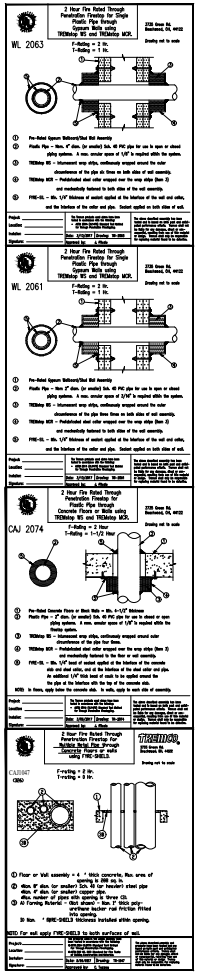
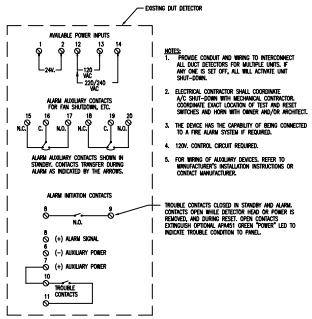
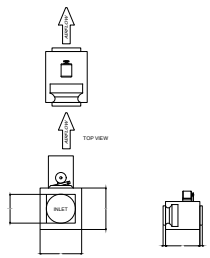




NOTES:
1. PROVIDE CONDUIT AND WIRING TO INTERCONNECT ALL DUCT DETECTORS FOR MULTIPLE UNITS. IF ANY ONE IS SET OFF, ALL WILL ACTIVATE UNIT SHUT-DOWN.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE A/C SHUT-DOWN WITH MECHANICAL CONTRACTOR. COORDINATE EXACT LOCATION OF TEST AND RESET SWITCHES AND HORN WITH OWNER AND/OR ARCHITECT.
3. THE DEVICE HAS THE CAPABILITY OF BEING CONNECTED TO A FIRE ALARM SYSTEM IF REQUIRED.
4. 120V. CONTROL CIRCUIT REQUIRED.
5. FOR WIRING OF AUXILIARY DEVICES, REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS OR CONTACT MANUFACTURER.

TROUBLE CONTACTS CLOSED IN STANDBY AND ALARM. CONTACTS OPEN WHILE DETECTOR HEAD OR POWER IS REMOVED, AND DURING RESET. OPEN CONTACTS EXTINGUISH OPTIONAL APA451 GREEN "POWER" LED TO INDICATE TROUBLE CONDITION TO PANEL.

DUCT SMOKE DETECTOR WIRING DETAIL
(WITH FIRE ALARM CONTROL PANEL)



DUCT DIMENSIONS ARE LARGEST POSSIBLE DUCT TO FIT THROUGH CURB. CONSULT SYSTEM DESIGN ENGINEER FOR RECOMMENDED DUCT SIZE.

OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

GARAGE EXHAUST FAN

FAN SCHEDULE

UNIT NUMBER		EF-26	AF-1
AREA SERVED		GARAGE	GARAGE
LOCATION		UL1 – DECK (SEE PLANS)	GARAGE CL6 (SEE PLANS)
DUTY	SUPPLY/EXH.	EXH.	CO2 AIR MOVEMENT
FAN TYPE		CENTRIFUGAL	CENTRIFUGAL JET FAN
DRIVE	BELT/DIRECT	BELT	DIRECT
FAN SPEED	RPM	735	TBD
AIR QUANITY	CFM	10000	2100
TOTAL STATIC PRESS.	H_2O	0.5	0.125
OPENING REQUIRED	IN.	-	N/A
FAN MOTOR	HP	61.5W	61.5W
ELECTRICAL CHAR.	V/Ø/~	208/3/60	208/1/60
MANUFACTURER		GREENHECK	GREENHECK
MODEL NUMBER		BSQ 300-30	GJL-25-LP
WEIGHT	LBS.	250	50

VENTILATION SCHEDULE

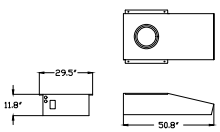
AS PER ASHRAE STANDARD 62.1 AND TABLE 403.3 MIN. VENT. RATES 2017 FBCM – 404.2

SPACE	OCCUPANCY CLASSIFICATION	Rp	Ra	AREA	DENSITY	MIN. REQ. VENT	PROVIDE	PROVIDE
		CFM/PERSON	CFM/SQ.FT.	SQ.FT.	PEOPLE	CFM	CFM	BY
GARAGE	ENCLOSED GARAGE	N/A	0.75	54,700	N/A	41025	48000	EF-26 (4)

HVAC DESIGN REQUIRES

	YES	NO
DUCT SMOKE DETECTOR	✓	
FIRE DAMPER		✓
SMOKE DAMPER		✓
FIRE RATED ENCLOSURE		✓
FIRE RETATED ROOF CEILING ASSEMBLY		✓
FIRE STOPPING	✓	
SMOKE CONTROL		✓

GARAGE VENTILATOR CAP



GARAGE VENTILATOR JET FAN

RECREATION ROOM A/C

SINGLE CIRCUIT SPLIT SYSTEM (208/230-3-60)		
UNIT NUMBER	CU/AHU-8	
AREA SERVED	RECREATION ROOM	
MODEL NAME	38AUQD12-5/40RUM12-5	
NOM TONS	10	
SYSTEM EER	11.2	
CFM	4000 @ 1"	
REFRIGERANT	R410A	
CONDENSING UNIT DATA		
COMPRESSOR QTY/STAGES	3/3	
COMPRESSOR 1-2 RLA-LRA	15.9/110 – 15.9/110	
COND. FAN FLA (QY)	2 / 1.5 – 1/4	
MCA	38.8	
MOCP	50	
DIMENSIONS (LxWxH) (IN)	60 X 46 X 51	
S/D WEIGHT (LBS)	516	
MANUFACTURER	CARRIER	
AIR HANDLER DATA		
EWT, FAN FLAB-HP	15.8 – 3.7	
HEATER KW	15	
MCA	52.6	
MOCP	60	
DIMENSIONS (LxWxH) (IN)	49 X 29 X 57	
S/D WEIGHT (LBS)	425	
SUCTION LINE	7/8 (2)	
LIQUID LINE	3/8 (2)	
MANUFACTURER	CARRIER	

A.C. GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2017 FBC, RECOMMENDED STANDARDS, FEDERAL REGULATIONS, LOCAL CODES AND ANY REQUIREMENT THAT APPLY FROM AHJ.
2. VENTILATION DUCTWORK SHALL BE GALVANIZED STEEL WITH GAUGES, DUCT CONSTRUCTION, BRACING AND SUSPENSION IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE LATEST EDITION OF THE A.S.H.R.A.E. GUIDE AND S.M.A.C.N.A. STANDARDS. DUCT SIZES SHOWN ARE "INSIDE" DIMENSIONS. CONTRACTOR SHALL VERIFY EXACT LOCATION OF DUCT WITH RESPECT TO STRUCTURE BEFORE FABRICATION. ALL VENTILATION DUCTWORK SHALL BE FIELD R-4 INSULATED, PREVENTING CONDENSATION ISSUES.
3. TEMPERATURE CONTROL SHALL BE AS SHOWN IN EQUIPMENT NOTES
4. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.
5. CONTRACTOR TO SUBMIT DUCTWORK SHOP DRAWINGS ACCORDINGLY TO EXISTING FIELD CONDITIONS FOR ENGINEERING REVISION AND APPROVAL PREVIOUS PURCHASING, FABRICATION OR INSTALLATION PROCESSES ON REQUIRED DUCTWORK. SHOP DRAWINGS SHALL MEET SMACNA'S FIBROUS GLASS DUCT CONSTRUCTION, SMACNA'S HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE AND ANY RELATED LOCAL AND STATE CODE AND NATIONAL REGULATION
6. PRIOR OF CLOSING OF WALL AND CEILINGS, CONTRACTOR TO SCHEDULE A FIELD VISIT BY E.O.R. TO CONDUCT A SITE INVESTIGATION OF DUCTWORK AND ALL RELATED HVAC SYSTEMS AND EQUIPMENTS TO VERIFY THAT THE COMPLETED INSTALLATION MEETS THE DESIGN INTENT. FAILURE TO DO SO WILL NOT BE ACCEPTED AS A REASON FOR EXTRA PAY REQUESTING. WHERE THE CONDITIONS ADVERSELY AFFECT THE DESIGN INTENT ANY DEFFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGES AND SHALL INCLUDE REPLACEMENTS OR REPAIRS OF ANY OTHER PHASE OF THE INSTALLATION.
7. MECHANICAL CONTRACTOR SHALL VERIFY DIRECTION OF EXISTING STRUCTURE BEFORE INSTALLATION OF EQUIPMENT AND DUCTWORK. SHOULD ANY DISCREPANCIES BE FOUND CONTACT ARCHITECT/ENGINEER.
8. EXISTING PIPES AND OR APPURTENANCES IN GENERATOR/PUMP ROOM SHALL BE CLEANED AND RE-PAINTED FOLLOWING THE EXISTING/ORIGINAL COLOR SCHEME. ANY COMPONENT SHOWING VISIBLE SIGNS OF EXCESSIVE OR DETRIMENTAL CORROSION SHALL BE REPLACED. CONTRACTOR SHALL PROVIDE AN ALLOWANCE ACCOUNT FOR THESE ITEMS IN BID.
9. VIBRATION ISOLATION: ALL EQUIPMENT AS PER MANUFACTURER RECOMMENDATIONS TO ELIMINATE ANY EQUIPMENT NOISE FROM BEING HEARD.
10. PRESSURE DIFFERENTIALS ACROSS CLOSED DOORS SHALL BE LIMITED TO 0.01 in.wg. DESIGNED AIR RETURN PATHS ARE BASED ON THIS REQUIREMENT. MECHANICAL CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL PREVIOUS FABRICATION AND INSTALLATION OF DUCTWORK SYSTEMS.
11. GUARANTEES:
    A. ALL FAN MOTORS ON NEW EQUIPMENT FURNISHED UNDER THIS CONTRACT SHALL HAVE A 5 YEARS PRODUCT GUARANTEE FROM DATE OF START-UP.
    B. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN A 1 YEAR FROM DATE OF ACCEPTANCE.
12. TESTING:
    A. BALANCE AIR SYSTEM TO DELIVER QUANTITIES AT EACH OUTLET WITHIN 5% USING A.A.B.C. PROCEDURES AND TESTS. SUBMIT AIR BALANCE TEST RESULTS FOR APPROVAL PRIOR TO FINAL INSPECTION.

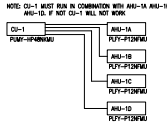
VRF HP UNITS

UNIT DESIGNATION		CU-1	CU-2	CU-3
AREA SERVED		SEE DWGS	SEE DWGS	SEE DWGS
UNIT TYPE		MULTI VRV	PLA HEAT PUMP	PLA HEAT PUMP
REFRIGERANT TYPE		R-410A	R-410A	R-410A
COOLING CAPACITY	BTUH	8,400 TO 48,000	8,000 TO 12,000	10,000 TO 24,000
HEATING CAPACITY	BTUH	9,240 TO 54,000	7,000 TO 19,000	9,000 TO 26,000
INVERTER QTY		1	1	1
MIN INDOOR UNITS		2	1	1
MAX INDOOR UNITS		4	1	2
MAX ALLOWABLE INDOOR CONNECTED CAPACITY	BTUH	48,000	12,000	20,000
LIQUID LINE CONNECTION (in. OD) x QTY		3/8 X4	1/4	3/8
VAPOR LINE CONNECTION (in. OD) x QTY		5/8 X4	1/2	5/8
MAX PIPING	FT	246	246	246
MAX PIPING B/W INDOOR AND OUTDOOR UNITS	FT	492	82	82
MAX ELEVATION TO INDOOR UNIT BELOW	FT	164	49.2	49.2
MAX ELEVATION TO INDOOR UNIT ABOVE	FT	131	24.6	24.6
EFFICIENCY				
SEER		22.6	22	22
HSPF		12	10	10
MODEL		PUMY-HP48NKMU	PUZ-A12NKA7	PUZ-A24NKA7
MANUFACTURER		MITSUBISHI	MITSUBISHI	MITSUBISHI

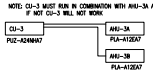
CASSETTE UNITS

UNIT DESIGNATION	AHU-1A,1B,1C,1D	AHU-2	AHU-3A	AHU-3B
AREA SERVED	SEE DWGS	SEE DWGS	SEE DWGS	SEE DWGS
UNIT TYPE	CLG CASSETTE	CLG CASSETTE	CLG CASSETTE	CLG CASSETTE
REFRIGERANT TYPE	R-410A	R-410A	R-410A	R-410A
COOLING CAPACITY BTUH	12,000	12,000	12,000	12,000
HEATING CAPACITY BTUH	13,500	13,500	14,000	14,000
AIRFLOW RATE (H-M-L)	245-280-335	380-420-450	380-420-450	380-420-450
MODEL	PLFY-P12NFMU	PLA-A12EA7	PLA-A12EA7	PLA-A12EA7
MANUFACTURER	MITSUBISHI	MITSUBISHI	MITSUBISHI	MITSUBISHI

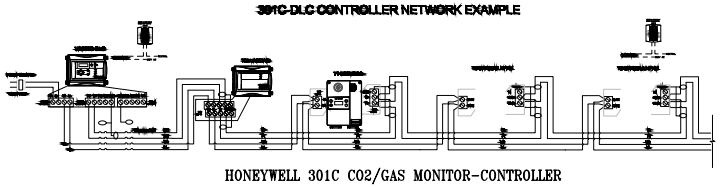
NOTE: CU-1 MUST RUN IN COMBINATION WITH AHU-1A AHU-1B AHU-1C AND AHU-1D. IF NOT CU-1 WILL NOT WORK



NOTE: CU-3 MUST RUN IN COMBINATION WITH AHU-3A AND AHU-3B IF NOT CU-3 WILL NOT WORK



301C-DLC CONTROLLER NETWORK EXAMPLE



HONEYWELL 301C CO2/GAS MONITOR-CONTROLLER

CHAMPLAIN TOWERS
SOUTH CONDOMINIUM
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SURFSIDE, FLORIDA 33154

CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

SEAL

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DESIGNED G.V. / H.O.	DRAWN G.V. / H.O.
CHECKED H.V.	APPROVED H.V.

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: MECHANICAL NOTES AND SCHEDULES

Sheet No.: M-0

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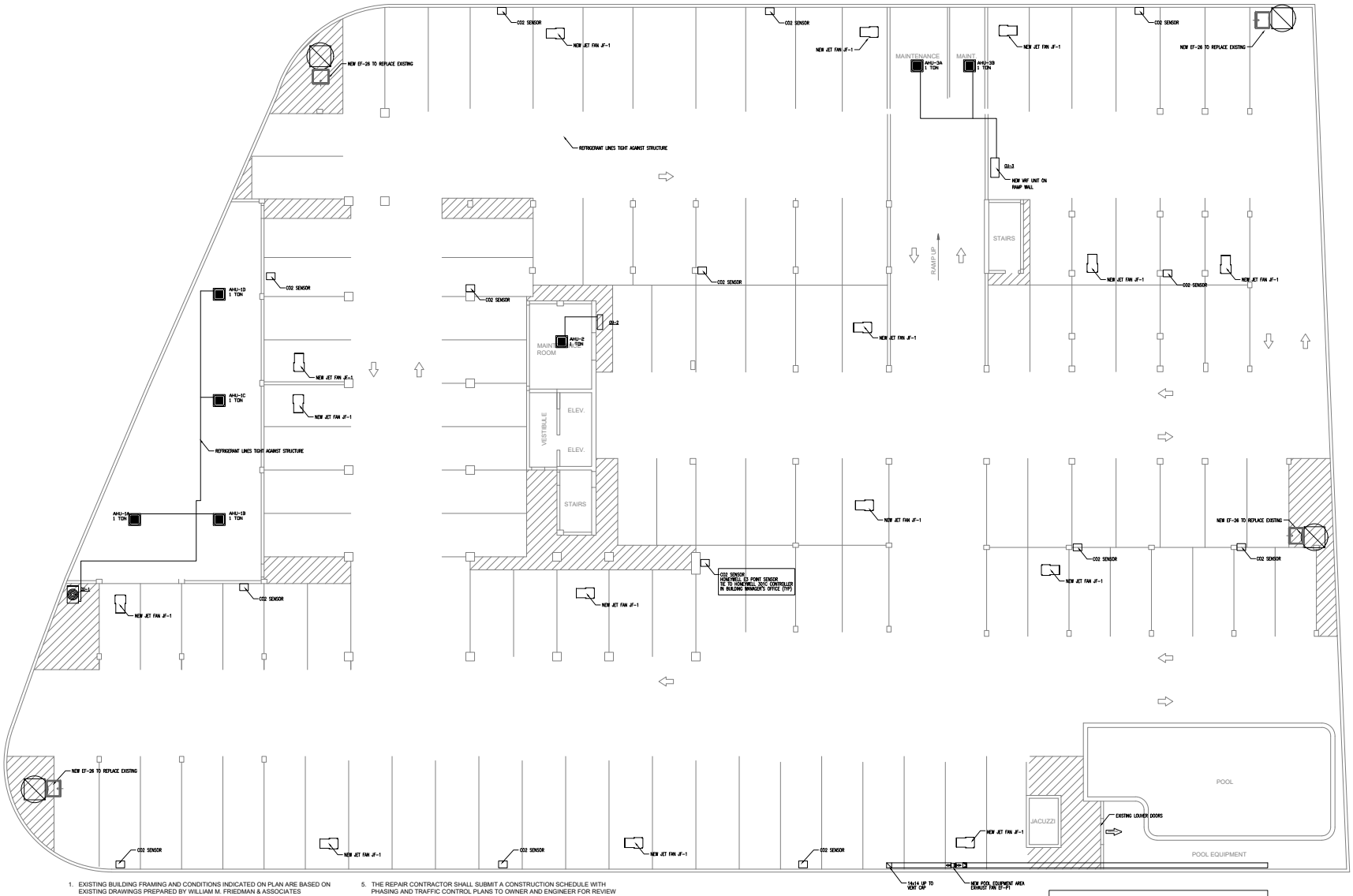

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3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. THE REPAIR CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE WITH PHASING AND TRAFFIC CONTROL PLANS TO OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.

