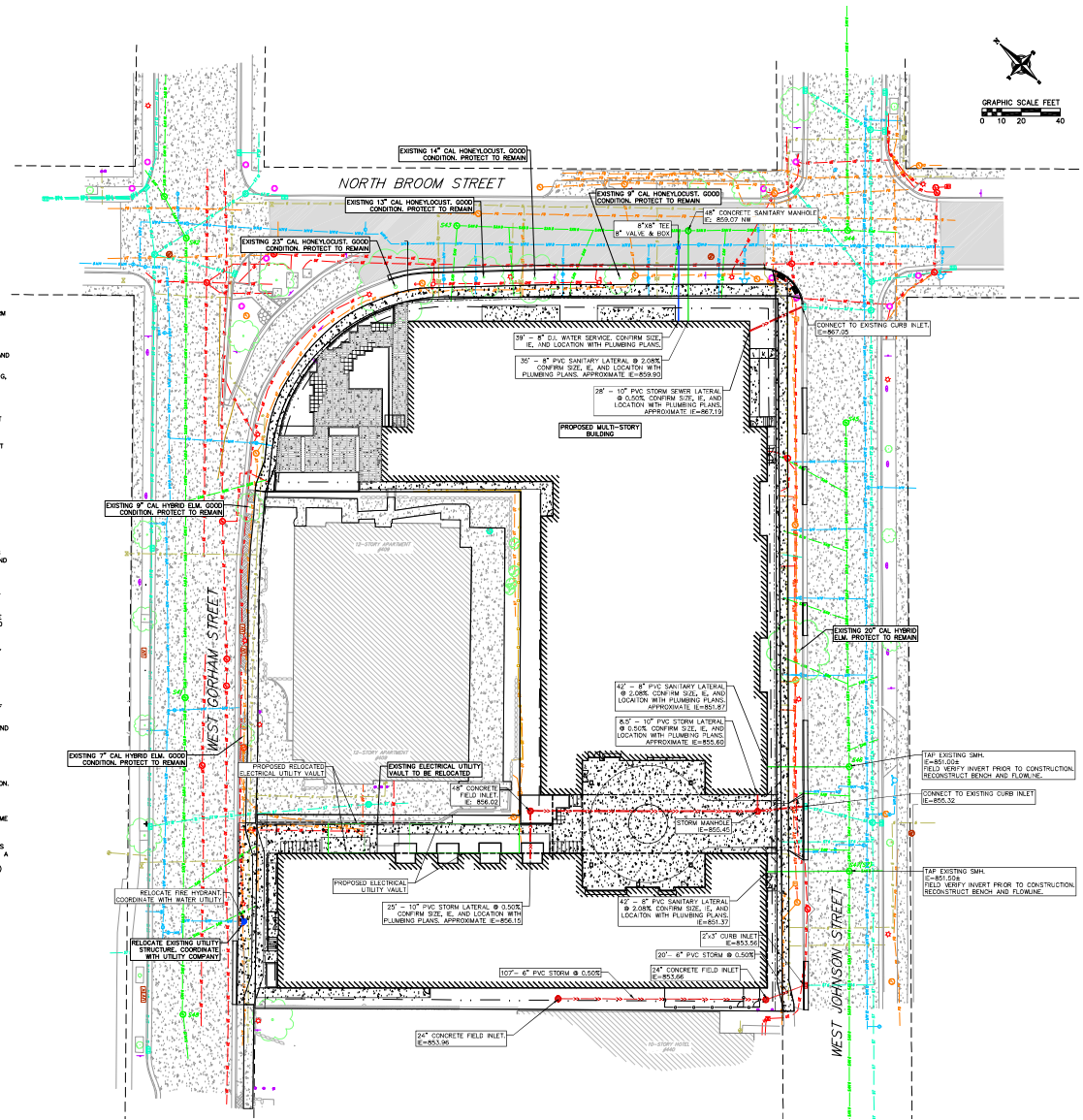
