Town of Brookfield
645 N. Janacek Road
Brookfield, WI 53045
(P) 262-796-3788
(F) 262-796-0339

MEETING NOTICE

Meeting will be held at the
Town of Brookfield Municipal Building, Eric Gnant Room
645 N. Janacek Road, Brookfield, WI

Tuesday, February 24, 2026

PUBLIC HEARING 7:00 pm

1) Confirmation of meeting notice.
2) Public Hearing to receive comment on a request by Point Real Estate Management LLC on behalf of SIX65 Brookfield Holdings LLC to amend the Conditional Use Permit to convert the existing multi-use building into a residential building located at 655 N. Brookfield Road. Tax Key BKFT 1124.997.001
3) Close public hearing.

PLAN COMMISSION Immediately Following

AGENDA

1) Call to Order.
2) Meeting Notices.
3) Approval of Agenda.
4) Approval of Minutes.
    a. January 27, 2026 Public Hearing (KCG Companies- Land Use Plan)
    b. January 27, 2026 Public Hearing (KCG Companies – Rezone)
    c. January 27, 2026 Public Hearing (Next Phase Advanced Care LLC)
    d. January 27, 2026 Plan Commission Meeting
5) Citizen Comments: Three-minute limit.
6) Old Business: None.
7) New Business:
    a. Review and possible action on a request from Point Real Estate Management LLC (applicant) on behalf of SIX65 Brookfield Holdings LLC (owner) to amend the Conditional Use Permit to convert the existing multi-use building into a residential building located at 655 N. Brookfield Road.
    b. Review and possible action on a request for Conceptual, Preliminary and Final approval for a proposed addition to Eble Ice Arena located at 19400 W. Bluemound Road. Briohn Building Corporation (applicant); Waukesha County (owner).
    c. Review and possible action on a Master Sign Program for Poplar Creek Town Center, located on the NE corner of Barker Road and W. Bluemound Road. David Wimmer and Mitch Wimmer (applicant); Poplar Creek Hospitality LLC and The Town Center at Poplar Creek LLC.
8) Communication and Announcements.
    a. Permanent outdoor lighting in residential areas
9) Adjourn.

Posted this 19th day of February, 2026
Rebekah Leto
Town Planner

PLEASE NOTE: It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above meetings to gather information. No action will be taken by any governmental body other than that specifically noticed. Also, upon reasonable notice, efforts will be made to accommodate the needs of individuals with disabilities through appropriate aids and services. For additional information or to request such services contact the clerk's office at the above.

TOWN OF BROOKFIELD

JOINT PUBLIC HEARING

JANUARY 27, 2026

PUBLIC HEARING TO RECEIVE COMMENT ON A REQUEST BY KCG COMPANIES LLC TO AMEND THE TOWN LAND USE PLAN MAP FROM THE COMMERCIAL AND OFFICE PARK CATEGORY TO THE MIXED-USE CATEGORY ON PROPERTY LOCATED AT 1345 S. BARKER ROAD FOR A FUTURE MULTI-FAMILY DEVELOPMENT. TAX KEY BKFT 1132.994.

The Joint Public Hearing with the Plan Commission and Town Board was held on Tuesday, January 27, 2026.

CALL TO ORDER

Town Board Supervisor Ryan Stanelle called the meeting to order at 7:00 pm. Also in attendance were Town Board Supervisors John Charlier, Steve Kohlmann, and John Schatzman; Plan Commissioners Len Smeltzer, Jeremy Watson, Dan Zuperku, and Town Planner Rebekah Leto. Town Chairman Keith Henderson and Plan Commissioners Tim Probst and Kevin Riordan were excused.

CONFIRMATION OF MEETING NOTICE

Town Planner Rebekah Leto reported that the meeting notice was published, mailed out, posted to the website in accordance with the law.

NOTICE OF HEARING AND PUBLIC COMMENTS

Supervisor Stanelle read the attached Notice of Hearing into the record and opened the Hearing for any public comments.

Planner Leto gave an overview of the proposed request.

David Balzer, 465 Victoria Lane, spoke in opposition of the proposal, stating the main concern was in regards to the stress placed on the Town’s Fire and Police Departments. He stated that their call volumes were up and they cannot keep up running a five-person crew. He indicated he was against additional growth in the Town until we’re (the town) backs the Fire, Police and Department of Public Works. He relayed that he has noticed it is taking longer to plow his streets than it used to, which was an indication to him that the town can’t keep up with the growth.

No additional comments were received.

The public hearing was closed at 7:09 pm.

Submitted by:

Rebekah Leto, Town Planner

TOWN OF BROOKFIELD

JOINT PUBLIC HEARING

JANUARY 27, 2026

PUBLIC HEARING TO RECEIVE COMMENT ON A REQUEST BY KCG COMPANIES LLC TO AMEND THE TOWN OF BROOKFIELD ZONING MAP FROM THE RS-3 SINGLE FAMILY RESIDENTIAL DISTRICT TO THE MU-1 MIXED USE DISTRICT ON PROPERTY LOCATED AT 1345 S. BARKER ROAD FOR A FUTURE MULTI-FAMILY DEVELOPMENT. TAX KEY BKFT1132.994.

The Joint Public Hearing with the Plan Commission and Town Board was held on Tuesday, January 27, 2026.

CALL TO ORDER

Town Board Supervisor Ryan Stanelle called the meeting to order at 7:09 pm. Also in attendance were Town Board Supervisors John Charlier, Steve Kohlmann, and John Schatzman; Plan Commissioners Len Smeltzer, Jeremy Watson, Dan Zuperku, and Town Planner Rebekah Leto. Town Chairman Keith Henderson and Plan Commissioners Tim Probst and Kevin Riordan were excused.

CONFIRMATION OF MEETING NOTICE

Town Planner Rebekah Leto reported that the meeting notice was published, mailed out, posted to the website in accordance with the law.

NOTICE OF HEARING AND PUBLIC COMMENTS

Supervisor Stanelle read the attached Notice of Hearing into the record and opened the Hearing for any public comments.

Planner Leto shared an email received by the Town Clerk earlier that day which was in opposition of the request due to too many apartments being constructed in the Town and additional traffic congestion this may bring at the intersection of Barker Road and Greenfield Ave.

No additional comments were received.

The public hearing was closed at 7:14 pm.

Submitted by:

Rebekah Leto, Town Planner

TOWN OF BROOKFIELD

JOINT PUBLIC HEARING

JANUARY 27, 2026

PUBLIC HEARING TO RECEIVE COMMENT ON A CONDITIONAL USE REQUEST MADE BY NEXT PHASE ADVANCED CARE LLC, DEMITREE JOHNSON, TO OPERATE AN ADULT COMMERCIAL DAY CARE ON PROPERTY KNOWN AS 20900 SWENSON DRIVE, SUITE 400. TAX KEY BKFT1128.960.

The Joint Public Hearing with the Plan Commission and Town Board was held on Tuesday, January 27, 2026.

CALL TO ORDER

Town Board Supervisor Ryan Stanelle called the meeting to order at 7:15 pm. Also in attendance were Town Board Supervisors John Charlier, Steve Kohlmann, and John Schatzman; Plan Commissioners Len Smeltzer, Jeremy Watson, Dan Zuperku, and Town Planner Rebekah Leto. Town Chairman Keith Henderson and Plan Commissioners Tim Probst and Kevin Riordan were excused.

CONFIRMATION OF MEETING NOTICE

Town Planner Rebekah Leto reported that the meeting notice was published, mailed out, posted to the website in accordance with the law.

NOTICE OF HEARING AND PUBLIC COMMENTS

Supervisor Stanelle read the attached Notice of Hearing into the record and opened the Hearing for any public comments.

Planner Leto gave an overview of the proposed request.

No public comments were received.

The public hearing was closed at 7:18 pm.

Submitted by:

Rebekah Leto, Town Planner

TOWN OF BROOKFIELD
PLAN COMMISSION MINUTES
JANUARY 27, 2026

The regular meeting of the Plan Commission was held in the Erich Gnant Room of the Town Hall, 645 N Janacek Road, Brookfield, WI.

1) CALL TO ORDER.
   Town Supervisor Ryan Stanelle called the meeting to order at 7:18 p.m., with the following people present: Plan Commissioners Len Smeltzer, Jeremy Watson, Dan Zuperku; and Town Planner Rebekah Leto. Town Chairman Keith Henderson, and Commission members Tim Probst and Kevin Riordan were excused.

2) MEETING NOTICES.
   Leto confirmed the meeting was noticed in accordance with Open Meeting Law.

3) APPROVAL OF AGENDA
   Motion by Mr. Watson to approve the agenda.
   Seconded by Mr. Zuperku.
   Motion Passed Unanimously.

4) APPROVAL OF MINUTES.

   a. Motion by Mr. Watson to approve the December 16, 2025 regular Plan Commission Meeting minutes.

      Seconded by Mr. Zuperku

      Motion Passed Unanimously.

5) CITIZEN COMMENTS: Three-minute limit.

   None.

6) OLD BUSINESS:
   a. None.

7) NEW BUSINESS:
   a. Review and possible action on a request from KCG Companies LLC (applicant) to amend the Town Land Use Plan map from the Commercial and Office Park category to the Mixed-Use category for property located at 1345 S. Barker Road for a future multi-family residential development. Michael and Sally Alexander (owners), Tax key BKFT 1132.994.

      Planner Leto gave an overview of the request in accordance with the staff report. The applicant, Megan Schuetz, gave a presentation about KCG Companies and examples of their work and shared an updated site plan and conceptual renderings. She relayed that 3-bedroom apartments are difficult to come by and that nine units will be enhanced with ADA-features for those with disabilities. There will be no wetland impacts. KCG Companies third-party manages their sites so someone will be onsite to manage it.

      Mr. Watson mimicked the comments from the public hearing, stating that the infrastructure is not there to support additional apartments. He relayed additional traffic will make an already bad intersection even worse. He had concerns about if a town resident were to get into an accident, Waukesha may need to come in and assist the Town because the town is understaffed and the resident is going to be billed twice. He would like the town to fix the infrastructure problem first and then revisit multi-family residential developments. He indicated that people in his neighborhood reflected a similar sentiment and that we do not have enough single-family homes for people. Mr. Smeltzer stated that he thinks it is a great project but has reservations. The Town has seen a lot of high density in a short amount of time and is not sure how it is going to affect them long-term. He agreed with the statements about making sure our Fire and Police departments are not overworked. Mr. Zuperku agreed, stating he was not aware these were issues of the town. Karen Johnson, Broker on behalf of the owners, stated that single family is not wanted here. She has consulted with many single family home builders over the years and they all pass on the parcel. The proposal before the Plan Commission is a logical development for the town to consider, stating that the 3-bedroom apartments provides an option for families. Mr. Watson noted that apartment occupants do not generally stay long term residents of the town, but did agree that it was not an ideal spot for single-family residential.

Additional discussion on process ensued, with Planner Leto breaking apart the Land Use Plan request versus the request for a rezone, followed by the requirement for the applicant to submit a Conditional Use Permit for consideration.

Motion by Mr. Watson to recommend approval of an amendment to the Town Land Use Plan map from the Commercial and Office Park category to the Mixed-Use category for property located at 1345 S. Barker Road, subject to the following condition:

1. Future uses are limited to residential, office and low-intensity commercial uses.

Seconded by Mr. Smeltzer.

Further Discussion: None.

Motion carried unanimously.

b. Review and possible action on a request from KCG Companies LLC (applicant) to amend the Town of Brookfield Zoning Map from the RS-3 Single Family Residential District to the MU-1 Mixed Use District for property located at 1345 S. Barker Road for a future multi-family residential development. Michael and Sally Alexander (owners), Tax Key BKFT1132.994.

Planner Leto discussed the existing and proposed zoning on site. Mr. Stanelle stated that it was clear the Land Use Plan already envisioned something different from single family residential here since it had been deemed Commercial and Office Park. Mr. Stanelle discussed how annexation is a real factor that the Town needs to consider and discussed how it was his understanding there may be intergovernmental agreements between the town and neighboring municipalities regarding the exchange of services (utilities). Planner Leto stated she was not aware of these agreements but acknowledged they may exist. Mr. Stanelle also noted this was a major intersection that was planned to be redone in the near future, which could help with the congestion issue brought up by a resident's email. Mr. Smeltzer relayed he was concerned about children walking on Barker Road. The applicant indicated they do not owner to the right of way but will explore possible options. Mr. Stanelle indicated he was in agreement with Mr. Watson that growth needs to occur in a calculated manner. However, he had concerns that the developer could just as easily annex to the City of Brookfield if the Town is not willing to work with them. Additional discussion regarding police and fire services ensued, with questions regarding how did the Sutter Creek development impact the Town and what might the impact be to the emergency services if an additional apartment complex were constructed? Mr. Smeltzer indicated that he wanted to ensure there was quality construction and Mr. Stanelle would like to see more architectural flair in the future renderings.

Motion by Mr. Watson to recommend approval of an amendment to the Town of Brookfield Zoning Map from the RS-3 Single Family Residential District to the MU-1 Mixed Use District for property located at 1345 S. Barker Road for a future multi-family residential development, subject to the following:

1. A report prepared by the Town of Brookfield Police Department shall be provided to the Town of Brookfield that states the number of service calls they have responded to from the Sutter Creek development in the City of Brookfield and the anticipated number of service calls they may receive from a 60-unit multi-family development on the subject parcel.
2. A report prepared by the Town of Brookfield Fire Department shall be provided to the Town of Brookfield that states the number of service calls they have responded to from the Sutter Creek development in the City of Brookfield and the anticipated number of service calls they may receive from a 60-unit multi-family development on the subject parcel.
3. The Waukesha County and Town of Brookfield Land Use Plan amendments shall be approved by the Waukesha County Board.
4. A Conditional Use Permit shall be sought by the applicant with specific site details, building elevations and floor plans within one year of Town Board action.

Seconded by Mr. Zuperku.

Further Discussion: None.

Motion carried unanimously.

c. Review and possible action on a request from Next Phase Advanced Care LLC, Demitree Johnson, (applicant) to consider a Conditional Use request to operate an adult commercial day care at 20900 Swenson Drive, Suite 400. Decade Companies Income Properties (owner). Tax Key BKFT1128.960

Planner Leto gave an overview of the request in accordance with the staff report. The applicant, Mr. Johnson, gave additional details on the project, including that he anticipates having 60-75 adults daily and will have the appropriate staff based on the state licensing requirements. His customers will be 55+ and he is looking to create an environment where seniors can be with other seniors. Mr. Watson asked what radius would he anticipate his customers coming from to which Mr. Johnson responded from the Waukesha County area. He identified his business plan included offering different opportunities and programs. Customers would be full time or part time and his goal was to be flexible for families' needs. Mr. Smeltzer stated that he liked what he was providing, as seniors need to get out and socialize. Mr. Watson brought up how this may be another strain on the Fire Department. Mr. Stanelle concurred that there was a higher call volume from senior centers. Mr. Johnson relayed that he would be willing to require that his staff assist customers in and out of the building.

Motion by Mr. Watson to recommend approval of a Conditional Use Permit to operate an adult commercial day care for Next Phase Advanced Care LLC at 20900 Swenson Drive, Suite 400 as presented.

Seconded by Mr. Zuperku.

Further Discussion: none.

Motion carried unanimously.

d. Review and possible action on a request from Next Phase Advanced Care LLC, Demitree Johnson, (applicant) to consider the associated Site Plan/Plan of Operation for an adult commercial day care at 20900 Swenson Drive, Suite 400. Decade Companies Income Properties (owner). Tax key BKFT1128.960.

Planner Leto indicated that this was a supplementary piece to the Conditional Use request regarding the business operation.

Motion by Mr. Watson to recommend approval of the associated Site Plan/Plan of Operation for an adult commercial day care for Next Phase Advanced Care LLC located at 20900 Swenson Drive, Suite 400 as presented.

Seconded by Mr. Smeltzer.

Further Discussion: None.

Motion carried Unanimously.

8) COMMUNICATION AND ANNOUNCEMENTS.
None.

9) ADJOURN.

Motion by Mr. Watson to adjourn at 8:53 pm.

Seconded by Mr. Smeltzer.

Motion Passed Unanimously.

Respectfully submitted,
Rebekah Leto – Town Planner

TOWN OF BROOKFIELD PLAN COMMISSION ZONING REPORT

TO:	Town of Brookfield Plan Commission
FROM:	Rebekah Leto, AICP, Town Planner
PC MEETING DATE:	February 27, 2026
RE:	Conditional Use and Plan of Operation amendment, SIX65 Brookfield Holdings LLC, **655 N. Brookfield Road, Tax Key No. BKFT 1124.997.001**

The following report is provided for cursory review prior to action. Specifics relating to the submitted documents of this application may be referenced in the Meeting Packet distributed by the Clerk.

Property owner:	SIX65 Brookfield Holdings, LLC
Applicant:	Point Real Estate Management, c/o Dana Aschenbrenner
Zoning:	MU-1 Mixed Use
Land Use Plan:	Mixed Use
Request:	Amend Conditional Use and Plan of Operation to convert the mixed-use building on the east portion of the property to primarily residential.

Project Description

The subject property is located on the west side of N. Brookfield Road and is .91 acres. In 2022, a Planned Unit Development Conditional Use was granted for the site to be partially redeveloped with a 24-unit apartment building on the west (rear) portion of the lot. There is a commercial building on the east (roadside) of the property that has three (3) commercial suites and one 2-bedroom apartment (approximately 1,200 sq. ft.) on the second floor. The applicant is requesting an amendment to the Conditional Use and Plan of Operation to convert two of the commercial units into residential apartments, resulting in three apartments and one remnant storage space. The storage space will be utilized by the property owner or rented to a resident. No traditional commercial tenant space will exist on site.

The proposed units are as follows:

Level	Tenant	Proposed	Approx. Square Footage
Lower Level (rear)	Formerly Hatched bakery - vacant 2 yrs	1 bedroom apartment	1,500+/- sq. ft.
Lower Level (front)	Point Real Estate Management	Storage for property maintenance and/or tenants	1,000+/- sq. ft.
Main Level	Formerly State Farm Insurance – vacant for a few months	2-bedroom apartment	1,000+/- sq. ft.
Second Level	Existing 2-bedroom apartment	No changes proposed	1,200+/- sq. ft.

Parking

Multi-family buildings require two spaces per dwelling unit (six spaces required). There are currently seven on-site spaces that abut N. Brookfield Road, in addition to two spaces in the attached garage that are utilized by the second floor tenants. The proposal complies with the parking requirements. No changes are proposed to the parking or drive aisles.

Signage

All tenant signage will be removed.

Site Plan Changes.

No changes to the lighting, landscaping or building are proposed.

Zoning and Land Use Plan Analysis

The Town of Brookfield Land Use Plan designates this property as Mixed Use. This category promotes a mix of uses, usually of higher density, and oftentimes contains a combination of residential, institutional, office, retail, service, research and development, and other commercial uses. Mixed use does not indicates a development has to contain a mix of uses on the same parcel, but rather provides flexibility within a designated area. The MU-1 Mixed-Use District intent indicates that higher-density is allowed and encourages efficient land use.

Surrounding area

North	Multi-tenant commercial building
West	Senior apartments
South	Galleria West

Staff Recommendation

Staff recommends **approval** of the request to convert commercial units into residential units for the west building located at 655 N. Brookfield Road, subject to the following:

1. The number of residential units be limited to three dwelling units.
2. A Conditional Use be prepared and recorded in the Register of Deeds, prior to a Building Permit being issued.

The proposal meets the purpose and intent of the Mixed Use zoning district by providing higher-density housing, while not intensifying the use of the parcel. The surrounding area is comprised of a mix of uses, including residential and commercial. The modification of two additional apartments within an existing building will not alter the landscape of the area and should not adversely affect adjacent properties given that no site plan changes are proposed.

Conceptual Narrative – Maximum Density Modification Request

SIX65 Apartments | SIX65 Brookfield Holdings LLC
Point Real Estate Management LLC

Point Real Estate Management, on behalf of SIX65 Brookfield Holdings LLC, respectfully requests approval for a maximum density increase at SIX65 Apartments to convert two existing commercial suites into residential dwelling units. The building currently includes three commercial spaces and one residential unit on the topmost floor. Upon approval, the building will include:

- Three residential units total (one existing and two newly created)
- One commercial storage rental unit

There will be no traditional commercial tenant spaces remaining on site.

Two commercial suites, the front-facing former State Farm space and the rear former bakery suites, have faced persistent leasing challenges. The bakery suite has remained vacant since at least January 31, 2024. Due to their configuration and limited commercial viability, these suites will be repurposed as follows:

- The former State Farm unit will be redeveloped as a two-bedroom apartment
- The former bakery suites will be redeveloped as a one-bedroom apartment

The smaller rear suite will remain in commercial use as a leasable storage unit, maintaining an appropriate and low-intensity commercial presence.

This request represents a modest and appropriate increase in residential density that allows the property to better support current housing needs and market demand. Compared to potential commercial uses, the shift to residential is expected to reduce parking requirements and traffic generation, which is favorable given the constrained circulation near the structure.

Critically, this proposal includes no exterior modifications:

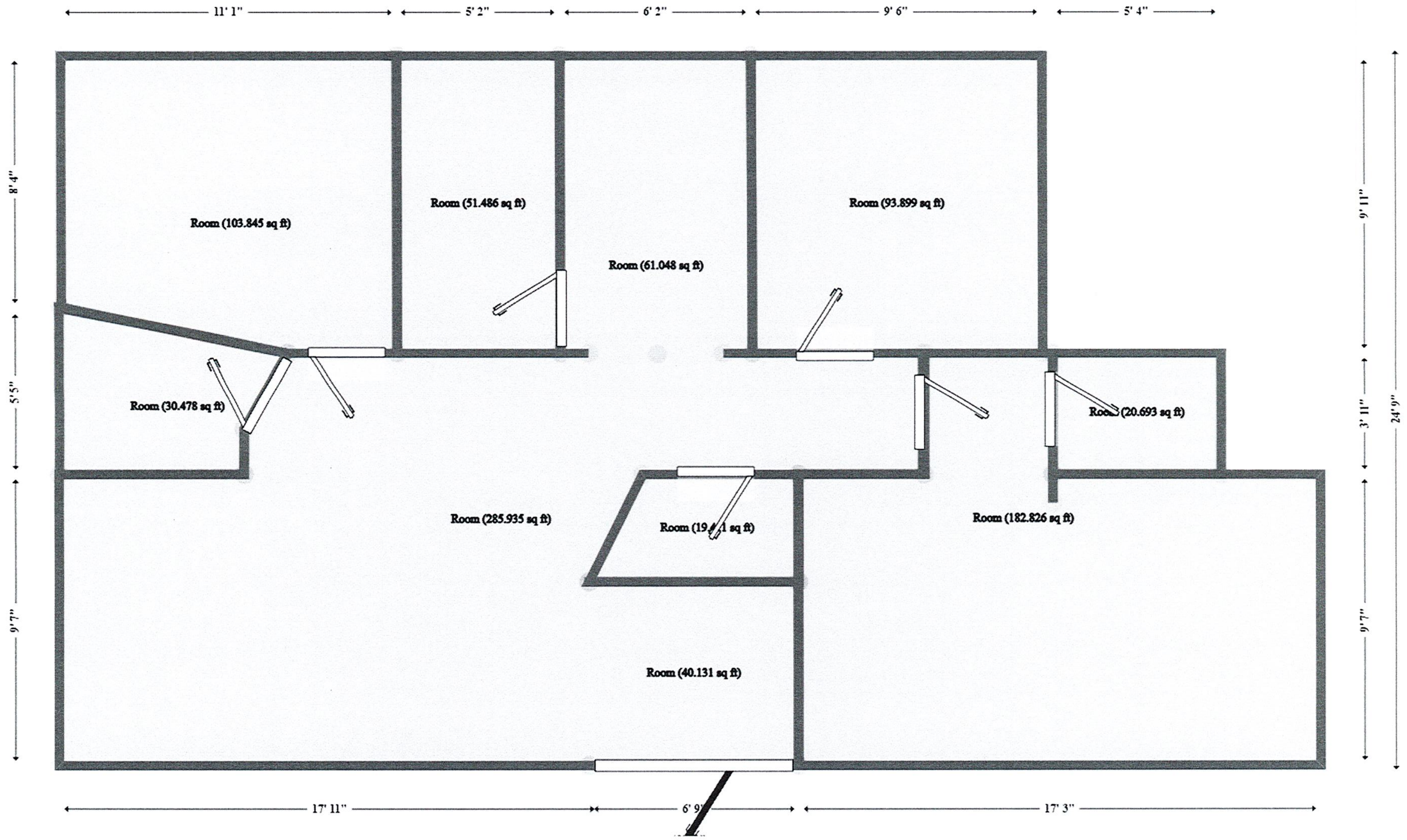
- No changes to parking or drive aisles
- No expansion of the building envelope
- No alterations to landscaping or lighting
- No impacts to the established architectural character of the site

All work will be contained within the existing interior spaces.

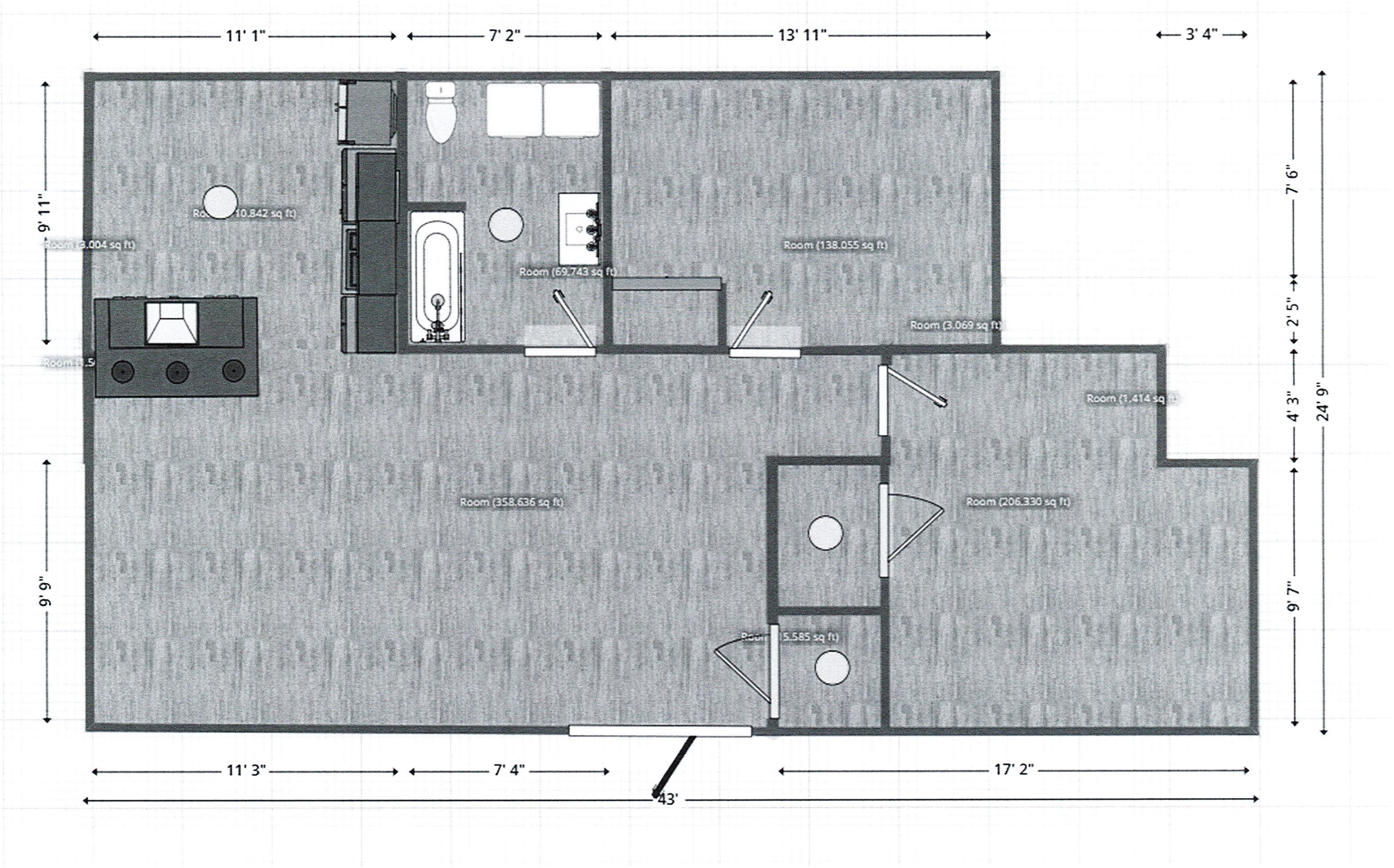
Key community and operational benefits:

- Eliminates long-term commercial vacancy
- Strengthens property utilization and financial sustainability
- Increases availability of quality rental housing
- Decreases site traffic intensity and parking demand
- Retains a low-impact commercial element appropriate for the site

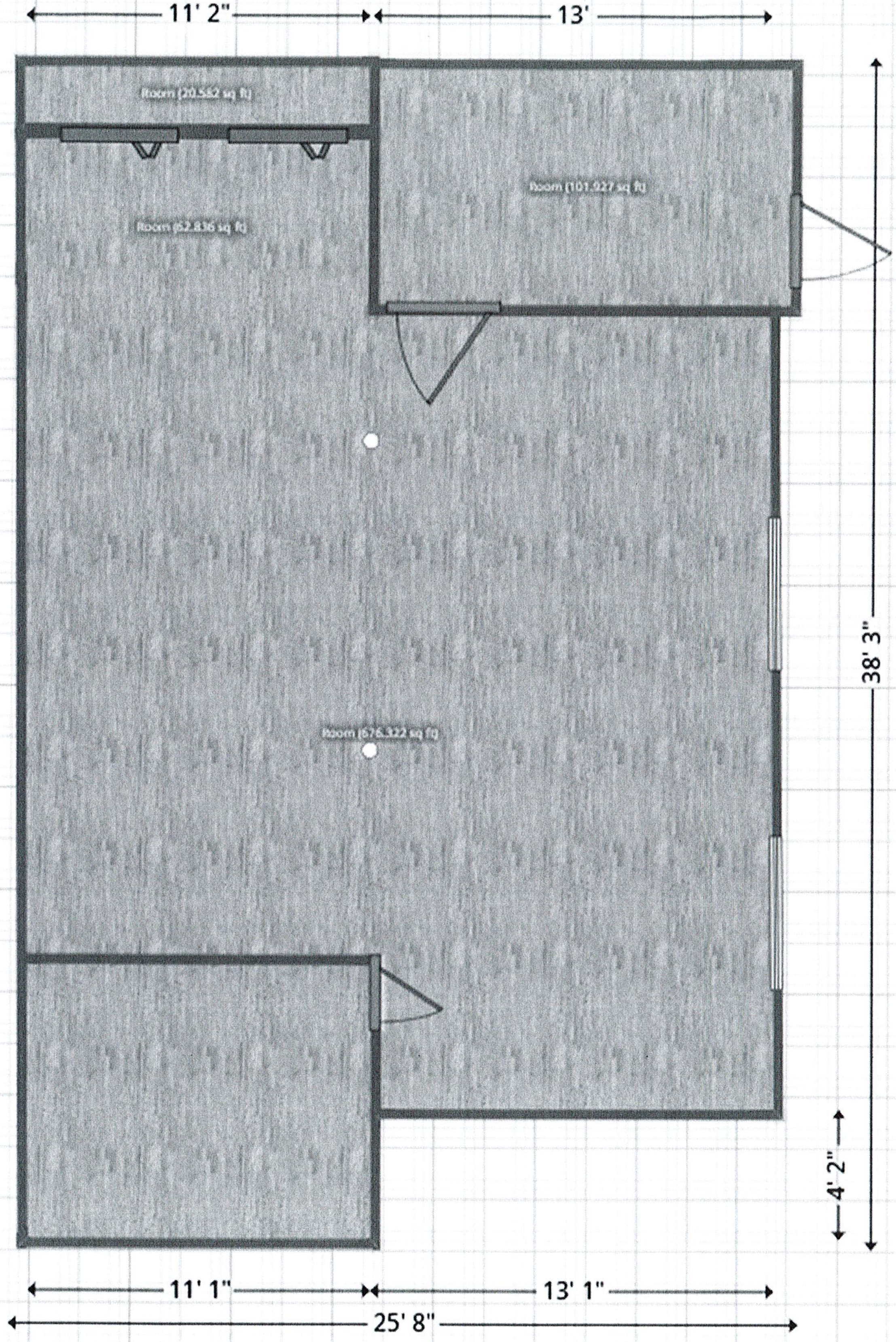
We appreciate the Town Commission Board's thoughtful review of this maximum density modification request. SIX65 Brookfield Holdings LLC is committed to ensuring that SIX65 Apartments continues to function as a stable, productive, and community-supportive asset. We welcome the opportunity to provide any additional materials or respond to questions as needed.



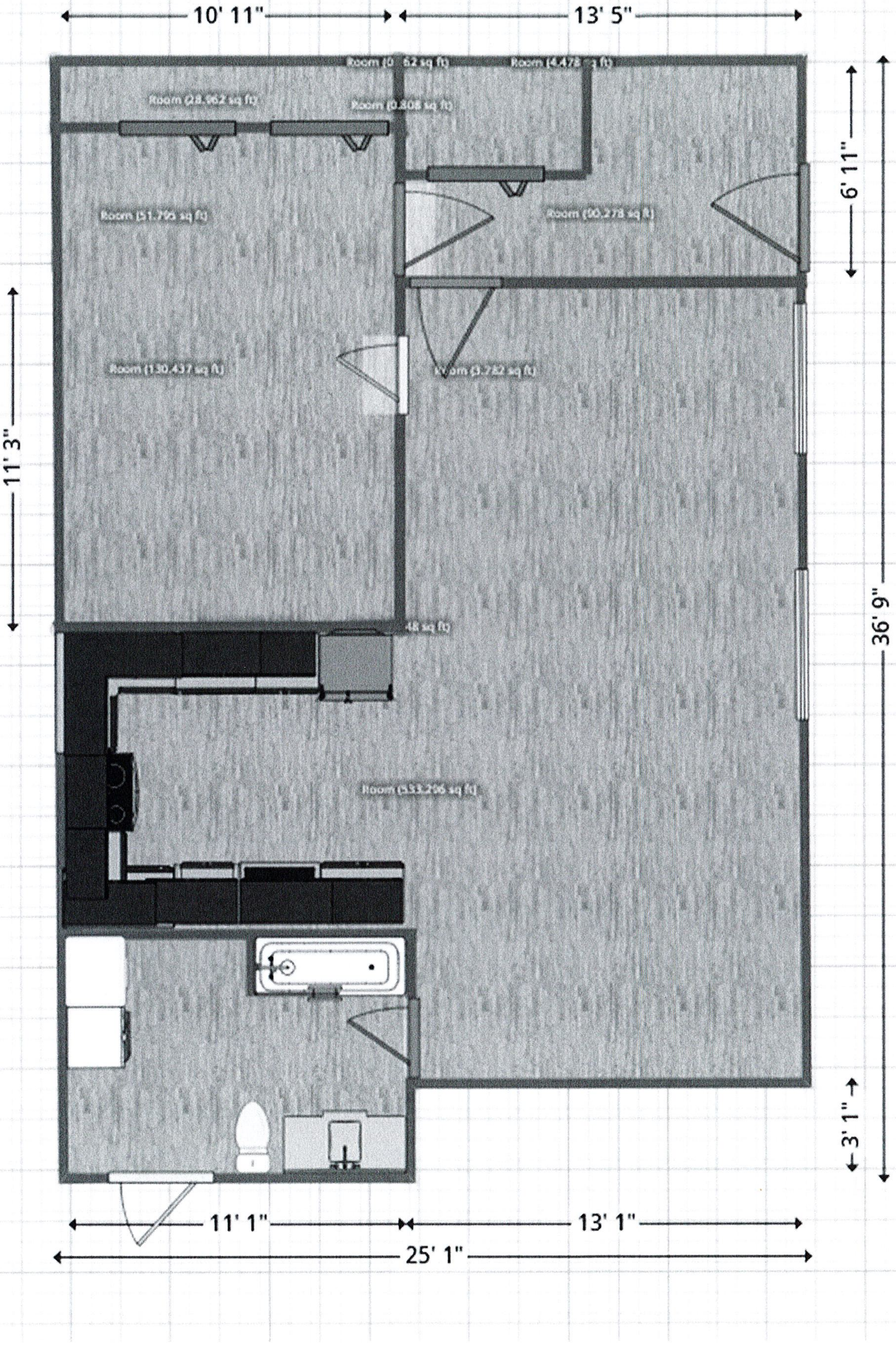
COMMERCIAL SPACE A - EXISTING



COMMERCIAL SPACE A – RENOVATION CONCEPT



COMMERCIAL SPACE C - EXISTING

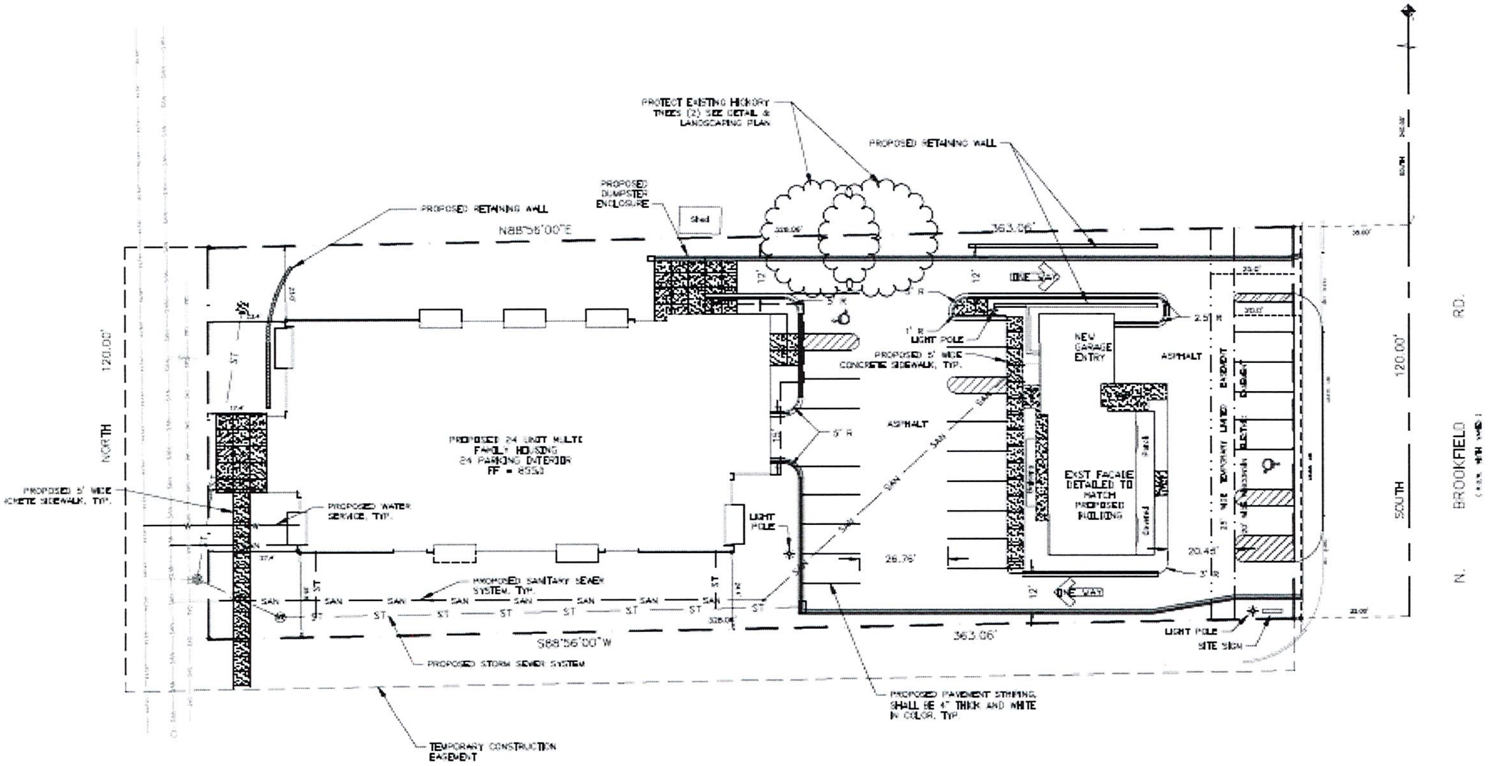


COMMERCIAL SPACE C – RENOVATION CONCEPT

NOTES:

1. MEASUREMENTS TO FACE OF CURB UNLESS OTHER
   NOTED.
2. ALL CURB & GUTTER REJECTION STYLE UNLESS
   OTHERWISE NOTED.

▨ STANDARD ACCEPTING STYLE CURB & GUTT



BENCHMARK NOTE

Concrete monument with Brass Cap marking the East 1/4 Corner of Section 29-7-20. Elevation : 889.14'

Reference Benchmark : Chisel Cross on Hydrant 31.35' West of 1/4 Corner Elevation : 871.26' — NGVD 1929 Datum

LEGEND

- ● — SET IRON STAKE
- ○ — FOUND IRON PIPE
- P/L — PROPERTY LINE
- × 100.00 — EXISTING SPOT ELEVATION
- Ⓢ — SEWER MANHOLE
- Ⓒ — COMMUNICATION MANHOLE
- Ⓔ — ELECTRIC MANHOLE
- ▦ — CATCH BASIN
- Ⓣ — TRAFFIC MANHOLE
- E — ELECTRIC METER
- G — GAS METER
- ⊠ — WATER VALVE
- ⊠ — GAS VALVE
- ✲ — HYDRANT
- · — TRAFFIC SIGNAL
- ▢ — UTILITY BOX
- ○ — UTILITY POLE
- ▼ — FLOOD LIGHT
- ✲ — LIGHT POLE
- ● — WELL
- ●— — BORING
- ● — CLEAN OUT
- ⊠ — TRANSFORME
- ▣ — AIR CONDITI
- ● — BOLLARD
- — — UNDERGROUN
- E — UNDERGROUN
- T — UNDERGROUN
- — — OVERHEAD E
- — — UNDERGROUN
- SAN — SANITARY SE
- ST — STORM SEWE
- — — CHAIN LINK
- SF — SILT FENCE
- × — HAND RAIL
- WET — WETLAND
- FP — FLOOD PLAI
- PP — PERMANENT
- PEC — PRIMARY EN
- ××××× — SAW CUT
- ◡◡◡ — TREE LINE

APPROXIMATE S
20' 0

DESCRIPTION	DATE	BY
COMMENTS	20.8.2020	RJN

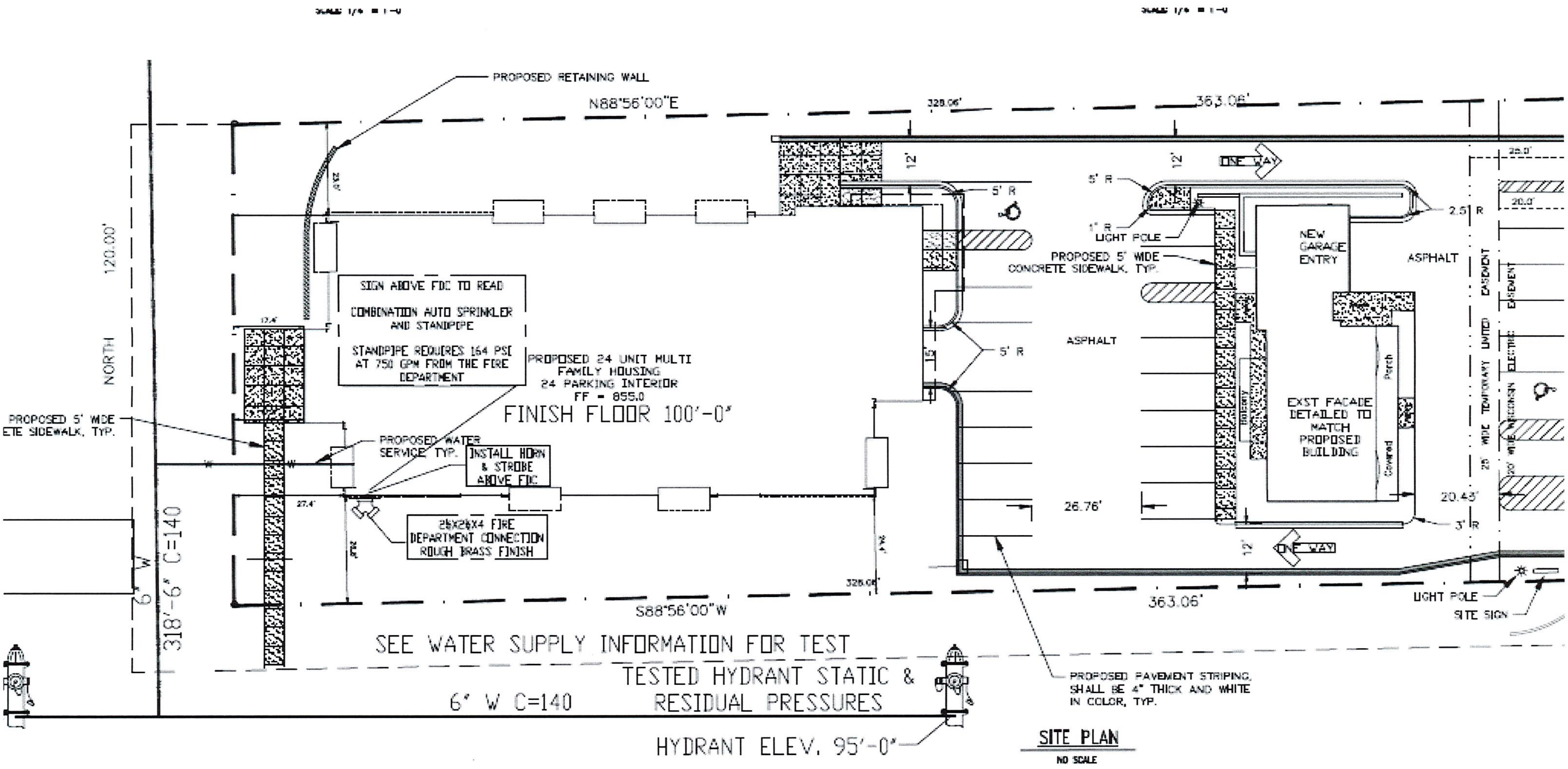
DESIGNED BY
RJN/DAT
DRAWN BY
RJN/DAT
APPROVED BY
DAT
DATE
8.25.2020

ISSUANCE TYPE
PERMIT

SITE PLAN
655 BROOKFIELD ROAD APARTMENTS
655 BROOKFIELD ROAD
TOWN OF BROOKFIELD, WISCONSIN

STAMP

TERRA
ENGINEERING LTD.
241 N. Broadway Ave., Suite 302 Milwaukee, WI 53202
(T) 414-763-1231 (W) www.terraengineering.com



SITE PLAN

NO SCALE

SYMBOLS		
	FP-1	-F.P. SITE PLAN -F.P. RISER DETAIL -BUILDING SECTIONS
	FP-2	1ST & 2ND FLOOR F.P. PLAN -RISER DETAIL
	FP-3	3RD & 4TH FLOOR F.P. PLAN

CONTRACT WITH: ALTUS
ADDRESS: 1578 N BARKER ROAD SUITE B
BROOKFIELD, WI 53045
CONTACT: ANDREW D KLIMPEL

PLAN NORTH

HYDRAULIC DESIGN INFORMATION

LOCATION	DENSITY	AREA	HOSE	GPM @ BOR	PSI @ BOR

WATER SUPPLY INFORMATION

STATIC: 71 DATE: 3/16/21
RESIDUAL: 64 LOCATION: 605 BROOKFIELD ROAD BROOKFIELD, WI
FLOW: 1300 GPM INFORMATION PROVIDED BY: BS USA—FP & MARK HOFFMANN BROOKFIELD

REVISIONS

NO.	DESCRIPTION	DATE	BY
7			
6			
5			
4	RECORD DRAWINGS	01.04.22	MRB
3	STANDPIPE FAB	07.19.21	MRB
2	FABRICATION DRAWING	05.25.21	MRD
1	SUBMITTAL DRAWINGS	5.13.21	MRB

SPRINKLER LEGEND

SYM	MAKE	MODEL	RESPONSE	SIN	TYPE	TEMP	THR

TOTAL NUMBER OF SPRINKLERS ON THIS JOB 397 TOTAL NUMBER OF SPR

TOWN OF BROOKFIELD PLAN COMMISSION STAFF REPORT

TO: Town of Brookfield Plan Commission

FROM: Rebekah Leto, AICP, Town Planner

MEETING DATE: February 27, 2026

RE: Conceptual, Preliminary and Final Approval for Eble Ice Arena, 19400 W. Bluemound Road

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The following report is provided for cursory review prior to action. Specifics relating to the submitted documents of this application may be referenced in the Meeting Packet distributed by the Clerk.

Property owner: Waukesha County

Applicant: Devon Pittman, Briohn Building Corporation

Application Type: Preliminary and Final Approval

Zoning: P-1 Park District and C-1 Conservancy District

Project Description

The subject property is 32.4 acres and contains Eble Ice Arena, which is owned and operated by Waukesha County. The applicant has submitted plans to construct a 1,020 sq. ft. addition and perform interior remodeling of an existing storage room. The addition is located on the south side (roadside) of the building and is over 300 ft. from the edge of the right of way.

The proposed addition is “L” shaped and will consist of a new ADA compliant locker room with an alarmed emergency only exit. The remodeled storage room will consist of a janitor’s closet, a single toilet room, and a coach’s office. The addition will be constructed of masonry materials to match the existing building.

Lighting. No additional lighting is proposed on the building, as there is an existing light pole outside near the addition. There are no other site plan changes being proposed.

Landscaping. Mature landscaping is already present in the area of the addition. Four trees under 12” in diameter will need to be removed for the addition. Two new trees, a serviceberry and a spruce, are proposed to anchor a new landscaping bed. Nineteen (19) shrubs are proposed that will consist of a mix of black chokeberry, gro-low fragrant sumac and southern arrowood. The planting bed with blend in with the existing landscaping.

Architectural Review Committee. On February 11, 2026, the ARC granted Preliminary and Final approval of the proposed addition, subject to landscaping being further reviewed by the Plan Commission, as the plan was not submitted to review prior to the meeting.

Additional comments may be relayed during the Plan Commission meeting.

Staff Recommendation

I recommend Conceptual, Preliminary and Final approval for the proposed addition to Eble Ice Arena located at 19400 W. Bluemound Road. The proposed building materials will match the existing building and is located over 300 ft. from the road. Landscaping will help to soften the look of the proposed addition.

LOCKER ROOM EXPANSION FOR:

EBLE PARK ICE ARENA

19400 W BLUEMOUND RD.
BROOKFIELD, WI 53045

CODE CALCULATIONS AND ANALYSIS:

BUILDING SIZE AND CONSTRUCTION:

35,585 SF EXISTING BUILDING
590 SF RENOVATION
1,040 SF NEW ADDITION
NEW CONSTRUCTION TYPE IB, SINGLE STORY, NONSPRINKLERED

EXISTING BUILDING IS CMU AND PRECAST MASONRY THROUGHOUT, CONSTRUCTED PRIOR TO ADOPTION OF ICC MODEL CODES. BUILDING MOST CLOSELY RESEMBLES TYPE IB CONSTRUCTION AND CALCULATIONS THIS SHEET AND ELSEWHERE IN THE DRAWINGS ASSUMES THIS TYPE.

ADDITION AND RENOVATION EQUAL 4.85% OF BUILDING. RENOVATION IS LEVEL 2. NEW CONSTRUCTION SHALL CONFORM TO CURRENT CODE AND ORDINANCE.

TYPE IB CONSTRUCTION (PER IBC TABLE 601):

PRIMARY STRUCTURAL FRAME	2 HOURS
INTERIOR BEARING WALLS	2 HOURS
EXTERIOR BEARING WALLS	2 HOURS
NONBEARING WALLS AND PARTITIONS (PER TABLE 705 > 30 FEET)	0 HOURS
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	2 HOURS
ROOF CONSTRUCTION AND SECONDARY MEMBERS	1 HOURS

OCCUPANCY CALCULATION:

OCCUPANCY	AREA	OCCUPANT LOAD	TOTAL LOAD
A-4 - LOCKER ROOMS	1,610 SF	1 PER 50 SF	32.2
U - UTILITY	90 SF	1 PER 300 SF	0.3
	1,700 SF		**33 PERSONS**

PLUMBING FIXTURE CALCULATION:

OCCUPANT LOAD NOT INCREASED BY >20%, NO FIXTURE MINIMUMS REQUIRED PER IEBC 808.

EXIT WIDTH REQUIRED AND EXIT ACCESS TRAVEL DISTANCE:

BUILDING IS UNSPRINKLERED

EXIT WIDTH REQUIRED 33 x .2 = 6.6 INCHES
EXIT WIDTH PROVIDED (1) 36" WIDE DOORS x 34" = **34 INCHES PROVIDED**
SCOPE OF WORK AREA OCCUPANCY IS LESS THAN 49. 1 EXIT REQUIRED. **(1) EXIT PROVIDED**

MINIMUM EXIT SEPARATION DISTANCE: 1/3 BUILDING DIAGONAL (182'-9" REQUIRED), **N/A**
MAXIMUM EXIT TRAVEL DISTANCE ALLOWED: 200', **64'-10" MAXIMUM PROVIDED**
MAXIMUM COMMON PATH OF EGRESS DISTANCE ALLOWED: 75', **49'-8" MAXIMUM PROVIDED**

AREA AND HEIGHT LIMITATION CALCULATIONS:

ADDITION IS SINGLE OCCUPANCY. NO SEPARATIONS REQUIRED WITHIN ADDITION.

TYPE IB CONSTRUCTION, SPRINKLERED THROUGHOUT, A-3 OCCUPANCY

MAXIMUM ALLOWABLE AREA:	**UNLIMITED**	
MAXIMUM ALLOWABLE BUILDING HEIGHT:	180 FEET	**(15'-0" ACTUAL)**
MAXIMUM NUMBER OF STORIES ABOVE GRADE:	11	**(1 ACTUAL)**

EXTERIOR WALL OPENINGS:

BUILDING IS >20' FROM PROPERTY LINE. NO RESTRICTION ON BUILDING OPENINGS PER IBC TABLE 705.8

BUILDING ENVELOPE REQUIREMENTS:

NO MODIFICATIONS TO EXISTING BUILDING ENVELOPE IN SCOPE OF WORK, EXISTING BUILDING NOT REQUIRED TO COMPLY.

NEW ADDITION: COMMERCIAL NON-RESIDENTIAL BUILDING
ENVELOPE ENERGY COMPLIANCE: TOTAL BUILDING PERFORMANCE PATH C407 (ASHRAE 90.1-2019) WITH AMENDMENTS

CLIMATE ZONE: 5A

SEE COMCheck REPORT SHEET A5.0

SHEET INDEX

0-GENERAL

GS0.1	SPECIFICATIONS
GS0.2	SPECIFICATIONS
GS0.3	SPECIFICATIONS
T1.1	TITLE SHEET

3-CIVIL

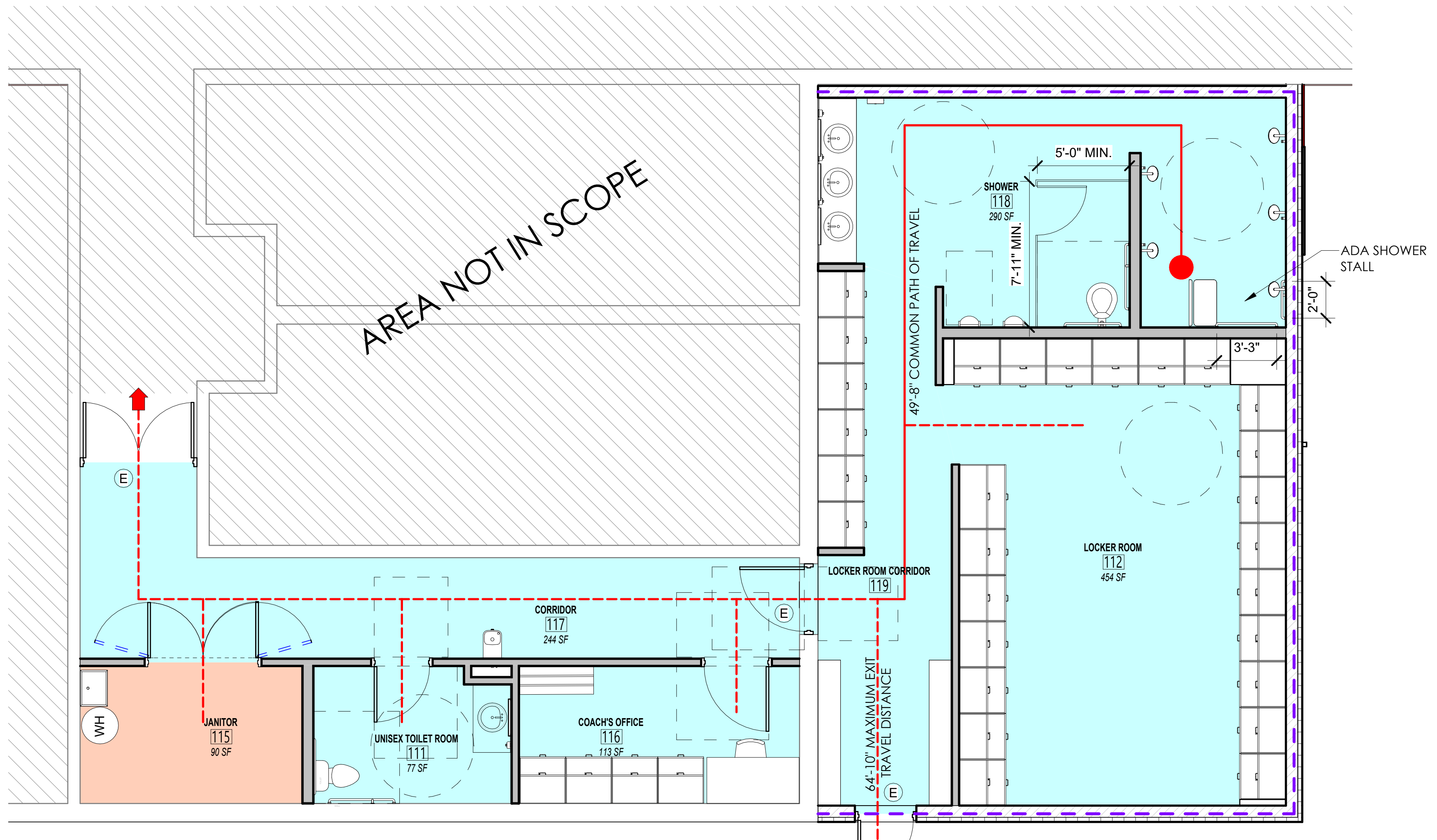
C1.0	SITE CIVIL PLAN

3-LANDSCAPING

L1.0	LANDSCAPE PLA, NOTE, DETAILS, & SCHEDULE

5-ARCHITECTURAL

A0.1	ADA GUIDELINES
A0.2	ADA GUIDELINES
A1.0	FLOOR PLANS
A1.1	CEILING AND ROOF PLANS
A5.0	ELEVATIONS
A7.0	WALL SECTIONS & DETAILS



3 CODE PLAN

3/16" = 1'-0"

ROOM OCCUPANCY

🟦	A-4
🟧	U

CODE PLAN LEGEND

– – –	EXIT ACCESS
34 ➡	EXIT WIDTH
Ⓔ	EXIT LIGHT
○ FE	COLUMN OR WALL MOUNTED FIRE EXTINGUISHER
FEC ▭	CABINET FIRE EXTINGUISHER
–·–·–	EXIT ACCESS
– – –	EXIT ACCESS

GENERAL NOTES-CODE

1	EXITS AND AISLES SHALL BE SO LOCATED THAT THE TRAVEL DISTANCE TO AN EXIT DOOR SHALL NOT BE GREATER THAN 250 FEET MEASURED ALONG THE LINE OF TRAVEL IN SPRINKLERED BUILDINGS. WHERE AISLES ARE PROVIDED FOR SEATING, THE DISTANCE SHALL BE MEASURED ALONG THE AISLES AND AISLE ACCESSWAY WITHOUT TRAVEL OVER OR ON THE SEATS.
2	EGRESS ROUTE & ACCESSIBLE ROUTE SHALL BE RE-EVALUATED FOR FUTURE TENANTS NEEDS IN TENANT SPACES.
3	EXITS AND EXIT ACCESS DOORS SHALL BE MARKED BY AN APPROVED EXIT SIGN READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL. THE PATH OF EGRESS TRAVEL TO EXITS AND WITHIN EXITS SHALL BE MARKED BY READILY VISIBLE EXIT SIGNS TO CLEARLY INDICATE THE DIRECT ON EGRESS TRAVEL IN CASES WHERE THE EXIT OR THE PATH OF EGRESS TRAVEL IS NOT IMMEDIATELY VISIBLE TO THE OCCUPANTS. INTERVENING MEANS OF EGRESS DOORS WITHIN EXITS SHALL BE MARKED BY EXIT SIGNS. EXIT SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT ACCESS CORRIDOR IS MORE THAN 100 FEET FROM THE NEAREST VISIBLE EXIT SIGN. ADDRESS THE NEED FOR 90 MINUTE CONTINUED ILLUMINATION IN CASE OF POWER LOSS. PROVIDE EXTERIOR SIDE LIGHT FIXTURES FOR EXITS. REFER TO ELECTRICAL DRAWINGS.
4	OWNER SHALL PROVIDE ACCESSIBLE DRINKING WATER FACILITIES.
5	EXIT TRAVEL DISTANCE IS LESS THAN 250 FEET.
6	FIRE EXTINGUISHERS TO COMPLY WITH NFPA 10 AND IBC906. COORDINATE WITH LOCAL FIRE MARSHAL.

