
Lab 7-010-F	SU-72-18	2
Lab 7-010-G	MT-48-30-WS	1

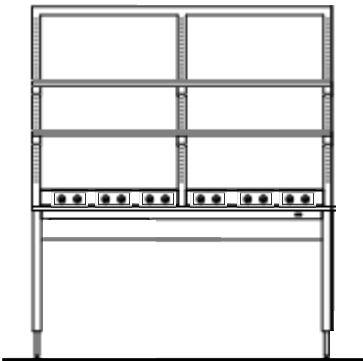
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Lab 7-010-G	MT-72-21	2
Lab 7-010-G	MT-72-30-WS	2
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Lab 7-010-G	MC-24-22-3d	1
Lab 7-010-G	MC-24-22-1d1dr	1
Lab 7-010-G	TS-36-22	1
Lab 7-010-H	MT-48-30-WS	2
Lab 7-010-H	MC-24-20-1d1dr	1
Lab 7-010-H	MT-72-21	2
Lab 7-010-H	MT-72-30-WS	2
Lab 7-010-H	MC-24-20-3d	1
Lab 7-010-H	MC-24-22-3d	1
Lab 7-010-H	MC-24-22-1d1dr	1
Lab 7-010-H	TS-36-22	1
Lab 7-010-H	SU-72-18	2
Lab 7-010-I	MT-48-30-WS	2
Lab 7-010-I	MC-24-20-1d1dr	1
Lab 7-010-I	MT-72-21	2
Lab 7-010-I	MT-72-30-WS	2
Lab 7-010-I	MC-24-20-3d	1
Lab 7-010-I	MC-24-22-3d	1
Lab 7-010-I	MC-24-22-1d1dr	1
Lab 7-010-I	TS-36-22	1
Lab 7-010-I	SU-72-18	1
Lab 7-010-J	MT-48-30-WS	1
Lab 7-010-J	MC-24-20-1d1dr	1
Lab 7-010-J	MT-72-21	1
Lab 7-010-J	MT-72-30-Wse	2
Lab 7-010-J	MT-72-30-WS	1
Lab 7-010-J	MC-24-22-3d	2
Lab 7-010-J	MC-24-22-1d1dr	1
Lab 7-010-J	TS-36-22	2
Lab 7-011	MT-60-30-Wse	2
Lab 7-011	MC-24-22-3d	1
Lab 7-011	MC-24-22-1d1dr	1
Lab 7-012	MT-60-30-Wse	3
Lab 7-012	MC-24-22-3d	2
Lab 7-012	MC-24-22-1d1dr	1
Lab 7-013A	MT-60-30-Wse	2
Lab 7-013A	MC-24-22-3d	1
Lab 7-013A	MC-24-22-1d1dr	1
Lab 7-013	TS-36-22	2
Lab 7-013B	MT-48-30-Wse	1
Lab 7-013B	MC-24-22-1d1dr	1
Lab 7-015	MC-24-22-1d1dr	1
Lab 7-015	MT-84-30-Wse	1
Lab 7-015	TS-30-22	2
	TS-36-22	1
Lab 7-016	MT-24-30-Wse	1

Lab 7-016	MC-24-22-1d1dr	1
Lab 7-017	MT-84-30-Wse	1
Lab 7-017	MC-24-22-1d1dr	1
Lab 7-017	MC-24-20-1d1dr	1
Lab 7-017	MT-60-30-Wse	1
Entry Cove 7-022	TS-30-22	8
Entry Cove 7-022	TS-36-22	2
Lab 7-021	MC-24-22-1d1dr	1
Lab 7-021	MT-60-30-Wse	1
Lab Support 7-020	MC-24-20-1d1dr	1
Lab Support 7-020	MT-60-30-Wse	1
Dark Room 7-019	MC-24-22-3dr	1
Dark Room 7-019	MT-48-30-Wse	1
Dark Room 7-019	MC-24-20-1d1dr	1
Dark Room 7-019	MT-30-30-Wse	1
Dark Room 7-019	MT-42-30-Wse	1
Entry Cove 7-018	TS-30-22	4
Entry Cove 7-018	TS-36-22	1
Entry Cove 7-018	MT--60-30-WS	1
Lab 7-024	MC-24-22-1d1dr	1
Lab 7-024	MT-42-30-Wse	1
Lab 7-024	MC-24-22-1d1dr	1
Lab 7-024	MT-96-30-Wse	1
Lab 7-024	MC-24-22-3dr	1
Fumehood 7-023	MC-24-22-1d1dr	1
Fumehood 7-023	MT-96-30-Wse	1
Fumehood 7-023	MC-24-22-3dr	1
Fumehood 7-023	MT-42-30-Wse	1
Fumehood 7-023	MC-24-20-1d1dr	1

Laboratory Furniture Details

Adjustable Height Tables

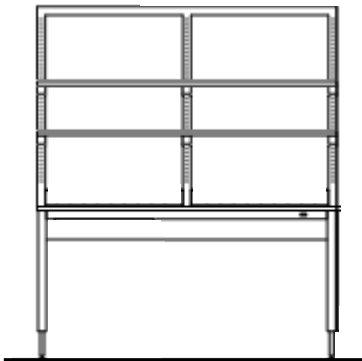
Movable Adjustable Height Table with removable shelving, electrical raceway – size per drawings



MT-72-30-WS-e

Movable Table
Length
Width
Shelving Unit
Electric raceway

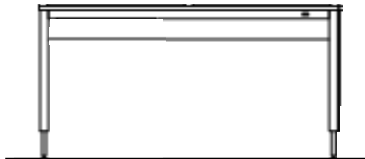
Movable Adjustable Height Table with removable shelving, – size per drawings



