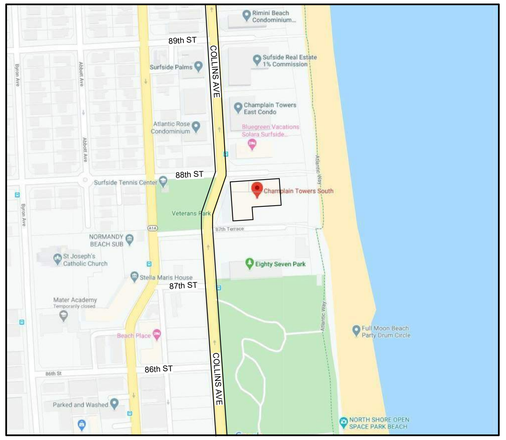


LOCATION MAP

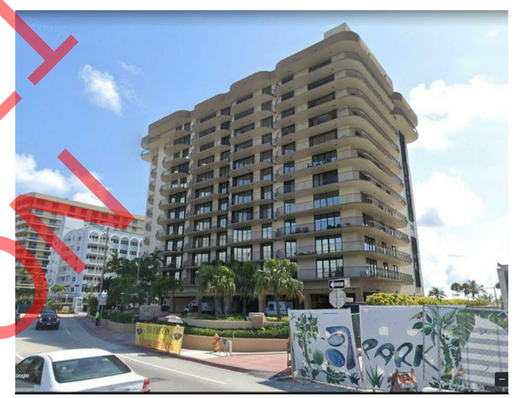
40 YEAR BUILDING REPAIR AND RESTORATION

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

CHAMPLAIN TOWERS SOUTH CONDOMINIUM

8777 COLLINS AVENUE
SURFSIDE, FLORIDA 33154

100% BID DOCUMENTS SET - 4/26/21



STREET VIEW

DRAWING LIST - PHASE IIC STRUCTURAL

DRAWING LIST - PHASE IIC ARCHITECTURAL

DRAWING LIST - PHASE IIC MEP

DRAWING LIST - PHASE IIC LANDSCAPE

SPECIFICATIONS

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

Project No.: 18217

Date: 04/26/21

Scale: As indicated

Sheet Title:
COVERSHEET

Sheet No.:
.C2C-1.0

GENERAL NOTES

CONTRACTORS RESPONSIBILITIES:

1. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTING. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT AND SHALL REMAIN THE CONTRACTOR'S PROPERTY.
2. CONTRACTOR SHALL VERIFY CONDITION IN THE FIELD AND IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY CONDITIONS NOT AS ASSUMED; HE SHALL TAKE FIELD MEASUREMENTS AS REQUIRED AND BE RESPONSIBLE FOR THE SAME.
3. CONTRACTOR SHALL COORDINATE WITH ALL RELATED TRADES FOR DETAILING, FABRICATION AND ERECTION PRIOR TO SUBMITTING SHOP DRAWINGS FOR APPROVAL.
4. ALL STRUCTURAL WORK SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC. REQUIREMENTS. DISCREPANCIES AND/OR INTERFERENCES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER IMMEDIATELY.
5. THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOBSITE SAFETY DURING CONSTRUCTION.
6. PROCESSING AND/OR APPROVED SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OF SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
7. THE ENGINEER IS NOT ENGAGED IN AND DOES NOT SUPERVISE CONSTRUCTION.

DEMOLITION:

1. REMOVE EXISTING CONSTRUCTION AS SHOWN ON PLANS. SEE SECTIONS AND DETAILS FOR EXTENT OF STRUCTURE TO BE REMOVED.
2. EXISTING STRUCTURAL ELEMENTS SHALL REMAIN UNLESS SPECIFICALLY NOTED ON PLAN TO BE REMOVED.
3. IF FIELD CONDITIONS DIFFER FROM THOSE SHOWN ON DRAWINGS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH DEMOLITION.

EXCAVATION SUPPORT SYSTEMS:

1. PROTECT THE SITE FROM CAVING AND UNACCEPTABLE SOIL MOVEMENT.
2. LOCATE THE SHORING SYSTEM TO CLEAR PERMANENT CONSTRUCTION AND TO PERMIT FORMING AND FINISHING OF CONCRETE SURFACES.
3. PROVIDE SHORING SYSTEM ADEQUATELY ANCHORED AND BRACED TO RESIST EARTH AND HYDROSTATIC PRESSURES.
4. THE CONTRACTOR SHALL EMPLOY AN INSPECTION AGENCY APPROVED BY THE A/E TO INSPECT THE SHEETING AND SHORING OPERATION TO ASSURE COMPLIANCE IN ALL REQUIREMENTS.
5. RESPONSIBILITY FOR ALL WORK SHALL BE ASSUMED BY THE CONTRACTOR. HE SHALL TAKE ALL PRACTICAL PRECAUTIONS TO ASSURE COMPLETE SAFETY AND SUFFICIENCY OF WORK PROVIDED UNDER THIS SECTION AND SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE.
6. SUBMIT SHEETING AND SHORING DESIGN DRAWINGS AND CALCULATIONS WITH THE CONSTRUCTION ENGINEER'S SEALS SHOWING METHODS, MATERIALS, LOADS, SEQUENCING, AND COORDINATION FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.

CONTROLLED FILL AND BACKFILL:

1. SAMPLES OF ALL MATERIALS THAT THE CONTRACTOR PROPOSES TO USE FOR COMPACTED FILL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
2. COMPACTED FILL SHALL CONSIST OF LOCAL MATERIAL FREE OF DELETERIOUS MATTER AND CLASSIFIED SP, SW, SM, SC, GP, GW, GM, OR GC PER ASTM D 2487.
3. THE CONTROL OF THE MOISTURE FOR PLACING THE FILL WILL BE BASED ON THE RESULTS OF COMPACTION TESTS PER ASTM D 1557.
4. ALL COMPACTED FILL SHALL HAVE A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557.
5. PRIOR TO PLACEMENT OF ANY FILLS, THE SITE SHALL BE STRIPPED OF ALL TOPSOIL, VEGETATION, ROCKS, AND ORGANIC MATERIALS AND THE EXPOSED SUBGRADE SHALL BE COMPACTED IN PLACE TO A CONFIRMED DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.
6. FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8" IN THICKNESS AND SHALL BE MIXED, SPREAD AND PLACED IN SUCH A WAY AS TO PRODUCE A UNIFORM THICKNESS OF MATERIAL AFTER PLACING.
7. EACH LAYER OF FILL SHALL BE COMPACTED WITH A MINIMUM OF 6 COMPLETE PASSES ON ALL PORTIONS OF THE SURFACE OF EACH LIFT OF FILL BY RUBBER TIRED ROLLERS, SHEEPS FOOT ROLLERS OR OTHER MECHANICAL EQUIPMENT APPROVED BY THE GEOTECHNICAL ENGINEER.
8. COMPACTED FILL PLACED WITHIN 4 FEET OF STRUCTURES AND PIPES SHOULD BE PLACED IN HORIZONTAL LIFTS NOT TO EXCEED 4 INCHES THICKNESS AND COMPACTED WITH HAND TAMPERS OR LIGHT COMPACTION EQUIPMENT TO THE SAME STANDARD.
9. HEAVY COMPACTION EQUIPMENT SHOULD NOT BE ALLOWED WITHIN 4 FEET OF STRUCTURES UNLESS A MINIMUM 2 FEET DEPTH OF FILL COVERS THE STRUCTURES.
10. WHENEVER IN PLACE DENSITIES ARE FOUND BELOW ACCEPTABLE LIMITS, ADDITIONAL ROLLING TO PRODUCE THE SPECIFIED DENSITIES SHALL BE REQUIRED.
11. THE CONTRACTOR SHALL TAKE ALL MEASURES REQUIRED TO PROVIDE FOR FREE DRAINAGE OF THE SITE AND TO PREVENT PONDING OF WATER. SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES.
12. PLACING OF FILL CONTAINING ORGANIC MATTER; PLACING OF FILL WITH MOISTURE CONTENT TOO HIGH OR TOO LOW FOR PROPER COMPACTION; PLACING OF FILL WHEN FREE WATER IS STANDING ON THE EXISTING FILL SURFACE; PLACING OF FILL IN A FROZEN CONDITION OR ON TOP OF FROZEN MATTER WILL NOT BE PERMITTED.
13. THE SOILS ENGINEER SHALL SUPERVISE THE PLACING OF THE COMPACTED FILL AND ALL THE MATERIAL AND EQUIPMENT USED FOR THIS PURPOSE AND SHALL MAKE SUCH SOILS TESTS AS MAY BE REQUIRED FOR THE COMPLETION OF THE WORK PERFORMING AT LEAST 6 IN PLACE DENSITY TESTS DURING EACH EIGHT HOUR SHIFT.

POST-INSTALLED ANCHORS:

1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.
2. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, FATIGUE, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
3. ANCHOR CAPACITY IS HIGHLY DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE/MASONRY. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS. IF EDGE DISTANCES OR ANCHOR SPACING IS NOT SPECIFIED ON THE DRAWINGS, PROVIDE THE FOLLOWING MINIMUM DISTANCES.
   A. EDGE DISTANCES
      a. ADHESIVE ANCHORS: 2 TIMES THE ANCHOR EMBEDMENT LENGTH
      b. UNDERCUT ANCHORS: 2.5 TIMES THE ANCHOR EMBEDMENT LENGTH
      c. EXPANSION ANCHORS (SLEEVE OR WEDGE): 4 TIMES THE ANCHOR EMBEDMENT LENGTH
   B. ANCHOR SPACING
      a. ALL ANCHORS: 3 TIMES THE ANCHOR EMBEDMENT
4. ANCHORS SHALL BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, BUILDING CODE, AND MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII).
5. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL POST-INSTALLED ANCHORS HAVE BEEN PROPERLY TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING FOR EACH SPECIFIC PRODUCT.
6. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS (AS DETERMINED BY THE ENGINEER) SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY THE ACI-CRSI "ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM".
7. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION BY AN INSPECTOR SPECIALLY APPROVED FOR THAT PURPOSE BY THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL FURNISH A REPORT TO THE STRUCTURAL ENGINEER OF RECORD AND BUILDING OFFICIAL THAT THE WORK COVERED BY THE REPORT HAS BEEN PROPERLY PERFORMED AND THAT THE MATERIALS USED AND THE INSTALLATION PROCEDURES USED CONFORM WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII).
8. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION. IF HIGH-EARLY STRENGTH CONCRETE MIXES ARE SPECIFIED, CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL OF MINIMUM INSTALLATION AGE.
9. EXISTING REINFORCING BARS OR PRESTRESSING STEEL IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TESTING TO LOCATE THE POSITION AND DEPTH OF THE REINFORCING BARS OR PRESTRESSING AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.
10. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES. ANCHORS EXPOSED TO WEATHER AND AT SILL PLATES SHALL BE STAINLESS STEEL.
    A. MECHANICAL ANCHORS IN CRACKED OR UNCRACKED CONCRETE USE:
       a. HILTI KWIK BOLT-TZ2 EXPANSION ANCHORS
       b. HILTI KWIK HUS-EZ AND KH-EZ I SCREW ANCHORS
    B. ADHESIVE ANCHORS IN CRACKED AND UNCRACKED CONCRETE USE:
       a. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HIT-Z ROD
       b. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH HAS-E THREADED ROD
    C. REBAR DOWELING INTO CONCRETE:
       a. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM
    D. ADHESIVE ANCHORS IN HOLLOW / GROUTED / MULTI-WYTHE MASONRY USE:
       a. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM
    E. MECHANICAL ANCHORS IN GROUTED MASONRY USE:
       a. HILTI KWIK BOLT-1 EXPANSION ANCHORS
       b. HILTI KWIK BOLT- EXPANSION ANCHORS
       c. HILTI KWIK HUS-EZ AND KH-EZ I SCREW ANCHORS

CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM TO ALL THE PROVISIONS OF THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318).
2. CONCRETE PROPERTIES FOR EACH STRUCTURAL ELEMENT IS DEFINED IN THE DESIGN DATA SECTION ON THIS SHEET.
3. CONCRETE SHALL CONFORM TO ALL THE PROVISIONS OF "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING" (ACI 305) AND "RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING" (ACI 306).
4. ALL FORMWORK SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE "FORMWORK FOR CONCRETE" SPECIAL PUBLICATION NO. 4 AND ACI'S "STANDARD RECOMMENDED PRACTICE FOR CONCRETE FORMWORK" (ACI 347).
5. CONCRETE MIX DESIGN SHALL BE BASED ON LABORATORY TRIAL BATCH METHOD DESCRIBED IN ACI-318. CONCRETE SHALL ALSO CONFORM TO THE FOLLOWING REQUIREMENTS.
6. THE MAXIMUM WATER CEMENT RATIO W/C SHALL NOT EXCEED 0.56 FOR ALL CONCRETE EXCEPT CONCRETE EXPOSED TO WEATHER WHICH SHALL NOT EXCEED 0.42.
7. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED.
8. THE MAXIMUM SLUMP OF ALL CONCRETE SHALL BE 4".
9. ALL CONCRETE SHALL BE CURED WITH LIQUID SEALING COMPOUND CONFORMING TO ASTM C-309, TYPE I AND FEDERAL SPECIFICATION TT-C-00800 OR OTHER APPROVED METHOD WHICH IS COMPATIBLE WITH FLOORING ADHESIVES AND OTHER SURFACE TREATMENTS.
10. ALL CONCRETE LEFT EXPOSED AT THE COMPLETION OF THE PROJECT SHALL BE TREATED WITH A CLEAR, PENETRATING ACRYLIC BASE POLYMER CAPABLE OF PREVENTING INFILTRATION OF WATER BORNE CHLORIDES SUCH AS "US CURE & SEAL" BY US CONCRETE PRODUCTS OR APPROVED EQUAL
11. CONTRACTOR SHALL SUPPORT ADJACENT STRUCTURES, UTILITIES, AND EXCAVATIONS AS REQUIRED FOR COMPLETION OF WORK.
12. ONE SET OF COMPRESSIVE TEST CYLINDERS FOR EACH 100 CUBIC YARDS POURED, BUT NOT LESS THAN ONE SET FOR EACH DAY'S POUR AND EACH CLASS OF CONCRETE, ALONG WITH SLUMP TESTS SHALL BE PERFORMED BY A TESTING LABORATORY APPROVED BY THE STRUCTURAL ENGINEER.
13. NO CONCRETE SHALL BE PLACED UNTIL CONCRETE DESIGN MIXES HAVE BEEN SUBMITTED FOR EACH CLASS OF CONCRETE AND HAVE BEEN APPROVED BY THE ENGINEER.
14. CONCRETE ON METAL DECK: THE CONTRACTOR SHALL CALCULATE AND INCLUDE ALL ADDITIONAL CONCRETE THAT MAY BE REQUIRED DURING PLACING DUE TO DEFLECTION OF STRUCTURE.
15. POLISHED CONCRETE SHALL BE NORMAL WEIGHT CONCRETE A MINIMUM COMPRESSIVE STRENGTH OF f'c = 4500 PSI. POLISHED CONCRETE SHALL NOT CONTAIN ANY AIR ENTRAINING ADD MIXTURES OR FLY ASH.

CONCRETE SUPERSTRUCTURE CONSTRUCTION:

1. FLOOR SLABS SHALL BE FINISHED TO A MINIMUM FLATNESS F-NUMBER Ff = 30 AND A MINIMUM LEVELNESS F-NUMBER F1 = 25 IN ANY DIRECTION.
2. LOADS GREATER THAN THE DESIGN LIVE LOADS SHALL NOT BE PLACED ON THE STRUCTURE.
3. A CONCRETE STRUCTURE MAY NOT SUPPORT ITS DESIGN LIVE LOAD FOR 28 DAYS.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL TEMPORARY FORMWORK INCLUDING STRIPPING PROCEDURES FOR CONCRETE FLAT SLABS, SHEETING, SHORING, UNDERPINNING, ETC. SEALED BY A REGISTERED PROFESSIONAL ENGINEER AS PART OF THE CONTRACTOR'S WORK.
5. DO NOT PLACE CONDUITS AND/OR PIPES IN THE PLANE OF SLABS OR WALLS WITHOUT PRIOR APPROVAL OF THE ARCHITECT/ENGINEER.
6. SUBMIT FLOOR PENETRATION LAYOUT COORDINATION DRAWINGS / ELECTRONIC FILES:
   A. FLOOR PENETRATIONS AFFECT THE STRUCTURAL CAPACITY OF THE FLOOR SYSTEM. THEREFORE, TO VERIFY THAT THE FLOOR PENETRATIONS LAID OUT BY THE CONTRACTOR DO NOT ADVERSELY AFFECT THIS CAPACITY, COORDINATION DRAWINGS OF THE FLOOR PENETRATIONS ARE TO BE SUBMITTED FOR APPROVAL.
   B. SOLE PURPOSE OF MORABITO CONSULTANTS REVIEW IS TO APPROVE THE LAYOUT RELATIVE TO THE IMPACT IT HAS ON THE STRUCTURE. WHETHER OR NOT THE LAYOUT COMPLIES WITH THE CONTRACT DOCUMENTS RELATIVE TO ANY ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION OR COMMUNICATION CRITERIA WILL NOT BE REVIEWED AND APPROVAL IN NO WAY AUTHORIZES THE CONTRACTOR TO DEVIATE FROM THE CONTRACT DOCUMENTS.
   C. OBTAIN FROM ARCHITECT ELECTRONIC BASE FILES OF THE ARCHITECTURAL AND STRUCTURAL FLOOR PLANS FOR USE IN CREATING THE FLOOR PENETRATION LAYOUT COORDINATION DRAWINGS.
   D. SUBMIT ELECTRONIC CAD FILES IN AUTOCAD OF FLOOR PENETRATION LAYOUT COORDINATION DRAWINGS SHOWING:
      a. ARCHITECTURAL AND STRUCTURAL BACKGROUND.
      b. OPENING SIZE
      c. OPENING LOCATION DIMENSIONED RELATIVE TO GRID LINES.
      d. ALL OPENINGS FOR MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND COMMUNICATION SHALL BE SHOWN ON THE SAME DRAWINGS

CORE DRILLING:

1. THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TESTING TO LOCATE THE POSITION AND DEPTH OF THE REINFORCING BARS OR PRESTRESSING AT THE LOCATIONS OF THE PROPOSED CORE, BY HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.
2. CORE DRILLED HOLES SHALL ONLY BE ALLOWED THRU THE CONVENTIONALLY REINFORCED ONE-WAY SLABS UNLESS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS.
3. ALL NEW HOLES SHALL BE LOCATED SUCH THAT THEY AVOID EXISTING PRIMARY SLAB REINFORCING.
4. SLAB TEMPERATURE REINFORCING MAY BE CUT WITH APPROVAL FROM DESIGN TEAM.
5. IF THE OPENINGS CAN NOT BE RELOCATED AWAY FROM PRIMARY REBAR, SUBMIT RFI TO MORABITO CONSULTANTS REQUESTING APPROVAL PRIOR TO CUTTING ANY BARS.

REINFORCING STEEL:

1. REINFORCING STEEL SHALL BE DEFORMED BARS IN ACCORDANCE WITH ASTM A 615, GRADE 60.
2. BENDS AND HOOKS ARE TO BE FABRICATED IN ACCORDANCE WITH ACI SP-66 ACI DETAILING MANUAL AND AS PER DETAILS.
3. PLACE MAIN REINFORCING STEEL SO AS TO PROVIDE 3" MINIMUM COVER FOR FOUNDATIONS POURED ON EARTH, 2" MINIMUM COVER FOR BEAMS AND COLUMNS, 3/4" MINIMUM COVER FOR SLABS AND 1 1/2" FOR ALL REBAR IN EXPOSED CONCRETE (EXCEPT AS OTHERWISE IN DETAILS).
4. LAP DEFORMED BARS IN ACCORDANCE WITH LAP SPLICE SCHEDULE ON THESE DRAWINGS, UNO.
5. HOOKS SHALL BE STANDARD HOOKS, UNO.
6. PROVIDE ACCESSORIES AND BAR SUPPORTS IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315).
7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 1064, UNO.
8. END LAPS OF ALL WWF REINFORCING SHALL BE LAPPED (1) SQUARE
9. CONCRETE ENGINEERED REINFORCING FIBERS SHALL BE POLYPROPYLENE, COLLATED, FIBRILLATED FIBERS FROM FIBERMESH, INC. INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

STRUCTURAL COLD FORMED METAL FRAMING:

1. ALL STUDS AND RUNNERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A-653, CQ, WITH A MINIMUM YIELD STRENGTH OF 33 KSI FOR 18 AND 20 GAUGE STEEL, ASTM A-653, SQ, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR 16 GAUGE OR HEAVIER, AND SHALL BE DESIGNED IN ACCORDANCE WITH AMERICAN IRON & STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL MEMBERS."
2. ALL STUDS AND RUNNERS SHALL BE GALVANIZED PER ASTM A-955, G60 AND HAVE THE MINIMUM PHYSICAL PROPERTIES BASED ON THE "MARINO/WARE LIGHTWEIGHT STEEL FRAMING MEMBERS AS REQUIRED BY THE DETAILS ON THESE DRAWINGS.
3. THE MAXIMUM ALLOWABLE WEB PUNCHING FOR ALL "C" SHAPED STRUCTURAL STUDS SHALL BE ONE (1) INCH DIAMETER HOLES AT 30" o/c.
4. HORIZONTAL STIFFENERS SHALL BE INSTALLED IN THE STUD SYSTEM AT NOT MORE THAN 4'-0" o/c VERTICALLY.
5. THE FASTENING OF COMPONENTS SHALL BE OF WELDS OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE CONNECTION.
6. ALL WELDS AND ANY PROTECTIVE COATINGS DAMAGED DURING HANDLING AND INSTALLATION SHALL BE TOUCHED UP WITH A ZINC RICH PAINT.
7. ENGINEERING CALCULATIONS SHALL BE PREPARED, SEALED, AND SUBMITTED FOR ALL MEMBERS NOT SPECIFICALLY SPECIFIED INCLUDING SIZE AND CONNECTIONS OF ALL COMPONENTS.
8. CONTRACTOR SHALL PROVIDE ADDITIONAL JOISTS, TRUSSES, RAFTERS, STUDS, TRACKS, ETC. BEYOND THAT PRESENTLY SHOWN ON THESE DOCUMENTS TO ASSURE THE ROOF AND EXTERIOR WALL SYSTEM IS COMPLETE AND SUFFICIENT TO MEET ALL OF THE REQUIREMENTS OF THE CODE.

EXISTING CONDITIONS:

1. ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES SHOWN ON THE DRAWINGS ARE OBTAINED FROM AVAILABLE SOURCES, AND ARE NOT GUARANTEED TO BE TRUE AND EXACT. THE GENERAL CONTRACTOR SHALL VERIFY THESE DIMENSIONS AND ELEVATIONS BY ACTUAL FIELD MEASUREMENTS PRIOR TO FABRICATION OF ANY MATERIALS AND START OF ANY WORK, AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER.
2. FOR ADDITIONAL INFORMATION ON THE EXISTING CONSTRUCTION, THE CONTRACTOR SHALL REFER TO DRAWINGS OF THE EXISTING STRUCTURE.
3. IN AS MUCH AS THE REMODELING AND/OR REHABILITATION OF AN EXISTING BUILDING REQUIRES THAT CERTAIN ASSUMPTIONS BE MADE REGARDING EXISTING CONDITIONS, AND BECAUSE SOME OF THESE ASSUMPTIONS CANNOT BE VERIFIED WITHOUT EXPENDING GREAT SUMS OF ADDITIONAL MONEY, OR DESTROYING OTHERWISE ADEQUATE OR SERVICEABLE PORTIONS OF THE BUILDING, THE OWNER AGREES THAT, EXCEPT FOR NEGLIGENCE ON THE PART OF MORABITO CONSULTANTS, THE OWNER WILL HOLD HARMLESS AND INDEMNIFY MORABITO CONSULTANTS FOR AND AGAINST ANY AND ALL CLAIMS, DAMAGES, AWARDS, AND COSTS OF DEFENSE ARISING OUT OF DEFICIENCIES IN THE ORIGINAL BUILDING STRUCTURE.

LOAD LIMITATIONS:

1. CONSTRUCTION ACTIVITIES SHALL NOT EXCEED THE FOLLOWING LOAD LIMITATIONS:
   TYPICAL FLOOR 50 PSF
   TYPICAL ROOF 20 PSF
1. CONSTRUCTION LOADS IMPOSED BY HEAVY EQUIPMENT OR OTHER CONSTRUCTION ACTIVITY THOUGHT TO EXCEED THIS LIMIT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR APPROVAL

OWNERSHIP OF DOCUMENTS:

1. THE CONTRACTOR ACKNOWLEDGES THESE PLANS AND SPECIFICATIONS PREPARED BY MORABITO CONSULTANTS, INC., AS INSTRUMENTS OF PROFESSIONAL SERVICE.
2. NEVERTHELESS, THE PLANS AND SPECIFICATIONS PREPARED UNDER THIS AGREEMENT SHALL REMAIN THE PROPERTY OF MORABITO CONSULTANTS, INC. UPON COMPLETION OF THE WORK.
3. THE CONTRACTOR AGREES TO HOLD HARMLESS AND INDEMNIFY MORABITO CONSULTANTS, INC., AGAINST ALL DAMAGES, CLAIMS, AND LOSSES, INCLUDING DEFENSE COSTS, ARISING OUT OF ANY REUSE OF THE PLANS AND SPECIFICATIONS WITHOUT THE WRITTEN AUTHORIZATION OF MORABITO CONSULTANTS, INC.

EXISTING CONDITIONS:

1. ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES SHOWN ON THE DRAWINGS ARE OBTAINED FROM AVAILABLE SOURCES, AND ARE NOT GUARANTEED TO BE TRUE AND EXACT. THE GENERAL CONTRACTOR SHALL VERIFY THESE DIMENSIONS AND ELEVATIONS BY ACTUAL FIELD MEASUREMENTS PRIOR TO FABRICATION OF ANY MATERIALS AND START OF ANY WORK, AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER.
2. FOR ADDITIONAL INFORMATION ON THE EXISTING CONSTRUCTION, THE CONTRACTOR SHALL REFER TO DRAWINGS OF THE EXISTING STRUCTURE.
3. IN AS MUCH AS THE REMODELING AND/OR REHABILITATION OF AN EXISTING BUILDING REQUIRES THAT CERTAIN ASSUMPTIONS BE MADE REGARDING EXISTING CONDITIONS, AND BECAUSE SOME OF THESE ASSUMPTIONS CANNOT BE VERIFIED WITHOUT EXPENDING GREAT SUMS OF ADDITIONAL MONEY, OR DESTROYING OTHERWISE ADEQUATE OR SERVICEABLE PORTIONS OF THE BUILDING, THE OWNER AGREES THAT, EXCEPT FOR NEGLIGENCE ON THE PART OF MORABITO CONSULTANTS, THE OWNER WILL HOLD HARMLESS AND INDEMNIFY MORABITO CONSULTANTS FOR AND AGAINST ANY AND ALL CLAIMS, DAMAGES, AWARDS, AND COSTS OF DEFENSE ARISING OUT OF DEFICIENCIES IN THE ORIGINAL BUILDING STRUCTURE.

LOAD LIMITATIONS:

1. CONSTRUCTION ACTIVITIES SHALL NOT EXCEED THE FOLLOWING LOAD LIMITATIONS:
   ROOFS: 20 PSF
   TYPICAL FLOORS: 50 PSF
   PLAZA LEVEL: 100 PSF
2. CONSTRUCTION LOADS IMPOSED BY HEAVY EQUIPMENT OR OTHER CONSTRUCTION ACTIVITY THOUGHT TO EXCEED THIS LIMIT SHALL BE EVALUATED BY AN INDEPENDENT ENGINEER TO BE HIRED BY THE CONTRACTOR AND SUBMITTED TO THE ARCHITECT/ENGINEER-OF-RECORD FOR APPROVAL

OWNERSHIP OF DOCUMENTS:

1. THE CONTRACTOR ACKNOWLEDGES THESE PLANS AND SPECIFICATIONS PREPARED BY MORABITO CONSULTANTS, INC., AS INSTRUMENTS OF PROFESSIONAL SERVICE.
2. NEVERTHELESS, THE PLANS AND SPECIFICATIONS PREPARED UNDER THIS AGREEMENT SHALL REMAIN THE PROPERTY OF MORABITO CONSULTANTS, INC. UPON COMPLETION OF THE WORK.
3. THE CONTRACTOR AGREES TO HOLD HARMLESS AND INDEMNIFY MORABITO CONSULTANTS, INC., AGAINST ALL DAMAGES, CLAIMS, AND LOSSES, INCLUDING DEFENSE COSTS, ARISING OUT OF ANY REUSE OF THE PLANS AND SPECIFICATIONS WITHOUT THE WRITTEN AUTHORIZATION OF MORABITO CONSULTANTS, INC.

DESIGN DATA:

BUILDING CODE: FLORIDA BUILDING CODE 7TH ED - FBC 2020, EXISTING FBC 2020

CONCRETE:

NORMAL WEIGHT CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c) AS FOLLOWS:

ALL CONCRETE, UNO	4000 PSI

REINFORCING STEEL: Fy = 60,000 PSI

STRUCTURAL STEEL:

W & WT SHAPES	ASTM A-992	Fy = 50,000 PSI, UNO
M & MT SHAPES	ASTM A-36	Fy = 36,000 PSI, UNO
S & ST SHAPES	ASTM A-36	Fy = 36,000 PSI, UNO
HP SHAPES	ASTM A-36	Fy = 36,000 PSI, UNO
CHANNELS	ASTM A-36	Fy = 36,000 PSI, UNO
ANGLES	ASTM A-36	Fy = 36,000 PSI, UNO
RECTANGULAR & SQUARE HSS	ASTM A-500 GR. B	Fy = 46,000 PSI, UNO
ROUND HSS	ASTM A-500 GR. B	Fy = 42,000 PSI, UNO
STEEL PIPE	ASTM A-53 GR. B	Fy = 35,000 PSI, UNO
STEEL PLATES & BARS	ASTM A-36	Fy = 36,000 PSI, UNO
ANCHOR BOLTS	ASTM F-1554	Fy = 36,000 PSI, UNO

STRUCTURAL ALUMINUM (UNO):

SHEET & PLATE UP TO 4" THICK	6061-T6 (Ftu = 42 KSI, Fty = 35 KSI)*
BARS, WIRE, AND ROD	6061-T6 (Ftu = 42 KSI, Fty = 35 KSI)*
EXTRUSIONS, TUBE, PIPES, & FORGINGS	6061-T6 (Ftu = 38 KSI, Fty = 35 KSI)*

*NOMINAL STRESSES. WELD-AFFECTED STRESSES ACCOUNTED FOR WHERE REQUIRED

WELD FILLER (AWS D1.2)	5356 (Ftuw = 35 KSI, Ftyw = 14 KSI)
BOLTS (ASTM F468 / B316)	2024-T4 (Fsu = 37 KSI, Ftu = 62 KSI)

LIVE LOADS:

RESIDENTIAL =	40 PSF
PARKING =	40 PSF
PUBLIC SPACES =	100 PSF
GREEN ROOF w/ ACCESS =	100 PSF
GREEN ROOF w/o ACCESS =	20 PSF
STAIRS =	100 PSF
ROOF =	20 PSF
PARTITIONS =	15 PSF

SUPERIMPOSED DEAD LOADS:

RESIDENTIAL =	6 PSF
ROOF =	11 PSF
PAVER TERRACE WITH TOPPING =	85 PSF
GREEN ROOF =	120 PSF + TREES

WIND LOAD ASCE 7-16 /FBC-2020

1. ULTIMATE WIND SPEED: V = 175 MPH
2. RISK CATEGORY II
3. EXPOSURE CATEGORY D
4. INTERNAL PRESSURE COEFFICIENT = ±0.18
5. DIRECTIONALITY: Kd = 0.85

COMPONENTS & CLADDING PRESSURE - WALLS (LRFD)

	WINWARD	LEEWARD	
TRIB. AREA	ZONES 4 & 5*	ZONE 4	ZONE 5*
<20 SF	107.8 PSF	-107.8 PSF	-197.6 PSF
50 SF	99.2 PSF	-102.1 PSF	-174.8 PSF
200 SF	86.4 PSF	-93.5 PSF	-140.5 PSF
>500 SF	77.8 PSF	-87.8 PSF	-117.7 PSF

*ZONE 5 WIDTH = 8.4 FT

FLOOD LOADING – ASCE 24-14 & 7-16

1. STRUCTURE FLOOD DESIGN CLASS	2
2. FEMA FIRM MAP PANEL	0326L (MAIMI-DADE COUNTY)
3. FLOOD ZONE	X
4. LOMR 15-04-3498P EFFECTIVE 2/5/16	

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants

Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED HR/JB/RM
DRAWN HR/JB/RM
CHECKED RM
APPROVED FPM

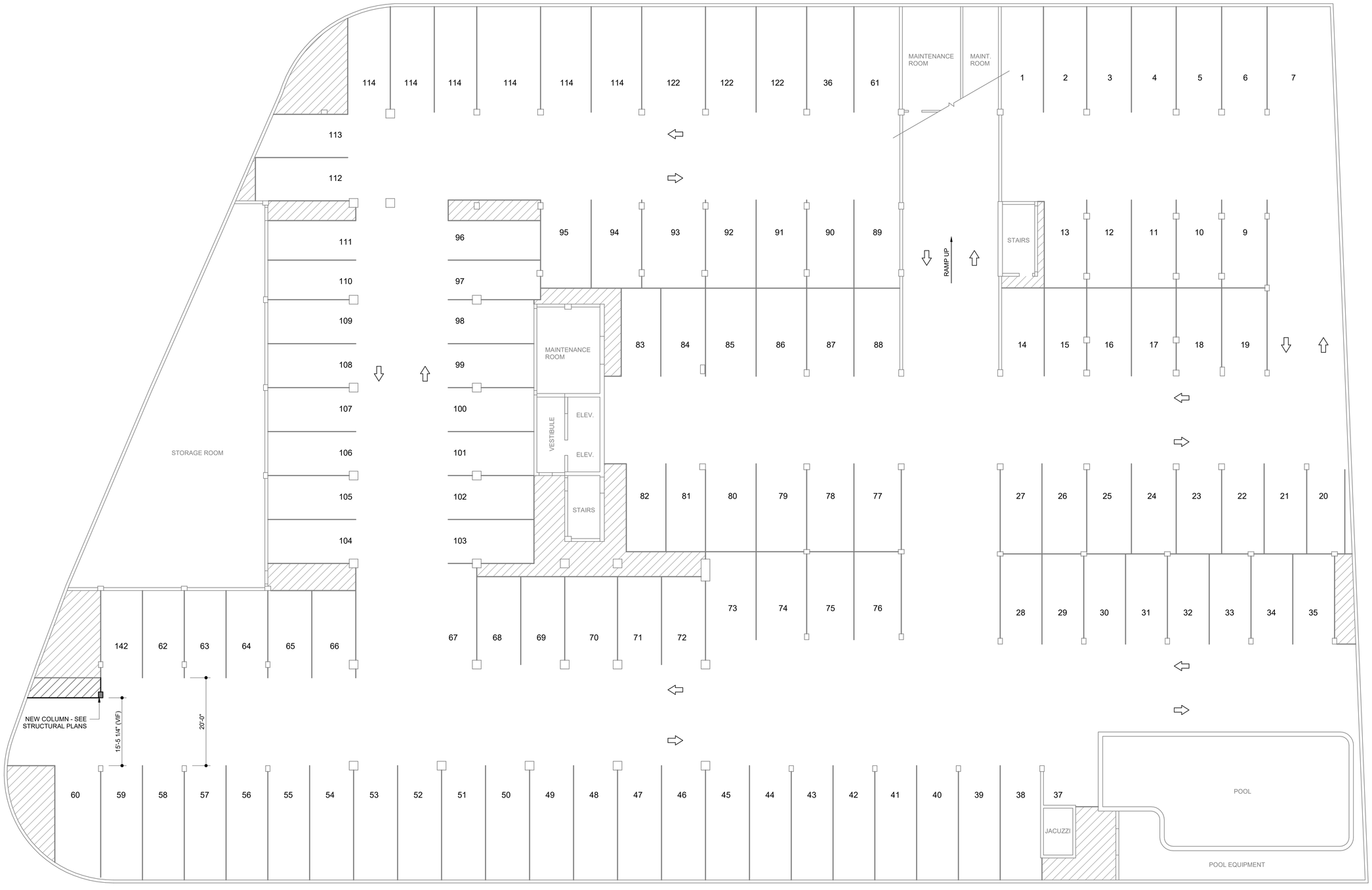
Project No.: 18217

Date: 04/26/21

Scale:

Sheet Title:
GENERAL NOTES &
DESIGN DATA

Sheet No.:
.C2C-1.1



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES, DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLABS BEARING ON CAST-IN-PLACE CONCRETE COLUMNS OVER A FRAMED CONCRETE SLAB ON GRADE SUPPORTED BY PILE CAPS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. ALL STRIPING SHALL BE 4" IN WIDTH.
6. ALL NON-PARKING AREAS SHALL HAVE 4" WIDE PAINTED STRIPING AT 1'-6" o/c.
7. ALL STRIPING FOR THE STANDARD STALLS AND ASSOCIATED NON-PARKING AREAS SHOULD BE YELLOW.
8. ALL STRIPING FOR THE HANDICAP STALLS AND ASSOCIATED NON-PARKING AREAS SHOULD BE SKY BLUE. THE HANDICAP FIGURE SHOULD BE WHITE WITH A SKY-BLUE BACKGROUND.
9. PARKING SPACE NUMBERING IN 6" LETTERING TO END OF PARKING SPACE AND ON COLUMN ADJACENT TO SPACE PER PAINT SPECIFICATION SECTION 09 9120. PARKING SPACE NUMBERING AS NOTED ON THIS SHEET.
10. APPLY SILANE SEALER TO ALL CONCRETE SLAB ON GRADE AREAS. SEE SPECIFICATION 03 0100.

EXISTING STANDARD PARKING THIS LEVEL = 120 SPACES

EXISTING PARKING THIS LEVEL = 120 SPACES

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

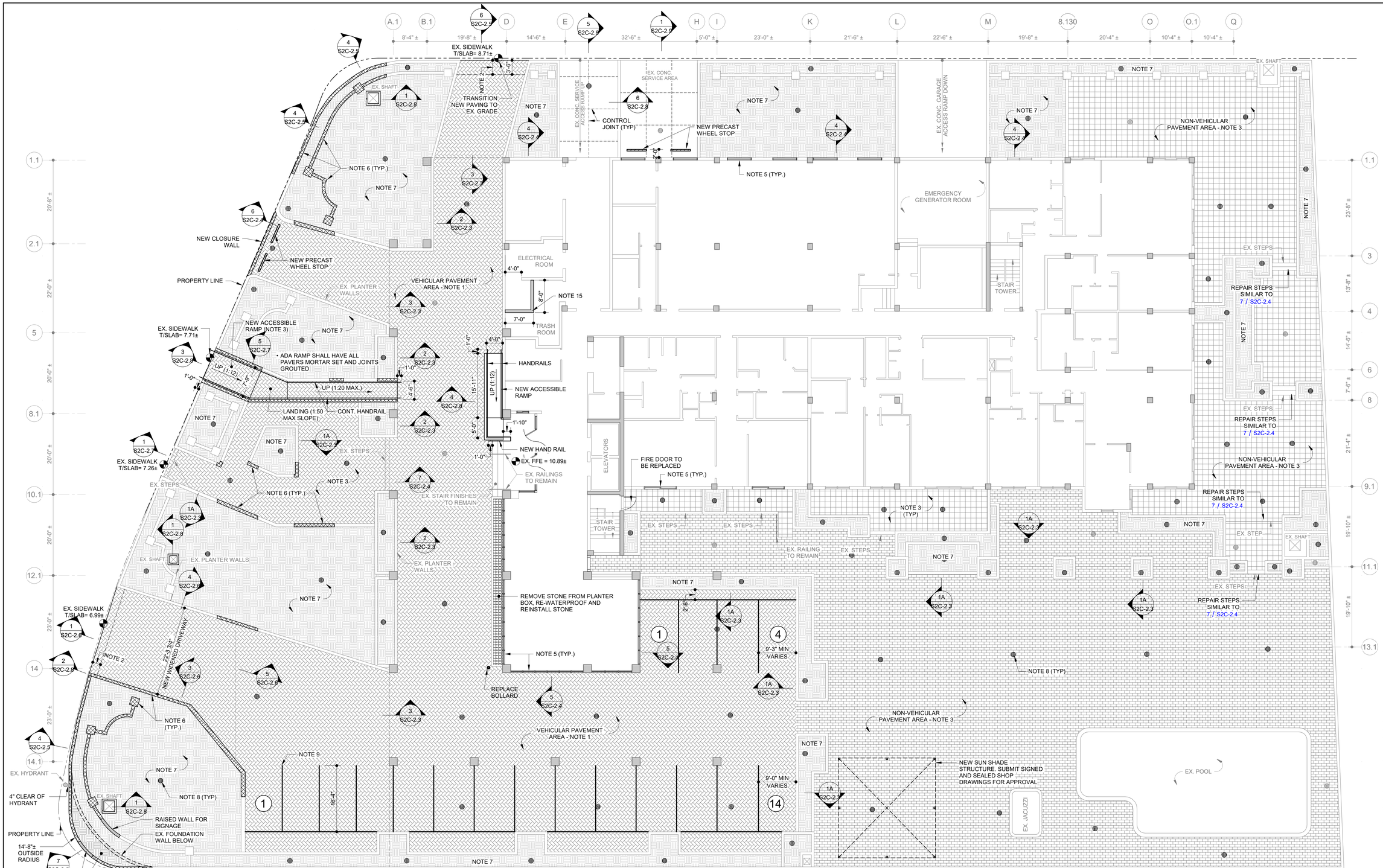
Project No.: 18217

Date: 04/26/21

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

Sheet Title: BASEMENT PARKING PLAN

Sheet No.: A2C-0.5



PLAN NOTES

1. TYPICAL VEHICULAR PAVEMENT SYSTEM SHALL BE 2-3/8" CONCRETE INTERLOCKING PAVERS OVER 1" SETTING BED CONSISTING OF A BLEND OF 3 PARTS ASTM C33 SAND AND 1 PART DRY TYPE IV (LOW HEAT HYDRYATION) PORTLAND CEMENT. SEE LANDSCAPE ARCHITECT PLANS FOR PAVER STYLES AND PATTERNS. TYPICAL PAVER JOINTS SHALL HAVE POLYMERIC AGGREGATE. SEE SPECIFICATION SECTION 32 14 00 FOR ADDITIONAL REQUIREMENTS. PAVER SYSTEM TO BE PLACED OVER SLOPED CONCRETE TOPPINGS PER STRUCTURAL PLANS.
2. VEHICULAR PAVEMENT AREAS AT TRANSITIONS TO SIDEWALK / ROADWAY SHALL BE MORTAR SET ON DRAINAGE BOARD FOR MINIMUM 2'-0" WIDTH, UNO. MORTAR SET PAVERS SHALL HAVE GROUTED JOINTS. SEE SPECIFICATION SECTION 32 14 00 FOR MORTAR AND GROUT REQUIREMENTS. SEE SHEET WP-6 FOR MORTAR SET DETAILS.
3. TYPICAL NON-VEHICULAR PAVEMENT SYSTEM SHALL BE 2-3/8" CONCRETE INTERLOCKING PAVERS OVER 1" SETTING BED CONSISTING OF ASTM C33 SAND. SEE LANDSCAPE ARCHITECT PLANS FOR PAVER STYLES AND PATTERNS. TYPICAL PAVER JOINTS SHALL HAVE POLYMERIC AGGREGATE. SEE SPECIFICATION SECTION 32 14 00 FOR ADDITIONAL REQUIREMENTS. PAVER SYSTEM TO BE PLACED OVER SLOPED CONCRETE TOPPINGS PER STRUCTURAL PLANS.
4. ALL STEP RISER AND TREAD PAVERS SHALL BE MORTAR SET ON DRAINAGE BOARD AND JOINT GROUTED. SEE SPECIFICATION SECTION 32 14 00 FOR MORTAR AND GROUT REQUIREMENTS. SEE SHEET WP-6 FOR MORTAR SET DETAILS.
5. REPLACE GLASS WINDOWS AND DOORS AT FIRST FLOOR COMMON AREAS AS NOTED ON PLAN. REPLACEMENT WINDOWS AND DOORS SHALL HAVE AN APPROVED NOA MEETING THE REQUIREMENTS OF THE 2020 FBC. REPLACEMENT INCLUDES NEW WOOD BUCKS, WATERPROOFING OF MASONRY OPENING AND WOOD BUCKS, AND PLACEMENT OF TEMPORARY WEATHER WALLS TO PROTECT THE INTERIOR DURING DOOR REPLACEMENT STRUCTURAL REINFORCEMENTS.
6. NEW PLANTER WALLS ARE INDICATED ON PLAN THUS: [▨] AND BE TOOTHED INTO EXISTING CMU TO REMAIN.
7. NEW SOIL AND PLANTING MATERIAL SHALL BE LIGHTWEIGHT (80 PCF MAX.) AND SHALL NOT EXCEED 1'-6" DEEP, EXCEPT AT TREE LOCATIONS. CONTRACTOR SHALL PROVIDE GEOFOAM INFILL AS REQUIRED TO ACHIEVE TOP OF SOIL ELEVATIONS IN PLANTERS. SUBMIT SOIL DATA FOR APPROVAL. NEW PLANTER SOIL INDICATED AS THUS: [▭]
8. NEW AND REPLACEMENT PLANTER AND HARDSCAPE DRAIN LOCATIONS ARE SHOWN ON THE PLAN. SEE S2C-1.1 FOR CONCRETE TOPPING SLOPES. SEE PLUMBING FOR DRAIN TYPES.
9. RESTORE PARKING SPACES WITH THE QUANTITY OF SPACES AS SHOWN. ALL PARKING STRIPING SHALL BE YELLOW AND 4" IN WIDTH. SEE PROJECT SPECIFICATIONS FOR PAINTING REQUIREMENTS.
10. CONTRACTOR'S MISC METALS FABRICATOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER TO DESIGN NEW RAILINGS TO MEET LOAD AND DIMENSIONAL REQUIREMENTS OF THE 2020 FBC. SUBMIT SIGNED AND SEALED SHOP DRAWINGS FOR APPROVAL.
11. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.
12. APPLY SILANE SEALER TO ALL CONCRETE SLAB ON GRADE AREAS. SEE SPECIFICATION 03 0100.
13. EXISTING POOL FINISH TO BE REMOVED, STRUCTURE REPAIRED AS NECESSARY, AND WATERPROOFING APPLIED. REFERENCE SHEETS S2C-3.0 AND WP-8.
14. CREATE SOLID REINFORCED CONCRETE WALL FOR 5 FOOT WIDTH CENTERED IN FRONT OF PROPOSED GAS METER. SEE DETAIL 7/S2C-2.9.
15. CREATE PARTITIONS FOR EXPANDED ELECTRICAL ROOM. USE 8" ASTM C-90 BLOCKS. EPOXY DOWEL #5 VERTICAL BARS AT ENDS AND WALL MID SPAN AND FILL WITH TYPE S MORTAR. USE HORIZONTAL JOINT REINFORCING EVERY OTHER COURSE. JOINTS TO BE TUCK POINTED. PAINT TO MATCH EXISTING.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

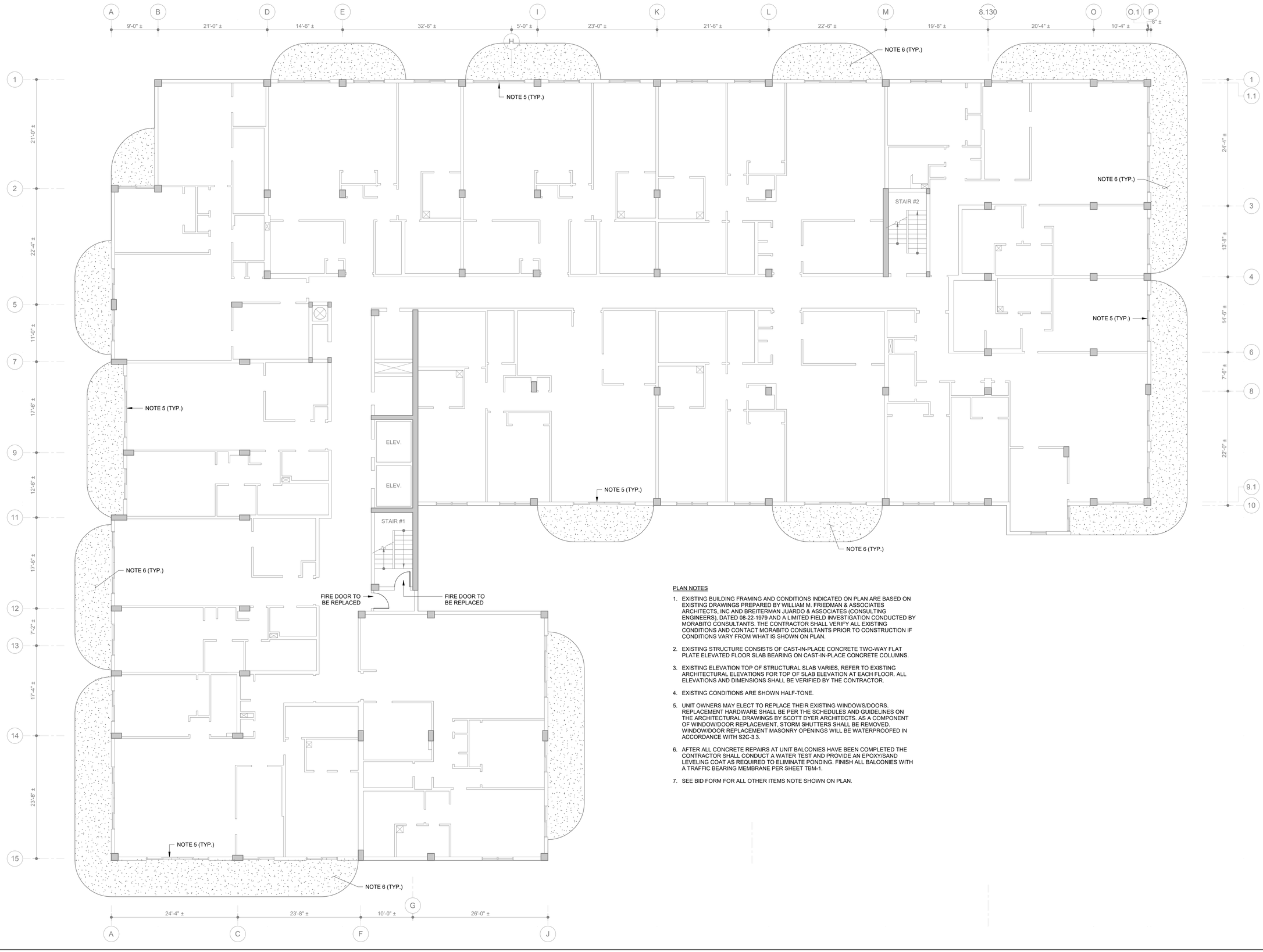
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LEVEL 1 FLOOR PLAN

Sheet No.:
A2C-1.0



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLAB BEARING ON CAST-IN-PLACE CONCRETE COLUMNS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES, REFER TO EXISTING ARCHITECTURAL ELEVATIONS FOR TOP OF SLAB ELEVATION AT EACH FLOOR. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. UNIT OWNERS MAY ELECT TO REPLACE THEIR EXISTING WINDOWS/DOORS. REPLACEMENT HARDWARE SHALL BE PER THE SCHEDULES AND GUIDELINES ON THE ARCHITECTURAL DRAWINGS BY SCOTT DYER ARCHITECTS. AS A COMPONENT OF WINDOW/DOOR REPLACEMENT, STORM SHUTTERS SHALL BE REMOVED. WINDOW/DOOR REPLACEMENT MASONRY OPENINGS WILL BE WATERPROOFED IN ACCORDANCE WITH S2C-3.3.
6. AFTER ALL CONCRETE REPAIRS AT UNIT BALCONIES HAVE BEEN COMPLETED THE CONTRACTOR SHALL CONDUCT A WATER TEST AND PROVIDE AN EPOXY/SAND LEVELING COAT AS REQUIRED TO ELIMINATE PONDING. FINISH ALL BALCONIES WITH A TRAFFIC BEARING MEMBRANE PER SHEET TBM-1.
7. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

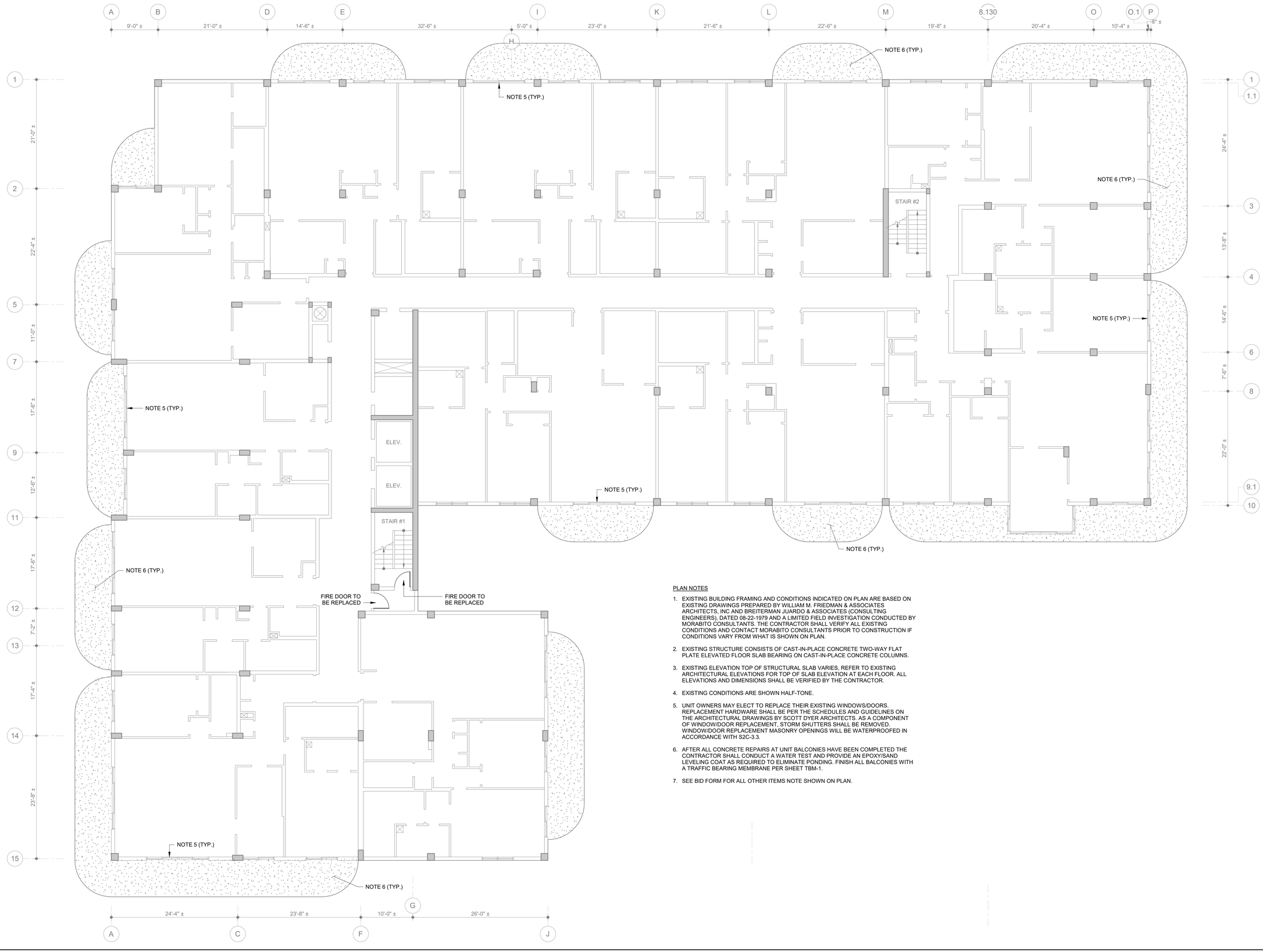
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LEVEL 2-8 FLOOR PLAN

Sheet No.:
A2C-1.1



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLAB BEARING ON CAST-IN-PLACE CONCRETE COLUMNS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES, REFER TO EXISTING ARCHITECTURAL ELEVATIONS FOR TOP OF SLAB ELEVATION AT EACH FLOOR. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. UNIT OWNERS MAY ELECT TO REPLACE THEIR EXISTING WINDOWS/DOORS. REPLACEMENT HARDWARE SHALL BE PER THE SCHEDULES AND GUIDELINES ON THE ARCHITECTURAL DRAWINGS BY SCOTT DYER ARCHITECTS. AS A COMPONENT OF WINDOW/DOOR REPLACEMENT, STORM SHUTTERS SHALL BE REMOVED. WINDOW/DOOR REPLACEMENT MASONRY OPENINGS WILL BE WATERPROOFED IN ACCORDANCE WITH S2C-3.3.
6. AFTER ALL CONCRETE REPAIRS AT UNIT BALCONIES HAVE BEEN COMPLETED THE CONTRACTOR SHALL CONDUCT A WATER TEST AND PROVIDE AN EPOXY/SAND LEVELING COAT AS REQUIRED TO ELIMINATE PONDING. FINISH ALL BALCONIES WITH A TRAFFIC BEARING MEMBRANE PER SHEET TBM-1.
7. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.