PLAN REVIEW AND PERMIT SET

MARCH 3, 2025

OWNER :

WAUKESHA COUNTY
DPT. OF PARKS AND LAND USE
Rebecca Mattano

515 MORELAND BLVD,
WAUKESHA, WISCONSIN 53188
(262) 548-7807 PHONE

TENANT :

GENERAL CONTRACTOR :

BRIOHN BUILDING CORPORATION
Kyle Roadt, Project Manager

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

CIVIL ENGINEER:

BRIOHN DESIGN GROUP LLC
Rizal Iskandarsjach, PLS, PE

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

ARCHITECT :

BRIOHN DESIGN GROUP LLC
Paul Grzeszczak, AIA

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

LANDSCAPE ARCHITECT:

LANDCO2
Kristi Sherfinski, PLA

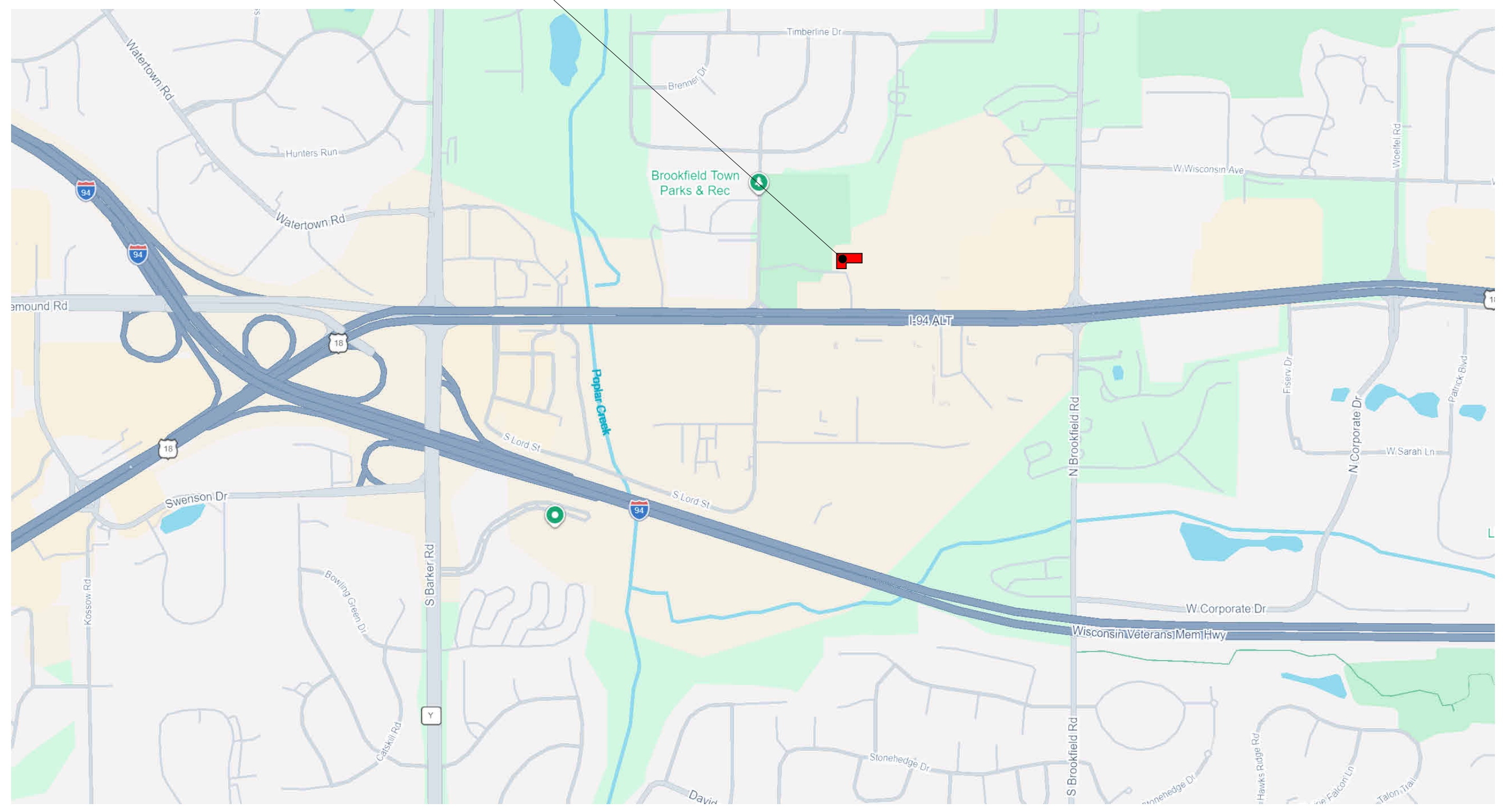
1836 W. FOND DU LAC AVE., SUITE 100
MILWAUKEE, WISCONSIN 53205
(414) 622-0103 PHONE

STRUCTURAL ENGINEER:

BRIOHN DESIGN GROUP LLC
Chris Cline, PE
Kevin Jankowski, PE

3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX

PROJECT LOCATION



SITE LOCATION MAP

NOT TO SCALE

NORTH

PROJECT INFORMATION:

CODE:	**BUILDING CODE: 2021 IBC -** INTERNATIONAL BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 362 **EXISTING BUILDING CODE: 2021 IEBC -** INTERNATIONAL EXISTING BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 366 **ACCESSIBILITY CODE: 2009 ICC**/ANSI A117.1 ACCESSIBLE AND USABLE **BUILDINGS AND FACILITIES ENERGY CODE: 2021 IECC -** INTERNATIONAL ENERGY CONSERVATION CODE WITH WISCONSIN AMENDMENTS SPS 363 **MECHANICAL CODE: 2021 IMC -** INTERNATIONAL MECHANICAL CODE WITH WISCONSIN AMENDMENTS SPS 364 **PLUMBING CODE:** 2026 WISCONSIN PLUMBING CODE SPS 381-387 **ELECTRICAL CODE:** 2017 NFPA 70 NATIONAL ELECTRICAL CODE WITH WISCONSIN AMENDMENTS SPS316 **FIRE CODE:** SPS 314 FIRE PREVENTION
OCCUPANCY:	PRIMARY A-4 (INDOOR SPORTING ASSEMBLY) SECONDARY
CLASS OF CONSTRUCTION:	TYPE IB
SPRINKLER SYSTEM:	NONE
FLOOR LEVELS:	1
NUMBER OF STORIES	1
ENCLOSED BUILDING AREA:	36,625 SF
PROPOSED TOTAL AREA:	1,700 SF WORK AREA
ZONING:	P-1 PARK DISTRICT
SETBACKS:	UNCHANGED
PARKING:	UNCHANGED
TOTAL PARKING (TOTAL ON-SITE):	UNCHANGED

NOTE:
ALL MECHANICAL, ELECTRICAL AND PLUMBING ENGINEERING BY DESIGN-BUILD CONTRACTORS

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

TITLE SHEET

SHEET TITLE

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

Date	Revision

JOB:	250070
DRAWN:	NB
CHECKED:	PG/DF
DATE:	2026-02-16

SHEET:

T1.1

GENERAL NOTES AND SPECIFICATIONS

1. THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
4. THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES DISCOVERED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON THEIR OWN COMPUTATIONS AND UNDER NO CIRCUMSTANCES BE BASED ON THE ENGINEER'S ESTIMATE.
6. QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD–OF–MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
7. PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
8. COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN THEIR ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
9. SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS IN OBTAINING PERMITS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND "DIGGER'S HOTLINE" IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS. CONTRACTOR IS RESPONSIBLE TO DETERMINE WHICH ORDINANCES/CODES/RULES/ETC. ARE APPLICABLE.
12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, BDG, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
15. ALL FIELD/DRAIN TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPORTED TO ENGINEER/OWNER. TILES ORIGINATING OUTSIDE THE PROJECT LIMITS SHALL BE RECONNECTED OR REROUTED TO MAINTAIN DRAINAGE. ENGINEER/OWNER SHALL DETERMINE THE MOST FAVORABLE METHOD OF RE–ESTABLISHMENT OF OFFSITE DRAINAGE. IF TILE IS ENCOUNTERED DURING TRENCH EXCAVATIONS, RE–ESTABLISHING TILE FUNCTIONALITY SHALL BE CONSIDERED AN INCIDENTAL EXPENSE.

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN WISCONSIN'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND TOWN OF BROOKFIELD AND WAUKESHA COUNTY ORDINANCES. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY BRIOHN DESIGN GROUP (BDG) OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
3. MODIFICATIONS TO THE APPROVED EROSION CONTROL PLAN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY BDG/MUNICIPALITY PRIOR TO DEVIATION OF THE APPROVED PLAN.
4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
5. PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AFTER THE END OF EACH WORK DAY AND AS REQUESTED BY THE GOVERNING AGENCIES.
6. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER. ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
7. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
8. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER PRIOR TO THE COMPLETION OF EACH WORK DAY.
9. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
10. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS.
11. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF THIRTY (30) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
12. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5–INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH PART IV D.4. (a–f). OF THE NPDES GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
13. THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.
    - SILT FENCE – REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE–HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
    - INLET PROTECTION – CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE BAG BECOMES ONE–HALF FULL OF SEDIMENT.

    ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING.

    - CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPAULIN TO PREVENT BLOWING DEBRIS.
    - STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

DEMOLITION NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) OF ALL BUILDING, STRUCTURES, PADS, WALLS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., IN A LAWFUL MANNER, SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
2. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING FOR ALL FEES AND CHARGES. COORDINATION REQUIRED PRIOR TO CONSTRUCTION.
3. THIS PLAN INDICATES ITEMS ON THE PROJECT AREA INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED BY A REASONABLE OBSERVATION OF THE EXISTING CONDITIONS THROUGH FIELD RECONNAISSANCE, ORIGINAL SITE CIVIL PLAN, AND GENERAL "STANDARD OF CARE". THERE MAY BE ADDITIONAL ITEMS THAT CAN NOT BE IDENTIFIED BY A REASONABLE ABOVE GROUND OBSERVATION, OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE THEIR OWN DUE DILIGENCE TO INCLUDE IN THEIR BID WHAT ADDITIONAL ITEMS, IN THEIR OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD. BRIOHN DESIGN GROUP (BDG) TAKES NO RESPONSIBILITY FOR ITEMS ON THE PROPERTY THAT COULD NOT BE LOCATED BY A REASONABLE OBSERVATION OF THE PROPERTY OR OF WHICH THEY WOULD HAVE NO KNOWLEDGE.
4. ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS, PRIVATE DRIVES AND PAVEMENT FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
5. ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF–SITE UNLESS OTHERWISE NOTED.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:

    6.1 EXAMINE ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.

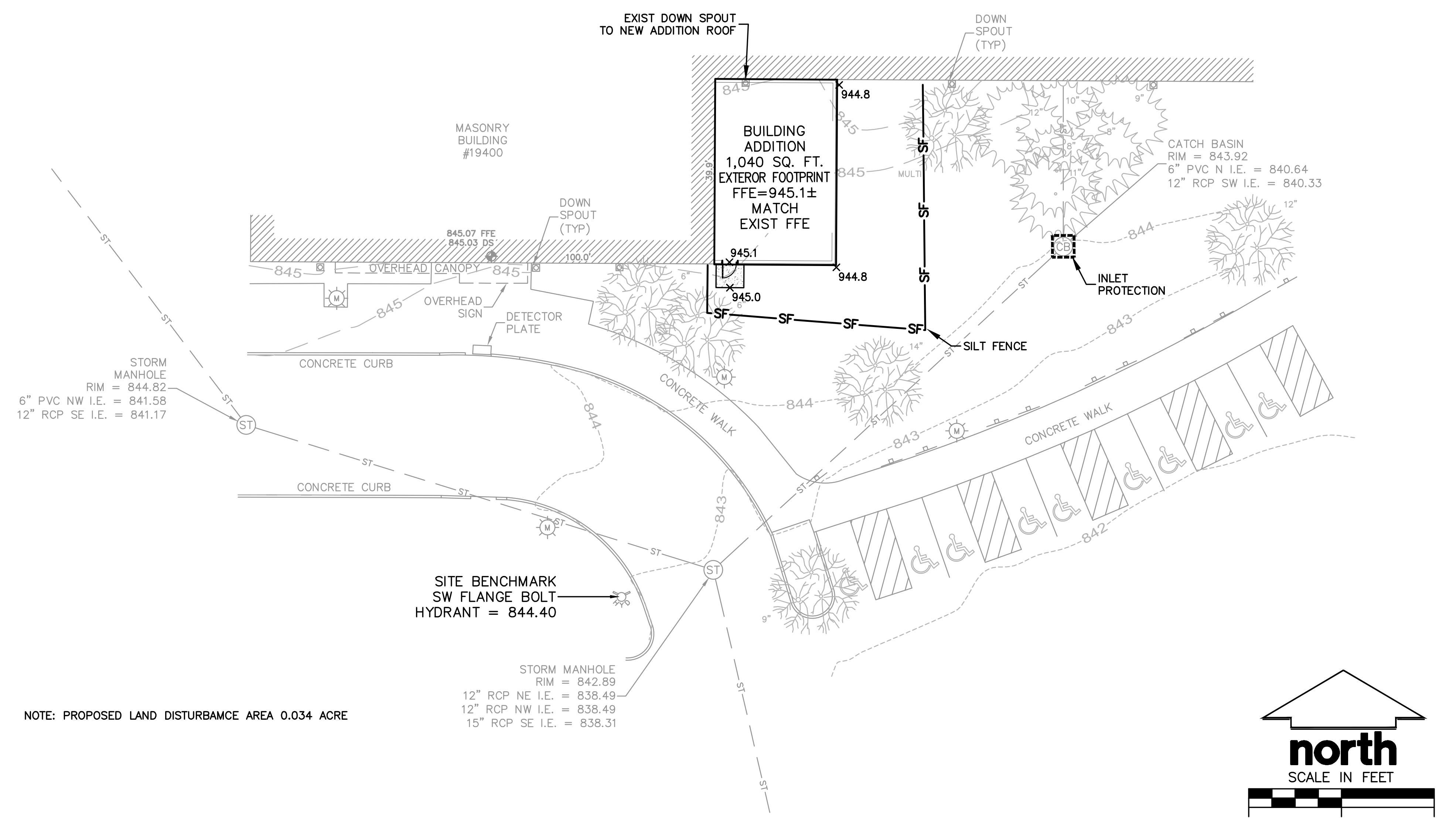
    6.2 VERIFYING UTILITY ELEVATIONS AND NOTIFYING THE DESIGN ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.

    6.3 NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.

    6.4 NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.

    6.5 PERFORMING UTILITY LOCATE OBSERVATIONS (ULO) ON ALL UTILITY CROSSINGS. CONTRACTOR TO REPORT ANY PLAN DISCREPANCIES OR CONFLICTS PRIOR TO THE START OF UTILITY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE APPROPRIATE UTILITY COMPANIES TO CONDUCT ULO'S.

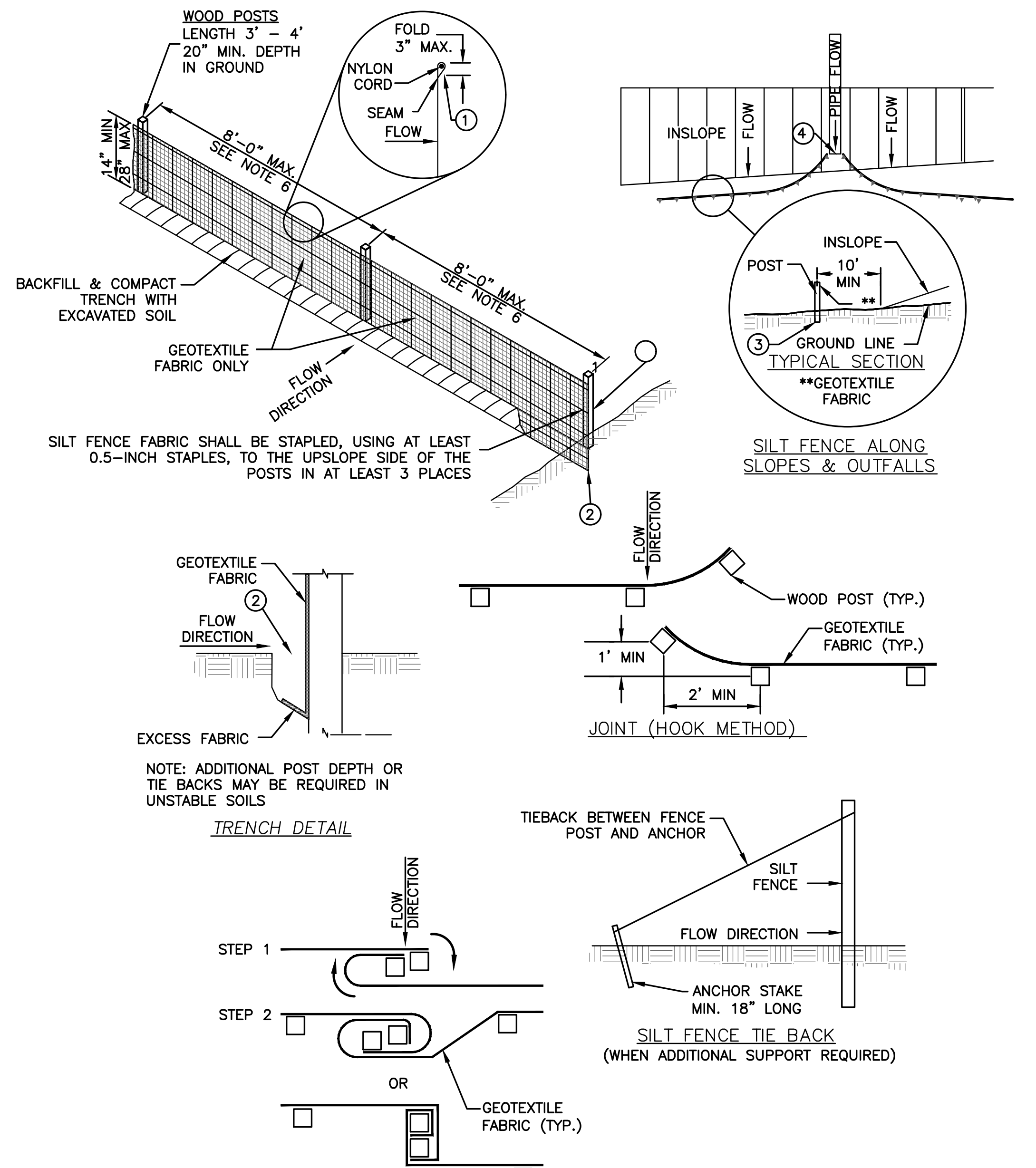
7. ALL EXISTING UTILITIES TO BE FIELD LOCATED AND FLAGGED BY CONTRACTOR.
8. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE TO REMAIN, THAT ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
9. CONTRACTOR SHALL NOTIFY BDG OF ANY ROOF LEADERS AND/OR STORM DRAIN LINES ENCOUNTERED DURING DEMOLITION WHICH ARE NOT SHOWN ON THE PLANS PRIOR TO ABANDONMENT OR REMOVAL.
10. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
11. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH THE APPROVED MUNICIPALITY RECYCLING PLAN.
12. BUILDING REMOVALS SHALL BE BY A QUALIFIED CONTRACTOR. CONTRACTOR TO FOLLOW ALL DEMOLITION REGULATIONS, DISCONNECT ALL UTILITIES, OBTAIN ALL APPLICABLE PERMITS AND DISPOSE OF ALL BUILDING MATERIALS IN APPROPRIATE LANDFILLS. DEMOLISHED MATERIALS SHALL NOT BE BURIED ON SITE. IF ENCOUNTERED, ANY CONTAMINATED BUILDING MATERIAL AND/OR SOILS SHALL BE REMOVED AND DISPOSED OF OFF–SITE BY THE CONTRACTOR IN ACCORDANCE WITH APPROPRIATE STATE AND FEDERAL REGULATIONS.



NOTE: PROPOSED LAND DISTURBAMCE AREA 0.034 ACRE

SITE GRADING PLAN

SCALE: 1' = 20'

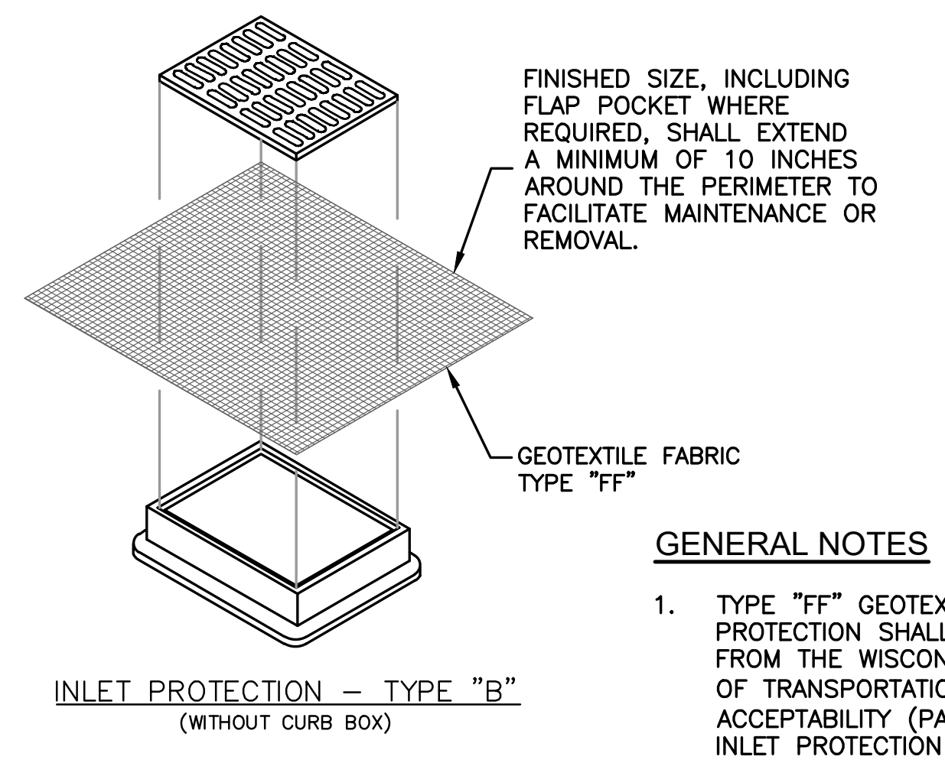


SILT FENCE DETAIL

N.T.S.

GENERAL NOTES

1. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8–INCHES OF FABRIC IN A 4–INCH WIDE AND 6–INCH DEEP TRENCH OR 6–INCH DEEP V–TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
2. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125–INCHES x 1.125–INCHES OF DRIED OAK OR HICKORY.
4. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE.
5. SILT FENCE CONSTRUCTION AND GEOTEXTILE FABRIC SHALL CONFORM TO WDNR TECHNICAL STANDARD 1056.
6. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8–FEET FOR WOVEN & 3–FEET FOR NON–WOVEN)



INLET PROTECTION – TYPE "B"
(WITHOUT CURB BOX)

TYPE "B" INSTALLATION NOTES

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

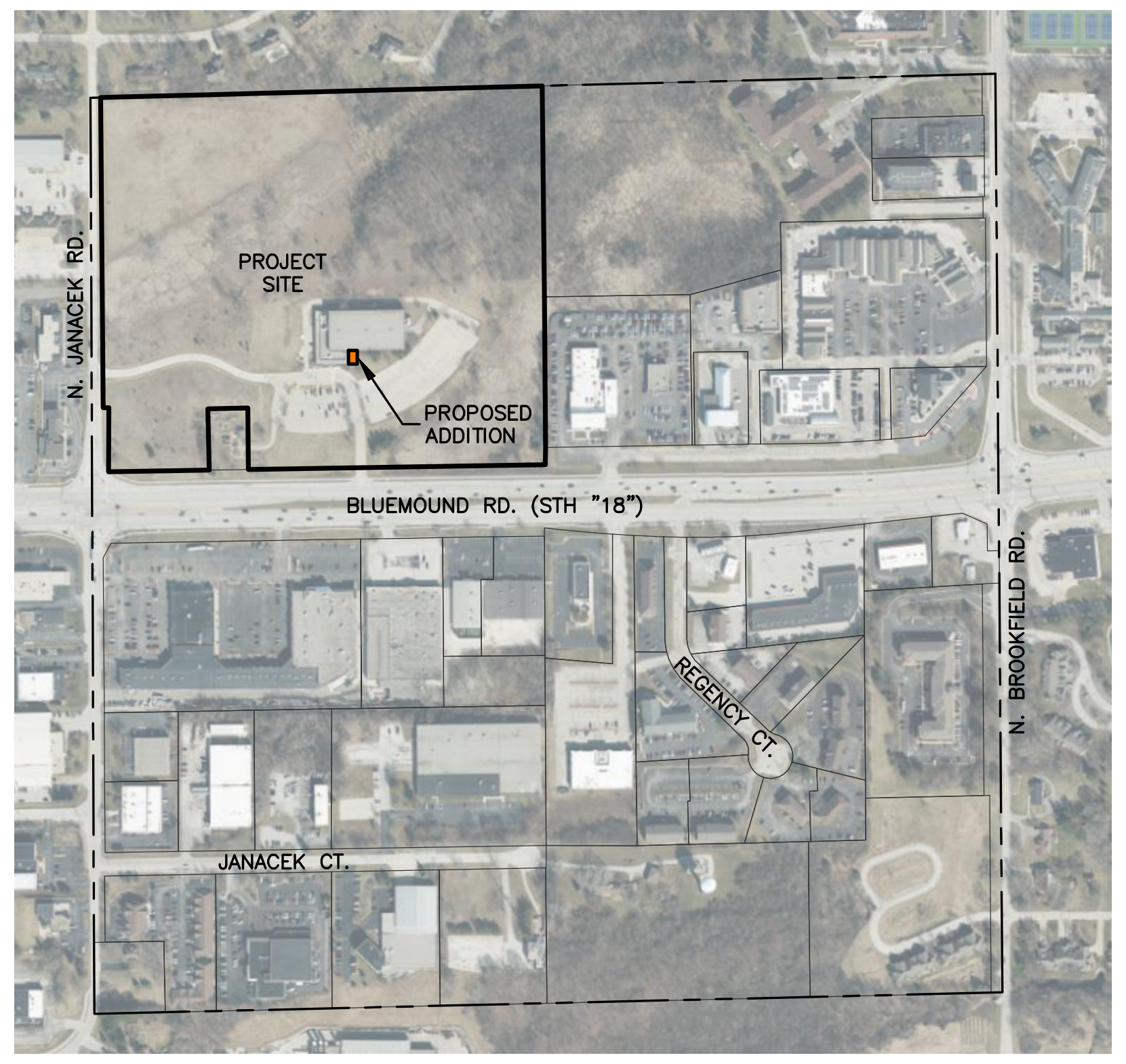
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GENERAL NOTES

1. TYPE "FF" GEOTEXTILE FABRIC INLET PROTECTION SHALL BE SELECTED FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S PRODUCT ACCEPTABILITY (PAL) LIST. FABRIC INLET PROTECTION AND MANUFACTURED ALTERNATIVES SHALL BE IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1060.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

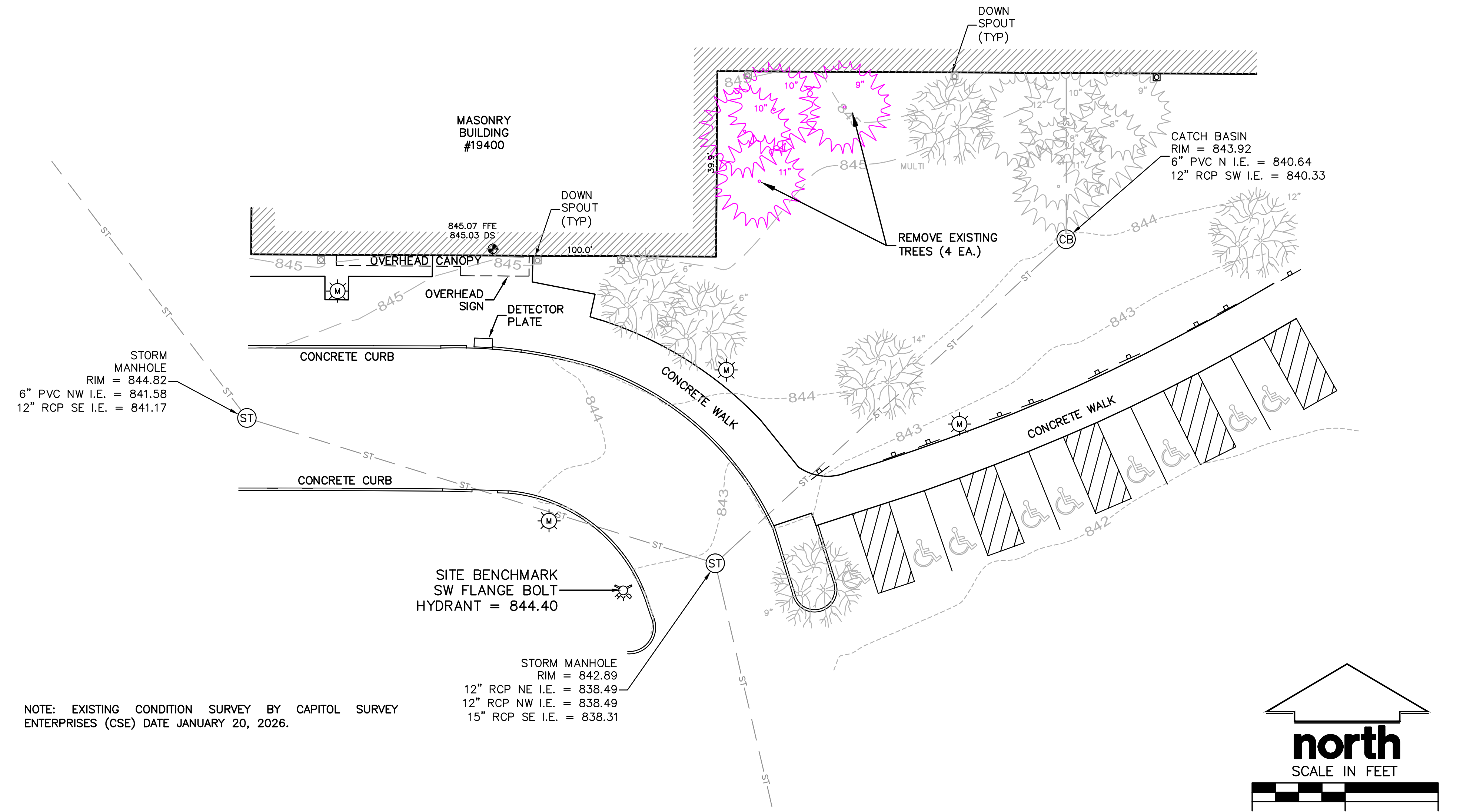
INLET PROTECTION

N.T.S.



PROJECT SITE

SE 1/4 SEC. 29–7–20
SCALE: 1' = 500'



NOTE: EXISTING CONDITION SURVEY BY CAPITOL SURVEY ENTERPRISES (CSE) DATE JANUARY 20, 2026.

SITE EXIST CONDITION/DEMOLITION PLAN

SCALE: 1' = 20'

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
SITE CIVIL PLAN

PROPOSED BUILDING ADDITION FOR:
EBLE ICE AREA
19400 W. BLUEMOUND RD.
TOWN OF BROOKFIELD, WISCONSIN

Date	Revision

JOB:	250074
DRAWN:	XXX
CHECKED:	XXX
DATE:	02-17-2026

SHEET:
C1.0

GENERAL

LANDSCAPE NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
2. CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
3. CONTRACTOR SHALL PROVIDE MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
4. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
5. TOP OF MULCH SHALL BE ½" MINIMUM BELOW THE TOP OF WALKS AND CURBS
6. ALL REQUIRED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED CONTROLLERS AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.

MAINTENANCE NOTES

1. THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE.
2. THE LANDSCAPE SHALL BE MAINTAINED IN A MANNER COMMON TO THE PRACTICE, INCLUDING MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING, TRASH REMOVAL, AND OTHER SUCH ACTIVITIES.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK FROM THE TIME OF PLANTING FOR 60 DAYS, OR UNTIL FINAL ACCEPTANCE BY THE OWNER. AN ON-SITE INSPECTION BY THE OWNER'S AGENT WILL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
4. DURING WORK, PREMISES SHALL BE KEPT NEAT AND ORDERLY AT ALL TIMES. ALL TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AS THE WORK PROGRESSES. KEEP PAVED AREAS CLEAN BY SWEEPING OR HOSING THEM AT THE END OF EACH WORK DAY.
5. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS THROUGH ONE (1) YEAR AFTER FINAL ACCEPTANCE BY THE OWNER'S AGENT. PLANTS SHALL BE IN HEALTHY CONDITION AT THE END OF THE GUARANTEE PERIOD. ALL PLANT MATERIALS WHICH DIE SHALL BE REPLACED WITH PLANT MATERIAL OF EQUAL OR BETTER VALUE AT NO COST TO OWNER. RESTORE BEDS AS NECESSARY FOLLOWING PLANT REPLACEMENT.
6. THE OWNER SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE, REPAIR AND REPLACEMENT OF ALL LANDSCAPING MATERIALS AS NECESSARY FOLLOWING THE 60 DAY CONTRACTOR MAINTENANCE PERIOD.

QUALITY ASSURANCE

1. LANDSCAPE CONTRACTOR SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.
2. SELECTION OF PLANT MATERIAL: MAKE CONTACT WITH SUPPLIERS IMMEDIATELY UPON NOTICE OF CONTRACT ACCEPTANCE TO SELECT AND BOOK MATERIALS.
3. SUBSTITUTIONS: DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY TO LANDSCAPE ARCHITECT, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL. WRITTEN VERIFICATION WILL BE REQUIRED DOCUMENTING MATERIAL SELECTION, SOURCE AND DELIVERY SCHEDULE TO SITE.
4. MEASUREMENTS: TAKE CALIPER MEASUREMENTS OF TREES SIX INCHES ABOVE GROUND. MEASURE MAIN BODY OF ALL PLANT MATERIAL FOR HEIGHT AND SPREAD DIMENSIONS, NOT FROM TIP-TO-TIP.
5. LANDSCAPE ARCHITECT OR OWNER, SHALL INSPECT ALL PLANT MATERIAL WITH RESPECT TO GENUS, SPECIES, CULTIVAR/VARIETY, SIZE AND QUALITY, INCLUDING SIZE AND CONDITION OF ROOT SYSTEMS, LIMBS, BRANCHING HABIT, INSECTS, INJURIES, OR OTHER LATENT DEFECTS UPON ARRIVAL TO SITE OR DURING INSTALLATION.
6. LANDSCAPE ARCHITECT OR OWNER MAY REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING THE WORK PROCESS. REMOVE REJECTED MATERIALS FROM SITE AND REPLACE WITH ACCEPTABLE MATERIAL AT NO ADDITIONAL COST TO THE OWNER. PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.

PRODUCT DELIVERY, STORAGE AND HANDLING

1. DELIVER ONLY PLANT MATERIALS THAT CAN BE PLANTED IN ONE DAY UNLESS ADEQUATE STORAGE AND WATERING FACILITIES ARE AVAILABLE ON THE JOB SITE.
2. PROTECT PLANTS DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALLS OR DESICCATION OF LEAVES. KEEP PLANTS MOIST AT ALL TIMES. COVER ALL MATERIALS DURING TRANSPORT. PROTECT ROOT BALLS BY HEELING IN WITH SAWDUST OR OTHER APPROVED MOISTURE RETAINING MATERIAL IF NO PLANTED WITHIN 24 HOURS OF DELIVERY.
3. TO AVOID DAMAGE OR STRESS, DO NOT LIFT, MOVE, ADJUST TO PLUMB, OR OTHERWISE MANIPULATE PLANTS BY TRUNK OR STEMS.
4. DELIVER PLANTS WITH LEGIBLE IDENTIFICATION LABELS.

MATERIALS

PLANTS

1. ALL PLANTS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1, MOST RECENT EDITION.
2. PLANTS SHALL CONFORM TO THE SIZE GIVEN ON THE PLAN, AND SHALL BE HEALTHY, SYMMETRICAL, WELL-SHAPED, FULL BRANCHED AND FREE OF DISEASE AND INSECTS.
3. ALL PLANTS WHICH ARE FOUND UNSUITABLE IN GROWTH, OR ARE IN ANY UNHEALTHY, BADLY SHAPED, OR UNDERSIZED CONDITION WILL BE REJECTED BY THE LANDSCAPE ARCHITECT EITHER BEFORE OR AFTER PLANTING AND SHALL BE REMOVED AT THE EXPENSE OF THE LANDSCAPE CONTRACTOR AND REPLACED WITH ACCEPTABLE PLANT AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.
4. PLANTS SHALL NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST 2 YEARS.
5. PLANTS SHALL BE FRESHLY DUG FROM DURING THE MOST RECENT APPROPRIATE HARVEST SEASON.
6. PRUNING SHALL BE LIMITED TO DEAD BRANCHES, LIMBS DAMAGED OR BROKEN DURING THE PLANTING PROCESS. PRUNING SHALL CONFORM TO AMERICAN STANDARD FOR TREE CARE OPERATIONS ANSI A300.

SOILS

1. PLANTING SOIL AND TOPSOIL TO BE A CLEAN, FRIABLE LOAM FROM A LOCAL SOURCE, FREE FROM STONES OR DEBRIS OVER ¾" IN DIAMETER, AND FREE FROM TOXINS AND WEEDS. TOPSOIL SHALL HAVE A pH VALUE BETWEEN 5.5 AND 7. ORGANIC MATERIAL SHALL BE 2.0-5.0% OF TOTAL DRY WEIGHT. SOLUBLE SALT LEVELS SHALL BE LESS THAN 2 mmho/cm. PLANTING SOIL AND TOPSOIL SHALL BE TESTED AND AMENDED TO MEET THESE SPECIFICATIONS.
2. COMPOST SHALL BE COMMERCIALLY PREPARED, PEAT-FREE COMPOST AND MEET US COMPOST COUNCIL STA/TMECC CRITERIA AND SHALL CONSIST OF PLANT-BASED MATERIALS, COMPOSTED FOR A MINIMUM OF 9 MONTHS AT TEMPERATURES SUFFICIENT TO BREAK DOWN ALL WOODY FIBERS, SEEDS, AND LEAF STRUCTURES.
3. ALL PLANTING AREAS WITHIN THE DRIP LINE OF EXISTING TREES SHALL BE PREPARED BY TILLING EXISTING SOIL TO A DEPTH OF SIX (6") INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. APPLY FERTILIZER AS PER MANUFACTURER'S RECOMMENDATIONS. ADD THREE (3") INCHES OF COMPOST AND TILL INTO A DEPTH OF SIX (6") INCHES OF THE TOPSOIL. ALL PLANTING AREAS WITHOUT EXISTING TREES SHALL BE PREPARED BY TILLING EXISTING SOIL TO A DEPTH OF EIGHTEEN (18") INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. APPLY FERTILIZER AS PER MANUFACTURER'S RECOMMENDATIONS. ADD SIX (6") INCHES OF COMPOST AND TILL INTO A DEPTH OF EIGHTEEN (18") INCHES OF THE TOPSOIL.
4. BACKFILL FOR TREE PITS SHALL CONSIST OF EXISTING TOPSOIL ON SITE (OR IMPORTED AS NEEDED) FREE FROM LARGE CLUMPS, ROCKS, DEBRIS, SUBSOILS, ETC., PLACED IN NINE (9") LAYERS AND WATERED IN THOROUGHLY.

OTHER MATERIALS

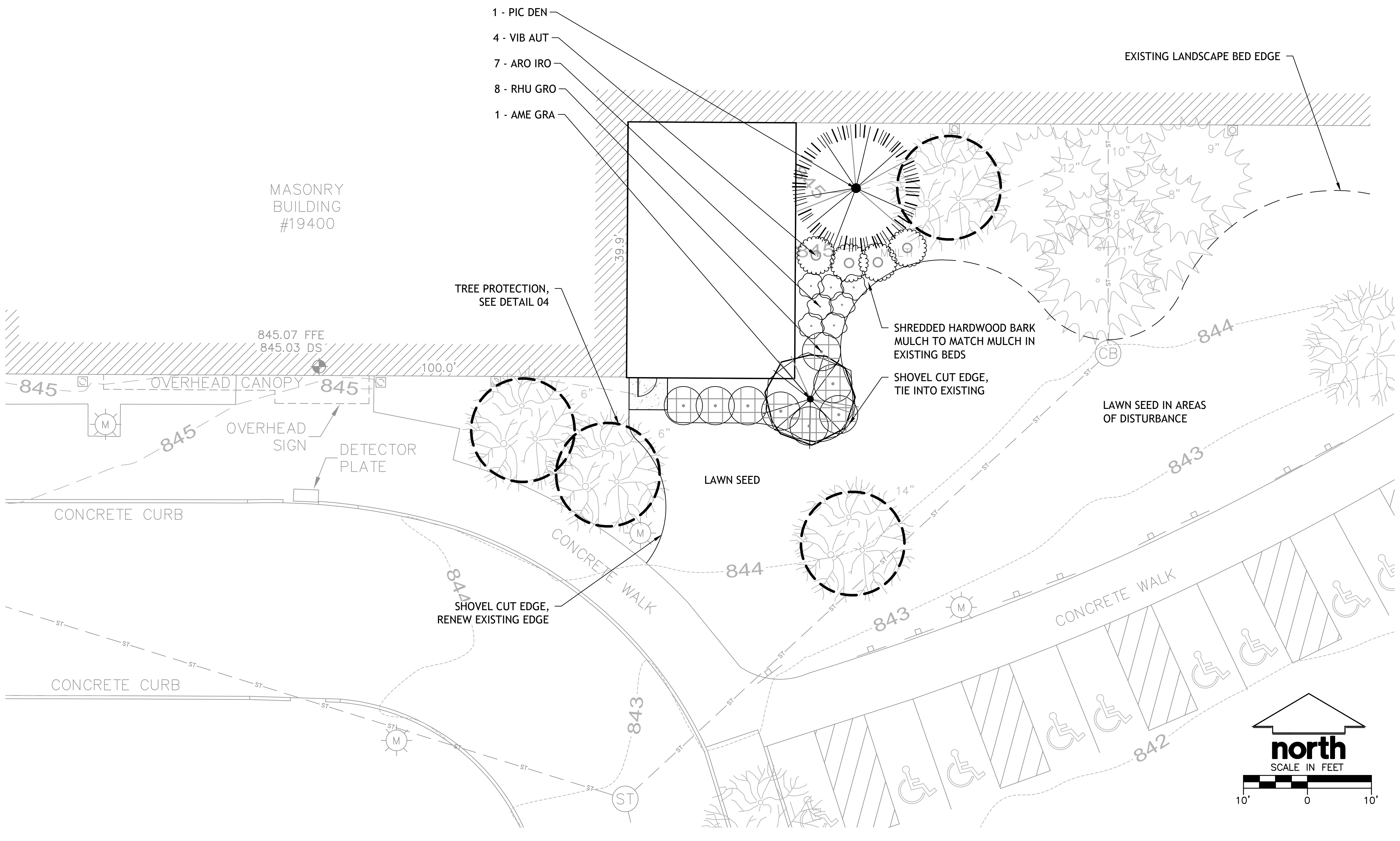
1. SHREDDED HARDWOOD BARK MULCH: ALL PLANTING AREAS LABELED ON PLAN SHALL RECEIVE CERTIFIED WEED-FREE SHREDDED HARDWOOD BARK MULCH SPREAD TO A DEPTH OF FOUR (4") INCHES OVER ALL PLANTING AREAS. SHREDDED HARDWOOD BARK MULCH, SIZE AND COLOR TO BE APPROVED BY OWNER'S AGENT PRIOR TO INSTALLATION.
2. EDGING: EDGING SHALL BE SHOVEL CUT EDGE PER DETAIL THIS PAGE.
3. LAWN SEED: DISTURBED LAWN AREAS LABELED AS SUCH ON PLAN, SHALL BE SPREAD BY HAND BROADCAST METHOD OR APPROPRIATE SPREADER EQUIPMENT WITH 'MADISON PARKS' OR EQUIVALENT SEED MIX AS APPROVED BY OWNER'S AGENT, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. IN ADDITION TO LAWN SEED, ANNUAL RYE SHALL BE APPLIED TO ALL DISTURBED AREAS WITH SLOPES EXCEEDING 3:1 AT A RATE OF 1 ½ POUNDS PER 1000 SQUARE FEET. FERTILIZE AND MULCH PER MANUFACTURER'S RECOMMENDATIONS.

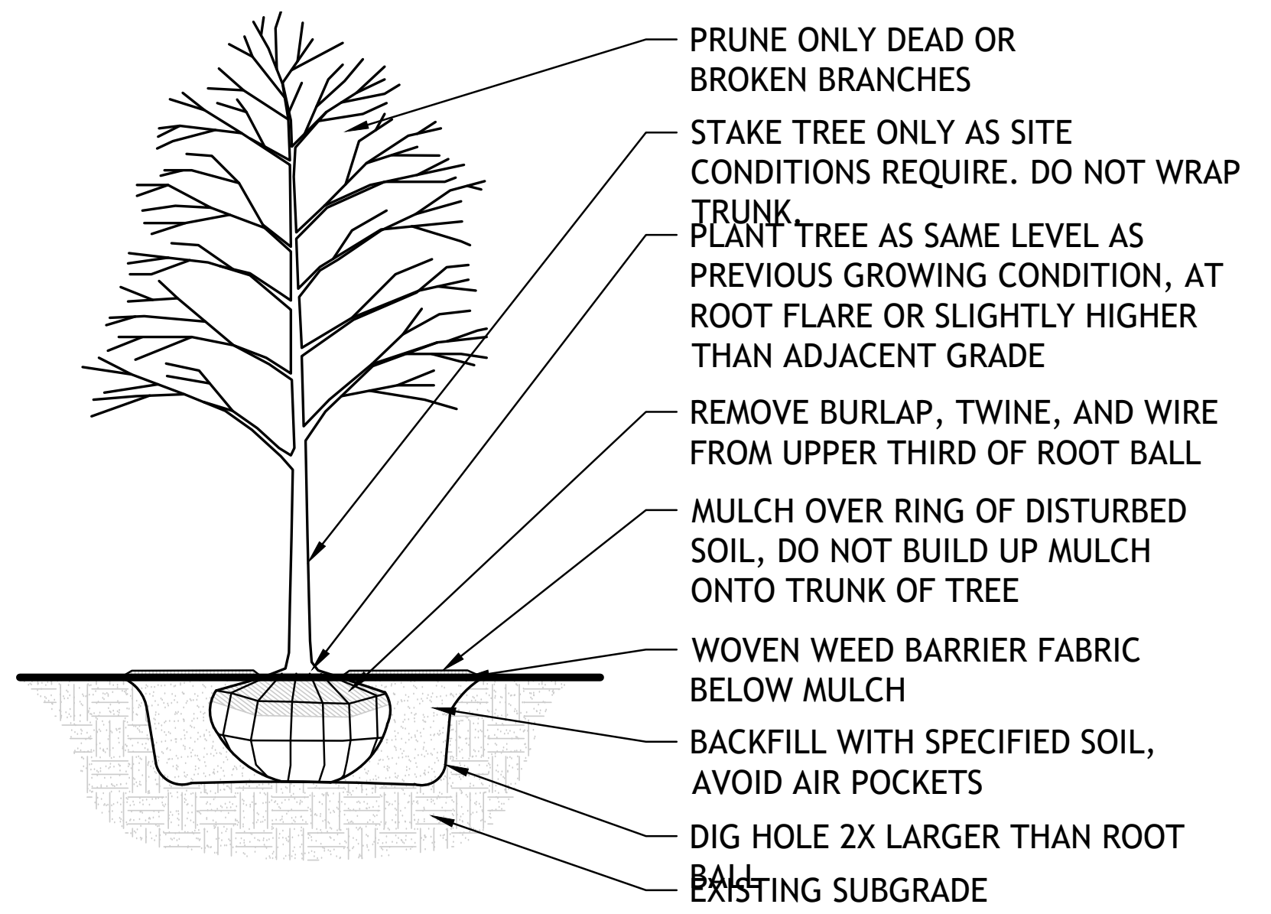
INSTALLATION

1. PLANT MATERIALS SHALL BE DELIVERED TO THE SITE ONLY AFTER THE BEDS ARE PREPARED AND AREAS ARE READY FOR PLANTING.
2. EXCAVATE PITS WITH VERTICAL SIDES AND HORIZONTAL BOTTOM. TREE PITS SHALL BE LARGE ENOUGH TO PERMIT HANDLING AND PLANTING WITHOUT INJURY TO THE ROOT BALLS, AND SHALL BE PLACED AT THE SAME DEPTH RELATIVE TO FINISH GRADE AS IT DID TO THE SOIL SURFACE IN THE ORIGINAL PLACE OF GROWTH.
3. SHRUB AND TREE PITS SHALL BE NO LESS THAN TWO TIMES WIDER THAN THE LATERAL DIMENSIONS OF THE EARTH BALL AND NO DEEPER THAN ITS VERTICAL DIMENSION. THE SIDES OF THE HOLE SHALL BE ROUGH AND JAGGED, NEVER SLICK AND GLAZED, ROUGH UP WITH SHOVEL IF NEEDED.
4. BACKFILL HOLE WITH 5 PARTS EXISTING SOIL AND 1 PART PLANT BED PREPARATION SOIL. CAREFULLY SETTLE BY WATERING TO PREVENT AIR POCKETS. REMOVE THE BURLAP, NYLON, STRING, AND WIRE FROM THE TOP ⅓ OF THE BALL. MULCH THE TOP OF THE BALL WITH A MINIMUM OF TWO (2") INCHES OF SPECIFIED MULCH OVER THE PLANTING PIT.
5. DO NOT WRAP TREES. STAKE TREES AND LARGE SHRUBS ONLY AS SITE CONDITIONS REQUIRE.

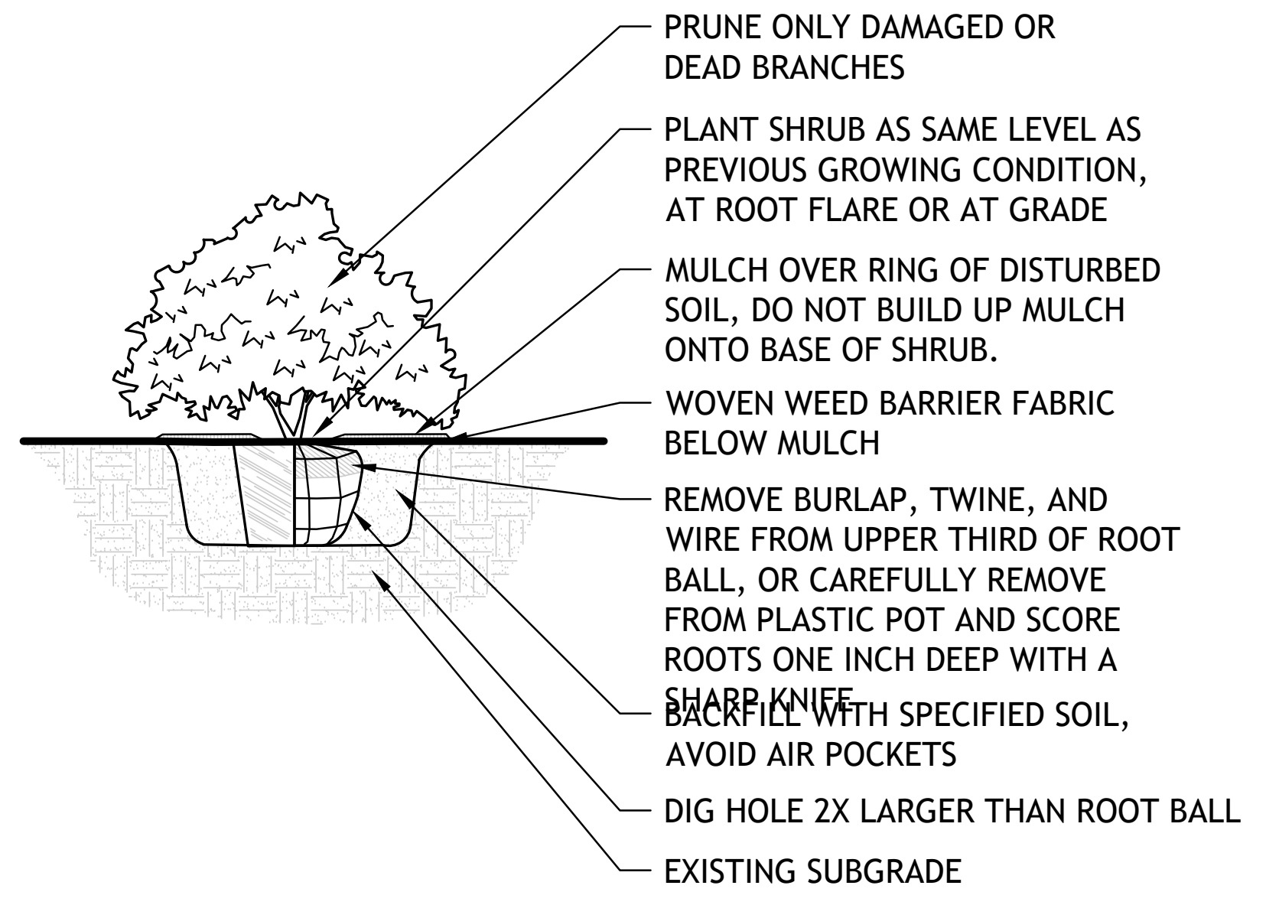
PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	PLANTING SIZE	MATURE HT	MATURE SP	QTY
TREES							
⊛	AME GRA	Amelanchier x grandiflora \`Autumn Brilliance\` / \`Autumn Brilliance\` Serviceberry	B & B	6 FT. Tall Min.	30\`	25\`	1
✹	PIC DEN	Picea glauca \`Densata\` / Black Hills Spruce	B & B	6 FT. Tall Min.	30\`	25\`	1
SHRUBS							
✿	ARO IRO	Aronia melanocarpa \`Iroquois Beauty\` / Black Chokeberry	3 gal	Container	3\`	4\`	7
⊕	RHU GRO	Rhus aromatica \`Gro-Low\` / Gro-Low Fragrant Sumac	3 gal	Container	2\`	6\`	8
◎	VIB AUT	Viburnum dentatum \`Autumn Jazz\` / Southern Arrowwood	3 gal	Container	10\`	6\`	4

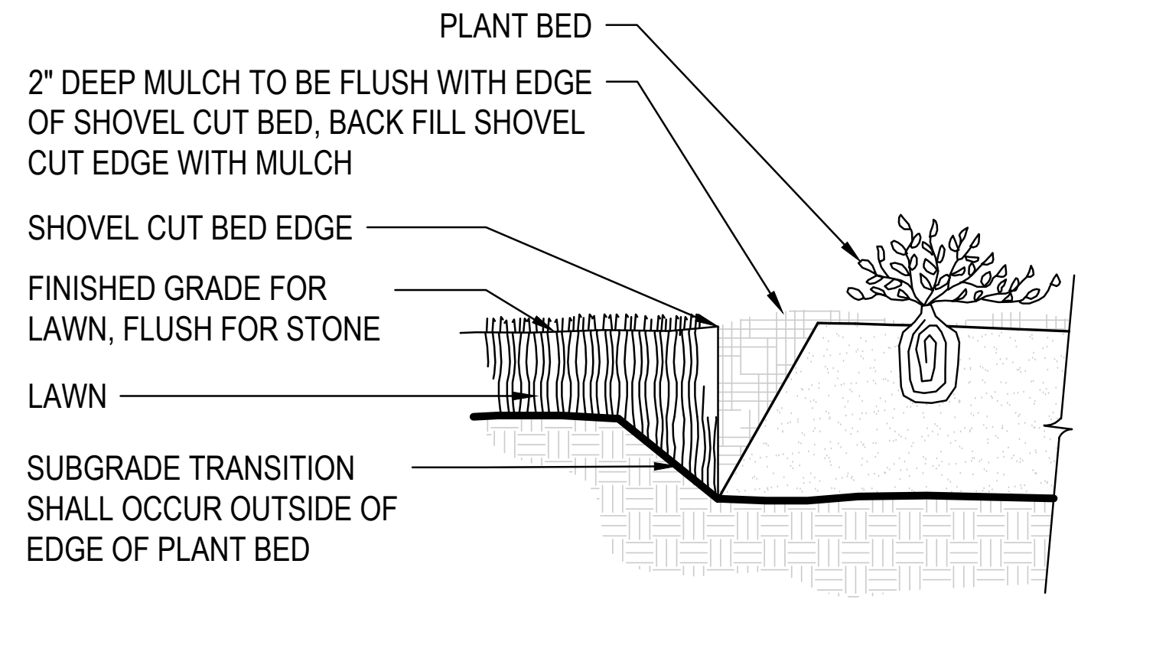




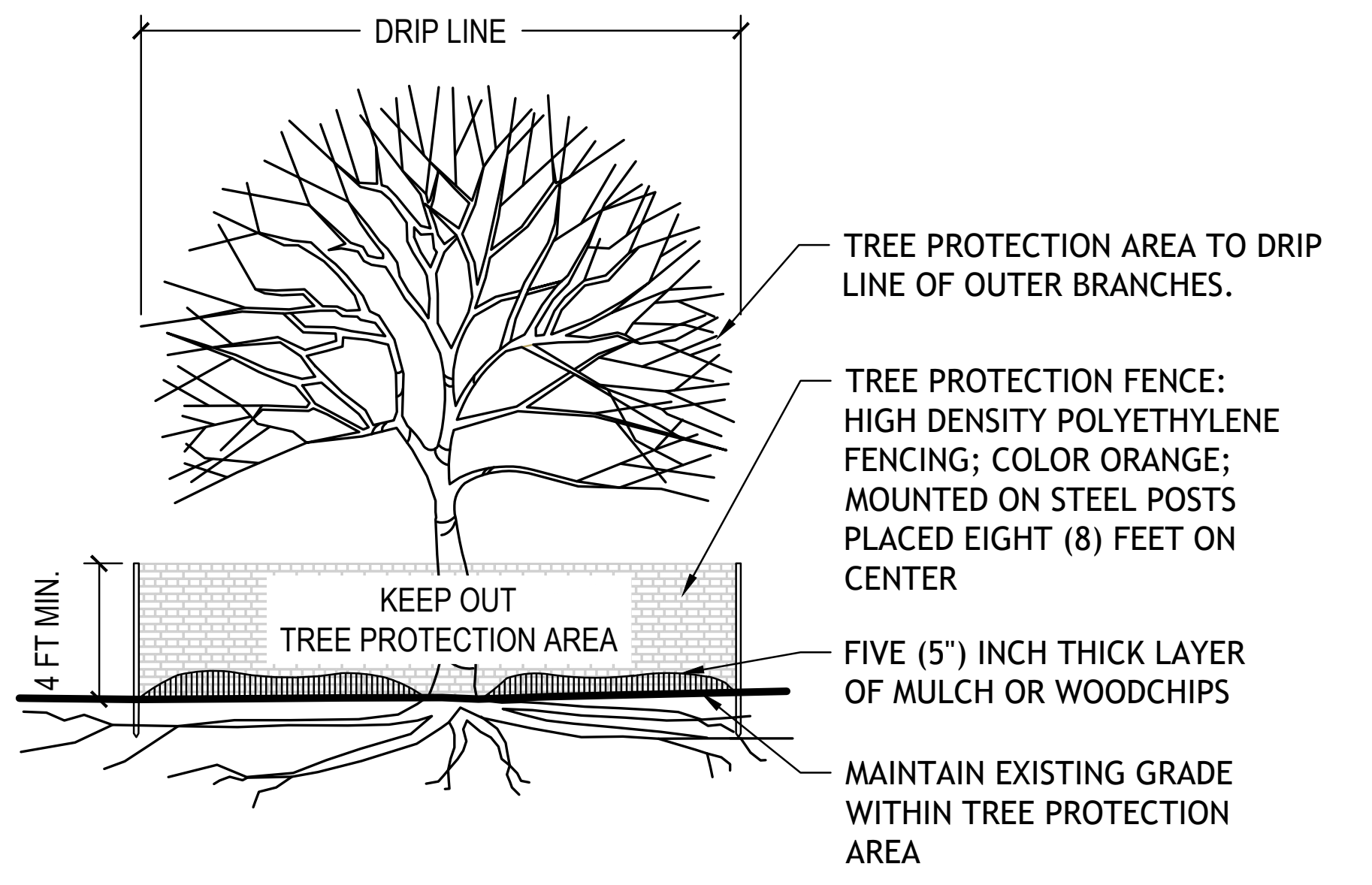
01 TREE PLANTING
NTS



02 SHRUB PLANTING
NTS



03 SHOVEL CUT EDGE
NTS



04 TREE PROTECTION
NTS

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

LANDCO2
P.O. BOX 12043
MILWAUKEE, WI 53212
www.LANDCO2.com

SHEET TITLE
LANDSCAPE PLAN, NOTES, DETAILS & SCHEDULE

PROPOSED BUILDING ADDITION FOR:
EBLE ICE AREA
19400 W. BLUEMOUND RD.
TOWN OF BROOKFIELD, WISCONSIN

Date	Revision

JOB:	250074
DRAWN:	MP
CHECKED:	JS/HG
DATE:	02-17-2026

SHEET:
L1.0

File: K:\Projects\250074 – MUHS Locker Room Eble Ice Arena\07 Design\Drawings_BDG Civil\dwg\250074 LANDSCAPE.dwg Layout: L1.0 User: riskandarsjach Plotted: Feb 16, 2026 – 8:29am Xref's:

GENERAL NOTES

THE FOLLOWING SHALL APPLY TO ALL SUBCONTRACTORS AND SUPPLIERS ENGAGED IN EXECUTION OF THE WORK SHOWN ON THESE DRAWINGS AND SPECIFICATIONS.

PART 1: DEFINITIONS
1. AS REQUIRED: AS REQUIRED BY REGULATORY REQUIREMENTS, BY REFERENCED STANDARDS, BY EXISTING CONDITIONS, BY GENERALLY ACCEPTED CONSTRUCTION PRACTICE, OR BY THE CONTRACT DOCUMENTS.
2. TYPICAL: IDENTICAL FOR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
3. SIMILAR: COMPARABLE CHARACTERISTICS FOR THE CONDITION NOTED. DIFFERENCES CAN BE INFERRED FROM OTHER INFORMATION INDICATED. VERIFY DIMENSIONS AND ORIENTATIONS.
4. REMOVE: ELIMINATE AND RECYCLE OR DISPOSE OF PROPERLY.
5. PER MANUFACTURER'S INSTRUCTIONS: PERFORM THE WORK IN STRICT ACCORDANCE WITH THE MOST CURRENT WRITTEN MANUFACTURER'S INSTRUCTIONS.

PART 2: CODE, PERMITS, AND JURISDICTIONAL AUTHORITY
1. ALL WORK, MATERIALS, AND INSTALLATION SHALL CONFORM TO ALL APPLICABLE PROVISIONS OF THE LOCAL AND STATE CODES, REFERENCED NATIONAL CODES, ORDINANCES, AND REFERENCE STANDARDS AS INDICATED ON T1.0 AND ELSEWHERE IN THE DRAWINGS.
2. WHERE A CODE, ORDINANCE, MANUAL, OR REFERENCE STANDARD IS INDICATED IN THESE SPECIFICATIONS AND DRAWINGS, THE VERSION RERENCED SHALL BE THE CURRENT ADOPTION BY LOCAL AND STATE AUTHORITIES, OR THE LATEST EDITION.
3. DESIGN LOADS SHALL CONFORM TO ALL GOVERNING CODES OF THE AUTHORITIES HAVING JURISDICTION, AND ALL CONSTRUCTION IS TO COMPLY WITH ALL LOCAL SEISMIC REQUIREMENTS.
4. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER APPLICATION FOR AND SECURING OF ALL NECESSARY PERMITS AND INSPECTIONS FROM THE AUTHORITY HAVING JURISDICTION.