MT-72-30-WS

Movable Table
Length
Width
Shelving Unit

Movable Adjustable Height Table



MT-72-30

Movable Table
Length
Width

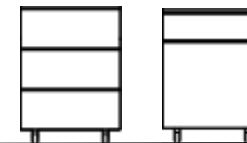
Mobile Cabinets

Movable File Cabinet



MCF-18-22-

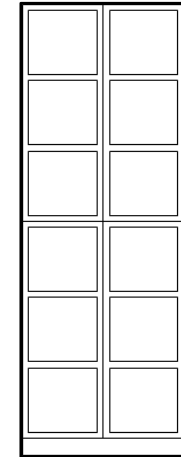
Movable Lab Cabinets



MC-24-22-3DR

Movable Cabinet
Length
Width
3 drawers or 1 door, 1 drawer

Tall Storage Cabinets

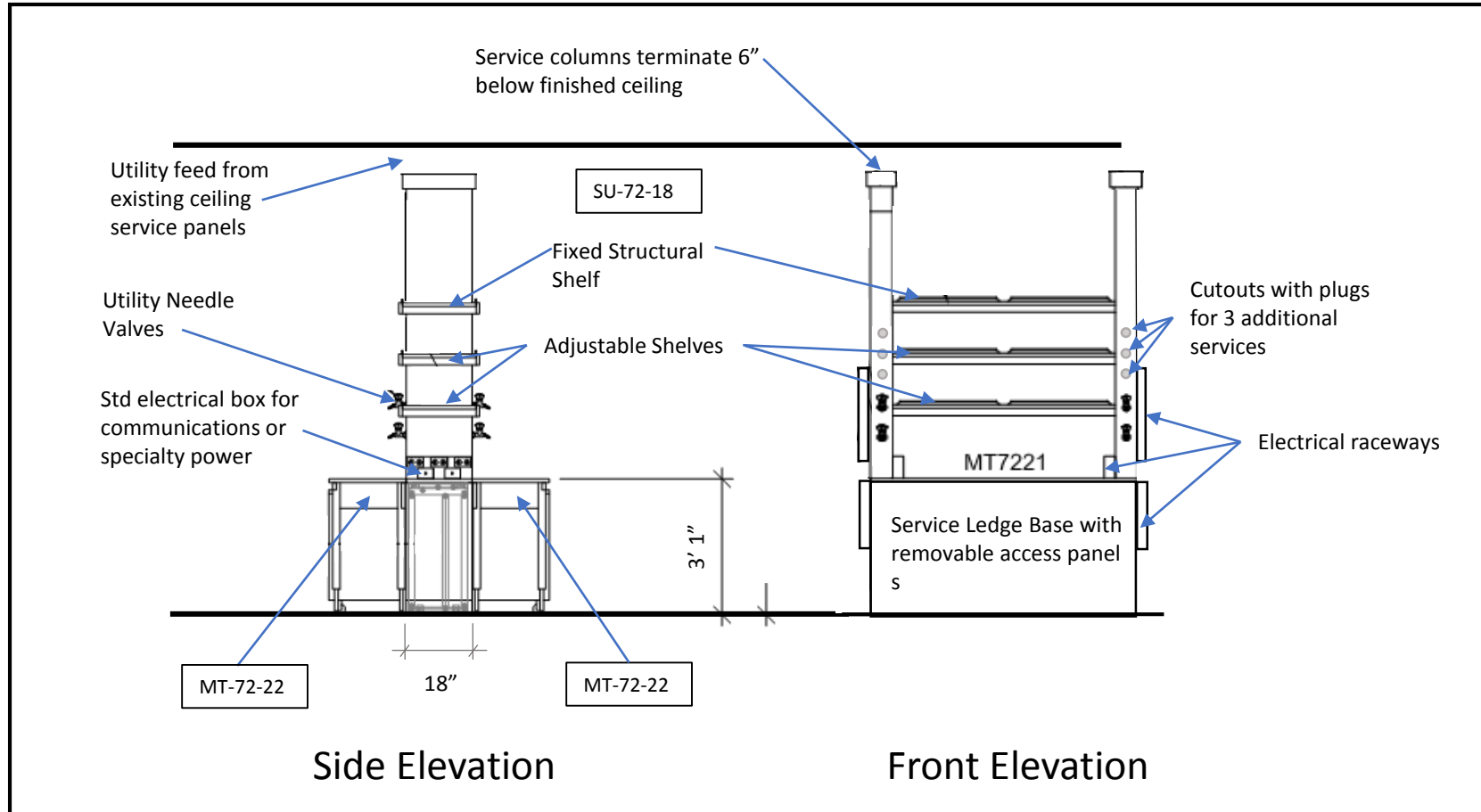


TS-36-20

Tall Storage cabinet
Length
Depth

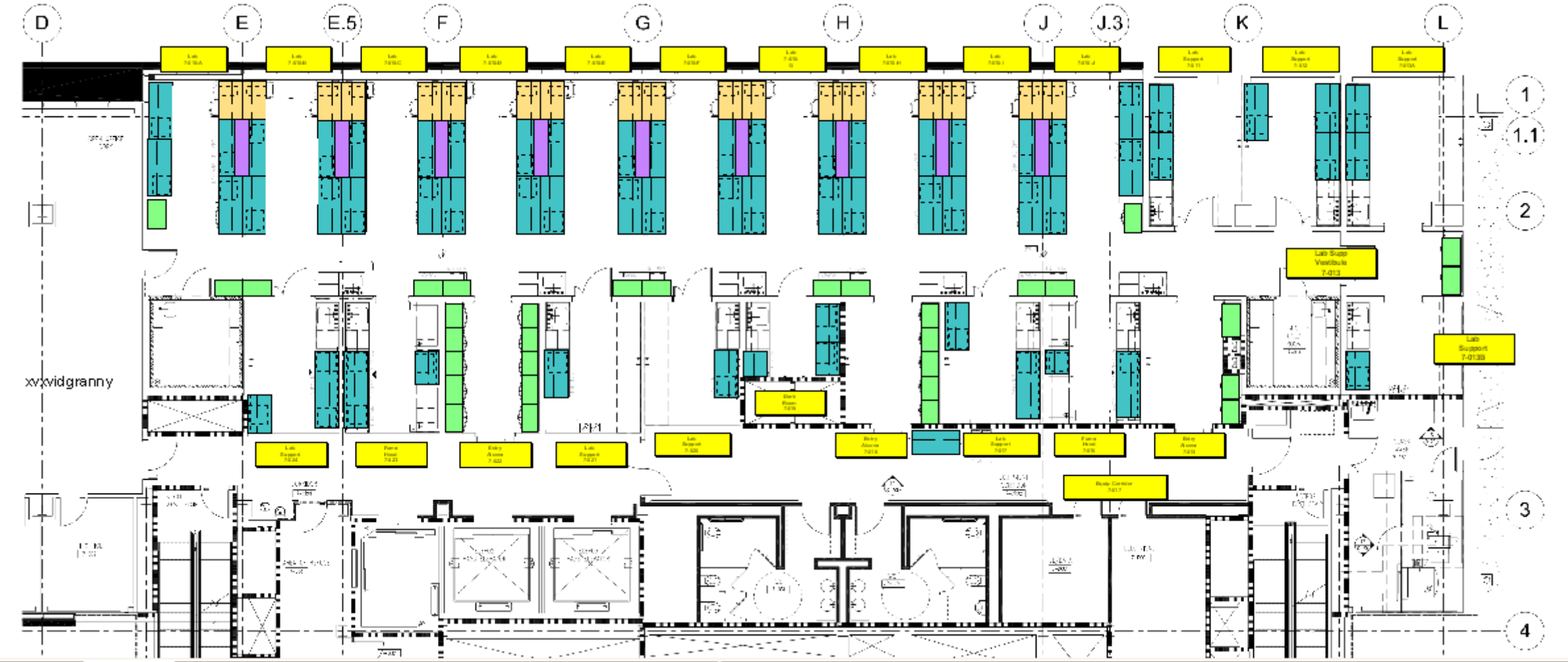
Laboratory Furniture Details

Service Unit



7th Floor Laboratory Furniture Plan

