



UTC NEW DINING FACILITY & MACLELLAN GYM UPGRADES



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01 OVERVIEW

1.0 Overview

1.1 Executive Summary

OVERVIEW

HED (Harley Ellis Devereaux) was engaged to lead the programming and planning effort for a new Dining Facility at the University of Tennessee at Chattanooga (UTC). The proposed facility will be located adjacent to Maclellan Gym on the current natatorium/Health Sciences site and will require demolition of the existing natatorium and connector structure to accommodate the new building footprint. The current natatorium is vacant and has not been utilized in years. The connector building between the gym and the natatorium houses UT Health Services along with various offices and locker rooms.

The new Dining Facility is intended to become the primary dining destination to support projected enrollment growth on campus. The current dining facility, the Crossroads Dining Hall, will remain active and continue to serve campus. The 2023 Campus Master Plan projects steady enrollment growth, with a projected enrollment of approximately 13,000 students by 2031. These growth projections, combined with current dining utilization data, informed the project's seat count and overall facility sizing.

The programming effort evaluated multiple massing and seat count scenarios ranging from approximately 450 seats to over 1,000 seats. After review of enrollment projections, operational data, cost benchmarking, and stakeholder priorities, the team selected a two-story preferred option totaling approximately 27,000 SF and 465 seats (excluding outdoor seating and soft seating). This facility is planned as an All-You-Care-to-Eat (AYCTE) dining operation with a central kitchen and diverse food platforms.

VISION AND INTENT

From the outset, HED's approach centered on listening, benchmarking, data collection, and collaborative decision-making. The programming process included:

- Weekly stakeholder workshops
- Operational analysis of current dining facility
- Projected operational needs
- Projected enrollment review
- Cost benchmarking
- Visioning and goal setting sessions

PROGRAM DRIVERS

With a project budget of \$30M, the design team looked at several program drivers to reach consensus on the preferred option.

Enrollment & Meal Demand

- Current and projected demand ranges from 4,000–5,000 meals per day
- Early studies suggested a possible need for up to 1,080 seats to support peak demand and enrollment growth
- Through cost analysis and utilization metrics (including average 60-minute length of stay time), the team refined the seat count to align operational goals with budget realities
- Length of stay time was reduced to 50 minutes and meal count was reduced to 3,500 meals per day. This still supported peak meal times of lunch and dinner

Dining Model

The facility will operate as AYCTE and include:

- Multiple food platforms (vegan/vegetarian, True Balance, deli, grill, pizza, pasta, bakery, dessert, international, etc.)
- Self-serve beverage model
- Central kitchen with scratch and prepared components
- Bakery component with display considerations

Site & Infrastructure

Key site constraints and considerations include:

- Demolition of the Maclellan Gym connector (UT Health Services)
- Relocation of MEP systems serving the gym
- Controlled truck access and loading configuration
- Existing utilities located within the existing parking lot to remain

MACLELLAN GYM RELOCATIONS & ENABLING WORK

The proposed Dining Facility project requires demolition of the existing natatorium and connector structure adjoining Maclellan Gym. As part of this effort, several athletic support spaces, utilities,

and building systems currently located within the connector and natatorium areas will be relocated and renovated to maintain full operation of Maclellan Gym throughout construction.

The programming effort evaluated multiple relocation and addition strategies to minimize disruption to existing gym operations while improving long-term functionality and accessibility. The preferred approach includes a new approximately 3,000 SF addition at the south side of Maclellan Gym, aligned with the existing lower-level wrestling area and integrated with targeted interior renovations.

The proposed Maclellan Gym scope includes:

- Relocation of wrestling program spaces displaced by demolition
- Renovation at the north side of the gym
- Reconfiguration of exterior access and circulation
- Utility and infrastructure enabling work, including relocation of mechanical systems currently located within the natatorium

PREFERRED OPTION SUMMARY – DINING FACILITY

Following evaluation of one-story and two-story options, the stakeholder group selected the two-story scheme as the preferred option.

Preferred Option Characteristics

- Approx. 27,000 SF
- 465 total seats (excluding outdoor/soft seating)
- Level 1: Primary server, dining, community space, BOH, loading
- Level 2: Additional seating, outdoor terrace, private dining, and two (2) food platforms
- Double-height volume to reinforce openness and campus presence

The two-story scheme was preferred because it:

- Creates a dynamic, light-filled interior volume
- Expands seating capacity without significantly increasing footprint
- Provides opportunities for private dining and event use

- Enhances campus presence along Douglas Street
- Maximizes greenscape and entry plaza opportunities

Refer to Section 07 Cost Estimate outlining the preferred option ROM costs, escalated to the midpoint of construction with a construction start date of October 2026.

BUDGET & COST ALIGNMENT

The selected option represents a balanced approach, aligning program goals with financial parameters while maintaining long-term flexibility.

SCHEDULE ALIGNMENT

The design team and stakeholder group discussed at length a design and construction timeline for this combined project of the enabling projects and the dining facility. The proposed project schedule reflects a very aggressive phased implementation strategy intended to maintain continuous operation of Maclellan Gym and adjacent campus facilities throughout construction.

- Enabling projects design and bid – 6 to 7 Months
 - Relocation of existing MEP infrastructure serving Maclellan Gym
 - New medium-voltage electrical distribution and transformer infrastructure
 - Maclellan Gym addition and interior renovations
 - Communications and fire alarm relocation
 - Accessible circulation modifications and exterior ramp improvements
 - Utility separation between Maclellan Gym and the future Dining Facility
- Enabling projects construction – 10 months
 - Commissioning and activation of relocated utility systems prior to demolition activities
- Demolition of the natatorium and connector structures ideally overlaps the conclusion of enabling work where feasible to compress the overall project schedule
- Dining Facility design – Commence concurrently with enabling projects
 - Utilize early release packages
- Dining Facility construction – 22 Months

02 EXISTING CONDITIONS

2.0 Existing Conditions

2.1 Context Map & Site Constraints

CONTEXT & SITE CONSTRAINTS & OPPORTUNITIES

The proposed UTC Dining Facility site is located at the north edge of Maclellan Gym at the intersection of Mocs Alumni Drive and Douglas Street. The project area occupies the footprint of the former natatorium and associated connector spaces adjoining the existing gymnasium.

The Maclellan Gym complex includes:

- Main gymnasium and athletic support spaces
- Former lap and diving pool areas
- Locker rooms and support facilities
- Existing mechanical and electrical infrastructure
- The Math Plaza and adjacent student activity areas

While the natatorium and connector structures are physically separated from the primary gym volume, the buildings remain mechanically and electrically interconnected. The proposed dining facility project therefore requires careful demolition sequencing, utility relocation, and phased enabling work to maintain continuous operation of Maclellan Gym and adjacent campus facilities throughout construction.

The proposed Dining Facility will become a prominent campus gateway project due to its visibility from Mocs Alumni Drive, Douglas Street, and the University Center pedestrian corridor. The site is heavily constrained by existing underground infrastructure, active pedestrian circulation, adjacent athletic operations, and campus utility systems serving surrounding facilities.

Existing Building Conditions

The existing natatorium structure includes depressed pool slab conditions, reinforced concrete construction, associated plumbing systems, and mechanical infrastructure currently serving portions of Maclellan Gym. Demolition will require removal of pool basins,

deck slabs, associated foundations, mechanical equipment, and related utility infrastructure.

The interface between the natatorium, connector building, and existing gym requires careful coordination to maintain structural stability, weather protection, utility continuity, and ongoing campus operations throughout demolition and construction activities.

EXISTING UTILITY INFRASTRUCTURE

Chilled Water / Heating Hot Water

Existing campus chilled water and heating hot water infrastructure runs adjacent to the natatorium footprint and along Douglas Street. These systems serve multiple surrounding campus facilities and represent critical campus infrastructure.

The project seeks to minimize major utility relocations where feasible and instead coordinate phased extensions and rerouting as part of the enabling work strategy.

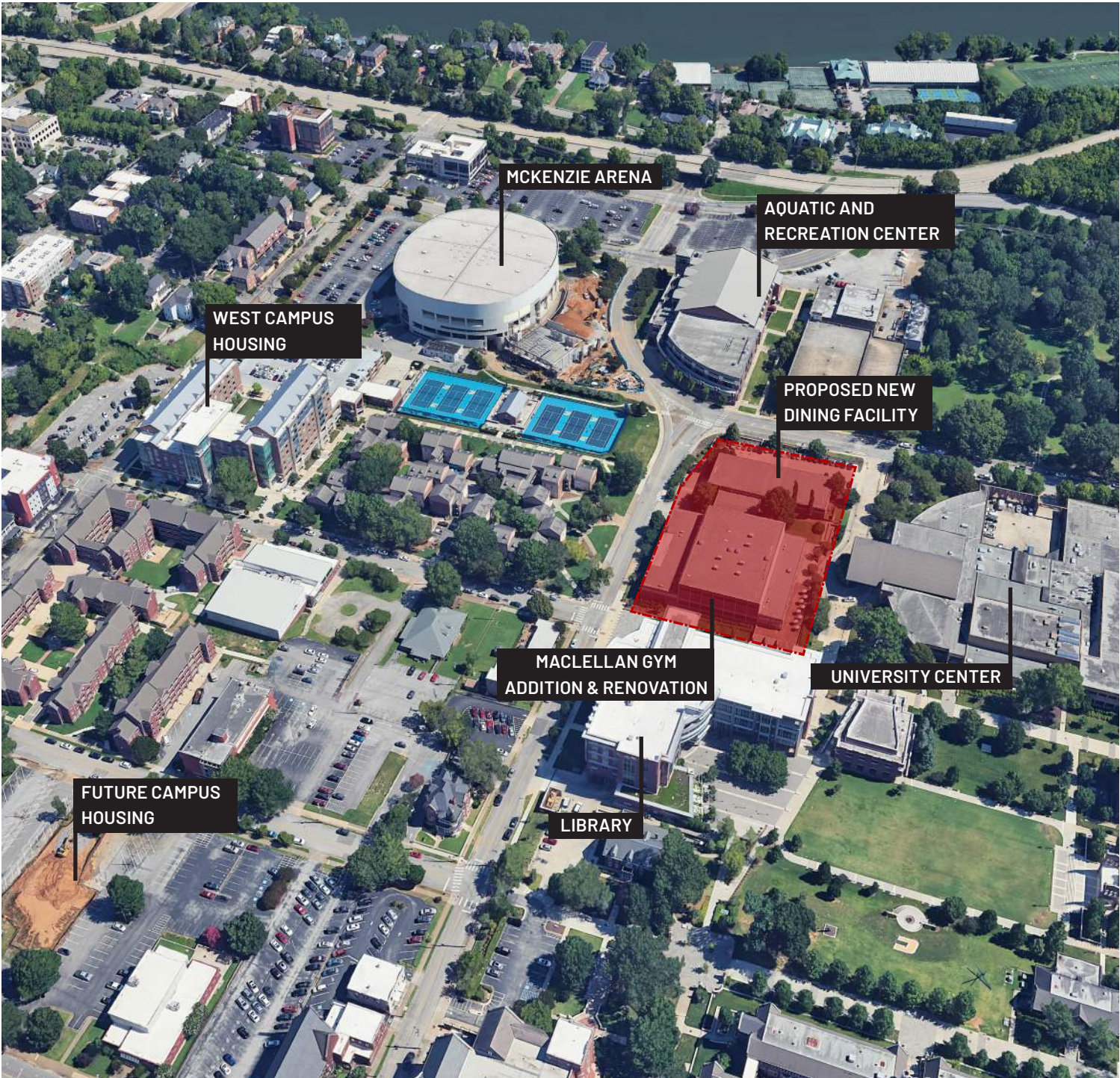
Domestic Water & Fire Sprinkler

Existing domestic water and fire protection infrastructure is routed throughout the project area and surrounding streets, including multiple underground valves, manholes, and service connections.

The design will require careful coordination of utility protection, new service tie-ins, and fire protection demands associated with the commercial kitchen program and Maclellan Gym upgrades.

Existing infrastructure includes:

- Domestic water service
- Fire sprinkler supply
- Underground valves and manholes
- Campus utility distribution mains



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Existing Conditions

Context Map & Site Constraints

Sewer & Storm Infrastructure

Existing site documentation indicates combined sanitary sewer and dedicated storm infrastructure along Douglas Street and adjacent portions of the site.

The project shall give consideration to:

- Grease interceptor placement
- Separation of sanitary and storm systems
- Coordination with combined sewer infrastructure
- Protection of existing campus drainage systems

Because of the commercial kitchen program and loading/service operations, utility coordination and stormwater management will be critical components of future design phases.

Electrical Distribution & Communications

Existing electrical duct banks, underground distribution lines, communications infrastructure, and associated manholes are located adjacent to the proposed dining facility footprint.

The project includes phased electrical and communications enabling work to separate Maclellan Gym systems from the demolished natatorium infrastructure while establishing new electrical service for both the gym and dining facility.

Consideration shall be given to:

- Protection or relocation of existing electrical duct banks
- Coordination with campus electrical distribution systems
- Avoidance of major rerouting where feasible
- New transformer and switchgear infrastructure
- Communications systems serving adjacent campus buildings

Existing Mechanical & Campus Systems

The primary mechanical systems currently serving Maclellan Gym are located within the natatorium footprint and connector structures scheduled for demolition. As a result, the project requires phased relocation of mechanical, electrical, communications, and fire alarm infrastructure prior to demolition activities.

The gym must remain operational throughout construction; therefore, enabling work and utility sequencing are critical components of the overall project scope.

The proposed utility relocation strategy includes:

- New mechanical room infrastructure within Maclellan Gym
- Separation of gym and dining utility systems
- New chilled water and heating hot water routing
- New medium-voltage electrical distribution
- New communications and fire alarm infrastructure
- Phased demolition of existing natatorium utility systems

Refer to Section 05 for proposed utility phasing diagrams and enabling work sequencing.

DEMOLITION SCOPE OVERVIEW

The proposed dining facility requires:

- Demolition of the former natatorium and connector structures
- Removal of pool basins, deck slabs, and associated foundations
- Removal of existing mechanical and electrical infrastructure
- Isolation and separation of systems currently serving Maclellan Gym
- Relocation of utility infrastructure and transformers
- Regrading of the site to accommodate truck circulation, loading, and unloading
- Removal and reconstruction of existing ADA access routes
- Construction of new athletic support and relocation spaces within Maclellan Gym

The project also includes phased enabling work to maintain continuous operation of Maclellan Gym and adjacent campus facilities throughout demolition and construction activities.

CONSTRAINTS & OPPORTUNITIES

Constraints

- Extensive underground utilities crossing the site
- Combined sewer infrastructure along Douglas Street
- Chilled water and heating hot water lines to remain where feasible
- Electrical duct banks and underground communications infrastructure
- Proximity to active gym and student activity areas
- Significant pedestrian circulation through the site
- Limited laydown and construction staging area
- Ongoing campus operations requiring phased construction sequencing

Opportunities

- Central campus location adjacent to the University Center
- Strong frontage along Douglas Street and Mocs Alumni Drive
- Ability to establish a new campus gateway dining destination
- Opportunity to modernize aging campus infrastructure
- Integration of indoor/outdoor student gathering spaces
- Improved accessibility and circulation around Maclellan Gym
- Long-term flexibility for future campus development

EXISTING SITE DOCUMENTATION

The following pages include existing site documentation, utility information, demolition plans, floor plans, and existing building photographs provided by UTC.

Due to the site’s location within a critical campus infrastructure corridor, maintaining continuous operation of surrounding campus buildings and utility systems throughout construction is imperative.

Stakeholder coordination identified Manhole 1 and Manhole 1A as critical utility structures located within the existing natatorium parking lot. While the proposed dining facility footprint does not directly conflict with these structures or associated underground utilities, careful coordination and protection measures will be required during both design and construction activities.

In addition, several utility systems extending beyond the project site continue to serve buildings across Douglas Street and adjacent campus facilities. These infrastructure constraints should be carefully evaluated throughout future design phases to minimize utility disruptions and maintain campus operations.

Existing Conditions

2.2 Existing Site Documentation

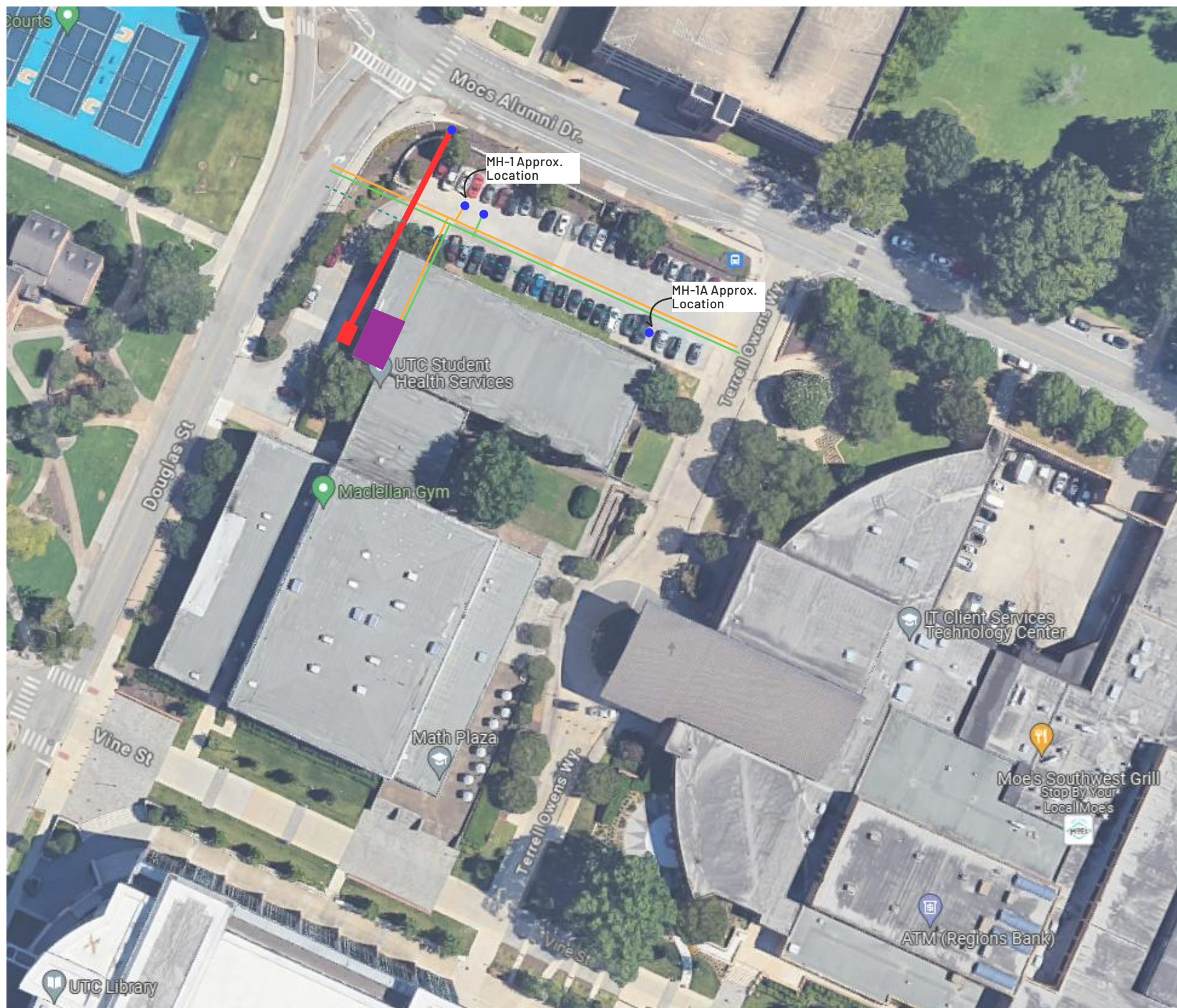
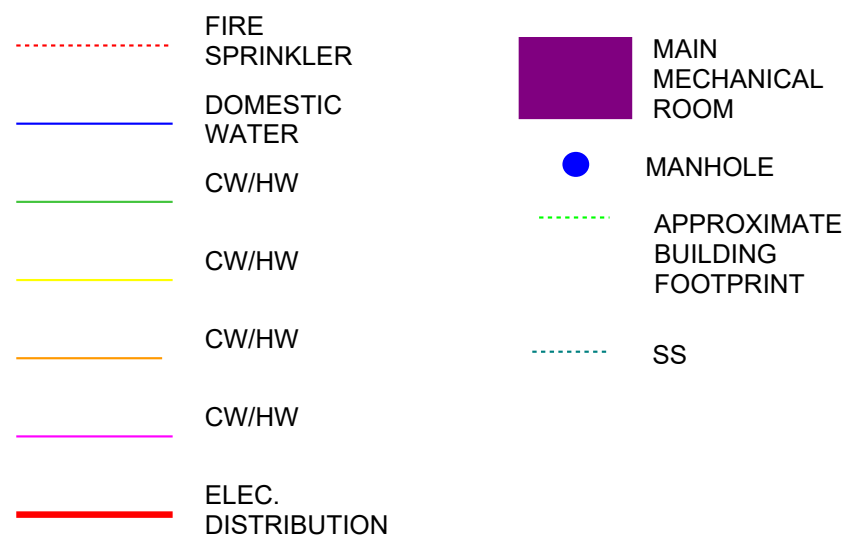
The following pages include the existing site and utility infrastructure as provided by UTC.

Refer to Section 05 for the proposed utility phasing diagrams. Due to the site's location within a critical campus infrastructure corridor, maintaining continuous operation of surrounding campus buildings and utility systems throughout construction is imperative.

Stakeholder coordination identified Manhole 1 and Manhole 1A as critical utility structures located within the existing natatorium parking lot. While the proposed dining facility footprint does not directly conflict with these structures or the associated underground utilities, careful coordination and protection measures will be required during both design and construction activities.

Consideration shall be given to construction staging and laydown areas throughout future design phases. Construction activities, temporary access routes, and material staging shall be coordinated to avoid impacts to existing underground utilities and ongoing campus operations.

In addition, several utility systems extending beyond the project site continue to serve buildings across Douglas Street and adjacent campus facilities. These existing infrastructure constraints should be carefully evaluated throughout future design phases to minimize utility disruptions and maintain campus operations.

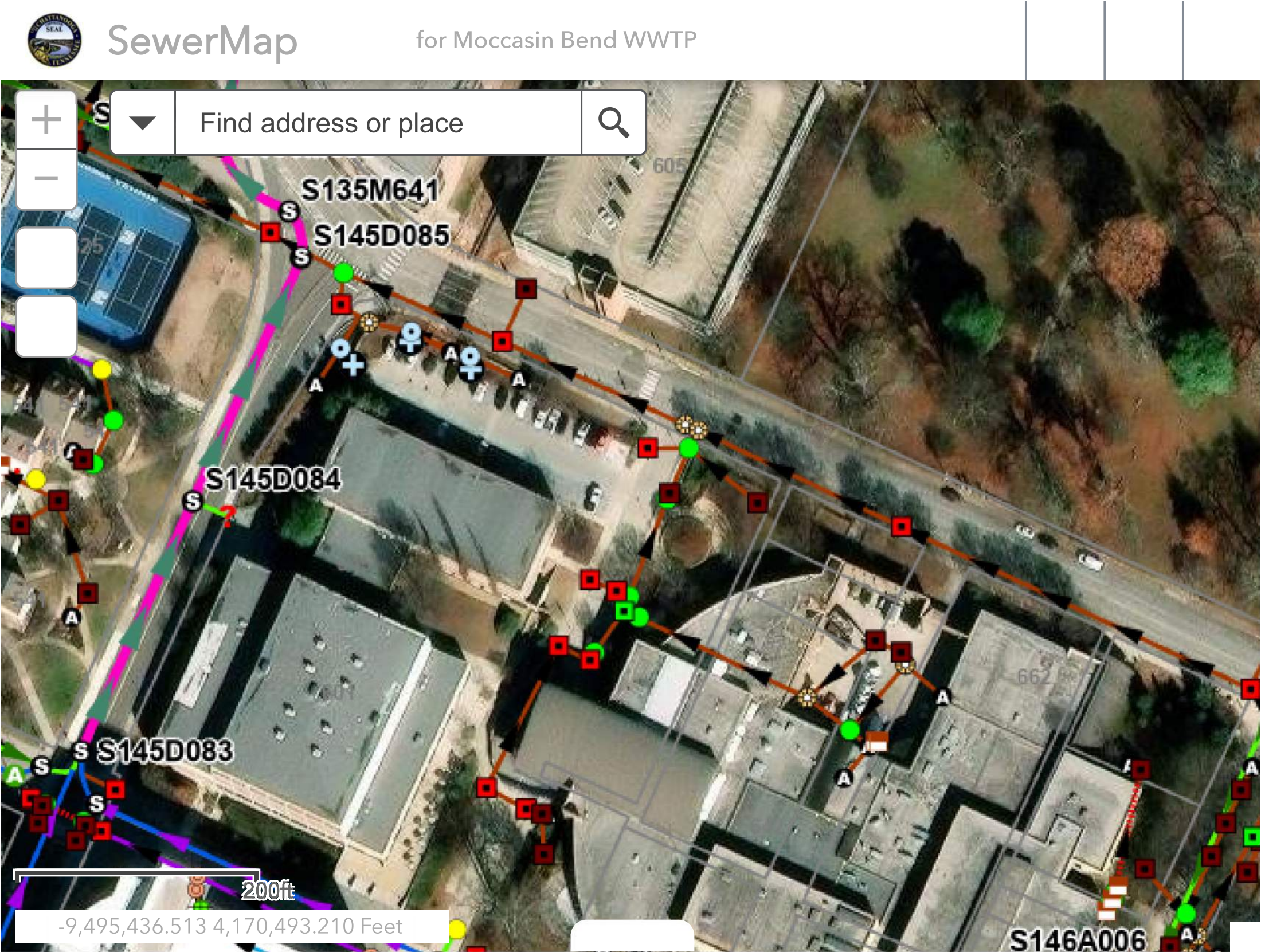


Existing Site Documentation



Existing Conditions

Existing Site Documentation

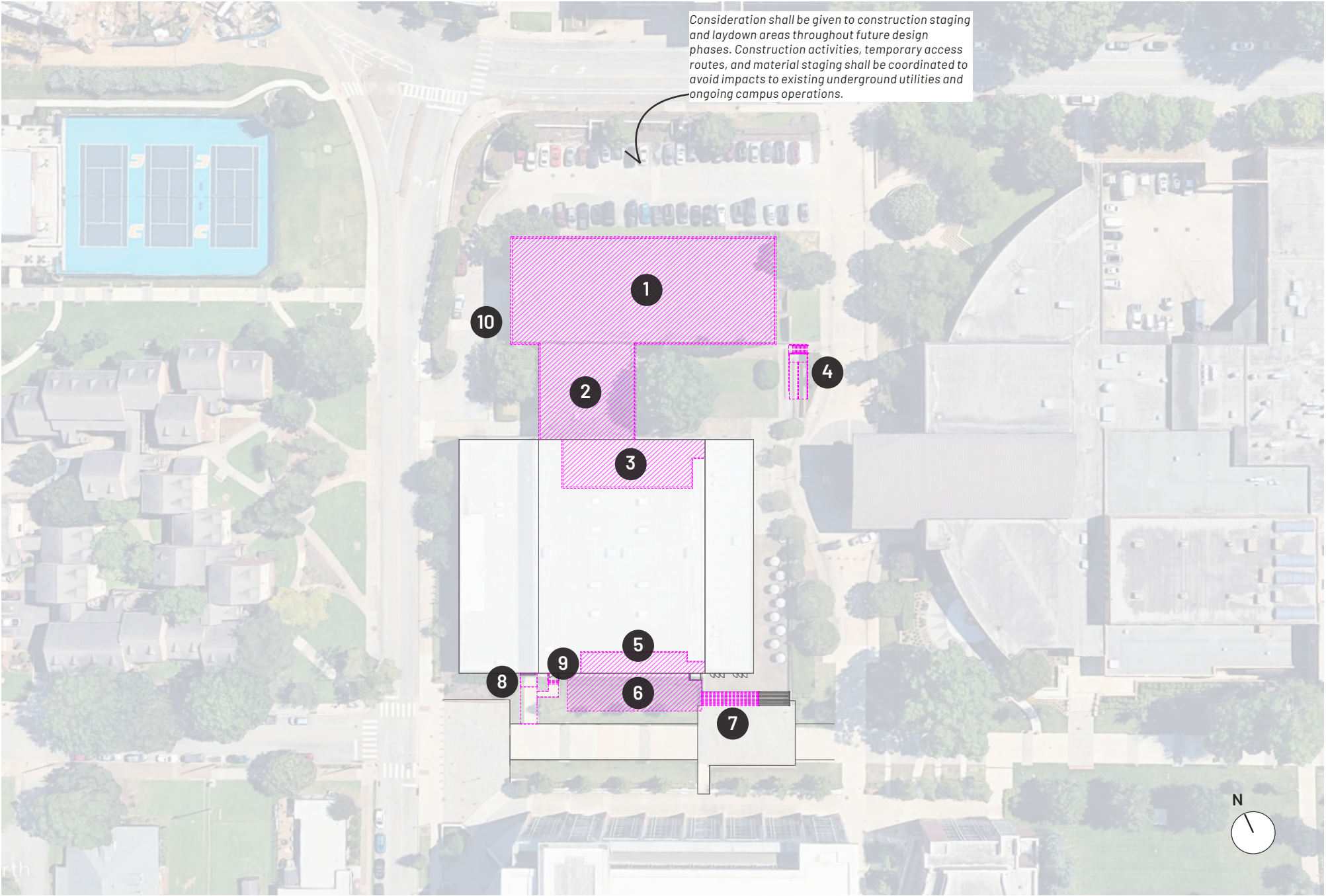


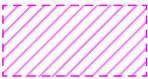
Existing Site Documentation



Existing Conditions

2.3 Demolition Site Plan



 Area of Demolition

- 1 Demo Natatorium Building
- 2 Demo Connector Building
- 3 Interior Renovation at the gym, including mechanical room (Relocated MEP from natatorium)
- 4 Demo exterior stair & ramp (For dining facility truck pass-through)
- 5 Interior renovation at the gym
- 6 Exterior addition to the gym (Depressed to align with the lowest level of the gym)
- 7 Demo exterior stair (For new exterior ramp)
- 8 Demo sidewalk (For new ramp & stair sequence)
- 9 Demo exterior stair (For new ramp & stair sequence)
- 10 Demo existing transformers. Location for new transformers (for both dining and gym) to be located in this general area

Note that the enabling projects must be substantially complete prior to demolition of the natatorium and connector structures and prior to commencement of construction for the new Dining Facility. The enabling scope includes:

- Relocation of all MEP infrastructure currently serving Maclellan Gym from the natatorium and connector areas
- Renovation and expansion of existing mechanical and electrical spaces within Maclellan Gym
- Commissioning and activation of relocated utility systems prior to demolition activities
- Maclellan Gym addition and interior renovation scope
- Exterior improvements at the south side of Maclellan Gym, including new accessible ramp and stair modifications

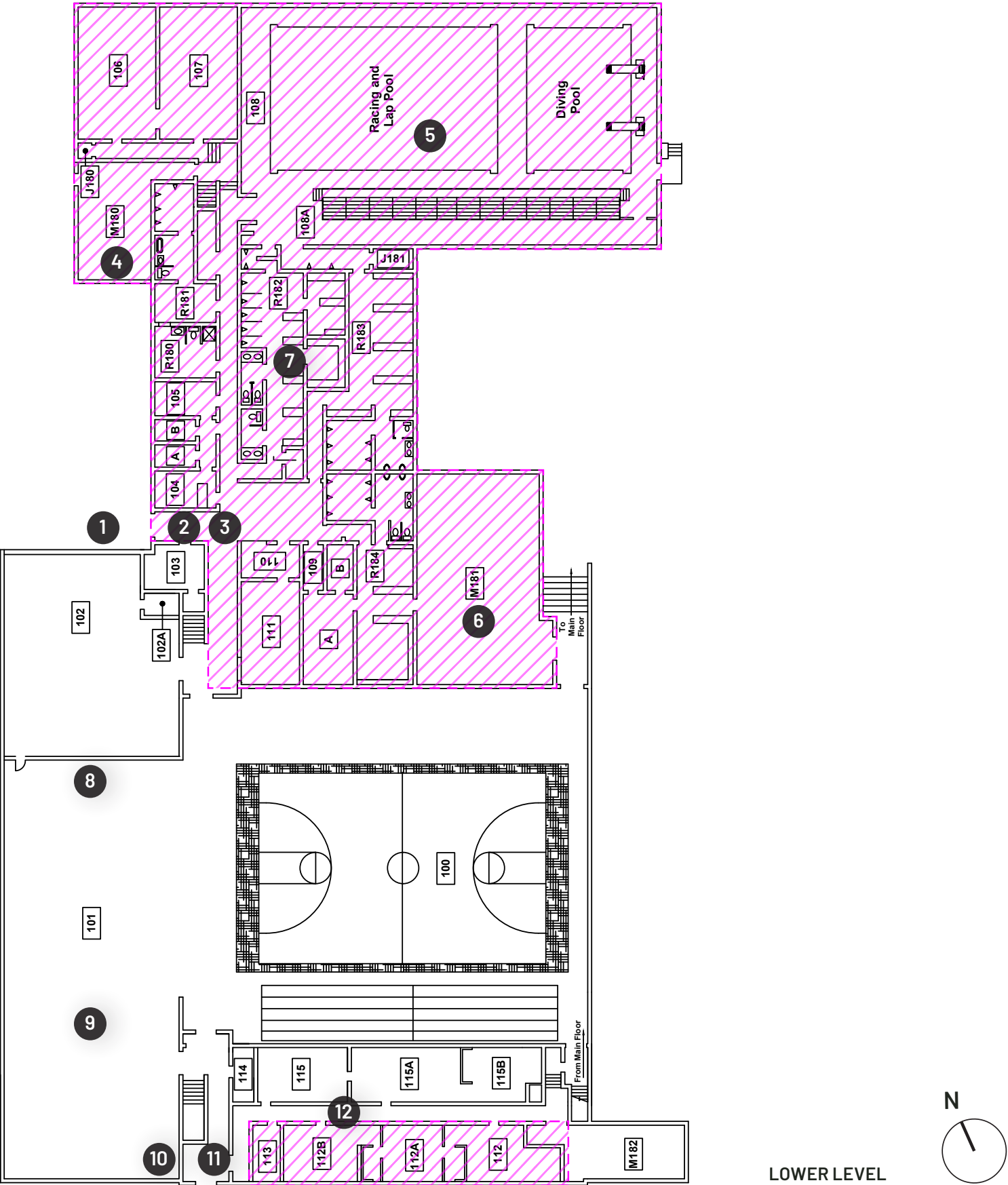
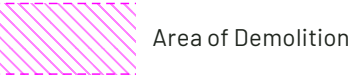
Existing Conditions

2.4 Existing Floor Plans

Lower Level | Demo Floor Plan

DEMOLITION SCOPE

The floor plan to the right indicates the existing Mac Gym, Natatorium, and connector layout. The demolition scope is indicated in the magenta hatch.



LOWER LEVEL



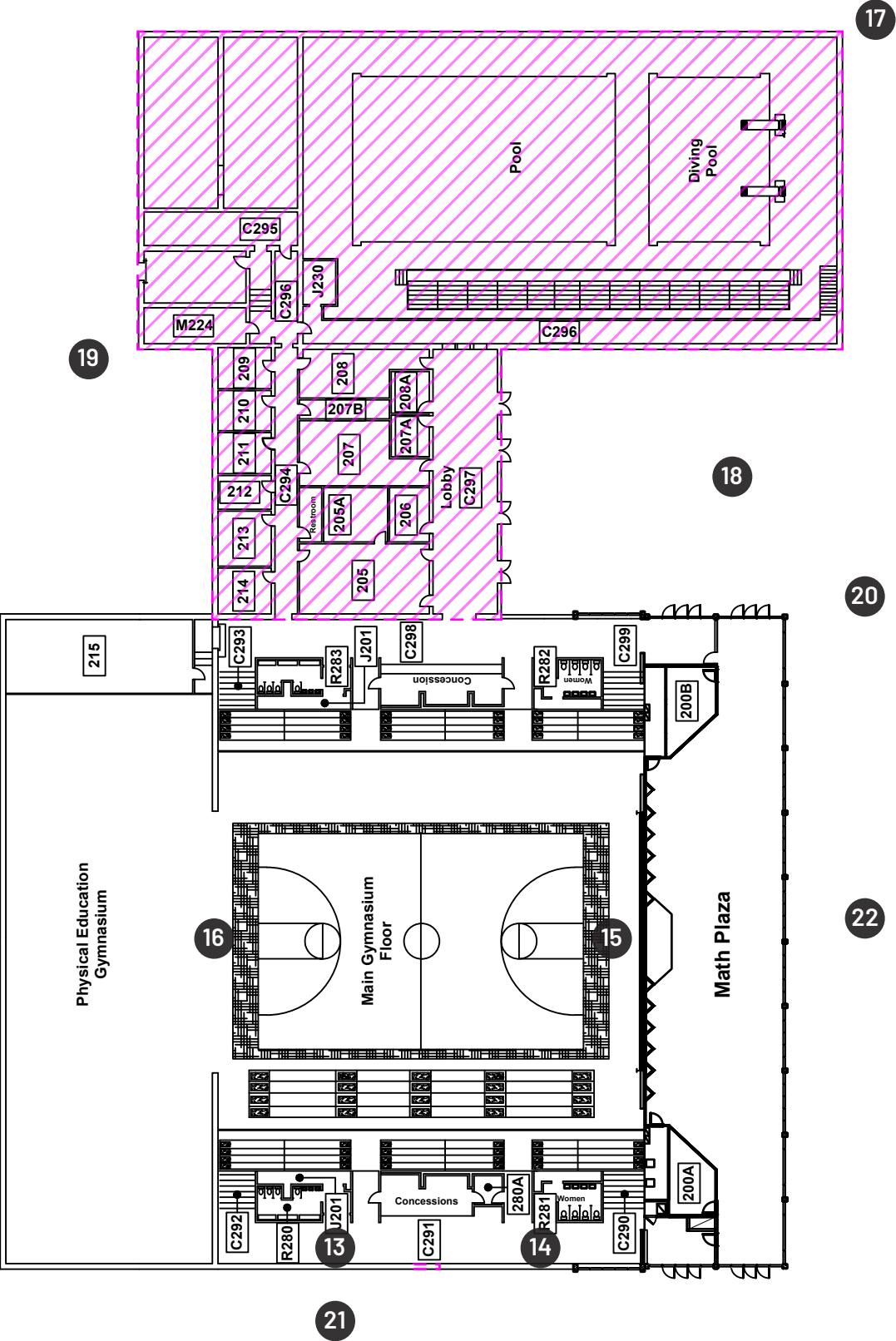
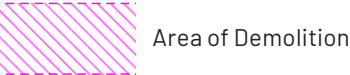
Existing Conditions

Existing Floor Plans

Lower Level | Demo Floor Plan

DEMOLITION SCOPE

The floor plan to the right indicates the existing Mac Gym, Natatorium, and connector layout. The demolition scope is indicated in the magenta hatch.



Existing Conditions

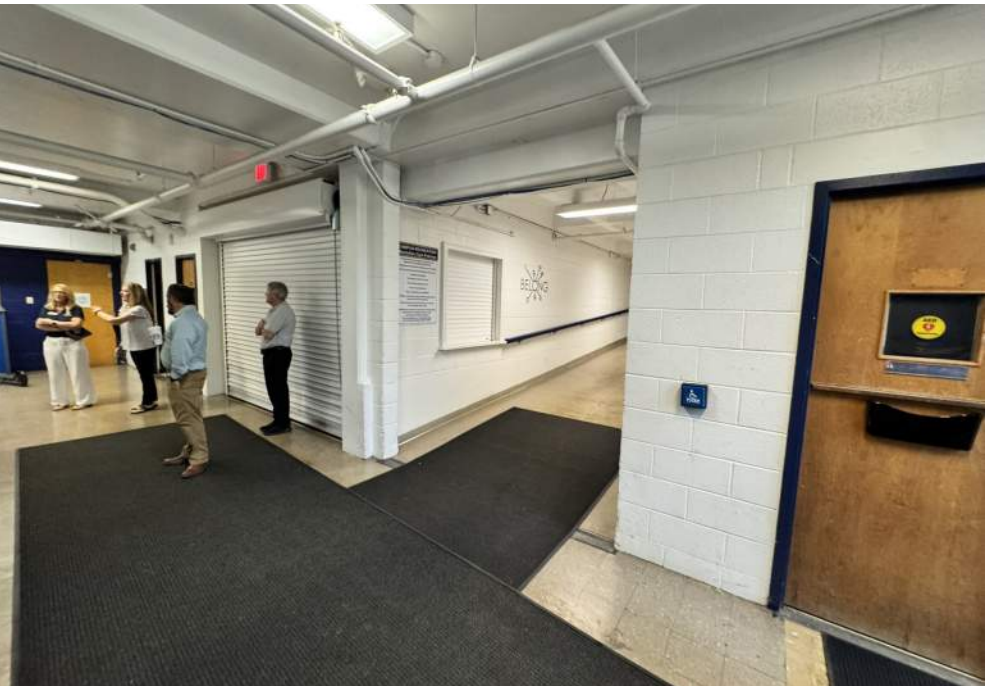
2.5 Existing Building Photos



1 View from Douglas Street



2 Entry off Douglas Street - Door to be relocated (in demo area)



3 Existing link between the gym and the connector, to be demolished



4 Existing mechanical room in natatorium building



5 Existing pool deck



6 Existing mechanical room, to remain

Existing Conditions

Existing Building Photos



7 Existing locker room



8 View looking at wrestling space



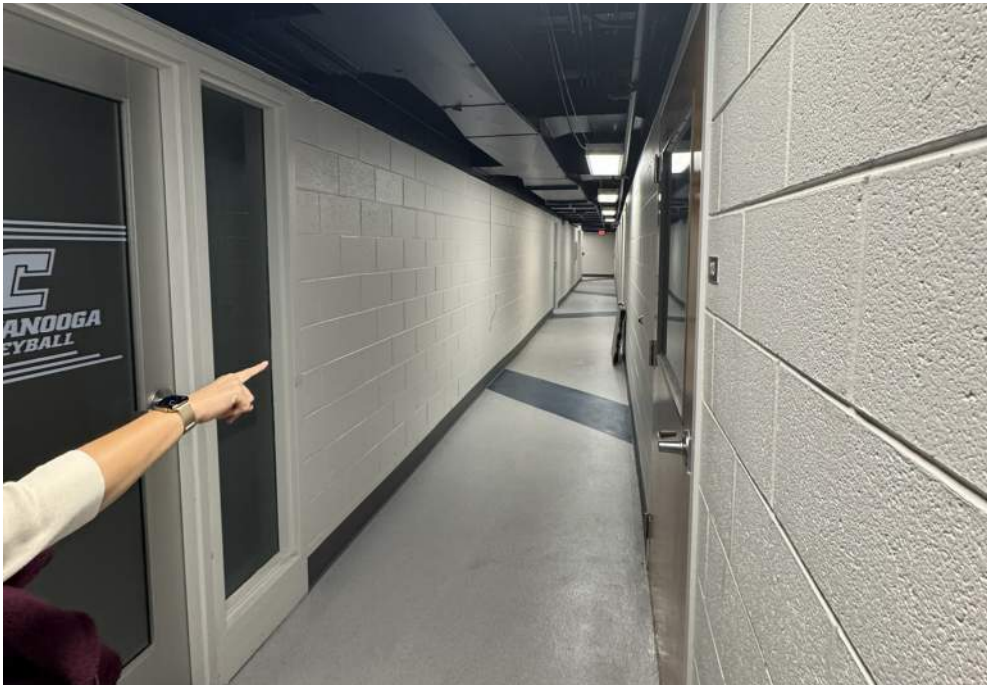
9 View looking south at wrestling space



10 Existing electric panel and roll-up door at wrestling space



11 Existing ramp connecting the south entry and gym level



12 Existing corridor, lower level, south end of the gym

Existing Conditions

Existing Building Photos



13 View looking at the existing concourse corridor



14 View looking at the existing concourse corridor



15 Existing gym



16 Existing gym



Existing Conditions

Existing Building Photos



17 View looking at the existing parking lot, to be demolished



18 View looking at the connector (center), natatorium (right), gym (left)



19 View looking north, towards the Mocs Alumni and Douglas Street intersection



20 View looking at the University Center and existing ADA ramp to be demolished



21 View looking at the south facade, existing gym



22 View looking at the east side of the existing gym and Math Plaza

03 SITE CONCEPTS

3.0 Site Concepts

3.1 Site Analysis

The Maclellan Gym site is located at a highly visible and active campus intersection at Mocs Alumni Drive and Douglas Street, one of the primary vehicular gateways into campus.

In consideration of building siting and truck access, the following factors were reviewed:

- Mocs Alumni Drive functions as a major campus thoroughfare and feeds into a primary campus entry intersection
- Douglas Street carries vehicular and pedestrian traffic
- Terrell Owens Way is a one-way street running north-south along the east side of the site and is an entry point for the University Center (UC)
- There is east-west pedestrian movement across the site
- Streets surrounding the site are narrow, limiting truck maneuverability

Deliveries are typically three days a week, Monday, Wednesday, and Friday from 5AM to 8AM. While box trucks are typical, semi-trucks are occasionally used. Accordingly, all site concepts were evaluated using the semi-truck as the worst-case delivery scenario.

Through conversations with the stakeholder group, all options pursued a delivery sequence accessing Terrell Owens Way, loading behind the dining facility (adjacent to the gym), and pulling through to Douglas Street. Trucks will then turn north onto Douglas Street and exit via the intersection. This approach avoids congestion on Mocs Alumni Drive and minimizes conflicts with pedestrian circulation.