PART 3: FIRE PROTECTION DESIGN AND CONSTRUCTION PROTECTION
A. SUBCONTRACTOR SHALL VERIFY THAT AN ADEQUATE NUMBER OF FIRE EXTINGUISHERS EXIST IN THE EXISTING STRUCTURE, AND SHALL PROVIDE ADDITIONAL EXTINGUISHERS AS REQUIRED BY CODE AND/OR INSURANCE COMPANIES (FOLLOW MORE STRINGENT REQUIREMENTS) DURING CONSTRUCTION.
B. THE GENERAL CONTRACTOR SHALL EMPLOY THE SERVICES OF A LICENSED FIRE SPRINKLER CONTRACTOR TO REWORK AND MODIFY THE EXISTING SYSTEM TO CONFORM WITH THE NEW ROOM AND CEILING HEIGHTS AS SHOWN IN THESE DRAWINGS. THE SPRINKLER CONTRACTOR SHALL DESIGN AND PREPARE SHOP DRAWINGS FOR THE PROPOSED SYSTEM MODIFICATIONS AND SUBMIT THESE DRAWINGS TO THE LOCAL AND STATE BUILDING CODE OFFICIALS AND THE ARCHITECT FOR APPROVAL PRIOR TO CONNECTING ANY WORK. PROVIDE CONCEALED HEADS FOR AREAS WITH FINISHED CEILINGS UNLESS OTHERWISE NOTED.

PART 4: DRAWINGS
1. THE COMPLETE CONSTRUCTION DOCUMENT SET IS INCLUSIVE OF ALL DRAWING SHEETS LISTED IN THE DRAWING INDEX.
2. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS.
3. DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS SUPERSEDE DIMENSIONS SHOWN ON STRUCTURAL PLANS.
4. INFORMATION RELATED TO EXISTING CONDITIONS GIVEN IN THE CONSTRUCTION DOCUMENTS WAS OBTAINED FROM EXISTING BUILDING SCHEMATIC DRAWINGS, FIELD SURVEYS, AND OBSERVATIONS AVAILABLE AT THE TIME OF DESIGN. ACCURACY CAN NOT BE GUARANTEED. DEPICTIONS OF EXISTING CONDITIONS ARE INTENDED FOR ASSISTANCE AND GUIDANCE, BUT EXACT DIMENSIONS AND ELEVATIONS SHALL BE GOVERNED BY ACTUAL CONDITIONS AT THE SITE AND SHALL BE VERIFIED BY THE SUBCONTRACTOR.
5. NOTES ARE AN AID FOR THE SUBCONTRACTOR IN UNDERSTANDING THE WORK AND SHALL NOT BE CONSTRUED AS BEING COMPLETE IN EVERY DETAIL. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VISIT THE SITE, BECOME THOROUGHLY FAMILIAR WITH THE WORK AND REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS TO THE ARCHITECT AND THE GENERAL CONTRACTOR.
6. THE DRAWINGS INDICATE LOCATION, DIMENSIONS, REFERENCE AND TYPICAL DETAILS OF CONSTRUCTION. THE DRAWINGS DO NOT ILLUSTRATE EVERY CONDITION; WORK NOT PARTICULARLY DETAILED SHALL BE OF CONSTRUCTION SIMILAR TO PARTS THAT ARE DETAILED. VERIFY WITH ARCHITECT AND GENERAL CONTRACTOR PRIOR TO FABRICATION OR INSTALLATION OF SPECIFIC DETAILS OF CONSTRUCTION.
7. DIMENSIONS
   A. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT THE APPROVAL OF THE ARCHITECT AND GENERAL CONTRACTOR UNLESS NOTED +/-.
   B. VERTICAL DIMENSIONS ARE FROM THE TOP OF FLOOR FINISH, ESTABLISHED BY THE ARCHITECT AND GENERAL CONTRACTOR, UNLESS OTHERWISE NOTED.
   C. DIMENSIONS MARKED "FIELD VERIFY" SHALL BE VERIFIED IN THE FIELD BY THE SUBCONTRACTORS AFFECTED.
   D. HORIZONTAL DIMENSIONS ARE SHOWN FROM THE FINISHED FACE OF CONSTRUCTION UNLESS OTHERWISE NOTED.
   E. CONSTRUCTION DOCUMENTS SHOW DIMENSIONS AND ELEVATIONS TO SIGNIFICANT WORKING POINTS. MATERIAL SUPPLIERS AND DESIGNERS ARE RESPONSIBLE FOR ALL OTHER INFORMATION IN ORDER TO DETAIL/FABRICATE THEIR WORK.
8. ALLOWABLE TOLERANCES -
   A. UNLESS OTHERWISE NOTED OR INDICATED, THE FOLLOWING TOLERANCES SHALL APPLY TO WORK WITHIN AND RELATED TO THE SCOPE OF THESE DOCUMENTS:
      1. VERTICAL SURFACES: PLUMB OR CONSTRUCTED TO THE EXACT SLOPES OR ANGLES INDICATED.
      2. HORIZONTAL SURFACES: LEVEL OR CONSTRUCTED TO THE EXACT ANGLE INDICATED.
      3. DEVIATION FROM THE TRUE PLANE: ≤ 1/8" IN 10'-0" AS MEASURED BY A STRAIGHT EDGE PLACED ANYWHERE ON THE SURFACE.
         a. APPLICABLE TO VERTICAL AND HORIZONTAL SURFACES.
      4. WALL AND SOFFIT INTERSECTIONS: 90° OR THE EXACT ANGLE INDICATED OR SHOWN.
      5. CORNERS AND EDGES: STRAIGHT AND TRUE WITHOUT DENTS, WAVES, BULGES OR OTHER BLEMISHES.
      6. JOINTS: TIGHT, STRAIGHT, EVEN AND SMOOTH.
      7. OPERABLE ITEMS SHALL OPERATE SMOOTHLY WITHOUT STICKING OR BINDING AND WITHOUT EXCESSIVE "PLAY" OR LOOSENESS.
   B. WHERE MANUFACTURER'S REQUIREMENTS FOR EQUIPMENT TO BE INSTALLED CONFLICT WITH THESE TOLERANCES, THE MOST RESTRICTIVE SHALL APPLY.
9. WHERE DETAILS ARE CALLED FOR IN A CERTAIN PORTION OF THE BUILDING, THEY SHALL BE DUPLICATED IN SIMILAR PORTIONS OF THE BUILDING UNLESS NOTED OTHERWISE. CLARIFY WITH ARCHITECT BEFORE SUBCONTRACTOR BEGINS WORK.
10. MECHANICAL CONTRACTORS SHALL VERIFY EXACT LOCATIONS AND DIMENSIONS WITH EQUIPMENT MANUFACTURERS. MECHANICAL CONTRACTORS SHALL VERIFY ALL SIZES AND LOCATIONS OF DUCT OPENINGS BEFORE INSTALLATION AND VERIFY DISCREPANCIES, IF ANY.
11. CONSULT PROPERTY AS-BUILT UTILITY PLANS BEFORE SAW CUTTING CONCRETE SLAB IF REQUIRED. IF AS-BUILT DRAWINGS ARE NOT AVAILABLE UTILIZE OTHER MEANS TO UNCOVER BURIED UTILITIES.
12. DISCREPANCIES AND CONFLICTS IN THE DRAWINGS
   A. EACH SUBCONTRACTOR IS CONSIDERED A SPECIALIST IN THEIR RESPECTIVE FIELD, AND PRIOR TO THE SUBMISSION OF BID OR PERFORMANCE OF WORK EACH SUBCONTRACTOR SHALL NOTIFY THE ARCHITECT AND GENERAL CONTRACTOR OF WORK IN THE DRAWINGS OR SPECIFICATIONS IN THEIR TRADE THAT CANNOT BE FULLY GUARANTEED OR CONSTRUCTED ACCORDING TO THE DESIGN INTENT.
   B. SUBCONTRACTOR TO CROSS CHECK WITH ARCHITECTURAL, HVAC, AND PLUMBING PLANS FOR OTHER DETAILS, DIMENSIONS, ELEVATIONS, OPENINGS, INSERTS, BRICK LEDGES, ETC. ARCHITECT TO BE NOTIFIED OF ANY DISCREPANCY BEFORE CONTRACTOR BEGINS WORK.
   C. DISCREPANCIES IN THE DRAWINGS SHALL BE REPORTED TO ARCHITECT AND GENERAL CONTRACTOR IMMEDIATELY. SUBCONTRACTOR SHALL NOT MAKE A DETERMINATION FOR CONFLICTS IN PLAN DIMENSIONS.
   D. DO NOT SUBSTITUTE, REVISE, OR CHANGE THE WORK WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT AND THE GENERAL CONTRACTOR.

PART 5: CONTRACTOR COMPLIANCE
1. THE SUBCONTRACTOR SHALL VISIT THE PREMISES AND VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION AND SHALL REPORT ALL DISCREPANCIES TO THE ARCHITECT AND THE GENERAL CONTRACTOR.
2. THE SUBCONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS REGARDING CONSTRUCTION PROCEDURES, INSURANCE, ETC AS SET FORTH BY THE GENERAL CONTRACTOR.
3. THE SUBCONTRACTOR SHALL SUBMIT A SPECIFIC CONSTRUCTION SCHEDULE TO THE GENERAL CONTRACTOR'S CONSTRUCTION/PROJECT MANAGER WITHIN 7 DAYS AFTER THE AWARD OF THE SUBCONTRACT.

PART 6: HAZARDOUS MATERIALS
1. IN THE EVENT HAZARDOUS MATERIALS ARE ENCOUNTERED ON THE PREMISES DURING THE EXECUTION OF THE WORK, NOTIFY THE GENERAL CONTRACTOR BEFORE PROCEEDING WITH THE WORK. PROCEED WITH WORK ONLY UPON WRITTEN APPROVAL BY THE OWNER/LANDLORD.
2. THE OWNER/LANDLORD IS RESPONSIBLE FOR DIRECTIONS TO THE GENERAL CONTRACTOR AS TO THE REMOVAL AND HANDLING OF HAZARDOUS MATERIALS.
3. REMOVAL AND HANDLING OF HAZARDOUS MATERIALS SHALL FOLLOW LOCAL AND STATE CODES AND REQUIREMENTS.

PART 7: QUALITY CONTROL
1. INSTALL WORK PLUMB, LEVEL, SQUARE, TRUE, IN PROPER ALIGNMENT, AND TO WITHIN TOLERANCES SPECIFIED OR INDICATED ON DRAWINGS.
2. PROVIDE AND COORDINATE LOCATION AND TYPE OF BLOCKING/BACKING REQUIRED WITHIN PARTITIONS AT LOCATIONS OF WALL MOUNTED ITEMS.
3. SUBCONTRACTOR SHALL PERFORM ANY AND ALL EXCAVATING, CUTTING, PATCHING, REPAIRING, RESTORING AND THE LIKE NECESSARY TO COMPLETE THE WORK OF THIS CONTRACT. RESTORE ANY DAMAGED OR AFFECTED SURFACES RESULTING FROM THE WORK OF THIS CONTRACT TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ARCHITECT, GENERAL CONTRACTOR, AND OWNER. PATCH DAMAGE CAUSED BY THE EXECUTION OF THE WORK BOTH WITHIN AND OUTSIDE THE WORK AREA.
4. PATCH AND REPAIR ALL FIREPROOFING AND FIRE STOPPING DAMAGED OR REMOVED DURING THE PERFORMANCE OF THE WORK.
5. ACCESSORIES, ETC. SHALL BE PAINTED TO MATCH THE ADJACENT SURFACE UNLESS OTHERWISE NOTED OR DIRECTED BY THE ARCHITECT AND THE GENERAL CONTRACTOR.
6. NOISE BARRIER BATTS (SOUND INSULATION) SHALL BE NON-COMBUSTIBLE.
7. ACCESSORIES, ETC. SHALL BE PAINTED TO MATCH THE ADJACENT SURFACE UNLESS OTHERWISE NOTED OR DIRECTED BY THE ARCHITECT AND THE GENERAL CONTRACTOR.
8. IN NO CASE SHALL STRUCTURAL ALTERATIONS OR WORK AFFECTING A STRUCTURAL MEMBER BE MADE, UNLESS APPROVED BY ARCHITECT.

PART 8: TEMPORARY FACILITIES, CONTROLS, AND SEQUENCING
1. NO WORK SHALL BE DONE IN NON-DESIGNATED AREAS UNLESS OTHERWISE NOTED. SCHEDULE AND PERFORM THE WORK SO THAT OTHER AREAS NOT DESIGNATED TO RECEIVE WORK WILL NOT BE DISTURBED, AND IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS.
2. NO WORK SHALL BE DONE IN OTHER NON-DESIGNATED AREAS OR OTHER TENANT AREAS UNLESS OTHERWISE NOTED. SCHEDULE AND PERFORM THE WORK SO THAT OTHER AREAS NOT DESIGNATED TO RECEIVE WORK AND OTHER TENANTS IN THE BUILDING WILL NOT BE DISTURBED, AND IN COMPLIANCE WITH THE BUILDING OWNER'S REQUIREMENTS.
3. COORDINATE WORK AS REQUIRED WITH THE OWNER'S REPRESENTATIVE INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   A. USE OF ELEVATORS, TEMPORARY STORAGE, LOADING DOCKS, AND FACILITIES.
   B. BUILDING KEYING SYSTEMS, ACCESS CONTROL, AND SECURITY.
   C. PARKING, TRASH, AND SITE AMENITIES.
4. PROVIDE NECESSARY BARRICADES, LIGHTING, SIGNAGE AND GUARDRAILS AS REQUIRED BY OWNER/LANDLORD AND/OR APPLICABLE REGULATORY AGENCIES FOR THE PROTECTION OF BUILDING OCCUPANTS, WORKERS, VISITORS, CUSTOMERS, AND PEDESTRIANS.

GENERAL NOTES

PART 8: TEMPORARY FACILITIES, CONTROLS, AND SEQUENCING (CONT.)
5. HOUSEKEEPING AND CLEANLINESS
   A. EACH SUBCONTRACTOR SHALL LEAVE THE SITE IN A NEAT, CLEAN AND ORDERLY CONDITION.
   B. WASTE AND REFUSE CAUSED BY WORK SHALL BE REMOVED FROM THE PREMISES AND DISPOSED OF OR RECYCLED PROPERLY BY THE SUBCONTRACTOR DAILY AND UPON CONCLUSION OF THEIR WORK.
   C. MAINTAIN STRICT CONTROL OF DUST AND DEBRIS EMANATING FROM THE PROJECT AREA. KEEP PROJECT AREA BROOM CLEAN AND CLEAR OF DEBRIS DAILY.
   D. FINAL CLEANING PRIOR TO FINAL INSPECTION SHALL INCLUDE A THOROUGH CLEANING OF ALL SURFACES AND REPLACEMENT OF ALL FILTERS IN NEW INSTALLED HVAC EQUIPMENT.
   E. NO RUBBISH SHALL BE LEFT ON THE PREMISES AFTER THE WORK IS COMPLETED.
6. IT IS THE SUBCONTRACTORS SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES BUT IS NOT LIMITED TO THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS AS MAY BE NECESSARY. ALL CONSTRUCTION AND ERECTION TO CONFORM TO OSHA REQUIREMENTS.

GENERAL REQUIREMENTS

PART 1: SCOPE OF WORK
1. SUBCONTRACTORS SHALL VISIT THE PREMISES WHILE BIDDING AND SHALL FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND THE REQUIREMENTS OF THE PROJECT PRIOR TO DEVELOPING THEIR BID. MATERIAL QUANTITIES SHALL BE BASED ON ACTUAL FIELD CONDITIONS AND MEASUREMENTS. DO NOT RELY ON SCALING PLANS FOR ACCURATE DIMENSIONING.
2. THE WORK SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY FOR THE WORK AS INDICATED IN THE SPECIFICATIONS, DRAWINGS AND DESIGN-BUILD CONSTRUCTION CONTRACT.
3. REMOVE, REPLACE AND/OR MODIFY ALL EXISTING CONSTRUCTION (ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL) AS REQUIRED IN ORDER TO PLACE NEW STRUCTURAL WORK SHOWN ON THE CONSTRUCTION DOCUMENTS.
4. SUBCONTRACTOR SHALL DESIGN AND PROVIDE ALL SHORING REQUIRED TO SUPPORT EXISTING CONSTRUCTION AND NEW CONSTRUCTION AS REQUIRED TO BUILD THIS PROJECT.
5. DRAWINGS HEREIN CREATE AN ENTIRE PACKAGE. ALL TRADES SHALL BE RESPONSIBLE FOR REVIEWING THEIR RESPECTIVE REQUIREMENTS AND COORDINATING THEIR HIDDEN OR EXPOSED WORK WITH OTHER RELATED TRADES.
6. UNLESS SPECIFICALLY NOTED, PROVIDE AND PAY FOR LABOR, MATERIALS AND EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT AND MACHINERY, AND OTHER FACILITIES AND SERVICES NECESSARY FOR PROPER EXECUTION AND COMPLETION OF WORK.
7. SUBCONTRACTOR SHALL PURCHASE AND MAINTAIN INSURANCE COVERAGE IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER AND GENERAL CONTRACTOR.

PART 2: COORDINATION
1. COORDINATE WORK OF THE VARIOUS TRADES AND SUBCONTRACTORS TO ASSURE EFFICIENT AND ORDERLY INSTALLATION. PROVIDE ACCOMMODATION FOR ITEMS INSTALLED AT A LATER DATE. VERIFY THAT CHARACTERISTICS OF ELEMENTS OF INTERRELATED OPERATING EQUIPMENT ARE COMPATIBLE. COORDINATE WORK OF VARIOUS SECTIONS WHICH HAVE INTERDEPENDENT RESPONSIBILITIES FOR INSTALLING, CONNECTING TO, AND PLACING IN SERVICE, SUCH EQUIPMENT. COORDINATE SPACE REQUIREMENTS AND INSTALLATION OF MECHANICAL AND ELECTRICAL WORK AND FIRE SPRINKLER SYSTEM WHICH ARE INDICATED, DETAILED OR IMPLIED DIAGRAMMATICALLY ON DRAWINGS.
2. DIMENSIONS AND FINISHES SHALL BE VERIFIED AND COORDINATED WITH EXISTING CONDITIONS PRIOR TO CONSTRUCTION, FABRICATION OR PURCHASING. IN CASE OF CONFLICT BETWEEN THE PROJECT REQUIREMENTS AND/OR EXISTING CONDITIONS, THE ONE HAVING THE MOST STRINGENT REQUIREMENTS SHALL GOVERN, AS APPROVED BY THE ARCHITECT AND THE GENERAL CONTRACTOR.
3. COORDINATE BLOCKING REQUIREMENTS WITH ADJACENT OR RELATED TRADES, ACCESSORIES, EQUIPMENT AND FIXTURES. INSTALL REQUIRED BLOCKING AT NO ADDITIONAL COST TO CONTRACT.
4. COORDINATE CONSTRUCTION SCHEDULING WITH THE OWNER, REVIEWING SCHEDULED ACTIVITIES AT OUTSET OF CONSTRUCTION.
5. THE OWNER OR OWNER'S AGENTS MAY OCCUPY PORTIONS OF THE PROJECT DURING THE FINAL STAGE OF CONSTRUCTION, WITH THE COOPERATION AND COORDINATION OF THE GENERAL CONTRACTOR AND APPROVAL OF THE LOCAL CODE OFFICIAL IF REQUIRED.

PART 3: QUALITY ASSURANCE
1. PERFORM WORK IN ACCORDANCE WITH ACCEPTABLE TRADE PRACTICE TO ENSURE HIGH QUALITY FINISHED PRODUCT. PERFORM WORK BY SKILLED MECHANICS IN ACCORDANCE WITH ESTABLISHED STANDARDS OF WORKMANSHIP IN EACH OF THE VARIOUS TRADES.
2. WHERE REQUESTED BY THE OWNER TO CERTIFY CONFORMANCE TO TRADE STANDARDS OR THE PROJECT REQUIREMENTS, THE SUBCONTRACTOR SHALL ENLIST A TESTING LABORATORY AT THE OWNER'S COST. IF THE REQUESTED TEST SHOWS NON-CONFORMANCE TO GENERALLY ACCEPTED TRADE STANDARDS OR THE PROTECT REQUIREMENTS, THE SUBCONTRACTOR SHALL CORRECT THE DEFICIENCY AT NO ADDITIONAL COSTS TO THE OWNER AND REIMBURSE THE COSTS OF THE TESTING TO THE OWNER
   A. THIS REIMBURSEMENT SHALL NOT APPLY IF THE NON-CONFORMANCE RESULTS FROM PRODUCTS INCORRECTLY LABELED BY THE MANUFACTURER OR PREVIOUSLY APPROVED CHANGES.
3. DO NOT USE MATERIALS OR EQUIPMENT FOR PURPOSES THEY ARE NOT SPECIFICALLY DESIGNED OR SPECIFIED FOR. MATERIALS AND EQUIPMENT FOR THE SAME OR SIMILAR APPLICATIONS SHALL BE THE SAME TYPE, MODEL, AND STYLE FOR THE SAME USE THE THROUGHOUT THE PROJECT OR THEY SHALL BE REJECTED.
4. PRODUCTS AND EQUIPMENT SHALL BE DELIVERED IN UNDAMAGED CONDITION AND STORED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS TO AVOID DISRUPTION OF THE WORK OR DAMAGE TO THE ITEMS. REPLACE DAMAGED OR UNFIT MATERIALS AT NO ADDITIONAL COST TO OWNER.
5. ATTACHING ANY WORK TO METAL DECK OR HANGING WORK FROM PLUMBING AND SPRINKLER PIPING OR CONDUIT IS STRICTLY PROHIBITED.
6. IT SHALL BE THE SUBCONTRACTOR'S SOLE RESPONSIBILITY TO RECEIVE, CHECK AND CONFIRM THE ARRIVAL IN GOOD ORDER ALL ITEMS CALLED FOR TO BE FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. THE SUBCONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER IN WRITING OF ANY ITEMS MISSING OR DAMAGED WITHIN 3 DAYS OF RECEIVING DATE. FAILURE TO SO NOTIFY THE ARCHITECT AND OWNER WILL BE CONSIDERED PROOF THAT PROPER QUANTITIES WERE DELIVERED IN GOOD CONDITION, AND IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY (AT SUBCONTRACTOR'S OWN COST) TO PROMPTLY REORDER, REPLACE AND/OR REPAIR ANY ITEM(S) NEEDED FOR THE PROPER COMPLETION OF THIS PROJECT, ON THE AGREED DATE OF COMPLETION
7. THE APPLICATION OF MATERIAL AND/OR EQUIPMENT BY A SUBCONTRACTOR TO WORK INSTALLED BY OTHERS CONSTITUTES ACCEPTANCE OF THAT WORK AND ASSUMPTION OF FULL RESPONSIBILITY FOR APPLICATION. PRIOR TO STARTING THE SPECIFIC APPLICATION, NOTIFY ARCHITECT IN WRITING OF ANY DEFECT OR DEFICIENCY WHICH WOULD IMPAIR COMPLETE AND SATISFACTORY APPLICATION, INSTALLATION, OR GUARANTEE OF SUBCONTRACTOR'S WORK.
8. PROVIDE ATTACHMENT AND CONNECTION DEVICES AND METHODS FOR SECURING WORK PROPERLY AS IT IS INSTALLED, TRUE TO LINE AND LEVEL, AND WITHIN RECOGNIZED INDUSTRY TOLERANCES UNLESS OTHERWISE NOTED. ALLOW FOR EXPANSION AND BUILDING MOVEMENT.
9. PROVIDE UNIFORM JOINT WIDTHS IN EXPOSED WORK, ORGANIZED FOR BEST POSSIBLE VISUAL EFFECT. REFER QUESTIONABLE VISUAL EFFECT CHOICES TO ARCHITECT AND GENERAL CONTRACTOR FOR A FINAL DECISION. RECHECK MEASUREMENTS AND DIMENSIONS OF THE WORK AS AN INTEGRAL STEP OF STARTING EACH INSTALLATION.
10. WHERE MOUNTING HEIGHTS ARE NOT INDICATED, MOUNT INDIVIDUAL UNITS OF WORK AT INDUSTRY RECOGNIZED STANDARD MOUNTING HEIGHTS FOR APPLICATIONS INDICATED. REFER QUESTIONABLE MOUNTING HEIGHT CHOICES TO ARCHITECT AND GENERAL CONTRACTOR FOR FINAL DECISION.
11. INSTALLATION OF ANY COMBUSTIBLE MATERIALS ABOVE FINISHED CEILINGS OR IN ANY OTHER CONCEALED, NON-SPRINKLERED SPACE IS STRICTLY PROHIBITED.
12. IMPOSING ANY STRUCTURAL LOAD, TEMPORARY OR PERMANENT ON ANY PART OF EXISTING OR PROPOSED STRUCTURE WITHOUT ARCHITECT AND STRUCTURAL ENGINEER'S APPROVAL IS STRICTLY PROHIBITED.
13. CUTTING ANY HOLE IN EXISTING OR PROPOSED FLOOR SLABS, WALLS, COLUMNS, BEAMS OR ROOF WITHOUT PROPER APPROVAL BY ARCHITECT AND STRUCTURAL ENGINEER AND NOT IN ACCORDANCE WITH INSTRUCTIONS HEREIN AND PROPER CONSTRUCTION PROCEDURES IS STRICTLY PROHIBITED.

PART 4: PROTECTION OF THE WORK
1. SUBCONTRACTORS SHALL TAKE CARE TO PROTECT ADJACENT AREAS FROM DUST AND DAMAGE DURING THE CONSTRUCTION PROCESS. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PROTECTION OF ADJACENT ITEMS AND SURFACES FROM DAMAGE RESULTING FROM THE FURNISHING OR INSTALLATION OF SUBCONTRACTOR'S WORK AND SHALL PROMPTLY REPLACE, AT THEIR OWN COST, WORK DAMAGED AS A RESULT OF FAILURE TO PROVIDE SUCH PROTECTION. SUBCONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PROPER PROTECTION OF HIS AND OTHERS' WORK FROM DAMAGE. USE APPROPRIATE COVERING OVER FURNITURE, DISPLAY CASES, EQUIPMENT, AND FINISHES AS REQUIRED.
2. DAMAGE DONE BY INSTALLERS TO PREVIOUSLY INSTALLED WORK SHALL BE REPAIRED TO A LIKE - NEW CONDITION OR REPLACED AT DAMAGING INSTALLERS' EXPENSE.

PART 5: TEMPORARY FACILITIES AND CONTROLS
1. FURNISH REQUIRED TEMPORARY FACILITIES AND TEMPORARY UTILITIES IMMEDIATELY AFTER RECEIPT OF NOTICE TO PROCEED FOR CONVENIENT USE BY THOSE ENGAGED IN THE PROJECT WORK.
2. SUBCONTRACTORS MUST STAY WITHIN THE BARRIERS AND MAINTAIN ACCESS TO SITE AREAS CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS. FAILURE TO MAINTAIN WORK AREAS AS INDICATED ELSEWHERE IN THESE SPECIFICATIONS WILL RESULT IN GENERAL CONTRACTOR HAVING OFFENDING MATERIALS AND DEBRIS REMOVED AND CHARGES FOR MAINTENANCE BILLED TO THE SUBCONTRACTOR.
3. PROVIDE AND COMPLETE ALL PRELIMINARY WORK AND TEMPORARY CONSTRUCTION AS INDICATED AND REQUIRED. INSTALL TEMPORARY BARRICADE AS REQUIRED BY LOCAL OFFICIALS IN MANNER STIPULATED BY SAME.
4. PROVIDE SECURITY OF THE WORK, INCLUDING TOOLS AND UNINSTALLED MATERIALS. PROTECT THE WORK, STORED PRODUCTS, CONSTRUCTION EQUIPMENT AND OWNER'S PROPERTY FROM THEFT AND VANDALISM. PROTECT THE PREMISES FROM ENTRY BY UNAUTHORIZED PERSONNEL UNTIL FINAL ACCEPTANCE BY OWNER.

PART 6: SUBSTANTIAL COMPLETION AND CLOSEOUT
1. NOTIFY THE OWNER WHEN THE WORK IS SUBSTANTIALLY COMPLETE AND READY FOR INSPECTION. PROVIDE WRITTEN OPERATION AND MAINTENANCE INSTRUCTIONS AND GUARANTEES FOR ALL EQUIPMENT AND MATERIALS INSTALLED. PROVIDE WRITTEN GUARANTEES FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.
2. OPERATION TOOLS, EQUIPMENT, AND SURPLUS MATERIALS REQUIRED TO BE PROVIDED ELSEWHERE IN THESE SPECIFICATIONS SHALL BE LEFT ON THE PREMISES IN THE LOCATIONS DIRECTED BY THE OWNER.

PART 7: SUBMITTALS AND SUBSTITUTIONS
1. NO SUBSTITUTIONS SHALL BE PERMITTED UNLESS PRIOR APPROVAL BY THE ARCHITECT AND THE GENERAL CONTRACTOR IS GIVEN.
2. SUBSTITUTION REQUESTS SHALL INCORPORATE PRODUCT DATA AND DOCUMENTATION SUFFICIENT TO ALLOW ARCHITECT TO MAKE A DETERMINATION AS TO SUITABILITY OF THE PROPOSED SUBSTITUTION.
3. SUBMITTALS REQUIRED IN THIS SECTION AND ELSEWHERE SHALL BE SUBMITTED VIA PROCORE UNDER THE SUBCONTRACTOR'S OWN LOGIN CREDENTIALS TO THE CORRECT PROJECT PAGE.
4. SUBMITTALS LISTED AND ASSIGNED IN PROCORE SHALL BE PROVIDED NOTWITHSTANDING THEIR REFERENCE OR LACK THEREOF IN THESE SPECIFICATIONS.
5. SUBMITTALS REFERENCED IN THESE SPECIFICATIONS SHALL BE PROVIDED NOTWITHSTANDING ANY LACK OF LISTING IN PROCORE. SUBMISSION MAY BE WAIVED ONLY BY EXPRESS WRITTEN PERMISSION OF CONTRACTOR AND ARCHITECT.

DEMOLITION

PART 1 GENERAL
1.1 SUMMARY
A. DEMOLITION AND REMOVAL OF ALL OR PORTIONS OF EXISTING STRUCTURES AND UTILITIES ON SITE.
B. PROTECTION OF PORTIONS OF ADJACENT STRUCTURES AND WORK DESIGNATED TO REMAIN.
C. REMOVAL OF ABANDONED UTILITIES AND WIRING.
D. REMOVAL OF MATERIALS.
E. SALVAGE OF DESIGNATED ITEMS.
F. HAZARDOUS MATERIALS: NOT KNOWN TO BE PRESENT.

PART 2 EXECUTION
1. EXPLOSIVES: USE OF EXPLOSIVES ARE STRICTLY FORBIDDEN.
2. DISCONNECT AND SEAL UTILITIES SERVING STRUCTURE TO BE DEMOLISHED PRIOR TO START OF DEMOLITION WORK.
   A. PROVIDE TEMPORARY UTILITIES FOR LOCATIONS TO REMAIN OCCUPIED IF REQUIRED.
3. DO NOT OBSTRUCT OR CLOSE STREETS, WALKS, BUILDINGS, OR PUBLIC WAYS WITHOUT THE WRITTEN PERMISSION OF THE OWNER OR AUTHORITY HAVING JURISDICTION.
4. DISPOSAL:
   A. DEBRIS AND MATERIALS DESIGNATED TO BE DEMOLISHED SHALL BE DISPOSED OF OFF SITE. BURIAL OF DEMOLISHED MATERIALS IS FORBIDDEN.
   B. BURNING OF MATERIAL IS FORBIDDEN.
5. ITEMS TO BE SALVAGED FOR REINSTALLATION: SEE PLANS
6. ITEMS TO BE SALVAGED FOR DELIVERY TO OWNER: SEE PLANS
7. ITEMS OF SALVAGE VALUE NOT NOTED TO BE SALVAGED OR RETURNED TO OWNER SHALL BECOME PROPERTY OF THE SUBCONTRACTOR AND REMOVED FROM THE AREA OF WORK. STORAGE OR SALE OF ITEMS AT PROJECT SITE IS STRICTLY PROHIBITED.

SITE WORK

WATER DISTRIBUTION

PART 1 GENERAL
1.1 SUMMARY
A. THIS SECTION INCLUDES WATER-DISTRIBUTION PIPING AND RELATED COMPONENTS OUTSIDE THE BUILDING FOR COMBINED WATER SERVICE AND FIRE-SERVICE.
B. UTILITY-FURNISHED PRODUCTS INCLUDE WATER METERS THAT WILL BE FURNISHED TO THE SITE.
C. RELATED SECTIONS:
   1. EARTHWORK
1.2 REFERENCES
A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
B. LOCAL MUNICIPALITY WATER WORKS RULES AND REGULATIONS GOVERNING WATER SERVICE AND WATER SERVICE PIPING SPECIFICATIONS, LATEST EDITION.
1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.
1.4 QUALITY ASSURANCE
A. REGULATORY REQUIREMENTS:
   1. COMPLY WITH REQUIREMENTS OF LOCAL MUNICIPALITY WATER WORKS.
   2. COMPLY WITH STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR POTABLE-WATER-SERVICE PIPING, INCLUDING MATERIALS, INSTALLATION, TESTING, AND DISINFECTION.
   3. COMPLY WITH STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR FIRE-SUPPRESSION WATER- SERVICE PIPING, INCLUDING MATERIALS, HOSE THREADS, INSTALLATION, AND TESTING.
1.5 PROJECT CONDITIONS
A. INTERRUPTION OF EXISTING WATER-DISTRIBUTION SERVICE: DO NOT INTERRUPT SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY WATER-DISTRIBUTION SERVICE ACCORDING TO REQUIREMENTS INDICATED:
   1. NOTIFY ARCHITECT AND OWNER NO FEWER THAN FIVE (5) DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF SERVICE.
   2. DO NOT PROCEED WITH INTERRUPTION OF WATER-DISTRIBUTION SERVICE WITHOUT ARCHITECT'S AND OWNER'S WRITTEN PERMISSION.
1.6 COORDINATION
A. COORDINATE CONNECTION TO WATER MAIN WITH LOCAL MUNICIPALITY WATER UTILITY.

PART 2 PRODUCTS
1. PIPE AND FITTINGS: DUCTILE-IRON OR PVC C-900 PIPE W/TRACER WITH PUSH-ON RUBBER GASKET JOINTS: CONFORM TO AWWA C151/A21.51-96 AND LOCAL MUNICIPALITY WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.
2. CORPORATION VALVES AND CURB VALVES: CONFORM TO LOCAL MUNICIPALITY WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.
3. WATER METERS:
   A. PRIMARY WATER METERS SHALL BE FURNISHED BY UTILITY COMPANY.
   B. SUB-METERS SHALL BE PROVIDED BY THE SUBCONTRACTOR IN THE QUANTITIES AND LOCATIONS INDICATED ON THE DRAWINGS AND IN COMPLIANCE WITH CODE.

PART 3 EXECUTION
1. PIPING INSTALLATION
   A. WATER-MAIN CONNECTION: TAP WATER MAIN ACCORDING TO REQUIREMENTS OF WATER UTILITY COMPANY AND OF SIZE AND IN LOCATION INDICATED.
   B. INSTALL DUCTILE-IRON OR PVC C-900 PIPE W/TRACER WATER-SERVICE PIPING ACCORDING TO AWWA C600 AND AWWA M41 AND IN ACCORDANCE WITH LOCAL MUNICIPALITY WATER WORKS' WATER SERVICE PIPING SPECIFICATIONS.
2. JOINT CONSTRUCTION
   A. MAKE PIPE JOINTS ACCORDING TO AWA C600 AND AWWA M41 AND LOCAL MUNICIPALITY WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.
3. 3.4 VALVE INSTALLATION
   A. IN ACCORDANCE WITH LOCAL MUNICIPALITY WATER WORKS WATER SERVICE PIPING SPECIFICATIONS.
4. 3.5 FIELD QUALITY CONTROL
   A. ARRANGE INSPECTION AND TESTING OF WATER SERVICE PIPING WITH LOCAL MUNICIPALITY WATER WORKS AND LOCAL MUNICIPALITY DEPARTMENT OF NEIGHBORHOOD SERVICES PLUMBING INSPECTION. CONDUCT INSPECTION AND TESTING BEFORE JOINTS ARE COVERED.
5. 3.6 CLEANING/DISINFECTION
   A. CLEAN AND DISINFECT WATER SERVICE PIPING IN ACCORDANCE WITH DCOMM CHAPTER 82.40(8)(I) AND LOCAL MUNICIPALITY WATER WORKS REQUIREMENTS.

SITE CLEARING

PART 1 GENERAL
1.1 SUMMARY
A. THIS SECTION INCLUDES THE FOLLOWING:
   1. REMOVING EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS.
   2. CLEARING AND GRUBBING.
   3. STRIPPING AND STOCKPILING TOPSOIL.
   4. REMOVING ABOVE- AND BELOW-GRADE SITE IMPROVEMENTS.
   5. DISCONNECTING AND CAPPING OR SEALING SITE UTILITIES.
   6. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES.
1.2 MATERIAL OWNERSHIP
A. EXCEPT FOR STRIPPED TOPSOIL OR OTHER MATERIALS INDICATED TO REMAIN OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.
1.3 PROJECT CONDITIONS
A. TRAFFIC: MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
   1. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION.
   2. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
B. SALVAGEABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.
C. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
D. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.

PART 2 PRODUCTS
1. OBTAIN APPROVED BORROW SOIL MATERIALS OFF-SITE WHEN SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE.

PART 3 EXECUTION
1. PREPARATION
   A. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
   B. LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.
   C. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION.
   D. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.
2. UTILITIES
   A. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED.
      a. ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
   B. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS WITHOUT ARCHITECT'S WRITTEN PERMISSION, AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED:
3. CLEARING AND GRUBBING
   A. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED.
      a. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES (200 MM), AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
4. TOPSOIL STRIPPING
   A. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
   B. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
   C. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
5. SITE IMPROVEMENTS: REMOVE EXISTING ABOVE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.
6. DISPOSAL: REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
   A. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NONRECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

SITE WORK

EARTHWORK

PART 1 GENERAL
1.1 RELATED DOCUMENTS
A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 SUMMARY
A. THIS SECTION INCLUDES THE FOLLOWING:
   1. PREPARING SUBGRADES FOR SLABS-ON-GRADE, WALKS, PAVEMENTS, LAWNS AND GRASSES AND EXTERIOR PLANTS.
   2. EXCAVATING AND BACKFILLING FOR BUILDINGS AND STRUCTURES.
   3. DRAINAGE COURSE FOR SLABS-ON-GRADE.
   4. BASE COURSE FOR CONCRETE WALKS, PAVEMENTS.
   5. BASE COURSE FOR ASPHALT PAVING.
   6. EXCAVATING AND BACKFILLING FOR UTILITY TRENCHES.
B. RELATED SECTIONS:
   1. SECTION "SITE CLEARING" FOR TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES, SITE STRIPPING, GRUBBING, STRIPPING AND STOCKPILING TOPSOIL, AND REMOVAL OF ABOVE- AND BELOW- GRADE IMPROVEMENTS AND UTILITIES.

1.3 REFERENCES
A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION
B. STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION

1.4 DEFINITIONS
A. BACKFILL: SOIL MATERIAL USED TO FILL AN EXCAVATION.
B. BASE COURSE: COURSE PLACED BETWEEN THE PREPARED SUBGRADE AND HOT-MIX ASPHALT PAVING OR CEMENT CONCRETE PAVEMENT, SIDEWALK OR CURB AND GUTTER.
C. BEDDING COURSE: COURSE PLACED OVER THE EXCAVATED SUBGRADE IN A TRENCH BEFORE LAYING PIPE.
D. BORROW SOIL: SATISFACTORY SOIL IMPORTED FROM OFF-SITE FOR USE AS FILL OR BACKFILL.
E. DRAINAGE COURSE: COURSE SUPPORTING THE SLAB-ON-GRADE THAT ALSO MINIMIZES UPWARD CAPILLARY FLOW OF PORE WATER.
F. EXCAVATION: REMOVAL OF MATERIAL ENCOUNTERED ABOVE SUBGRADE ELEVATIONS AND TO LINES AND DIMENSIONS INDICATED.
   1. AUTHORIZED ADDITIONAL EXCAVATION: EXCAVATION BELOW SUBGRADE ELEVATIONS OR BEYOND INDICATED LINES AND DIMENSIONS AS DIRECTED BY ARCHITECT. AUTHORIZED ADDITIONAL EXCAVATION AND REPLACEMENT MATERIAL WILL BE PAID FOR ACCORDING TO CONTRACT PROVISIONS FOR CHANGES IN THE WORK.
   2. UNAUTHORIZED EXCAVATION: EXCAVATION BELOW SUBGRADE ELEVATIONS OR BEYOND INDICATED LINES AND DIMENSIONS WITHOUT DIRECTION BY ARCHITECT. UNAUTHORIZED EXCAVATION, AS WELL AS REMEDIAL WORK DIRECTED BY ARCHITECT, SHALL BE WITHOUT ADDITIONAL COMPENSATION.
G. FILL: SOIL MATERIALS USED TO RAISE EXISTING GRADES.
H. PIPE COVER MATERIAL: MATERIAL WHICH IS PLACED IN A TRENCH AROUND AND OVER SEWER OR WATER PIPE ABOVE THE BEDDING COURSE.
I. STRUCTURES: BUILDINGS, FOOTINGS, FOUNDATIONS, RETAINING WALLS, SLABS, TANKS, CURBS, MECHANICAL AND ELECTRICAL APPURTENANCES, OR OTHER MAN-MADE STATIONARY FEATURES CONSTRUCTED ABOVE OR BELOW THE GROUND SURFACE.
J. SUBGRADE: SURFACE OR ELEVATION REMAINING AFTER COMPLETING EXCAVATION, OR TOP SURFACE OF A FILL OR BACKFILL IMMEDIATELY BELOW BASE COURSE, DRAINAGE FILL, OR TOPSOIL MATERIALS.
K. TRENCH BACKFILL: MATERIAL PLACED IN A TRENCH ABOVE THE PIPE COVER MATERIAL FOR SEWER OR WATER PIPE.
L. UTILITIES: ON-SITE UNDERGROUND PIPES, CONDUITS, DUCTS, AND CABLES, AS WELL AS UNDERGROUND SERVICES WITHIN BUILDINGS.

1.5 SUBMITTALS
A. MATERIAL TEST REPORTS: FROM A QUALIFIED TESTING AGENCY INDICATING AND INTERPRETING TEST RESULTS FOR COMPLIANCE OF THE FOLLOWING WITH REQUIREMENTS INDICATED:
   1. CLASSIFICATION ACCORDING TO ASTM D 2487 OF EACH ON-SITE AND BORROW SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
   2. LABORATORY COMPACTION CURVE ACCORDING TO ASTM D 1557 FOR EACH ON-SITE AND BORROW SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
B. PRE-EXCAVATION PHOTOGRAPHS OR VIDEOTAPE: SHOW EXISTING CONDITIONS OF ADJOINING CONSTRUCTION AND SITE IMPROVEMENTS, INCLUDING FINISH SURFACES, THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY EARTHWORK OPERATIONS. SUBMIT BEFORE EARTHWORK BEGINS.
C. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.6 QUALITY ASSURANCE
A. GEOTECHNICAL TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT TESTING AGENCY QUALIFIED ACCORDING TO ASTM E 329 TO CONDUCT SOIL MATERIALS AND ROCK-DEFINITION TESTING, AS DOCUMENTED ACCORDING TO ASTM D 3740 AND ASTM E 548.

1.7 PROJECT CONDITIONS
A. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED IN WRITING BY ARCHITECT AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED.
   1. NOTIFY ARCHITECT NOT LESS THAN FIVE DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
   2. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT ARCHITECT'S WRITTEN PERMISSION.
   3. CONTACT UTILITY-LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE EXCAVATING.
B. DEMOLISH AND COMPLETELY REMOVE FROM SITE EXISTING UNDERGROUND UTILITIES INDICATED TO BE REMOVED. COORDINATE WITH UTILITY COMPANIES TO SHUT OFF SERVICES IF LINES ARE ACTIVE.

PART 2 PRODUCTS
A. GENERAL: PROVIDE BORROW SOIL MATERIALS WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE FROM EXCAVATIONS.
B. SATISFACTORY SOILS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER OR ANY SOIL GROUP OR COMBINATION OF GROUPS APPROVED OF BY THE PROJECT GEOTECHNICAL ENGINEER
C. UNSATISFACTORY SOILS: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487 OR A COMBINATION OF THESE GROUPS.
   1. UNSATISFACTORY SOILS ALSO INCLUDE SATISFACTORY SOILS NOT MAINTAINED WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.
D. BASE COURSE: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.
E. ENGINEERED FILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE.
F. BEDDING COURSE: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND CONFORMING TO THE REQUIREMENTS OF SECTION 8.43.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
G. DRAINAGE COURSE: NARROWLY GRADED MIXTURE OF WASHED,CRUSHED STONE, OR CRUSHED OR UNCRUSHED GRAVEL; ASTM D 448; COARSE-AGGREGATE GRADING SIZE 57; WITH 100 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND 0 TO 5 PERCENT PASSING A NO. 8 SIEVE.
H. PIPE COVER MATERIAL: CONFORM TO SECTION 8.43.3 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
I. TRENCH BACKFILL: CONFORM TO SECTIONS 8.43.4 AND 8.43.5 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. TRENCH BACKFILL BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS SHALL BE GRANULAR BACKFILL. TRENCH BACKFILL BENEATH LANDSCAPE AREAS MAY BE SATISFACTORY SOIL MATERIAL.

PART 3 EXECUTION
1. PREPARATION
   A. SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE REFERENCED PRELOADING COMPLETION REPORT AND GEOTECHNICAL RECOMMENDATIONS REVIEW OR AS DIRECTED BY THE PROJECT GEOTECHNICAL ENGINEER IN THE FIELD.
   B. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTHWORK OPERATIONS.
   C. PREPARATION OF SUBGRADE FOR EARTHWORK OPERATIONS INCLUDING REMOVAL OF VEGETATION, TOPSOIL, DEBRIS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE IS SPECIFIED IN SECTION "SITE CLEARING."
   D. PROTECT AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS, WHICH ARE SPECIFIED IN DIVISION 2 SECTION "SITE CLEARING," DURING EARTHWORK OPERATIONS.
   E. PROVIDE PROTECTIVE INSULATING MATERIALS TO PROTECT SUBGRADES AND FOUNDATION SOILS AGAINST FREEZING TEMPERATURES OR FROST.
2. DEWATERING
   A. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
   B. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION.
      a. REROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATED AREAS. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES.
      b. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUND WATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED.
3. GENERAL EXCAVATION
   A. UNCLASSIFIED EXCAVATION: EXCAVATE TO SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF OBSTRUCTIONS.
      a. IF EXCAVATED MATERIALS INTENDED FOR FILL AND BACKFILL INCLUDE UNSATISFACTORY SOIL MATERIALS AND ROCK, REPLACE WITH SATISFACTORY SOIL MATERIALS.
   B. SHORING, SHEETING AND BRACING: SHORE, BRACE OR SLOPE BANKS OF EXCAVATION TO PROTECT WORKMEN, BANKS, ADJACENT PAVING, STRUCTURES, AND UTILITIES TO MEET OSHA REQUIREMENTS. DESIGN OF TEMPORARY SUPPORT OF EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
   C.

SITE WORK

EARTHWORK (CONTINUED)
4. EXCAVATION FOR STRUCTURES
   A. EXCAVATE TO INDICATED ELEVATIONS AND DIMENSIONS WITHIN A TOLERANCE OF ± 1/10 FOOT. IF APPLICABLE, EXTEND EXCAVATIONS A SUFFICIENT DISTANCE FROM STRUCTURES FOR PLACING AND REMOVING CONCRETE FORMWORK, FOR INSTALLING SERVICES AND OTHER CONSTRUCTION, AND FOR INSPECTIONS.
      a. EXCAVATIONS FOR FOOTINGS AND FOUNDATIONS: DO NOT DISTURB BOTTOM OF EXCAVATION. EXCAVATE BY HAND TO FINAL GRADE JUST BEFORE PLACING CONCRETE REINFORCEMENT. TRIM BOTTOMS TO REQUIRED LINES AND GRADES TO LEAVE SOLID BASE TO RECEIVE OTHER WORK.
      b. PILE FOUNDATIONS: STOP EXCAVATIONS 6 TO 12 INCHES ABOVE BOTTOM OF PILE CAP BEFORE PILES ARE PLACED. AFTER PILES HAVE BEEN DRIVEN, REMOVE LOOSE AND DISPLACED MATERIAL. EXCAVATE TO FINAL GRADE, LEAVING SOLID BASE TO RECEIVE CONCRETE PILE CAPS.
      c. EXCAVATION FOR UNDERGROUND TANKS, BASINS, AND MECHANICAL OR ELECTRICAL UTILITY STRUCTURES: EXCAVATE TO ELEVATIONS AND DIMENSIONS INDICATED WITHIN A TOLERANCE OF PLUS OR MINUS 1 INCH. DO NOT DISTURB BOTTOM OF EXCAVATIONS INTENDED AS BEARING SURFACES.
5. EXCAVATION FOR WALKS AND PAVEMENTS: EXCAVATE SURFACES UNDER WALKS AND PAVEMENTS TO INDICATED LINES, CROSS SECTIONS, ELEVATIONS, AND SUBGRADES.
6. EXCAVATION FOR UTILITY TRENCHES
   A. EXCAVATE TRENCHES TO INDICATED GRADIENTS, LINES, DEPTHS, AND ELEVATIONS.
   B. TRENCH BOTTOMS: EXCAVATE TRENCHES DEEPER THAN BOTTOM OF PIPE ELEVATION TO ALLOW FOR REQUIRED BEDDING COURSE.
   C. CONFORM TO CLASS B COMPACTED SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
7. SUBGRADE INSPECTION
   A. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH HEAVY PNEUMATIC-TIRED EQUIPMENT TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES. PROOF ROLL IN PRESENCE OF PROJECT GEOTECHNICAL ENGINEER.
      a. COMPLETELY PROOF-ROLL SUBGRADE IN ONE DIRECTION, REPEATING PROOF-ROLLING IN DIRECTION PERPENDICULAR TO FIRST DIRECTION. LIMIT VEHICLE SPEED TO 5 MPH.
      b. PROOF-ROLL WITH A 20-TON TRI-AXIAL DUMP TRUCK.
      c. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY GEOTECHNICAL ENGINEER, AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
   B. AUTHORIZED ADDITIONAL EXCAVATION AND REPLACEMENT MATERIAL WILL BE PAID FOR ACCORDING TO CONTRACT PROVISIONS FOR CHANGES IN THE WORK.
   C. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES, AS DIRECTED BY ARCHITECT, WITHOUT ADDITIONAL COMPENSATION.
8. UNAUTHORIZED EXCAVATION
   A. FILL UNAUTHORIZED EXCAVATION UNDER FOUNDATIONS OR WALL FOOTINGS BY EXTENDING BOTTOM ELEVATION OF CONCRETE FOUNDATION OR FOOTING TO EXCAVATION BOTTOM, WITHOUT ALTERING TOP ELEVATION. LEAN CONCRETE FILL, WITH 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI, MAY BE USED WHEN APPROVED BY ARCHITECT.
      a. FILL UNAUTHORIZED EXCAVATIONS UNDER OTHER CONSTRUCTION OR UTILITY PIPE AS DIRECTED BY CONTRACTOR.
9. STORAGE OF SOIL MATERIALS
   A. STOCKPILE BORROW SOIL MATERIALS AND EXCAVATED SATISFACTORY SOIL MATERIALS WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
      a. STOCKPILE SOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS. DO NOT STORE WITHIN DRIP LINE OF REMAINING TREES.
10. BACKFILL
   A. PLACE AND COMPACT BACKFILL IN EXCAVATIONS PROMPTLY, BUT NOT BEFORE COMPLETING THE FOLLOWING:
      a. CONSTRUCTION BELOW FINISH GRADE INCLUDING, WHERE APPLICABLE, SUBDRAINAGE, DAMPPROOFING, WATERPROOFING, AND PERIMETER INSULATION.
      b. SURVEYING LOCATIONS OF UNDERGROUND UTILITIES FOR RECORD DOCUMENTS.
      c. TESTING AND INSPECTING UNDERGROUND UTILITIES.
      d. REMOVING CONCRETE FORMWORK.
      e. REMOVING TRASH AND DEBRIS.
      f. REMOVING TEMPORARY SHORING, BRACING, AND SHEETING.
      g. INSTALLING PERMANENT OR TEMPORARY HORIZONTAL BRACING ON HORIZONTALLY SUPPORTED WALLS.
   B. PLACE BACKFILL ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
11. UTILITY TRENCH BACKFILL
   A. PLACE BACKFILL ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
   B. PLACE AND COMPACT BEDDING COURSE ON TRENCH BOTTOMS AND WHERE INDICATED. SHAPE BEDDING COURSE TO PROVIDE CONTINUOUS SUPPORT FOR BELLS, JOINTS, AND BARRELS OF PIPES AND FOR JOINTS, FITTINGS, AND BODIES OF CONDUITS.
   C. CONFORM TO CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
   D. BEDDING PLACEMENT: CONFORM TO SECTION 3.2.6 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
   E. BACKFILL PLACEMENT: CONFORM TO SECTION 2.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION EXCEPT THAT FLOODING OF GRANULAR TRENCH BACKFILL SHALL NOT BE ALLOWED FOR BACKFILL CONSOLIDATION.
   F. INSTALL TRACER WIRE ABOVE NON-METALLIC PIPING IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF COMMERCE CODE SECTION 82.30(11)(H).
12. SOIL FILL
   A. PLOW, SCARIFY, BENCH, OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING MATERIAL.
   B. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS AS FOLLOWS:
      a. SATISFACTORY SOIL MATERIAL: BENEATH GRASS, PLANTED AREAS, WALKS, AND PAVEMENTS.
      b. ENGINEERED FILL: BENEATH STEPS, STAIRS, RAMPS, BUILDING SLABS, FOOTINGS, AND FOUNDATIONS.
   C. PLACE SOIL FILL ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
13. SOIL MOISTURE CONTROL
   A. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL SOIL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
      a. DO NOT PLACE BACKFILL OR FILL SOIL MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST OR ICE.
      b. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY OTHERWISE SATISFACTORY SOIL MATERIAL THAT EXCEEDS OPTIMUM MOISTURE CONTENT BY 2 PERCENT AND IS TOO WET TO COMPACT TO SPECIFIED DRY UNIT WEIGHT.
14. COMPACTION OF SOIL BACKFILLS AND FILLS
   A. PLACE BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
   B. PLACE BACKFILL AND FILL SOIL MATERIALS EVENLY ON ALL SIDES OF STRUCTURES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE.
   C. COMPACT SOIL MATERIALS TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 1557:
      a. UNDER STRUCTURES, BUILDING SLABS, AND STEPS, SCARIFY AND RECOMPACT TOP 12 INCHES OF EXISTING SUBGRADE AND EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL AT 92 PERCENT.
      b. UNDER PAVEMENTS AND WALKWAYS, SCARIFY AND RECOMPACT TOP 6 INCHES BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL WITHIN THREE FEET OF THE BASE COURSE ELEVATION AT 92 PERCENT.
      c. UNDER LAWN OR UNPAVED AREAS, SCARIFY AND RECOMPACT TOP 6 INCHES BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL AT 85 PERCENT.
15. SUBBASE AND BASE COURSES
   A. PLACE BASE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
   B. ON PREPARED SUBGRADE, PLACE BASE COURSE UNDER PAVEMENTS AND WALKS AS FOLLOWS:
      a. SHAPE BASE COURSE TO REQUIRED CROWN ELEVATIONS AND CROSS-SLOPE GRADES.
      b. COMPACT BASE COURSE AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS, AND THICKNESS TO CONFORM TO STANDARD COMPACTION REQUIREMENTS CONTAINED IN SECTION 301.3.4.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.
16. DRAINAGE COURSE
   A. PLACE DRAINAGE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
   B. ON PREPARED SUBGRADE, PLACE AND COMPACT DRAINAGE COURSE UNDER CAST-IN-PLACE CONCRETE SLABS- ON-GRADE AS FOLLOWS:
      a. INSTALL SUBDRAINAGE GEOTEXTILE ON PREPARED SUBGRADE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, OVERLAPPING SIDES AND ENDS.
      b. PLACE DRAINAGE COURSE 6 INCHES OR LESS IN COMPACTED THICKNESS IN A SINGLE LAYER.
      c. PLACE DRAINAGE COURSE THAT EXCEEDS 6 INCHES IN COMPACTED THICKNESS IN LAYERS OF EQUAL THICKNESS, WITH NO COMPACTED LAYER MORE THAN 6 INCHES THICK OR LESS THAN 3 INCHES THICK.
   C. COMPACT EACH LAYER OF DRAINAGE COURSE TO REQUIRED CROSS SECTIONS AND THICKNESSES TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698.
17. FIELD QUALITY CONTROL
   A. TESTING AGENCY: OWNER WILL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY-CONTROL TESTING.
   B. ALLOW TESTING AGENCY TO INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.
   C. FOOTING SUBGRADE: AT FOOTING SUBGRADES, AT LEAST ONE TEST OF EACH SOIL STRATUM WILL BE PERFORMED TO VERIFY DESIGN BEARING CAPACITIES. SUBSEQUENT VERIFICATION AND APPROVAL OF OTHER FOOTING SUBGRADES MAY BE BASED ON A VISUAL COMPARISON OF SUBGRADE WITH TESTED SUBGRADE WHEN APPROVED BY ARCHITECT.
   D. TESTING AGENCY SHALL OBSERVE PROOF ROLLING OF BUILDING AND PAVEMENT SUBGRADES.
   E. TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922, AND ASTM D 2937, AS APPLICABLE. TESTS WILL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES:
      1. BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST FOR EVERY 2500 SQ. FT. OR LESS OF BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
      2. PAVEMENT AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST ONE TEST FOR EVERY 5,000 SQUARE FEET OF PAVEMENT AREA.
      3. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.
      4. TRENCH BACKFILL: AT EACH COMPACTED INITIAL AND FINAL BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 150 FEET OR LESS OF TRENCH LENGTH, BUT NO FEWER THAN 2 TESTS.

SITE WORK

EARTHWORK (CONTINUED)
   F. WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
18. PROTECTION
   A. PROTECTING GRADED AREAS: PROTECT NEWLY GRADED AREAS FROM TRAFFIC, FREEZING, AND EROSION. KEEP FREE OF TRASH AND DEBRIS.
   B. REPAIR AND REESTABLISH GRADES TO SPECIFIED TOLERANCES WHERE COMPLETED OR PARTIALLY COMPLETED SURFACES BECOME ERODED, RUTTED, SETTLED, OR WHERE THEY LOSE COMPACTION DUE TO SUBSEQUENT CONSTRUCTION OPERATIONS OR WEATHER CONDITIONS.
      1. SCARIFY OR REMOVE AND REPLACE SOIL MATERIAL TO DEPTH AS DIRECTED BY ARCHITECT; RESHAPE AND RECOMPACT.
   C. WHERE SETTLING OCCURS BEFORE PROJECT CORRECTION PERIOD ELAPSES, REMOVE FINISHED SURFACING, BACKFILL WITH ADDITIONAL SOIL MATERIAL, COMPACT, AND RECONSTRUCT SURFACING.
      1. RESTORE APPEARANCE, QUALITY, AND CONDITION OF FINISHED SURFACING TO MATCH ADJACENT WORK, AND ELIMINATE EVIDENCE OF RESTORATION TO GREATEST EXTENT POSSIBLE.
   D. DISPOSAL OF SURPLUS AND WASTE MATERIALS: REMOVE SURPLUS SATISFACTORY SOIL AND WASTE MATERIAL, INCLUDING UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF IT OFF OWNER'S PROPERTY.