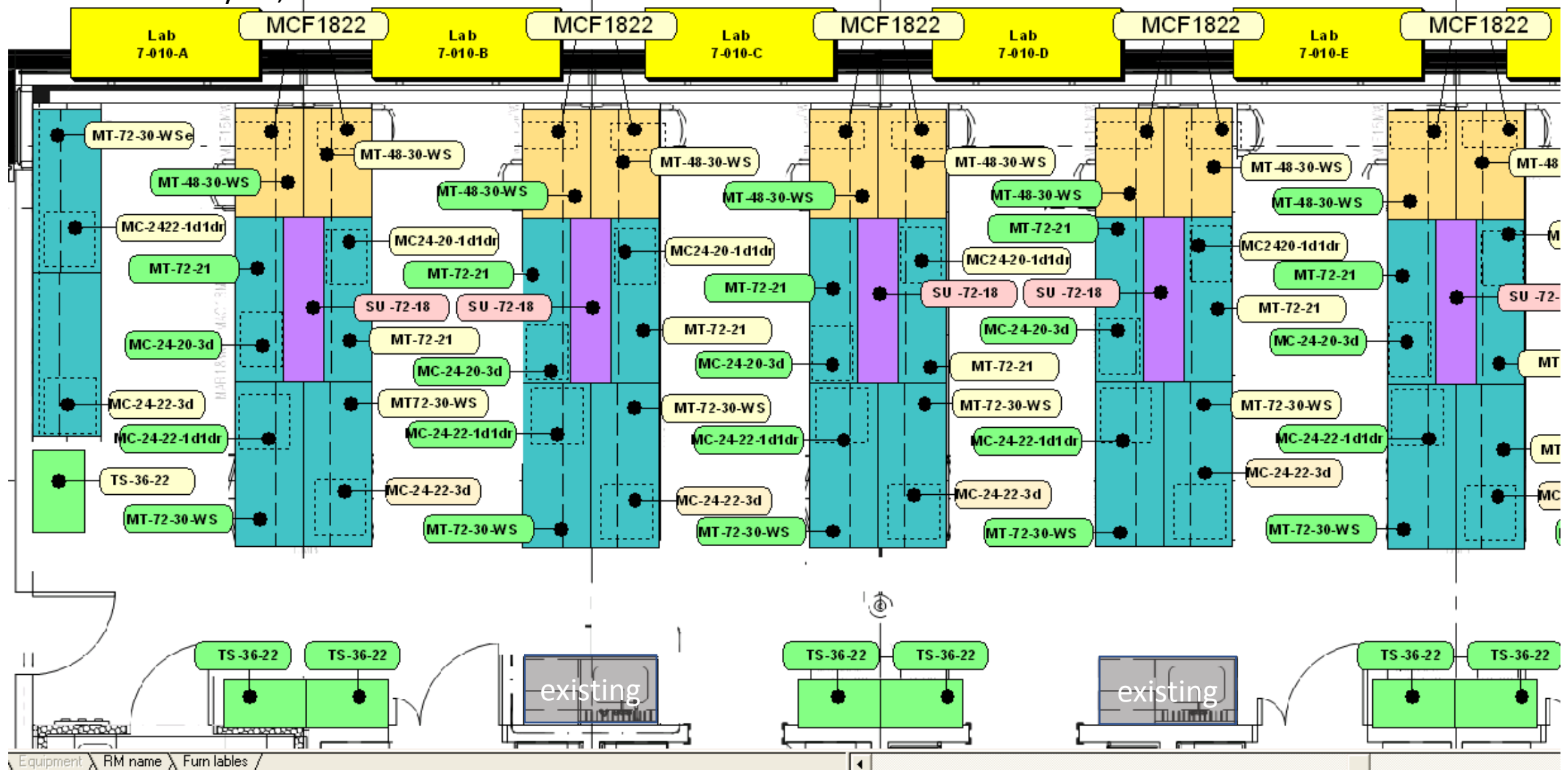
revised July 20, 2018



xxvidgranny

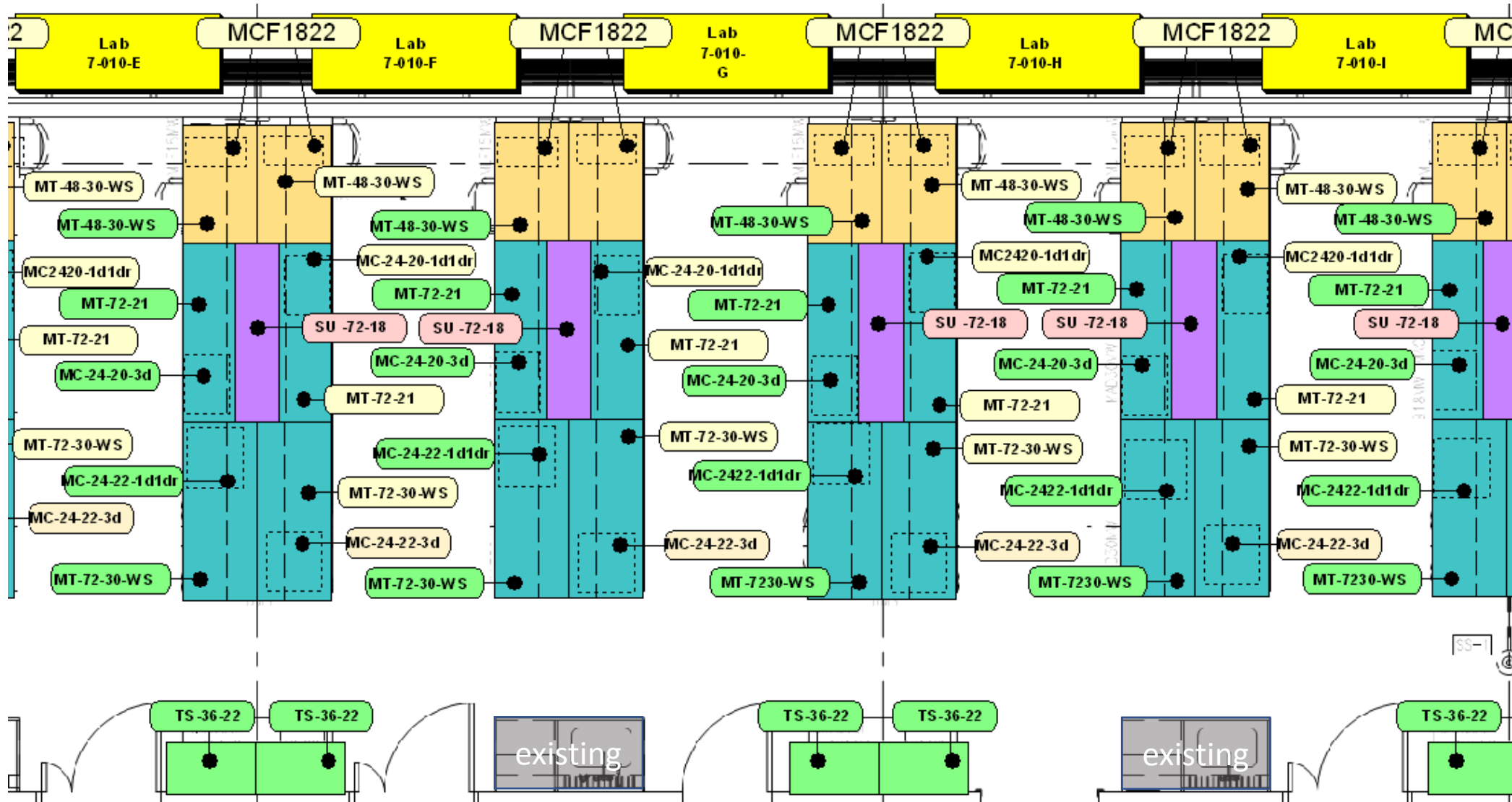
Detailed Laboratory Furniture Plan

revised July 20, 2018



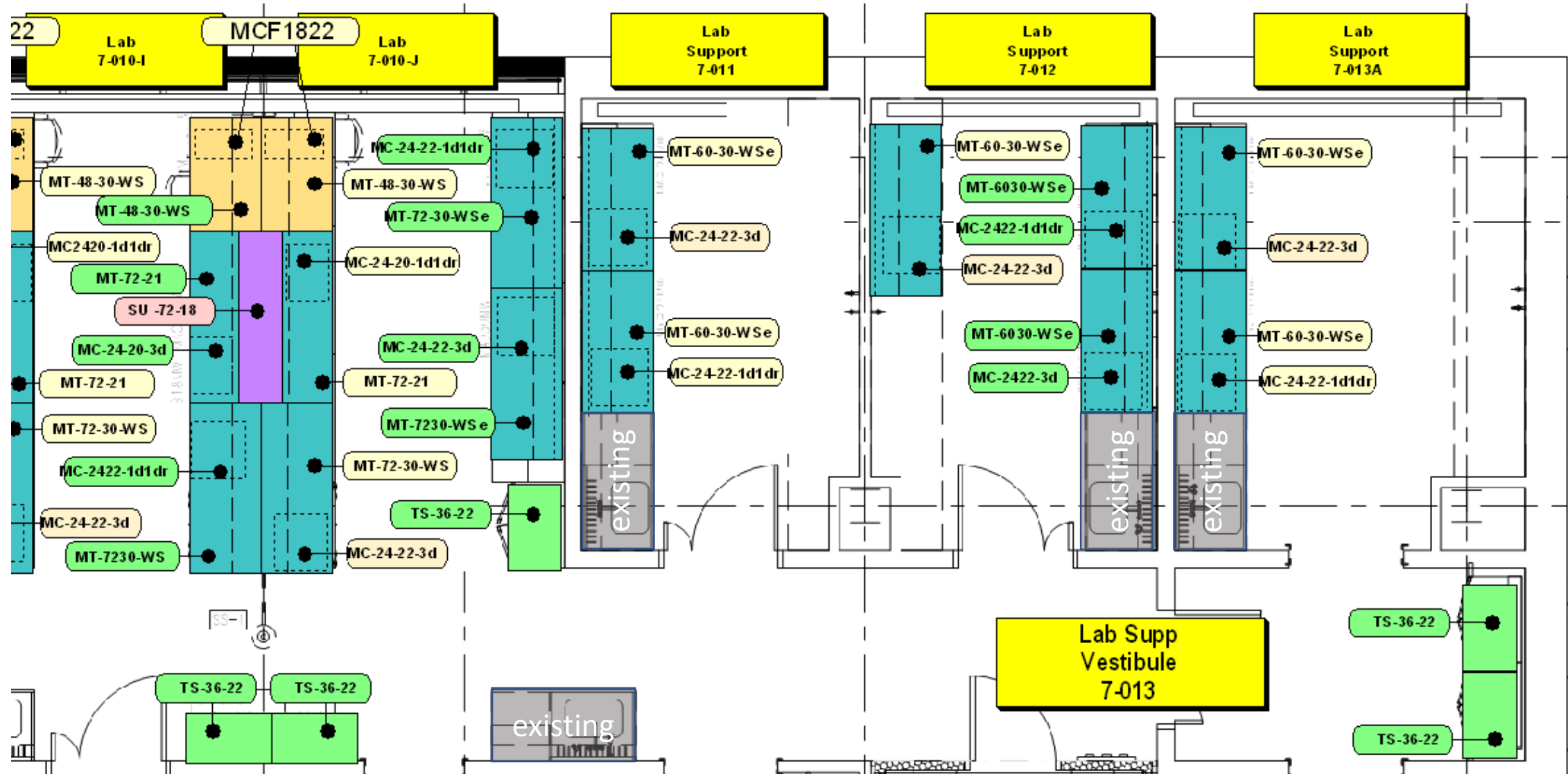
Detailed Laboratory Furniture Plan

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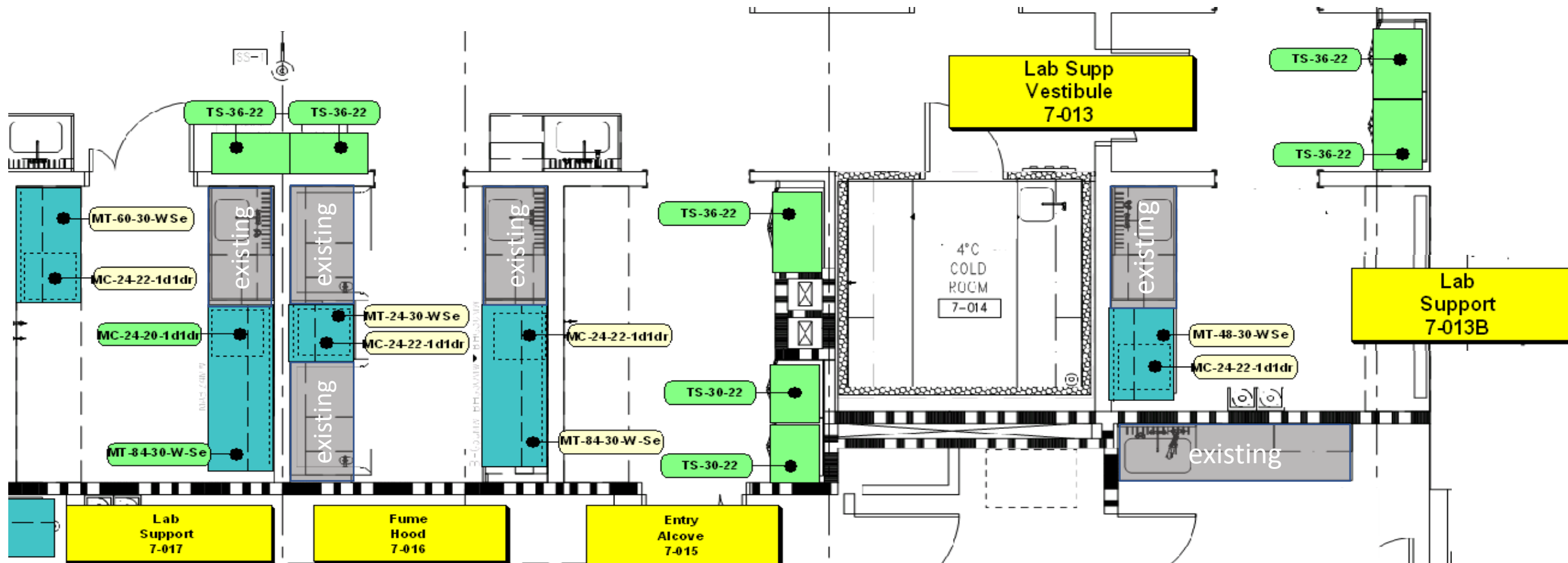