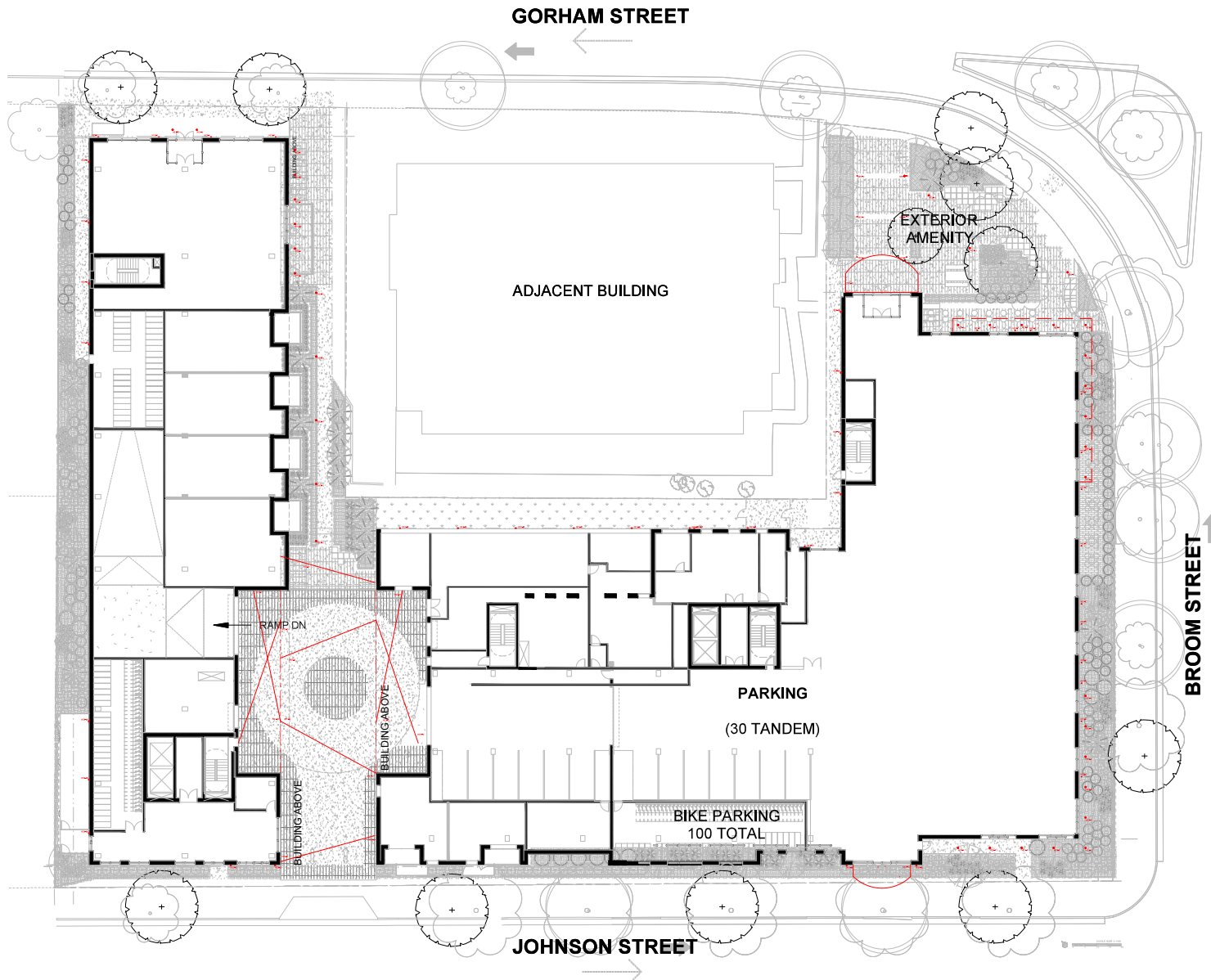