EXISTING STANDARD PARKING THIS LEVEL = 120 SPACES

EXISTING PARKING THIS LEVEL = 120 SPACES

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CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

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Project No.: 18217

Date: 04-01-2021

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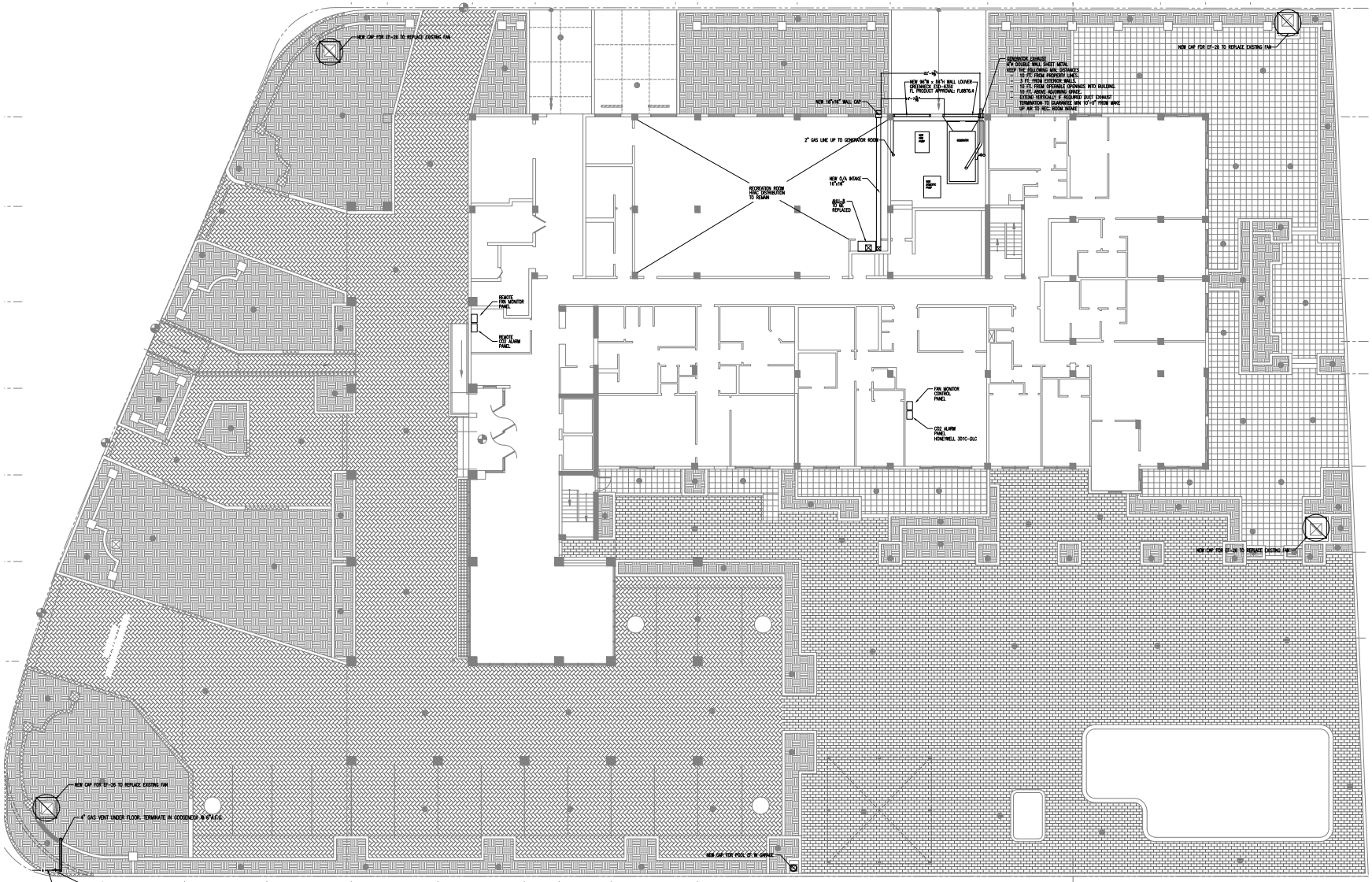
Sheet Title: MECHANICAL - HVAC GARAGE PLAN

Sheet No.: M-1



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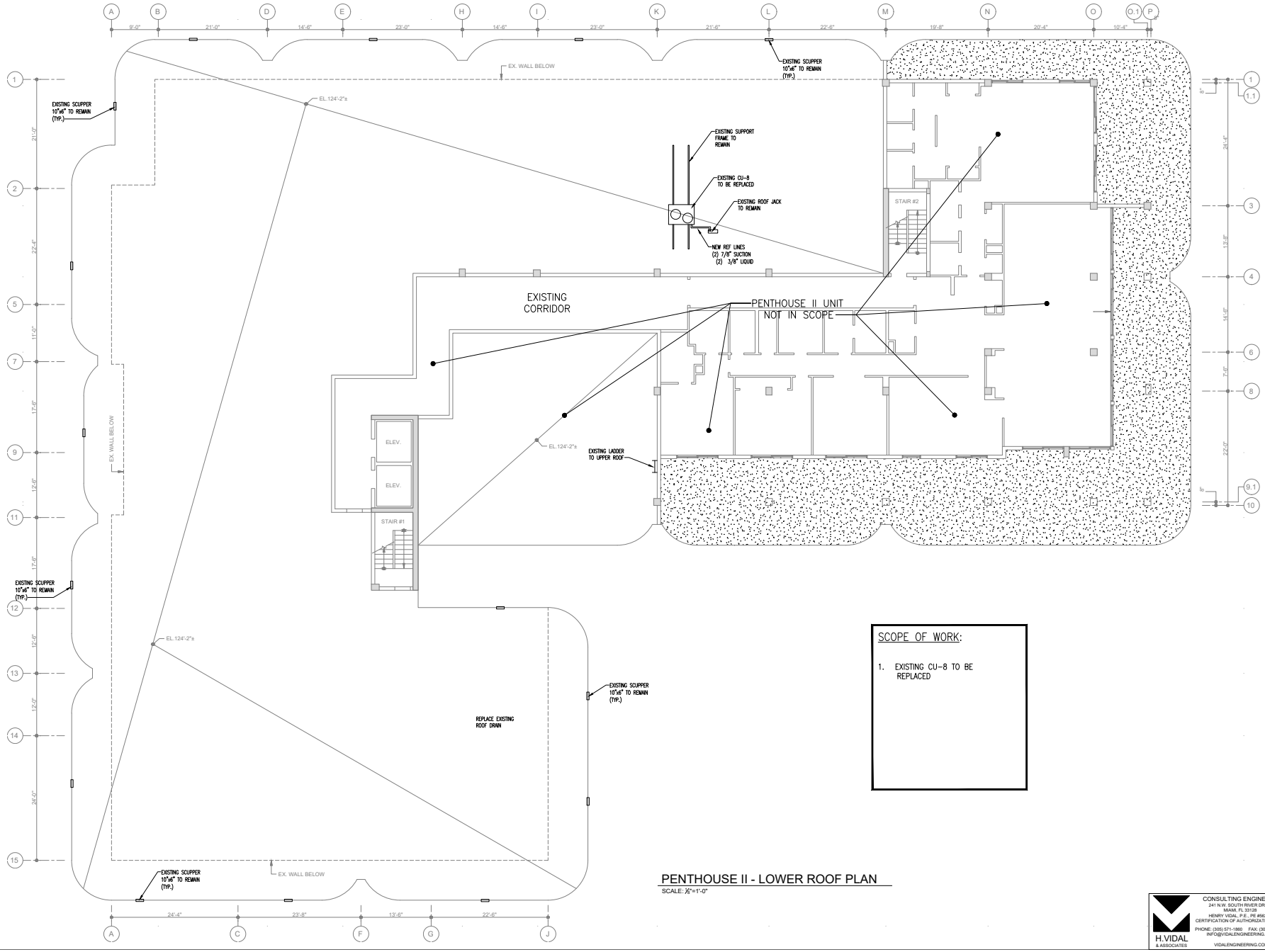
Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title:
MECHANICAL GROUND FLOOR PLAN

Sheet No.:
M-2



SCOPE OF WORK:

1. EXISTING CU-8 TO BE REPLACED

PENTHOUSE II - LOWER ROOF PLAN

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

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CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

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Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: LOW ROOF HVAC REPLACEMENT PLAN

Sheet No.: M-3

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GENERAL PLUMBING NOTES:

1. ALL WORK SHALL CONFORM WITH THE 2020 FBC, RESIDENTIAL, NFPA, NEC, AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND ORDINANCES. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR THE COMPLETION OF THE PLUMBING SYSTEMS DESCRIBED HEREIN AND SHOWN ON THE DRAWINGS.
2. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECTIONS, TESTS, PERFORMANCE BONDS, FEES AND OTHER ITEMS AS REQUIRED FOR THE INSTALLATION OF THE COMPLETE PLUMBING SYSTEMS, AND SHALL BE RESPONSIBLE FOR OBTAINING ANY DWG PERMIT.
3. CONTRACTOR SHALL PROVIDE ALL REQUIRED INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
4. EXCEPT WHERE LONGER WARRANTIES ARE SPECIFIED FOR SPECIFIC EQUIPMENT, CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL WRITTEN ACCEPTANCE OF THE PROJECT BY THE OWNER.
5. PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE PLUMBING SYSTEMS BEFORE FINAL ACCEPTANCE.
6. PROVIDE THREE SETS OF BRAND AND LABELED EQUIPMENT MAINTENANCE AND OPERATION MANUALS. MANUALS TO BE SUBMITTED TO ARCHITECT/ENGINEER FOR ACCEPTANCE.
7. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS AND EQUIPMENT FOR ACCEPTANCE OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE PURCHASE OR INSTALLATION OF ANY EQUIPMENT AND MATERIALS.
8. LABEL AND IDENTIFY ALL EQUIPMENT, MOTOR STARTERS, CONTROLS, PIPING AND VALVES. SUBMIT IDENTIFICATION SCHEME TO THE ARCHITECT/ENGINEER FOR APPROVAL.
9. ALL CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE MECHANICAL SUB-CONTRACTOR. WIRING SHALL BE AS PER THE ELECTRICAL SPECIFICATIONS. MECHANICAL SUB-CONTRACTOR TO FURNISH ALL MOTORS AND STARTERS, RELAYS, ETC.
10. PRODUCTS AND MATERIALS SPECIFIED BY TRADE NAME AND/OR MODEL OR THE EQUIVALENT, SHALL BE PROVIDED AS SPECIFIED. WHERE MATERIALS ARE NOT SPECIFIED, COMPUTER SHALL BE USED AS THE BASIS FOR BIDDING. BIDDER SHALL BE CONSIDERED TO ESTABLISH A STANDARD BASIS OF BIDDING. REQUESTS FOR SUBSTITUTION SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER DEMONSTRATING THAT THE PROPOSED PRODUCT IS COMPARABLE, AND THAT BASIC DESIGN CONCEPTS ARE MAINTAINED. ANY PRODUCT SUBSTITUTED MUST BE ACCEPTED FROM THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGE IN THE WORK REQUIRED BY OTHER TRADES AND SHALL PAY FOR ANY EXPENSES INCURRED DUE TO THE CONTRACTOR'S REQUEST FOR REVISIONS OR SUBSTITUTIONS.
11. CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE PROJECT SITE WITH UP TO-DATE INFORMATION ON AS-BUILT CONDITIONS INDICATING WITH COLORED PENCIL ALL CHANGES AND DEVIATIONS FROM THE CONTRACT DRAWINGS. THIS SET OF PRINTS SHALL BE TURNED OVER TO THE ARCHITECT/ENGINEER AT THE COMPLETION OF THE PROJECT AS A PRE-REQUISITE FOR FINAL PAYMENT.
12. PROVIDE ALL NEW MATERIALS OF AMERICAN MANUFACTURE, BEARING THE UL LABEL AS APPLICABLE. PROVIDE SUPPLEMENTAL MATERIALS NOT SPECIFICALLY NOTED HEREIN, BUT REQUIRED TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DRAWINGS, AT NO ADDITIONAL COST TO THE OWNER.
13. FURNISH ALL NECESSARY ACCESS PANELS TO CONTROL VALVES, DAMPERS, ETC., TO THE GENERAL CONTRACTOR, FOR INSTALLATION UNDER THE GENERAL TRADES.
14. ALL WORK SHALL BE FIELD CHECKED BEFORE INSTALLATION AND COORDINATED WITH ALL OTHER TRADES. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO DEPICT APPROXIMATE EQUIPMENT LOCATIONS AND ARRANGEMENTS, NOT EXACT ANY SHORT LENGTH, ELBOWS, FITTINGS SHALL BE ATTACHED. REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS.
15. OFFSET PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, DUCTWORK, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY FIELD CONDITIONS.
16. PLUMBING CONTRACTOR SHALL VERIFY ALL SPACE CONDITIONS AND DIMENSIONS AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT. VERIFY ALL VOLTAGES WITH THE ELECTRICAL TRADE BEFORE ORDERING ANY EQUIPMENT.
17. FURNISH AND INSTALL FIXTURE ACCESSORIES AS REQUIRED. UNLESS OTHERWISE SPECIFIED, ALL ACCESSORIES AND TRIM SHALL BE FIRST QUALITY WITH FINISH AS SELECTED BY ARCHITECT.
18. EACH PLUMBING FIXTURE SHALL BE PROVIDED WITH MECHANICAL SHOCK ARRESTORS.
19. PROVIDE SHUT-OFF VALVE(S) FOR EACH FIXTURE.
20. WHERE DISSIMILAR METALS ARE TO BE JOINED, A DIELECTRIC FITTING SHALL BE PROVIDED TO CONNECT BOTH TYPES OF PIPES.
21. PROVIDE PIPING AS FOLLOWS:
    A. DOMESTIC COLD WATER, HOT WATER, AND ELECTRIC WATER HEATER PAN RELIEF VALVE/DRAIN PIPE PIPING
       1. UNDERGROUND AND ABOVE GROUND:
       TYPE "L" HARD DRAWN COPPER TUBING WITH 95/5 TIN/ANTIMONY SOLDER JOINTS. PROVIDE FLANGED AND MECHANICAL CONNECTION TO BOILER PIPING.
       2. BURIED GROUND:
       3" DIAMETER AND SMALLER COPPER TUBING, ASTM B88, TYPE "K", SEAMLESS, ANNEALED TEMPER WITH 95/5 TIN/ANTIMONY SOLDER JOINT FITTINGS TO MATERIALS: 300 PSI, AND SHALL BE FOUR LOOP FIELD.
       3. ABOVE GROUND (PRESSURE UNDER 60 PSI):
       TYPE "L" SEAMLESS HARD DRAWN COPPER TUBE WITH CAST COPPER ALLOY OR WROUGHT SOLDER JOINT FITTINGS AND SHALL SHALL BE FOUR LOOP FIELD.
    B. STORM WATER, SANITARY WASTE AND VENT PIPING, AIR CONDITIONING CONDENSATE:
       UNDERGROUND: DWV SCH-40 PVC PIPE WITH SOCKET TYPE FITTINGS.
       ABOVE GROUND: SERVICE WEIGHT CAST IRON SOIL PIPE, AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF CISPI STANDARD 301, ASTM A-888.
       UNLESS NOTED OTHERWISE, HORIZONTAL WASTE PIPING 3-IN. AND LARGER SHALL BE SLOPED AT A MINIMUM OF 1/4-IN PER FOOT; 2-1/2-IN AND SMALLER SHALL BE SLOPED AT NO LESS THAN 1/8-IN PER FOOT.
    C. PAN DRAIN: DWV COPPER PIPE & FITTINGS WITH SOCKET TYPE FITTINGS.
22. CONNECT ALL DOMESTIC WATER PIPING IN ACCORDANCE WITH FBC SECT 610 (PLUMBING).
23. THERMAL INSULATION
    A. DOMESTIC HOT WATER AND HOT WATER CIRCULATING PIPING: MINIMUM 1/2" THICK OR AS REQUIRED BY THE STATE OF FLORIDA ENERGY CODE, PRE-MOLDED GLASS FIBER PIPE INSULATION WITH SELF-ADHESIVE JACKET.
    B. AIR CONDITIONING CONDENSATE COPPER PIPING:
       PIPE RATED 1/2" THICK ELASTOMERIC CLOSED CELL POLYETHYLENE THERMAL INSULATION WITH ASTM E96 WATER VAPOR BARRIER. SEAL ALL JOINTS AS RECOMMENDED BY THE MANUFACTURER.
    C. HORIZONTAL STORM DRAINAGE PIPING RUNNING PARALLEL TO THE ROOF: 1/2" THICK PRE-MOLDED GLASS FIBER PIPE INSULATION WITH SELF-ADHESIVE JACKET.
24. CLEANOUTS
    A. WALL CLEANOUT: JOSAM SERIES 58700 WITH THREADED PLUG AND VANDAL PROOF STAINLESS STEEL ACCESS COVER PLATE.
    B. FLOOR CLEANOUT:
       INTERIOR: JOSAM SERIES 58625 WITH VANDAL PROOF COVER.
       EXTERIOR: JOSAM SERIES 58640 WITH VANDAL PROOF COVER.