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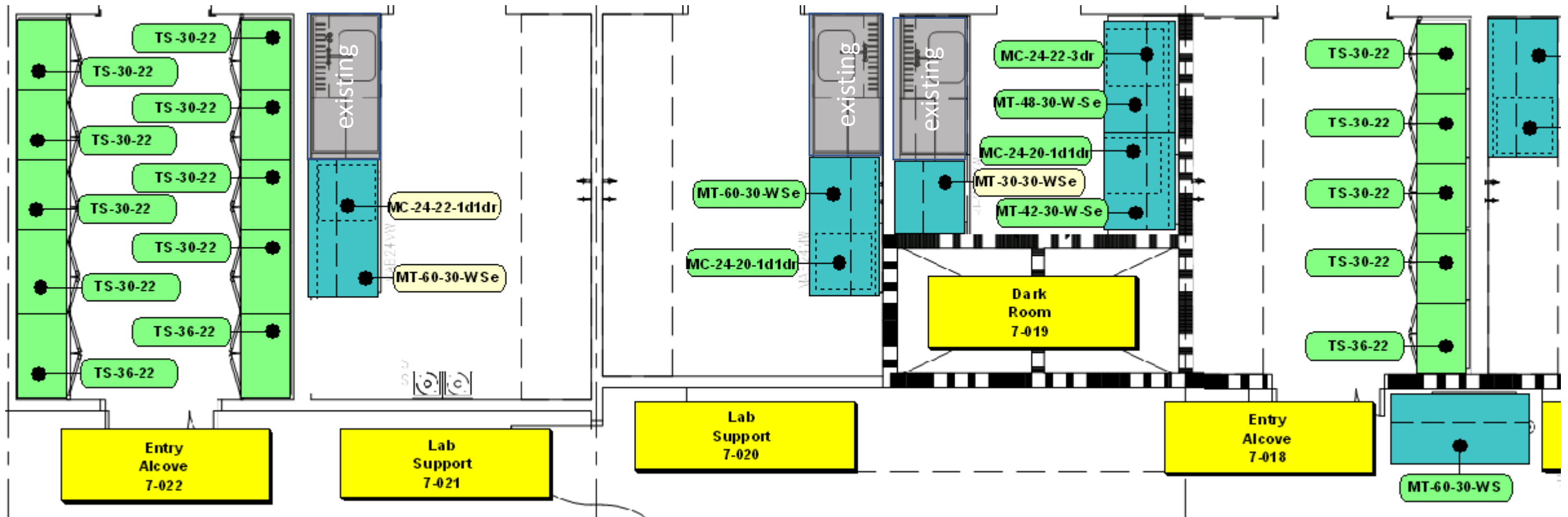
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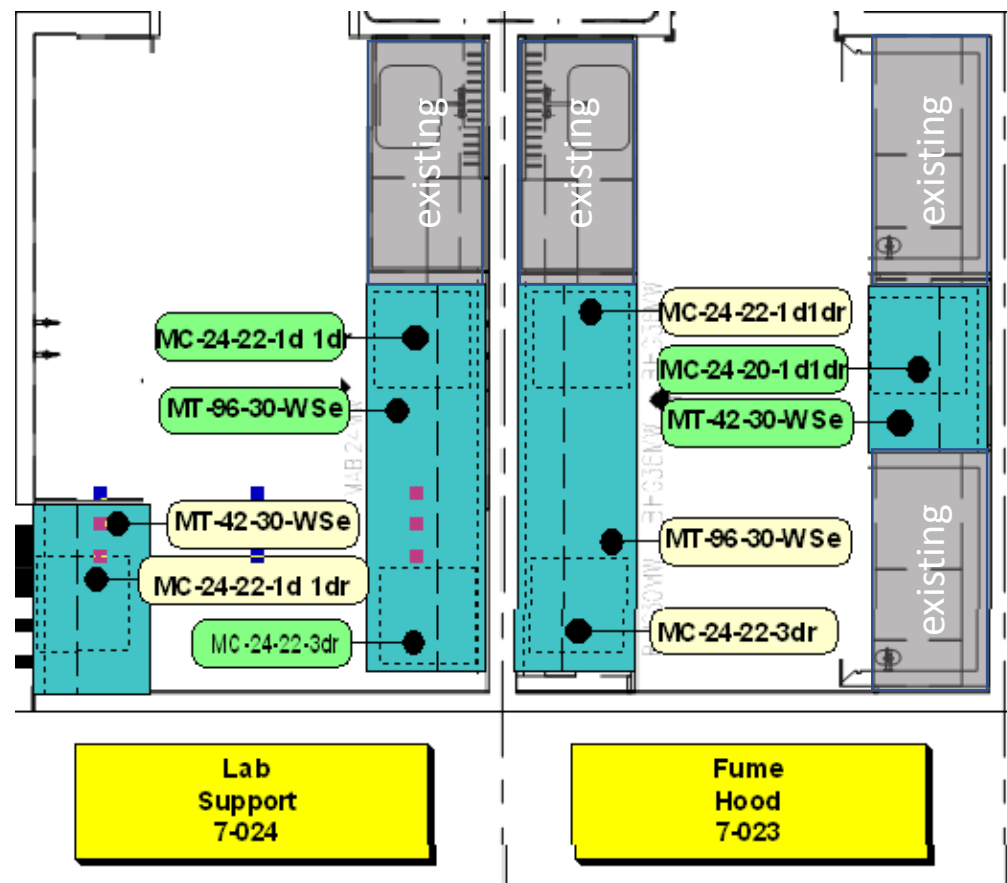
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Detailed Laboratory Furniture Plan