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

License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

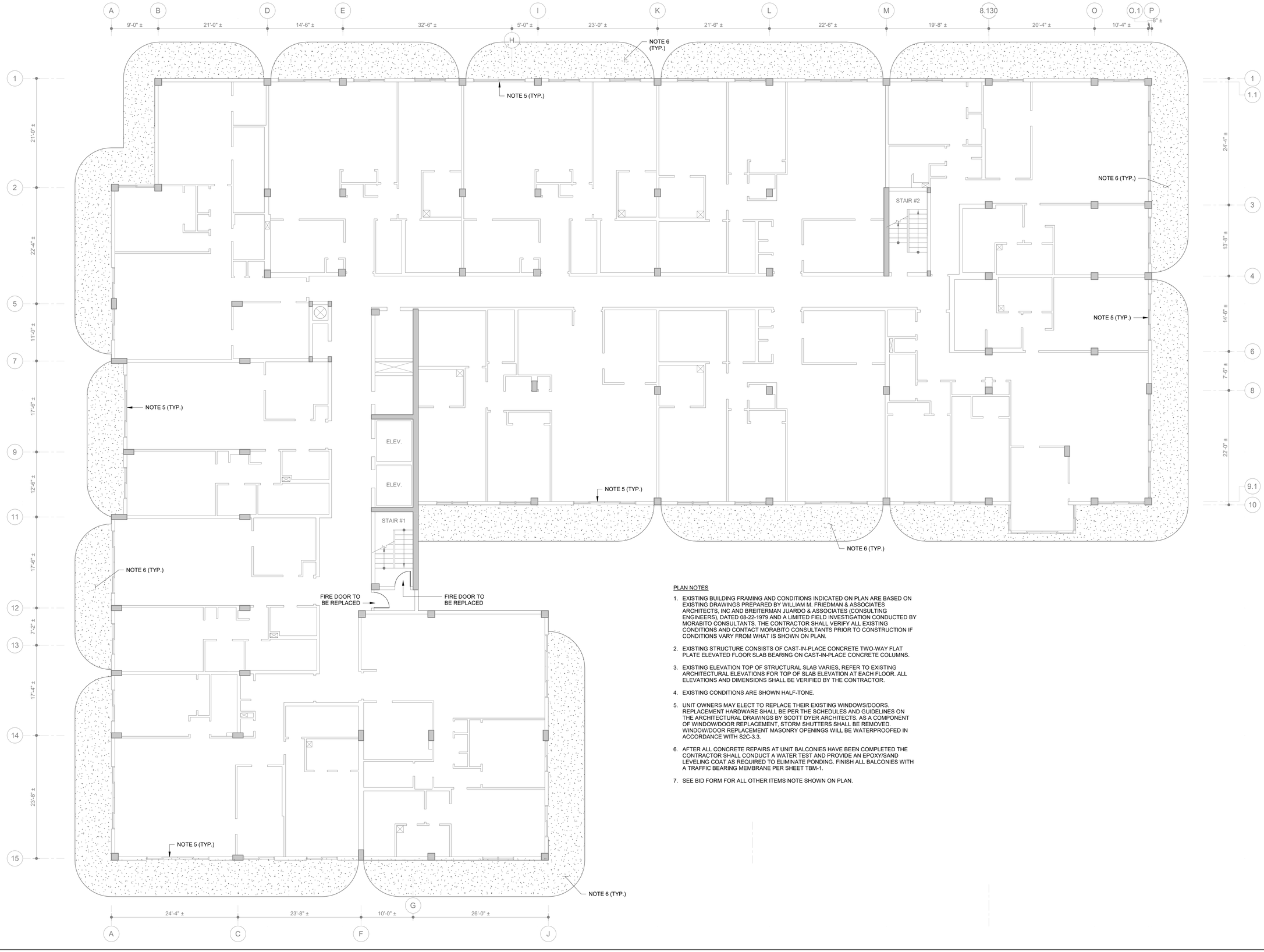
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LEVEL 9-11 FLOOR PLAN

Sheet No.:
A2C-1.2



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLAB BEARING ON CAST-IN-PLACE CONCRETE COLUMNS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES, REFER TO EXISTING ARCHITECTURAL ELEVATIONS FOR TOP OF SLAB ELEVATION AT EACH FLOOR. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. UNIT OWNERS MAY ELECT TO REPLACE THEIR EXISTING WINDOWS/DOORS. REPLACEMENT HARDWARE SHALL BE PER THE SCHEDULES AND GUIDELINES ON THE ARCHITECTURAL DRAWINGS BY SCOTT DYER ARCHITECTS. AS A COMPONENT OF WINDOW/DOOR REPLACEMENT, STORM SHUTTERS SHALL BE REMOVED. WINDOW/DOOR REPLACEMENT MASONRY OPENINGS WILL BE WATERPROOFED IN ACCORDANCE WITH S2C-3.3.
6. AFTER ALL CONCRETE REPAIRS AT UNIT BALCONIES HAVE BEEN COMPLETED THE CONTRACTOR SHALL CONDUCT A WATER TEST AND PROVIDE AN EPOXY/SAND LEVELING COAT AS REQUIRED TO ELIMINATE PONDING. FINISH ALL BALCONIES WITH A TRAFFIC BEARING MEMBRANE PER SHEET TBM-1.
7. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

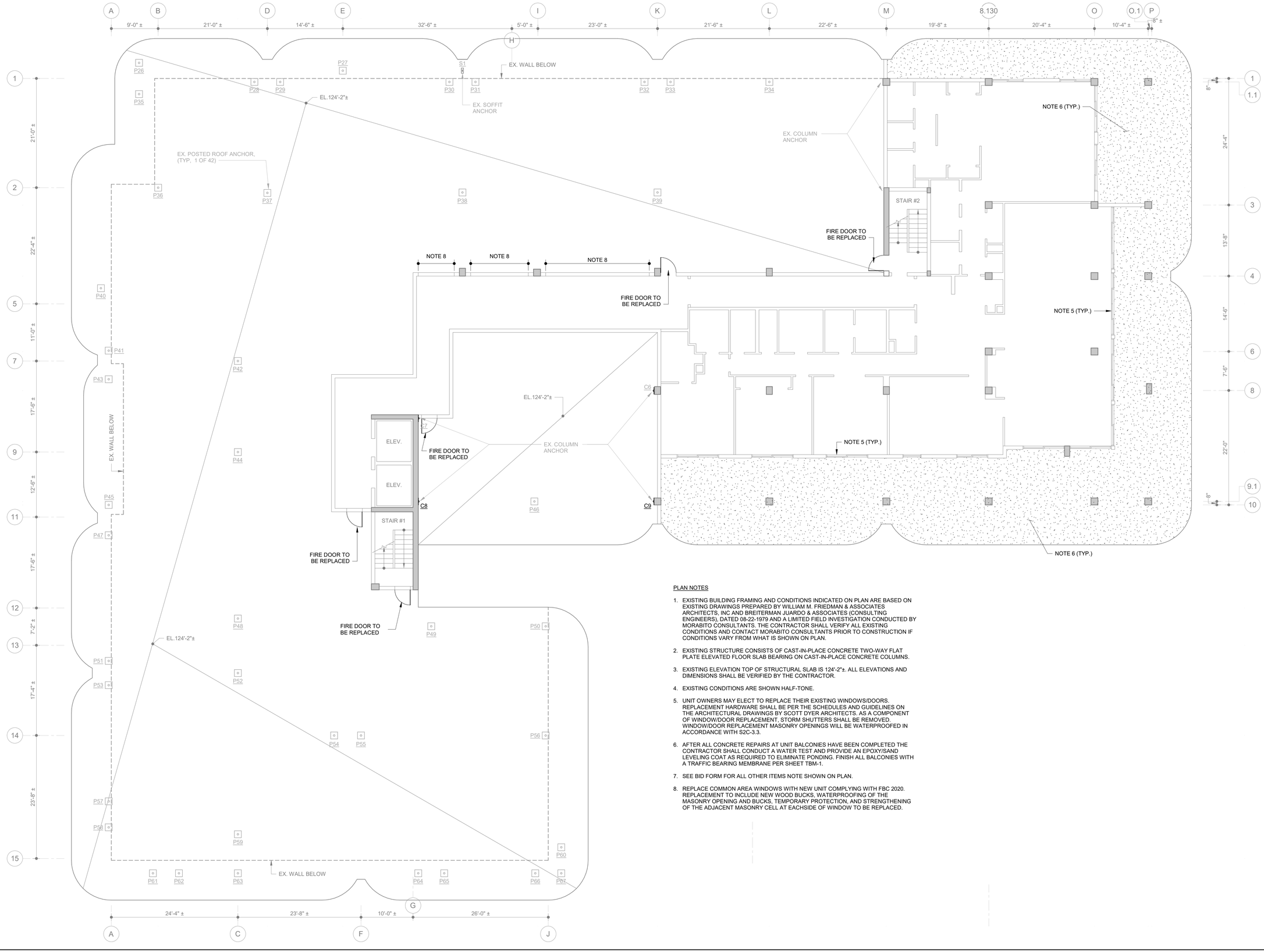
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LEVEL 12 FLOOR PLAN

Sheet No.:
A2C-1.3



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLAB BEARING ON CAST-IN-PLACE CONCRETE COLUMNS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB IS 124'-2"±. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. UNIT OWNERS MAY ELECT TO REPLACE THEIR EXISTING WINDOWS/DOORS. REPLACEMENT HARDWARE SHALL BE PER THE SCHEDULES AND GUIDELINES ON THE ARCHITECTURAL DRAWINGS BY SCOTT DYER ARCHITECTS. AS A COMPONENT OF WINDOW/DOOR REPLACEMENT, STORM SHUTTERS SHALL BE REMOVED WINDOW/DOOR REPLACEMENT MASONRY OPENINGS WILL BE WATERPROOFED IN ACCORDANCE WITH S2C-3.3.
6. AFTER ALL CONCRETE REPAIRS AT UNIT BALCONIES HAVE BEEN COMPLETED THE CONTRACTOR SHALL CONDUCT A WATER TEST AND PROVIDE AN EPOXY/SAND LEVELING COAT AS REQUIRED TO ELIMINATE PONDING. FINISH ALL BALCONIES WITH A TRAFFIC BEARING MEMBRANE PER SHEET TBM-1.
7. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.
8. REPLACE COMMON AREA WINDOWS WITH NEW UNIT COMPLYING WITH FBC 2020. REPLACEMENT TO INCLUDE NEW WOOD BUCKS, WATERPROOFING OF THE MASONRY OPENING AND BUCKS, TEMPORARY PROTECTION, AND STRENGTHENING OF THE ADJACENT MASONRY CELL AT EACHSIDE OF WINDOW TO BE REPLACED.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

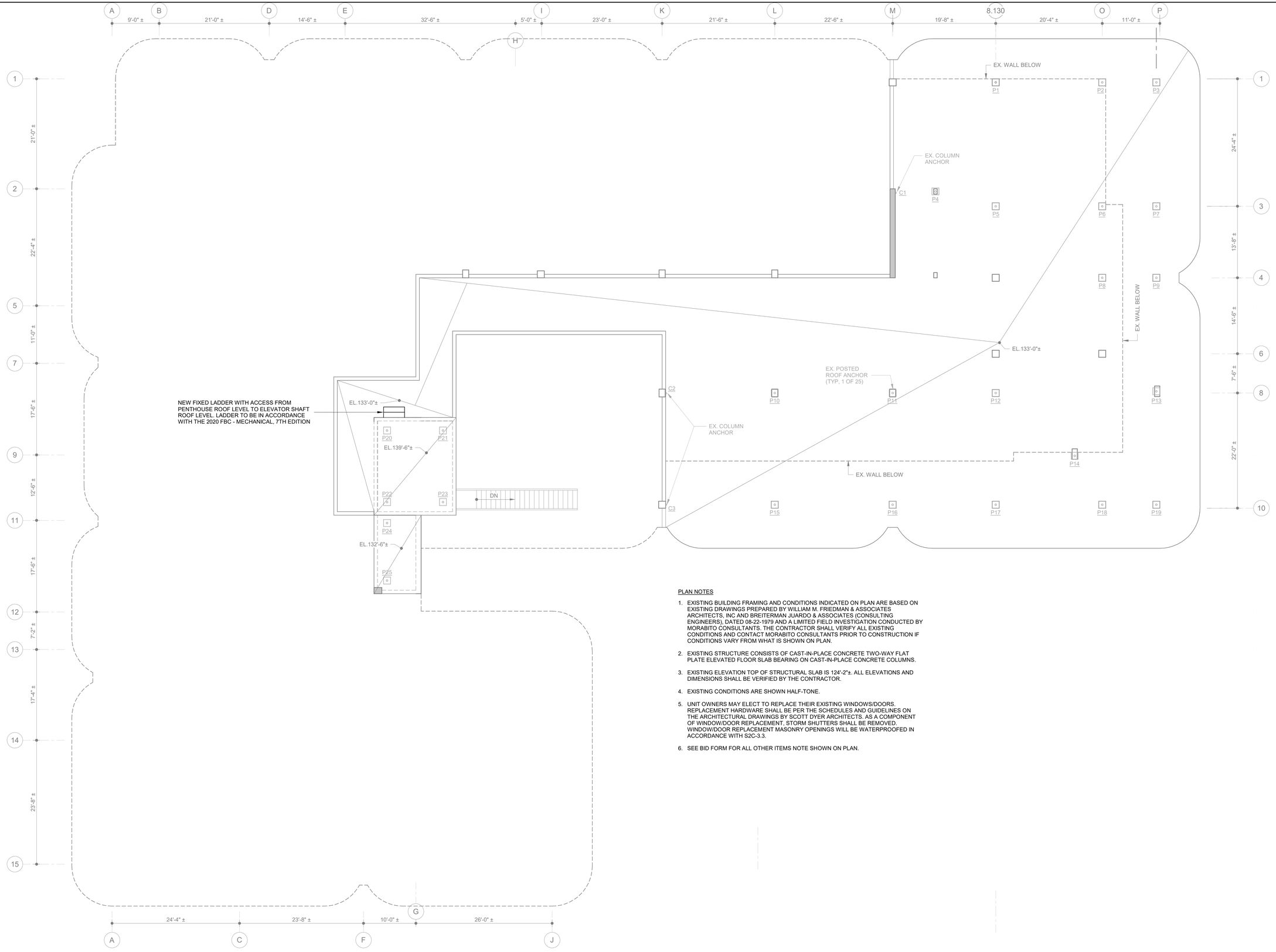
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LOW ROOF & PENTHOUSE FLOOR PLAN

Sheet No.:
A2C-1.4



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLAB BEARING ON CAST-IN-PLACE CONCRETE COLUMNS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB IS 124'-2"±. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. UNIT OWNERS MAY ELECT TO REPLACE THEIR EXISTING WINDOWS/DOORS. REPLACEMENT HARDWARE SHALL BE PER THE SCHEDULES AND GUIDELINES ON THE ARCHITECTURAL DRAWINGS BY SCOTT DYER ARCHITECTS. AS A COMPONENT OF WINDOW/DOOR REPLACEMENT, STORM SHUTTERS SHALL BE REMOVED. WINDOW/DOOR REPLACEMENT MASONRY OPENINGS WILL BE WATERPROOFED IN ACCORDANCE WITH S2C-3.3.
6. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.

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

License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants

Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

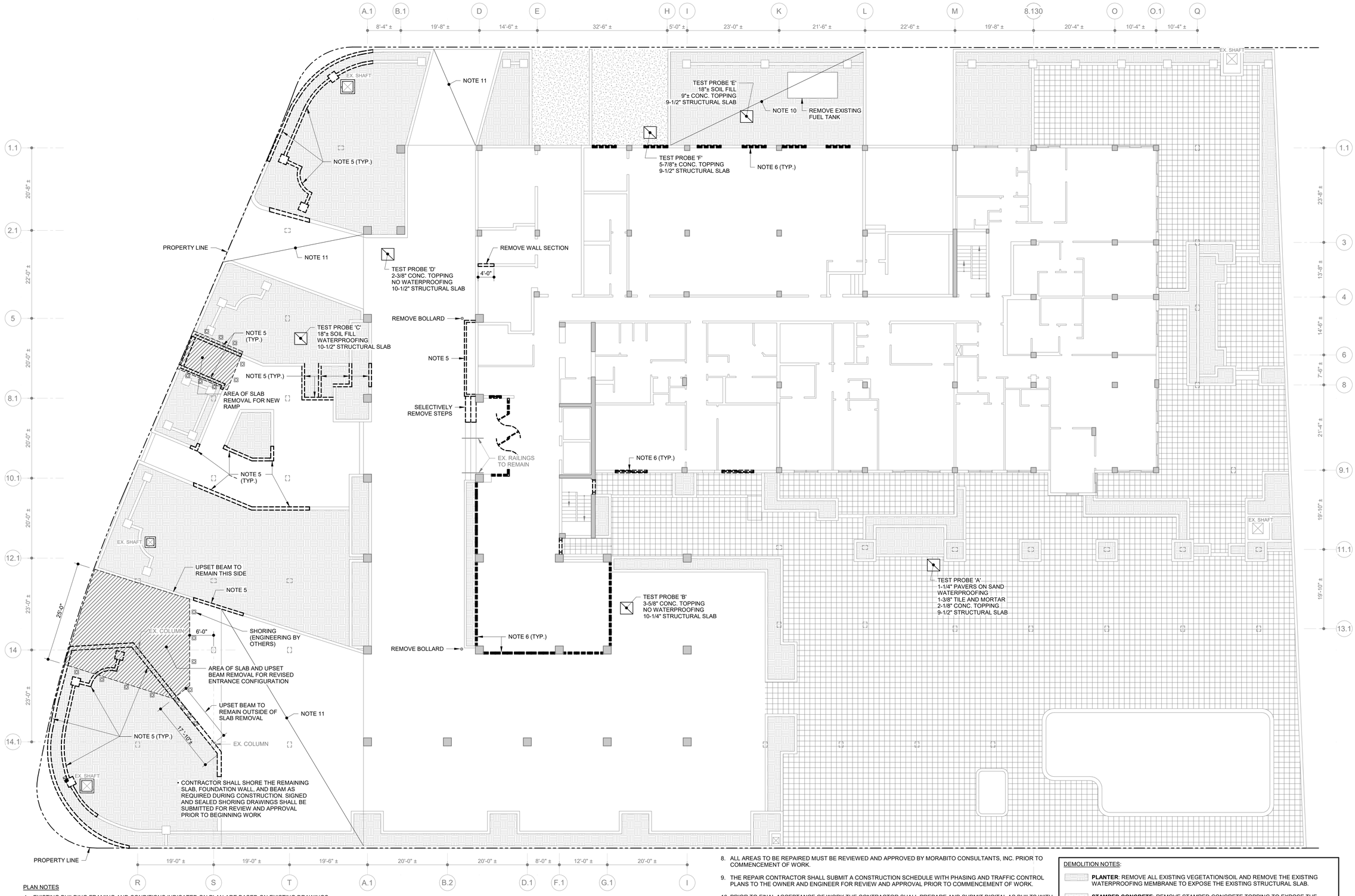
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
PENTHOUSE AND HIGH ROOF PLAN

Sheet No.:
A2C-1.5



- CONTRACTOR SHALL SHORE THE REMAINING SLAB, FOUNDATION WALL, AND BEAM AS REQUIRED DURING CONSTRUCTION. SIGNED AND SEALED SHORING DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO BEGINNING WORK

PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES, DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLAB BEARING ON CAST-IN-PLACE CONCRETE COLUMNS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES. SEE STRUCTURAL PLAN S2C- 1.0 FOR ELEVATIONS OF THE FIRST FLOOR SLAB.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. EXISTING PLANTER/MASONRY WALLS TO BE REMOVED ARE NOTED ON PLAN THUS:
6. INSTALL TEMPORARY WEATHER WALLS AND REMOVE GLASS WINDOWS AND DOORS AT FIRST FLOOR COMMON AREAS AS NOTED ON PLAN.
7. ONCE ALL DEMOLITION IS COMPLETE AND THE EXISTING STRUCTURAL SLAB IS EXPOSED, THE ENTIRE CONCRETE STRUCTURE SHALL BE SURVEYED AND ALL DETERIORATED CONCRETE SHALL BE NOTED BY THE CONTRACTOR AS PART OF THEIR WORK.
8. ALL AREAS TO BE REPAIRED MUST BE REVIEWED AND APPROVED BY MORABITO CONSULTANTS, INC. PRIOR TO COMMENCEMENT OF WORK.
9. THE REPAIR CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE WITH PHASING AND TRAFFIC CONTROL PLANS TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.
10. PRIOR TO FINAL ACCEPTANCE OF WORK THE CONTRACTOR SHALL PREPARE AND SUBMIT DIGITAL AS BUILTS WITH "PATCH LOGS" OF ALL WORK COMPLETED.
11. THE PLANTER AREA ALONG 88TH STREET INDICATED ON PLAN (IN ADDITION TO REMOVAL OF THE VEGETATION, SOIL, AND WATERPROOFING) REQUIRES REMOVAL OF THE EXISTING CONCRETE TOPPING SLAB TO EXPOSE THE EXISTING STRUCTURAL SLAB.
12. AFTER STAMPED CONCRETE REMOVAL, REMOVE EXISTING FILL TO EXPOSE THE EXISTING STRUCTURAL SLAB AT THE LOCATIONS NOTED ON PLAN.
13. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.

DEMOLITION NOTES:

- **PLANTER**: REMOVE ALL EXISTING VEGETATION/SOIL AND REMOVE THE EXISTING WATERPROOFING MEMBRANE TO EXPOSE THE EXISTING STRUCTURAL SLAB.
- **STAMPED CONCRETE**: REMOVE STAMPED CONCRETE TOPPING TO EXPOSE THE EXISTING STRUCTURAL SLAB.
- **POOL DECK/PRIVATE BALCONIES**: REMOVE ALL EXISTING PAVERS AND SAND SETTING BED, WATERPROOFING MEMBRANE, ABANDONED TILE AND MORTAR LAYER, AND CONCRETE TOPPING SLAB TO EXPOSE THE EXISTING STRUCTURAL SLAB.
- **EXPOSED CONCRETE SURFACE**: REMOVE EXISTING CONCRETE TOPPING SLAB TO EXPOSE THE EXISTING STRUCTURAL SLAB.

SEE TEST PROBES NOTED ON PLAN FOR EXISTING CONDITIONS

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

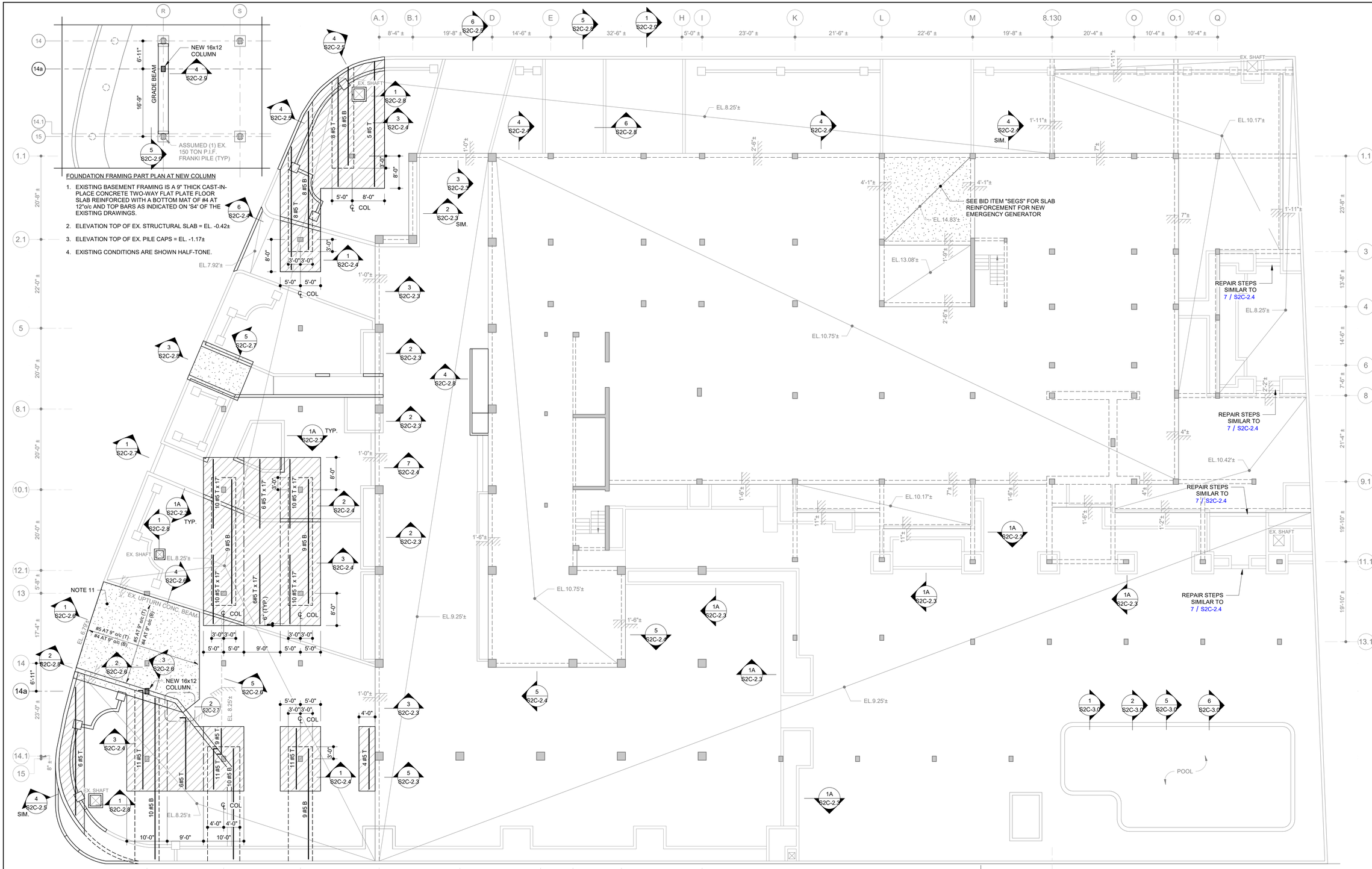
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LEVEL 1 DEMO PLAN

Sheet No.:
D2C-1.0



FOUNDATION FRAMING PART PLAN AT NEW COLUMN

1. EXISTING BASEMENT FRAMING IS A 9" THICK CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE FLOOR SLAB REINFORCED WITH A BOTTOM MAT OF #4 AT 12"o/c AND TOP BARS AS INDICATED ON 'S4' OF THE EXISTING DRAWINGS.
2. ELEVATION TOP OF EX. STRUCTURAL SLAB = EL. -0.42±
3. ELEVATION TOP OF EX. PILE CAPS = EL. -1.17±
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.

PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING FIRST FLOOR (LOBBY LEVEL) FRAMING IS A 9 1/2" THICK CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE FLOOR SLAB REINFORCED WITH A BOTTOM MAT OF #4 AT 12"o/c AND TOP BARS AS INDICATED ON 'S5' OF THE EXISTING DRAWINGS.
3. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
4. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES. REFER TO PLAN FOR TOP OF SLAB ELEVATIONS. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
5. SEE SHEET A2C-1.0 FOR NEW CMU WALL LOCATIONS
6. CONCRETE WALLS THAT ARE SUPPORTING EARTH MUST BE ALLOWED TO CURE FOR 7 DAYS PRIOR TO PLACING ANY RETAINED EARTH.
7. FOR ELEVATION TOP OF EXISTING FINISHED SURFACES, REFER TO 'BOUNDARY SURVEY' BY J. BONFILL & ASSOCIATES, INC. DATED AUGUST 7, 2020.
8. FULLY BONDED CONCRETE OVERLAY AREAS ARE NOTED ON PLAN THUS: ▨. BONDED OVERLAYS SHALL BE A MINIMUM OF 2" THICK AND REINFORCED AS INDICATED ON PLAN. REINFORCEMENT SHALL BE EVENLY SPACED ACROSS THE WIDTH OF THE BONDED OVERLAY. REFER TO ELEVATIONS PROVIDED ON S2C-1.1 FOR ELEVATION TOP OF BONDED CONCRETE OVERLAYS.
9. ALL REMAINING EXPOSED CONCRETE AREAS NOT SPECIFICALLY NOTED AS FULLY BONDED SHALL RECIEVE CONCRETE TOPPING TO ACHIEVE REQUIRED ELEVATIONS AND SLOPE FOR DRAINAGE. REFER TO SPOT ELEVATIONS PROVIDED ON S2C-1.1 FOR ELEVATION TOP OF CONCRETE TOPPINGS.
10. DROP PANEL LOCATIONS ARE INDICATED ON PLAN THUS: ⊏⊐. DROPS PANEL DEPTH SHALL BE A 4" PROJECTION BELOW THE BOTTOM OF THE SLAB. DROPS SHALL BE REINFORCED AS INDICATED ON PLAN, REINFORCEMENT SHALL BE EVENLY SPACED ACROSS THE WIDTH OF THE DROP PANEL.
11. NEW ENTRANCE DRIVE RAMP SLAB SHALL BE 9-1/2" MINMUM THICK REINFORCED CONCRETE SLAB (f'c = 4,000 PSI) WITH MAXIMUM W/C RATIO OF 0.42, REINFORCED AS SHOWN ON PLAN. TIE EXISTING SLAB REINFORCEMENT INTO NEW CONCRETE PER DETAILS.
12. ONCE CONCRETE REPAIRS AND PLACEMENT OF BONDED OVERLAYS AND TOPPINGS HAVE BEEN COMPLETED, THE HOT APPLIED WATERPROOFING SYSTEM SHALL BE APPLIED OVER THE ENTIRE DECK PER APPROVED DETAILS. IMMEDIATELY PROTECT WATERPROOFING WITH PROTECTION BOARD, INSTALLED PER MANUFACTURERS REQUIREMENTS.
13. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.

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
License: PE89035
Expires: 02/28/21

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

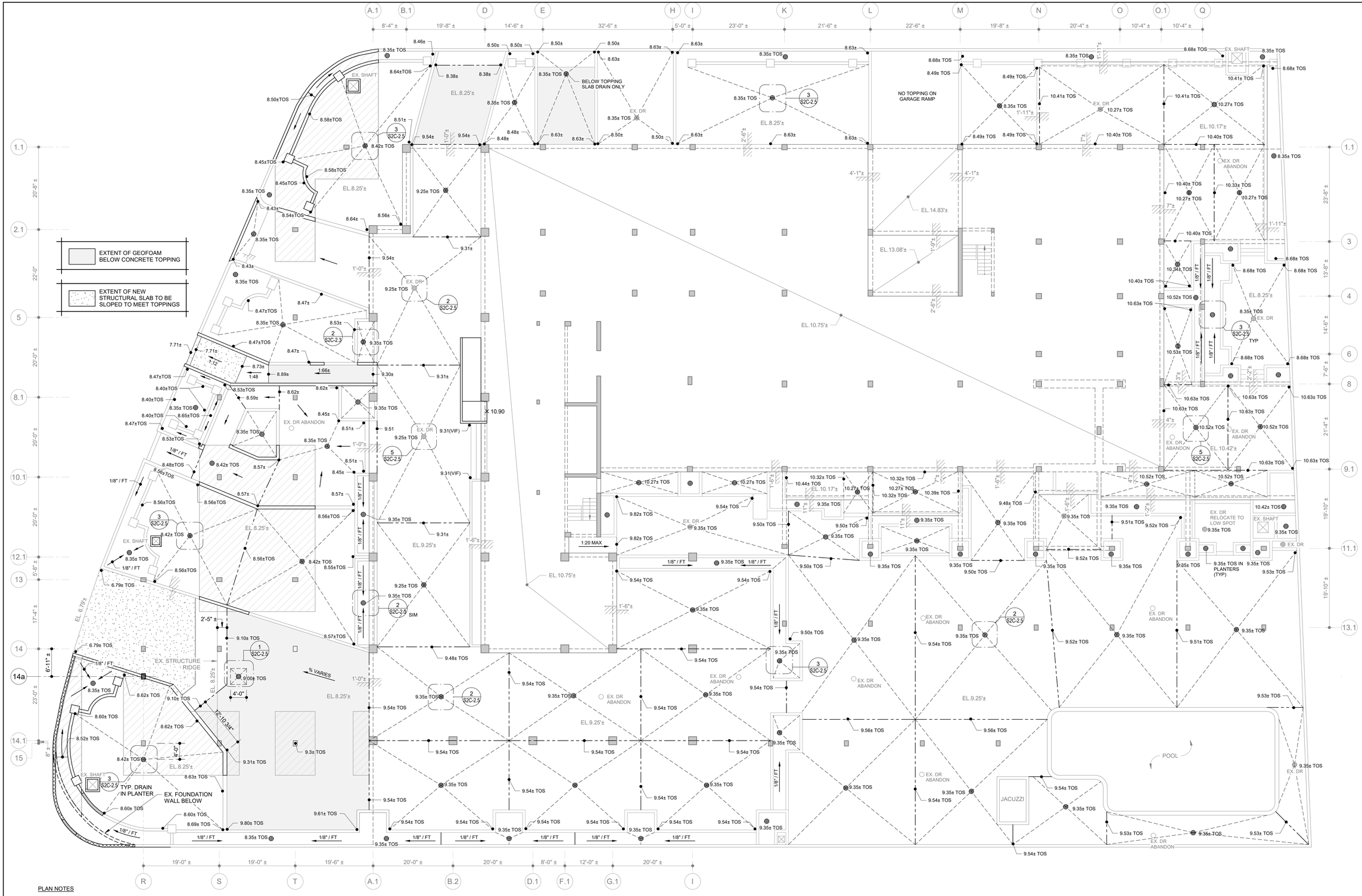
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LEVEL 1 SLAB REINFORCEMENT AND FRAMING PLAN

Sheet No.:
S2C-1.0



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING FIRST FLOOR (LOBBY LEVEL) FRAMING IS A 9 1/2" THICK CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE FLOOR SLAB REINFORCED WITH A BOTTOM MAT OF #4 AT 12"o/c AND TOP BARS AS INDICATED ON 'S5' OF THE EXISTING DRAWINGS.
3. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
4. EXISTING ELEVATION TOP OF STRUCTURAL SLAB VARIES AS INDICATED. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
5. FOR ELEVATION TOP OF EXISTING FINISHED SURFACES, REFER TO 'BOUNDARY SURVEY' BY J. BONFILL & ASSOCIATES, INC. DATED AUGUST 7, 2020.
6. FULLY BONDED CONCRETE OVERLAY AREAS ARE NOTED ON PLAN THUS: ▨ SEE SHEET S2C-1.0 FOR STRUCTURAL STRENGTHENING BONDED OVERLAY AREAS. STRUCTURAL BONDED TOPPING AREAS SHALL BE CAST INTEGRALLY WITH TYPICAL SLOPED BONDED TOPPINGS
7. ALL HARDSCAPE AND PLANTER AREAS NOT SPECIFICALLY NOTED TO HAVE 2" FULLY BONDED TOPPING PER NOTE 6 SHALL RECIEVE CONCRETE TOPPING TO ACHIEVE REQUIRED ELEVATIONS AND SLOPE FOR DRAINAGE. SPOT ELEVATIONS PROVIDED ON THIS SHEET FOR ELEVATION TOP OF CONCRETE TOPPINGS NOTED AS "X.XX± TOS". WHERE NO SPOT ELEVATIONS ARE PROVIDED, PROVIDE MINIMUM 1/8" PER FOOT SLOPE.
8. ALL ABANDONDED DRAINS SHALL BE SAW-CUT FROM SLAB AND REPAIRED FULL-DEPTH. NOTE THAT NOT ALL EXISTING PLANTER DRAIN LOCATIONS ARE KNOWN. WHERE FOUND, ABANDON AND REPAIR SLAB FULL-DEPTH.
9. ONCE CONCRETE REPAIRS AND PLACEMENT OF BONDED OVERLAYS AND TOPPINGS HAVE BEEN COMPLETED, THE HOT APPLIED WATERPROOFING SYSTEM SHALL BE APPLIED OVER THE ENTIRE DECK PER APPROVED DETAILS. IMMEDIATELY PROTECT WATERPROOFING WITH PROTECTION BOARD, INSTALLED PER MANUFACTURERS REQUIREMENTS.
10. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.
11. TOPPING SLAB SHALL HONOR ALL EXISTING FEATURES TO REMAIN (STEPS, SIDEWALK, BUILDING ENTRANCE, ETC.). CONTRACTOR TO ADJUST TOPPING SLAB TO ENSURE SMOOTH, CODE-COMPLIANT TRANSITIONS TO EXISTING CONDITIONS AT FINISHED SURFACE.
12. LEVEL RIDGES TO BE UNIFORM ELEVATION ACROSS SHOWN AS: — — — — — —
13. SLOPED RIDGES BETWEEN DRAINAGE PLANES SHOWN AS: - - - - - - - - - - - -

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

License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

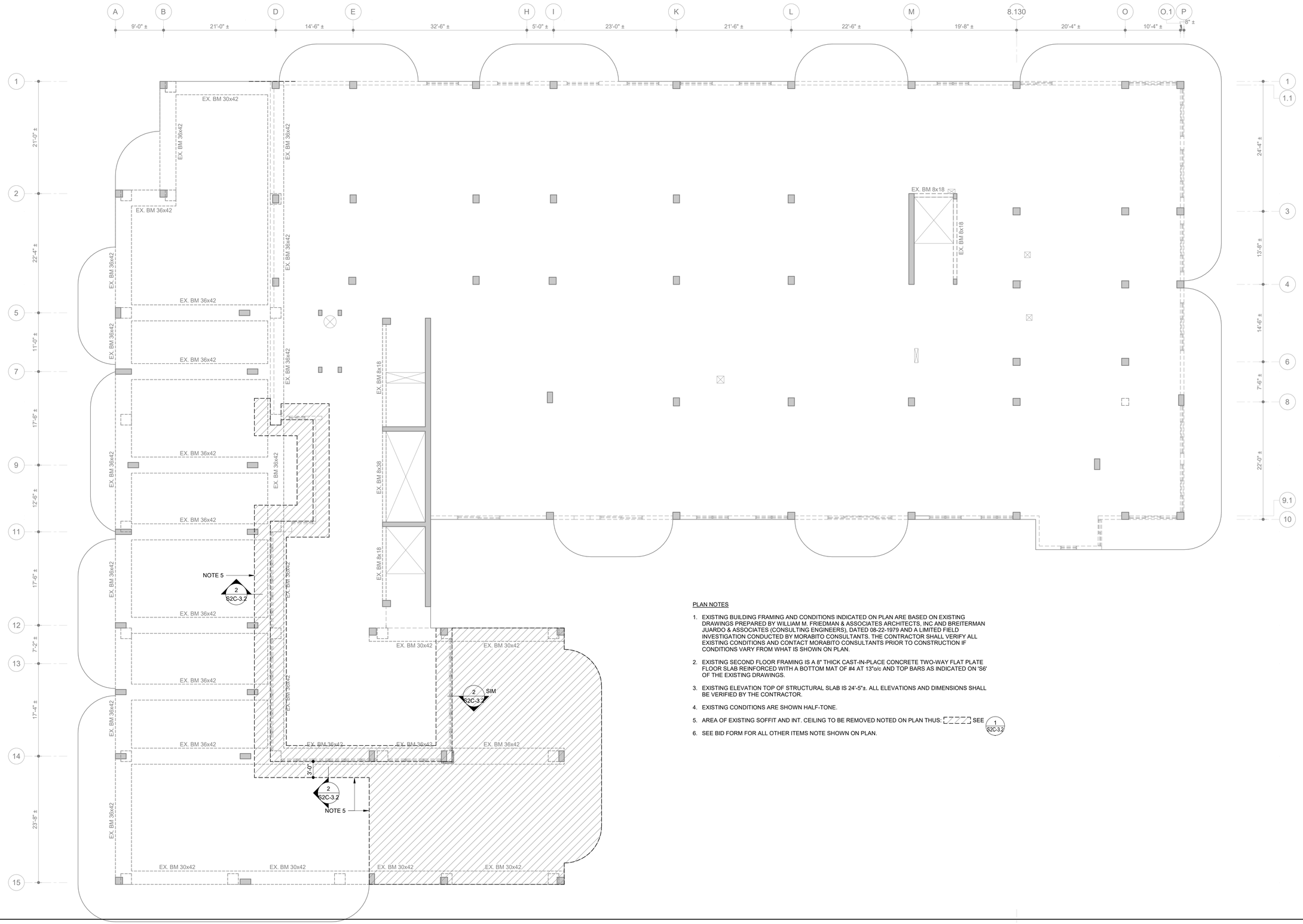
Project No.: 18217

Date: 04/26/21

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

Sheet Title:
LEVEL 1 BONDED OVERLAY AND TOPPING ELEVATIONS

Sheet No.:
S2C-1.1



PLAN NOTES

1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES (CONSULTING ENGINEERS), DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING SECOND FLOOR FRAMING IS A 8" THICK CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE FLOOR SLAB REINFORCED WITH A BOTTOM MAT OF #4 AT 13"o/c AND TOP BARS AS INDICATED ON 'S6' OF THE EXISTING DRAWINGS.
3. EXISTING ELEVATION TOP OF STRUCTURAL SLAB IS 24'-5"±. ALL ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. EXISTING CONDITIONS ARE SHOWN HALF-TONE.
5. AREA OF EXISTING SOFFIT AND INT. CEILING TO BE REMOVED NOTED ON PLAN THUS: [ ] SEE 1 S2C-3.2
6. SEE BID FORM FOR ALL OTHER ITEMS NOTE SHOWN ON PLAN.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

Project No.: 18217

Date: 04/26/21

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

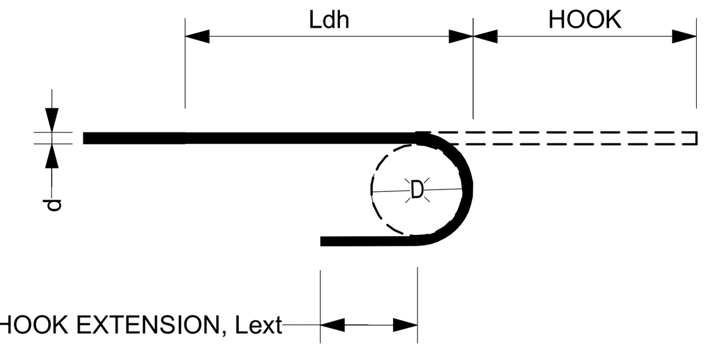
Sheet Title:
LEVEL 2 FRAMING PLAN

Sheet No.:
S2C-1.2

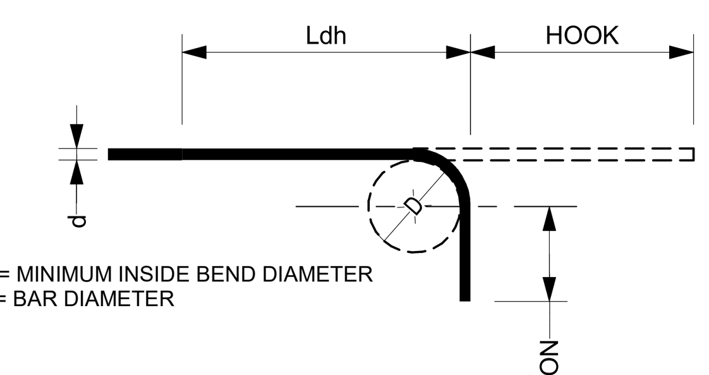
ACI STANDARD HOOKS

OTHER THAN BEAM & COLUMN TIES / STIRRUPS

BAR SIZE	180° HOOK		90° HOOK	
	HOOK EXTENSION LENGTH, "Lext"	MINIMUM BEND DIAMETER, "D"	HOOK EXTENSION LENGTH, "Lext"	MINIMUM BEND DIAMETER, "D"
#3	3"	2-1/4"	5"	2-1/4"
#4	3"	3"	6"	3"
#5	3"	3-3/4"	8"	3-3/4"
#6	3"	4-1/2"	9"	4-1/2"
#7	4"	5-1/4"	11"	5-1/4"
#8	4"	6"	12"	6"
#9	5"	9"	14"	9"
#10	5"	10"	15"	10"
#11	6"	11"	17"	11"



180° HOOK



D = MINIMUM INSIDE BEND DIAMETER
d = BAR DIAMETER

90° HOOK

MINIMUM HOOK DEVELOPMENT LENGTH, Ldh

MULTIPLE ALL VALUES BY 1.5 FOR EPOXY COATED REINFORCEMENT

BAR SIZE	F'c = 3 ksi	5 ksi > F'c > 3 ksi	F'c = 5 ksi OR GREATER
#3	9"	8"	7"
#4	11"	10"	9"
#5	14"	12"	11"
#6	17"	15"	13"
#7	20"	17"	15"
#8	22"	19"	17"
#9	25"	22"	20"
#10	28"	25"	22"
#11	31"	27"	24"

NOTES:
1. ALL REINFORCING BARS SHALL BE MEASURED, CUT, BENT, AND INSTALLED TO WITHIN THE ALLOWABLE TOLERANCES INDICATED IN THE ACI 318, ACI 317, ACI 315/315R, AND CONCRETE REINFORCING STEEL INSTITUTE (CRSI) MANUAL.
2. ALL BARS SHALL BE BENT COLD UNLESS APPROVED BY ENGINEER-OF-RECORD
3. REINFORCING BARS SHALL NOT BE FIELD BENT AFTER BEING PARTIALLY EMBEDDED IN CONCRETE U.N.O.
4. WHERE BAR BEND LENGTH IS INDICATED AS "STD" OR "STANDARD", BEND BAR PER ACI STANDARD HOOKS TABLE.
5. WHERE LIGHT WEIGHT CONCRETE IS USED, THE HOOK DEVELOPMENT LENGTHS (Ldh) SHOWN IN THE SCHEDULE SHALL BE MULTIPLIED BY 1.33.

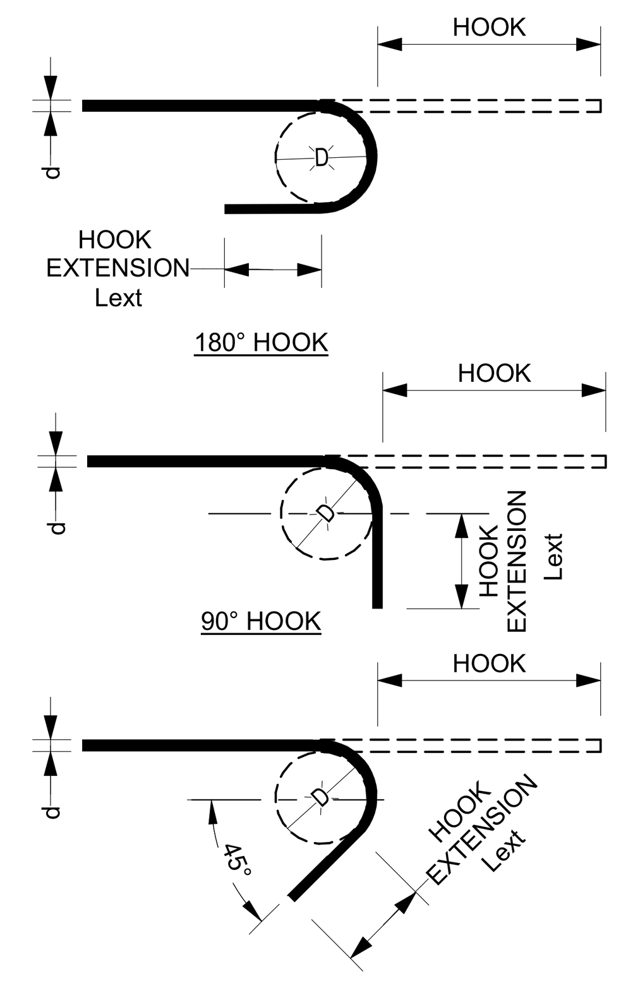
STIRRUPS AND TIES

BEAMS AND COLUMNS

BAR SIZE	180° HOOK		90° HOOK		135° HOOK	
	HOOK EXTENSION LENGTH, "Lext"	MINIMUM BEND DIAMETER, "D"	HOOK EXTENSION LENGTH, "Lext"	MINIMUM BEND DIAMETER, "D"	HOOK EXTENSION LENGTH, "Lext"	MINIMUM BEND DIAMETER, "D"
#3	3"	1-1/2"	3"	1-1/2"	3"	1-1/2"
#4	3"	2"	3"	2"	3"	2"
#5	3"	2-1/2"	4"	2-1/2"	3-3/4"	2-1/2"
#6	3"	4-1/2"	9"	4-1/2"	4-1/2"	4-1/2"
#7	4"	5-1/4"	11"	5-1/4"	5-1/4"	5-1/4"

NOTES:
1. ALL REINFORCING BARS SHALL BE MEASURED, CUT, BENT, AND INSTALLED TO WITHIN THE ALLOWABLE TOLERANCES INDICATED IN THE ACI 318, ACI 317, ACI 315/315R, AND CONCRETE REINFORCING STEEL INSTITUTE (CRSI) MANUAL.
2. ALL BARS SHALL BE BENT COLD UNLESS APPROVED BY ENGINEER-OF-RECORD.
3. REINFORCING BARS SHALL NOT BE FIELD BENT AFTER BEING PARTIALLY EMBEDDED IN CONCRETE U.N.O.

D = MINIMUM INSIDE BEND DIAMETER
d = BAR DIAMETER



135° HOOK

COMPRESSION DEVELOPMENT & SPLICE LENGTHS [L_{dc} & L_{sc}] (in)

BAR SIZE	F'c = 3 ksi				5 ksi > F'c > 3 ksi				F'c = 5 ksi (or greater)			
	ENCLOSED WITH #4 TIES AT <= 4" o/c		OTHER		ENCLOSED WITH #4 TIES AT <= 4" o/c		OTHER		ENCLOSED WITH #4 TIES AT <= 4" o/c		OTHER	
	Ld	Ls	Ld	Ls	Ld	Ls	Ld	Ls	Ld	Ls	Ld	Ls
#3	8	12	9	12	8	12	8	12	8	12	8	12
#4	8	13	11	15	8	13	10	15	8	13	9	15
#5	11	16	14	19	9	16	12	19	9	16	11	19
#6	13	19	17	23	11	19	14	23	10	19	14	23
#7	15	22	20	27	13	22	17	26	11	22	16	26
#8	17	25	22	30	14	25	19	30	14	25	18	30
#9	19	28	25	34	16	28	22	34	15	28	20	34
#10	21	32	28	38	18	32	24	38	17	32	23	38
#11	23	35	31	42	20	35	27	42	19	35	26	42

NOTES:
1. EPOXY REBAR NOR LIGHTWEIGHT CONCRETE DOES NOT AFFECT COMPRESSION DEVELOPMENT OR LAP LENGTH.
2. Fy = 60 ksi ONLY

TENSION LAP SPLICE LENGTHS [Ls] (in)

BAR SIZE	LOCATION	F'c = 3 ksi & 3.5 ksi			F'c = 4 ksi & 4.5 ksi			F'c = 5 ksi OR GREATER		
		MINIMUM (UNO)	MAY USE REDUCED LENGTH WHEN:		MINIMUM (UNO)	MAY USE REDUCED LENGTH WHEN:		MINIMUM (UNO)	MAY USE REDUCED LENGTH WHEN:	
			MEMBERS WITH CONCRETE COVER > = 3/4" AND (BAR SPACING > = 4" OR > = 6db)	MEMBERS WITH CONCRETE COVER > = 1 1/2" AND (BAR SPACING > = 4" OR > = 6db)		MEMBERS WITH CONCRETE COVER > = 3/4" AND (BAR SPACING > = 4" OR > = 6db)	MEMBERS WITH CONCRETE COVER > = 1 1/2" AND (BAR SPACING > = 4" OR > = 6db)		MEMBERS WITH CONCRETE COVER > = 3/4" AND (BAR SPACING > = 4" OR > = 6db)	MEMBERS WITH CONCRETE COVER > = 1 1/2" AND (BAR SPACING > = 4" OR > = 6db)
#3	TOP BARS	42	17	17	37	15	15	33	13	13
	OTHER BARS	32	13	13	28	12	12	25	12	12
#4	TOP BARS	56	28	23	49	24	20	43	22	18
	OTHER BARS	43	22	18	37	19	15	34	17	14
#5	TOP BARS	70	41	28	61	36	24	54	32	22
	OTHER BARS	54	32	22	47	28	19	42	25	17
#6	TOP BARS	84	56	34	73	49	29	65	43	26
	OTHER BARS	65	43	26	56	37	23	50	34	20
#7	TOP BARS	122	90	55	106	78	48	95	70	43
	OTHER BARS	94	69	43	81	60	37	73	54	33
#8	TOP BARS	139	112	70	121	97	61	108	86	54
	OTHER BARS	107	86	54	93	74	47	83	67	42
#9	TOP BARS	157	135	89	136	117	77	122	105	69
	OTHER BARS	121	104	68	105	90	59	94	81	53
#10	TOP BARS	177	162	112	153	140	97	137	126	87
	OTHER BARS	136	125	87	118	108	75	106	97	67
#11	TOP BARS	196	190	138	170	165	120	152	147	107
	OTHER BARS	151	146	107	131	127	92	117	113	83

TENSION DEVELOPMENT LENGTHS [Ld] (in)

BAR SIZE	LOCATION	F'c = 3 ksi & 3.5 ksi			F'c = 4 ksi & 4.5 ksi			F'c = 5 ksi OR GREATER		
		MINIMUM (UNO)	MAY USE REDUCED LENGTH WHEN:		MINIMUM (UNO)	MAY USE REDUCED LENGTH WHEN:		MINIMUM (UNO)	MAY USE REDUCED LENGTH WHEN:	
			MEMBERS WITH CONCRETE COVER > = 3/4" AND (BAR SPACING > = 4" OR > = 6db)	MEMBERS WITH CONCRETE COVER > = 1 1/2" AND (BAR SPACING > = 4" OR > = 6db)		MEMBERS WITH CONCRETE COVER > = 3/4" AND (BAR SPACING > = 4" OR > = 6db)	MEMBERS WITH CONCRETE COVER > = 1 1/2" AND (BAR SPACING > = 4" OR > = 6db)		MEMBERS WITH CONCRETE COVER > = 3/4" AND (BAR SPACING > = 4" OR > = 6db)	MEMBERS WITH CONCRETE COVER > = 1 1/2" AND (BAR SPACING > = 4" OR > = 6db)
#3	TOP BARS	32	13	13	28	12	12	25	12	12
	OTHER BARS	25	12	12	22	12	12	20	12	12
#4	TOP BARS	43	22	18	37	19	15	34	17	14
	OTHER BARS	33	17	14	29	15	12	26	13	12
#5	TOP BARS	54	32	22	47	28	19	42	25	17
	OTHER BARS	42	25	17	36	21	15	32	19	13
#6	TOP BARS	65	43	26	56	37	23	50	34	20
	OTHER BARS	50	33	20	43	29	18	39	26	16
#7	TOP BARS	94	69	43	81	60	37	73	54	33
	OTHER BARS	72	53	33	63	46	29	56	41	26
#8	TOP BARS	107	86	54	93	74	47	83	67	42
	OTHER BARS	83	66	42	72	57	36	64	51	32
#9	TOP BARS	121	104	68	105	90	59	94	81	53
	OTHER BARS	93	80	53	81	69	46	72	62	41
#10	TOP BARS	136	125	87	118	108	75	106	97	67
	OTHER BARS	105	96	67	91	83	58	81	75	52
#11	TOP BARS	151	146	107	131	127	92	117	113	83
	OTHER BARS	116	113	82	101	98	71	90	87	64

NOTES:
1. TOP BARS = HORIZONTAL BARS WITH MORE THAN 12 IN. OF CONCRETE BELOW.
2. db = REINFORCING BAR DIAMETER.
3. BAR SPACING = CENTER TO CENTER SPACING BETWEEN BARS. WHEN MULTIPLE BARS LOCATED IN THE SAME PLANE ARE SPLICED AT THE SAME SECTION, THE CENTER TO CENTER SPACING IS THE MINIMUM DISTANCE BETWEEN ADJACENT SPLICES.
4. NORMAL WEIGHT CONCRETE ONLY, WHERE LIGHT WEIGHT CONCRETE IS USED, THE SPLICE LENGTHS SHOWN IN THE SCHEDULE SHALL BE MULTIPLIED BY 1.33.
5. WHERE EPOXY BARS ARE USED, THE SPLICE LENGTHS IN THE SCHEDULE SHALL BE MULTIPLIED BY 1.5.
6. Fy = 60 KSI ONLY.
7. MINIMUM LENGTHS ARE BASED ON MEMBERS WITH BAR SPACING > = 2db.