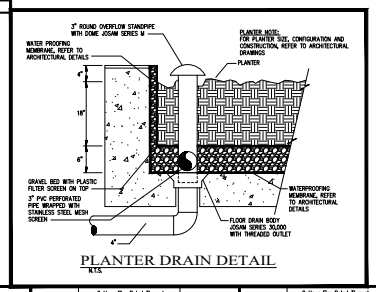
    PROVIDE CLEAN-OUTS IN HORIZONTAL PIPING AT MATERIALS REQUIRED BY CODE, AT THE BOTTOM OF ALL WASTE STACKS AND RISERS, AND AT EVERY CHANGE IN DIRECTION, AND ENDING REDUCED ON DRAWINGS.
25. DRAINS: SHALL BE AS SELECTED BY ARCHITECT.
26. PLUMBING FIXTURES AND TRIM: PROVIDE FIXTURES COMPLETE WITH DRAINS, TRAPS, SUPPLIES, WALL ESCUTCHEONS AND ANY OTHER ACCESSORY REQUIRED. FIXTURES AND FAUCETS SHALL COMPLY WITH THE WATER SAVING STANDARDS.
    A. ELECTRIC WATER HEATER: SHALL COMPLY WITH FPC ENERGY SAVING STANDARDS.
27. CARRIERS
    A. ALL CARRIERS SHALL BE FULLY BOLTED TO THE FLOOR AND INSTALLED AS RECOMMENDED BY MANUFACTURER.
    B. LAVATORIES INSTALLED ON METAL STUD PARTITIONS: JOSAM SERIES 17700 RECTANGULAR STRUCTURAL STEEL CARRIER WITH ADJUSTABLE, WELDED HEAVY STEEL FOOT AND DUCTILE IRON CONCEALED.
28. VALVES
    A. GATE VALVES: 2 1/2" AND SMALLER: ALL BRONZE CONSTRUCTION, SOLID WEDGE, CLASS 125, 300 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 1151. 3" AND LARGER: FLANGED ENDS, IRON BODY, BRONZE TRIM, MILWAUKEE F-2885.
    B. GLOBE VALVES: 10 2"; BRONZE CONSTRUCTION, CLASS 150, 300 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 593. TO 2"; BALANCED DISCS, MILWAUKEE 1502.
    C. CHECK VALVES: 2 1/2" AND SMALLER: BRONZE BODY, CLASS 150, 300 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 509; BALANCED DISCS, MILWAUKEE 1509. 3" AND LARGER: FLANGED ENDS, IRON BODY, BRONZE TRIM, CLASS 125, MILWAUKEE F-2974.
    D. HOSE BIBBS: 3/4" KOHLER BRASS CONSTRUCTION WITH SHUT-OFF VALVE AND VACUUM BREAKER.
29. HANG ALL PIPING FROM STRUCTURE UTILIZING GALVANIZED HANGER RODS AND TRAPEZE OR CLEVIS HANGERS. FOR COPPER PIPING, RODS AND HANGERS SHALL BE COPPER CLAD. SUPPORT PIPING INDEPENDENTLY FROM EQUIPMENT. PLACE HANGERS AT INTERVALS AS REQUIRED BY CODE, BUT NOT LESS THAN ONE PER 10 FEET OF VALVE. PROVIDE PROTECTIVE SHIELD WITH SHIELDS FOR ALL INSULATED PIPING.
30. PIPING TESTS

    SANITARY AND STORM PIPING: SUBJECT ENTIRE SYSTEM TO A HYDROSTATIC HEAD OF NO LESS THAN 10 FEET OF WATER EXCEPT FOR THE CAPACITY 10 FEET OF PIPE AT FILLING SYSTEM WITH WATER UP TO THE OVERFLOW POINT OF THE HIGHEST OPENING, FOR A PERIOD OF TWO HOURS WITHOUT DROP IN WATER LEVEL.

    DOMESTIC WATER PIPING: SUBJECT THE ENTIRE SYSTEM TO A HYDROSTATIC PRESSURE OF NO LESS THAN 100 PSIG FOR A PERIOD OF TWO HOURS WITHOUT LOSS IN PRESSURE.
31. TEST ALL EQUIPMENT TO DEMONSTRATE PROPER FUNCTIONING AND CAPACITY.
32. PROVIDE SHOCK ABSORBERS, DIELECTRIC FITTINGS, HANGERS AND RODSTOS, TRAP RE-SEALERS, PRESSURE BREAKER, GAUGES AND THERMOMETERS, STRAINERS, VALVES, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY CODE. PROVIDE UNIONS AND VALVES AS INDICATED ON PLANS. PROVIDE UNIONS AND FLANGES AT ALL CONNECTIONS TO EQUIPMENT FOR EASY MAINTENANCE AND DISMANTLING. PROVIDE ESCUTCHEONS AT ALL PIPE PENETRATIONS OF WALLS, PARTITIONS, FLOORS AND CEILINGS.
33. PROVIDE SIGNING AND BRACING IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS FOR THE PROTECTION OF PERSONNEL AND UTILITIES BEFORE EXCAVATING AND MISC. PROVIDE ALL LABOR AND MATERIALS IN CONNECTION WITH EXCAVATION, TRENCHING, RE-WATERING, FILLING, BACKFILLING, COMPACTING, ETC., UNDER THIS DIVISION (MECHANICAL).
34. EXISTING PIPES AND OR APPURTENANCES IN CONCRETE/PUMP ROOM SHALL BE CLEANED AND RE-PAINTED FOLLOWING THE EXISTING/ORIGINAL COLOR SCHEME. ANY CONTENT SHOWING VISIBLE SIGNS OF EXCESSIVE OR EXTENSIVE CORROSION SHALL BE REPLACED. CONTRACTOR SHALL PROVIDE AN ALLOWANCE ACCOUNT FOR THESE ITEMS IN BID.

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	SANITARY
	VENT LINE
SD	STORM DRAIN
SW	SAFEWASTE
CD	CONDENSATE
G	GAS LINE
	COLD WATER
	HOT WATER
FCO	FLUSH CLEAN OUT
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
RD	ROOF DRAIN
CO	CLEANOUT
VTR	VENT THRU ROOF
RWL	RAIN WATER LEADER
PRV	PRESSURE REDUCING VALVE
	SANITARY RISER
	WATER RISER
	WATER HAMMER ARRESTOR
	BALL VALVE
	HOT WATER RETURN BALANCING VALVE
	HOT WATER RETURN PIPE



PLANTER DRAIN DETAIL
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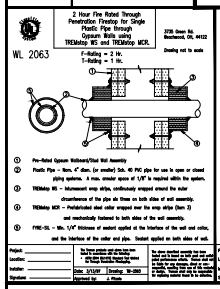

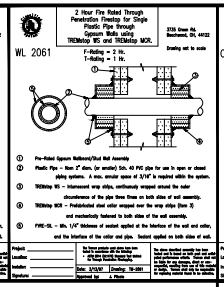

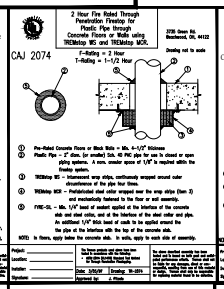

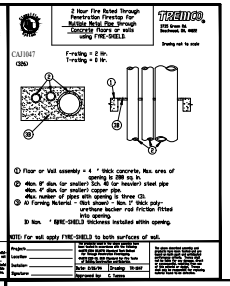

TYPICAL CLEANOUT DETAIL

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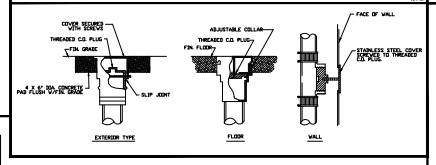

TYPICAL CONDENSATE DRAIN TRAP

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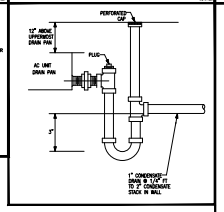

DOMESTIC WATER DUPLEX PUMP

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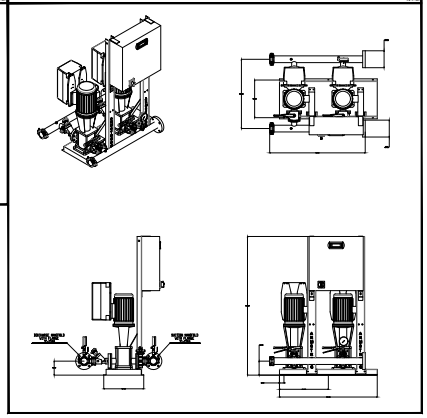
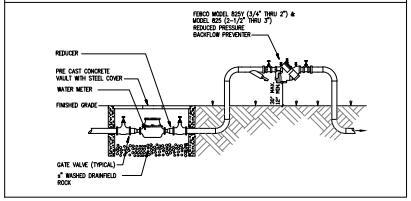


WATER METER ENCLOSURE & BACKFLOW PREVENTER DETAIL



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CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

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Project No.: 18217

Date: 04-01-2021

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Sheet Title:
PLUMBING GENERAL NOTES AND DETAILS

Sheet No.:
P-0

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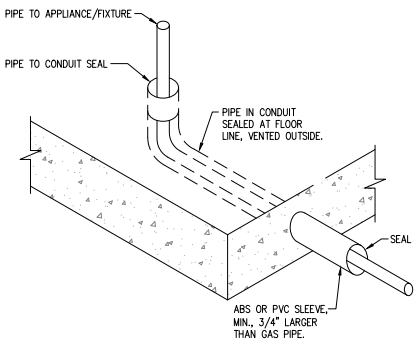
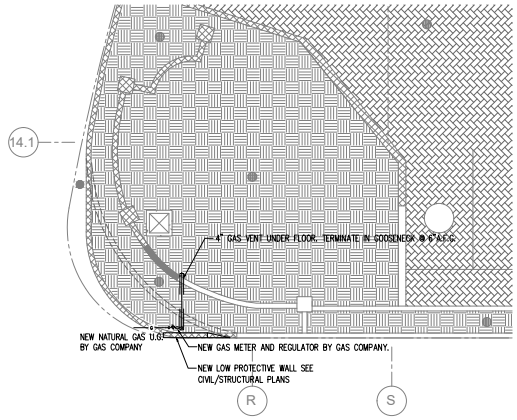
GAS PIPING UNDER SLAB DETAIL





NEW NATURAL GAS CONNECTION

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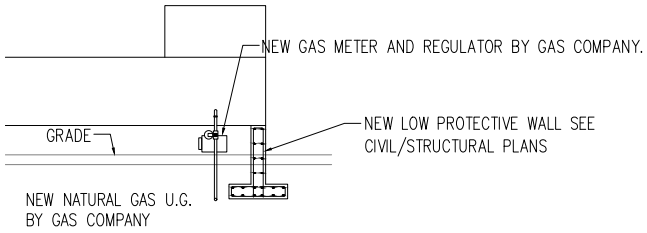

NEW NATURAL GAS CONNECTION

GENERAL PLUMBING NOTES:

1. ALL WORK SHALL CONFORM WITH THE 2020 FBC, RESIDENTIAL, NFPA, NEC, AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND ORDINANCES. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR THE COMPLETION OF THE PLUMBING SYSTEMS DESCRIBED HEREON AND SHOWN ON THE DRAWINGS.
2. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECTIONS, TESTS, PERFORMANCE BONDS, FEES AND OTHER ITEMS AS REQUIRED FOR THE INSTALLATION OF THE COMPLETE PLUMBING SYSTEMS, AND SHALL BE RESPONSIBLE FOR OBTAINING AS- BUILT FORMS.
3. CONTRACTOR SHALL PROVIDE ALL REQUIRED INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
4. EXCEPT WHERE LONGER WARRANTIES ARE SPECIFIED FOR SPECIFIC EQUIPMENT, CONTRACTOR SHALL WARRANT ALL WORK TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL WRITTEN ACCEPTANCE OF THE PROJECT BY THE OWNER.
5. PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE PLUMBING SYSTEMS BEFORE FINAL ACCEPTANCE.
6. PROVIDE THREE SETS OF BOUND AND LABELED EQUIPMENT MAINTENANCE AND OPERATION MANUALS. MANUALS TO BE SUBMITTED TO ARCHITECT/ENGINEER FOR ACCEPTANCE.
7. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS AND EQUIPMENT FOR ACCEPTANCE BY THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE PURCHASE OR INSTALLATION OF ANY EQUIPMENT AND MATERIALS.
8. LABEL AND IDENTIFY ALL EQUIPMENT, MOTOR STARTERS, CONTROLS, PIPING AND VALVES. SUBMIT IDENTIFICATION SCHEME TO THE ARCHITECT/ENGINEER FOR APPROVAL.
9. PRODUCTS AND MATERIALS SPECIFIED BY TRADE NAME AND/OR MODEL ON THE DRAWINGS CONSTITUTE A STANDARD OF QUALITY, PERFORMANCE AND APPEARANCE. SUBSTITUTIONS OF EQUAL OR BETTER QUALITY, PERFORMANCE AND APPEARANCE WILL BE CONSIDERED TO STANDARD & STANDARD MODEL OF BIDDING. REQUESTS FOR SUBSTITUTION SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER DEMONSTRATING THAT THE PROPOSED PRODUCT IS COMPARABLE, AND THAT BASIC DESIGN, CONSTRUCTION TOLERANCES, QUALITY AND WARRANTIES ARE EQUAL. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL DRAWINGS AND INFORMATION NEEDED FOR ANY CHANGE IN THE WORK REQUIRED BY OTHER TRADES AND SHALL PAY FOR ANY EXPENSES INCURRED DUE TO THE CONTRACTOR'S REQUEST FOR REVISIONS OR SUBSTITUTIONS.
10. CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE PROJECT SITE WITH UP TO-DATE INFORMATION ON AS-BUILT CONDITIONS INDICATING WITH COLORED PENS ALL CHANGES AND DEVIATIONS FROM THE CONTRACT DRAWINGS. THIS SET OF PRINTS SHALL BE TURNED OVER TO THE ARCHITECT/ENGINEER AT THE COMPLETION OF THE PROJECT AS A PRE-REQUISITE FOR FINAL PAYMENT.
11. PROVIDE ALL NEW MATERIALS OF AMERICAN MANUFACTURE, BEARING THE U.L. LABEL (IF APPLICABLE). PROVIDE SUPPLEMENTAL MATERIALS NOT SPECIFICALLY NOTED HEREON, BUT REQUIRED TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DRAWINGS, AT NO ADDITIONAL COST TO THE OWNER.
12. FURNISH ALL NECESSARY ACCESS PANELS TO CONTROL VALVES, DAMPERS, ETC., TO THE GENERAL CONTRACTOR, FOR INSTALLATION UNDER THE GENERAL TRADES.
13. ALL WORK SHALL BE FIELD CHECKED BEFORE INSTALLATION AND COORDINATED WITH ALL OTHER TRADES. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO EXPECT APPROXIMATE EQUIPMENT LOCATIONS AND ARRANGEMENTS, NOT SHOW ANY MINOR DETAIL. PLANS SHALL NOT BE SCALED. REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS.
14. EXPECT PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, UNDERWORK, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY FIELD CONDITIONS.
15. PLUMBING CONTRACTOR SHALL VERIFY ALL SPACE DIMENSIONS AND DIMENSIONS OF EQUIPMENT TO BE INSTALLED PRIOR TO PURCHASE OR FABRICATION OF EQUIPMENT. VERIFY ALL CLEARANCES WITH THE ELECTRICAL TRADE BEFORE ORDERING ANY EQUIPMENT.
16. FURNISH AND INSTALL FIXTURE ACCESSORIES AS REQUIRED. UNLESS OTHERWISE SPECIFIED, ALL ACCESSORIES AND TRIM SHALL BE FIRST QUALITY WITH FINISH AS SELECTED BY ARCHITECT.
17. WHEREVER DISSIMILAR METALS ARE TO BE JOINED, A DIELECTRIC FITTING SHALL BE PROVIDED TO CONNECT BOTH TYPES OF PIPES.
18. HANG ALL PIPING FROM STRUCTURE UTILIZING GALVANIZED HANGER RODS AND TRAPEZE OR CLEVIS HANGERS. FOR COPPER PIPING, RODS AND HANGERS SHALL BE COPPER CLAD. SUPPORT PIPING INDEPENDENTLY FROM EQUIPMENT. PLACE HANGERS AT EXCEPT PIPE CHANGE OF DIRECTION AND AT EACH SIDE OF SHUT OFF VALVES. PROVIDE PROTECTING SHEET METAL SHIELDS FOR ALL INSULATED PIPING.
19. TEST ALL EQUIPMENT TO DEMONSTRATE PROPER FUNCTIONING AND CAPACITY.
20. PROVIDE SUCHING AND WRACING IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS FOR THE PROTECTION OF POTABLE WATER EXCHANGERS. WRC TEMPERATURE SENSOR, WATER AND MATERIALS IN CONNECTION WITH EXCAVATION, TRENCHING, BACKFILLING, FILLING, SHORTCUTS, COMPACTING, ETC., UNDER THIS DIVISION (MECHANICAL).

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CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

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CHECKED H.V.	APPROVED H.V.