Grading Considerations / Impact to the Gym Building

Refer to the following page for a conceptual grading plan.

With the introduction of the loading/unloading area between the gym and the new dining facility, a new pedestrian sidewalk was added to accommodate assumed pedestrian travel between the University Center and Douglas Street through the back-of-house loading zone.

Due to the grade changes, the sidewalk starts at elevation 713+/- and transitions down via steps to elevation 702+/- . This leaves a portion of the gym exposed. The section on this page cuts through the existing connector building and looks toward the gym.

Outside of the connector footprint, only the shaded portion of the gym wall adjacent to the new steps will be exposed. This exterior wall will require reskinning to match the existing gym facade. The cost associated with this reskinning is not included in the ROM estimate and is assumed to be part of a separate project scope.

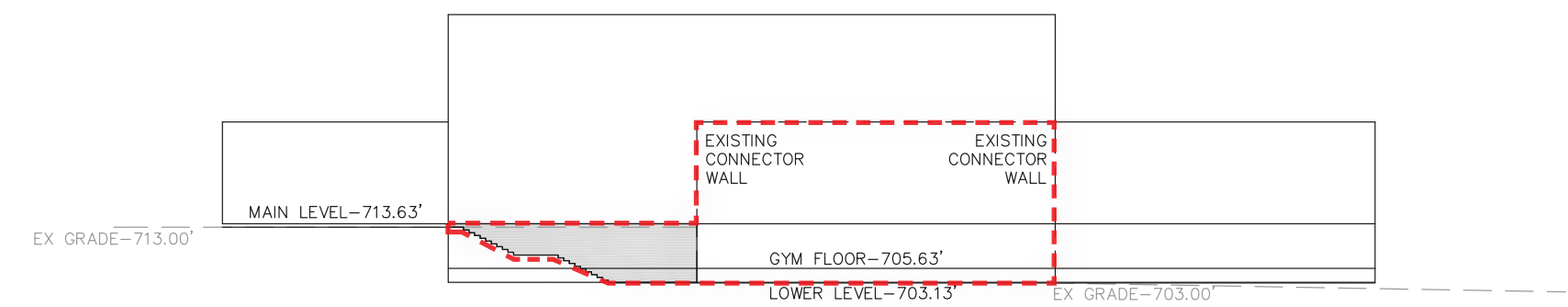
Landscape Concept Framework

Several landscape conceptual options were discussed during the programming effort; however, no preferred option was selected at this stage.

Stakeholders identified a desire for an expansive greenspace along Mocs Alumni Drive, combined with outdoor seating, to establish a strong campus gateway presence.

The various concepts explored hardscape plazas, structured planting zones, accessible approach routes, and opportunities for seating and campus gathering.

The following pages illustrate the conceptual grading and truck access plan, along with one of the landscape concepts reviewed during programming.



Red dashed line indicates portion of exterior wall that will require a reskin to match the existing building.

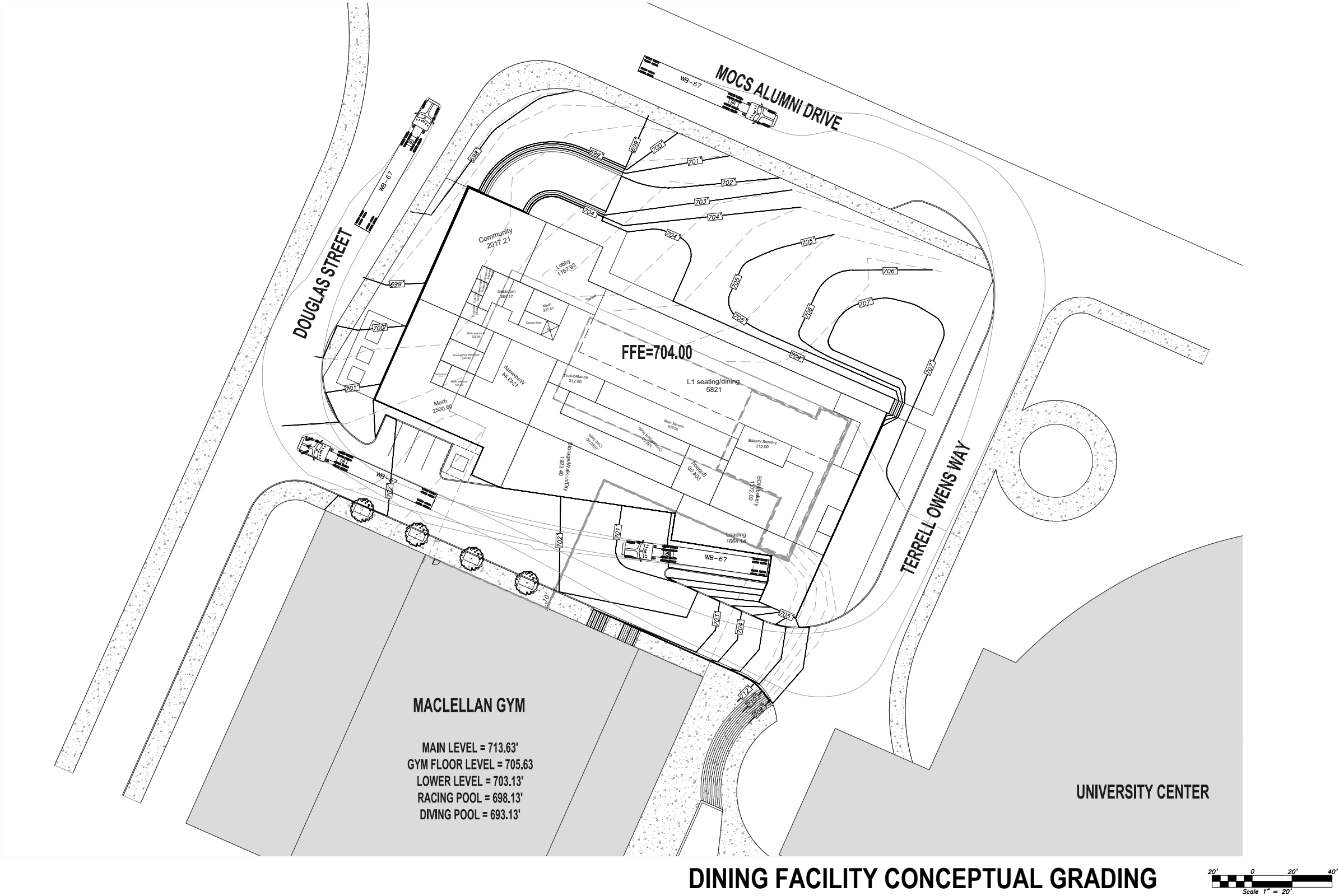
Site Concepts

3.2 Conceptual Grading Plan / Dining Facility

Summary

The design team reviewed multiple grading and site options with the preferred concept shown on this page. As the project progresses through design, several elements of the conceptual design will need to be studied such as:

- Consideration for pedestrians and trucks within the truck loading zone
- Consideration for trash and recycling (frequency, odors, noise levels, etc...)
- Consideration for existing utilities within the existing parking lot and T.O. Way
- Consideration for phasing of site and utility work
- Consideration for final location of exterior equipment such as transformers and switchgear
- Consideration for existing manholes located within the existing parking lot



Site Concepts

3.3 Conceptual Landscape Plan

Summary

The design team reviewed several landscape concepts with the stakeholder group. A preferred option was not selected during the programming phase. It should be noted that the included designs did not account for the existing manhole location including specific utility locations and hardscape / plantings overlayment. Concepts were for discussion only. Landscape designs will require further refinement in subsequent phases.





3.4 Conceptual Grading Plan / Maclellan Gym

Similarly to the Dining Facility Conceptual Grading Plan on the previous pages, the Maclellan Gym Conceptual Grading Plan will required further design review and refinement. During the programming phase, the design team discussed several elements for consideration during design:

-
- MAIN LEVEL = 713.63'**
GYM FLOOR LEVEL = 705.63
LOWER LEVEL = 703.13'
- 3 STEPS DOWN TO LOWER LEVEL
- EX ROLL-UP DOOR
- 705.63
- 705.70
- 705.85
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- 705.96
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04 PROGRAMMING

4.0 Programming

4.1 Process & Visioning

The programming effort for the UTC Dining Facility was conducted over a series of weekly stakeholder workshops. Participants represented a diverse group of campus and operational leadership, including:

- UTC Administration
- UTC Student Affairs
- UTC Facilities Planning
- UT System
- Aramark Dining Services

Given the operational complexity of a primary campus dining facility, it was essential that both institutional leadership and dining operations were actively engaged throughout the process. The programming effort addressed not only space needs, but also enrollment projections, meal demand, kitchen functionality, loading and utilities, grading, and cost benchmarking.

HED structured the programming process in three primary phases:

Data Collection & Operational Alignment

Early discussions explored seat count scenarios ranging from 450 seats to over 1,000 seats to accommodate projected meal counts of 4,000–5,000 meals per day. Through analysis of dwell time, peak periods, and budget parameters, the team refined the program to align operational needs with financial feasibility.

Visioning & Benchmarking

Following operational analysis, the group participated in structured benchmarking and visioning workshops. These included:

- Review of peer dining facilities
- Visioning exercises
- Open discussion regarding seating, food concepts, community spaces, and exterior activation
- Circulation and server configuration studies

The visioning exercises focused on four core areas:

- Seating Diversity
- Community & Social Space
- Food Concept Organization
- Exterior & Campus Integration

Because the stakeholder group represented both operational and institutional priorities, consensus-building was critical. The exercises helped unify preferences around atmosphere, layout efficiency, and student experience.

Key themes emerged from the workshops.

Key Takeaways from Visioning

- The dining facility must feel open, light-filled, and welcoming
- Avoid a traditional “cafeteria” aesthetic
- Emphasize natural light, transparency, and vertical volume
- Provide a variety of seating types (communal, 2-top, 4-top, bar seating, soft seating)
- Avoid large, bulky architectural elements that consume usable space
- Organize food concepts in a linear or core layout to maximize seating and improve clarity
- Use flexible digital signage to allow evolving food concepts
- Incorporate a bakery element with visible display
- True Balance/allergen-sensitive dining should remain a distinct, identifiable concept
- Outdoor seating should be activated but operationally controlled
- The facility should support team dinners, campus events, and extended use

Initial Project Assumptions & Scope Refinement

The programming effort began with multiple massing and seat count options, including:

- One-story and two-story configurations
- 450-seat, 750-seat, and 1,080-seat scenarios
- Food concepts on one floor versus split-level offerings
- Outdoor terrace and green roof considerations
- Private dining / campus events / team dinners

Through cost benchmarking and ROM analysis, it became clear that higher seat count options exceeded budget parameters. The team refined the scope to balance:

- Enrollment projections
- Operational efficiency
- Cost per square foot
- Long-term flexibility

Ultimately, the group selected a two-story preferred option, approximately 27,000 SF and 465 seats (excluding outdoor and soft seating), as the direction for plan signoff.

Vision and Mission Statement

The UTC Dining Facility is envisioned as more than a place to eat — it is the primary dining destination and a central hub of student life. The facility aims to foster community interaction beyond the dining experience. The project emphasizes:

Capacity and Adaptability / A facility designed to respond to evolving enrollment, dining trends, and operational flexibility.

Engagement of the Campus Community / The dining hall must feel vibrant and non-transactional in nature — a space where students gather, study, collaborate, and build relationships.

Transparency and Openness / Abundant daylight, visual connectivity between levels, and clear sightlines to food platforms reinforce accessibility and inclusivity.

Operational Excellence / Efficient pan-to-plate workflows, centralized kitchen operations, and controlled loading access ensure the facility functions as effectively as it feels.

Indoor/Outdoor Activation / Ground-level greenspace and second-level terrace opportunities extend the dining experience into the landscape, reinforcing campus integration.

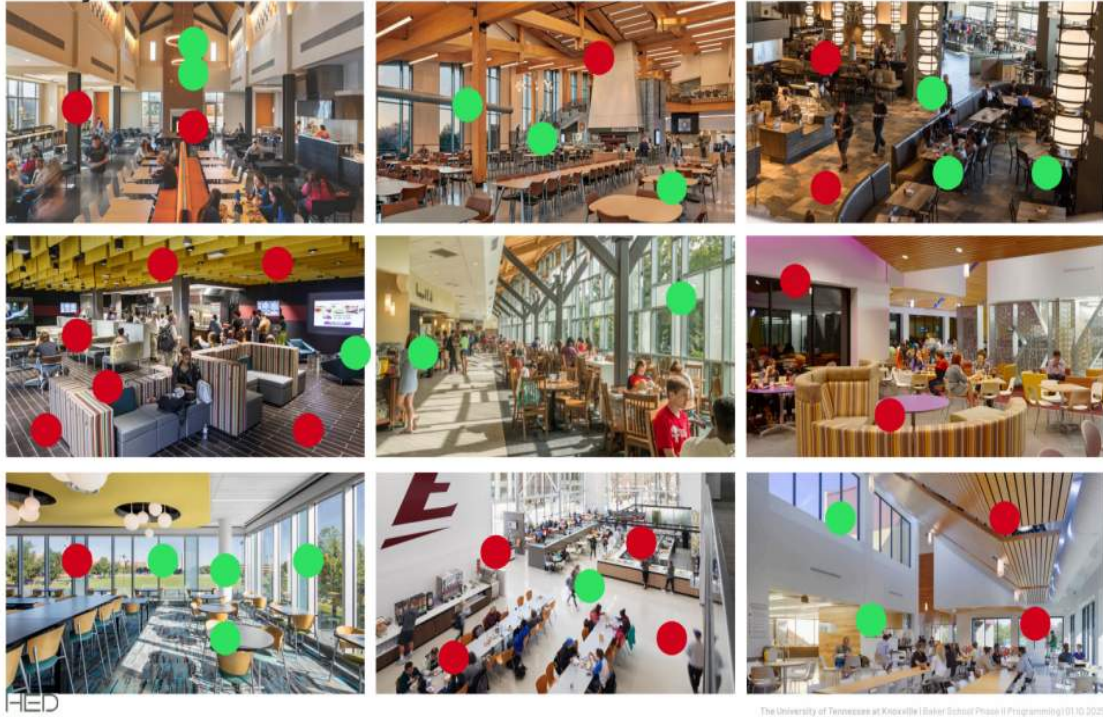
Student Ownership / The facility should clearly communicate that it is for the students — welcoming, comfortable, and designed around their daily rhythms.

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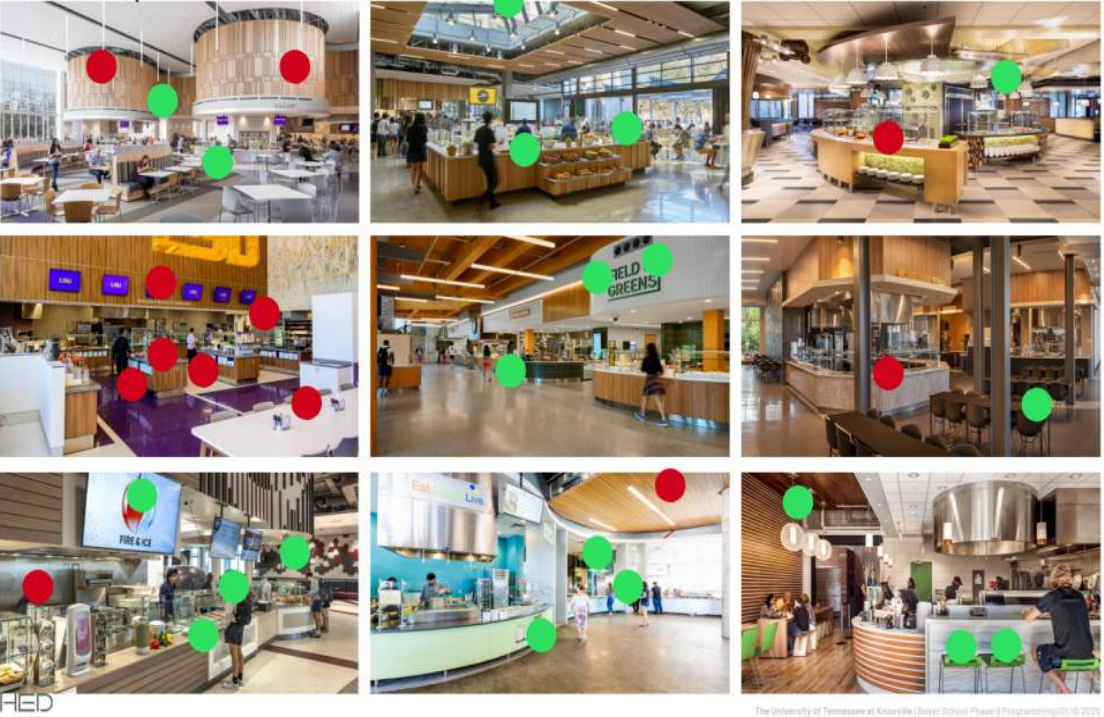
Programming

Process & Visioning

Seating



Food Concepts



Visioning Exercise Summary

Four program areas were identified as basis for the programming effort: Seating, Food Concepts, Community Spaces, and Exterior Seating.

The Red Dot Green Dot exercise asks the stakeholder group to place red dots of items they dislike and green dots for items they like. The "likes" can be anything about the image. The group is encouraged to not view images literally, but more about various concepts from each image. The "dislikes" are just as important as the "likes".

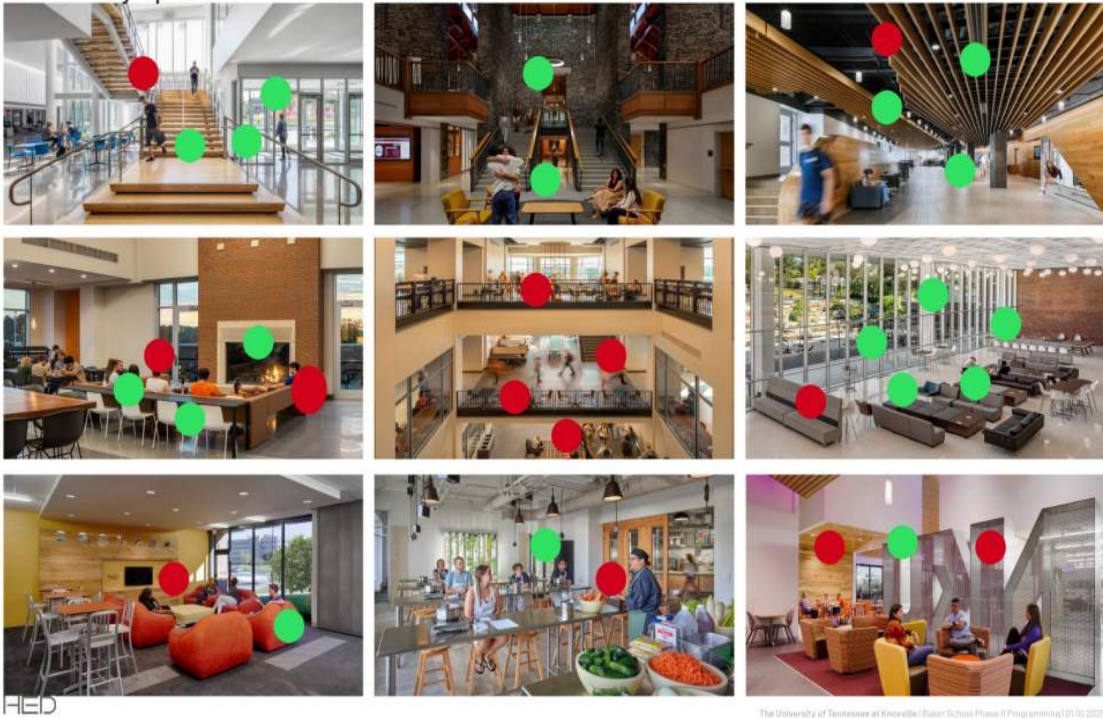
Key Takeaways

The visioning exercise revealed a clear direction for the project. Stakeholders emphasized that the new dining facility must:

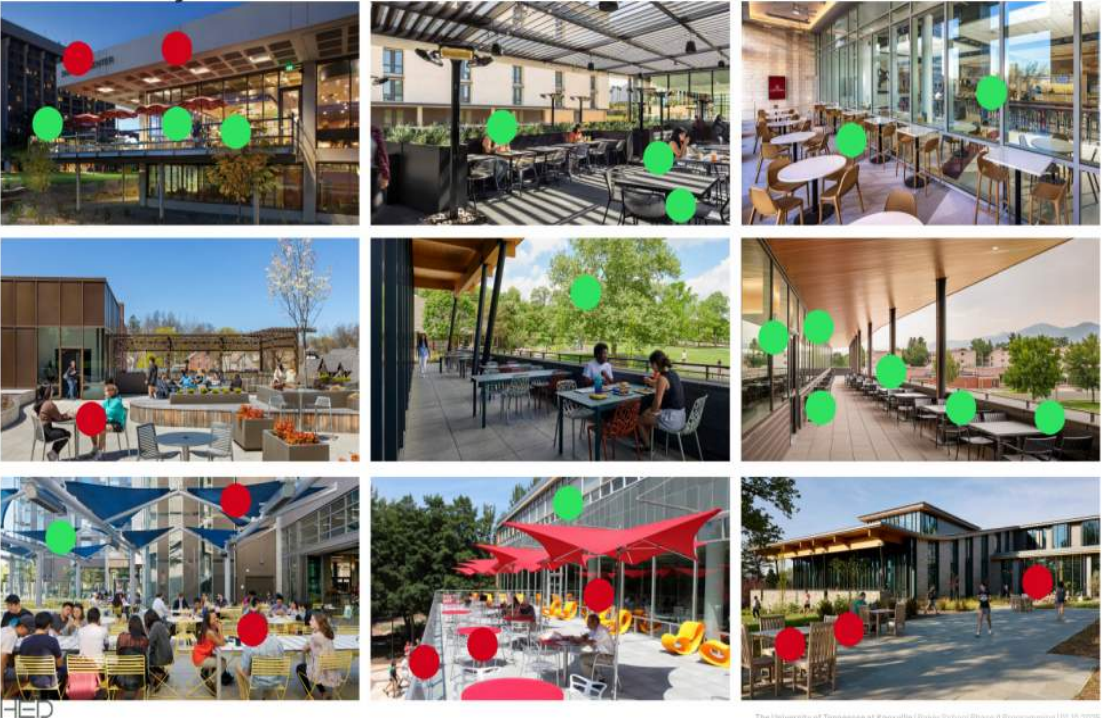
- Student-Centered Experience
- Open, Light-Filled Environments
- Operational Efficiency (Pan-to-Plate)
- Flexibility & Adaptability
- Variety of Seating & Social Settings
- Clear Circulation & Food Visibility
- Campus Integration & Landscape Activation

There was strong consensus that the facility must be more than transactional dining. It should function as a vibrant student hub – supporting community, team gatherings, informal study, and extended campus life throughout the day and summer months

Community Spaces

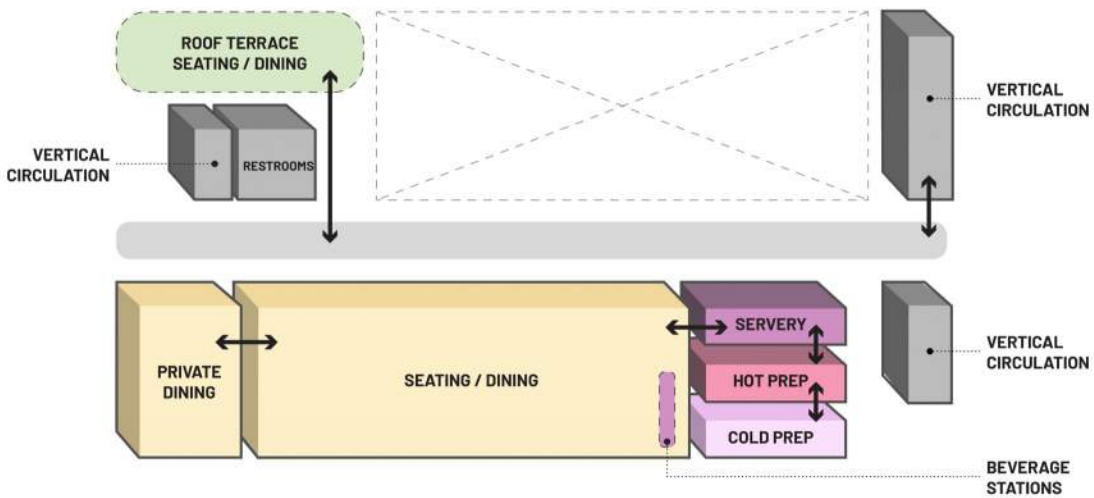
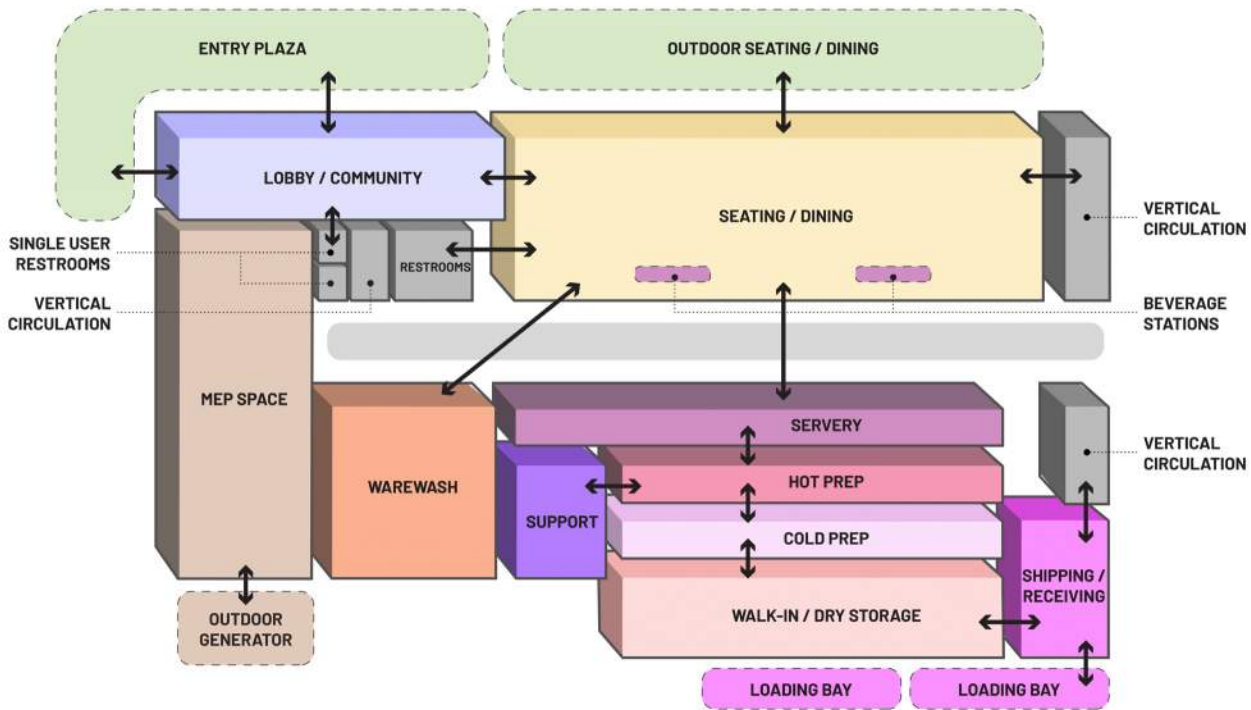
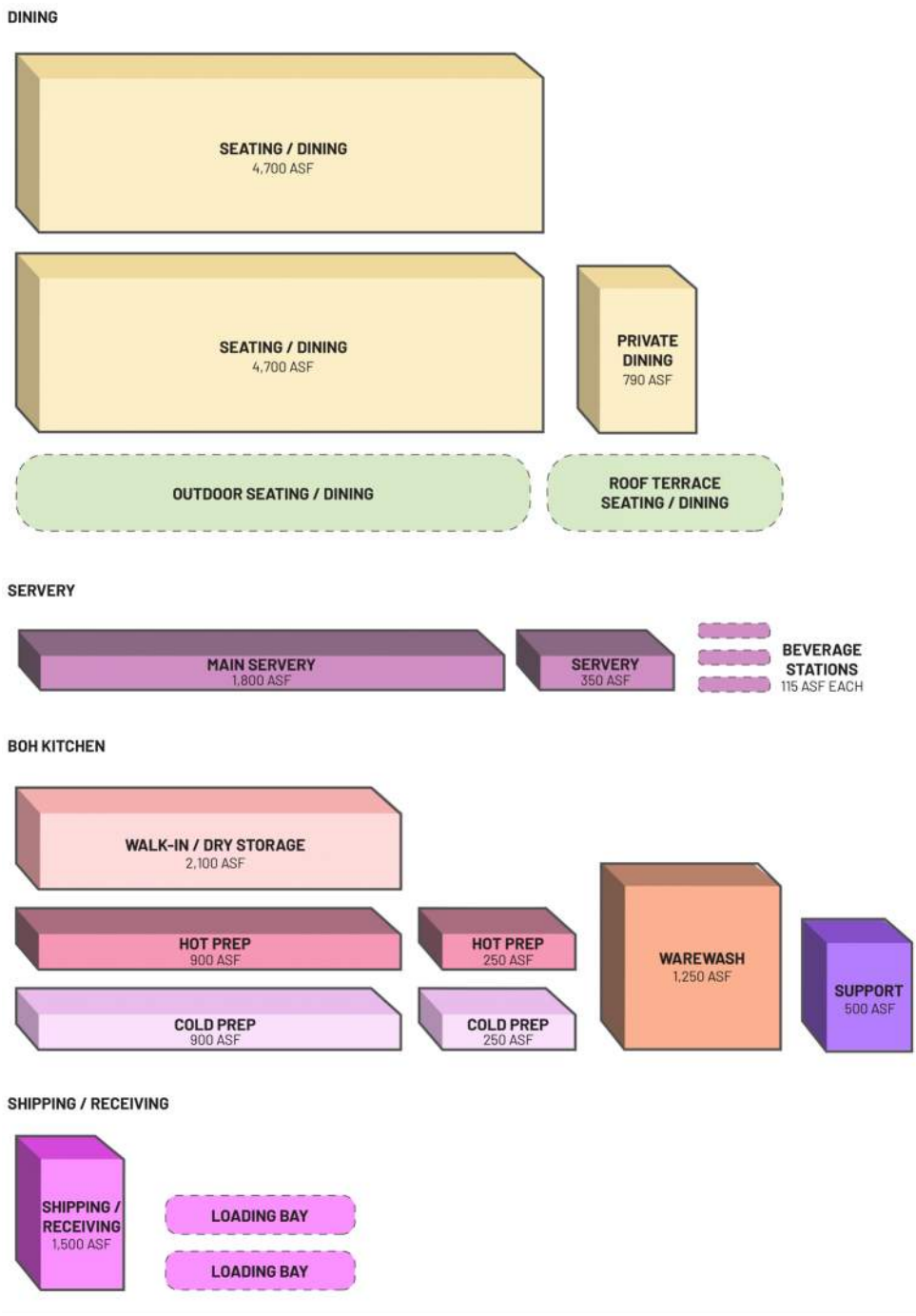


Exterior Seating



Programming

4.2 Organizing Concepts / Dining Facility Program Adjacency



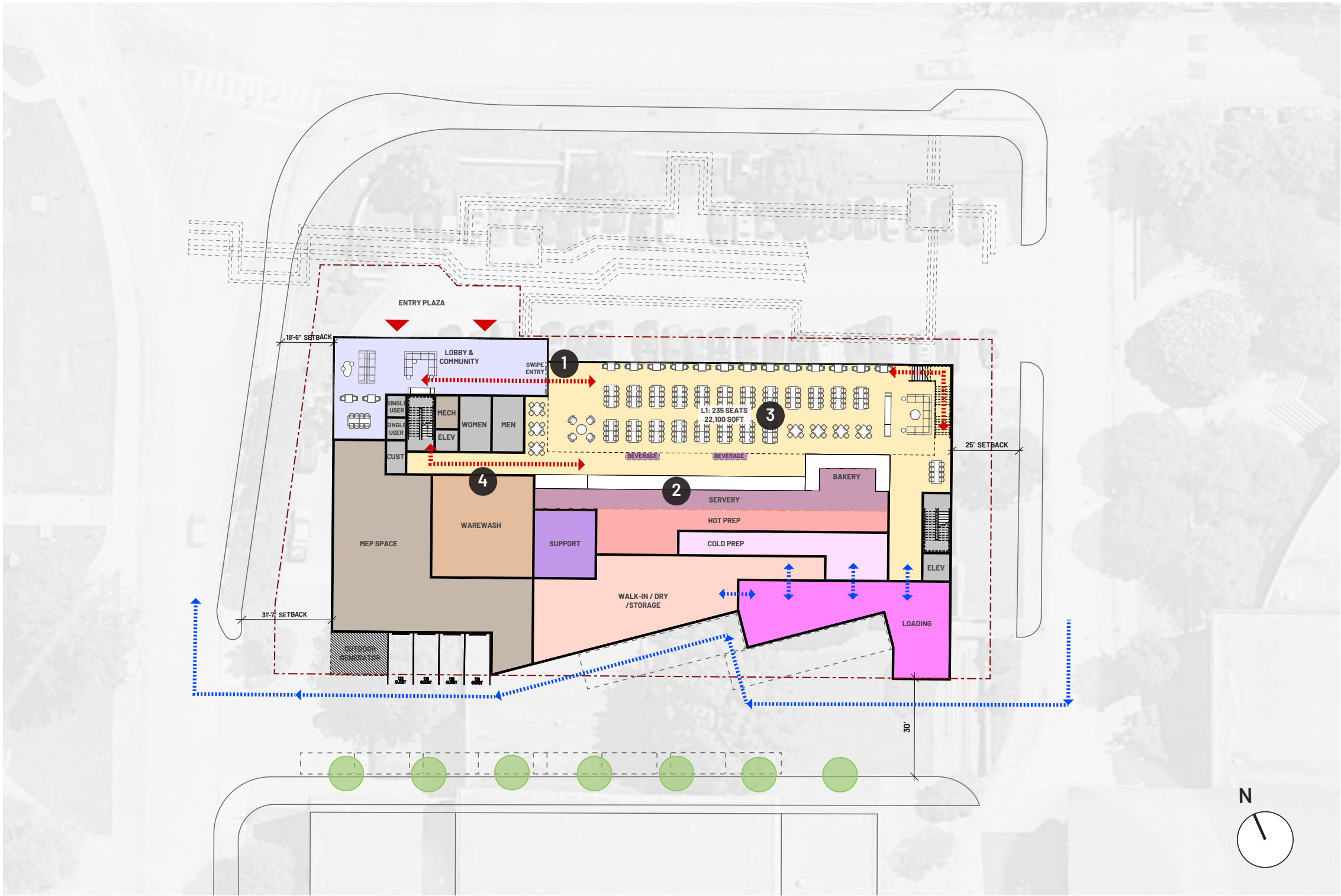
Summary

Through various stakeholder meetings, the design team studied several organizing concepts across one-story and two-story buildings. The design ultimately pursued a two-story option with the following general program areas and adjacencies.

		NSF	QTY	Subtotal NSF
First Floor	COMMUNITY	1,450.00	1	1,450
	SEATING/DINING	5,941.00	1	5,941
	WAREWASH	1,090.00	1	1,090
	WALK-IN/DRY	1,819.00	1	1,819
	COLD PREP	662.00	1	662
	SUPPORT	437.00	1	437
	SERVERY	892.00	1	892
	HOT PREP	849.00	1	849
	LOADING	1,314.00	1	1,314
Subtotal				14,454
2nd Floor	PRIVATE DINING	650	1	650
	SEATING / DINING	5836	1	5,836
	COLD PREP	210	1	210
	SERVERY	177	1	177
	HOT PREP	250	1	250
Subtotal				7,123
Total Building NSF				21,577
Efficiency				79.4%
Total Building GSF				27,170

Programming

4.3 Preferred Option Floor Plan / Dining Facility Level 1



Preferred Option / Level 01

- 465 seats total
- Indoor, outdoor seating, and soft seating provided
- Approx. 27,000 SF
- Existing connector is demolished
- Includes the following program:
 - Open Study / Community Space
 - Outdoor seating at ground level
- Parking Included:
 - (4) stalls located adjacent to MEP BOH

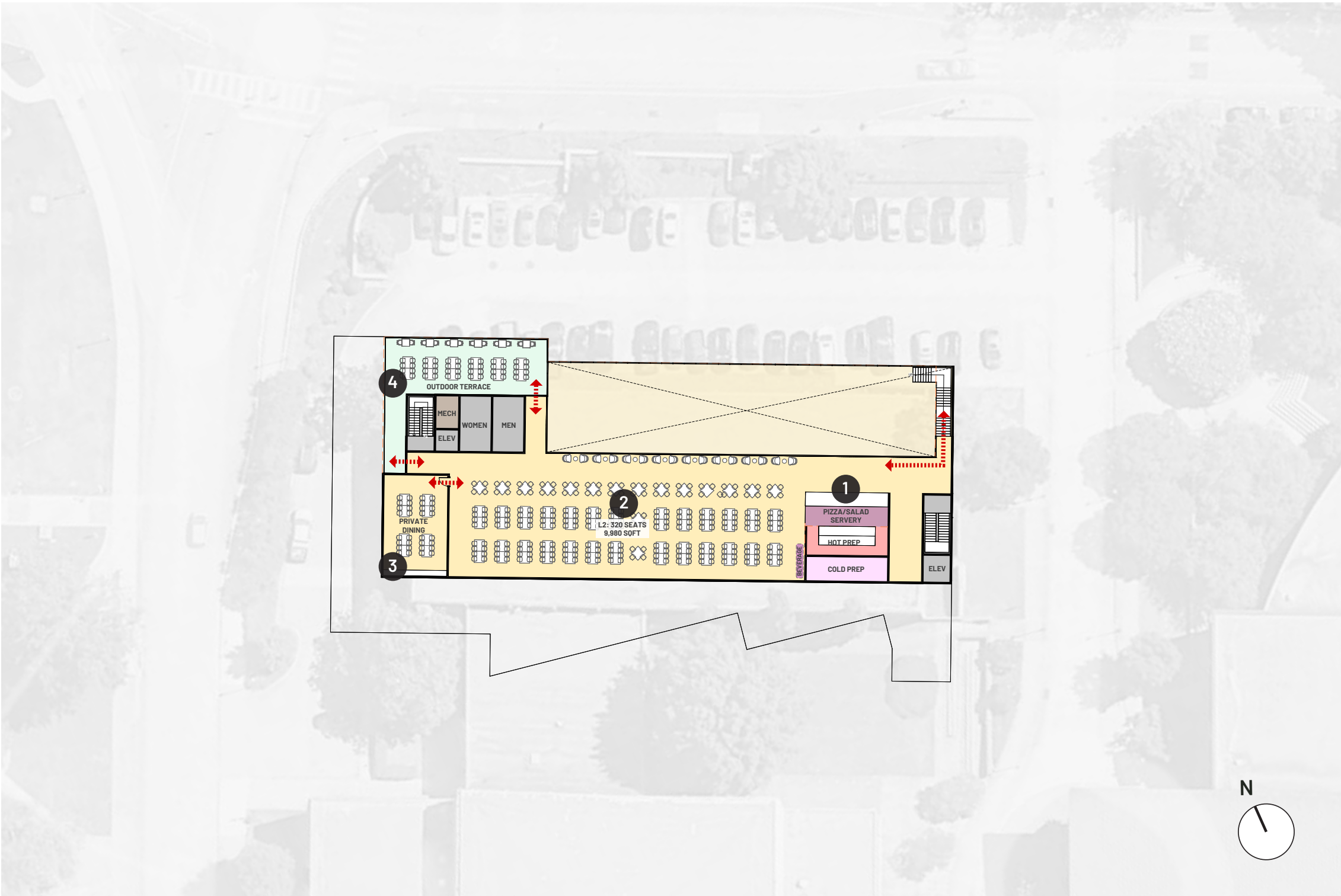
Note this option indicates approximately 32,000 SF, however it was determined to downsize each program area to achieve a total gross square footage of 27,000 to align with the project budget. The plans on this page and the following page show the higher square footage and higher seat count. The budget is based on 27,000 GSF and 465 seats.

The program reflects current scope expectations. Future design development will include scope prioritization strategies to align with final approved funding.

- ① Dining Entrance / Card Swipe
- ② Servery
- ③ Seating
- ④ Dish Dropoff
- Greenscape
- ➡ Truck Access / Loading / Unloading
- Build To Line

Programming

Preferred Option Floor Plan / Dining Facility Level 2



Preferred Option / Level 02

- 465 seats total
- Indoor and outdoor seating provided
- Approx. 27,000 SF
- Includes the following program:
 - Outdoor seating at second level
 - Private dining with option to expand
 - Two food concepts on second level

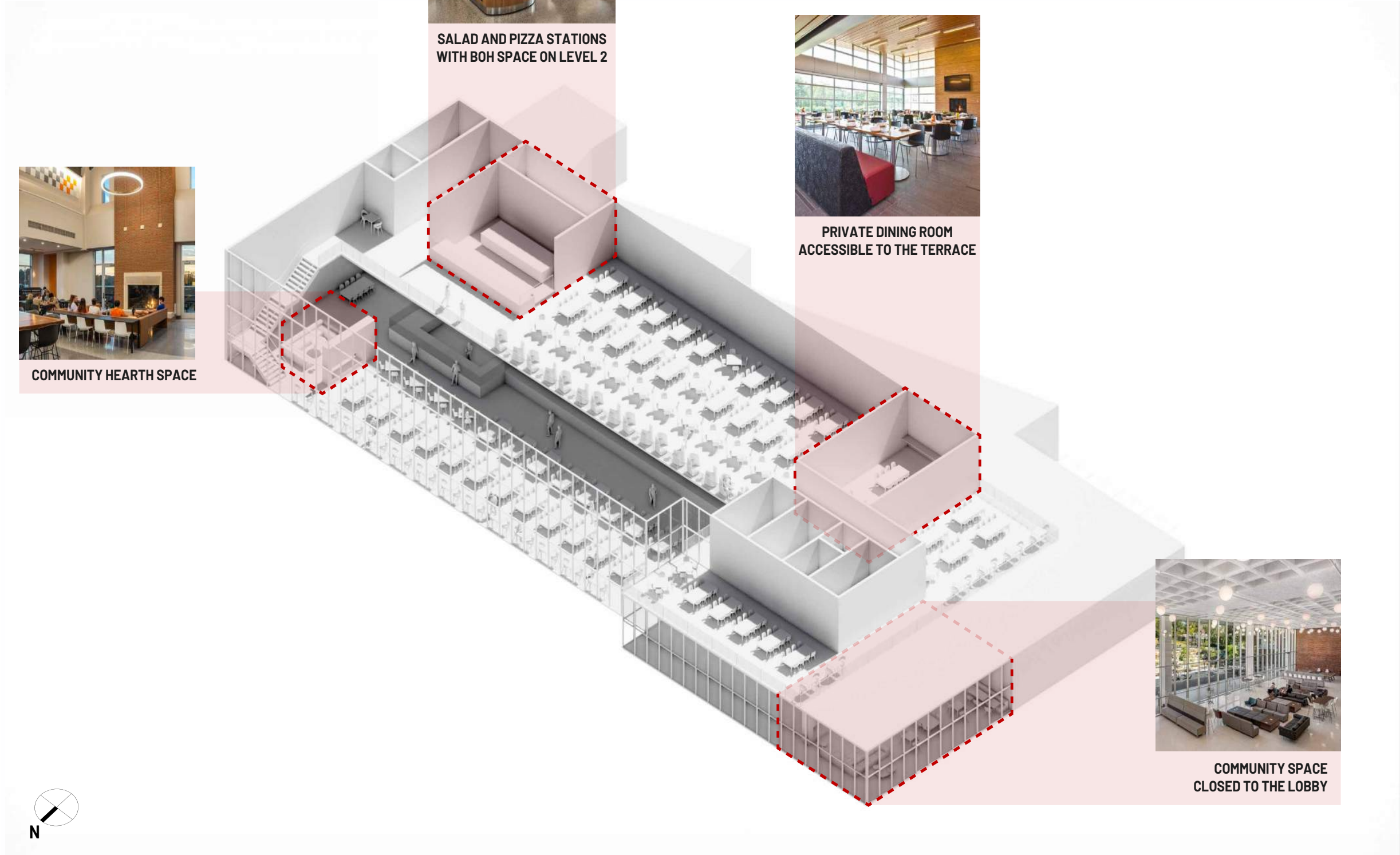
Note this option indicates approximately 32,000 SF, however it was determined to downsize each program area to achieve a total gross square footage of 27,000 to align with the project budget. The plans on this page and the following page show the higher square footage and higher seat count. The budget is based on 27,000 GSF and 465 seats.

The program reflects current scope expectations. Future design development will include scope prioritization strategies to align with final approved funding.