RN TYPICAL CONCRETE REPAIR PROCEDURES AND NOTES

1. AREAS OF UNSOUND CONCRETE AND DETERIORATED REINFORCING SHALL BE IDENTIFIED AND MARKED BY CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A UNIT PRICE FOR ALL WORK SHOWN ON THESE DRAWINGS AND DETAILS AS REQUIRED BY SPEC SECTIONS 002113, 004100, 012200 AND 012300. WHERE POSSIBLE, REMOVAL AREAS SHALL BE RECTANGULAR IN SHAPE IN PLAN/ELEVATION VIEW. SEE SPECIFICATION SECTIONS 024119 AND 030100. IT IS IN THE INTEREST OF THE OWNER TO REPAIR ALL CONCRETE FACADE DEFECTS WITHIN THE WORK LIMITS SHOWN REGARDLESS OF WHETHER OR NOT ALL DEFECTS ARE INDICATED ON THE CONTRACT DOCUMENTS AND/OR IDENTIFIED BY THE CONTRACTOR.

2. TEMPORARILY SHORE ALL EXISTING CONCRETE SLABS, BEAMS, WALLS AND COLUMNS WHICH ARE DAMAGED PRIOR TO PERFORMING THE NECESSARY REPAIRS. SEE SPECIFICATION SECTIONS 31 40 00 AND 03 01 00. AS DEMOLITION PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE SHORING ENGINEER WHEN DEMOLITION LIMITS ARE EXPECTED TO EXTEND BEYOND CURRENT SHORING LIMITS. WORK SHALL CEASE UNTIL SHORING HAS BEEN RE-EVALUATED. SHORING SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR UNO. SHORING SHALL BE DESIGNED FOR ALL SUPERIMPOSED LOADS DURING CONSTRUCTION IN ADDITION TO SELF-WEIGHT OF STRUCTURE. SHORING ENGINEER SHALL BE RESPONSIBLE FOR ALL REQUIRED SEQUENCING AND RE-SHORING AS REQUIRED. SHORING PLANS AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW.

3. REMOVE ALL UNSOUND CONCRETE WITH CHIPPING HAMMERS. USE 30 POUND CHIPPING HAMMERS FOR ALL SELECTIVE DEMOLITION UNLESS OTHERWISE APPROVED. DO NOT HAMMER AROUND REBAR WITH LARGER THAN 15 POUND HAMMERS.

4. WHERE EXPOSED PORTIONS OF THE EXISTING REINFORCING ARE NOT SOUNDLY BONDED TO THE REMAINING CONCRETE, OR IF MORE THAN 1/2 OF THE REBAR DIAMETER / THICKNESS IS EXPOSED, THE CONTRACTOR SHALL REMOVE CONCRETE AROUND AND UNDER THE REINFORCING. ALL FREELY EXPOSED REINFORCING SHALL BE NO CLOSER THAN 3/4" TO EXISTING CONCRETE. WHEN EXISTING REINFORCING IS NOT PROPERLY EXPOSED (OR NO REBAR IS PRESENT) THE CONTRACTOR SHALL INSTALL STAINLESS STEEL THREADED RODS SET IN EPOXY AT 6" ON CENTER EACH WAY (3" MINIMUM EMBEDMENT INTO SOUND CONCRETE) UNLESS OTHERWISE SHOWN IN DETAILS OR DIRECTED IN FIELD. REMOVE ALL OILS FROM RODS PRIOR TO SETTING IN EPOXY.

5. REMOVE ALL DIRT, GREASE, OIL, LAITANCE AND CURING COMPOUNDS FROM EXISTING CONCRETE SURFACES AND SUBSTRATES BY SANDBLASTING OR MECHANICAL ROUGHENING. PROVIDE MANUFACTURER-REQUIRED CRSI CONCRETE SURFACE PROFILE (CSP) FOR EACH REPAIR PRODUCT TO BE USED. FOR CONVENTIONAL PORTLAND CONCRETE REPAIR, NO LESS THAN CSP-6 (1/4" AMPLITUDE) SHALL BE USED. REMOVE GREASE, OIL, RUST AND MILL SCALING FROM EXISTING EMBEDDED STEEL, ANCHOR PLATES AND REINFORCING STEEL BY SANDBLASTING OR WIRE BRUSHING. COAT ALL EXPOSED REINFORCING STEEL WITH 7 WET MILS OF ECB ANTI-CORROSION PROTECTION, BY CONPROCO.

6. ADD NEW REBAR AND/OR EPOXY COATED WIRE MESH TO REPLACE ANY RUSTED OR DEFECTIVE EXISTING REINFORCING AS DIRECTED BY MORABITO CONSULTANTS INC. SEE EXISTING FRAMING PLANS AND DETAILS FOR ESTIMATED EXISTING REINFORCEMENT. ALL WIRE MESH SHALL BE EPOXY-COATED. PROVIDE PROPER REINFORCING LAP SPLICES AS REQUIRED. SEE SPECIFICATIONS FOR FURTHER INFORMATION.

7. PRESOAK ALL EXISTING HORIZONTAL AND VERTICAL CONCRETE SURFACES TO RECEIVE REPAIR CONCRETE TO ACHIEVE A SATURATED SURFACE DRY (SSD) CONDITION BEFORE APPLYING CEMENTITIOUS REPAIR CONCRETE/MORTAR. INSTALL PROPRIETARY CONCRETE REPAIR MATERIAL PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS. APPLY "SCRUB", "SLURRY", OR "PEANUT BUTTER" COAT ON SSD CONCRETE IF RECOMMENDED BY MANUFACTURER'S WRITTEN DATA SHEET. DO NOT WET CONCRETE PRIOR TO INSTALLATION OF EPOXY-SAND (NON-CEMENTITIOUS) MATERIALS. ALLOW EPOXY ANCHORING GROUTS TO FULLY CURE PRIOR TO WETTING SURFACES. PROPRIETARY CONCRETE BONDING AGENTS MAY ONLY BE USED AS APPROVED BY THE ENGINEER. FOR POOL FLOOR AND WALL REPAIRS, APPLY SIKA SWELL S2 IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AT PERIMETER COLD JOINT PRIOR TO CONCRETE PLACEMENT. CONTRACTOR TO ENSURE SIKASWELL S2 REMAINS CLEAN AND DRY PRIOR TO CONCRETE PLACEMENT.

8. WHEN CONCRETE PATCH DEPTH IS LESS THAN 2 1/2", INSTALL APPROVED SURFACE REPAIR MORTAR. EXTEND MORTAR WITH AGGREGATE WHERE REQUIRED BY SPECIFICATIONS. ALLOW REPAIR MORTAR TO BE CURED PER SPEC SECTION 030100.

9. WHEN CONCRETE PATCH DEPTH IS GREATER THAN OR EQUAL TO 2 1/2", INSTALL APPROVED PRE-MIX CONCRETE (BAG MIX) OR READY MIX CONCRETE. BAG MIX REPAIR CONCRETE/MORTAR SHALL BE SHRINKAGE-COMPENSATING WITH FIBERS. READY MIX CONCRETE SHALL BE DESIGNED TO THE LIMITATIONS IN SECTION 030100. REPAIR CONCRETE SHALL BE CURED PER SPEC SECTION 030100.

10. AFTER ALL CONCRETE REPAIR PATCHES HAVE FULLY CURED, AND IF REQUIRED BY THE BID FORM, ALL SURFACES SHALL BE COATED WITH A ACRYLIC CONCRETE COATING WITH COLOR TO MATCH EXISTING. PRESSURE WASH AND PREPARE EXISTING SURFACES TO RECEIVE COATING PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.

11. ALL EXISTING CONNECTIONS, ANCHORS, AND PLATES THAT ARE EXPOSED DURING REPAIRS SHALL BE PROPERLY SAND BLASTED OR MECHANICALLY CLEANED AND COATED WITH ECB ANTI-CORROSION PROTECTION (ORANGE COLORED) BY CONPROCO CORP. PER SPEC SECTION 030100.

12. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

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

License: 89035
Expires: 02/28/23

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED HR/JB/RM	DRAWN HR/JB/RM
CHECKED RM	APPROVED FPM

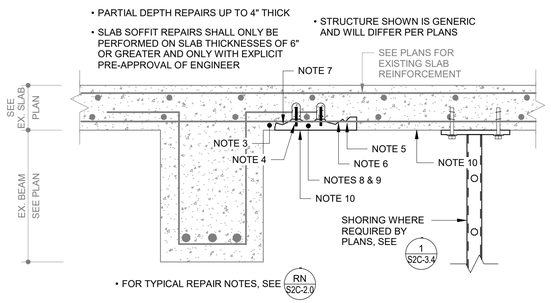
Project No.: 18217

Date: 04/26/21

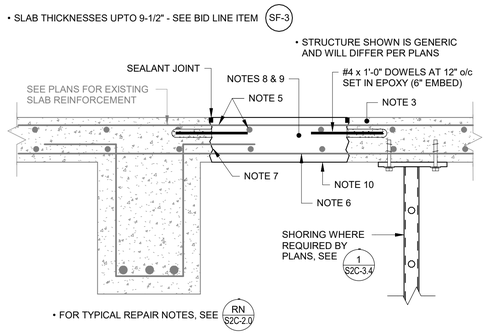
Scale: As indicated

Sheet Title: TYPICAL REINFORCEMENT & REPAIR NOTES

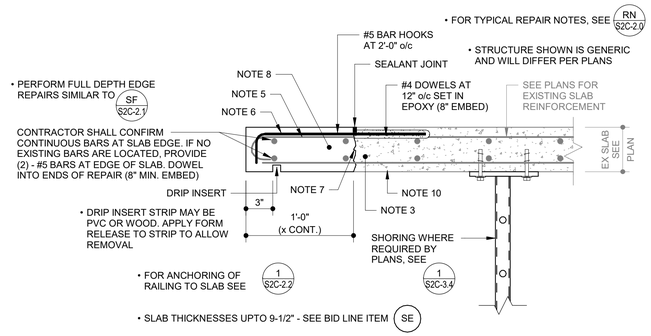
Sheet No.: S2C-2.0



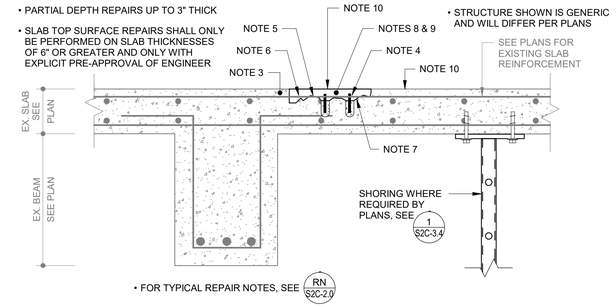
SU SLAB SOFFIT REPAIR
1 1/2" = 1'-0"



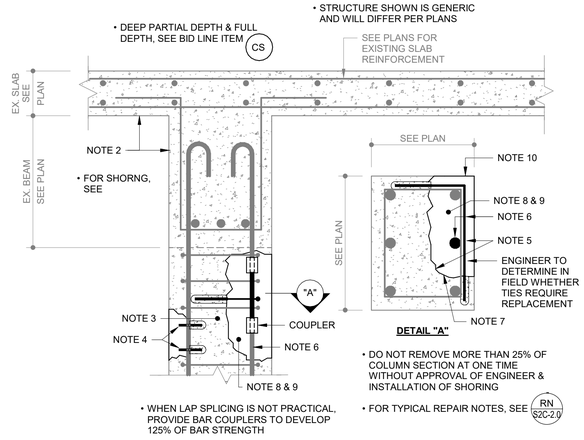
SF SLAB FULL-DEPTH REPAIR
1 1/2" = 1'-0"



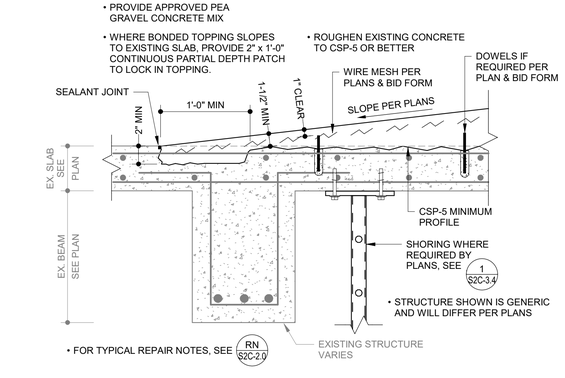
SE SLAB FULL-DEPTH DECK EDGE REPAIR
1 1/2" = 1'-0"



ST SLAB TOP SURFACE REPAIR
1 1/2" = 1'-0"

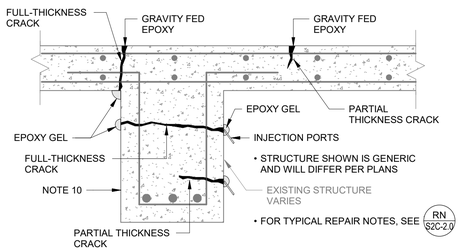


CS COLUMN SPALL REPAIR
1 1/2" = 1'-0"



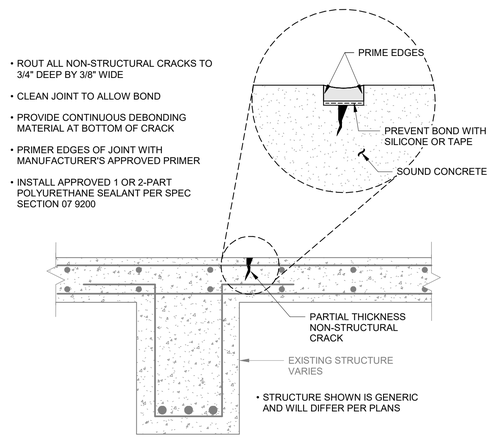
BT BONDED TOPPING TERMINATION
1 1/2" = 1'-0"

- CRACKS TO BE REPAIRED MUST BE PRE-APPROVED BY ENGINEER.
- PRIOR TO CHEMICAL GROUT OR EPOXY INSTALLATION, ROUT CRACK & CLEAN SURFACE TO RECEIVE GROUT OF ANY LOOSE MATERIALS, DIRT, DUST, LAITANCE, ETC. CLEANING SHALL BE DONE BY POWER WASHING FOLLOWED BY BLASTING WITH OIL-FREE COMPRESSIVE AIR. NO CLEANING SOLVENTS SHALL BE USED.
- SEAL ALL FULL-DEPTH CRACKS AS SHOWN WITH EPOXY GEL PRIOR TO INJECTION AND PROVIDE ADEQUATE PRESSURE INJECTION POINTS.
- CLEAN SURFACE OF EXCESS GEL MATERIAL AFTER CURE IS COMPLETE.
- SEE SPEC. SECTION 030100 FOR APPROVED INJECTION MATERIAL. CONTRACTOR SHALL INSTALL REPAIR PRODUCTS IN STRICT ACCORDANCE PER THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- AFTER TOPSIDE INJECTION HAS BEEN COMPLETED, CRACK TO BE ROUTED AND SEALED WITH APPROVED POLYURETHANE SEALANT



EI STRUCTURAL CRACK REPAIR (EPOXY INJECTION)
1 1/2" = 1'-0"

- ROUT ALL NON-STRUCTURAL CRACKS TO 3/4" DEEP BY 3/8" WIDE
- CLEAN JOINT TO ALLOW BOND
- PROVIDE CONTINUOUS DEBONDING MATERIAL AT BOTTOM OF CRACK
- PRIMER EDGES OF JOINT WITH MANUFACTURER'S APPROVED PRIMER
- INSTALL APPROVED 1 OR 2-PART POLYURETHANE SEALANT PER SPEC SECTION 07 9200



JS NON-STRUCTURAL CRACK REPAIR (CRACK SEALANT)
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

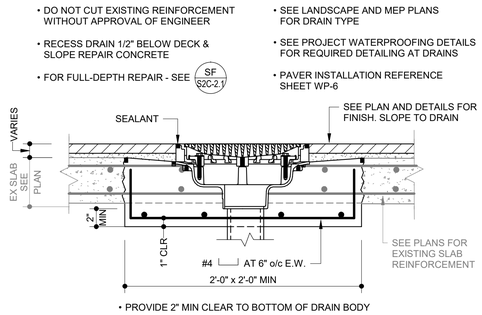
Project No.: 18217

Date: 04/26/21

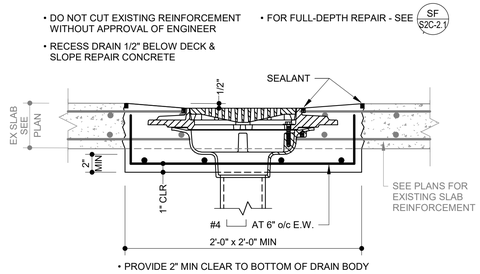
Scale: 1 1/2" = 1'-0"

Sheet Title: CONCRETE REPAIR DETAILS

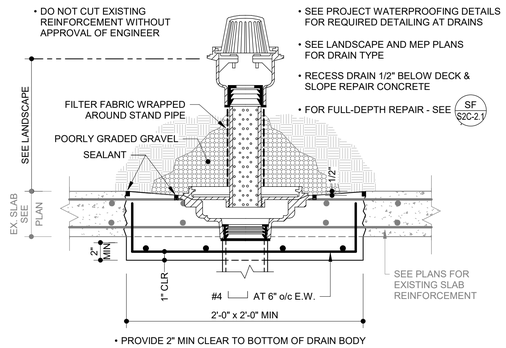
Sheet No.: S2C-2.1



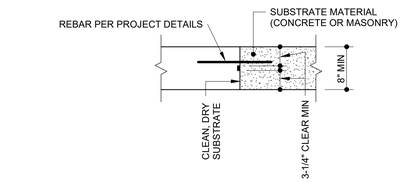
DD1 PROMENADE DECK DRAIN
1 1/2" = 1'-0"



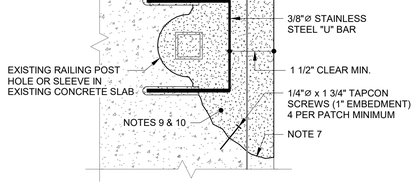
DD2 PARKING DECK DRAIN
1 1/2" = 1'-0"



DD3 PLANTER DRAIN
1 1/2" = 1'-0"

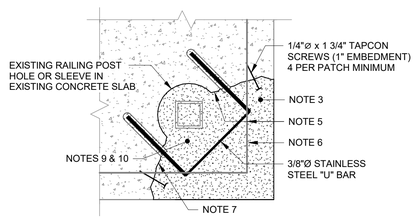


WS WATERSTOP
1" = 1'-0"

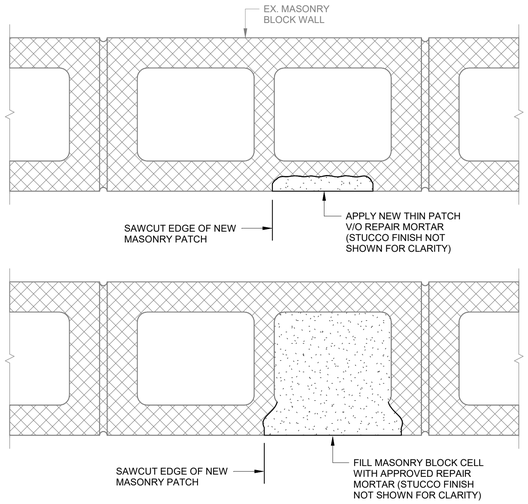


1 RAILING CONNECTION CONCRETE SPALL REPAIR
1 1/2" = 1'-0"

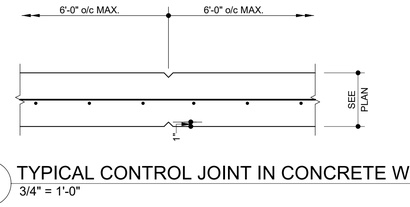
TYPICAL POST PLAN VIEW



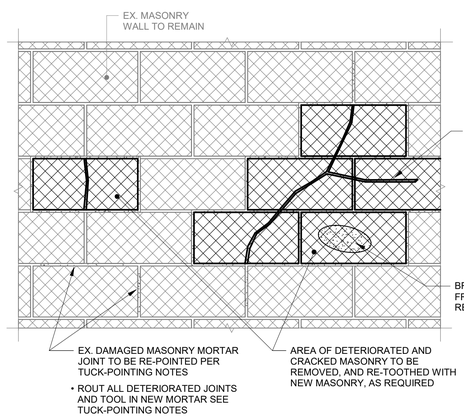
CORNER POST PLAN VIEW



2 PARTIAL DEPTH MASONRY WALL REPAIR
3/4" = 1'-0"



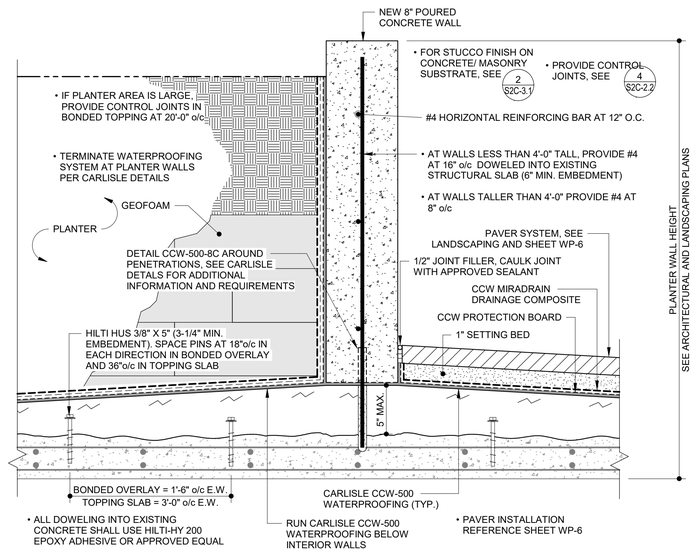
4 TYPICAL CONTROL JOINT IN CONCRETE WALLS
3/4" = 1'-0"



TUCK-POINTING MASONRY NOTES:

1. REMOVE ALL LOOSE AND CRACKED MORTAR WITH CHISELS, GRINDING WHEELS, ADN OTHER APPROPRIATE EQUIPMENT DOWN TO A MINIMUM DEPTH OF 1/2". THE REPAIRED JOINTS SHALL BE CLEANED WITH A STIFF BRUSH ALONG WITH A LIGHT HOSE STREAM
2. THE REPAIR MORTAR SHALL BE TYPE 'N' PRE-HYDRATED TO REDUCE EXCESSIVE SHRINKAGE. THE PROPER PRE-HYDRATION PROCESS IS AS FOLLOWS:
   A. ALL DRY INGREDIENTS SHALL BE THROUGHLY MIXED PRIOR TO ADDITION OF WATER
   B. ONLY ENOUGH CLEAN WATER SHALL BE ADDED TO THE DRY MIX TO PRODUCE A DAMP, WORKABLE CONSISTENCY WHICH WILL RETAIN ITS SHAPE WHEN FORMED INTO A BALL
   C. THE MORTAR SHALL STAND IN THIS DAMPENED CONDITION FOR 1 TO 1-1/2 HOURS
3. THE JOINTS TO BE TUCK-POINTED SHALL BE DAMPENED TO A SATURATED SURFACE DRY CONDITION. TO ENSURE A GOOD BOND, THE BRICKWORK MUST ABSORB ALL SURFACE WATER
4. WATER SHOULD BE ADDED TO THE PRE-HYDRATED MORTAR TO BRING IT TO A WORKABLE CONSISTANCY (SOMEWHAT DRIER THAN CONVENTIONAL MORTAR)
5. THE MORTAR SHALL BE PACKED TIGHTLY INTO THE JOINTS IN THIN LAYERS (1/4" MAXIMUM). EACH LAYER SHALL BECOME "THUMBPRINT" HARD BEFORE APPLYING THE NEXT LAYER
6. THE JOINTS SHALL BE TOOLED TO A CONCAVE PROFILE AFTER THE LAST LAYER OF MORTAR IS "THUMBPRINT" HARD

3 EXISTING MASONRY BLOCK REPAIRS
3/4" = 1'-0"



5 BONDED OVERLAY / TOPPING SLAB AT NEW POURED PLANTER WALL
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

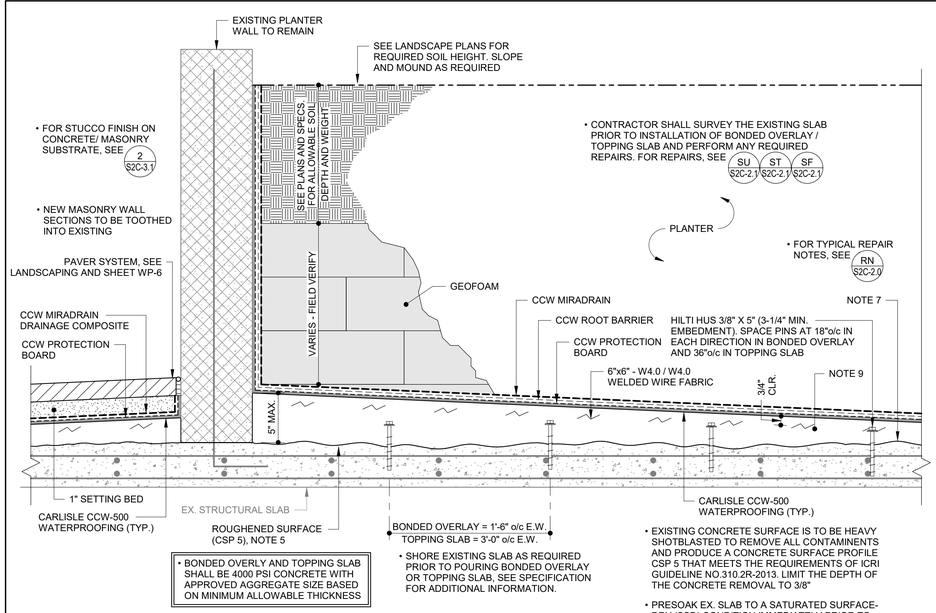
Project No.: 18217

Date: 04/26/21

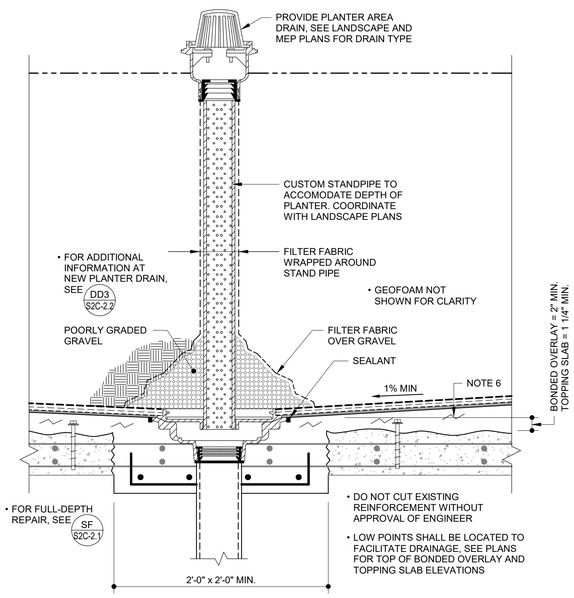
Scale: As indicated

Sheet Title:
CONCRETE/MASONRY REPAIR DETAILS

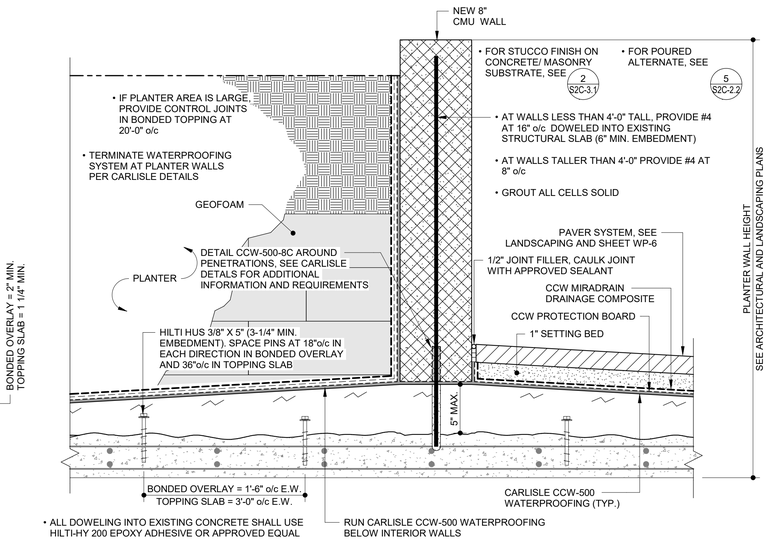
Sheet No.:
S2C-2.2



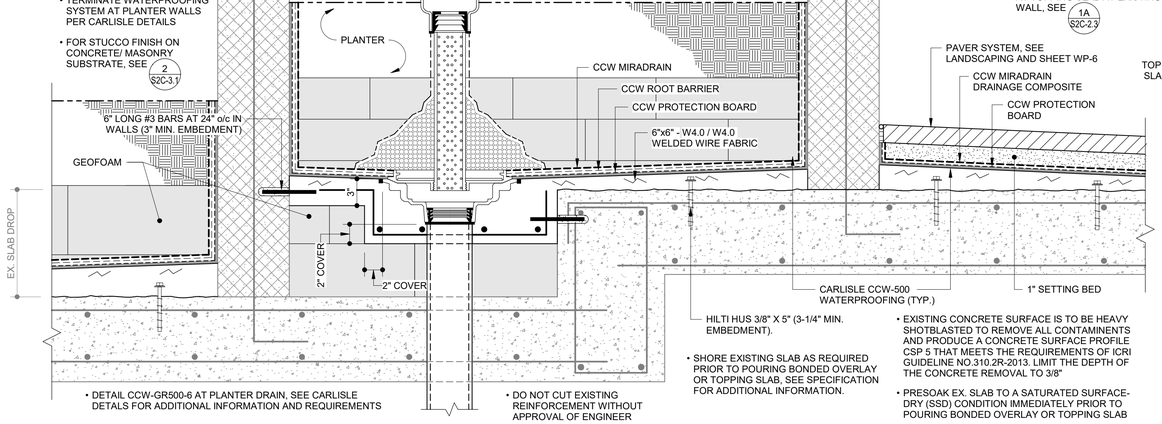
1A BONDED OVERLAY / TOPPING SLAB AT EXISTING PLANTER WALL
NOT TO SCALE



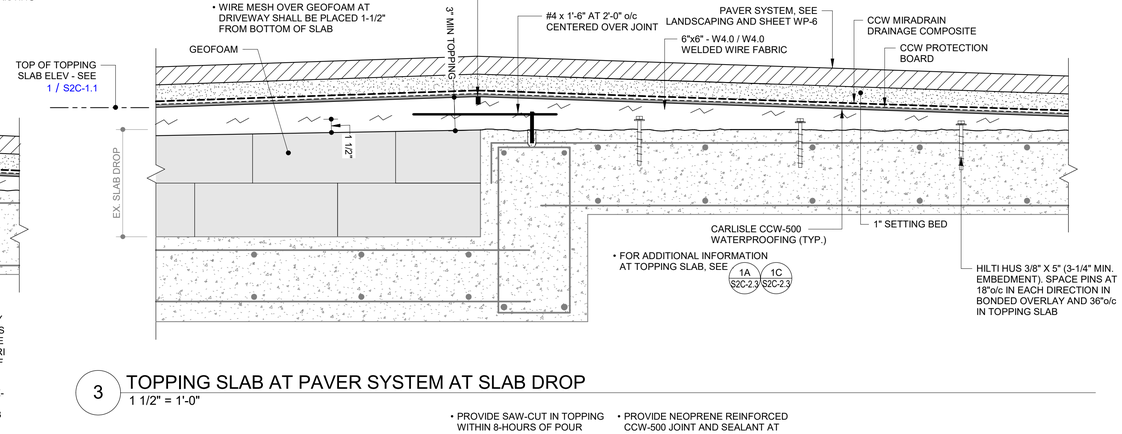
1B BONDED OVERLAY / TOPPING SLAB AT PLANTER DRAIN
NOT TO SCALE



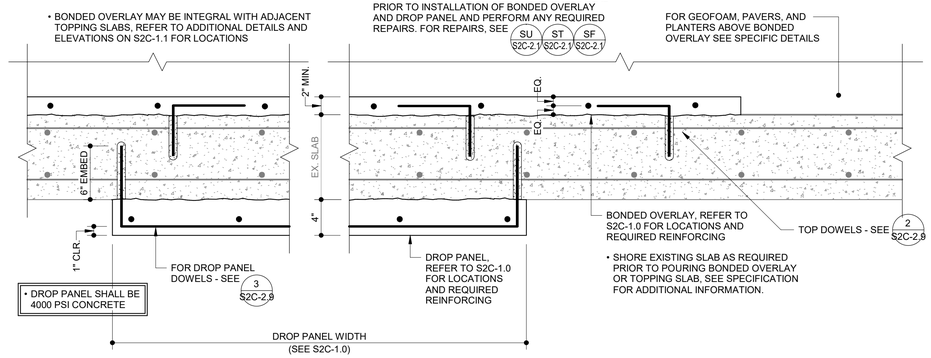
1C BONDED OVERLAY / TOPPING SLAB AT NEW CMU PLANTER WALL
NOT TO SCALE



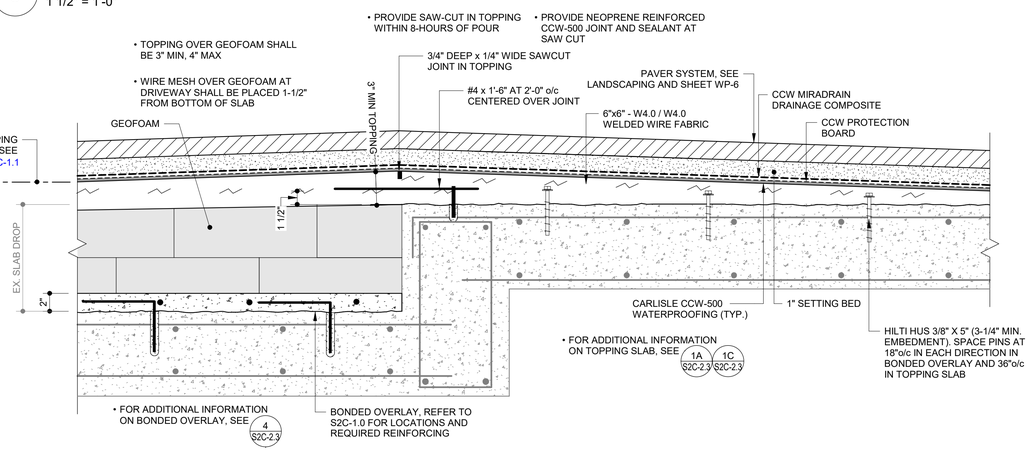
2 TOPPING SLAB & PAVER SYSTEM AT EXISTING PLANTER WALL AT SLAB DROP
1 1/2" = 1'-0"



3 TOPPING SLAB AT PAVER SYSTEM AT SLAB DROP
1 1/2" = 1'-0"



4 BONDED OVERLAY AND DROP PANEL
1 1/2" = 1'-0"



5 BONDED OVERLAY / TOPPING SLAB AT PAVER SYSTEM AT SLAB DROP
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED HR/JB/RM	DRAWN HR/JB/RM
CHECKED RM	APPROVED FPM

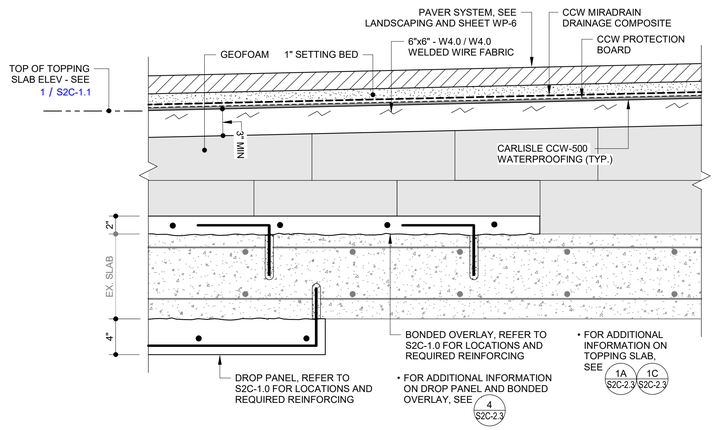
Project No.: 18217

Date: 04/26/21

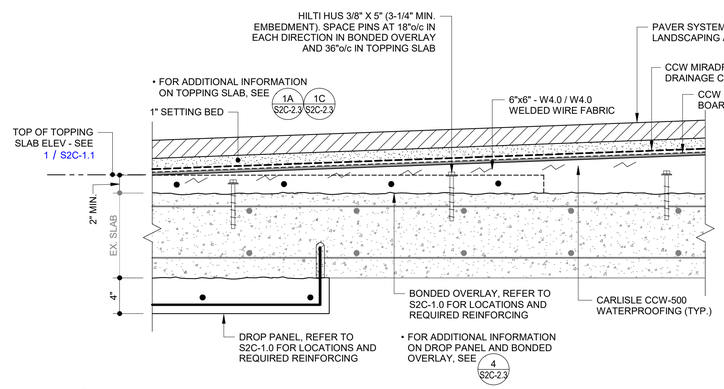
Scale: 1 1/2" = 1'-0"

Sheet Title: PLAZA DETAILS

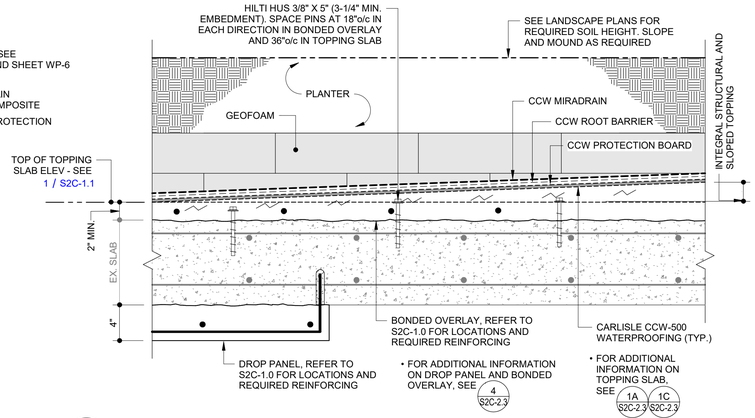
Sheet No.: S2C-2.3



1 BONDED OVERLAY / TOPPING SLAB AT RAISED PAVERS
1 1/2" = 1'-0"



2 INTEGRAL BONDED OVERLAY / TOPPING SLAB AT PAVERS
1 1/2" = 1'-0"



3 INTEGRAL BONDED OVERLAY / TOPPING SLAB AT PLANTER
1 1/2" = 1'-0"

4 TOPPING SLAB AND PLANTER AT STORE FRONT AT SLAB DROP
1 1/2" = 1'-0"

6 TOPPING SLAB AT NEW EXTERIOR CMU WALL
1 1/2" = 1'-0"

5 TOPPING SLAB AND PAVERS AT STORE FRONT AT SLAB DROP
1 1/2" = 1'-0"

7 TOPPING SLAB AND PAVERS AT EXISTING STAIRS AT SLAB DROP
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

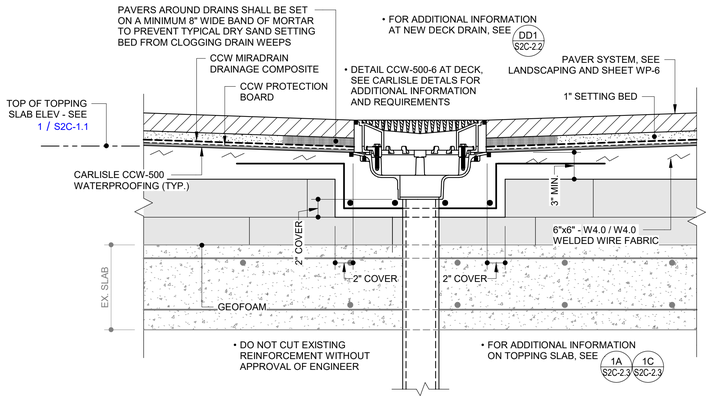
Project No.: 18217

Date: 04/26/21

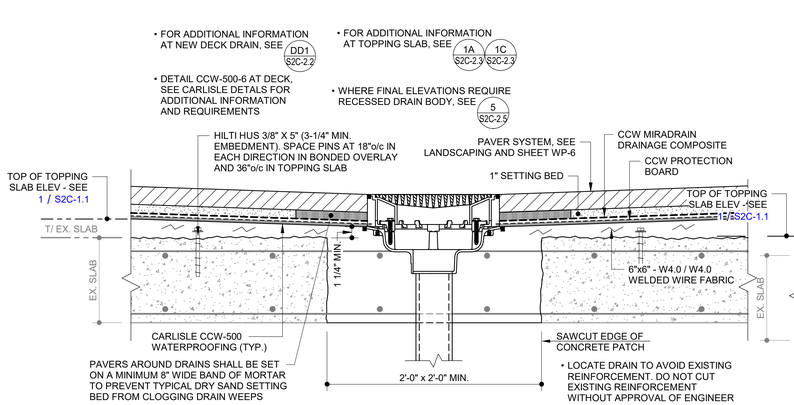
Scale: 1 1/2" = 1'-0"

Sheet Title:
PLAZA DETAILS

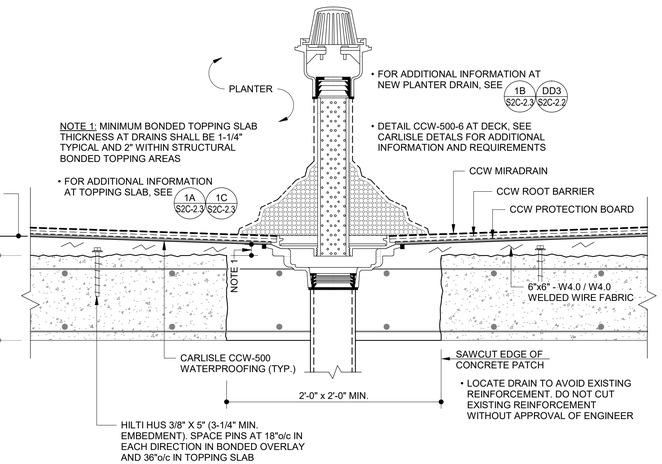
Sheet No.:
S2C-2.4



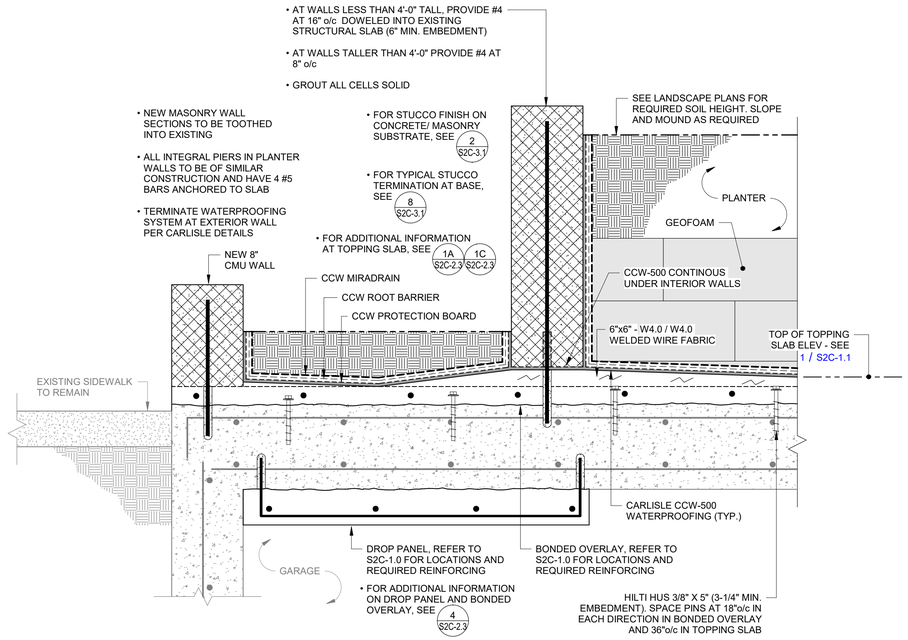
1 DRAIN IN TOPPING SLAB AT RAISED PAVER SYSTEM AT SLAB DROP
1 1/2" = 1'-0"



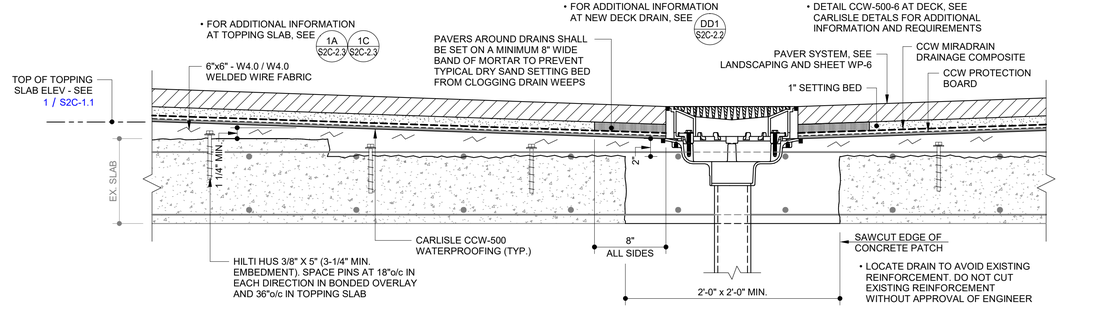
2 DRAIN IN TOPPING SLAB AT PAVER SYSTEM (TYPICAL)
1 1/2" = 1'-0"



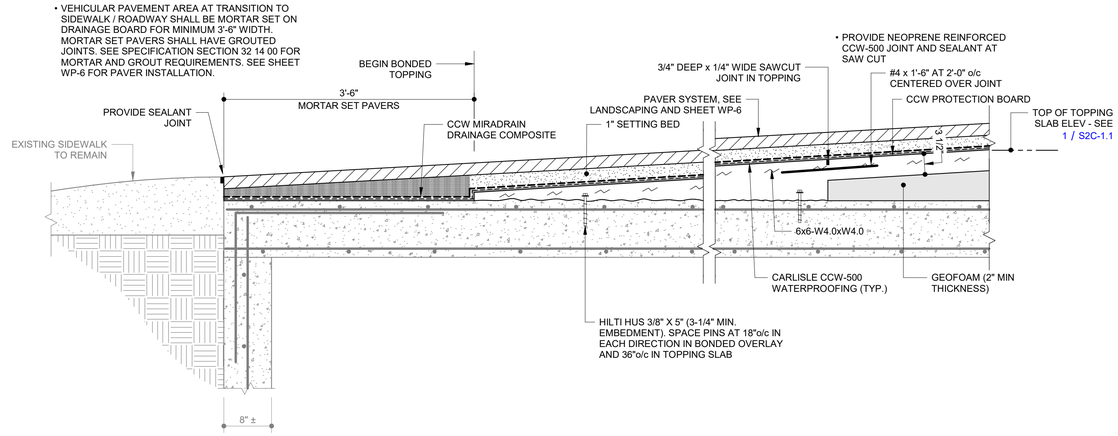
3 DRAIN IN TOPPING SLAB AT PLANTERS
1 1/2" = 1'-0"



4 BONDED OVERLAY / TOPPING SLAB AT NEW EXTERIOR & INTERIOR CMU WALLS
1 1/2" = 1'-0"



5 DRAIN IN TOPPING SLAB AT PAVER SYSTEM (ALTERNATE)
1 1/2" = 1'-0"



6 EXISTING DRIVEWAY RAMP AT FOUNDATION
1" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

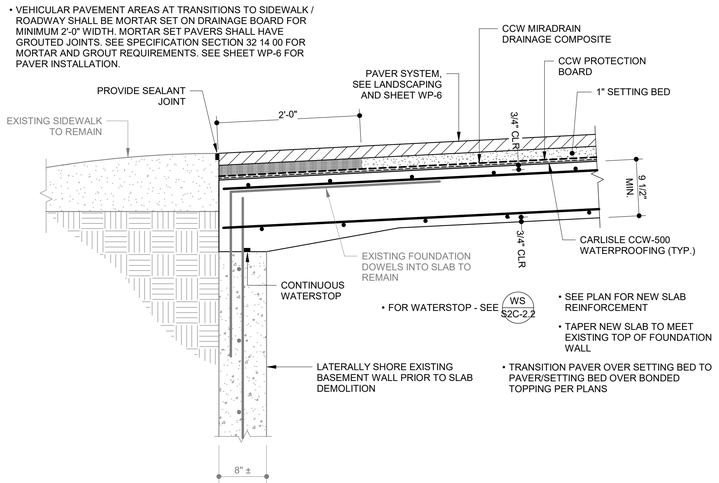
Project No.: 18217

Date: 04/26/21

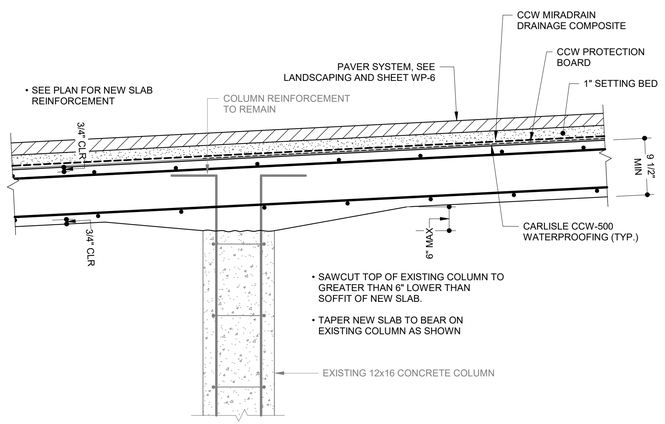
Scale: As indicated

Sheet Title:
PLAZA DETAILS

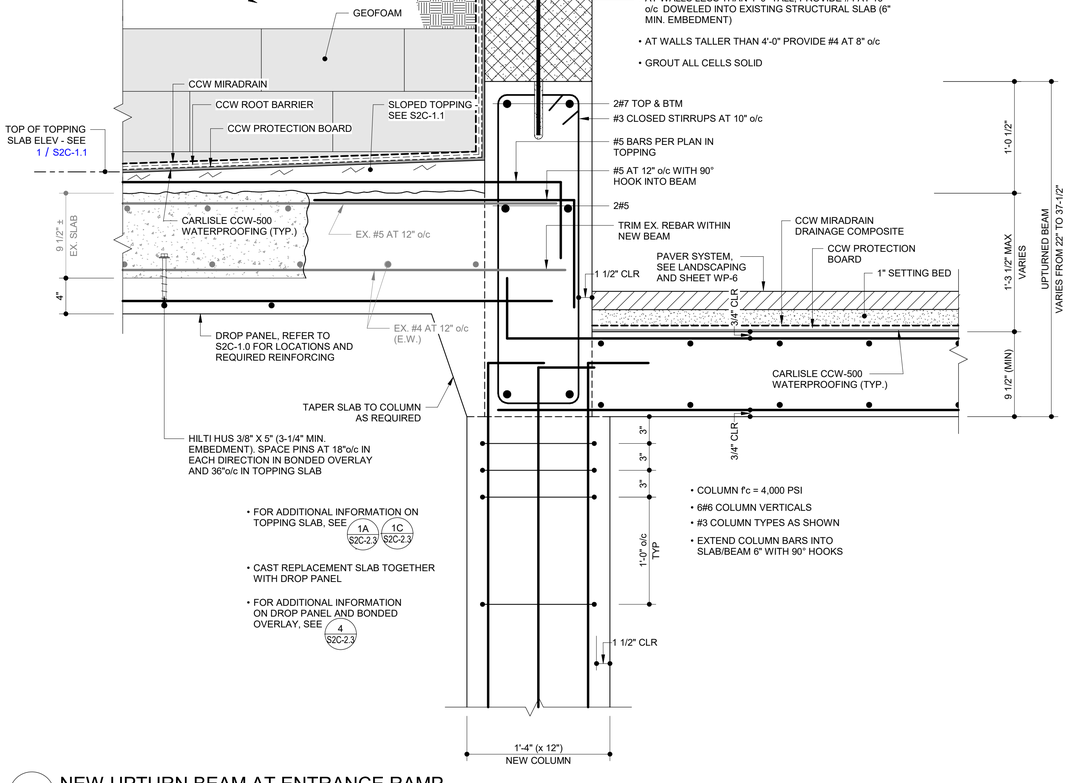
Sheet No.:
S2C-2.5



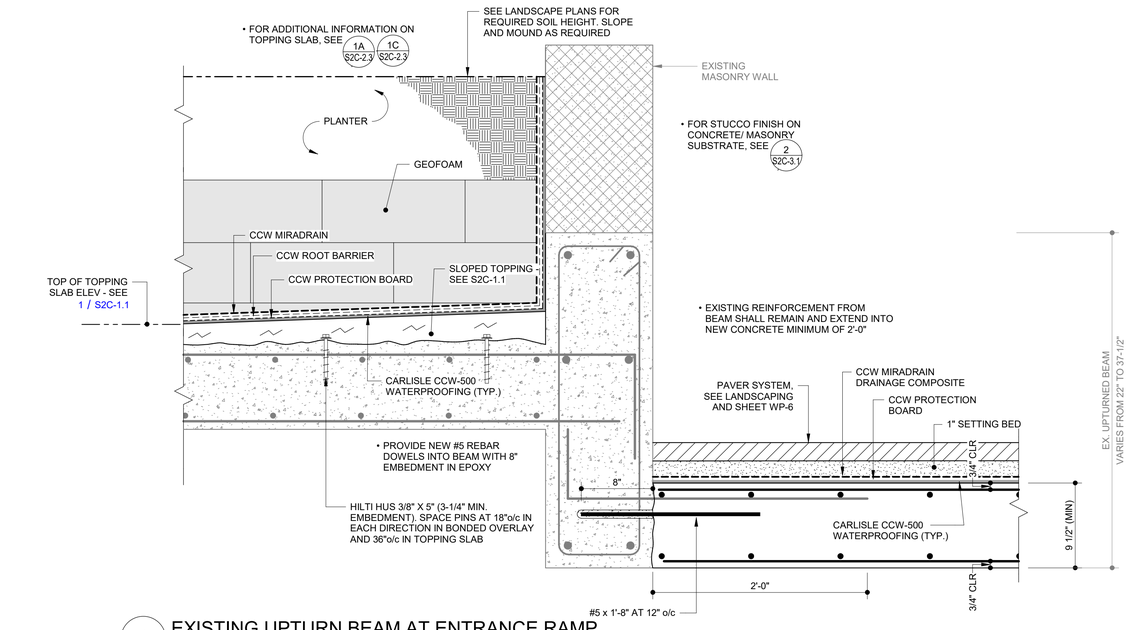
1 NEW DRIVEWAY RAMP AT FOUNDATION
1" = 1'-0"