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

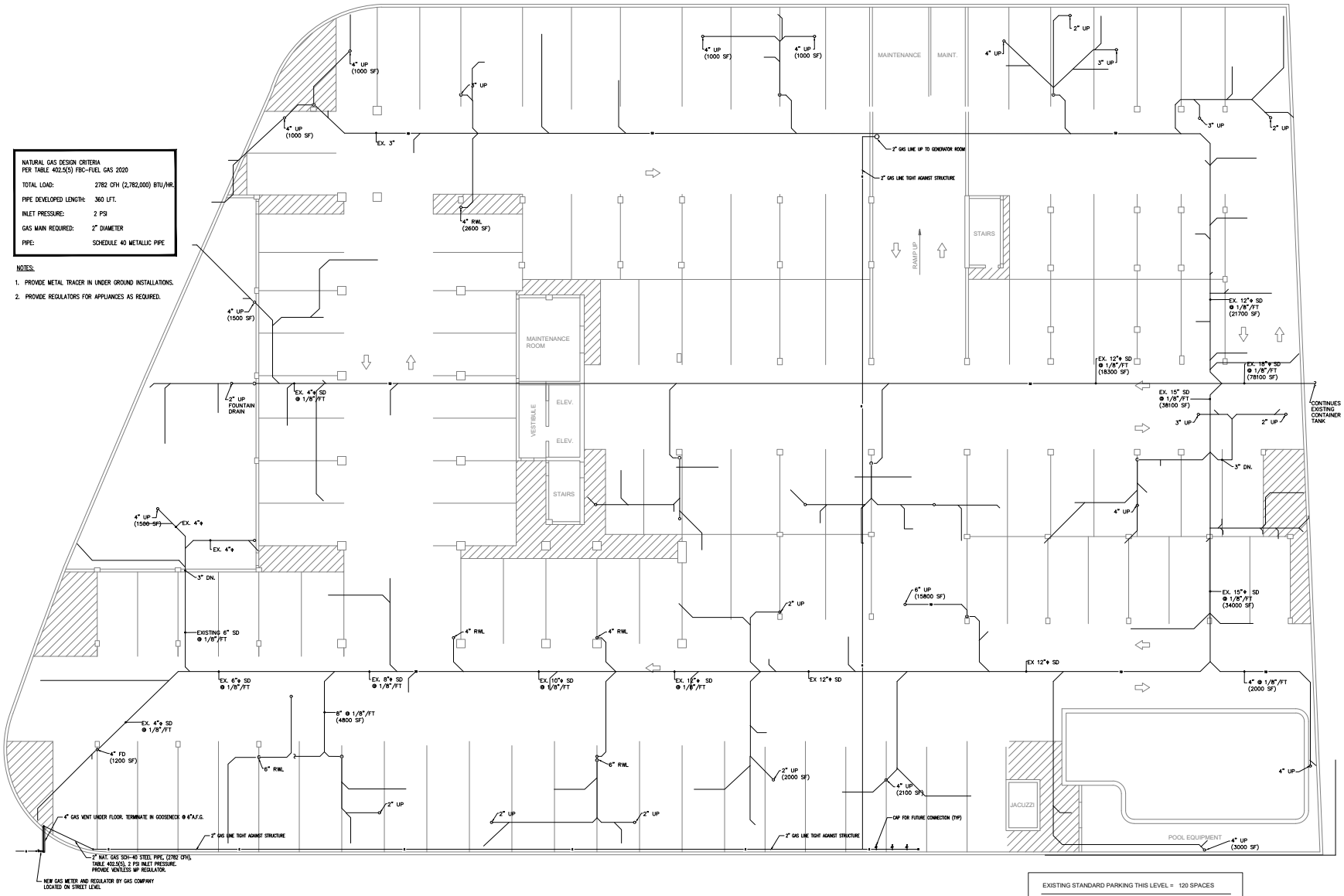
Sheet Title: NATURAL GAS BASEMENT PARKING PLAN

Sheet No.: P-0A

NATURAL GAS DESIGN CRITERIA PER TABLE 402.5(5) FBC-FUEL GAS 2020	
TOTAL LOAD:	2782 CFH (2,782,000) BTU/HR.
PIPE DEVELOPED LENGTH:	360 LFT.
INLET PRESSURE:	2 PSI
GAS MAIN REQUIRED:	2" DIAMETER
PIPE:	SCHEDULE 40 METALLIC PIPE

NOTES:

1. PROVIDE METAL TRACER IN UNDER GROUND INSTALLATIONS.
2. PROVIDE REGULATORS FOR APPLIANCES AS REQUIRED.



EXISTING STANDARD PARKING THIS LEVEL =	120 SPACES
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PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

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CHECKED H.V.	APPROVED H.V.

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: PLUMBING GAS GARAGE PLAN

Sheet No.: P-1

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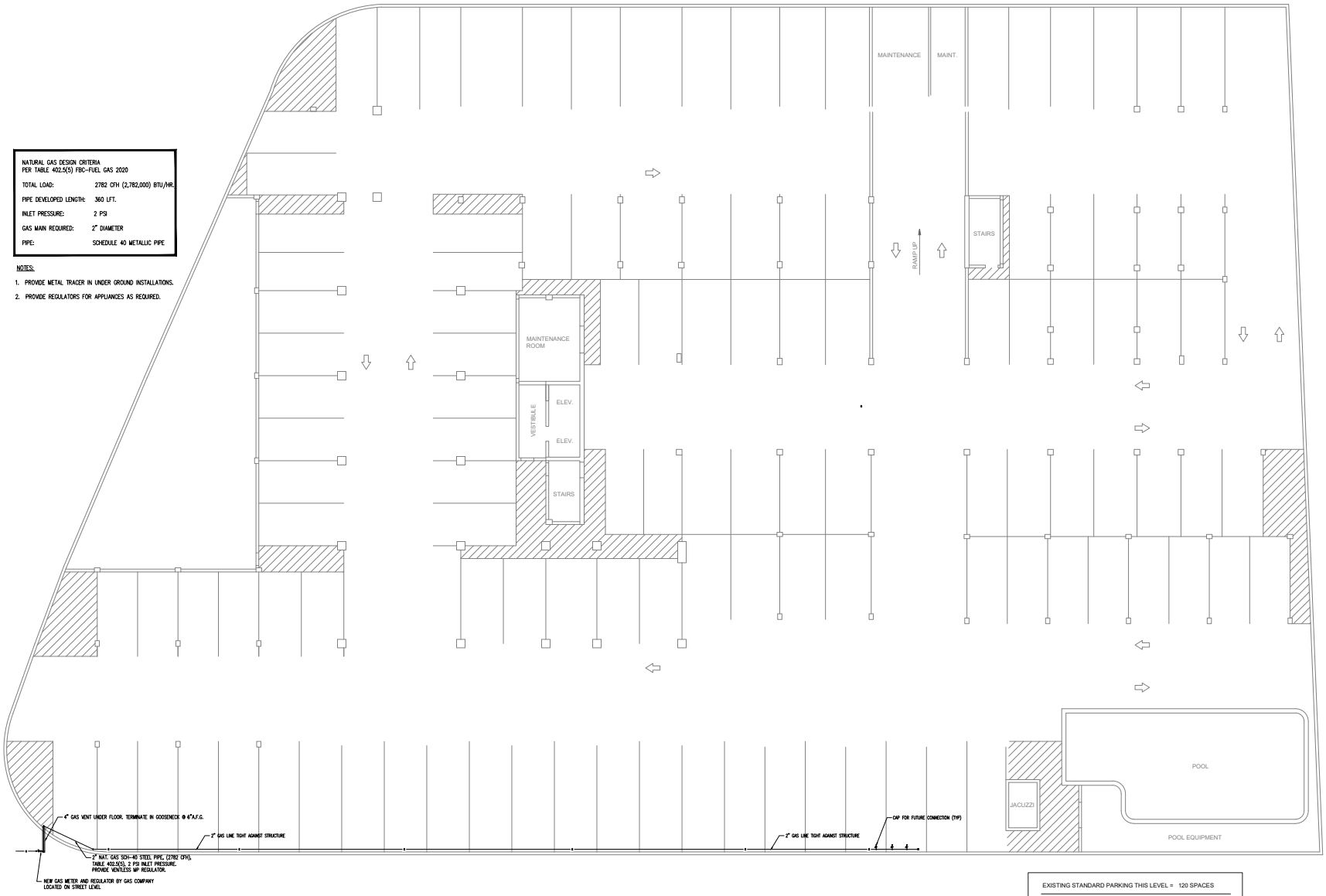

EXISTING STANDARD PARKING THIS LEVEL =	120 SPACES
EXISTING PARKING THIS LEVEL =	120 SPACES

BASEMENT PARKING PLAN - GAS

SCALE: 3/32"=1'-0"

CONSULTING ENGINEERS
241 N.W. SOUTH RIVER DRIVE
MIAMI, FL 33128
HENRY VIDAL, P.E., PE #56204
CERTIFICATION OF AUTHORIZATION #9056
PHONE: (305) 571-1860 FAX: (305)571-1861
INFO@VIDALENGINEERING.COM
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H.VIDAL & ASSOCIATES

CHAMPLAIN TOWERS SOUTH CONDOMINIUM

8777 COLLINS AVENUE
SURFSIDE, FLORIDA 33154

CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

SEAL

Henry A. Vidal, P.E.
PE #56204

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-7701
Tel. 316.7660 | www.morabitoconsultants.com

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No.	Date	Revisions

DESIGNED G.V. / H.O.	DRAWN G.V. / H.O.
CHECKED H.V.	APPROVED H.V.

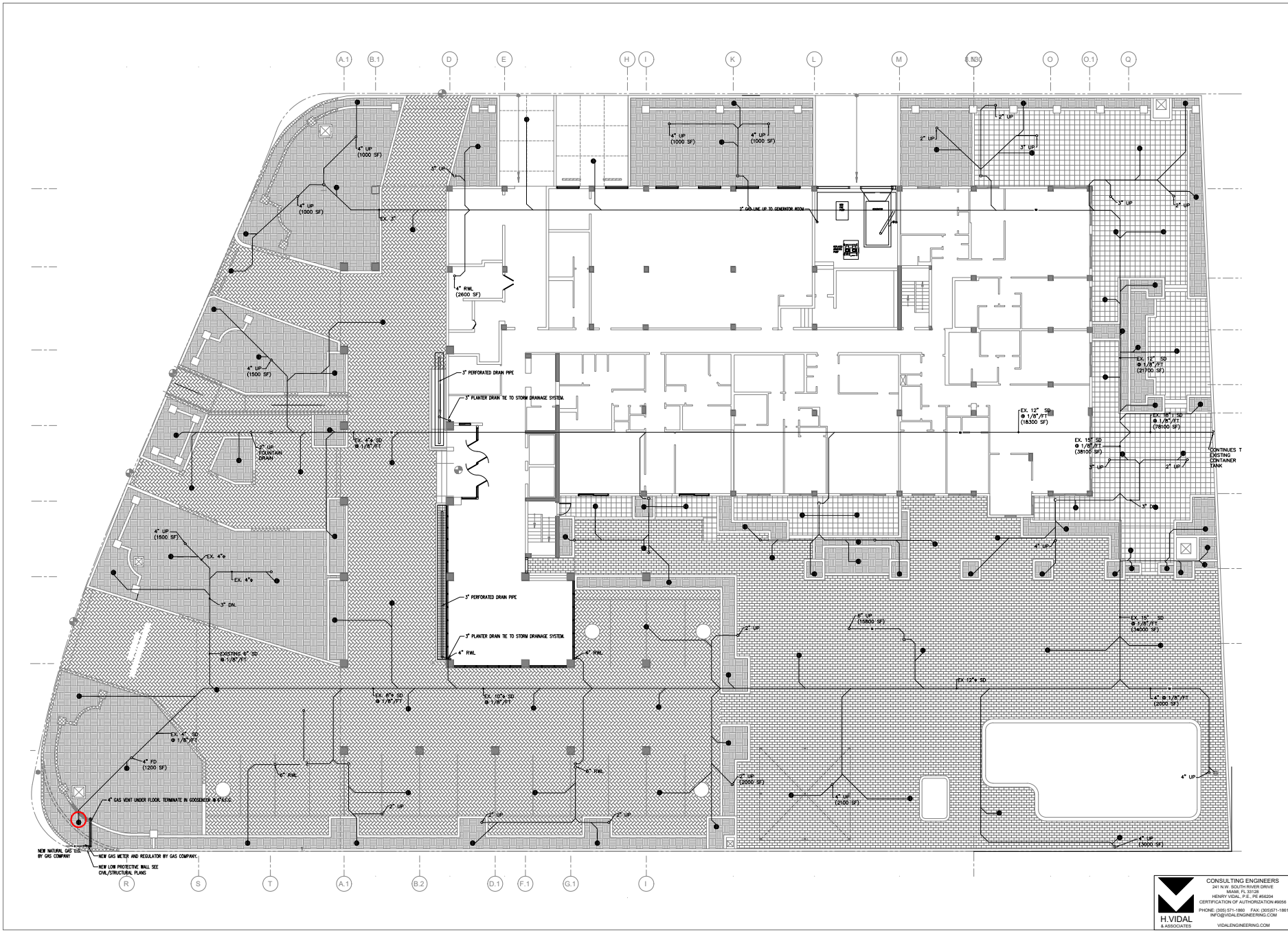
Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: NATURAL GAS BASEMENT PLAN

Sheet No.: P-1A



CHAMPLAIN TOWERS
SOUTH CONDOMINIUM
8777 COLLINS AVENUE
SURFSIDE, FLORIDA 33154

CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

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CHECKED H.V.	APPROVED H.V.

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title:
PLUMBING - FIRST FLOOR PARKING PLAN

Sheet No.:
P-2

H.VIDAL & ASSOCIATES
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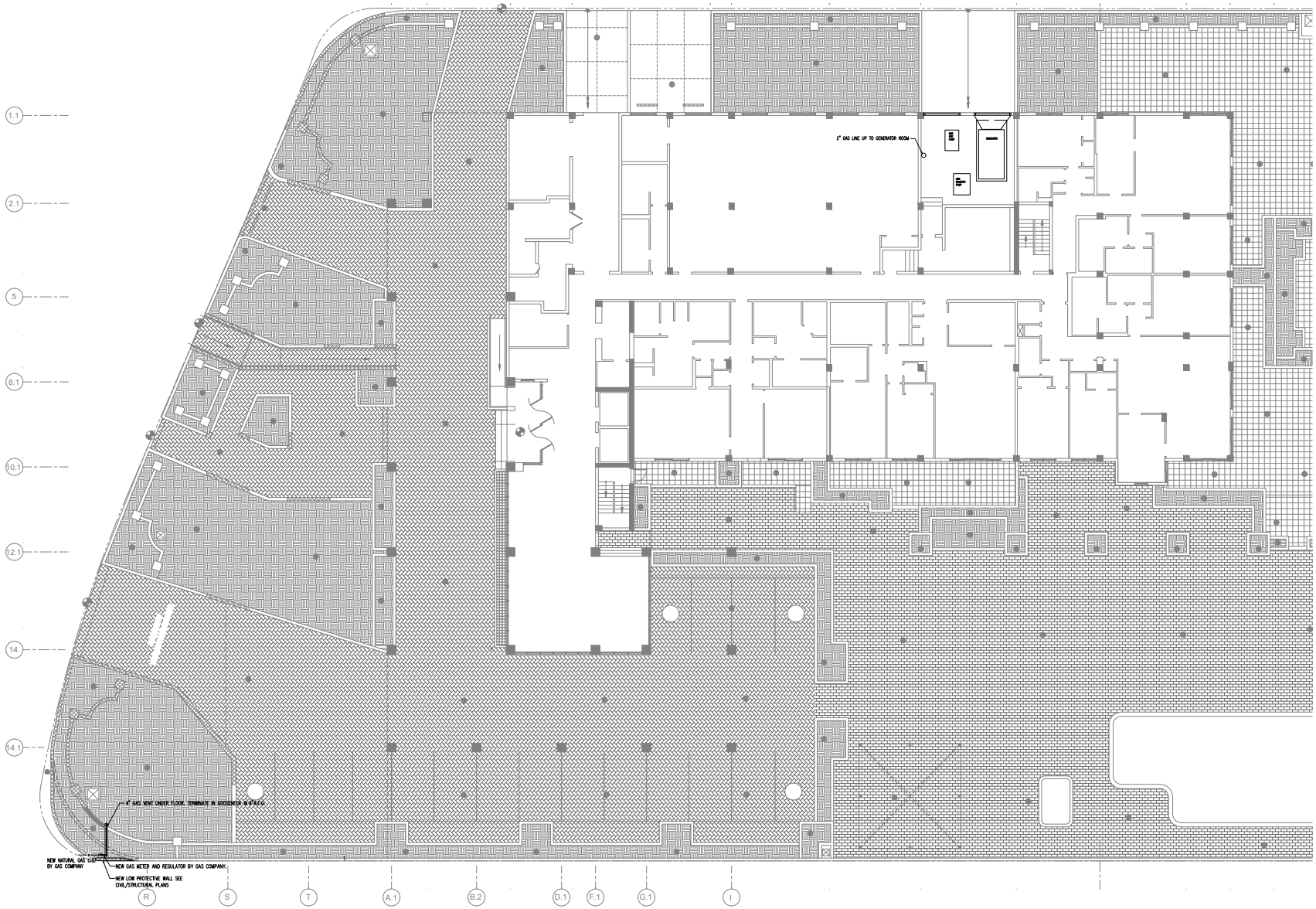

FIRST FLOOR PARKING PLAN - GAS

SCALE: 3/32"=1'-0"

H.VIDAL & ASSOCIATES

CONSULTING ENGINEERS
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CHAMPLAIN TOWERS SOUTH CONDOMINIUM

8777 COLLINS AVENUE
SURFSIDE, FLORIDA 33154

CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

SEAL

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DESIGNED G.V. / H.O.	DRAWN G.V. / H.O.
CHECKED H.V.	APPROVED H.V.

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title:
NATURAL GAS - FIRST FLOOR PARKING PLAN

Sheet No.:
P-2A

NOTE: ALL BASE INFORMATION
INDICATES EXISTING CONDITIONS FROM
SURVEY BY J. BONFILL & ASSOC. 8/7/2020

TREE DISPOSITION LEGEND

LOCATION OF EXISTING PALM

3 —— TREE NUMBER

TREE DISPOSITION LIST

Tree Number	Botanical Name	Common Name	Height (Feet)	Spread (Feet)	Cond.	Disposition	Canopy (Sq. Ft.)	Note
1	Sabal Palmetto	Cabbage Palm	12	8	Fair	Remove	50	
2	Adonidia merrillii	Christmas Palm	15	10	Fair	Remove	79	4 trunks
3	Sabal Palmetto	Cabbage Palm	12	8	Fair	Remove	50	
4	Ptychosperma elegans	Solitaire Palm	25	10	Fair	Remove	79	4 trunks
5	Ptychosperma elegans	Solitaire Palm	25	10	Fair	Remove	79	4 trunks
6	Ptychosperma elegans	Solitaire Palm	20	10	Fair	Remove	79	3 trunks
7	Ptychosperma elegans	Solitaire Palm	16	10	Fair	Remove	79	3 trunks
8	Adonidia merrillii	Christmas Palm	15	10	Fair	Remove	79	4 trunks
9	Adonidia merrillii	Christmas Palm	15	10	Fair	Remove	79	4 tunks
10	Sabal Palmetto	Cabbage Palm	10	8	Fair	Remove	50	
11	Sabal Palmetto	Cabbage Palm	10	8	Fair	Remove	50	
12	Sabal Palmetto	Cabbage Palm	10	8	Fair	Remove	50	
13	Adonidia merrillii	Christmas Palm	10	8	Fair	Remove	50	3 trunks

Note: Palm heights are given as clear trunk (c.t.) height.