- 1 Servery
- 2 Seating
- 3 Private Dining
- 4 Outdoor Terrace

Programming

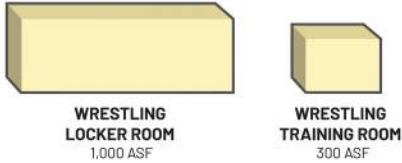
Preferred Option Massing / Dining Facility



Programming

4.4 Organizing Concepts / Maclellan Gym Program Adjacency

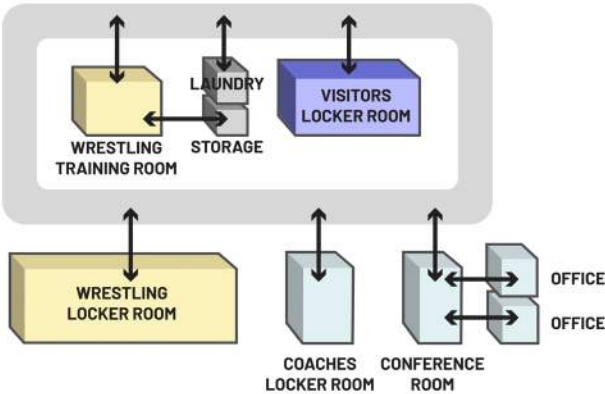
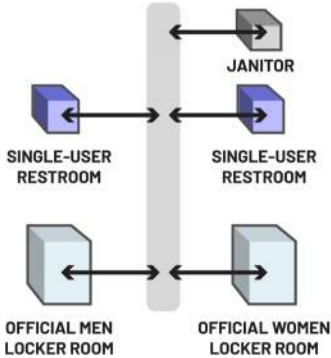
SERVERY



OFFICIAL



VISITOR



Summary

Through various stakeholder meetings, the design team studied several organizing concepts for the gym addition and renovation. The design ultimately pursued the following general program areas and adjacencies.

	NSF	QTY	Subtotal NSF
Lower Level			
WRESTLING LOCKER ROOM	1042	1	1,042
COACHES LOCKER ROOM	263	1	263
OFFICE	226	1	226
CONFERENCE ROOM	100	2	200
WRESTLING TRAINING ROOM	313	1	313
LAUNDRY	61	1	61
STORAGE	47	1	47
VISITORS LOCKER ROOM	507	1	507
STAIR/RAMP ENTRY	400	1	400
OFFICIALS LOCKER ROOM	220	2	440
MECH/ELECTRICAL ROOM	1988	1	1,988
JANITOR	55	2	110
SINGLE USER RESTROOM	71	2	142
BOH / MEP	85	1	85
ELEC/MDF	206	2	412
Subtotal			6,236
Total Building NSF			6,236
Efficiency			61.2%
Total Building GSF			10,190

Programming

4.5 Preferred Option Floor Plan / Maclellan Gym Lower Level



Preferred Option / Lower Level

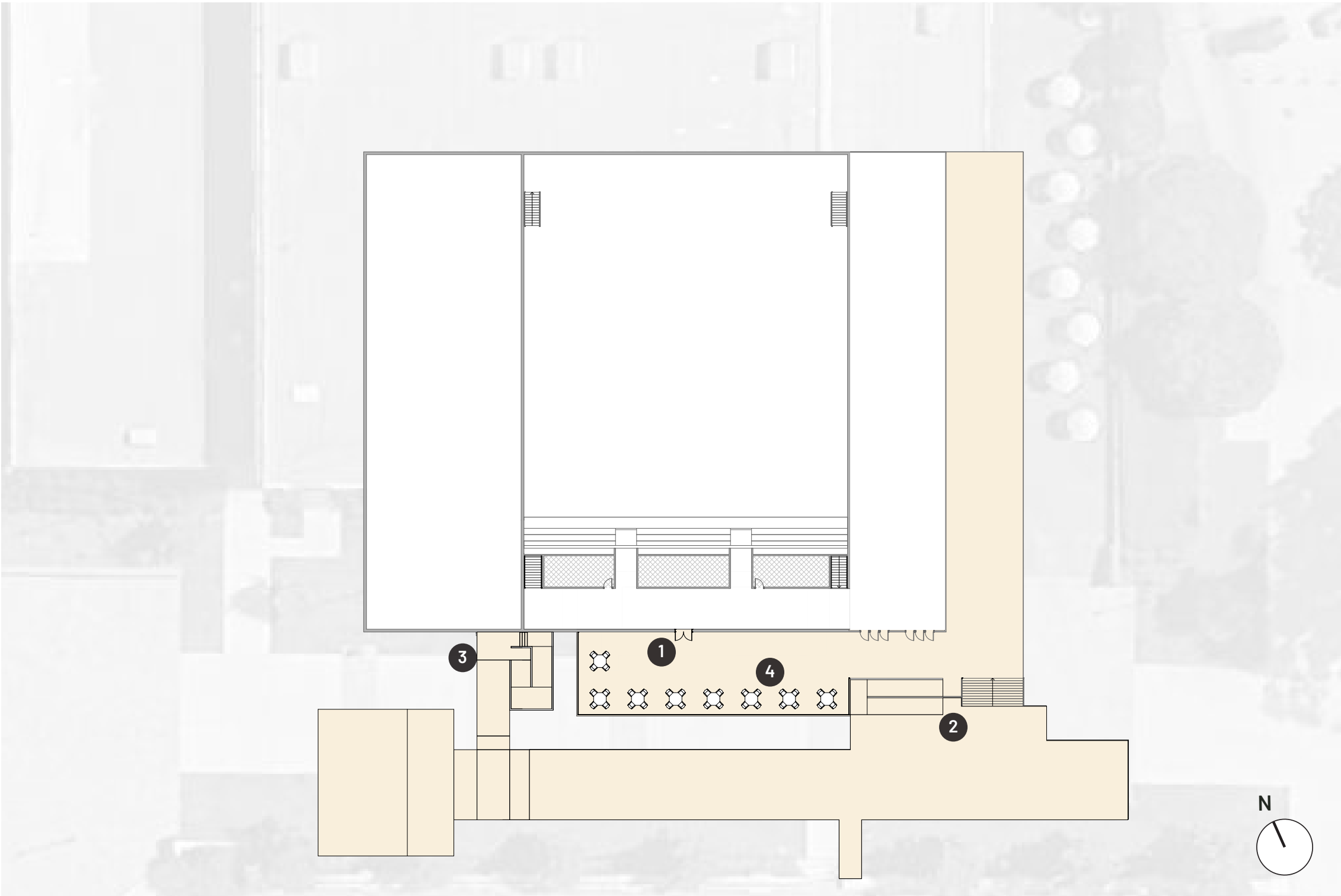
In order to relocate select program from the connector building, an approximately 2,890 GSF addition plus renovation within the existing footprint was determined to meet the needs of the project. The following are key concepts of the addition and renovation:

- Approx. 2,890 GSF addition
 - Relocated wrestling locker room with adjacent showers and restrooms
 - 32 total lockers with space in the middle for team huddles
 - Coaches locker room with adjacent (2) offices and bullpen space
- Approx. 1,260 SF renovation, south end of gym
- Relocated training room with adjacent storage and laundry
- Relocated visitor locker room with adjacent showers and restrooms. Note that the visitor locker room has been downsized from the current locker room space and is single gender. A separate male / female visitor locker room has not been provided at this time.
- Approx. 3,370 SF renovation, north end of gym
 - Expanded mechanical room to include relocated MEP equipment from the natatorium space (all equipment serves the gym only)
 - Relocated officials locker room, male and female
 - Two single user accessible toilet rooms
 - Janitor closet
 - Modified stair / ramp to allow for an accessible entrance from Douglas to the gym floor and wrestling space

- 1 Existing Electric Panels
- 2 Finish upgrades of the stair/ramp area

Programming

Preferred Option Floor Plan / Maclellan Gym Main Level



Preferred Option / Main Level

There is no interior scope on the main level at this time other than a new exterior door centered off the concessions space.

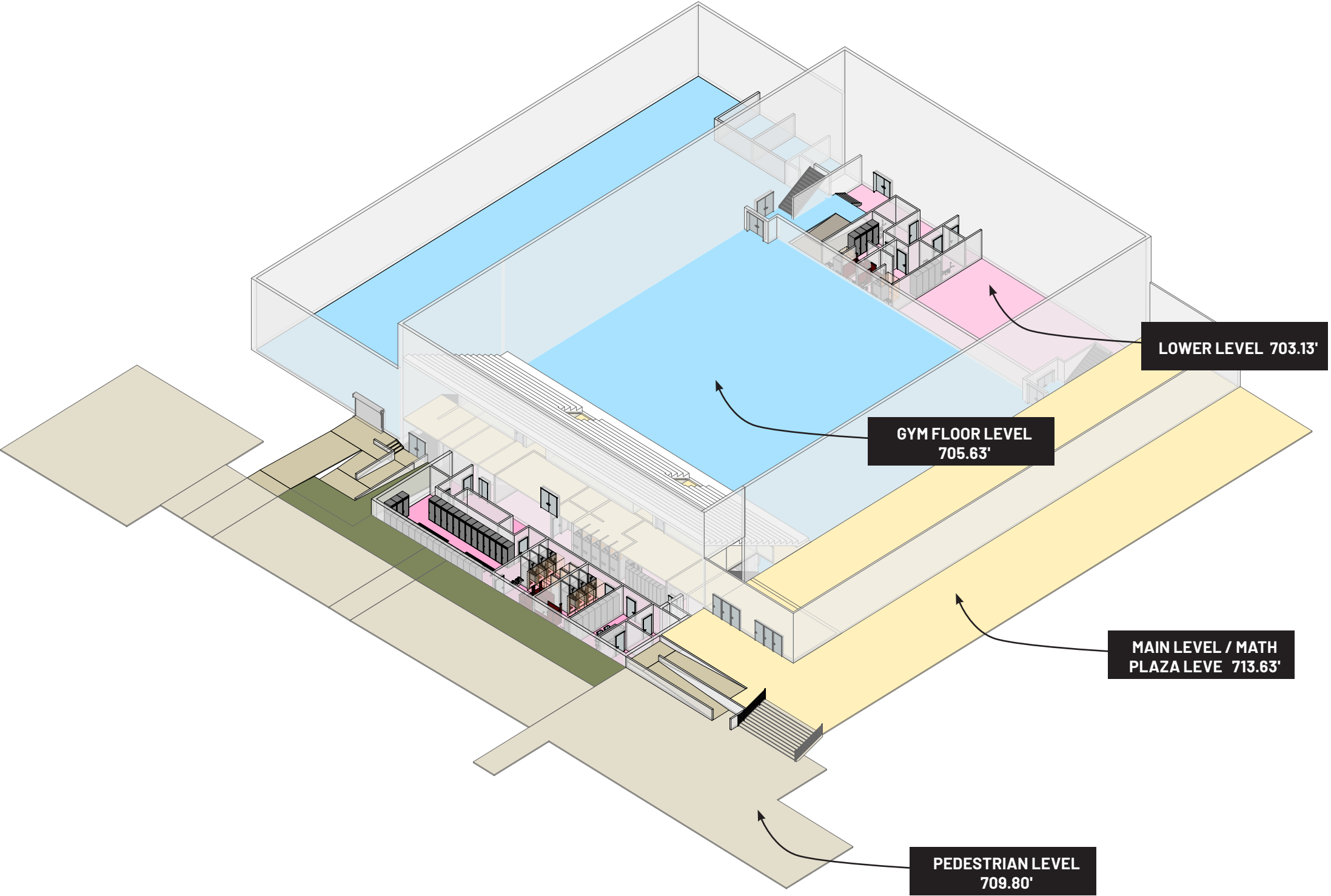
Exterior upgrades include the following:

- Modified southeast exterior stair to allow for ramp to the main level (concessions level). Currently the only ramp exists towards the northern end of the gym. With the demolition of the connector building and the natatorium building, along with the proposed truck access, the ramp is required to be demolished. The replacement ramp is proposed along the south façade with modified stair integration.
- New ramp / stair sequence to the lower level / addition. Currently, there is only a stair to access this lower level. This entrance is proposed to be an accessible entrance to the lower level, which also connects to the gym floor level.

- 1 New Entrance to Concessions Level
- 2 Modified Exterior Stair / New Ramp to Main Level
- 3 Modified Exterior Stair / New Ramp to Lower Level / New Addition
- 4 Possible Outdoor Terrace

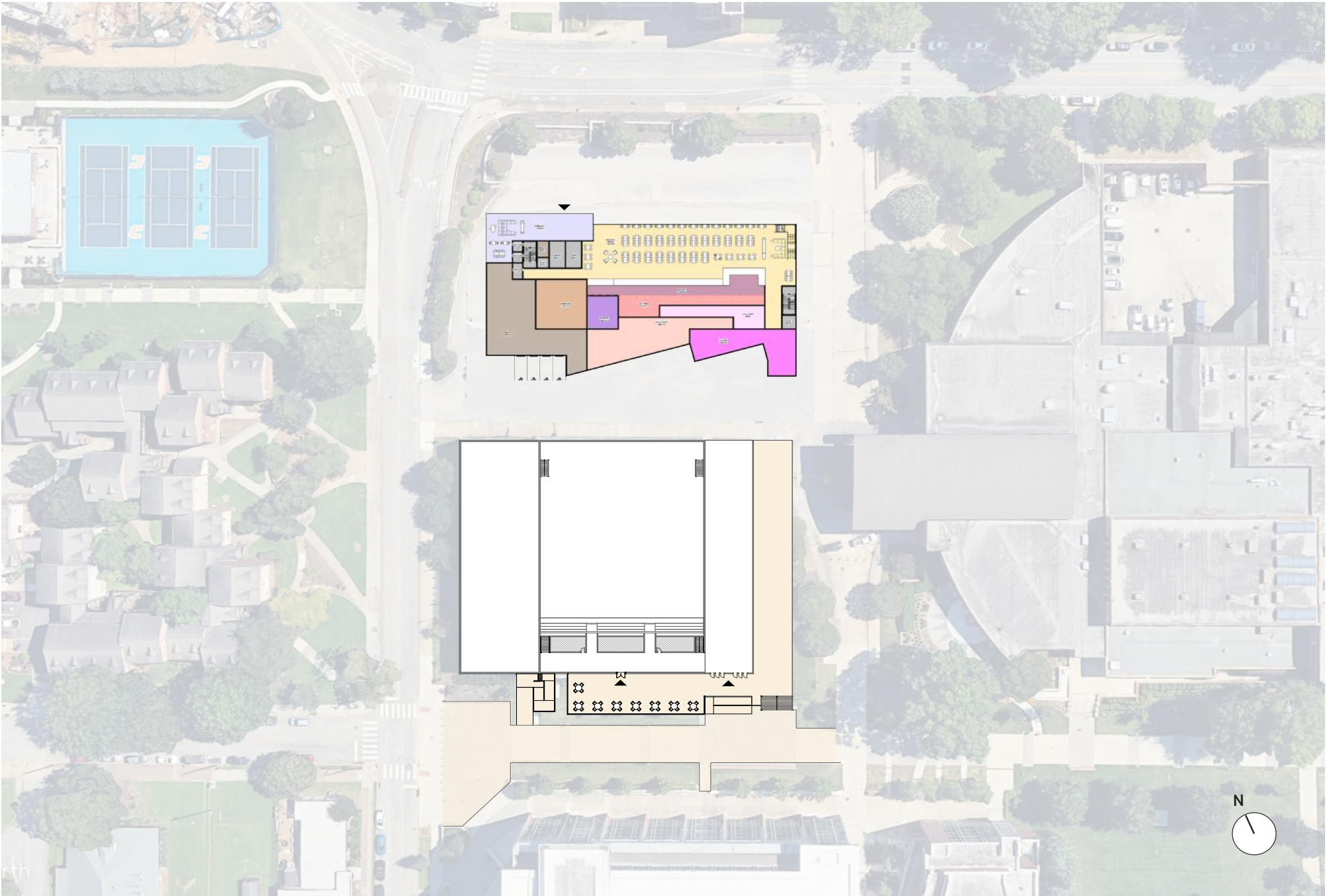
Programming

Preferred Option Massing / Maclellan Gym and Level Differential



Programming

Preferred Option Program / Overall Plan

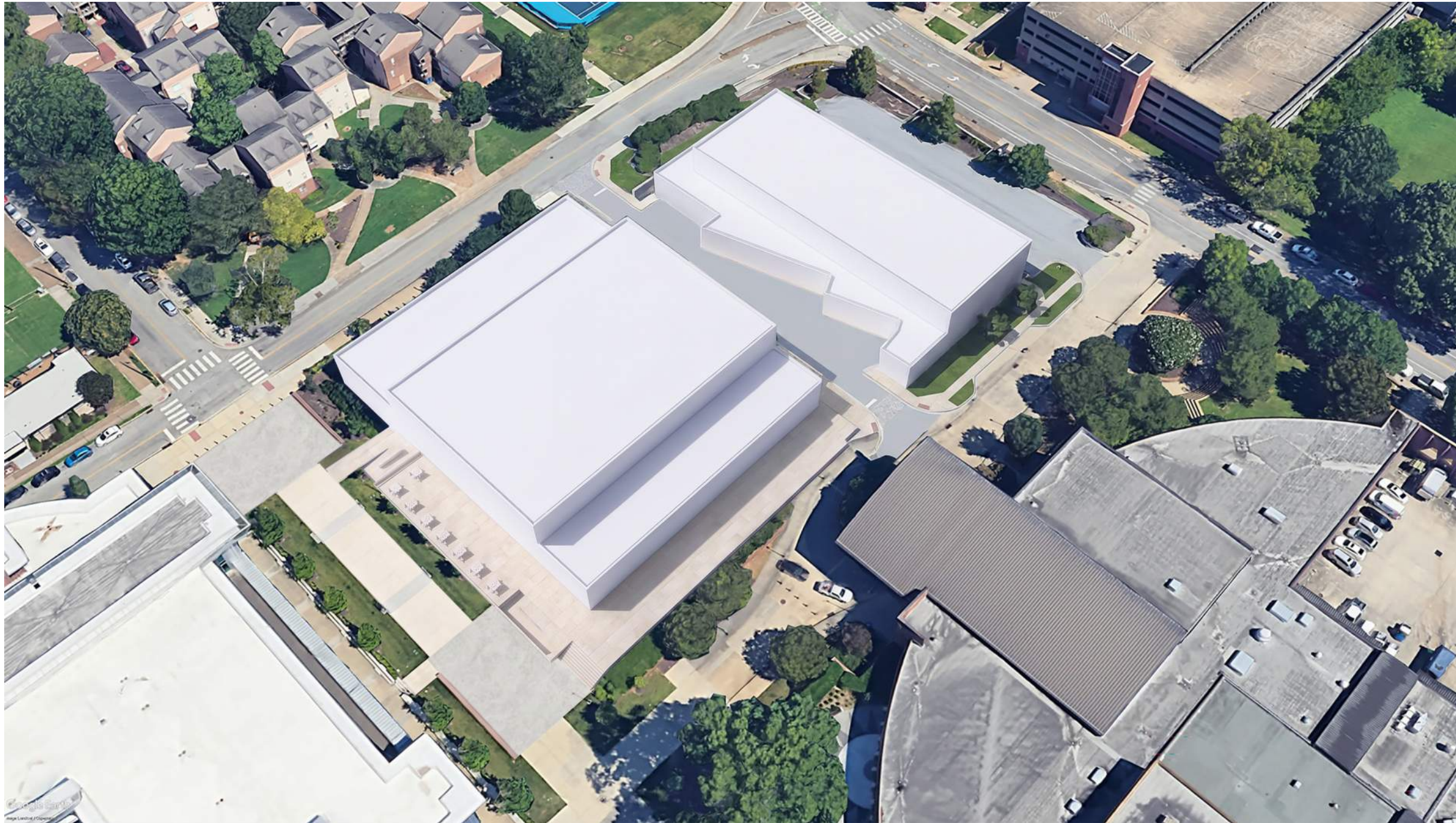


Summary

The diagrams included on this page and the following page indicate the full scope of work after final completion – Maclellan Gym renovation and addition, enabling projects and the new Dining Facility.

Programming

Preferred Option Floor Plan / Overall Massing



05 DESIGN CRITERIA

5.0 Design Criteria

5.1 Civil Narrative

SITE CHARACTERISTICS

Per FEMA flood map 47065C0341G, dated 02/03/16, the subject property is outside of the 100-year floodplain (see below image). The estimated finished floor of the lowest level of the dining facility is 704.00', which is 47' above the 100-year flood elevation of 657.00'. Similarly, the estimated finished floor of the lowest level of the gym addition is 703.13', which is 46.13' above the 100-year flood elevation of 657.00'. As the property is outside of the 100-year floodplain, no negative impacts to the floodplain are anticipated.

The property is bordered by Douglas Street, Mocs Alumni Drive, Terrell Owens Way, and Vine Street. While no vehicular lane changes are anticipated in the scope of the project, the entrance to Terrell Owens Way from Mocs Alumni Drive will need to be reconfigured for the maneuverability of larger delivery trucks serving the dining facility. This will necessitate new ADA ramps and reconfigured crosswalks. It is also recommended for Terrell Owens Way to be repaved entirely, as the pavement is 20+ years old and will most likely sustain some level of damage during construction. This could allow for a slight widening of the street to allow for more flexible truck maneuverability. We recommend the pavement be heavy-duty concrete with a minimum section of 6" stone and 6" of concrete, due to the truck traffic and to protect the proposed chilled water/hot water routing.

- All surrounding streets currently have sidewalks installed. At minimum, broken or lifted sections of existing sidewalk will need to be replaced and existing sections of sidewalk that are in good condition need to be pressure-washed and cleaned.
- Two new ADA ramps will be required for access to the gym addition, which will require some rework of the existing stairs and sidewalk to the gym's roll-up door.

SITE UTILITIES

Utility infrastructure is well established around the subject property.

- 6" water mains are located along Douglas Street and a portion of Mocs Alumni Drive; these will be the most likely sources of water service to the dining facility for potable and fire protection needs. Water services for the gym addition are anticipated to connect to existing services inside the existing building.

- A larger 24" water main and 20" water main are also located in Mocs Alumni Drive and Vine Street, respectively, but it is not recommended to connect to these mains as they are larger distribution mains.
- An existing gas main appears to be located in Douglas Street and will be the most likely source of gas service to the dining facility. Gas service for the gym addition is anticipated to connect to existing gas service inside the existing building; however, there is a 4" gas main in Vine Street should a new tap be needed.
- Several existing underground electrical lines are located along Mocs Alumni Drive and Douglas Street. Anticipate electrical service coming from one of the lines along those streets for the dining facility. Additionally, there are several green spaces located around the dining facility that could house transformer and generator equipment.
- An existing 25"x37.5" brick sanitary main is located in Douglas Street. Anticipate new sanitary sewer service from the dining facility to connect to this main. If the existing service line from the natatorium can be located, it could potentially be connected to (assuming it meets the size requirements) and eliminate the need for a pavement cut in Douglas Street. For the gym addition, anticipate sewer service to connect to the 18" sewer main in the middle of Vine Street.
- The dining facility site slopes from Terrell Owens Way down to Douglas Street, where it enters an existing storm drainage pipe system. Anticipate any new storm drainage piping to connect to this existing pipe system. The gym addition site drains to the corner of Vine Street and Douglas Street, where it enters an existing storm drainage pipe system. Anticipate any new storm drainage piping to connect to this existing pipe system.

SITE GRADING

- The dining facility site will slope from Terrell Owens Way down towards Douglas Street. Anticipate a floor elevation of 704.00'. At this elevation, the main level of the building will be down approximately 3' from Terrell Owens Way and approximately 5' above Douglas Street. Steps will be needed from both directions to transition the grades, along with ADA ramps for accessibility.

- With a dining facility floor elevation of 704.00' the site roughly balances based on preliminary models. There is an estimated 3,700cy of cut and shift on site.
- Several existing underground utility lines are routed under the existing parking lot between the dining facility and Mocs Alumni Drive. The depth of these utility lines is currently unknown, so anticipate minimal cutting below existing grades in this area. We would recommend not planning on cutting deeper than 6" below existing grade until the utility line depths can be determined. However, there should not be any problem placing fill in this area, which would increase the depth of the utility lines; so, this area could be flattened out or terraced for outdoor gathering areas. This grading scheme will require some type of grade transition (steps, ramps, etc.) from the elevation directly above the utility lines to the floor elevation of the dining facility.
- At the rear of the dining facility, the service driveway will drop (roughly 8% slope) from approximately 707.50' (in Terrell Owens Way) down to approximately 702.00'. At this point, the pavement will slope down towards the truck docks to an elevation of 700.00' (4' below the floor elevation of 704.00'). The west end of the service driveway will slope gradually towards Douglas Street.
- The surrounding grades around the gym addition will remain largely as is, except for the areas of the new ADA ramps. Anticipate only excavation for these areas and the building footprint itself.

STORMWATER DRAINAGE AND MANAGEMENT

- In the dining facility service driveway, anticipate catch basins to pick up surface drainage and any downspouts, along with trench drains from the truck docks. This pipe system will connect to the existing pipe system in Douglas Street.
- The storm drainage system on the north side of the dining facility will depend heavily on the layout of any outdoor areas, but it is safe to assume catch basins will be required along that face of the dining facility to pick up surface drainage and downspouts. This pipe system will also connect to the existing pipe system in Douglas Street.
- At this point, it should be assumed that the impervious area on the dining facility site will increase and that stormwater

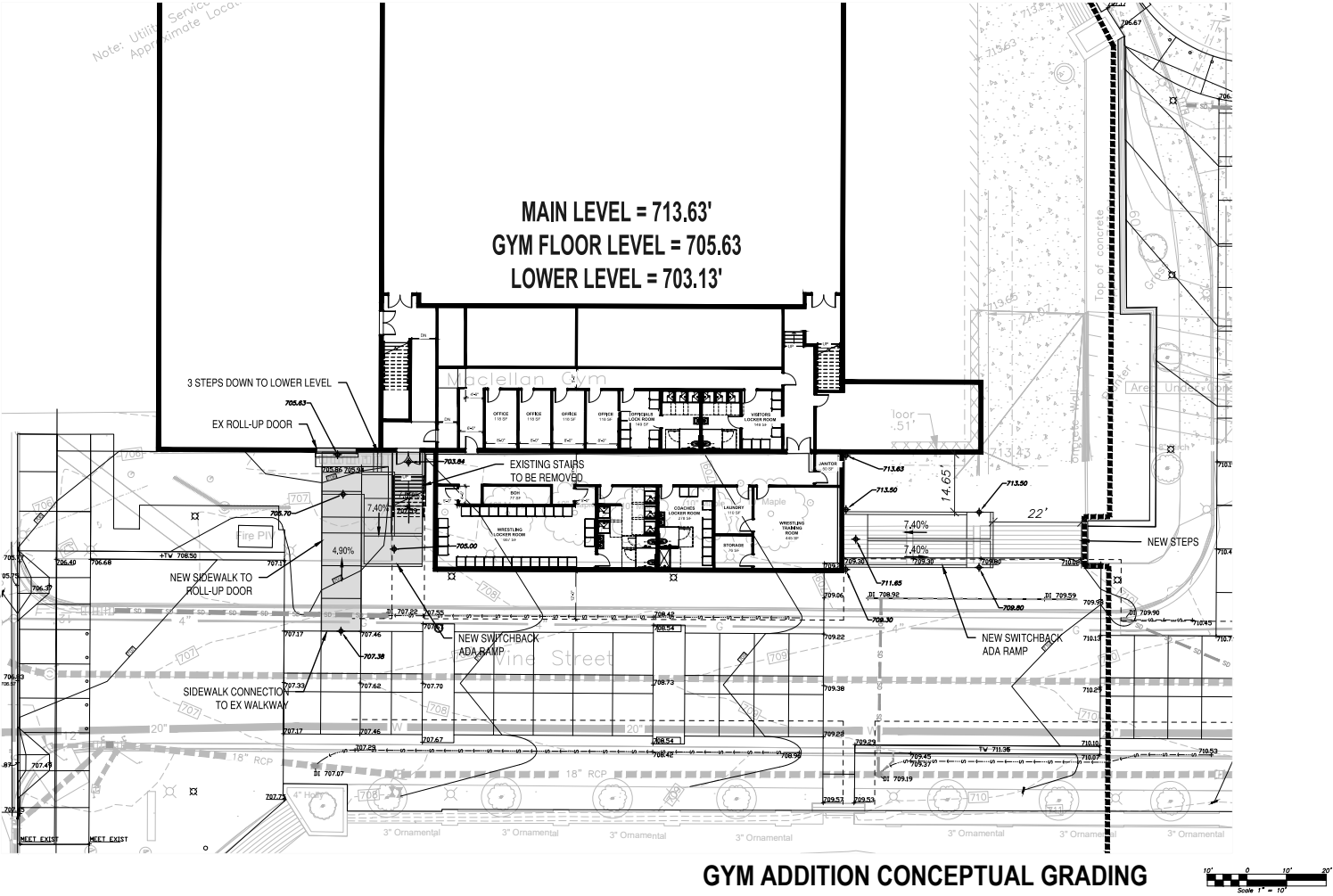
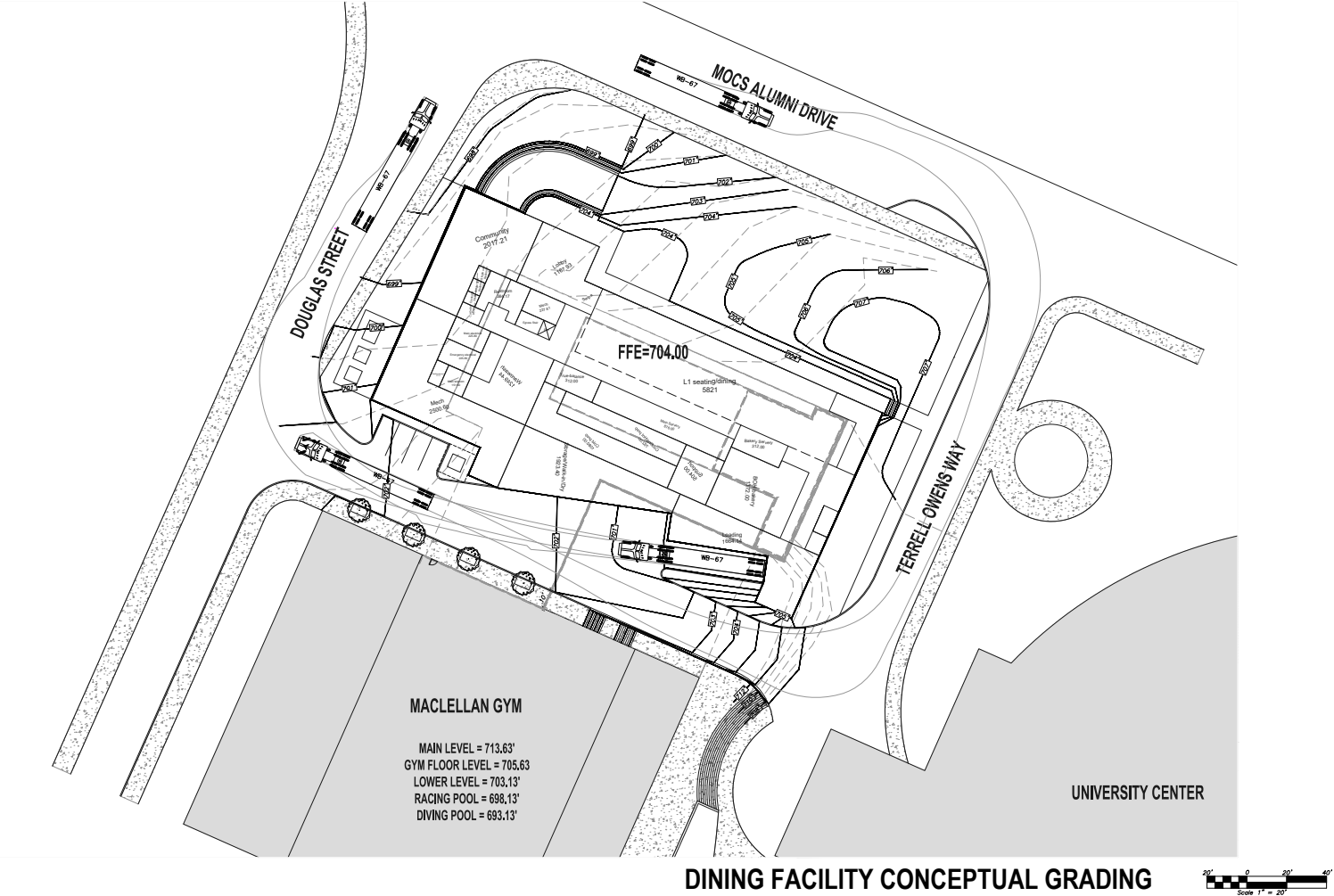
detention and treatment will be required. This will be highly dependent on the design of the outdoor areas and the limits of the existing underground utilities, but the most likely options would be:

- Smaller bioretention areas located in green spaces around the site.
 - Pervious pavement or paver sections on the north side of the site.
 - Underground chamber or pipe system on top of a gravel infiltration bed; this could be located either on the north side of the site or in the service driveway.
- The gym addition area will receive a slight increase in impervious area, most of which is roof area. Anticipate a small bioretention area or underground detention system to be utilized for storm water management.



Design Criteria

Civil Narrative



Design Criteria

5.2 Structural Narrative

PROPOSED DINING FACILITY

The program consists of razing the Maclellan Gymnasium connector and one-story building bounded by Douglas Street to the west, Mocs Alumni Drive to the north, and Terrell Owens Way to the east for a new dining facility building. The two-story building will encompass approximately 27,000 gross square feet and will house a dining area, open study/community spaces, outdoor seating at ground level, MEP spaces, walk-in storage, and loading dock. The second floor is planned to be open from the first floor to the roof in the seating area.

The governing code for the project is the 2021 International Building Code. A geotechnical subsurface investigation and site-specific seismic study have not yet been performed; however, preliminary design assumes aggregate pier elements with shallow foundations based on geotechnical information available for the adjacent football/athletic training facility. Final foundation type, slab-on-grade design criteria, and retaining wall parameters will be confirmed upon completion of the site specific geotechnical and seismic studies.

The existing building houses swimming pools which are anticipated to conflict with the new building column grids. Removal of the concrete pool structure will be required to use an aggregate pier foundation system. As an alternative, micropile deep foundation could be installed through the pool structures to support column loads. In either case, the areas of the pools will need to be filled with engineered fill compacted according to the geotechnical engineers requirements.

The site slopes downward from east to west approximately 8 feet, requiring perimeter retaining walls to transition the grade. Additional aggregate pier elements may be required along the building perimeter and within the footprint of the building to reduce potential settlement issues.

The structural framing grid is anticipated to range from approximately 33'-0" to 43'-0". The floor-to-floor height between the first and second floors is expected to be 18'-0" A steel-framed structure could be used based on the building parameters. Typical floors could utilize steel beams ranging from 18 inches to 27 inches in depth, spaced at approximately 10'-4", supporting a 3-1/2-inch lightweight concrete slab (114 to 120 pcf) placed on a 3-inch (20-gauge) composite metal deck for a total thickness of 6-1/2 inches. The slab would be reinforced with welded wire fabric (WWF 6x6/W2.1xW2.1) and #4 top bars over all steel beams. W12 to W14 columns are anticipated based on the structural grid dimensions. Fireproofing requirements should be reviewed during the design process. The lateral force-resisting system could consist of concrete shear walls located at the stair and elevator cores and located as necessary throughout the building. Steel moment frames or braced frames could be another option for the lateral force resisting system. The sloped roof will consist of steel beams supporting steel roof joists spaced at 6'-0" on-center and 1-1/2-inch (20 gauge) galvanized metal roof deck.

Lightly loaded areas of the building may utilize a 4-inch concrete slab-on-grade reinforced with WWF6x6/W1.4xW1.4 placed over compacted gravel and a vapor barrier. Areas with higher anticipated loads, such as mechanical rooms or storage spaces, may require a 6-inch slab-on-grade with WWF6x6/W2.9xW2.9 and similar subbase preparation. Final slab thickness and reinforcement will be confirmed following the geotechnical report and equipment loading criteria.

Site retaining walls are anticipated to help transition grade across the site. The walls will be constructed using 8" to 12" thick concrete and concrete footings. The walls will step in thickness to provide a ledge 5" ledge for masonry cladding.

Miscellaneous steel framing will be required to provide cladding backup and elevator rail support.

BUILDING CODE REQUIREMENTS

2021 International Building Code with ASCE 7-22 Provisions for Seismic Mapped Acceleration Values

• Live Loads		• Seismic Design	
Corridors at floors with egress	100 psf	Ss	0.50
Corridors	80 psf (unless noted otherwise)	S1	0.13
Office	50 psf	Importance Factor	1.25
Assembly	100 psf	Risk Category	III
Stairs	100 psf	Seismic Design Category	C (assumed)*
Mechanical Room	150 psf	Site Class	D (assumed)*
Storage	125 psf	*Pending further subsurface exploration.	
Roof	20 psf		
• Wind Loads			
Basic Wind Speed	111 mph		
Importance Factor	1.0		
Exposure Category	B		
Internal Pressure Coefficient	+/-0.18		
• Snow Loads			
Ground Snow Load	10 psf		
Importance Factor	1.1		
Exposure	1.0		
Thermal Factor	1.0		
Drift	To be determined		

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Design Criteria

Structural Narrative

PROPOSED MACLELLAN GYM ADDITION AND RENOVATION

The project consists of an addition to the existing Maclellan Gymnasium along with interior renovations within portions of the existing facility. The addition will be located adjacent to the existing building on the south side and will include new enclosed program space. Interior work within the existing building is anticipated to occur in open areas to accommodate new program elements.

The addition will be approximately 3,000 square feet and will include gymnasium support spaces, training areas, offices, and conference room. The addition will be structurally independent from the existing building and separated by an expansion joint to isolate building movements due to thermal effects, settlement, and structural loading.

The structural system for the addition will consist of load-bearing CMU perimeter walls on all sides, including a CMU wall constructed along the existing building interface to support the new roof structure. The CMU walls will support a steel-framed roof system consisting of structural steel beams and/or open web steel joists with metal roof deck. Lateral stability will be provided by reinforced masonry shear walls acting in conjunction with the roof diaphragm. Costs for this narrative are based on CMU wall construction; however, steel stud exterior wall construction may be considered as an acceptable alternate system.

The governing code for the project is the 2021 International Building Code. A geotechnical subsurface investigation and site-specific seismic study have not yet been performed; however, preliminary design assumes shallow spread foundations bearing on improved subgrade, if required, based on geotechnical information available for adjacent campus facilities. Continuous strip footings will support the load-bearing CMU walls. All foundations will bear below frost depth and will be designed in accordance with geotechnical recommendations. Final foundation type, slab-on-grade design criteria, and site-related structural elements will be confirmed upon completion of the site-specific geotechnical and seismic studies.

Floor construction in the addition will consist of a concrete slab-on-grade. Lightly loaded areas of the building may utilize a 4-inch slab-on-grade reinforced with WWF 6x6/W1.4xW1.4 placed over compacted gravel and a vapor barrier. Areas with higher anticipated loads, such as mechanical rooms or storage spaces, may require a 6-inch slab-on-grade reinforced with WWF 6x6/W2.9xW2.9 and similar subbase preparation. Final slab thickness and reinforcement will be confirmed following the geotechnical report and equipment loading criteria.

Interior construction within the addition and work within the existing building will consist primarily of non-load-bearing cold-formed metal stud framing with gypsum board finishes installed within existing open areas. These walls will require a framed ceiling system or supplemental structural framing to provide lateral support at the top of walls. Structural modifications to the existing building are anticipated to be minimal but may include localized framing to support new construction as required. Field verification of existing structural systems will be required.

Miscellaneous structural steel framing may be required to support architectural features, mechanical equipment, and ceiling systems.

Installation of a new wheelchair lift has been discussed. Should a lift be installed within the existing building, it will require the following:

- Recessed pit with removal of the existing concrete slab-on-grade in the area of the lift
- The pit will be constructed to the depth and configuration required by the selected manufacturer and will require coordination with structural and geotechnical design to address subgrade preparation and support.
- The surrounding slab and any affected areas will be restored following installation of the lift system.

Design Criteria

5.3 Architectural Narrative

GENERAL

- International Building Code-2021
- NFPA 70-2017, National Electrical Code
- International Mechanical Code-2021
- International Fire Code, 2021 edition
- International Fuel Gas Code, 2021 edition
- International Plumbing Code, 2021 edition
- International Energy Conservation Code-2021
- Accessible and Usable Buildings and Facilities (ANSI ICC A117.1), 2009 edition
- Tennessee High Performance Building Requirements Manual – 2021
- University of Tennessee – Division of Facilities Planning – Designer’s Manual

The UT Chattanooga Dining Facility is a new, purpose-built, two-story All-You-Care-to-Eat (AYCTE) dining center located at the corner of Mocs Alumni Drive and Douglas Street. The project replaces the former natatorium/connector structure adjacent to Maclellan Gym and establishes a new campus dining destination positioned centrally within the academic core.

The facility is designed to supplement Crossroads Dining Hall and provide an additional AYCTE option on campus. The building is planned to support approximately 450–550 seats (excluding outdoor and soft seating) and accommodate an estimated 2,500–3,500 daily meals. The building program totals approximately 27,000 square feet.

The architectural organization reflects a clear separation between public-facing dining functions and back-of-house production spaces, while maintaining efficient operational adjacencies.

The building is vertically organized as follows:

- Level 01 – Primary Servery, Dining, and Full Production Kitchen
- Level 02 – Expanded Dining, Private Dining, Terrace, and Secondary Food Platforms

BUILDING ORGANIZATION & CIRCULATION

The planning strategy is organized around a traditional and highly efficient food service flow:

- Deliveries received at loading dock
- Bulk storage directly adjacent to dock
- Cold preparation adjacent to storage
- Hot production located between prep and servery
- Serving platforms oriented toward seating
- Dish drop and ware wash positioned near exit

This linear operational model ensures efficient pan-to-plate delivery while maintaining separation between front-of-house and back-of-house spaces.

Public circulation is intuitive and direct, with clear sightlines from entry to servery and vertical circulation elements prominently positioned to support movement between levels.

LEVEL 01 – MAIN ENTRY & PRIMARY DINING

Main Entry & Lobby

The primary public entry is located off Douglas Street and aligned with major pedestrian pathways. The entry plaza provides accessible access to the building and establishes a welcoming entrance into the dining hall.

The lobby includes:

- Card swipe / access control entry
- Queuing space sized for peak meal periods
- Visual connection to primary food platforms
- Vertical circulation core (elevator and open stair)
- Adjacent community seating zone

The lobby shall feel open, light-filled, and welcoming, reinforcing the project’s goal of creating a non-transactional campus gathering space. It shall incorporate direct visual connection to servery and vertical circulation, with glazing to maximize daylight.

Servery & Primary Food Platforms

The Level 01 servery forms the core of the dining experience. Platforms are organized in a linear configuration to maximize seating efficiency and maintain clear circulation.

Serving counters incorporate millwork finishes at public faces with stainless steel construction in all food contact and operational zones.

Beverage counters are positioned adjacent to, but not interrupting, the main food platforms. Major equipment may include: Soda dispensing systems, coffee and tea dispensing equipment, water fillers, ice machines, and specialty beverage machines.

Counters are designed with durable surfaces suitable for high-volume service. Utilities are concealed within casework or floor penetrations coordinated per food service engineering standards.

Level 01 dining provides a variety of seating typologies, including:

- Communal tables
- Two-top and four-top tables
- Bar-height seating
- Soft seating adjacent to community areas
- Window-oriented seating for natural light access

The dining volume emphasizes openness and vertical height. Ceiling clearances are designed to support proper exhaust hood mounting and ventilation performance, while maintaining a light-filled and inviting environment.

Floor finishes in public dining areas will be commercial-grade, high-durability materials suitable for heavy traffic and frequent cleaning.

Major equipment elements include:

- Serving counter with millwork finishes, stainless steel cabinet core
- Drop in hot/cold wells
- Drop in hot decks
- Undercounter refrigeration
- Undercounter hot holding cabinets
- Food shields with glass/light/heat

- Plate dollies for back up
- Plate/ware displays
- Drop in silverware holders
- Soda machines
- Coffee machines and dispensing
- Tea machines and dispensing
- Water fillers
- Specialty drink machines
- Ice machines

LEVEL 02 – EXPANDED DINING & OUTDOOR TERRACE

Level 02 provides additional seating capacity and expands the experiential quality of the dining facility.

At least one Level 02 food platform includes hood and exhaust capacity to support hot production. The secondary platforms provide flexibility for varied cuisines and operational adaptability.

The Private Dining Room is designed to support team dinners, campus events, and catering functions with the ability to open up to the seating area for expanded capacity.

The terrace extends dining outdoors while allowing operational control between AYCTE seating and public-access areas.

BACK-OF-HOUSE PROGRAM

Loading Dock

The dock is positioned to allow safe, efficient truck access and pull-through circulation. Program elements include:

- Scales, in floor or on dock
- Trash/recycling/digesting/composting bins
- Cardboard baler, if needed
- If fry oil is used, a heated fry oil containment tank, and a fry pump dolly cart
- Holding walk-in cooler
- Holding linen/uniform room
- Possible remote refrigeration rack, if not roof mounted
- Office to monitor deliveries, and outgoing meals/baked goods/catering
- Secure entrance for Dining staff

Design Criteria

Architectural Narrative

Dock areas are designed to accommodate equipment access clearances and appropriate floor loading for commercial kitchen operations.

Additionally in the loading area are four (4) parking spaces, adjacent to MEP spaces. This will allow for staff parking or service truck parking.

Bulk Storage

Bulk storage is located adjacent to the dock for operational efficiency, including walk-in cooler, walk-in freezer, dry storage room, large ice production machines, fountain soda bag-in-box systems, remote CO2 tanks.

Walk-in assemblies include insulated floor systems and waterproof membrane beneath finished flooring.

Cold Preparation

Cold preparation is positioned between bulk storage and hot production for efficient workflow. Spaces include:

- Work Tables with sinks
- Salad spinner
- Vegetable wash tumbler
- Meat slicers
- Hand sinks
- Undercounter refrigeration
- Counter top mixers/food processors/dicers
- Speed racks
- Hose reel for wash down
- 3-compartment sink for ware washing only for cold prep space
- Pot washer, adjacent to 3-compartment sink
- Dry and dish wire metro racks
- Knife storage and sterilization
- Bin/Ilexan dollies
- Blast chillers

Wall finishes in wet and prep areas shall be non-absorbent, smooth, and easily cleanable. Acceptable materials include stainless steel panels or FRP installed over cementitious backer board.