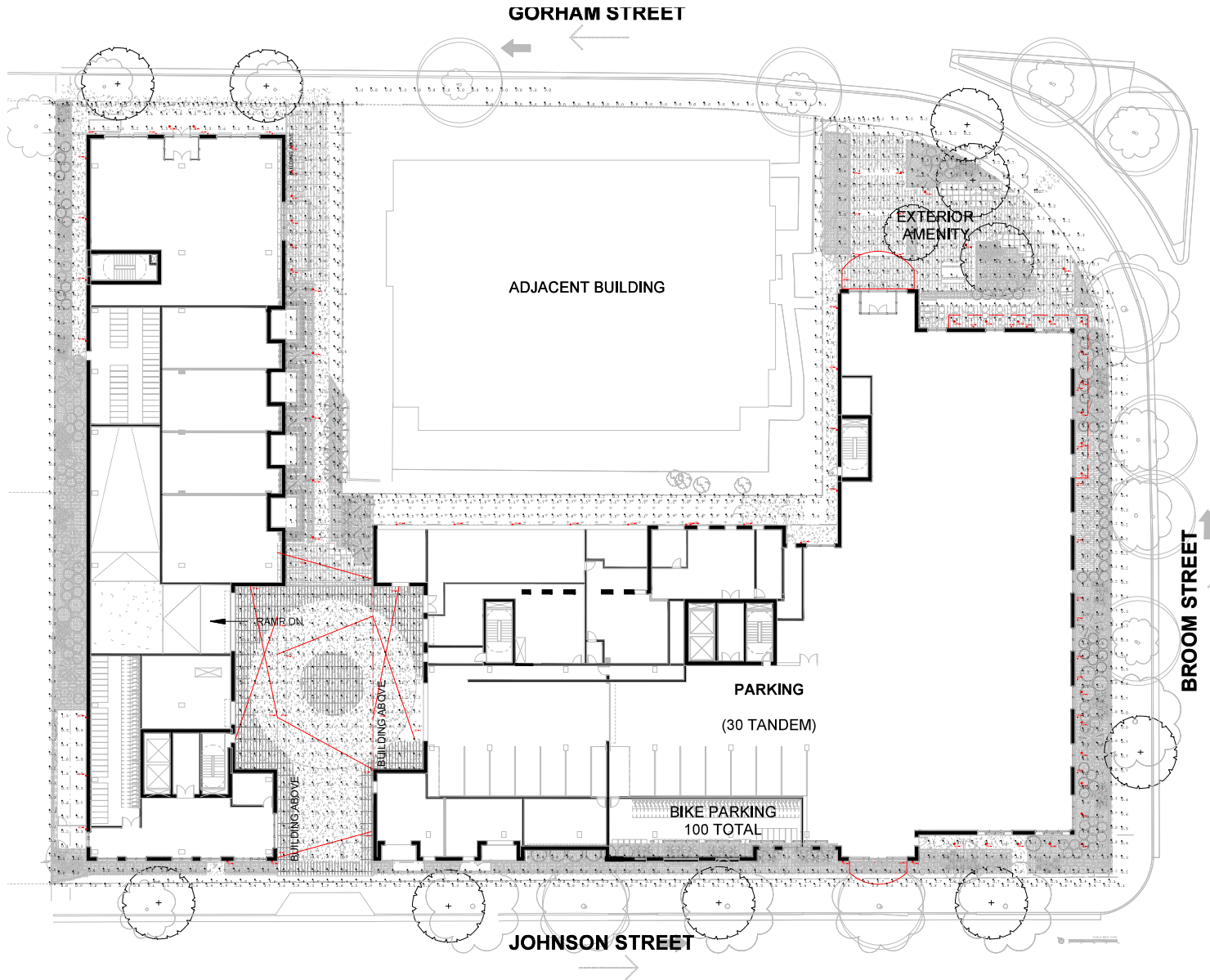
**UTILITY NOTES:**

1. SANITARY & STORM SEWER LINES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. STORM SEWER END SECTIONS ARE INCLUDED IN THE LENGTH AND SLOPE OF THE PIPE.
2. CONTRACTOR SHALL INVESTIGATE ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL UTILITY STRUCTURES (MANHOLE RIMS, WATER VALVES, AND CURB STOPS), IF NECESSARY.
4. CONTRACTOR SHALL OBTAIN ANY NECESSARY WORK IN RIGHT-OF-WAY, EXCAVATION, UTILITY CONNECTION, PLUGGING, MANAGEMENT, AND SHEET CONNECTION PERMITS PRIOR TO CONSTRUCTION.
5. FOR ALL SEWER AND WATER MAIN CROSSINGS, PROVIDE MINIMUM 18" SEPARATION WHEN WATER MAIN CROSSES BELOW SEWER AND MINIMUM 6" SEPARATION WHEN WATER MAIN CROSSES ABOVE SEWER.
6. IF DEWATERING OPERATIONS EXCEED TO GALLONS PER MINUTE OF PUMPING CAPACITY, A Dewatering WELL PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT PRIOR TO INITIATING ANY DEWATERING ACTIVITIES.
7. A COPY OF THE APPROVED UTILITY PLANS, SPECIFICATIONS AND PLUMBING PERMIT APPROVAL LETTER SHALL BE ON-SITE DURING CONSTRUCTION AND OPEN TO INSPECTION BY AUTHORIZED REPRESENTATIVES OF THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES AND OTHER LOCAL INSPECTORS.
8. STORM BUILDING SEWER PIPE SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-4 OF SPS 384.30(5).
9. PRIVATE WATER SERVICES AND PRIVATE WATER MAINS SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-7 OF SPS 384.30(5).
10. PRIVATE WATER HYDRANTS SHALL BE YELLOW IN COLOR.
11. PRIVATE SANITARY SEWER AND LATERALS SHALL BE POLYVINYL CHLORIDE (PVC) ASTM D3034 - SDR 35 OR APPROVED EQUAL MATERIAL THAT CONFORMS TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-3 OF SPS 384.30(5).
12. A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS, MAINS AND WATER SERVICES, MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED PER SPS 382.10(1)(b) AND SPS 382.40(9)(k).
13. EXTERIOR WATER SUPPLY PIPING SETBACKS AND CROSSINGS SHALL BE IN ACCORDANCE WITH SPS 382.40(8)(b).
14. NO PERSON MAY ENGAGE IN PLUMBING WORK IN THE STATE UNLESS LICENSED TO DO SO BY THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PER SLS 16.00.
15. SITE CONTRACTOR SHALL LEAVE SANITARY AND WATER LATERALS FIVE (5) FEET SHORT (HORIZONTALLY) FROM THE BUILDING PLUMBER SHALL VERIFY SIZE, LOCATION, AND INVERT ELEVATION OF PROPOSED SANITARY AND WATER LATERALS.
16. CONTRACTOR SHALL FIELD VERIFY THE SIZE, TYPE, LOCATION, AND ELEVATION OF EXISTING UTILITIES PRIOR TO INSTALLING ANY ON-SITE UTILITIES OR STRUCTURES. CONTACT ENGINEER PRIOR TO INSTALLATION IF DISCREPANCY EXISTS WITH THESE PLANS.
17. PROPOSED UTILITY SERVICE LINES SHOWN ARE APPROXIMATE. COORDINATE THE EXACT LOCATIONS WITH THE PLUMBING DRAWINGS. COORDINATE THE LOCATIONS WITH THE PLUMBING CONTRACTOR AND/OR OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO INSTALLATION OF ANY NEW UTILITIES.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF ANY UTILITIES ENGINEERED AND REPLACEMENT OF ANY UTILITIES DAMAGED WITHIN INFLUENCE ZONE OF NEW CONSTRUCTION. CONTACT ENGINEER IF THE EXISTING UTILITIES VARY APPRECIABLY FROM THE PLANS.