TOTAL CANOPY REMOVED (S.F.) 851

TOTAL CANOPY REPLACED (S.F.) XXXXXX

NORTH

0 16' 32'
GRAPHIC SCALE

No.	REV/ISSUE	Date

Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154

Drawing Title
TREE DISPOSITION PLAN

RHETT ROY
Landscape Architecture-Planning, P.A.
412 North Andrews Avenue
Fort Lauderdale, FL 33301
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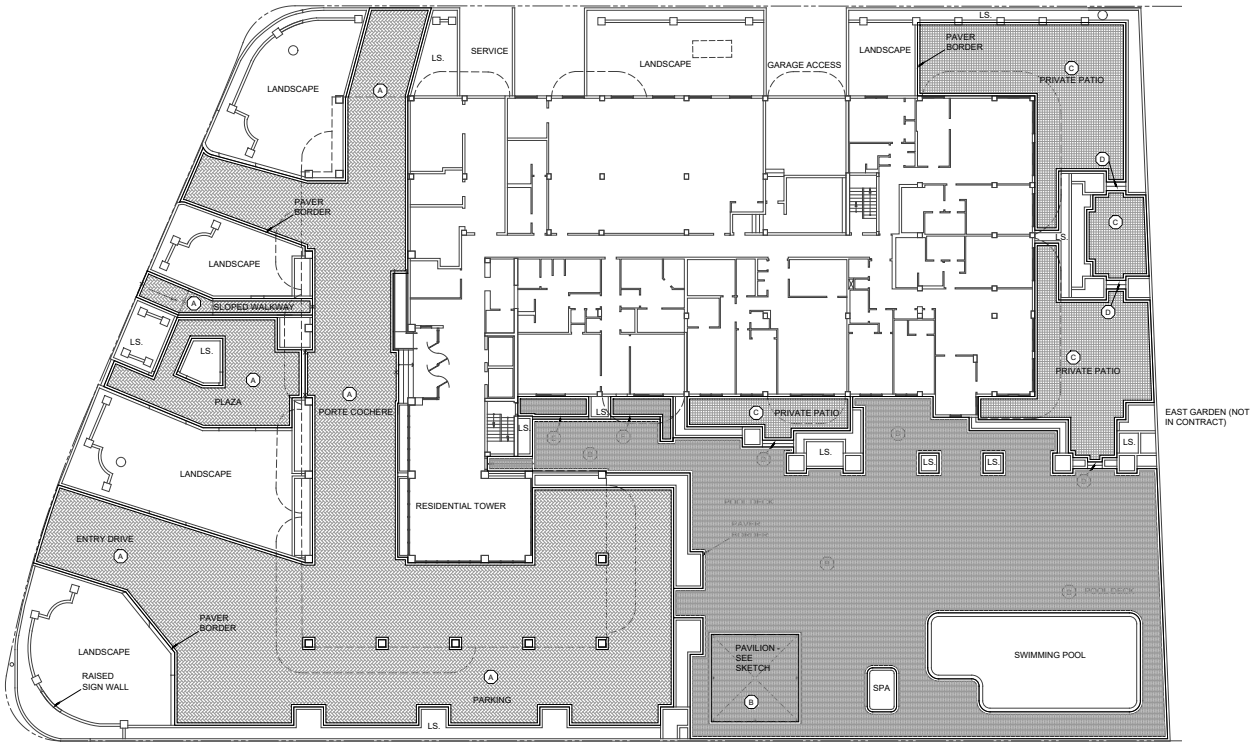
Herbert C. Hodgman
LA0001079

Drawn: HH
Project No.: 19034
CAD File No.: 19034
Date: 3/31/2021
Scale: 1/16" = 1'-0"
Drawing No.: LD-1

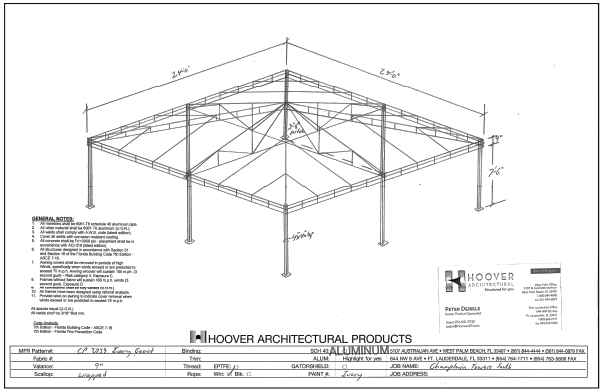


HARDSCAPE MATERIALS LEGEND

CONCRETE PAVERS BY BELGARD -2 3/8" THICK, SAND SET ON CONCRETE SLAB (UNLESS NOTED OTHERWISE)

- (A) DRIVEWAY / PARKING / PLAZA - HOLLAND STONE 4"x8" HERRINGBONE PATTERN FIELD, COLORS CHARCOAL, SLATE & GRAY (33% EA.) WITH 4"x8" SOLDIER COURSE BORDERS, RANDOM EVEN COLOR DISTRIBUTION.
- (B) POOL DECK - MODULINE 3"X12" STAGGERED RUNNING BOND PATTERN, COLORS 40% WHITE, 30% PEWTER, 30% GRAY, WITH 4"x8" SOLDIER COURSE BORDERS RANDOM EVEN COLOR DISTRIBUTION.
- (C) PRIVATE PATIOS - OCEANSIDE 8"x8" STACKED BOND PATTERN FIELD, COLOR CREAM WITH 4"x8" SOLDIER COURSE BORDERS.
- (D) STEPS / RISERS - COPING 4"x9" TREAD WITH CUT HOLLAND STONE INFILL & RISERS, COLOR CREAM . MUD SET ON SLAB
- (E) STEPS / RISERS - COPING 4"x9" TREAD WITH CUT HOLLAND STONE INFILL & RISERS, COLOR PEWTER. MUD SET ON SLAB

NOTE: CONTRACTOR SHALL INSTALL A 4' MIN. SQ. AREA OF EACH PAVER TYPE A, B & C FOR OWNER APPROVAL PRIOR TO ORDER AND INSTALL. SAMPLES OF STEP TREADS SHALL ALSO BE PROVIDED FOR APPROVAL BY OWNER.



1 / LH-1 PAVILION SKETCH (FOR BIDDING ONLY)
SCALE: NONE

NORTH

0 16' 32'
GRAPHIC SCALE

No.	REVISIONS	Date

Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154
Drawing Title
HARDSCAPE PLAN

RHETT ROY
Landscape Architecture-Planning, P.A.
412 North Andrews Avenue
Fort Lauderdale, FL 33301
Florida License Number: LA393
Fax 954 / 462-0722
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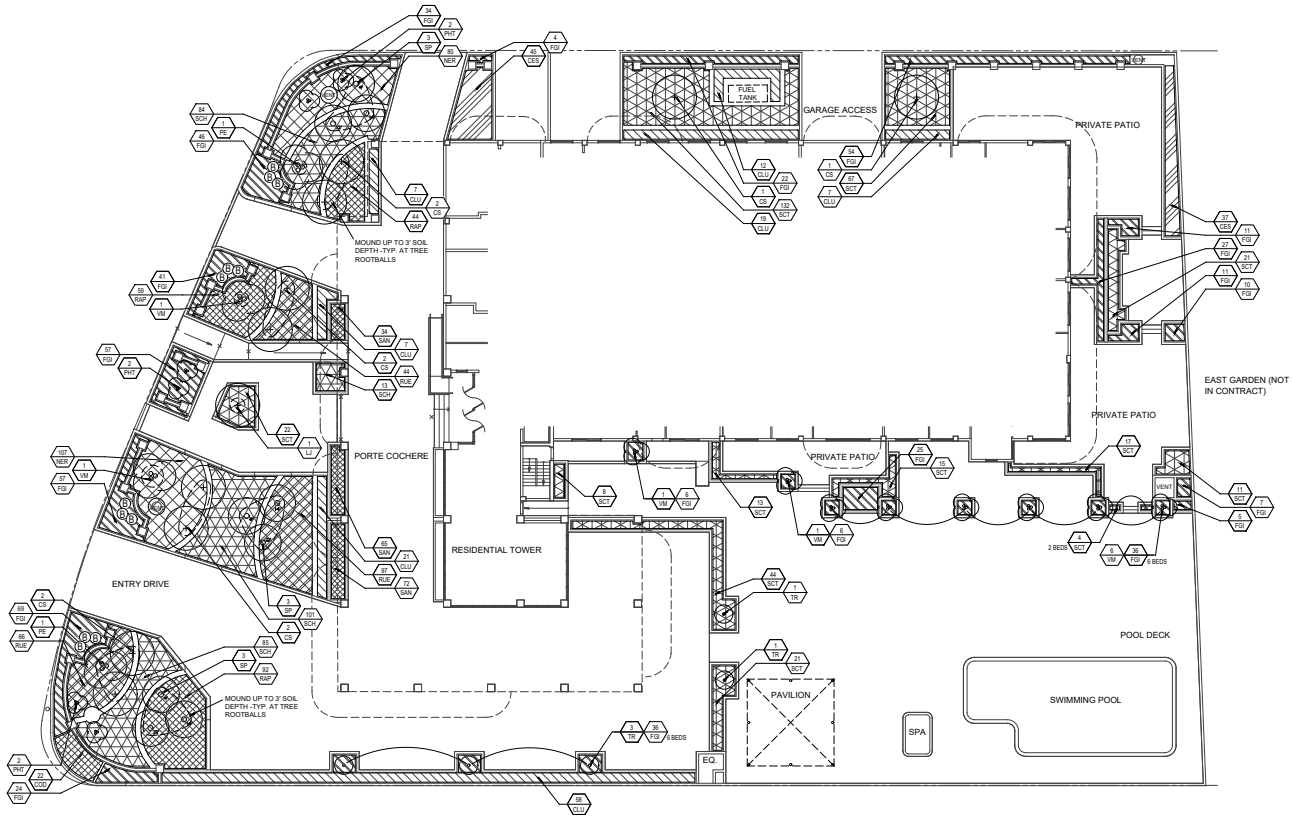
Herbert C. Hodgman
LA0001074

Drawn: HH
Project No.: 19034
CAD File No.: 19034
Date: 3/31/2021
Scale: 1/16" = 1'-0"
Drawing No.: LH-1



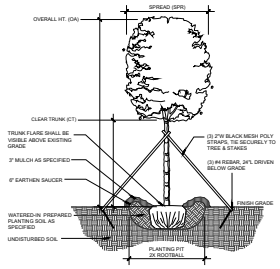
NOTE: INSTALL SPECIFIED SOIL TO 18" DEPTH, 36" DEPTH SURROUNDING TREE ROOT BALLS.

PLANT LIST

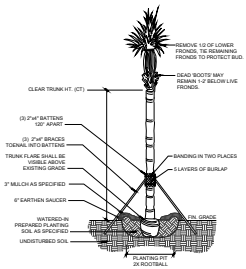
SYM.	ITEM	SPECIFICATION	QTY.
TREES			
CS	Conocarpus erectus 'Sericeus' Silver Buttonwood	12'ht., 5'spr., 4'ct., standard	10
LJ	Ligustrum japonicum Ligustrum Tree	10'ht., 10'spr., full., multi, matched	1
PALMS			
PE	Ptychosperma elegans Alexander Palm	10'-16' oa ht., triple	2
SP	Sabal palmetto Cabbage Palm	9', 12' & 14' c.t. ht. noted on plan	9
TR	Thrinax radiata triple Thatch Palm Triple	7' oa. ht., 3' ct.min.,triple	5
VM	Veitchia merrillii triple Adonidia Palm	10'-12'oa ht., triple	10
SHRUBS			
B	Aechmea blanchetiana Sun Bromeliad	3' ht. x 3' spr., full	12
CES	Conocarpus erectus 'Sericeus' Silver Buttonwood	24" ht. x 24" spr., 24" o.c.	82
COD	Codiaeum v. 'Red Mammey' Red Croton	24" ht. x 24" spr., 24" o.c.	22
CLU	Clusia guttifera Small Leaf Clusia	36" ht. x30" spr.,30" o.c. full to base	131
FGI	Ficus macrophylla 'Green Island' Ficus Green Island	18" ht., 18" spr., 18" o.c.	588
NER	Nerium oleander 'Petite pink' Petite Pink Oleander	24" ht. x 24" spr., 24" o.c.	187
PHT	Phoenix roebellenii Pygmy Date Palm Triple	3' min. clear trunk, triple stg.	6
RAP	Raphiolepsis indica Indian Hawthorn	24" ht. x 24" spr., 24" o.c.	195
RUE	Ruellia brittoniana 'Purple Showers' Mexican Petunia	24" ht. x 24" spr., 24" o.c.	207
SCH	Schefflera arboricola Green Dwarf Schefflera	24" ht. x 24" spr., 24" o.c.	283
SCT	Schefflera arboricola 'Trinette' Trinette Schefflera	24" ht. x 24" spr., 24" o.c.	375
GROUNDCOVERS			
SAN	Sanseveria trifasciata 'Hahnii' Snake plant	8"ht., 12" oc, full	375

PLANT NOTES

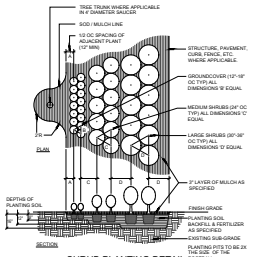
1. ALL PLANTS TO BE FLORIDA NO. 1 GRADE OR BETTER.
2. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT.
3. ALL LANDSCAPE AREAS TO RECEIVE 100% IRRIGATION COVERAGE WITH A MINIMUM 50% OVERLAP BY AN AUTOMATIC IRRIGATION SYSTEM. SYSTEM SHALL INCLUDE A RAIN SENSOR DEVICE. USE OF NON-POTABLE WATER (IF AVAILABLE) SHALL BE USED FROM A RUST FREE SOURCE.
4. QUANTITIES ON PLANT LIST ARE FOR CONVENIENCE ONLY. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANTING PLAN(S). WHEN DISCREPANCIES OCCUR BETWEEN THE PLANT LIST AND PLANTING PLANS, THE PLANS ARE TO OVERRIDE THE PLANT LIST IN ALL CASES.
5. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.
6. ALL SHRUB AND GROUNDCOVER BEDS SHALL BE LAID OUT IN A UNIFORM AND CONSISTENT PATTERN AND SET IN A PERPENDICULAR LINE WHEN ABUTTING PAVEMENT OR BUILDINGS.
7. ALL TREES AND PALMS TO BE STAKED AND GUYED AS INDICATED ON DETAILS.
8. ALL PLANTING AREAS TO RECEIVE 3" LAYER OF GRADE B SHREDDED EUCALYPTUS MULCH. TOP OF MULCH SHALL BE 1" BELOW ANY ADJACENT PAVEMENT OR TOP OF WALL.
9. ALL PLANTERS TO BE BACKFILLED WITH 30% PEAT / 20% SAND / 20% RICE ROCK / 20% PERLITE PLANTING MIXTURE. 18" DEPTH, 36" DEPTH SURROUNDING TREE ROOT BALLS.
10. FERTILIZER SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS AS FOLLOWS:
    SOD 8-8-8
    ANNUALS / GROUNDCOVER OSMOCOTE SIERRA BLEND 14-14-14
    SHRUBS, TREES, PALMS AGRIFORM 20-10-5- TABLETS
11. ALL SOD SHALL BE SOLID WEED-FREE PANELS, LAID ON ONE INCH DEPTH OF TOPSOIL WITH STAGGERED JOINTS.
12. ALL MECHANICAL EQUIPMENT SHALL BE SCREENED ON THREE SIDES WITH APPROVED HEDGE.
13. ALL TREES PLANTED ADJACENT TO OVERHEAD POWER LINES SHALL CONFORM TO F.P.L 'RIGHT TREE RIGHT PLACE' GUIDELINES
14. LANDSCAPE SHALL NOT OBSCURE FIRE HYDRANTS OR STANDPIPES.
15. ALL PLANT MATERIAL SHALL BE WARRANTED FOR ONE YEAR



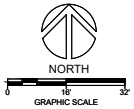
SMALL TREE PLANTING DETAIL
N.T.S.



SABAL PALM PLANTING DETAIL
N.T.S.



SHRUB PLANTING DETAIL
N.T.S.