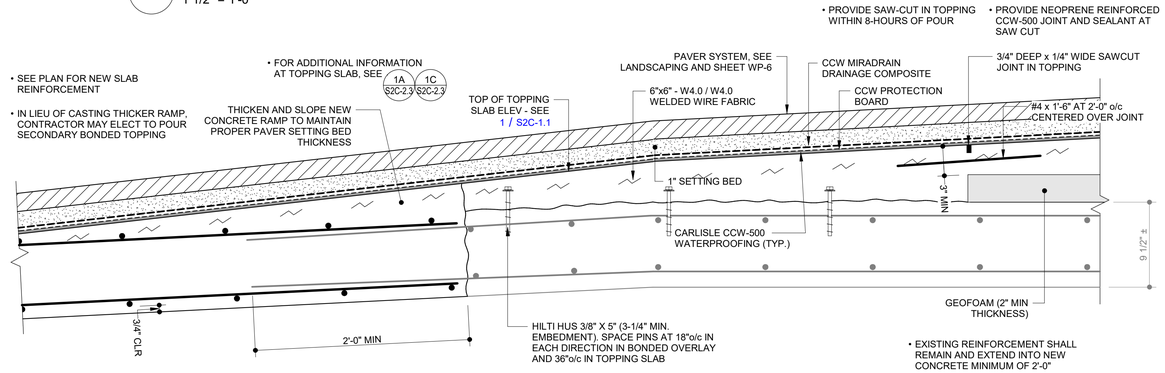
2 RAMP SLAB AT EXISTING COLUMN
1" = 1'-0"



3 NEW UPTURN BEAM AT ENTRANCE RAMP
1 1/2" = 1'-0"



4 EXISTING UPTURN BEAM AT ENTRANCE RAMP
1 1/2" = 1'-0"



5 TOPPING SLAB RAMP TRANSITION
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

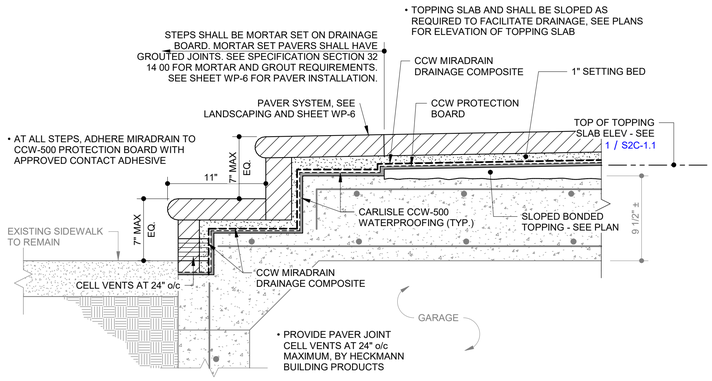
Project No.: 18217

Date: 04/26/21

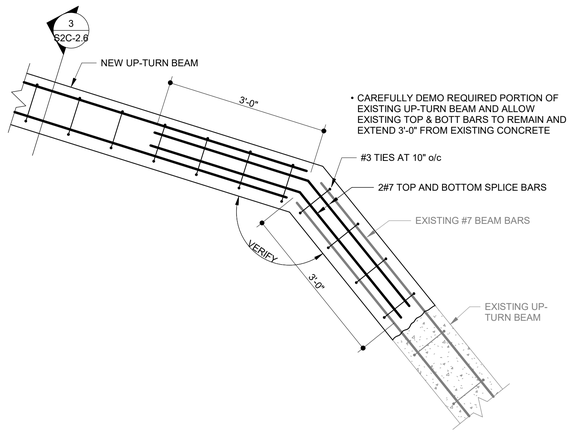
Scale: As indicated

Sheet Title:
PLAZA DETAILS

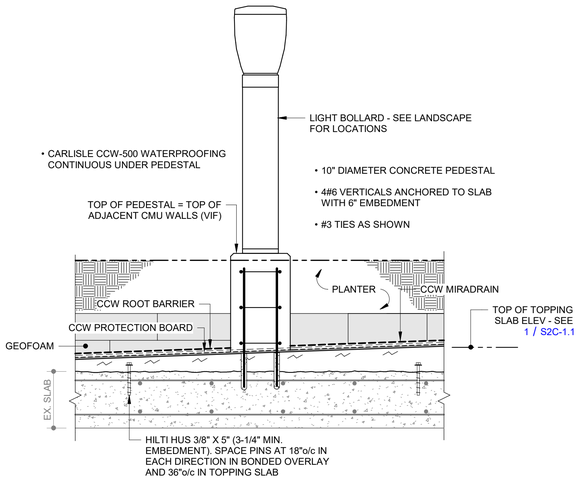
Sheet No.:
S2C-2.6



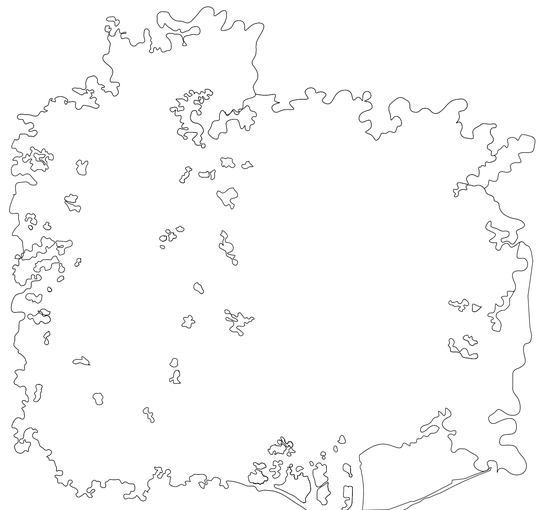
1 EXISTING STEPS AT FOUNDATION WALL
1 1/2" = 1'-0"



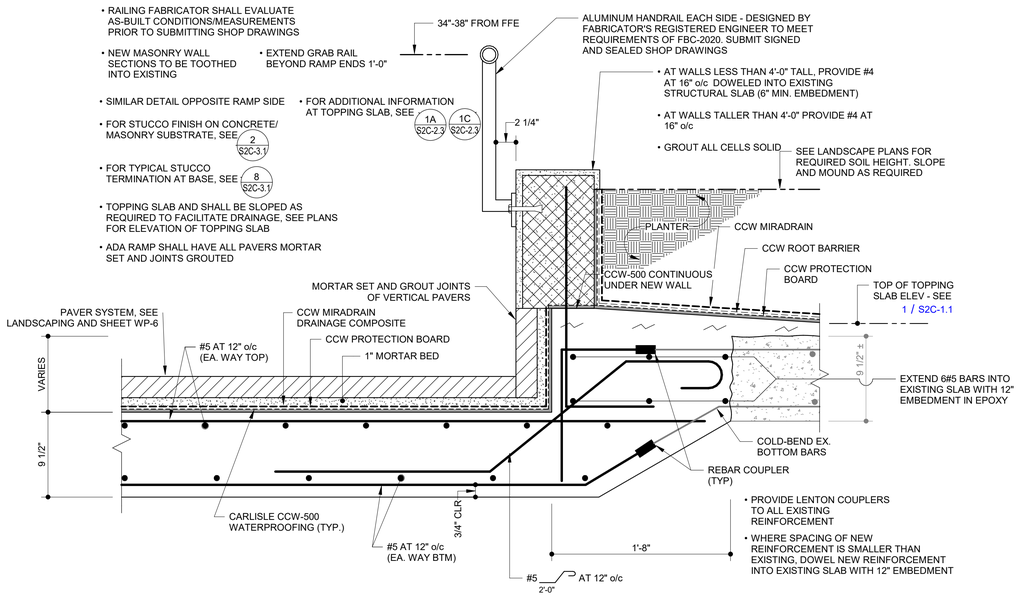
2 CONCRETE BEAM TIE-IN TO EXISTING BEAM
3/4" = 1'-0"



3 TYPICAL PLANTER BOLLARD
1" = 1'-0"



4 TYPICAL LARGE TREE PIT
NOT TO SCALE



5 SECTION THRU ADA RAMP
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

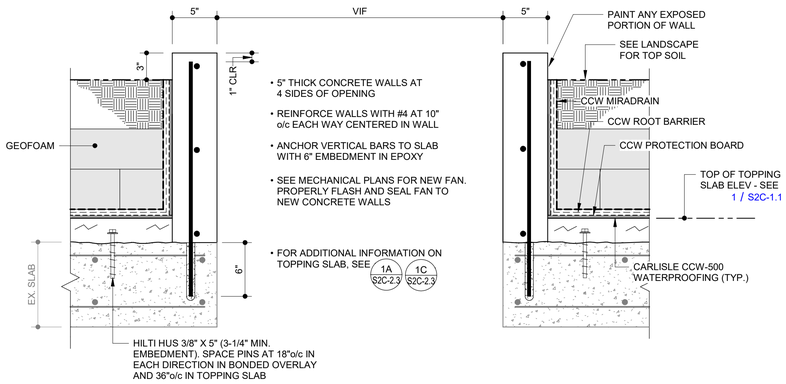
morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

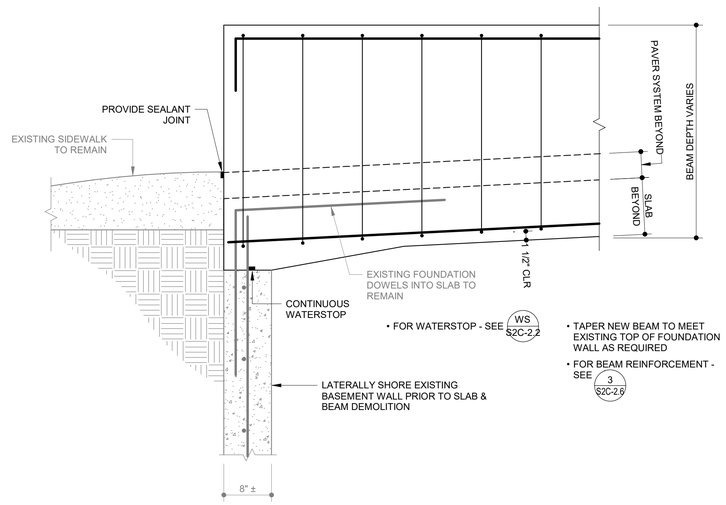
DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

Project No.: 18217
Date: 04/26/21
Scale: As indicated
Sheet Title: PLAZA DETAILS

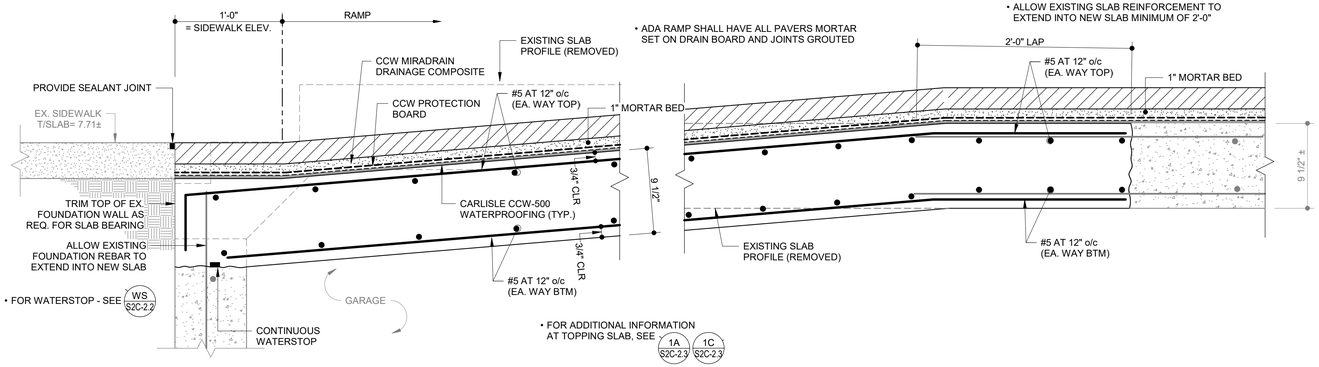
Sheet No.: S2C-2.7



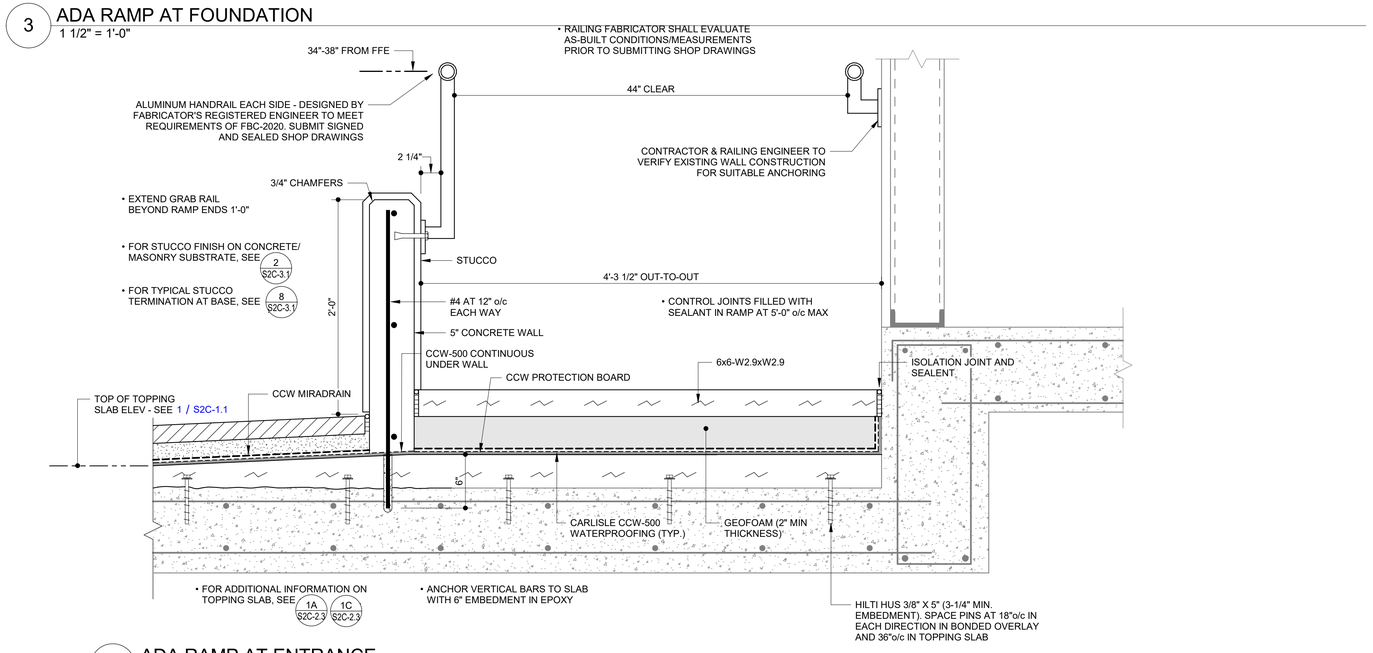
1 NEW AIR SHAFT WALLS
1 1/2" = 1'-0"



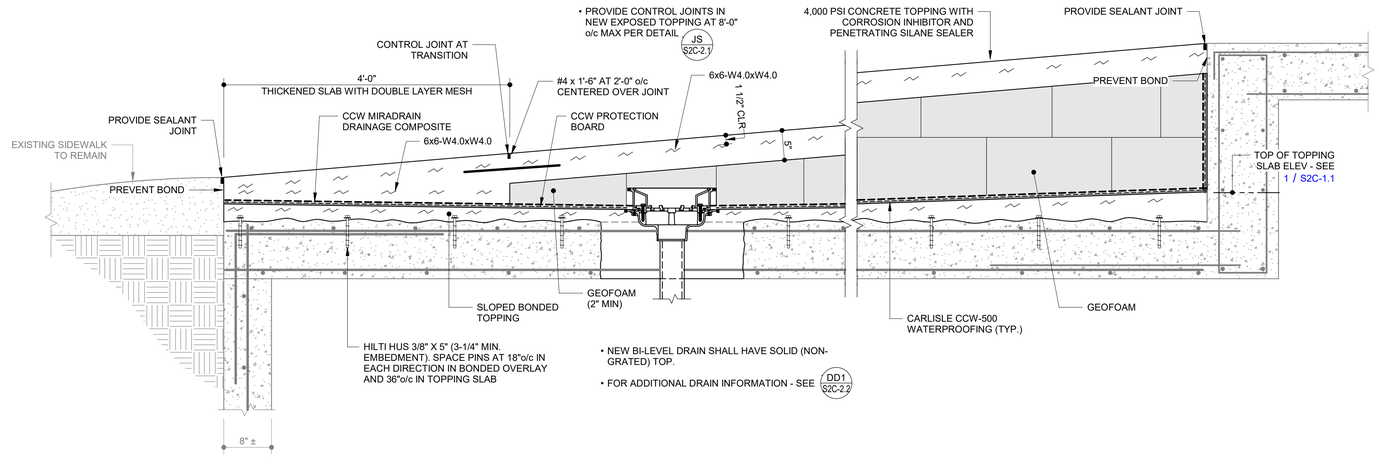
2 BASEMENT WALL AT NEW BEAM
1" = 1'-0"



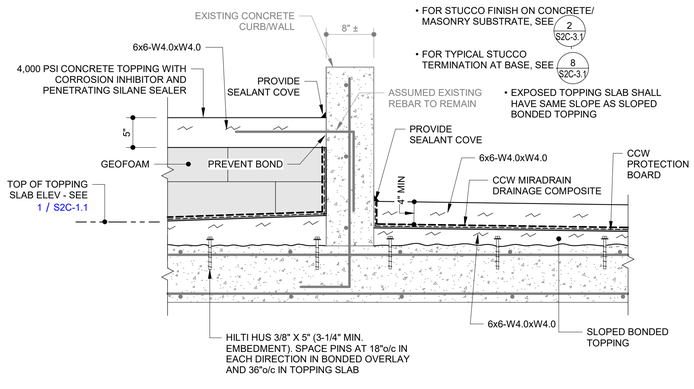
3 ADA RAMP AT FOUNDATION
1 1/2" = 1'-0"



4 ADA RAMP AT ENTRANCE
1 1/2" = 1'-0"



5 EXISTING SERVICE DRIVEWAY RAMP
1" = 1'-0"



6 EXISTING SERVICE DRIVEWAY RAMP
1" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

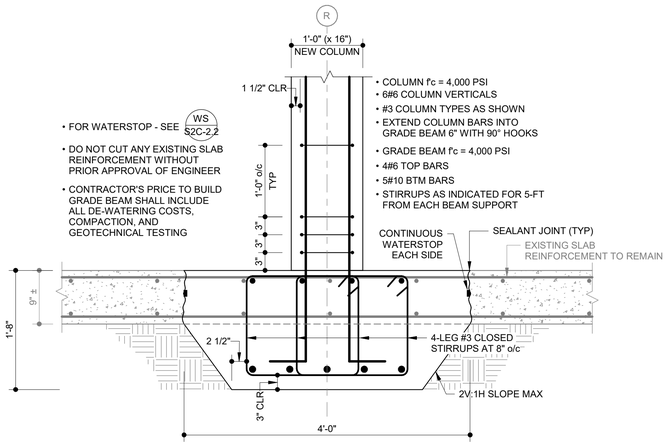
Project No.: 18217

Date: 04/26/21

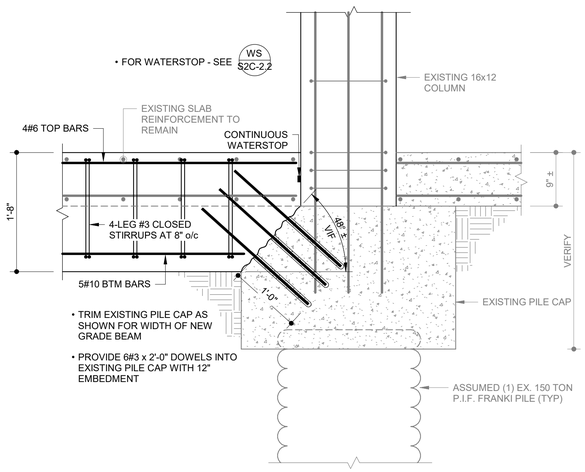
Scale: As indicated

Sheet Title:
PLAZA DETAILS

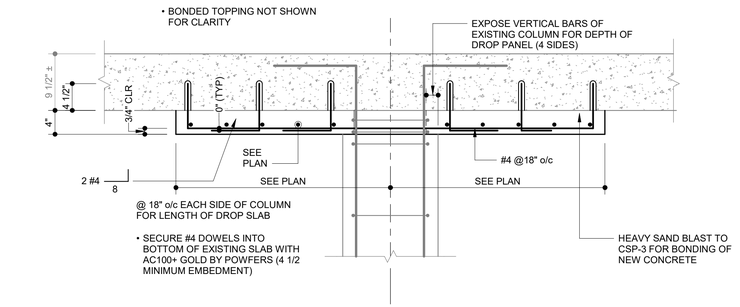
Sheet No.:
S2C-2.8



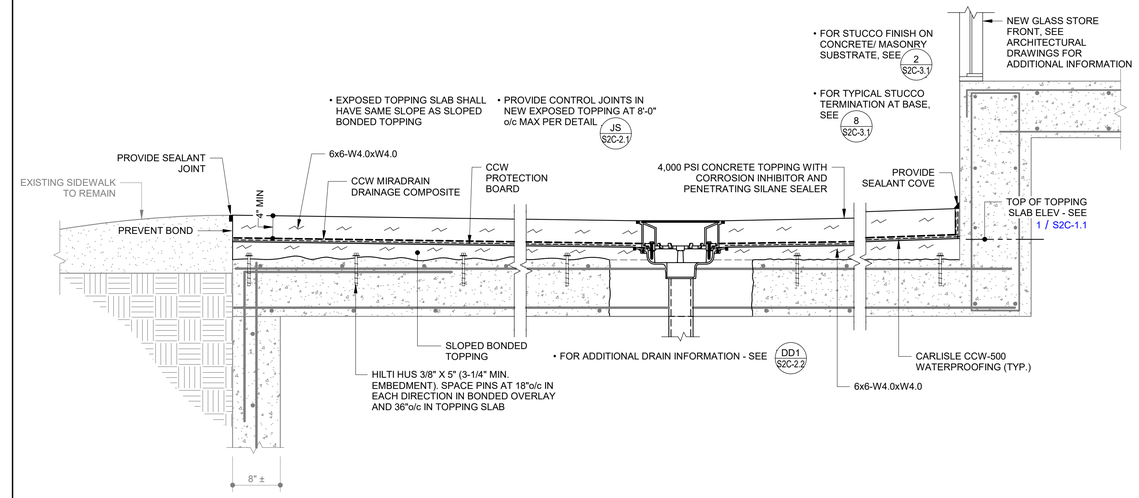
4 NEW GRADE BEAM AT COLUMN
1" = 1'-0"



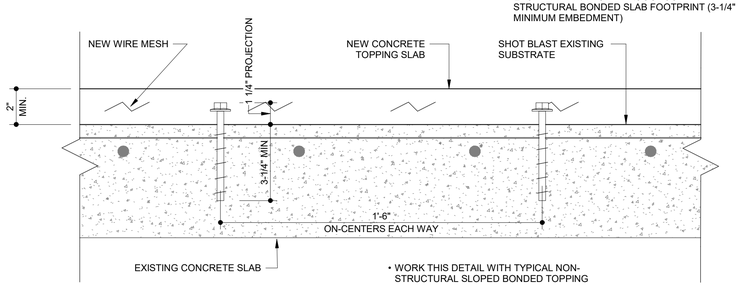
5 NEW GRADE BEAM AT EXISTING PILE CAP
1" = 1'-0"



3 NEW SLAB DROP PANEL
1" = 1'-0"

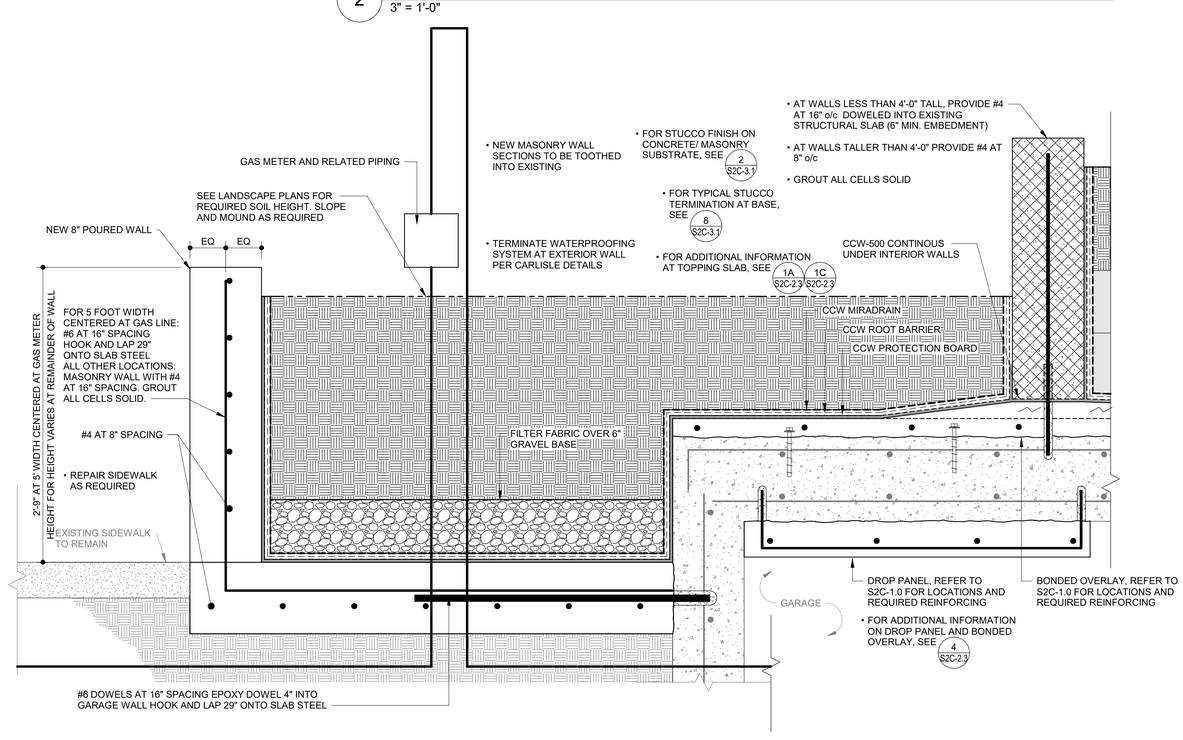


1 EXISTING SERVICE DRIVEWAY RAMP
1" = 1'-0"



2 STRUCTURAL BONDED TOPPING
3" = 1'-0"

6 BOLLARD AND STRUCTURE SLAB ANCHORING
1" = 1'-0"



7 EXPANDED GAS LINE SLAB AND WALL EXTENSION
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

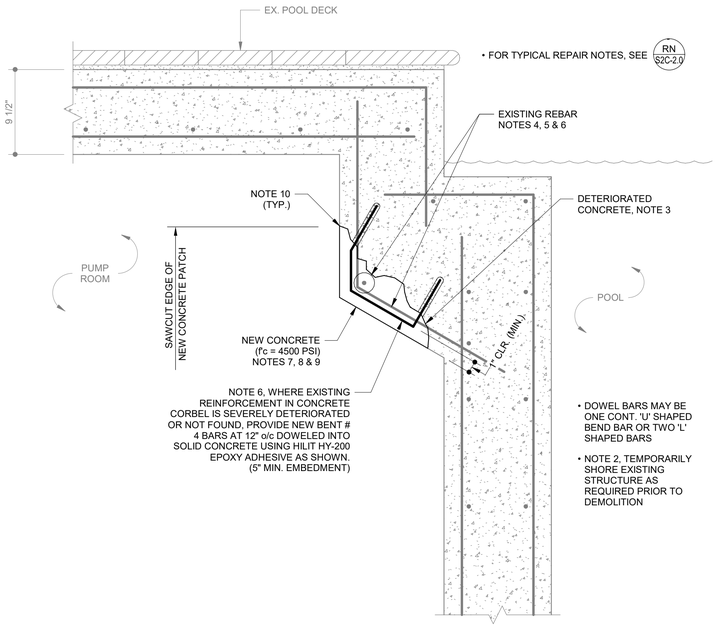
Project No.: 18217

Date: 04/26/21

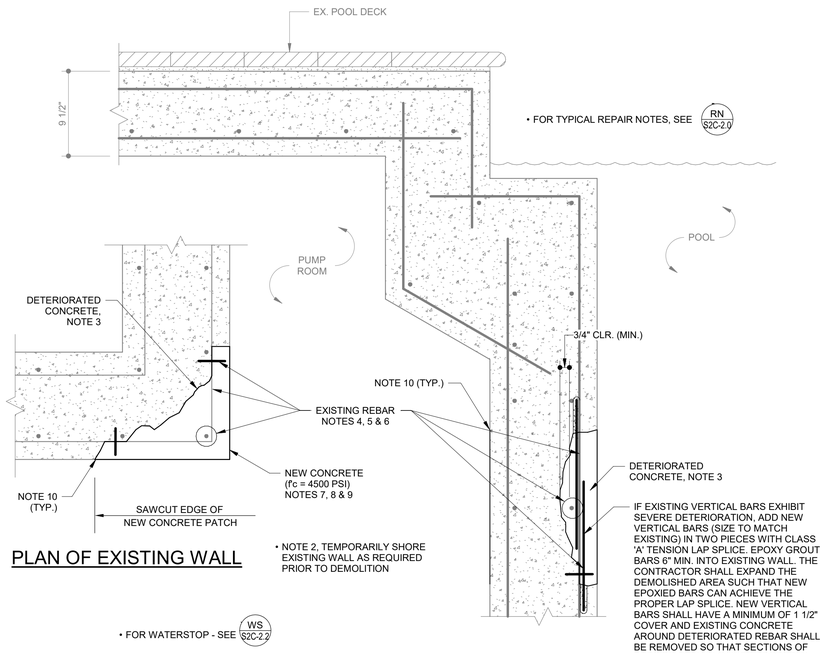
Scale: As indicated

Sheet Title: PLAZA & FOUNDATION DETAILS

Sheet No.: S2C-2.9

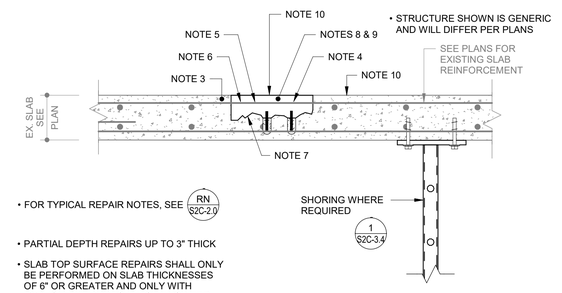


1 CONCRETE CORBEL REPAIR AT POOL
1 1/2" = 1'-0"

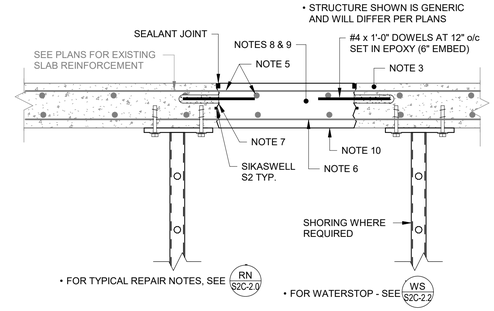


PLAN OF EXISTING WALL

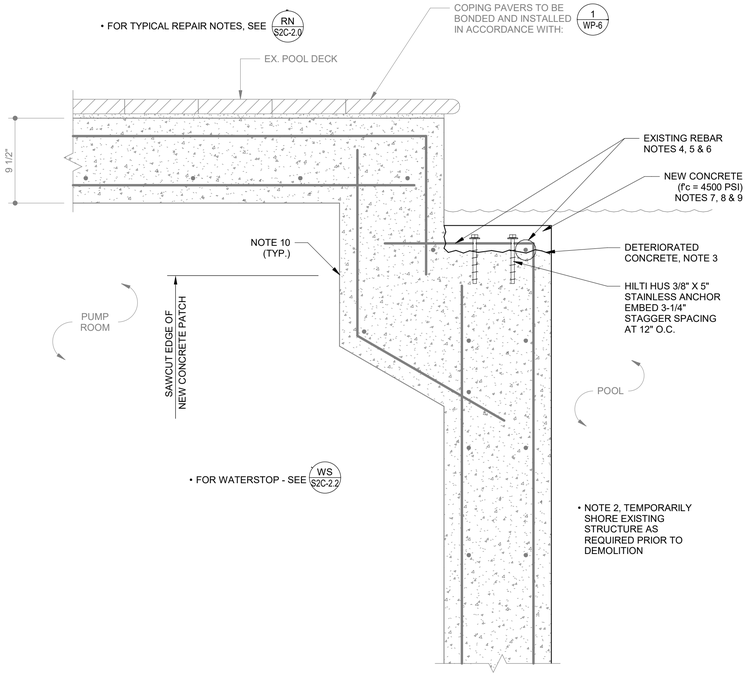
2 POOL WALLS CONCRETE SPALL REPAIR
1 1/2" = 1'-0"



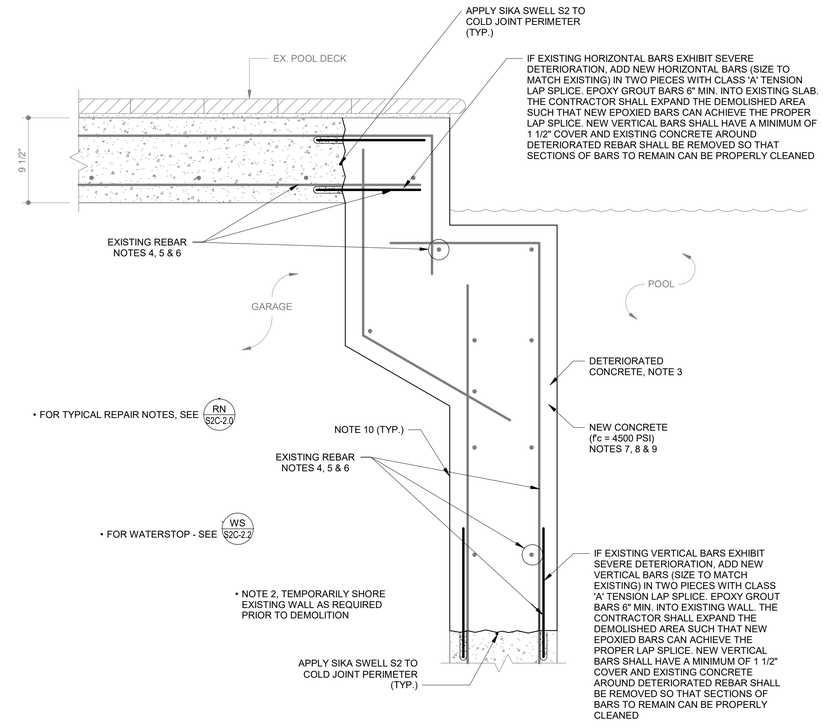
4 POOL SLAB TOP SURFACE REPAIR
1 1/2" = 1'-0"



3 POOL SLAB FULL-DEPTH REPAIR
1 1/2" = 1'-0"



5 CONCRETE GUTTER REPAIR AT POOL
1 1/2" = 1'-0"



6 POOL WALLS CONCRETE FULL DEPTH REPAIR
1 1/2" = 1'-0"

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
License: PE89035
Expires: 02/28/21

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED Designer	DRAWN Author
CHECKED Checker	APPROVED Approver

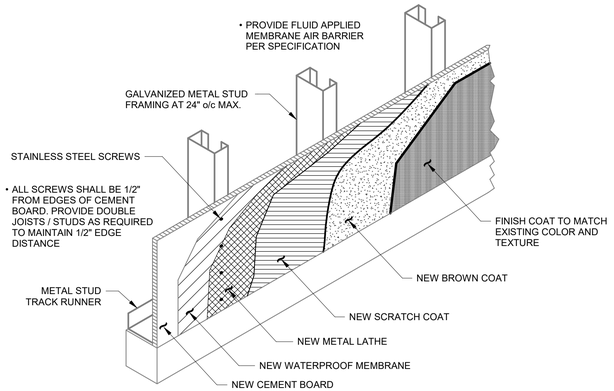
Project No.: 18217

Date: 04/26/21

Scale: 1 1/2" = 1'-0"

Sheet Title:
POOL REPAIR DETAILS

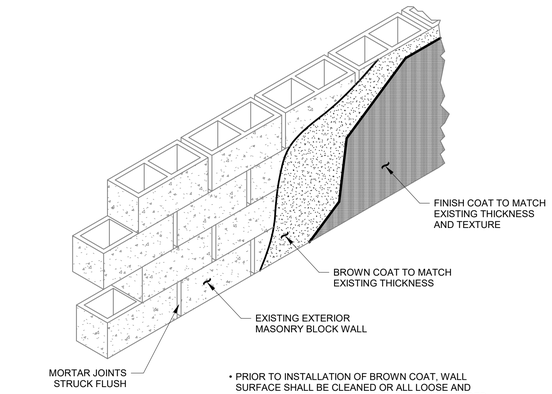
Sheet No.:
S2C-3.0



• PROVIDED 3/8" x 3.4 lbs/yd3 GALVANIZED EXTERIOR RIB EXPANDED METAL LATHE SECURED TO CEMENT BOARD WITH 1 1/2" x 11 GAUGE S.S. SCREWS WITH 7/16"Ø PAN WAFER HEAD FABRICATED PER ASTM C-954 OR ASTM C-1002 SPACED AT 6" o/c E.W.

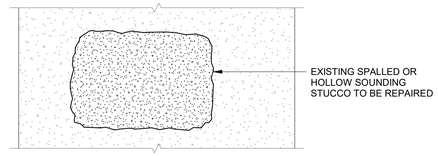
• PROVIDE 3/4" ARMOROC STRUCTURAL CEMENT BOARD - FASTEN ALL EDGES AND INTERIOR SUPPORTS WITH 1 5/8" x #10 SELF-DRILLING CEMENT BOARD SCREWS AT 6" o/c MAX. SPACING

1 NEW STUCCO OVER LIGHTGAGE / CEMENT BOARD SURFACES
3/4" = 1'-0"



• PRIOR TO INSTALLATION OF BROWN COAT, WALL SURFACE SHALL BE CLEANED OR ALL LOOSE AND FOREIGN CONTAMINATES AND THE ENTIRE EXPOSED SURFACE SHALL BE COATED WITH AN APPROVED BONDING AGENT CONFORMING TO ASTM C-932

2 NEW STUCCO OVER MASONRY / CONCRETE SURFACES
3/4" = 1'-0"



SURFACE ELEVATION

1. PRIOR TO COMMENCEMENT OF STUCCO REPAIRS, THE CONTRACTOR SHALL HIRE AN EXPERIENCED TESTING LABORATORY TO COMPLETE A CHEMICAL AND MICROSCOPIC ANALYSIS OF THE EXISTING STUCCO.
2. CHIP-OFF ALL DELAMINATED STUCCO WITH CHISEL AND HAMMER.
3. PROPERLY CLEAN EXISTING SURFACE TO RECEIVE STUCCO REPAIR.
4. MECHANICALLY ROUGHEN EXISTING BROWN COAT SURFACE WITH SAND BLASTING OR LIGHT CHIPPING HAMMER OR HAMMER AND CHISEL TO REMOVE LOOSE MATERIAL TO ASSURE PROPER BONDING. SURFACE MUST BE STRUCTURALLY SOUND AND CLEAN, FREE OF ANY AND ALL OIL, GREASE, WAX, DUST, SAND, DIRT, LAITANCE, PAINT, EFFLORESCENCE, CURING COMPOUNDS, FORM RELEASE AGENTS AND BASE MATERIALS OF ANY KIND.
5. COAT PREPARED SURFACE WITH AN APPROVED BONDING AGENT CONFORMING TO ASTM C-932.
6. STUCCO REPAIR MATERIALS SHALL MATCH THE EXISTING STUCCO AS DETERMINED BY THE LABORATORY ANALYSIS. SUBMIT PRODUCT DATA FOR APPROVAL.
7. TOUCH-UP BROWN COAT AND INSTALL NEW FINISH COAT OF STUCCO TO MACH EXISTING IN COLOR, THICKNESS AND APPEARANCE. SEE SPECIFICATIONS FOR ADDITIONAL PROJECT REQUIREMENTS.

3 STUCCO REPAIR OVER MASONRY / CONCRETE SURFACES
3/4" = 1'-0"

1. CRACKS TO BE REPAIRED SHALL BE ROUTED TO A MINIMUM WIDTH AND DEPTH OF 1/4" TO ACCOMMODATE STUCCO FILL. THE EDGES OF THE CRACK SHALL BE UNDERCUT WHERE POSSIBLE. BRUSH CRACKS CLEAN OF LOOSE DEBRIS WITH A SOFT BRUSH.
2. THE AREA TO RECEIVE THE STUCCO FILL SHALL BE THOROUGHLY WETTED TO PREVENT DEHYDRATION OF THE STUCCO. RE-WET AS NECESSARY.
3. USING THE APPROVED STUCCO MIX, FILL THE CRACK AND WORK STUCCO IN AS TIGHTLY AS POSSIBLE UNTIL FLUSH WITH ADJOINING SURFACE. REMOVE EXCESS STUCCO.
4. PROTECT FILLED AREAS WITH PLASTIC SHEETING AND RE-WET PERIODICALLY TO ALLOW A FULL CURE.

4 REPAIR OF STUCCO CRACKS GREATER THAN 1/8" WIDE
3/4" = 1'-0"

• REGARDLESS OF SOUNDNESS OF STUCCO, REPLACE STUCCO AT ALL FLOOR LINES AND INSTALL GLASS FABRIC DETAIL MESH BY STO INTO STUCCO BROWN COAT

• PROVIDE TWO (2) 9.5" WIDE MESH STRIPS, EACH CENTERED OVER THE TOP AND BOTTOM EDGES OF SLAB

6 STUCCO REINFORCEMENT AT FLOOR LINES
3/4" = 1'-0"

• CONTINUOUS #36 SILL SCREED (SI36) BY CLARKDIETRICH AND 4" STRIP OF GALVANIZED LATHE

• FASTEN TO CONCRETE WALL PER ASTM A1063 & MANUFACTURER AT NOT MORE THAN 6" o/c

• SIMILAR CONDITION WHERE STUCCO TERMINATES AT CONCRETE DECK

• SEE SPECIFICATIONS FOR ADDITIONAL STUCCO INFORMATION

8 STUCCO WEEP SCREED AT BASE/FOUNDATION
3/4" = 1'-0"

1. CRACK SHOULD BE FREE FROM DIRT, GREASE, AND VEGETATION. BLOW CRACKS CLEAN WITH COMPRESSED AIR, NOT TO EXCEED 150 PSI.
2. COAT CRACK WITH A BONDING AGENT CONFORMING TO ASTM C-932 IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3. PREPARE A SLURRY COAT OF STUCCO TO MATCH THE COLOR AND FINISH OF THE EXISTING STUCCO. APPLY A LIGHT COAT OF THE SLURRY ALONG THE CRACK AND WORK TO MATCH EXISTING STUCCO.

5 REPAIR OF STUCCO CRACKS LESS THAN 1/8" WIDE
3/4" = 1'-0"

• WHERE STUCCO REPAIRS EXTEND ACROSS CMU/CONCRETE COLUMN JOINTS, INSTALL GLASS FABRIC DETAIL MESH BY STO INTO STUCCO BROWN COAT

• PROVIDE MINIMUM 4" MESH DEVELOPMENT BEYOND JOINT

7 STUCCO REINFORCEMENT AT WALL AND COLUMN JOINTS
3/4" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

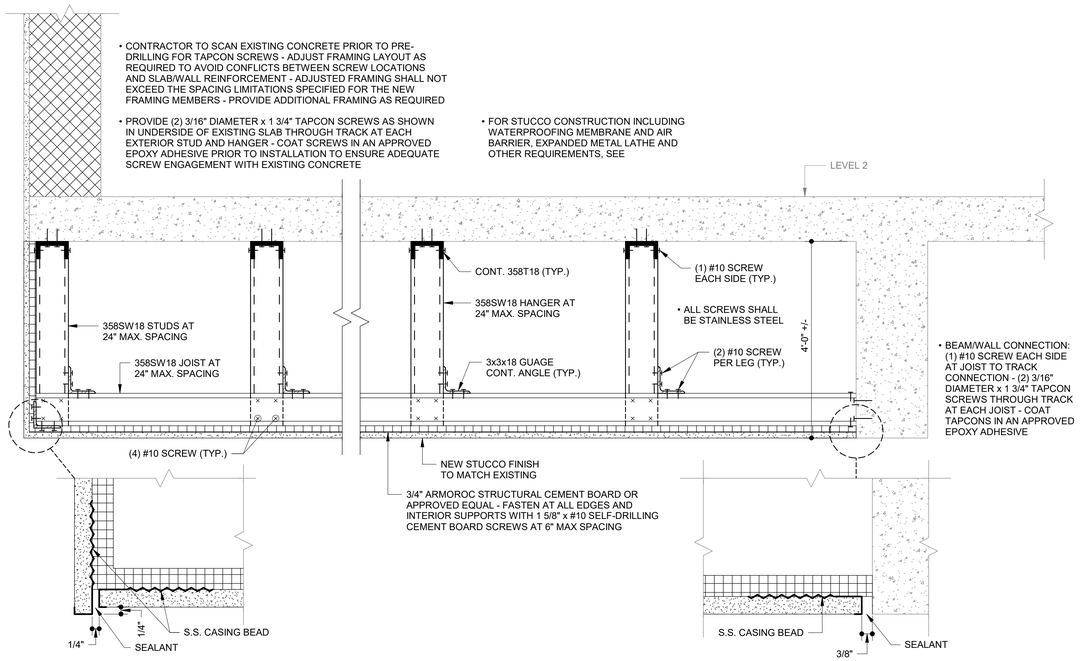
Project No.: 18217

Date: 04/26/21

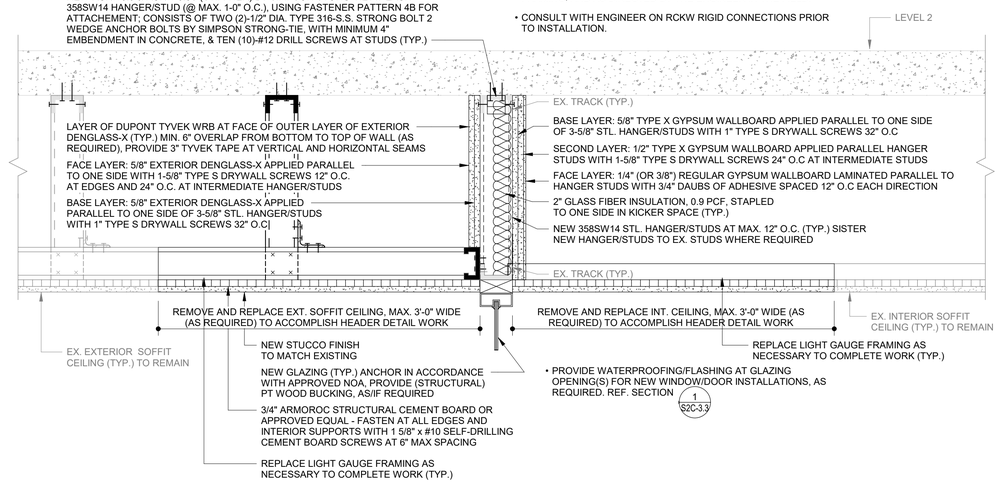
Scale: 3/4" = 1'-0"

Sheet Title:
STUCCO REPAIR DETAILS

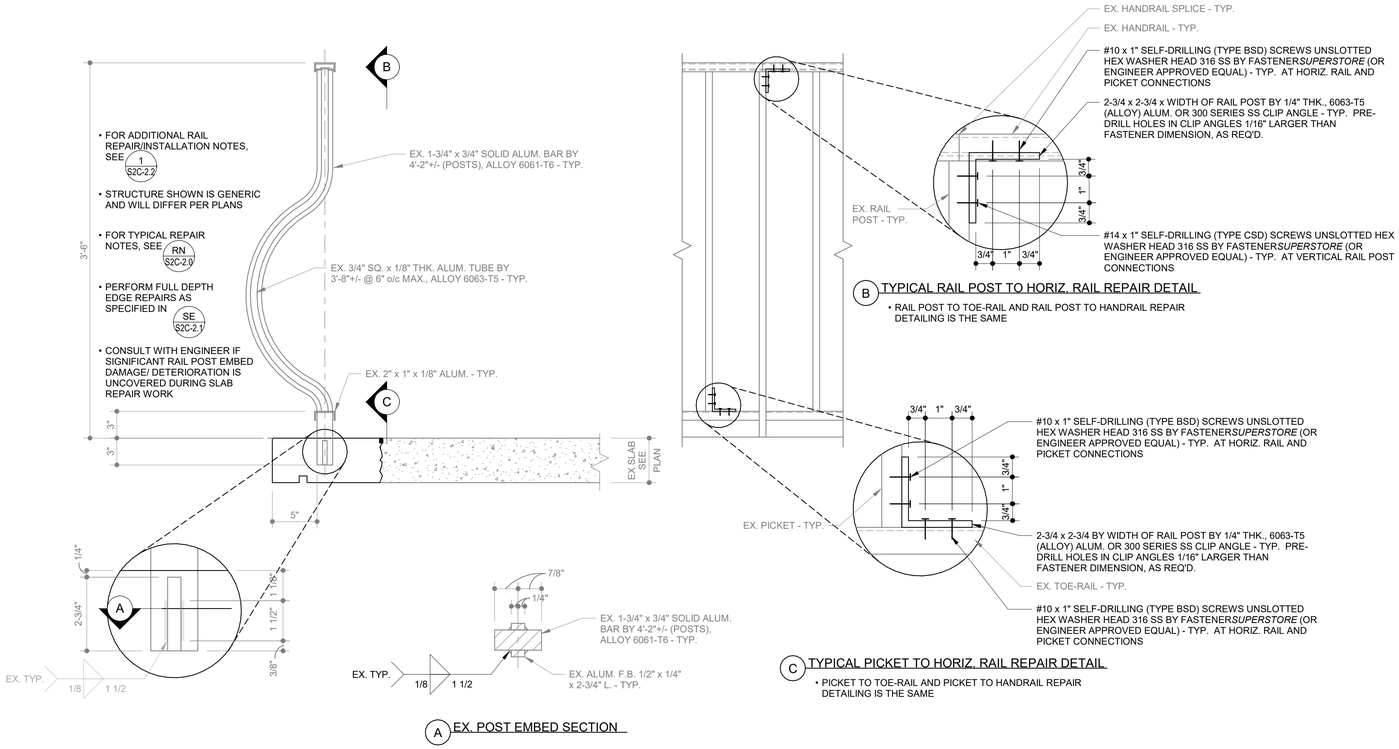
Sheet No.:
S2C-3.1



1 HUNG SOFFIT REPLACEMENT
1 1/2" = 1'-0"



2 FIRST FLOOR COMMON AREA GLAZING HEADER REINFORCEMENT
1 1/2" = 1'-0"



A EX. POST EMBED SECTION

B TYPICAL RAIL POST TO HORIZ. RAIL REPAIR DETAIL
• RAIL POST TO TOE-RAIL AND RAIL POST TO HANDRAIL REPAIR DETAILING IS THE SAME

C TYPICAL PICKET TO HORIZ. RAIL REPAIR DETAIL
• PICKET TO TOE-RAIL AND PICKET TO HANDRAIL REPAIR DETAILING IS THE SAME

3 RAIL REPAIR
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

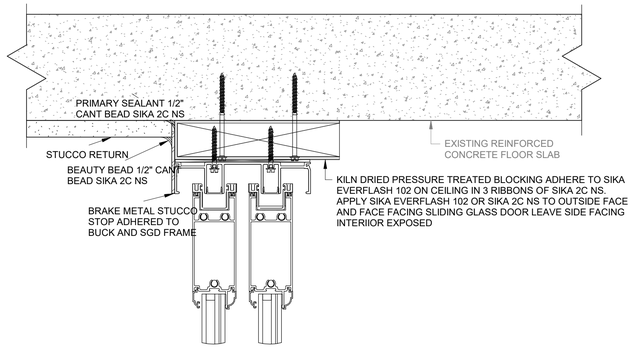
This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

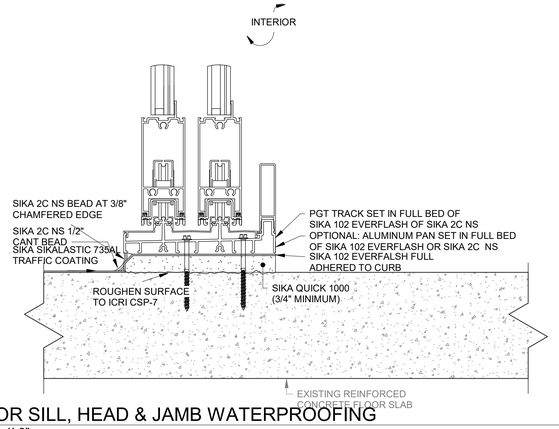
morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

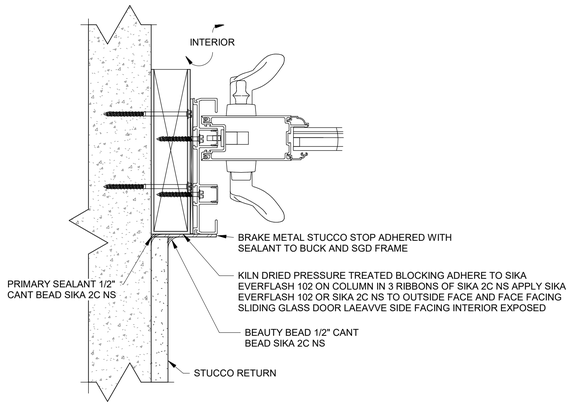
DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

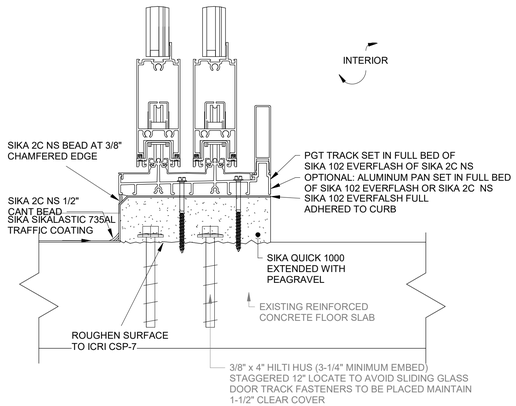
Project No.: 18217
Date: 04/26/21
Scale: 1 1/2" = 1'-0"
Sheet Title: SOFFIT AND RAIL REPAIR DETAILS
Sheet No.: S2C-3.2



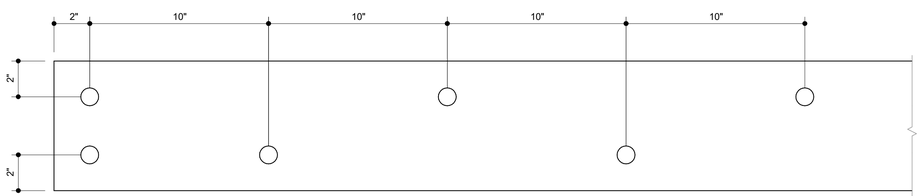


1 DOOR SILL, HEAD & JAMB WATERPROOFING
1/4" = 1'-0"





3 REINFORCED DOOR CURB
1/4" = 1'-0"



2 BUCK FASTENING SCHEDULE
3/4" = 1'-0"

GENERAL NOTES:

1. SLIDING GLASS DOOR INSTALLATION TO BE IN ACCORDANCE WITH MIAMI-DADE NOA 20-0429.03
2. IF BUCKING AT HEADER OR JAMB REQUIRES LESS THAN 2X, ATTACH BUCKING WITH MINIMAL NUMBER OF FASTENERS TO ENSURE TIGHT BOND TO CONCRETE SUBSTRATE. INSTALL REQUIRED NUMBER OF CONCRETE FASTENERS FOR SLIDING GLASS DOOR FRAME THROUGH BUCKING TO ACHIEVE MINIMUM EMBEDMENT INTO SUBSTRATE REQUIRED BY MIAMI-DADE NOA. EMBEDMENT DEPTH DOES NOT INCLUDE BUCKING.
3. IF BUCKING AT HEADER OR JAMB IS EQUAL TO A 2X OR GREATER, ATTACH BUCKING (SEE FASTENING SCHEDULE THIS SHEET) USING 1/4" ELCO CRETEFLEX SS4 FASTENERS AT 1" CONCRETE EDGE DISTANCE AND 1-3/4" EMBEMENT. ATTACH SLIDING GLASS DOOR FRAME TO STRUCTURAL WOOD BUCKING USING REQUIRED FASTENERS UNDER GROUP D INTO WOOD SUBSTRATE ONLY (DO NOT PENERTRATE CONCRETE SUBSTRATE) PER NOA.
4. BUCKING TO BE KILN DRIED PRESSURE TREATED #2 SOUTHERN YELLOW PINE 4% OR LESS MOISTURE CONTENT REQUIRED.
5. MAXIMUM SHIM SPACING OF 1/4" PER NOA.
6. ALL FASTENER HOLES TO BE VACUUMED CLEAN AND INJECTED WITH APPROVED SEALANT. AFTER FASTENERS ARE DRIVEN INTO HOLES, SIKA 2C NS SEALANT TO BE APPLIED TO HEADS OF SIL FASTENERS. APPROVED SEALANT AT ALL OTEHR FASTENERS.