19. ALL WATER MAIN AND SERVICES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4.5' FROM TOP OF FINISHED GROUND ELEVATION TO TOP OF MAIN.
20. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE EXISTING VALVES WILL HOLD THE PRESSURE TEST PRIOR TO CONNECTION. THE CITY IS NOT RESPONSIBLE FOR ANY COSTS INCURRED DUE TO THE CONTRACTOR NOT VERIFYING THAT THE EXISTING VALVE WILL HOLD THE PRESSURE TEST PRIOR TO CONNECTION. IF A NEW VALVE IS REQUIRED, THE APPLICANT WILL BE REQUIRED TO INSTALL ONE AT THEIR EXPENSE, AT THE POINT OF CONNECTION.
21. CLEAN OUT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS AT THE COMPLETION OF CONSTRUCTION.
22. ALL WORK WITHIN THE CITY RIGHT-OF-WAY AND ALL PUBLIC IMPROVEMENTS TO SERVE THE PROJECT SHALL BE COMPLETED PER THE CITY OF MADISON ISSUED PLANS (CONTRACT XXXXX, PROJECT XXXXX).
23. THE RIGHT-OF-WAY IS THE SOLE JURISDICTION OF THE CITY OF MADISON AND CITY ENGINEERING DIVISIONS.
24. CONTRACTOR SHALL TAKE PRECAUTIONS DURING CONSTRUCTION TO NOT DISRUPT, SCALD, OR HARM THE HEALTH OF ANY STREET TREE. CONTRACTOR SHALL OPERATE EQUIPMENT IN A MANNER AS TO NOT DAMAGE THE BRANCHES OF THE STREET TREES. THIS MAY REQUIRE SMALLER EQUIPMENT AND LOADING AND UNLOADING MATERIALS IN A DESIGNATED SPACE AWAY FROM THE TREES ON THE CONSTRUCTION SITE. ANY DAMAGE OR INJURY TO EXISTING STREET TREES (EXCEPT MANSUR OR BELOW GROUND) SHALL BE REPORTED IMMEDIATELY TO CITY FORESTRY AT (608) 266-4816. PENALTIES AND REMEDIATION SHALL BE REQUIRED.
25. AS DIRECTED BY THE SECTION 10713 OF CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, IF EXCAVATION IS PERMITTED WITHIN 8 FEET OF THE TRUNK OF THE STREET TREE, OR WHEN CUTTING BRUSH OVER 3 INCHES IN DIAMETER, IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON CITY FORESTRY AT (608) 266-4816 PRIOR TO EXCAVATION. CITY OF MADISON FORESTRY PERSONNEL SHALL ASSESS THE IMPACT TO THE TREE AND TO WHAT EXTENT PERMITS TO WORK COMMENCING. TREE PROTECTION AND SPECIFICATIONS CAN BE FOUND ON THE FOLLOWING WEBSITE: <https://www.cityofmadison.com/business/pwp/specs.cfm>.













Luminaire Schedule								
Symbol	Qty	Tag	Label	Description	LLF	Luminaire Lumens	Luminaire Waits	
○	22	HEX-A	HEXA_EVO4_30_10 AR MWD LD	EVO4 30_10 AR MWD LD	0,800	852	6,8	
○	4	HEX-B	AT7928-BK - Vesta	AT7928-BK HEX-B Opt1	0,800	1574	31,3	
●	116	HEX-C	KBL-F-V-30K-24V	KBL-F-V-30K-24V	0,225	722	14,3	
○	52	HEX-C1	KBL-F-V-BL-30K-IEFP-IEC-24_IE	KBL-F-V-BL-30K-IEFP-IEC-24_3	0,800	96	7,7	
○	6	HEX-G	ZXL-114-M_JESNA2002		0,800	633	8,111	
○	4	HEX-H	SN825-L1L5	SN825-L1L5	0,250	555	12,2	
○	5	HEX-K	LN801B-L10-R30	LN801B-L10-R30	0,200	1120	11	
○	3	HEX-L	LC0123WCC010LD7T540KJES	LC0123C010LD7T540K	0,800	955	10	
○	15	HEX-M	WDGE1 LED P1 30K 80CRI VF	WDGE1 LED P1 30K 80CRI VF	0,800	1161	10,0002	
○	94	HEX-O	FN-SCS8-5W-3-27K	SL-X-X-5W3FT-27K-XX	0,720	912	16,4	
●	6	HEX-J	1E345590	1E345590	0,900	550	6,1	
●	4	HEX-V	KPLM412ML230_SP	KPLM412ML230_SP	0,800	611	13,5	