Hot Production / Finish Kitchen

The hot production kitchen is directly adjacent to the servery to support efficient service.

Major elements include:

- Hand sinks
- Spreader tables
- Wall shelving
- Pot pan shelving
- Expo tables and counters
- Speed racks
- Refrigerator/freezers
- Bulk cooking equipment
 - Roll in ovens
 - Tilt skillets
 - Tilt kettles
- Typical Cooking Equipment
 - Combi ovens
 - Conveyor oven
 - Rice cookers
 - Griddles
 - Fryers
 - Grills
 - Woks
- Exhaust hood systems
- Fire suppression systems

Cooking walls are protected with 20-gauge stainless steel flashing from floor upturn to hood bottom. Floors in hot production areas shall be quarry tile or high-performance resin flooring with integral coved base and waterproof membrane beneath.

Bakery

The bakery supports both the dining hall and broader campus baking needs and is located near both the dock and servery for visibility and production efficiency. The bakery shall include:

- Walk-in cooler and freezer
- 40 qt and 60 qt mixers
- Dough press
- Proofer
- Sheeter, fold up
- Roll-in oven
- Blast chillers
- Hand sinks
- Ingredient bins, under counter
- Cookline (bakery only) – roll in oven, combi, small batch tilt kettles
- Work tables with sinks

Ware Wash / Dish Room

Located near the dining exit to maintain clear clean/soiled circulation separation. This space shall include:

- Conveyor or carousel dish drop
- Soiled dish table
- Scraping station with sprayers
- Wet waste collector
- Flatware soaking carts
- Trash cans
- Hand sinks
- Multiple dish drying shelves and racks
- Flight-type dish machine
- 3-compartment sink
- Floor troughs
- Mop sink
- Hose reel

Ware wash rooms are acoustically treated due to high operational noise levels. Floors are pitched to drains to prevent standing water while maintaining smooth transitions for rolling carts.

SUPPORT SPACES

Staff areas are accessed via secure circulation paths separate from public dining zones. Support areas include:

- Chef Office
- Kitchen Manager Office
- Open administrative workspace (sous chef/admin/etc...)
- Staff restroom
- Locker area
- Uniform or laundry carts or pickup space
- Janitorial room

EXTERIOR FACADE

The exterior architecture shall emphasize a primary public entrance with glazing along the double-height volume and an exterior canopy at the entry.

Primary façade materials shall include masonry consistent with surrounding campus buildings, along with high-performance glazing along the north and northwest façades. Glazing shall emphasize views into and out of the building, showcasing community seating and dining activity.

Additional exterior materials may include metal panel accents to articulate levels and transitions.

Key elements of the exterior shall include:

- Materiality consistent with campus context
- Double-height glazing at northwest corner
- Sloped roof form
- Curtain wall expression
- Terrace guardrail integration
- Relationship to Maclellan Gym massing
- Integrated mechanical screening strategy

Design Criteria

Architectural Narrative

PROPOSED MACLELLAN GYM ADDITION AND RENOVATION

The Maclellan Gym scope includes targeted additions, renovations, utility relocation, and accessibility upgrades required to support demolition of the existing natatorium and connector structures while maintaining continuous operation of the gymnasium throughout construction.

The project includes approximately 2,890 SF of new enclosed addition space at the south side of the gym, along with approximately 4,600 SF of interior renovation distributed between the north and south portions of the existing facility.

The architectural approach is focused on:

- Maintaining ongoing athletic and campus operations
- Relocating displaced athletic support functions
- Improving accessibility and circulation
- Separating gym infrastructure from the demolished natatorium systems
- Integrating new construction (addition) with the existing gym architecture

The proposed addition is positioned adjacent to the existing lower-level wrestling area and is partially depressed to align with the current lower-level floor elevation.

LOWER LEVEL - ATHLETIC SUPPORT AND RELOCATIONS

The lower-level scope includes relocation of spaces displaced by demolition of the natatorium and connector structures.

Program elements include:

- Wrestling locker room with adjacent showers and restrooms
- Visitor locker room with adjacent showers and restrooms
- Wrestling training room
- Coaches offices and bullpen workspace
- Laundry and storage support spaces
- Officials locker rooms
- Single-user accessible toilet rooms
- Janitorial support spaces

The relocated wrestling locker room is designed to support approximately 32 lockers with open central space for team gathering and pre-event huddles.

The visitor locker room has been intentionally reduced in size from the existing condition to better align with current operational needs and project budget parameters.

Interior renovation work at the north side of the gym includes expansion of the existing mechanical and utility infrastructure areas to accommodate relocated systems currently housed within the natatorium.

ACCESSIBILITY AND CIRCULATION IMPROVEMENTS

Demolition of the connector structure requires reconfiguration of existing accessible circulation routes serving Maclellan Gym.

The project includes:

- New accessible entrance sequence to the lower-level wrestling and training spaces
- New ramp and stair systems at the south side of the gym
- Reconfigured exterior circulation adjacent to Douglas Street
- New accessible path connecting the lower level to the gym floor level
- Modifications to existing exterior stairs and sidewalks

The existing exterior ramp adjacent to the connector structure will be demolished to accommodate truck circulation and loading access for the new dining facility. New accessible routes are therefore required to maintain ADA access to both the gym floor and lower-level athletic spaces.

The proposed circulation strategy maintains separation between service/loading operations and primary public access points while improving long-term accessibility around the facility.

The design team discussed a possible accessible lift for access between the lower level and the main concessions level. At the conclusion of this programming effort, a lift was included in the total ROM estimate but it is not anticipated for this lift to be part of the completed project.

MECHANICAL & UTILITY ENABLING WORK

A significant portion of the Maclellan Gym scope involves relocation and separation of utility infrastructure currently located within the natatorium and connector structures.

The project includes:

- New mechanical room infrastructure
- Relocated chilled water and heating hot water systems
- New electrical rooms and distribution infrastructure
- New communications and MDF spaces
- Relocated fire alarm and security systems
- New transformer and medium-voltage infrastructure

These systems are phased carefully to maintain continuous operation of Maclellan Gym throughout demolition and construction activities.

Refer to Section 5.5 through 5.10 for detailed MEP narratives and phased enabling work diagrams.

ARCHITECTURAL CHARACTER & MATERIALS

The Maclellan Gym addition is intended to complement the existing gymnasium while remaining visually subordinate to the new Dining Facility.

Exterior materials should coordinate with the existing gym structure and broader UTC campus architectural vocabulary. Anticipated materials include:

- Brick masonry
- Storefront glazing systems, where needed given the subgrade

- elevation of the addition
- Durable exterior metal railings and canopy elements

The addition should maintain durable, low-maintenance construction appropriate for athletic and student-use facilities.

Interior renovation areas should prioritize:

- Durable athletic finishes
- Moisture-resistant wall systems
- Improved lighting and visibility
- Clear circulation and wayfinding
- Accessibility and code compliance

Design Criteria

5.4 Food Service Narrative

GENERAL

UTC's Maclellan Gym North Building was originally constructed as a natatorium but has not operated as such for many years. This programming effort centers on demolition of the existing pool structure and development of a new purpose-built dining facility to provide an additional All-You-Care-to-Eat (AYCTE) option on campus.

Currently, the UTC campus operates one (1) AYCTE dining hall, the Crossroads Dining Hall in Guerry Center. There are four retail options on campus, as indicated in the map below:

- POD and Einsteins - West Campus
- Multiple QSR options - University Center
- Starbucks - Library
- Subway and POD - Stacy Town Center



Vicinity Map of Current Retail Food Offerings on UTC's Campus

Crossroads Dining Hall, a renovation of an existing building, was not originally designed for food service use and is constrained by its existing footprint. The proposed facility will be purpose-built for dining and food and beverage operations and is intended to serve as the primary AYCTE dining location on campus.

The new dining facility will be located adjacent to the University Center along the western side of campus. Crossroads Dining Hall will continue to support the eastern portion of campus.

The facility will be a two-story dining center with a fully resourced and self-sustaining kitchen operated by Aramark. Additional program elements alongside the main dining hall functions will include catering production for banquets and events and a bakery to serve campus.

OPERATIONAL INTENT

The planning approach is organized around the following operational goals:

- Provide an additional AYCTE option
- Integrate campus-wide catering and bakery functions
- Provide approximately 450-500 seats
- Support 2,500-3,500 daily meals
- Support peak meal counts of approximately:
 - 700 breakfast
 - 1,400 lunch
 - 1,400 dinner
- Provide a private dining room for team dinners, campus events, and reservable use
- Incorporate sustainable kitchen strategies including all-electric cooking where feasible, water-reducing equipment, elimination of fry oil where possible, and EPA-compliant refrigerants

PLANNING ORGANIZATION

The concept design flow will follow traditional food service operational logic:

- Products and goods delivered to back-of-house and kitchen via a loading dock (between the gym and the new facility)
- Bulk storage located adjacent to dock
- Cold preparation located adjacent to storage and cookline

- Hot production located between prep and servery
- Serving lines organized by cuisine
- Beverage counters located adjacent to food platforms and seating
- Bussing and dish drop located near dining exit
- Bakery positioned for visibility and adjacency to both dock and servery

PLATFORM STRATEGY

With the two-level configuration, each level will include food and beverage service.

The second level will have a smaller platform with one to two cuisines offered. At least one second-level platform shall include cooking with hood and exhaust capacity, as well as a cold platform and a beverage counter.

The Level 01 platforms will require further coordination with the operator, with a goal of four to seven individual platforms serving different cuisines to meet the target meal count. This may provide an opportunity to introduce a cuisine not currently offered at Crossroads Dining Hall or available at the existing retail options on campus.

Design Criteria

5.5 Mechanical Narrative

GENERAL

Heating, ventilating, and air conditioning systems will comply with the following codes and standards:

- International Building Code-2021
- International Mechanical Code-2021
- ASHRAE Standard 62.1-2019
- International Energy Conservation Code-2021
- Tennessee High Performance Building Requirements Manual – 2021
- University of Tennessee – Division of Facilities Planning – Designer’s Manual

DEMOLITION

The existing installation at Maclellan gymnasium will remain as is except as otherwise indicated herein. The new work will be connected with the existing work and the existing work adapted to the changes in the building and systems.

The installation of new piping and equipment will be coordinated with existing equipment which is to remain operational to avoid conflict with operating performance and working clearances.

Exposed piping rendered useless due to changes will be removed.

Concealed piping which is exposed by the removal of walls will be relocated and reconnected.

Material and equipment which has been removed will not be used in the new work, except as indicated herein.

MACLELLAN GYMNASIUM – ENABLING WORK

HVAC systems serving the Maclellan Gym are fed from the campus chilled and hot water systems. Pumps, heat exchangers, and other equipment providing this service are located in a main mechanical room slated for demolition when the old aquatics center and connector bridge are demolished. The following mechanical changes will be required to maintain HVAC service to Maclellan Gym prior to and after demolition. The work will need to occur in phases as described below.

Phase 1: Site Hydronic Expansion and New Plant Installation

- Extend new underground 8” chilled water and 4” high-temperature hot water piping from the parking lot just south of Mocs Alumni Dr. to Storage Room 128. Measures shall be implemented to prevent deflection of new piping installed under roadways and other vehicular traffic areas.
- Provide a new pair of end suction chilled water pumps (approximately 600 gpm each, 25 HP each) and a pair of hot water pumps (approximately 400 gpm, 15 HP each).
- Provide shell and tube heat exchanger for converting campus high-temperature hot water to building heating hot water.

Phase 2: Hydronic Piping Extension within Maclellan Gym

- Route new tempered water piping to intercept existing tempered water piping in the gymnasium building. New piping will intercept and connect to four sets of tempered water supply and return connections (eight existing piping connections in total.) Provide isolation valves in the existing tempered water piping between the new connections and the mechanical room to allow future demolition.

Phase 3: Demolition

- Demolish and remove the existing hydronic plant and piping serving Maclellan Gym, including hot and chilled water pumps, heat exchangers, controls, and accessories.

Phase 4: Dining Facility Construction

- Provide dedicated hot and chilled water piping from Storage Room 128 to the new dining facility.

MACLELLAN GYM – ADDITION

The proposed addition at the south end of the gymnasium would add approximately 3,000 square feet of locker room, restroom, and training space. New roof-mounted centrifugal exhaust fans will provide exhaust from locker rooms and restrooms. Fans would be located on either the existing high roof or lower roofs within the main gym footprint. New horizontal ducted four-pipe fan-coil units will provide sensible heating and cooling to the added spaces. A small dedicated outside air system (DOAS) will provide conditioned

make-up air for exhausted spaces. Hot and chilled water piping will be extended from the new mechanical room provided in the enabling work to the new fan-coil units and DOAS. Outside air for the DOAS will be introduced through an exterior wall louver or a roof-mounted intake hood.

The new officials locker room at the north end of the gym will be exhausted via the existing exhaust air system, which will be reconfigured to match the new space layout.

COOLING SYSTEM

Chilled water will be provided from the existing central plant chilled water system. New underground chilled water branch lines will extend from the existing mains to the building.

Chilled Water Pumps: horizontal split case type with premium efficiency motors sized to prevent overloading at any point along the pump curve. The pumps will have variable frequency drives to modulate flow to maintain a constant system differential pressure.

Piping: Chilled water piping 2.5" and larger will be ERW schedule 40 black steel, and 2" and smaller will be type L hard drawn copper. Piping will be insulated with preformed cellular glass pipe insulation with all service jacket with self-sealing lap. Underground chilled water piping will be schedule 40 steel, preinsulated with polyurethane foam in an outer FRP or HDPE conduit.

A control valve on the chilled water return line will modulate to maintain chilled water return temperature back to the central plant.

HEATING SYSTEM

Heating will be provided by the campus high temperature heating water system. New piping will be extended from the campus system to the building. A shell and tube style heat exchanger will produce lower temperature (~180°F) hot water and building hot water pumps will supply heating water to air handling units, terminal unit reheat coils, unit heaters, and fan-coil units. The hot water system will be located in a mechanical room on the lowest level of the building.

Heating Water Pumps: horizontal split case type with premium efficiency motors sized to prevent overloading at any point along the pump curve. The pumps will have variable frequency drives to

modulate flow to maintain a constant system differential pressure.

Piping: Heating water piping 2.5" and larger will be ERW schedule 40 black steel and 2" and smaller will be type L hard drawn copper. Piping will be insulated with preformed fiberglass pipe insulation with white all service jacket with self-sealing lap. Underground high temperature hot water piping will be Class A preinsulated type with seamless ASTM Grade B schedule 40 piping. Heating plant accessories will include expansion tanks, inline air separators, and manual batch type chemical feeder.

AIR HANDLING SYSTEMS

Air handling units serving common areas, lobbies, seating and dining areas, administration space, and storage areas will be designed for recirculated air with approximately 25-30% minimum outside air. These systems will be provided with airside economizer capabilities.

Air handling units serving kitchens, servery areas, and warewashing areas will be designed to deliver 100% outside air.

Air handling units will be standard modular, draw-through, factory-fabricated, medium pressure type including the following features:

- 2” thick, solid, galvanized steel, double-wall casings with rigid foam insulation between the walls. Perforated inner walls at fan sections for improved acoustic performance.
- 12” deep MERV 14 cartridge filters and 2” deep pleated pre-filters.
- Hot water type preheat coils with 30°ΔT. An inline circulating pump will be provided to maintain full design flow at each preheat coil.
- Chilled water type cooling coils with maximum face velocity of 450 FPM, maximum 8 rows of depth, and 16°ΔT.
- Air blenders: counter rotation design for mixing of outside air and return air streams.
- Premium efficiency fan motors with variable frequency drives.
- Fan arrays for large air handling units (30,000 CFM and higher).
- Relief air or return air fans: to be provided for air handling units with airside economizer cycles. These fans will have variable frequency drives, controlled to an overall balance between outside air intake and relief air discharge.

Design Criteria

Mechanical Narrative

AIR DISTRIBUTION

Ductwork will conform to SMACNA recommendations. Concealed supply, outside air, and return duct will be insulated with 2” fiberglass blanket. Exposed supply duct will be flanged round double-wall duct with 1” insulation sandwiched between the duct walls.

Grease hood exhaust ductwork will be double wall, insulated, prefabricated 316 stainless steel outer wall, type 316 stainless steel inner wall, and minimum 3” thick ceramic fiber insulation between the two walls. Dishwasher exhaust ductwork will be Type 304 18 gauge stainless steel exposed and aluminum where concealed. In general, all other ductworks will be galvanized steel.

Terminal Units: Variable-volume reheat terminal units will provide heating/cooling supply air to all occupied spaces. Heat will be provided by heating water coils.

Mechanical rooms and electrical rooms will be ventilated.

Independent ductless split systems will provide conditioning for elevator machine rooms and telecom rooms.

EXHAUST SYSTEMS

Exhaust systems will be provided to serve kitchen equipment. Individual systems will be provided for each hood or each group of hoods that may be controlled together. Fans will have variable frequency drives to control fan speed based on input from the hood controller provided by the kitchen hood manufacturer. Fans serving grease hoods will be NFPA 96 compliant.

The dish room will have two dedicated exhaust systems. One will serve the dish room and the other will serve the dishwasher machine.

A general exhaust system will be provided to serve toilet rooms, housekeeping closets and other spaces requiring general exhaust.

SPECIALTY SYSTEMS

A centralized process chilled water system will be provided to serve select food service equipment. This system will include a plate heat exchanger to isolate the process system from the campus chilled water system. The process system will require two pumps and

accessories including expansion tank, air separator, chemical feeder, and make-up water connection.

HVAC TESTING, ADJUSTING, AND BALANCING

Systems will be tested, adjusted, and balanced to achieve proper operation, design flow, temperature and pressure differentials, and pressure drop through piping, ductwork, equipment, and components.

AUTOMATIC TEMPERATURE CONTROLS

An open-protocol building control system (BCS), including a web-based remote operation system, will be provided to control the chilled water systems, heating water systems, air handling units, exhaust systems, energy recovery systems, and terminal units. The system will be tied into the existing campus facility management system. Software graphics with pictorial representations of equipment and devices being controlled will be provided.

UTILITY METERING

Metering will be provided for chilled water and high-temperature hot water. Submetering for high-temperature hot water serving domestic water heating is anticipated.

Design Criteria

5.6 Plumbing Narrative

GENERAL

Plumbing systems will comply with the following minimum requirements:

- International Building Code-2021
- International Plumbing Code-2021
- International Energy Conservation Code-2021
- NFPA 45-2015, Standard on Fire Protection for Laboratories Using Chemicals
- Tennessee High Performance Building Requirements Manual – 2021
- University of Tennessee – Division of Facilities Planning – Designer’s Manual

DEMOLITION

The existing installation at Maclellan gymnasium will remain as is except as otherwise indicated herein. The new work will be connected with the existing work and the existing work adapted to the changes in the building and systems.

The installation of new piping and equipment will be coordinated with existing equipment which is to remain operational to avoid conflict with operating performance and working clearances.

Exposed piping rendered useless due to changes will be removed.

Concealed piping which is exposed by the removal of walls will be relocated and reconnected.

Material and equipment which has been removed will not be used in the new work, except as indicated herein.

MACLELLAN GYMNASIUM – ENABLING WORK

Plumbing systems serving the Maclellan Gym are fed from the main mechanical room slated for demolition when the old aquatics center and connector bridge are demolished. The following mechanical changes will be required to maintain plumbing service to Maclellan Gym prior to and after demolition.

- Provide new 4” domestic water entry into Storage Room 128. Reconnect to existing water piping serving the gymnasium.
- Provide new domestic hot water heater in Storage Room 128. Water heater will include heat exchanger with campus high-temperature hot water as the heating source.

Phasing and sequencing of this work will match the phasing indicated in the HVAC narrative and associated phasing diagrams.

MACLELLAN GYMNASIUM – ADDITION

The proposed addition at the south end of the gymnasium would add approximately 3,000 square feet of locker room, restroom, and training space. New plumbing fixtures will be provided in the toilet rooms and locker rooms. Sanitary and vent piping will be extended from the existing systems within the gym to connect to the new fixtures. New vent piping will extend through the roof. Cold water and hot water piping will be extended from existing mains to the new fixtures.

The new officials locker room at the north end of the gym will be connected to existing sanitary, vent, and pressure piping previously serving this area.

PLUMBING FIXTURES

Water Closets: elongated vitreous china, wall-hung, sensor-activated, flush valve type, 1.28 gallons per flush with white open front seats.

Lavatories: vitreous china, under-mount type, with sensor-activated centerset faucet, 0.5 gpm flow control, and grid strainer.

Urinals: vitreous china, wall-hung, sensor-activated, flush valve type, 0.125 gallons per flush.

Water Fountains: electric, modular type with in-wall chiller, extended round receptors, and bottle filler option.

Sinks: service sinks will be terrazzo, floor type with grid strainer, rim guard and faucet with hose thread outlet, vacuum breaker and wall brace. Break room sinks will be stainless steel, self-rimming type, with swing spout faucet, and 1.5 gpm flow control.

DRAINAGE SYSTEMS

Sanitary Drainage System: Sanitary drain, waste, and vent systems will extend from 5' outside the building to all fixtures and equipment requiring service. Drainage and vent stacks will extend vertically through the roof. The system will be provided with traps, vents, and cleanouts as required by code. Trap primers will be provided for drains susceptible to loss of water seal by evaporation.

Elevator pits will be provided with sump pumps with the discharge piped indirectly to the sanitary system.

Rainwater Drainage System: Rainwater primary and secondary drainage systems will extend from the roof and gutter drains to 5' outside the building. Piping will extend from these drains to 5’ outside the building. Cleanouts will be provided as required by code. Drain bodies and horizontal rainwater primary and secondary piping above grade and within heated spaces will be insulated to prevent condensation. Rainwater secondary drainage piping will be routed independent of other drainage systems and discharge above grade at an observable location.

Piping: Sanitary and rainwater drainage and vent piping above grade will be hubless cast iron pipe and fittings with heavy duty compression type couplings. Drainage and vent piping below grade will be service weight cast iron pipe and fittings with elastomeric compression joints. Grease waste piping above and below grade will be stainless steel DWV piping and fittings with push-on joints with EPDM seals.

Area drains in food service areas and floor sinks serving food service equipment will be provided.

Outdoor central inground grease interceptors will be pre-cast, reinforced concrete units and will be located in the loading dock area of the building to receive and pretreat the kitchen waste prior to connection to the sanitary system. The interceptor will be sized to provide a maximum 100 ppm grease discharge performance and meet the requirements of local authorities having jurisdiction.

DOMESTIC WATER SYSTEMS

Water Supply: the water supply will be provided from municipal sources with service separate from fire protection service.

Water Service: The water service will be extended from 5' outside the building to the mechanical room. The water service will be provided with dual RPZ type backflow prevention devices in accordance with local code. Pressure reducing valves will be provided, as required, to control excessive water pressure.

Water Distribution: After passing through the building's main backflow preventers and a water pressure booster system, the domestic cold water supply will be piped to a dedicated water heater that will generate the domestic hot water supply. The domestic cold water and hot water will be distributed to toilet rooms, break rooms, and other areas where water may be required for human consumption.

Isolation valves will be provided at each building's domestic water entrance, at the base or top of each vertical riser, at each branch to commons areas serving 2 or more fixtures, and at each wall hydrant or equipment connection. Water hammer arresters will be provided for shock suppression. Water connections for mechanical system make-up will be isolated from the domestic water system by reduced pressure backflow preventers.

Water connections for mechanical system make-up will be isolated from the domestic water system by RPZ type backflow preventers.

Design Criteria

Plumbing Narrative

DOMESTIC HOT WATER

The domestic hot water service will be extended from water heaters to the plumbing fixtures. Water heaters will be shell and U-tube water-to-water heat exchangers with vertical hot water storage tanks, using campus high-temperature hot water as the heating source. Heater systems will include the necessary control valves, expansion tank, pumps, and thermostatic mixing valves.

The domestic hot water will be heated to 140°F. A hot water circulating pump will be provided to limit temperature loss throughout the system to 10°F maximum. A master thermostatic mixing valve will be installed at the water heater to reduce the hot water temperature to the building to 120°F.

Piping: domestic water piping within the building will be type L hard copper with wrought copper sweat type fittings, and joints using lead-free solder. Water piping below slabs on grade will be type K soft copper with no joints below slab. Domestic hot and cold water piping will be insulated with fiberglass pipe insulation. Fittings will be insulated with preformed fiberglass fittings finished with glass fabric and vapor barrier mastic.

NATURAL GAS

A building natural gas system will be extended to the site by the natural gas provider, and the requested natural gas service pressure will be 5 psig from the gas provider. Before the gas piping enters the building, a 5 psig natural gas line will be routed from the outdoor building gas service to the engine-generator set provided for the project. The natural gas pressure will be further reduced to 2 psig before entering the building to serve food service equipment, and each equipment will be provided with pressure regulators to control gas pressure to each equipment’s specific needs.

Natural gas piping above grade will be schedule 40 black steels with welded joints for 5 psig systems and threaded or welded joints for 2 psig and less systems.

Design Criteria

5.7 Fire Alarm Narrative

GENERAL

Fire alarm systems will comply with the following minimum requirements:

- International Building Code – 2021
- International Fire Code – 2021
- NFPA 70-2017, National Electrical Code
- NFPA 72-2025, National Fire Alarm Code
- NFPA 101-2021, Life Safety Code
- University of Tennessee – Division of Facilities Planning – Designer’s Manual – 2018

DEMOLITION

The existing installation at Maclellan Gymnasium will remain as is except as otherwise indicated herein. The new work will be connected with the existing work and the existing work adapted to the changes in the building and systems.

The existing fire alarm panel (manufactured by Simplex) serving the Maclellan Gymnasium is located in the main electrical room slated for demolition. In order to keep the existing equipment operational, a new fire alarm panel will be provided in the new electrical room within the gymnasium. The new fire alarm panel will serve the existing devices within the gymnasium and the fire alarm circuits will be intercepted and extended to the new panel location. New devices will be provided in the addition and connected to the existing system.

Refer to the electrical portion for phasing requirements.

DESIGN CRITERIA

A new fire alarm system will be installed to serve the Dining Facility. The system will be a supervised, local protective signaling system employing multiplex communication and individually addressable initiating devices. Acceptable manufacturers will be SimplexGrinnell.

In lieu of a fireman’s telephone system, a distributed antenna system will be provided to ensure signal strength for public safety portable radios.

CONTROL EQUIPMENT

Control equipment will be modular in construction, UL listed, and housed in a recessed steel cabinet. Operating voltage will be 24 V DC. Standby power will be furnished by a 24-hour self-contained emergency battery power supply.

The main fire alarm control panel will include solid state construction, plug-in modules and dead front construction. Signaling line circuits and initiating device circuits will be arranged so that the number of connected devices does not exceed 80% of circuit capacity. The fire alarm annunciator will be an LCD display with minimum 80 character capacity.

Speaker circuits will be selectable for 1-way transmission of voice instructions. The circuit selector panel will be mounted adjacent to or integral with the CPU and will include individual zone selector switches, an all-call switch, and a microphone with press-to-call button and coil cord.

ALARM INITIATING DEVICES

Alarm initiating devices will include addressable manual pull stations, monitor modules, duct detectors, heat detectors, and smoke detectors. Addressable monitor modules will be provided for nonaddressable devices including sprinkler water flow switches and valve tamper switches.

Auxiliary functions will be performed by control modules located within 36" of the controls for the equipment to be operated.

NOTIFICATION DEVICES

Alarm signaling devices will consist of alarm speakers and strobe lights.

Design Criteria

5.8 Fire Suppression Narrative

GENERAL

Fire suppression systems will comply with the following minimum requirements:

- NFPA 13-2019, Installation of Sprinkler Systems
- NFPA 20-2019, Installation of Centrifugal Fire Pumps
- State of Tennessee High Performance Building Requirements
- University of Tennessee – Division of Facilities Planning – Designer’s Manual

DEMOLITION

The existing installation at Maclellan gymnasium will remain as is except as otherwise indicated herein. The new work will be connected with the existing work and the existing work adapted to the changes in the building and systems. The existing system will be extended to the addition areas.

The installation of new piping and equipment will be coordinated with existing equipment which is to remain operational to avoid conflict with operating performance and working clearances.

Exposed piping rendered useless due to changes will be removed.

Concealed piping which is exposed by the removal of walls will be relocated and reconnected.

Material and equipment which has been removed will not be used in the new work, except as indicated herein.

DESIGN CRITERIA

The building will be protected throughout by a combined system of Class I wet standpipes and automatic sprinklers.

Areas subject to freezing, including loading docks, will be protected by a dry pipe sprinkler system.

Systems will comply with the requirements of the University’s insurance underwriter.

SPRINKLER SYSTEM

Piping will be sized by hydraulic calculations. Laboratories, mechanical rooms, locker rooms, electrical rooms, and storage areas will be classified Ordinary Hazard Group 1. Other areas will be classified light hazard. Hydraulic design criteria will be in accordance with NFPA 13-2016, Paragraph 11.2.3 as follows:

- Light hazard areas will be designed to provide a minimum density of 0.10 gpm/ft². Maximum area per sprinkler will be 225 ft².
- Ordinary hazard, Group 1 areas will be designed to provide a minimum density of 0.15 gpm/ft². Maximum area per sprinkler will be 130 ft².
- Minimum design area will be the most hydraulically demanding 1500 ft² for wet systems and 2000 ft² for dry systems.
- A simultaneous inside hose demand of 100 gpm will be included for light hazard areas and 250 gpm for ordinary hazard areas.
- Sprinkler connections on each floor will include a monitored control valve, a flow switch, and a test/drain connection. A drain riser with discharge at the building exterior will also be provided to serve each sprinkler system.

A dry-pipe system will be provided for the loading docks and walk-in coolers, and a wet-pipe system will be provided for other project spaces.

STANDPIPE SYSTEM

Wet standpipes will be located within heated stairwells. Additional standpipes, if required, will be provided so that all portions of all floors are within reach of a 100' hose. Hose thread pattern will match the local fire department pattern.

SPRINKLER HEADS

Commercial, quick response, UL listed type. Sprinklers in areas having lay-in ceilings will be semi-recessed pendent type with a white finish and white ceiling cup. Sprinklers in grid ceilings will be aligned and located in the center of tiles.

PIPING

Aboveground piping will be black steel with threaded, grooved, or welded fittings. Piping 2" and smaller will be schedule 40 and pipe 2.5" and larger will be schedule 10. No plain-end fittings, strap-on branch outlets, or couplings employing set screws will be used. Piping subject to alternate wetting and drying will be galvanized. Underground piping will be cement-lined ductile iron with mechanical joints or HDPE. Underground piping will be anchored with concrete thrust blocks and tie rods.

WATER SUPPLY

Water supply will be fed from a connection to the campus main. A UL-listed, ASSE-approved reduced pressure detector backflow preventer will be installed on each fire water service to isolate the fire suppression systems from the potable water.

MONITORING

The fire suppression system will be monitored by the building fire alarm system. Monitor points will include trouble and alarm conditions for water flow switches, valve tamper switches, and fire pump status.

Design Criteria

5.9 Electrical Narrative

GENERAL

Electrical systems will comply with the following minimum requirements:

- International Building Code – 2021
- NFPA 70-2017, National Electrical Code
- NFPA 110-2025, Emergency and Standby Power Systems
- NFPA 780-2023, Installation of Lightning Protection Systems
- International Energy Conservation Code – 2021
- State of Tennessee High Performance Building Requirements – 2021
- University of Tennessee – Division of Facilities Planning – Designer’s Manual

DEMOLITION

The existing installation at Maclellan gymnasium will remain as is except as otherwise indicated herein. The new work will be tied in with the existing work and the existing work adapted to the changes in the building and systems.

The existing installation at Maclellan gymnasium will remain as is except as otherwise indicated herein. The new work will be tied in with the existing work and the existing work adapted to the changes in the building and systems.

The natatorium portion of the building, which will be demolished, contains the main electrical room for the entire existing building. The main electrical room contains the service switchboard, fire alarm panel, communications service, and security panels, and this equipment will be removed or relocated and new equipment installed.

Existing branch circuit panelboards within the Maclellan gymnasium will remain and will be served with new feeders from new electrical distribution equipment.

Equipment, apparatus, and exposed wiring and raceways rendered useless due to changes will be removed.

Circuit continuity for existing wiring devices and equipment outside the demolished and renovated areas served from or through the renovation area will be provided.

MACLELLAN GYMNASIUM – ENABLING WORK

Electrical distribution equipment serving the Maclellan Gymnasium is fed from the main electrical room slated for demolition when the old aquatics center and connector bridge are demolished. The following electrical changes will be required to maintain electrical service to the Maclellan Gym prior to and after demolition. The work will need to occur in phases as described below:

- Phase 1: Site Medium Voltage Distribution and Communications
- Provide a new 4-way medium voltage ductbank from the existing manhole at the intersection of Douglas Street and Mocs Alumni Drive to the new medium voltage switchgear. New medium voltage switchgear will be a six-way Vista switch. The new switchgear will serve the existing Boling Apartment transformer, a new transformer to serve the Maclellan Gym, and a new transformer to serve the new Dining Facility. The sixth way will be a spare.
 - Intercept existing primary ductbank that serves the Boling Apartment transformer and serve from the new medium voltage switchgear.
 - Install new pad-mount transformer to serve the existing Maclellan Gym.
 - Provide new secondary service to new distribution panelboard to reserve existing distribution equipment.
 - Provide new communications ductbank from existing handhole at the NE corner of the site to the existing Maclellan Gym to create a new communications service entrance.

Phase 2: Maclellan Gymnasium Electrical Distribution, Communications Equipment, and Fire Alarm Equipment

- Provide new distribution panelboard in the Maclellan Gym to reserve existing branch circuit panelboards and new mechanical equipment.
- Provide new conduit and feeders to existing branch circuit panelboards from new distribution panelboard.
- Provide new fire alarm panel in new electrical room to serve existing devices.
- Create new communications service entrance room with equipment to refeed existing outlet locations and equipment.

Phase 3: Demolish Existing Aquatics Center and Connector Bridge

- Remove existing pad-mount transformer and medium voltage switchgear and return to Owner.
- Demolish existing primary ductbank and primary feeders.
- Demolish existing electrical distribution equipment, fixtures, and luminaries within the building.
- The existing installation at Maclellan gymnasium will remain as is except as otherwise indicated herein. The new work will be tied in with the existing work and the existing work adapted to the changes in the building and systems.
- The natatorium portion of the building, which will be demolished, contains the main electrical room for the entire existing building. The main electrical room contains the service switchboard, fire alarm panel, communications service, and security panels, and this equipment will be removed or relocated and new equipment installed.
- Existing branch circuit panelboards within the Maclellan gymnasium will remain and will be served with new feeders from new electrical distribution equipment.
- Equipment, apparatus, and exposed wiring and raceways rendered useless due to changes will be removed.
- Circuit continuity for existing wiring devices and equipment outside the demolished and renovated areas served from or through the renovation area will be provided.

MACLELLAN GYMNASIUM – ADDITION

The proposed addition at the south end of the gymnasium would add approximately 3,000 square feet of locker room, restroom, and training space. A new 120/208V branch circuit panelboard will be located within the addition to serve the receptacles. New lighting will be provided throughout the space and served from a new lighting branch circuit. 480 V, 3-phase circuits will be provided to serve the new mechanical equipment for the addition. The existing electrical room within the addition/renovation area will remain and be served from the new distribution equipment.

PRIMARY ELECTRICAL SYSTEM

Underground concrete-encased ductbank will be used for primary feeder installation.

Medium voltage cables will be single conductor, insulated, thermoplastic jacketed, copper tape shielded rated for 15000 V, 133% insulation level. Conductors will be copper with ethylene propylene rubber insulation. Conductor size will be 500 kcmil. Medium voltage elbows and splices will be furnished.

Medium voltage switchgear will be pad-mounted style, SF6 insulated with six (6) ways. Basis of design manufacturer is S&C Vista.

The new pad-mount service transformers will be 3-phase, Envirotemp FR3 liquid-filled, self-cooled, 60 Hz, 65°C rise, with primary voltage of 13200 V delta, secondary of 480Y/277 V wye. Coils will be copper.

Pad-mount transformer size for the new Dining Hall is anticipated to be 1,000 kVA. Pad-mount transformer size for the existing Maclellan Gym is anticipated to be 500 kVA.

SECONDARY ELECTRICAL SYSTEM

Electrical service for the Dining Facility and Maclellan Gymnasium will originate from new pad-mount service transformers. Service to the buildings will be 480Y/277 V, 4-wire, wye connected, grounded neutral. Secondary feeder will be installed in underground concrete-encased duct bank from pad-mount transformer to secondary service switchboard.

In general loads will be served as follows:

- LED lighting – 277 V
- Motors 0.5 hp and larger – 480 V, 3-phase
- Receptacles and motors 0.33 hp and smaller – 120 V, single-phase through use of step down transformers.

Design Criteria

Electrical Narrative

For the new Dining Facility, service equipment will consist of a low-voltage switchboard. Service switchboard will be front accessible with individually mounted main and group mounted feeder devices. Switchboard bussing will be copper and will be braced for the available fault current. Main devices will be stationary, insulated case type circuit breakers. Feeder devices will be molded case circuit breakers. Solid state ground fault protection will be provided for main circuit breaker and feeder devices. Service switchboards will be provided with integral surge protection device. Service switchboards will be provided with an electronic power monitor to meter multiphase amperes and volts, and power parameters.

For the existing Maclellan Gymnasium, a new 480V service-entrance rated distribution panelboard will be provided to serve existing branch circuit panelboards, existing loads, and new loads. The new distribution panelboard will be provided with integral surge protection and an electronic power monitor.

Building lighting, receptacle, and mechanical equipment loads will be served by separate feeders. Feeder risers will be cable in conduit to supply power to distribution and branch circuit panelboards. Branch circuit panelboards will be provided on each floor to serve lighting and receptacles on the same floor. Protective devices in panelboards will be bolt-on type circuit breakers. Bussing in panelboards will be copper. Panelboards will have minimum 20% spare circuit breakers plus 10% spaces for future breakers. Six spare 1" conduits will be stubbed up above ceiling for recessed panelboards. Dry-type transformers will be provided to serve receptacle and other 120 V loads. Dry-type transformers will be copper wound, 480 delta primary, 208Y/120 V secondary, 220°C insulation, 115°C rise.

Wiring will be insulated conductors installed in raceways. Conductors will be copper with type THWN/THHN or XHHW insulation. Conductors for power wiring will be minimum #12 AWG and a maximum of 500 kcmil. Separate neutral conductors will be provided for each branch circuit phase conductor. Wiring will be color-coded the entire length to identify phases, neutral, and ground.

Raceways will be minimum 0.75" for power and minimum 1" for communications. In general, electrical metallic tubing will be provided for interior wiring installations. Rigid metal conduit will be provided for exposed raceways serving fire pumps and fire pump control equipment and other applications. Flexible metal conduits will be provided for connections to recessed luminaires, motors, dry-type transformers, and electrical equipment subject to movement or vibration. Liquidtight flexible metal conduits will be provided for connection to equipment exposed to rain or spray and fire pumps. Cable trays will be provided to form a system that interconnect all telecommunication rooms and extends throughout corridors and work areas. With the exception of raceways serving floor boxes, conduits shall not be installed in concrete floor slabs.

Electrical systems, circuit and equipment will be grounded and bonded. The maximum resistance of electrical systems to ground will be 5 ohms. A green colored grounding conductor will be installed in raceways with phase conductors.

A lightning protection system will be provided for the new Dining Facility and will be the concealed type installed with UL lighting protection inspection certificates.

Electrical studies including short-circuit, coordination, and arc-fault will be provided to confirm the interrupting and withstand capacities and the potential fault energy levels at each piece of equipment.

LIGHTING

Generally, interior and exterior lighting will be LED type. Illumination levels for work surfaces will be provided in accordance with IESNA recommended illumination levels.

In general, the following luminaire types will be provided:

- Lobbies and corridors: downlights and recessed linear slot luminaires.
- Dining Areas: recessed, 2' x 2' or 2' x 4' direct/indirect luminaires.

- Private Dining Areas: recessed downlights and decorative pendant luminaires.
- Kitchen/Food Preparation Spaces: recessed 2' x 4' food service rated LED luminaires.
- Mechanical and electrical rooms: industrial type luminaires.
- Toilets: downlights, linear cove, and architectural LED wall-mounted luminaires.
- Means of egress: LED edge-lit exit signs.
- Exterior area lighting: UT campus standard luminaires.
- Exterior building lighting: wall-mount luminaires and architectural luminaires at main entries.

Interior spaces will be provided controls for automatic lighting shut-off in accordance with International Energy Conservation Code-2021. Automatic lighting shut-off controls will consist primarily of ceiling-mounted vacancy and occupancy sensors with local dimmer switch. Mechanical and electrical rooms will be provided with line voltage wall switches. Lighting along the building exterior walls within daylight zones will be provided with daylight responsive dimming controls. Architectural preset lighting control systems will be provided for private dining spaces. Dining spaces will be controlled with relay panels and timeclock interfaces based on building schedule. Emergency lighting throughout the building will be controlled with normal power lighting. Exterior lighting will be controlled via a lighting contactor with photocell.

EMERGENCY POWER SYSTEM

The emergency power system will include an engine-generator set, automatic transfer switches, remote annunciator, and accessories to automatically supply power during a utility power failure. Engine-generator set will be provided with a diesel-fueled engine. Generator will be 480Y/277 V, 3-phase, 4-wire, synchronous type with permanent magnet pilot exciter. The engine-generator set will be located at the building exterior in a weatherproof, acoustically-treated enclosure with a sub-base fuel tank sized to provide 48 hours of runtime at full rated load. Acceptable engine-generator manufacturers will be Caterpillar and Kohler. Automatic transfer switches will be open transition type 4-pole switched neutral. A temporary generator connection cabinet will be provided near the loading dock as required per NFPA 70, Article 700.

Emergency and standby power system loads:

- Egress lighting and exit lights.
- Fire detection and alarm systems.
- Engine-generator set auxiliaries.
- Fire protection systems.
- BCS system.
- Lighting and receptacles in main and emergency electrical rooms.
- Lighting, receptacles, and outlets serving communication equipment rooms.
- Cooling systems for communication equipment rooms.
- Public safety communication systems.
- Sump pumps.
- Automatic doors for handicap door operators.
- Process chilled water system providing heat rejection for coolers and freezers
- Kitchen refrigeration equipment (refrigerators, freezers, etc.)

COMMUNICATION SYSTEMS

For the new Dining Facility, a complete communications system (equipment, equipment racks, cabling, duct banks, conduits, pathways, equipment rooms, work area outlets, wireless LAN, etc.) will be furnished and installed per UT Telecommunications Design and Installation Standards.

Refer to the electrical portion for phasing requirements.

Communications service will originate from the existing manhole at the northwest corner of the site and will enter a new MDF Room near the Main Electrical Room. Underground concrete-encased duct bank will extend from existing manhole to building entry room.

Exterior pole-mounted site emergency phones will be provided.

For the existing Maclellan Gymnasium, a new service will be provided to a new MDF Room along the west side of the building. New cabling will be provided from the new MDF Room to existing outlet and device locations within the existing building. New cabling and devices will be provided for the addition as necessary.

Design Criteria

5.10 MEP Phasing Diagrams

SECURITY SYSTEMS

For the new Dining Facility, electronic security systems will include an integrated system of intrusion detection, access control and alarm monitoring, and video surveillance. Building exterior entry, classrooms, and computer lab doors will be provided with electric strikes with access control and alarm monitoring. Classrooms will be provided with UTK locking requirements. Video surveillance will be provided at building main entrances and exits. Final connectivity and programming will be by UT Facility Services.

A new security panel for the Maclellan Gymnasium will be provided in the new MDF room. Cabling will be reworked or installed as necessary to serve the existing devices. New devices (card readers, security cameras, etc.) will be provided for the addition.