SILL CONSTRUCTION GENERAL PROCEDURE:

1. REMOVE AND DISPOSE EXISTING SLIDING GLASS DOOR, FRAME, AND BUCKING. REPAIR CONCRETE IF NECESSARY. PREPARE FLOOR SLAB TO ICRI CSP-7.
2. REMOVE ALL DUST AND DEBRIS. WET PREPARED FLOOR SLAB TO SSD CONDITION.
3. MIX SIKAQUICK 1000 IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. APPLY BONDCOAT OF SIKAQUICK 1000 TO PREPARED SSD FLOOR SLAB USING STIFF BRISTLE IMMEDIATELY POUR GROUT BED LEVEL. 1/2' MINIMUM. HEIGHT DICTATED BY SLIDING GLASS DOOR INSTALLER. IF GROUT BED EXCEEDS 2", EXTEND PER MANUFACTURER GUIDELINES. 3/4" MINIMUM GROUT BEDHEIGHT. FINAL GROUT BED HEIGHT DETERMINED BY SLIDING GLASS DOOR INSTALLER.
4. ALLOW 6 HOURS TO CURE THEN APPLY SIKA EVERFLASH 102 TO TOP AND OUTSIDE VERTICAL FACE OF GROUT BED IN ACCORDANCE WIHT MANUFACTURER GUIDELINES. ENSURE 4% OR LESS MOISTURE CONTENT.
5. OPTIONAL: ALLOW EVERFLASH 2 HOURS TO CURE THEN SET ALUMINUM PAN INTO EVERFLASH 102 IN FULL BED OF EVERFLASH 102 O SIKA 2C NS. ALUMINUM PAN TO BE 0.060" THICKNESS AND FACTORY COLOR MATCHED TO SLIDING GLASS DOOR FRAME. PAN TO HAVE END DAMS 1/4"

VERTICAL AND OVERHEAD WATERPROOFING GENERAL PROCEDURE (REINFORCED CONCRETE SUBSTRATE): OUTSIDE

1. REMOVE AND DISPOSE EXISTING SLIDING GLASS DOOR, FRAME, AND BUCKING. REPAIR CONCRETE IF NECESSARY. FULL BED OF EVERFLASH 102 OR SIKA 2C NS.
2. REMOVE ALL DUST AND DEBRIS FROM SUBSTRATE. CUT BACK STUCCO AT JAMBS AND HEADER MINIMAL AMOUNT TO ACCOUNT FOR NEW
7. FRAME WIDTH AND INSTALLATION OF PRIMARY SEALANT. CONFIRM LOCATION WITH SLIDING GLASS DOOR INSTALLER. ONLY DEPTH INTO STRUCTURAL SLAB BENEATH GROUT BED.
3. VERIFY SUBSTRATE IS 4% OR LESS MOISTURE CONTENT. APPLY SIKA EVERFLASH 102 TO COLUMNS AND CEILING CONSTRAINING INTERIOR TO INSIDE LOCATIN OF BUCK PLACEMENT.
4. ALLOW EVERFLASH 2 HOURS TO CURE. APPLY 3 RIBBONS OF SIKA 2C NS COMPLETELY TO FACE OF BUCK ATTACHING TO SUBSTRATE. BUCK TO BE SET FLUSH WITH OUTSIDE FACE OF SLIDING GALSS DOOR FRAME. INSTALL PRIMARY SEALANT. BUCK MAY NEED TO BE RIPPED DOWN IN WIDTH TO MATCH FRAME WIDTH. SEE BUCK REQUIREMENTS AND INSTALLATION UNDER GENERAL NOTES 2-4 OF SKS-01.
5. APPLY SIKA EVERFLASH OR SIKA 2C NS COMPLETELY TO OUTSIDE FACE AND SIDE FACING SLIDING GLASS DOOR FRAME. IF CAVITY EXISTS BETWEEN BOTTOM OF BUCK AND SILL PAN, INJECT EVERFLASH INTO CAVITY FULLY. ALLOW EVERFLASH TO CURE 2 HOURS.
6. INSTALL SLIDING GLASS DOOR FRAME PER MANUFACTURER'S GUIDELINES. FOLLOW GENERAL NOTE 6 REGARDING FASTENER INSTALLATIONS.
7. ATTACH BREAK METAL STUCCO STOPS AT JAMBS AND HEADER TO EXISTING SLIDING GLASS DOOR FRAME. ALL BREAK METAL STUCCO STOPS TO HAVE FACTORY APPLIED FINISH TO MATCH DOOR FRAME.
8. REPLACE REMOVED STUCCO.
9. APPLY BEAUTY BEAD BETWEEN STUCCO AND STUCCO STOP.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

Project No.: 18217

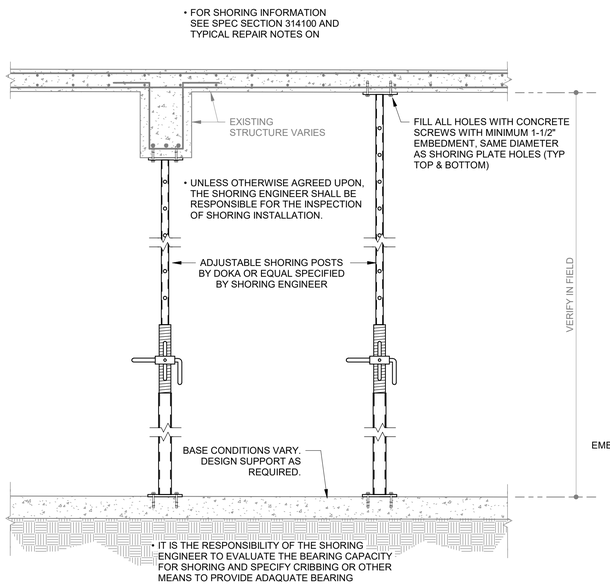
Date: 04/26/21

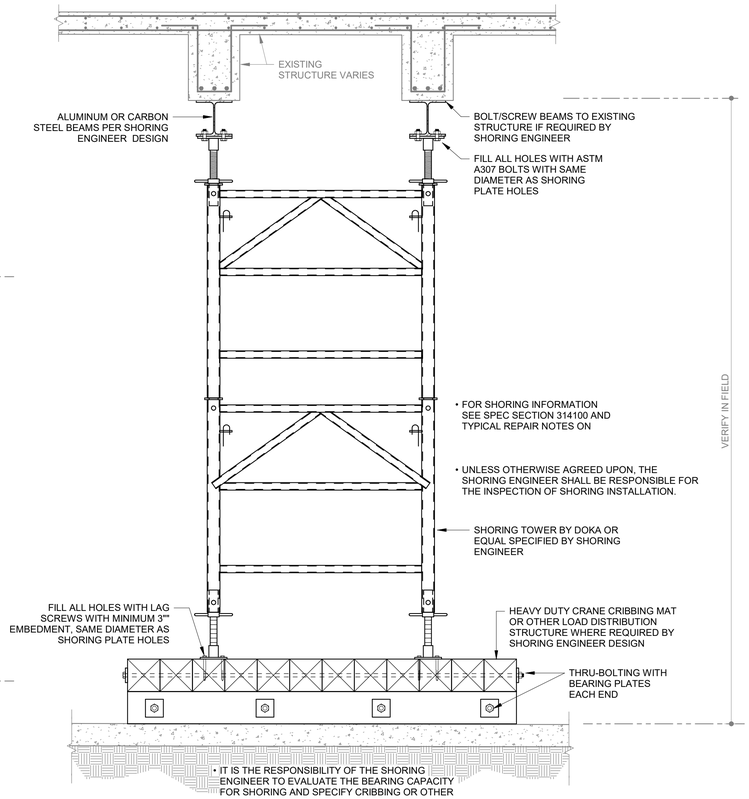
Scale: As indicated

Sheet Title:
BALCONY DOOR
WATERPROOFING

Sheet No.:
S2C-3.3

THESE DETAILS ARE CONCEPTUAL ONLY. IT IS THE SOLE RESPONSIBILITY OF THE DELEGATED SHORING ENGINEER TO VERIFY CAPACITIES OF BEAMS, SLABS, ETC IN ORDER TO DETERMINE SHORING SYSTEM TYPE / CONFIGURATION AND SPACING.





1 SHORING REQUIREMENTS FOR CONCRETE REPAIRS
3/4" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED HR/JB/RM	DRAWN HR/JB/RM
CHECKED RM	APPROVED FPM

Project No.: 18217

Date: 04/26/21

Scale: 3/4" = 1'-0"

Sheet Title:
SHORING DETAILS

Sheet No.:
S2C-3.4

FLORIDA PRODUCT APPROVAL FL16355.4-R3 REFERENCE DOOR DRAWINGS:

CECO DOOR PRODUCTS
GLAZED SINGLE COMMERCIAL STEEL DOORS
DRAWING 20-34881 SHEETS 1-16
DATED 12/21/2020

SINGLE DOOR SERIES TRIO ASSEMBLY 1 WITH LIGHT QUANTITY SCHEDULE		
Level	Doors per Level	Total Doors at Level(s)
Garage	0	0
1 (Lobby)	1	1
2-8	2	14
9-11	2	6
12	2	2
Low Roof & PH	5	5
High Roof	0	0

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING MASONRY OPENING SIZES AT EACH DOOR OPENING.
2. CONTRACTOR SHALL REPLACE EXTERIOR FIRE DOORS NOTED ON THESE PLANS WITH SERIES TRI SINGLE DOOR WITH LIGHT BY CECO DOOR PRODUCTS A DIVISION OF ASSA ABLOY DOOR GROUP, INC. SEE CECO DOOR PRODUCTS DRAWING No. 20-34881, SHEETS 1-16 DATED 12/21/2020 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. SEE PLANS FOR DOOR LOCATIONS.
3. WIND CALCULATIONS ON THIS SHEET.
4. ALL METAL TO MASONRY/CONCRETE/STUCCO SURFACES SHALL BE SEALED WITH AN APPROVED URETHANE SEALANT.
5. SEE DETAIL ON THIS SHEET FOR REQUIRED REINFORCEMENT OF EXISTING DOOR MASONRY JAMBS AND HEADS.
6. ALL NEW FIRE-RATED DOORS SHALL BE 90 MINUTE LABEL DOORS AND BE FIBERGLASS BAT FILLED.
7. ALL NEW FIRE-RATED DOORS SHALL CONTAIN STAINLESS STEEL HINGES, AND DOOR CLOSURES TO ASSURE THAT ALL DOORS ARE SELF-CLOSING AND SELF-LATCHING. ALL EXISTING DOOR LEAVERS SHALL BE REPLACED IN-KIND WITH NEW.
8. THE CONTRACTOR SHALL COMPLETE THIS WORK IN SUCH A WAY TO ASSURE THAT THE PRESENT LEVEL OF LIFE-SAFETY INCLUDING THE MEANS OF EGRESS WILL REMAIN ACCESSIBLE AT ALL LEVELS. THE REMOVAL AND INSTALLATION OF A FIRE DOOR MUST TAKE PLACE ON THE SAME DAY, AND WORK SHALL BE IN ONLY ONE STAIR TOWER AT A TIME. ONE STAIR TOWER SHALL BE COMPLETELY ACCESSIBLE IN CASE OF AN EMERGENCY.
9. ALL NEW FIRE-RATED DOORS SHALL BE SECURED TO BLOCK WALL JAMBS AND CONCRETE FLOOR SLABS WITH 3/8" DIAMETER HILTI KWIK BOLT 3 EXPANSION ANCHOR WITH 1 1/2" MINIMUM EMBEDMENT AND 4" MINIMUM EDGE DISTANCE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BLOCK AND OTHER WALL FINISHES. KWIK BOLTS AT JAMBS SHAL BE 6" MAXIMUM AT EVERY CORNER AND SPACED A MAXIMUM OF 21" o/c. MINIMUM ANCHOR QUANTITY PER NOA. SEE CECO DOOR PRODUCTS DRAWINGS FOR ADDITIONAL REQUIREMENTS.
10. USE 1/4" TAPCONS AT SILLS. TAPCONS SHALL BE 6" MINIMUM AT EVERY CORNER AND SPACED AT 12" o/c. TAPCONS AT JAMBS SHALL BE 6" MINIMUM AT EVERY CORNER AND SPACED AT 21" o/c. SEE CECO DOOR PRODUCTS DRAWINGS FOR ADDITIONAL REQUIREMENTS.
11. ALL DOORS SLABS AND FRAMES (INTERIOR, EXTERIOR, AND INSIDE) SHALL BE FINISHED USING PPG PAINTS (OR APPROVED EQUAL) INSTALLED PER THE FOLLOWING PROCEDURE:
    - 11.1. PRETREATMENT: WASH WITH DEGREASER
    - 11.2. PRETREATMENT: SAND TO CREATE PROFILE
    - 11.3. PRETREATMENT: SOLVENT WIPE WITH DENATURED ALCOHOL
    - 11.4. PRIMER COAT: PROVIDE ONE (1) FULL COAT OF 90-912 PITT TECH PLUS DTM INDUSTRIAL PRIMER
    - 11.5. FINISH COAT: PROVIDE ONE (1) FULL COAT OF BREAK-THROUGH 250 SATIN WATER-BOURNE ACRYLIC (V50 SERIES)

DOOR CALCULATION NOTES:

1. THIS PRESSURES SHOWN IN THE TABLE ABOVE ARE LRFD LOADS FROM ASCE 7-16 FOR COMPONENTS AND CLADDING BASED ON VARIOUS EFFECTIVE AREAS. THEREFORE, THE LOADS FROM THE TABLE ABOVE MUST MULTIPLIED BY A FACTOR OF 0.6 TO CORRELATE TO THE ASD DESIGN PRESSURE RATING NOTED ON DAYBAR INDUSTRIES LTD DRAWING No 20-156 SHEET 3.
2. THE DOOR IN QUESTION APPROXIMATELY 6'-8" BY 3'-4" FOR A TOTAL SQUARE FOOTAGE OF 25 SQUARE FEET. BASED ON TABLE 30.6-1 IN ASCE 7-10, THE AMOUNT OF C&C LOADING DECREASES AS A FUNCTION OF AREA UNDER CONSIDERATION AND THIS TABLE RETURNS A VALUE CALLED 'EXTERNAL PRESSURE COEFFICIENT, GCp' WHICH IS USED IN EQUATION 30.5-1 TO DETERMINE THE NET WIND PRESSURE. THIS TABLE ALLOWS FOR INTERPOLATION ALONG THE PROPER LINE AND THE CONTROLLING LINE IN THIS CASE CORRESPONDS TO DESIGN ZONE 4. USING TABLE 30.5-1:
   THE EXTERNAL PRESSURE COEFFICIENT ALONG LINE 4 AT 25 SQFT IS 0.88
3. USING THE PEAK VELOCITY PRESSURE CALCULATED ABOVE (99.8 PSF) AND THE NET PRESSURE EQUATION (ASCE 7-16 EQUATION 30.5-1) THE NET PRESSURE CAN BE FORMULATED TO BE:
   NET PRESSURE = PEAK * (GCp + GCpi) * (ASD FACTOR)
   OR, IN NUMBERS
   q_net = 99.8 * (0.88 + 0.18) * 0.6 = 63.5 PSF
4. AS SHOWN NOTED ON CECO DOOR PRODUCTS DRAWING No 20-34881 SHEET 2, THE MAXIMUM ASD ALLOWABLE LOAD ON THE DOOR IS 70 PSF. SINCE THE NET PRESSURE CALCULATED IN NOTE 3 IS 70 PSF, THIS DOOR WORKS IN THIS APPLICATION.

Tekla Tedds — Morabito Consultants Inc., 952 Ridgebrook Road, Suite 1700, Sparks, MD 21152

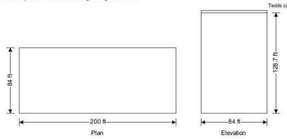
Project	Job Ref.
Champlain Towers South	18217
Section	Sheet no./rev.
1	
Calc. by: HR	Date: 2/11/2021
Chk'd by:	Date:
App'd by:	Date:

WIND LOADING

In accordance with ASCE7-16

Using the components and cladding design method

Tedds calculation version 2.1.06



Building data

Type of roof	Flat
Length of building	b = **200.00** ft
Width of building	d = **84.00** ft
Height to eaves	H = **128.67** ft
Height of parapet	h_p = **3.00** ft
Mean height	h = **128.67** ft

General wind load requirements

Basic wind speed	V = **175.0** mph
Risk category	II
Velocity pressure exponent coef (Table 26.6-1)	K_d = **0.85**
Ground elevation above sea level	z_g = **0** ft
Ground elevation factor	K_e = exp(-0.0000362 × z_g/1ft) = **1.00**
Exposure category (cl 26.7.3)	D
Enclosure classification (cl.26.12)	Enclosed buildings
Internal pressure coef +ve (Table 26.13-1)	$GC_{pi,p}$ = **0.18**
Internal pressure coef -ve (Table 26.13-1)	$GC_{pi,n}$ = **-0.18**
Parapet internal pressure coef +ve (Table 26.11-1)	$GC_{pi,p}$ = **0.18**
Parapet internal pressure coef -ve (Table 26.11-1)	$GC_{pi,n}$ = **-0.18**
Gust effect factor	G_f = **0.85**

Topography

Topography factor not significant	K_{zt} = 1.0

Velocity pressure

Velocity pressure coefficient (Table 26.10-1)	K_z = **1.50**
Velocity pressure	q_z = 0.00256 × K_z × K_{zt} × K_d × K_e × V^2 × 1psf/mph^2 = **99.8** psf

Tekla Tedds — Morabito Consultants Inc., 952 Ridgebrook Road, Suite 1700, Sparks, MD 21152

Project	Job Ref.
Champlain Towers South	18217
Section	Sheet no./rev.
2	
Calc. by: HR	Date: 2/11/2021
Chk'd by:	Date:
App'd by:	Date:

Velocity pressure at parapet

Velocity pressure coefficient (Table 26.10-1)	K_z = **1.50**
Velocity pressure	q_p = 0.00256 × K_z × K_{zt} × K_d × K_e × V^2 × 1psf/mph^2 = **100.2** psf

Peak velocity pressure for internal pressure

Peak velocity pressure – internal (as roof press.)	q_i = **99.78** psf

Equations used in tables

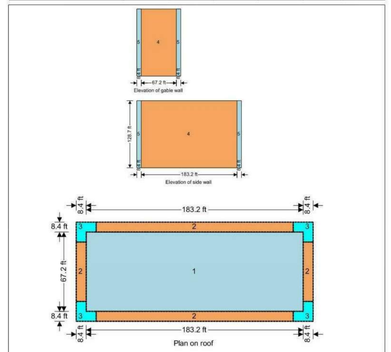
Net pressure	p = q × (GC_p) - q_i × (GC_{pi})
Parapet net pressure	p = q_p x [GC_p - GC_{pi},]

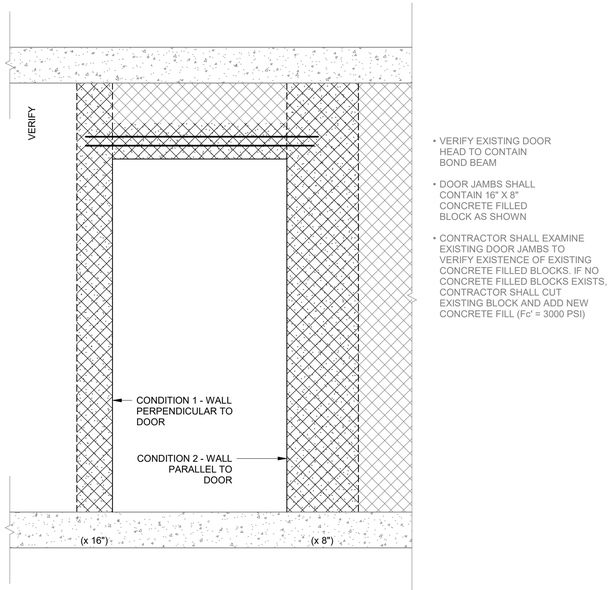
Components and cladding pressures - Wall (Table 30.5.1 and (Table 30.5.1))

Component	Zone	Height (ft)	V press. (psf)	Length (ft)	Width (ft)	Effect Area (ft²)	+GC_p	-GC_p	Pres (+ve) (psf)	Pres (-ve) (psf)
<20sf (W)	4	128.7	99.8	-	-	20.0	0.90	-0.90	107.8	
50sf (W)	4	128.7	99.8	-	-	50.0	0.81	-0.84	99.2	
200sf (W)	4	128.7	99.8	-	-	200.0	0.69	-0.76	86.4	
>500sf (W)	4	128.7	99.8	-	-	500.0	0.60	-0.70	77.8	
<20sf (L/S)	4	128.7	99.8	-	-	20.0	0.90	-0.90	-	-107.8
50sf (L/S)	4	128.7	99.8	-	-	50.0	0.81	-0.84	-	-102.1
200sf (L/S)	4	128.7	99.8	-	-	200.0	0.69	-0.76	-	-93.5
>500sf (L/S)	4	128.7	99.8	-	-	500.0	0.60	-0.70	-	-87.8
<20sf (W)	5	128.7	99.8	-	-	20.0	0.90	-1.80	107.8	
50sf (W)	5	128.7	99.8	-	-	50.0	0.81	-1.57	99.2	
200sf (W)	5	128.7	99.8	-	-	200.0	0.69	-1.23	86.4	
>500sf (W)	5	128.7	99.8	-	-	500.0	0.60	-1.00	77.8	
<20sf (L/S)	5	128.7	99.8	-	-	20.0	0.90	-1.80	-	-197.6
50sf (L/S)	5	128.7	99.8	-	-	50.0	0.81	-1.57	-	-174.8
200sf (L/S)	5	128.7	99.8	-	-	200.0	0.69	-1.23	-	-140.5
>500sf (L/S)	5	128.7	99.8	-	-	500.0	0.60	-1.00	-	-117.7

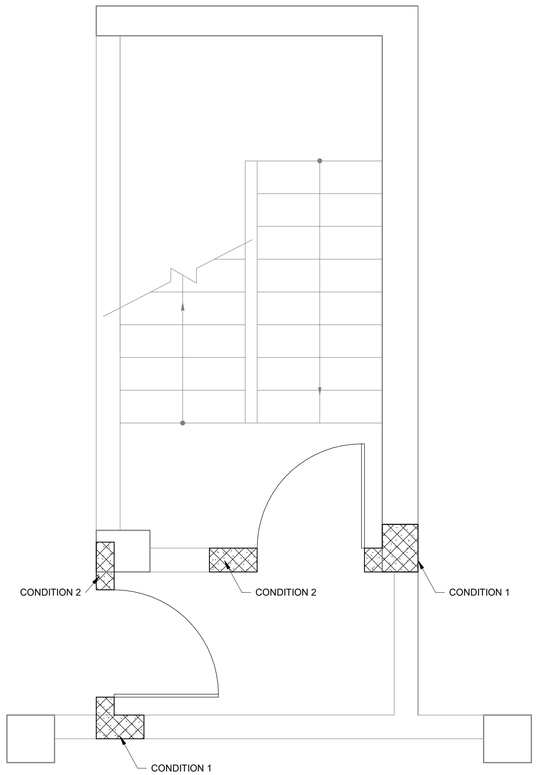
Tekla Tedds — Morabito Consultants Inc., 952 Ridgebrook Road, Suite 1700, Sparks, MD 21152

Project	Job Ref.
Champlain Towers South	18217
Section	Sheet no./rev.
3	
Calc. by: HR	Date: 2/11/2021
Chk'd by:	Date:
App'd by:	Date:





FD FIRE DOOR JAMB REINFORCEMENT ELEVATION VIEW
NOT TO SCALE



3 FIRE DOOR JAMB REINFORCEMENT PLAN VIEW
1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED HR/JB/RM	DRAWN HR/JB/RM
CHECKED RM	APPROVED FPM

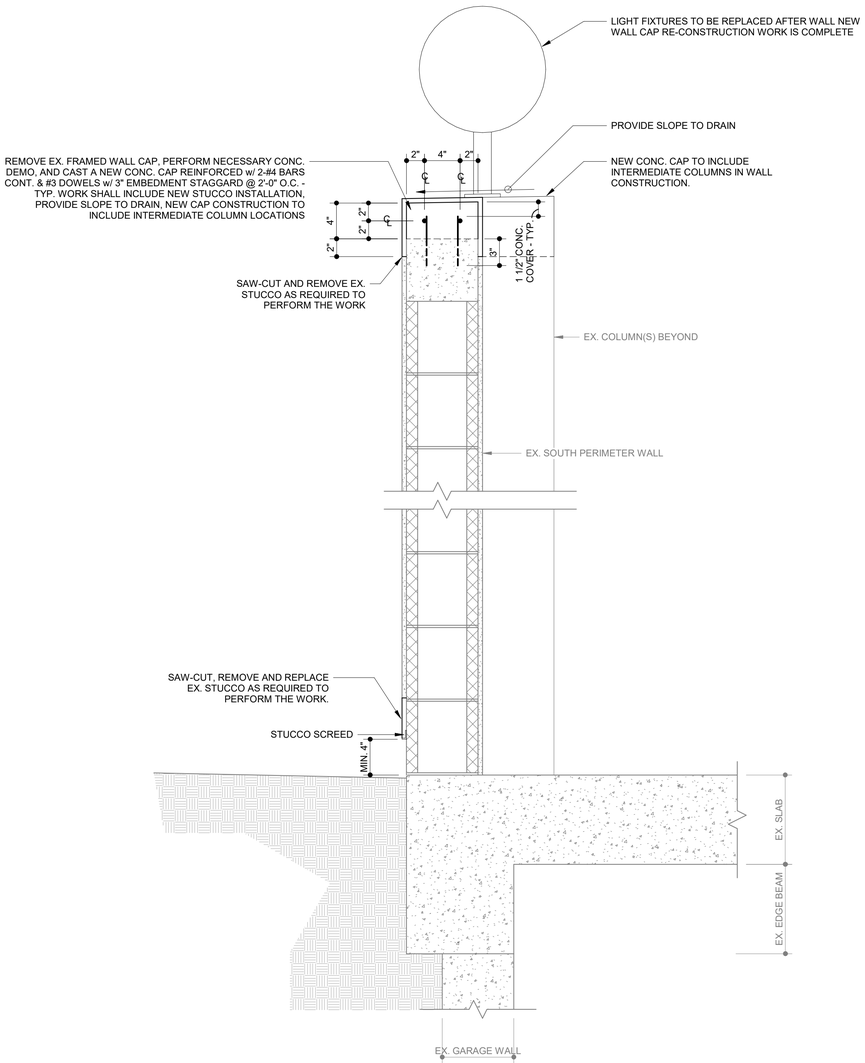
Project No.: 18217

Date: 04/26/21

Scale: As indicated

Sheet Title: FIRE DOOR REPLACEMENT DETAILS

Sheet No.: S2C-3.5



1 SOUTH PERIMETER WALL REPAIR
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

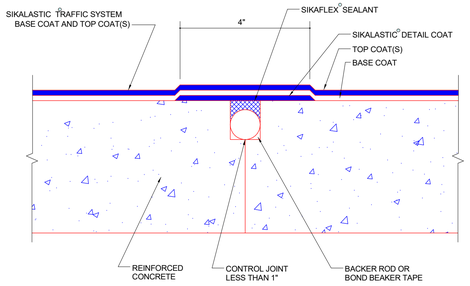
Project No.: 18217

Date: 04/26/21

Scale: 1 1/2" = 1'-0"

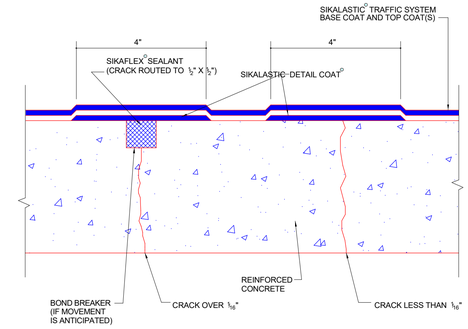
Sheet Title:
SOUTH WALL REPAIR

Sheet No.:
S2C-3.6



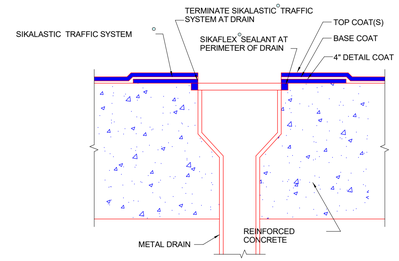
1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
CONTROL JOINT DETAIL	N.T.S.	9/13		TR-1



1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

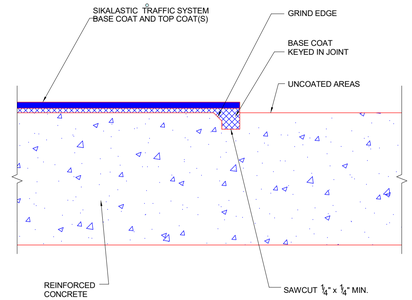
DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
CRACK DETAIL	N.T.S.	9/13		TR-2



NOTE:
PROVIDE 4" DETAIL COAT AT DRAIN PERIMETER.

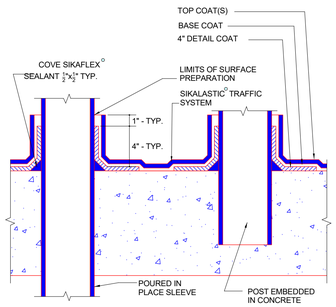
1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
DRAIN DETAIL	N.T.S.	9/13		TR-3



1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

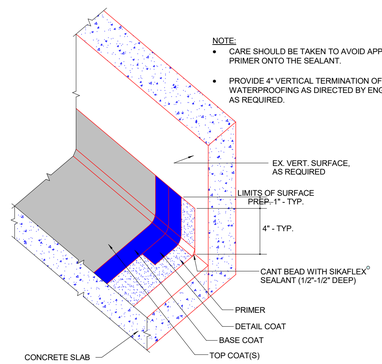
DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
TERMINATION DETAIL	N.T.S.	9/13		TR-12



NOTE:
PROVIDE 4" DETAIL COAT AT COVE SEALANT.

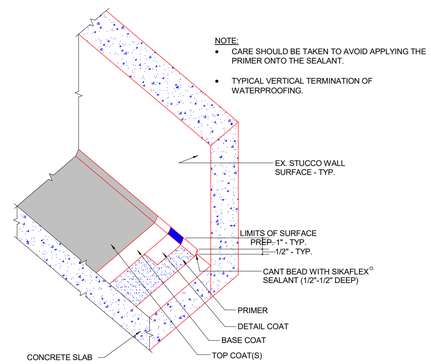
1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
VERTICAL PROJECTION DETAIL	N.T.S.	9/13		TR-7



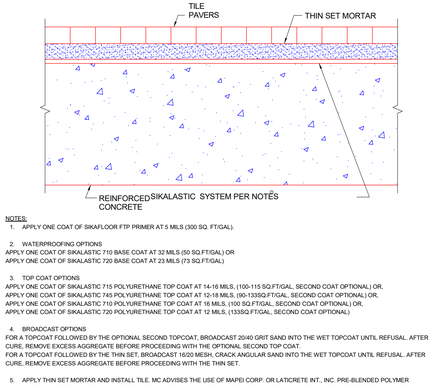
1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
VERT. SURFACE/SLAB JOINT DETAIL	N.T.S.	3/9/20		TR-8.1



1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
WALL/SLAB JOINT DETAIL	N.T.S.	3/9/20		TR-8.2



NOTES:
1. APPLY ONE COAT OF SIKAFLOOR FTP PRIMER AT 5 MILS (300 SQ. FT/GAL).

2. WATERPROOFING OPTIONS
A. APPLY ONE COAT OF SIKALASTIC 710 BASE COAT AT 32 MILS (50 SQ.FT/GAL) OR
B. APPLY ONE COAT OF SIKALASTIC 720 BASE COAT AT 23 MILS (73 SQ.FT/GAL)

3. TOP COAT OPTIONS
A. APPLY ONE COAT OF SIKALASTIC 715 POLYURETHANE TOP COAT AT 14-16 MILS, (100-115 SQ.FT/GAL, SECOND COAT OPTIONAL) OR,
B. APPLY ONE COAT OF SIKALASTIC 745 POLYURETHANE TOP COAT AT 12-16 MILS, (90-133SQ.FT/GAL, SECOND COAT OPTIONAL) OR,
C. APPLY ONE COAT OF SIKALASTIC 710 POLYURETHANE TOP COAT AT 16 MILS, (100 SQ.FT/GAL, SECOND COAT OPTIONAL) OR,
D. APPLY ONE COAT OF SIKALASTIC 720 POLYURETHANE TOP COAT AT 12 MILS, (133SQ.FT/GAL, SECOND COAT OPTIONAL)

4. BROADCAST OPTIONS
A. FOR A TOPCOAT FOLLOWED BY THE OPTIONAL SECOND TOPCOAT, BROADCAST 20/40 GRIT SAND INTO THE WET TOPCOAT UNTIL REFUSAL. AFTER CURE, REMOVE EXCESS AGGREGATE BEFORE PROCEEDING WITH THE OPTIONAL SECOND TOP COAT.
B. FOR A TOPCOAT FOLLOWED BY THE THIN SET, BROADCAST 16/20 MESH, CRACK ANGULAR SAND INTO THE WET TOPCOAT UNTIL REFUSAL. AFTER CURE, REMOVE EXCESS AGGREGATE BEFORE PROCEEDING WITH THE THIN SET.

5. APPLY THIN SET MORTAR AND INSTALL TILE. MC ADVISES THE USE OF MAPEI CORP. OR LATICRETE INT., INC. PRE-BLENDED POLYMER MODIFIED SETTING MATERIALS (MORTAR, GROUT, ETC.) FOR ALL TILE INSTALLATION. PERFORM WORK IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT APPROVAL, NOTICE OF ACCEPTANCE (NOA) No. 16-0203.02 (EXP. DATE: 11/17/21).

1-800-933-SIKA (7452)
WWW.SIKAUSA.COM

DETAIL TITLE	SCALE:	DATE:		DRW. NO.:
THIN SET TILE DETAIL	N.T.S.	9/13		TR-11

BALCONY WATERPROOFING GENERAL SEQUENCE

1. AT TOP SIDE AND OUTSIDE VERTICAL FACE OF BALCONY DECKS, PROPERLY PREPARE CONCRETE SUBSTRATE FOR APPLICATION OF NEW WATERPROOFING MEMBRANES, GRIND OFF ANY EXISTING SURFACES AND SHOT BLAST/WATER BLAST TO ACHEIVE CONCRETE SURFACE PROFILE AS REQUIRED BY THE NEW COATING MANUFACTURER.
2. FLOOD RESIDENTIAL BALCONY DECKS AND OUTLINE AREAS OF PONDING.
3. ALLOW DECKS TO DRY.
4. PRIME LOW SPOTS WITH SIKADUR 21
5. WHILE SIKADUR 21 IS WET AND TACKY, FILL LOW SPOTS WITH A 4.5 TO 1 MIXTURE OF UNIMIN 20/40 SAND TO SIKADUR 22 LO-MOD EPOXY
6. APPLY SIKALASTIC 710/715 MEMBRANE TO TOP SIDE OF DECK IN ACCORDANCE WITH MIAMI DADE NOA 16-0203.02 SYSTEM TYPE A(1) FOR WATERPROOFING AS THE FINISH OR SYSTEM TYPE A(4) FOR TILE AS THE FINISH
   A. WHERE APPLYING MEMBRANE OVER ORIGINAL CONCRETE USE SIKA FTP PRIMER
   B. WHERE APPLYING MEMBRANE OVER SIKADUR 22 LO-MOD/SAND MIXTURE, SAND AND XYLENE WIPE BEFORE APPLICATION OF MEMBRANE
7. WHILE APPLYING SYSTEM TO TOP SIDE OF DECK, CARRY SYSTEM TO OUTSIDE VERTICAL FACE OF CONCRETE DECK, SAND TOP COAT TO REFUSAL, AND PAINT TO MATCH FACADE

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

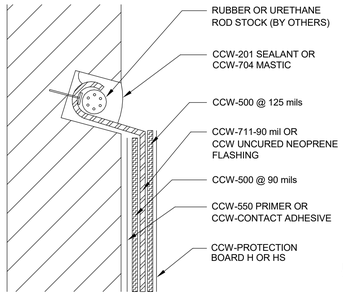
Project No.: 18217

Date: 04/26/21

Scale: 3/4" = 1'-0"

Sheet Title:
TRAFFIC BEARING WATERPROOFING MEMBRANE & FINISH

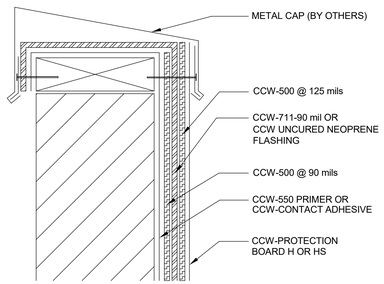
Sheet No.:
TBM-1



NOTES:
1. DIAMETER OF ROD STOCK MUST EXCEED WIDTH OF REGLET GAP.
2. FASTEN MEMBRANE TO SUBSTRATE 12 INCHES ON CENTER.
3. IF FLASHING MEMBRANE EXTENDS ABOVE FINAL GRADE, COUNTER FLASHING MUST BE PROVIDED.

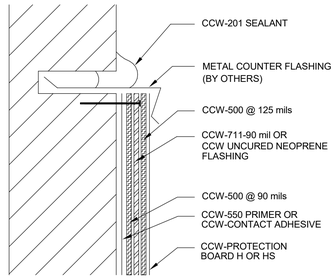
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-9A	VERTICAL TERMINATION REGLET FLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-9B	VERTICAL TERMINATION CAP FLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



NOTES:
1. FASTEN METAL COUNTER FLASHING TO SUBSTRATE 12 INCHES ON CENTER.
2. IF FASTENER PENETRATES METAL COUNTER FLASHING, USE NEOPRENE WASHER. APPLY WATER CUT-OFF MASTIC OR CAULK FASTENER HEAD.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-9C	VERTICAL TERMINATION COUNTERFLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

NOTES:
1. APPLY ON HARD SMOOTH SURFACE ONLY; NOT FOR USE ON WOOD.
2. FLASHING MUST BE HELD UNDER CONSTANT COMPRESSION.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-9D	VERTICAL TERMINATION MECHANICAL	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

NOTES:
1. IF CCW-711-90 FLASHING OR CCW UNCURED NEOPRENE FLASHING EXTENDS ABOVE FINAL GRADE, METAL COUNTER FLASHING MUST BE USED.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-9E	VERTICAL TERMINATION EMBEDDED TERMINATION	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

NOTE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENGAGE THE MANUFACTURER TO VERIFY THE SUITABILITY OF ALL DETAILS TO BE USED ON THE JOB. THE CONTRACTOR SHALL SUBMIT ALL ADDITIONAL DETAILS THAT THE MANUFACTURER REQUIRES TO COMPLETE THE WORK.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

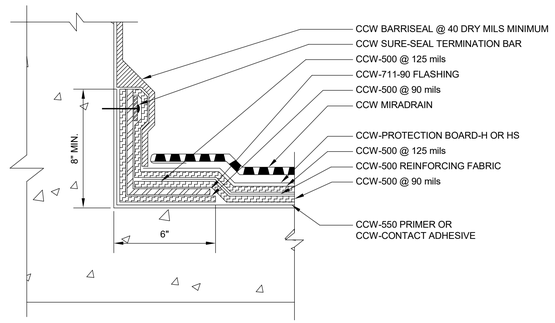
Project No.: 18217

Date: 04/26/21

Scale: 3" = 1'-0"

Sheet Title:
CCW-500 WALL DETAILS

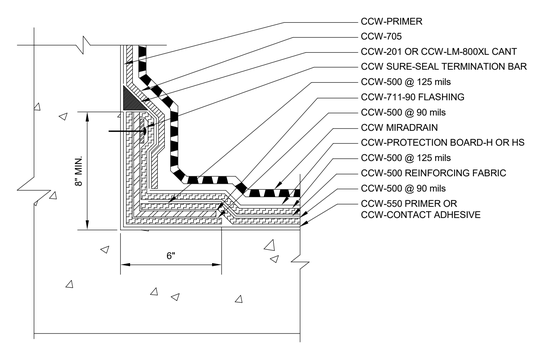
Sheet No.:
WP-1



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

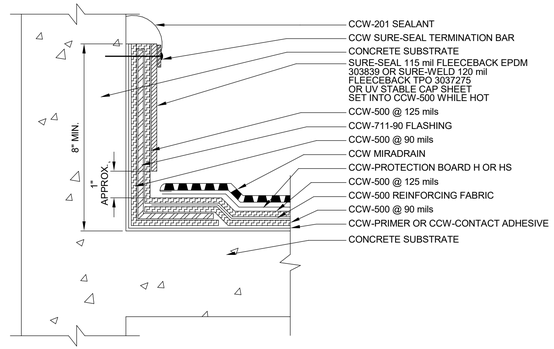
TERMINATION OF WATERPROOFING ON WALL SHALL BE BELOW FINISH COURSE

500-7D	BARRISEAL AT WALL TO 500R DECK TIE-IN	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7E	CCW-500R/ CCW-705 WALL TIE-IN	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-4A	EXPOSED CURB & PARAPET FLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-4A.2	EXPOSED CURB & PARAPET FLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

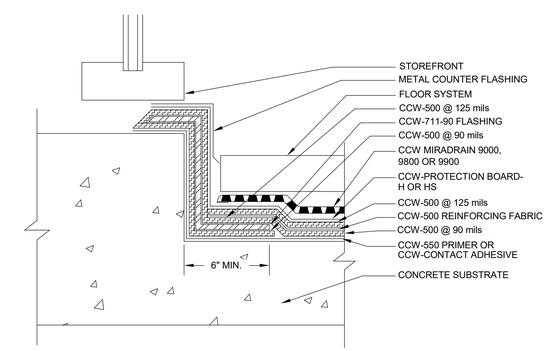
TERMINATION OF SHEET FLASHING ON WALL SHALL BE BELOW FINISH COURSE

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-4B	NON-EXPOSED CURB & PARAPET	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

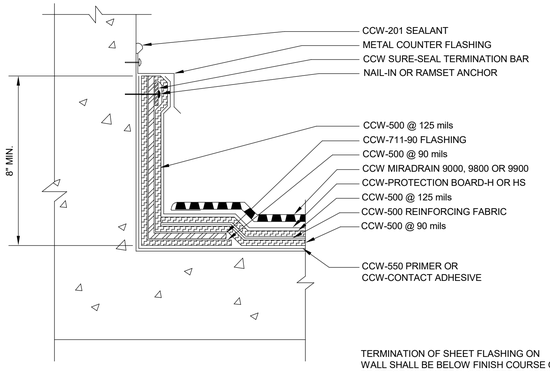
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-4C	FOUNDATION WALL /FOOTING TERMINATION	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-4D	WINDOW FLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



TERMINATION OF SHEET FLASHING ON WALL SHALL BE BELOW FINISH COURSE OR PROTECT WITH METAL COUNTER FLASHING AS SHOWN

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-4E	FLASHING TERMINATION	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

NOTE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENGAGE THE MANUFACTURER TO VERIFY THE SUITABILITY OF ALL DETAILS TO BE USED ON THE JOB. THE CONTRACTOR SHALL SUBMIT ALL ADDITIONAL DETAILS THAT THE MANUFACTURER REQUIRES TO COMPLETE THE WORK.

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

License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

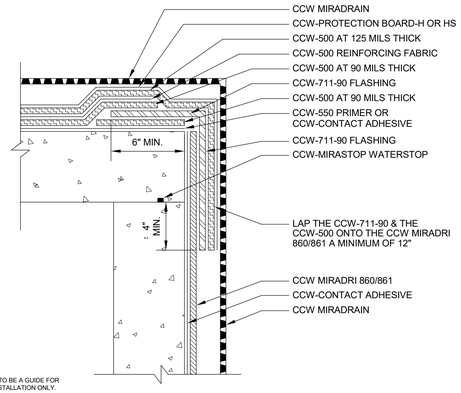
Project No.: 18217

Date: 04/26/21

Scale: 3" = 1'-0"

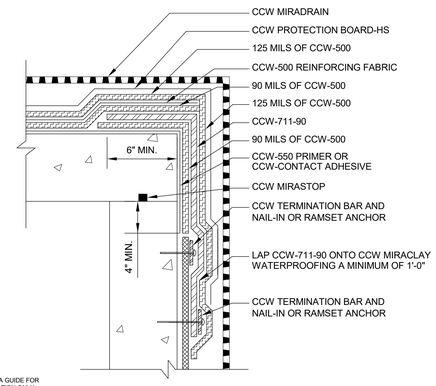
Sheet Title:
CCW-500 SLAB-WALL DETAILS

Sheet No.:
WP-2



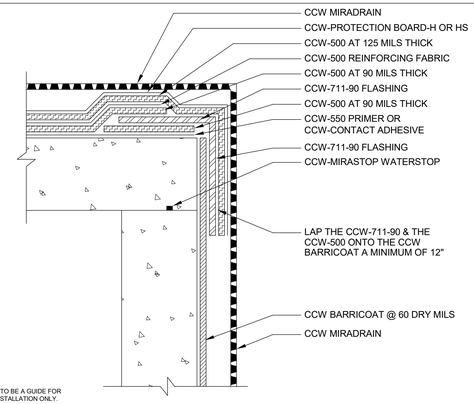
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7A	500R - MIRADRI 860/861 TIE-IN	CARLISLE COATINGS & WATERPROOFING



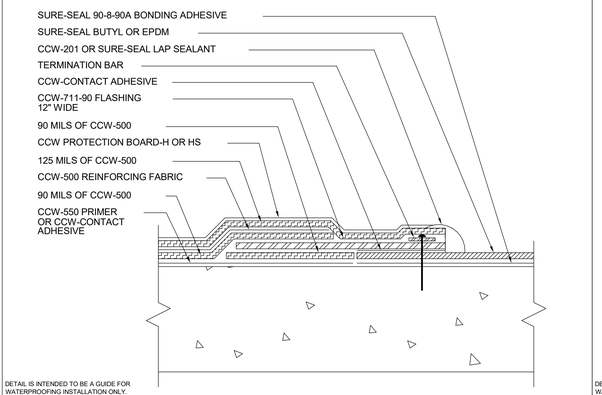
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7B	500R-MIRACLAY TIE-IN	CARLISLE COATINGS & WATERPROOFING



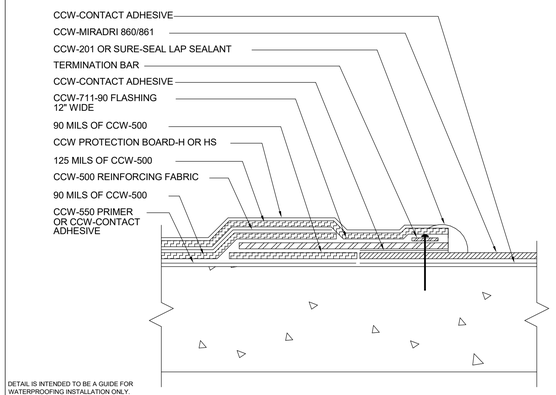
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7C	500R-BARRICOAT TIE-IN	CARLISLE COATINGS & WATERPROOFING



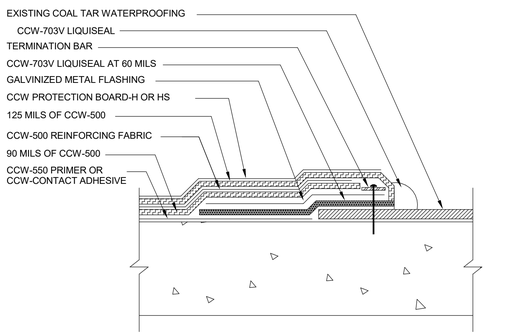
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7F	CCW-500R/ BUTYL OR EPDM TIE-IN	CARLISLE COATINGS & WATERPROOFING



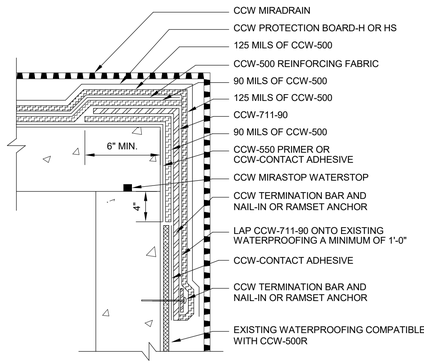
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7G	CCW-500R/ DECK TIE-IN TO CCW MIRADRI 860/861	CARLISLE COATINGS & WATERPROOFING



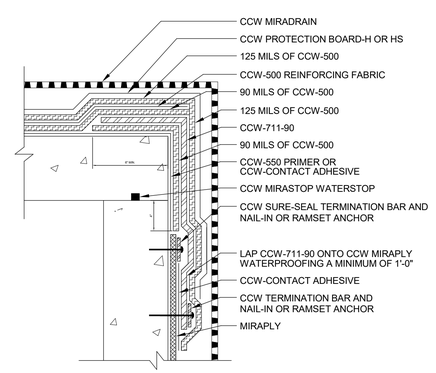
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7H	CCW-500 / EXISTING COAL TAR TIE-IN	CARLISLE COATINGS & WATERPROOFING



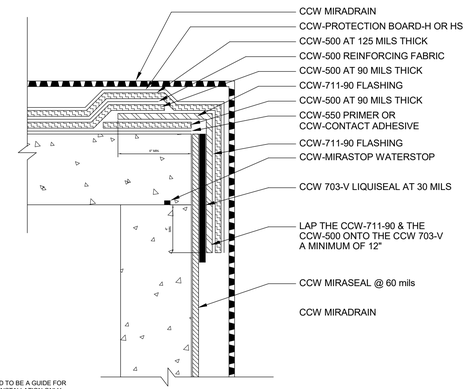
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7I	500R-EXISTING WATERPROOF TIE-IN	CARLISLE COATINGS & WATERPROOFING



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7J	500R-MIRAPLY TIE-IN	CARLISLE COATINGS & WATERPROOFING



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-7K	500R - MIRASEAL TIE-IN	CARLISLE COATINGS & WATERPROOFING

NOTE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENGAGE THE MANUFACTURER TO VERIFY THE SUITABILITY OF ALL DETAILS TO BE USED ON THE JOB. THE CONTRACTOR SHALL SUBMIT ALL ADDITIONAL DETAILS THAT THE MANUFACTURER REQUIRES TO COMPLETE THE WORK.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

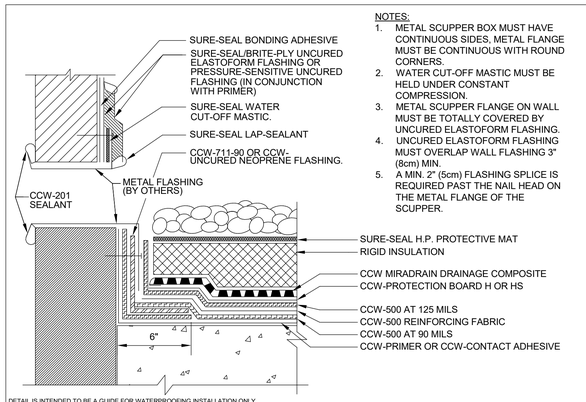
Project No.: 18217

Date: 04/26/21

Scale: 3" = 1'-0"

Sheet Title:
CCW-500 TIE-IN TO OTHER MEMBRANES

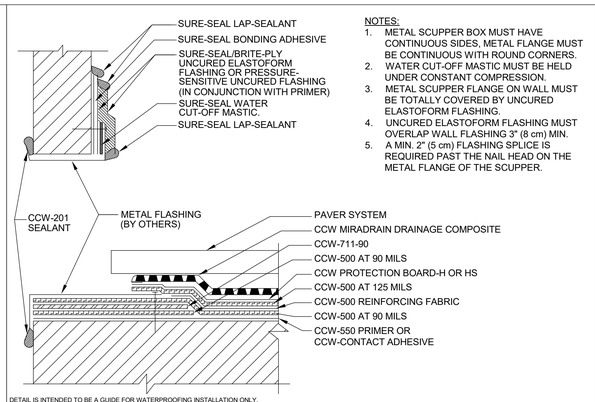
Sheet No.:
WP-4



NOTES:
1. METAL SCUPPER BOX MUST HAVE CONTINUOUS SIDES, METAL FLANGE MUST BE CONTINUOUS WITH ROUND CORNERS.
2. WATER CUT-OFF MASTIC MUST BE HELD UNDER CONSTANT COMPRESSION.
3. METAL SCUPPER FLANGE ON WALL MUST BE TOTALLY COVERED BY UNCURED ELASTOFORM FLASHING.
4. UNCURED ELASTOFORM FLASHING MUST OVERLAP WALL FLASHING 3" (8cm) MIN.
5. A MIN. 2" (5cm) FLASHING SPLICE IS REQUIRED PAST THE NAIL HEAD ON THE METAL FLANGE OF THE SCUPPER.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

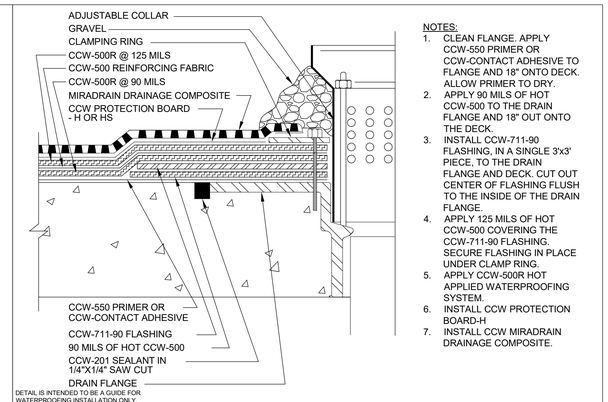
500-18A	OVERFLOW METAL SCUPPER	CARLISLE COATINGS & WATERPROOFING



NOTES:
1. METAL SCUPPER BOX MUST HAVE CONTINUOUS SIDES, METAL FLANGE MUST BE CONTINUOUS WITH ROUND CORNERS.
2. WATER CUT-OFF MASTIC MUST BE HELD UNDER CONSTANT COMPRESSION.
3. METAL SCUPPER FLANGE ON WALL MUST BE TOTALLY COVERED BY UNCURED ELASTOFORM FLASHING.
4. UNCURED ELASTOFORM FLASHING MUST OVERLAP WALL FLASHING 3" (8 cm) MIN.
5. A MIN. 2" (5 cm) FLASHING SPLICE IS REQUIRED PAST THE NAIL HEAD ON THE METAL FLANGE OF THE SCUPPER.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-18B	OVERFLOW METAL SCUPPER	CARLISLE COATINGS & WATERPROOFING



NOTES:
1. CLEAN FLANGE. APPLY CCW-550 PRIMER OR CCW-CONTACT ADHESIVE TO FLANGE AND 18" ONTO DECK. ALLOW PRIMER TO DRY.
2. APPLY 90 MILS OF HOT CCW-500 TO THE DRAIN FLANGE AND 18" OUT ONTO THE DECK.
3. INSTALL CCW-711-90 FLASHING, IN A SINGLE 3'x3' PIECE, TO THE DRAIN FLANGE AND DECK. CUT OUT CENTER OF FLASHING FLUSH TO THE INSIDE OF THE DRAIN FLANGE.
4. APPLY 125 MILS OF HOT CCW-500 COVERING THE CCW-711-90 FLASHING. SECURE FLASHING IN PLACE UNDER CLAMP RING.
5. APPLY CCW-500R HOT APPLIED WATERPROOFING SYSTEM.
6. INSTALL CCW PROTECTION BOARD-H
7. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-6	DOUBLE DRAIN	CARLISLE COATINGS & WATERPROOFING

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

GR 500-6	PLANTER DRAIN	CARLISLE COATINGS & WATERPROOFING

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

GR 500-6B	PLANTER DRAIN	CARLISLE COATINGS & WATERPROOFING

NOTES:
1. CLEAN AND PRIME FLANGE.
2. INSTALL CCW-711-90 FLASHING, IN A SINGLE PIECE, UNDER FLANGE AND 6" ONTO DECK.
3. APPLY CCW-500R HOT APPLIED MEMBRANE.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

GR 500-6C	GREEN ROOF DRAIN	CARLISLE COATINGS & WATERPROOFING

NOTE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENGAGE THE MANUFACTURER TO VERIFY THE SUITABILITY OF ALL DETAILS TO BE USED ON THE JOB. THE CONTRACTOR SHALL SUBMIT ALL ADDITIONAL DETAILS THAT THE MANUFACTURER REQUIRES TO COMPLETE THE WORK.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

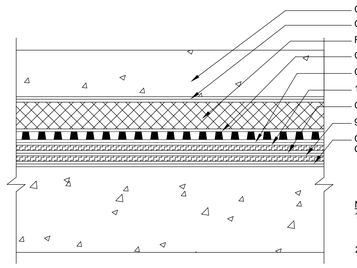
Project No.: 18217

Date: 04/26/21

Scale: 3" = 1'-0"

Sheet Title:
CCW-500 DRAINS

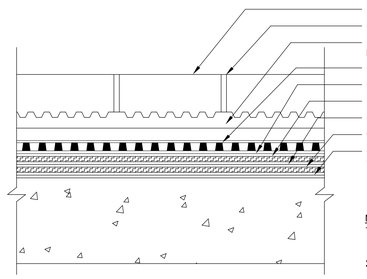
Sheet No.:
WP-5



NOTES:
1. APPLY CCW-550 PRIMER OR CCW-CONTACT ADHESIVE TO ENTIRE SURFACE AREA.
2. APPLY CCW-500R HOT APPLIED WATERPROOFING SYSTEM TO ENTIRE SURFACE AREA.
3. INSTALL CCW PROTECTION BOARD.
4. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-10A	INSULATED PLAZA DECK	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



NOTES:
1. APPLY CCW-550 PRIMER OR CCW-CONTACT ADHESIVE TO ENTIRE SURFACE AREA.
2. APPLY CCW-500R HOT APPLIED LIQUID MEMBRANE TO ENTIRE SURFACE AREA.
3. INSTALL CCW PROTECTION BOARD.
4. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

TILE / PAVER INSTALLATION SHALL BE AS RECOMMENDED BY TILE COUNCIL OF AMERICA

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-10C	MORTAR BED W/ PAVER PLAZA DECK	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

NOTES:
1. APPLY CCW-550 PRIMER OR CCW-CONTACT ADHESIVE TO ENTIRE SURFACE AREA.
2. APPLY CCW-500R HOT APPLIED LIQUID MEMBRANE TO ENTIRE SURFACE AREA.
3. INSTALL CCW PROTECTION BOARD.
4. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-10D	SAND BED W/ PAVER PLAZA DECK	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

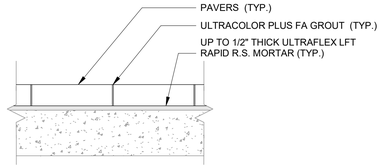
NOTES:
1. APPLY CCW-550 PRIMER OR CCW-CONTACT ADHESIVE TO ENTIRE SURFACE AREA.
2. APPLY CCW-500R HOT APPLIED WATERPROOFING SYSTEM TO ENTIRE SURFACE AREA.
3. INSTALL CCW PROTECTION BOARD.
4. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

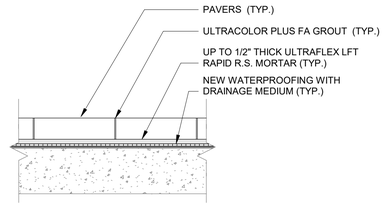
500-10E	CONCRETE TOPPING SLAB	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION

NOTE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENGAGE THE MANUFACTURER TO VERIFY THE SUITABILITY OF ALL DETAILS TO BE USED ON THE JOB. THE CONTRACTOR SHALL SUBMIT ALL ADDITIONAL DETAILS THAT THE MANUFACTURER REQUIRES TO COMPLETE THE WORK.