Calculation Summary							
Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min
DOG PARK	Illuminance	Fc	1,25	3,7	0,1	12,60	37,00
EXTERIOR AMENITY	Illuminance	Fc	1,76	5,9	0,2	8,90	29,50
INTERIOR ALLEY	Illuminance	Fc	3,51	7,9	0,7	5,01	11,29
PATHWAY_EAST	Illuminance	Fc	2,78	5,4	0,1	27,80	54,00
PATHWAY_NORTH_1	Illuminance	Fc	3,26	9,2	0,1	32,60	92,00
PATHWAY_NORTH_2	Illuminance	Fc	1,33	7,7	0,0	N/A	N/A
PATHWAY_SOUTH_1	Illuminance	Fc	2,02	5,5	0,0	N/A	N/A
PATHWAY_SOUTH_2	Illuminance	Fc	2,19	7,6	0,0	N/A	N/A
PATHWAY_WEST	Illuminance	Fc	2,65	6,3	0,0	N/A	N/A
PROMENADE	Illuminance	Fc	2,64	11,9	0,1	26,40	119,00
PROPERTY_LINE_EAST	Illuminance	Fc	0,85	3,5	0,1	8,50	35,00
PROPERTY_LINE_NORTH	Illuminance	Fc	1,32	12,1	0,0	N/A	N/A
PROPERTY_LINE_SOUTH	Illuminance	Fc	1,44	8,7	0,0	N/A	N/A
PROPERTY_LINE_WEST	Illuminance	Fc	0,08	0,2	0,0	N/A	N/A
SIDEWALK_BROOM	Illuminance	Fc	0,59	2,0	0,2	2,95	10,00
SIDEWALK_GORHAM	Illuminance	Fc	0,16	2,3	0,0	N/A	N/A
SIDEWALK_JOHNSON	Illuminance	Fc	1,26	6,6	0,0	N/A	N/A
TURN AROUND SPOT	Illuminance	Fc	7,31	14,1	2,0	3,66	7,05

**GENERAL NOTES:**  
 EXTERIOR LIGHTS HEX-D, E, F, G, J, K, AND L TO BE CONTROLLED VIA TIMECLOCK TO TURN ON 1 HR BEFORE SUNSET AND TURN OFF 1 HR AFTER SUNRISE.

TYPE HEX-A, B, C, AND H WILL BE CONTROLLED SEPERATELY THAN THE TIMECLOCK.

**GENERAL CALCULATION NOTES:**  
 AVERAGE REFLECTANCES = 50% GROUND AND 50% WALLS

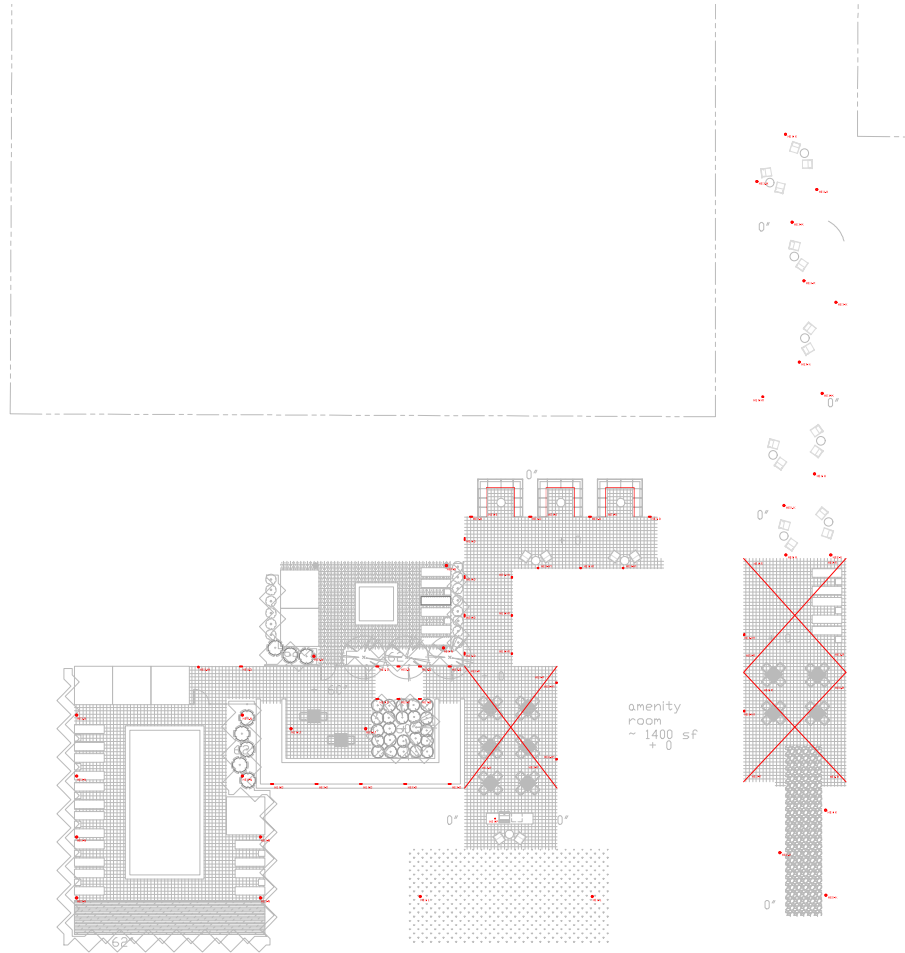
PROPERTY LINE ILLUMINANCE MEASURED AT 4'0 ABOVE GRADE  
 ALL OTHER CALCULATIONS TAKEN AT GROUND