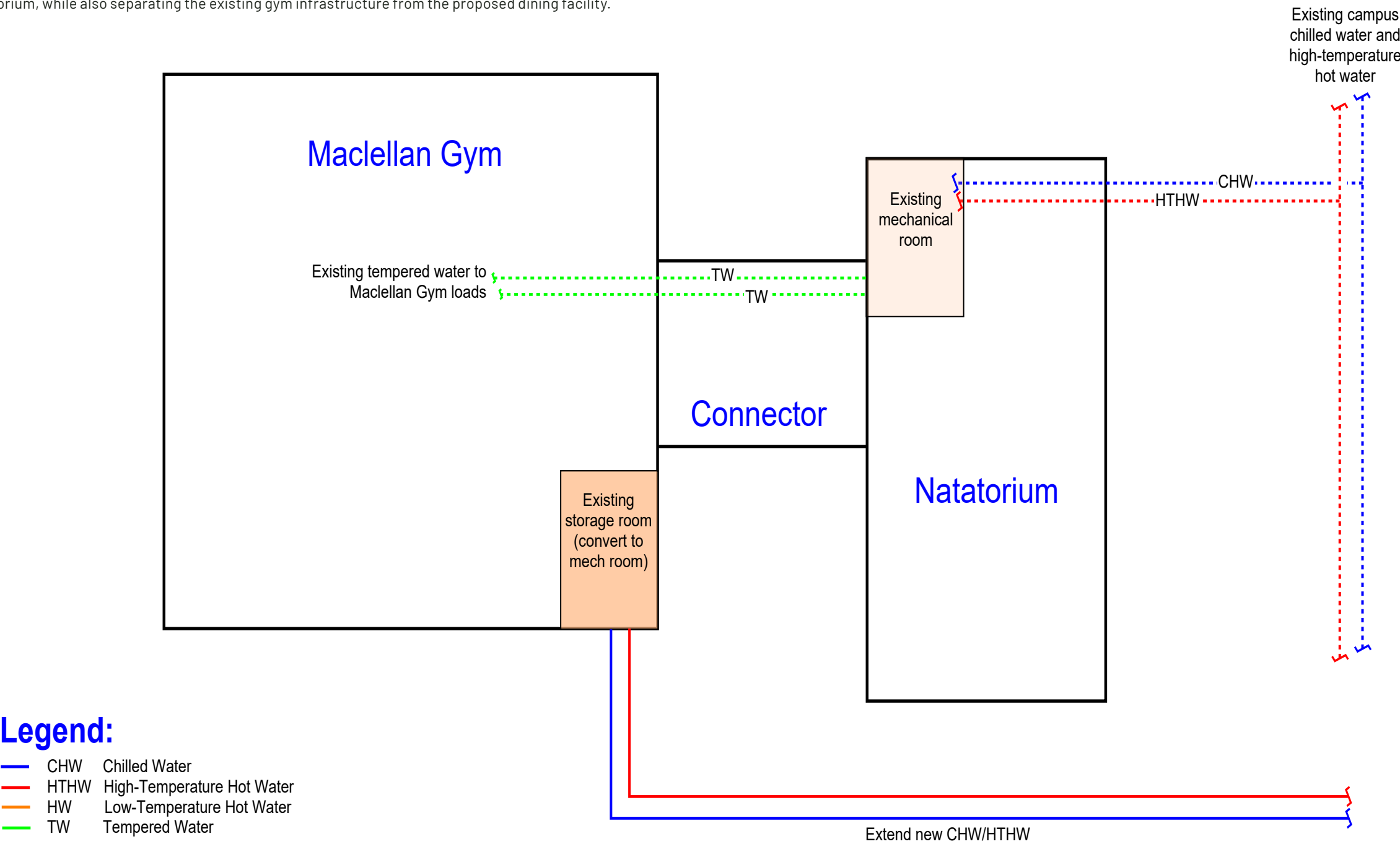
ELECTRICAL SYSTEMS COMMISSIONING

The project will require commissioning of lighting controls systems and electrical distribution systems as required by the State of Tennessee High Performance Building Requirements.

Design Criteria

MEP Phasing Diagrams

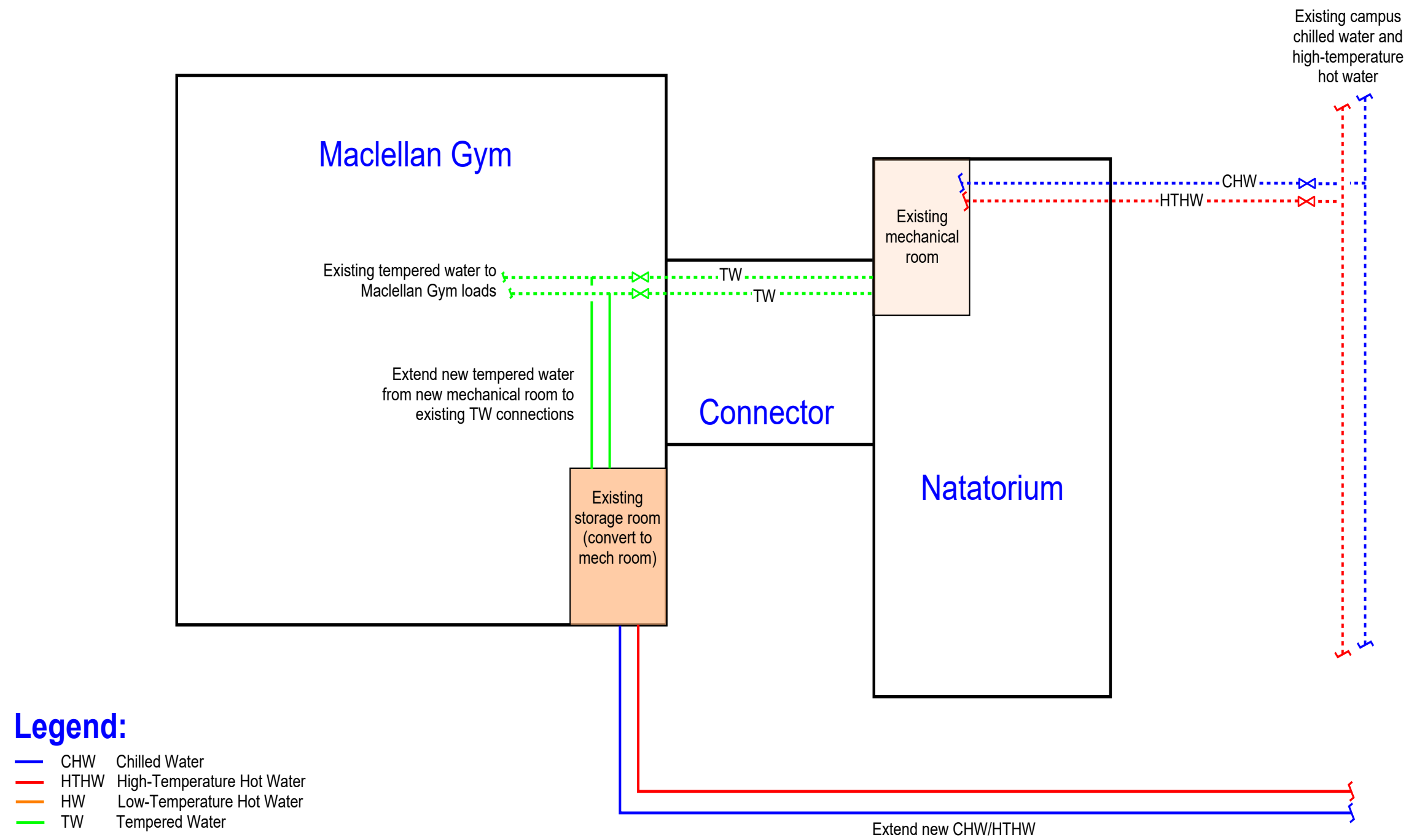
The following pages illustrate the proposed phasing plan for relocating the existing utilities that currently service the gym from the natatorium, while also separating the existing gym infrastructure from the proposed dining facility.



Phase 1: Site Hydronic Expansion and New Plant Installation

Design Criteria

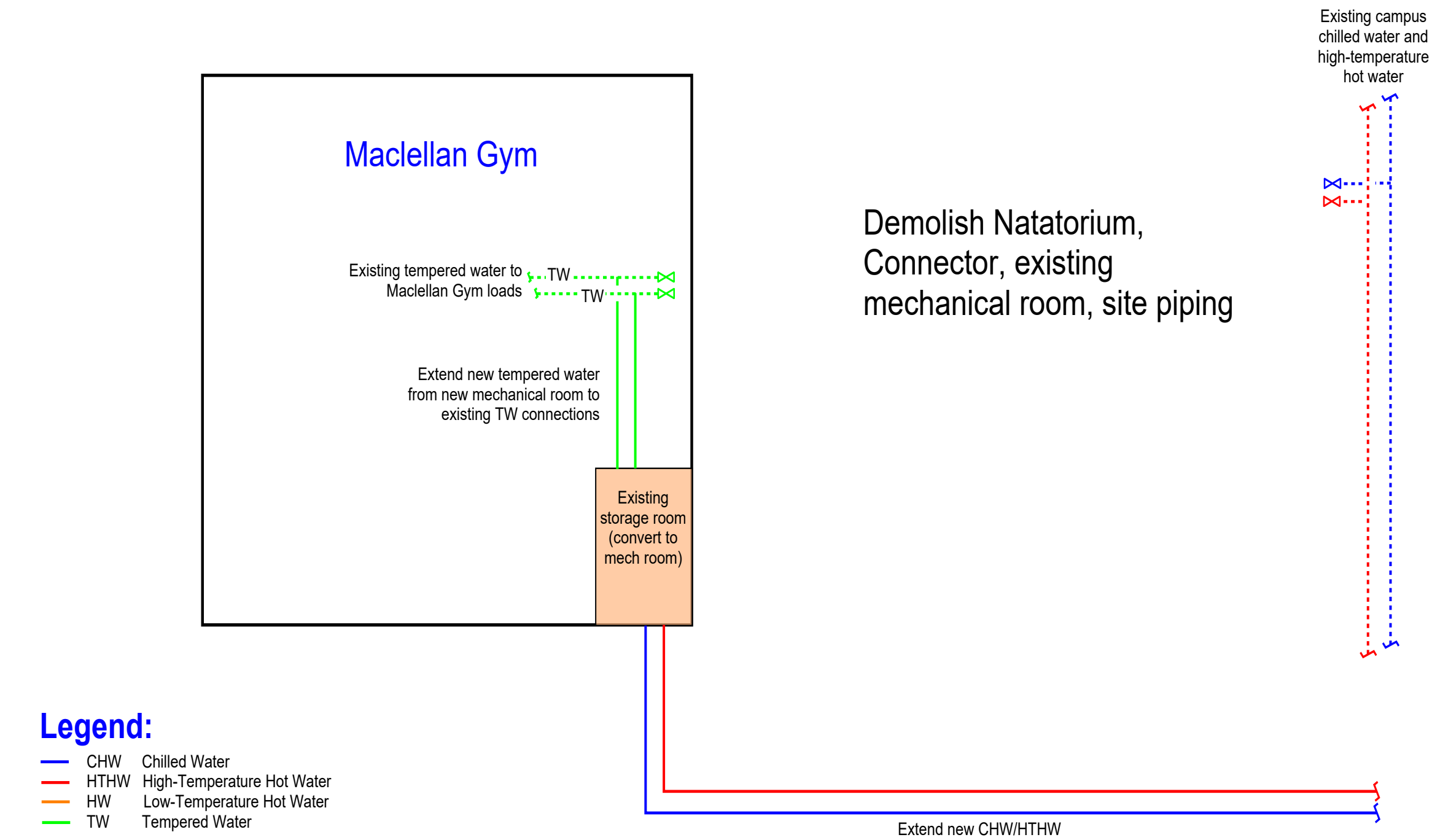
MEP Phasing Diagrams



Phase 2: Hydronic Piping Expansion Within Maclellan Gym

Design Criteria

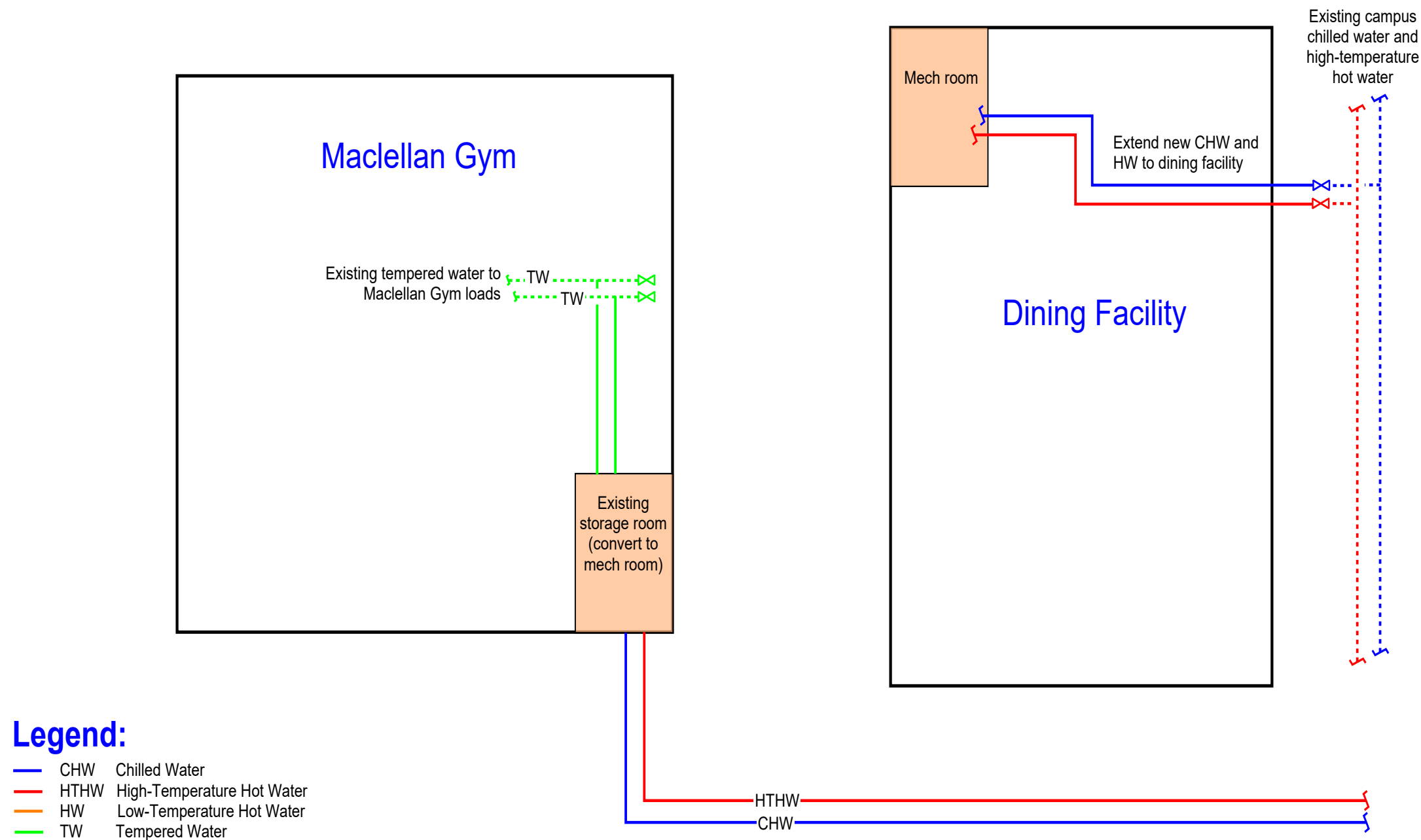
MEP Phasing Diagrams



Phase 3: Demolition

Design Criteria

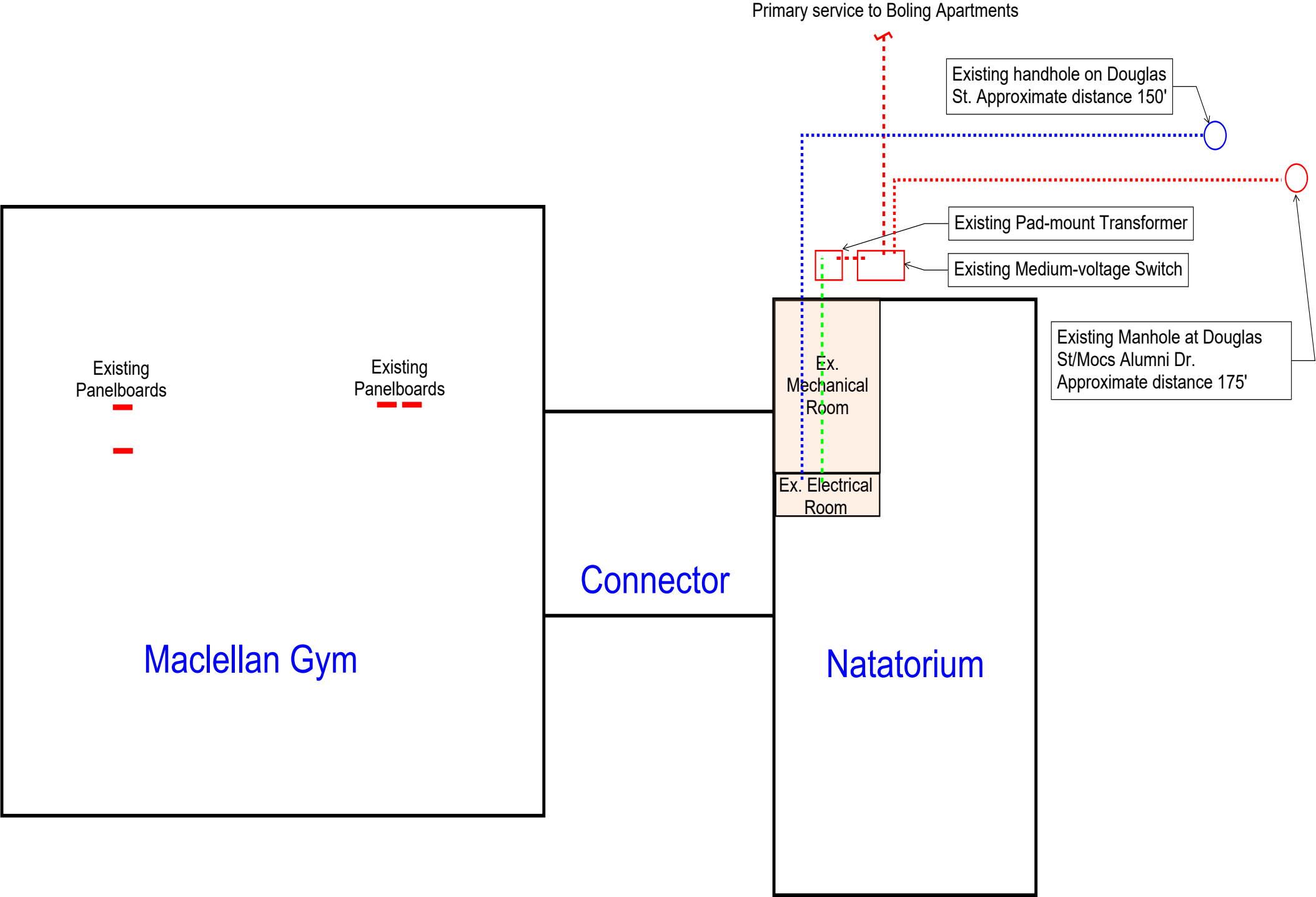
MEP Phasing Diagrams



Phase 4: Dining Facility Construction

Design Criteria

MEP Phasing Diagrams

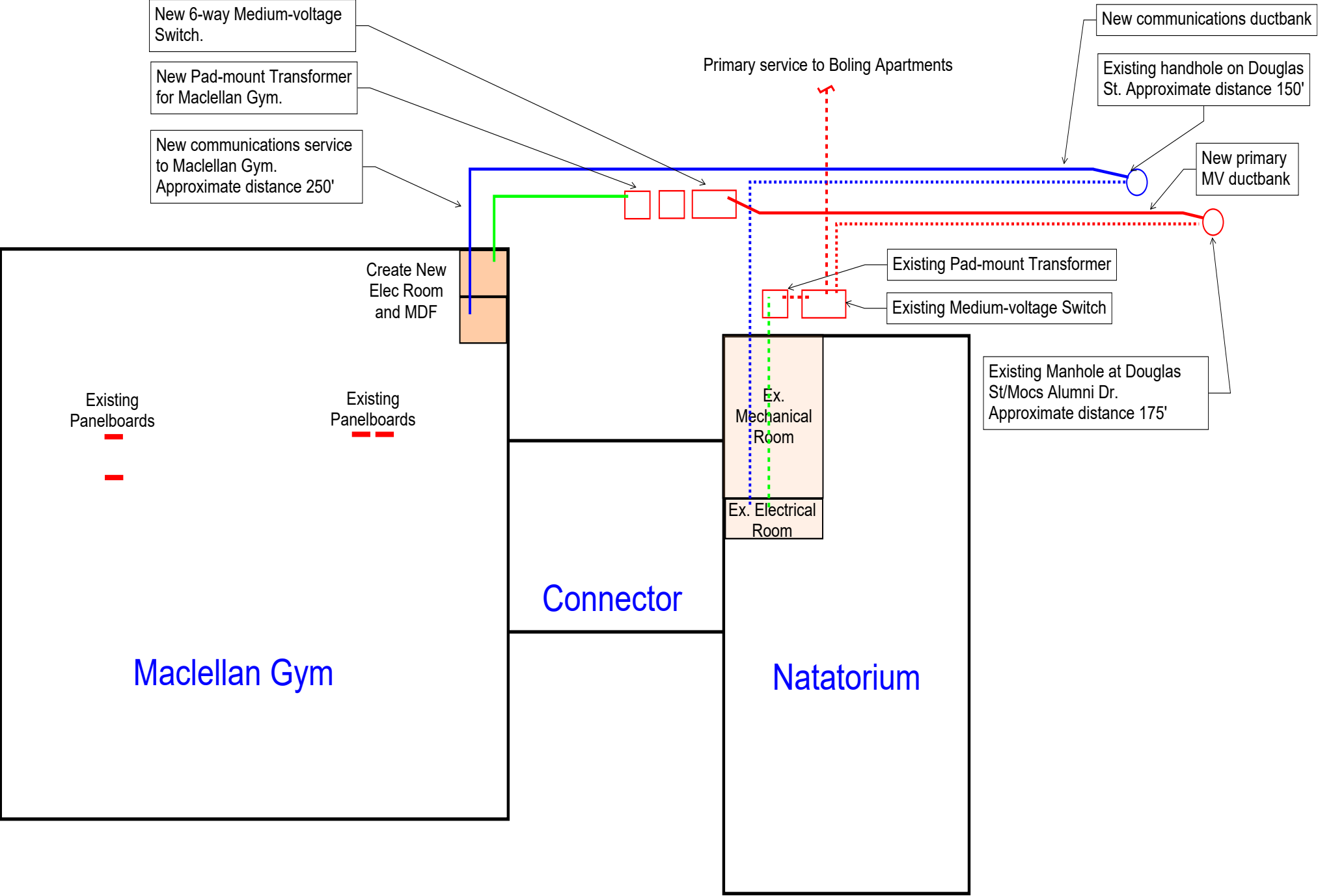


Legend:

- C Communications
- P Medium-voltage Electrical
- E Secondary Electrical

Design Criteria

MEP Phasing Diagrams

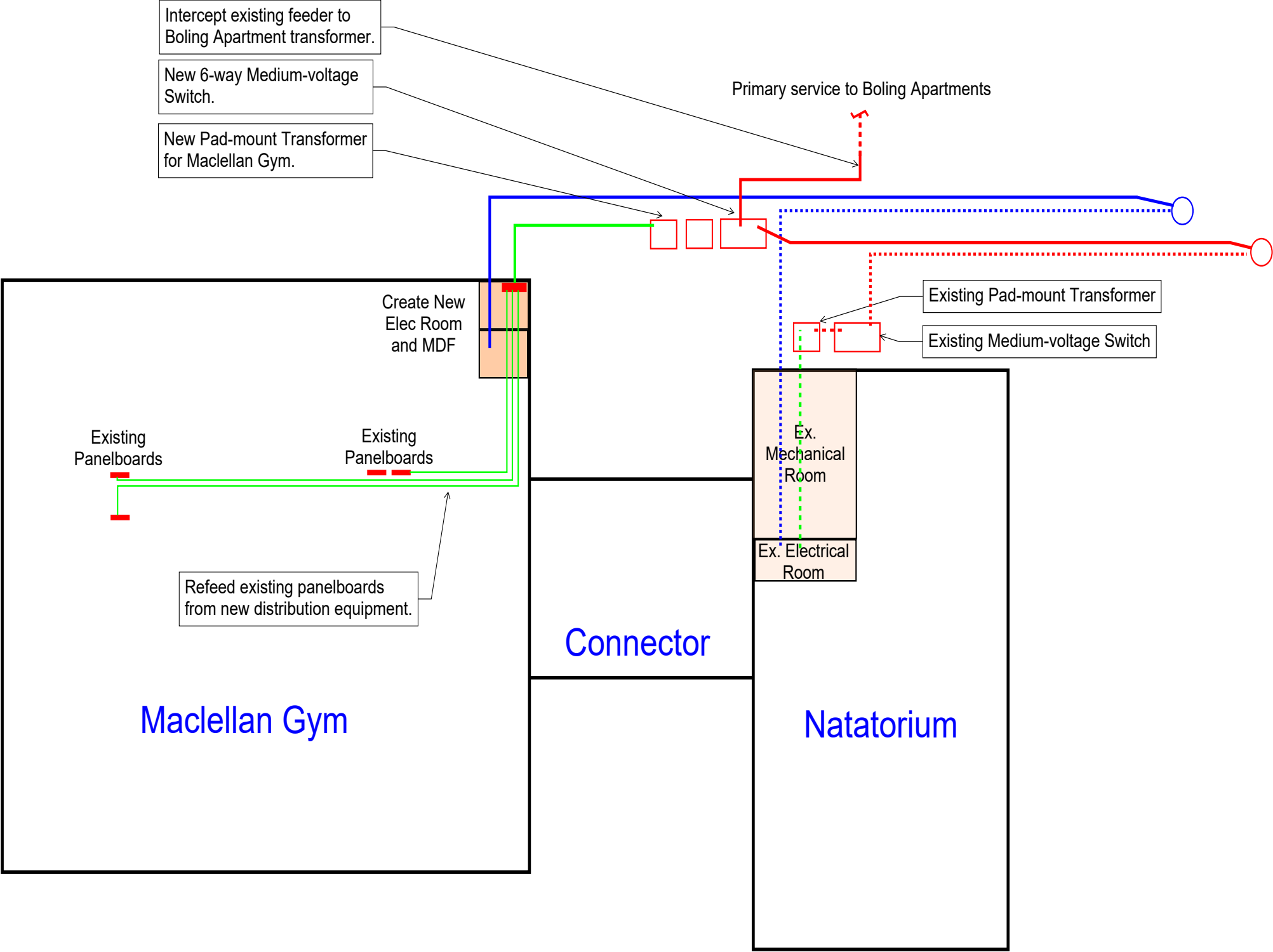


Legend:

- C Communications
- P Medium-voltage Electrical
- E Secondary Electrical

Design Criteria

MEP Phasing Diagrams

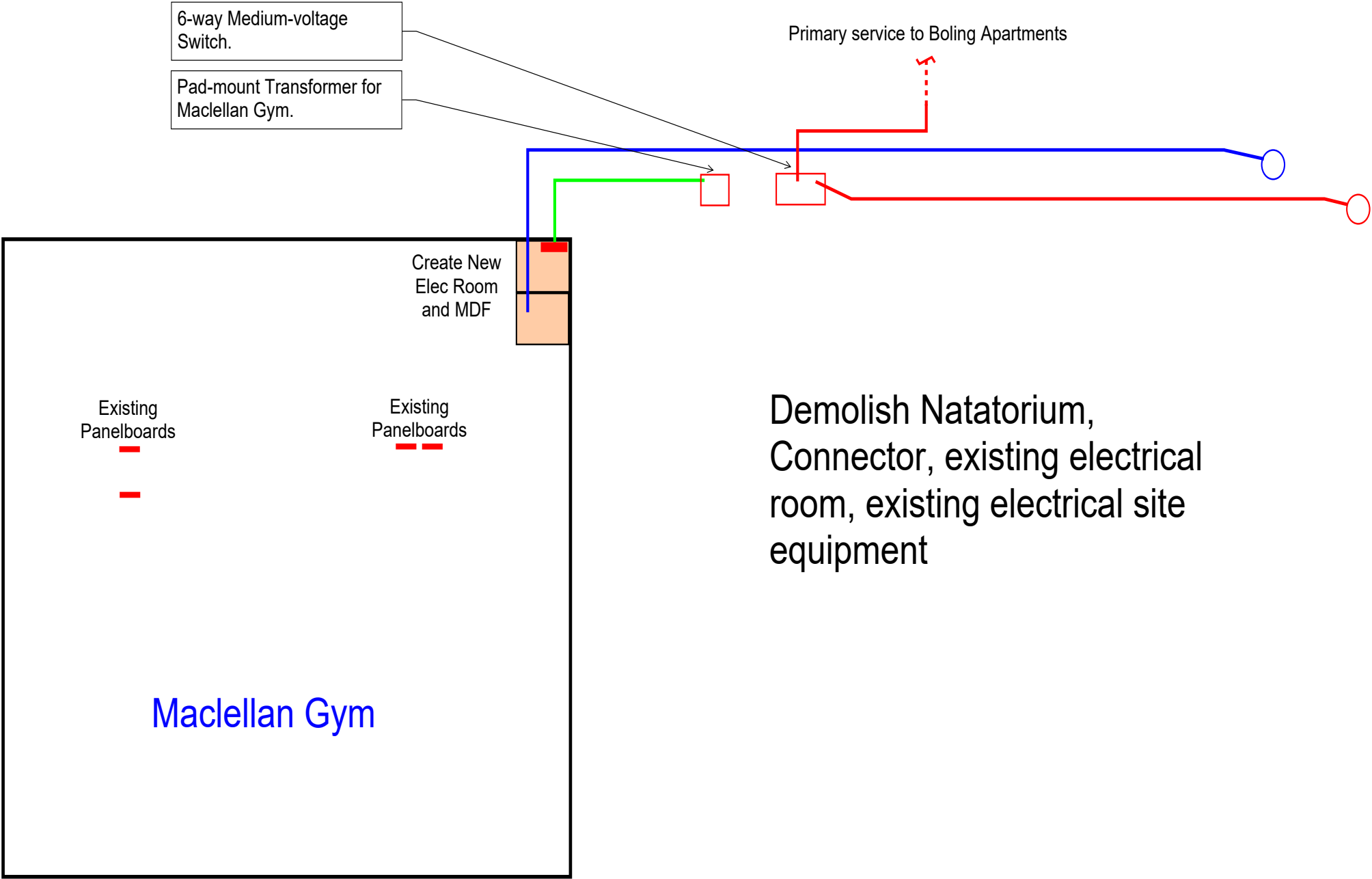


Legend:

- C Communications
- P Medium-voltage Electrical
- E Secondary Electrical

Design Criteria

MEP Phasing Diagrams

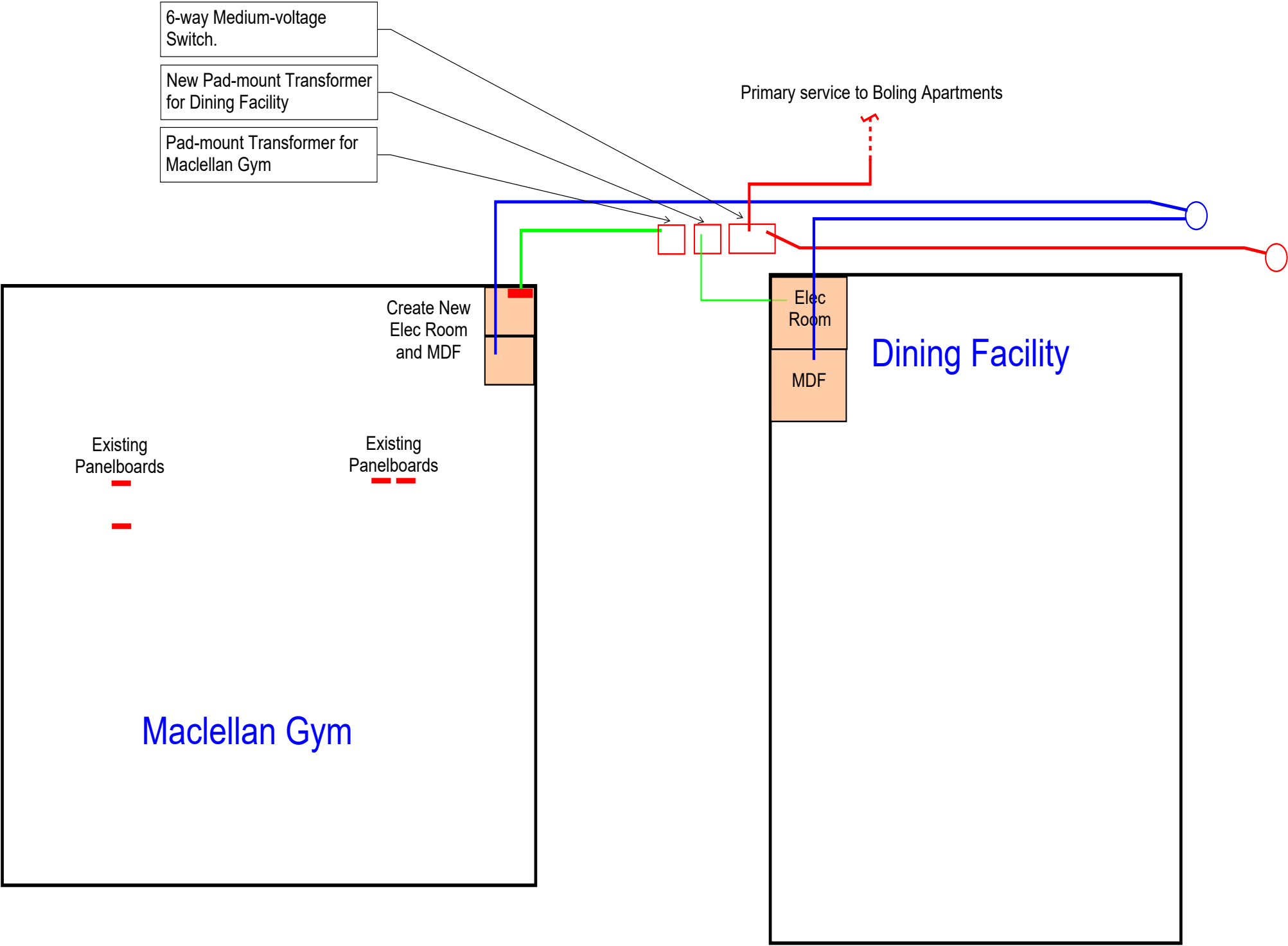


Legend:

- C Communications
- P Medium-voltage Electrical
- E Secondary Electrical

Design Criteria

MEP Phasing Diagrams



Legend:

- C Communications
- P Medium-voltage Electrical
- E Secondary Electrical

06

DESIGN GUIDELINES

6.0 Design Guidelines

6.1 Architectural Expression

UNIVERSITY DESIGN GUIDELINES & PREFERENCES

Refer to the “2023 Design Standards and Guidelines” for the basis-of-design standards and campus-specific architectural considerations established by the University of Tennessee System and the University of Tennessee at Chattanooga (UTC).

The new Dining Facility and associated Maclellan Gym additions should complement the surrounding campus context while establishing a distinct student-centered identity appropriate for a major campus destination.

The project is prominently positioned along Mocs Alumni Drive and Douglas Street and will serve as a highly visible campus gateway project adjacent to the University Center, Maclellan Gym, and future campus housing developments.

ARCHITECTURAL CHARACTER

The architectural character of the project should promote student life, campus engagement, and community interaction. The facility is envisioned as more than a dining hall; it is intended to function as a vibrant social and campus gathering space throughout the day and evening.

The design should emphasize:

- Transparency and openness
- Strong visual connection between interior and exterior spaces
- Natural daylight and views
- Flexibility and adaptability
- Clear circulation and intuitive wayfinding
- Warm, welcoming material palettes
- Durable and low-maintenance systems appropriate for high student use

The overall architectural expression should reinforce the facility’s role as a primary student destination within the campus core.

EXTERIOR MATERIALITY & MASSING

Building massing and exterior materials should respond to the surrounding UTC campus architectural vocabulary while incorporating contemporary detailing appropriate for new campus development.

Primary exterior materials should include:

- Brick masonry consistent with surrounding campus buildings
- High-performance glazing systems
- Metal panel accents at upper levels and transition areas
- Durable architectural metal and canopy systems

Brick should serve as a primary exterior material due to its durability, longevity, and compatibility with adjacent campus buildings. Brick detailing, coursing, and texture should be carefully considered to reinforce scale and visual richness.

Large areas of glazing are encouraged at public-facing façades, particularly along the north and northwest elevations, to maximize daylight and visually activate dining and community spaces from the exterior.

The project should incorporate:

- Double-height glazed dining volumes
- Sloped roof forms consistent with campus context
- Clearly articulated entry sequences
- Exterior canopies and weather protection
- Integrated mechanical screening systems

The dining facility should establish a strong civic presence at the Douglas Street and Mocs Alumni Drive intersection while maintaining compatibility with adjacent campus development.

INTERIOR DESIGN PRINCIPLES

Interior spaces should encourage a warm, contemporary, and welcoming student environment. Materials should prioritize durability, maintainability, and long-term operational flexibility.

Interior spaces should support:

- A variety of seating arrangements and social interaction
- Flexibility for changing dining and student-use patterns
- Clear visual connectivity between levels and gathering area
- Access to natural light and exterior views
- Informal study and extended occupancy beyond peak meal periods

Preferred seating types include:

- Communal seating
- Two-top and four-top tables
- Soft seating and lounge environments

Large or bulky architectural elements that reduce visibility or usable seating capacity should be minimized.

COMMUNITY & SOCIAL SPACES

Community and social spaces are intended to support:

- Informal student gathering
- Extended occupancy throughout the day
- Team dinners and campus events
- Informal study and collaboration

The project should incorporate:

- Open community seating zones
- Flexible private dining space
- Outdoor terrace and greenspace opportunities
- Visual connection between dining and social spaces

An open stair connecting Levels 01 and 02 is preferred and should be integrated carefully to support circulation, openness, and visual connectivity while minimizing impact on usable floor area.

LANDSCAPE & OUTDOOR ACTIVATION

The landscape and exterior gathering areas should reinforce the building’s role as a campus gateway and student destination. Outdoor spaces should include:

- Greenspace along Mocs Alumni Drive
- Covered outdoor seating opportunities
- Entry plaza and gathering zones
- Durable exterior furnishings
- Accessible pedestrian circulation routes

Outdoor dining areas should be operationally controlled where necessary to separate AYCTE seating from public-access areas.

Landscape design should coordinate with:

- Existing utilities
- Future campus developments
- Truck circulation and loading operations
- Existing pedestrian movement patterns

The overall site design should establish a welcoming and highly visible campus presence while balancing operational requirements, accessibility, and long-term campus flexibility.



EXIT

DISH RETURN



Design Guidelines

Architectural Expression

Exterior concepts should emphasize transparency, sloped roof forms, durable masonry, and warm material palettes that reinforce a welcoming campus environment



Exterior materials should reinforce UTC's campus character through durable masonry systems, textured detailing, and contemporary interpretation of traditional campus materials



Interior dining spaces should maximize daylight, vertical openness, and visual connectivity through large glazed volumes and open gathering areas



Building massing should establish a strong campus presence through articulated roof forms, transparency, and clearly defined entry sequences

Design Guidelines

Architectural Expression

Provide light-filled spaces, ideally with a double height volume. Introduce glazing and transparency with a variety of seating



Provide a two story volume with a grand stair, encouraging patrons to access both floors. Food platforms are provided on the second floor with the majority of seating and food offerings provided on the first floor



Provide natural and light interior materials but large elements are discouraged



Incorporate screens that can easily be changed to accommodate new concepts and menus (on a day-to-day basis). Provide a linear layout for food concepts with slight variations in the layout

Design Guidelines

Architectural Expression

Outdoor seating that is durable and will remain



Multiple level spaces can be challenging so number of levels should be limited to two floors. Food offerings should be centrally located and easy for students and first time visitors to understand and navigate

Material palettes should balance durable contemporary finishes with selective use of warm natural materials. Preference for an open stair near the entry or within the seating area is an ideal architectural element



Provide a light-filled space with a variety of seating options

Design Guidelines

6.2 Conceptual Renderings



Design Guidelines

Conceptual Renderings



07

COST ESTIMATE

7.0 Cost Estimate

The following rough order of magnitude cost analysis, dated May 28, 2026, is based on the program data and conceptual floor plans for the Design Program. The program reflects current scope expectations with expectation that future design development will include scope prioritization strategies to align with final approved funding. This project includes scope for the enabling projects plus the new construction of the Dining Facility. The total project cost is \$44,954,871 with an MACC of \$35,208,911.

The Dining Facility new construction MACC is estimated at \$27,468,410 with site MACC at \$2,926,084. The Maclellan Gym addition and renovation MACC is estimated at \$4,814,417.

The following are key assumptions:

- Normal market conditions
- Three or more qualified Subcontractors competitively bidding on bid packages for this project
- Design Bid Build approach
- Approximately 36-month phased construction for the total project, both enabling and the dining facility. This is based on an aggressive schedule and it is assumed that modifications to the schedule may occur.
- Assumed March 2030 substantial completion for the total project.
- Escalation is taken to the midpoint of construction

KEY EXCLUSIONS

- Land acquisition cost
- Seismic requirements
- Public improvements
- Offsite improvements
- LEED requirements
- Hazardous material testing
- Utility relocation outside the property boundary

University of Tennessee, Dining Pavilion
Chattanooga, TN
Rough Order of Magnitude

EXECUTIVE SUMMARY

1.1 Introduction

This estimate has been prepared, pursuant to an agreement between HED and Cumming, for the purpose of establishing a probable cost of construction at the rough order of magnitude stage.