SANITARY SEWERAGE

PART 1 GENERAL
1.1 SUMMARY
A. THIS SECTION INCLUDES GRAVITY-FLOW, NONPRESSURE SANITARY SEWERAGE OUTSIDE THE BUILDING, WITH THE FOLLOWING COMPONENTS:
   1. CLEANOUTS.
   2. PRECAST CONCRETE MANHOLES.
B. B. RELATED SECTIONS
   1. EARTHWORK
1.2 REFERENCES
A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION
B. WISCONSIN DEPARTMENT OF COMMERCE PLUMBING CODE DCOMM CHAPTERS 82 – 85.
1.3 SUBMITTALS
A. SHOP DRAWINGS: FOR MANHOLES, INCLUDING FRAMES AND COVERS. INCLUDE PLANS, ELEVATIONS, SECTIONS, AND DETAILS.
B. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

PART 2 PRODUCTS
2.1 PIPING MATERIALS
A. PVC SEWER PIPE AND FITTINGS, ASTM D 3034, [SDR 35], WITH BELL-AND-SPIGOT ENDS FOR GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
2.2 NONPRESSURE-TYPE PIPE COUPLINGS
A. COMPLY WITH ASTM C 1173, ELASTOMERIC, SLEEVE-TYPE, REDUCING OR TRANSITION COUPLING, FOR JOINING UNDERGROUND NONPRESSURE PIPING. INCLUDE ENDS OF SAME SIZES AS PIPING TO BE JOINED AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
B. B. SLEEVE MATERIALS:
   1. FOR PLASTIC PIPES: ASTM F 477, ELASTOMERIC SEAL OR ASTM D 5926, PVC.
   2. FOR DISSIMILAR PIPES: ASTM D 5926, PVC OR OTHER MATERIAL COMPATIBLE WITH PIPE MATERIALS BEING JOINED.
C. UNSHIELDED, FLEXIBLE COUPLINGS: ELASTOMERIC SLEEVE WITH STAINLESS-STEEL SHEAR RING AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
   1. MANUFACTURERS:
      a. DALLAS SPECIALTY & MFG. CO.
      b. FERNCO INC.
      c. LOGAN CLAY PRODUCTS COMPANY (THE).
      d. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.
      e. NDS INC.
      f. PLASTIC ODDITIES, INC.
D. SHIELDED, FLEXIBLE COUPLINGS: ASTM C 1460, ELASTOMERIC OR RUBBER SLEEVE WITH FULL-LENGTH, CORROSION-RESISTANT OUTER SHIELD AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
   1. MANUFACTURERS:
      a. CASCADE WATERWORKS MFG.
      b. DALLAS SPECIALTY & MFG. CO.
      c. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.
E. RING-TYPE, FLEXIBLE COUPLINGS: ELASTOMERIC COMPRESSION SEAL WITH DIMENSIONS TO FIT INSIDE BELL OF LARGER PIPE AND FOR SPIGOT OF SMALLER PIPE TO FIT INSIDE RING.
   1. MANUFACTURERS:
      a. FERNCO INC.
      b. LOGAN CLAY PRODUCTS COMPANY (THE).
      c. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.
2.3 CLEANOUTS
A. CLEANOUTS: IN ACCORDANCE WITH DEPARTMENT OF COMMERCE CODE CHAPTER 82.35.
2.4 MANHOLES
A. STANDARD PRECAST CONCRETE MANHOLES: CONFORM TO ASTM C478 AND SECTION 8.39.0 AND FILE NO. 12 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
B. MANHOLE STEPS: CONFORM TO SECTION 8.40.0 AND FILE NO. 15 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

PART 3 EXECUTION
3.1 PIPING APPLICATIONS
A. PIPE COUPLINGS AND FITTINGS WITH PRESSURE RATINGS AT LEAST EQUAL TO PIPING RATING MAY BE USED IN APPLICATIONS BELOW, UNLESS OTHERWISE INDICATED.
   1. USE NONPRESSURE-TYPE FLEXIBLE COUPLINGS WHERE REQUIRED TO JOIN GRAVITY-FLOW, NONPRESSURE SEWER PIPING, UNLESS OTHERWISE INDICATED.
B. UNSHIELDED FLEXIBLE COUPLINGS FOR SAME OR MINOR DIFFERENCE OD PIPES.
C. UNSHIELDED, INCREASER/REDUCER-PATTERN, FLEXIBLE COUPLINGS FOR PIPES WITH DIFFERENT OD.
D. RING-TYPE FLEXIBLE COUPLINGS FOR PIPING OF DIFFERENT SIZES WHERE ANNULAR SPACE BETWEEN SMALLER PIPING'S OD AND LARGER PIPING'S ID PERMITS INSTALLATION.
3.2 PIPING INSTALLATION
A. GENERAL LOCATIONS AND ARRANGEMENTS: DRAWING PLANS AND DETAILS INDICATE GENERAL LOCATION AND ARRANGEMENT OF UNDERGROUND SANITARY SEWERAGE PIPING. LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE DESIGN CONSIDERATIONS INTO ACCOUNT. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL. WHERE SPECIFIC INSTALLATION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
B. INSTALL IN ACCORDANCE WITH CHAPTER 3.2.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
C. INSTALL PROPER SIZE INCREASERS, REDUCERS, AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. REDUCING SIZE OF PIPING IN DIRECTION OF FLOW IS PROHIBITED.
D. USE CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
E. CLEAR INTERIOR OF PIPING AND MANHOLES OF DIRT AND SUPERFLUOUS MATERIAL AS WORK PROGRESSES. MAINTAIN SWAB OR DRAG IN PIPING, AND PULL PAST EACH JOINT AS IT IS COMPLETED. PLACE PLUG IN END OF INCOMPLETE PIPING AT END OF DAY AND WHEN WORK STOPS.
F. INSTALL TRACER WIRE OVER NON-METALLIC PIPING IN ACCORDANCE WITH DCOMM CH. 82.30(11)(H).
3.3 PIPE JOINT CONSTRUCTION
A. FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
B. JOIN GRAVITY-FLOW, NONPRESSURE, DRAINAGE PIPING ACCORDING TO THE FOLLOWING:
   1. JOIN PVC SEWER PIPING ACCORDING TO ASTM D 2321 AND ASTM D 3034 FOR ELASTOMERIC- GASKET JOINTS.
C. JOIN DISSIMILAR PIPE MATERIALS WITH NONPRESSURE-TYPE, FLEXIBLE COUPLINGS.
3.4 MANHOLE INSTALLATION
A. SET MANHOLE RIMS TO ELEVATIONS INDICATED.
B. INSTALL IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
3.5 CLEANOUT INSTALLATION
A. INSTALL CLEANOUTS AND RISER EXTENSIONS FROM SEWER PIPES TO CLEANOUTS AT GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE.
   1. USE LIGHT-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT-TRAFFIC AREAS.
   2. USE MEDIUM-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT-TRAFFIC AREAS.
   3. USE HEAVY-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICLE-TRAFFIC SERVICE AREAS.
   4. USE EXTRA-HEAVY-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN LOCATIONS INDICATED.
B. SET CLEANOUT FRAMES AND COVERS IN EARTH IN CAST-IN-PLACE-CONCRETE BLOCK, 18"x18" BY 12 INCHES DEEP. SET WITH TOPS 1 INCH ABOVE SURROUNDING GRADE.
C. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT WITH TOPS FLUSH WITH PAVEMENT SURFACE.
3.6 FIELD QUALITY CONTROL
A. INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED.
B. INSPECT AFTER APPROXIMATELY 24 INCHES OF BACKFILL IS IN PLACE, AND AGAIN AT COMPLETION OF PROJECT.
C. DEFECTS REQUIRING CORRECTION INCLUDE THE FOLLOWING:
   1. ALIGNMENT: LESS THAN FULL DIAMETER OF INSIDE OF PIPE IS VISIBLE BETWEEN STRUCTURES.
   2. DEFLECTION: FLEXIBLE PIPING WITH DEFLECTION THAT PREVENTS PASSAGE OF BALL OR CYLINDER OF SIZE NOT LESS THAN 92.5 PERCENT OF PIPING DIAMETER.
   3. CRUSHED, BROKEN, CRACKED, OR OTHERWISE DAMAGED PIPING.
   4. INFILTRATION: WATER LEAKAGE INTO PIPING.
   5. EXFILTRATION: WATER LEAKAGE FROM OR AROUND PIPING.
D. REPLACE DEFECTIVE PIPING USING NEW MATERIALS, AND REPEAT INSPECTIONS UNTIL DEFECTS ARE WITHIN ALLOWANCES SPECIFIED.
E. REINSPECT AND REPEAT PROCEDURE UNTIL RESULTS ARE SATISFACTORY.
F. TEST NEW SANITARY BUILDING SEWER IN ACCORDANCE WITH SECTION 5.4.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
   1. DO NOT ENCLOSE, COVER, OR PUT INTO SERVICE BEFORE INSPECTION AND APPROVAL.
   2. SCHEDULE TESTS AND INSPECTIONS BY AUTHORITIES HAVING JURISDICTION WITH AT LEAST 24 HOURS' ADVANCE NOTICE.
   3. SUBMIT SEPARATE REPORT FOR EACH TEST.
   4. LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS THAT MUST BE REPAIRED.
   5. REPLACE LEAKING PIPING USING NEW MATERIALS, AND REPEAT TESTING UNTIL LEAKAGE IS WITHIN ALLOWANCES SPECIFIED.

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
SPECIFICATIONS

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

PROGRESS SET
NOT FOR CONSTRUCTION

Revision	Date

JOB: 250070
DRAWN: NB
CHECKED: BDG
DATE: 2026-02-16
SHEET:
GS0.1

SITE WORK

STORM DRAINAGE

PART 1 GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES GRAVITY-FLOW, NONPRESSURE STORM DRAINAGE OUTSIDE THE BUILDING, WITH THE FOLLOWING COMPONENTS:
  - 1. STORM SEWER PIPING
  - 2. PRECAST CONCRETE CATCH BASINS.
- B. RELATED SECTIONS:
  - 1. EARTHWORK

1.2 REFERENCES

- A. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN
- B. WISCONSIN DEPARTMENT OF COMMERCE PLUMBING CODE DCOMM CHAPTERS 82 – 85.

1.3 SUBMITTALS

- A. SHOP DRAWINGS: FOR CATCH BASINS. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND CATCH BASIN FRAMES AND GRATES.
- B. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

PART 2 PRODUCTS

2.1 PIPING MATERIALS

- A. PVC, CONCRETE, OR HDPE SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.

2.2 NONPRESSURE-TYPE PIPE COUPLINGS

- A. COMPLY WITH ASTM C 1173, ELASTOMERIC, SLEEVE-TYPE, REDUCING OR TRANSITION COUPLING, FOR JOINING UNDERGROUND NONPRESSURE PIPING. INCLUDE ENDS OF SAME SIZES AS PIPING TO BE JOINED AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
- B. SLEEVE MATERIALS:
  - 1. FOR PLASTIC PIPES: ASTM F 477, ELASTOMERIC SEAL OR ASTM D 5926, PVC.
  - 2. FOR DISSIMILAR PIPES: ASTM D 5926, PVC OR OTHER MATERIAL COMPATIBLE WITH PIPE MATERIALS BEING JOINED.
- C. UNSHIELDED FLEXIBLE COUPLINGS: ELASTOMERIC SLEEVE WITH STAINLESS-STEEL SHEAR RING AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
  - 1. MANUFACTURERS:
    - a. DALLAS SPECIALTY & MFG. CO. B. FERNCO INC.
    - b. LOGAN CLAY PRODUCTS COMPANY (THE).
    - c. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.
    - d. NDS INC.
    - e. PLASTIC ODDITIES, INC.
- D. SHIELDED FLEXIBLE COUPLINGS: ASTM C 1460, ELASTOMERIC OR RUBBER SLEEVE WITH FULL-LENGTH, CORROSION-RESISTANT OUTER SHIELD AND CORROSION-RESISTANT-METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.
  - 1. MANUFACTURERS:
    - a. CASCADE WATERWORKS MFG.
    - b. DALLAS SPECIALTY & MFG. CO.
    - c. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.
- E. RING-TYPE FLEXIBLE COUPLINGS: ELASTOMERIC COMPRESSION SEAL WITH DIMENSIONS TO FIT INSIDE BELL OF LARGER PIPE AND FOR SPIGOT OF SMALLER PIPE TO FIT INSIDE RING.
  - 1. MANUFACTURERS:
    - a. FERNCO INC.
    - b. LOGAN CLAY PRODUCTS COMPANY (THE).
    - c. MISSION RUBBER COMPANY; A DIVISION OF MCP INDUSTRIES, INC.

2.3 CLEANOUTS

- A. CLEANOUTS SHALL BE IN ACCORDANCE WITH DEPARTMENT OF COMMERCE CODE CHAPTER 82.35.

2.4 CATCH BASINS

- A. STANDARD PRECAST CONCRETE CATCH BASINS: CONFORMING TO CHAPTER 3.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION, OF DEPTH INDICATED.
  - 1. BASE SECTION: 12-INCH MINIMUM THICKNESS FOR FLOOR SLAB AND 5-INCH MINIMUM THICKNESS FOR WALLS AND BASE RISER SECTION.
  - 2. TOP SECTION: ECCENTRIC-CONE TYPE.
- B. FRAMES AND GRATES: ASTM A-48, CLASS NO. 35B. NEENAH R-2501 WITH TYPE G GRATE OR EQUAL. NEENAH R-3229-A FOR CURB TYPE FRAMES OR EQUAL.

2.5 MANHOLES

- A. STANDARD PRECAST REINFORCED CONCRETE MANHOLES: CONFORM TO ASTM C478 AND SECTION 8.39.0 AND FILE NO. 12 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- B. MANHOLE STEPS: CONFORM TO SECTION 8.40.0 AND FILE NO. 15 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- C. FRAMES AND COVERS: AS INDICATED ON PLANS

2.6 TRENCH DRAIN

- A. ACO MODEL S200K, OR EQUAL

PART 3 EXECUTION

3.1 PIPING APPLICATIONS

- A. PIPE COUPLINGS AND FITTINGS WITH PRESSURE RATINGS AT LEAST EQUAL TO PIPING RATING MAY BE USED IN APPLICATIONS BELOW, UNLESS OTHERWISE INDICATED.
  - 1. USE NONPRESSURE-TYPE FLEXIBLE COUPLINGS WHERE REQUIRED TO JOIN GRAVITY-FLOW, NONPRESSURE SEWER PIPING, UNLESS OTHERWISE INDICATED.
  - 2. UNSHIELDED FLEXIBLE COUPLINGS FOR SAME OR MINOR DIFFERENCE OD PIPES.
  - 3. UNSHIELDED, INCREASER/REDUCER-PATTERN, FLEXIBLE COUPLINGS FOR PIPES WITH DIFFERENT OD.
  - 4. RING-TYPE FLEXIBLE COUPLINGS FOR PIPING OF DIFFERENT SIZES WHERE ANNULAR SPACE BETWEEN SMALLER PIPING'S OD AND LARGER PIPING'S ID PERMITS INSTALLATION.

3.2 PIPING INSTALLATION

- A. GENERAL LOCATIONS AND ARRANGEMENTS: DRAWING PLANS AND DETAILS INDICATE GENERAL LOCATION AND ARRANGEMENT OF UNDERGROUND STORM DRAINAGE PIPING. LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE DESIGN CONSIDERATIONS INTO ACCOUNT. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL. WHERE SPECIFIC INSTALLATION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
- B. INSTALL IN ACCORDANCE WITH CHAPTER 3.2.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- C. INSTALL PROPER SIZE INCREASERS, REDUCERS, AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED.
  - 1. REDUCING SIZE OF PIPING IN DIRECTION OF FLOW IS PROHIBITED.
- D. USE CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- E. CLEAR INTERIOR OF PIPING AND MANHOLES OF DIRT AND SUPERFLUOUS MATERIAL AS WORK PROGRESSES.
- F. INSTALL TRACER WIRE OVER NON-METALLIC PIPING IN ACCORDANCE WITH DCOMM CH. 82.30(11)(H) AND 82.36(7)(D).

3.3 PIPE JOINT CONSTRUCTION

- A. BASIC PIPE JOINT CONSTRUCTION IS SPECIFIED IN DIVISION 2 SECTION "PIPED UTILITIES - BASIC MATERIALS AND METHODS." WHERE SPECIFIC JOINT CONSTRUCTION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS.
- B. JOIN GRAVITY-FLOW, NONPRESSURE DRAINAGE PIPING ACCORDING TO THE FOLLOWING:
  - 1. JOIN PVC SEWER PIPING ACCORDING TO ASTM D 2321 AND ASTM D 3034 FOR ELASTOMERIC-GASKET JOINTS.
  - 2. JOIN DISSIMILAR PIPE MATERIALS WITH NONPRESSURE-TYPE FLEXIBLE COUPLINGS.

3.4 CLEANOUT INSTALLATION

- A. INSTALL CLEANOUTS AND RISER EXTENSIONS FROM SEWER PIPES TO CLEANOUTS AT GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE.
  - 1. USE LIGHT-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT-TRAFFIC AREAS.
  - 2. USE MEDIUM-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT-TRAFFIC AREAS.
  - 3. USE HEAVY-DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICLE-TRAFFIC SERVICE AREAS.
- B. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT WITH TOPS FLUSH WITH PAVEMENT SURFACE.

3.5 CATCH BASIN INSTALLATION

- A. SET FRAMES AND GRATES TO ELEVATIONS INDICATED.
- B. INSTALL IN ACCORDANCE WITH CHAPTER 3.6.1 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- C. CATCH BASIN EXCAVATION AND PREPARATION OF SUBGRADE SHALL BE IN ACCORDANCE WITH SECTION 3.5.4(A) AND (B) OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

3.6 MANHOLE INSTALLATION

- A. SET MANHOLE RIMS TO ELEVATIONS INDICATED.
- B. INSTALL IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

3.7 FIELD QUALITY CONTROL

- A. INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED.
- B. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
  - 1. REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TEST USING NEW MATERIALS.
  - 2. REINSPECT AND REPEAT PROCEDURE UNTIL RESULTS ARE SATISFACTORY.

CONCRETE

COMMON WORK RESULTS FOR CONCRETE

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES COMMON WORK RESULTS AND SPECIFICATIONS FOR CONCRETE.

1.2 REFERENCES

- A. ASTM C33 - STANDARD SPECIFICATION FOR CONCRETE AGGREGATES
- B. ASTM C94 - STANDARD SPECIFICATION FOR READY-MIXED CONCRETE
- C. ASTM C150 - STANDARD SPECIFICATION FOR PORTLAND CEMENT
- D. ASTM C309 - STANDARD SPECIFICATION FOR LIQUID MEMBRANE-FORMING COMPOUNDS FOR CURING CONCRETE

1.3 SUBMITTALS

- A. MIX DESIGNS: FOR EACH TYPE OF CONCRETE USED IN PROJECT. SUBMIT 3 WEEKS PRIOR TO POUR AND APPROVED IN WRITING PRIOR TO PRE-POUR MEETING.
- B. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 QUALITY ASSURANCE

- 1. CONSTRUCTION SUPERINTENDENT IS TO BE PRESENT DURING CONCRETE POURS, UNLESS SPECIFIC AUTHORITY IS GRANTED BY CONTRACTOR TO POUR WITHOUT SUPERINTENDENT PRESENT.
- 2. A PRE-POUR MEETING IS TO BE HELD WITH REPRESENTATIVES OF THE OWNER, ARCHITECT, CONCRETE SUBCONTRACTOR, ELECTRICIAN, PLUMBER, TESTING AGENCY, CONCRETE SUPPLIER AND FLOORING CONTRACTOR A MINIMUM OF ONE (1) WEEK PRIOR TO POURING.
  - A. ACTUAL POUR PROCEDURES WILL BE AGREED TO AT THIS MEETING AND PUT IN WRITING BEFORE POURING BEGINS.
  - B. THE FOLLOWING PROCEDURE SHALL BE FOLLOWED UNLESS OTHERWISE AMENDED OR AUTHORIZED AT PRE-POUR MEETING:
    - a. POUR CONCRETE FLOORS ONLY AFTER THE ROOF IS ON.
    - b. MAKE SURE THERE ARE EQUIVALENT TEMPERATURES BETWEEN THE SUB GRADE AND THE AIR TEMPERATURE.
    - c. IF THE SUB GRADE IS EXTREMELY DRY IT SHOULD BE WETTED DOWN PRIOR TO POURING THE CONCRETE TO AVOID RAPID DRYING OF THE SLAB UNDERSIDE.
    - d. THE TOP OF SLAB WILL BE COVERED WITH A 6 MIL POLYETHYLENE SHEETING AS SOON AS POSSIBLE AFTER FINISHING TO PREVENT RAPID DRYING, AND REMAIN COVERED FOR A MINIMUM OF 7 DAYS.
    - e. THE CONCRETE SHALL BE POURED PER THIS SPECIFICATION WITH A 3 1/2" SLUMP, ± 1". ARCHITECT AND CONTRACTOR HAVE THE RIGHT TO TEST ALL LOADS PRIOR TO PLACEMENT.
    - f. MESH WILL BE FLAT, NOT ROLLED.
    - g. "DIAMOND" OVERPOURS AT COLUMNS TO BE POURED 1/4" LOW.
    - h. THE FLOOR WILL BE SAW CUT ON A GRID PER PLANS AS SOON AS POSSIBLE AFTER POUR WITH A SOFT CUT SAW.
    - i. CONCRETE SHALL HAVE A HARD TROWEL FINISH.
    - j. CURING COMPOUNDS WILL BE APPLIED TO ALL SLABS, INCLUDING A DOUBLE COAT ON ALL SAW CUTS, AS SOON AS POSSIBLE AFTER FINISHING.
    - k. NO WATER MAY BE ADDED TO CONCRETE ON SITE WITHOUT PRIOR AUTHORITY. (SEE NOTE 13 THIS SECTION).
    - l. VERIFY FLOOR DRAINS ARE AT LOW POINT OF FLOOR AND FLOOR PITCHES TOWARDS DRAIN.
- 3. STRENGTH TESTING:
  - 1. ALL STRENGTH TESTS SHALL CONSIST OF FOUR STANDARD CYLINDERS, WITH TESTS AT THREE DAYS, SEVEN DAYS, AND TWO (2) TESTS AT 28 DAYS.
  - 2. STRENGTH AT THREE DAYS TO BE MINIMUM 1800 PSI.
  - 3. CONCRETE TEST REPORTS SHALL DIRECTLY STATE WHETHER OR NOT THE TEST RESULTS COMPLY WITH THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.
  - 4. CONCRETE TEST REPORTS SHALL STATE THE FOLLOWING INFORMATION:
    - a. LOCATION ON THE PROJECT WHERE THE CONCRETE IS USED
    - b. 7 DAY COMPRESSIVE STRENGTH
    - c. 28 DAY COMPRESSIVE STRENGTH
    - d. AIR CONTENT
    - e. SLUMP
    - f. AMOUNT OF WATER ADDED ON JOB SITE
    - g. MIX USED

PART 2 PRODUCTS

2.1 ADMIXTURES

- A. CLASS 'C' FLY ASH IS PERMITTED.
- B. TYPE 'A' WATER REDUCERS ARE PERMITTED.
- C. CURING COMPOUNDS:
  - 1. CONFORM TO ASTM C309 TYPE 1
  - 2. MINIMUM 12% SOLIDS BY WEIGHT
  - 3. CLEAR SOLVENT TYPE
  - 4. MANUFACTURER: SONNEBORN KURE 'N SEAL
- D. ADDITIONAL CHEMICAL ADMIXTURES PERMITTED ONLY WHEN APPROVED IN WRITING BY ARCHITECT.

2.2 AGGREGATES

- A. SHALL CONFORM TO ASTM C33
- B. CHERT SHALL BE 'NON-REACTIVE' TYPE

2.3 CEMENTS

- A. ALL CEMENT SHALL BE PORTLAND CEMENT CONFIRMING TO ASTM C150 TYPE 1
- B. MANUFACTURER: SOURCED FROM A SINGLE MANUFACTURER AND BATCH PLANT
  - 1. IF CEMENT CANNOT BE SOURCED FROM A SINGLE MANUFACTURER, NOTIFY ARCHITECT IN WRITING MINIMUM 3 WEEKS PRIOR TO POUR.
- C. TEMPERATURE SHALL NOT EXCEED 150° F FROM PLANT AT THE TIME OF MIXING
- D. LOW SHRINKAGE CEMENTS ARE PERMITTED.
- E. CONTENT RATIOS: 5 1/2 BAG MINIMUM TO MEET REQUIRED MINIMUM PSI REQUIREMENTS AS INDICATED ON DRAWINGS AND ENGINEERING CALCULATIONS. MIX DESIGNS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO PROCUREMENT.
  - 1. 3,000 PSI CONCRETE FOR FOOTINGS MAY BE REDIMIX SUPPLIER'S STANDARD FOOTING DESIGN.

2.4 WATER

- A. ALL WATER SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OIL, ACID, ALKALI, SALT, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES.
- B. WATER FROM A MUNICIPAL WATER SOURCE SHALL BE CONSIDERED ACCEPTABLE IN ALL CASES.
- C. MAXIMUM WATER TO CEMENT RATIO: 0.5

2.5 ISOLATION JOINT MATERIALS

- A. POLYETHYLENE FOAM EXPANSION JOINT FILLER: 1/2" UNLESS OTHERWISE NOTED.
- B. MINIMUM DEPTH TO EQUAL ADJOINING CONCRETE SLAB THICKNESS.

2.6 VAPOR BARRIER

- A. MANUFACTURER: FORTIFIBER CORP. MOISTOP ULTRA
  - 1. SUBSTITUTIONS NOT PERMITTED.

PART 3 EXECUTION

- 1. ALL CONCRETE SHALL BE READY-MIXED IN ACCORDANCE WITH ASTM C95 UNLESS OTHERWISE NOTED.
- 2. CAREFULLY INSPECT THE INSTALLED WORK OF OTHER TRADES AFFECTING CONCRETE PLACEMENT, AND VERIFY THAT ALL SUCH WORK IS COMPLETE TO THE POINT WHERE THE WORK MAY PROPERLY COMMENCE PRIOR TO THE WORK OF THIS SECTION.
  - A. VERIFY ALL ITEMS TO BE EMBEDDED IN CONCRETE ARE IN PLACE AND IN PROPER POSITION AND ALIGNMENT.
- 3. VERIFY THAT CONCRETE MAY BE PLACED TO THE LINES AND ELEVATIONS INDICATED ON THE DRAWINGS, WITH ALL REQUIRED CLEARANCE FROM REINFORCEMENT. PROVIDE THE FOLLOWING CLEAR COVER DISTANCES FOR REINFORCEMENT IN CONCRETE:
  - A. FOOTINGS - BOTTOM AND SIDES 3"
  - B. FOOTINGS - TOP 2"
  - C. SLABS - BOTTOM AND SIDES 1"
  - D. SLABS - TOP 3/4"
  - E. INTERIOR WALLS 1"
  - F. EXTERIOR WALLS - OUTSIDE FACE 1/2"
  - G. BEAMS AND GIRDERS 1 1/2"
  - H. PIERS AND COLUMNS 2"
- 4. WATER ADDITIONS:
  - A. NO WATER FROM THE TRUCK WATER SYSTEM OR ELSEWHERE SHALL BE ADDED EXCEPT WHEN, ON ARRIVAL AT THE JOB SITE, THE SLUMP OF THE CONCRETE IS LESS THAN SPECIFIED.
  - B. IF WATER IS ADDED, FOLLOW DIRECTIONS OF ASTM C94.
    - a. ONLY THE INDIVIDUAL AGREED TO AT THE PRE-POUR MEETING HAS AUTHORITY TO ADD WATER AFTER PRODUCT HAS LEFT BATCH PLANT.
  - C. ADDITIONAL WATER THAT IS ADDED TO BRING THE SLUMP WITHIN REQUIRED LIMITS SHALL BE INJECTED INTO THE MIXER UNDER CORRECT PRESSURES AND DIRECTION.
    - a. THE DRUM OR BLADES SHALL BE TURNED AN ADDITIONAL 30 REVOLUTIONS OR MORE IF NECESSARY, AT MIXING SPEED, UNTIL UNIFORMITY OF THE CONCRETE IS ACHIEVED.
    - b. WATER SHALL NOT BE ADDED TO THE BATCH AT ANY LATER TIME.
  - D. DISCHARGE OF THE CONCRETE SHALL BE COMPLETED WITHIN 1 1/2 HOURS OR BEFORE THE DRUM HAS REVOLVED 300 TIMES, WHICHEVER COMES FIRST.
  - E. SEE ASTM C94 FOR ADDITIONAL REQUIREMENTS.
  - F. NO DEVIATION SHALL BE ALLOWED FROM THIS SECTION.
- 5. SLUMPS: ALL SLUMPS SHALL CONFORM TO THE FOLLOWING STANDARDS EXCEPT WITH PRIOR WRITTEN APPROVAL BY ARCHITECT:
  - A. FORMED REINFORCED FOUNDATION WALLS AND FOOTINGS: 3 1/2" ± 1"
  - B. FORMED PLAIN FOOTINGS AND STRUCTURAL WALLS: 3 1/2" ± 1"
  - C. EARTH FORM FOUNDATIONS: 5" ± 1"
  - D. CAISSONS: 8" ± 1"
  - E. BUILDING COLUMNS: 3 1/2" ± 1"
  - F. PAVEMENTS AND SLABS ON GRADE: 3 1/2" ± 1"
  - G. STRUCTURAL SLABS: 3 1/2" ± 1"
  - H. MASS CONCRETE: 2" ± 1/2"
  - I. BOND BEAMS AND LINTELS: 4" ± 1"
  - J. METAL PANS AND STAIRS AND LANDINGS: 5" ± 1"
  - K. HIGH SLUMP CONCRETE FOR FILLING MASONRY PIERS AND PILASTERS: 9" ± 1"

CONCRETE

COMMON WORK RESULTS FOR CONCRETE (CONTINUED)

- 6. AIR ENTRAINMENT: ALL CONCRETE SUBJECT TO FREEZE/THAW OR REQUIRED TO BE WATERTIGHT SHALL HAVE AN AIR CONTENT OF 4.5% TO 7.5% AT THE TIME OF PLACEMENT.
- 7. CONVEY CONCRETE FROM MIXER TO PLACE OF FINAL DEPOSIT BY METHODS THAT WILL PREVENT SEPARATION AND LOSS OF MATERIAL.
- 8. DEPOSIT CONCRETE AS NEARLY AS POSSIBLE IN ITS FINAL POSITION TO AVOID SEGREGATION DUE TO RE-HANDLING AND FLOWING.
- 9. PLACE CONCRETE AS DRY AS POSSIBLE CONSISTENT WITH GOOD WORKMANSHIP, NEVER EXCEEDING THE MAXIMUM SPECIFIED SLUMP.
- 10. PLACE CONCRETE AT SUCH A RATE THAT CONCRETE IS AT ALL TIMES PLASTIC AND FLOWS READILY BETWEEN REINFORCEMENT.
- 11. ONCE PLACING IS STARTED, CARRY IT ON AS CONTINUOUS OPERATIONS UNTIL PLACEMENT OF THE PANEL SECTION IS COMPLETE.
- 12. DO NOT PLACE A GREATER AREA AT ONE TIME THAN CAN BE PROPERLY FINISHED WITHOUT CRACKING. THIS IS PARTICULARLY IMPORTANT DURING HOT OR DRY WEATHER.
- 13. THOROUGHLY CONSOLIDATE CONCRETE BY SUITABLE MEANS DURING PLACEMENT, WORKING IT AROUND ALL EMBEDDED FIXTURES AND INTO CORNERS OF THE FORMS. TYPE AND USE OF VIBRATORS SHALL BE IN STRICT CONFORMANCE WITH ACI C309.
- 14. INSTALL EXPANSION AND CONTROL JOINTS ONLY IN LOCATIONS SHOWN AND AS DETAILED ON THE DRAWINGS.
- 15. PLACE, CONSOLIDATE, STRIKE OFF, AND LEVEL CONCRETE TO THE PROPER ELEVATIONS.
- 16. AFTER THE CONCRETE HAS STIFFENED SUFFICIENTLY TO PERMIT THE OPERATION AND THE WATER SHEEN HAS DISAPPEARED. THE SURFACE SHALL BE FLOATED AT LEAST TWICE TO A UNIFORM SANDY TEXTURE.
- 17. TAKE CARE THAT THE SURFACE OF THE SLAB MEETS THE SCREEDS ACCURATELY AND DOES NOT RISE ABOVE OR FALL BELOW THEM.
- 18. CAREFULLY PROVIDE SLAB DEPRESSIONS AS REQUIRED FOR THE FINISHES INDICATED ON THE DRAWINGS.
- 19. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, MAKE ALL SLABS EVEN AND UNIFORM IN APPEARANCE AND IN TRUE PLANES, SO THE DEPRESSIONS BETWEEN HIGH SPOTS DO NOT EXCEED 3/16" UNDER A 10' STRAIGHT EDGE OR F_F30.
- 20. WHERE FLOOR DRAINS OR FLOOR SLOPES ARE INDICATED, SLOPE SLABS UNIFORMLY TO PROVIDE EVEN FALL FOR DRAINAGE.
- 21. TROWEL ALL INTERIOR SLABS TO A SMOOTH, HARD FINISH USING STEEL TROWELS.
- 22. WHERE 'BROOM FINISH' IS INDICATED AND WHERE NO OTHER EXTERIOR SLAB FINISH IS INDICATED, FINISH THE EXPOSED CONCRETE SURFACES BY LIGHTLY COMBING WITH A MEDIUM STIFF BROOM AFTER FLOATING IS COMPLETE.
- 23. RUBBED SURFACES SHALL BE PROVIDED ON ALL EXPOSED WALLS AND PIERS IMMEDIATELY AFTER FORMS ARE REMOVED. EXPOSED SURFACES SHALL BE WETTED AND RUBBED WITH CARBORUNDUM BRICK OR OTHER ABRASIVE UNTIL EVEN, SMOOTH, AND UNIFORM IN APPEARANCE.
- 24. PVC WATER STOPS SHALL BE INSTALLED IN LOCATIONS INDICATED. SUBCONTRACTOR SHALL ATTACH WATER STOPS FIRMLY TO REINFORCEMENT AND/OR FORM WORK TO ENSURE THAT WATER STOP WILL NOT BE DISPLACED OR BENT DURING CONCRETE OPERATIONS.
- 25. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY IRREGULARITIES OR DEFECTS IN CONCRETE SLABS (CRACKS, BUMPS, FLOOR CURLING, ETC) BEFORE ANY FLOOR FINISHES ARE APPLIED.

REINFORCED CONCRETE FOUNDATIONS

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES REINFORCED CONCRETE FOUNDATIONS, FOOTINGS, AND SLABS.

1.2 REFERENCES

- A. RELATED SECTIONS:
  - a. CONCRETE (FOR STANDARD WORK RESULTS AND SPECIFICATIONS)
  - b. EARTHWORK (FOR SPECIFICATIONS REGARDING FILL)

PART 2 PRODUCTS

2.1 FILL MATERIAL

- A. BEARING CAPACITY: MINIMUM 3,000 PSF
- B. TYPE: FREE DRAINING GRANULAR
- C. COMPACTION: 90% MODIFIED PROCTOR.
- D. FILL MATERIAL SHALL BE APPROVED BY ARCHITECT.
- E. PLACEMENT PER SOIL ENGINEER'S RECOMMENDATIONS.

2.2 BACKFILL

- A. TYPE: FREE-DRAINING GRANULAR
- B. COMPACTION: PER SOILS REPORT RECOMMENDATIONS

PART 3 EXECUTION

3.1 PREPARATION

- 1. REMOVE UNSUITABLE EXISTING SOILS BELOW FOOTINGS AND SLABS ON GRADE. PROVIDED ENGINEERED FILL TO RAISE SITE TO ELEVATIONS CALLED FOR ON PLANS.
- 2. FILL AND EXCAVATION SHALL CONFORM TO SOIL REPORT UNDER DIRECTION AND SUPERVISION OF CONTRACTOR.
- 3. PLACEMENT OF FOOTINGS OR FOUNDATIONS ON FROZEN SUBGRADE IS PROHIBITED.

3.2 INSTALLATION

- 1. FOOTING EXCAVATIONS SHALL EXTEND TO COMPETENT BEARING MATERIAL AS INDICATED ON GEOTECHNICAL REPORT AND DRAWINGS. IF SUITABLE BEARING STRATUM DOES NOT EXIST AT LISTED ELEVATIONS ON DRAWINGS, EXCAVATIONS SHALL EXTEND UNTIL SOIL WITH STATED BEARING CAPACITY IS REACHED.
  - A. COMPACTION OR SLURRY BENEATH FOOTINGS IS ACCEPTABLE TO REACH REQUIRED BEARING CAPACITY.
  - B. EXTENSION OF FOOTINGS DOWN TO ACCEPTABLE STRATUM IS ACCEPTABLE.
- 2. COMPACTION OF FILL AND BACKFILL SHALL BE PERFORMED UNDER SUPERVISION OF CONTRACTOR.
- 3. PIERS AND COLUMN FOOTINGS SHALL BE CENTERED ON COLUMN CENTERLINES UNLESS NOTED OTHERWISE.
- 4. WALL FOOTINGS SHALL BE CENTERED ON WALL CENTERLINES UNLESS NOTED OTHERWISE.
- 5. FILL OR BACKFILL SHALL EXTEND LATERALLY BEYOND THE EDGE OF THE BUILDING OR FOUNDATIONS A MINIMUM OF TWO FEET.
  - A. SLOPES SHALL NOT EXCEED 1:1 FOR COHESIVE SOILS AND 2(HORIZONTAL): 1(VERTICAL) FOR GRANULAR SOILS.
- 6. FOUNDATIONS SHALL BEAR ON UNDISTURBED, NON-ORGANIC BEARING SOILS. IF EXCAVATION ACTIVITY LOOSENS SOILS BELOW BOTTOM OF FOOTINGS, BASE SHALL BE COMPACTED.
- 7. SUBCONTRACTOR SHALL FOLLOW ALL ADDITIONAL REQUIREMENTS AS SPECIFIED IN SOIL REPORT.
- 8. MINIMUM BEARING DEPTH: 4'-0" BELOW ADJACENT FINISH GRADE.
- 9. ADJACENT EXISTING FOOTINGS: STEP NEW FOOTING AS REQUIRED TO MATCH NEW FOOTING'S BEARING ELEVATION TO EXISTING FOOTING'S BEARING ELEVATION.
  - A. FIELD VERIFY EXISTING BOTTOM OF FOOTING ELEVATION.

METALS

STRUCTURAL STEEL

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS, SPECIFICATIONS FOR ACCESSORIES AND MATERIALS.

1.2 REFERENCES

- A. AWS D1.1
- B. AISC - MANUAL OF STEEL CONSTRUCTION
- C. ASTM A307 - STANDARD SPECIFICATION FOR CARBON STEEL BOLTS
- D. ASTM A325 - STANDARD SPECIFICATION FOR STEEL BOLTS

1.3 SUBMITTALS

- A. SHOP DRAWINGS: PLANS, ELEVATIONS, DETAILS, AND CALCULATIONS.
  - 1. SUBMIT SEVEN (7) WORKING DAYS PRIOR TO FABRICATION DATE NEEDED FOR PROJECT SCHEDULING.
- B. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 QUALITY ASSURANCE

- A. CERTIFICATION: ALL WELDERS SHALL BE AWS CERTIFIED

PART 2 PRODUCTS

2.1 ACCESSORIES

- A. BOLTS: COMPLY WITH ASTM A325 UNLESS OTHERWISE NOTED
- B. WASHERS: COMPLY WITH ASTM A307

PART 3 EXECUTION

- 1. ALL WELDING SHALL BE PERFORMED WITH E70xx ELECTRODES.
- 2. PROVIDE AND MAINTAIN TEMPORARY BRACING OF STEEL UNTIL SECURELY INCORPORATED INTO CONSTRUCTION.
- 3. BOLTED CONNECTIONS:
  - A. DOUBLE ANGLE WITH 3/4" DIAMETER BOLTS
  - B. SINGLE SHEAR WING PLATE CONNECTIONS:
    - a. 3/4" DIAMETER BOLTS
  - C. PROVIDE MAXIMUM NUMBER OF BOLTS IN A SINGLE LINE WITH 3" GAGE.
  - D. PROVIDE WASHERS FOR ALL ANCHOR BOLTS. AT BASE PLATES FOR ALL MOMENT OR BRACED FRAMES COLUMNS, PROVIDE HOLES AND PLATE WASHERS AS INDICATED IN DESIGN DRAWINGS OR PER AISC STEEL CONSTRUCTION MANUAL FOR INDICATED BOLT DIAMETER. PLATE WASHERS TO BE WELDED TO BASE PLATE WITH MINIMUM 1/4" WELD ALL AROUND.
- 4. STEEL COLUMNS BUILT INTO MASONRY: PROVIDE ADJUSTABLE MASONRY WALL ANCHORS AT 2'-0" O.C. VERTICALLY EACH SIDE. LOCATE IN COURSING.
- 5. WIDE FLANGE BEAMS 12" OR DEEPER SHALL HAVE 1/4" STIFFENER PLATE EACH SIDE AT ALL POINTS OF SUPPORT INCLUDING BEARING ENDS ON CONCRETE OR MASONRY.
  - A. PROVIDE 5/8" BEARING PLATES WITH (2) 3/4" ANCHOR BOLTS 12" LONG WITH 3" HOOKS UNLESS OTHERWISE INDICATED ON STRUCTURAL DRAWINGS..
- 6. UNLESS NOTED OTHERWISE, FRAME AROUND ALL ROOF DECK OPENINGS LARGER THAN 12" IN DIAMETER, INCLUDING ROOF DRAINS/SUMPS, WITH 4-L's 3" x 3" x 1/4" DOWN TURNED.
- 7. ALL STEEL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER (WITHIN THE MILL TOLERANCE) LOCATED ABOVE THE HORIZONTAL CENTERLINE BETWEEN THE END CONNECTIONS.
- 8. ROOF SLOPE TO BE 1/4" PER FOOT UNLESS OTHERWISE NOTED ON CONSTRUCTION DOCUMENTS. ROOF SLOPE IS GENERALLY TO BE ACHIEVED BY SLOPING THE STRUCTURE UNLESS THICKENED OR TAPERED INSULATION IS NOTED ON THE ROOF PLAN. ROOF SLOPE MAY BE 1/8" PER FOOT IF PONDING ANALYSIS IS PERFORMED PROVING STABILITY OF THE ROOF STRUCTURE AGAINST PROGRESSIVE DEFLECTIONS. SEE ASCE 7-16 CHAPTER 8. IF DIFFERENCE IN HEIGHT BETWEEN ROOF DRAINS AND HIGH POINT IN ROOF IS GREATER THAN 6", PLUMBING CONTRACTOR TO PROVIDE OVERFLOW DRAINS @ EACH DRAINAGE FIELD ON THE ROOF.

METALS

DECKING

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES FABRICATION AND SPECIFICATIONS FOR METAL DECKING, ACCESSORIES, AND ATTACHMENTS.

1.2 REFERENCES

- A. ANSI SD-2022 STANDARD FOR STEEL DECK
- B. RELATED SECTIONS: 'STRUCTURAL STEEL'

1.3 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED
- B. SHOP DRAWINGS: PLANS, MATERIALS, CONSTRUCTION, AND FINISH. INCLUDE RELATIONSHIP WITH ADJACENT CONSTRUCTION.
- C. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 QUALITY ASSURANCE

- A. MANUFACTURER QUALIFICATIONS: MEMBER OF STEEL DECK INSTITUTE

PART 2 PRODUCTS

- A. COVER PLATES: 16 GAUGE FASTENED WITH #12 TEK SCREWS UNLESS NOTED OTHERWISE.
- B. DECK SUPPORT BRACKETS: AT ALL COLUMNS AS REQUIRED, L 2x2x3/16 MINIMUM
- C. CONTINUOUS PLATE: 22 GAUGE, 12" CONTINUOUS.
  - 1. PROVIDE AT ALL CHANGES IN DECK DIRECTION, RIDGES, VALLEYS, AND HIPS.
  - 2. BEND TO MATCH ROOF PROFILE.
- D. DECKING: AS INDICATED ON DRAWINGS

PART 3 EXECUTION

- 1. IN ACCORDANCE WITH ANSI SD-2022.
- 2. PROVIDE TEMPORARY SHORING BEFORE POURING CONCRETE IF REQUIRED TO MEET STRENGTH OR DEFLECTION LIMITATIONS.
- 3. INSTALL DECK ENDS WITH END BEARING AS INDICATED OR 2", WHICHEVER IS GREATER.
- 4. CUT AND NEATLY FIT DECK PANELS AND ACCESSORIES AROUND OPENINGS AND OTHER WORK PROJECTING THROUGH OR ADJACENT TO DECK.
- 5. TOUCH-UP, REPAIR, OR REPLACE DAMAGED PRODUCTS BEFORE SUBSTANTIAL COMPLETION.

STEEL JOISTS AND GIRDERS

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES FABRICATION AND SPECIFICATIONS FOR METAL JOIST AND GIRDERS.

1.2 REFERENCES

- A. SJI CODES OF STANDARD PRACTICE
- B. SJI 100
- C. RELATED SECTIONS: 'STRUCTURAL STEEL'

1.3 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED
- B. SHOP DRAWINGS: PLANS, MATERIALS, CONSTRUCTION, AND FINISH. INCLUDE RELATIONSHIP WITH ADJACENT CONSTRUCTION.
  - a. SUBMIT A MINIMUM OF SEVEN WORKING DAYS PRIOR TO FABRICATION DATE NEEDED FOR PROJECT SCHEDULING.
- C. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 QUALITY ASSURANCE

- A. MANUFACTURER QUALIFICATIONS: MEMBER OF THE STEEL JOIST INSTITUTE (SJI)

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

- 1. DESIGN AND FABRICATION OF JOISTS AND GIRDERS SHALL BE IN ACCORDANCE WITH SJI CODES OF STANDARD PRACTICE AND REQUIREMENTS IN SJI-100.
- 2. DESIGN LOADS AND DEFLECTIONS:
  - A. L/240 LIVE LOAD DEFLECTION MAXIMUM
  - B. UPLIFT LOAD: 5 PSF NET
  - C. WHERE THE DRAWINGS OR STRUCTURAL CALCULATIONS CONFLICT WITH THESE DESIGN CRITERIA, THE MORE STRINGENT SHALL APPLY.
- 3. PROVIDE STANDARD BRIDGING AS REQUIRED BY DESIGN LOADS OR SHOWN ON DRAWINGS, WHICHEVER IS MORE STRINGENT.
- 4. PROVIDE JOIST CAMBER AS RECOMMENDED BY SJI-100 UNLESS OTHERWISE NOTED.
- 5. CUTTING OR DRILLING THROUGH JOISTS OR GIRDERS IS STRICTLY PROHIBITED.
- 6. ARRANGE CONCENTRATED LOADS TO BEAR ON JOIST PANEL POINTS UNLESS SPECIFICALLY NOTED OTHERWISE.
- 7. JOIST MANUFACTURER SHALL BE RESPONSIBLE FOR DESIGN AND COORDINATION OF ROOFTOP, SUSPENDED EQUIPMENT, AND BULKHEAD LOADS AS SHOWN ON THE CONSTRUCTION DOCUMENTS. COORDINATE EXACT LOCATION OF LOADS WITH RELEVANT SUBCONTRACTOR.
- 8. COORDINATE DESIGN, DELIVERY, AND SCHEDULING WITH STEEL SUPPLIER TO PREVENT DELAY IN SCHEDULING OF PROJECT OR EXCESSIVE BUILDUP OF MATERIAL REQUIRING STORAGE ON SITE.
- 9. TIE OFF TO EXISTING JOISTS FOR FALL PROTECTION IS STRICTLY PROHIBITED UNLESS SIGNED OFF BY STRUCTURAL ENGINEER OR ARCHITECT.

COLD FORMED STEEL FRAMING

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES FABRICATION AND SPECIFICATIONS FOR COLD FORMED STEEL FRAMING, AS WELL AS ACCESSORIES AND ATTACHMENTS FOR SAME.

1.2 REFERENCES

- A. AISI COLD FORMED STEEL DESIGN MANUAL
- B. ASCE 7-22 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
- C. ASTM A525 STANDARD SPECIFICATION FOR GALVANIZED STEEL SHEET
- D. ASTM A780 STANDARD PRACTICE FOR REPAIR OF DAMAGED AND UNCOATED AREAS OF HOT-DIP GALVANIZED COATINGS

1.3 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED
- B. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

PART 2 PRODUCTS

2.1 METAL STUDS

- A. MATERIAL: GALVANIZED STEEL, MINIMUM COATING G-90 IN COMPLIANCE WITH ASTM A525
- B. MINIMUM THICKNESS: 18 GAUGE (0.045 IN)
- C. MINIMUM STRENGTH: 33 KSI (≥18 GAUGE), 50 KSI (≤16 GAUGE)

2.2 METAL TRACK

- A. MATERIAL: GALVANIZED STEEL, MINIMUM COATING G-90 IN COMPLIANCE WITH ASTM A525
- B. MINIMUM THICKNESS: 18 GAUGE (0.045 IN)
- C. MINIMUM STRENGTH: 33 KSI (≥18 GAUGE), 50 KSI (≤16 GAUGE)

PART 3 EXECUTION

3.1 DESIGN

- 1. FRAMING MEMBERS SHOWN ON PLANS ARE SCHEMATIC IN NATURE AND SHOWN TO DEMONSTRATE DESIGN INTENT.
  - A. SUPPLIER SHALL DESIGN AND CALCULATE ALL LIGHT GAUGE FRAMING MEMBERS TO BE SUPPLIED FOR THIS PROJECT, INCLUDING BUT NOT LIMITED TO BEAMS; HEADERS; STUDS; COLUMNS; BRACING; CURTAIN WALLS AND CONNECTIONS; AND CONNECTIONS TO MASONRY, STEEL, AND OTHER LIGHT GAUGE MEMBERS.
  - B. DESIGNS SHALL BE SEALED AND STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED AND EXPERIENCED IN THIS WORK.
- 2. DESIGN LOADS AND DEFLECTIONS:
  - A. DEFLECTION LIMITS:
    - a. AT BRICK VENEER: L/600
    - b. AT WALL STUDS: L/360
  - B. WIND LOADS: SEE STRUCTURAL DRAWINGS, IBC CODE REQUIREMENTS, AND ASCE 7-16. WHERE THESE LODES CONFLICT, THE MOST STRINGENT DESIGN REQUIREMENTS SHALL APPLY.
  - C. LOAD BEARING STUDS SHALL BE DESIGNED TO CARRY ALL GRAVITY LOADS AND LATERAL FORCES INCLUDING BUT NOT LIMITED TO DEAD LOADS, LIVE LOADS, WIND LOADS, AND AXIAL LOAD ECCENTRICITES
  - D. NON-LOAD BEARING STUDS SHALL TRANSFER LATERAL LOADS TO STRUCTURE BY MEANS OF SLIDE CLIPS TO ALLOW VERTICAL MOVEMENT OF PRIMARY STRUCTURAL MEMBERS.

3.2 INSTALLATION

- 1. INSPECT AND ENSURE STRUCTURE IS INSTALLED AND READY TO RECEIVE THE WORK OF THIS SECTION.
- 2. INSTALL STUDS PLUMB, ALIGNED, AND SECURELY ATTACHED TO FLANGES OR WEBS OF LOWER TRACK.
- 3. STUDS SHALL BE SEATED TIGHT TO TRACK EXCEPT AS REQUIRED FOR DIAGONAL BRACING, SLOPED WALLS, WARPED SURFACES, OR SIMILAR CONDITIONS AS INDICATED ON THE DRAWINGS.
- 4. CONSTRUCTION OF FRAMING SHALL NOT ADVERSELY IMPACT THE LATERAL STABILITY OF THE STRUCTURE. COORDINATE INSTALLATION TO ENSURE STRUCTURE IS READY TO WITHSTAND ADDITIONAL LOADS FROM FRAMING.
- 5. LOCATE JOINTS DIRECTLY OVER BEARING STUDS, OR PROVIDE A LOAD DISTRIBUTION MEMBER AT THE TOP OF WALL.
- 6. INSTALL SUPPLEMENTARY FRAMING, BLOCKING, AND BRACING AS REQUIRED FOR INSTALLATION OF FIXTURES, EQUIPMENT, SERVICES, CASEWORK, OR SIMILAR. COORDINATE BLOCKING AMOUNTS AND LOCATIONS WITH OTHER TRADES PRIOR TO ENCLOSURE OF THE WALLS.
  - A. ALL BLOCKING AND BRACING SHALL BE NON-FLAMMABLE IN COMPLIANCE WITH BUILDING TYPE IIB AS PER IBC 603
- 7. PROVIDE ALL REQUIRED BRIDGING AND ATTACHMENT TO WALL SHEATHING AS REQUIRED TO CARRY CONSTRUCTION LOADS.
- 8. WELDING:
  - A. ALL WELDERS SHALL BE AWS CERTIFIED
  - B. WELDS SHALL BE COATED IN A ZINC-RICH PAINT COR CORROSION PROTECTION IN COMPLIANCE WITH ASTM A780
  - C. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR WHEN WELDS ARE COMPLETED AND READY FOR INSPECTION.
  - D. WELDS AND PROTECTIVE COATINGS SHALL BE INSPECTED BY THE ENGINEER PRIOR TO THE WELDED AREAS BEING ENCLOSED.
- 9. SPLICING AXIALLY LOADED STUDS IS STRICTLY PROHIBITED.

WOOD AND PLASTICS

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES FABRICATION, ERECTION, AND INSTALLATION OF ALL ROUGH AND FINISH CARPENTRY, MILLWORK, FINISH PLASTICS, AND RELATED ACCESSORIES.

1.2 REFERENCES

- A. ANSI/AWI 400 FACTORY FINISHING
- B. ANSI/AWI 620 FINISH CARPENTRY
- C. ANSI/AWI 641 ARCHITECTURAL WOOD CASEWORK
- D. ANSI/AWI 1232 MANUFACTURED WOOD CASEWORK
- E. ANSI/AWI 1235 SPECIALTY CASEWORK

1.3 SUBMITTALS

- A. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 REQUIREMENTS

- A. CERTIFICATION: ALL WOOD PRODUCTS OF THIS SECTION SHALL MEET OR EXCEED AWI QUALITY STANDARDS.
- B. SUBCONTRACTOR SHALL PROVIDE AND INSTALL ALL ELEMENTS INCLUDING BUT NOT LIMITED TO TRIM, ROUGH WORK, FASTENERS, SEALANTS, ADHESIVES, AND MISCELLANEOUS ACCESSORIES AS REQUIRED TO ACHIEVE A COMPLETE INSTALLATION AS SHOWN ON DRAWINGS.
- C. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND SPECIFICATIONS. WHERE THE DRAWINGS AND THIS SECTION CONFLICT, THE MOST STRINGENT OF THE TWO SHALL APPLY.

PART 2 PRODUCTS

2.1 ROUGH LUMBER AND PLYWOOD

- A. DIMENSIONS: INDUSTRY STANDARD DIMENSIONS
  - a. USE OF OFFCUTS, REMNANTS, AND SCRAP PIECES NOT GENERATED BY THIS WORK ARE PROHIBITED.
- B. MOISTURE CONTENT: 19% MAXIMUM

2.2 FASTENERS

- A. NAILS: FINISH OR CASING WHERE EXPOSED
- B. SCREWS: TYPE 'S' TRIM HEAD SCREWS FOR ATTACHMENT OF TRIM TO METAL COMPONENTS.

2.3 ADHESIVES AND SOLVENTS

- A. AS RECOMMENDED BY THE MANUFACTURER FOR EACH PARTICULAR APPLICATION.
- B. ADHESIVES SHALL MEET OR EXCEED SCAQMD RULE 1168(2022) FOR VOC CONTENT.
- C. SOLVENTS AND CLEANERS SHALL MEET OR EXCEED SCAQMD RULE 1171(2009) FOR VOC CONTENT.

2.3 FINISH CARPENTRY

- A. IN ACCORDANCE WITH AWI 'PREMIUM GRADE' QUALITY STANDARDS.
- B. FULL LENGTH PIECES ONLY
- C. JOINTING:
  - a. SHOULDER JOINT: AT ALL DOOR JAMBS
  - b. MITRED JOINTS AT ALL OTHER LOCATIONS UNLESS NOTED OTHERWISE.

PART 3 EXECUTION

PREPARATION

- 1. FURNISH AND INSTALL ALL FRAMING AND BLOCKING AS REQUIRED FOR THE WORK OF THIS SECTION. COORDINATE WITH COLD FORMED STEEL SUPPLIER AS REQUIRED.
- 2. EXAMINE AND ENSURE ALL SURFACES TO RECEIVE LAMINATES ARE PREPARED AND CLEAN BEFORE COMMENCING THE WORK.

INSTALLATION

- 1. APPLY ADHESIVES, REMOVE EXCESS, AND CLEAN IN ACCORDANCE WITH MANUFACTURER'S MOST RECENT PRINTED INSTRUCTIONS.
- 2. RELIEVE BACKS OF WOOD TRIM, KERF BACKS OF MEMBERS MORE 5" WIDE AND 1" NOMINAL THICKNESS. EASE ALL EXTERNAL CORNERS.
- 3. INSTALL WOODS AND PLASTICS IN CONFORMANCE WITH DETAILS AND THE FOLLOWING CONSIDERATIONS AND REQUIREMENTS:
  - A. INSTALL WOODS AND PLASTICS WITH TIGHT JOINTS.
  - B. MITER CASINGS AND MOLDINGS UNLESS OTHERWISE NOTED.
  - C. ALL RUNNING TRIM ONE (1) PIECE UP TO 10'-0" LONG. MATCH GRAIN AND COLOR PIECE TO PIECE.
  - D. USE FINISH NAILS EXCEPT WHERE ARE SPECIFICALLY CALLED FOR OR WHERE SCREWS DO NOT SHOW.
  - E. SET FASTENERS FOR PUTTYING.
  - F. WHERE SCREW ATTACHMENT IS REQUIRED, SPACE SCREWS AT EQUAL INTERVALS. SINK AND PUTTY IN FINISH WOOD SURFACES.
  - G. ALL MEMBERS AND LINES SHALL BE LEVEL AND PLUMB.
  - H. SELECT AND CUT MATERIAL TO EXCLUDE DAMAGED, MARKED OR DEFECTIVE AREAS.
  - I. FINISH EXPOSED SURFACES SMOOTH, FREE FROM TOOL AND MACHINE MARKS.
  - J. EASE ALL EXPOSED WOOD EDGES 1/8" MINIMUM RADIUS.
- 4. FILL IN ALL NAIL HOLES AND SAND SMOOTH.
- 5. FILL IN ALL SEAMS WITH MANUFACTURER'S RECOMMENDED PRODUCT.
- 6. CLEAN ALL WORK OF THIS SECTION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.

PROTECTION

- 1. PROTECT FROM DAMAGE BY OTHER TRADES WORKING ADJACENT TO THE INSTALLATION.
- 2. PROVIDE DROP CLOTHS OR COVERS TO PROTECT THE WORK OF THIS SECTION FROM THE ACTIVITIES O SUBSEQUENT TRADES.
- 3. REPAIR OR REPLACE DAMAGED SURFACES IN A MANNER ACCEPTABLE TO OWNER AND ARCHITECT PRIOR TO SUBSTANTIAL COMPLETION.

LUMBER

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES WOOD LUMBER INCLUDING MASS TIMBER, BUILT-UP LAMINATES, AND HEAVY FRAMING.

1.2 REFERENCES

- A. AWPA U1 STANDARD FOR PRESERVATIVE-TREATED WOOD PRODUCTS
- B. RELATED SECTIONS: "WOOD AND PLASTICS" (WOOD DOORS)

1.3 SUBMITTALS

- A. MATERIAL DATA SHEETS: FOR ALL FASTENERS USED IN CONTACT WITH PRESERVATIVE-TREATED WOOD.
- B. CERTIFICATES: FOR ALL PRESERVATIVE-TREATED WOOD TYPES, SPECIFYING THE FOLLOWING:
  - a. THE NAME OF THE TREATMENT USED
  - b. THE LEVEL OF TREATMENT
  - c. LOCATION OF USE ON PROJECT
  - d. RELEVANT AWPA STANDARD REFERENCE
- C. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 STORAGE AND HANDLING

- A. STORE ALL PRODUCTS COVERED OR INDOORS AWAY FROM WEATHER. PROTECT FROM WATER INFILTRATION AND SPACE TO ALLOW AIR CIRCULATION BETWEEN MEMBERS WHILE STORED. STORE MEMBERS OFF OF GROUND ON PALLETS OR SIMILAR SPACING MATERIAL.

PART 2 PRODUCTS

- A. GRADING: LUMBER SHALL BE GRADED AND STAMPED WITH THE FOLLOWING MINIMUM DESIGN VALUES:
  - 1. BEAMS, JOISTS, LINTELS & HEADERS: #1/#2 DOUGLAS FIR 850 PSI Fb. 95 PSI Fv. 1600 KSI E
  - 2. STUDS AND PLATES: #1/#2 S.P.F. 875 PSI Fb. 1150 PSI Fv. 1400 KSI E
  - 3. LVL: 2600 PSI Fb. 285 PSI Fv. 1800 KSI E
  - 4. MICROLAM: 2600 PSI Fb. 285 PSI Fv. 1900 KSI E
  - 5. WHERE STRUCTURAL DRAWINGS CONTRADICT THESE GRADES, THE MOST STRINGENT SHALL APPLY.
- B. PRESERVATIVE-TREATMENT:
  - 1. PROVIDE PRESERVATIVE-TREATED WOOD IN THE FOLLOWING LOCATIONS:
    - a. ALL WOOD ATTACHED TO EXTERIOR BELOW-GRADE MASONRY AND CONCRETE WALLS.
    - b. ALL WOOD ATTACHED TO EXTERIOR SINGLE WYTHE MASONRY WALLS.
    - c. ALL WOOD CAP FLASHING BLOCKING ATTACHED TO PARAPETS.
    - d. ALL WOOD ON CONCRETE SLABS IN DIRECT CONTACT WITH EARTH.
    - e. ALL WOOD IN CONTACT WITH GROUND OR EXPOSED TO WEATHER.
  - 2. WOOD SILL PLATES ON CONCRETE SLABS SEPARATED FROM DIRECT CONTACT TO THE EARTH WITH A 10 MIL POLYETHYLENE VAPOR BARRIER SHALL NOT REQUIRE PRESERVATIVE TREATMENT.
  - 3. INTERIOR TREATED WOOD CHALL USE AN ACQ-C, ACQ-D, CBA-A, CA-B TREATMENT.
    - A. RETENTION LEVELS SHALL BE ≤ 0.40PCF, ≤ 0.40PCF, ≤ 0.41PCF, ≤ 0.21PCF RESPECTIVELY.
  - 4. CHROMATED ARSENICALS, CREOSOTE, AND PENTACHLOROPHENOL TREATMENT IS PROHIBITED.
  - 5. ALL INTERIOR CONNECTION HARDWARE AND FASTENERS IN CONTACT WITH TREATED WOOD SHALL BE GALVANIZED OR STAINLESS STEEL.
  - 6. ALL EXTERIOR CONNECTION HARDWARE AND FASTENERS IN CONTACT WITH TREATED WOOD SHALL BE STAINLESS STEEL.
  - 7. FASTENERS CONNECTING WOOD BLOCKING TO PARAPETS SHALL BE TAPCON CLIMASEAL OR EQUIVALENT.
- C. WOOD HEADERS AND FRAMING MATERIAL SHALL BE THOROUGHLY SEASONED, FREE FROM WARP, SPLITS, SHAKES, AND CHECKS.
- D. MISCELLANEOUS LUMBER: #3 OR STANDARD GRADE, ANY SPECIES. USE OF OFFCUTS, REMNANTS, AND SCRAP PIECES NOT GENERATED BY THIS WORK ARE PROHIBITED.
- E. METAL CONNECTORS AND FRAMING: SIMPSON COMPANY "STRONG-TIE"

PART 3 EXECUTION

- 1. INSTALL 2" NOMINAL FIRE-BLOCKING IN STUD WALLS AT CEILINGS, SOFFITS, FLOOR LEVELS, AND AT EACH 10'-0" HEIGHT OF STUD CAVITY.
- 2. PRE-DRILL ALL HOLES FOR LAG BOLTS AND SCREWS TO SHANK DIAMETER AND FULL DEPTH.
- 3. CUT WASHERS SHALL BE USED AT ALL BOLT AND LAG BOLT HEADS AND NUTS.
- 4. JOISTS 2x12 OR DEEPER SHALL BE BLOCKED AND BRIDGED AT INTERVALS OF 8'-0"
- 5. JOISTS BENEATH BEARING PARTITIONS SHALL BE DOUBLED AND TRIPLED UNLESS OTHERWISE NOTED IN STRUCTURAL DRAWINGS.
- 6. INSTALL ALL WOOD FRAMING AS INDICATED ON THE DRAWINGS. ATTACH ACCORDING TO SPECIFICATIONS ON STRUCTURAL DRAWINGS.

DOORS AND WINDOWS

DOORS

PART 1 GENERAL

1.1 SUMMARY

- A. THE FOLLOWING INCLUDES FABRICATION AND INSTALLATION OF HOLLOW METAL DOORS, AND FRAMES.