- SET PAVING UNITS BASED ON APPROVED PATTERN, PLACING TO ALLOW FOR JOINT WIDTHS OF 1/16" TO 3/8". REVIEW SPECIFIC JOINT WIDTH WITH MANUFACTURER OF APPROVED PAVERS, DESIGNATED FOR THE WORK, BEFORE PROCEEDING WITH PAVER INSTALLATION WORK.
- GROUT JOINTS SHALL BE UNIFORM AND STRAIGHT IN ALL DIRECTIONS AS INDICATED ON THE DRAWINGS.
- MAINTAIN NO GREATER THAN 1/16" HEIGHT DIFFERENCE BETWEEN ADJACENT PAVERS.
- GROUT/MORTAR JOINTS IN ACCORDANCE WITH ANSI A1108.10.

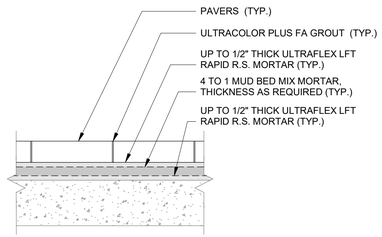


BONDED PAVER INSTALLATION WITH MORTAR-BED UP TO 1/2" THICK

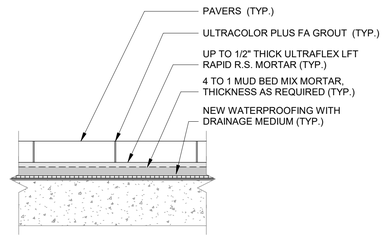


UNBONDED PAVER INSTALLATION WITH MORTAR-BED UP TO 1/2" THICK

- ALL SURFACES WHERE BONDED PAVERS ARE TO BE INSTALLED ARE TO BE STRUCTURALLY SOUND, STABLE, DRY, CLEAN, AND FREE OF ANY SUBSTANCE OR CONDITION THAT MAY REDUCE OR PREVENT PROPER ADHESION.
- MIX ULTRAFLEX LFT RAPID R.S. MORTAR (BY MAPEI) PER MANUFACTURER WRITTEN GUIDELINES.
- WITH THE APPROPRIATE NOTCHED TROWEL, AND WITH PRESSURE, APPLY A COAT OF ULTRAFLEX LFT RAPID R.S. MORTAR. SPREAD ONLY AS MUCH MORTAR AS CAN BE COVERED WITH PAVERS BEFORE PRODUCT SKINS OVER. OPEN TIMES FOR MATERIAL (MORTAR) USAGE CAN VARY WITH JOBSITE CONDITIONS.
- PLACE THE PAVERS FIRMLY IN THE WET MORTAR. PUSH PAVERS BACK AND FORTH IN A DIRECTION PERPENDICULAR TO THE TROWEL LINES, TO COLLAPSE THE MORTAR RIDGES AND HELP ACHIEVE MAXIMUM COVERAGE. ENSURE MINIMUM 95% CONTACT OF MORTAR TO BOTH THE PAVER AND SUBSTRATE ON INSTALLATION. PERIODICALLY LIFT A FEW PAVERS TO CHECK FOR ACCEPTABLE COVERAGE.
- ENSURE THAT PAVERS ARE PRE-SEALED (BY MANUFACTURER) AND OR SEALED IN THE FIELD WITH ENGINEER APPROVED SILANE/SILOXANE PENETRATING SEALER PRIOR TO GROUT WORK (WHERE SPECIFIED/REQUIRED).
- ALLOW 3-4 HOURS OF MORTAR-BED CURE PRIOR TO COMMENCING WITH GROUT WORK.
- REMOVE EXCESS MORTAR FROM THE JOINT AREAS SO THAT AT LEAST 2/3 OF THE PAVER DEPTH IS AVAILABLE FOR GROUTING. GROUT JOINTS MUST BE CLEAN AND FREE OF STANDING WATER, DUST, DIRT AND FOREIGN MATTER PRIOR TO INTENDED GROUT WORK.
- MIX ULTRACOLOR PLUS FA GROUT (BY MAPEI) PER MANUFACTURER WRITTEN GUIDELINES. REVIEW "GROUTING IN HOT WEATHER" SECTION OF PRODUCT APPLICATION ON DATA SHEET TO ACCOMPLISH THE BEST RESULTS.
- SLIGHTLY MOISTEN PAVER JOINT SURFACES WITH A DAMP SPONGE JUST PRIOR TO GROUT APPLICATION (TO AID APPLICATION). DO NOT FLOOD/SATURATE PAVERS, OR ALLOW FOR STANDING WATER AT UN-GROUTED JOINT AREAS.
- SPREAD GROUT IMMEDIATELY INTO THE DAMP JOINTS WITH A RUBBER GROUT FLOAT. MAKE SURE THAT ALL JOINTS ARE WELL COMPACTED AND FREE OF VOIDS AND/OR GAPS.
- REMOVE EXCESS GROUT FROM THE PAVER SURFACE BY MOVING THE GROUT FLOAT DIAGONALLY TO THE JOINTS WHILE GROUT MATERIAL IS STILL FRESH, SMOOTH SURFACES WITH A DAMP SPONGE, AS NECESSARY.
- CLEAN GROUTED JOINTS PER MANUFACTURER GUIDELINES TO ACHIEVE DESIRED COLOR-CONSISTENCY.
- APPLY ULTRACARE PENETRATING PLUS STONE TILE/GROUT SEALER (BY MAPEI) AT GROUTED JOINTS AFTER SUFFICIENT CURE.



BONDED PAVER INSTALLATION WITH MORTAR-BED GREATER THAN 1/2" THICK



UNBONDED PAVER INSTALLATION WITH MORTAR-BED GREATER THAN 1/2" THICK

- ALL SURFACES WHERE BONDED PAVERS ARE TO BE INSTALLED ARE TO BE STRUCTURALLY SOUND, STABLE, DRY, CLEAN, AND FREE OF ANY SUBSTANCE OR CONDITION THAT MAY REDUCE OR PREVENT PROPER ADHESION.
- MIX ULTRAFLEX LFT RAPID R.S. MORTAR (BY MAPEI) PER MANUFACTURER WRITTEN GUIDELINES.
- WITH THE APPROPRIATE NOTCHED TROWEL, AND WITH PRESSURE, APPLY A ¼"-½" THICK COAT OF ULTRAFLEX LFT RAPID R.S. MORTAR AS A BOND-COAT MORTAR LAYER. SPREAD ONLY AS MUCH MORTAR AS CAN BE COVERED BEFORE PRODUCT SKINS OVER. OPEN TIMES FOR MATERIAL (MORTAR) USAGE CAN VARY WITH JOBSITE CONDITIONS.
- MIX 4 TO 1 MUD BED MIX MORTAR (BY MAPEI) PER MANUFACTURER WRITTEN GUIDELINES.
- WORK A FLOAT-COAT LAYER OF 4 TO 1 MORTAR INTO (WET) BOND-COAT MORTAR LAYER OF ULTRAFLEX LFT WITH A WOOD OR MAGNESIUM FLOAT. IMMEDIATELY FOLLOW WITH MORE 4 TO 1 TO ACHIEVE THE DESIRED/REQUIRED THICKNESS (PRIOR TO FINAL APPLICATION OF ULTRAFLEX LFT MORTAR AND PAVER INSTALLATION).
- AFTER MIXING, WITH THE APPROPRIATE NOTCHED TROWEL, AND WITH PRESSURE, APPLY A ¼"-½" THICK COAT OF ULTRAFLEX LFT RAPID R.S. MORTAR. SPREAD ONLY AS MUCH MORTAR AS CAN BE COVERED WITH PAVERS BEFORE PRODUCT SKINS OVER.
- PLACE THE PAVERS FIRMLY IN THE WET MORTAR. PUSH PAVERS BACK AND FORTH IN A DIRECTION PERPENDICULAR TO THE TROWEL LINES, TO COLLAPSE THE MORTAR RIDGES AND HELP ACHIEVE MAXIMUM COVERAGE. ENSURE MINIMUM 95% CONTACT OF MORTAR TO BOTH THE PAVER AND SUBSTRATE ON INSTALLATION. PERIODICALLY LIFT A FEW PAVERS TO CHECK FOR ACCEPTABLE COVERAGE.
- ENSURE THAT PAVERS ARE PRE-SEALED (BY MANUFACTURER) AND OR SEALED IN THE FIELD WITH ENGINEER APPROVED SILANE/SILOXANE PENETRATING SEALER PRIOR TO GROUT WORK (WHERE SPECIFIED/REQUIRED).
- ALLOW 3-4 HOURS OF MORTAR-BED CURE PRIOR TO COMMENCING WITH GROUT WORK.
- REMOVE EXCESS MORTAR FROM THE JOINT AREAS SO THAT AT LEAST 2/3 OF THE PAVER DEPTH IS AVAILABLE FOR GROUTING. GROUT JOINTS MUST BE CLEAN AND FREE OF STANDING WATER, DUST, DIRT AND FOREIGN MATTER PRIOR TO INTENDED GROUT WORK.
- MIX ULTRACOLOR PLUS FA GROUT (BY MAPEI) PER MANUFACTURER WRITTEN GUIDELINES. REVIEW "GROUTING IN HOT WEATHER" SECTION OF PRODUCT APPLICATION ON DATA SHEET TO ACCOMPLISH THE BEST RESULTS.
- SLIGHTLY MOISTEN PAVER JOINT SURFACES WITH A DAMP SPONGE JUST PRIOR TO GROUT APPLICATION (TO AID APPLICATION). DO NOT FLOOD/SATURATE PAVERS, OR ALLOW FOR STANDING WATER AT UN-GROUTED JOINT AREAS.
- SPREAD GROUT IMMEDIATELY INTO THE DAMP JOINTS WITH A RUBBER GROUT FLOAT. MAKE SURE THAT ALL JOINTS ARE WELL COMPACTED AND FREE OF VOIDS AND/OR GAPS.
- REMOVE EXCESS GROUT FROM THE PAVER SURFACE BY MOVING THE GROUT FLOAT DIAGONALLY TO THE JOINTS WHILE GROUT MATERIAL IS STILL FRESH, SMOOTH SURFACES WITH A DAMP SPONGE, AS NECESSARY.
- CLEAN GROUTED JOINTS PER MANUFACTURER GUIDELINES TO ACHIEVE DESIRED COLOR-CONSISTENCY.
- APPLY ULTRACARE PENETRATING PLUS STONE TILE/GROUT SEALER (BY MAPEI) AT GROUTED JOINTS AFTER SUFFICIENT CURE.

- MIX 4 TO 1 MUD BED MIX MORTAR (BY MAPEI) PER MANUFACTURER WRITTEN GUIDELINES.
- APPLY 4 TO 1 MORTAR TO DESIRED/REQUIRED THICKNESS (PRIOR TO APPLICATION OF ULTRAFLEX LFT MORTAR AND PAVER INSTALLATION).
- AFTER MIXING, WITH THE APPROPRIATE NOTCHED TROWEL, AND WITH PRESSURE, APPLY A ¼"-½" THICK COAT OF ULTRAFLEX LFT RAPID R.S. MORTAR. SPREAD ONLY AS MUCH MORTAR AS CAN BE COVERED WITH PAVERS BEFORE PRODUCT SKINS OVER. OPEN TIMES FOR MATERIAL (MORTAR) USAGE CAN VARY WITH JOBSITE CONDITIONS.
- PLACE THE PAVERS FIRMLY IN THE WET MORTAR. PUSH PAVERS BACK AND FORTH IN A DIRECTION PERPENDICULAR TO THE TROWEL LINES, TO COLLAPSE THE MORTAR RIDGES AND HELP ACHIEVE MAXIMUM COVERAGE. ENSURE MINIMUM 95% CONTACT OF MORTAR TO BOTH THE PAVER AND SUBSTRATE ON INSTALLATION. PERIODICALLY LIFT A FEW PAVERS TO CHECK FOR ACCEPTABLE COVERAGE.
- ENSURE THAT PAVERS ARE PRE-SEALED (BY MANUFACTURER) AND OR SEALED IN THE FIELD WITH ENGINEER APPROVED SILANE/SILOXANE PENETRATING SEALER PRIOR TO GROUT WORK (WHERE SPECIFIED/REQUIRED).
- ALLOW 3-4 HOURS OF MORTAR-BED CURE PRIOR TO COMMENCING WITH GROUT WORK.
- REMOVE EXCESS MORTAR FROM THE JOINT AREAS SO THAT AT LEAST 2/3 OF THE PAVER DEPTH IS AVAILABLE FOR GROUTING. GROUT JOINTS MUST BE CLEAN AND FREE OF STANDING WATER, DUST, DIRT AND FOREIGN MATTER PRIOR TO INTENDED GROUT WORK.
- MIX ULTRACOLOR PLUS FA GROUT (BY MAPEI) PER MANUFACTURER WRITTEN GUIDELINES. REVIEW "GROUTING IN HOT WEATHER" SECTION OF PRODUCT APPLICATION ON DATA SHEET TO ACCOMPLISH THE BEST RESULTS.
- SLIGHTLY MOISTEN PAVER JOINT SURFACES WITH A DAMP SPONGE JUST PRIOR TO GROUT APPLICATION (TO AID APPLICATION). DO NOT FLOOD/SATURATE PAVERS, OR ALLOW FOR STANDING WATER AT UN-GROUTED JOINT AREAS.
- SPREAD GROUT IMMEDIATELY INTO THE DAMP JOINTS WITH A RUBBER GROUT FLOAT. MAKE SURE THAT ALL JOINTS ARE WELL COMPACTED AND FREE OF VOIDS AND/OR GAPS.
- REMOVE EXCESS GROUT FROM THE PAVER SURFACE BY MOVING THE GROUT FLOAT DIAGONALLY TO THE JOINTS WHILE GROUT MATERIAL IS STILL FRESH, SMOOTH SURFACES WITH A DAMP SPONGE, AS NECESSARY.
- CLEAN GROUTED JOINTS PER MANUFACTURER GUIDELINES TO ACHIEVE DESIRED COLOR-CONSISTENCY.
- APPLY ULTRACARE PENETRATING PLUS STONE TILE/GROUT SEALER (BY MAPEI) AT GROUTED JOINTS AFTER SUFFICIENT CURE.

1 BONDED VS UNBONDED PAVER INSTALLATIONS
1 1/2" = 1'-0"

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

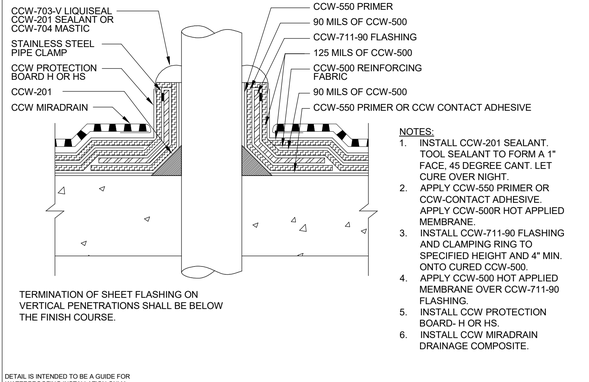
Project No.: 18217

Date: 04/26/21

Scale: As indicated

Sheet Title:
CCW-500 PAVERS

Sheet No.:
WP-6

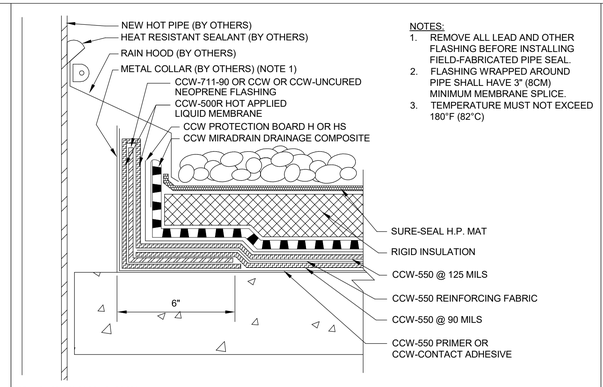


TERMINATION OF SHEET FLASHING ON VERTICAL PENETRATIONS SHALL BE BELOW THE FINISH COURSE.

NOTES:
1. INSTALL CCW-201 SEALANT. TOOL SEALANT TO FORM A 1" FACE, 45 DEGREE CANT. LET CURE OVER NIGHT.
2. APPLY CCW-550 PRIMER OR CCW-CONTACT ADHESIVE. APPLY CCW-500R HOT APPLIED MEMBRANE.
3. INSTALL CCW-711-90 FLASHING AND CLAMPING RING TO SPECIFIED HEIGHT AND 4" MIN. ONTO CURED CCW-500.
4. APPLY CCW-500 HOT APPLIED MEMBRANE OVER CCW-711-90 FLASHING.
5. INSTALL CCW PROTECTION BOARD- H OR HS.
6. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

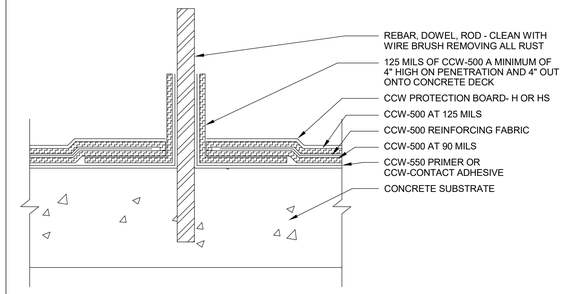
500-8A	PIPE AND PENETRATION FLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



NOTES:
1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD-FABRICATED PIPE SEAL.
2. FLASHING WRAPPED AROUND PIPE SHALL HAVE 3" (8CM) MINIMUM MEMBRANE SPLICE.
3. TEMPERATURE MUST NOT EXCEED 180°F (82°C)

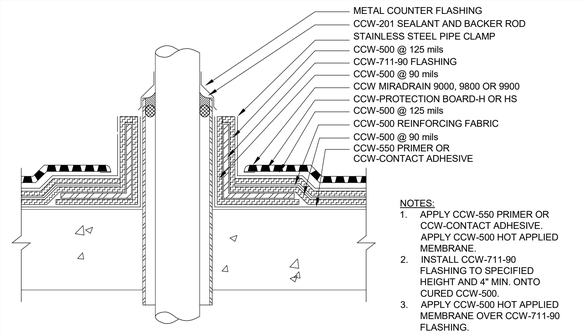
DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-8B	FIELD FABRICATED NEW HOT STACK	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

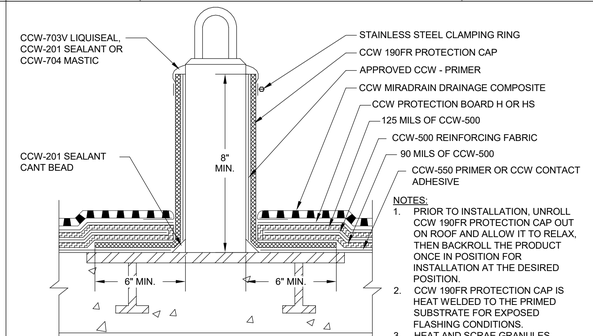
500-8C	SMALL PENETRATIONS	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



NOTES:
1. APPLY CCW-550 PRIMER OR CCW-CONTACT ADHESIVE. APPLY CCW-500 HOT APPLIED MEMBRANE.
2. INSTALL CCW-711-90 FLASHING TO SPECIFIED HEIGHT AND 4" MIN. ONTO CURED CCW-500.
3. APPLY CCW-500 HOT APPLIED MEMBRANE OVER CCW-711-90 FLASHING.
4. INSTALL CCW PROTECTION BOARD-H OR HS.
5. INSTALL MIRADRAIN DRAINAGE COMPOSITE.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

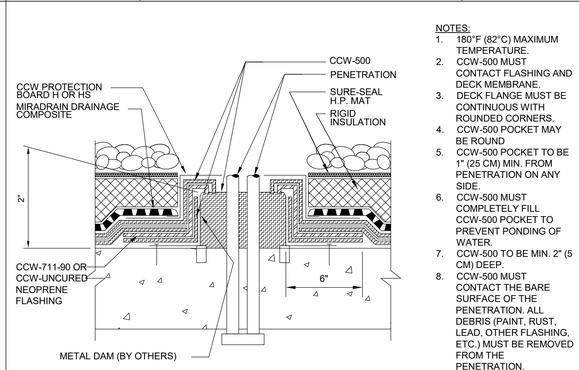
500-8D	PIPE SLEEVE PENETRATION FLASHING	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



NOTES:
1. PRIOR TO INSTALLATION, UNROLL CCW 190FR PROTECTION CAP OUT ON ROOF AND ALLOW IT TO RELAX, THEN BACKROLL THE PRODUCT ONCE IN POSITION FOR INSTALLATION AT THE DESIRED POSITION.
2. CCW 190FR PROTECTION CAP IS HEAT WELDED TO THE PRIMED SUBSTRATE FOR EXPOSED FLASHING CONDITIONS.
3. HEAT AND SCRAE GRANULES FROM CCW 190FR PRIOR TO MAKING TIE-IN WITH CCW-500.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

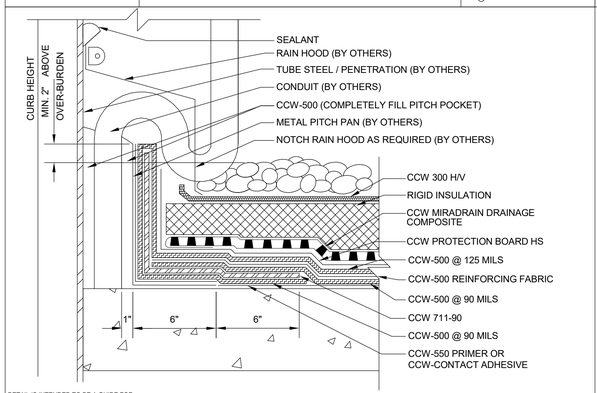
500-8E	CCW 190FR PROTECTION CAP - ROOF DAVIT	CARLISLE COATINGS & WATERPROOFING ©2019 CARLISLE CORPORATION



NOTES:
1. 180°F (82°C) MAXIMUM TEMPERATURE.
2. CCW-500 MUST CONTACT FLASHING AND DECK MEMBRANE.
3. DECK FLANGE MUST BE CONTINUOUS WITH ROUNDED CORNERS.
4. CCW-500 POCKET MAY BE ROUND
5. CCW-500 POCKET TO BE 1" (25 CM) MIN. FROM PENETRATION ON ANY SIDE.
6. CCW-500 MUST COMPLETELY FILL CCW-500 POCKET TO PREVENT PONDING OF WATER.
7. CCW-500 TO BE MIN. 2" (5 CM) DEEP.
8. CCW-500 MUST CONTACT THE BARE SURFACE OF THE PENETRATION. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHING, ETC.) MUST BE REMOVED FROM THE PENETRATION.

DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-16A	FIELD FABRICATED CCW-500 POCKET	CARLISLE COATINGS & WATERPROOFING ©2012 CARLISLE CORPORATION



DETAIL IS INTENDED TO BE A GUIDE FOR WATERPROOFING INSTALLATION ONLY.

500-16B	FIELD FABRICATED PITCH POCKET	CARLISLE COATINGS & WATERPROOFING ©2013 CARLISLE CORPORATION

NOTE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENGAGE THE MANUFACTURER TO VERIFY THE SUITABILITY OF ALL DETAILS TO BE USED ON THE JOB. THE CONTRACTOR SHALL SUBMIT ALL ADDITIONAL DETAILS THAT THE MANUFACTURER REQUIRES TO COMPLETE THE WORK.

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
HR/JB/RM	HR/JB/RM
CHECKED	APPROVED
RM	FPM

Project No.: 18217

Date: 04/26/21

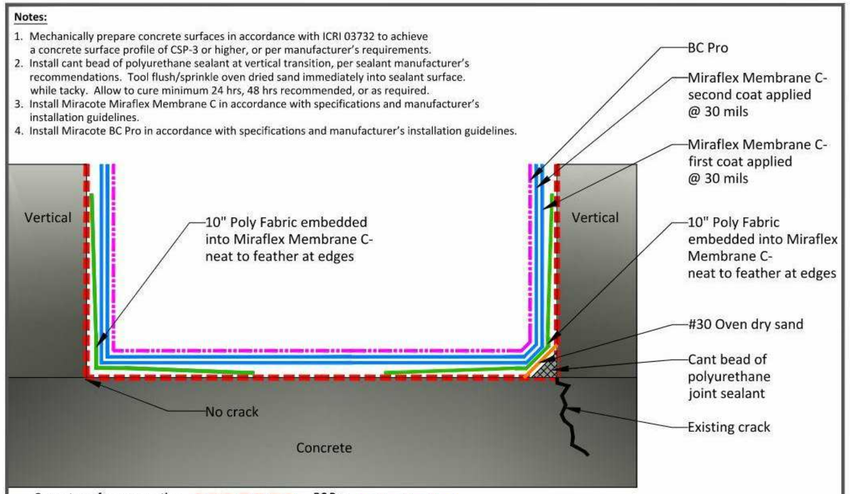
Scale: 3" = 1'-0"

Sheet Title:
CCW-500 PENETRATIONS

Sheet No.:
WP-7

Notes:

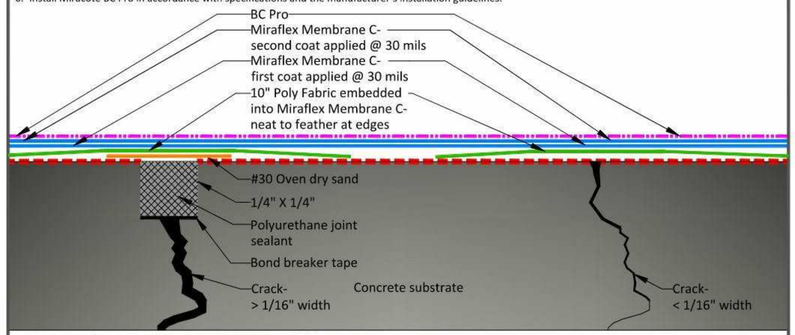
1. Mechanically prepare concrete surfaces in accordance with ICRI 03732 to achieve a concrete surface profile of CSP-3 or higher, or per manufacturer's requirements.
2. Install cant bead of polyurethane sealant at vertical transition, per sealant manufacturer's recommendations. Tool flush/sprinkle oven dried sand immediately into sealant surface. while tacky. Allow to cure minimum 24 hrs, 48 hrs recommended, or as required.
3. Install Miracote Miraflex Membrane C in accordance with specifications and manufacturer's installation guidelines.
4. Install Miracote BC Pro in accordance with specifications and manufacturer's installation guidelines.



MIR-MEMC-PPF-CPD-2		CHANGE IN PLANE DETAIL Pool Plaster Finishes	MIRACOTE Division of Crossfield Products Corp.
1/12/14	NTS		

Notes:

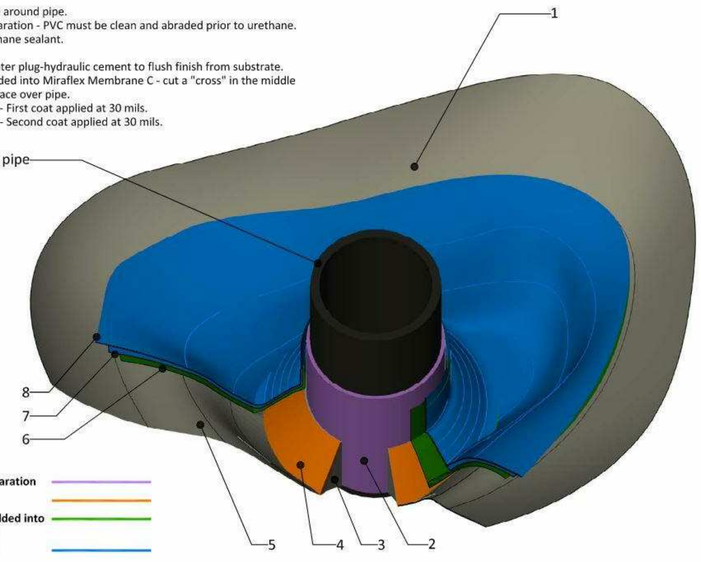
1. Mechanically prepare cracks >1/16" width, per manufacturer's requirements.
2. Mechanically prepare concrete surfaces in accordance with ICRI 03732 to achieve a concrete surface profile of CSP-3 or higher, or per manufacturer's requirements.
3. Seal routed cracks with polyurethane sealant, per sealant manufacturer's recommendations. Tool flush and sprinkle oven dried sand immediately into sealant surface while tacky. Allow to cure minimum 24 hrs, 48 hrs recommended, or as required.
4. Apply detail coat of Miracote Poly Fabric embedded into Miraflex Membrane C, per manufacturer's installation guidelines, over cracks <1/16", cold joints and all routed cracks previously sealed with polyurethane sealant. Miraflex Membrane C detail coat(s) shall extend 4" minimum on each side of crack.
5. Install Miracote Miraflex Membrane C in accordance with specifications and the manufacturer's installation guidelines.
6. Install Miracote BC Pro in accordance with specifications and the manufacturer's installation guidelines.



MIR-MEMC-PPF-CTD-2		CRACK TREATMENT DETAIL Pool Plaster Finishes	MIRACOTE Division of Crossfield Products Corp.
1/12/14	NTS		

Notes:

1. Chip existing substrate around pipe.
2. PVC pipe surface preparation - PVC must be clean and abraded prior to urethane.
3. Cant bead of polyurethane sealant.
4. #30 oven dry sand.
5. Fill entire void with water plug-hydraulic cement to flush finish from substrate.
6. 10" Ploy fabric embedded into Miraflex Membrane C - cut a "cross" in the middle of the Poly Fabric to place over pipe.
7. Miraflex Membrane C - First coat applied at 30 mils.
8. Miraflex Membrane C - Second coat applied at 30 mils.



MIR-MEMC-PD1		PIPE DETAIL Miraflex Membrane C	MIRACOTE Division of Crossfield Products Corp.
1/02/2014	NTS		

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
License: 89035
Expires: 02/28/23

This item has been digitally signed and sealed by Robert J. Miller on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED	DRAWN
Designer	Author
CHECKED	APPROVED
Checker	Approver

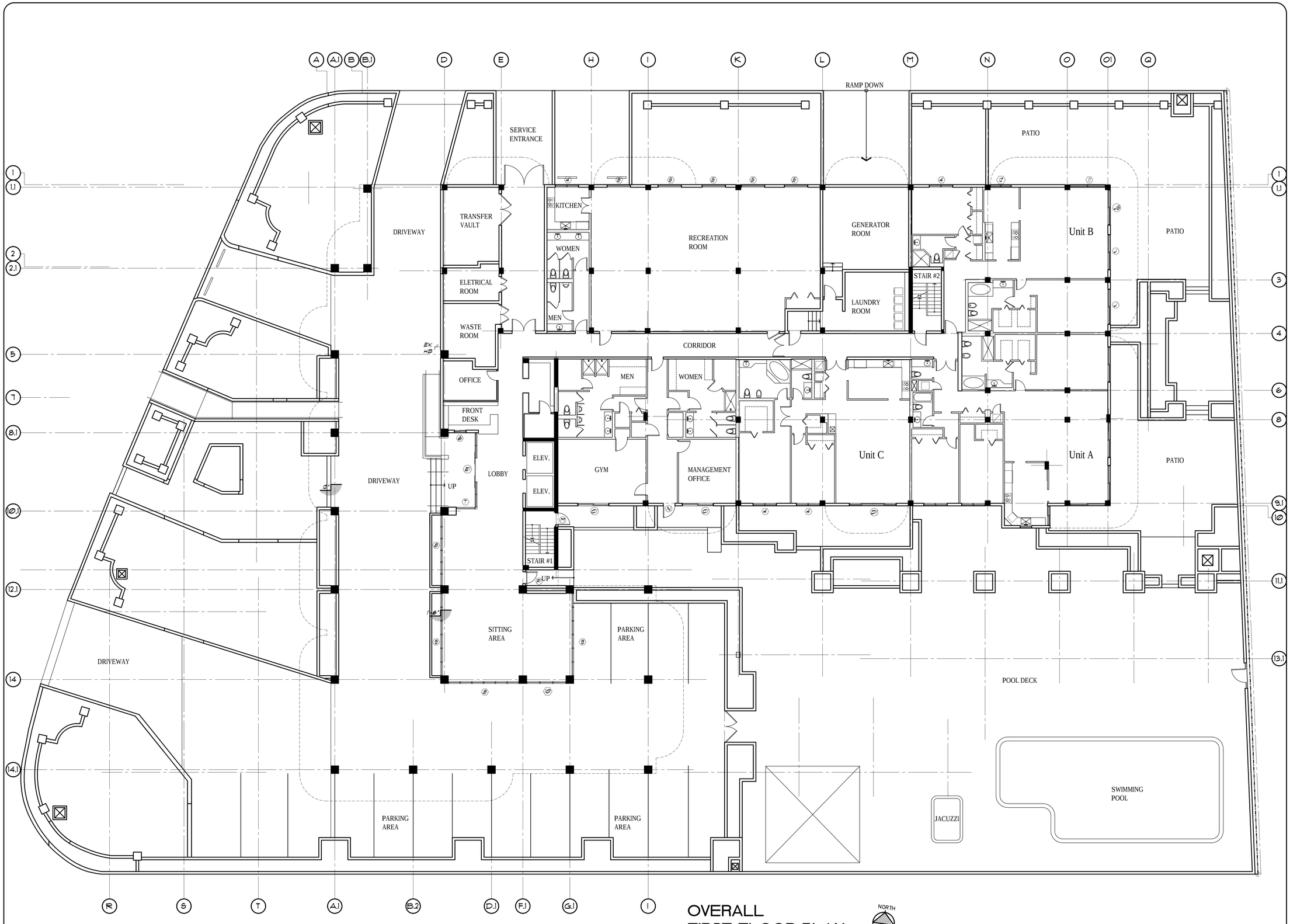
Project No.: 18217

Date: 04/26/21

Scale:

Sheet Title: MIRACOTE POOL MEMBRANE

Sheet No.: WP-8



OVERALL FIRST FLOOR PLAN

3/32" = 1'-0"

NORTH

SCOTT D. DYER ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

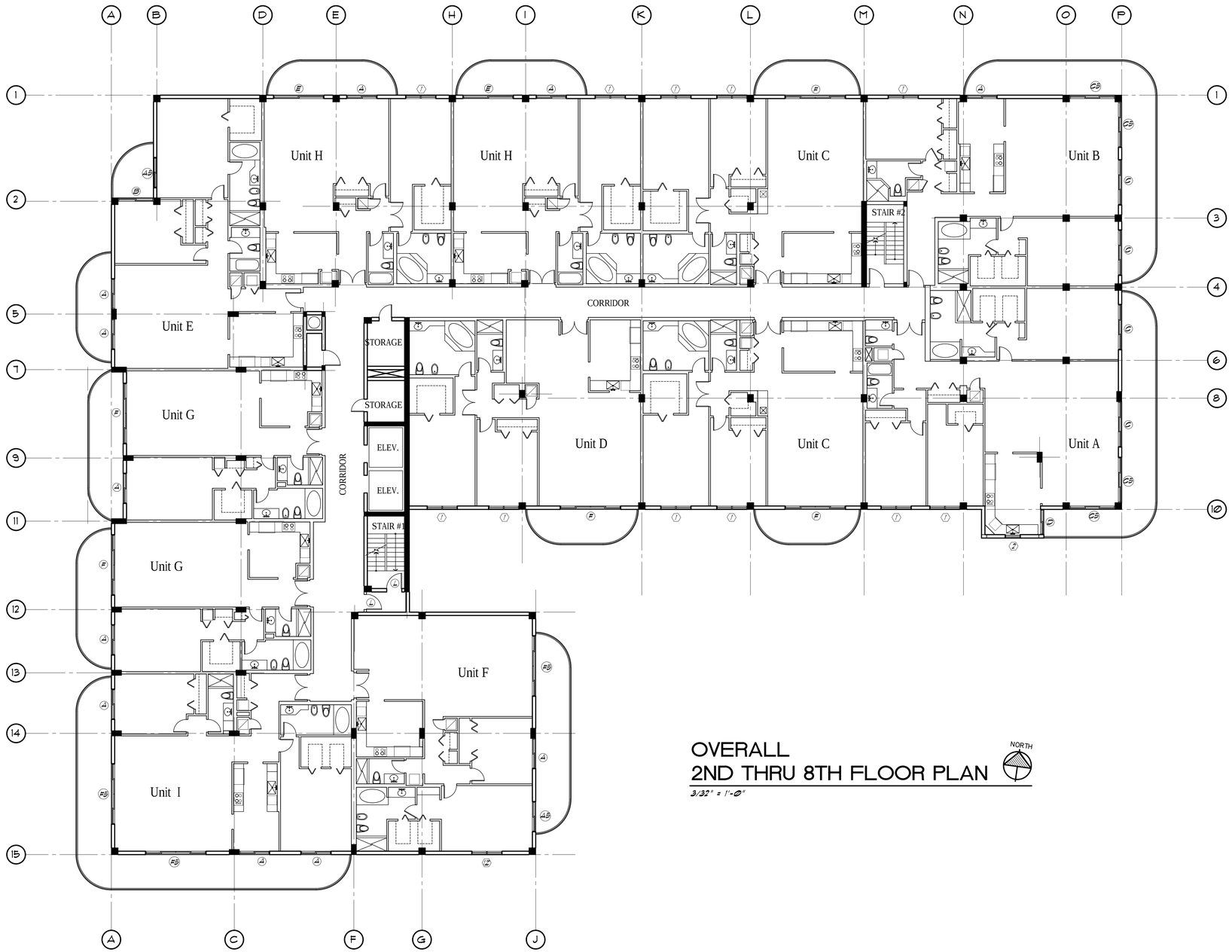
8777 COLLINS AVE.

SURFSIDE, FLORIDA

OVERALL FIRST FLOOR RAMP, WINDOW, & DOOR PLAN

SHEET
A-1
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)



OVERALL
2ND THRU 8TH FLOOR PLAN

NORTH

3/32" = 1'-0"

SCOTT D. DYER
ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

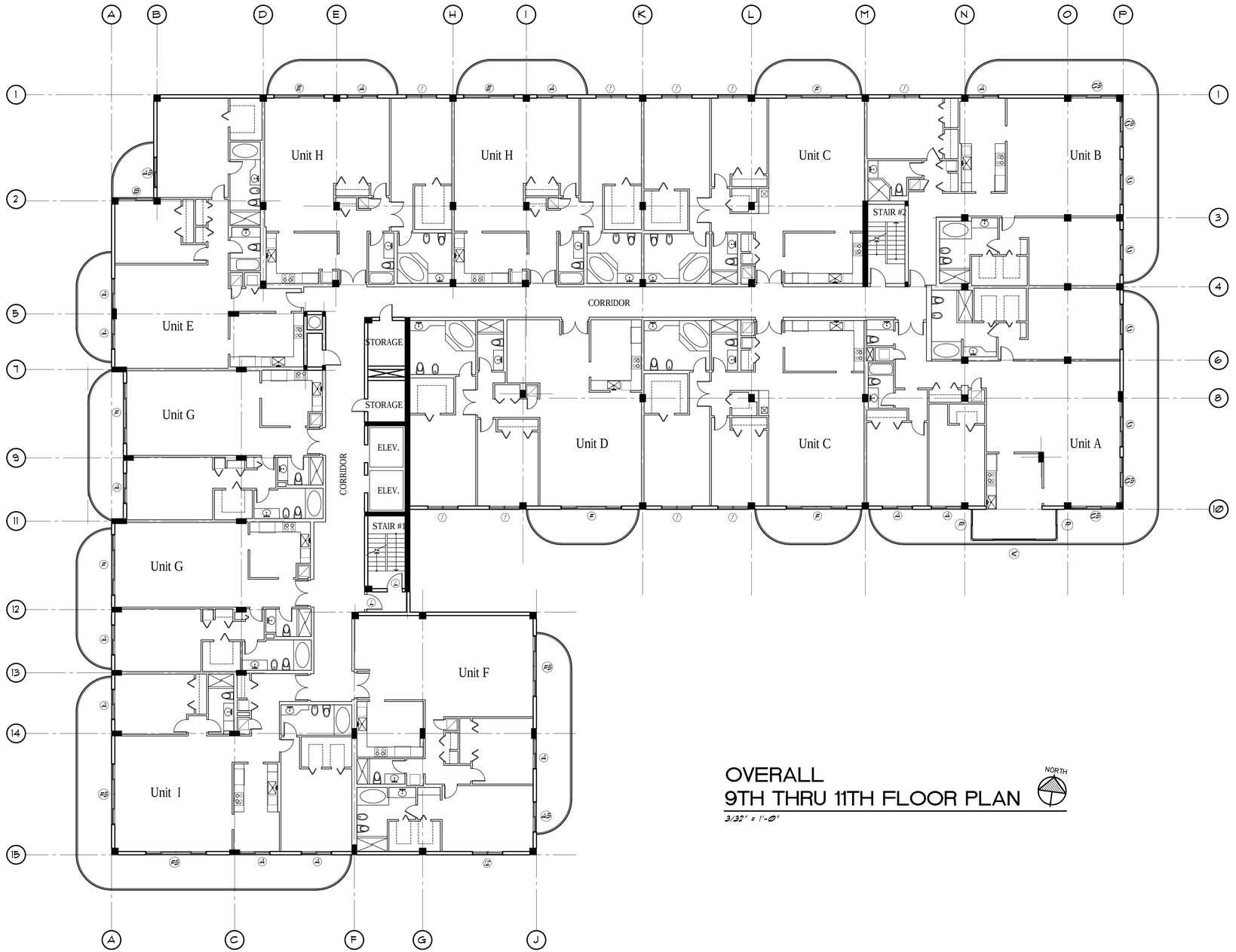
8777 COLLINS AVE.

SURFSIDE, FLORIDA

OVERALL 2ND THRU 8TH FLOOR WINDOW, & DOOR PLAN

SHEET
A-2
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)



OVERALL
9TH THRU 11TH FLOOR PLAN

NORTH

3/32" = 1'-0"

SCOTT D. DYER
ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN
TOWERS SOUTH
REPAIR &
ALTERATION

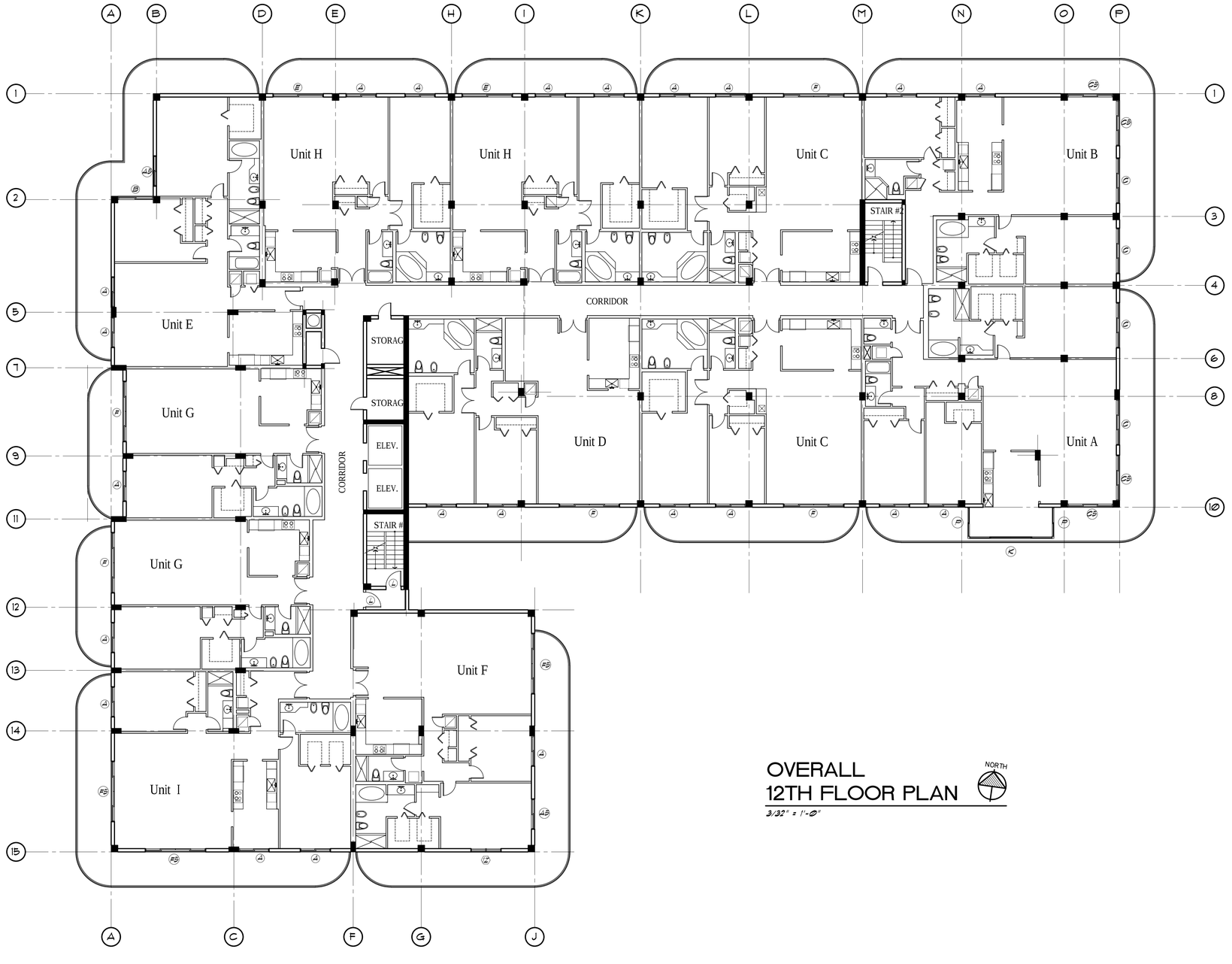
8777 COLLINS AVE.

SURFSIDE,
FLORIDA

OVERALL 9TH THRU 11TH FLOOR WINDOW, & DOOR PLAN

SHEET
A-3
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)



OVERALL 12TH FLOOR PLAN

NORTH

3/32" = 1'-0"

SCOTT D. DYER ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

SCOTT D. DYER AR-0011551

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY SCOTT D. DYER ARCHITECT, P.A. USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND ALL SIGNATURES MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

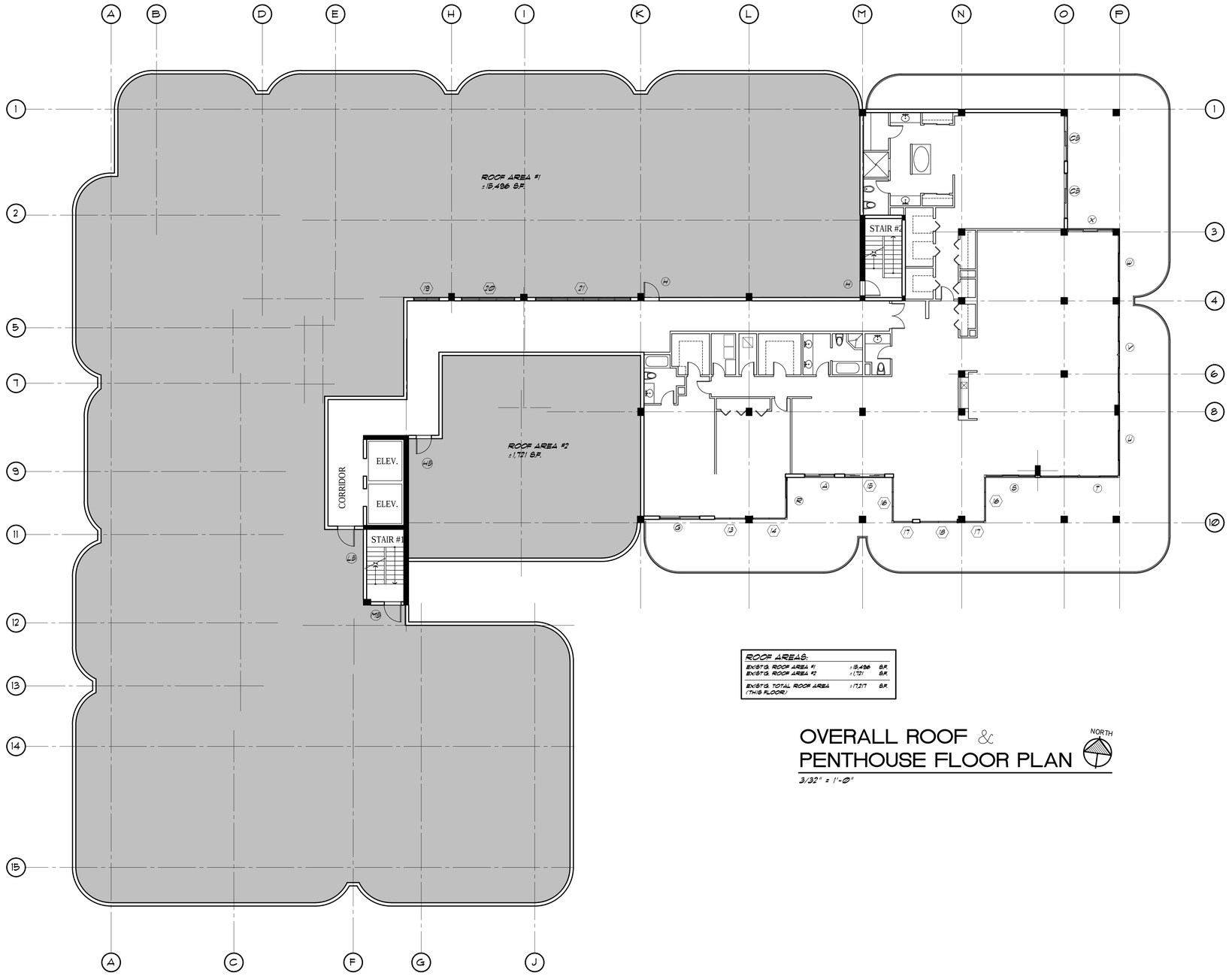
8777 COLLINS AVE.