1.2 Cost Estimation Breakdown

University of Tennessee, Dining Pavilion	Site 64,342 SF		Dining Facility 27,170 SF		Mac Gym Addition & Renovation 7,584 SF		TOTAL Project 34,754 SF	
Description							Total	Cost/SF
A CONSTRUCTION COST:								
1 Substructure			\$1,097,193	\$40.4	\$135,918.0	\$17.9	\$1,233,111	\$35.5
2 Shell			\$5,527,152	\$203.4	\$703,007.0	\$92.7	\$6,230,159	\$179.3
3 Interiors			\$2,534,625	\$93.3	\$739,782.0	\$97.5	\$3,274,407	\$94.2
4 Services			\$6,724,356	\$247.5	\$902,708.0	\$119.0	\$7,627,064	\$219.5
5 Equipment & Furnishings			\$195,962	\$7.2	\$221,605.0	\$29.2	\$417,567	\$12.0
6 Special Construction & Demolitions	\$391,973	\$6.1	\$3,042,201	\$112.0	\$193,754.0	\$25.5	\$3,627,928	\$104.4
7 Siteworks	\$1,647,505	\$25.6			\$364,430.0	\$48.1	\$2,011,935	\$57.9
8 GR/GC, Fee, Insurance	\$397,698	\$6.2	\$3,728,690	\$137.2	\$635,934.8	\$83.9	\$4,762,323	\$137.0
9 Design & Construction Contingency	\$243,718	\$3.8	\$2,285,018	\$84.1	\$389,713.9	\$51.4	\$2,918,449	\$84.0
10 Escalation	\$105,853	\$1.6	\$1,025,193	\$37.7	\$191,674.6	\$25.3	\$1,322,721	\$38.1
Bid Target	\$2,786,747	\$43.3	\$26,160,391	\$962.8	\$4,478,527	\$590.5	\$33,425,664	\$1,230.2
1 Owners Contingency	\$139,337	\$2.2	\$1,308,020	\$48.1	\$335,889.5	\$44.3	\$1,783,246	\$51.3
MACC	\$2,926,084	\$45.5	\$27,468,410	\$1,011.0	\$4,814,417	\$634.8	\$35,208,911	\$1,295.9
B BELOW THE LINE ITEMS:								
1 Professional Fees	\$175,565	\$2.7	\$1,648,105	\$60.7	\$288,865.0	\$38.1	\$2,112,535	\$60.8
2 Moveable Equipment (FF&E)	\$146,304	\$2.3	\$3,373,421	\$124.2	\$240,720.8	\$31.7	\$3,760,446	\$108.2
3 Networking Equipment	\$117,043	\$1.8	\$1,098,736	\$40.4	\$192,576.7	\$25.4	\$1,408,356	\$40.5
4 Admin & Misc	\$204,826	\$3.2	\$1,922,789	\$70.8	\$337,009.2	\$44.4	\$2,464,624	\$70.9
Sub-Total Soft Cost:	\$643,738	\$10.0	\$8,043,050	\$296.0	\$1,059,172	\$139.7	\$9,745,960	\$358.7
TOTAL ESTIMATED PROJECT COST	\$3,569,822	\$55.5	\$35,511,460	\$1,307.0	\$5,873,588	\$774.5	\$44,954,871	\$1,654.6

1.3 Key Assumptions and Exclusions

This document should be read in association with Appendix 1 which outline assumptions, project understanding, approach, and cost management methodology. Key assumptions built into the above cost breakdown include:

1.4 Key Exclusions:

- Land Acquisition Cost.
- Seismic requirements.
- Public Improvements.
- Offsite Improvements.
- LEED requirements.
- Hazardous material testing
- Utilities relocation outside the property boundary

36-month

1.5 Key Assumptions:

- 36-month construction for the total project, both enabling and dining facility.
- Areas and quantities measured/assumed based on narrative and preliminary sketches provided.
- Demolition limited to the existing Natatorium only, with no impact on surrounding structures.
- Structure of existing building is assumed capable of supporting the tie-in without major reinforcement.
- Work performed during standard working hours.
- Kitchen Equipment carried below the line in Core/Shell breakout. \$2m
- Building only Direct Cost, not including site/demo/utilities (separate breakout) \$962.8 /sf
- Escalation carried to Midpoint of Construction
- Unsuitable soils Allowance carried in Site - "60% Hardscape" breakdown, \$100,000
- Relocation of MEP carried in Core/Shell - 'Demolition' line, \$660,000
- Summary of MEP Relocations:

Demolition	\$	50,000	Existing Natatorium, Existing Mac mech room
General	\$	75,000	Piping/Valves/shutoffs
Cooling/Heating	\$	195,000	Extension of CW/HW piping, New CW/HW Water pumps, Heat exchanger, Valves
Drainage	\$	15,000	Adjustments to existing, connections
Domestic	\$	150,000	New 4" service, backflow, pressure valves, distribution to HW
Domestic Hot	\$	150,000	Water heating, piping, connections
Gas	\$	25,000	New service to mech room
	\$	660,000	

ESTIMATE DETAIL - Level 1

University of Tennessee, Dining Pavilion Dining Facility, Level 1	%	MEP Space 3,051 SF		Restroom 543 SF		Stairs/Elevators 548 SF		BOH Dining 5,062 SF		Dining Area 5,592 SF		Loading 1,553 SF		Lobby & Community 1,711 SF	
Element		Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF
A) SUBSTRUCTURE						\$25,372	\$46.3								
10 Foundations															
20 Subgrade Enclosures						\$25,372	\$46.3								
40 Slabs-on-Grade															
60 Water and Gas Mitigation															
90 Substructure Related Activities															
B) SHELL						\$43,237	\$78.9								
10 Owners Contingency, 5%						\$43,237	\$78.9								
20 Exterior Vertical Enclosures															
30 Exterior Horizontal Enclosures															
C) INTERIORS		\$234,927	\$77.0	\$50,608	\$93.2	\$64,336	\$117.4	\$406,226	\$80.3	\$589,452	\$105.4	\$95,975	\$61.8	\$179,142	\$104.7
10 Interior Construction		\$63,461	\$20.8	\$15,910	\$29.3	\$41,758	\$76.2	\$77,196	\$15.3	\$202,430	\$36.2	\$23,916	\$15.4	\$61,938	\$36.2
20 Interior Finishes		\$171,466	\$56.2	\$34,698	\$63.9	\$22,578	\$41.2	\$329,030	\$65.0	\$387,022	\$69.2	\$72,059	\$46.4	\$117,204	\$68.5
D) SERVICES															
10 Conveying															
20 Plumbing															
30 Heating, Ventilation and Air Conditioning															
40 Fire Protection															
50 Electrical															
60 Communications															
70 Electronic Safety and Security															
80 Integrated Automation															
E) EQUIPMENT & FURNISHINGS				\$22,969	\$42.3					\$35,789	\$6.4	\$36,806	\$23.7	\$10,950	\$6.4
10 Equipment				\$6,407	\$11.8							\$36,806	\$23.7		
20 Furnishings/Casework				\$16,562	\$30.5					\$35,789	\$6.4			\$10,950	\$6.4
F) SPECIAL CONSTRUCTION & DEMOLITION		\$18,916	\$6.2					\$23,285	\$4.6						
10 Special Construction		\$18,916	\$6.2					\$23,285	\$4.6						
30 Demolition															
Z) GENERAL		\$49,499	\$16.2	\$14,348	\$26.4	\$25,924	\$47.3	\$83,755	\$16.5	\$121,922	\$21.8	\$25,892	\$16.7	\$37,068	\$12.1
10 General Requirements/GCs	10%	\$25,384	\$8.3	\$7,358	\$13.6	\$13,295	\$24.3	\$42,951	\$8.5	\$62,524	\$11.2	\$13,278	\$8.5	\$19,009	\$11.1
70 Taxes, Permits, Insurance and Bonds	4%	\$8,885	\$2.9	\$2,575	\$4.7	\$4,653	\$8.5	\$15,033	\$3.0	\$21,883	\$3.9	\$4,647	\$3.0	\$6,653	\$3.9
90 Fees and Contingencies	6%	\$15,231	\$5.0	\$4,415	\$8.1	\$7,977	\$14.6	\$25,771	\$5.1	\$37,514	\$6.7	\$7,967	\$5.1	\$11,406	\$6.7
Design & Construction contingency	10%	\$30,334	\$9.9	\$8,792	\$16.2	\$15,887	\$29.0	\$51,327	\$10.1	\$74,716	\$13.4	\$15,867	\$10.2	\$22,716	\$41.8
Escalation	5%	\$14,721	\$4.8	\$4,551	\$8.4	\$8,223	\$15.0	\$25,360	\$5.0	\$38,671	\$6.9	\$8,212	\$5.3	\$11,757	\$21.7
Bid Target		\$348,398	\$114.2	\$101,268	\$186.5	\$182,979	\$333.9	\$589,952	\$116.5	\$860,550	\$153.9	\$182,753	\$117.7	\$261,633	\$152.9
Owners Contingency	5%	\$17,420	\$5.7	\$5,063	\$9.3	\$9,149	\$16.7	\$29,498	\$5.8	\$43,027	\$7.7	\$9,138	\$5.9	\$13,082	\$24.1
MACC		\$365,817	\$119.9	\$106,331	\$195.8	\$192,128	\$350.6	\$619,450	\$122.4	\$903,577	\$161.6	\$191,891	\$123.6	\$274,715	\$505.9
Professional Fees	6%	\$21,949	\$7.2	\$6,380	\$11.7	\$11,528	\$21.0	\$37,167	\$7.3	\$54,215	\$9.7	\$11,513	\$7.4	\$16,483	\$30.4
Moveable Equipment (FF&E)	5%	\$18,291	\$6.0	\$5,317	\$9.8	\$9,606	\$17.5	\$30,972	\$6.1	\$45,179	\$8.1	\$9,595	\$6.2	\$13,736	\$25.3
Networking Equipment	4%	\$14,633	\$4.8	\$4,253	\$7.8	\$7,685	\$14.0	\$24,778	\$4.9	\$36,143	\$6.5	\$7,676	\$4.9	\$10,989	\$20.2
Admin & Misc	7%	\$25,607	\$8.4	\$7,443	\$13.7	\$13,449	\$24.5	\$43,361	\$8.6	\$63,250	\$11.3	\$13,432	\$8.6	\$19,230	\$35.4
Total Below the Line Items:		\$80,480	\$26.4	\$23,393	\$43.1	\$42,268	\$77.1	\$136,279	\$26.9	\$198,787	\$35.5	\$42,216	\$27.2	\$60,437	\$111.3
Total Estimated Construction Cost		\$446,297	\$146.3	\$129,724	\$238.9	\$234,396	\$427.7	\$755,728	\$149.3	\$1,102,364	\$197.1	\$234,107	\$150.7	\$335,152	\$617.2

ESTIMATE DETAIL - Level 2

University of Tennessee, Dining Pavilion Dining Facility, Level 2		MEP Space 96 SF		Toilets 435 SF		Stairs/Elevators 735 SF		BOH Dining 871 SF		Dining Area 6,190 SF		Outdoor Terrace 1,290 SF		Private Dining 783 SF		Core/Shell 27,170 SF	
Element	%	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF
A) SUBSTRUCTURE												\$33,927	\$26.3			\$1,037,894	\$38.2
10 Foundations												\$23,478	\$18.2			\$600,457	\$22.1
20 Subgrade Enclosures												\$774	\$0.6			\$16,302	\$0.6
40 Slabs-on-Grade												\$8,514	\$6.6			\$179,322	\$6.6
60 Water and Gas Mitigation												\$645	\$0.5			\$13,585	\$0.5
90 Substructure Related Activities												\$516	\$0.4			\$228,228	\$8.4
B) SHELL												\$52,632	\$40.8			\$5,431,283	\$199.9
10 Owners Contingency, 5%												\$28,767	\$22.3			\$2,121,977	\$78.1
20 Exterior Vertical Enclosures																\$2,070,354	\$76.2
30 Exterior Horizontal Enclosures												\$23,865	\$18.5			\$1,238,952	\$45.6
C) INTERIORS		\$7,392	\$77.0	\$49,373	\$113.5	\$68,429	\$93.1	\$70,028	\$80.4	\$652,488	\$105.4			\$66,249	\$84.6		
10 Interior Construction		\$1,997	\$20.8	\$12,746	\$29.3	\$19,698	\$26.8	\$13,413	\$15.4	\$224,078	\$36.2			\$12,058	\$15.4		
20 Interior Finishes		\$5,395	\$56.2	\$36,627	\$84.2		\$48,731	\$66.3	\$56,615	\$65.0	\$428,410	\$69.2		\$54,191	\$69.2		
D) SERVICES						\$260,337	\$354.2					\$21,027	\$28.6			\$6,442,992	\$237.1
10 Conveying						\$260,337	\$354.2										
20 Plumbing																\$627,627	\$23.1
30 Heating, Ventilation and Air Conditioning																\$2,255,551	\$83.0
40 Fire Protection																\$304,304	\$11.2
50 Electrical												\$21,027	\$16.3			\$2,502,357	\$92.1
60 Communications																\$278,493	\$10.3
70 Electronic Safety and Security																\$211,926	\$7.8
80 Integrated Automation																\$262,734	\$9.7
E) EQUIPMENT & FURNISHINGS		\$595	\$6.2					\$10,713	\$14.6	\$39,616	\$53.9			\$38,524	\$52.4		
10 Equipment		\$595	\$6.2														
20 Furnishings/Casework								\$10,713	\$12.3	\$39,616	\$6.4			\$38,524	\$49.2		
F) SPECIAL CONSTRUCTION & DEMOLITION																\$3,000,000	\$110.4
10 Special Construction																	
30 Demolition																\$3,000,000	\$110.4
Z) GENERAL		\$1,557	\$16.2	\$9,628	\$22.1	\$64,109	\$87.2	\$15,744	\$18.1	\$134,960	\$21.8	\$20,979	\$16.3	\$20,431	\$26.1	\$3,102,873	\$114.2
10 General Requirements/GCs	10%	\$799	\$8.3	\$4,937	\$11.4	\$32,877	\$44.7	\$8,074	\$9.3	\$69,210	\$11.2	\$10,759	\$8.3	\$10,477	\$13.4	\$1,591,217	\$58.6
70 Taxes, Permits, Insurance and Bonds	4%	\$280	\$2.9	\$1,728	\$4.0	\$11,507	\$15.7	\$2,826	\$3.2	\$24,224	\$3.9	\$3,766	\$2.9	\$3,667	\$4.7	\$556,926	\$20.5
90 Fees and Contingencies	6%	\$479	\$5.0	\$2,962	\$6.8	\$19,726	\$26.8	\$4,844	\$5.6	\$41,526	\$6.7	\$6,455	\$5.0	\$6,286	\$8.0	\$954,730	\$35.1
Design & Construction contingency	10%	\$954	\$9.9	\$5,900	\$13.6	\$39,288	\$53.5	\$9,649	\$11.1	\$82,706	\$13.4	\$12,857	\$10.0	\$12,520	\$28.8	\$1,901,504	\$70.0
Escalation	5%	\$494	\$5.1	\$3,054	\$7.0	\$20,334	\$27.7	\$4,994	\$5.7	\$42,806	\$6.9	\$6,654	\$5.2	\$6,480	\$14.9	\$828,884	\$30.5
Bid Target		\$10,993	\$114.5	\$67,954	\$156.2	\$452,497	\$615.6	\$111,128	\$127.6	\$952,577	\$153.9	\$148,076	\$114.8	\$144,204	\$184.2	\$21,745,430	\$800.3
Owners Contingency	5%	\$550	\$5.7	\$3,398	\$7.8	\$22,625	\$30.8	\$5,556	\$6.4	\$47,629	\$7.7	\$7,404	\$5.7	\$7,210	\$16.6	\$1,087,272	\$40.0
MACC		\$11,543	\$120.2	\$71,352	\$164.0	\$475,122	\$646.4	\$116,684	\$134.0	\$1,000,206	\$161.6	\$155,480	\$120.5	\$151,414	\$193.4	\$22,832,702	\$840.4
Professional Fees	6%	\$693	\$7.2	\$4,281	\$9.8	\$28,507	\$38.8	\$7,001	\$8.0	\$60,012	\$9.7	\$9,329	\$7.2	\$9,085	\$20.9	\$1,369,962	\$50.4
Moveable Equipment (FF&E)	5%	\$577	\$6.0	\$3,568	\$8.2	\$23,756	\$32.3	\$5,834	\$6.7	\$50,010	\$8.1	\$7,774	\$6.0	\$7,571	\$17.4	\$3,141,635	\$115.6
Networking Equipment	4%	\$462	\$4.8	\$2,854	\$6.6	\$19,005	\$25.9	\$4,667	\$5.4	\$40,008	\$6.5	\$6,219	\$4.8	\$6,057	\$13.9	\$913,308	\$33.6
Admin & Misc	7%	\$808	\$8.4	\$4,995	\$11.5	\$33,259	\$45.2	\$8,168	\$9.4	\$70,014	\$11.3	\$10,884	\$8.4	\$10,599	\$24.4	\$1,598,289	\$58.8
Total Below the Line Items:		\$2,539	\$26.5	\$15,697	\$36.1	\$104,527	\$142.2	\$25,671	\$29.5	\$220,045	\$35.5	\$34,206	\$26.5	\$33,311	\$42.5	\$7,023,194	\$258.5
Total Estimated Construction Cost		\$14,082	\$146.7	\$87,050	\$200.1	\$579,648	\$788.6	\$142,355	\$163.4	\$1,220,251	\$197.1	\$189,685	\$147.0	\$184,726	\$235.9	\$29,855,896	\$1,098.9

ESTIMATE DETAIL - Mac Gym Addition & Renovation									
University of Tennessee, Dining Pavilion Dining Facility, Level 2	%	Mac Gym Addition 2,890 SF		Interior Renovations - South 1,260 SF		Interior Renovations - North 3,370 SF		Wheelchair Lift Renovation 64 SF	
Element		Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF
A) SUBSTRUCTURE		\$135,918	\$47.0						
10 Foundations		\$61,413	\$21.3						
20 Subgrade Enclosures		\$8,670	\$3.0						
40 Slabs-on-Grade		\$35,981	\$12.5						
60 Water and Gas Mitigation		\$11,242	\$3.9						
90 Substructure Related Activities		\$18,612	\$6.4						
B) SHELL		\$477,891	\$165.4			\$225,116	\$66.8		
10 Superstructure		\$176,984	\$61.2						
20 Exterior Vertical Enclosures		\$188,948	\$65.4			\$225,116	\$66.8		
30 Exterior Horizontal Enclosures		\$111,959	\$38.7						
C) INTERIORS		\$331,801	\$114.8	\$148,138	\$117.6	\$253,283	\$75.2	\$6,560	\$102.5
10 Interior Construction		\$151,927	\$52.6	\$70,963	\$56.3	\$89,029	\$26.4	\$3,040	\$47.5
20 Interior Finishes		\$179,874	\$62.2	\$77,175	\$61.3	\$164,254	\$48.7	\$3,520	\$55.0
D) SERVICES		\$560,111	\$193.8	\$80,010	\$63.5	\$213,995	\$63.5	\$48,592	\$759.3
10 Conveying								\$33,600	\$525.0
20 Plumbing		\$90,168	\$31.2	\$6,552	\$5.2	\$17,524	\$5.2		
30 Heating, Ventilation and Air Conditioning		\$214,265	\$74.1	\$15,750	\$12.5	\$42,125	\$12.5		
40 Fire Protection		\$37,194	\$12.9	\$9,072	\$7.2	\$24,264	\$7.2	\$2,880	\$45.0
50 Electrical		\$154,557	\$53.5	\$25,326	\$20.1	\$67,737	\$20.1	\$6,720	\$105.0
60 Communications		\$26,444	\$9.2	\$10,206	\$8.1	\$27,297	\$8.1	\$2,672	\$41.8
70 Electronic Safety and Security		\$15,808	\$5.5	\$5,292	\$4.2	\$14,154	\$4.2	\$1,440	\$22.5
80 Integrated Automation		\$21,675	\$7.5	\$7,812	\$6.2	\$20,894	\$6.2	\$1,280	\$20.0
E) EQUIPMENT & FURNISHINGS		\$96,844	\$33.5	\$50,116		\$72,085	\$21.4	\$2,560	\$0.8
10 Equipment		\$65,430	\$22.6	\$33,201	\$26.4	\$41,923	\$12.4	\$2,560	\$40.0
20 Furnishings/Casework		\$31,414	\$10.9	\$16,915	\$13.4	\$30,162	\$9.0		
F) SPECIAL CONSTRUCTION & DEMOLITION		\$80,776	\$28.0	\$30,240	\$24.0	\$73,298	\$21.8	\$9,440	\$2.8
10 Special Construction		\$28,178	\$9.8	\$12,285	\$9.8	\$25,275	\$7.5	\$4,160	\$65.0
30 Demolition		\$52,598	\$18.2	\$17,955	\$14.3	\$48,023	\$14.3	\$5,280	\$82.5
G) SITEWORK		\$364,430	\$126.1						
10 Site Preparation		\$14,132	\$4.9						
20 Site Improvements		\$162,563	\$56.3						
30 Liquid and Gas Site Utilities		\$9,393	\$3.3						
40 Electrical Site Improvements		\$21,848	\$7.6						
50 Site Communications		\$6,503	\$2.3						
90 Miscellaneous Site Construction		\$149,991	\$51.9						
Z) GENERAL		\$399,315	\$138.2	\$60,158	\$47.7	\$163,367	\$48.5	\$13,095	\$204.6
10 General Requirements/GCs	10%	\$204,777	\$70.9	\$30,850	\$24.5	\$83,778	\$24.9	\$6,715	\$104.9
70 Taxes, Permits, Insurance and Bonds	4%	\$71,672	\$24.8	\$10,798	\$8.6	\$29,322	\$8.7	\$2,350	\$36.7
90 Fees and Contingencies	6%	\$122,866	\$42.5	\$18,510	\$14.7	\$50,267	\$14.9	\$4,029	\$63.0
Design & Construction contingency	10%	\$244,709	\$84.7	\$36,866	\$29.3	\$100,114	\$79.5	\$8,025	\$125.4
Escalation	5%	\$122,472	\$42.4	\$17,516	\$13.9	\$48,022	\$38.1	\$3,665	\$57.3
Bid Target		\$2,814,267	\$973.8	\$423,044	\$335.7	\$1,149,280	\$341.0	\$91,936	\$1,436.5
Owners Contingency	7.5%	\$211,070	\$73.0	\$31,728	\$25.2	\$86,196	\$25.6	\$6,895	\$107.7
MACC		\$3,025,337	\$1,046.8	\$454,772	\$360.9	\$1,235,476	\$366.6	\$98,831	\$1,544.2
Professional Fees	6%	\$181,520	\$62.8	\$27,286	\$21.7	\$74,129	\$22.0	\$5,930	\$92.7
Moveable Equipment (FF&E)	5%	\$151,267	\$52.3	\$22,739	\$18.0	\$61,774	\$18.3	\$4,942	\$77.2
Networking Equipment	4%	\$121,013	\$41.9	\$18,191	\$14.4	\$49,419	\$14.7	\$3,953	\$61.8
Admin & Misc	7%	\$211,774	\$73.3	\$31,834	\$25.3	\$86,483	\$25.7	\$6,918	\$108.1
Total Below the Line Items:		\$665,574	\$230.3	\$100,050	\$79.4	\$271,805	\$80.7	\$21,743	\$339.7
Total Estimated Construction Cost		\$3,690,911	\$1,277.1	\$554,822	\$440.3	\$1,507,281	\$447.3	\$120,574	\$1,884.0

ESTIMATE DETAIL - Siteworks									
University of Tennessee, Dining Pavilion Siteworks	%	Hardscape 60% 20,501 SF		Landscape 40% 5,125 SF		Utilities 47,163 SF		Maclellan Demolition 21,537 SF	
Element		Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF	Subsystem	Cost/SF
F) SPECIAL CONSTRUCTION & DEMOLITION								\$391,973	\$18.2
10 Special Construction									
30 Demolition								\$391,973	\$18.2
G) SITEWORK		\$536,667	\$26.2	\$186,444	\$36.4	\$924,394	\$19.6		
10 Site Preparation		\$100,000	\$4.9	\$25,000	\$4.9				
20 Site Improvements		\$291,111	\$14.2	\$114,292	\$22.3				
30 Liquid and Gas Site Utilities						\$698,012	\$14.8		
40 Electrical Site Improvements						\$146,205	\$3.1		
50 Site Communications						\$80,177	\$1.7		
90 Miscellaneous Site Construction		\$145,556	\$7.1	\$47,152	\$9.2				
Z) GENERAL		\$104,650	\$5.1	\$36,357	\$7.1	\$180,257	\$3.8	\$76,435	\$3.5
10 General Requirements/GCs	10%	\$53,667	\$2.6	\$18,644	\$3.6	\$92,439	\$2.0	\$39,197	\$1.8
70 Taxes, Permits, Insurance and Bonds	4%	\$18,783	\$0.9	\$6,526	\$1.3	\$32,354	\$0.7	\$13,719	\$0.6
90 Fees and Contingencies	6%	\$32,200	\$1.6	\$11,187	\$2.2	\$55,464	\$1.2	\$23,518	\$1.1
Design & Construction contingency	10%	\$64,132	\$3.1	\$22,280	\$4.3	\$110,465	\$2.3	\$46,841	\$2.2
Escalation	5%	\$33,192	\$1.6	\$11,531	\$2.2	\$57,173	\$1.2	\$3,956	\$0.2
Bid Target		\$738,641	\$36.0	\$256,612	\$50.1	\$1,272,289	\$27.0	\$519,205	\$24.1
Owners Contingency	5%	\$36,932	\$1.8	\$12,831	\$2.5	\$63,614	\$1.3	\$25,960	\$1.2
MACC		\$775,573	\$37.8	\$269,443	\$52.6	\$1,335,903	\$28.3	\$545,165	\$25.3
Professional Fees	6%	\$46,534	\$2.3	\$16,167	\$3.2	\$80,154	\$1.7	\$32,710	\$1.5
Moveable Equipment (FF&E)	5%	\$38,779	\$1.9	\$13,472	\$2.6	\$66,795	\$1.4	\$27,258	\$1.3
Networking Equipment	4%	\$31,023	\$1.5	\$10,778	\$2.1	\$53,436	\$1.1	\$21,807	\$1.0
Admin & Misc	7%	\$54,290	\$2.6	\$18,861	\$3.7	\$93,513	\$2.0	\$38,162	\$1.8
Total Below the Line Items:		\$170,626	\$8.3	\$59,277	\$11.6	\$293,899	\$6.2	\$119,936	\$5.6
Total Estimated Construction Cost		\$946,199	\$46.2	\$328,720	\$64.1	\$1,629,802	\$34.6	\$665,101	\$30.9

SCHEDULE OF AREAS AND CONTROL QUANTITIES

Schedule of Areas	MEP Space	Restroom	Stairs/Elevators	BOH Dining	Dining Area	Loading	Lobby & Community	SF
1 Dining Facility, Level 1								
Areas	3,051	543	548	5,062	5,592	1,553	1,711	18,060
Total Enclosed	3,051	543	548	5,062	5,592	1,553	1,711	18,060

	MEP Space	Toilets	Stairs/Elevators	BOH Dining	Dining Area	Outdoor Terrace	Private Dining	Core/Shell	SF
2 Dining Facility, Level 2 Owners Contingency, 5%									
Areas	96	435	735	871	6,190	1,290	783	27,170	9,110
Total Enclosed	96	435	735	871	6,190	1,290	783	27,170	9,110

	Hardscape 60%	Landscape 40%	Utilities	Maclellan Demolition	SF
3 Siteworks					
Areas	20,501	5,125	47,163	21,537	47,163
Total Enclosed	20,501	5,125	47,163	21,537	47,163

	Mac Gym Addition	Interior Renovations - South	Interior Renovations - North	Wheelchair Lift Renovation	SF
4 Mac Gym Addition & Renovation					
Areas	2,890	1,260	3,370	64	7,584
Total Enclosed	2,890	1,260	3,370	64	7,584

APPENDIX 1 - APPROACH & METHODOLOGY

Basis of Estimate	- University of Tennessee Chattanooga Narratives and ROM drawings from HED Architects
Estimate Format	A component cost classification format has been used for the preparation of this estimate. It classifies costs by building system / element.
Cost Mark Ups	The following % mark ups have been included in the estimate: General Requirements/GCs, 10% Taxes, Permits, Insurances and Bonds, 4% Fees, CM, 6% Design and Construction Contingency, 10% Escalation, 7% Owners Contingency, 5% Dining, 7.5% Maclellan Gym Professional Fees, 6% Moveable Equipment (FF&E), 5%, Kitchen Equipment Allowance included, \$2m Networking Equipment, 4% Admin & Misc., 7%
Escalation	Escalation has been included to the midpoint of construction at 6.54%
Design Contingency	Design contingency is excluded from the Construction Cost but included in the Soft Costs as indicated.
Construction Contingency	Construction contingency is excluded from the Construction Cost but included in the Soft Costs as indicated.
Bid Conditions	This estimate has been based upon competitive bid situations (minimum of 3 bidders) for all items of subcontracted work.
Basis For Quantities	Wherever possible, this estimate has been based upon the actual measurement of different items of work. For the remaining items, parametric measurements were used in conjunction with other projects of a similar nature.
Basis for Unit Costs	Unit costs as contained herein are based on current bid prices in Spring 2026.. Sub overheads and profit are included in each line item unit cost. Their overhead and profit covers each sub's cost for labor burden, materials, and equipment, sales taxes, field overhead, home office overhead, and profit. The general contractor's overhead is shown separately on the master summary.
Items Affecting Cost Estimate	Items which may change the estimated construction cost include, but are not limited to: - Modifications to the scope of work included in this estimate. - Unforeseen sub-surface conditions. - Restrictive technical specifications or excessive contract conditions.

APPENDIX 1 - APPROACH & METHODOLOGY

	- Any other non-competitive bid situations. - Bids delayed beyond the projected schedule. - Deep foundations, challenging site conditions
Statement of Probable Cost	Cumming has no control over the cost of labor and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. This estimate is made on the basis of the experience, qualifications, and best judgement of a professional consultant familiar with the construction industry. Cumming, however, cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from this or subsequent cost estimates. Cumming's staff of professional cost consultants has prepared this estimate in accordance with generally accepted principles and practices. This staff is available to discuss its contents with any interested party. Pricing reflects probable construction costs obtainable in the project locality on the target dates specified and is a determination of fair market value for the construction of this project. The estimate is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work for all sub and general contractors with a range of 3 - 4 bidders for all items of work. Experience and research indicates that a fewer number of bidders may result in higher bids. Conversely, an increased number of bidders may result in more competitive bid day responses.
Recommendations	Cumming recommends that the Owner and the Architect carefully review this entire document to ensure it reflects their design intent. Requests for modifications of any apparent errors or omissions to this document must be made to Cumming within ten days of receipt of this estimate. Otherwise, it will be assumed that its contents have been reviewed and accepted. If the project is over budget or there are unresolved budget issues, alternate systems / schemes should be evaluated before proceeding into further design phases. It is recommended that there are preparations of further cost estimates throughout design by Cumming to determine overall cost changes since the preparation of this preliminary estimate. These future estimates will have detailed breakdowns indicating materials by type, kind, and size, priced by their respective units of measure.

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ACKNOWLEDGMENTS

8.0 Acknowledgments

PROGRAMMING ADVISORY COMMITTEE

Name
Matthew Parks, UT System, Architect / Project Manager - Department of Capital Projects
Brent Goldberg, UTC, Vice Chancellor for Finance & Administration, Budget & Finance
Chris Sherbesman, UTC, Associate Vice Chancellor for Finance & Administration, Budget & Finance
Anthony McClellan, UTC, Assistant Vice Chancellor for Operations, Facilities, Planning, and Management
Adam Homer, UTC, Executive Director of Planning and Project Management, Facilities, Planning, and Management
Chelsie Ewing, UTC, Director of Engineering & Planning Services, Facilities, Planning, and Management
Jason Gehrlein, UTC, Director of Operations & Utility Management, Facilities, Planning, and Management
Michelle Prince, UTC, Executive Director, Auxiliary Services
Mary Lee King, UTC, Associate Director of Campus Card, Dining, and Vending Operations, Auxiliary Services
Andrew Brown, Aramark, Resident District Manager, Southeast Region, Collegiate Hospitality
Sam Holm, Aramark, Director of Operations, Southeast Region, Collegiate Hospitality

CONSULTANT TEAM

Department	Name
HED (Harley Ellis Devereaux)	
Architecture + Planning, Landscape Architecture	Alli Mallory, AIA Katherine Kalant, AIA Mengzhen Xu Haley Baker Mijung Ko, ASLA, PLA
March Adams & Associates	
Civil Engineering	Michael Hutcherson, PE
Newcomb & Boyd	
Mechanical, Electrical, Plumbing, & Fire Protection Engineering	Ricky Dozier, PE, LEED AP Walker Jones, PE, LEED AP
Ricca Design Studios	
Food Service Consulting	Garrett Sletten
Ross Bryan & Associates	
Structural Engineering	Brent Thornton, PE, SE
Cumming Group	
Cost Estimating	Seth Martin

09

APPENDIX

9.0 Appendix

Dining Facility Program Traffic Safety Assessment dated June 30, 2026.

The traffic and pedestrian safety study concluded that while the existing intersections provide adequate stopping sight distance and have experienced very few reported crashes, the increased pedestrian activity associated with the new dining facility, combined with scheduled food service deliveries, warrants targeted operational and infrastructure improvements to enhance overall safety. Recommended measures include adjusting delivery schedules to occur before peak pedestrian activity, upgrading crosswalks and curb ramps, refreshing pavement markings, improving advance pedestrian warning signage and lighting, enhancing the existing pedestrian beacon with passive pedestrian detection, and evaluating intersection modifications to reduce vehicle speeds and pedestrian conflict points. These recommendations shall be further evaluated and coordinated with the University of Tennessee at Chattanooga and the City of Chattanooga during subsequent phases of design.

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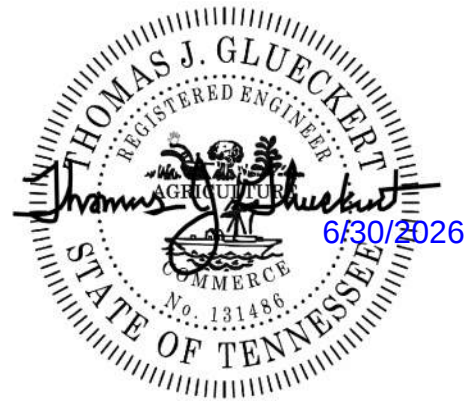
MEMORANDUM

To: Allie A. Mallory
Harley Ellis Devereaux, Inc.

From: Thomas Glueckert, PE, PTOE
Ava Pezzimenti, EIT
Kimley-Horn

Date: June 30, 2026

Subject: Dining Facility Program Traffic Safety Assessment
Chattanooga, Tennessee



Kimley-Horn and Associates, Inc. was retained by Harley Ellis Devereaux, Inc. (HED) to provide professional transportation engineering services to review pedestrian crossing safety at intersections adjacent to a new dining hall on the University of Tennessee at Chattanooga (UTC) campus, located in Chattanooga, Tennessee. The new dining hall will be located on the southeast corner of the Mocs Alumni Drive at Douglas Street intersection, in space currently occupied by Maclellan Gymnasium, directly to the west of the University Center, which houses the current Mocs Dining facilities. The new location of the dining hall requires food delivery trucks to pass through two (2) unsignalized intersections, Mocs Alumni Drive at Douglas Street and Mocs Alumni Drive at Terrell Owens Way, which are heavily utilized pedestrian crossings within the central UTC campus.

This memorandum serves as the pedestrian crossing study to evaluate the current pedestrian operations of the two (2) unsignalized intersections and provide mitigation strategies to improve pedestrian safety based on guidance provided by the Federal Highway Administration's (FHWA) *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations* and the Manual on Uniform Traffic Control Devices (MUTCD), 11th Edition.

Site Conditions

The study area extends from the intersection of Mocs Alumni Drive at Douglas Street to Mocs Alumni Drive at Terrell Owens Way, approximately 300 feet to the east. The study area encompasses the entire Mocs Alumni Drive frontage of the new dining hall facility, including the associated driveway access points, as illustrated in **Figure 1**. A project location map is provided in **Attachment A**.

Within the study area, the new dining hall has two (2) paved driveways along Mocs Alumni Drive and Douglas Street to provide access for delivery, each of which is numbered in **Figure 1** for reference.



Figure 1: Site Aerial

Segment Conditions

There are three roadway segments within the study area, each are described below.

Mocs Alumni Drive

Within the study area, Mocs Alumni Drive is a two-lane, undivided major collector roadway oriented in the east-west direction. Mocs Alumni Drive transitions to a four-lane roadway west of Douglas Street. Along Mocs Alumni Drive, there is a two-way left turn lane between Douglas Street and Terrell Owens Way, providing access to the UTC Visitor's Garage and westbound left turn storage to Douglas Street. There is no posted speed limit within the study area; based on the context of the roadway, it is assumed that the operating speed of Mocs Alumni Drive is 30 miles per hour (mph). There are school flashers, approximately 450 feet to the west of the study area and approximately 1,485 feet to the east of the study area, which limits the speed limit of the road to 25 mph when flashing. The flashers are owned and operated by UTC.

There are striped bike lanes along the north and south sides of Mocs Alumni Drive, with the bike lane along the north side of the road transitioning to a shared bike lane west of Douglas Street.

There is pedestrian lighting along Mocs Alumni Drive throughout the study limits on the south side of the roadway. Pedestrian lighting is present on the north side of the roadway from just west of Terrell Owens Way through the western study limits. There is street lighting along the north side of the roadway from just east of Terrell Owens Way through the eastern study limits.

Based on a desktop review, the roadway features a 3.2-percent downhill grade traveling from east to west, and there is one horizontal curve located along Mocs Alumni Drive to the west of the study area.

Douglas Street

Douglas Street is a two-lane undivided major collector roadway oriented in the north-south direction. There is no posted speed limit along Douglas Street within the study area.

There is pedestrian lighting along Douglas Street, but no dedicated street lighting.

Terrell Owens Way

Terrell Owens Way is a two-lane, undivided private roadway oriented in the north-south direction, which provides access to the University Center and the Maclellan Gymnasium. There is no posted speed limit along Terrell Owens Way.

There is pedestrian lighting along Terrell Owens Way, but no dedicated street lighting.

Intersection Conditions

There are two intersections included within the study area, each are described below.

Mocs Alumni Drive at Douglas Street

The intersection of Mocs Alumni Drive at Douglas Street is a 3-legged, unsignalized, two-way stop-controlled intersection, with Mocs Alumni Drive traffic flowing freely through the intersection. The westbound left turn from Mocs Alumni Drive utilizes a two-way left turn lane for storage. The eastbound right turn from Mocs Alumni Drive is a channelized, yield controlled right turn with a large diameter radius, allowing vehicles to maintain speed through the movement. The Douglas Street approach consists of two (2) lanes, including dedicated left and right turn lanes, with approximately 100 feet of right turn storage provided.

On-street parking is not permitted within the limits of the intersection.

The intersection has three (3) separate pedestrian crossings, one (1) crossing the channelized right turn lane, one (1) crossing the south approach, and one (1) crossing the east approach. All crosswalks are marked with high-visibility longitudinal bar crosswalk markings. Curb ramps appear to be in suitable condition with the exception of the southeast corner of the intersection, which is missing a tactile warning strip and is configured as a single curb ramp in a curb, guiding pedestrians to the center of the intersection, as opposed to two (2) perpendicular ramps, which guide pedestrians through the crosswalk and to the corresponding receiving ramp.

Mocs Alumni Drive at Terrell Owens Way

The intersection of Mocs Alumni Drive at Terrell Owens Way is a 3-legged, unsignalized, two-way stop-controlled intersection, with Mocs Alumni Drive traffic flowing freely through the intersection. There are no dedicated turn lanes within the intersection limits.

There is metered parking to the east of and within the intersection limits, with parking spaces available directly across from the Terrell Owens Way northbound approach. Additionally, there are speed cushions installed just to the east of the intersection, which help reduce vehicle speed.

The intersection has two (2) separate pedestrian crossings, one (1) crossing the west approach and one (1) crossing the south approach. The crosswalk crossing the west approach is marked with high-visibility longitudinal bar crosswalk markings, tactile warning pads, and has a pedestrian actuated rectangular rapid flashing beacon (RRFB) installed as well as bump outs to better daylight the intersection and reduce the crossing distance. The crosswalk crossing the south leg is unmarked, which is typical of driveway crossings. Curb ramps are in suitable condition except for the southeast corner of the intersection, which is missing a tactile warning pad. The curb ramps for the crosswalk across the south approach could be better aligned with the direction of pedestrian travel.

Land Use

The study area is within the existing UTC campus. The campus land uses surrounding the study area are primarily geared towards athletics and recreation. The UTC Aquatic and Recreation Center, McKenzie Arena, Maclellan Gymnasium, and UTC tennis courts all border along the project area. The UTC University Center is a social & administrative campus land use, to the southeast of the study area. The Boling Apartments student housing is a residential land use to the southwest of the study area. Finally, the Chattanooga Confederate Cemetery is an open space campus land use to the northeast of the study area.

Proposed Facilities

The new UTC dining hall will be located on the southeast corner of the intersection of Mocs Alumni Drive at Douglas Street. The new dining hall is expected to have a capacity of 750 seats, more than double the capacity of the existing Mocs Dining facility which has a current capacity of 363 seats. Once the new dining hall is completed, the existing dining hall will be renovated to be an auxiliary dining hall, catering to farm-to-table and allergen free options. The total dining hall seating capacity within the vicinity of the study area in the proposed condition is expected to be more than 1,100 seats.

The new configuration and capacity of the dining hall is expected to generate additional foot traffic during operational hours as well as additional truck traffic during identified delivery hours. Delivery trucks are anticipated to primarily be single unit box trucks, with an occasional multi-unit semi-truck being utilized. The delivery window is anticipated to be between 5:00 AM and 8:00 AM on Mondays, Wednesdays, and Fridays. Delivery truck traffic is anticipated to arrive at the new dining hall by turning southbound onto Terrell Owens Way to enter a loading dock on the south side of the facility. Delivery truck traffic is anticipated to depart the new dining hall by turning northbound onto Douglas Street before proceeding onto Mocs Alumni Drive. A depiction of the proposed truck circulation for the site is included in **Figure 2**.

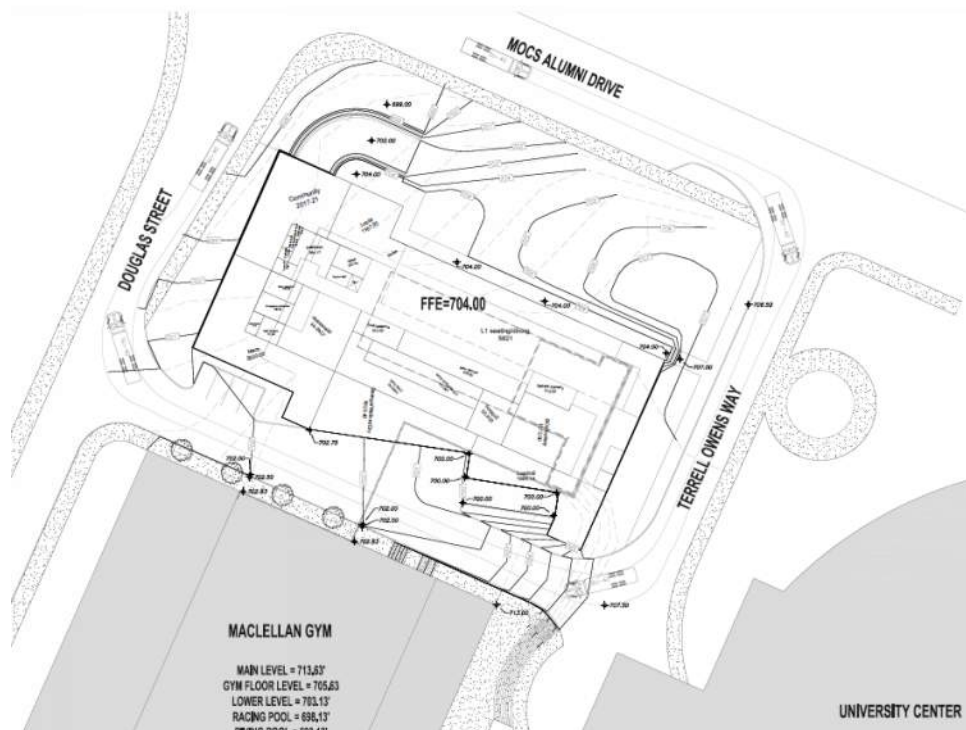


Figure 2: Site Delivery Truck Circulation

Site Visit

A site visit was completed on Tuesday, May 12, 2026, during the morning off-peak period, to assess existing geometric features and traffic characteristics for drivers along the corridor. At the time of the site visit, the spring semester had already concluded. The following conditions were noted:

- Street illumination during the early AM hours along Mocs Alumni Drive is limited and at distance, which reduces visibility of objects in and along the roadway.
- Sidewalk illumination is adequate throughout the study area.
- Vehicles completing an eastbound right turn from Mocs Alumni Drive to southbound Douglas Street were observed completing the turn at their downstream travel speed, influenced by the horizontal curve west of Douglas Street and the right-turn channelization. While yielding to pedestrians requires drivers to slow down, reducing speed is not necessary to complete the turn when no pedestrian is present in the crosswalk.
- Due to the low traffic volumes, pedestrians can often enter the crosswalk without encountering conflicting vehicles. This consistent lack of interaction creates a sense of security, leading many pedestrians to step into the roadway without pausing to confirm that it is safe to cross, even when vehicles are approaching the intersection.
- Most pedestrians observed crossing at the intersection of Mocs Alumni Drive at Terrell Owens Way did not activate the RRFB.
- Pavement markings at Mocs Alumni Drive at Douglas Street are deteriorating.

Data Collection

The following sections summarize data collection efforts that were used to evaluate pedestrian safety at the two (2) intersections within the study area. A map of traffic count data collection sites is provided in **Figure 3**.



Figure 3: Count Location Map

Vehicular Traffic Volumes

Vehicle turning movement counts (TMCs) were collected at the intersections of Mocs Alumni Drive at Douglas Street and Mocs Alumni Drive at Terrell Owens Way over three (3) four-hour periods, between 4:30 AM – 8:30 AM on Friday, April 24th, 2026; Monday, April 27th, 2026; and Wednesday, April 29th, 2026.

A summary of the collected traffic volumes is presented in **Table 1**, and the raw traffic count data is provided in **Attachment B**. Four-hour intersection volumes ranged between 618 – 658 vehicles at the intersection of Mocs Alumni Drive at Douglas Street and between 486 – 515 vehicles at the intersection of Mocs Alumni Drive at Terrell Owens Way. Overall, the four-hour volume of vehicular traffic remained consistent over the data collection period.

Table 1: Turning Movement Count Summary

Location	Movement	4-Hour Volume (All Vehicles)		
		Friday, April 24, 2026	Monday, April 27, 2026	Wednesday, April 29, 2026
Mocs Alumni Drive at Douglas Street	EBT	310	331	351
	EBR	80	93	91
	WBL	35	37	33
	WBT	93	98	91
	NBL	27	21	28
	NBR	73	62	64
	Total	618	642	658
Mocs Alumni Drive at Terrell Owens Way	EBT	300	311	314
	EBR	15	20	19
	WBL	22	24	25
	WBT	133	142	135
	NBL	7	10	12
	NBR	9	8	5
	Total	486	515	510

Table 2 provides a summary of heavy vehicle traffic at study intersections.

During the 4:30 AM – 8:30 AM data collection period, heavy truck traffic remained minimal compared to the overall vehicle volume entering the study intersections.

Between 4:30 AM and 6:30 AM, vehicle volumes at Mocs Alumni Drive at Douglas Street and Mocs Alumni Drive at Terrell Owens Way remain low, averaging at or below 20 vehicles per 15-minute period. From 6:45 AM to 7:45 AM, vehicle traffic grows until it hits its peak, around 125 vehicles per 15-minute period at Mocs Alumni Drive at Douglas Street and 95 vehicles per 15-minute period at Mocs Alumni Drive at Terrell Owens Way.

Figure 4 and **Figure 5** summarize the total volume of vehicles entering the intersections by 15-minute intervals throughout the data collection period at the two (2) subject intersections.