1.2 REFERENCES

- A. ANSI A250 SPECIFICATIONS FOR STANDARD STEEL DOORS AND FRAMES
- B. RELATED SECTIONS:
  - a. 'WINDOWS' (DOOR LITES AND SIDELITES)

1.3 SUBMITTALS

- A. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 REQUIREMENTS

- A. PROVIDED UNITS SHALL BE SQUARE, TRUE, AND FREE FROM VISIBLE DEFECTS IN WORKMANSHIP OR FINISH.
- B. INSTALLER SHALL INCLUDE ALL HARDWARE, FASTENERS, ANCHORS, BOLTS, AND MISCELLANEOUS ACCESSORIES TO PROVIDE A COMPLETE INSTALLATION IN ACCORDANCE WITH THE DESIGN INTENT AS INDICATED ON THE DRAWINGS AND IN THE SCHEDULE.

PART 2 PRODUCTS

2.1 DOORS

- A. EXTERIOR DOORS
  - a. MATERIAL: GALVANIZED STEEL, FULLY WELDED SEAMLESS
  - b. DIMENSIONS: AS INDICATED ON DRAWINGS
  - c. THICKNESSES:
    - FACE SHEETS: 16 GA. MIN.
    - EDGE CHANNELS: 16 GA. MIN.
    - FACE STIFFENERS: 22 GA. MIN.
  - d. PERFORMANCE: U-0.50 MIN.
- B. INTERIOR METAL DOORS
  - a. MATERIAL: STEEL, FULLY WELDED SEAMLESS
  - b. DIMENSIONS: AS INDICATED ON DRAWINGS
  - c. THICKNESSES:
    - FACE SHEETS: 18 GA. MIN.
    - EDGE CHANNELS: 16 GA. MIN.
    - FACE STIFFENERS: 22 GA. MIN.
- C. INTERIOR WOOD DOORS
  - a. IN ACCORDANCE WITH AWI 'PREMIUM GRADE' QUALITY STANDARDS.
  - b. PACKAGE SHALL INCLUDE ALL THAT IS REQUIRED FOR A COMPLETE INSTALLATION OF DOORS AND FRAMES, INCLUDING MOLDING, TRIM, AND PANELING.
- D. FIRE RATING: AS INDICATED ON THE DRAWINGS.

2.2 FRAMES

- A. PROVIDE FRAMES CUSTOM WELDED WITH INTEGRAL TRIM, SIZES AND SHAPES AS INDICATED ON DRAWINGS AND SCHEDULES.
- B. EXTERIOR FRAMES
  - a. MATERIAL: GALVANIZED STEEL
  - b. THICKNESS: 14 GA. MIN.
  - c. FINISH: FACTORY FINISHED IN COLOR AS INDICATED ON SCHEDULE
- C. INTERIOR METAL FRAMES
  - a. MATERIAL: STEEL OR ALUMINUM AS INDICATED ON SCHEDULE
  - b. THICKNESS: 16 GA. MIN.
  - c. FINISH: FACTORY FINISHED IN COLOR AS INDICATED ON SCHEDULE
- D. INTERIOR WOOD FRAMES
  - a. MATERIAL: SPECIES TO MATCH DOOR LEAF
  - b. DIMENSIONS: AS INDICATED ON DOOR ELEVATIONS
  - c. PROFILE: AS SELECTED FROM SUPPLIER'S STANDARD RANGE.
  - d. FINISH: TO MATCH DOOR LEAF U.N.O.
- E. FIRE RATING: AS INDICATED ON THE DRAWINGS

2.3 WEATHERSTRIPPING

- A. COMPRESSION AIR SEAL GASKET TYPE
- B. UV RESISTANT
- C. IN COMPLIANCE WITH UL1784, ASTM E283, AND ANSI 105
- D. PRODUCT: 'CURRISeal' OR SIMILAR

2.4 HARDWARE AND ACCESSORIES

- A. HARDWARE SHALL COMPLY WITH ANSI A117.1 AND APPLICABLE CODE FOR TYPE AND OPERATIONAL FORCES
- B. HARDWARE SHALL COMPLY WITH ANSI A156 LEVEL 'A' DURABILITY
- C. MANUFACTURER: AS INDICATED ON THE SCHEDULE
- D. FINISH: AS INDICATED. ACCESSORY HARDWARE AND FASTENER FINISHES SHALL HARMONIZE WITH HARDWARE WHERE FINISH IS SPECIFIED.

PART 3 EXECUTION

PREPARATION

- 1. EXAMINE AND VERIFY SIZE AND LOCATION OF ROUGH WALL OPENINGS BEFORE BEGINNING THE WORK OF THIS SECTION.
- 2. COORDINATE WITH OTHER TRADES TO ENSURE PROPER PHASING AND REQUIRED CLEARANCES FOR INSTALLATION OF OTHER COMPONENTS.

INSTALLATION

- 1. PROVIDE AND INSTALL HARDWARE REINFORCEMENT AND ANCHORS AS REQUIRED FOR SECURE INSTALLATION AND IN ACCORDANCE WITH REQUIREMENTS FOR SPECIFIC HARDWARE AND INTENDED USE.
- 2. INSTALL FRAMES IN ACCURATE LOCATIONS AS INDICATED ON DRAWINGS AS MEASURED FROM THE NEAREST PERPENDICULAR WALL OR CORNER.
- 3. INSTALL RIGID, PLUMB, LEVEL, AND TRUE. ALIGN DOORS AND FRAMES WITH ADJACENT CONSTRUCTION.
- 4. SHIM FRAMES AS REQUIRED BEFORE FASTENING.
- 5. SECURE TO FLOOR AND WALLS WITH SPECIFIED ANCHORS AND MECHANICAL FASTENINGS.
- 6. CLEAN AND PREPARE UNITS TO RECEIVE SEALANTS WHERE INDICATED ON DRAWINGS.
- 7. INSTALL ALL FIRE RATED DOORS IN ACCORDANCE WITH REQUIREMENTS OF NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) PUBLISHED CODES AND RECOMMENDATIONS.
- 8. INSTALL AND HANG METAL AND WOOD DOORS AND TRIM AS INDICATED ON DRAWINGS.
  - A. CLEARANCES: 1/8" TOP, 3/8" BOTTOM UNLESS SPECIFICALLY NOTED IN SCHEDULES FOR UNDERCUTS. 3/32" BETWEEN DOOR PAIR LEAVES.
  - B. FIELD CUTTING OF DOORS IS PROHIBITED WITHOUT WRITTEN PERMISSION FROM ARCHITECT AND CONTRACTOR.
- 9. ADJUST AND CHECK OPERATION OF ALL UNITS TO ENSURE FREE AND SMOOTH OPERATION WITHOUT STICKING, BINDING, OR JAMMING. DOORS SHALL LATCH PROPERLY. REPAIR OR REPLACE UNITS WHICH CANNOT BE ADJUSTED SUFFICIENTLY.

PROTECTION

- 1. BRACE AND PROTECT FRAMES TO RETAIN POSITION AND ALIGNMENT DURING ADJACENT WALL CONSTRUCTION.
- 2. TOUCH UP OR REPAIR FINISH DAMAGE AS A RESULT OF INSTALLATION OR SUBSEQUENT WORK.

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
SPECIFICATIONS

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

PROGRESS SET
NOT FOR CONSTRUCTION

Revision
Date

JOB: 250070
DRAWN: NB
CHECKED: BDG
DATE: 2026-02-16
SHEET:
GS0.2

THERMAL AND MOISTURE PROTECTION

SEALANTS

PART 1 GENERAL
1.1 SUMMARY
A. THE FOLLOWING INCLUDES SEALANTS, ADHESIVES, SOLVENTS, CLEANERS, BACKER RODS, AND CONTROL JOINT MATERIALS.

1.2 REFERENCES
A. SCAQMD VOC CONTENT RULES
B. FEDERAL SPECIFICATIONS FOR SEALANTS TTS-1543, TT-S-230
C. SEE OTHER SECTIONS FOR ADDITIONAL REQUIREMENTS RELATED TO SPECIFIC SUBSTRATES.

1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED, INCLUDING PERFORMANCE DATA AND COLOR OPTIONS.

1.4 STORAGE AND HANDLING
A. STORE ALL PRODUCTS AWAY FROM DIRECT SUNLIGHT, EXCESSIVE HEAT OR COLD, AND MOISTURE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. OPENED MATERIALS SHALL BE APPLIED OR USED WITHIN THE MANUFACTURER'S LISTED TIMEFRAME AND THEN DISCARDED.

PART 2 PRODUCTS
A. ALL SEALANTS AND ADHESIVES:
    a. SHALL MEET OR EXCEED SCAQMD RULE 1168 FOR VOC CONTENT.
    b. SHALL BE NON-SAG, COMPLIANT WITH FEDERAL SPECIFICATIONS TTS-1543 OR TT-S-230 TYPE II, CLASS A.
B. ACOUSTICAL SEALANT: NON-HARDENING, NONDRYING SYNTHETIC RUBBER TYPE
    a. MIN. 90% SOLIDS
C. FOOD PROCESSING FACILITIES OR FOOD STORAGE AREAS: SONNEBORN DEGUSSA NP1 OR EQUAL
D. DOOR AND WINDOW PRIMER: "B" SEALANT RECOMMENDED BY MANUFACTURER FOR SPECIFIC SUBSTRATES.
E. BACKING MATERIALS: DOW 'ETHAFOAM' OR APPROVED EQUAL.
F. ISOLATION AND CONTROL JOINT MATERIALS: 1/2" POLYETHYLENE FOAM EXPANSION JOINT FILLER

PART 3 EXECUTION
1. PREPARE AND CLEAN ALL SURFACES PRIOR TO BEGINNING THE WORK OF THIS SECTION. SOLVENTS AND CLEANERS SHALL MEET OR EXCEED SCAQMD RULE 1171 FOR VOC CONTENT.
2. CAULK AROUND ALL WINDOW HEADS AND JAMBS, DOORFRAMES, VENTS, WALL OPENINGS, WHERE DIFFERENT MATERIALS MEET, ROOF OPENINGS, EAVES, SOFFITS, JOINTS, COUNTERTOPS, AND SIMILAR IN ORDER TO ACHEIVE A WATERTIGHT AND AIRTIGHT CONNECTION.
3. USE AN ACOUSTICAL SEALANT AROUND ALL PIPES, DUCTS, CONDUITS, SWITCHES, ETC. ON BOTH SIDES OF WALLS (CROSSING/PENETRATION) WITH THERMAL AND ACOUSTIC INSULATION. MAINTAIN REQUIRED FIRE RATING.
4. APPLY ACOUSTIC SEALANT AT ALL INTERIOR JOINTS AT INTERSECTIONS BETWEEN PLANES.
5. APPLY IN AMOUNTS AND RATES IN COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS.
6. SEALANT BEADS SHALL BE UNIFORM, CONTINUOUS, AND SOLID, FILLING ALL JOINTS AND VOIDS.
    A. SUPERFICIAL POINTING WITH SKIM BEADS SHALL NOT BE ACCEPTED.
7. APPLY SEALANTS AND CAULKS AFTER ADJACENT FINISHES ARE APPLIED.
8. SEE ROOF PLAN AND ROOFING SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR ROOF THERMAL AND MOISTURE PROTECTION.

INSULATION

PART 1 GENERAL
1.1 SUMMARY
A. THE FOLLOWING INCLUDES RIGID AND BATT THERMAL INSULATION AND ACOUSTIC BATT INSULATION.

1.2 REFERENCES
A. ASTM C578 - STANDARD SPECIFICATION FOR RIGID POLYSTYRENE THERMAL INSULATION
B. ASTM E84 - STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS
C. ASTM C1320 - STANDARD FOR INSTALLATION OF FIBER BATT AND BLANKET INSULATION
D. ASTM C518 - STANDARD TEST METHOD FOR THERMAL INSULATION

1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED
B. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 STORAGE AND HANDLING
A. STORE ALL PRODUCTS AWAY FROM MOISTURE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS IN ORIGINAL PACKAGING.

PART 2 PRODUCTS
2.1 RIGID INSULATION
A. TYPE: XPS
B. R-VALUE: 4.6/IN. MINIMUM
C. SIZE: LARGEST STANDARD SHEETS FROM MANUFACTURER'S STANDARD RANGE
D. THICKNESS: AS REQUIRED TO MEET INDICATED R-VALUE
E. FACING: UNFACED UNLESS OTHERWISE NOTED ON DRAWINGS

2.2 THERMAL BATT INSULATION
A. TYPE: MINERAL WOOL BATT
B. R-VALUE: 3.6/IN. MINIMUM OR AS REQUIRED TO MEET INDICATED R VALUE, WHICHEVER IS GREATER
C. SIZE: MATCHED TO STUD DEPTH AND JOIST SPACING
D. FACING: UNFACED UNLESS OTHERWISE NOTED ON DRAWINGS

2.3 ACOUSTIC INSULATION
A. TYPE: NONCOMBUSTIBLE BATT OR BOARD
B. NRC: 1.0 MIN AT 3IN.
C. SIZE: MATCHED TO STUD DEPTH AND JOIST SPACING
D. DO NOT INSTALL ACOUSTIC BATT INSULATION ON EXTERIOR WALLS OR ANY WALL INDICATED TO RECIEVE A VAPOR BARRIER.

2.4 LOOSE FILL INSULATION
A. TYPE: NONCOMBUSTIBLE
B. R-VALUE: 4.2/IN. MINIMUM
C. DEPTH: SUFFICIENT TO ACHEIVE R VALUE INDICATED ACROSS ENTIRE AREA INDICATED

2.5 SPRAY INSULATION
A. TYPE: CLOSED CELL
B. R-VALUE: 7/IN. MINIMUM
C. DEPTH: SUFFICIENT TO ACHEIVE R VALUE INDICATED ACROSS ENTIRE AREA INDICATED. DO NOT APPLY MORE THAN MANUFACTURER'S MAXIMUM THICKNESS IN ONE APPLICATION PASS.

2.6 PIPE AND DUCT INSULATION
A. HOT WATER PIPING: 1" MINIMUM OR PER ASHRAE 90.1 6.8.3, WHICHEVER IS HIGHER
    a. INSTALL ALONG ENTIRE PATH OF PIPING
B. CHILLED WATER PIPING: 1" MINIMUM ALONG ENTIRE PATH OF PIPING
C. DUCTS: AS INDICATED ON DRAWINGS AND IN COMPLIANCE WITH ASHRAE 90.1 6.8.2

PART 3 EXECUTION
1. ENSURE SURFACES AND CAVITIES ARE READY TO RECIEVE INSULATION PRIOR TO INSTALLATION. VERIFY INSTALLATION OF ANY VAPOR BARRIER OR COATINGS REQUIRED BENEATH INSULATION ARE COMPLETED AND CURED PRIOR TO INSTALLATION.
2. VERIFY INSTALLATION SUBSTRATE IS CLEAN AND DRY BEFORE INSTALLATION.
3. INSTALL INSULATION PER MANUFACTURER'S INSTRUCTIONS
    A. STAGGER JOINTS IN RIGID INSULATION MINIMUM OF 1/X DIMENSION OF BOARD WHERE 'X' IS NUMBER OF LAYERS INDICATED ON DRAWINGS. JOINTS SHALL BE STAGGERED IN BOTH DIRECTIONS.
    B. FILL CAVITIES EDGE TO EDGE BETWEEN JOISTS TO FULL DEPTH OF JOIST UNLESS OTHERWISE INDICATED. DO NOT OVERFILL OR COMPRESS INSULATION TO FIT. USE BATT THICKNESSES INDICATED FOR CAVITY DEPTH.
    C. USE THE LARGEST SHEETS AND LONGEST CONTINUOUS BATTS AVAILABLE; DO NOT FILL AREAS WITH OFFCUTS OR REMNANTS.
4. CUT TO SHAPE AND INSTALL INSULATION AROUND PENETRATIONS AND IN-WALL EQUIPMENT FLUSH AND TIGHT.
5. LOOSE FILL INSULATION: MAINTAIN REQUIRED DEPTH ACROSS ENTIRE AREA TO RECIEVE INSULATION INCLUDING OVER CEILING PENETRATION DOMES AND CONDUITS. DO NOT STEP ON OR COMPRESS FILL AFTER INSTALLATION. VERIFY DEPTH OF INSTALLATION BY SAMPLING DEPTH AT MINIMUM (5) POINTS. SPREAD AND FLUFF DISTURBED OR COMPRESSED INSULATION PRIOR TO SUBSTANTIAL COMPLETION.

THERMAL AND MOISTURE PROTECTION

FLAT ROOFING SYSTEMS

PART 1 GENERAL
1.1 SUMMARY
A. THE FOLLOWING INCLUDES ROOF MEMBRANES, FLASHING, AND BALLAST

1.2 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED
B. QUALIFICATIONS: INSTALLER'S CERTIFICATION TO INSTALL PRODUCT INDICATED
C. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.
D. WARRANTY: MANUFACTURER'S HIGHEST CLASSIFICATION, 30 YEAR MINIMUM, SUBMITTED IN OWNER'S NAME.

1.3 REQUIREMENTS
A. STORE ALL PRODUCTS AWAY FROM MOISTURE AND EXCESSIVE TEMPERATURE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS IN ORIGINAL PACKAGING.
B. ALL SHINGLES, UNDERLAYMENT, LEAK BARRIER, AND VENTILATION SHALL BE SUPPLIED BY A SINGLE MANUFACTURER OR FROM APPROVED MANUFACTURERS TO COMPLY WITH SHINGLE MANUFACTURER'S HIGHEST WARRANTY CLASSIFICATION
C. INSTALLER QUALIFICATIONS: CERTIFIED BY MANUFACTURER TO INSTALL INDICATED PRODUCT TO ACHIEVE HIGHEST WARRANTY CLASSIFICATION

PART 2 PRODUCTS
2.1 MEMBRANE
A. MATERIAL: EDPM
B. THICKNESS: AS INDICATED ON DRAWINGS, 45 MIL MIN.
C. COLOR: WHITE
D. INSTALLATION TYPE
    a. PRIMARY ROOFS: BALLASTED WITH PAVERS AT BUILDING CORNERS AND AROUND MECHANICALS AND HATCHES
    b. CANOPIES AND ROOFS UNDER 300 SF: FULLY ADHERED

2.2 FLASHING
A. FULL SELF-ADHERED MEMBRANE OF SAME MANUFACTURER AND TYPE AS PRIMARY MEMBRANE
B. THICKNESS: 75 MIL MIN.
C. PENETRATION FLASHING: FROM SAME MANUFACTURER AS PRIMARY MEMBRANE OF TYPE AND SIZE FOR PENETRATION.

2.3 BALLAST AND PAVERS
A. BALLAST: ROUND OR IRREGULAR WASHED.
    a. SIZE: ASTM D448 NO.67
B. PAVERS: SQUARE AND UNIFORM
    a. MATERIAL: PRECAST CONCRETE
    b. SIZE: 24" x 24" MINIMUM
    c. THICKNESS: 2" MINIMUM

PART 3 EXECUTION
1. INSTALL ONLY WHEN WEATHER IS PREDICTED TO BE ACCEPTABLE FOR INSTALLATION OF ROOF FOR ENTIRE SCHEDULED DURATION OF INSTALLATION PLUS (2) DAYS.
2. INSTALL ONLY AFTER ALL PENETRATIONS THROUGH ROOF DECK ARE INSTALLED.
3. ENSURE DECK IS DRY AND READY TO RECIEVE ROOF SURFACE.
4. CLEAN DECK SURFACE THOROUGHLY PRIOR TO INSTALLATION OF ROOFING SYSTEM.
5. INSTALL PER MANUFACTURER'S SPECIFICATIONS, CONSISTENT WITH ACHIEVING MANUFACTURER'S HIGHEST WARRANTY CLASSIFICATION.
6. FLASH ALL PENETRATIONS WITH MANUFACTURER'S SPECIFIED BOOT OR ACCESSORY FOR PENETRATION TYPE AND SIZE. PROVIDE A CONTINUOUS BEAD OF SEALANT AROUND ENTIRE PERIMETER OF FLASHING.
7. INCOMPLETE ROOFING AREAS SHALL BE COVERED AND PROTECTED FROM MOISTURE AND CONTAMINANTS UNTIL ROOFING IS COMPLETE.
8. NAILING OR ANCHORING OF ANY OBJECT THROUGH INSTALLED MEMBRANE IS STRICTLY PROHIBITED.

PAINTS AND COATINGS

PART 1 GENERAL
1.1 SUMMARY
A. THE FOLLOWING INCLUDES INTERIOR AND EXTERIOR PAINTS AND COATINGS.

1.2 REFERENCES
A. SCAQMD VOC CONTENT RULES
B. SEE OTHER SECTIONS FOR ADDITIONAL REQUIREMENTS RELATED TO SPECIFIC SUBSTRATES.

1.3 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED ON DRAWINGS.
B. DRAWDOWN SAMPLES: ONE PER COLOR AND PAINT COMBINATION ON PROJECT, 6x10 INCH SAMPLE BOARD MINIMUM
C. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 STORAGE AND HANDLING
A. STORE ALL PRODUCTS AWAY FROM DIRECT SUNLIGHT, EXCESSIVE HEAT OR COLD, AND MOISTURE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. OPENED MATERIALS SHALL BE APPLIED OR USED WITHIN THE MANUFACTURER'S LISTED TIMEFRAME AND THEN DISCARDED.

PART 2 PRODUCTS
A. PAINTS AND COATINGS SHALL BE SOURCED FROM A SINGLE MANUFACTURER FOR THE ENTIRE SCOPE OF THE WORK.
B. ALL COATINGS SHALL MEET OR EXCEED SCAQMD RULES FOR VOC CONTENT.
C. ACRYLIC CONCRETE STAIN:
    a. MAUFACTURERS:
        1. HALLMAN LINDSAY - GRIPCRETE 167 VERTICAL
        2. SHERWIN WILLIAMS - LOXON VERTICA
        3. BENJAMIN MOORE - TUFFCRETE WATERBORNE
D. INTERIOR PAINT:
    a. LATEX BASED
    b. PRODUCT: SHERWIN WILLIAMS PRO-MAR 200 ZERO VOC OR SIMILAR

PART 3 EXECUTION
1. PREPARE AND CLEAN ALL SURFACES PRIOR TO BEGINNING THE WORK OF THIS SECTION. SOLVENTS AND CLEANERS SHALL MEET OR EXCEED SCAQMD RULE 1171 FOR VOC CONTENT.
2. METALS SHALL BE CLEAN, FREE OF OIL, CORROSION AND RUST FREE.
3. EXTERIOR PRECAST CONCRETE TO BE PAINTED SHALL WEATHER FOR A MINIMUM 90 DAYS BEFORE PAINT APPLICATION.
4. DO NOT APPLY PAINT OR COATINGS AT TEMPERATURES BELOW 45° F OR WHEN TEMPERATURE SHALL FALL BELOW 45° WITHIN 3 DAYS OF APPLICATION.
5. PROVIDE TWO (2) COATS PAINT MINIMUM OVER PRIMER WHERE REQUIRED TO OBTAIN A FLAT, CONSISTENT COLOR WITHOUT SHADOWING OR STREAKING.
6. PROTECT PAINTED SURFACES FROM DAMAGE FROM ADJACENT AND SUBSEQUENT WORK. TOUCH UP ANY DAMAGE OR CHIPPING PRIOR TO SUBSTANTIAL COMPLETION.

MASONRY

CONCRETE UNIT MASONRY

PART 1 GENERAL

1.1 SUMMARY
A. THIS SECTION INCLUDES CONCRETE UNIT MASONRY, STEEL REINFORCEMENT, ANCHORS, TIES, FLASHING, JOINTS, WEEPHOLES, MORTAR, AND OTHER RELATED ACCESSORIES.

1.2 REFERENCES
A. ACI 117 STANDARD SPECIFICATIONS FOR CONCRETE CONSTRUCTION MATERIALS
B. ASTM C90 STANDARD SPECIFICATION FOR LOADBEARING CONCRETE MASONRY UNITS
C. ASTM C270 STANDARD SPECIFICATION FOR MORTAR FOR UNIT MASONRY

1.3 SUBMITTALS
A. SEE 'SUBMITTALS' UNDER GENERAL REQUIREMENTS.

1.4 DELIVERY, STORAGE, AND HANDLING
A. DELIVER AND HANDLE MATERIALS AS TO PREVENT DAMAGE.
B. DELIVER UNITS WRAPPED AND ON WOODEN PALLETS IN A MANNER TO ALLOW AIR CIRCULATION TO PREVENT MOISTURE ACCUMULATION.
C. MASONRY UNITS WITH GROUND OR POLISHED FACES SHALL BE PACKAGED WITH PROTECTIVE MEASURES TO MINIMIZE CHIPPING.
D. STORE MATERIALS OFF GROUND WITH A WATERPROOF COVERING AND IN A DRY LOCATION.

PART 2 PRODUCTS

2.1 MANUFACTURERS
A. MANUFACTURER: MASONRY SHALL BE SOURCED FROM A SINGLE MANUFACTURER AND BATCH PLANT.
B. WHERE A SPECIFIC MANUFACTURER IS INDICATED ON THE DRAWINGS, SUBSTITUTIONS SHALL NOT BE PERMITTED.

2.2 CONCRETE MASONRY UNITS
A. DIMENSIONS: INDUSTRY STANDARD NOMINAL UNITS AS INDICATED ON DRAWINGS.
B. SHAPES: PROVIDE SPECIAL MASONRY UNITS FOR BOND BEAMS, CORNERS, SILLS, CAPS, AND LINTELS AS REQUIRED AND INDICATED ON DRAWINGS.
C. FACE FINISH: GROUND FACE, OR AS INDICATED ON DRAWINGS.
D. COLOR: AS SELECTED FROM MANUFACTURER'S STANDARD RANGE.

2.3 ACCESSORIES
A. REINFORCING BARS: STEEL, PER ASTM A951
B. FLASHING: STAINLESS STEEL, PER ASTM A666
C. EXPANSION JOINTS: EXTRUDED, CLOSED CELL POLYETHYLENE

2.4 MORTAR
A. SHALL CONFORM TO ASTM C270
B. PROFILE: TOOLED TO A CONCAVE APPEARANCE UNLESS OTHERWISE NOTED
C. COLOR: AS SELECTED FROM MANUFACTURER'S STANDARD RANGE

PART 3 EXECUTION

3.1 PREPARATION
A. DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED. VERIFY FOUNDATION TOLERANCES CONFORMING TO ACI 117.
B. CLEAN SURFACES THOROUGHLY PRIOR TO BEFORE INSTALLATION.
C. REMOVE MUD, LOOSE RUST, ICE, AND OTHER COATINGS FROM REINFORCEMENT THAT WOULD INTERFERE WITH THE BOND.
D. PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER TO ACHIEVE THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.

3.2 INSTALLATION
1. LAY MASONRY IN BOND PATTERN AS INDICATED ON DRAWINGS OR GENERAL NOTES.
2. LAY MASONRY WITH FULL HEAD AND BED JOINTS, PLUMB AND TRUE TO LINES.
3. WHERE FRESH MORTAR JOINS PARTIALLY SET MORTAR, REMOVE LOOSE BRICK AND MORTAR, AND LIGHTLY WET EXPOSED SURFACE OF SET MASONRY.
4. FILL HOLES NOT SPECIFIED IN EXPOSED AND BELOW GRADE MASONRY WITH MORTAR.
5. REMOVE MASONRY PROTRUSIONS EXTENDING 1/2 OR MORE INTO CELLS OR CAVITIES TO BE GROUTED.
6. DO NOT SHIFT OR TAP MASONRY UNITS AFTER MORTAR HAS TAKEN INITIAL SET.
7. TOOTHING SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER.
8. WHEN ADJUSTMENT IS NECESSARY TO BE MADE AFTER MORTAR BEGINS TO HARDEN, REMOVE HARDENED MORTAR, AND REPLACE IT WITH FRESH MORTAR.
9. TOOL EXPOSED JOINTS WHEN "THUMB-PRINT" HARD. FLUSH CUT ALL JOINTS NOT TOOLED.
10. FLASHING
    A. CLEAN FROM MASONRY SURFACE ANY PROJECTIONS THAT MIGHT PUNCTURE FLASHING.
    B. PLACE THROUGH-WALL FLASHING ON A BED OF MORTAR. COVER FLASHING WITH MORTAR.
    C. LAP FLASHING A MINIMUM OF 6 INCHES (152 MM).
    D. PROJECT FLASHING FROM THE FACE OF THE WALL APPROXIMATELY 1/4 INCH (6 MM) TO FORM A DRIP.
11. LOCATE JOINTS AS SHOWN ON DRAWINGS. INSTALL NEOPRENE PRE-MOLDED FOAM PAD, BACKER ROD, AND SEALANT. PRIME SURFACES IF NECESSARY.
12. PROTECT WALL CAVITIES DURING CONSTRUCTION TO PREVENT RAINWATER SATURATION AND EXCESSIVE MOISTURE ACCUMULATION.

3.3 CLEANING
1. CLEAN MASONRY AS WORK PROGRESSES WITHIN SEVEN DAYS BY DRY BRUSHING TO REMOVE EXCESS MORTAR.
2. ALL CLEANING PRACTICES AND PRODUCTS USED SHALL FOLLOW THE CLEANING PRODUCT MANUFACTURER'S PRINTED INSTRUCTIONS.
3. REMOVE LARGE MORTAR PARTICLES BY HAND WITH WOODEN PADDLES AND NON-METALLIC TOOLS.

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

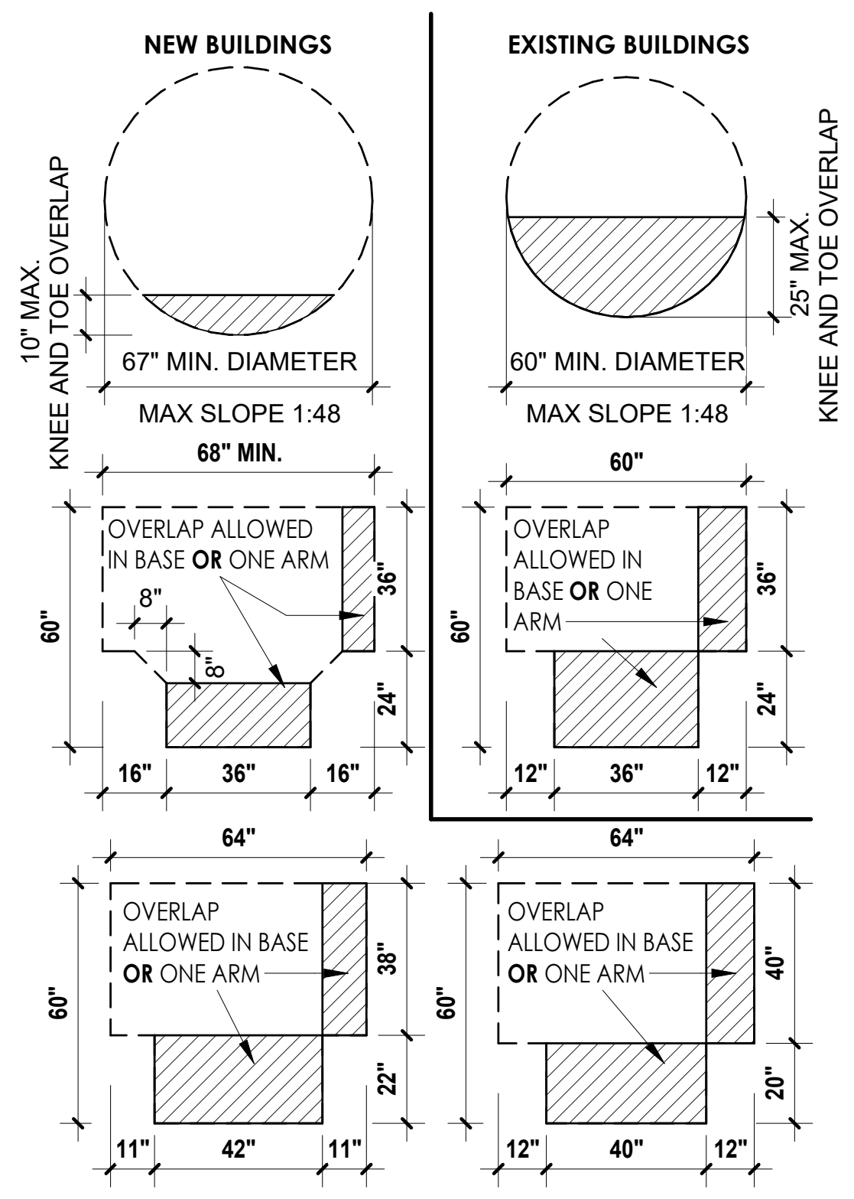
SHEET TITLE
SPECIFICATIONS

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

PROGRESS SET
NOT FOR CONSTRUCTION

Revision
Date

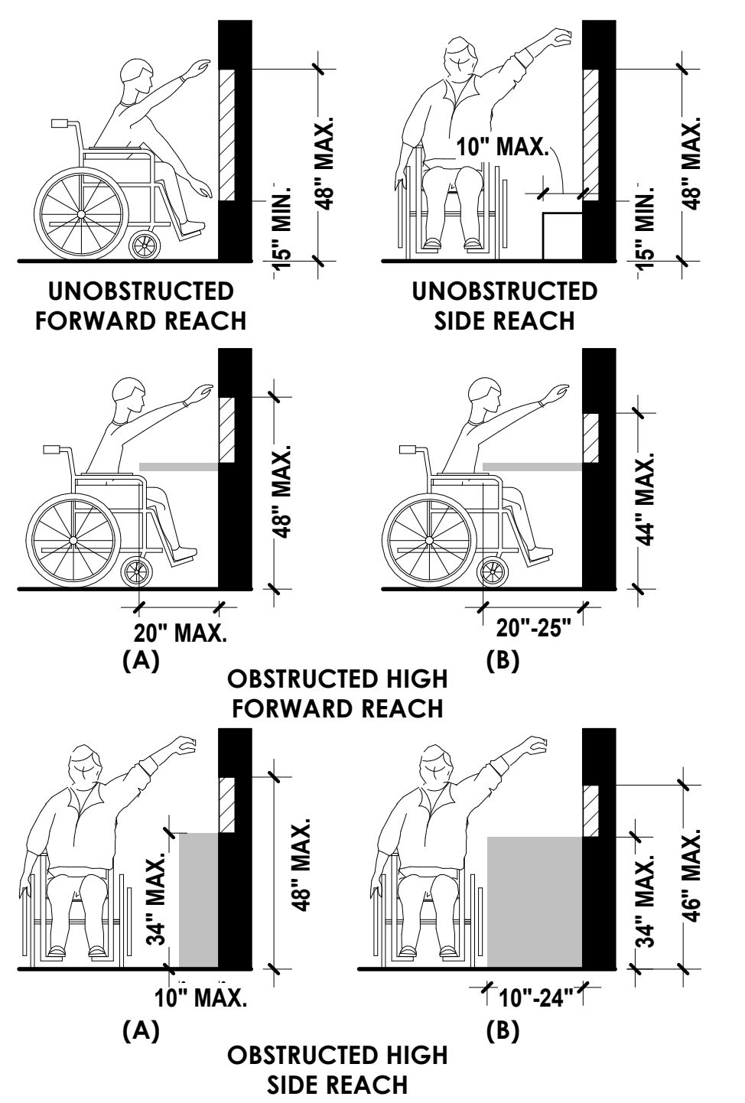
JOB: 250070
DRAWN: NB
CHECKED: BDG
DATE: 2026-02-16
SHEET:
GS0.3



13 TURNING SPACES

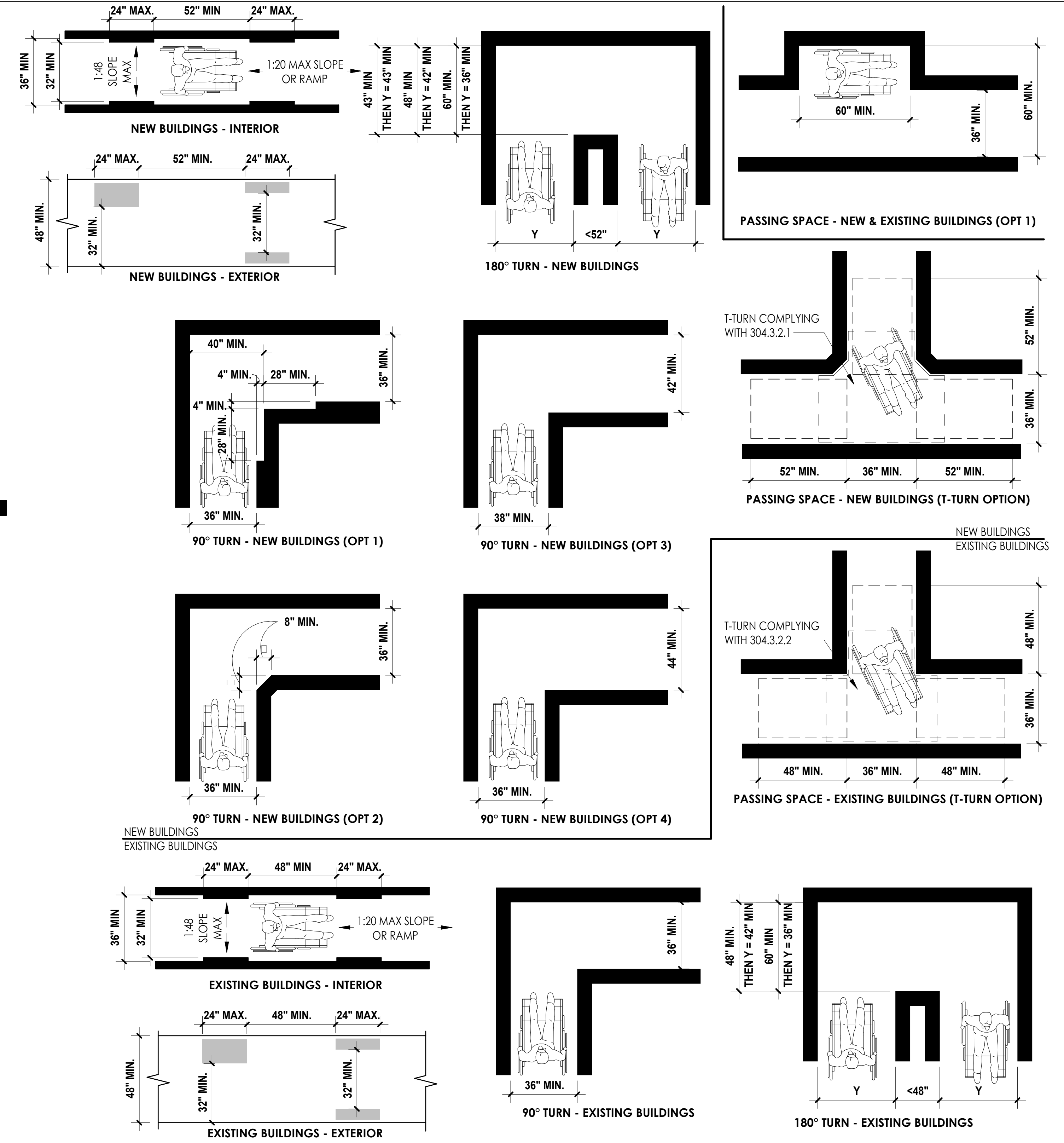
1/4" = 1'-0"

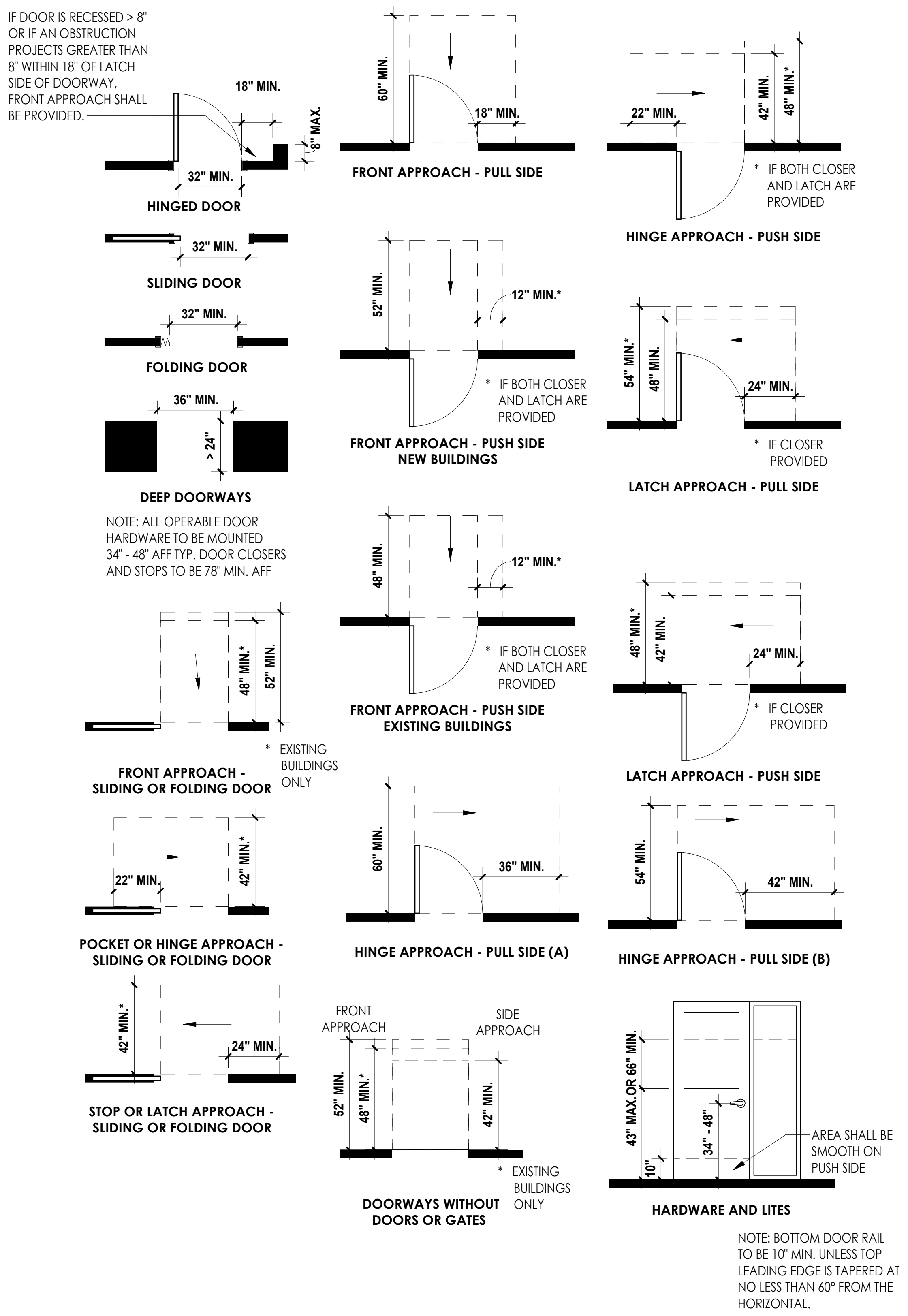
NOTE: ALL DIMENSIONS MINIMUM U.N.O.

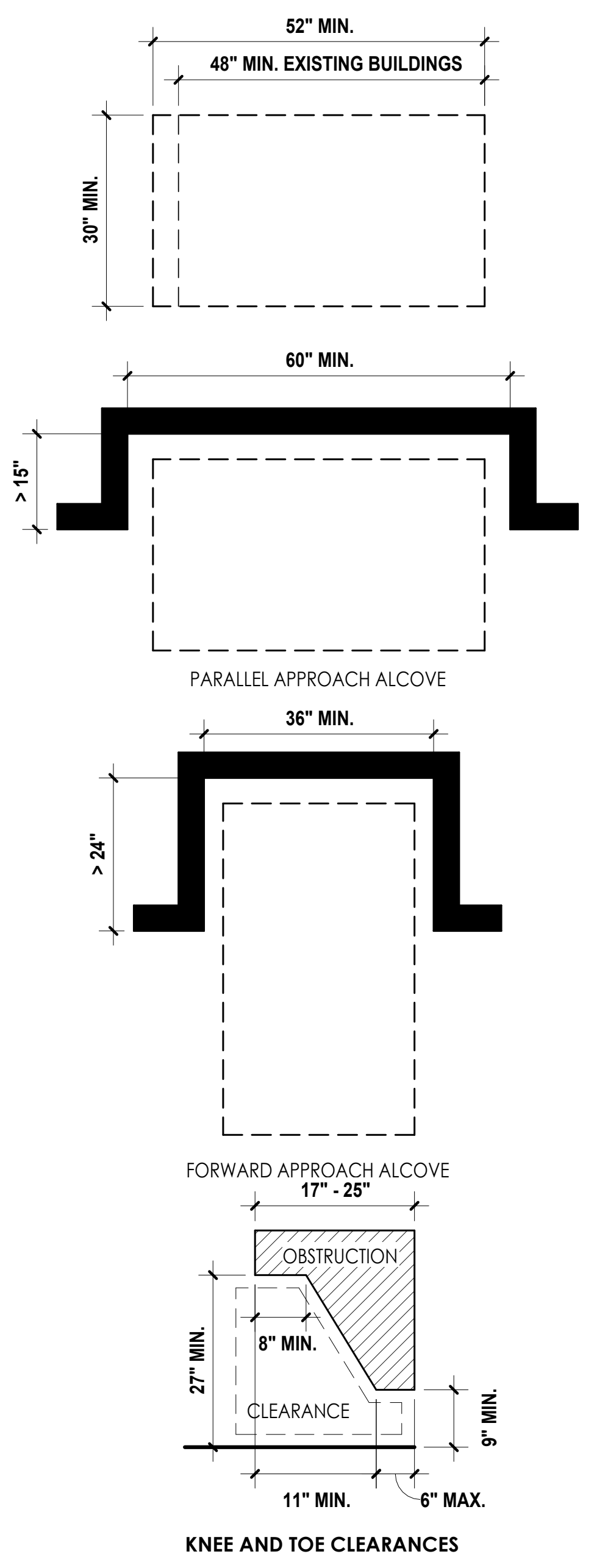


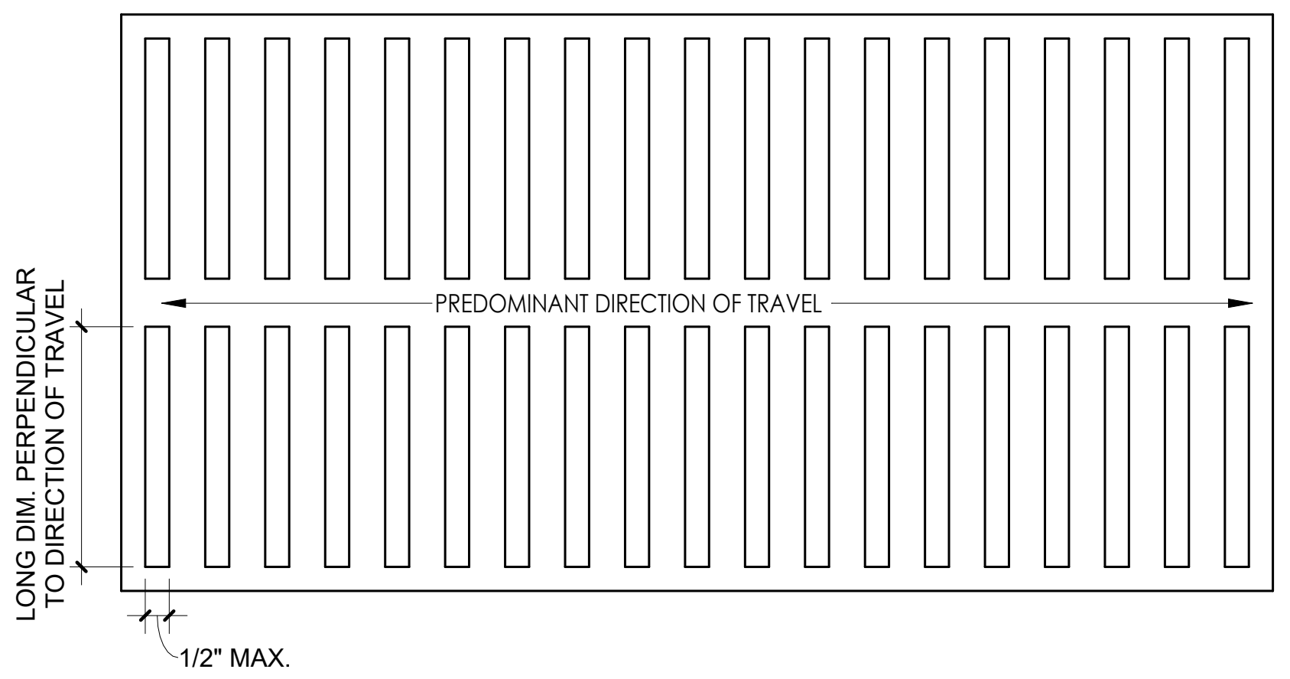
12 REACH RANGES

1/4" = 1'-0"



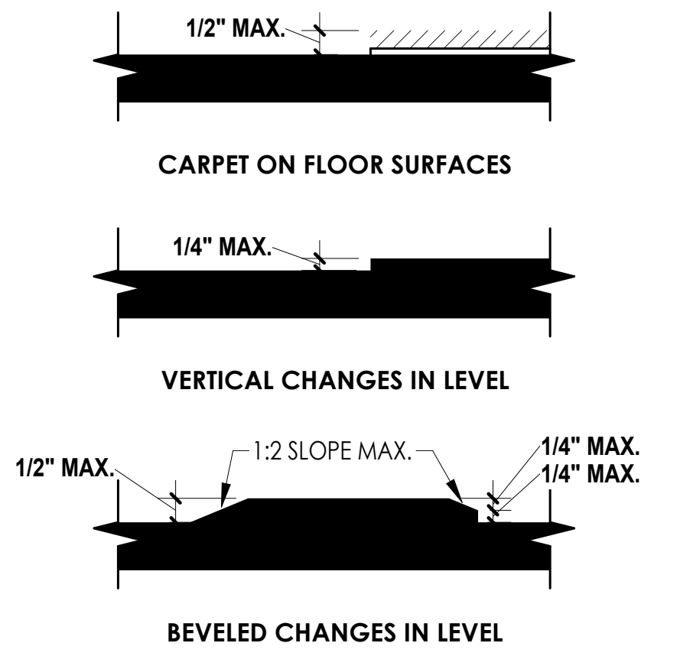






11 OPENINGS IN FLOOR SURFACES

3" = 1'-0"



10 CHANGES IN LEVEL

3" = 1'-0"

9 CLEAR FLOOR SPACE

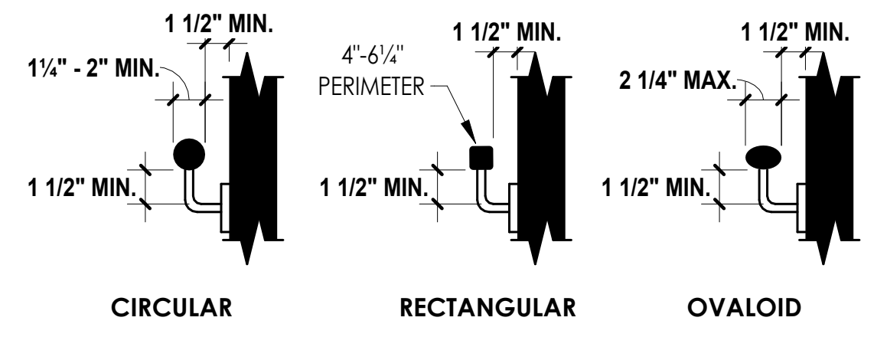
1/2" = 1'-0"

8 CLEAR WIDTHS OF ACCESSIBLE ROUTES

1/4" = 1'-0"

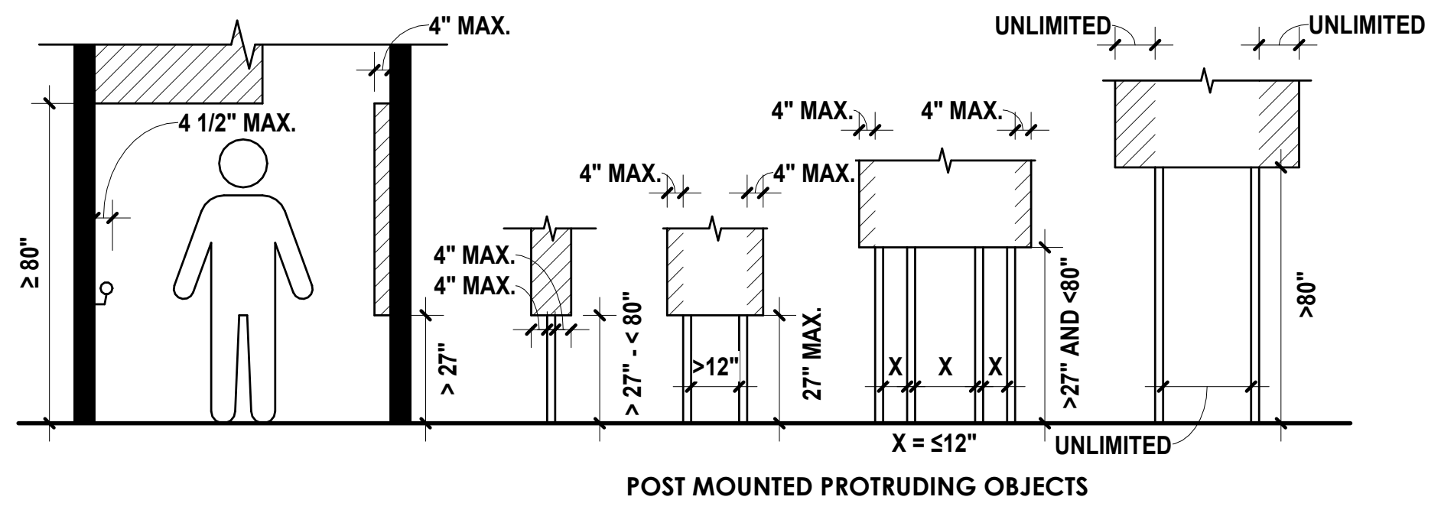
7 DOOR CLEARANCES

1/4" = 1'-0"



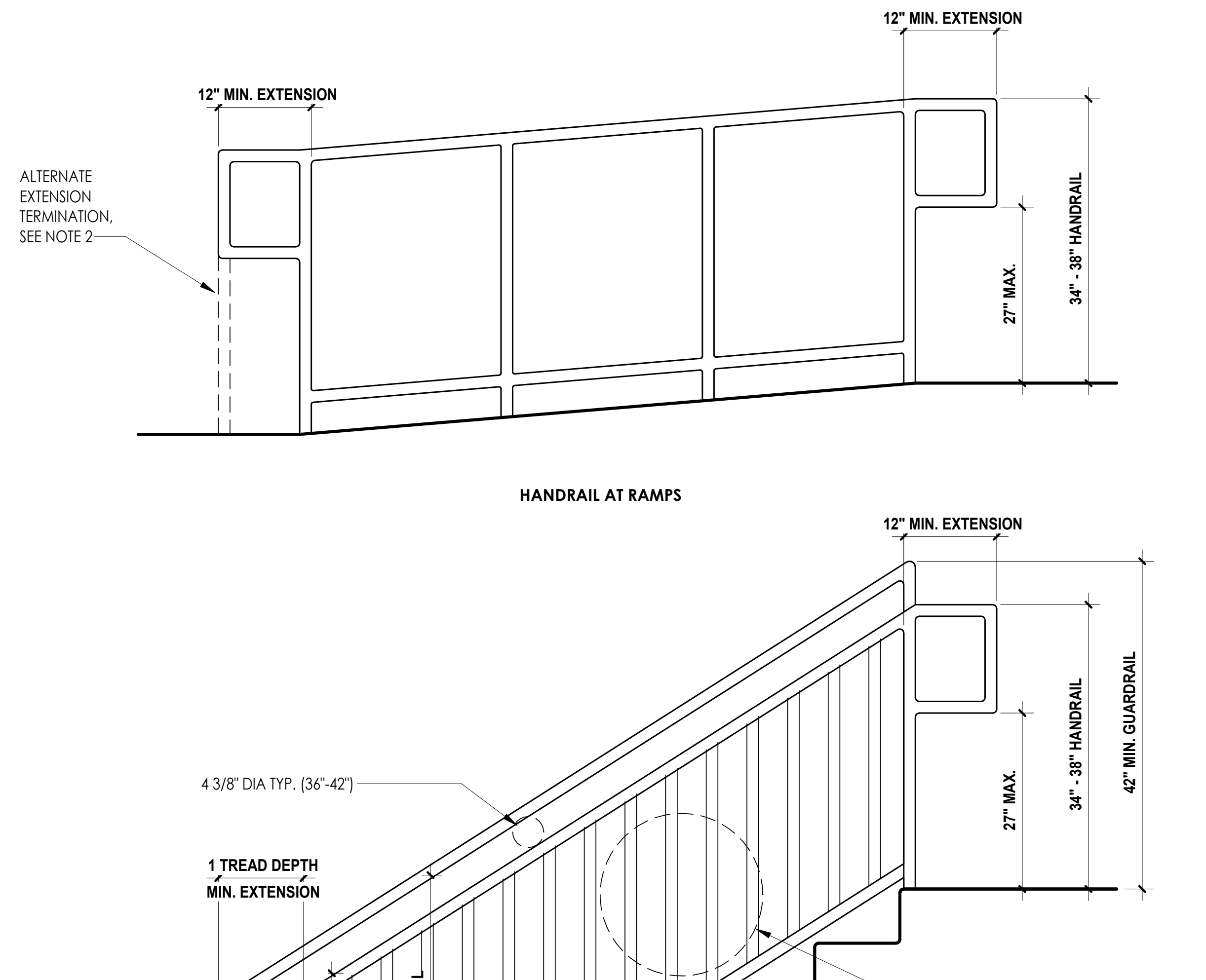
6 HANDRAIL PROFILES

1" = 1'-0"



5 PROTRUDING OBJECTS

1/4" = 1'-0"



21" DIA (UP TO 42") **ONLY** FOR:

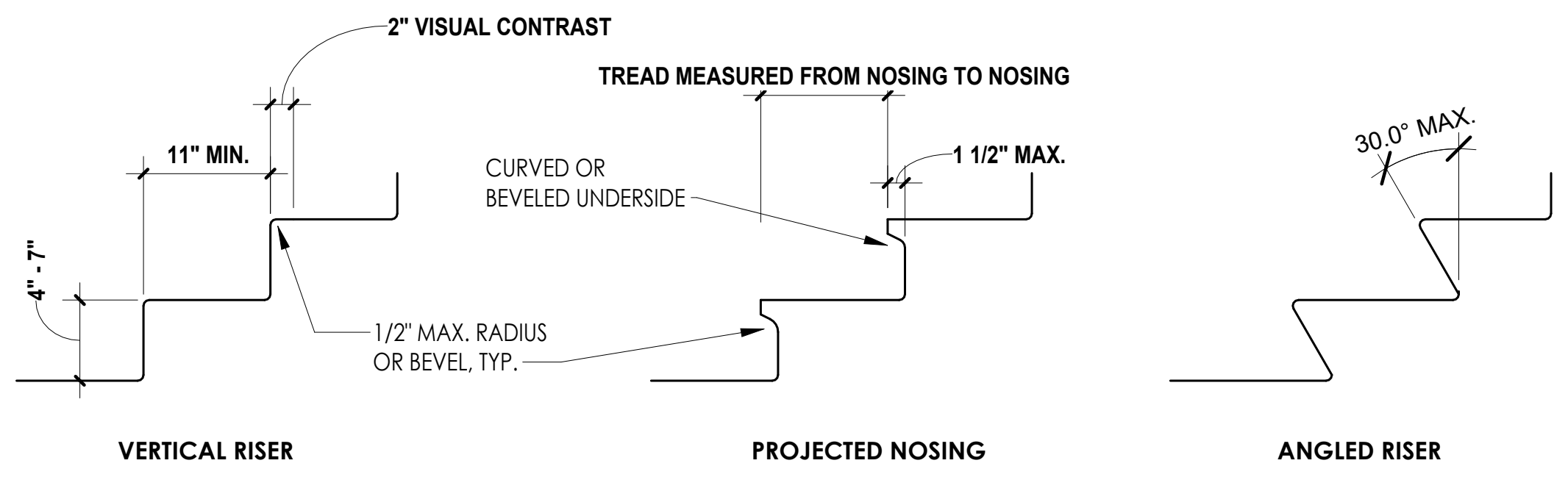
1. ACCESS TO MEP SYSTEMS OR EQUIP. (IBC2021 1015.4 EXCEPTION 3)
2. AREAS NOT OPEN TO PUBLIC IN OCCUPANCIES I-3, F, H, S (IBC2021 1015.4 EXCEPTION 4)

NOTES:

1. GUARDS SHALL BE CONSTRUCTED TO PREVENT PASSAGE OF A SPHERE OF INDICATED DIAMETER IN INDICATED LOCATIONS.
2. HANDRAIL EXTENSIONS SHALL RETURN TO A WALL, GUARD, LANDING SURFACE, OR BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.