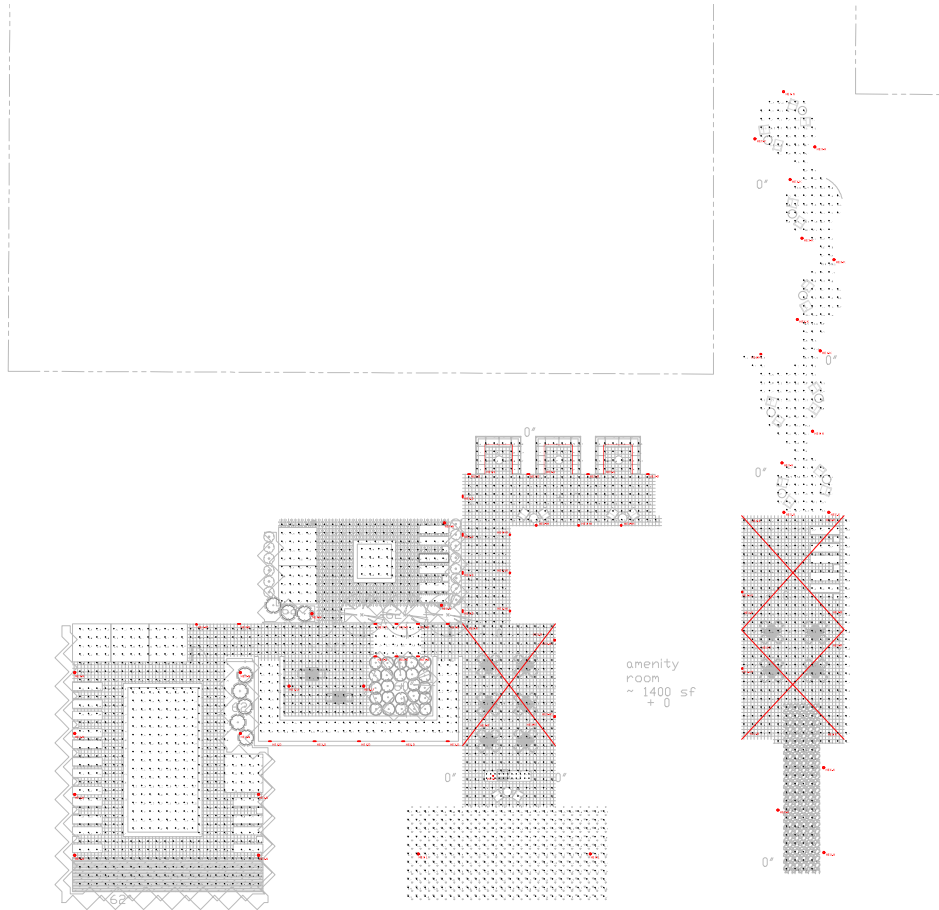
90% LUMEN MAINTENANCE

**CALCULATION DISCLAIMER:**

ILLUMINANCE CALCULATIONS ARE INTENDED TO SERVE AS A VERIFICATION TOOL FOR LIGHTING DESIGN, NOT AS A GUARANTEE OF SPECIFIC ILLUMINANCE LEVELS. ALL CALCULATIONS PERFORMED BY HARTRANFT LIGHTING DESIGN, LLC ARE BASED ON STANDARDS AND METHODS APPROVED BY THE IESNA, AND PHOTOMETRY MADE AVAILABLE BY LIGHTING FIXTURE MANUFACTURERS. WHILE ALL NECESSARY STEPS HAVE BEEN TAKEN TO INSURE THE ACCURACY OF THE CALCULATIONS, ALL RESULTS ARE DIRECTLY DEPENDENT ON THE IES FORMAT PHOTOMETRIC FILE USED AS INPUT AND THE POINT-BY-POINT CALCULATION METHOD USED BY THE SOFTWARE. COMPUTED RESULTS CAN VARY SIGNIFICANTLY (+/-20%) FROM ACTUAL LEVELS AS A RESULT OF FIELD CONDITIONS SUCH AS FINISHES AND ENVIRONMENTAL FACTORS THAT MAY AFFECT THE LIGHTING AS WELL AS HE ACCURACY OF DATA INCLUDED IN THE INPUT FILE. HARTRANFT LIGHTING DESIGN, LLC SHALL NOT BEAR RESPONSIBILITY FOR ANY DISCREPANCY BETWEEN CALCULATED LEVELS AND THOSE ULTIMATELY REALIZED UNDER FIELD CONDITIONS.









Luminaire Schedule								
Symbol	Qty	Tag	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	
⬢	14	HEX-D	S6240W	S6240W_14	0.900	422	13.5	
○	11	HEX-H1	SN624_1L5	SN624_1L5	0.900	565	12.2	
○	15	HEX-K	LN601BL10-R30	LN601BL10R30	0.900	3120	11	
○	2	HEX-L	LC0123WCC010LD7T540K-IES	LC0123C010LD7T540K	0.900	595	10	
○	14	HEX-N	EQ111E039LDT430K	EQ111E039LDT430K	0.900	4261	39	
⬢	143	HEX-R	HEX-R_78284.SL2-B-12-S-30-C	LSL2-B-12-S-30-C	0.900	5	0.2	

Calculation Summary							
Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min
Counter_1_Top_1	Illuminance	Fc	0.54	0.6	0.5	1.08	1.20