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DORMITORY AUTHORITY OF THE STATE OF NEW YORK
("DASNY")
515 Broadway, Albany, New York 12207

SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

Project Site Logistics
Fixtures, Furniture & Equipment Deliveries

A. Project Overview:

1. SUNY Downtown Medical College's New Academic Building consists of 1 (one) building(s) and contains approximately 106,500 GSF square feet of space spread across 8 floors. The New Academic Building consists of learning spaces, including simulation labs; a library/learning commons; meeting/function space; administrative offices; and student activity areas.
2. The facility is located at 450 Clarkson Avenue in Brooklyn, New York. Deliveries to the buildings are via the loading dock located at Lenox Road.
3. Occupancy is scheduled to occur July 2018.

B. Site Visit, Conditions and Logistics:

1. All vendors are responsible for scheduling a site visit to assess logistical delivery issues and site conditions. DASNY shall presume all vendors have visited the project site and verified existing field conditions. All visits must be coordinated with Facilities Maintenance & Design at SUNY Downstate.
2. Each vendor shall be responsible for assessing all site logistics, including appropriate truck size, loading dock conditions and gate availability, and shall be responsible for providing and fitting equipment in locations, as required. All vendors shall assume full responsibility for all equipment and accessories required to unload furniture and/or equipment at the dock.
3. If the site is still under construction at the time of delivery and/or installation, all workers entering the site must wear the required Personal Protective Equipment (PPE) including safety vests, hard hats, work boots, etc., in accordance with OSHA and other authorities having jurisdiction. No employees will be permitted on-site without proper PPE, no exceptions.
4. All loading dock and/or elevator usage must be coordinated with Bob Matychak, a minimum of seven (7) calendar days in advance of deliveries. Delivery dates and times are to be approved 30 days prior, in writing; Tel.: 718-270-4671; Mobile 917-225-9521. Deliveries will not be accepted without written approval from SUNY Downstate Campus. Attempts to deliver without appropriate authorization may be rejected at the vendor's expense.

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SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

C. Dock and Site Restrictions:

1. The loading dock is located on _Lenox Road between East 34th and East 35th Streets__
 - i. The loading dock does not have a dock leveler.
 - ii. Refer to Drawing(s) for Loading Dock details. –see attached pdf
 - iii. There is a staging area located in the building
2. Vendors shall provide flagmen with vests during deliveries to direct pedestrian and vehicular traffic, as required.
3. Dumpsters will not be available. Vendors shall be responsible for daily removal of debris off site. All vendors shall be responsible for obeying all site rules and established protocol.
4. Installation work shall include unloading, unpacking and delivering to respective floor locations.

D. Elevator Information:

- Service Elevator 1.
 - a. Cab Interior
 - b. Doorway:
 - c. Capacity: 5000 LB
- Service Elevator 2, etc.
 - a. Cab Interior:
 - b. Doorway:
 - c. Capacity:

At delivery, the vendor will be not be provided with exclusive use of the freight elevator for the area(s) where delivery will take place. Other Contractors may be currently working in the building and will be shared.

1. Vendors are responsible for confirming the dimension of the elevators cabs and doors before delivery.
2. Elevator protection: By vendors.

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SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

3. A person dedicated to operate the Freight Elevator is required by the vendor.

E. Building Protection:

1. The vendor shall be responsible for the protection of all access and work areas, including, but not limited to walls, doors etc., but not flooring. Flooring protection will be by the vendors. The vendor will be held responsible for the repair or replacement of any damage to the building, grounds, walls, and flooring due to the delivery and installation of the product.
2. All delivery paths (walls, etc.) will be protected and maintained, with paper and masonite. The utilization of steel-wheel dollies is prohibited.
3. Furniture/Equipment Protection: All furniture/equipment work surfaces shall be protected after installation is completed. The work surface protection shall be removed by others at a later date.

F. Delivery Schedule:

1. All deliveries shall occur from 7:30 am to 3:00 pm.
2. The Vendor shall be responsible for coordinating permitting for their deliveries in the street as required with the City of New York.
3. The Vendor shall be responsible for coordinating exact delivery dates and times with the project site. Only products that can be immediately installed in a completed space shall be delivered, to avoid staging and on-site storage. The Vendor shall be responsible for temporarily storing materials in a secure warehouse for a period of up to 30 days from DASNY's requested delivery date at no additional cost. The Vendor shall be responsible for the rejection of product delivery, replacement, repair or any other corrective action required, for items received damaged, soiled or not conforming to the detailed specifications.

G. Tentative Fixtures, Furniture and Equipment Delivery Schedule:

1. Installation of furniture can begin after employees completing the Campus On-boarding requirements.
2. Installation of fixtures and equipment can begin on _after completing Campus On-boarding requirements for Contractor employees accessing the project site.

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SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

H. Supervision:

1. A full-time Coordinating Project Manager and a minimum of one (1) Coordinating Superintendent/Foreman per floor shall be engaged while delivery and installation work are performed.

I. Parking:

1. Is Parking available on-site? None, The availability of public street parking is extremely limited and again permitting is the responsibility of each vendor for their deliveries by the City of New York.

J. Punch list:

1. Each vendor is responsible for contacting DASNY's designated representative at the end of each workday to review project status and obtain sign-off for daily work.
2. The furniture/equipment vendor shall schedule a punch list review with DASNY's designated representative. DASNY reserves the right to withhold 5% payment pending resolution of open punch list items.

SECURITY REQUIREMENTS

- A. Downstate Campus Public Safety office will control access to the facility only; any/all site security is the responsibility of each vendor.
- B. Provide Criminal Background information within 30 days following Award of Contract, personal information for each worker expected to be assigned to the Project. Campus Approval of the submission of employee Criminal Background Checks is required prior to mobilizing to the Project site.
- C. Downstate Campus Public Safety Office will provide workers and office personnel with ID badges which shall be worn at all times. A fee of \$20.00 will be charged to for badges.
- D. Workers and visitors shall sign in each day and receive an ID badge. Each is required to sign out and return the ID badge when their work or visit for that day is complete. Badges shall not leave the facility.
- E. All Contractors shall submit Daily Reports to FM&D Project Manager by 10:00 am the following day. Daily Reports are to record, at the minimum, the date, temperature, weather conditions, number of workforce, subcontractors, work activities and location, and special observations. Submission of Daily Reports to FM&D Project Manager will be a condition of monthly payments to the Contractor.