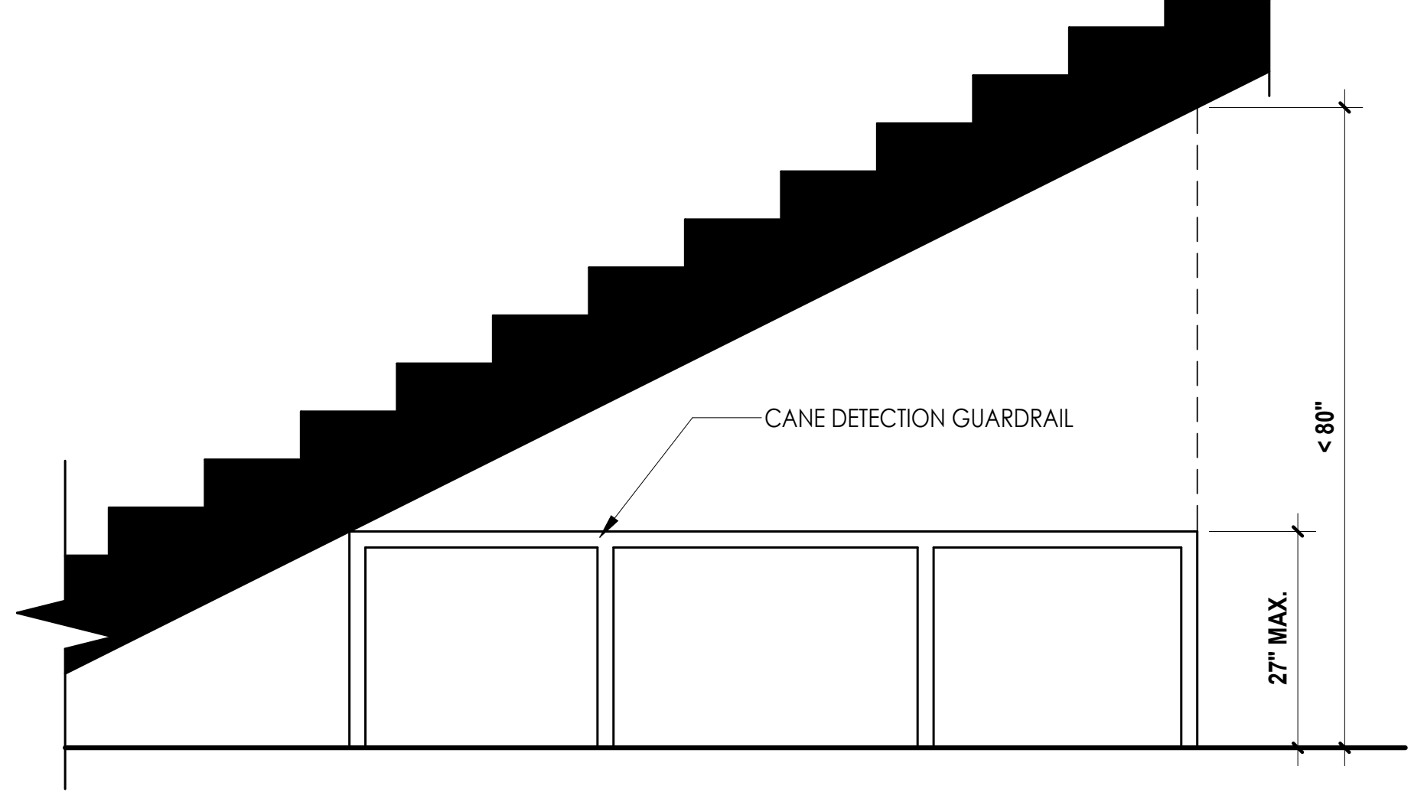
3 HANDRAILS AND GUARDRAILS

3/4" = 1'-0"



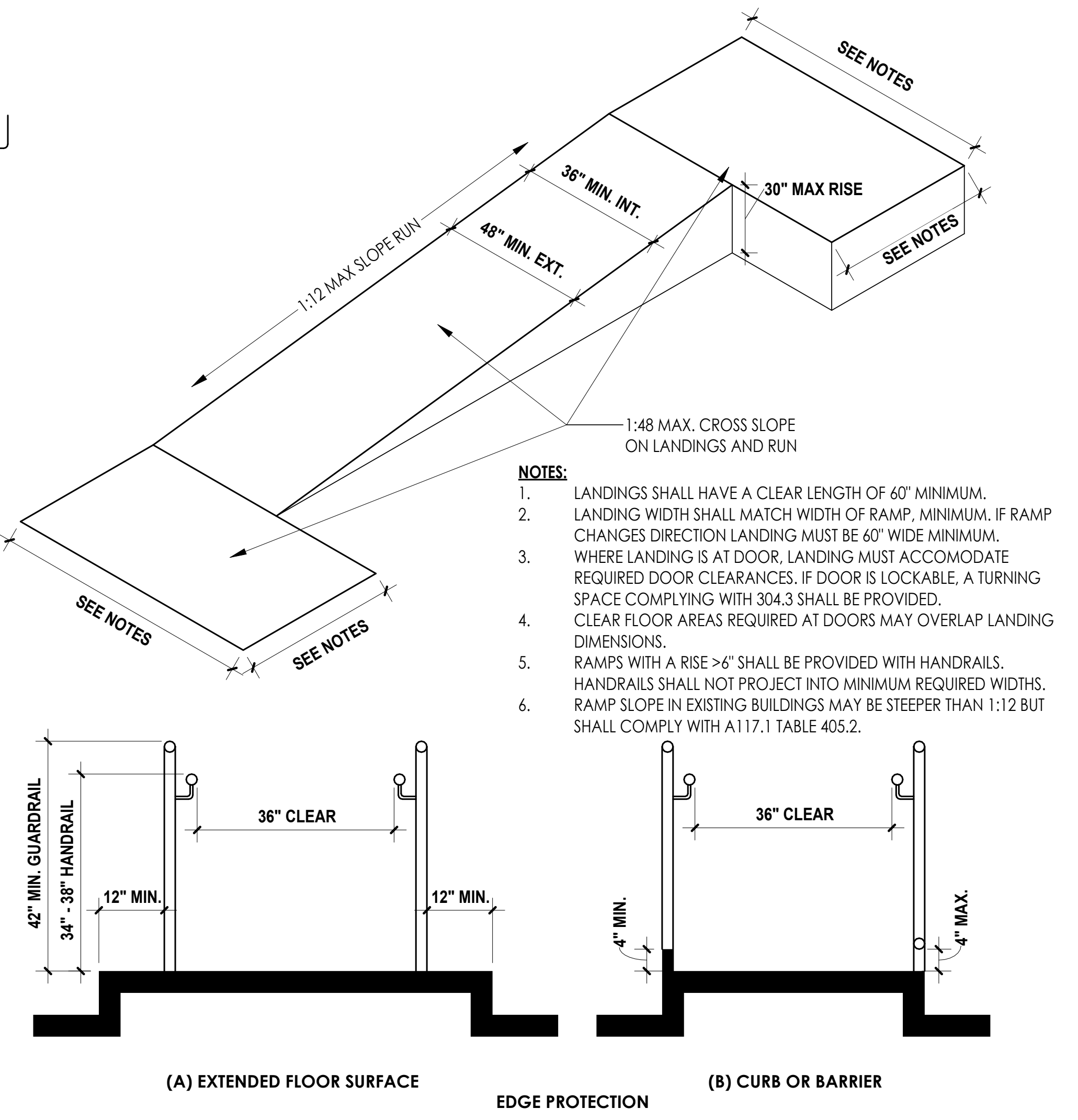
4 STAIR NOSINGS

3/4" = 1'-0"



2 STAIR CLEARANCE

1/2" = 1'-0"



1:48 MAX. CROSS SLOPE ON LANDINGS AND RUN

NOTES:

1. LANDINGS SHALL HAVE A CLEAR LENGTH OF 60" MINIMUM.
2. LANDING WIDTH SHALL MATCH WIDTH OF RAMP, MINIMUM. IF RAMP CHANGES DIRECTION LANDING MUST BE 60" WIDE MINIMUM.
3. WHERE LANDING IS AT DOOR, LANDING MUST ACCOMODATE REQUIRED DOOR CLEARANCES. IF DOOR IS LOCKABLE, A TURNING SPACE COMPLYING WITH 304.3 SHALL BE PROVIDED.
4. CLEAR FLOOR AREAS REQUIRED AT DOORS MAY OVERLAP LANDING DIMENSIONS.
5. RAMPS WITH A RISE >6" SHALL BE PROVIDED WITH HANDRAILS. HANDRAILS SHALL NOT PROJECT INTO MINIMUM REQUIRED WIDTHS.
6. RAMP SLOPE IN EXISTING BUILDINGS MAY BE STEEPER THAN 1:12 BUT SHALL COMPLY WITH A117.1 TABLE 405.2.

1 RAMPS

1/2" = 1'-0"

THIS SHEET FOR REFERENCE ONLY.
ITEMS SHOWN ON THIS SHEET DO NOT NECESSARILY REPRESENT THE WORK BEING COMPLETED UNDER THIS CONTRACT. SEE OTHER SHEETS FOR SCOPE OF WORK. WHEN DIMENSIONS AND NOTES IN OTHER SHEETS CONTRADICT THE DRAWINGS ON THIS SHEET, THE MOST RESTRICTIVE SHALL APPLY.

MATERIAL ON THIS SHEET IS BASED UPON THE FOLLOWING CODES/STANDARDS:

- IBC 2021
- ICC 117.1 (2017)
- NFPA 10 - 2026

THESE DETAILS DO NOT REPRESENT THESE STANDARDS IN THEIR ENTIRETY. THE INTENT OF THIS PAGE IS TO INDICATE THE MOST PREVALENT ISSUES IN THE ABOVE-MENTIONED SOURCES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW THE ADOPTED CODES AND STANDARDS IN THEIR ENTIRETY.

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE

ADA GUIDELINES

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

PROGRESS SET
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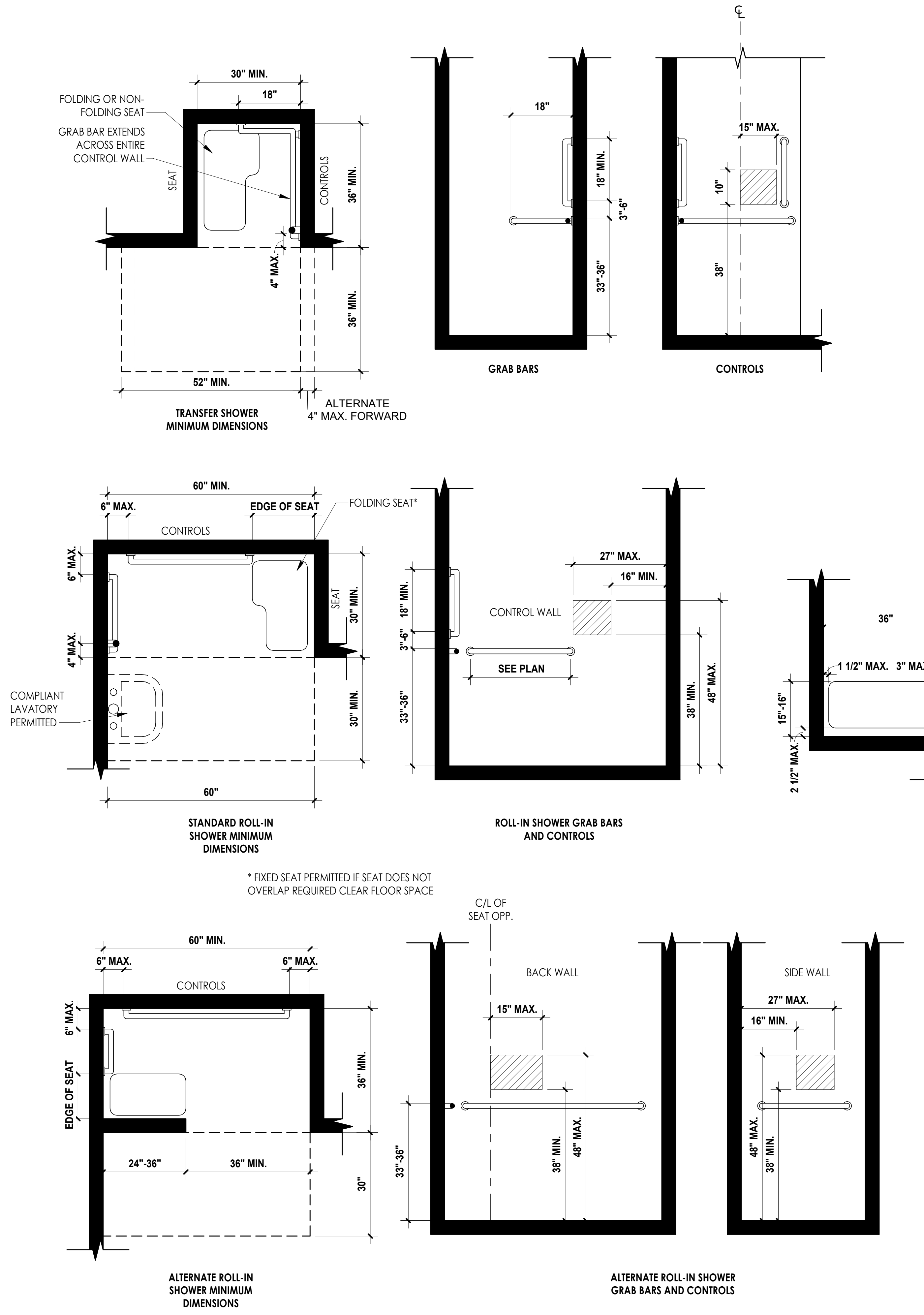
Revision

Date

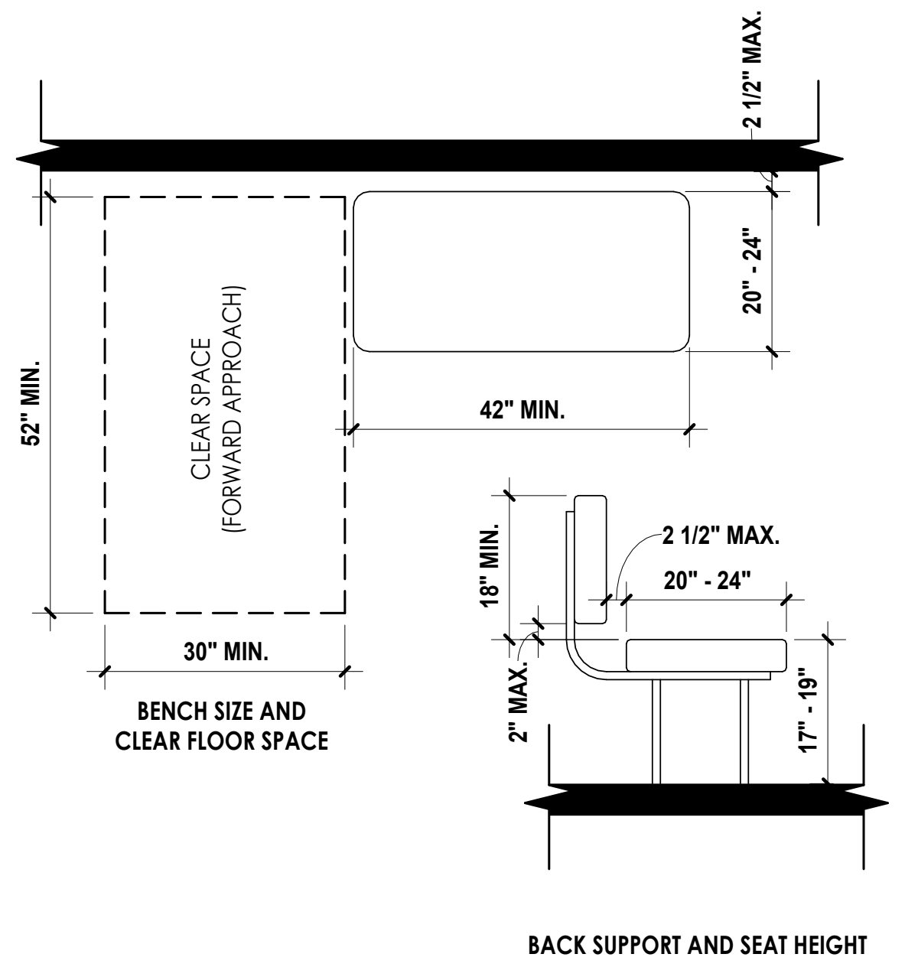
JOB:	250070
DRAWN:	NB
CHECKED:	BDG
DATE:	2026-02-16
SHEET:	A0.1



* FIXED SEAT PERMITTED IF SEAT DOES NOT OVERLAP REQUIRED CLEAR FLOOR SPACE

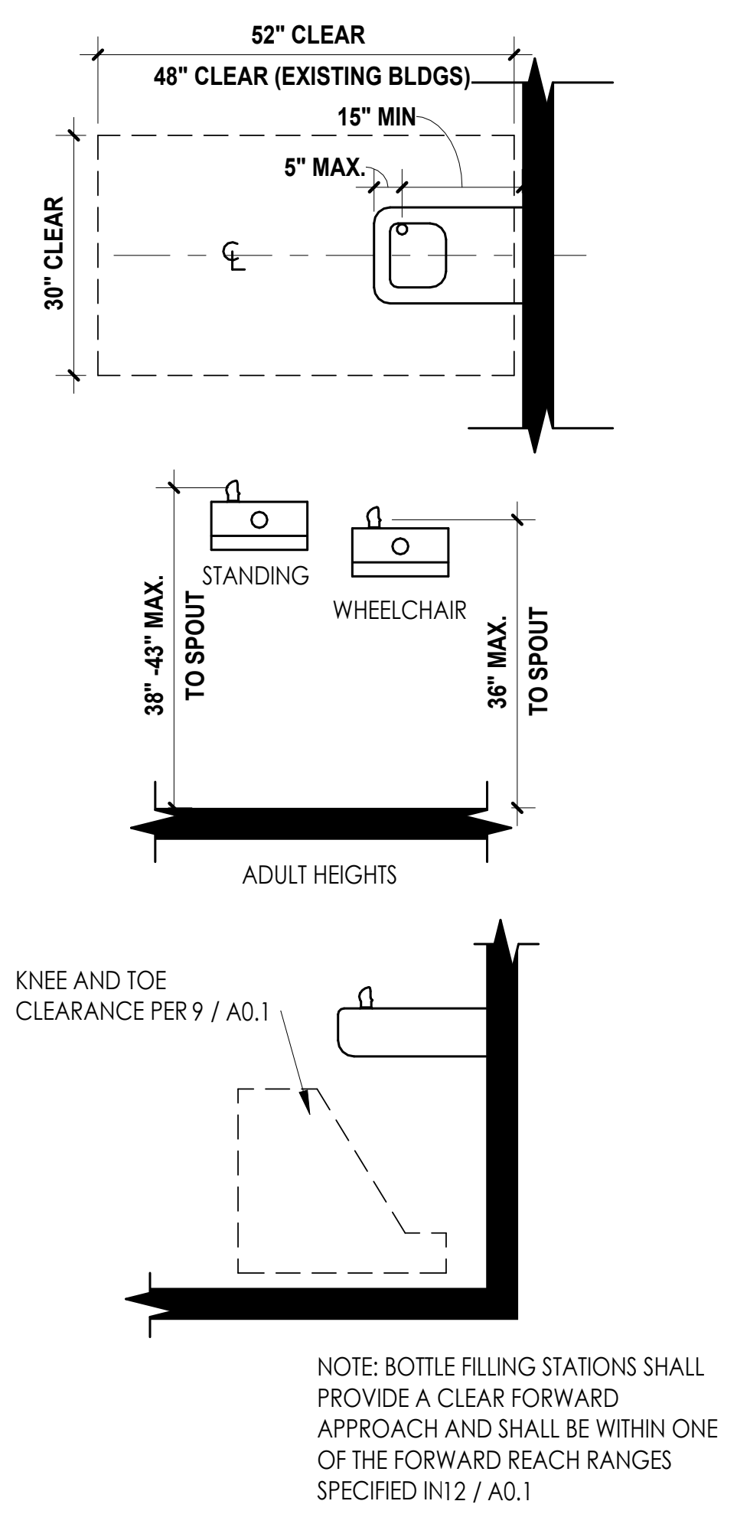
9 SHOWERS

1/2" = 1'-0"



8 BENCHES

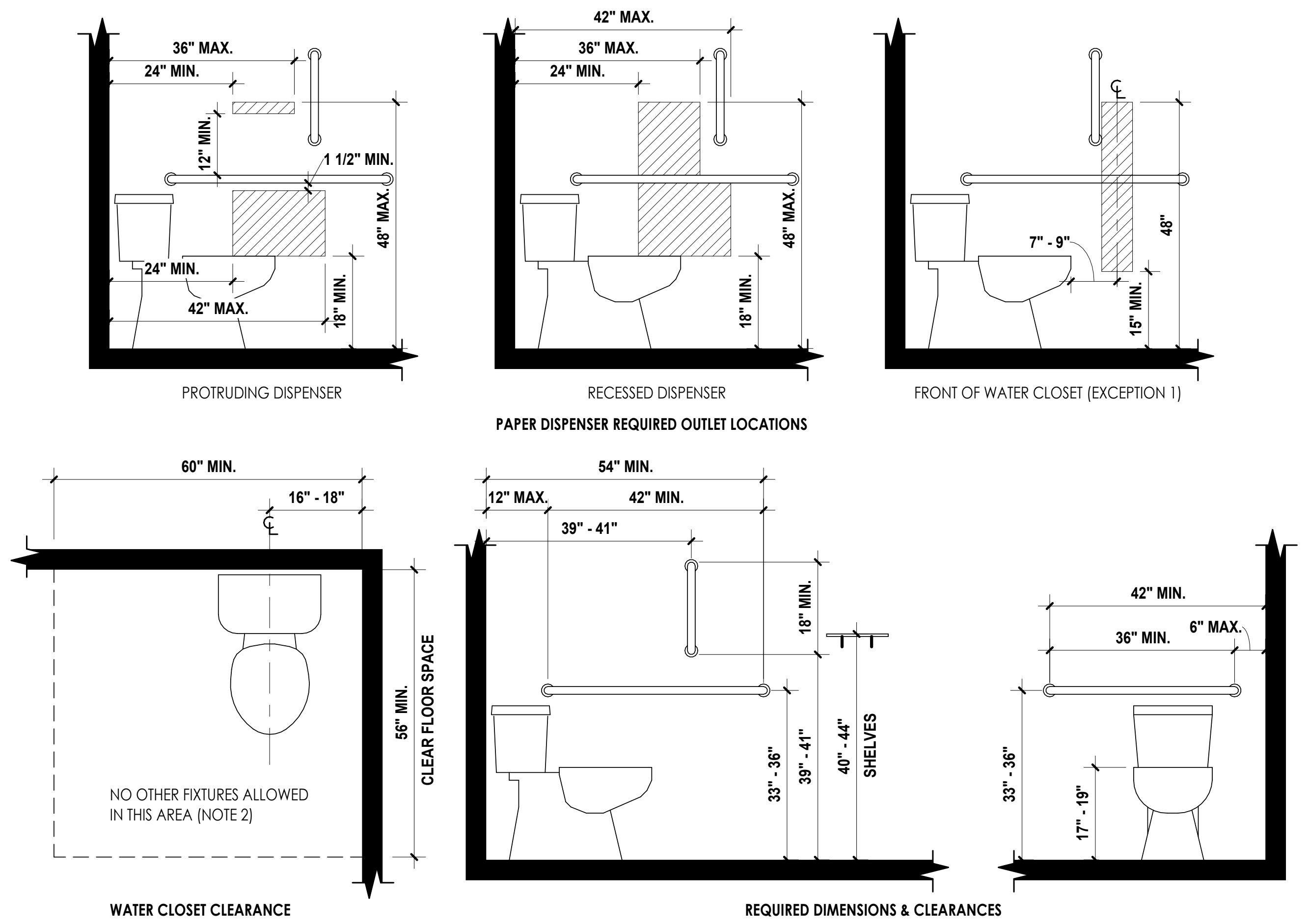
1/2" = 1'-0"



NOTE: BOTTLE FILLING STATIONS SHALL PROVIDE A CLEAR FORWARD APPROACH AND SHALL BE WITHIN ONE OF THE FORWARD REACH RANGES SPECIFIED IN12 / A0.1

7 DRINKING FOUNTAINS

1/2" = 1'-0"

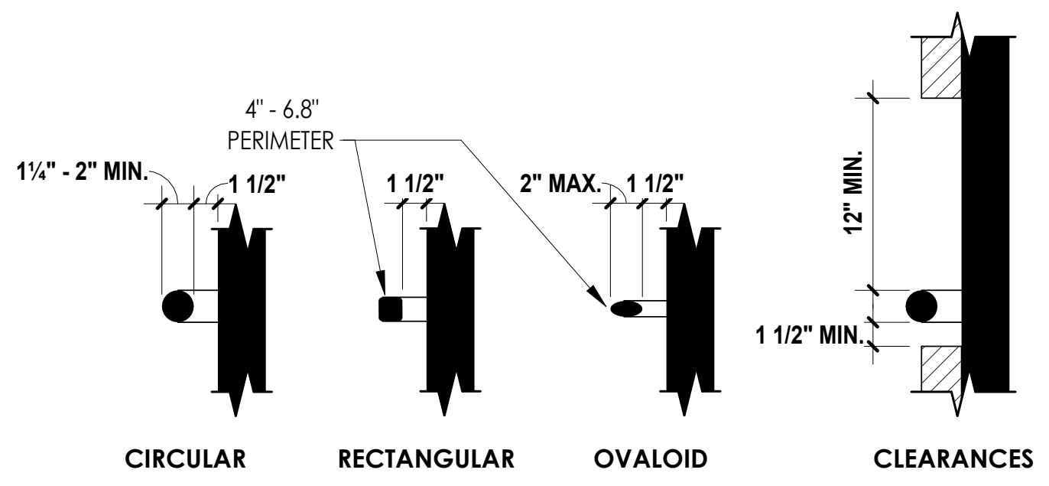


NOTES:

1. TOILET CONTROLS SHALL BE MOUNTED ON OPEN SIDE OF TOILET.
2. THE WATER CLOSET, ASSOCIATED GRAB BARS, PAPER DISPENSERS, SANITARY NAPKIN RECEPTACLES, COAT HOOKS, SHELVES, ACCESSIBLE ROUTES, CLEAR FLOOR SPACE OF OTHER FIXTURES, AND TURNING SPACES SHALL BE PERMITTED TO OVERLAP THE WATER CLOSET CLEAR SPACE. OTHER FIXTURES SHALL NOT OVERLAP.
3. WHERE COMBINED TOILET COMPARTMENTS AND URINALS PROVIDED IN A TOILET ROOM IS 6 OR MORE, 5% OF, AND NO FEWER THAN 1, COMPARTMENTS SHALL BE AMBULATORY ACCESSIBLE IN ADDITITON TO THE WHEELCHAIR ACCESSIBLE COMPARTMENT. SEE A117.1 (2017) 604.10 FOR REQUIREMENTS.

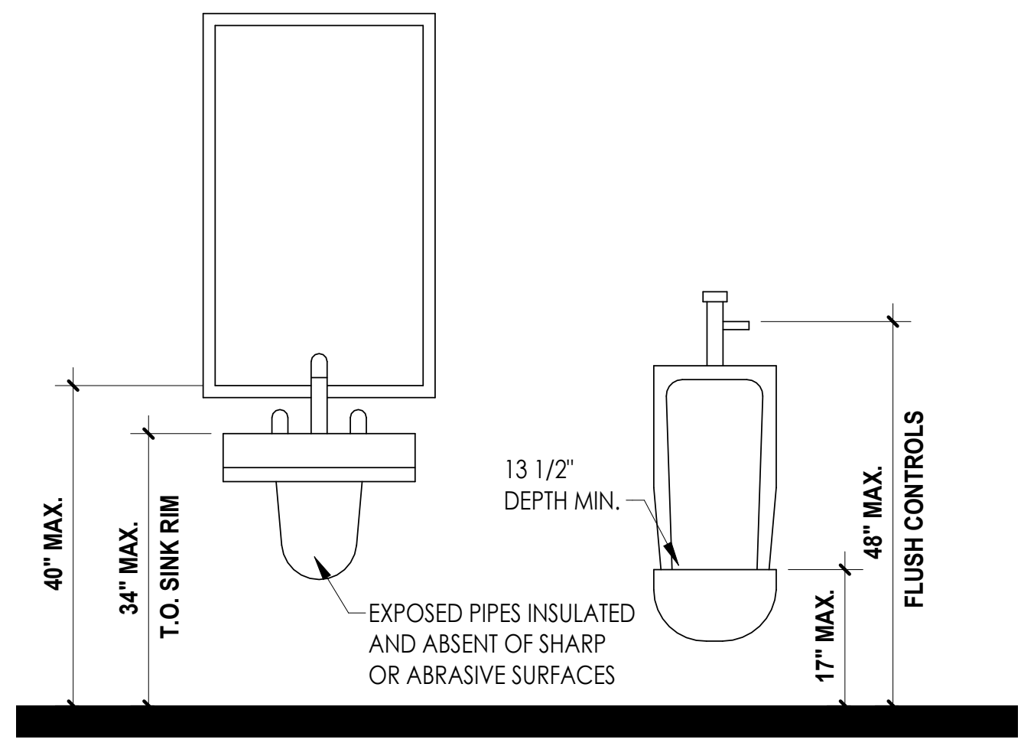
6 WATER CLOSETS

1/2" = 1'-0"



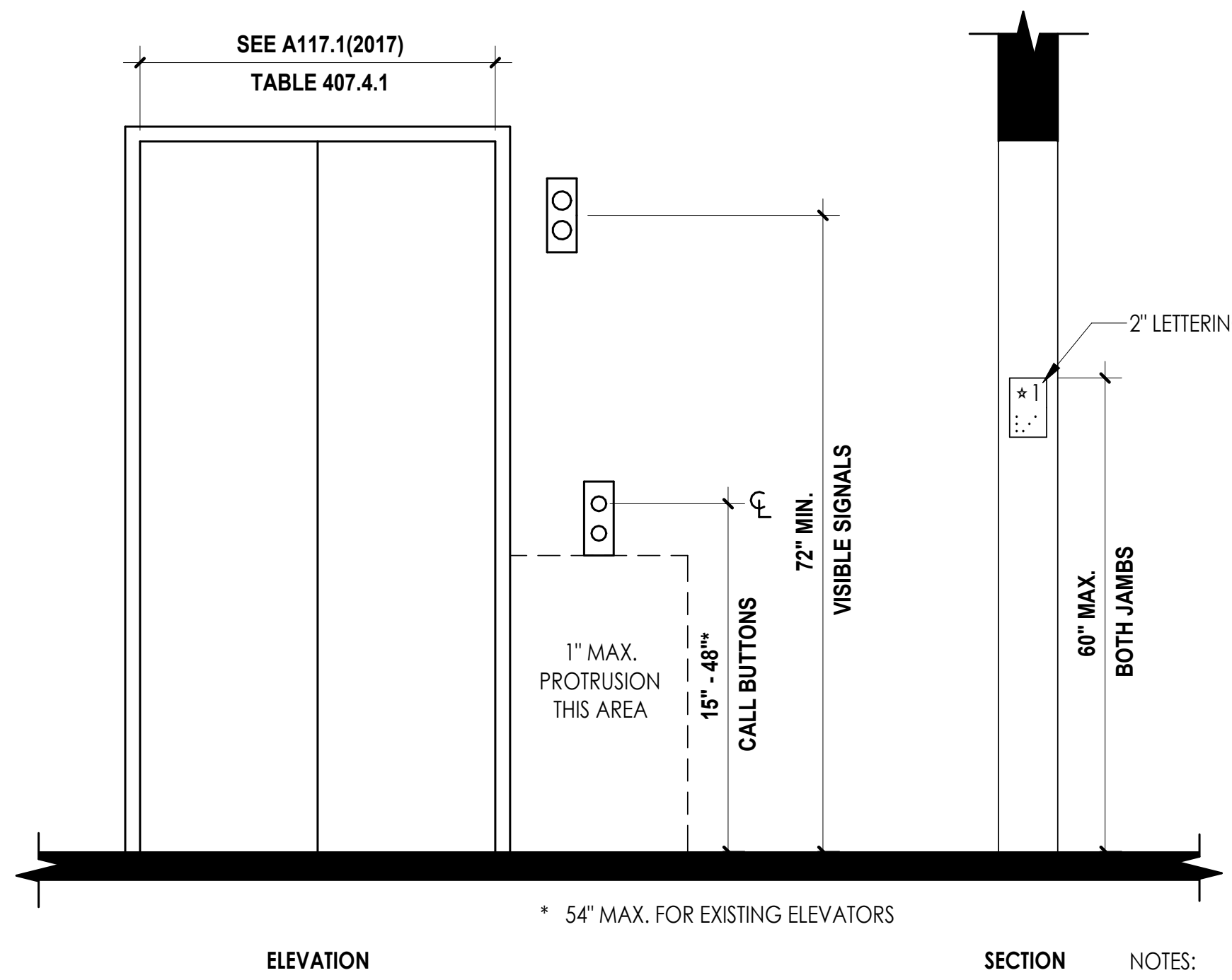
5 GRAB BAR PROFILES

1" = 1'-0"



4 LAVATORIES AND URINALS

1/2" = 1'-0"

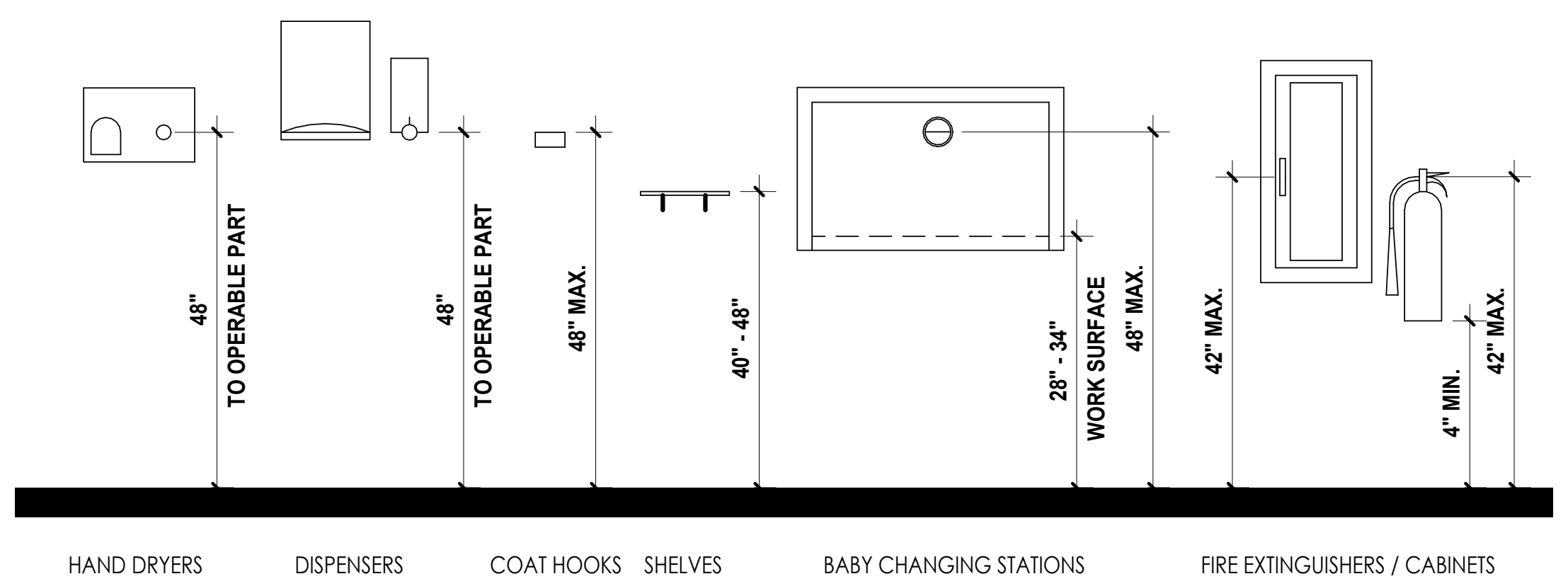


NOTES:

1. CALL BUTTONS SHALL BE FLUSH OR RAISED. EXISTING ELEVATORS MAY HAVE RECESSED CALL BUTTONS.
2. SIDE APPROACH CLEAR FLOOR SPACE REQUIRED IN FRONT OF CALL BUTTONS.
3. SEE SPECIFICATIONS FOR REQUIRED DIMENSIONS OF CALL BUTTONS, VISIBLE, AND AUDIBLE SIGNALS.

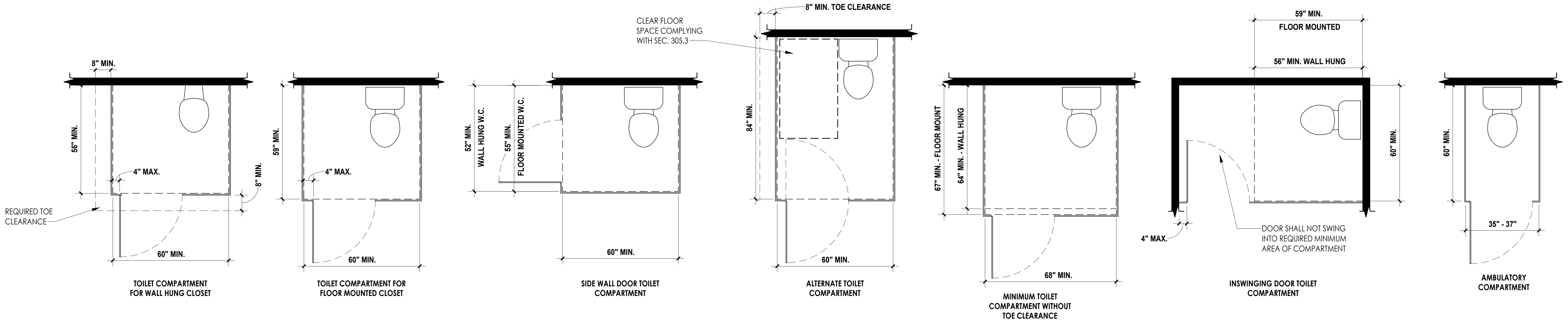
3 ELEVATORS

1/2" = 1'-0"



2 MISCELLANEOUS EQUIPMENT MOUNTING HEIGHTS

1/2" = 1'-0"



1 ACCESSIBLE TOILET COMPARTMENTS

3/8" = 1'-0"

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

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EBLE ICE ARENA
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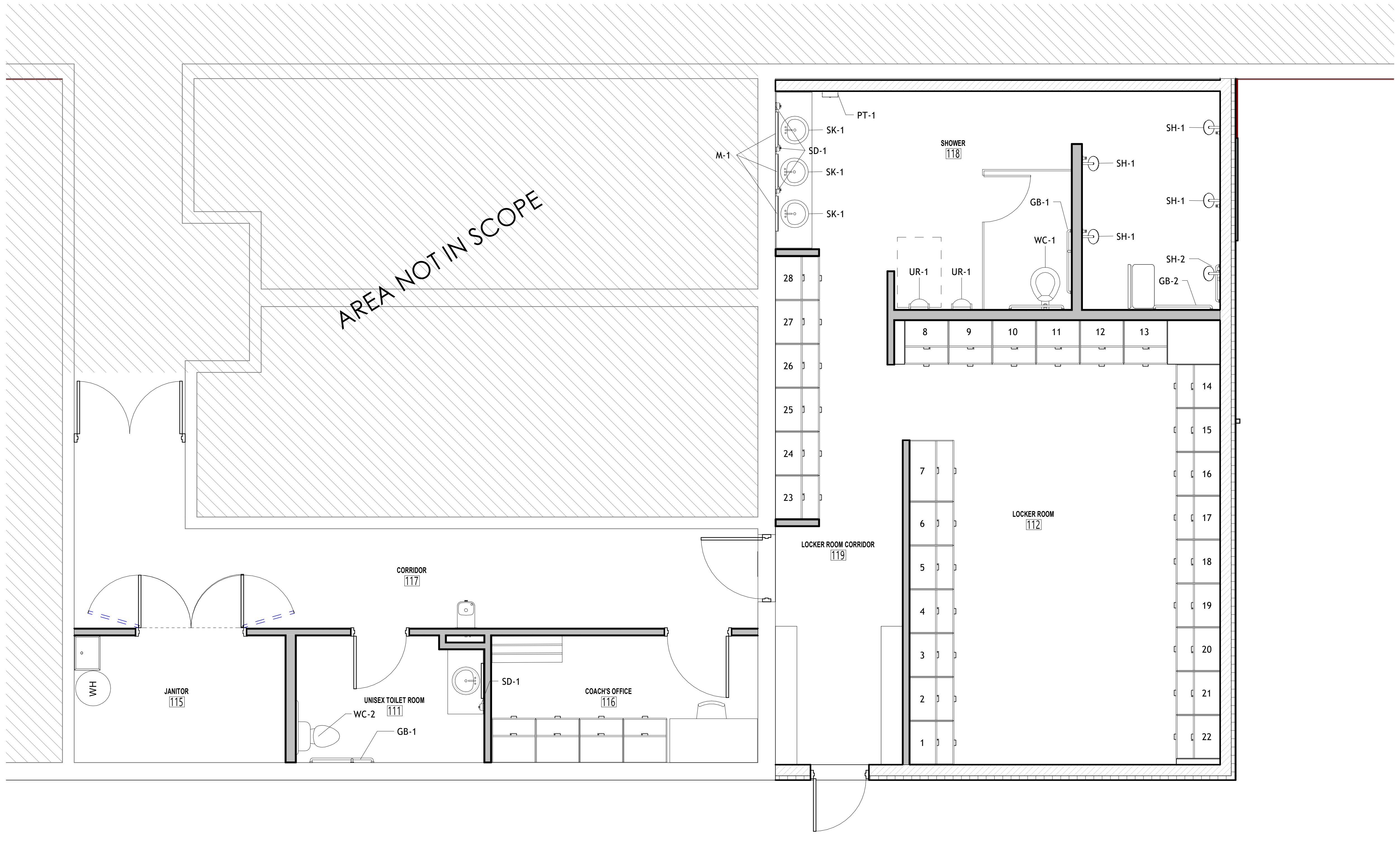
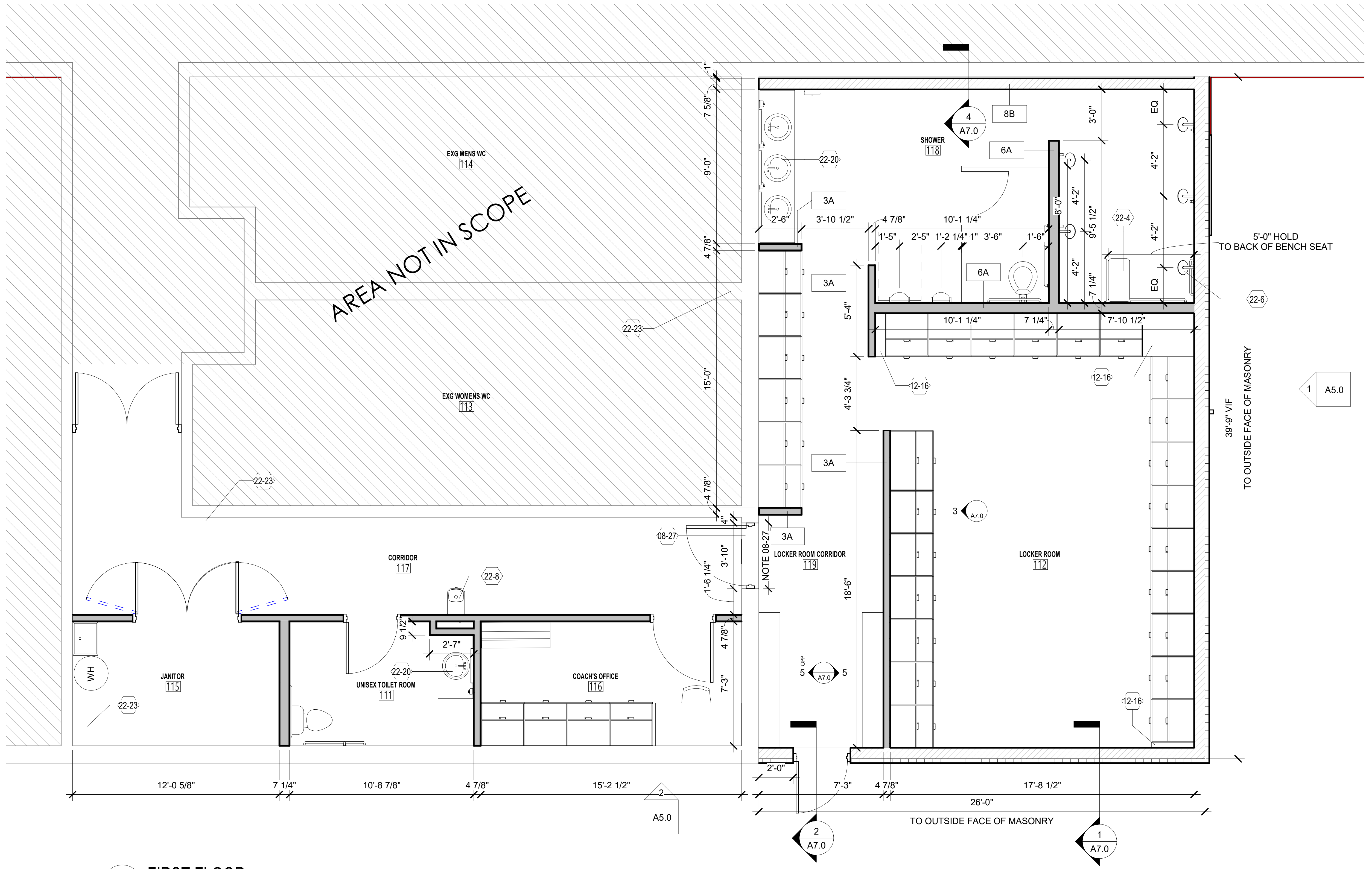
Revision	Date

JOB:	250070
DRAWN:	NB
CHECKED:	BDG
DATE:	2026-02-16
SHEET:	A0.2



2 FINISH FLOOR PLAN
1/4" = 1'-0"



1 FIRST FLOOR
1/4" = 1'-0"

FLOOR PLAN LEGEND

ROOM 100	ROOM NAME ROOM NUMBER		PARTITION TO BE DEMOLISHED
100	DOOR NUMBER		DOOR AND FRAME TO BE REMOVED
A	PARTITION TYPE		EXISTING PARTITION TO REMAIN
1	KEYNOTES		EXISTING DOOR TO REMAIN
F.E.	SURFACE MOUNTED FIRE EXTINGUISHER		NEW CONSTRUCTION
F.E.C.	RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER		NEW DOOR & FRAME
⊗	EXIT LIGHT		
◐	EXIT LIGHT (DIRECTIONAL)		
BL-1	BORROWED LIGHT TAG		
TP-1	TOILET ACCESSORY TAG		

GENERAL NOTES

1	VERIFY ALL CONDITIONS, DIMENSIONS AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS.
2	VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR ACCESS TO MECHANICAL AND ELECTRICAL ITEMS.
3	SEAL PENETRATIONS IN FIRE RATED ASSEMBLIES AND SMOKE BARRIERS TO MEET REQUIRED RATINGS. UTILIZE UL APPROVED METHODS.
4	DURING CONSTRUCTION, AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS.
5	ALIGNMENT OF NEW METAL BUILDING WALL CONDITION WITH EXISTING METAL BUILDING WALL CONDITION TO BE PROVIDED IN METAL BUILDING SUPPLIER COMPONENT SUBMITTAL

TOILET ACCESSORY SCHEDULE

MARK	DESCRIPTION
GB-1	PEENED ADA COMPLIANT TOILET COMPARTMENT GRAB BARS
GB-2	PEENED ADA COMPLIANT SHOWER GRAB BARS. SEE A0.2 FOR REQUIRED DIMENSIONS AND MOUNTING LOCATIONS
M-1	24" X 36" FRAMELESS FLOAT GLASS MIRROR
PT-1	SURFACE MOUNTED PAPER TOWEL DISPENSER
SD-1	SURFACE MOUNTED SOAP DISPENSER
SH-1	SHOWER HEAD AND CONTROLS
SH-2	ADA COMPLIANT SHOWER HEAD, CONTROLS, AND HANDHELD UNIT.
SK-1	19" UNDERMOUNT SINK
UR-1	WALL MOUNTED URINAL
WC-1	WALL MOUNTED WATER CLOSET, SET AT ADA HEIGHT AFF
WC-2	FLOOR MOUNTED WATER CLOSET, ADA HEIGHT

TOILET ROOM GENERAL NOTES

1	6 1/2" MAXIMUM SINK DEPTH ALLOWED
2	INSULATE PIPES BELOW COUNTERTOPS (WATER AND WASTE LINES) W/PVC MOLDED PROTECTION.
3	PROVIDE LEVER FAUCET HANDLES AT ALL SINKS AND LAVATORIES.
4	ALL DIMENSIONS SHOWN ARE FROM ALL FINISH UNLESS NOTED OTHERWISE.

KEYNOTE LEGEND

08-27	NEW DOOR OPENING TO BE CUT INTO EXISTING EXTERIOR PRECAST WALL PANEL. COORDINATE LOCATION TO MAINTAIN STRUCTURAL INTEGRITY OF WALL, PROVIDE REINFORCING OF OPENING IF REQ'D.
12-16	CASEWORK END AND CORNER SPACERS BY CASEWORK SUPPLIER. MATCH PROFILE OF ADJACENT LOCKER STALLS. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION.
22-4	FOLDABLE ADA COMPLIANT SHOWER BENCH. POSITION AS INDICATED.
22-6	ADA COMPLIANT SHOWER AND CONTROLS
22-8	ELECTRIC WATER COOLER W/BOTTLE FILLER, CHILLER AND FILTER
22-20	DROP-IN STYLE SINK - TOP OF SINK TO NOT EXCEED 34" AFF TO TOP OF RIM PER ADA, INSULATED EXPOSED PIPING BELOW SINK.
22-23	ALL NEW PLUMBING FIXTURES TO CONNECT TO EXISTING SUPPLY AND DRAIN SYSTEMS IN ADJACENT EXISTING SPACES; SEE EXISTING BUILDING PLUMBING DOCUMENTS AND VERIFY IN FIELD.

PARTITION TYPES

TAG	STUD TYPE	STUD HEIGHT	INSULATION	VAPOR BARRIER	SURFACE MATERIAL	SURFACE HEIGHT	REMARKS
3A	3 5/8" STEEL STUDS	TO BT. OF DECK	3.5" SOUND BATT.	----	5/8" IMPACT RESISTANT TYPE "X" GYP. WALLBOARD	12'-0" A.F.F.	
6A	6" STEEL STUDS	TO BT. OF DECK	6" SOUND BATT.	----	5/8" IMPACT RESISTANT TYPE "X" GYP. WALLBOARD	12'-0" A.F.F.	PROVIDE IMPACT RESISTANT WATERPROOF GWB AT SHOWER AREAS
8B	8" CONCRETE MASONRY UNITS	TO ROOF DECK	----	----	----	----	

1. ALL STEEL STUDS SHALL BE 25 GAUGE STUDS @ 16" O.C.. (UNLESS NOTED OTHERWISE) - SEE STRUCTURAL FOR GAUGE AND SIZE
2. ALL EXPOSED GYPSUM WALL BOARD SHALL BE TAPED & COATED SMOOTH, READY FOR PAINT - LEVEL 4 FINISH
3. INSTALL MOISTURE RESISTANT GYPSUM WALL BOARD AT ALL "WET WALL" LOCATIONS
4. STUDS EXTENDED TO DECK AND/OR JOIST SHALL HAVE A SLIP CONNECTION TO ALLOW FOR DEFLECTION
5. INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH IBC SECTION 803 AND ASTM E84 AND UL 723 : NOTE PROVIDE CLASS A MINIMUM
6. INTERIOR FLOOR FINISHES SHALL COMPLY WITH IBC SECTION 804
7. BATT INSULATION LOCATED ABOVE CEILING AND EXPOSED SHALL BE COVERED TO MEET EXPOSED RATED BARRIER REQUIREMENTS.
8. MAXIMUM CONTROL JOINT SPACING FOR WALLS AND CEILINGS WITHOUT PERIMETER RELIEF IS 30 FEET. WITH PERIMETER RELIEF THE MAXIMUM RECOMMENDED CONTROL JOINT SPACING IS 50 FEET.
9. PROVIDE BLOCKING IN STUD CAVITY FOR ALL TOILET ROOM ACCESSORIES AND WALL MOUNTED DOOR STOPS.

NOTE : AT FURRING WALLS AT THE EXTERIOR WALLS, PROVIDE A 1" GAP BETWEEN PRECAST WALL INTERIOR SIDE AND STEEL STUD FURRING SUCH THAT THE FURRING WALL IS SUPPORTED INDEPENDENTLY WITH SLIP CONNECTIONS.

NOTE : PROVIDE WOOD BLOCKING FOR LAVATORIES AND ACCESSORIES, FIXTURES & EQUIPMENT AS REQUIRED IN RESTROOM AREAS.

APPLICABLE
TO ALL
PLAN VIEWS

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE

FLOOR PLANS

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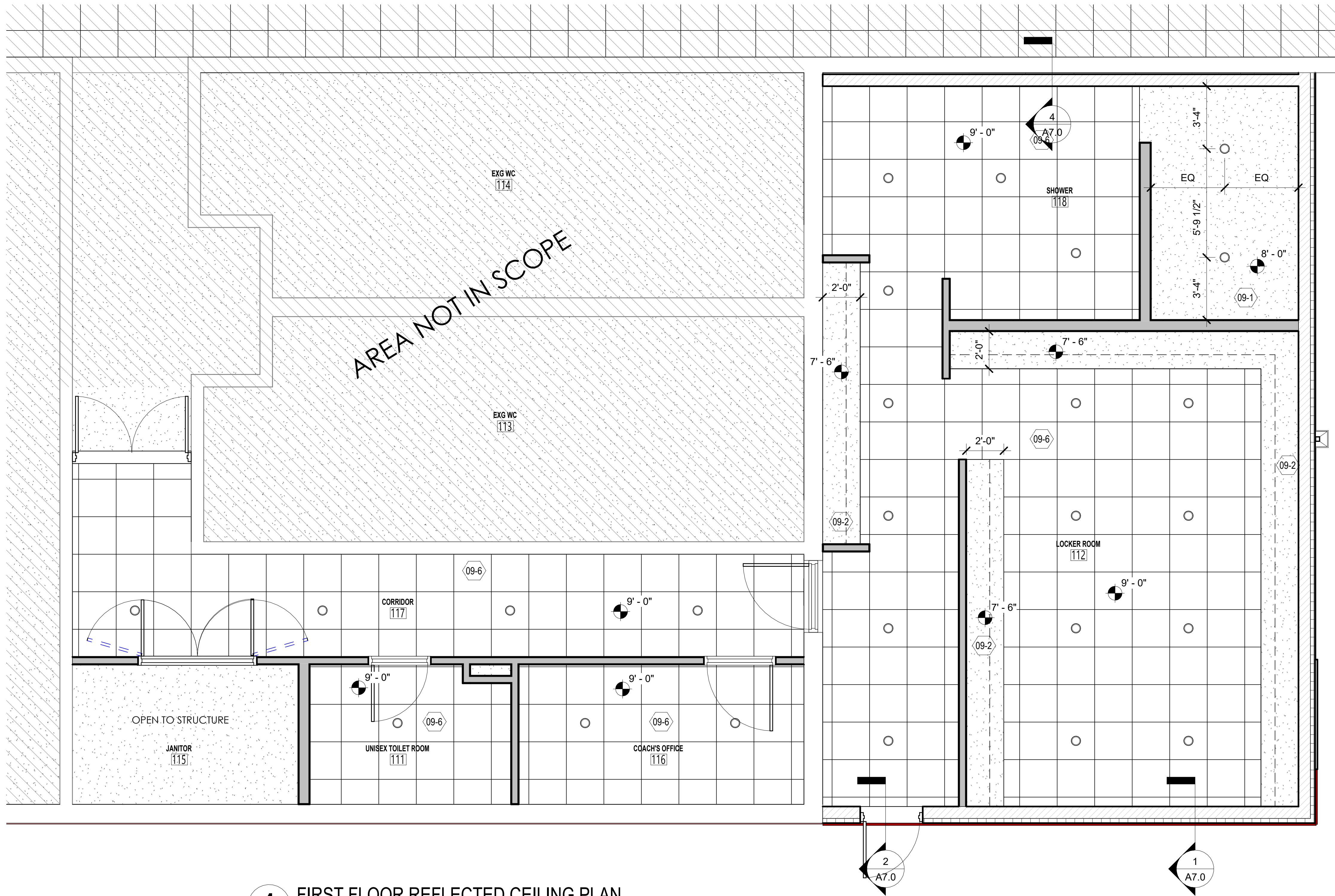
JOB:	250070
DRAWN:	NB
CHECKED:	PG
DATE:	2026-02-16

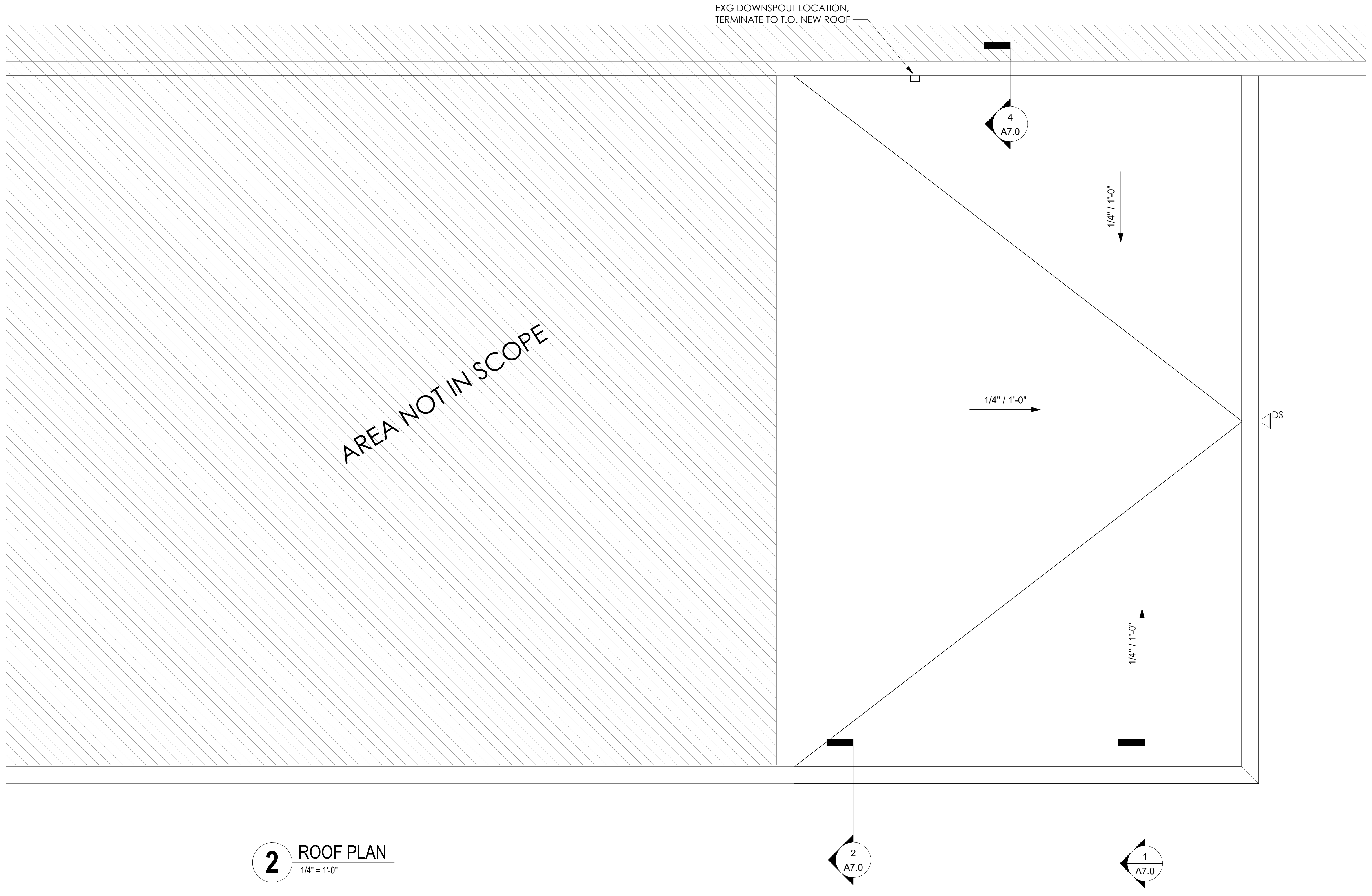
SHEET:

A1.0



1 FIRST FLOOR REFLECTED CEILING PLAN

1/4" = 1'-0"



2 ROOF PLAN

1/4" = 1'-0"

REFLECTED CEILING PLAN LEGEND

ROOM 100	ROOM NAME ROOM NUMBER
⟨1⟩	PLAN NOTES
⊗	EXIT LIGHT
╋	2'X2' SUSPENDED ACOUSTICAL CEILING TILE SYSTEM
▨	SUSPENDED GYPSUM BOARD CEILING SYSTEM
■	SOUND BATT INSULATION ABOVE CEILING

KEYNOTE LEGEND

09-1	WATER RESISTANT GYPSUM CEILING BOARD IN SHOWER LOCATIONS
09-2	GYPSUM BULKHEAD. DASHED LINE INDICATES EXTENT OF LOCKER CASEWORK ABUTTING BT. OF BULKHEAD.
09-6	2'-0" X 2'-0" LAY-IN ACOUSTICAL CEILING TILES WITHIN A 9/16 " WHITE METAL SUSPENDED GRID

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
CEILING AND ROOF PLANS

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

Revision	Date

APPLICABLE
TO ALL
PLAN VIEWS

JOB:	250070
DRAWN:	NB
CHECKED:	Checker
DATE:	2026-02-16
SHEET:	A1.1

COMcheck-Web

Compliance Certificate

Project Information

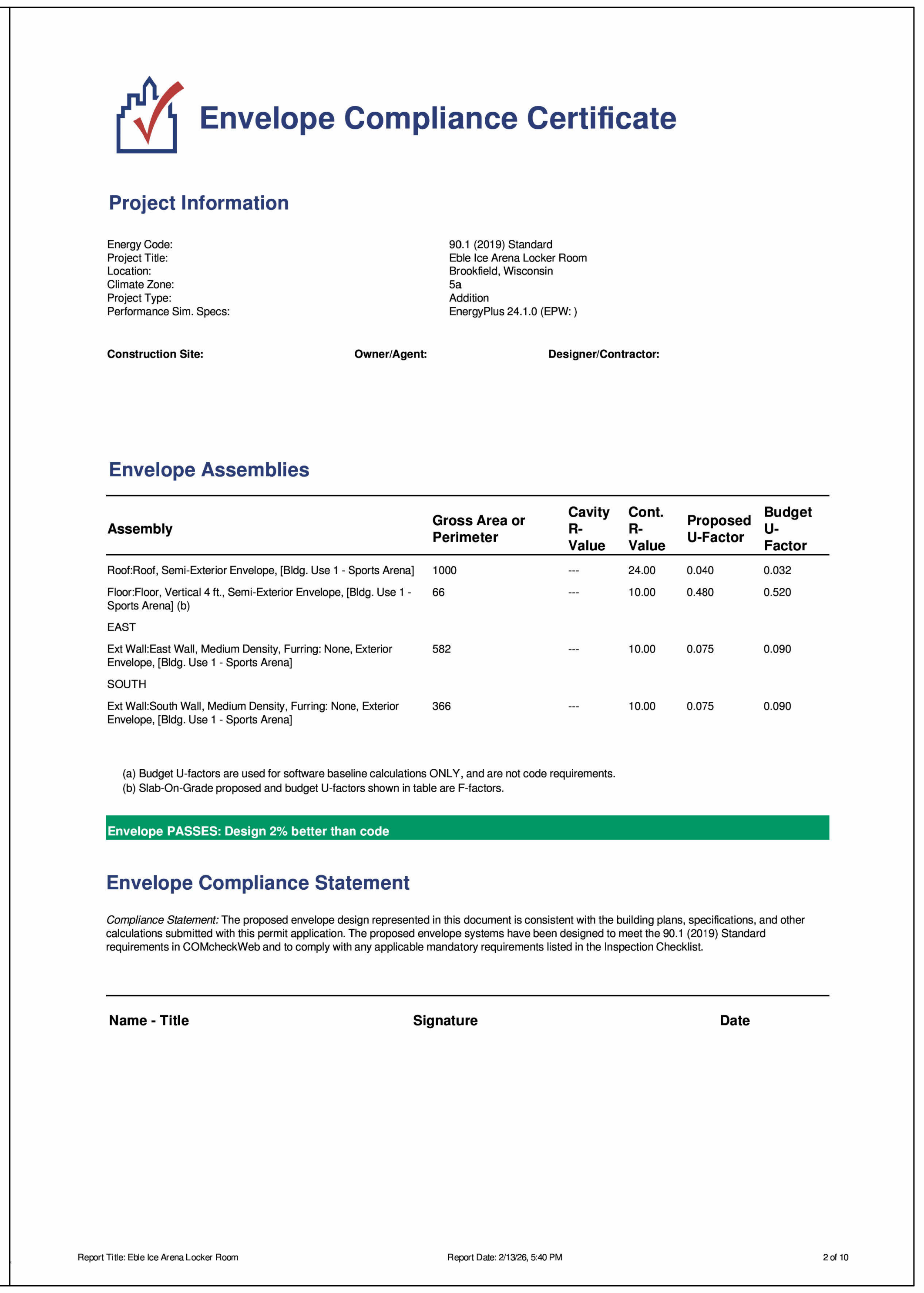
Energy Code:	90.1 (2019) Standard
Project Title:	Eble Ice Arena Locker Room
Location:	Brookfield, Wisconsin
Climate Zone:	5a
Project Type:	Addition
Project No:	83201
Performance Sim. Specs:	EnergyPlus 24.1.0 (EPW:)
All Electric:	false
Is Renewable:	false
Has Battery:	false
Has Charger:	false
Has Heat Pump	false

Construction Site: **Owner/Agent:** **Designer/Contractor:**

Notes:

Building Area

Description	Floor Area
1-Sports Arena (Sports Arena) : Nonresidential	1040



Envelope Compliance Certificate

Project Information

Energy Code:	90.1 (2019) Standard
Project Title:	Eble Ice Arena Locker Room
Location:	Brookfield, Wisconsin
Climate Zone:	5a
Project Type:	Addition
Performance Sim. Specs:	EnergyPlus 24.1.0 (EPW:)

Construction Site: **Owner/Agent:** **Designer/Contractor:**

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof:Roof, Semi-Exterior Envelope, [Bldg. Use 1 - Sports Arena]	1000	---	24.00	0.040	0.032
Floor:Floor, Vertical 4 ft., Semi-Exterior Envelope, [Bldg. Use 1 - Sports Arena] (b)	66	---	10.00	0.480	0.520
EAST					
Ext Wall:East Wall, Medium Density, Furring: None, Exterior Envelope, [Bldg. Use 1 - Sports Arena]	582	---	10.00	0.075	0.090
SOUTH					
Ext Wall:South Wall, Medium Density, Furring: None, Exterior Envelope, [Bldg. Use 1 - Sports Arena]	366	---	10.00	0.075	0.090

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 2% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2019) Standard requirements in COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title **Signature** **Date**

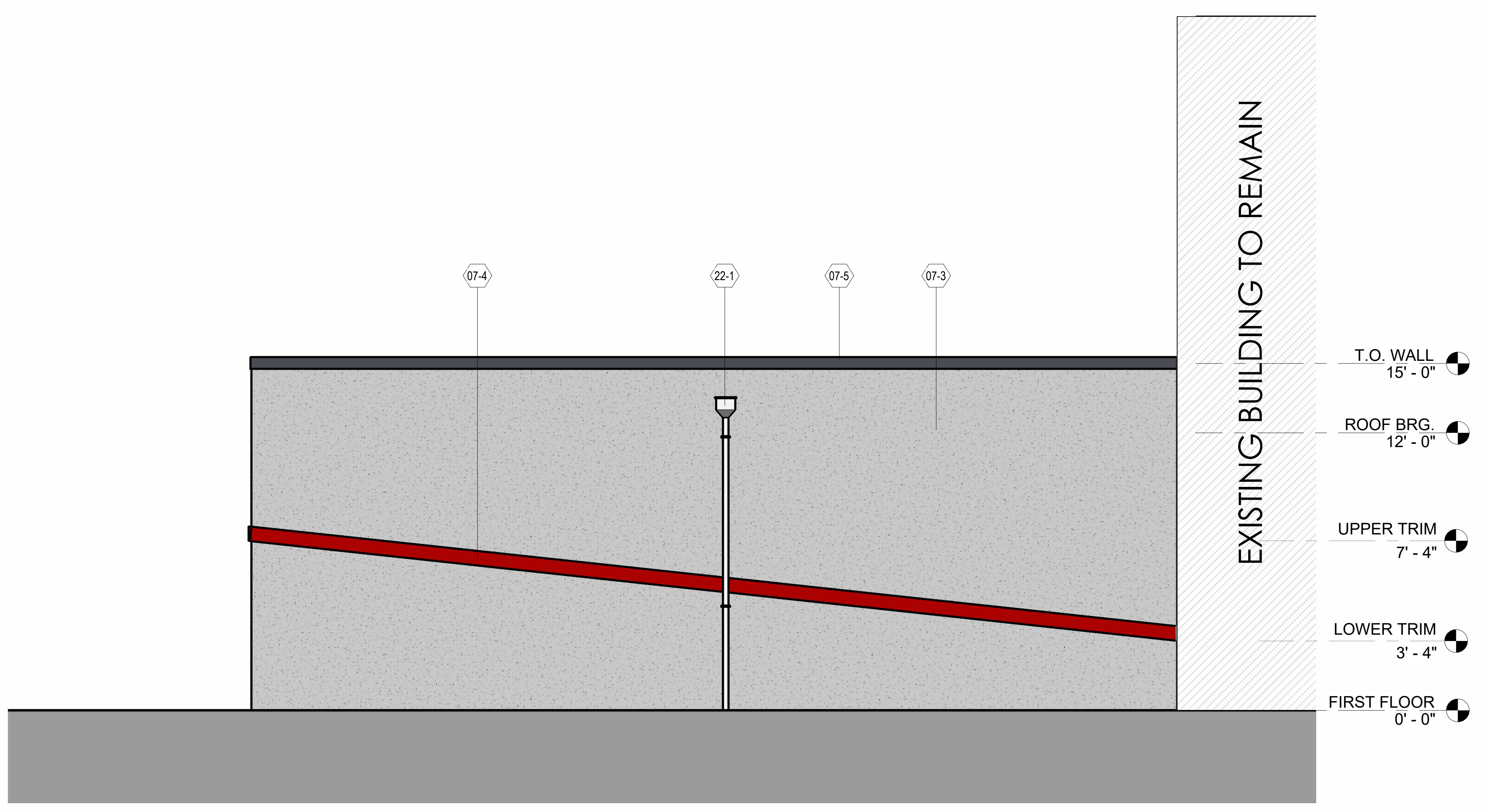
EXTERIOR BUILDING SYSTEMS LEGEND

LOW-SLOPE ROOF SYSTEM: BALLASTED EDPM ROOF MEMBRANE ON TAPERED INSULATION (R-24 AVG. MIN.) ON PRECAST ROOF CAP - SEE STRUCTURAL FOR PRECAST THICKNESS AND SPECIFICATIONS.