Dining and Grills	Illuminance	Fc	2.23	23.8	0.6	3.72	39.67
Dining East	Illuminance	Fc	2.23	218.2	0.0	N/A	N/A
Hot Tub Deck	Illuminance	Fc	5.85	7.0	2.9	2.02	2.41
Hot Tub Surface	Illuminance	Fc	6.44	6.6	6.3	1.02	1.05
Landing_1_Planar	Illuminance	Fc	5.43	13.3	2.1	2.59	6.33
Landing_2_Planar	Illuminance	Fc	3.47	9.1	1.1	3.15	8.27
Landing_3_Planar	Illuminance	Fc	4.85	5.9	3.2	1.52	1.84
Lounge West	Illuminance	Fc	6.49	159.9	0.2	32.45	799.50
Pool Deck	Illuminance	Fc	6.98	65.0	3.0	2.33	21.67
Pool Surface	Illuminance	Fc	6.18	7.7	4.7	1.31	1.64
Raised Eating Area	Illuminance	Fc	4.26	22.6	1.1	3.86	20.55
Ramp_1_Planar	Illuminance	Fc	1.42	2.7	0.5	2.84	5.40
Ramp_2_Planar	Illuminance	Fc	4.13	15.7	0.7	5.90	22.43
Ramp_3_Planar	Illuminance	Fc	3.33	13.9	0.9	3.70	15.44
Ramp_4_Planar	Illuminance	Fc	4.71	5.8	3.4	1.39	1.71
Seating East	Illuminance	Fc	11.92	227.5	0.1	115.20	2225
Stairs	Illuminance	Fc	11.64	91.8	2.1	5.54	43.71
Turf	Illuminance	Fc	3.13	6.0	1.1	2.85	5.45

**GENERAL NOTES:**

EXTERIOR LIGHTS HEX- F, G, M, N, AND R TO BE CONTROLLED VIA TIMECLOCK TO TURN ON 1 HR BEFORE SUNSET AND TURN OFF 1 HR AFTER SUNRISE.

**GENERAL CALCULATION NOTES:**

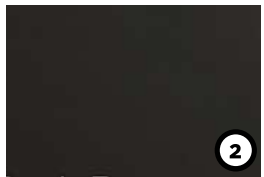
AVERAGE REFLECTANCES = 50% GROUND AND 50% WALLS

PROPERTY LINE ILLUMINANCE MEASURED AT 4'0 ABOVE GRADE  
ALL OTHER CALCULATIONS TAKEN AT GROUND

90% LUMEN MAINTENANCE

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**2**  
POLYMER WINDOW SYSTEM  
COLOR, BLACK



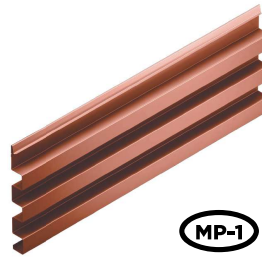
GLAZING UNITS  
LOW IRON CLEAR



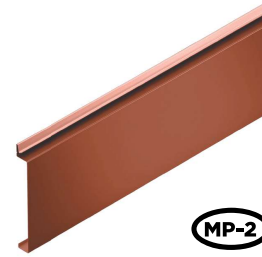
**1**  
STOREFRONT SYSTEM  
COLOR, BLACK