Table 2: Heavy Vehicles Turning Movement Count Summary

Location	Movement	4-Hour Volume (Heavy Vehicles)		
		Friday, April 24, 2026	Monday, April 27, 2026	Wednesday, April 29, 2026
Mocs Alumni Drive at Douglas Street	EBT	3	7	5
	EBR	5	4	5
	WBL	0	1	1
	WBT	5	7	5
	NBL	1	1	4
	NBR	5	4	5
	Total	19	24	25
Mocs Alumni Drive at Terrell Owens Way	EBT	8	12	9
	EBR	1	2	1
	WBL	0	1	0
	WBT	5	11	8
	NBL	0	0	0
	NBR	0	0	0
	Total	14	26	18

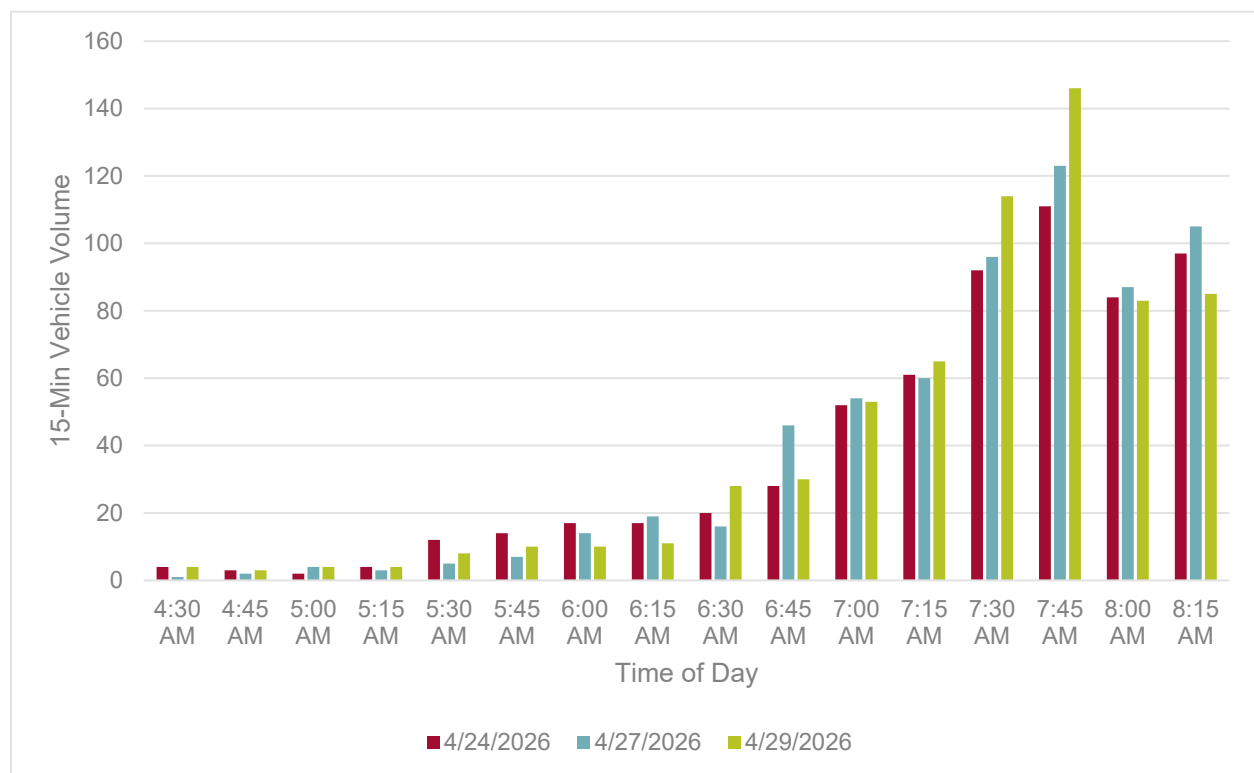


Figure 4: Mocs Alumni Drive at Douglas Street Vehicle Volume by Time of Day

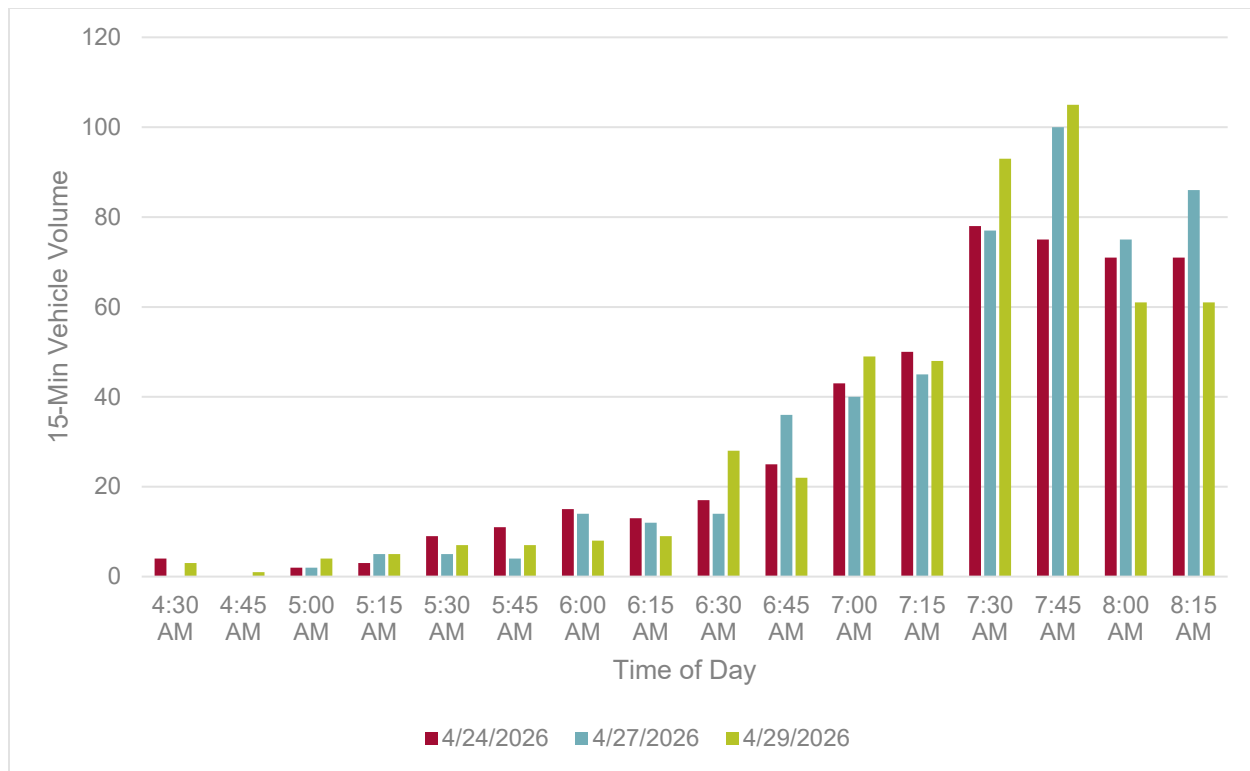


Figure 5: Mocs Alumni Drive at Terrell Owens Way Vehicle Volume by Time of Day

Pedestrian and Bicyclist Volumes

Pedestrian and Bicyclist crossing counts were collected at the intersections of Mocs Alumni Drive at Douglas Street and Mocs Alumni Drive at Terrell Owens Way over three (3) four-hour periods, between 4:30 AM – 8:30 AM on Friday, April 24th, 2026; Monday, April 27th, 2026; and Wednesday, April 29th, 2026. A summary of the pedestrian volumes is presented in **Table 3**. A summary of bicyclist volumes is presented in **Table 4**.

Table 3: Pedestrian Crossing Summary

Location	Crossing	4-Hour Volume (Pedestrian)		
		Friday, April 24, 2026	Monday, April 27, 2026	Wednesday, April 29, 2026
Mocs Alumni Drive at Douglas Street	South Leg	15	19	12
	East Leg	46	42	54
	Total	61	61	64
Mocs Alumni Drive at Terrell Owens Way	South Leg	36	43	38
	West Leg	95	67	96
	Total	131	110	134

Table 4: Bicyclist Volume Summary

Location	Movement	4-Hour Volume (Heavy Vehicles)		
		Friday, April 24, 2026	Monday, April 27, 2026	Wednesday, April 29, 2026
Mocs Alumni Drive at Douglas Street	EBT	1	1	1
	EBR	1	2	0
	WBL	0	1	1
	WBT	0	0	0
	NBL	3	1	0
	NBR	0	1	0
	Total	5	6	2
Mocs Alumni Drive at Terrell Owens Way	EBT	1	2	1
	EBR	0	0	0
	WBL	0	0	0
	WBT	1	1	1
	NBL	0	0	0
	NBR	0	0	0
	Total	2	3	2

Four-hour pedestrian volumes ranged from 61 – 64 pedestrians at the intersection of Mocs Alumni Drive at Douglas Street and between 110 – 134 pedestrians at the intersection of Mocs Alumni Drive at Terrell Owens Way. Overall, the four-hour volume of pedestrian traffic remained consistent over the data collection period. Notably, pedestrian traffic at the intersection of Mocs Alumni Drive at Terrell Owens Way was nearly double the pedestrian volume at the intersection of Mocs Alumni Drive at Douglas Street.

During the 4:30 AM – 8:30 AM data collection period, bicyclist traffic remained minimal compared to the overall pedestrian volume at the study intersections.

Figure 6 and **Figure 7** below summarize the total volume of pedestrians entering the intersections by time of day at the two (2) subject intersections.

Pedestrian volume at the two (2) subject intersections are more erratic than vehicle volumes during the collection period, but both locations experience little to no pedestrian crossing traffic between 4:30 AM – 6:30 AM before growing to peak pedestrian crossing traffic of 12 pedestrians per 15-minutes at 7:30 AM at Mocs Alumni Drive at Douglas Street and 39 pedestrians per 15-minutes at Mocs Alumni Drive at Terrell Owens Way.

Figure 8 and **Figure 9** below compare average vehicle volume and average pedestrian volume by time of day at the two (2) subject intersections.

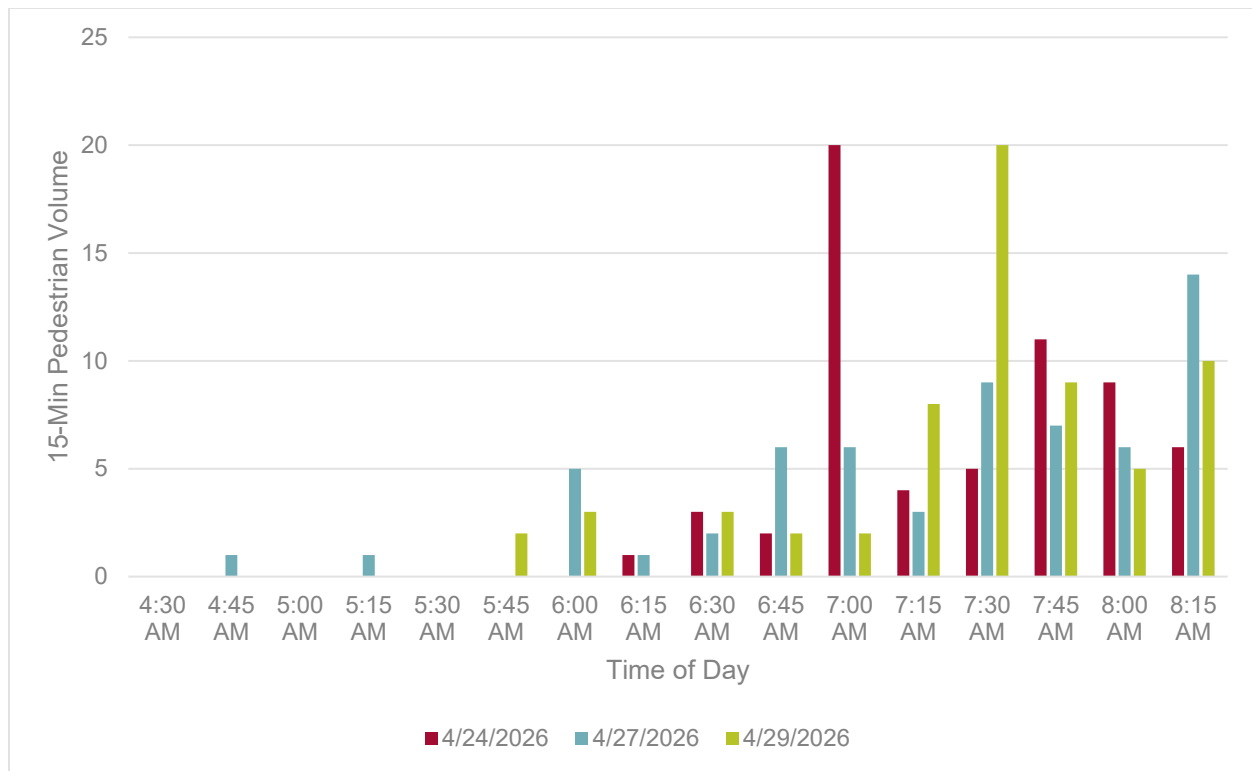


Figure 6: Mocs Alumni Drive at Douglas Street Pedestrian Volume by Time of Day

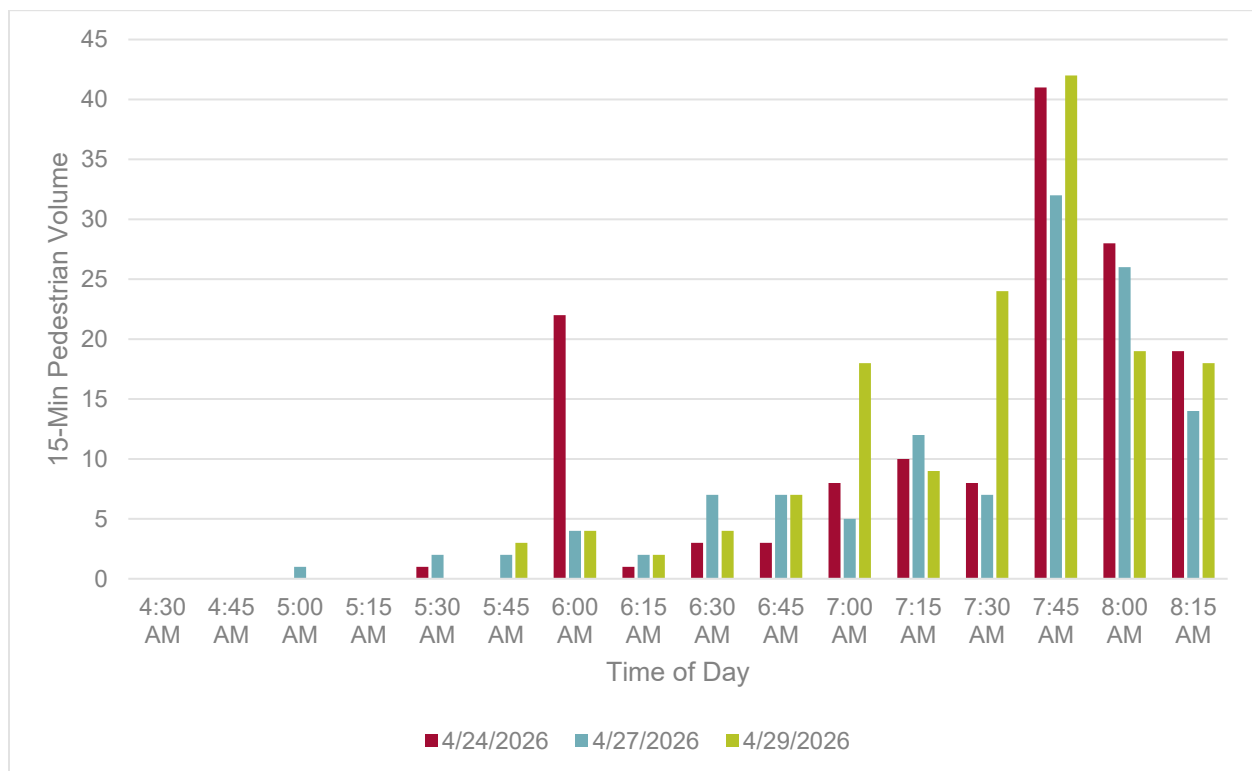


Figure 7: Mocs Alumni Drive at Terrell Owens Way Pedestrian Volume by Time of Day

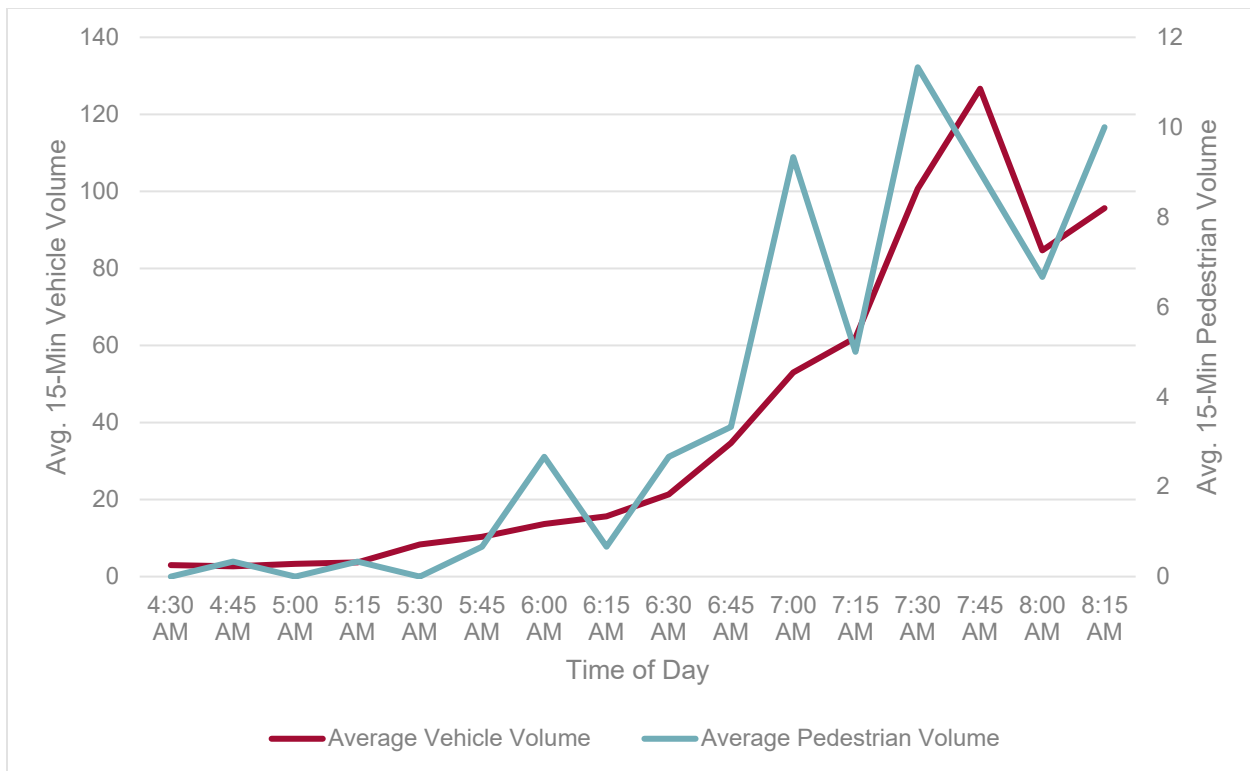


Figure 8: Mocs Alumni Drive at Douglas Street Average Vehicle and Pedestrian Volume by Time of Day

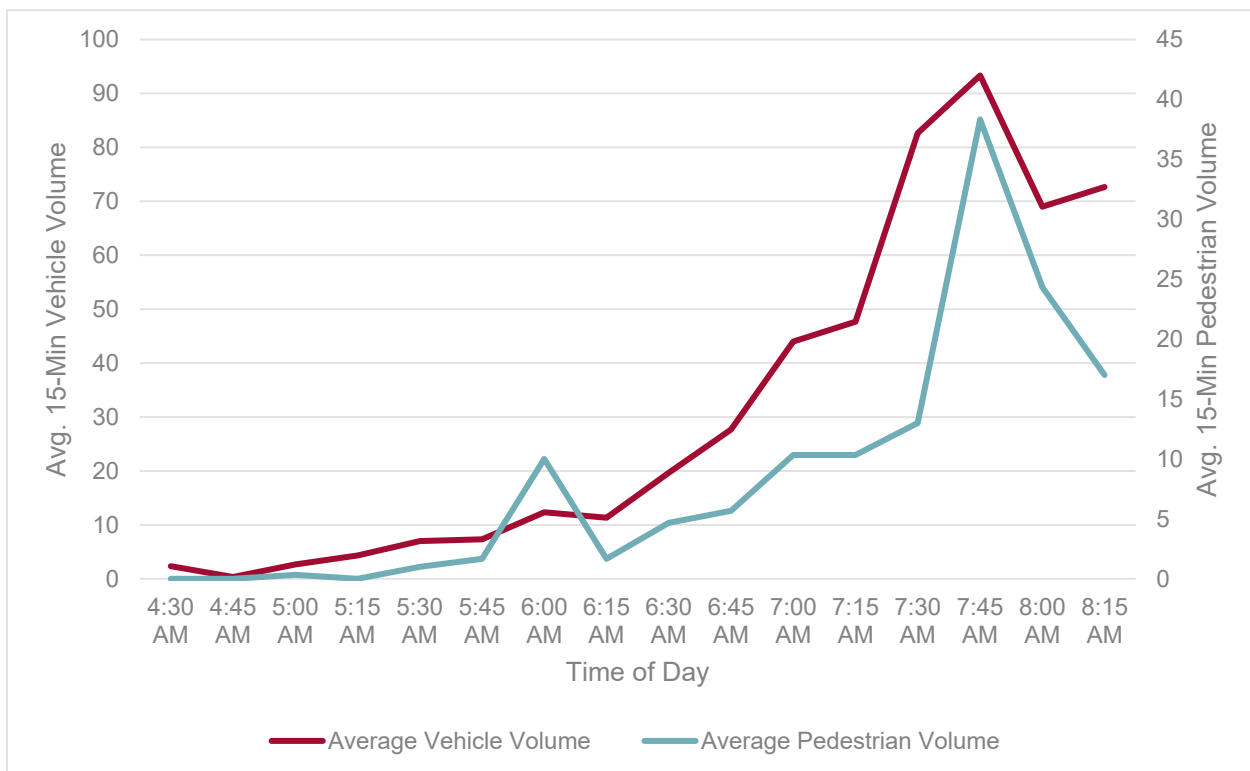


Figure 9: Mocs Alumni Drive at Terrell Owens Way Average Vehicle and Pedestrian Traffic by Time of Day

Sight Distance Evaluation

Stopping sight distance (SSD) was evaluated using criteria from Chapter 3.2 of the American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets, 7th Edition. During the site visit, a visual review was performed to identify potential pedestrian crossing locations and any limitations. Sight distance was evaluated at for the eastbound and westbound approaches at both study intersections and is summarized in **Table 5**.

Table 5: Sight Distance Measurements

Crossing Location	Approach	Measured Sight Distance	Required Stopping Sight Distance	Sufficient
Mocs Alumni Drive at Douglas Street	EB	~220 ft	205 ft	Yes
	WB	>500 ft	205 ft	Yes
Mocs Alumni Drive at Terrell Owens Way	EB	~370 ft	205 ft	Yes
	WB	~390 ft	205 ft	Yes

¹Stopping sight distance was evaluated for a downgrade of 3%

Based on the sight distance evaluation, there is sufficient sight distance for a driver to react to a pedestrian in the roadway and stop.

At the intersection of Mocs Alumni Drive at Douglas Street, a vehicle traveling eastbound has limited sight distance to a pedestrian on the northeast corner of the intersection. Sight distance for eastbound vehicles is obstructed by the UTC Aquatic and Recreation Center and could be obstructed by street trees located along the north side of the roadway. This sight distance concern can be mitigated through the use of a W11-2 “Pedestrian Crossing” sign placed in advance of the intersection, with or without flashers; by permanently reducing the speed limit along Mocs Alumni Drive to 25 mph, thereby reducing the stopping sight distance to 158 ft; or by converting the intersection to all-way stop control.

At the intersection of Mocs Alumni Drive at Terrell Owens Way, stopping sight distance is determined to be sufficient for both directions. Even with the curb bump out, parked vehicles on the north side of the roadway, immediately to the east of the crossing, may temporarily obstruct sight distance for vehicles traveling westbound on the roadway. This temporary obstruction can be mitigated by removing the two (2) parking spaces to the east of the crossing.

Crash Analysis

Historical crash data was extracted from AASHTOWare Safety online crash database and analytics tool, for the period of April 30th, 2021, through April 30th, 2026. Because crash types can often be miscoded in the data due to the individual discretion of the reporting law enforcement officer, all individual crash reports were reviewed to confirm that the details surrounding the crash, including location, crash type, severity, direction of travel, lighting condition, and surface condition, were coded correctly. A crash data table is provided in **Attachment C**.

Crash Summary

Over the 5-year crash analysis period, a total of one (1) crash was reported within the study area at the intersection of Mocs Alumni Drive at Douglas Street. The crash history is summarized in **Table 6**. There were no fatal or injury crashes that occurred within the study limits between April 30th, 2021, through April 30th, 2026.

Table 6: Crash History

Year	Total Crashes	Dark Crashes	Wet Crashes	Heavy Vehicle Crashes	Bike/Ped Crashes
2021	0	0	0	0	0
2022	1	0	0	0	1
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	0	0	0
Total	1	0	0	0	0
Average	0.2	0	0	0	0.2
<i>Percent</i>		0%	0%	0%	100%

¹Crash data through April 20, 2026

Due to the small number of crashes, trends related to crash data cannot be identified. It should be noted that the crash report for the one (1) crash was reviewed, and it states that the struck pedestrian was not able to identify which intersection the crash occurred at.

Near-Miss Crashes

A near-miss analysis was completed to supplement the historical crash analysis, since there often can be incidents where the potential for a crash is present but, whether by chance or intervention, the crash did not occur. Although a crash does not actually occur in a near-miss incident, the contributing factors to a crash are often still present and evaluating the incident can help diagnose safety issues at a location.

Near-miss data was collected along with the pedestrian and vehicle crossing counts over three (3) four-hour periods, between 4:30 AM – 8:30 AM on Friday, April 24th, 2026; Monday, April 27th, 2026; and Wednesday, April 29th, 2026. The near-miss data captured vehicle-vehicle conflicts, pedestrian-vehicle conflicts, and bicycle-vehicle conflicts, and total conflicts were grouped into three conflict intervals: 0.0 to 1.5 seconds, 1.5 to 2.0 seconds, and 2.0 to 3.0 seconds. These conflict intervals depict how close the incident was to resulting in a crash by time in seconds. The results of the near-miss analysis are summarized in **Table 7**, and the full near-miss data set is included in **Attachment D**.

Table 7: New-Miss Data Summary

Location	Vehicle-Vehicle Conflicts			Pedestrian-Vehicle Conflicts			Bicycle-Vehicle Conflicts			Total Conflicts		
	0.0 – 1.5 s	1.5 – 2.0 s	2.0 – 3.0 s	0.0 – 1.5 s	1.5 – 2.0 s	2.0 – 3.0 s	0.0 – 1.5 s	1.5 – 2.0 s	2.0 – 3.0 s	0.0 – 1.5 s	1.5 – 2.0 s	2.0 – 3.0 s
Mocs Alumni Drive at Douglas Street	0	0	0	0	3	11	0	0	1	0	3	12
Mocs Alumni Drive at Terrell Owens Way	0	0	0	0	2	34	0	0	0	0	2	34
Total	0	0	0	0	5	45	0	0	1	0	5	36

During the 12-hour data collection period, 15 near-miss events were recorded at the intersection of Mocs Alumni Drive at Douglas Street, and 36 near-miss events were recorded at the intersection of Mocs Alumni Drive at Terrell Owens Way.

At the intersection of Mocs Alumni Drive at Douglas Street, 11 of the 15 (73.3%) near-miss events occurred between a pedestrian traveling southbound, crossing the east leg of the intersection. Six (6) of the 15 (40%) near-miss events occurred between a pedestrian traveling southbound, crossing the east leg of the intersection and a vehicle traveling eastbound through the intersection. All the near-miss events at Mocs Alumni Drive at Douglas Street occurred during daylight conditions, which aligned with the increasing pedestrian volumes after 7:00 AM. The speed of vehicles involved in near-miss events could not be determined due to the curved roadway approaches.

At the intersection of Mocs Alumni Drive at Terrell Owens Way, 33 of the 36 (91.6%) near-miss events occurred between a pedestrian traveling southbound, crossing the west leg of the intersection. Twenty-seven (27) of the 36 (75%) near-miss events occurred between a pedestrian traveling southbound, crossing the west leg of the intersection and a vehicle traveling eastbound through the intersection. All the near-miss events at Mocs Alumni Drive at Douglas Street occurred during daylight conditions, which aligns with the increasing pedestrian volumes after 7:00 AM. The speed of vehicles involved in near-miss events could not be determined due to the curved roadway approaches.

Based on a video review of near-miss events at both study intersections, vehicles reduce speed prior to arriving at the crosswalks, indicating they have identified and reacted to a pedestrian in their path of travel.

Based on a video review of near-miss events at the intersection of Mocs Alumni Drive at Terrell Owens Way, 32 of the 35 (91.5%) of the near-miss events that involved a pedestrian crossing the west leg of the intersection occurred when the RRFB was not activated.

Most of the near-miss events at both intersections observed occurred between a pedestrian traveling south across Mocs Alumni Drive and a vehicle traveling east along Mocs Alumni Drive, indicating a potential sight distance limitation for pedestrians crossing Mocs Alumni Drive southbound and through vehicles on Mocs Alumni Drive. These conflicts can be mitigated through active signage for vehicles traveling on Mocs Alumni Drive, alerting drivers in advance of potential conflicts; through passive pedestrian detection installed at the existing RRFB; or through the installation of active overhead or pavement lighting which illuminates when pedestrians are present in the crosswalk.

Future Growth Potential

The new dining hall is expected to add 750 seats of dining capacity to UTC's campus. The current Mocs Dining facility is anticipated to be renovated as an auxiliary dining hall, catering to farm-to-table and allergen free options. The total dining hall seating capacity within the vicinity of the study area in the proposed condition is expected to be more than 1,100 seats. As such, it is assumed that additional trips will be generated by the addition of the new dining hall. Due to limited nearby parking, these trips will be completed on-foot and will utilize crosswalks at Douglas Street and Terrell Owens Way as a part of their trip.

There is no standardized method for determining the number of trips an on-campus dining hall will generate. At best, trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 12th Edition*, can be used to estimate the trip generation potential for the new dining

hall. The land use selected to assess the trip generation potential is *High-Turnover (Sit Down) Restaurant* (ITE Land Use Code: 932) as it allows for trip estimation based on seating capacity. A summary of the trip generation potential is included in **Table 8**.

The additional 750 seats in the new dining hall have the potential to generate an additional 148 inbound trips and 137 outbound trips to the study area, many of which are anticipated to arrive from and depart to the south of the site as it is connected to the greater UTC campus. Based on a video review of the two study intersections, most pedestrians are crossing from the north side to the south side of Mocs Alumni Drive, indicating that they are arriving to campus from on or off campus parking and will spend several hours on campus before departing. TMC data was not collected during the PM peak; it is assumed that a reciprocal movement of pedestrians would be identified, with many leaving the campus for the day.

Table 8: Potential Dining Hall Trip Generation

ITE LUC	Land Use	Size	Unit	AM In	AM Out	AM Total
932	High-turnover (Sit-Down) Restaurant	363	Seats	72	66	138
		750	Seats	148	137	285
Total				220	203	423

Preliminary plans for the new dining hall were provided and the primary entrance to the facility will be located on the north side of the building, on the Mocs Alumni Frontage. A sidewalk will connect the facility to Terrell Owens Way, and no specific connection was identified to the sidewalk on Mocs Alumni Drive. Given the site layout, it is anticipated that trips to the new dining hall, from the north side of Mocs Alumni Drive, will continue to be concentrated at the intersection of Mocs Alumni Drive at Terrell Owens Way.

Recommendations

Based on the assessment, there are several recommendations that may improve the safety of the pedestrian crossings at the two (2) study intersections during both normal operations and during the delivery period identified (5:00 AM – 8:00 AM). They are categorized below by the type of improvement.

Operations

- Consider shifting the deliver window so that the arrival of the food delivery truck occurs prior to 7:00 AM, before pedestrian traffic increases within the study area.

Infrastructure

- Refresh fading pavement markings at the intersection of Mocs Alumni Drive at Douglas Street.
- Consider reconfiguring pedestrian curb ramps on the southeast corner of Mocs Alumni Drive at Douglas Street and Mocs Alumni Drive at Terrell Owens Way to better align with crosswalks.
- Consider reconfiguring the intersection of Mocs Alumni Drive at Douglas Street to remove the eastbound right turn slip lane, reducing travel speeds for right turning vehicles and reducing the number of conflict points at the intersection. Eliminating the slip lane would also create a single-stage pedestrian crossing and shorten the overall crossing distance, improving pedestrian safety and comfort.

- Consider reconfiguring the intersection of Mocs Alumni Drive at Douglas Street to an all-way stop controlled intersection, reducing vehicle speed as they enter the Mocs Alumni Drive corridor and increasing pedestrian safety.
- Consider removing two (2) parking spots along the north side of Mocs Alumni Drive, immediately to the east of Terrell Owens Way to increase sight distance for oncoming vehicles.

Technology

- Install passive pedestrian detection at the RRFB to automatically activate the warning lights when a pedestrian approaches the roadway.
- Install a W11-2 (“Pedestrian Crossing”) and W16-10P (“Ahead”) along with supplemental warning beacons, approximately 200 feet in advance of the east leg crosswalk at the intersection of Mocs Alumni Drive at Douglas Street. Warning beacons can flash based on a timer or based on passive pedestrian detection installed at the crosswalk.
- Consider installing overhead or in-pavement lighting, adjacent to the crosswalks crossing Mocs Alumni Drive to alert drivers to the crossing.

Once implemented, periodic monitoring of the study area is recommended to analyze the performance of the improvements using key indicators, such as vehicular speeds, pedestrian volumes, and compliancy with applicable signage.

Each of the safety enhancements listed above may be implemented based on coordination with the City of Chattanooga and using the latest federal and TDOT guidelines.

Attachments

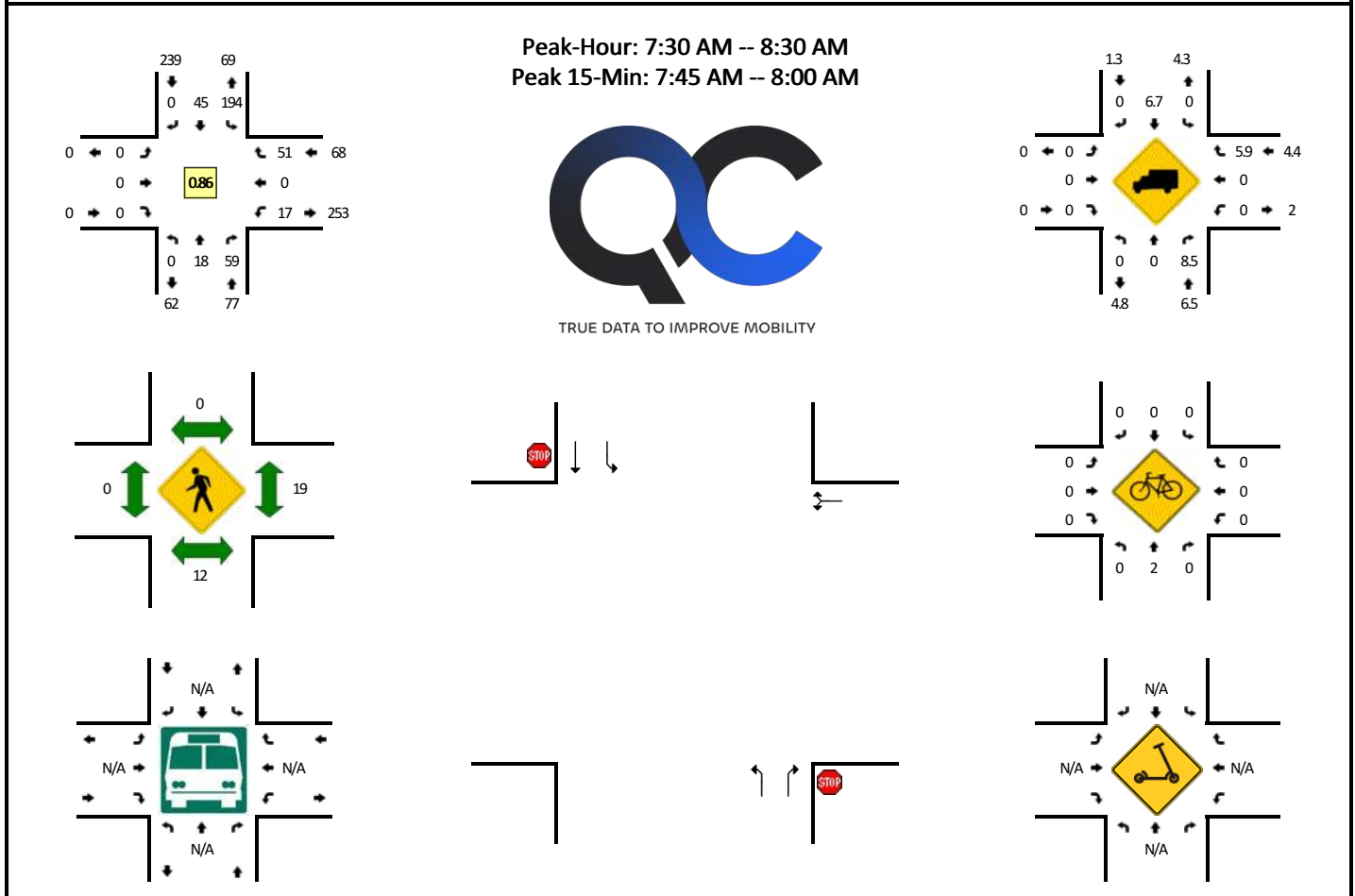
The following attachments are included to supplement the memorandum:

- A. Project Location Map
- B. Vehicle and Pedestrian Count Data
- C. Crash Data Table
- D. Near-Miss Data



LOCATION: Douglas St -- Mocs Alumni Dr
CITY/STATE: Chattanooga, TN

QC JOB #: 17492501
DATE: Fri, Apr 24 2026

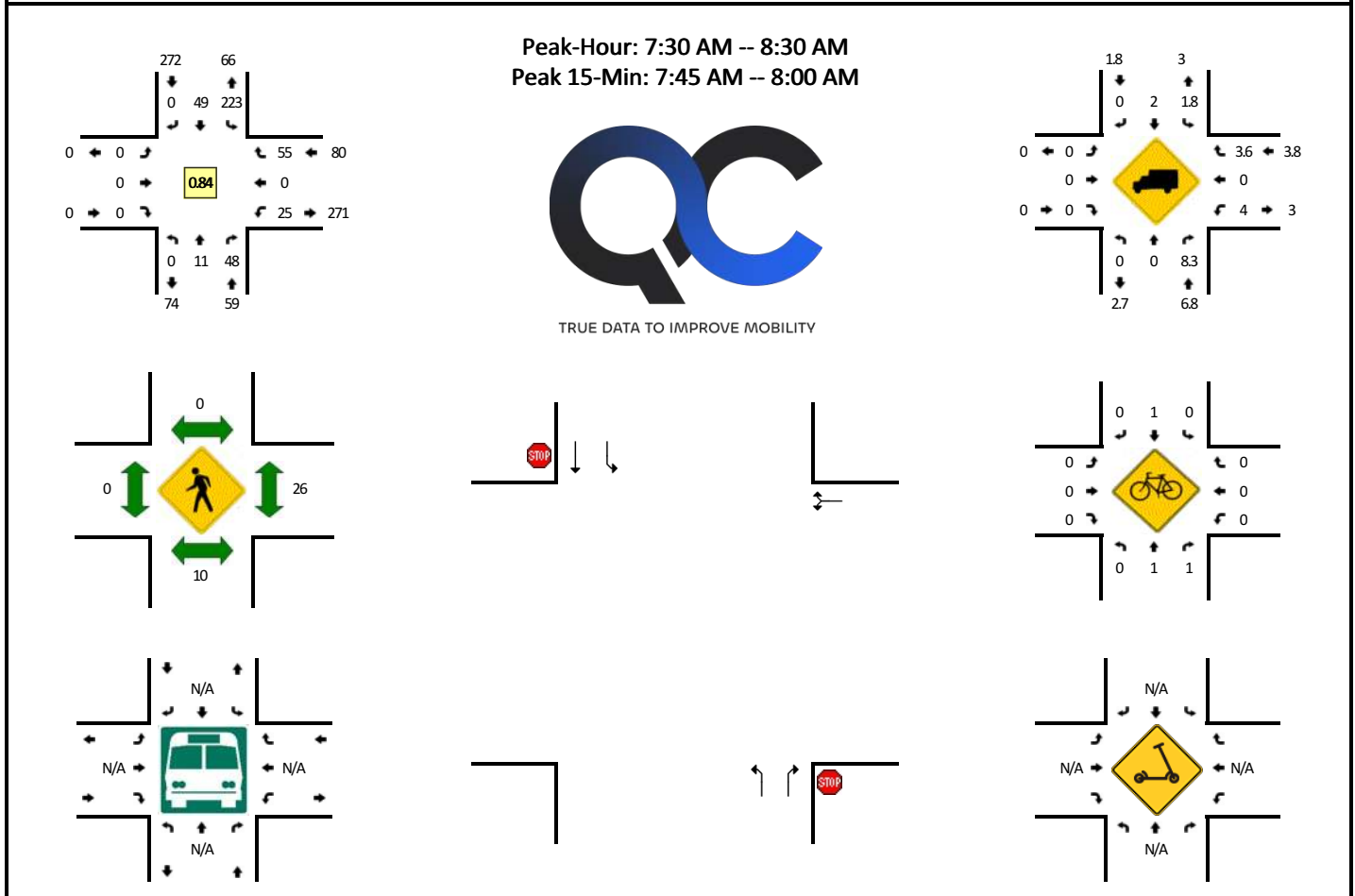


15-Min Count Period Beginning At	Douglas St (Northbound)				Douglas St (Southbound)				Mocs Alumni Dr (Eastbound)				Mocs Alumni Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	4	
4:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	
5:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	
5:15 AM	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4	13
5:30 AM	0	0	0	0	3	2	0	0	0	0	0	0	3	0	4	0	12	21
5:45 AM	0	1	0	0	7	2	0	0	0	0	0	0	2	0	2	0	14	32
6:00 AM	0	0	0	0	10	1	0	0	0	0	0	0	1	0	5	0	17	47
6:15 AM	0	2	0	0	5	6	0	0	0	0	0	0	2	0	2	0	17	60
6:30 AM	0	1	2	0	3	3	0	0	0	0	0	0	1	0	10	0	20	68
6:45 AM	0	1	0	0	17	5	0	0	0	0	0	0	3	0	2	0	28	82
7:00 AM	0	1	5	0	30	5	0	0	0	0	0	0	3	0	8	0	52	117
7:15 AM	0	2	5	0	37	7	0	0	0	0	0	0	3	0	7	0	61	161
7:30 AM	0	1	20	0	46	8	0	0	0	0	0	0	4	0	13	0	92	233
7:45 AM	0	4	16	0	64	12	0	0	0	0	0	0	3	0	12	0	111	316
8:00 AM	0	4	10	0	40	12	0	0	0	0	0	0	6	0	12	0	84	348
8:15 AM	0	9	13	0	44	13	0	0	0	0	0	0	4	0	14	0	97	384
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	16	64	0	256	48	0	0	0	0	0	0	12	0	48	0	444	
Heavy Trucks	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	8	
Buses																		
Pedestrians		24				0				0				20			44	
Bicycles	0	4	0		0	0	0		0	0	0		0	0	0		4	
Scooters																		

Comments:

LOCATION: Douglas St -- Mocs Alumni Dr
CITY/STATE: Chattanooga, TN

QC JOB #: 17492502
DATE: Mon, Apr 27 2026



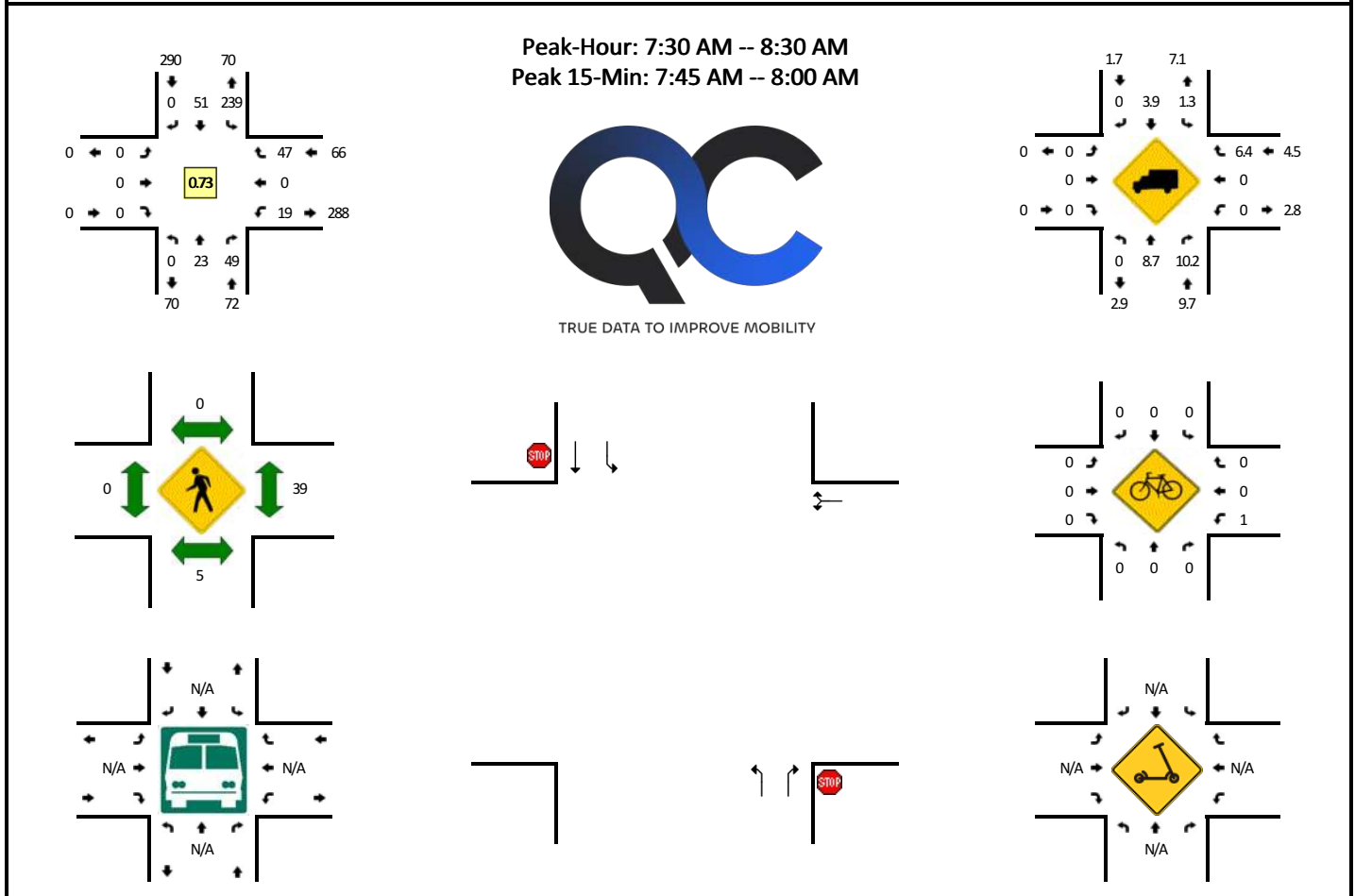
15-Min Count Period Beginning At	Douglas St (Northbound)				Douglas St (Southbound)				Mocs Alumni Dr (Eastbound)				Mocs Alumni Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
4:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
5:00 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	0	4	
5:15 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3	10
5:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	5	14
5:45 AM	0	0	1	0	2	2	0	0	0	0	0	0	0	0	2	0	7	19
6:00 AM	0	0	0	0	6	2	0	0	0	0	0	0	2	0	4	0	14	29
6:15 AM	0	3	1	0	5	4	0	0	0	0	0	0	3	0	3	0	19	45
6:30 AM	0	0	0	0	5	3	0	0	0	0	0	0	1	0	7	0	16	56
6:45 AM	0	2	1	0	28	9	0	0	0	0	0	0	1	0	5	0	46	95
7:00 AM	0	3	4	0	21	10	0	0	0	0	0	0	4	0	12	0	54	135
7:15 AM	0	1	6	0	36	10	0	0	0	0	0	0	1	0	6	0	60	176
7:30 AM	0	2	14	0	51	11	0	0	0	0	0	0	9	0	9	0	96	256
7:45 AM	0	2	11	0	74	17	0	0	0	0	0	0	4	0	15	0	123	333
8:00 AM	0	3	12	0	42	9	0	0	0	0	0	0	6	0	15	0	87	366
8:15 AM	0	4	11	0	56	12	0	0	0	0	0	0	6	0	16	0	105	411