No.	Date
1	05/18/2018

Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154
Drawing Title
LANDSCAPE PLAN

RHETT ROY
Landscape Architecture-Planning, P.A.
412 North Andrews Avenue
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Florida License Number LA393
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Phone 954 / 462-0704
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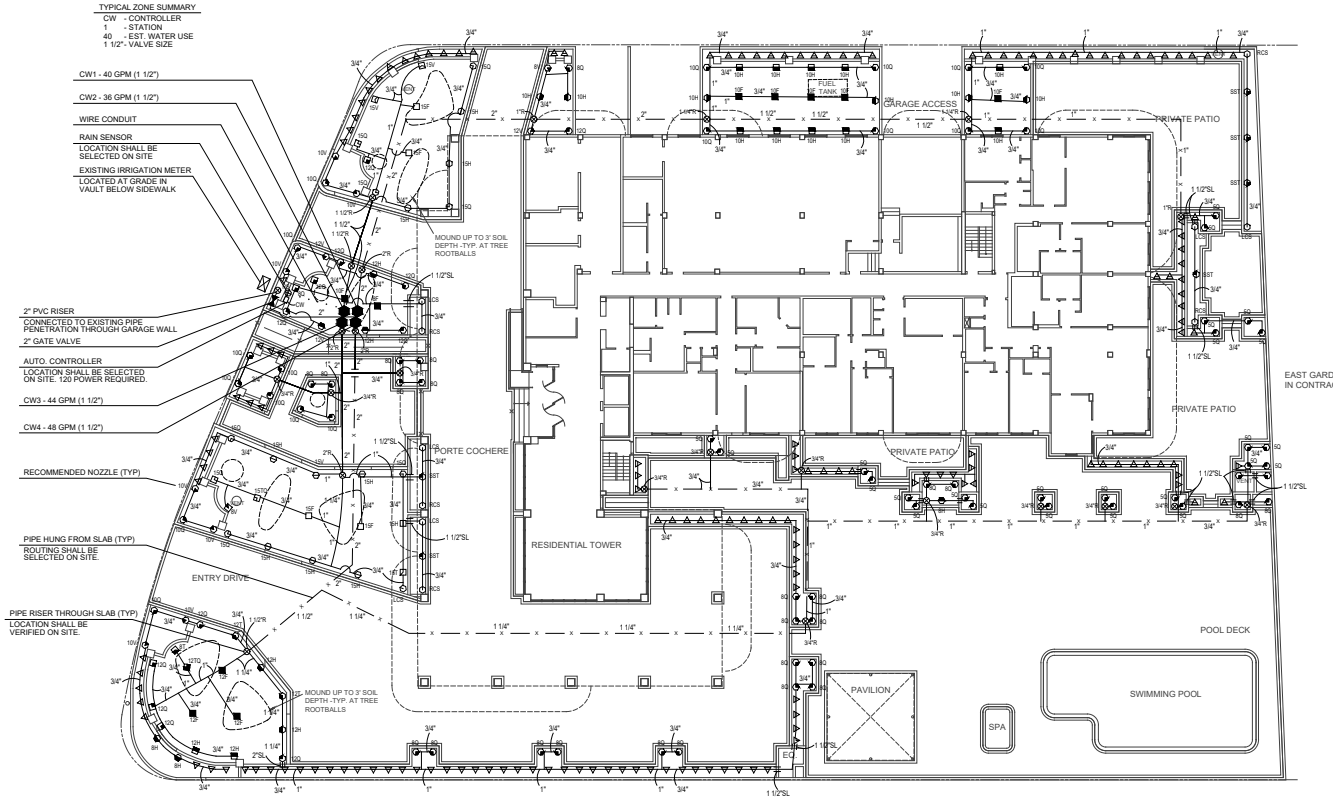
Herbert C. Hodgman
LA0001074

Drawn HH
Project No. 19034
CAD File No. 19034
Date 3/31/2021
Scale 1/16" = 1'-0"
Drawing No. LP-1



LEGEND

SYMBOL	MODEL NO.	DESCRIPTION	* EST. QUANTITY
2Q	PA8S-SCST-B	RAINBIRD STREAM BUBBLER	06
2H	PA8S-SQ-QTR	RAINBIRD SPRAY BUBBLER	06
	PA8S-SQ-HLF	RAINBIRD SPRAY BUBBLER	145
8V	PA8S-8V	RAINBIRD SHRUB SPRAY	02
8Q	PA8S-8Q	RAINBIRD SHRUB SPRAY	01
8F	PA8S-8F	RAINBIRD SHRUB SPRAY	01
10H	PA8S-10H	RAINBIRD SHRUB SPRAY	08
10F	PA8S-10F	RAINBIRD SHRUB SPRAY	06
12Q	PA8S-12Q	RAINBIRD SHRUB SPRAY	05
12H	PA8S-12H	RAINBIRD SHRUB SPRAY	02
12TQ	PA8S-12TQ	RAINBIRD SHRUB SPRAY	01
12F	PA8S-12F	RAINBIRD SHRUB SPRAY	03
15V	PA8S-15V	RAINBIRD SHRUB SPRAY	02
15Q	PA8S-15Q	RAINBIRD SHRUB SPRAY	02
15T	PA8S-15T	RAINBIRD SHRUB SPRAY	01
15H	PA8S-15H	RAINBIRD SHRUB SPRAY	01
15TQ	PA8S-15TQ	RAINBIRD SHRUB SPRAY	01
15F	PA8S-15F	RAINBIRD SHRUB SPRAY	04
5Q	1812-5Q	RAINBIRD 12" POP-UP SPRAY	24
8Q	1812-8Q	RAINBIRD 12" POP-UP SPRAY	29
8H	1812-8H	RAINBIRD 12" POP-UP SPRAY	03
10V	1812-10V	RAINBIRD 12" POP-UP SPRAY	08
10Q	1812-10Q	RAINBIRD 12" POP-UP SPRAY	18
10H	1812-10H	RAINBIRD 12" POP-UP SPRAY	05
12V	1812-12V	RAINBIRD 12" POP-UP SPRAY	01
12Q	1812-12Q	RAINBIRD 12" POP-UP SPRAY	08
12T	1812-12T	RAINBIRD 12" POP-UP SPRAY	02
12H	1812-12H	RAINBIRD 12" POP-UP SPRAY	04
RCS	1812-15RCS	RAINBIRD 12" POP-UP SPRAY	05
LCS	1812-15LCS	RAINBIRD 12" POP-UP SPRAY	06
SST	1812-15SST	RAINBIRD 12" POP-UP SPRAY	06
15V	1812-15V	RAINBIRD 12" POP-UP SPRAY	01
15Q	1812-15Q	RAINBIRD 12" POP-UP SPRAY	06
15H	1812-15H	RAINBIRD 12" POP-UP SPRAY	07
	150 PEB	RAINBIRD 1 1/2" SOLENOID VALVE	04
CW	ESP-4ME	RAINBIRD AUTO. CONTROLLER	01
NOT SHOWN	ESP-SM3	RAINBIRD EXPANSION MODULE	01
RS	RSD-BEX	RAINBIRD RAIN SENSOR	01
NOT SHOWN	#14AWG	PAIGE THHN WIRE	AS REQUIRED
		SCH 40 PVC	AS REQUIRED
		MAIN LINE	
		LATERALS	
		SLEEVES	
		PIPE HUNG FROM SLAB	
R		PIPE RISERS	
NOT SHOWN		SPRINKLER RISERS	
NOT SHOWN		PVC FITTINGS	
		WIRE CONDUIT	
		GATE VALVE (TO LINE SIZE)	01
		VALVE BOX	05
CW		GROUNDING LOCATION	01
		CITY WATER METER	01

NOTE: ABOVE QUANTITIES ARE FOR COMPARISON ONLY.
CONTRACTOR SHALL VERIFY PRIOR TO SUBMITTING BID.

ZONE SUMMARY CHART

STA NO.	VALVE	SPRINKLER TYPE	VALVE SIZE	WATER DEMAND	RUN *TIME	WEEKLY USAGE
1	CW1	SPRAY	1 1/2"	40 GPM	40 MIN/WK	1,600 GAL/WK
2	CW2	SPRAY	1 1/2"	36 GPM	40 MIN/WK	1,440 GAL/WK
3	CW3	SPRAY	1 1/2"	44 GPM	40 MIN/WK	1,760 GAL/WK
4	CW4	SPRAY	1 1/2"	48 GPM	40 MIN/WK	1,920 GAL/WK
5-7	SPARE					
					160 MIN/WK	6,720 GAL/WK

*ESTIMATED RUN TIME TO APPLY 1.0 IN/WK.

NORTH

0 16' 32'
GRAPHIC SCALE

No.	REVISIONS	Date

Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154

Drawing Title
IRRIGATION PLAN AND LEGEND

RHETT ROY
Landscape Architecture-Planning, P.A.
412 North Andrews Avenue
Fort Lauderdale, FL 33301
Florida License Number: LA393
Fax 954 / 462-0722
Phone 954 / 462-0704
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Herbert C. Hodgman
LA0001074

Drawn: KD
Project No. 19034
CAD File No. 19034
Date 3/31/2021
Scale 1/16" = 1'-0"
Drawing No. LR-1

IRRIGATION NOTES & SPECIFICATIONS

AUTOMATIC IRRIGATION SYSTEM	
WATER DEMAND / ZONE	REFER TO PLAN
WATER SOURCE	2" CITY WATER METER
PRESSURE REQUIRED	50 PSI

GENERAL

IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, CONTRACT SPECIFICATIONS, AND APPENDIX "F" OF THE FLORIDA BUILDING CODE.

IRRIGATION DESIGN BASED ON "LANDSCAPE PLAN" DATED JANUARY 2021. CONTRACTOR SHALL REFER TO THIS PLAN TO COORDINATE SPRINKLER LOCATIONS AND PIPE ROUTING WITH NEW AND EXISTING PLANT LOCATIONS.

THIS IRRIGATION PLAN SHALL BE USED AS A GUIDE ONLY. CONTRACTOR SHALL INSTALL IRRIGATION TO MATCH ON SITE CONDITIONS AND TO OVERCOME THE INHERENT INACCURACIES THAT RESULT WHEN DESIGNING FROM BASE PLANS SCALED AT 1" = 16'.

THE WATER SOURCE SHALL BE AN EXISTING 2" LINE WHICH PENETRATES THE PARKING GARAGE WALL. THIS LINE IS SUPPLIED FROM A 2" CITY WATER METER WHICH IS LOCATED IN A VAULT IN THE SIDEWALK.

BACKFLOW PREVENTION SHALL BE EVALUATED TO DETERMINE IF EXISTING PREVENTION CONFORMS TO CURRENT LOCAL CODES FOR CROSS CONNECTION CONTROL. A REDUCE PRESSURE UNIT IS REQUIRED.

THIS IRRIGATION HAS BEEN DESIGNED AS A TYPICAL BLOCK VALVE TYPE USING RAINBIRD SPRINKLERS, IN-LINE VALVES AND CONTROL SYSTEM. A RAIN SENSOR SHALL BE INSTALLED TO CONSERVE WATER.

IRRIGATION SHALL BE INSTALLED AND MAINTAINED TO MINIMIZE UNDESIRABLE OVERTHROW ONTO PAVEMENT, SIDEWALKS, AND BUILDINGS.

CONTRACTOR IS ADVISED TO STUDY THE PLANS FOR ADDITIONAL INFORMATION AND TO VISIT THE SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS.

TO ENSURE PROPER OPERATION, PRESSURE REQUIRED, SOURCE SIZE, VALVE SIZES, ZONE CAPACITIES, SPRINKLER SPACING, PIPE AND WIRE SIZES, INSTALLATION NOTES AND DETAILS, AND SPECIFICATIONS SHALL BE FOLLOWED AS SHOWN.

PIPING

PIPE ROUTING IS SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR ON SITE CONDITIONS. PIPE SHALL BE INSTALLED TO MINIMIZE DAMAGE TO THE ROOT SYSTEMS OF EXISTING TREES AND PALMS.

PIPE SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, SECTION "F" OF THE FLORIDA BUILDING CODE, AND PIPE MANUFACTURER'S INSTRUCTIONS.

PIPE ROUTED THROUGH PLANTER WALLS SHALL BE SLEEVED IN SCH 40 PVC. EACH SLEEVE SHALL BE TWO PIPE SIZES LARGER THAN THE CARRIER PIPE. CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING SLEEVES.

ALL PIPE AND FITTINGS SHALL BE TYPE 1120 SCH 40 PVC.

PIPE SIZED TO LIMIT FLOW VELOCITIES TO 5 FEET/SECOND AND TO LIMIT FRICTION LOSS IN THE PIPING NETWORK.

PIPE SHALL BE INSTALLED AT SUFFICIENT DEPTH BELOW GROUND TO PROTECT IT FROM HAZARD SUCH AS VEHICULAR TRAFFIC OR ROUTINE OCCURRENCES WHICH OCCUR IN THE NORMAL USE AND MAINTENANCE OF THE PROPERTY. DEPTHS OF COVER SHALL MEET OR EXCEED SCS CODE 430-DD. REFER TO THE APPLICABLE DETAIL FOR ADDITIONAL INFORMATION.

BACKFILL SHALL BE OF SUITABLE MATERIAL, FREE OF ROCKS, STONES, AND OTHER DEBRIS THAT WOULD DAMAGE IRRIGATION SYSTEM COMPONENTS.

THE BACKFLOW PREVENTER IF REQUIRED SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND SHALL BE LOCATED TO BE CONCEALED FROM VIEW.

A GATE VALVE SHALL BE INSTALLED FOR ISOLATION. THIS VALVE SHALL BE TO LINE SIZE AND INSTALLED IN A VALVE BOX. POROUS MATERIAL SHALL BE INSTALLED PER BOX TO PROMOTE DRAINAGE.

PIPE HUNG FROM SLAB SHALL BE SCH 40 PVC WHICH SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE MECHANICAL SPECIFICATIONS. THE ROUTING OF HUNG PIPE SHALL BE VERIFIED ON SITE.

ALL PIPE RISERS THROUGH THE SLAB SHALL BE SCH 40 PVC WHICH SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE MECHANICAL SPECIFICATIONS. THE LOCATION OF EACH PENETRATION SHALL BE VERIFIED ON SITE AND ALL PENETRATIONS SHALL BE MADE WATERPROOF.

CONTRACTOR SHALL VERIFY THAT INSTALLING PVC PIPE IN THE GARAGE IS TO LOCAL CODES.

SPRINKLERS

SPRINKLER LOCATIONS ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR LANDSCAPING, SITE LIGHTING, PREVAILING WIND, MOUNDING, ETC., TO ENSURE PROPER COVERAGE WITH MINIMAL UNDESIRABLE OVERTHROW. A PRIME OBJECTIVE SHALL BE TO ELIMINATE OVERTHROW ONTO SIDEWALKS.

SPRINKLERS SHALL BE RAINBIRD 1800 SERIES. TWELVE INCH POP UP TYPE SHALL BE INSTALLED IN AREAS LANDSCAPED WITH GROUNDCOVER AND LOW SHRUBS, SHRUBS HEADS SHALL BE INSTALLED IN AREAS LANDSCAPED WITH TALL SHRUBS, AND BUBBLERS SHALL BE INSTALLED IN NARROW LANDSCAPED AREAS.

POP-UP TYPE LOCATED IN SHRUBS SHALL BE INSTALLED ON 1/2" SCH 40 PVC RISERS TO A HEIGHT SO SPRINKLERS ARE CONCEALED FROM VIEW EXCEPT DURING USE.

SHRUB TYPE AND BUBBLERS SHALL BE INSTALLED ON 1/2" SCH 40 PVC RISERS. SHRUB HEADS SHALL BE INSTALLED A STANDARD HEIGHT OF 6" ABOVE PLANTS AND SHALL BE INSTALLED WITHIN PLANTS TO BE CONCEALED FROM VIEW. BUBBLERS SHALL BE INSTALLED AT THE BASE OF TREES FOR LOW LEVEL WATERING. ALL RISERS SHALL BE PAINTED FLAT BLACK TO BE LESS VISIBLE.

EACH SPRAY HEAD SHALL BE EQUIPPED WITH THE APPROPRIATE SPRAY NOZZLE.

ADJUSTMENT FEATURES OF SPRINKLERS SPECIFIED SHALL BE UTILIZED TO INSURE PROPER COVERAGE WITH MINIMAL UNDESIRABLE OVERTHROW. LOW ANGLE, FLAT SPRAY, AND ADJUSTABLE ARC NOZZLES SHALL BE USED TO MINIMIZE OVERTHROW.

SPRINKLERS LOCATED ADJACENT TO HARDSCAPED AREAS SHALL BE INSTALLED AWAY FROM HARDSCAPED AREAS TO MINIMIZE OVERTHROW AND THE CHANCE OF DAMAGE BY VEHICLES, PEDESTRIANS, AND LAWN MAINTENANCE PERSONNEL. AS A GENERAL RULE, 6" POP-UP SPRAY HEADS SHALL BE INSTALLED IN 4", AND SHRUBS HEADS AND 12" POP-UP SPRAY HEADS SHALL BE INSTALLED IN 12".

CONTROL SYSTEM

CONTROL SYSTEM SHALL BE A RAINBIRD ESP SERIES ELECTRIC TYPE. ONE 7 STATION CONTROLLER SHALL ACTIVATE 4 IN-LINE VALVE. A RAIN SENSOR BE INSTALLED TO CONSERVE WATER.

CONTROLLER SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S INSTRUCTIONS. PROPER GROUNDING EQUIPMENT SHALL BE PROVIDED.

CONTROLLER LOCATION SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. A 110 VAC ELECTRIC SOURCE IS REQUIRED.

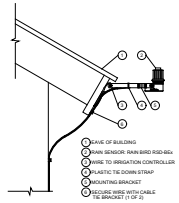
CONTROL LINES FROM THE AUTOMATIC CONTROLLER TO IN-LINE AUTOMATIC VALVES SHALL BE #14 AWG THHN TYPE WHICH SHALL BE: (1) INSTALLED IN ACCORDANCE WITH LOCAL CODES, (2) INSTALLED IN SCH 40 PVC WIRE CONDUIT, AND (3) BURIED TO A MINIMUM DEPTH OF 15".

AUTOMATIC VALVE LOCATIONS ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR ON SITE CONDITIONS. EACH VALVE SHALL BE INSTALLED IN A VALVE BOX. A MINIMUM OF ONE CUBIC FOOT OF GRAVEL SHALL BE PROVIDED PER BOX TO PROMOTE DRAINAGE.

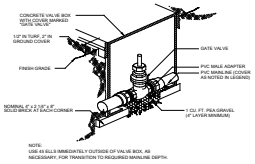
THE RAIN SENSOR SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. LOCATION SHALL BE SELECTED ON SITE.

TIMING AND PRECIPITATION

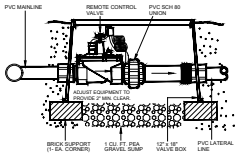
TIMING OF EACH STATION SHALL BE SET IN THE FIELD TO MATCH LOCAL REQUIREMENTS. REFER TO ZONE SUMMARY CHART FOR RECOMMENDED RUN TIMES TO APPLY 1.0 INCHES/WEEK.