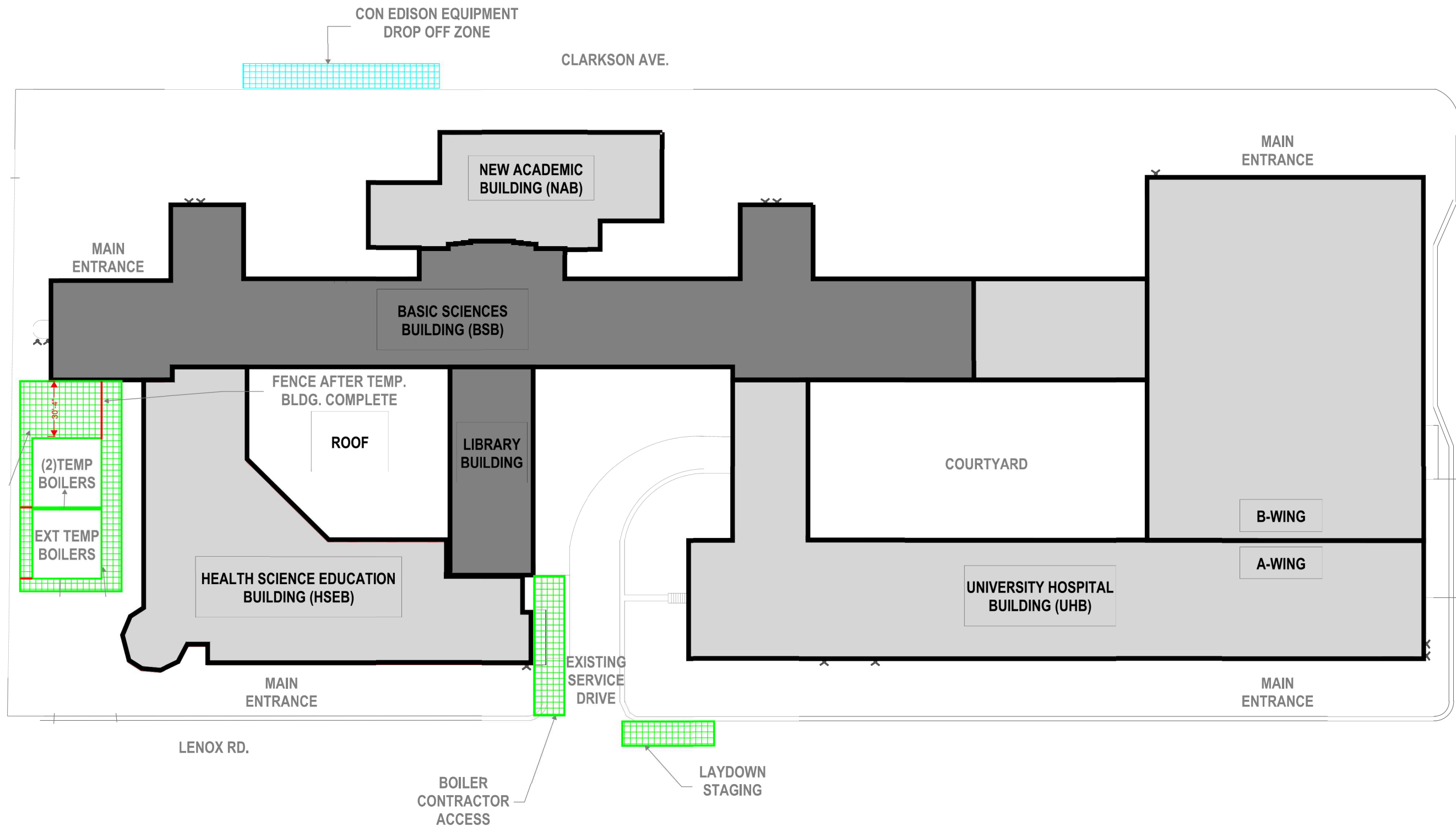
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SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

SPECIAL PROVISIONS

- A. This is a designated Hard Hat Project.
- B. There shall be no eating in the work area.
- C. Smoking is not permitted in the building, near air intakes, or within 30 feet of any building entrance or outdoor-air intakes.
- D. Use of alcohol and controlled substances on the project site is not permitted.
- E. Contractors are to comply with Owner's requirements for drug and background screening of contractor personnel working on the project site. Contractors are required to maintain a list of approved, screened personnel with a Nationally recognized background search company- see attached list of criteria_.
- F. No signs or advertising material will be permitted on the job site.



SUNY Downstate Medical Center
CONTRACTOR ON-BOARDING REQUIREMENTS (HOSPITAL)

A. Supplemental Human Resources Requirements

Scope: Contractors/Vendors working within the Hospital or Clinical Areas

Objective: Provide additional guidelines to contractor, sub-contractors vendors and their employees to ensure patient safety in accordance with CMS, NYSDOH and TJC requirements.

Contractors shall fulfill the following requirements prior to commencing ANY project related construction work within SUNY Downstate/UHB Facility:

I. Contractor Health Screening Requirements

Current Health Screening and Physical, including all the following

- **Varicella (chickenpox) – 2 Doses or positive titers**
- **Measles, Mumps, Rubella (MMR) – 2 Doses or positive titers. Contractors will be allowed to work after the first dose. Waiting time between vaccines shall be one month. The employee's file shall remain open pending the administering of the second (2nd) inoculation. Employee Health Services shall notify the DMC project mgr. accordingly.**
- **TB (PPD or Quantiferon)**
- **Influenza (during flu season). Surgical mask must be worn if vaccine not received**
- **Fit-Testing (if required)**

II. Professional License and Certificate as applicable to trade

III. Post Contract SUNY Downstate/UHB Facility– Hospital Orientation and Training

Mandatory Training

- **Conducted on campus at no cost to the Contractors, Sub-Contractors or vendor**
- **Patient Rights, Confidentiality and HIPAA**
- **Fire and Safety**
- **Blood Borne Pathogens and Infection Prevention**
- **Behavior and Etiquette**

- Department specific orientation to specialty areas such as the ICUs, Transplant, Pediatrics, Surgical Suites.
- Safety and security in closed units (pediatrics and L/D)
- ILSM/ICRA Monitoring Requirements during construction (Project Manager Monitoring Tool)

SUNY Downstate Medical Center

CONTRACTOR ON-BOARDING REQUIREMENTS (HOSPITAL)

IV Criminal Background Checks

In Addition, The Following Background Results Must Be Provided:

1. Motor Vehicle Report
2. Social Security Address/Alias Trace
3. Federal/State Criminal History (7 years) including Sex Offender Search
4. Office of Inspectors General Sanctions (OIG)
5. National Wants and Warrants

Procedure for submission of documentation

1. The contractor shall submit all required documentation for each employee. Place documentation in in two (2) separate envelopes, immunization history in one envelope addressed to Employee Health Services (EHS), 2nd envelope criminal background checks addressed to the Dept. of Human Resource (HR) in a sealed envelope and submit to the designated logistics construction manager (CM). Contents of the enclosed material shall be marked on the face of the envelope.
2. Designated site representative or construction manager will forward the sealed envelopes to the campus assigned project mgr. who will in turn forward to the Department of Human Resources and Employee Health Services for their reviews.
3. Review and turnaround by The Department of human Recourses (HR) including Employee Health Services (EHS) estimated at the campus 2.5 weeks maximum. Each Department in turn will notify the campus project manager of their determination regarding the employee background reviews.
4. **Note To The Contractor**
Prior to the issuance of I.D. badges, the contractor must have completed all On-Boarding requirements. The contractor shall not proceed with any work without having obtained approval and clearance from the Campus.