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	8	44	0	296	68	0	0	0	0	0	0	16	0	60	0	492
Heavy Trucks	0	0	4	0	8	4	0	0	0	0	0	0	0	0	0	0	16
Buses																	
Pedestrians		12				0				0				16			28
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

LOCATION: Douglas St -- Mocs Alumni Dr
CITY/STATE: Chattanooga, TN

QC JOB #: 17492503
DATE: Wed, Apr 29 2026

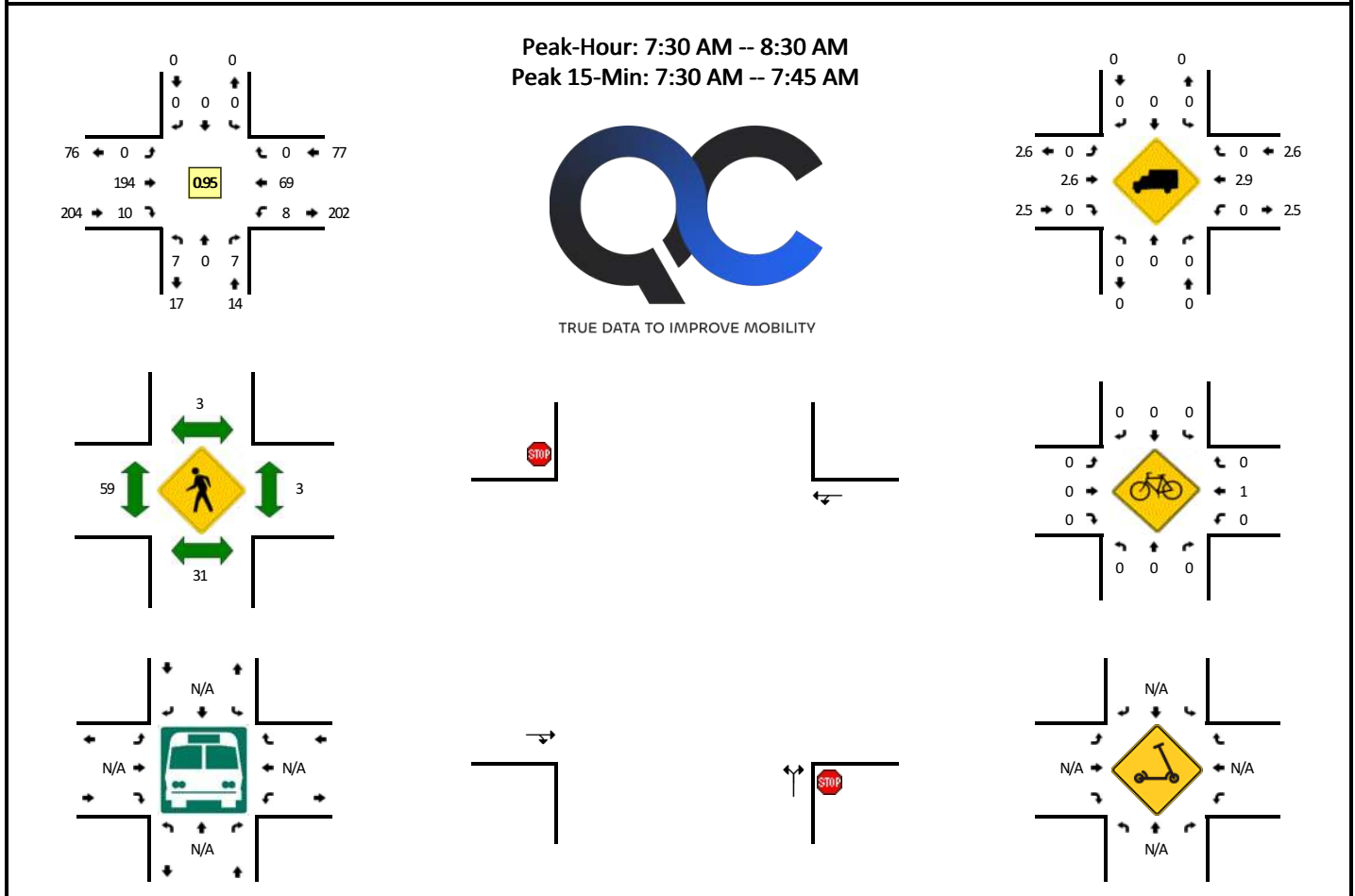


15-Min Count Period Beginning At	Douglas St (Northbound)				Douglas St (Southbound)				Mocs Alumni Dr (Eastbound)				Mocs Alumni Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4	
4:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	
5:00 AM	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	
5:15 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	4	15
5:30 AM	0	0	0	0	3	1	0	0	0	0	0	0	1	0	3	0	8	19
5:45 AM	0	1	1	0	1	2	0	0	0	0	0	0	1	0	4	0	10	26
6:00 AM	0	0	0	0	3	3	0	0	0	0	0	0	2	0	2	0	10	32
6:15 AM	0	0	0	0	7	2	0	0	0	0	0	0	0	0	2	0	11	39
6:30 AM	0	1	3	0	10	3	0	0	0	0	0	0	3	0	8	0	28	59
6:45 AM	0	1	0	0	17	7	0	0	0	0	0	0	0	0	5	0	30	79
7:00 AM	0	0	6	0	28	9	0	0	0	0	0	0	3	0	7	0	53	122
7:15 AM	0	0	4	0	36	10	0	0	0	0	0	0	3	0	12	0	65	176
7:30 AM	0	3	10	0	69	12	0	0	0	0	0	0	6	0	14	0	114	262
7:45 AM	0	10	19	0	87	15	0	0	0	0	0	0	5	0	10	0	146	378
8:00 AM	0	6	8	0	41	13	0	0	0	0	0	0	3	0	12	0	83	408
8:15 AM	0	4	12	0	42	11	0	0	0	0	0	0	5	0	11	0	85	428
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	40	76	0	348	60	0	0	0	0	0	0	20	0	40	0	584	
Heavy Trucks	0	8	4		0	0	0		0	0	0		0	0	4		16	
Buses																		
Pedestrians		4				0				0				32			36	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

LOCATION: Terrell Owens Way -- Mocs Alumni Dr
CITY/STATE: Chattanooga, TN

QC JOB #: 17492504
DATE: Fri, Apr 24 2026

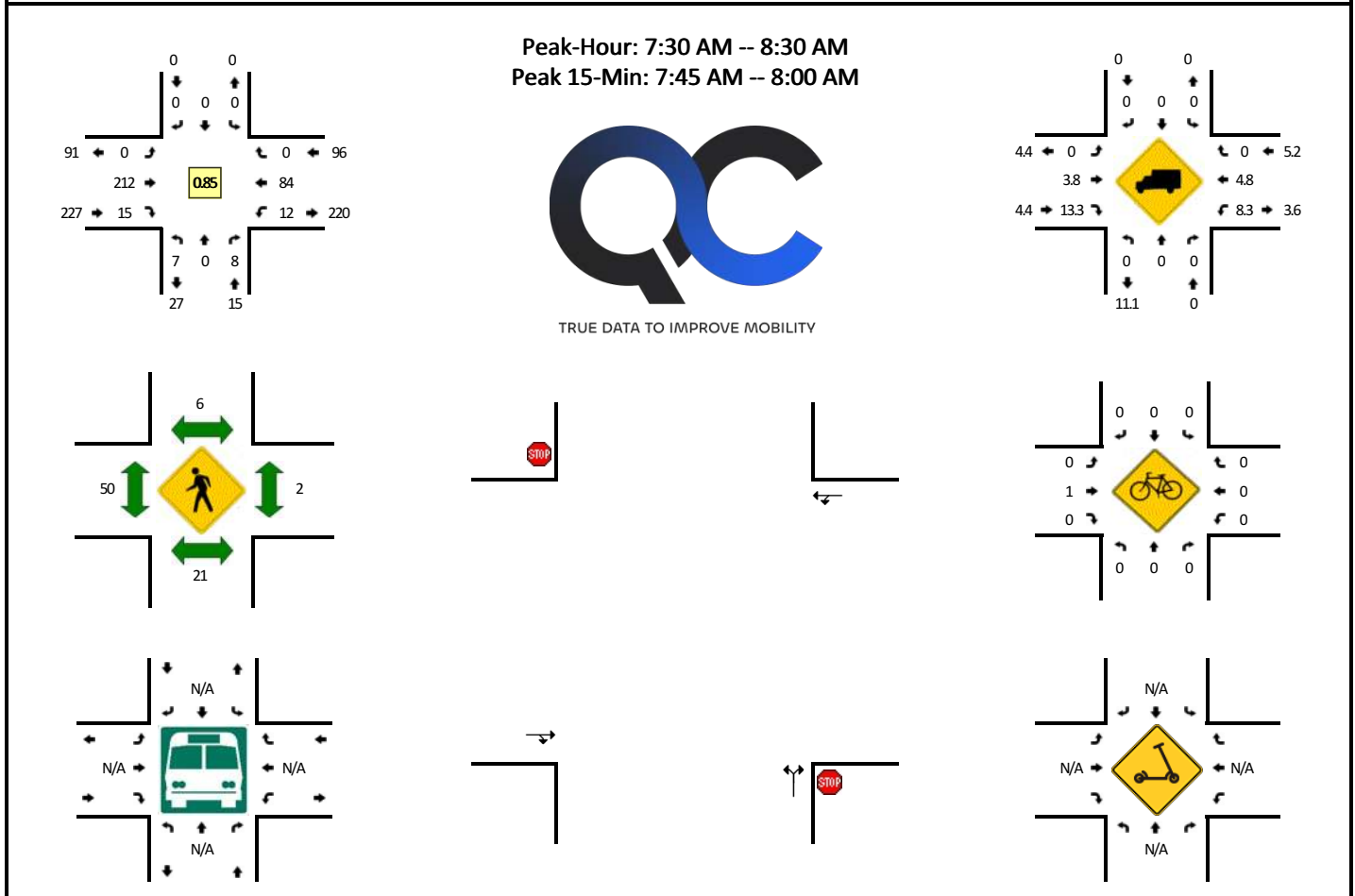


15-Min Count Period Beginning At	Terrell Owens Way (Northbound)				Terrell Owens Way (Southbound)				Mocs Alumni Dr (Eastbound)				Mocs Alumni Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4	
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	9
5:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	14
5:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	7	0	0	9	25
5:45 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	0	11	38
6:00 AM	0	0	0	0	0	0	0	0	0	6	1	0	0	7	0	0	15	48
6:15 AM	0	0	0	0	0	0	0	0	0	4	2	0	0	7	0	0	13	56
6:30 AM	0	0	0	0	0	0	0	0	0	4	1	0	0	9	0	0	17	70
6:45 AM	0	0	1	0	0	0	0	0	0	14	1	0	0	4	0	0	25	98
7:00 AM	0	0	1	0	0	0	0	0	0	28	0	0	0	11	0	0	43	135
7:15 AM	0	0	0	0	0	0	0	0	0	35	0	0	0	12	0	0	50	196
7:30 AM	2	0	3	0	0	0	0	0	0	51	4	0	0	16	0	0	78	246
7:45 AM	2	0	1	0	0	0	0	0	0	56	2	0	0	12	0	0	75	274
8:00 AM	3	0	1	0	0	0	0	0	0	40	2	0	0	22	0	1	71	295
8:15 AM	0	0	2	0	0	0	0	0	0	47	2	0	0	19	0	0	71	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	0	12	0	0	0	0	0	0	204	16	0	8	64	0	0	312	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8	
Buses																		
Pedestrians		16				0				16				0			32	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

LOCATION: Terrell Owens Way -- Mocs Alumni Dr
CITY/STATE: Chattanooga, TN

QC JOB #: 17492505
DATE: Mon, Apr 27 2026

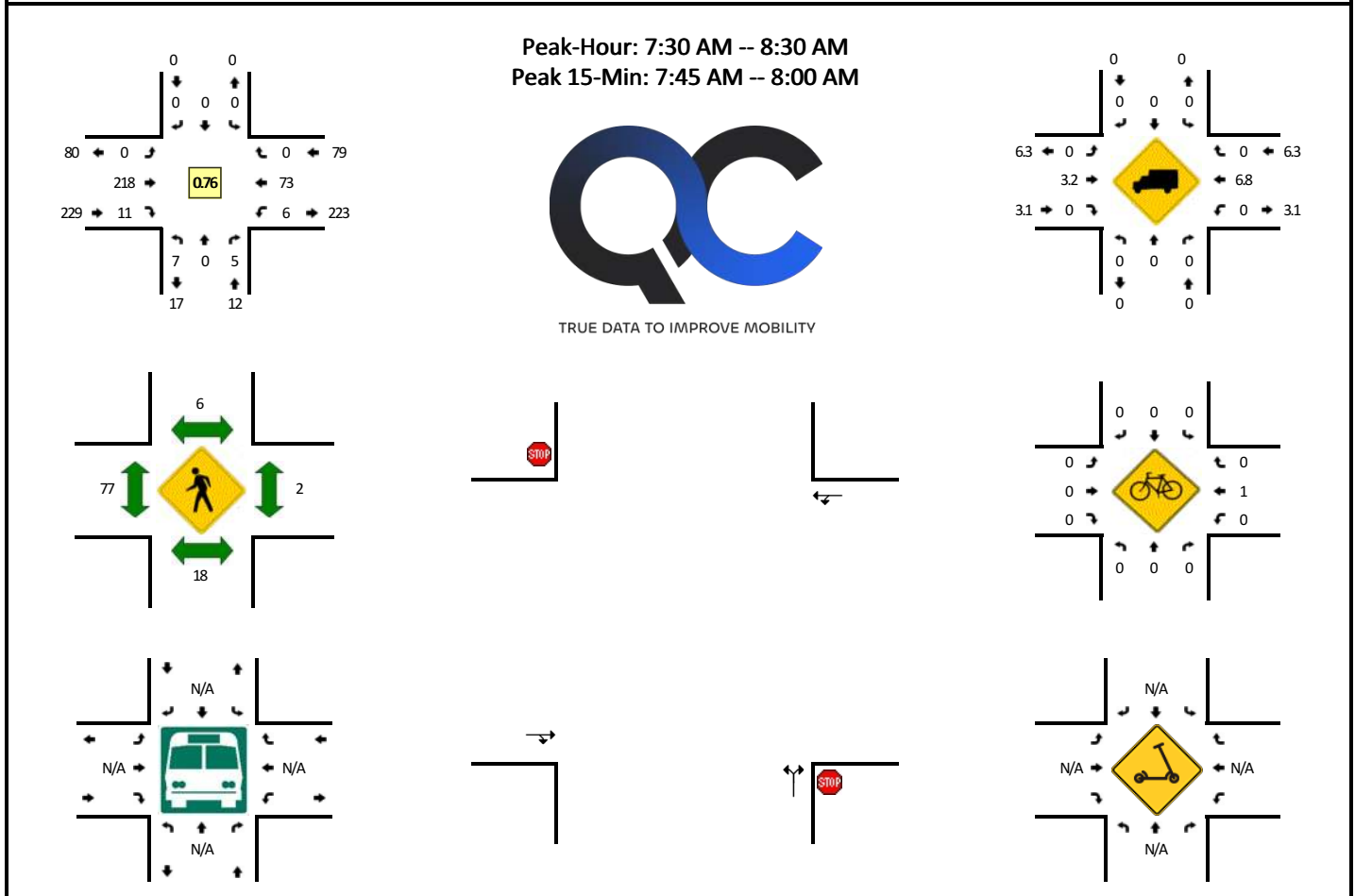


15-Min Count Period Beginning At	Terrell Owens Way (Northbound)				Terrell Owens Way (Southbound)				Mocs Alumni Dr (Eastbound)				Mocs Alumni Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	7
5:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	1	1	0	0	5	12
5:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5	16
5:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4	28
6:00 AM	1	0	0	0	0	0	0	0	0	6	0	0	1	6	0	0	14	35
6:15 AM	1	0	0	0	0	0	0	0	0	3	2	0	0	6	0	0	12	44
6:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	3	8	0	0	14	76
6:45 AM	0	0	0	0	0	0	0	0	0	22	2	0	5	7	0	0	36	102
7:00 AM	1	0	0	0	0	0	0	0	0	21	1	0	2	15	0	0	40	135
7:15 AM	0	0	0	0	0	0	0	0	0	36	0	0	0	9	0	0	45	198
7:30 AM	2	0	2	0	0	0	0	0	0	52	2	0	3	16	0	0	77	262
7:45 AM	1	0	2	0	0	0	0	0	0	67	6	0	4	20	0	0	100	297
8:00 AM	4	0	2	0	0	0	0	0	0	41	2	0	4	22	0	0	75	338
8:15 AM	0	0	2	0	0	0	0	0	0	52	5	0	1	26	0	0	86	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	0	8	0	0	0	0	0	0	268	24	0	16	80	0	0	400	
Heavy Trucks	0	0	0	0	0	0	0	0	0	12	4	0	4	0	0	0	20	
Buses																		
Pedestrians		32				12				80				4			128	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

LOCATION: Terrell Owens Way -- Mocs Alumni Dr
CITY/STATE: Chattanooga, TN

QC JOB #: 17492506
DATE: Wed, Apr 29 2026



15-Min Count Period Beginning At	Terrell Owens Way (Northbound)				Terrell Owens Way (Southbound)				Mocs Alumni Dr (Eastbound)				Mocs Alumni Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
5:00 AM	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	
5:15 AM	1	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	5	13
5:30 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	7	17
5:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7	23
6:00 AM	1	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	8	27
6:15 AM	0	0	0	0	0	0	0	0	0	3	2	0	0	4	0	0	9	31
6:30 AM	0	0	0	0	0	0	0	0	0	9	2	0	0	11	0	0	28	52
6:45 AM	1	0	0	0	0	0	0	0	0	11	0	0	0	4	0	0	22	67
7:00 AM	1	0	0	0	0	0	0	0	0	29	2	0	0	12	0	1	49	108
7:15 AM	0	0	0	0	0	0	0	0	0	30	0	0	0	16	0	0	48	147
7:30 AM	2	0	1	0	0	0	0	0	0	64	1	0	0	22	0	0	93	212
7:45 AM	1	0	2	0	0	0	0	0	0	79	6	0	0	15	0	0	105	295
8:00 AM	3	0	2	0	0	0	0	0	0	36	2	0	0	17	0	0	61	307
8:15 AM	1	0	0	0	0	0	0	0	0	39	2	0	0	19	0	0	61	320
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	0	8	0	0	0	0	0	0	316	24	0	8	60	0	0	420	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	8	0	0	12	
Buses																		
Pedestrians		20				4				144				0			168	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

Crashes within Study Area

Case Number	Route	Log Mile	Date of Crash	Type of Crash	Total Fatalities	Total Suspected Serious Injuries	Total Other Injuries	Total Vehicles	Vehicle Most Harmful Event	Driver Actions	Vehicle Going on Direction	Relation to First Roadway	Weather Conditions	Light Conditions	Gps Coordinate Latitude	Gps Coordinate Longitude
300827657	5001	0.505	8/30/2022 17:35	(C) Possible Injury	0		0	1	1 Pedestrian	Inattentive (Eating, Reading, Talking, Etc.)		On Roadway	Clear	Daylight	35.049294	-85.299739

Crashes at the intersection of Mocs Alumni Drive at 4th Street, north of Study Area

Case Number	Route	Log Mile	Date of Crash	Type of Crash	Total Fatalities	Total Suspected Serious Injuries	Total Other Injuries	Total Vehicles	Vehicle Most Harmful Event	Driver Actions	Vehicle Going on Direction	Relation to First Roadway	Weather Conditions	Light Conditions	Gps Coordinate Latitude	Gps Coordinate Longitude
300790102	3552	0.58	3/30/2022 17:18	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "Following Improperly"]	["North", "North"]	On Roadway	Clear	Daylight	35.050666	-85.299812
300776162	3552	0.58	2/1/2022 18:28	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Unknown Action", "No Contributing Actions"]	East	On Roadway	Clear	Dusk	35.050666	-85.299812
300751505	3552	0.579	10/28/2021 17:24	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Failure to Yield Right of Way", "No Contributing Actions"]	["North", "East"]	On Roadway	Clear	Daylight	35.050666	-85.299812
300853185	3552	0.58	12/10/2022 8:15	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Improper Lane Changing", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.050666	-85.299812
300930162	3552	0.58	12/15/2023 16:00	(O) Property-Damage Only	0		0	0	1 Pedestrian	No Contributing Actions	South	On Roadway	Clear	Daylight	35.05066	-85.299808
300937936	3552	0.58	1/27/2024 16:50	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "Speed Too Fast for Conditions"]	["East", "East"]	Gore	Rain	Daylight	35.05066	-85.299808
300947036	3552	0.583	3/20/2024 10:15	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "Improper Passing"]	["East", "East"]	On Roadway	Clear	Daylight	35.05081	-85.29964
300949446	3552	0.58	4/1/2024 16:52	(C) Possible Injury	0		0	2	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Failure to Yield Right of Way", "No Contributing Actions"]	["North", "South"]	On Roadway	Clear	Daylight	35.05066	-85.299808
300906603	3552	0.579	8/23/2023 8:15	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Improper Lane Changing", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.05066	-85.299808
300894532	3552	0.552	6/22/2023 11:50	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Unknown Action", "No Contributing Actions"]	East	On Roadway	Clear	Daylight	35.051152	-85.300043
300895985	3552	0.58	5/27/2023 16:00	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Following Improperly", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.050675	-85.299835
400119247	3552	0.578	7/14/2024 21:45	(C) Possible Injury	0		0	1	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Other (Narrative)", "No Contributing Actions"]	South	On Roadway	Clear	Dark-Lighted	35.05069	-85.29981
300988639	3552	0.579	12/2/2024 15:46	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.05066	-85.299808
300987821	3552	0.58	11/27/2024 13:00	(C) Possible Injury	0		0	1	2 ["Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "Following Improperly"]	["East", "East"]	On Roadway	Clear	Daylight	35.05066	-85.299808
300987814	3552	0.579	11/27/2024 12:50	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Improper Turn", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.05066	-85.299808
301031472	3552	0.58	7/29/2025 15:30	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Failure to Obey Traffic Controls", "No Contributing Actions"]	["North", "West"]	On Roadway	Clear	Daylight	35.05066	-85.299808
400157022	3552	0.58	10/4/2024 12:15	(B) Suspected Minor Injury	0		0	1	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Unknown Action", "No Contributing Actions"]	["North", "East"]	On Roadway	Clear	Daylight	35.05065	-85.2997
301025727	3552	0.58	6/28/2025 17:50	(C) Possible Injury	0		0	2	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Failure to Obey Traffic Controls", "No Contributing Actions"]	["East", "South"]	On Roadway	Rain	Daylight	35.05066	-85.299808
301059358	3552	0.548	12/30/2025 16:00	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Following Improperly", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.050851	-85.3003
301062886	3552	0.58	1/30/2026 6:44	(C) Possible Injury	0		0	3	3 ["Vehicle in Transport", "Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "No Contributing Actions", "No Contributing Actions"]	["South", "North", "East"]	On Roadway	Clear	Dark-Lighted	35.05066	-85.299808
301065097	3552	0.58	2/13/2026 17:21	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Unknown Action", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.05066	-85.299808
301065969	3552	0.579	2/19/2026 9:02	(C) Possible Injury	0		0	1	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Swerved or Avoided", "No Contributing Actions"]	["East", "East"]	On Roadway	Rain	Daylight	35.05066	-85.299808
301073097	3552	0.579	4/2/2026 16:00	(C) Possible Injury	0		0	2	3 ["Vehicle in Transport", "Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "No Contributing Actions", "Following Improperly"]	["South", "South", "South"]	On Roadway	Clear	Daylight	35.05066	-85.299808
301075321	3552	0.58	4/14/2026 21:00	(C) Possible Injury	0		0	1	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Failure to Yield Right of Way", "No Contributing Actions"]	["North", "South"]	On Roadway	Clear	Dark-Lighted	35.05066	-85.299808
300834053	5001	0.623	9/26/2022 11:10	(O) Property-Damage Only	0		0	0	1 Curb	Swerved or Avoided	North	Roadside -- Right	Clear	Daylight	35.050866	-85.299698
400078787	5001	0.64	4/18/2024 11:00	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Failure to Yield Right of Way", "No Contributing Actions"]	["West", "North"]		Clear	Daylight	35.05108	-85.29954

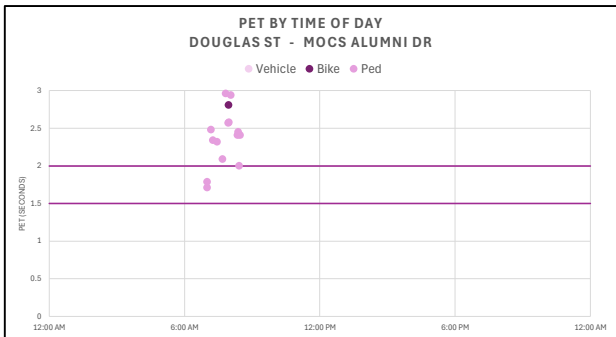
Crashes along Mocs Alumni Drive, east of Study Area

Case Number	Route	Log Mile	Date of Crash	Type of Crash	Total Fatalities	Total Suspected Serious Injuries	Total Other Injuries	Total Vehicles	Vehicle Most Harmful Event	Driver Actions	Vehicle Going on Direction	Relation to First Roadway	Weather Conditions	Light Conditions	Gps Coordinate Latitude	Gps Coordinate Longitude
103224000	5768	0.174	2/16/2022 8:30	(O) Property-Damage Only	0		0	0	2	Lane Departure					35.04814	-85.2968
103103581	5768	0.217	9/29/2021 13:45	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Parked Motor Vehicle"]	Unknown Action				Daylight	35.04848	-85.29745
300773201	5768	0.179	1/10/2022 8:48	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["No Contributing Actions", "Following Improperly"]	["North", "North"]	On Roadway	Clear	Daylight	35.048168	-85.296872
300861619	5768	0.253	1/18/2023 16:44	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	Improper Backing	["West", "West"]	In Parking Lane	Cloudy	Daylight	35.048623	-85.298062
103560795	5768	0.247	2/7/2023 0:00	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Improper Turn", "No Contributing Actions"]	["East", "East"]		Clear	Daylight	35.04858	-85.29796
301075182	5768	0.247	4/13/2026 15:43	(O) Property-Damage Only	0		0	0	2 ["Vehicle in Transport", "Vehicle in Transport"]	["Failure to Yield Right of Way", "No Contributing Actions"]	["East", "East"]	On Roadway	Clear	Daylight	35.048582	-85.297966

Site Code(s):	01,02,03
Site Name:	Douglas St - Mocs Alumni Dr
Date(s):	4/24, 4/27 & 4/29/2026
Times:	04:30 - 08:30
Total Conflicts:	15
Total Hours:	12

Near Miss Summary	Veh-Veh	Veh-Ped	Veh-Bike	Total
0.0 - 1.5s	0	0	0	0
1.5 - 2.0s	0	3	0	3
2.0 - 3.0s	0	11	1	12
Total	0	14	1	15

Top 3 Conflict Types		
Movement 1	Movement 2	Conflicts
EL Ped	SB Left	6
EL Ped	WB Right	3
WB Right	EL Ped	2



Left Turn Conflicts

Veh-to-Veh

Douglas St

SBL vs WBT

Absolute Percentile: 0%

Observed	Expected	O/E Ratio
0	0.0	--

Avg Thru Speed (MPH): --

Mocs Alumni Dr

Mocs Alumni Dr

EBL vs WBT

Absolute Percentile: 0%

Observed	Expected	O/E Ratio
0	0.0	--

Avg Thru Speed (MPH): --

All Left Turn Conflicts

Absolute Percentile: 0%

Observed	Expected	O/E Ratio
0	0.0	--

Avg Thru Speed (MPH): --

WBL vs EBT

Absolute Percentile: 0%

Observed	Expected	O/E Ratio
0	0.0	--

Avg Thru Speed (MPH): --

NBL vs EBT

Absolute Percentile: 0%

Observed	Expected	O/E Ratio
0	0.0	--

Avg Thru Speed (MPH): --

*Average speeds of thru movements involved in
Vehicle-to-Vehicle near misses

Douglas St

Vulnerable Roadway Users

Totals & Near Misses

Mocs Alumni Dr

Douglas St

Mocs Alumni Dr

← 0 →

140

← 46 →

13

North Leg - Ped Conflicts		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	0.0	--
Avg Thru Speed (MPH): --		

East Leg - Ped Conflicts		
Absolute Percentile: 90%		
Observed	Expected	O/E Ratio
11	1.7	6.64
Avg Thru Speed (MPH): --		

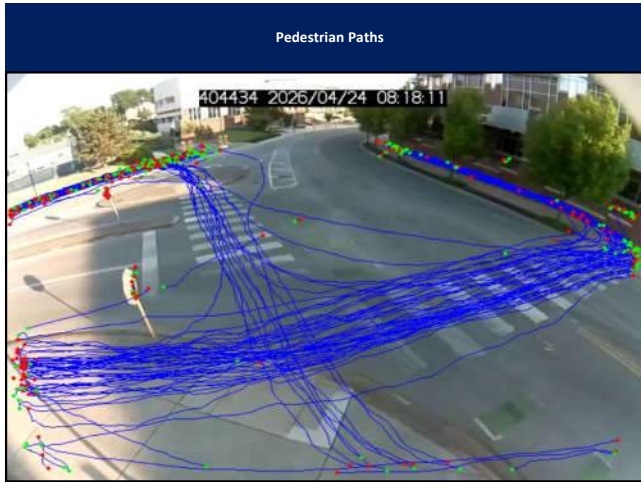
West Leg - Ped Conflicts		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	0.0	--
Avg Thru Speed (MPH): --		

Intersection - Ped Conflicts		
Absolute Percentile: 80%		
Observed	Expected	O/E Ratio
14	2.8	5.01
Avg Thru Speed (MPH): --		

South Leg - Ped Conflicts		
Absolute Percentile: 75%		
Observed	Expected	O/E Ratio
3	1.1	2.64
Avg Thru Speed (MPH): --		

Intersection - Bike Conflicts		
Absolute Percentile: 56%		
Observed	Expected	O/E Ratio
1	1.0	0.97
Avg Thru Speed (MPH): --		

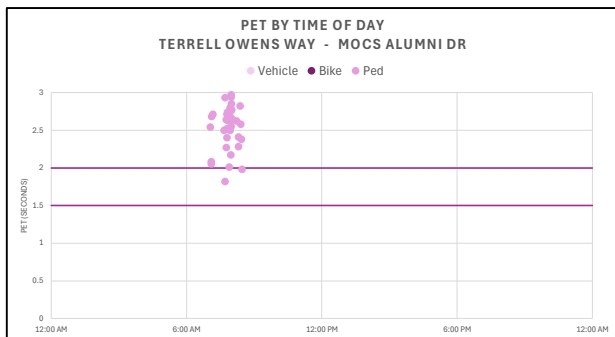
*Average speeds of thru movements involved in Pedestrian-to-Vehicle near misses



Site Code(s):	04,05,06
Site Name:	Terrell Owens Way - Mocs Alumni Dr
Date(s):	4/24, 4/27 & 4/29/2026
Times:	04:30 - 08:30
Total Conflicts:	36
Total Hours:	12

Near Miss Summary	Veh-Veh	Veh-Ped	Veh-Bike	Total
0.0 - 1.5s	0	0	0	0
1.5 - 2.0s	0	2	0	2
2.0 - 3.0s	0	34	0	34
Total	0	36	0	36

Top 3 Conflict Types		
Movement 1	Movement 2	Conflicts
WL Ped	EB Thru	28
WL Ped	WB Thru	5
WB Thru	WL Ped	1

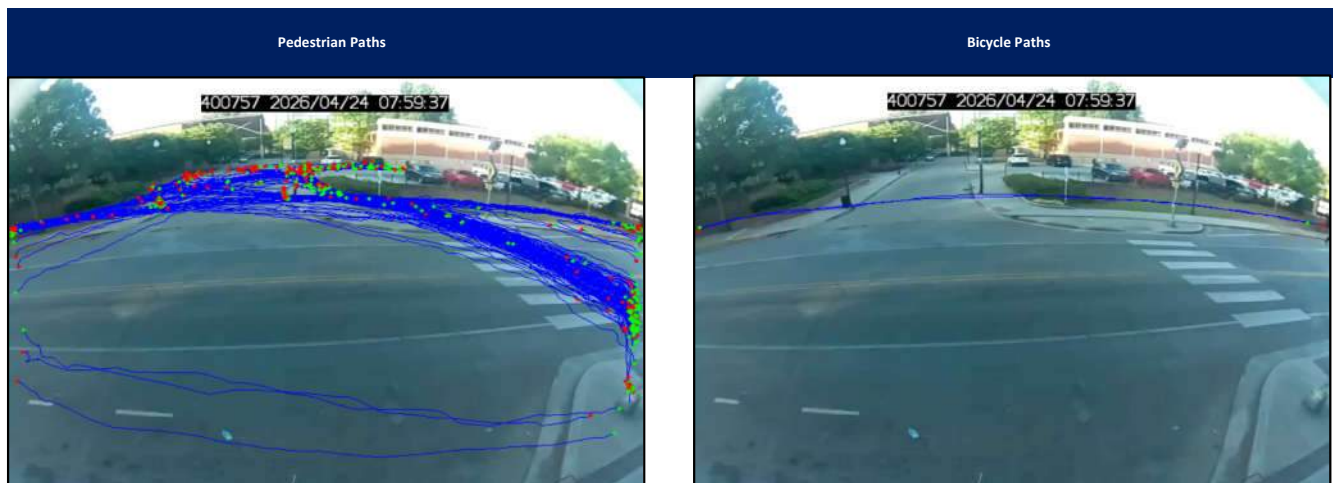


Left Turn Conflicts		
Veh-to-Veh		
Terrell Owens Way		
Mocs Alumni Dr		
STOP		
SBL vs WBT		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	0.0	--
Avg Thru Speed (MPH): --		
EBL vs WBT		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	0.0	--
Avg Thru Speed (MPH): --		
All Left Turn Conflicts		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	4.5	0.00
Avg Thru Speed (MPH): --		
WBL vs EBT		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	3.0	0.00
Avg Thru Speed (MPH): --		
NBL vs EBT		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	1.5	0.00
Avg Thru Speed (MPH): --		

*Average speeds of thru movements involved in Vehicle-to-Vehicle near misses

Vulnerable Roadway Users		
Totals & Near Misses		
Terrell Owens Way		
Mocs Alumni Dr		
STOP		
North Leg - Ped Conflicts		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	0.0	--
Avg Thru Speed (MPH): --		
West Leg - Ped Conflicts		
Absolute Percentile: 97%		
Observed	Expected	O/E Ratio
35	13.4	2.61
Avg Thru Speed (MPH): 12		
Intersection - Ped Conflicts		
Absolute Percentile: 90%		
Observed	Expected	O/E Ratio
36	20.1	1.79
Avg Thru Speed (MPH): 12		
East Leg - Ped Conflicts		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	4.6	0.00
Avg Thru Speed (MPH): --		
South Leg - Ped Conflicts		
Absolute Percentile: 58%		
Observed	Expected	O/E Ratio
1	2.2	0.46
Avg Thru Speed (MPH): --		
Intersection - Bike Conflicts		
Absolute Percentile: 0%		
Observed	Expected	O/E Ratio
0	0.6	0.00
Avg Thru Speed (MPH): --		

*Average speeds of thru movements involved in Pedestrian-to-Vehicle near misses



Project Number: 174925
Project Name: UTC Safety Study Chattanooga TN

TO VIEW LOCATION DETAILS, SELECT LINKS BELOW

Site Code(s)	Site Name	Total Hr	Total Conflicts			Veh - Veh Conflicts			Ped - Veh Conflicts			Bike - Veh Conflicts	
			0.0 - 1.5s	1.5 - 2.0s	2.0 - 3.0s	0.0 - 1.5s	1.5 - 2.0s	2.0 - 3.0s	0.0 - 1.5s	1.5 - 2.0s	2.0 - 3.0s	0.0 - 1.5s	1.5 - 2.0s
01,02,03	Douglas St - Mocs Alumni Dr	12	0	3	12	0	0	0	0	3	11	0	0
04,05,06	Terrell Owens Way - Mocs Alumni Dr	12	0	2	34	0	0	0	0	2	34	0	0
Website	www.QualityCounts.net												
Email	info@QualityCounts.net												
Phone	971.223.0000												

Site Code(s)	Site Name	Highlights to 1.5 Sec	Video Reels			Average Speed (MPH)	Veh Summary				Ped Summary		
			0.5 to 2 Sec	2 to 3 Sec	3 to 4 Sec		Observed Conflicts	Expected Conflicts	O/E Ratio	Absolute Percentile	Observed Conflicts	Expected Conflicts	O/E Ratio
01,02,03	Douglas St - Mocs Alumni Dr	o Compile	--	Video Reel	Video Reel	-- *	0	0.0	--	0%	14	2.8	5.01
04,05,06	Terrell Owens Way - Mocs Alumni Dr	o Compile	--	Video Reel	Video Reel	12.2	0	4.5	0.00	0%	36	20.1	1.79

* Curved intersection geometry prevents accurate speed measurements.

Site Code(s)	Site Name	Bike Summary			
		Observed Conflicts	Expected Conflicts	O/E Ratio	Absolute Percentile
01,02,03	Douglas St - Mocs Alumni Dr	1	1.0	0.97	56%
04,05,06	Terrell Owens Way - Mocs Alumni Dr	0	0.6	0.00	0%

Intersection	Near Misses	Vehicle Movement	Ped Button Counts	Time Stamps	Ped Crossing Direction	Misc	Time Bin
Mocs Alumni at Douglas St	P1, P3, PC7 (WB)	WBT	N/A	4/24/2026 7:00	SB		1
Mocs Alumni at Douglas St	P1, P3, PC7 (WB)	WBT	N/A	4/24/2026 7:00	SB		1
Mocs Alumni at Douglas St	P392, PC394 (EB)	EBT	N/A	4/24/2026 7:26	SB		2
Mocs Alumni at Douglas St	P630, PC631 (EB)	EBT	N/A	4/24/2026 7:49	SB		4
Mocs Alumni at Douglas St	P920, PC918 (EB)	EBT	N/A	4/24/2026 7:56	NB	Bike	4
Mocs Alumni at Douglas St	P765, PC766 (WB)	WBT	N/A	4/24/2026 7:57	SB		4
Mocs Alumni at Douglas St	P63, PC70 (EBR)	EBR	N/A	4/24/2026 8:02	EB		4
Mocs Alumni at Douglas St	P333, PC335 (EB)	EBT	N/A	4/27/2026 7:40	SB		3
Mocs Alumni at Douglas St	P212, TB219 (WBL)	WBL	N/A	4/27/2026 8:20	WB		4
Mocs Alumni at Douglas St	P54, PC57 (EB)	EBT	N/A	4/29/2026 7:10	SB		1
Mocs Alumni at Douglas St	P88, PC86 (NBL)	NBL	N/A	4/29/2026 7:15	WB		1
Mocs Alumni at Douglas St	P681, PC680 (EB)	EBT	N/A	4/29/2026 7:55	SB		4
Mocs Alumni at Douglas St	P253, PC255 (WB)	WBT	N/A	4/29/2026 8:22	SB		5
Mocs Alumni at Douglas St	P280, PC281 (EB)	EBT	N/A	4/29/2026 8:24	SB		5
Mocs Alumni at Douglas St	P308, PC309 (WB)	WBT	N/A	4/29/2026 8:27	SB		5

Intersection	Near Misses	Vehicle Movement	Ped Button Counts	Time Stamps	Ped Crossing Direction	Misc	Time Bin
Mocs Alumni at Terrell Owens Way	P57, PC58 (WB)	WBT	N	4/24/2026 7:05	SB		1
Mocs Alumni at Terrell Owens Way	P352, PC358 (EB)	EBT	N	4/24/2026 7:45	SB		4
Mocs Alumni at Terrell Owens Way	P369, PC371 (WB)	WBT	N	4/24/2026 7:47	SB		4
Mocs Alumni at Terrell Owens Way	P417, PC420 (EB)	EBT	N	4/24/2026 7:53	SB		4
Mocs Alumni at Terrell Owens Way	P1172, PC1184 (EB)	EBT	N	4/24/2026 7:56	NB		4
Mocs Alumni at Terrell Owens Way	P466, PC468 (EB)	EBT	N	4/24/2026 7:56	SB		4
Mocs Alumni at Terrell Owens Way	P1238, PC1234 (WB)	WBT	N	4/24/2026 7:57	SB		4
Mocs Alumni at Terrell Owens Way	P495, PC492 (NBL)	NBL	N	4/24/2026 7:58	SB		4
Mocs Alumni at Terrell Owens Way	P17, PC23 (EB)	EBT	N	4/24/2026 8:00	SB		5
Mocs Alumni at Terrell Owens Way	P210, PC214 (EB)	EBT	N	4/24/2026 8:18	SB		6
Mocs Alumni at Terrell Owens Way	P254, PC258 (EB)	EBT	N	4/24/2026 8:22	SB		6
Mocs Alumni at Terrell Owens Way	P306, PC307 (EB)	EBT	N	4/24/2026 8:26	SB		6
Mocs Alumni at Terrell Owens Way	P325, PC328 (EB)	EBT	N	4/24/2026 8:27	SB		6
Mocs Alumni at Terrell Owens Way	P368, PC373 (EB)	EBT	Y	4/27/2026 7:39	SB		3
Mocs Alumni at Terrell Owens Way	P512, PC517 (EB)	EBT	N	4/27/2026 7:49	SB		4
Mocs Alumni at Terrell Owens Way	P630, PC631 (WB)	WBT	N	4/27/2026 7:57	SB		4
Mocs Alumni at Terrell Owens Way	P646, PC655 (EB)	EBT	N	4/27/2026 7:59	SB		4
Mocs Alumni at Terrell Owens Way	P231, PC242 (EBR)	EBR		4/27/2026 8:18	EB		6
Mocs Alumni at Terrell Owens Way	P35, PC36 (EB)	EBT	N	4/29/2026 7:03	SB		1
Mocs Alumni at Terrell Owens Way	P46, PC49 (EB)	EBT	N	4/29/2026 7:06	SB		1
Mocs Alumni at Terrell Owens Way	P53, PC54 (EB)	EBT	N	4/29/2026 7:06	SB		1
Mocs Alumni at Terrell Owens Way	P72, PC77 (EB)	EBT	N	4/29/2026 7:10	SB		1
Mocs Alumni at Terrell Owens Way	P379, PC382 (EB)	EBT	N	4/29/2026 7:42	SB		3
Mocs Alumni at Terrell Owens Way	P379, PC377 (WB)	WBT	N	4/29/2026 7:42	SB		3
Mocs Alumni at Terrell Owens Way	P422, PC429 (EB)	EBT	N	4/29/2026 7:45	SB		4
Mocs Alumni at Terrell Owens Way	P441, PC446 (EB)	EBT	N	4/29/2026 7:46	SB		4
Mocs Alumni at Terrell Owens Way	P461, PC469 (EB)	EBT	N	4/29/2026 7:47	SB		4
Mocs Alumni at Terrell Owens Way	P470, PC477 (EB)	EBT	N	4/29/2026 7:47	SB		4
Mocs Alumni at Terrell Owens Way	P497, PC498 (EB)	EBT	N	4/29/2026 7:49	SB		4
Mocs Alumni at Terrell Owens Way	P568, PC575 (EB)	EBT	N	4/29/2026 7:52	SB		4
Mocs Alumni at Terrell Owens Way	P657, PC662 (EB)	EBT	Y	4/29/2026 7:59	SB		4
Mocs Alumni at Terrell Owens Way	P655, PC662 (EB)	EBT	Y	4/29/2026 7:59	SB		4
Mocs Alumni at Terrell Owens Way	P666, PC669 (EB)	EBT	N	4/29/2026 7:59	SB		4
Mocs Alumni at Terrell Owens Way	P134, PC147 (WB)	WBT	N	4/29/2026 8:03	NB		5
Mocs Alumni at Terrell Owens Way	P108, PC110 (EB)	EBT	N	4/29/2026 8:13	SB		5
Mocs Alumni at Terrell Owens Way	P212, PC222 (EB)	EBT	N	4/29/2026 8:24	SB		6