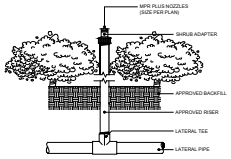
RAIN SENSOR RSD-BEx
NOT TO SCALE



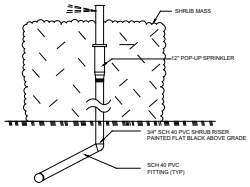
GATE VALVE DETAIL
NOT TO SCALE



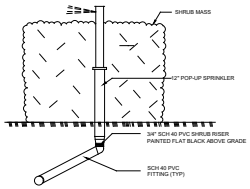
REMOTE CONTROL VALVE DETAIL
NOT TO SCALE



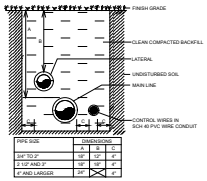
SHRUB/BUBBLER SPRINKLER (NTS)
BUBBLER/SHRUB SPRAY INSTALLED AT THE BASE OF PLANTS FOR LOW LEVEL WATERING.



SPRINKLER DETAIL (N.T.S.)
12" POP-UP SPRAY ON PVC SWING JOINT WITH RISER LOCATED IN PLANT MASS MAINTAINED TO A MIN. HEIGHT OF 24"

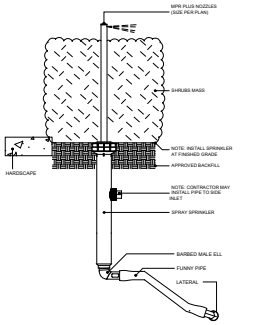


SPRINKLER DETAIL (N.T.S.)
12" POP-UP SPRAY ON PVC SWING JOINT LOCATED IN PLANT MASS MAINTAINED TO A MIN. HEIGHT OF 18"

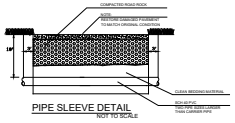


PIPE SIZE	DIMENSIONS		
	A	B	
24" TO 2"	18"	12"	4"
2 1/2" AND 3"	18"	12"	4"
4" AND LARGER	24"	12"	4"

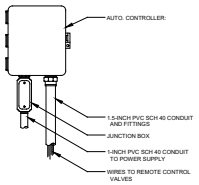
TRENCHING DETAIL (NTS)
NON-TRAFFIC AREAS



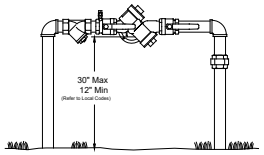
SPRINKLER DETAIL (N.T.S.)
12" POP-UP SPRAY ON POLY PIPE SWING JOINT LOCATED IN PLANTS MAINTAINED TO A MAX. HEIGHT OF 8"



PIPE SLEEVE DETAIL
NOT TO SCALE



AUTOMATIC CONTROLLER
NOT TO SCALE



REDUCED PRESSURE ASSEMBLY
(IF REQUIRED)
NOT TO SCALE

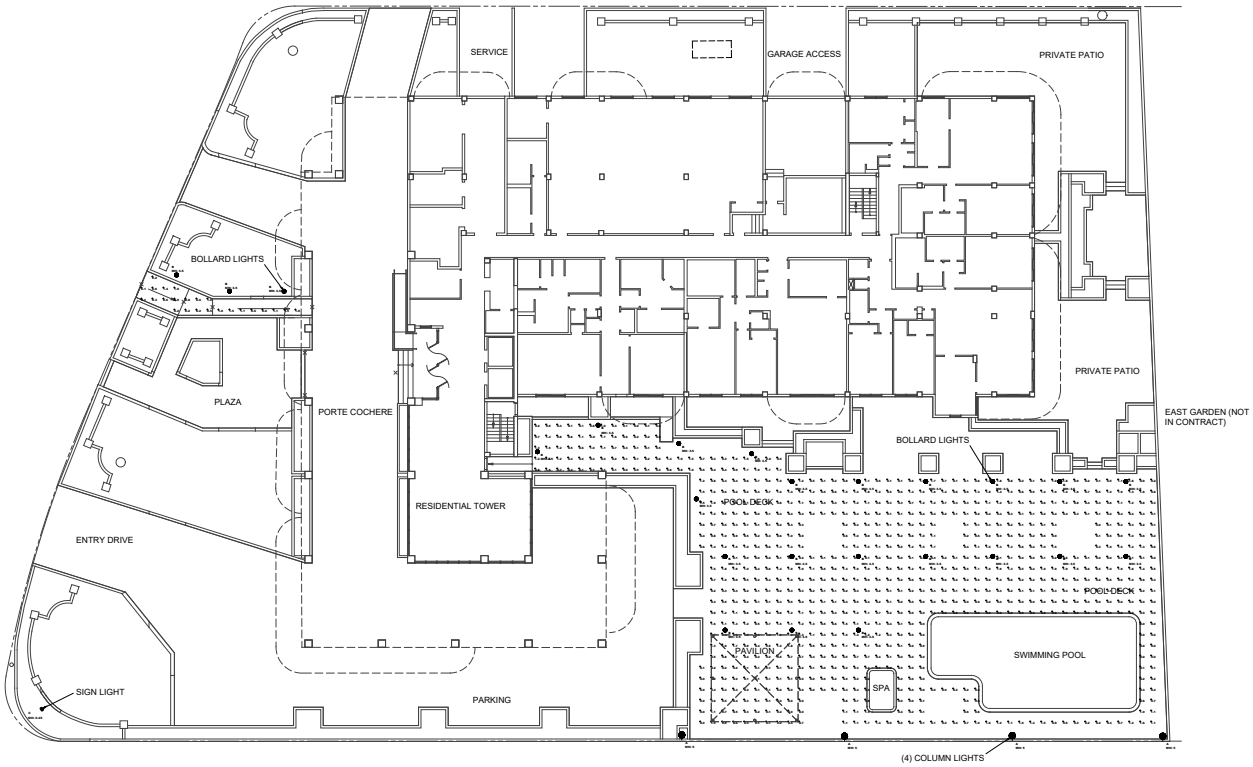
No.	REVISIONS	Date

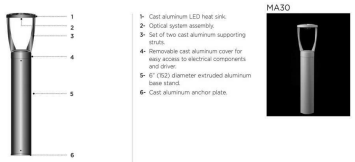
Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154
Drawing Title
IRRIGATION NOTES AND DETAILS

RHETT ROY
Landscape Architecture-Planning, P.A.
412 North Andrews Avenue
Fort Lauderdale, FL 33301
Florida License Number: LA393
Fax 954 / 462-0722
Phone 954 / 462-0704
rrla@rhettroy.com

Herbert C. Hodgman
LA0001074

Drawn
KD
Project No.
19034
CAD File No.
19034
Date
3/31/2021
Scale
N.T.S
Drawing No.
LR-2





1- Cast aluminum LED heat sink.
2- Optical system assembly.
3- Set of two cast aluminum supporting struts.
4- Removable cast aluminum cover for easy access to electrical components and driver.
5- 6" (152) diameter extruded aluminum base stand.
6- Cast aluminum anchor plate.

ROUND BOLLARD

1- Cast aluminum driver housing.
2- Housing/shade assembly hinge mechanism.
3- Sealed and isolated LED compartment.
4- Cast aluminum shade.
5- LED optical control silicone lenses.
6- Hinged cast aluminum lens frame.

APS
Ø 1 5/8" shepherd aluminum post top mount, with a cast aluminum tenon to fit with a 2 3/4" I.D. pole. (EPA: 0.15)

COLUMN LIGHT

NOTE: PROPOSED LIGHTS SHALL BE 'TURTLE FRIENDLY' AND SUBJECT TO APPROVAL BY STATE REGULATING AUTHORITY

Luminaire Schedule

Project: CHAMPLAIN TOWERS SOUTH - POOL AREA, REV 1 02/02/2021

Symbol	Qty	Label	Arrangement	Manufacturer	Description	Luminaire Lumens	LLF	Luminaire Watts	Assembly Watts
	4	A	SINGLE	Luminis Canada Inc.	SR135-L3W18K2A-xxx-BKT-APS MN: COLUMN MOUNT A.F.F. (bottom of fixture)	4083	0.168	34	34
	24	B	SINGLE	Luminis Canada Inc.	MA30 L1W112A-BS MN: 42" BOLLARD	274	0.859	11.3	11.3
	1	C	SINGLE	Lithonia Lighting	DSXF1 LED P2 30K WFL MVOLT IS xxx MN: GROUND MOUNT A.F.G.	4753	0.859	42	42

Calculation Summary

Project: CHAMPLAIN TOWERS SOUTH - POOL AREA, REV 1 02/02/2021

Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min
POOL DECK	Illuminance	Fc	0.56	2.0	0.0	N.A.	N.A.
TOP LEFT AREA	Illuminance	Fc	0.75	1.9	0.1	7.50	19.00

NORTH

0 16' 32'
GRAPHIC SCALE

No.	Revision	Date

Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154

Drawing Title
LANDSCAPE LIGHTING PLAN

RHETT ROY
Landscape Architecture-Planning, P.A.
412 North Andrews Avenue
Fort Lauderdale, FL 33301
Florida License Number: LA393
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Phone 954 / 462-0704
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Herbert C. Hodgman
LA0001074

Drawn
HH

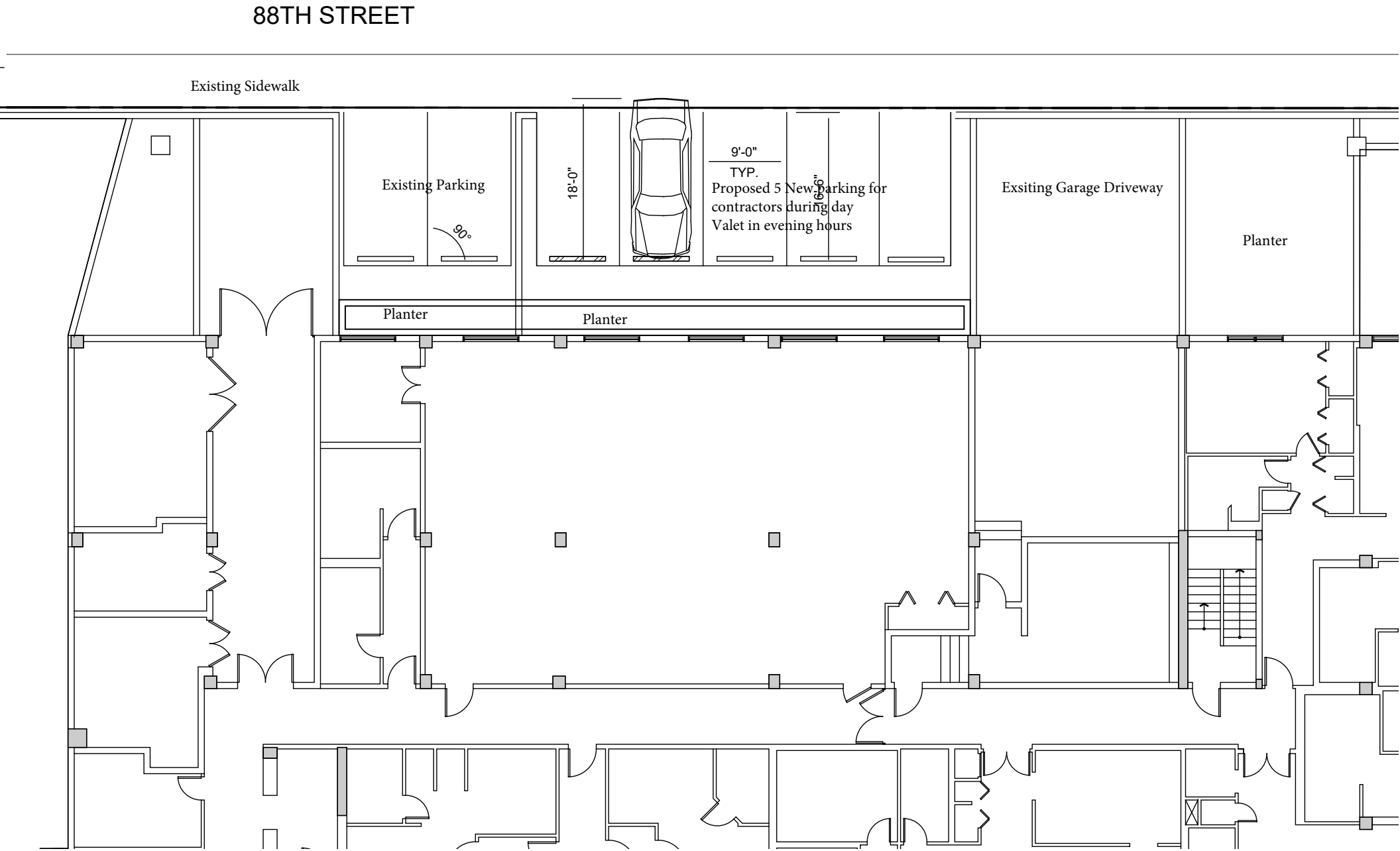
Project No.
19034

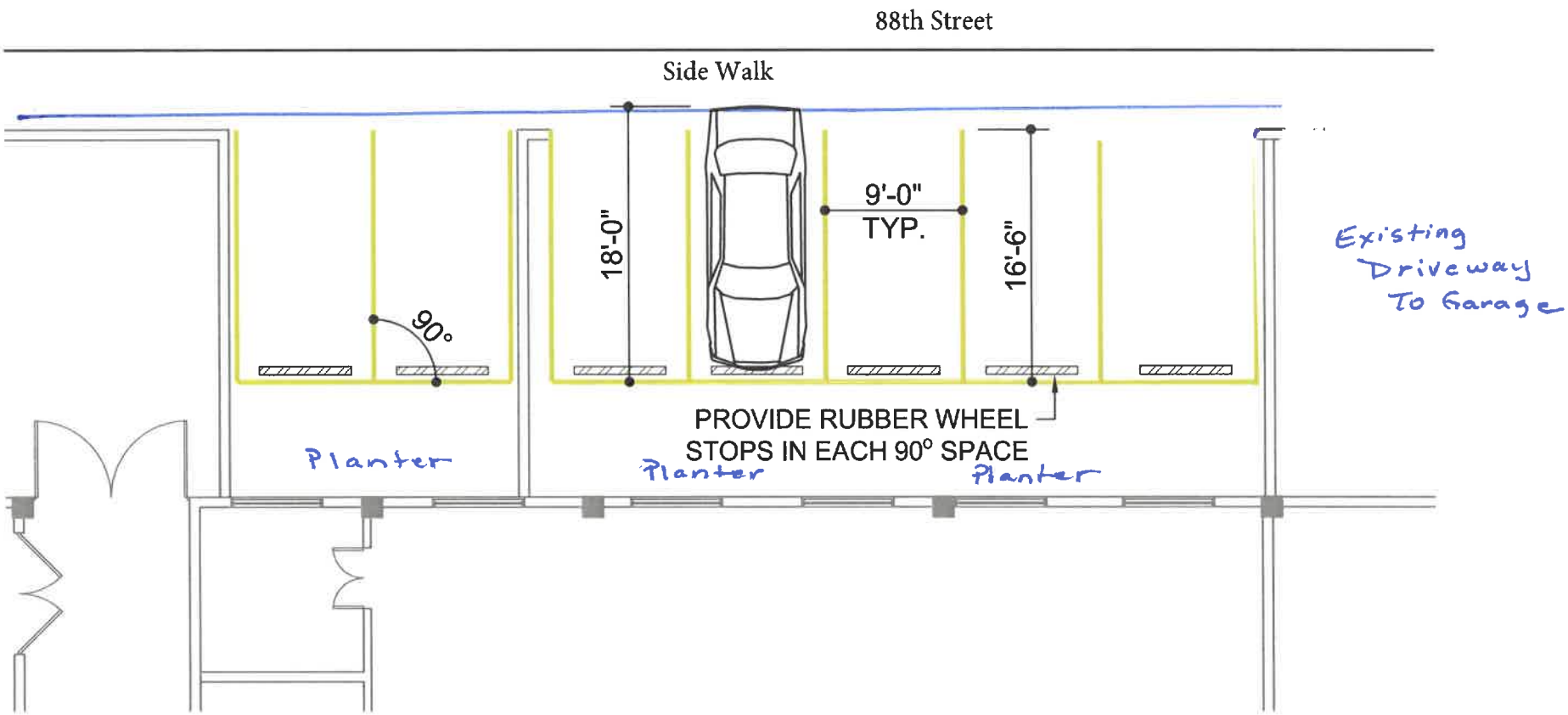
CAD File No.
19034

Date
3/31/2021

Scale
1/16" = 1'-0"

Drawing No.
LT-1


88TH STREET
Existing Sidewalk
Existing Parking
90°
18'-0"
9'-0"
TYP.
Proposed 5 New parking for
contractors during day
Valet in evening hours
Exsiting Garage Driveway
Planter
Planter
Planter


88th Street
Side Walk
18'-0"
9'-0"
TYP.
16'-6"
90°
PROVIDE RUBBER WHEEL
STOPS IN EACH 90° SPACE
Planter
Planter
Planter
Existing
Driveway
To Garage

88th Street
Entry/
Exit
Temp valet parking for diplaced cars from garage / deck as repairs are made to garage area.
Alt: Stagging / parking area for resteration crew. Day time use only.

EAST ELEVATION

WEST ELEVATION

Champlain Towers South

8777 Collins Ave. SURFSIDE , FL.

SOUTH ELEVATION

Preliminary COLOR CHART	BENJAMIN MOORE Classic Colors Color Preview
Color -- A -Main Bldg. Tower Color BM --- OC-28 Collingwood Color Preview	
Color -- B -Secondary . Accent Bldg.Color -Partial Accent Tower Base BM--- 1467 Baltic Gray Classic Colors	
Color -- C -Inner Coves Accent Color -Partial South Side Tower Color BM -1649 Polaris Blue Classic Colors	

SO ARCHITECT, P.A.