SUNY Downstate Medical Center
Contractor On-Boarding Requirements for Non-Hospital Locations

Criminal Background Checks

Contractor must maintain a file including documentation of the compliance of each employee working at SUNY-DMC's and must make said file available via fax transmission or other reasonably requested medium to SUNY_DMC's Human Resources Department when requested, upon four (4) hours' notice. At a minimum such file must include for each individual, copies of any license, registration, certification and/or permits.

Contractor shall determine, through use of an appropriate consumer reporting agency, whether every individual under contract has at any time been convicted of a crime under any federal or state law, and shall furnish SUNY-DMC with copy of the report resulting from such process. In the event that the individual has been so convicted, SUNY-DMC shall determine, in its sole discretion, whether assignment of such individual is acceptable.

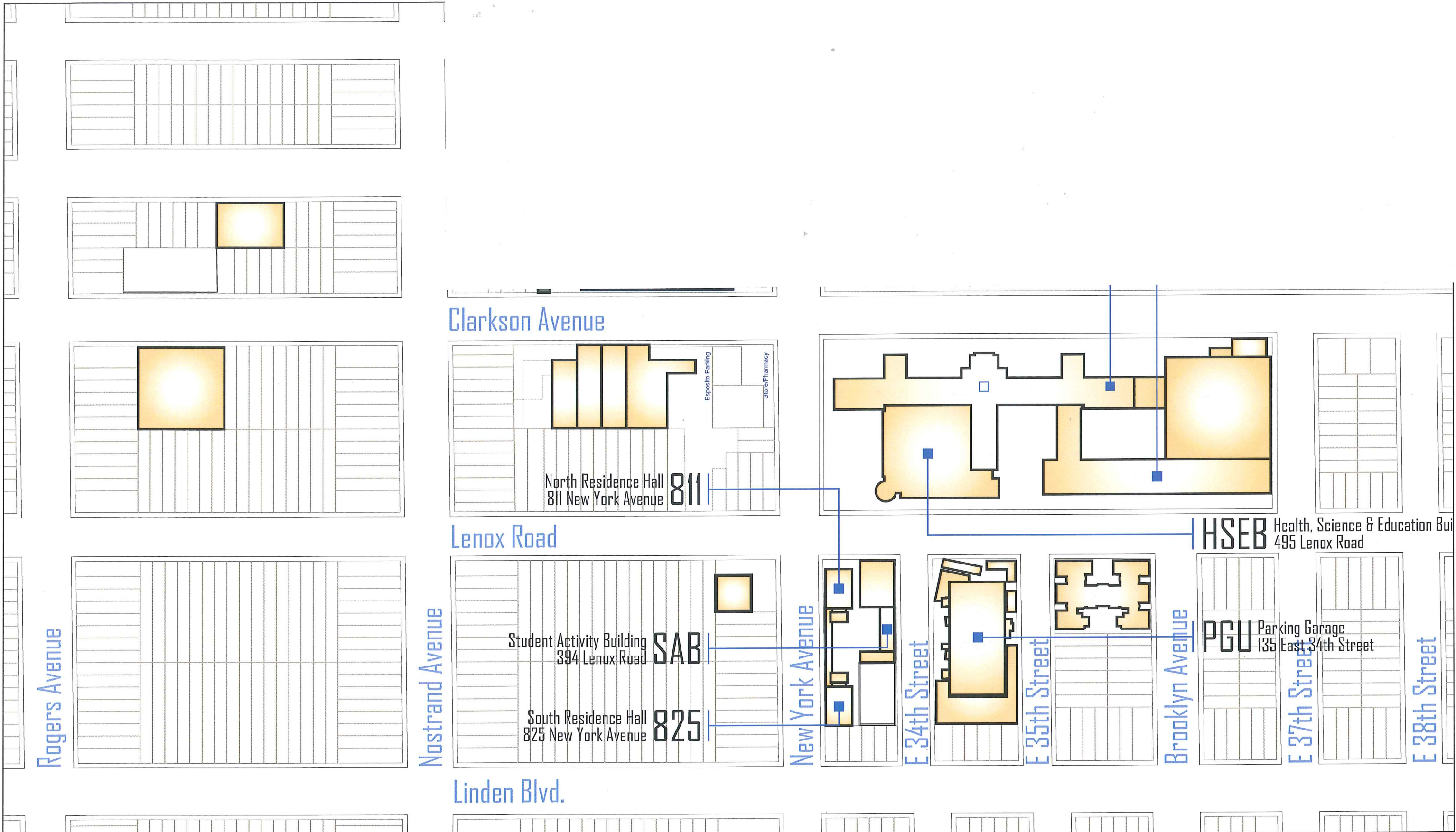
In addition to the above, the contractor must provide the following background results:

1. Motor Vehicle Report
2. Social Security Address/Alias Trace
3. Federal/State Criminal History (7 years) including Sex Offender Search
4. Office of Inspectors General Sanctions (OIG)
5. National Wants and Warrants

Procedure for submission of documentation

1. The contractor shall submit all required documentation for each employee. Place Documentation in a sealed envelope and submit to the designated site representative or construction manager (CM). Contents of the enclosed material shall be marked on the face of the envelope.
2. Designated site representative or construction manager will forward the sealed envelope to the campus assigned project manager who will in turn forward to the department of Human Resources for their review.
3. Review and turnaround by The Department of Human Resource (HR) is estimated at the campus 4 weeks maximum. The Department of Human Resources in turn will notify the campus project manager of their determination regarding employee background reviews.
4. **Note To The Contractor**
Prior to the issuance of I.D. badges, the contractor must have completed all On-Boarding requirements. The contractor shall not proceed with any work without having obtained approval and clearance from the Campus.

The campus reserves the right to modify the requirements from time to time. The contractor shall be required to fulfil the requirements as may be required.



HEALTH SCIENCE CENTER AT BROOKLYN CAMPUS LOCATION PLAN