**1**  
GRANITE  
COLOR, BLACK



**MP-1**  
METAL PANEL  
BOXED RIBBED  
COLOR, FIRED BRICK



**MP-2**  
METAL PANEL  
FLAT  
COLOR, FIRED BRICK



**MP-3**  
METAL PANEL  
BOXED RIBBED  
COLOR, FIRED BRICK



**MP-4**  
METAL PANEL  
FLAT  
COLOR, ARCTIC WHITE



**MP-5**  
METAL PANEL  
BOXED RIBBED  
COLOR, MIDNIGHT BRONZE



**MP-6**  
METAL PANEL  
FLAT  
COLOR, MIDNIGHT BRONZE



**BR-1**  
BRICK  
COLOR, ASH, PLATINUM



**BR-2**  
BRICK  
COLOR, CEDAR, COPPERTONE



**BR-3**  
BRICK  
COLOR, MOUNTAIN RED



**BR-4**  
BRICK  
COLOR, BLACK OPAL





PREVIOUS



CURRENT



PREVIOUS



CURRENT

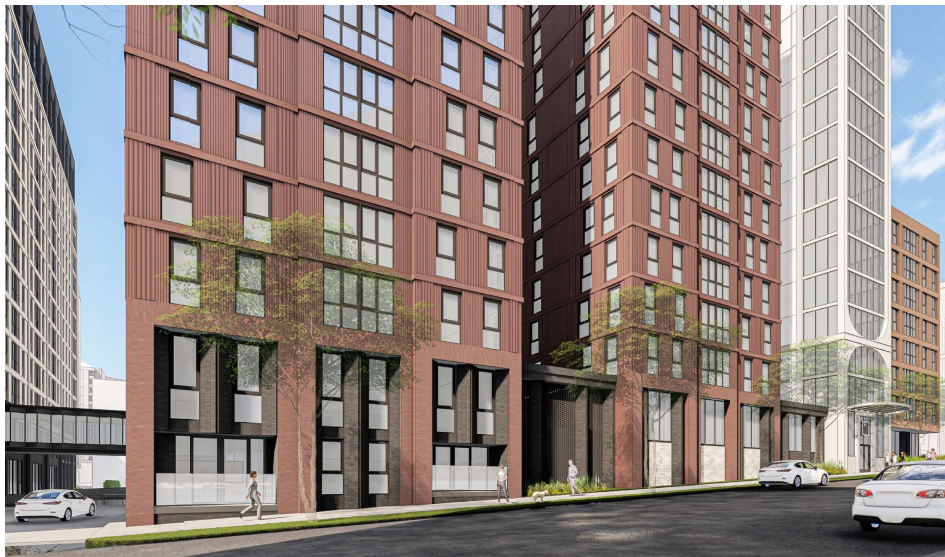




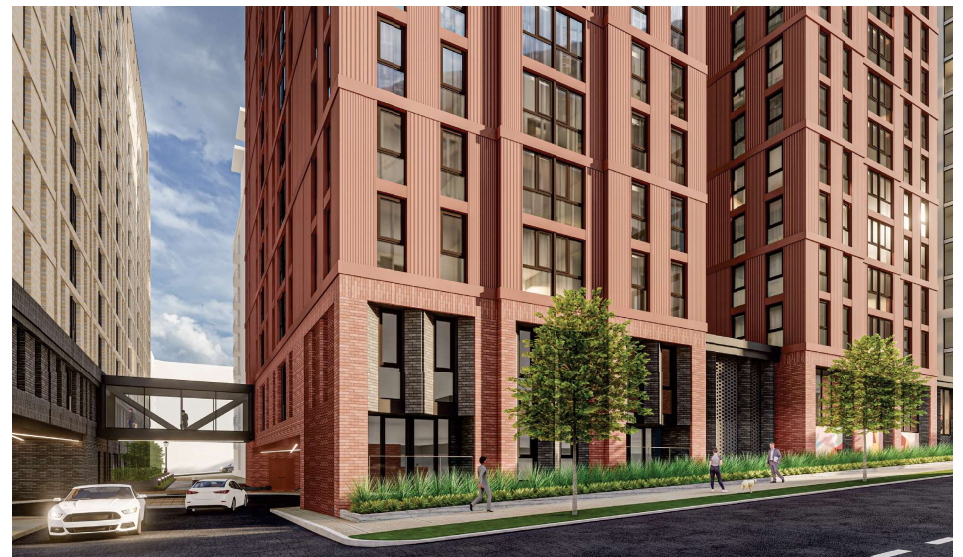
PREVIOUS



CURRENT



PREVIOUS



CURRENT





PREVIOUS



CURRENT



PREVIOUS



CURRENT





PREVIOUS



CURRENT



PREVIOUS



CURRENT