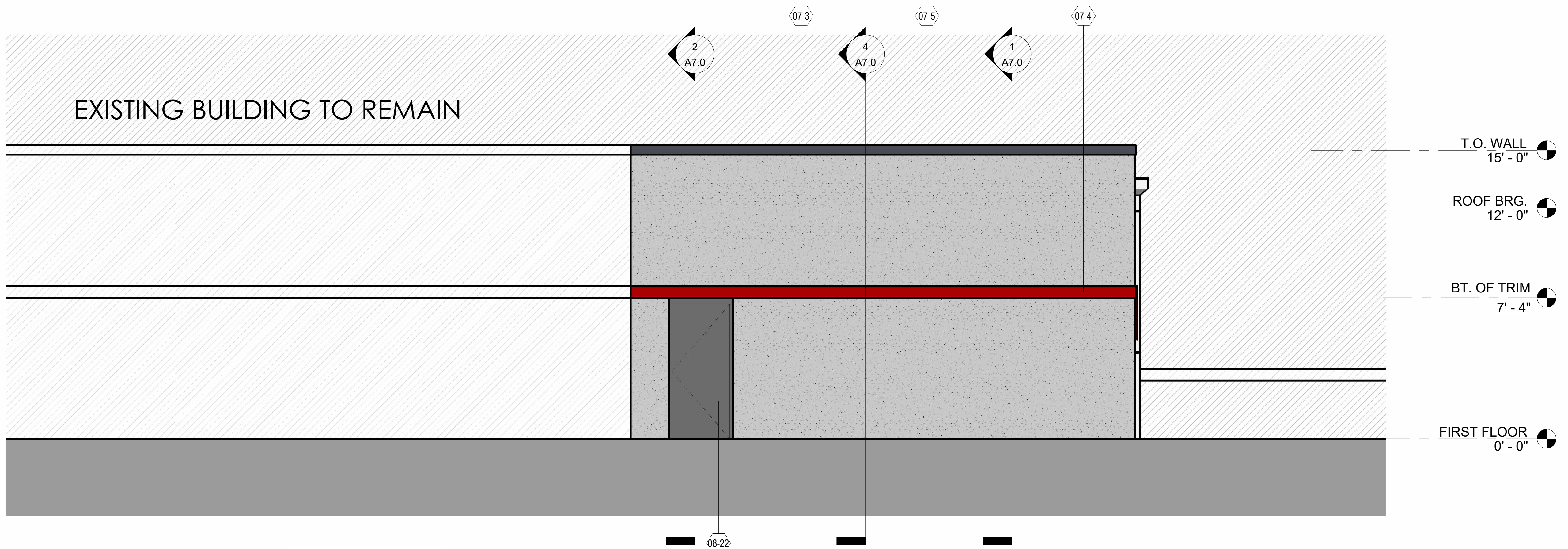
EXTERIOR WALL SYSTEM: 2" EIFS SYSTEM (R-10 MIN.) WITH AGGREGATE AND CEMENT EXTERIOR FINISH ON DRAINAGE PLANE AND MOISTURE BARRIER, ON 8" NOM. CMU MASONRY WALL. CMU TO BE FILLED WITH INSULATION, TYP. EXTERIOR FINISH AND AGGREGATE TO MATCH EXG. SEE INTERIOR FINISH PLAN FOR INTERIOR CMU FINISH.

KEYNOTE LEGEND ELEVATION

MARK	ELEVATION CODED NOTES
07-3	2" EFIS W/ AGGREGATE-EMBEDDED CEMENT COATING. AGGREGATE AND CEMENT FINISH TO MATCH EXG ADJACENT WALL
07-4	METAL-CLAD ACCENT PIECE. SEE SECTIONS FOR COMPOSITION. MATCH FINISH, SIZE, AND POSITION TO EXISTING TRIM PIECES AND SECURE TO CREATE A CONTINUOUS LOOK.
07-5	PREFINISHED METAL PARAPET COPING. FINISH TO MATCH EXISTING AND OVERLAP TO PROVIDE CONTINUOUS LOOK.
08-22	3'-0" X 7'-0" INSULATED AND PAINTED GALVANIZED HOLLOW METAL DOOR AND FRAME WITH ADA HARDWARE AND EMERGENCY EGRESS CODE REQUIRED LIGHTING - PAINTED TO MATCH ADJACENT WALL COLOR.
22-1	THROUGH-WALL SCUPPER AND DOWNSPOUT DIRECT TO DRAIN. POSITION TO RUN ATOP TRIM BAND, DO NOT CUT.



1 EAST ELEVATION
1/4" = 1'-0"



2 SOUTH ELEVATION
1/4" = 1'-0"

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

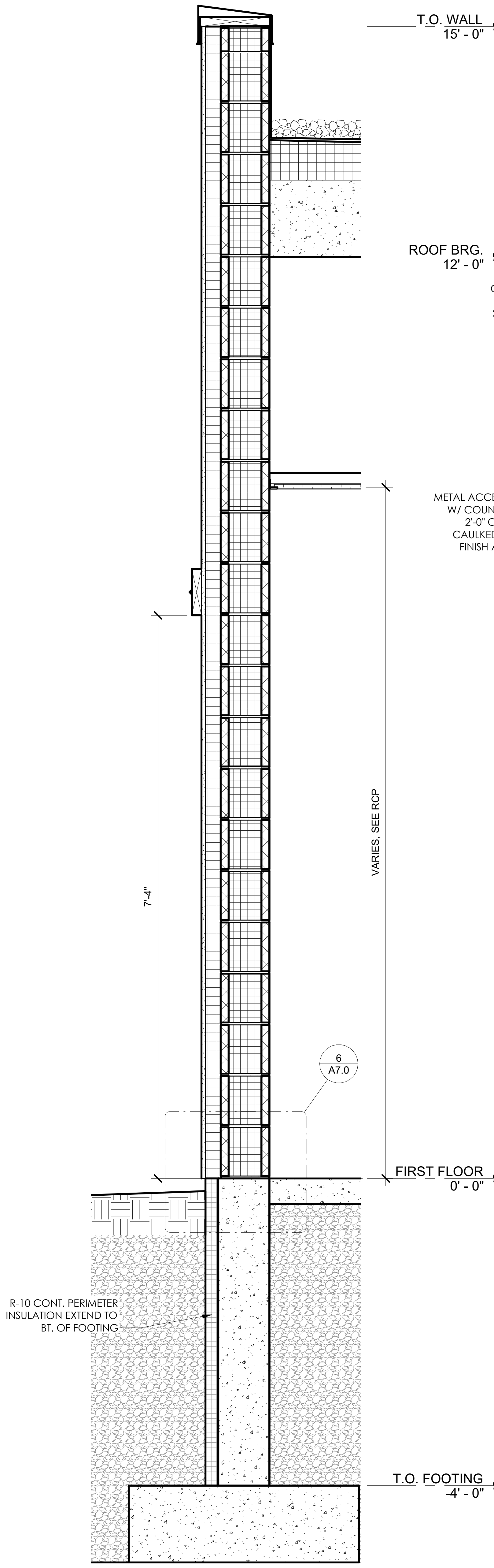
SHEET TITLE
ELEVATIONS

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

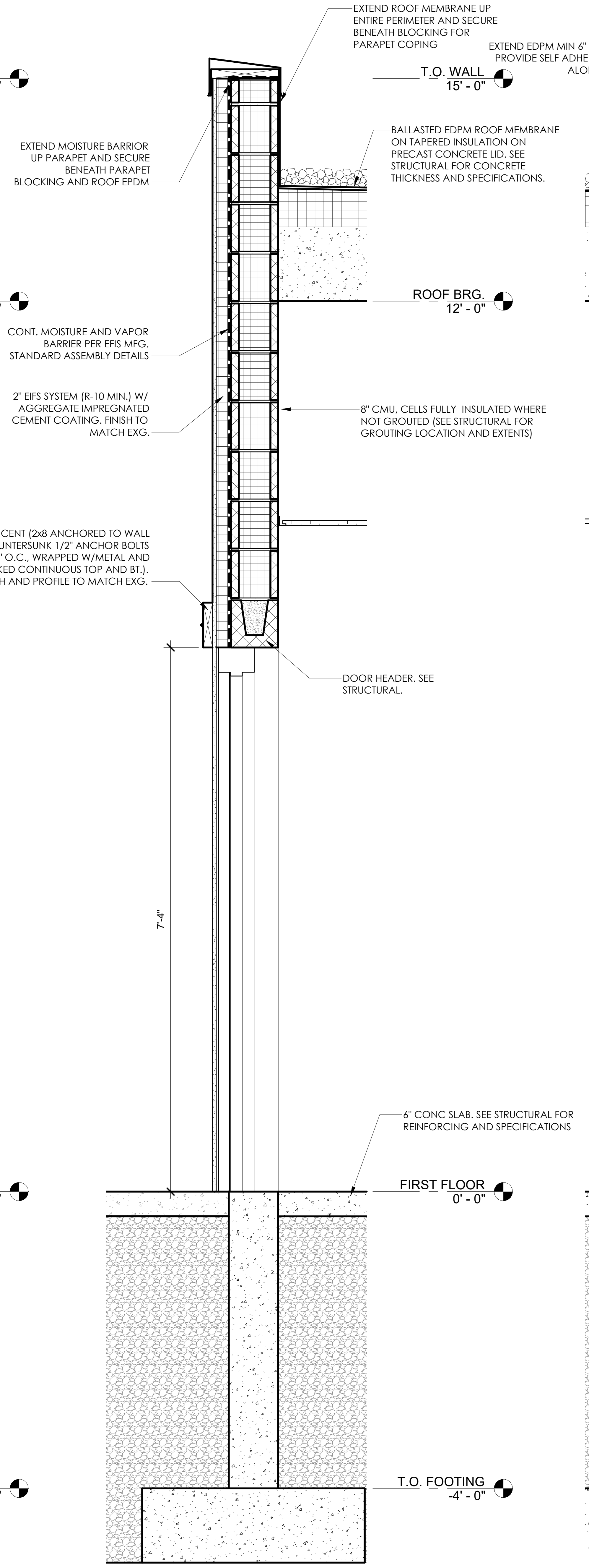
Revision
Date

JOB:	250070
DRAWN:	NB
CHECKED:	PG/DF
DATE:	2026-02-16

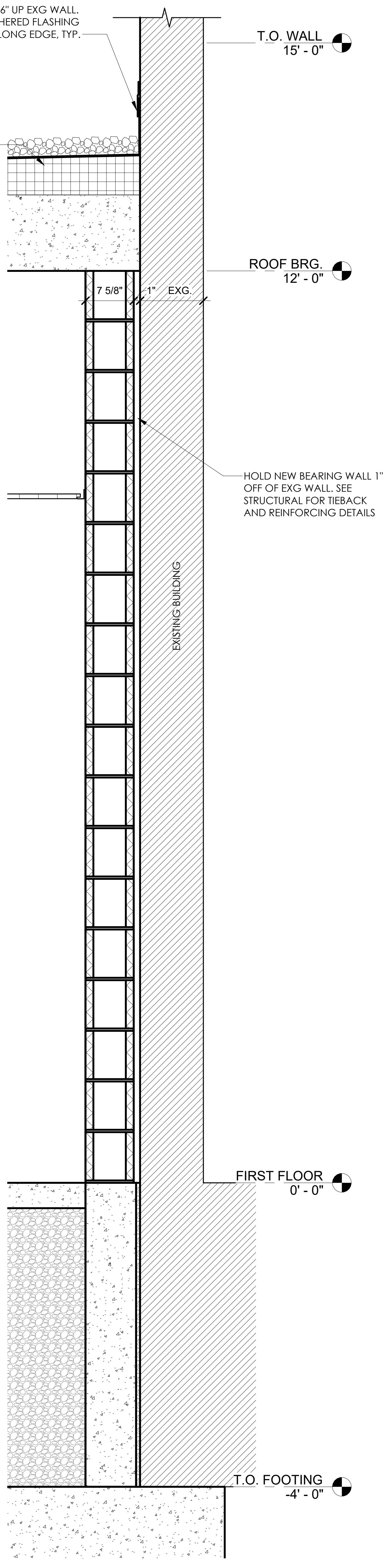
SHEET:
A5.0



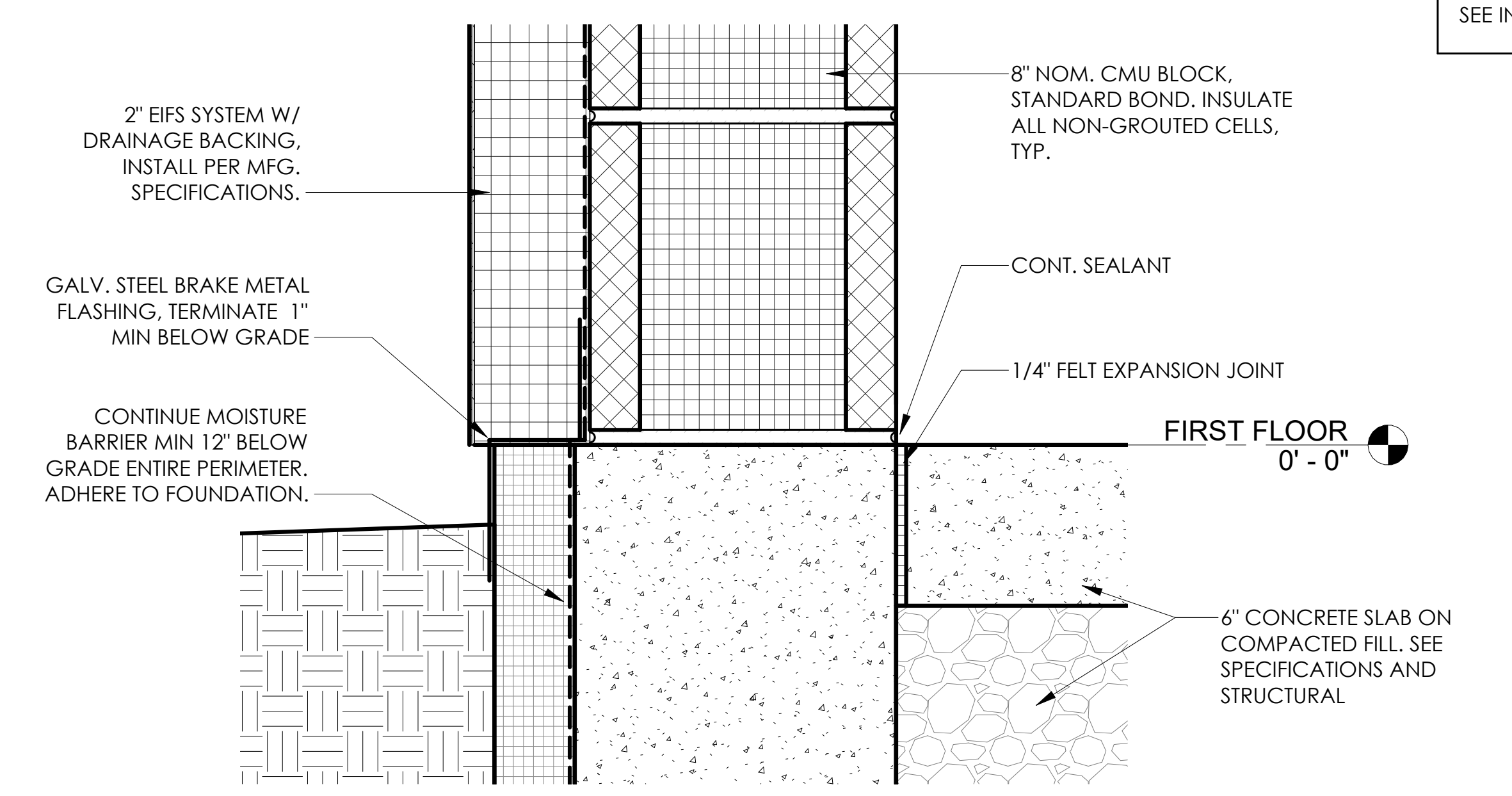
1 WALL SECTION
1" = 1'-0"



2 WALL SECTION
1" = 1'-0"



4 CMU BEARING WALL AT EXG WALL
1" = 1'-0"

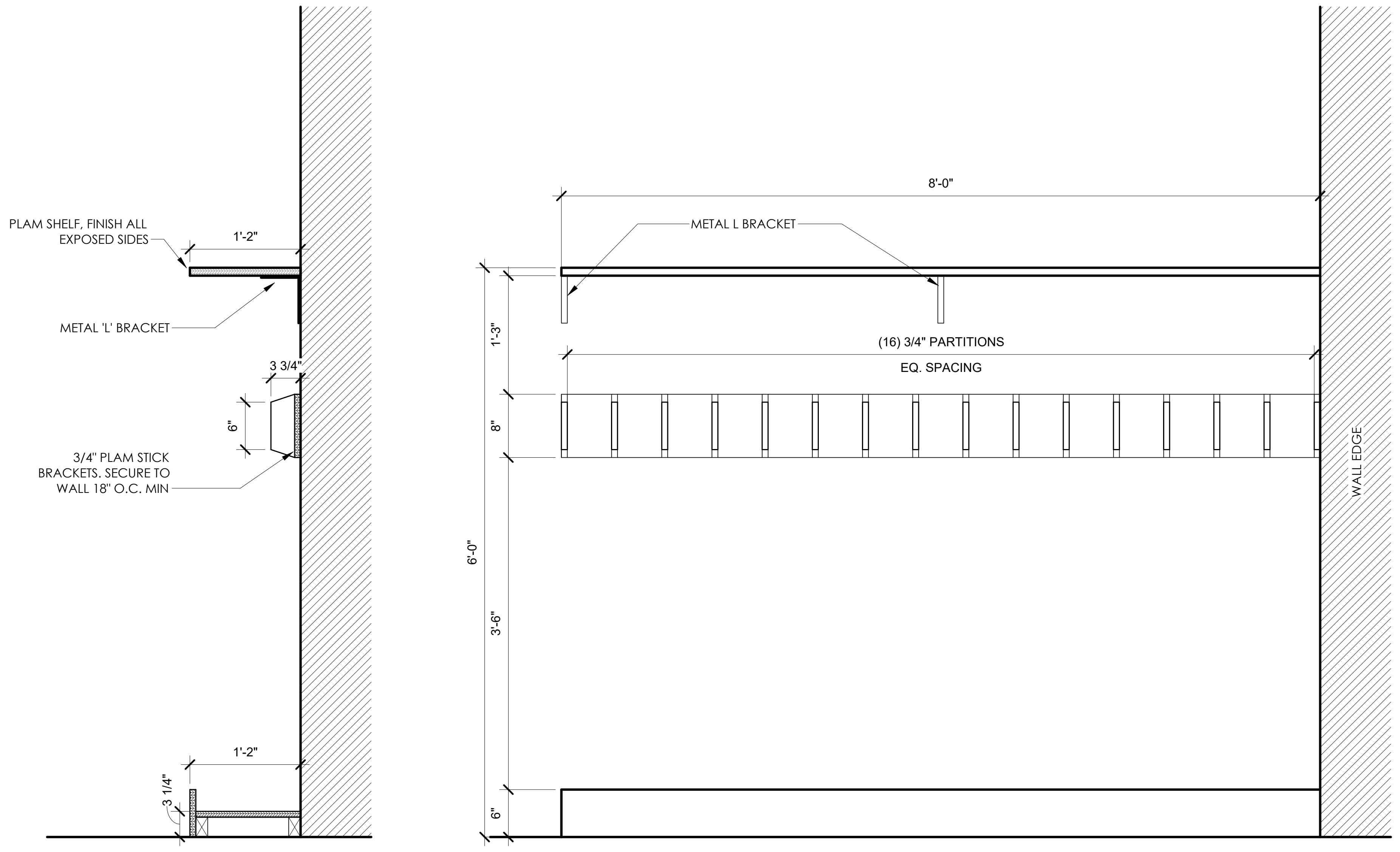


6 BASE OF WALL DETAIL
3" = 1'-0"

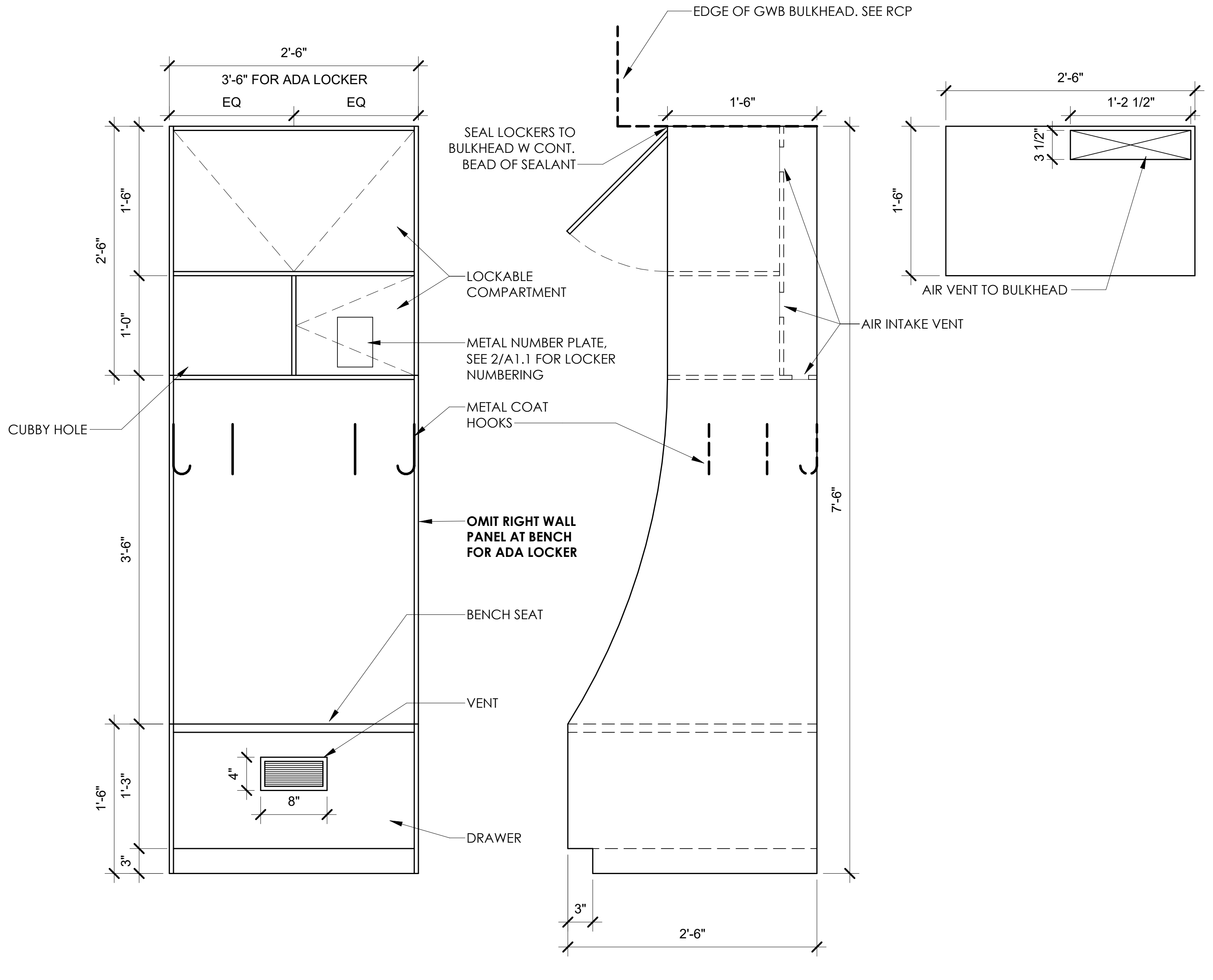
EXTERIOR BUILDING SYSTEMS LEGEND

LOW-SLOPE ROOF SYSTEM : BALLASTED EDPM ROOF MEMBRANE ON TAPERED INSULATION (R-24 AVG. MIN.) ON PRECAST ROOF CAP - SEE STRUCTURAL FOR PRECAST THICKNESS AND SPECIFICATIONS.

EXTERIOR WALL SYSTEM : 2" EIFS SYSTEM (R-10 MIN.) WITH AGGREGATE AND CEMENT EXTERIOR FINISH ON DRAINAGE PLANE AND MOISTURE BARRIER, ON 8" NOM. CMU MASONRY WALL. CMU TO BE FILLED WITH INSULATION, TYP. EXTERIOR FINISH AND AGGREGATE TO MATCH EXG. SEE INTERIOR FINISH PLAN FOR INTERIOR CMU FINISH.



5 STICK RACK UNITS
1" = 1'-0"



3 LOCKER UNIT
1" = 1'-0"

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
WALL SECTIONS & DETAILS

EBLE ICE ARENA
LOCKER ROOM EXPANSION
19400 W BLUEMOUND RD
BROOKFIELD, WI 53045

Date	Revision

JOB: 250070
DRAWN: NB
CHECKED: PG
DATE: 2026-02-16
SHEET:
A7.0

TOWN OF BROOKFIELD PLAN COMMISSION ZONING STAFF REPORT

TO: Town of Brookfield Plan Commission

FROM: Rebekah Leto, AICP, Town Planner

MEETING DATE: February 27, 2026

RE: S26-4; Master Sign Program for Poplar Creek Town Center

APPLICANT: David Wimmer and Mitch Wimmer

PROPERTY OWNER: Poplar Creek Hospitality LLC and The Town Center at Poplar Creek LLC

The following report is provided for cursory review prior to action. Specifics relating to the submitted documents of this application may be referenced in the Meeting Packet distributed by the Clerk.

Poplar Creek Town Center has submitted a Master Sign Program (MSP) for the Town's consideration (enclosed). The Architectural Review Committee reviewed the MSP on February 11, 2026. Their recommendation was as follows:

Regarding 600 N. Barker Road (Office building)

Unanimously approved, subject to Table 1C being removed and anything over three tenant signs proposed on the building requires approval from the Architectural Review Committee, and subject to Plan Commission and Town Board approval.

Regarding 20400 W. Bluemound Road (Retail building attached to the Marriott Center)

Unanimously approved as presented, subject to Plan Commission and Town Board approval, with a specific note to the applicants to provide updated renderings showing the sign plan in practice.

Regarding 20200 W. Bluemound (Retail under construction)

Unanimously approved as presented, subject to Plan Commission and Town Board approval.

Regarding Remaining Miscellaneous Plan Elements *(installation, lighting, window signage, temporary signage, etc.*

Unanimously approved.

This report reviews the individual buildings, followed by a summary of other information proposed in the plan. A table showing the installed signs is also enclosed, as requested previously by the ARC.

600 N. Barker (Office)

Corresponding Exhibits and Tables include Tables 1A, 1B and 1C and Exhibits 3, 4, 5 and 6 (pg. 3-10)

The office building is located in the northwest portion of the hotel complex. There is currently a single tenant (Fidelity). However, the MPS provides guidance in the event there are multiple tenants based on the amount of square feet being leased. All signs are to be internally illuminated.

- Table 1A – Memorializes the existing signage, in addition to an east façade wall sign that mirrors the existing 18’-9” x 4’-6” west façade wall sign. Fidelity chose not to incorporate an east elevation wall sign. The panel color is noted as TBD Tenant Brand, as single tenants occupying 15,000 sq. ft. of office space are going to have their own branding to incorporate on future signage. Font size varies based on the sign. *See Exhibits 3, 4 and 5.*

- Table 1B – Describes tenants leasing 5,000 sq. ft. (one per floor). Each tenant is permitted one wall sign on the east and west facades, with a maximum sign area of 18’-9” x 2’-10”. Font size is limited to 2’-9”. The signs will be illuminated white channel letters. No over the door signage is proposed. The office and parking ramp directories are illuminated white lettering on black backing, with a maximum font size of 5”. This is consistent with Code requirements for directional and informational signage. *See Exhibits 3 and 5.*

- Table 1C – Describes if the building were to be divided into no more than three (3) tenants per floor, resulting in a maximum of nine (9) tenants. There are no changes from Table 1B. *See Exhibits 3 and 5.* ***Note: the ARC voted to have this table removed and replaced with a requirement that more than three tenants requires ARC approval.***

20400 W. Bluemound Road (Retail), connected to the Marriott Center

Corresponding Exhibits and Tables include Tables 7A and 7B and Exhibits 2 and 9 (pg. 6, 12-13, 15)

- “K” units are the three units next to the hotel (east to west). Maximum sign area is proposed to be 20’ 9”x 2’10”. Signs are proposed on the top forward edge of the entry canopy. *See Table 7A*
- “M” units face Barker Road and are next to the office building. Maximum sign area is 14’-6” x 2’-10”. Signs are proposed on the top forward edge of the entry canopy. *See Table 7A*
- “L” and “L1” units are on W. Bluemound and turn onto Barker Rd. Maximum sign area is 20’ x 2’-10” (L) and 12’-8” x 2’-10” (L1). This is a corner suite so L1 is a second sign if

desired by the tenant, on a separate elevation than L. Signs will be mounted to the building's exterior wall. *See Table 7B*
- Signs will be individual internally lit white dimensional letters on black backer.

20200 W. Bluemound (Retail – under construction)
Table 7A and Exhibits 8, 10-12 (pg. 12, 14, 16-18)

- There are eight suites in this building. Proposed maximum sign length area ranges from 10' to 22', with the maximum height consistently being 2'-10". *See Table 7A*
- The east corner suite (Suite 10) will have the option for two signs (one on the south façade facing Bluemound and one on the east façade) (N1) (N2).
- The west corner suite (Suite 80) will have the option for three signs (N2, N4, N5) due to the architecture of the building.
- Signs will be individual internally lit white dimensional letters on black backer.
- Signs labeled N1 and N4, which are on the east and west corners of the building, are proposed on the front face of the canopy.
- Signs labeled N, N3 and N5, will be located on the top forward edge of the entry canopy.

The MSP also proposes:

- All signs are to be internally lit, with white channel-set letters. Signs are required to be illuminated from sunset to sunrise.
- The illumination standards (Page 20, #7, bullet 3) includes a warm white light (3000K) and a color rendering index greater than 85 LED lighting. This mirrors The Corners lighting plan. Cases and raceways will be black and all connection materials hidden.
- Sign cabinets (retail only) are generally discouraged and approved on a case-by-case basis by the Landlord. Illuminated sign cabinets shall not exceed 50% of the overall sign area allowed. The lettering must be white on a non-illuminated black backer.
- One sign permitted per elevation.
- Window graphics may not exceed 15 sq. ft.
- Temporary signage may be permitted and limited to 75 days ahead of business opening. Sign information is limited to their name, logo and projected opening date. Signs must be banners or a fully adhered vinyl graphic. The Town Code requires a sign permit for temporary sign. I would recommend the Town consider allowing temporary signs to be permitted by the Landlord with these provisions noted in the MSP. Failure to comply may result in fines from the Town.
- Sign permits must be obtained by applicants after receiving approval from the landlord. This is a staff level review to ensure they meet the MSP. No ARC approval would be required if the sign complies with the ARC. This is how The Corners operates.
- The hotel signage is intentionally left out of the MSP. This plan is specifically for office and retail spaces.

Analysis on sign size.

Each table identifies a maximum sign area to accommodate tenants with various branding. Depending on the length of a business's name, it may or may not utilize that entire area. The applicant has noted that the average width of a letter is 80% of its letter height. Therefore, the height is the governing dimension. Below is a table to help describe this in practice using “Brooks Brothers” as a prospective tenant. Note this an example only to help illustrate how a sign area may change based on a tenants name and branding.

Assumption used for all scenarios:
Average letter width ≈ 80% of letter height (sans-serif font),
Text = “Brooks Brothers” (14 letters).

Letter Height	Approx. width	Notes
2’9” (33 in).	30.8 ft. (exceeds more than the maximum sign width of 22 ft.)	Using max. sign area height permitted.
1’-11.5” (23.6 in).	22 ft. (max. sign width at 20200 W. Bluemound)	Letter height reduced by approx. 9.4”
1’-5.25” (17.3 in.)	16 ft. 2 in.	Reduced letter height by approx. 15.7”

While the sign area’s stated in the MSP, specifically for some of the retail spaces, seem larger than necessary, the table above illustrates that it is unlikely all retail spaces will have signs that fill the maximum sign area in its entirety.

Recommendation

At the discretion of the Plan Commission. This recommendation will proceed to Town Board for final approval. The following are possible motions:

- **Table** to allow the applicant time to revise the MSP in accordance with any comments received.
- **Conditional approval** subject to any conditions or modifications being incorporated and approved by Staff, prior to going to Town Board.
- **Denial** due to __________________________.

Enclosures: MSP dated February 2026 and Table of existing signage

POPLAR CREEK TOWN CENTER

Signage and Graphic Design Guidelines

February 2026

Table of Contents

Appendix

Poplar Creek Town Center
Signage and Graphic Design Guidelines

The primary intent of the Tenant Signage and Graphic Design Guidelines is to encourage visually attractive and engaging signage for the office and retail suites that integrates into the overall Project image and character. Signage and Graphic Design Guidelines do not apply to the Hotel located at 20300 W. Bluemound Road. These standards have been approved by the Town of Brookfield and any deviation from these guidelines will require review and approval by the Landlord and Town's Architectural Review Committee.

1. <u>General Signage Guidelines</u>

- Tenants shall have the right to place one store identification sign on the front canopy or building as designated by Landlord. The size, shape, color, type, placement, and method of installation shall require prior Landlord approval. Tenant shall pay 100% of costs for all expenses related to signage including sign design, permit and application fees, costs for sign fabrication, installation, operation, maintenance, and restoration following removal, including repair of any damage to the building.

In addition to the municipal requirements, the following are general graphic guidelines to be used in the development of all signage and graphic elements unless otherwise noted:

- Primary shop-front identification shall be limited to Tenant's trade name, as approved in the Lease, or as otherwise approved in writing by Landlord, as long as it is in compliance with municipal codes.

- Tenants may use a crest, shield, logo or other established corporate insignia, and are encouraged to incorporate them in a three-dimensional manner befitting the image of the Center. A logo and/or color may be authorized solely at the discretion of the Landlord.

- The use of product descriptions or merchandise offerings is **prohibited, except as specifically approved by Landlord on a case-by-case basis.**

- **The use of taglines or slogans is prohibited.**

- All signs must fit comfortably into their shop-front architecture, leaving sufficient margins and negative space on all sides. Thickness, height and colors of lettering and graphics must be visually balanced and in proportion with other signs.

- All submitted Tenant sign shop drawings and shop-front elevations need to illustrate proposed signage in each design presentation to the Landlord inclusive of both day and night illustrations.

- All signs shall be presented to the Landlord for approval prior to application for permit with the Town of Brookfield and commencement of fabrication.

2. Office Tenant Identification Signage

600 North Barker Road

The Size, Shape, Color, Type, and Placement of all signs shall conform to that defined on Tables 1A, 1B and 1C and require prior Landlord approval.

Tenants may have one (1) identification sign on the Office Building structure as generally depicted on Exhibits 3, 4 and 5. Tenant shall bear the cost of creating, installing, and maintaining the identification sign.

Office Tenants shall have one (1) identification sign on the following directories of Office Tenants:

- Barker Office Monument Directory(Exhibit 6A)
- Parking Ramp Directory (Exhibit 6B)
- East/West Connector Building Directory (Exhibit 6 C/D)
- East/West Office Entry Directory (Exhibit 6 E/F) as available

A Comprehensive Location Map for 600 N. Barker Road and 20400 W. Bluemound Road is presented in Exhibit 2.

Table 1A
600 North Barker

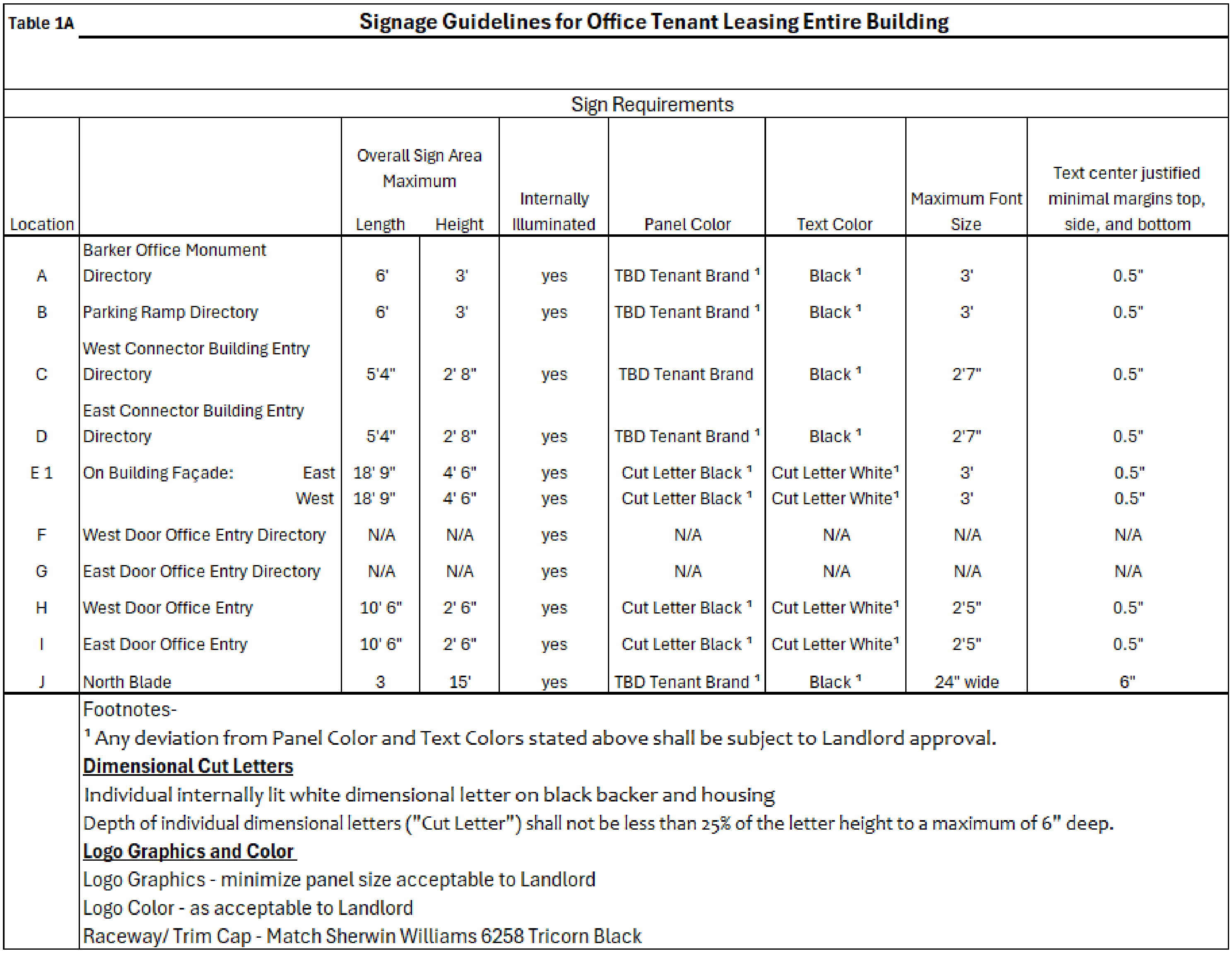


Table 1A **Signage Guidelines for Office Tenant Leasing Entire Building**

Sign Requirements

Location		Overall Sign Area Maximum Length	Height	Internally Illuminated	Panel Color	Text Color	Maximum Font Size	Text center justified minimal margins top, side, and bottom
A	Barker Office Monument Directory	6'	3'	yes	TBD Tenant Brand [1]	Black [1]	3'	0.5"
B	Parking Ramp Directory	6'	3'	yes	TBD Tenant Brand [1]	Black [1]	3'	0.5"
C	West Connector Building Entry Directory	5'4"	2' 8"	yes	TBD Tenant Brand	Black [1]	2'7"	0.5"
D	East Connector Building Entry Directory	5'4"	2' 8"	yes	TBD Tenant Brand [1]	Black [1]	2'7"	0.5"
E 1	On Building Façade: East	18' 9"	4' 6"	yes	Cut Letter Black [1]	Cut Letter White[1]	3'	0.5"
	West	18' 9"	4' 6"	yes	Cut Letter Black [1]	Cut Letter White[1]	3'	0.5"
F	West Door Office Entry Directory	N/A	N/A	yes	N/A	N/A	N/A	N/A
G	East Door Office Entry Directory	N/A	N/A	yes	N/A	N/A	N/A	N/A
H	West Door Office Entry	10' 6"	2' 6"	yes	Cut Letter Black [1]	Cut Letter White[1]	2'5"	0.5"
I	East Door Office Entry	10' 6"	2' 6"	yes	Cut Letter Black [1]	Cut Letter White[1]	2'5"	0.5"
J	North Blade	3	15'	yes	TBD Tenant Brand [1]	Black [1]	24" wide	6"

Footnotes-

[1] Any deviation from Panel Color and Text Colors stated above shall be subject to Landlord approval.

Dimensional Cut Letters

Individual internally lit white dimensional letter on black backer and housing

Depth of individual dimensional letters ("Cut Letter") shall not be less than 25% of the letter height to a maximum of 6" deep.

Logo Graphics and Color

Logo Graphics - minimize panel size acceptable to Landlord

Logo Color - as acceptable to Landlord

Raceway/ Trim Cap - Match Sherwin Williams 6258 Tricorn Black

Table 1B
600 North Barker

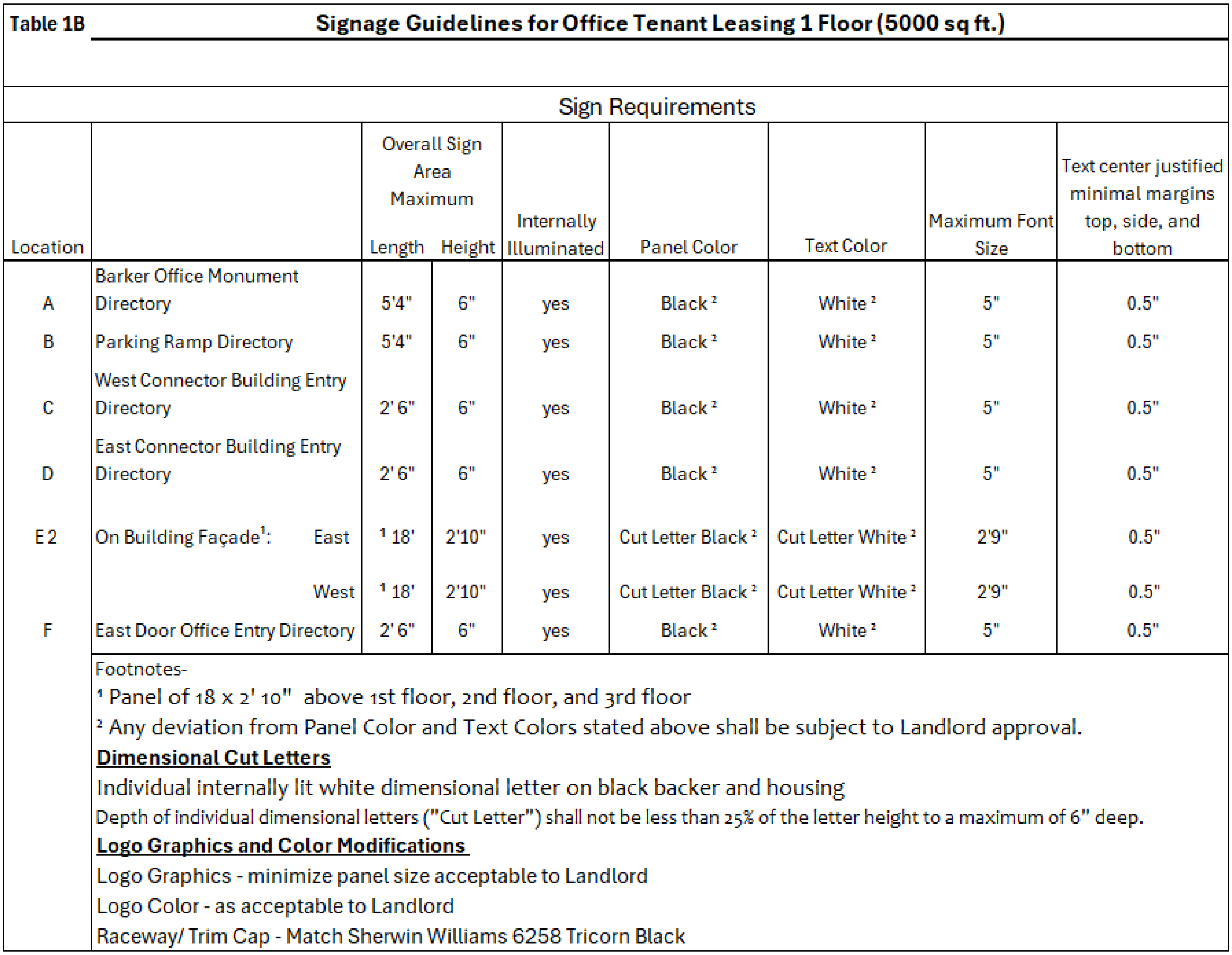


Table 1B — **Signage Guidelines for Office Tenant Leasing 1 Floor (5000 sq ft.)**

Sign Requirements

Location		Overall Sign Area Maximum Length	Height	Internally Illuminated	Panel Color	Text Color	Maximum Font Size	Text center justified minimal margins top, side, and bottom
A	Barker Office Monument Directory	5'4"	6"	yes	Black [2]	White [2]	5"	0.5"
B	Parking Ramp Directory	5'4"	6"	yes	Black [2]	White [2]	5"	0.5"
C	West Connector Building Entry Directory	2' 6"	6"	yes	Black [2]	White [2]	5"	0.5"
D	East Connector Building Entry Directory	2' 6"	6"	yes	Black [2]	White [2]	5"	0.5"
E 2	On Building Façade[1]: East	[1] 18'	2'10"	yes	Cut Letter Black [2]	Cut Letter White [2]	2'9"	0.5"
	West	[1] 18'	2'10"	yes	Cut Letter Black [2]	Cut Letter White [2]	2'9"	0.5"
F	East Door Office Entry Directory	2' 6"	6"	yes	Black [2]	White [2]	5"	0.5"

Footnotes-

[1] Panel of 18 x 2' 10" above 1st floor, 2nd floor, and 3rd floor

[2] Any deviation from Panel Color and Text Colors stated above shall be subject to Landlord approval.

Dimensional Cut Letters

Individual internally lit white dimensional letter on black backer and housing

Depth of individual dimensional letters ("Cut Letter") shall not be less than 25% of the letter height to a maximum of 6" deep.

Logo Graphics and Color Modifications

Logo Graphics - minimize panel size acceptable to Landlord

Logo Color - as acceptable to Landlord

Raceway/ Trim Cap - Match Sherwin Williams 6258 Tricorn Black

Table 1C
600 North Barker

Table 1C **Signage Guidelines for Office Tenants Leasing less than 5000 sq ft.**

Sign Requirements

Location		Overall Sign Area Maximum		Internally Illuminated	Panel Color	Text Color	Maximum Font Size	Text center justified minimal margins top, side, and bottom
		Length	Height					
A	Barker Office Monument Directory	2'6"	6"	yes	Black[3]	White[3]	5"	0.5"
B	Parking Ramp Directory	2'6"	6"	yes	Black[3]	White[3]	5"	0.5"
C	West Connector Building Entry Directory	2'6"	6"	yes	Black[3]	White[3]	5"	0.5"
D	East Connector Building Entry Directory	2'6"	6"	yes	Black[3]	White[3]	5"	0.5"
E 2	On Building Façade[1]: East	[1] 18'	2'10"	yes	Cut Letter Black [2]	Cut Letter White [2]	2'9"	0.5"
	West	[1] 18'	2'10"	yes	Cut Letter Black [2]	Cut Letter White [2]	2'9"	0.5"
F	East Office Building Lobby Entry Directory [2]	2'6"	6"	yes	Black[3]	White[3]	5"	0.5"

Footnotes-

[1] (Limit is to 1 sign per elevation and no more than 2 elevation signs)

[2] If available

[3] Any deviation from Panel Color and Text Colors stated above shall be subject to Landlord approval.

Dimensional Cut Letters

Individual internally lit white dimensional letter on black backer and housing

Depth of individual dimensional letters ("Cut Letter") shall not be less than 25% of the letter height to a maximum of 6" deep.

Logo Graphics and Color Modifications

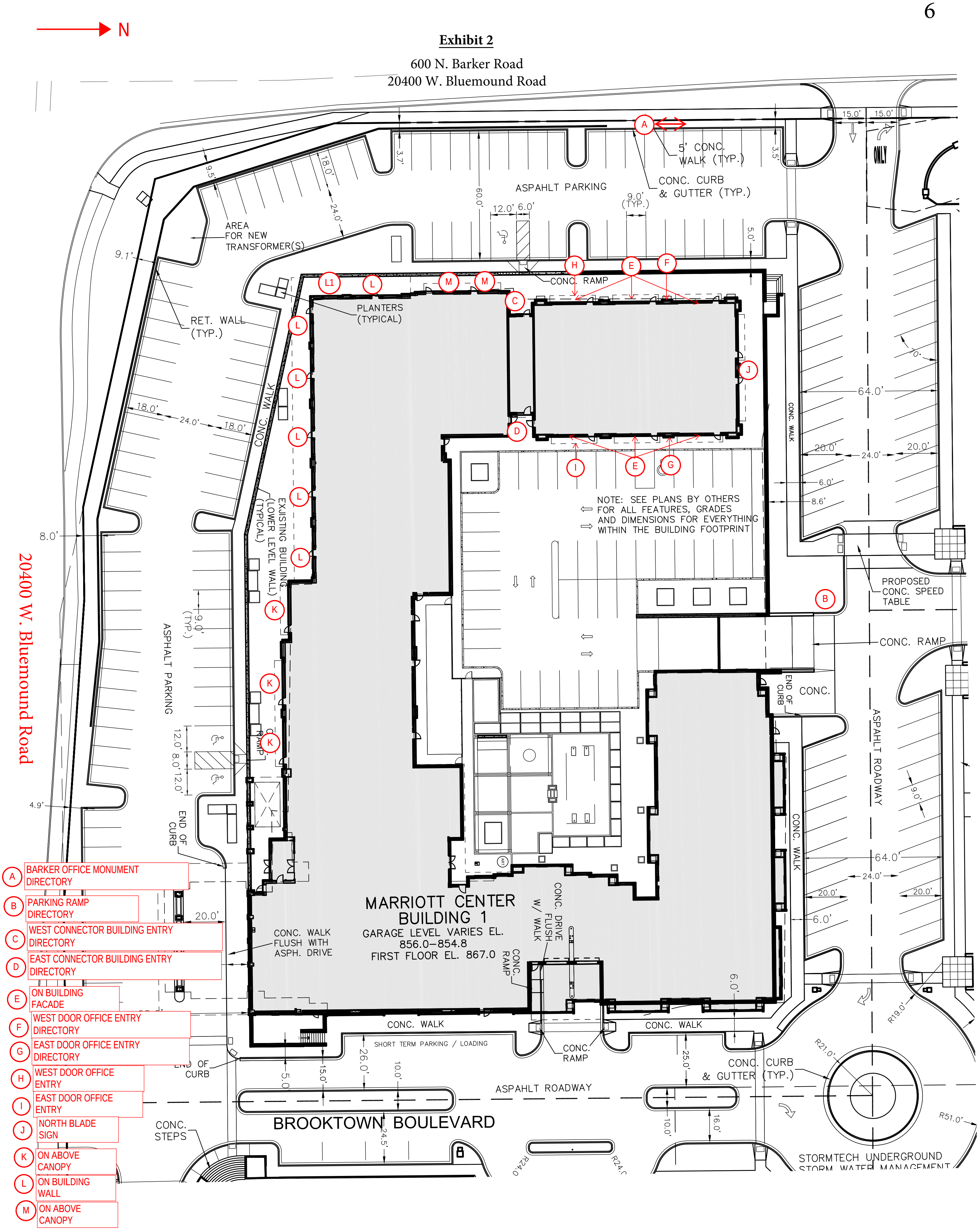
Logo Graphics - minimize panel size acceptable to Landlord

Logo Color - as acceptable to Landlord

Raceway/ Trim Cap - Match Sherwin Williams 6258 Tricorn Black

Exhibit 2

600 N. Barker Road
20400 W. Bluemound Road



Ⓐ BARKER OFFICE MONUMENT DIRECTORY
Ⓑ PARKING RAMP DIRECTORY
Ⓒ WEST CONNECTOR BUILDING ENTRY DIRECTORY
Ⓓ EAST CONNECTOR BUILDING ENTRY DIRECTORY
Ⓔ ON BUILDING FACADE
Ⓕ WEST DOOR OFFICE ENTRY DIRECTORY
Ⓖ EAST DOOR OFFICE ENTRY DIRECTORY
Ⓗ WEST DOOR OFFICE ENTRY
Ⓘ EAST DOOR OFFICE ENTRY
Ⓙ NORTH BLADE SIGN
Ⓚ ON ABOVE CANOPY
Ⓛ ON BUILDING WALL
Ⓜ ON ABOVE CANOPY

Exhibit 3

West Office/
West Retail
600 N. Barker Road and
20400West Bluemound Road

Table 1A

Illustrates guidelines for Office tenant leasing entire building

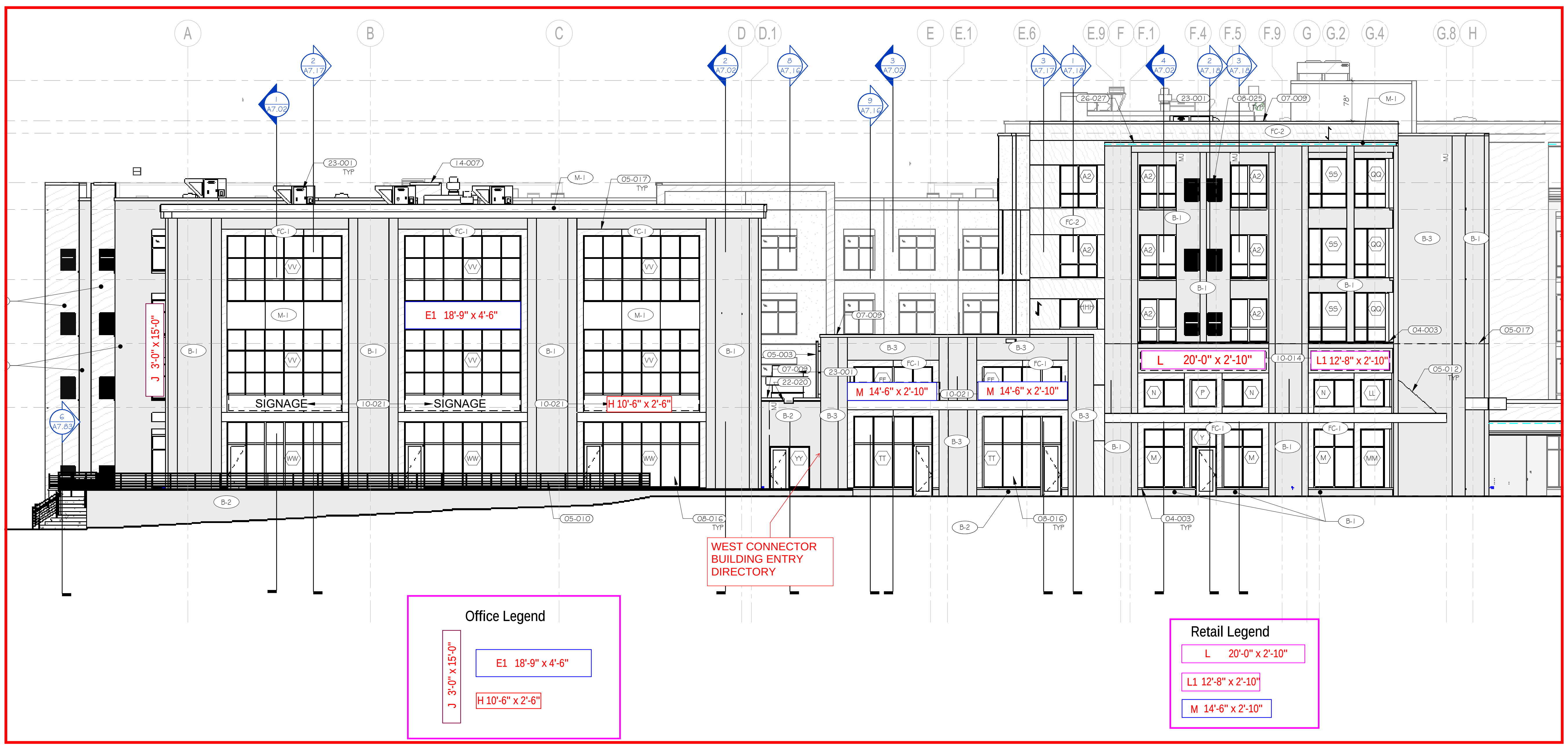


Table 1B

Illustrates guidelines for Office tenant leasing one floor (5,000 sq. ft.)