SURFSIDE, FLORIDA

OVERALL 12TH FLOOR WINDOW, & DOOR PLAN

SHEET
A-4
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)



ROOF AREAS:		
EXIST'G. ROOF AREA #1	±15,496	S.F.
EXIST'G. ROOF AREA #2	±1,721	S.F.
EXIST'G. TOTAL ROOF AREA (THIS FLOOR)	±17,217	S.F.

OVERALL ROOF & PENTHOUSE FLOOR PLAN

NORTH

3/32" = 1'-0"

SCOTT D. DYER
ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

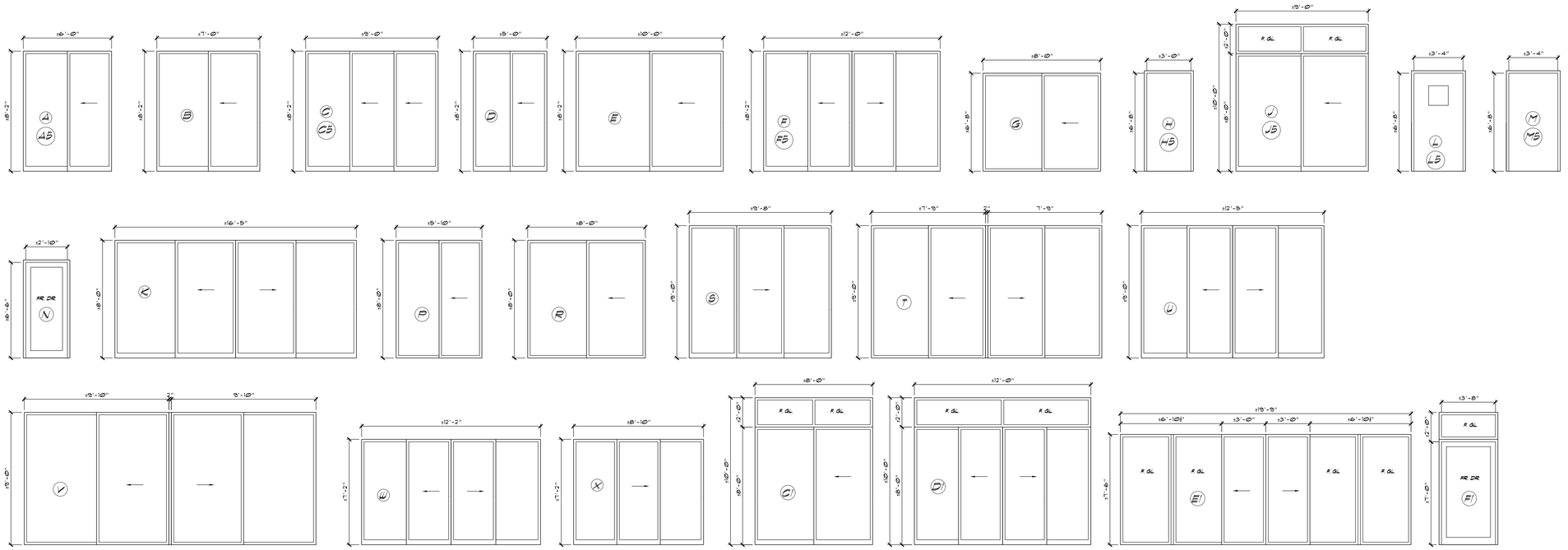
8777 COLLINS AVE.

SURFSIDE,
FLORIDA

OVERALL ROOF & PENTHOUSE FLOOR WINDOW, & DOOR PLAN

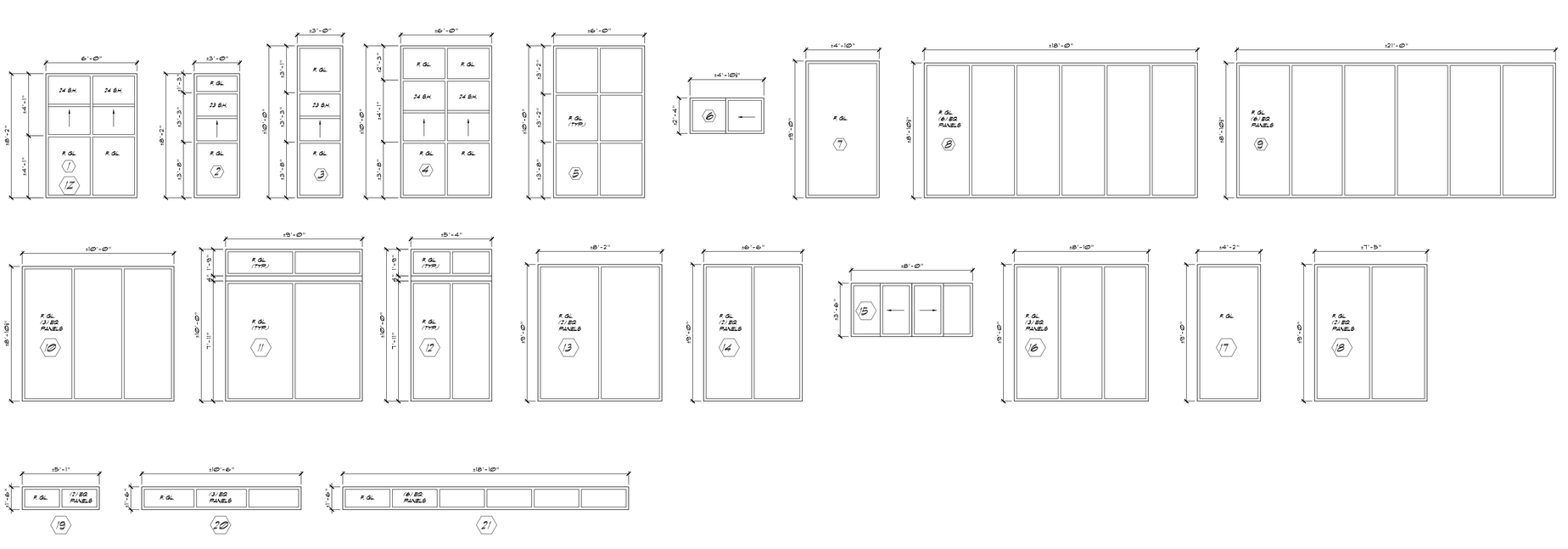
SHEET
A-5
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)



DOOR PROFILES

1/4" = 1'-Ø"



WINDOW PROFILES

1/4" = 1'-Ø"

SCOTT D. DYER
ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

8777 COLLINS AVE.

SURFSIDE, FLORIDA

DOOR & WINDOW ELEVATION PROFILES

SHEET
A-6
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)

DOOR NOTES:
1. ALL DOORS SHALL COMPLY W/ F.B.C. 1010 (DOORS, GATES AND TURNSTILES) & F.F.P.C. 101 CHAPTER 7 7.2.1.5 (LOCKS, LATCHES, AND ALARM DEVICES) AND A.D.A. HANDICAPPED ACCESSIBILITY CODES.
2. DOORS WITHIN AN ACCESS TO AN EXIT AND EXIT DOORS SHALL BE OPENED FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT AT ALL TIMES WHEN THE PORTION OF THE BUILDING AREA IS OCCUPIED.
3. FORCE REQUIRED TO FULLY OPEN ANY DOOR MANUALLY IN A MEANS OF EGRESS SHALL NOT EXCEED 15 LBS. (67 N) TO RELEASE THE LATCH, 30 LBS. (133 N) TO SET THE DOOR IN MOTION, AND 15 LBS. (67 N) TO OPEN THE DOOR TO THE MIN. REQ'D. WIDTH.
4. A DOOR DESIGNED TO NORMALLY BE KEPT CLOSED IN A MEANS OF EGRESS, SHALL BE A SELF-CLOSING DOOR AND SHALL NOT BE SECURED IN THE OPEN POSITION AT ANY TIME.
5. CLOSERS TO BE LCN 4010 TYP. (VERIFY W/ N.O.A. SELECTED).
6. GENERAL CONTRACTOR TO COORDINATE ALL LOCKSETS WITH OWNER.

NOTE:
G.C. TO PROVIDE SPRING SCALE @ TIME OF FIRE DEPT. REVIEW IN FIELD.

WINDOW NOTES:
1. GLASS & GLAZING SHALL COMPLY W/ 2020 F.B.C. CHAPTER 24
2. ALL ALUMINUM FRAMES TO BE BRONZED ANODIZED FINISH.
3. GLASS COLOR TO BE SOLARGOOL
4. ALL GLASS TO BE IMPACT RESISTANT.

HARDWARE GROUP:

GROUP "A"

STOREFRONT (IMPACT)
PANIC HARDWARE
ADA THRESHOLD
CLOSER
HINGES (PER N.O.A.)

GROUP "B"

STOREFRONT (IMPACT)
AUTOMATIC SLIDING DOOR
ADA THRESHOLD

GROUP "C"

HOLLOW METAL (IMPACT)
HOLLOW METAL FRAME
"B" LABEL (1-1/2 HOUR RATED)
PANIC HARDWARE
ADA THRESHOLD
CLOSER
HINGES (PER N.O.A.)

GROUP "D"

HOLLOW METAL (IMPACT)
HOLLOW METAL FRAME
"B" LABEL (1-1/2 HOUR RATED)
10X10 WIRE GLASS VISION PANEL
PANIC HARDWARE
ADA THRESHOLD
CLOSER
HINGES (PER N.O.A.)

GROUP "E"

HOLLOW METAL (IMPACT)
HOLLOW METAL FRAME
"B" LABEL (1-1/2 HOUR RATED)
PASS-THRU LOCKSET
ADA THRESHOLD
CLOSER
HINGES (PER N.O.A.)

GROUP "F"

HOLLOW METAL (IMPACT)
HOLLOW METAL FRAME
10X10 WIRE GLASS VISION PANEL
PASS-THRU LOCKSET
ADA THRESHOLD
CLOSER
HINGES (PER N.O.A.)

GROUP "G"

HOLLOW METAL (IMPACT)
HOLLOW METAL FRAME
10X10 WIRE GLASS VISION PANEL
PASS-THRU LOCKSET
ADA THRESHOLD
CLOSER
HINGES (PER N.O.A.)

GROUP "H"

HOLLOW METAL (IMPACT)
HOLLOW METAL FRAME
"B" LABEL (1-1/2 HOUR RATED)
PASS-THRU LOCKSET
ADA THRESHOLD
CLOSER
HINGES (PER N.O.A.)

CHAMPLAIN TOWERS SOUTH DOOR & WINDOW SCHEDULE

FLOOR (S)	UNIT / ROOM	DOOR	WINDOW	ULTIMATE (LRFD) WIND PRESSURE (PSF) POSITIVE	ULTIMATE (LRFD) WIND PRESSURE (PSF) NEGATIVE	ALLOWABLE (ASD) WIND PRESSURE (PSF) POSITIVE	ALLOWABLE (ASD) WIND PRESSURE (PSF) NEGATIVE	HARDWARE GROUP
1	GYM	C1		107.8	107.8	64.7	64.7	
1	MANAGEMENT OFFICE	C1		107.8	107.8	64.7	64.7	
1	KITCHEN / RECREATION ROOM		5	107.8	107.8	64.7	64.7	
			4	107.8	107.8	64.7	64.7	
1	FRONT DESK		6	107.8	107.8	64.7	64.7	
1	LOBBY / ENTRY	E1		107.8	107.8	64.7	64.7	GROUP "B"
			7	107.8	107.8	64.7	64.7	
1	LOBBY / SITTING AREA	F1		107.8	107.8	64.7	64.7	GROUP "A"
			8	107.8	107.8	64.7	64.7	
			9	107.8	107.8	64.7	64.7	
			10	107.8	107.8	64.7	64.7	
1	STAIR	M		107.8	107.8	64.7	64.7	GROUP "C"
1	CORRIDOR	N		107.8	107.8	64.7	64.7	GROUP "A"
1	UNIT "B"	J		107.8	107.8	64.7	64.7	
		J5		107.8	197.6	64.7	118.6	
			11	107.8	197.6	64.7	118.6	
			12	107.8	107.8	64.7	64.7	
			4	107.8	107.8	64.7	64.7	
1	UNIT "C"	D1		107.8	107.8	64.7	64.7	
			4	107.8	107.8	64.7	64.7	
2 THRU 12	CORRIDORS / STAIRS	L		107.8	107.8	64.7	64.7	GROUP "D"
2 THRU 8	UNIT "A"	C		107.8	107.8	64.7	64.7	
		D		107.8	197.6	64.7	118.6	
		C5		107.8	197.6	64.7	118.6	
			1	107.8	107.8	64.7	64.7	
			2	107.8	197.6	64.7	118.6	
2 THRU 11	UNIT "B"	C		107.8	107.8	64.7	64.7	
		A		107.8	107.8	64.7	64.7	
		C5		107.8	197.6	64.7	118.6	
			1	107.8	107.8	64.7	64.7	
2 THRU 11	UNIT "C" (TWO UNITS)	F		107.8	107.8	64.7	64.7	
			1	107.8	107.8	64.7	64.7	
2 THRU 11	UNIT "D"	F		107.8	107.8	64.7	64.7	
			1	107.8	107.8	64.7	64.7	
2 THRU 12	UNIT "E"	A		107.8	107.8	64.7	64.7	
		B		107.8	197.6	64.7	118.6	
		A5		107.8	197.6	64.7	118.6	
2 THRU 12	UNIT "F"	A		107.8	107.8	64.7	64.7	
		F		107.8	107.8	64.7	64.7	
		A5		107.8	197.6	64.7	118.6	
		F5		107.8	197.6	64.7	118.6	
			12	107.8	197.6	64.7	118.6	
2 THRU 12	UNIT "G" (TWO UNITS)	A		107.8	107.8	64.7	64.7	
		F		107.8	107.8	64.7	64.7	
2 THRU 11	UNIT "H" (TWO UNITS)	A		107.8	107.8	64.7	64.7	
		E		107.8	107.8	64.7	64.7	
			1	107.8	107.8	64.7	64.7	
2 THRU 12	UNIT "I"	A		107.8	107.8	64.7	64.7	
		F5		107.8	197.6	64.7	118.6	
9 THRU 12	UNIT "A"	A		107.8	107.8	64.7	64.7	
		C		107.8	107.8	64.7	64.7	
		C5		107.8	197.6	64.7	118.6	
		K		107.8	197.6	64.7	118.6	
		P		107.8	197.6	64.7	118.6	
12	UNIT "B"	A		107.8	107.8	64.7	64.7	
		C		107.8	107.8	64.7	64.7	
		C5		107.8	197.6	64.7	118.6	
12	UNIT "C" (TWO UNITS)	A		107.8	107.8	64.7	64.7	
		F		107.8	107.8	64.7	64.7	
12	UNIT "D"	A		107.8	107.8	64.7	64.7	
		F		107.8	107.8	64.7	64.7	
12	UNIT "H" (TWO UNITS)	A		107.8	107.8	64.7	64.7	
		E		107.8	107.8	64.7	64.7	
PENTHOUSE	PENTHOUSE	A		107.8	107.8	64.7	64.7	
		C5		107.8	197.6	64.7	118.6	
		Q		107.8	197.6	64.7	118.6	
		R		107.8	197.6	64.7	118.6	
		S		107.8	197.6	64.7	118.6	
		T		107.8	197.6	64.7	118.6	
		U		107.8	197.6	64.7	118.6	
		V		107.8	107.8	64.7	64.7	
		W		107.8	197.6	64.7	118.6	
		X		107.8	197.6	64.7	118.6	
			13	107.8	197.6	64.7	118.6	
			14	107.8	197.6	64.7	118.6	
			15	107.8	197.6	64.7	118.6	
			16	107.8	197.6	64.7	118.6	
			17	107.8	197.6	64.7	118.6	
			18	107.8	197.6	64.7	118.6	
PENTHOUSE	PENTHOUSE CORRIDOR	H		107.8	107.8	64.7	64.7	GROUP "E"
		H5		107.8	197.6	64.7	118.6	GROUP "G"
		L5		107.8	197.6	64.7	118.6	GROUP "F"
		M5		107.8	197.6	64.7	118.6	GROUP "H"
			19	107.8	197.6	64.7	118.6	
			20	107.8	197.6	64.7	118.6	
			21	107.8	107.8	64.7	64.7	

SCOTT D. DYER ARCHITECT, P.A.
AA C001929
AR 0011551
6671 CONCH COURT
BOYNTON BEACH, FLORIDA 33437
(561) 596-7503

SCOTT D. DYER AR-0011551

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY SCOTT D. DYER ARCHITECT, P.A. USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND ALL SIGNATURES MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

8777 COLLINS AVE.

SURFSIDE, FLORIDA

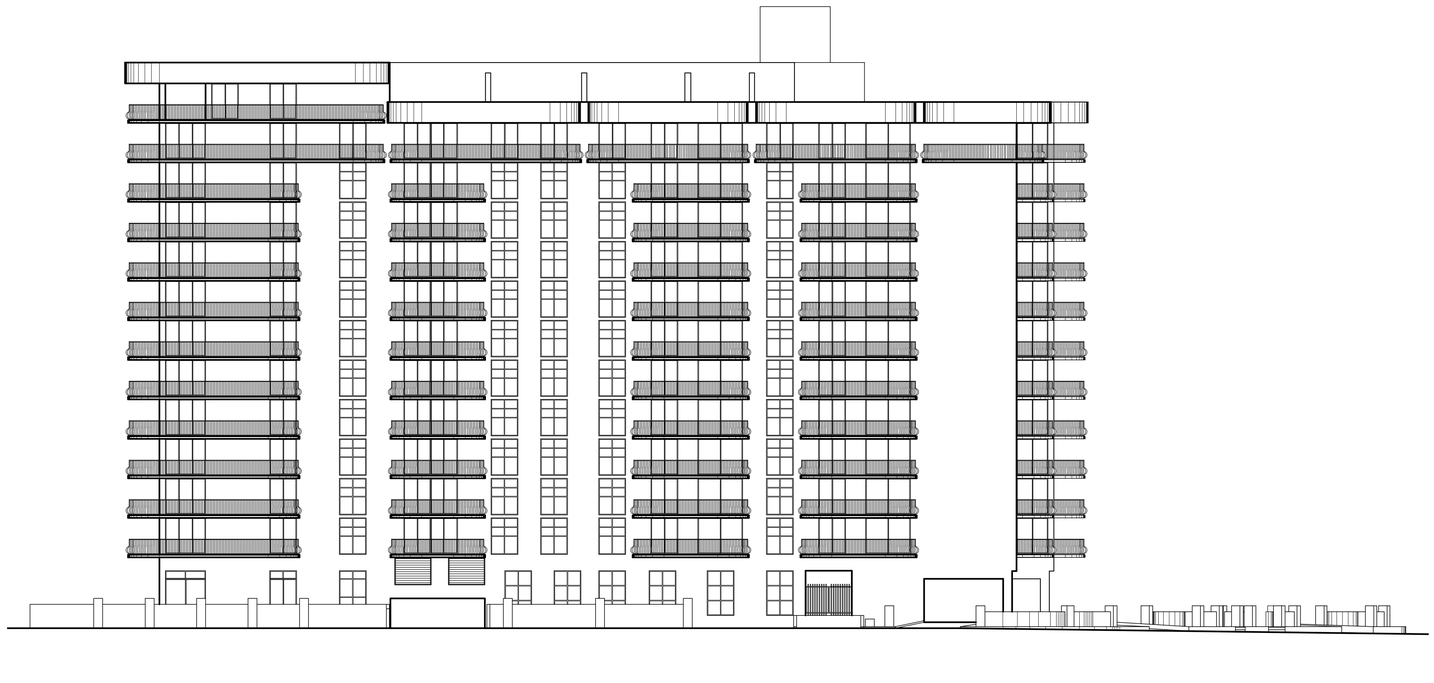
DOOR & WINDOW SCHEDULE, DOOR & WINDOW NOTES, DOOR HARDWARE SCHEDULE

SHEET
A-7
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)

WEST ELEVATION

1/16" = 1'-0"



NORTH ELEVATION

1/16" = 1'-0"

SCOTT D. DYER
ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

SCOTT D. DYER AR-0011551

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY SCOTT D. DYER ARCHITECT, P.A. USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND ALL SIGNATURES MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

8777 COLLINS AVE.

SURFSIDE, FLORIDA

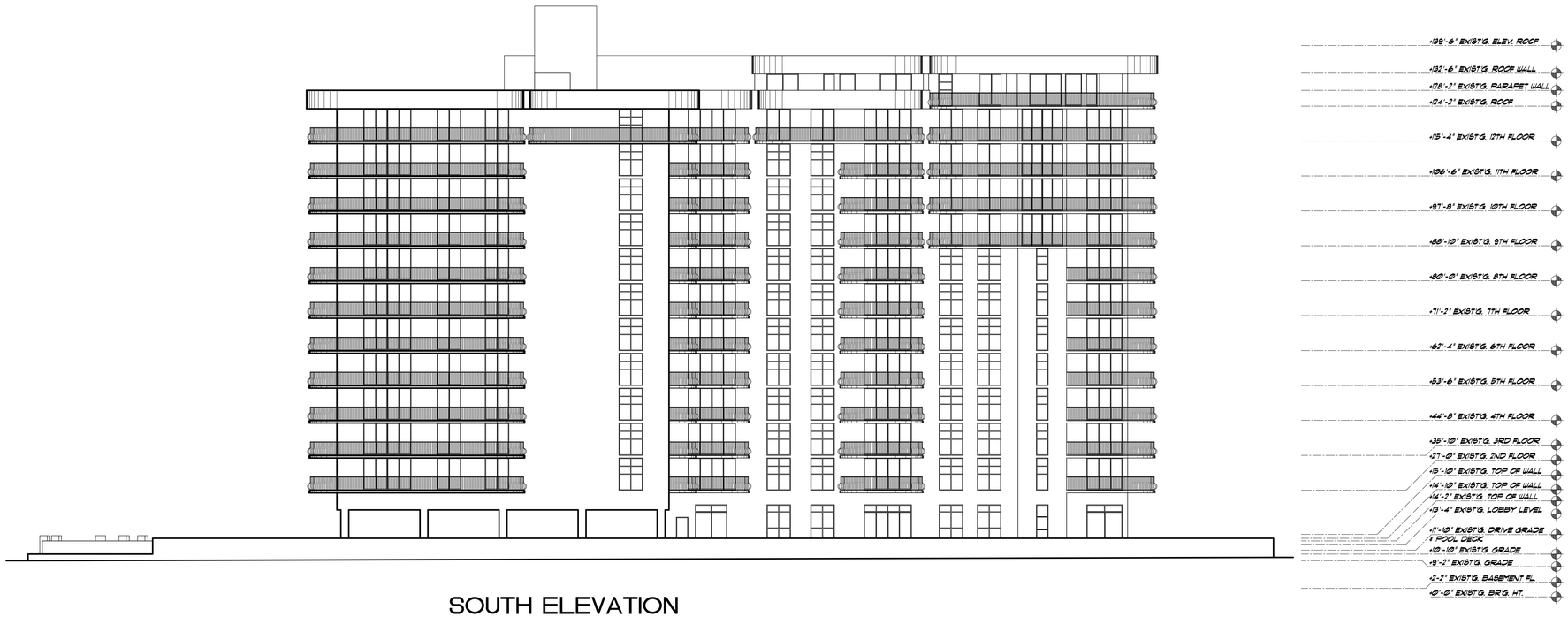
WEST & NORTH BUILDING ELEVATIONS

SHEET
A-8
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)

EAST ELEVATION

1/16" = 1'-0"



SOUTH ELEVATION

1/16" = 1'-0"

SCOTT D. DYER
ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

SCOTT D. DYER AR-0011551

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY SCOTT D. DYER ARCHITECT, P.A. USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND ALL SIGNATURES MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

8777 COLLINS AVE.

SURFSIDE, FLORIDA

EAST & SOUTH BUILDING ELEVATIONS

SHEET
A-9
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)

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

SD ARCHITECT, P.A.

LLOYD GLOBAL ARTS

10-20-2020

SCOTT D. DYER
ARCHITECT, P.A.

AA C001929
AR 0011551

6671 CONCH COURT
BOYNTON BEACH, FLORIDA
33437

(561) 596-7503

REVISIONS

COMM. NO.
19-021

DATE
5 APRIL 2021

CHAMPLAIN TOWERS SOUTH REPAIR & ALTERATION

8777 COLLINS AVE.

SURFSIDE, FLORIDA

PRELIMINARY COLOR CHART & NEW BUILDING ELEVATIONS

SHEET
A-10
OF 10

LAST DATE PRINTED 6-18-20 (PRELIM) / 4-5-21 (BID PACKAGE)

ELECTRICAL NOTES:

1. MATERIALS AND INSTALLATION, AS A MINIMUM, ARE TO CONFORM WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE 2017 EDITION, N.F.P.A., LOCAL CODES, ORDINANCES, INCLUDING ALL AMENDMENTS TO THE N.E.C. EQUIPMENT WHERE APPLICABLE, WILL BE LISTED WITH THE UNDERWRITER'S LABORATORIES, INC. QUALITY AND WORKMANSHIP ESTABLISHED BY DRAWINGS AND SPECIFICATIONS ARE NOT TO BE REDUCED BY THE ABOVE MENTIONED CODES.
2. BIDDERS ARE TO VISIT THE SITE AND FAMILIARZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF WORK. THE SUBMISSION OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORSEEN HAD AN EXAMINATION BEEN MADE, WILL NOT BE ALLOWED.
3. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM IS TO BE FULLY OPERABLE AND ACCEPTANCE OF THIS SYSTEM BY THE ENGINEER MUST BE A CONDITION OF THE SUB CONTRACT.
4. ALL WORK TO BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
5. CONTRACTOR TO GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE.
6. CORRECTION OF ANY DEFECTS TO BE COMPLETED WITHOUT ADDITIONAL CHARGE AND TO INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
7. ALL REQUIRED INSURANCE TO BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
8. CONTRACTOR TO PAY FOR ALL PERMITS, FEES INSPECTIONS AND TESTINGS.
9. ELECTRICAL INSTALLATION TO MEET ALL STANDARD REQUIREMENTS OF LOCAL POWER AND TELEPHONE COMPANIES. ELECTRICAL CONTRACTOR SHALL CONTACT LOCAL POWER AND TELEPHONE COMPANIES PRIOR TO START OF CONSTRUCTION.
10. ALL WIRING SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED, MINIMUM WIRE SIZE SHALL BE #14 AWG. EXCLUDING CONTROL WIRING. ALL CONDUCTORS SHALL BE COPPER WITH THWN/THHN INSULATION. CONDUCTORS #10 AND SMALLER MAY BE SOLID; ALL THOSE #8 AND LARGER TO BE STRANDED.
11. ALL UNDERGROUND RACEWAYS SHALL BE MINIMUM 3/4", SCHEDULE 40 PVC. ALL OTHER RACEWAYS TO COMPLY WITH GOVERNING CODES. WHERE RIGID STEEL IS USED, IT SHALL BE COMPLETELY COATED WITH AN ALKALI AND RUST RESISTANT BITUMASTIC PAINT, COPPER NO. 50, AND THREADS SHALL BE COATED WITH ZINC CHROMATE. RIGID STEEL SHALL ALSO BE USED WHEN CONDUIT IS EXPOSED TO EXTERIOR ENVIRONMENT SUCH AS EXTERIOR OF BUILDING OR WHERE IT IS EXPOSED AND SUBJECT TO DAMAGE, INSIDE OF BUILDING.
12. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS, AND BE OF SPECIAL CONSTRUCTION FOR OTHER CLASSIFIED AREAS. ALL BOXES SHALL BE RECESSED (FLUSH) IN WALLS OR CEILINGS WHENEVER POSSIBLE.
13. DISCONNECT SWITCHES SHALL BE H.P. RATED, GENERAL DUTY, QUICK-MAKE, QUICK-BREAK TYPE. ENCLOSURES SHALL BE AS REQUIRED BY N.E.C. AND LOCATION (WEATHERPROOF, EXPLOSION PROOF, ETC.). ENGRAVED LAMINATED PLASTIC IDENTIFICATION PLATES SHALL BE FURNISHED AND INSTALLED ON ALL DISCONNECT SWITCHES, CONTACTORS AND STARTERS.
14. ALL FUSES FOR SAFETY SWITCHES SHALL BE DUAL ELEMENT, CARTRIDGE TYPE. FUSES SHALL BE THOSE MANUFACTURED BY EITHER BUSSMAN OR LITTLEFUSE. THE CONTRACTOR SHALL FURNISH TO THE OWNER ONE SPARE FUSE FOR EACH SIZE AND TYPE OF FUSE INSTALLED. FUSES 600 AMPS. OR LESS SHALL BE CLASS RK1, TYPICAL UNLESS OTHERWISE NOTED. FUSES OVER 600 AMPS. SHALL BE CLASS L.
15. ALL GENERAL PURPOSE SWITCHES AND RECEPTACLES SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER.
16. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM, AND PROVIDE ALL NECESSARY DEVICES AND COMPONENTS FOR EQUIPMENT BE PLACED IN PROPER WORKING ORDER.
17. EQUIPMENT GROUNDING AND EQUIPMENT GROUNDING CONDUCTORS SHALL BE PER NEC CODE SECTION 250 GROUNDING AND BONDING. SIZE OF EQUIPMENT GROUNDING CONDUCTORS SHALL BE PER NEC CODE SECTION 250.122.

    A SEPERATE GROUND CONDUCTOR SHALL BE INSTALLED IN EVERY CONDUIT AND RACEWAY AND SECURELY BONDED IN AN APPROVED GROUNDING TERMINAL AT BOTH ENDS OF THE RUN. THE GROUNDING CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH TABLE 250-95 OF THE N.E.C. CONTRACTOR SHALL SIZE CONDUIT TO ACCOMMODATE ADDITIONAL CONDUCTOR.
18. LOAD DATA IS BASED ON INFORMATION GIVEN TO THE ENGINEER AT THE TIME OF DESIGN. VERIFY ALL EQUIPMENT NAMEPLATE RATINGS BEFORE ORDERING.
19. CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZES. THE CONTRACTOR IS TO PROVIDE CIRCUITS AND ROUTING OF CONDUITS TO SUIT JOB CONDITIONS.
20. FURNISH AND INSTALL DISCONNECT SWITCHES, WIRING, AND CONNECTIONS ON AIR CONDITIONING SYSTEM AS SHOWN ON PLANS. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE WITH MECHANICAL CONTRACTOR REGARDING SUPPLY AND INSTALLATION OF ALL REQUIRED CONTROLS.
21. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE IN LINE FUSING AND ENERGY SAVING BALLASTS. (ONLY REQUIRED IN MIAMI DADE COUNTY)
22. ALL SWITCHGEAR, PANELS, STARTERS, CONTACTORS ETC., SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER, THE SYSTEM DESIGN IS BASED ON SQUARE "D"; HOWEVER, COMPARABLE EQUIPMENT BY G.E. & SIEMENS WILL BE ACCEPTABLE. TANDEM AND HALF-SPACE CIRCUIT BREAKERS SHALL NOT BE USED.
23. TYPEWRITTEN CIRCUIT INDEX SHALL BE AFFIXED TO INSIDE SURFACE OF EACH PANELBOARD DOOR, CLEARLY INDICATING AREA AND TYPE OF LOAD SERVED BY EACH BRANCH CIRCUIT PROTECTIVE DEVICE, INCLUDING SPARES. HAND PRINTED WILL NOT BE ACCEPTED.
24. ENGRAVED, LAMINATED PLASTIC IDENTIFICATION PLATES SHALL BE FURNISHED AND INSTALLED ON ALL PANELS AND SWITCHGEAR. PLATES SHALL BE AFFIXED TO FRONT OF PANELS, INDICATING PANEL NAME, VOLTAGE AND AMPERAGE.
25. ALL UNDERGROUND PVC CONDUIT RUNS SHALL HAVE RIGID STEEL ELBOWS AND RIGID STEEL SECTIONS AT SLAB PENETRATIONS WHERE SUBJECT TO POSSIBLE DAMAGE. WHERE RIGID STEEL IS USED, IT SHALL BE COMPLETELY COATED WITH AN ALKALI AND RUST-RESISTANT BITUMASTIC PAINT, COPPER NO. 50, AND THREADS SHALL BE COATED WITH ZINC CHROMATE.
26. THE ELECTRICAL CONTRACTOR SHALL MEET AND COORDINATE WITH THE LOCAL POWER COMPANY AT THE SITE PRIOR TO CONTRUCTION. AT THAT TIME, THE CONTRACTOR SHALL COORDINATE ALL RELATED WORK WITH THE UTILITY COMPANY'S RESPONSIBILITIES TO MEET THE OWNER'S SCHEDULE.
27. ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN AN APPROVED RACEWAY, EMT, IMC, RIGID GALVANIZED CONDUIT OR SCEDULE 40 PVC MAXIMUM NUMBER OF 120V CIRCUITS ALLOWED IN A COMMON CONDUIT SHALL BE SIX (6). THE CONTRACTOR SHALL STRICTLY CONFORM TO THE N.E.C. REQUIREMENTS OF DERATING FOR CONDUCTOR AMPACITY AND CONDUIT FILL.
28. CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS: 208V SYSTEM
    NEUTRAL – WHITE
    PHASE A – BLACK
    PHASE B – RED
    PHASE C – BLUE
    GRD.CON – GREEN
29. CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL CONDUIT PENETRATIONS MADE THROUGH FIRE RATED WALLS, CEILINGS, SLABS, ETC. PENETRATION SEALS SHALL BE PER U.L. ASSEMBLY STANDARDS.
30. CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF CONTRACT DRAWINGS AT JOB SITE WITH COLORED MARKINGS INDICATING PROGRESS OF WORK. THIS SET OF CONTRACT DRAWINGS IS TO BE SEPERATE FROM AND IN ADDITION TO CONTRACTOR'S CONSTRUCTION SET. EVERY UNIT OF EQUIPMENT, DEVICE, CONDUIT AND WIRE IS TO BE MARKED WHEN INSTALLED. USE GREEN TO INDICATE INSTALLATION AS SHOWN ON RAWINGS AND USE RED TO INDICATE FIELD CHANGES. UPON COMPLETION OF WORK, THIS SET OF CONTRACT DRAWINGS IS TO BE TURNED OVER TO, AND BECOME PROPERTY OF THE ELECTRICAL ENGINEER.
31. IF ELECTRICAL CONTRACTOR HAS QUESTIONS, OR IN THEIR OPINION FINDS OMISSIONS OR ERRORS ON ELECTRICAL DOCUMENTS, IT IS THEIR RESPONSIBILITY TO BRING THIS TO THE ATTENTION OF THE ELECTRICAL ENGINEER IMMEDIATELY. IF ELECTRICAL CONTRACTOR PROCEEDS WITH ANY CHANGES TO THE CONTRACT DOCUMENTS, WITHOUT WRITTEN PRIOR APPROVAL FROM THE ELECTRICAL ENGINEER, CONTRACTOR WILL NOT BE COMPENSATED.
32. IN ALL AREAS SPECIFIED IN 210.52, ALL 125 VOLT, 15 AND 20 AMP. RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT AS PER NEC CODE SECTION 406.11.
33. COMPLY AS REQUIRED AS STATED IN NEC ART. 210.8.
34. ALL ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC ART. 110.26.
35. COMPLY AS REQUIRED AS STATED IN NEC ART. 358.12.

ELECTRICAL SYMBOL LEGEND

BOXES & FITTINGS

- J — CEILING MOUNTED JUNCTION BOX
- J — WALL MOUNTED JUNCTION BOX , 18" A.F.F. OR AS OTHERWISE NOTED.
- J — CEILING MOUNTED JUNCTION BOX, 12"X12"X6" DEEP UNLESS OTHERWISE INDICATED.
- PB — PULLBOX, SIZED AS INDICATED OR AS REQUIRED BY N.E.C.

SYMBOL SUFFIXES

A.F.F.	ABOVE FINISHED FLOOR
C.B.	CIRCUIT BREAKER
CKT.	CIRCUIT
COND. OR C.	CONDUIT
E	EXISTING
E.C.	EMPTY CONDUIT
E.W.C.	ELECTRIC WATER COOLER
E.W.H.	ELECTRIC WATER HEATER
ENCL.	ENCLOSURE
F.A.	FIRE ALARM
GFI	GROUND FAULT INTERRUPTER.
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
PNL	PANEL
SW.	SWITCH
U.O.N.	UNLESS OTHERWISE NOTED
WP	INDICATES WEATHERPROOF NEMA 3R EQUIPMENT
MTD.	MOUNTED
*	FUSE AS PER MANUFACTURER'S RECOMMENDATION
MVD	MANUAL VOLUME DAMPER
AFI	ARC FAULT INTERRUPTER

PANELBOARDS

- POWER, LIGHTING OR DISTRIBUTION PANELBOARD. (NEW)
- T — TRANSFORMER WALL OR FLOOR MOUNTED; SIZE AND MOUNTING AS INDICATED ON DWGS.

RECEPTACLES

- 120V.,1 PHASE, 60 HZ., 20 AMP. DUPLEX RECEPTACLE MTD.. 18" A.F.F.,
- SAME AS ABOVE EXCEPT MTD. AT 6" ABOVE COUNTER MOUNT RECEPTACLE HORIZONTALLY
- 120v.,1 PHASE, 60 hz., 20 amp. DUAL DUPLEX RECEPTACLE MTD. 18" a.f.f.
- 2P-30 — SPECIAL PURPOSE RECEPTACLE 2P. DENOTES POLES, 30 DENOTES AMPERAGE RATING
- 120V.,1 PHASE, 60 HZ., 20 AMP. DUPLEX RECEPTACLE FLOOR MTD. BOX COVER TO BE DETERMINED BY ARCHITECT
- 120V.,1 PHASE, 60 HZ., 20 AMP. SWITCH DUPLEX RECEPTACLE

MOTORS & CONTROLS

- 5 — MOTOR, 5 = 5 H.P. OR AS OTHERWISE INDICATED.
- MOTOR MAGNETIC STARTER.
- MOTOR COMBINATION STARTER AND DISCONNECT.
- T — THERMOSTAT
- EXHAUST FAN

WIRING

- A-1,3,5 — HOMERUN TO PANEL "A".1-3-5 ARE CIRCUIT NO'S. TICKS ARE NO. OF CONDUCTORS (✓) INDICATES GROUND WIRE SIZED AS PER N.E.C. ART. 250.
- INDICATES A EXISTING CONDUIT RUN CONCEALED IN A CEILING OR WALL.
- INDICATES A CONDUIT RUN CONCEALED IN FLOOR. EMBEDDED IN CONCRETE OR UNDERGROUND.
- INDICATES AN EXISTING CONDUIT RUN.
- INDICATES A CAPPED CONDUIT.
- INDICATES A FLEXIBLE METAL CONDUIT CONNECTION. USE LIQUID TIGHT CONDUIT IN WET, DAMP OR OILY LOCATIONS.
- FLEXIBLE EQUIPMENT CONNECTION.
- G — G — GROUNDING SYSTEM CONDUCTOR, BARE COPPER CONDUCTOR OR INSULATED CONDUCTOR IN CONDUIT AS INDICATED.
- CONDUIT RUN TURNED DOWN.
- CONDUIT RUN TURNED UP.
- CONDUIT EXPANSION JOINT

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

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

Project No.: 18217

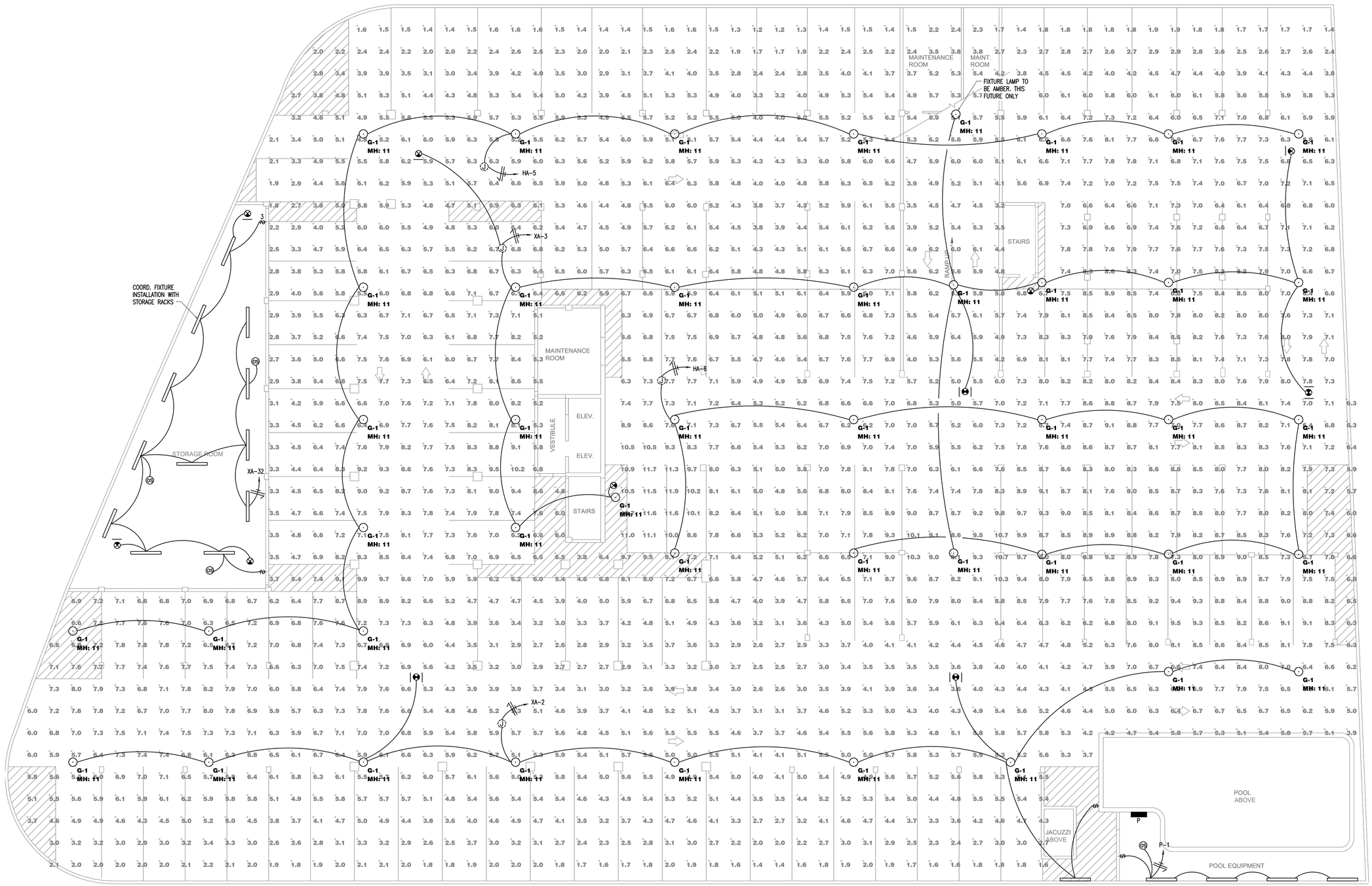
Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: ELECTRICAL SYMBOL LEGEND AND NOTES

Sheet No.: E-0

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM



Luminaire Schedule CHAMPLAIN TOWERS BASEMENT REV2 EM

Symbol	Qty	Label	Description	Lumens/Lamp	LLF	Lum. Watts	Total Watts
+	21	G-1 E	SVPG-140L-1675-NW-G2-5	N.A.	0.900	75.5	1585.5

Calculation Summary CHAMPLAIN TOWERS BASEMENT REV2 EM

Label	Avg	Max	Min	Avg/Min	Max/Min
Room_1_Floor	3.32	9.3	0.3	11.07	31.00

BASEMENT PARKING PLAN - LIGHTING

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

H.VIDAL & ASSOCIATES
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
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
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

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: BASEMENT PARKING PLAN - LIGHTING

Sheet No.: E-1

FIRST FLOOR PARKING PLAN - LIGHTING

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

Luminaire Schedule

Symbol	Qty	Label	Description	Lumens/Lamp	LLF	Lum. Watts	Total Watts
	269	A	SC24-S_S_DBT_A	93.5	1.000	5.42	1457.98
	3	W	VEE-1-T4-48LC-S-TS-SWV	N.A.	0.900	78	234
	2	SA	ECF-3-G4L-600-ABK-G2-4	N.A.	1.000	93.9	187.8

Calculation Summary

Label	Avg	Max	Min	Avg/Min	Max/Min
G_Planar	2.46	5.4	1.0	2.46	5.40
OPEN PARKING & ENTRANCE_Planar	2.50	5.2	0.7	3.57	7.43
OPEN PARKING_Planar_1	1.90	4.0	0.8	3.00	9.87

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.	SR13S-L2W18K2A-xxx-BKT-APS MH: COLUMN MOUNT A.F.F. (bottom of fixture)	4493	0.148	34	34
	24	B	SINGLE	Luminis Canada Inc.	MA30 L1W112A-RS MH: 42" BOLLARD	274	0.855	11.3	11.3
	1	C	SINGLE	Lithonia Lighting	DSXF1 LED P2 30K WFL MVOLT IS xxx MH: GROUND MOUNT A.F.G.	4753	0.855	42	42

Calculation Summary

Project: CHAMPLAIN TOWERS SOUTH - POOL AREA_REV 1 02/02/2021

Label	CalcType	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

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
VIDALENGINEERING.COM
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 License: 0000000
Expires: 00/00/00

PRELIMINARY
NOT FOR
CONSTRUCTION

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED EC	DRAWN EC
CHECKED RJM	APPROVED FPM

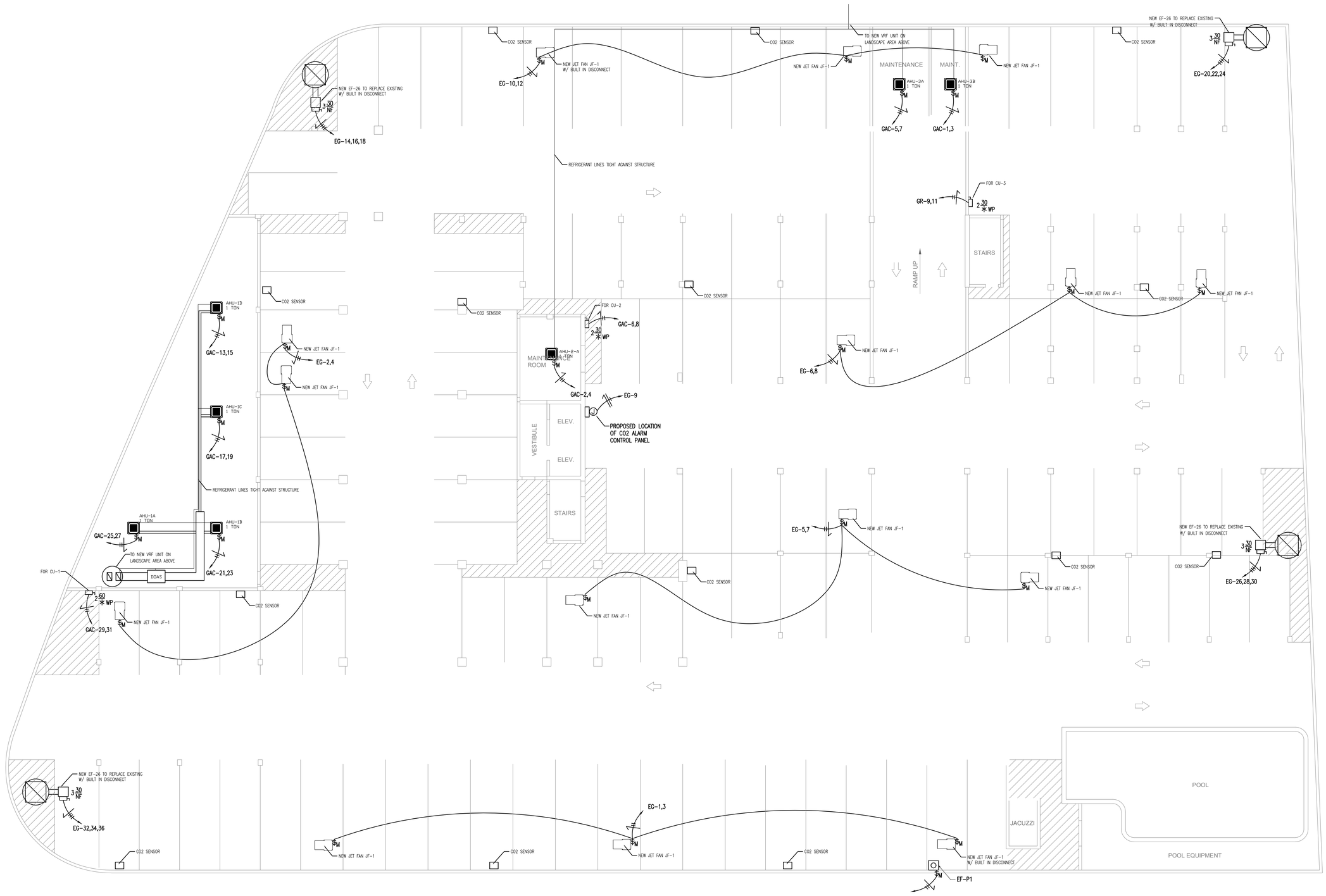
Project No.: 18217

Date: 11/03/2020

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

Sheet Title:
FIRST FLOOR PARKING PLAN - LIGHTING

Sheet No.:
E-2



BASEMENT PARKING PLAN - POWER

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

H.VIDAL & ASSOCIATES

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
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

Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

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

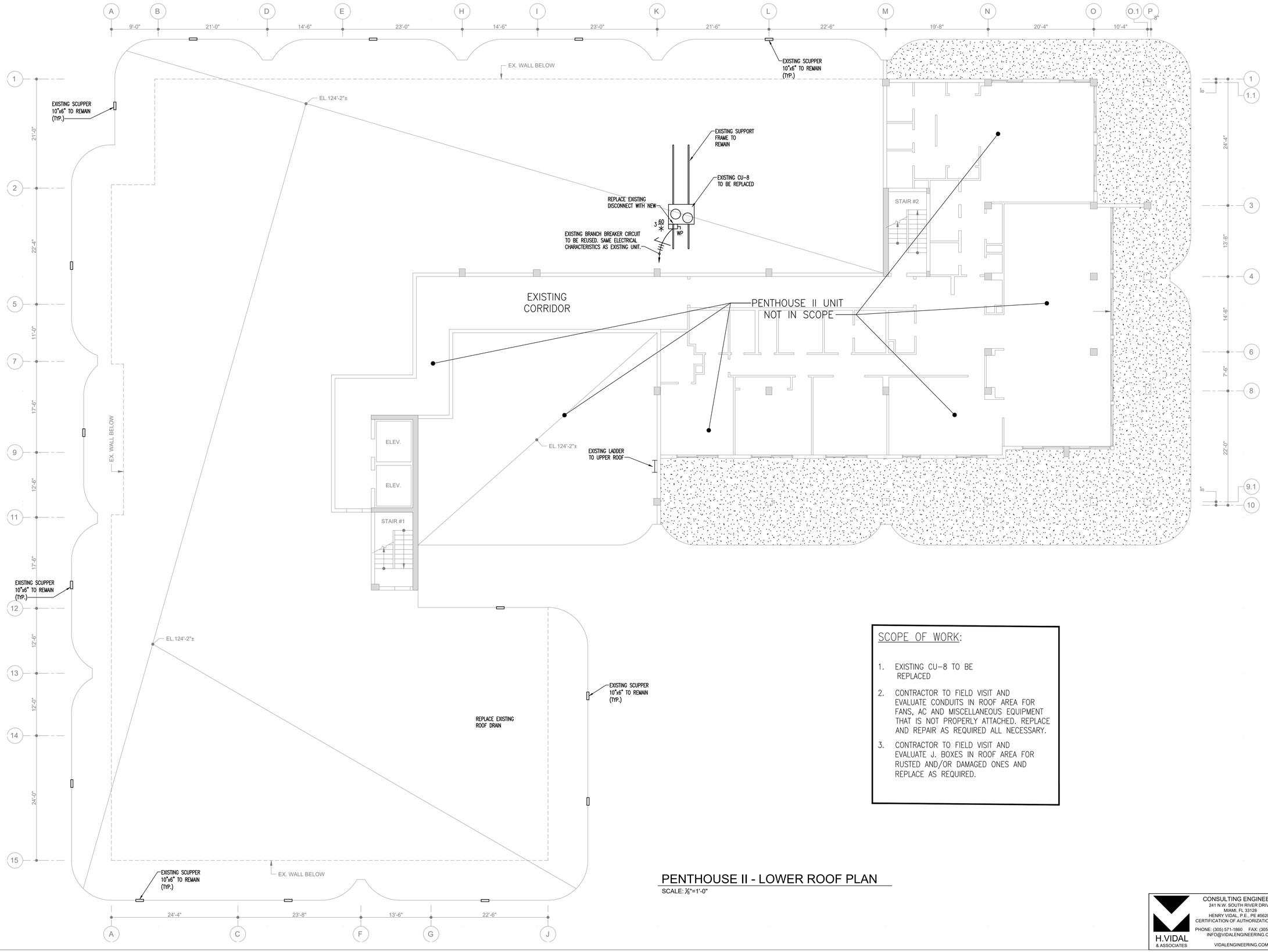
Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: BASEMENT PARKING PLAN - POWER

Sheet No.: E-3



SCOPE OF WORK:

1. EXISTING CU-8 TO BE REPLACED
2. CONTRACTOR TO FIELD VISIT AND EVALUATE CONDUITS IN ROOF AREA FOR FANS, AC AND MISCELLANEOUS EQUIPMENT THAT IS NOT PROPERLY ATTACHED. REPLACE AND REPAIR AS REQUIRED ALL NECESSARY.
3. CONTRACTOR TO FIELD VISIT AND EVALUATE J. BOXES IN ROOF AREA FOR RUSTED AND/OR DAMAGED ONES AND REPLACE AS REQUIRED.