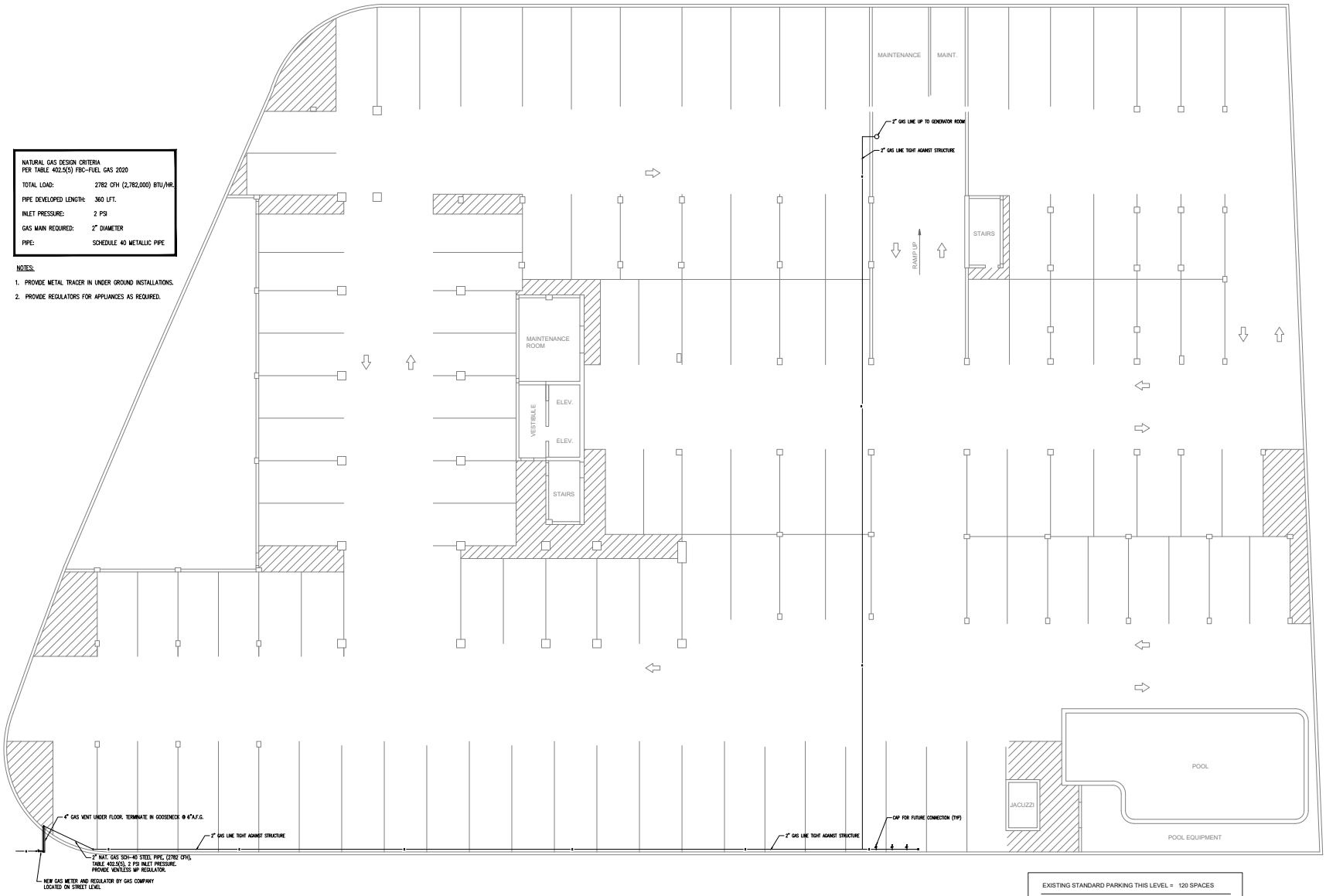
LLOYD WEEM ARTS

10-20-2020

NATURAL GAS DESIGN CRITERIA PER TABLE 402.5(5) FBC-FUEL GAS 2020	
TOTAL LOAD:	2782 CFH (2,782,000) BTU/HR.
PIPE DEVELOPED LENGTH:	360 LFT.
INLET PRESSURE:	2 PSI
GAS MAIN REQUIRED:	2" DIAMETER
PIPE:	SCHEDULE 40 METALLIC PIPE

NOTES:

1. PROVIDE METAL TRACER IN UNDER GROUND INSTALLATIONS.
2. PROVIDE REGULATORS FOR APPLIANCES AS REQUIRED.



EXISTING STANDARD PARKING THIS LEVEL =	120 SPACES
EXISTING PARKING THIS LEVEL =	120 SPACES

H.VIDAL & ASSOCIATES
CONSULTING ENGINEERS
241 N.W. SOUTH RIVER DRIVE
MIAMI, FL 33128
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VIDALENGINEERING.COM

CHAMPLAIN TOWERS SOUTH CONDOMINIUM

8777 COLLINS AVENUE
SURFSIDE, FLORIDA 33154

CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

SEAL

Henry A. Vidal, P.E.
PE #56204

morabito consultants
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206 Via Condado Way | Palm Beach Gardens, FL 33418-7201
Tel. 316.7660 | www.morabitoconsultants.com

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No.	Date	Revisions

DESIGNED G.V. / H.O.	DRAWN G.V. / H.O.
CHECKED H.V.	APPROVED H.V.

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: PLUMBING GAS GARAGE PLAN

Sheet No.: P-1

NATURAL GAS DESIGN CRITERIA PER TABLE 402.5(5) FBC-FUEL GAS 2020	
TOTAL LOAD:	2782 CFH (2,782,000) BTU/HR.
PIPE DEVELOPED LENGTH:	360 LFT.
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PIPE:	SCHEDULE 40 METALLIC PIPE

NOTES:

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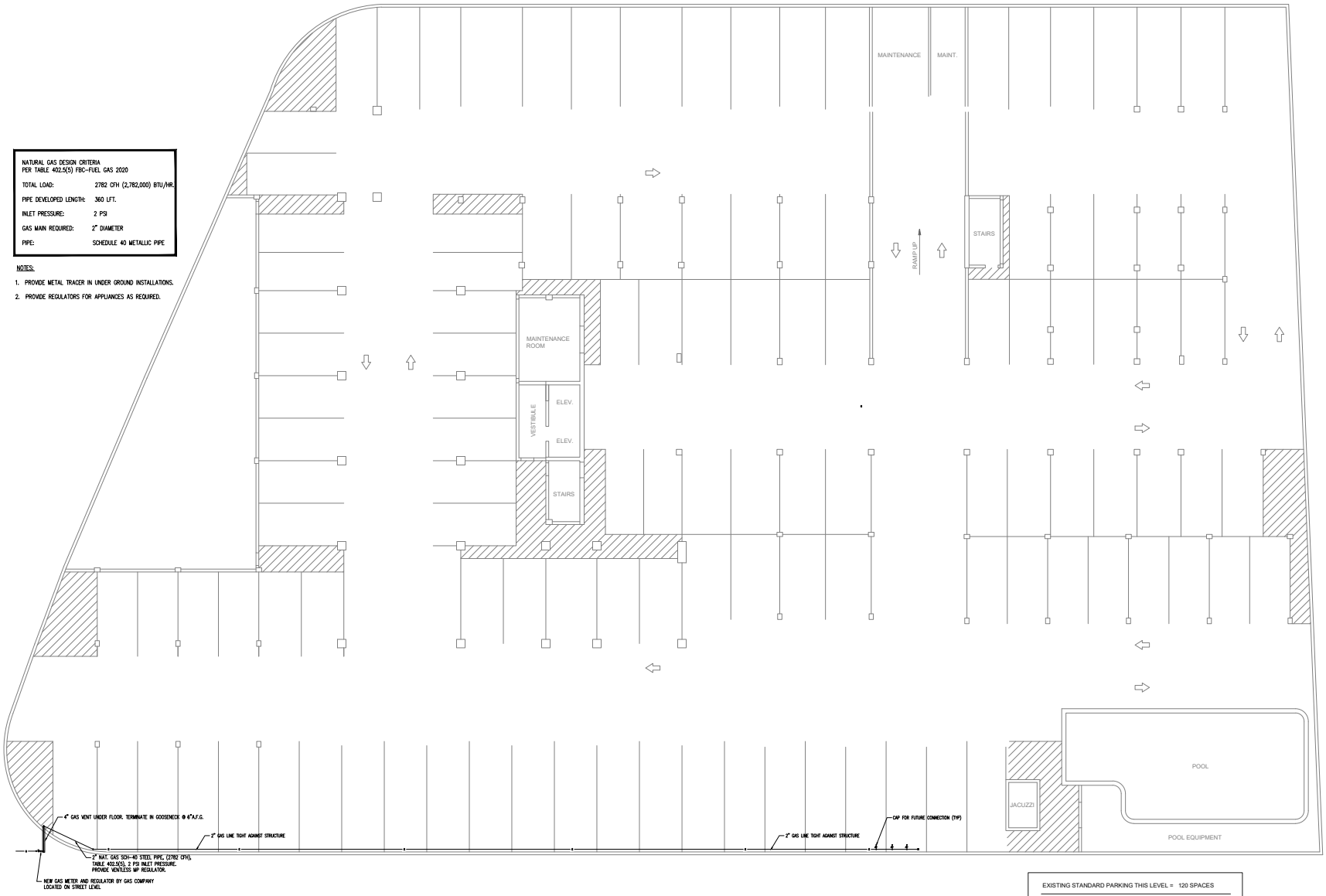
2. PROVIDE REGULATORS FOR APPLIANCES AS REQUIRED.



EXISTING STANDARD PARKING THIS LEVEL =	120 SPACES
EXISTING PARKING THIS LEVEL =	120 SPACES

BASEMENT PARKING PLAN - GAS

SCALE: 3/32"=1'-0"

H.VIDAL & ASSOCIATES

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CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

SEAL

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DESIGNED G.V. / H.O.	DRAWN G.V. / H.O.
CHECKED H.V.	APPROVED H.V.

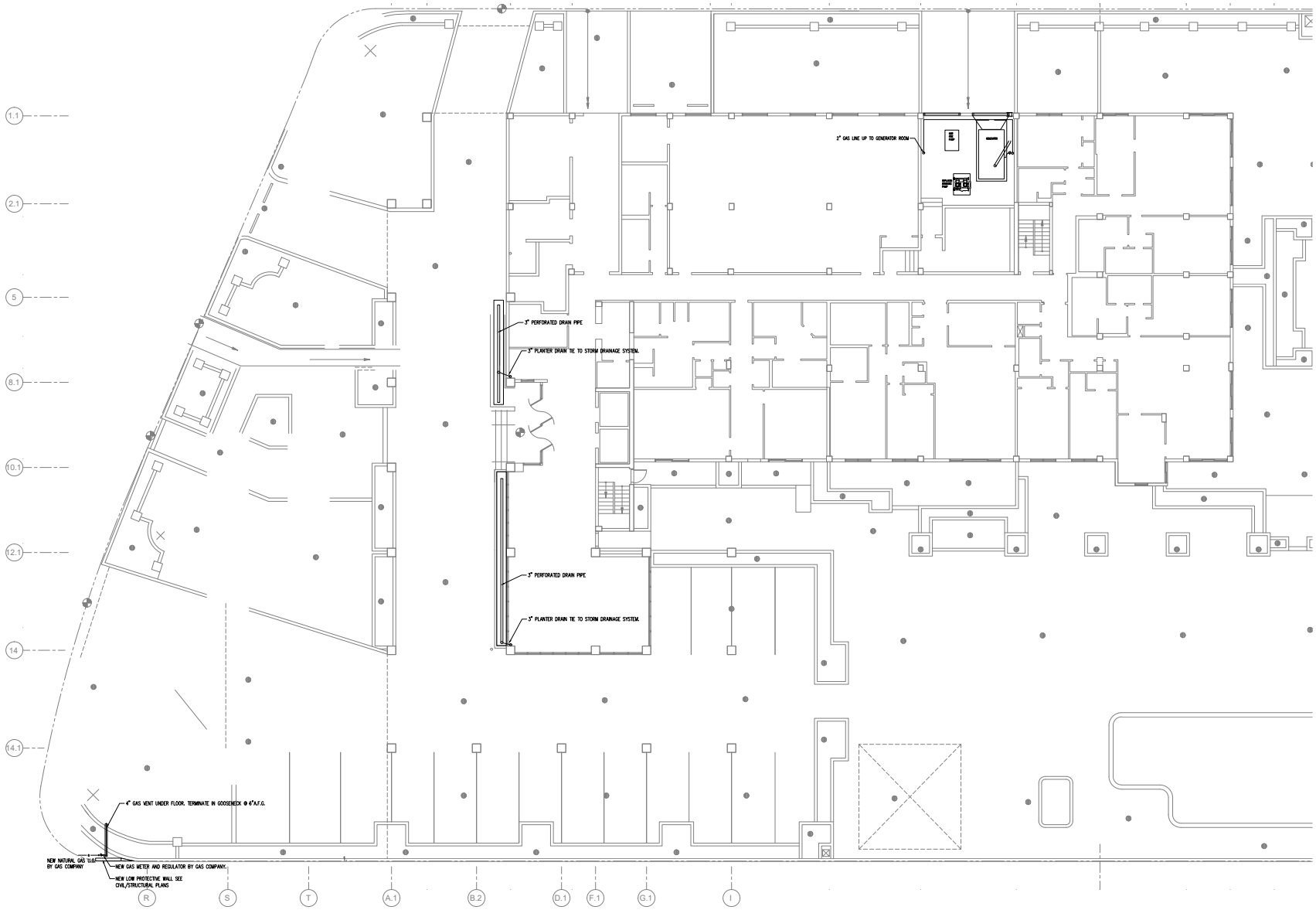
Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: NATURAL GAS BASEMENT PLAN

Sheet No.: P-1A



CHAMPLAIN TOWERS SOUTH CONDOMINIUM

8777 COLLINS AVENUE
SURFSIDE, FLORIDA 33154

CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

SEAL

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CHECKED H.V.	APPROVED H.V.

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title:
PLUMBING - FIRST FLOOR PARKING PLAN

Sheet No.:
P-2

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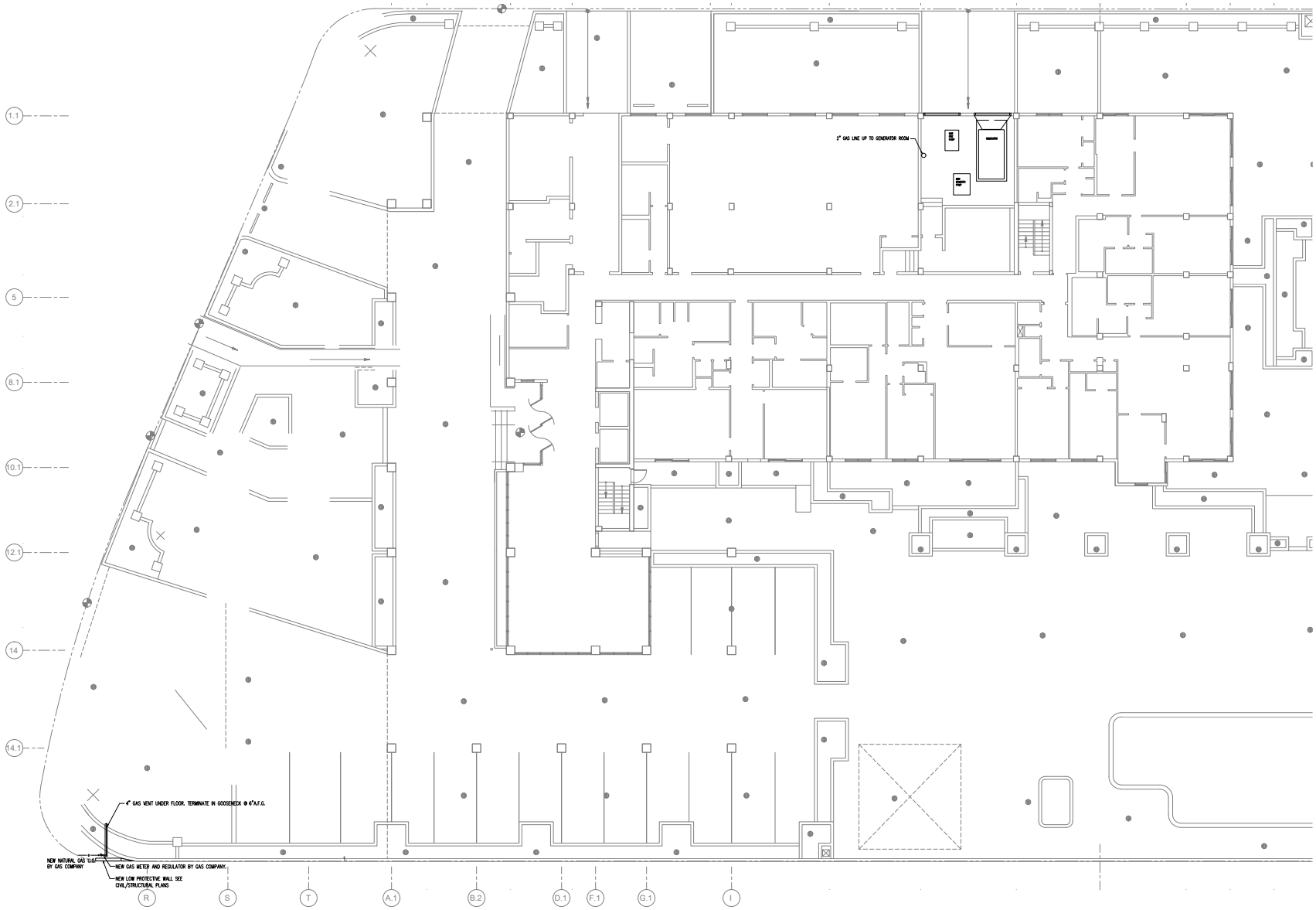

FIRST FLOOR PARKING PLAN - GAS

SCALE: 3/32"=1'-0"

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CHAMPLAIN TOWERS SOUTH 40-YEAR BUILDING REPAIR & RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

SEAL

Henry A. Vidal, P.E.
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