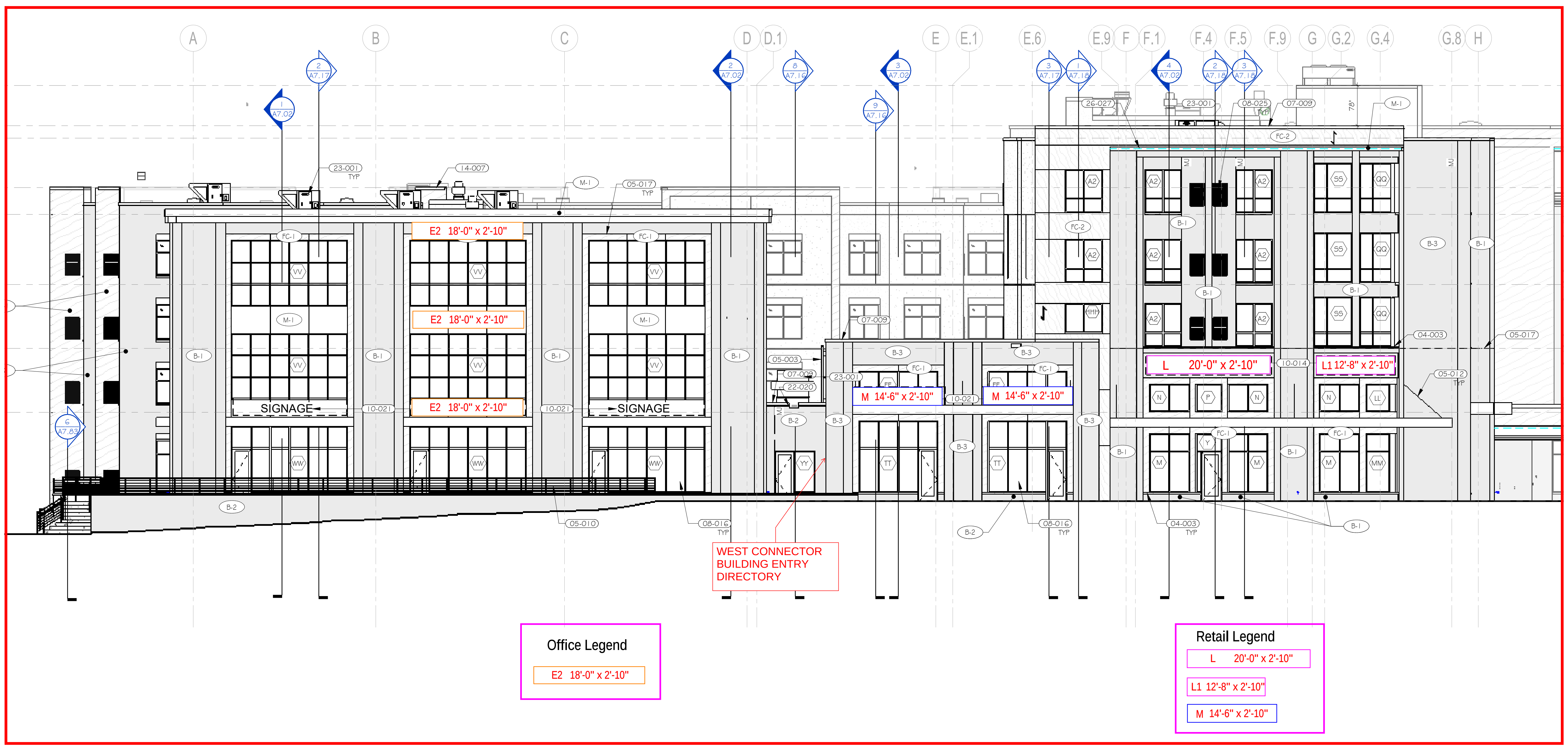


Table 1C

Illustrates guidelines for Office tenant leasing less than 5,000 sq. ft.

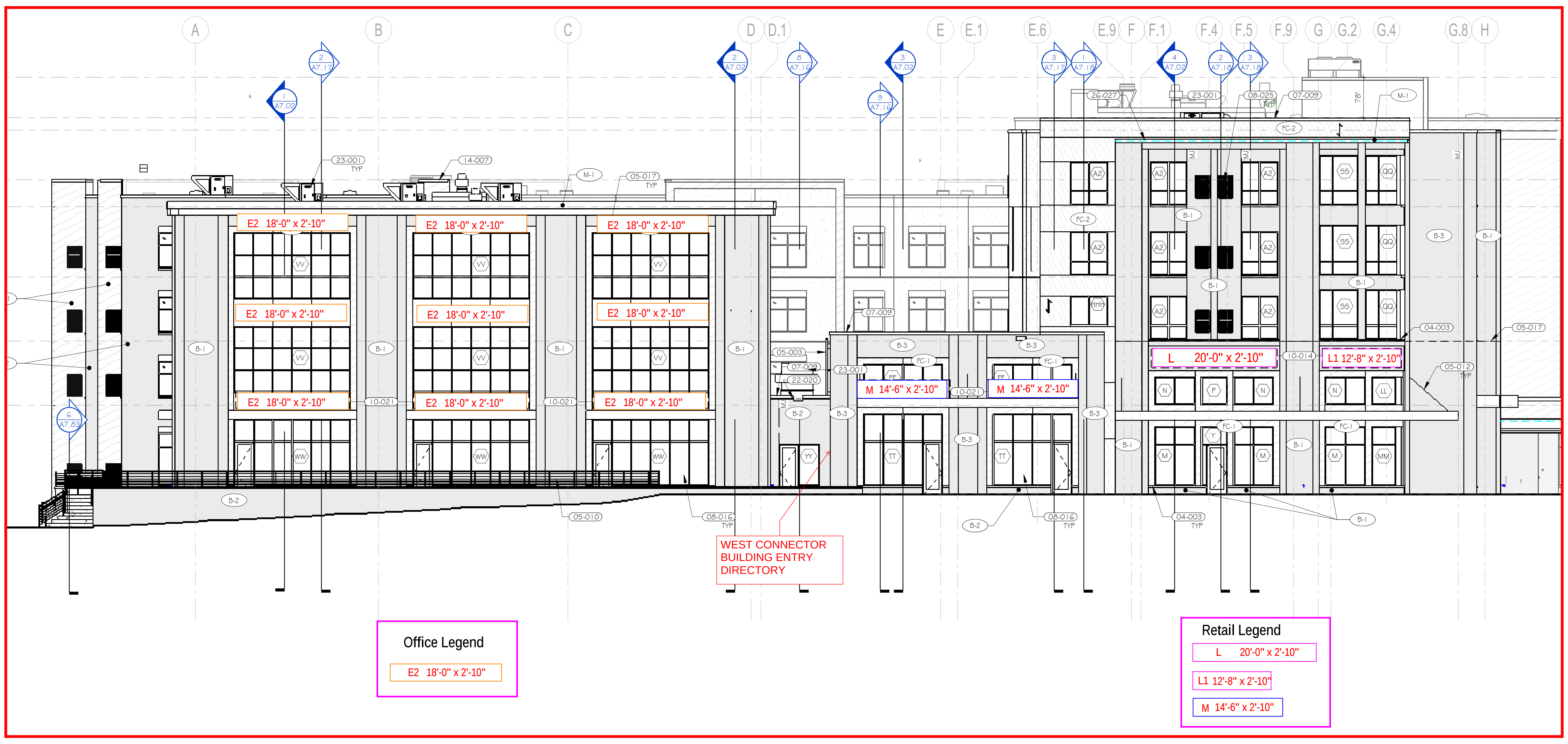


Exhibit 4

North Office
600 North Barker Road

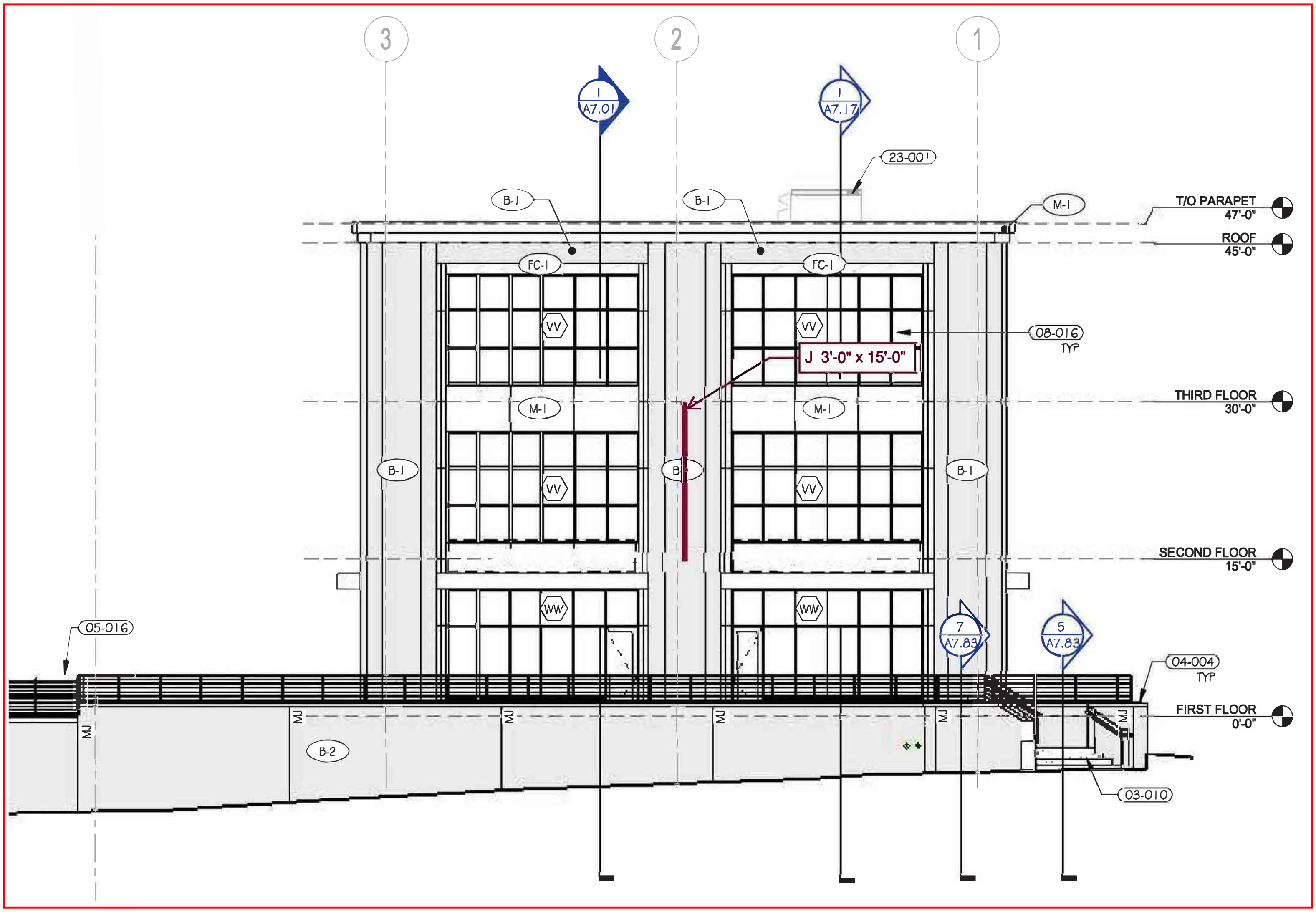


Exhibit 5
East Office
600 North Barker Road

Table 1A

Illustrates guidelines for Office tenant leasing entire building

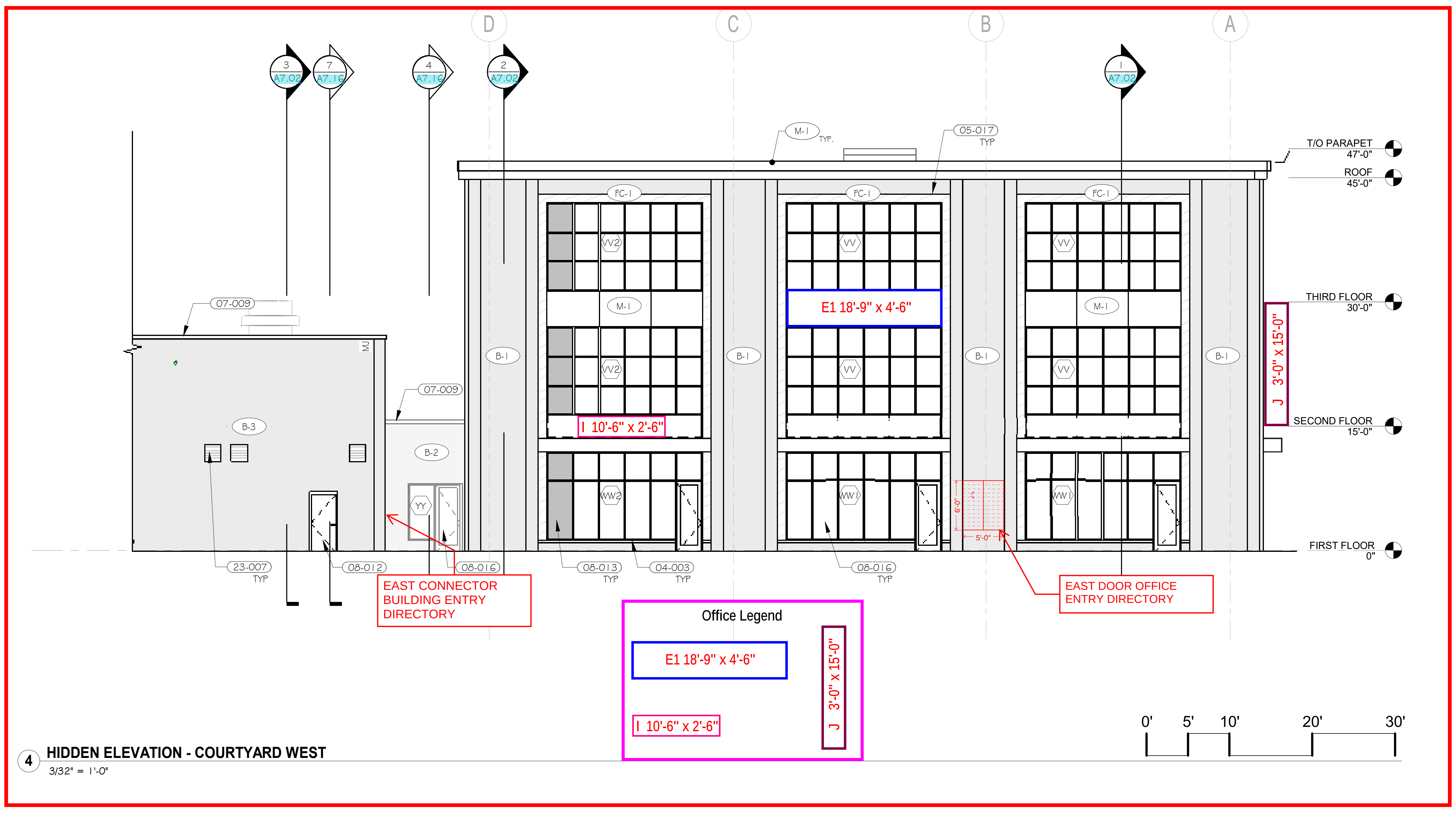


Table 1B

Illustrates guidelines for Office tenant leasing one floor (5,000 sq. ft.)

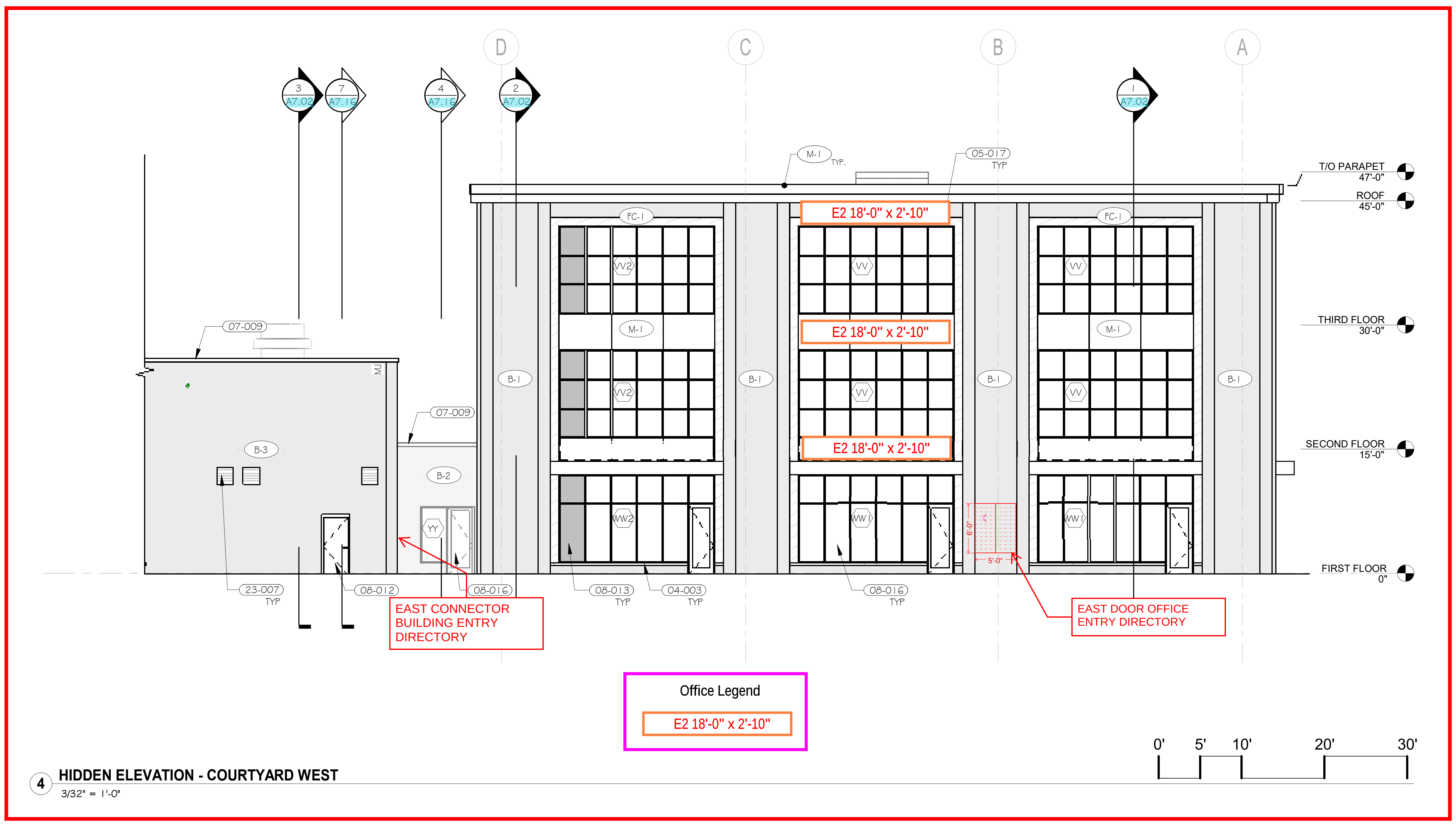


Table 1C

Illustrates guidelines for Office tenant leasing less than 5,000 sq. ft.

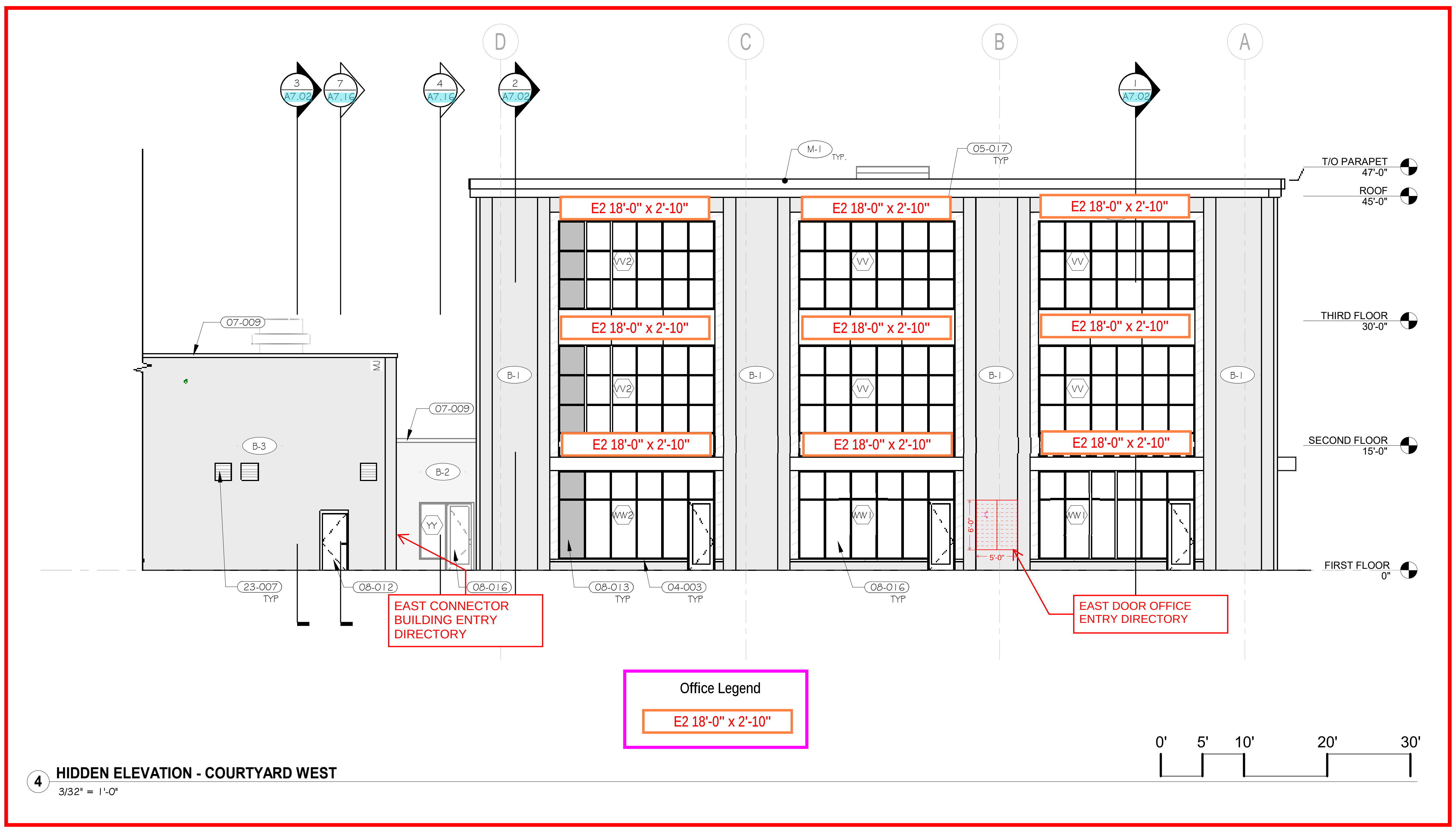
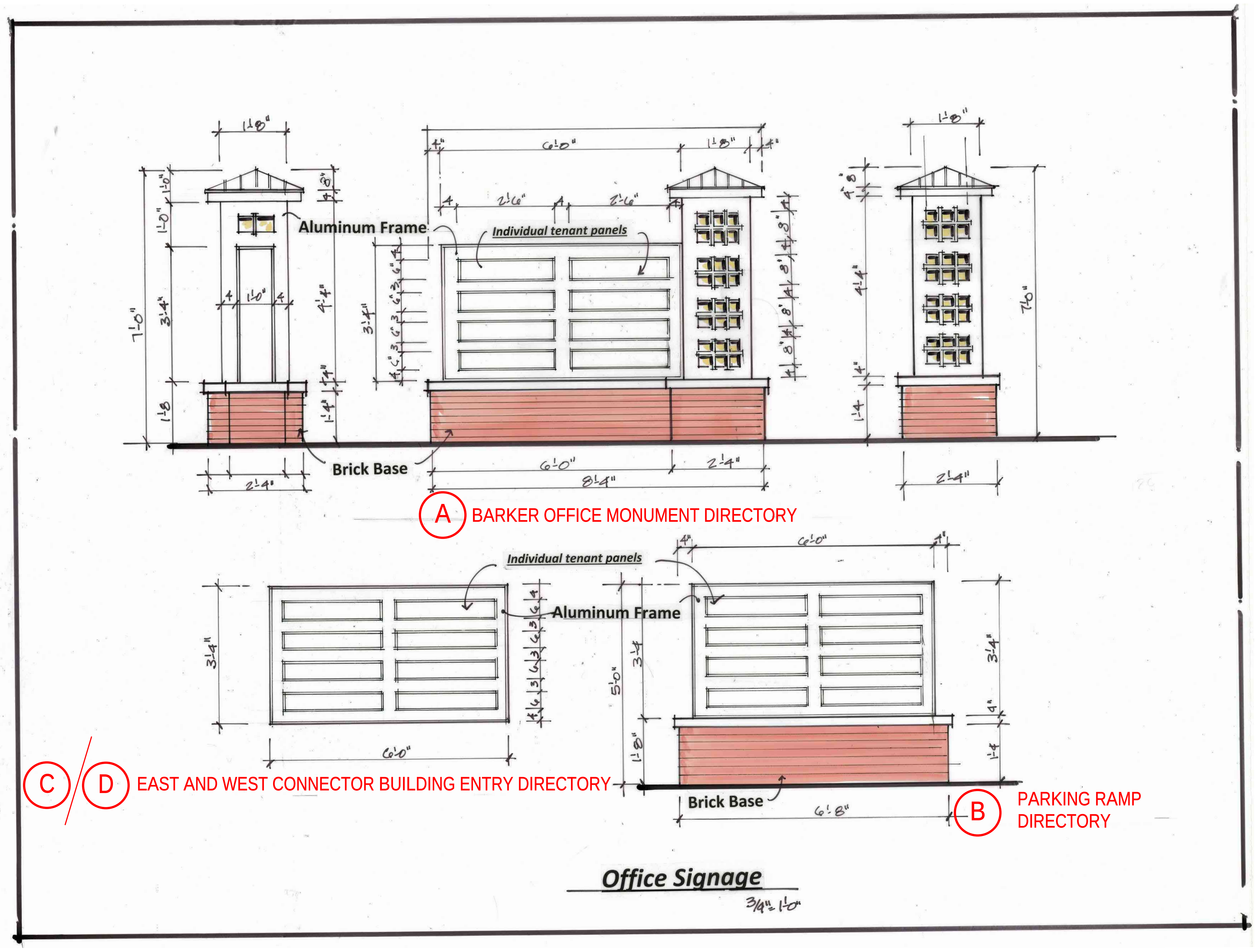


Exhibit 6

Marriott Center Dimensions/Monuments

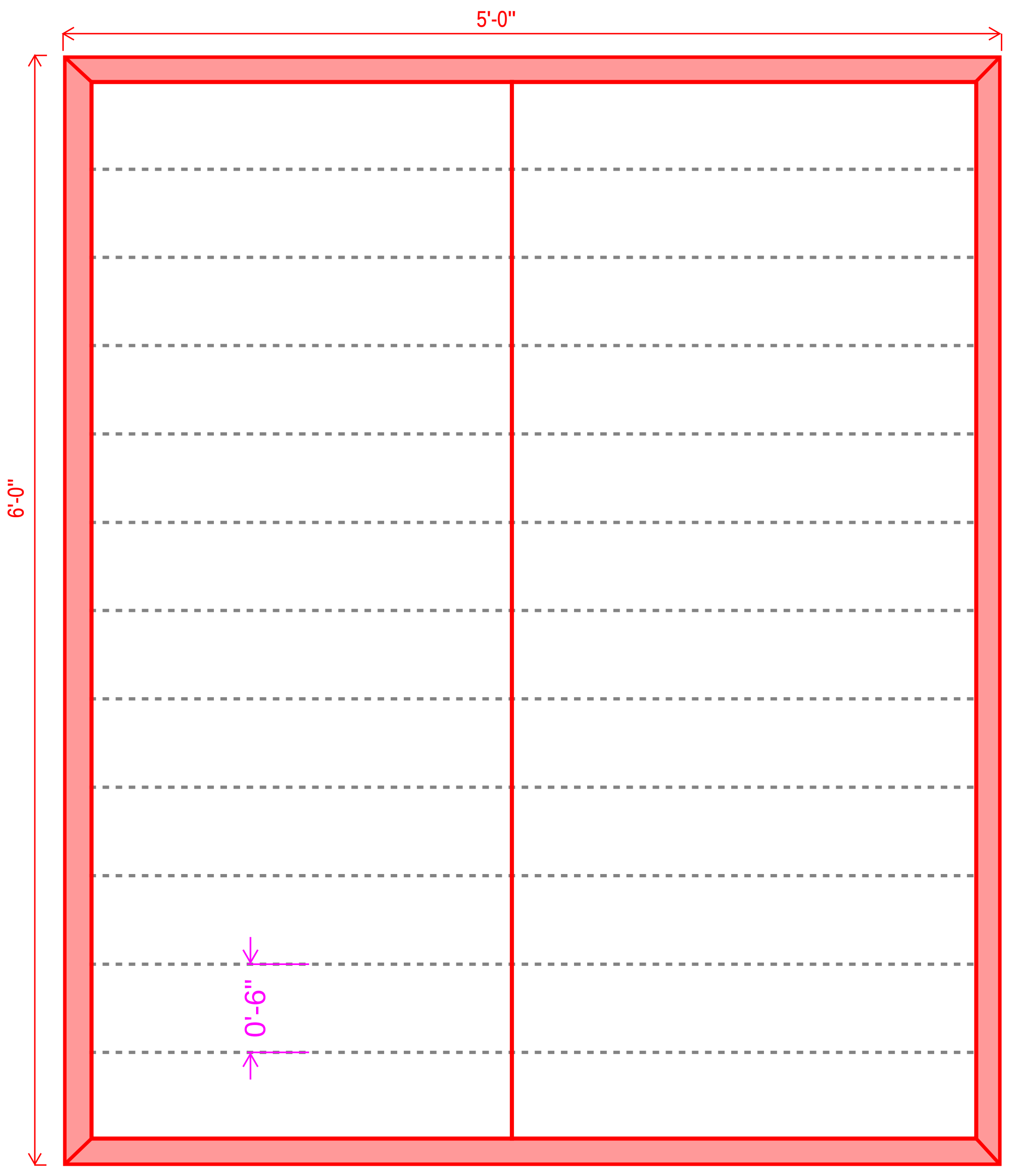


(A) BARKER OFFICE MONUMENT DIRECTORY

(C)/(D) EAST AND WEST CONNECTOR BUILDING ENTRY DIRECTORY

(B) PARKING RAMP DIRECTORY

Office Signage



4" DEEP BLACK ALUMINUM INTERNALLY LIT DIRECTORY BOX WITH REMOVABLE BLACK BACKGROUND AND WHITE LETTERING

(H)/(I) EAST & WEST OFFICE ENTRY DIRECTORY

3. Retail Tenant Canopy and Wall Identification Signage

Suites addressed as 20400 West Bluemound Road and 20200 West Bluemound Road

- Signage is to be mounted to top forward edge of entry canopy for Suites 100, 200, 300, 700 and 800 at 20400 E. Bluemound Road and Suites 10 - 80 at 20200 W. Bluemound Road. All other retail Units 400, 500 and 600 at 20400 W. Bluemound Road shall be Exterior Wall Mounted above the canopy as generally located per Exhibits 2 and 8 and as depicted on Exhibits 9, 10, 11 and 12.

- **The Size, Shape, Color, Type and Placement of all signs shall conform to that defined on Tables 7A and 7B and require Landlord approval.**

Table 7A

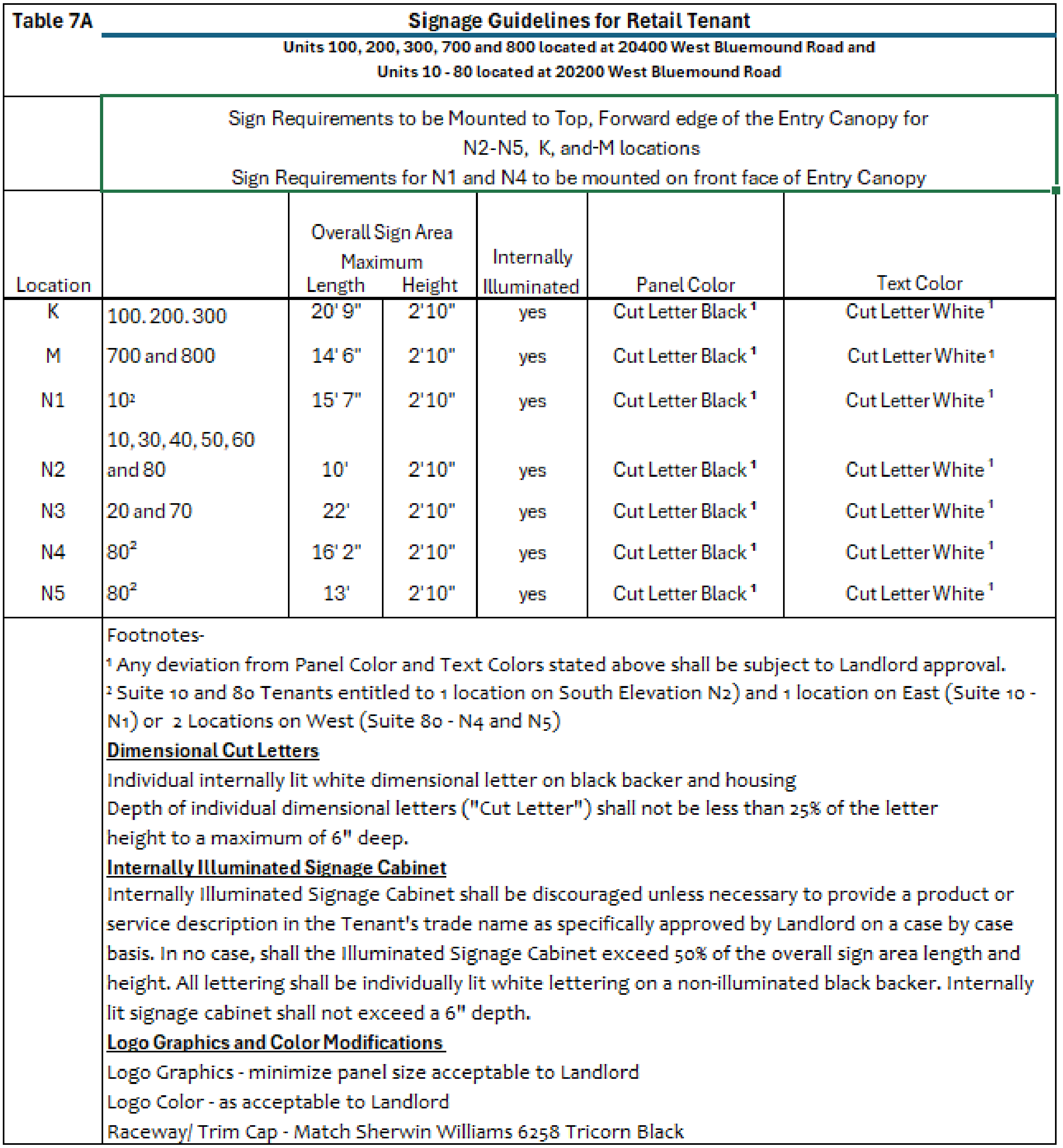


Table 7A **Signage Guidelines for Retail Tenant**

Units 100, 200, 300, 700 and 800 located at 20400 West Bluemound Road and
Units 10 - 80 located at 20200 West Bluemound Road

Sign Requirements to be Mounted to Top, Forward edge of the Entry Canopy for
N2-N5, K, and-M locations
Sign Requirements for N1 and N4 to be mounted on front face of Entry Canopy

Location		Overall Sign Area Maximum Length	Height	Internally Illuminated	Panel Color	Text Color
K	100. 200. 300	20' 9"	2'10"	yes	Cut Letter Black [1]	Cut Letter White [1]
M	700 and 800	14' 6"	2'10"	yes	Cut Letter Black [1]	Cut Letter White [1]
N1	10[2]	15' 7"	2'10"	yes	Cut Letter Black [1]	Cut Letter White [1]
N2	10, 30, 40, 50, 60 and 80	10'	2'10"	yes	Cut Letter Black [1]	Cut Letter White [1]
N3	20 and 70	22'	2'10"	yes	Cut Letter Black [1]	Cut Letter White [1]
N4	80[2]	16' 2"	2'10"	yes	Cut Letter Black [1]	Cut Letter White [1]
N5	80[2]	13'	2'10"	yes	Cut Letter Black [1]	Cut Letter White [1]

Footnotes-

[1] Any deviation from Panel Color and Text Colors stated above shall be subject to Landlord approval.

[2] Suite 10 and 80 Tenants entitled to 1 location on South Elevation N2) and 1 location on East (Suite 10 - N1) or 2 Locations on West (Suite 80 - N4 and N5)

Dimensional Cut Letters

Individual internally lit white dimensional letter on black backer and housing
Depth of individual dimensional letters ("Cut Letter") shall not be less than 25% of the letter height to a maximum of 6" deep.

Internally Illuminated Signage Cabinet

Internally Illuminated Signage Cabinet shall be discouraged unless necessary to provide a product or service description in the Tenant's trade name as specifically approved by Landlord on a case by case basis. In no case, shall the Illuminated Signage Cabinet exceed 50% of the overall sign area length and height. All lettering shall be individually lit white lettering on a non-illuminated black backer. Internally lit signage cabinet shall not exceed a 6" depth.

Logo Graphics and Color Modifications

Logo Graphics - minimize panel size acceptable to Landlord
Logo Color - as acceptable to Landlord
Raceway/ Trim Cap - Match Sherwin Williams 6258 Tricorn Black

Table 7B

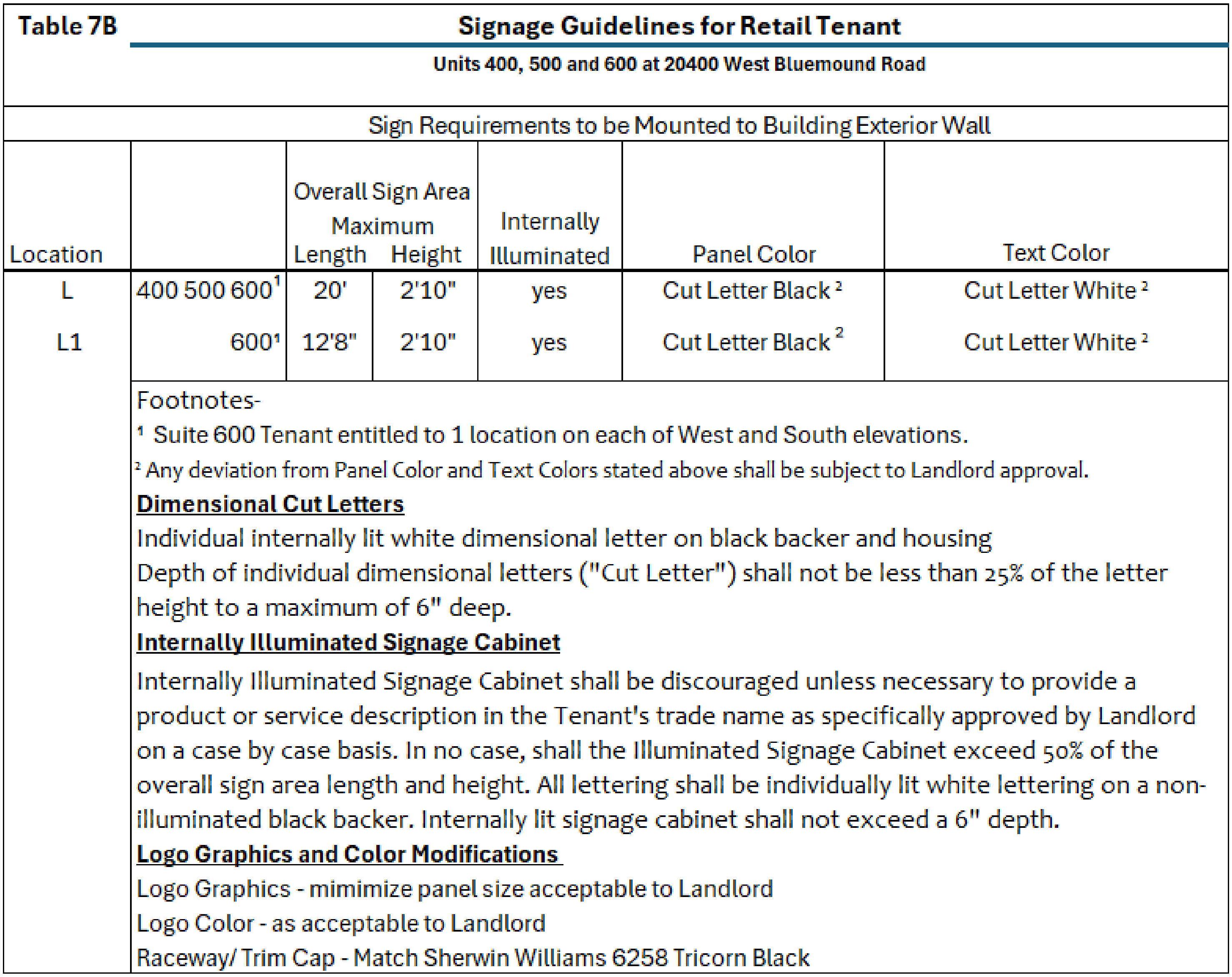


Table 7B **Signage Guidelines for Retail Tenant**

Units 400, 500 and 600 at 20400 West Bluemound Road

Sign Requirements to be Mounted to Building Exterior Wall

Location		Overall Sign Area Maximum Length	Height	Internally Illuminated	Panel Color	Text Color
L	400 500 600[1]	20'	2'10"	yes	Cut Letter Black [2]	Cut Letter White [2]
L1	600[1]	12'8"	2'10"	yes	Cut Letter Black [2]	Cut Letter White [2]

Footnotes-

[1] Suite 600 Tenant entitled to 1 location on each of West and South elevations.

[2] Any deviation from Panel Color and Text Colors stated above shall be subject to Landlord approval.

Dimensional Cut Letters

Individual internally lit white dimensional letter on black backer and housing

Depth of individual dimensional letters ("Cut Letter") shall not be less than 25% of the letter height to a maximum of 6" deep.

Internally Illuminated Signage Cabinet

Internally Illuminated Signage Cabinet shall be discouraged unless necessary to provide a product or service description in the Tenant's trade name as specifically approved by Landlord on a case by case basis. In no case, shall the Illuminated Signage Cabinet exceed 50% of the overall sign area length and height. All lettering shall be individually lit white lettering on a non-illuminated black backer. Internally lit signage cabinet shall not exceed a 6" depth.

Logo Graphics and Color Modifications

Logo Graphics - mimimize panel size acceptable to Landlord

Logo Color - as acceptable to Landlord

Raceway/ Trim Cap - Match Sherwin Williams 6258 Tricorn Black

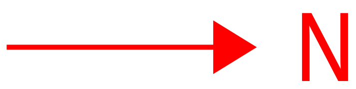


Exhibit 8

20200 W. Bluemound
Road

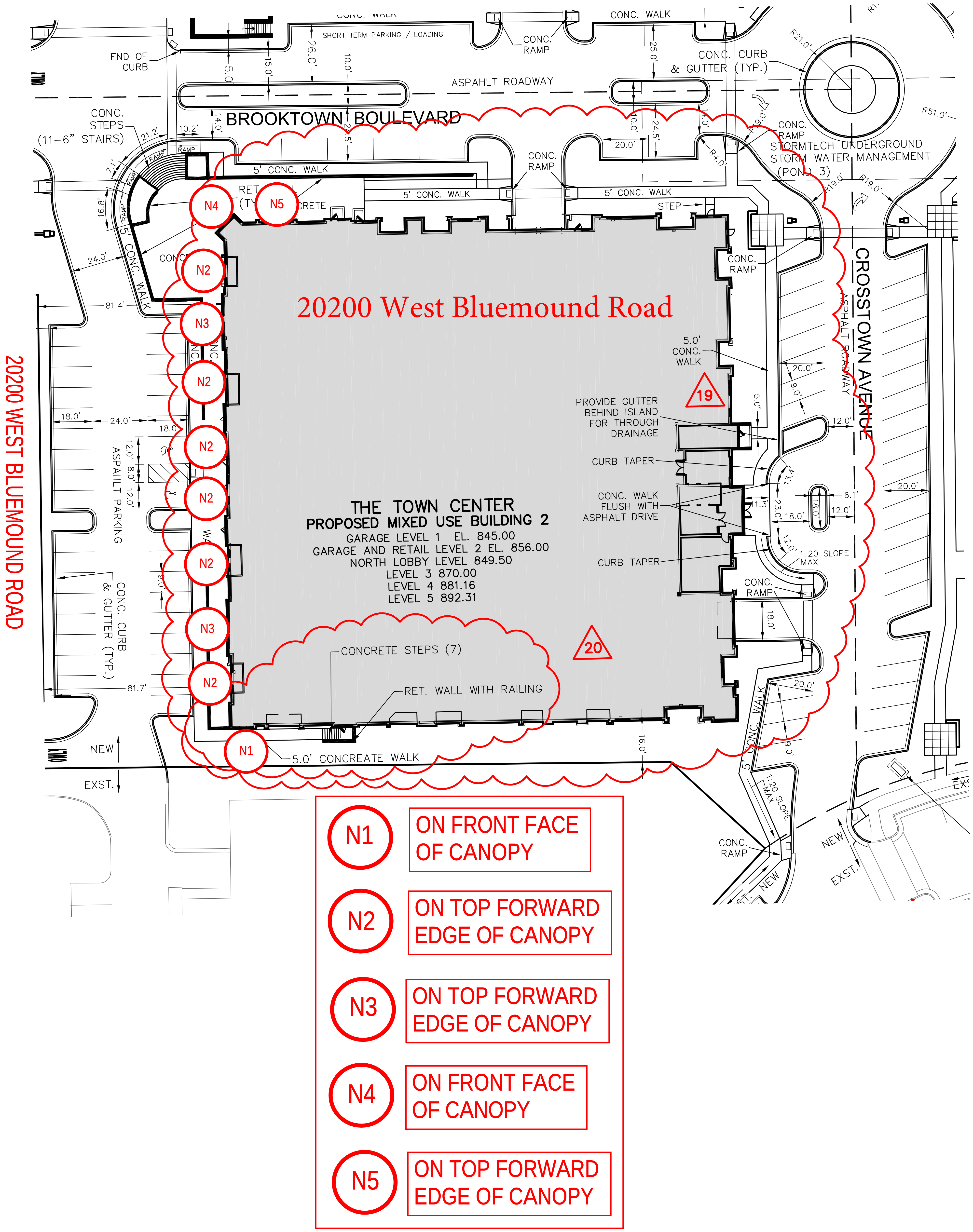
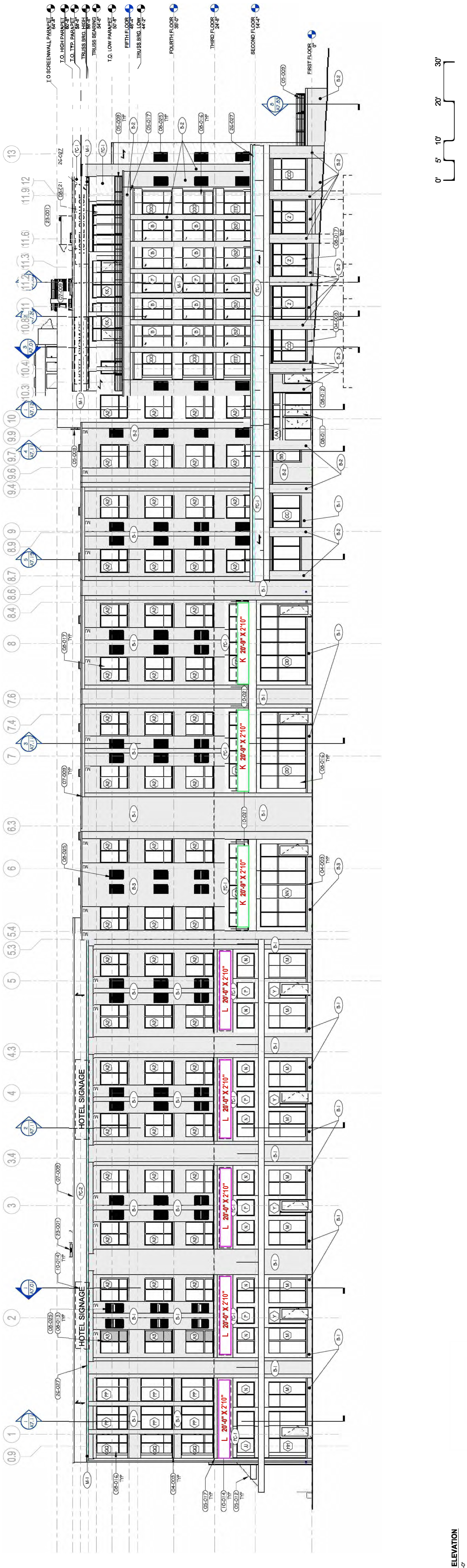


Exhibit 9

South Retail
20400 West
Bluemound Road



② SOUTH ELEVATION
3/32" = 1'-0"

Retail Legend

- 🟩 K 20'-9" X 2'-10"
- 🟪 L 20'-0" X 2'-10"

Exhibit 10

South Exterior Elevation 20200
West Bluemound Road

Retail Legend

N2	10' x 2'-10"
N3	22'-0" x 2'-10"

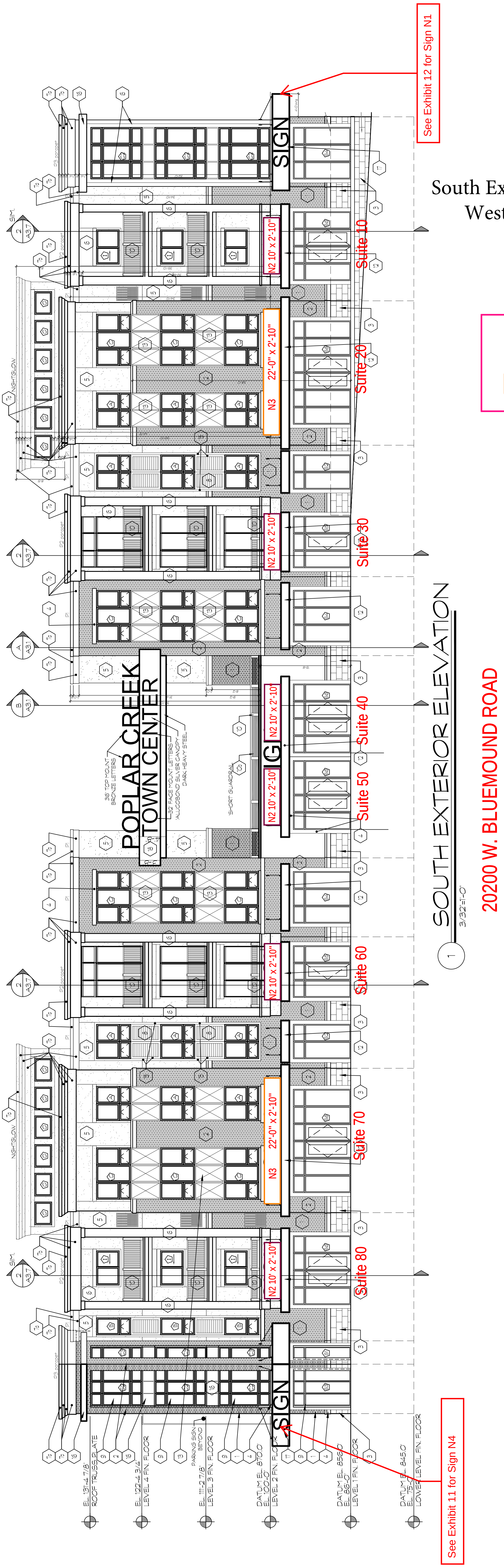


Exhibit 11

West Exterior Elevation
20200 West Bluemound Road

Retail Legend

N4 16'-2" x 2'-10"

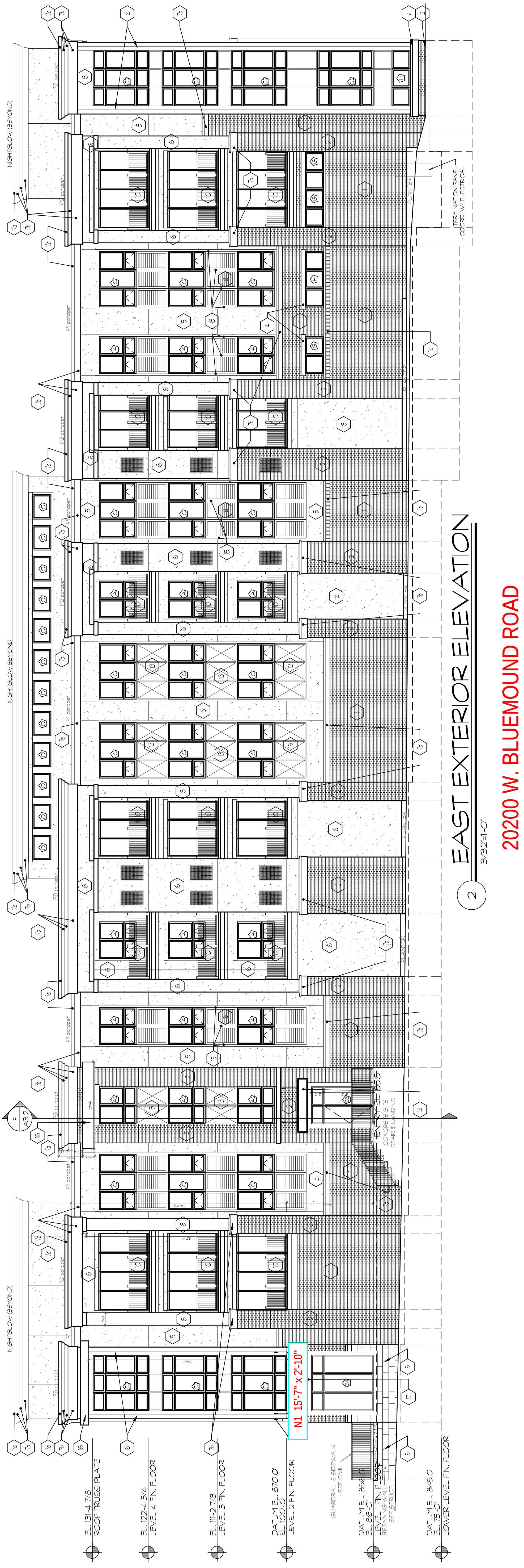
N5 13'-0" x 2'-10"

Exhibit 12

East Exterior Elevation
20200 West Bluemound Road

Retail Legend

N1 15'-7" x 2'-10"



4. Window Graphics

Small-scaled pedestrian level graphic designs may be incorporated into or applied to glazing- Including, but not limited to:

- Name
- Logo
- Slogan
- Services
- Hours of Operation
- Contact Information

Signage and graphics that are applied to the storefront glazing system must comply with the following guidelines, and in all cases, but be approved by Landlord as to design, size, and location:

- Tenant's trade name or logo may be displayed in this location. Additional text or graphics that relate to services may be authorized at Landlord's discretion.

- Graphics must be created from high-quality, durable materials and be professionally applied directly to the interior face of the glass storefront. Techniques include silk-screening, the application of pressure sensitive machine-cut vinyl, metal leaf/applique, and etching or sandblasting glass.

- All signs applied with adhesive will be finished on both sides of the storefront glass with no visible mastic or adhesive.

- Text on graphics cannot exceed 15 square feet.

Maximum width	Width of Tenant Space Window
Maximum height	1 single line of 4-inch graphic
Maximum mounting height	36 inches from grade to top of graphic except Name
Allowable mounting location	per above
Required illumination	N/A

5. Temporary Signage

Pre-Opening:

At Tenant's expense, the Tenant may provide temporary signage on the storefront system while the suite is being constructed. Signage needs to be approved by the Landlord and a signage permit is obtained from the Town of Brookfield. Pre-opening temporary signage limited to 75 days ahead of business opening.

Tenant may furnish and install a fully adhered vinyl graphic or banner on the storefront system created specifically for the project which reflects the Tenant's brand, or the Landlord specified graphic.

Tenant is encouraged to include their name, logo, and projected opening date. All other information is prohibited.

All temporary signage desired by the Tenant must be reviewed and approved by the Landlord. Temporary pennants, flags, and inflatable displays are prohibited as are any signs placed outside the Tenant's leased premises.

Post-Opening:

The temporary signage is prohibited post-opening.

6. Approvals

- All Tenants shall submit a written proposal with their intention to Poplar Creek Hospitality, LLC c/o Wimmer Brothers Realty, Inc.; Attention: David Wimmer, Corporate Counsel. Each written proposal shall include for approval prior to fabrication, complete and fully dimensioned scaled shop drawings indicating elevation of signs and identifying all visual and structural elements of the sign including logos, typestyles, dimensions, construction details, attachment devices, treatment of seams, lips and edges, weep holes, paint finish colors, materials, and lighting details. Locate wall signs on building elevation.

- Fully dimensioned section of sign elements showing 3-dimensional projections and indicate type, method, and intensity of illumination.

- Color board with color chips (8½” x 11” format) if requested.

- All proposed signage must have final written approval from Wimmer Brothers Realty, Inc., as manager of Poplar Creek Hospitality, LLC prior to installation.

- All proposed signage must obtain approved sign permits from the Town of Brookfield. Tenant shall not submit any signage application to the Town of Brookfield without first obtaining the signature of Landlord on such application.

7. Construction Requirements

- Tenants shall contract independently with a licensed and bonded sign contractor to fabricate and install signage on the Tenant’s leased premises.

- Signs must be made of durable, rust inhibited materials that are appropriate and complementary to the building. All materials must be new.

- All signage shall be individual letters with white faces (Rohm Haas 7328 white Plexiglas or equal) with a warm white (3000K) and a Color Rendering Index (CRI) greater than 85 LED lighting. Cases and raceway shall be Channelume aluminum with baked enameled finish to match Sherwin Williams 6258 Tricorn Black. Any deviation from these materials specifications must be approved in advance by Landlord.

- Logos, if approved in the sole determination of the Landlord, shall be of an appropriate integrated design with the individual lettering and size of the business name. Logo face may be an accent color if approved by the Landlord. Raceway color shall conform to that stated above.

- All bolts and fasteners shall consist of stainless steel, anodized aluminum, brass or bronze or carbon bearing steel with painted finish. All methods of fastening to the building surfaces shall be approved by Landlord.

- Joining of materials (seams) shall be finished in such a way as to be unnoticeable. Visible welds shall be continuous, ground smooth, and filled. Rivets, screws, and other fasteners that extend to visible surfaces shall be flush, filled, and finished so as to be unnoticeable. Finished surfaces of metal shall be free from canning, warping, and other imperfections.

- All visible finishes shall be matte unless otherwise called out on shop drawings and approved by Landlord.

- Surface brightness of all illuminated materials shall be consistent in all letters and components of the sign. Internally illuminated components shall be free of light leaks. Weep holes should be baffled.

- All conduits, wiring, ballast boxes, transformers, and other equipment necessary for sign connection shall be concealed within the sign raceway.

- Penetrations into building walls and roofs, where required, shall be made waterproof.

- All illuminated signs and the materials and fitting thereof shall be constructed and maintained in accordance with the Wisconsin State Electrical Code and the Electrical Code of the Town of Brookfield and bear a UL or ETL label and listed as well as approved.

- Electrical power to light the individual Tenant identification sign will be run directly from the raceway to the preinstalled sign electrical outlets without any need for exposed conduit, wiring, or other equipment, and final hook-up shall be by a licensed electrician.

- Switches on sign cabinets or letters are not allowed.
- Tenants are required to provide timer controls on Tenant's signage. Signage illumination shall be required from sunset to sunrise.

- Transformers that ensure uniform lighting in cold weather must be utilized.

- Access panels shall not be located at the underside of the entry-way ceilings.

8. **Maintenance**

- The Tenant is responsible for maintaining the good appearance and proper operating conditions of sign(s). The Tenant shall, upon termination of its lease and at its own expense, remove all associated signs and restore building surfaces to their original condition.
- Non-conforming or Deteriorated Signs – Landlord may, at its sole discretion and at Tenant’s expense, correct, replace, or remove any sign that is installed without written approval and/or that is deemed not to be in conformance with the approved plans and criteria or any sign which has become deteriorated.

9. **Removal and Restoration**

- Tenant shall remove any and all signage prior to the termination of its lease. Any signage remaining past said date shall constitute a “hold over” and be subject to the lease terms governing said condition.

- Any and all penetrations to the canopy or building wall shall be restored by the Landlord at the Tenant’s expense.

Appendix
20400 West Bluemound Road - SW Corner View

Illustration for general architecture. Actual signage may vary.

Appendix

20400 West Bluemound Road - SE Corner View

Illustration for general architecture. Actual signage may vary.

Appendix
20200 West Bluemound Road - SW Corner View

Illustration for general architecture. Actual signage may vary.

Appendix
20200 West Bluemound Road - SE Corner View

Illustration for general architecture. Actual signage may vary.

Existing Poplar Creek Town Center signage

Sign	Elevation	Width	Height	Size (SF)	Letter height
Residence Inn by Marriott	East & West (over drive thru awning)	8’-5 3/16”	1’-8 5/16”	14.27	12” (R) / 3 13/16” (M)
Courtyard by Marriott	East & West (over drive thru awning)	10’- 1 5/16”	1’ – 7 5/16”	16.27	12” (C) / 3 13/16” (M)
Hotel Guest Parking	East entry parking garage	15’ – 8 11/16”	1’- 0 7/16”	16.3	12”
Residence Inn by Marriott	South elevation (top)	16’- 10 5/16”	3’ 4 5/8”	57.08	24” (R) / 7 11/16” (M)
Courtyard by Marriott	South elevation (top)	20’ -2 9/16”	3’ – 3 11/16”	66.85	24” (C) / 8 11/16” (M)
Fidelity	West elevation (3rd floor)	18’ – 9”	4’ – 6”	84.38	36”
Fidelity	West elevation (over door)	10’-5”	26 7/8”	23.33	24”