PENTHOUSE II - LOWER ROOF PLAN

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

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

morabito consultants

Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

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

Project No.: 18217

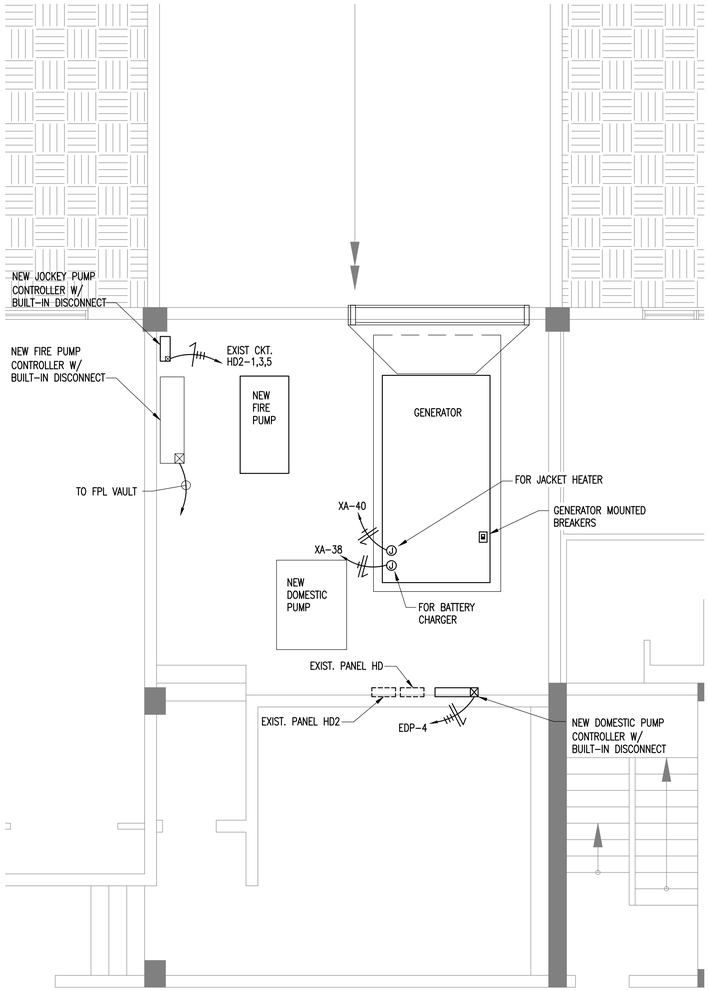
Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: PENTHOUSE FLOOR PLAN / LOWER ROOF

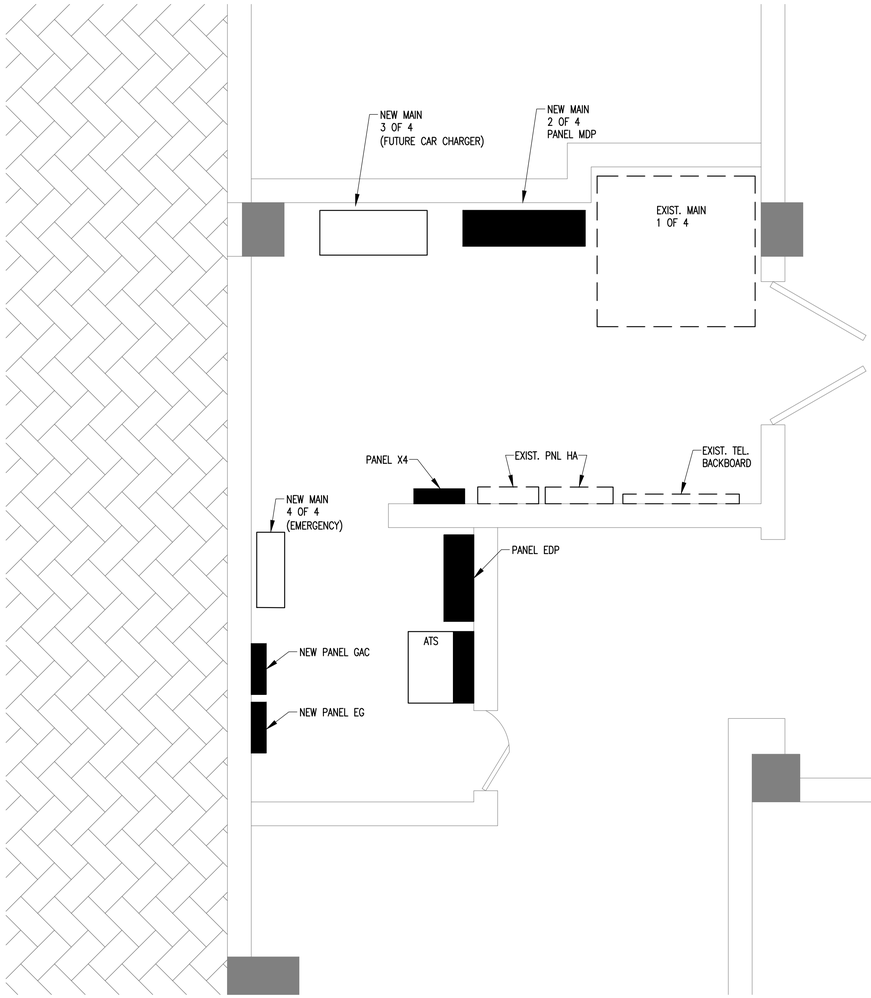
Sheet No.: E-4

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM



GENERATOR ROOM PLAN

SCALE: 1/4" = 1'-0"



MAIN ELECTRICAL ROOM PLAN

SCALE: 1/2" = 1'-0"

ADDITIONAL MAIN ELECTRIC WORK NOTES:

1. PROVIDE FIRE PROOFING TO ALL PENETRATIONS. USE APPROVED 2-HOUR FIRE PROOF CAULK.
2. CLOSE ALL OPEN PENETRATIONS WITH APPROVED 2-HOUR FIRE PROOF CAULK

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

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

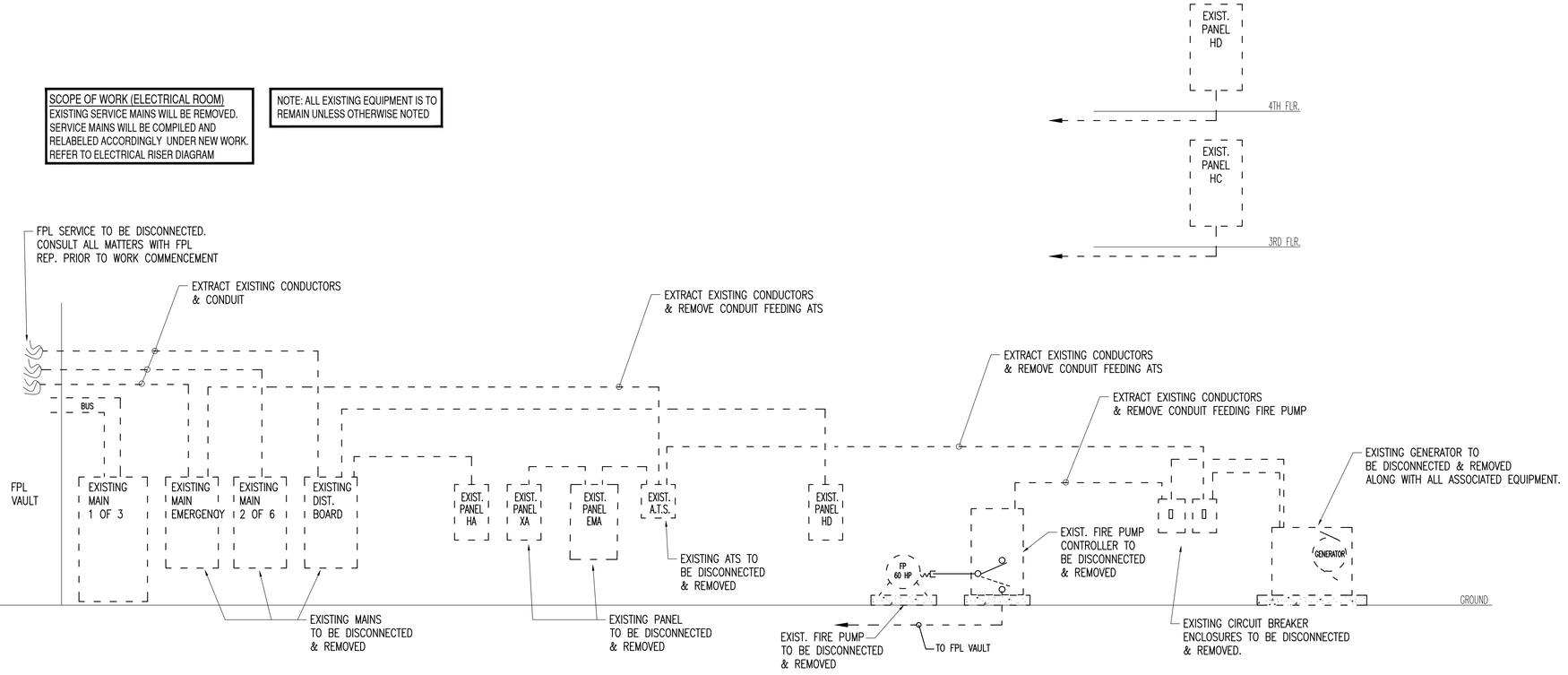
Sheet Title: GENERATOR ROOM PLAN

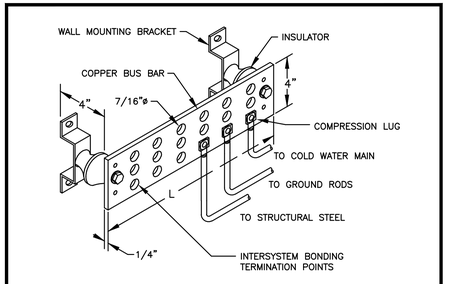
Sheet No.: E-5

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM

SCOPE OF WORK (ELECTRICAL ROOM)
EXISTING SERVICE MAINS WILL BE REMOVED. SERVICE MAINS WILL BE COMPILED AND RELABELED ACCORDINGLY UNDER NEW WORK. REFER TO ELECTRICAL RISER DIAGRAM

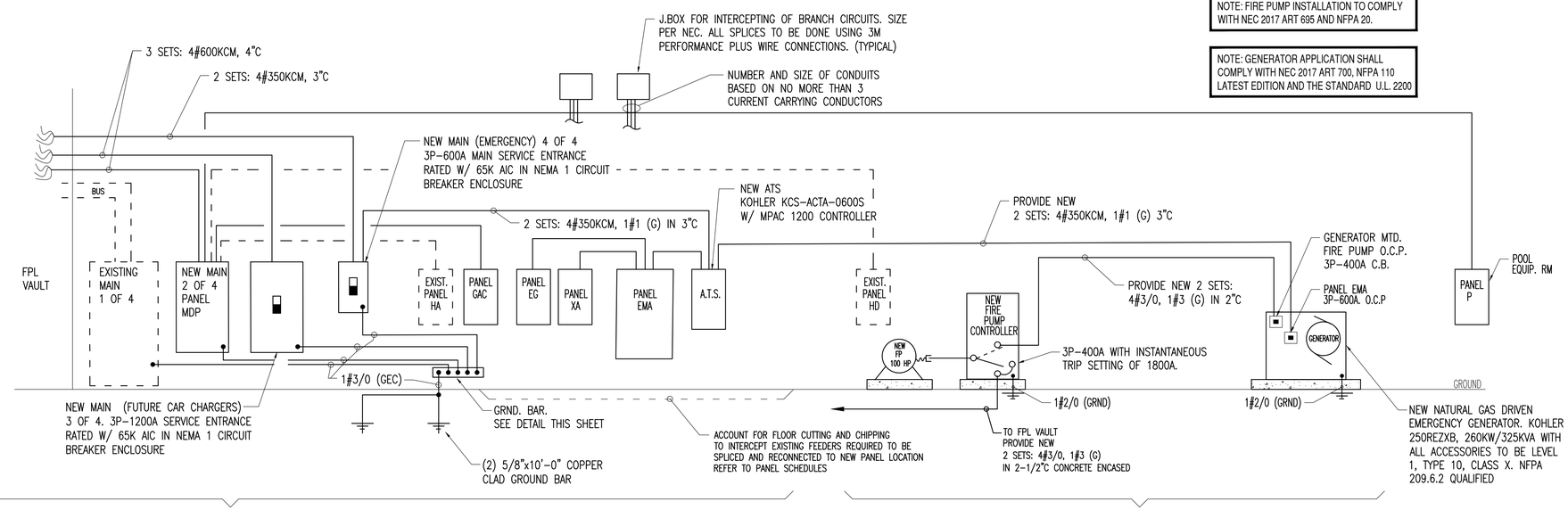
NOTE: ALL EXISTING EQUIPMENT IS TO REMAIN UNLESS OTHERWISE NOTED





GROUND BAR DETAIL
N.T.S.

ELECTRICAL RISER DIAGRAM (DEMO)
N.T.S.



ELECTRICAL RISER DIAGRAM(NEW WORK)
N.T.S.

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

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: ELECTRICAL NOTES

Sheet No.: E-6

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
VIDALENGINEERING.COM
H.VIDAL & ASSOCIATES

KOHLER. **Model: 250REZXB**

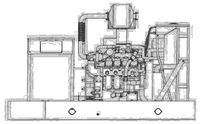
208-600 V **Gas**

ISO 9001 KOHLER NATIONALLY REGISTERED

EPA-Certified for Stationary and Mobile Emergency and Non-Emergency Applications

Ratings Range

		60 Hz
Standby:	kW	170- 260
	kVA	213- 325
Prime:	kW	225- 235
	kVA	281- 294



Generator Set Ratings

Alternator	Voltage	Ph	Hz	Rich-Burn Natural Gas 130°C Rise Standby Rating kW/kVA	Amps	105°C Rise Prime Rating kW/kVA	Amps	Rich-Burn LP Gas (Vapor) 130°C Rise Standby Rating kW/kVA	Amps
4UA10	120/208	3	60	260/325	902	230/288	798	170/213	590
	127/220	3	60	260/325	853	230/288	754	170/213	558
	120/240	3	60	260/325	782	230/288	692	170/213	511
	139/240	3	60	260/325	782	230/288	692	170/213	511
	220/380	3	60	260/313	475	226/281	427	170/213	323
	240/416	3	60	260/325	451	230/288	399	170/213	295
	277/480	3	60	260/325	391	230/288	346	170/213	256
	347/600	3	60	260/325	313	230/288	277	170/213	204
4UA1S	120/208	3	60	260/325	902	235/294	815	170/213	590
	127/220	3	60	260/325	853	235/294	771	170/213	558
	120/240	3	60	260/325	782	235/294	707	170/213	511
	120/240	1	60	230/290	958	208/259	871	170/170	708
	139/240	3	60	260/325	782	235/294	707	170/213	511
	220/380	3	60	260/325	494	235/294	446	170/213	323
	240/416	3	60	260/325	451	235/294	408	170/213	295
	277/480	3	60	260/325	391	235/294	353	170/213	256
	347/600	3	60	260/325	313	235/294	283	170/213	204

RATINGS: All three-phase units are rated at 0.8 power factor. Standby Ratings: The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Prime Power Ratings: At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Dual Fuel Reset Box

Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- A one-year limited warranty covers all generator set systems and components. Two- and five-year extended limited warranties are also available.
- Alternator features:
  - The unique Fast-Response® II excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Dual fuel model features:
  - Natural gas is the primary fuel. Automatically transfers back to primary fuel when LPG fuel becomes low or generator stops and restarts.
  - The patent pending reset box on the generator provides the ability to manually transfer back to natural gas.
  - The natural gas rating is available when running on natural gas.
  - APM603 controller provides load shed for automatic derate to LPG ratings to prevent an overload condition.

Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet
Leads: quantity, type	12, Reconnectable
Voltage regulator	Solid State, Volts/Hz
Insulation: Material	NEMA MG1
Insulation: Temperature rise	Class H 130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	Controller Dependent
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V 4UA10	790 (60Hz)
480 V 4UA13	995 (60Hz)

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Windings are vacuum-impregnated with epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.
- Fast-Response® II brushless alternator with brushless exciter for excellent load response.

Application Data

Engine

Engine Specifications	
Manufacturer	Doosan
Engine model	D146L
Engine type	14.6 L, 4-Cycle, Turbocharged, Aftercooled
Cylinder arrangement	V-8
Displacement, L (cu. in.)	14.6 (892)
Bore and stroke, mm (in.)	128 x 142 (5.04 x 5.59)
Compression ratio	10.5:1
Piston speed, m/min. (ft./min.)	511 (1677)
Main bearings: quantity, type	10, Precision Half-Shell
Rated rpm	1800
Max. power at rated rpm, kWm (BHP)	300 (402)
Cylinder head material	Cast Iron
Piston: type, material	—
Crankshaft material	Forged Steel
Valve material	—
Governor: type	Electronic
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±0.5%
Frequency	Fixed
Air cleaner type, all models	Dry

Exhaust

Exhaust System	
Exhaust manifold type	Wet
Exhaust flow at rated kW, kg/hr, (cfm)	1131 (1611)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	600 (1112)
Maximum allowable back pressure: overall, kPa (in. Hg)	10.2 (3)
Maximum allowable back pressure after catalyst, kPa (in. Hg)	5.1 (1.5)
Engine exhaust outlet size, mm (in.)	Flanged Outlet at Catalyst, see ADV drawing

Engine Electrical

Engine Electrical System	
Battery charging alternator: Ground (negative/positive)	Negative
Volts (DC)	24
Ampere rating	45
Starter motor rated voltage (DC)	24
Battery, recommended cold cranking amps (CCA): Qty., CCA rating each	Two, 1000
Battery voltage (DC)	12

Fuel

Fuel System - Rich Burn	
Fuel type	Natural Gas, LP Gas, or Dual Fuel
Fuel supply line inlet	2.0 NPTF
Natural gas fuel supply pressure, kPa (in. H_2O)	1.74- 2.74 (7.0- 11.0)
LPG vapor withdrawal fuel supply pressure, kPa (in. H_2O)	1.24- 2.74 (5.0- 11.0)
Dual fuel engine, LPG vapor withdrawal fuel supply pressure, kPa (in. H_2O)	1.24 (5.0)
Fuel supply pressure, measured at the generator set fuel inlet downstream of any fuel system equipment accessories.	

Fuel Composition Limits *	Nat. Gas	LP Gas
Methane, % by volume	90 min.	—
Ethane, % by volume	4.0 max.	—
Propane, % by volume	1.0 max.	85 min.
Propane, % by volume	0.1 max.	5.0 max.
C_6 and higher, % by volume	0.3 max.	2.5 max.
Sulfur, ppm mass	25 max.	
Lower heating value, MJ/m^3 (Btu/ft^3), min.	33.2 (890)	84.2 (2260)

* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

Application Data

Lubrication

Lubricating System	
Type	Full Pressure
Oil pan capacity, L (qt.) §	40 (42.3)
Oil pan capacity with filter, L (qt.) §	47.1 (49.7)
Oil filter: quantity, type §	2, Cartridge
Oil cooler	Water-Cooled

§ Kohler recommends the use of Kohler Genuine oil and filters.

Cooling

Radiator System	
Ambient temperature, °C (°F) *	50 (122)
Engine jacket water capacity, L (gal.)	43.2 (9.5)
Radiator system capacity, including engine, L (gal.)	227.3 (50)
Engine jacket water flow, Lpm (gpm)	680 (180)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	284 (16189)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	35 (2000)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	1143 (45)
Fan, kWm (HP)	16 (22)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H_2O)	0.125 (0.5)

* Weather and sound enclosures with internal silencer reduce ambient temperature capability by 5°C (9°F).

Operation Requirements

Air Requirements	
Radiator-cooled cooling air, $m^3/min.$ (scfm)†	638 (22500)
Combustion air, kg/hr. (cfm)	1064 (632)
Heat rejected to ambient air: Engine, kW (Btu/min.)	66(3754) (3765)
Alternator, kW (Btu/min.)	23 (1309)

† Air density = 1.20 kg/m^3 (0.075 lbm/ft^3)

Fuel Consumption:	
Natural Gas, m^3/hr. (cfh) at % load	**Standby Rating**
100%	78.8 (2782)
75%	61.4 (2168)
50%	43.1 (1521)
25%	28.5 (998)
Natural Gas, m^3/hr. (cfh) at % load	**Prime Rating**
100%	71.8 (2536)
75%	55.9 (1974)
50%	39.7 (1402)
25%	24.8 (876)
LP Gas, m^3/hr. (cfh) at % load	**Standby Rating**
100%	28.2 (996)
75%	22.4 (789)
50%	15.1 (532)
25%	9.6 (335)

‡ Nominal fuel rating: Natural gas, 37 MJ/m^3 (1000 Btu/ft^3) LP vapor, 93 MJ/m^3 (2500 Btu/ft^3)

LP vapor conversion factors:
8.58 $ft.^3$ = 1 lb.
0.535 m^3 = 1 kg.
36.39 $ft.^3$ = 1 gal.

Controllers

APM402 Controller
Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.
- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or serial configuration
- Controller supports Modbus® protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-161 for additional controller features and accessories.

APM603 Controller
Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.
- 7-inch graphic display with touch screen and menu control provides easy local data access
- Measurements are selectable in metric or English units
- Paralleling capability to control up to 8 generators on an isolated bus with first-on logic, synchronizer, kW and kVAR load sharing, and protective relays
  Note: Parallel with other APM603 controllers only.
- Generator management to turn paralleled generators off and on as required by load demand
- Load management to connect and disconnect loads as required
- Controller supports Modbus® RTU, Modbus® TCP, SNMP and BACnet®
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- UL-listed overcurrent protective device
- NFPA 110 Level 1 capability

Refer to G6-162 for additional controller features and accessories.

Decision-Maker® 6000 Paralleling Controller
Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities for paralleling multiple generator sets.
- Paralleling capability to control up to 8 generators on an isolated bus with first-on logic, synchronizer, kW and kVAR load sharing, and protective relays
  Note: Parallel with other Decision-Maker® 6000 controllers only
- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus® protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-107 for additional controller features and accessories.

Modbus® is a registered trademark of Schneider Electric.

KOHLER. **Model KCS/KCP/KCC**

Automatic Transfer Switches
Standard Any Breaker Rated

ISO 9001 KOHLER NATIONALLY REGISTERED

Available Controllers

- Decision-Maker® MPAC 1200
- Decision-Maker® MPAC 1500

Ratings

Model	Current	Voltage, Frequency
KCS	30- 4000 amps	208- 600 VAC 50/60 Hz
KCP	150- 4000 amps	
KCC	150- 4000 amps	

Transfer Switch Standard Features

- UL 1008 listed
  file # E58962 (automatic), # E86894 (nonautomatic)
- CSA certification available
- IBC and OSHPD seismic certification available
- Available in 2, 3, or 4 pole configurations
- Electrically operated, mechanically held mechanism
- High withstand and close-on ratings
- Design suitable for emergency and standby applications on all classes of load, 100% tungsten rated through 400 amps
- Silver alloy main contacts
- Gold-flashed engine start contacts
  rated 2 amps @ 30 VDC/250 VAC
- Front-accessible contacts for easy inspection
- Front-replaceable main and arcing contacts (800- 4000 amps)
- Reliable, field-proven solenoid mechanism
- Switching mechanisms lubricated for the expected life of the transfer switch
- Internal manual operating handle
- Main shaft auxiliary position-indicating contacts
  rated 10 amps @ 32 VDC/250 VAC
- NEMA type 1, 12, 3R, 4, and 4X enclosures available
- Standard one-year limited warranty. Extended limited warranties are available.

Standard-Transition Models (KCS)

- Standard-transition operation with either automatic or non-automatic control
- Standard-transition transfer time less than 100 milliseconds (6 cycles @ 60 Hz)
- Double-throw, mechanically interlocked design (break-before-make power contacts)
- Solid, switched, or overlapping (make-before-break) neutral

Programmed-Transition Models (KCP)

- Programmed-transition operation with either automatic or non-automatic control
- Programmed-transition operation provides a center OFF position that allows residual voltages in the load circuits to decay
- Programmable OFF time
- Double-throw, mechanically interlocked design (break-before-make power contacts)
- Solid or switched neutral

Closed-Transition Models (KCC)

- Closed-transition transfer switches operate with no power interruption during transfer and retransfer between two live sources
- Source parallel times are less than 100 milliseconds (6 cycles @ 60 Hz)
- Adjustable extended transfer time relay (ensure that the setting complies with applicable codes)
- Solid or switched neutral

Available Automatic Transfer Switch Controllers

Select one of the following controllers for your automatic transfer switch.

Decision-Maker® MPAC 1200 Controller

- LCD display, 4 lines x 20 characters, backlit
- Complete programming and viewing capability at the door using the keypad and LCD display
- LED indicators: Source available, transfer switch position, service required (fault), and "not in auto"
- Programmable voltage and frequency pickup and dropout settings
- Programmable time delays
- Programmable generator exerciser
- Time-based load control
- Two programmable inputs and two programmable outputs
- Up to four I/O extension modules available
- Modbus communication standard
- RS-485 communication standard
- Ethernet communication optional

For more information about Decision-Maker® MPAC 1200 features and functions, see specification sheet G11- 127.

Decision-Maker® MPAC 1500 Controller

- LCD display, 4 lines x 20 characters, backlit
- Complete programming and viewing capability at the door using the keypad and LCD display
- LED indicators: Source available, transfer switch position, service required (fault), and "not in auto"
- Programmable voltage and frequency pickup and dropout settings
- Programmable time delays
- Programmable generator exerciser
- Time-based load control
- Current-based load control (current-sensing kit required)
- Two programmable inputs and two programmable outputs
- Up to four I/O extension modules available
- Modbus communication standard
- RS-485 communication standard
- Ethernet communication standard
- Three-source system
- Prime power

For more information about Decision-Maker® MPAC 1500 features and functions, see specification sheet G11- 128.

Weights and Dimensions

Note: Always use the transfer switch dimension drawing for planning and installation. Weights and dimensions may vary for different configurations. See your local distributor for dimension drawings.

Weights and dimensions are shown for NEMA Type 1 enclosures, NEMA Type 3R enclosures and open units. See the transfer switch dimension drawings for other enclosure types.

Model	Amps	NEMA Type	Poles	Wires	Dimensions mm (in.) Height	Width	Depth	Weight kg (lb.) 2-Pole	3-Pole	4-Pole	Dimension Drawing
KCS	30- 200	1, 3R	2,3,4	3, 4	791 (31)	400 (16)	314 (12.4)‡	28 (62)	30 (65)	31 (68)	ADV-6566
	230 (208- 480V)		2,3,4	3, 4	1223 (48)	560 (22)	362 (14.3)‡	52 (115)	56 (123)	59 (131)	ADV-6568
	230 (600 V) 260- 600		2,3,4	3, 4	1702 (67)	610 (24)	514 (20.2)‡	179 (395)	183 (403)	188 (414)	ADV-6570
	800		2,3,4	3, 4	1932 (76)*	864 (34)	515 (20.3)‡	220 (485)	231 (510)	236 (525)	ADV-6572
	1000		3,4	4	1932 (76)*	864 (34)	515 (20.3)‡	—	231 (510)	236 (525)	ADV-6572
	1200	1	3,4	4	2286 (90)	963 (38)	688 (27.1)	—	356 (785)	379 (835)	ADV-6574
		3R	3,4	4	2286 (90)	940 (37)	717 (28.2)	—	356 (785)	379 (835)	ADV-6575
	1600- 2000F †	1	3,4	4	2286 (90)	963 (38)	688 (27.1)	—	472(1040)	494(1090)	ADV-6577
		3R	3,4	4	2286 (90)	940 (37)	869 (34.2)	—	356 (785)	379 (835)	ADV-6578
	1600- 2000	1	3,4	4	2286 (90)	963 (38)	1220 (48)	—	472(1040)	494(1090)	ADV-6579
		3R	3,4	4	2286 (90)	940 (37)	1434 (56.4)	—	472(1040)	494(1090)	ADV-6580
	2600- 3000	1	3,4	4	2286 (90)	963 (38)	1524 (60)	—	649(1430)	679(1495)	ADV-6581
		3R	3,4	4	2286 (90)	940 (37)	1738 (68.4)	—	649(1430)	679(1495)	ADV-6582
	4000	1	3,4	4	2311 (91)	1524 (60)	1836 (72.3)	—	975 (2149)	1056 (2328)	ADV-6583
		3R	3,4	4	2529 (100)	1606 (63)	2310 (91)	—	1436 (3165)	1523 (3357)	
KCS	30- 200	Open Unit §	2,3,4	3, 4	787 (31)	445 (18)	296 (11.6)	8 (17)	9 (20)	11 (23)	ADV-7182
	230 (208- 480V)		2,3,4	3, 4	1219 (48)	457 (18)	330 (13.0)	17 (37)	21 (45)	24 (53)	
	230 (600V) 260- 600		2,3,4	3, 4	1422 (56)	610 (24)	362 (14.3)	31 (68)	34 (74)	36 (80)	
	800		2,3,4	3, 4	1829 (72)	864 (34)	508 (20)	68 (150)	78 (170)	90 (196)	
	1000		3,4	4	1829 (72)	864 (34)	508 (20)	—	78 (170)	90 (196)	
	1200		3,4	4	2210 (87)	965 (38)	584 (23)	—	78 (170)	90 (196)	
	1600- 2000F †		3,4	4	2210 (87)	965 (38)	635 (25)	—	190 (420)	213 (470)	
	1600- 2000		3,4	4	2286 (90)	965 (38)	1219 (48)	—	190 (420)	213 (470)	
	2600- 3000		3,4	4	2286 (90)	965 (38)	1524 (60)	—	213 (470)	243 (535)	
KCP KCC	150- 800	1, 3R	2,3,4	3, 4	1702 (67)	610 (24)	514 (20.2)‡	179 (395)	183 (403)	188 (414)	ADV-6570
	800	1, 3R	2,3,4	3, 4	1932 (76)*	864 (34)	515 (20.3)‡	220 (485)	231 (510)	236 (525)	ADV-6572
	1000	1, 3R	2,3,4	4	1932 (76)*	864 (34)	515 (20.3)‡	220 (485)	231 (510)	236 (525)	ADV-6572
	1200	1	3,4	4	2286 (90)	963 (38)	688 (27)	—	463(1020)	485(1070)	ADV-6574
		3R	3,4	4	2286 (90)	940 (37)	717 (28.2)	—	463(1020)	485(1070)	ADV-6575
	1600- 2000F †	1	3,4	4	2286 (90)	963 (38)	688 (27)	—	533 (1175)	556(1225)	ADV-6577
		3R	3,4	4	2286 (90)	940 (37)	869 (34.2)	—	533 (1175)	556(1225)	ADV-6578
	1600- 2000	1	3,4	4	2286 (90)	963 (38)	1220 (48)	—	533 (1175)	556(1225)	ADV-6579
		3R	3,4	4	2286 (90)	940 (37)	1434 (56.4)	—	533 (1175)	556(1225)	ADV-6580
	3000	1	3,4	4	2286 (90)	963 (38)	1524 (60)	—	735 (1620)	765 (1685)	ADV-6581
		3R	3,4	4	2286 (90)	940 (37)	1738 (68.4)	—	735 (1620)	765 (1685)	ADV-6582
	4000	1	3,4	4	2311 (91)	1524 (60)	1836 (72.3)	—	975 (2149)	1056 (2328)	ADV-6583
		3R	3,4	4	2528 (100)	1606 (63)	2310 (91)	—	1436 (3165)	1523 (3357)	ADV-6583
KCP	150- 600	Open Unit §	2,3,4	3, 4	1422 (56)	610 (24)	362 (14.3)	38 (84)	41 (90)	44 (96)	ADV-7182
	800		2,3,4	3, 4	1829 (72)	864 (34)	508 (20)	80 (175)	94 (205)	106 (235)	
	1000		2,3,4	4	1829 (72)	864 (34)	508 (20)	80 (175)	94 (205)	106 (235)	
	1200		2,3,4	4	2210 (87)	965 (38)	584 (23)	80 (175)	94 (205)	106 (235)	
	1600- 2000F †		3,4	4	2210 (87)	965 (38)	635 (25)	—	252 (555)	274 (605)	
	1600- 2000		3,4	4	2286 (90)	965 (38)	1219 (48)	—	252 (555)	274 (605)	
	2600- 3000		3,4	4	2286 (90)	965 (38)	1524 (60)	—	300 (660)	329 (725)	
	2600- 3000		3,4	4	2286 (90)	965 (38)	1524 (60)	—	300 (660)	329 (725)	

* Includes mounting feet
† F = Front connected
‡ On 30- 1000 amp models, the NEMA type 3R enclosures have a security cover on the controller that extends 54 mm (2.1 in.) beyond the door.
§ Dimensions shown for open units are the minimum required enclosure size. Open unit weights are shipping weights for the contactor only.

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

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:
ELECTRICAL
GEAR SPECIFICATIONS

Sheet No.:
E-7

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM

DIST. PANEL-MDP

SERVICE ENTRANCE RATED

120/208 VOLTS, 3 ø 4 WIRE – S/N | 65K AIC
1200 AMPS. ■MAIN BKR. □MAIN SW. □M.L.O. @ 208 VOLTS
□GND. FAULT PROT. □SHUNT-TRIP ■TOP OR □BOTTOM FED

CKT NO.	DESCRIPTION OF LOAD	BRANCH SIZE (AMPS) NO. OF POLES	FRAME	TRIP	FEEDER SIZE WIRE	CONDUIT	KVA
1	● PANEL HA	3		200	4#3/0, 1#6 (G)	2"	48.6
2	● PANEL HB			200	4#3/0, 1#6 (G)	2"	43.9
3	● PANEL HC			100	4#3, 1#8 (G)	2"	51.8
4	● PANEL HD			200	4#3/0, 1#6 (G)	2"	44.6
5	● WATER HEATER			125	3#1, 1#6 (G)	1-1/2"	36.0
6	○ PANEL P			200	4#3/0, 1#6 (G)	2-1/2"	15.0
7	○ AC			400	2 SETS: 3#3/0, 1#3 (G)	2"	67.6
8	○ PANEL GAC			150	4#1/0, 1#6 (G)	2"	16.2
9	SPACE		200				
10	SPACE		200				
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TOTAL LOAD: (KVA) 323.2

TOTAL CONNECTED LOAD: (A) 898

● RECONNECT EXISTING SUB-FEED PANELS
○ PROVIDE NEW WIRE & CONDUIT AS SHOWN

DIST. PANEL-EDP

120/208 VOLTS, 3 ø 4 WIRE – S/N | 65K AIC
600 AMPS. □MAIN BKR. □MAIN SW. ■M.L.O. @ 208 VOLTS
□GND. FAULT PROT. □SHUNT-TRIP ■TOP OR □BOTTOM FED

CKT NO.	DESCRIPTION OF LOAD	BRANCH SIZE (AMPS) NO. OF POLES	FRAME	TRIP	FEEDER SIZE WIRE	CONDUIT	KVA
1	● ELEVATOR	3		200	3#3/0, 1#6 (G)	2"	28.0
2	○ PANEL EG			100	4#3, 1#8 (G)	2"	15.2
3	○ PANEL XA			150	4#1/0, 1#6	2"	29.3
4	○ DOMESTIC WATER PUMP			100	4#3, 1#8 (G)	1-1/2"	18.7
5	● EXISTING			80	3#3, 1#8 (G)	1-1/4"	14.4
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TOTAL LOAD: (KVA) 105.6

TOTAL CONNECTED LOAD: (A) 293

● RECONNECT EXISTING SUB-FEED PANELS
○ PROVIDE NEW WIRE & CONDUIT AS SHOWN

PANEL-XA

LOCATION: –
□FLUSH ■TOP FEED
■SURFACE □BOTTOM FEED

120/208 VOLTS, 3 ø 4 WIRE
225 AMP BUS
■GROUND BUS
■LUGS ONLY
NEMA 1

■NEUTRAL
■FULL
□50%
□200%

□MAIN BKR.
FRAME - A.
TRIP - A.
□SHUNT TRIP

@ 42K AIC
208 VOLTS

LOAD DESCRIPTION	WIRE & CONDUIT	POLE	AMP TRIP	CKT. K.V.A.	CKT No.	LOAD(KVA) øA	LOAD(KVA) øB	LOAD(KVA) øC	CKT No.	CKT. K.V.A.	AMP TRIP	POLE	WIRE & CONDUIT	LOAD DESCRIPTION
EXIST.	EXIST.	1	20	0.6	1	1.4			2	0.8	20	1	EXIST.	EXIST.
				0.4	3		1.0		4	0.6				
				0.6	5			1.1	6	0.5				
				0.5	7	1.2			8	0.7				
				0.4	9		1.1		10	0.7				
				0.8	11			1.4	12	0.6	25	2		
				0.7	13	1.3			14	0.6				
				0.6	15		1.2		16	0.6	20	1		
				0.5	17			2.4	18	1.9	50	2		
		3		1.0	19	2.9			20	1.9				
			30	1.0	21		1.3		22	0.3	20	1		
				1.0	23			1.4	24	0.4				
		3		2.1	25	2.6			26	0.5				
			35	2.1	27		2.7		28	0.6				
				2.1	29			2.7	30	0.6				
SPACE					31	0.5			32	0.5			#12, 1/2"	LIGHTS – STORAGE ○
					33		0.7		34	0.7			#10, 1/2"	LIGHTS – POOL DECK ○ ■
					35			0.4	36	0.4			#12, 1/2"	LIGHTS – WALL NORTH ○ ■
					37	1.0			38	1.0			#12, 1/2"	GEN. BATT CHARGER ○
					39		1.0		40	1.0			#12, 3/4"	GEN. JACKET HEATER ○
					41			–	42					
						10.9	9.0	9.4						

TOTAL CONNECTED LOAD: 29.3 KVA; 81 AMPS.

NOTES:

■ VIA 6 POLE, 20A LIGHTING CONDUCTOR CONTROLLED BY ASTRONOMICAL TIMECLOCK
○ PROVIDE NEW WIRE & CONDUIT AS SHOWN

PANEL-EG

LOCATION: –
□FLUSH □TOP FEED
■SURFACE □BOTTOM FEED

120/208 VOLTS, 3 ø 4 WIRE
225 AMP BUS
■GROUND BUS
■LUGS ONLY
NEMA 1

■NEUTRAL
■FULL
□50%
□200%

□MAIN BKR.
FRAME - A.
TRIP - A.
□SHUNT TRIP

@ 10K AIC
208 VOLTS

LOAD DESCRIPTION	WIRE & CONDUIT	POLE	AMP TRIP	CKT. K.V.A.	CKT No.	LOAD(KVA) øA	LOAD(KVA) øB	LOAD(KVA) øC	CKT No.	CKT. K.V.A.	AMP TRIP	POLE	WIRE & CONDUIT	LOAD DESCRIPTION
SF-1's	#12, 3/4"C	2	20	0.8	1	1.6			2	0.8	20	2	#12, 3/4"	SF-1's
				0.8	3		1.6		4	0.8				
SF-1's	#12, 3/4"C	2	20	0.8	5			1.6	6	0.8	20	2	#12, 3/4"	SF-1's
				0.8	7	1.6			8	0.8				
CO2 ALARM	#12, 1/2"	1	20	0.4	9		0.8		10	0.8	20	2	#12, 3/4"	SF-1's
SPACE					11			0.8	12	0.8				
					13	0.6			14	0.6		3			
					15		0.6		16	0.6	20		#12, 3/4"	EF-26
					17			0.6	18	0.6				
					19	0.6			20	0.6		3		
					21		0.6		22	0.6	20		#12, 3/4"	EF-26
					23			0.6	24	0.6				
					25	0.6			26	0.6		3		
					27		0.6		28	0.6	20		#12, 3/4"	EF-26
					29			0.6	30	0.6				
					31	0.6			32	0.6		3		
					33		0.6		34	0.6	20		#12, 3/4"	EF-26
					35			0.6	36	0.6				
					37				38					SPACE
					39				40					SPACE
					41			–	42					SPACE
						5.6	4.8	4.8						

TOTAL CONNECTED LOAD: 15.2 KVA; 42 AMPS.

NOTES:

PANEL-GAC

LOCATION: –
□FLUSH □TOP FEED
■SURFACE ■BOTTOM FEED

120/208 VOLTS, 3 ø 4 WIRE
225 AMP BUS
■GROUND BUS
■LUGS ONLY
NEMA 1

■NEUTRAL
■FULL
□50%
□200%

□MAIN BKR.
FRAME - A.
TRIP - A.
□SHUNT TRIP

@ 42K AIC
208 VOLTS

LOAD DESCRIPTION	WIRE & CONDUIT	POLE	AMP TRIP	CKT. K.V.A.	CKT No.	LOAD(KVA) øA	LOAD(KVA) øB	LOAD(KVA) øC	CKT No.	CKT. K.V.A.	AMP TRIP	POLE	WIRE & CONDUIT	LOAD DESCRIPTION
AHU-3B	#12, 3/4"	2	15	0.2	1	0.4			2	0.2	15	2	#12, 3/4"	AHU-2A
				0.2	3		0.4		4	0.2				
AHU-2A	#12, 3/4"	2	15	0.2	5			1.7	6	1.5	25	2	#10, 3/4"	CU-2
				0.2	7	1.7			8	1.5				
CU-3	#10, 3/4"	2	25	2.0	9		2.0		10	0.2	15	2	#12, 3/4"	AHU-2B
				2.0	11			2.0	12	0.2				
AHU-1D	#12, 3/4"	2	15	0.2	13	0.2			14					SPACE
				0.2	15		0.2		16					SPACE
AHU-1C	#12, 3/4"	2	15	0.2	17			0.2	18					SPACE
				0.2	19	0.2			20					SPACE
AHU-1B	#12, 3/4"	2	15	0.2	21		0.2		22					SPACE
				0.2	23			0.2	24					SPACE
AHU-1A	#12, 3/4"	2	15	0.2	25	0.2			26					SPACE
				0.2	27		0.2		28					SPACE
CU-1	#8, 3/4"	2	40	3.2	29			3.2	30					SPACE
				3.2	31	3.2			32					SPACE
SPACE					33				34					SPACE
SPACE					35				36					SPACE
SPACE					37				38					SPACE
SPACE					39				40					SPACE
SPACE					41			–	42					SPACE
						5.9	3.0	7.3						

TOTAL CONNECTED LOAD: 16.2 KVA; 45 AMPS.

NOTES:

PANEL-P

LOCATION: –
□FLUSH ■TOP FEED
■SURFACE □BOTTOM FEED

120/208 VOLTS, 3 ø 4 WIRE
225 AMP BUS
■GROUND BUS
■LUGS ONLY
NEMA 4X

■NEUTRAL
■FULL
□50%
□200%

□MAIN BKR.
FRAME - A.
TRIP - A.
□SHUNT TRIP

@ 10K AIC
208 VOLTS

LOAD DESCRIPTION	WIRE & CONDUIT	POLE	AMP TRIP	CKT. K.V.A.	CKT No.	LOAD(KVA) øA	LOAD(KVA) øB	LOAD(KVA) øC	CKT No.	CKT. K.V.A.	AMP TRIP	POLE	WIRE & CONDUIT	LOAD DESCRIPTION
SPACE	#12, 1/2"	1	20	0.4	1				2					SPACE
					3				4					
					5				6					
					7				8					
					9				10					
					11				12					
					13				14					
					15				16					
					17				18					
					19				20					
					21				22					
					23				24					
					25				26					
					27				28					
					29				30					
					31				32					
					33				34					
					35				36					
					37				38					
					39				40					
					41			–	42					
						5.0	5.0	5.0						

TOTAL CONNECTED LOAD: 15.0 KVA; 42 AMPS.

NOTES:

ADDITIONAL PANEL WORK NOTES:
1. CONTRACTOR TO TRACE ALL CIRCUITS IN ALL PANELBOARDS AND PROVIDE NEW IDENTIFICATION LABEL TO ALL.

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
VIDALENGINEERING.COM
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 33418-1701
561.316.7660 | www.morabitoconsultants.com

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: ELECTRICAL PANELS

Sheet No.: E-8

Classified UL System

2 Hour Fire Rated Through Penetration Firestop for Multiple Metal Pipe through Concrete floors or walls using FYRE-SHIELD.

TREMCO

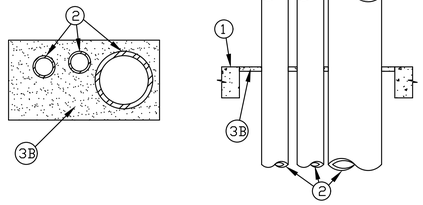
3735 Green Rd.
Beachwood, OH, 44122

Drawing not to scale

CAJ1047

(326)

F-rating = 2 Hr.
T-rating = 0 Hr.



① Floor or Wall assembly = 4 " thick concrete, Max. area of opening is 288 sq. in.

② • Nom. 8" diam. (or smaller) Sch. 40 (or heavier) steel pipe
• Nom. 4" diam. (or smaller) copper pipe.
• Max. number of pipes with opening is three (3).

③ A) Forming Material – (Not shown) – Nom. 1" thick poly-urethane backer rod friction fitted into opening.

B) Nom 1/2 " FYRE-SHIELD thickness installed within opening.

NOTE: For wall apply FYRE-SHIELD to both surfaces of wall.

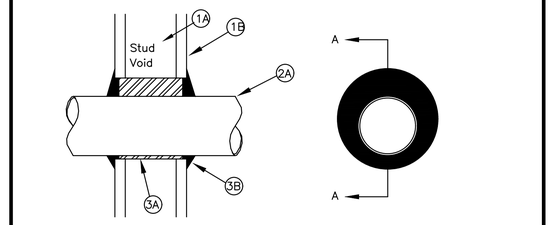
NOTE: SIMILAR PRODUCTS OF OTHER MANU-FACTURERS MAY BE USED IF ACCEPTED EQUAL.

Project:_____
Location:_____
Installer:_____
Signature:_____

The products used in the above assembly have been tested in accordance with the following:
- ASTM E814 (UL1479) Standard Test Method for Through Penetration Firestopping.
- ASTM E119 (UL 263) Standard for Fire Tests of Building Construction and Materials.

Date: 2/26/94 | Drawing:TR-1047
Approved by: C. Tuzzeo

The above described assembly and products have been tested and are based on both past and anticipated performance criteria. Tremco shall not be liable for any damages, direct or consequential, resulting from use of this material or design. Tremco shall only be responsible for replacing material found to be defective.



SECTION A-A

NOTES

1A. METAL STUDS MIN. 2X4 IN. NOMINAL AT A MAX. 16 IN. ON CENTER OR STEEL STUDS MIN. 2X3 IN. NOMINAL AT A MAX. 24 IN. ON CENTER.

1B. ONE LAYER OF GYPSUM WALLBOARD CAPABLE OF PROVIDING A 1 HR. F RATING OR TWO LAYERS OF GYPSUM WALLBOARD CAPABLE OF PROVIDING A 2 HR. F RATING. MAX. DIAMETER OF PENETRANT OPENING FOR STEEL FRAMING IS 24-5/8 IN. AND A MAX. DIAMETER OF PENETRANT OPENING FOR WOOD FRAMING IS 14-1/2IN.

2A. ONE OF THE FOLLOWING MAY BE USED:
1. MAX. 24 IN. STEEL PIPE.
2. MAX. 24 IN. IRON PIPE
3. MAX. 6 IN STEEL CONDUIT OR MAX. 4 IN ETM.
4. MAX. 6 IN. COPPER PIPE OR TUBING.
ANNULAR SPACE – MIN. 1/8 IN TO MAX. 1/2 IN.

3A. MINERAL WOOD BACKING (4 PCF) FILLED TO DEPTH OF WALL SPACE.

3B. APPLY FS 1900 INTO ANNULAR SPACE TO A DEPTH OF 1/4 IN. FOR A 1 HOUR ASSEMBLY ADD A 1/2 IN. CROWN AND OVERLAP THE WALLBOARD 1/2 IN. FOR A 2 HR. ASSEMBLY ADD A 1/4 IN. CROWN AND OVERLAP THE WALLBOARD 1/4 IN.

FLAMESAFE FS 1900 SERIES SEALANT

1 OR 2 HOUR (U.L. LISTED F & T RAITING EQUAL)
WL1089

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

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:
ELECTRICAL DETAILS

Sheet No.:
E-9

H.VIDAL & ASSOCIATES

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
VIDALENGINEERING.COM

GENERAL NOTES

1.- FIRE PROTECTION MATERIALS, DESIGNS & HYDRAULIC CALCULATIONS SHALL COMPLY WITH APPLICABLE CODES AND STANDARDS. ALL DRAWINGS ILLUSTRATING FIRE PROTECTION SHALL COMPLY TO NFPA 13, 14, 20, 24, THE FLORIDA STATE FIRE PREVENTION CODE, AND THE AUTHORITY HAVING JURISDICTIONS (AHJ) MINIMUM REQUIREMENTS FOR INSTALLING FIRE SPRINKLER SYSTEM. REFER TO APPLICABLE CODES (THIS SHEET) FOR ANY SPECIAL CONDITIONS AND/OR ADDITIONAL REQUIREMENTS THAT SHALL BE CONSIDERED.

2.- CONTRACTOR SUBMITTAL PACKAGE SHALL BE SUBMITTED , COORDINATED AND APPROVED BY THE ARCHITECT/ENGINEER OF RECORD, PRIOR TO SUBMITTING SHOP DRAWINGS, HYDRAULIC CALCULATIONS, & EQUIPMENT DATA SHEETS TO THE AHJ FOR FINAL APPROVAL PERMITTING PURPOSES.

3.- AFTER AS BUILTS ARE APPROVED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL RECEIVE CONTRACT CONFIRMATION COMPLIANCE DOCUMENTATION. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY BY PROVIDING THE ENGINEER/ARCHITECT OF RECORD AN ADDITIONAL COMPLETE SET OF SHOP DRAWINGS MODIFIED SHOP DRAWINGS OR AS BUILTS AND HYDRAULIC CALCULATIONS INCLUDING ANY AND ALL ADDITIONAL FITTINGS THAT MAY BE ADDED DUE TO COORDINATION ISSUES.

4.- PIPE ROUTING SHOWN IS FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE ANY ADDITIONAL MODIFICATIONS TO THE EXISTING FIRE SPRINKLER SYSTEM AND HYDRAULIC CALCULATIONS, AS REQUIRED FOR COMPLAINT MATERIAL INSTALLATION AND COORDINATION WITH OTHER TRADES.

5.- PIPING IN AREAS WITH EXPOSED STRUCTURE SHALL BE INSTALLED AS HIGH AS POSIBLE TO ALOW THE OWNER MAXIMUM USE OF THE SPACE.

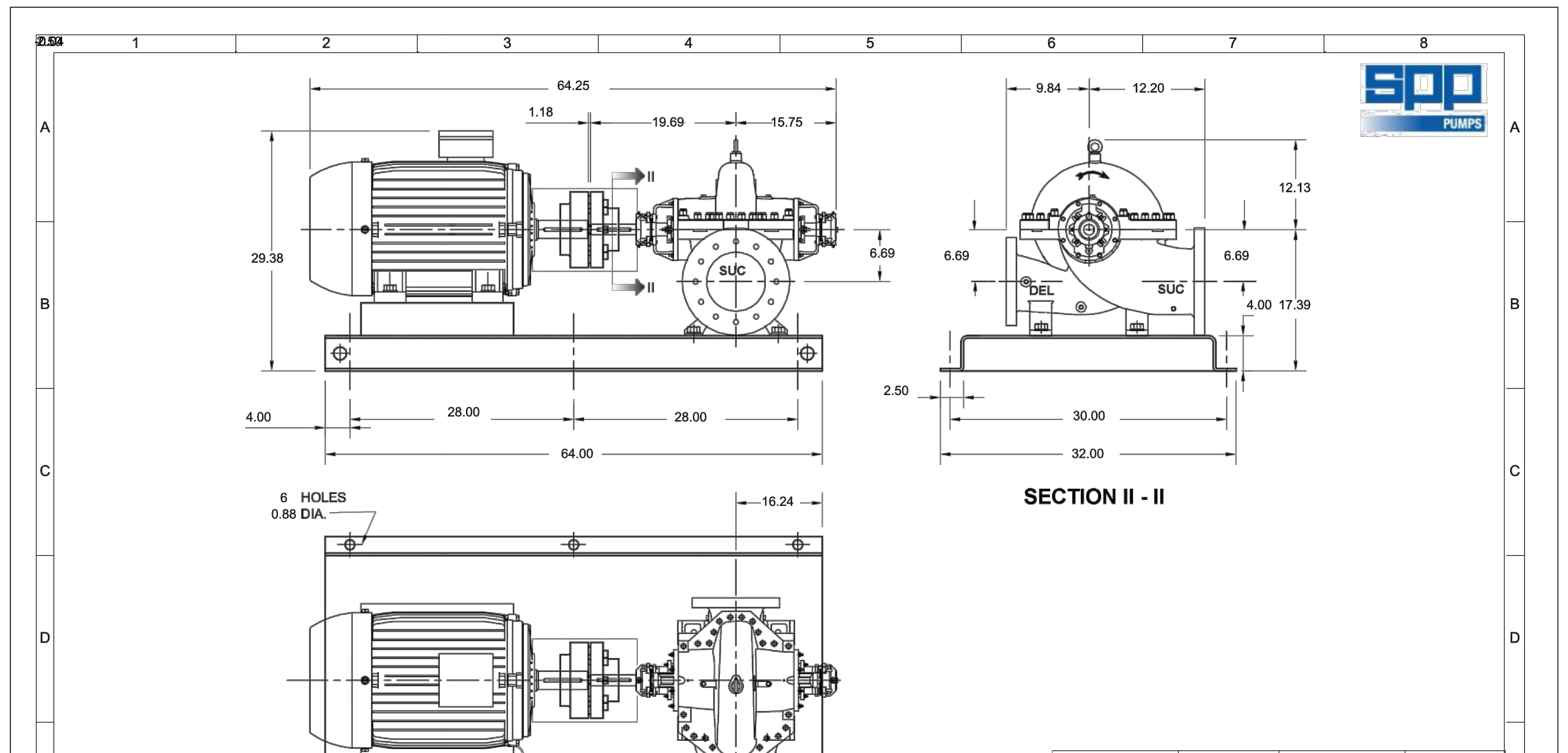
6.- CONTRACTOR SHALL SLEEVE AND/OR FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS AND FLOORS WITH UL/LISTED ASSEMBLIES. FIRESTOP ASSEMBLIES SHALL BE EQUAL OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR.

APPLICABLE CODES AND STANDARDS

FLORIDA ADMINISTRATIVE CODE 61G15-32.003 A-M (LATEST REVISION)
FLORIDA BUILDING CODE
NFPA 1
NFPA 13 (2013 EDITION)
NFPA 14 (2013 EDITION)
NFPA 24 (2013 EDITION)

SCOPE OF WORK

PROJECT CONSIST IN REPLACING THE EXISTING FIRE PUMP WITH A NEW ELECTRIC FIRE PUMP THAT MEETS NEW CODE REQUIREMENTS. NEW PUMP SHALL BE 750 GPM @ 130 PSI WITH TRANSFER SWITCH. VOLTAGE SHALL BE 208/3 PHASE. CONTRACTOR SHALL SUBMIT FIRE PUMP AND CONTROLERS SPECS PRIOR CITY PERMIT SUBMITTAL. INSTALL NEW PRESSURE REDUCING VALVES WHERE PRESSURE EXCEEDS 175 PSI. INSTALL NEW BACKFLOW PREVENTER TO MEET NEW CODE REQUIREMENTS.



Pump	TB10F	Static load	2,443.6 lb
Driver Rating	100Hp	Dynamic load	3,054.5 lb
Driver Size	365TS	GD2	-1.00 lb.ft2
Rated Speed	3550RPM	Rotation	CLOCKWISE
Enquiry No/Date	Fire Pump /	Quantity	1
Quotation No /	405749 01 Apr	Item no	001
Customer	Hernandez Fire Protection		
Project	750 @ 130		
Service	-		

PUMP DUTIES				FLANGE DRILLING STANDARD AND DETAILS		
Capacity	750.0 USgpm	Efficiency	67.47 %	BRANCH	Nom Size	Flange drilling std
Total Head	130.0 psi	Peak Power	94.95 hp	Suction	6.00 in	ANSI B16.1 CL250lb (FF)
				Delivery	4.00 in	ANSI B 16.1 Cl 250 (FF)

Note1: This drawing is not to be used for installation purpose until it has been certified by SPP Pumps Limited.
Note2: All dimensions are in inches unless stated otherwise.
Note3: Refer to the SPP Pumps Limited installation guide for advice on pump installation.
Note4: Dimensions without tolerances for welded parts are as per ISO13920-D.

SPP PUMPS INC
2905 PACIFIC DRIVE NORCROSS GA 30071 USA

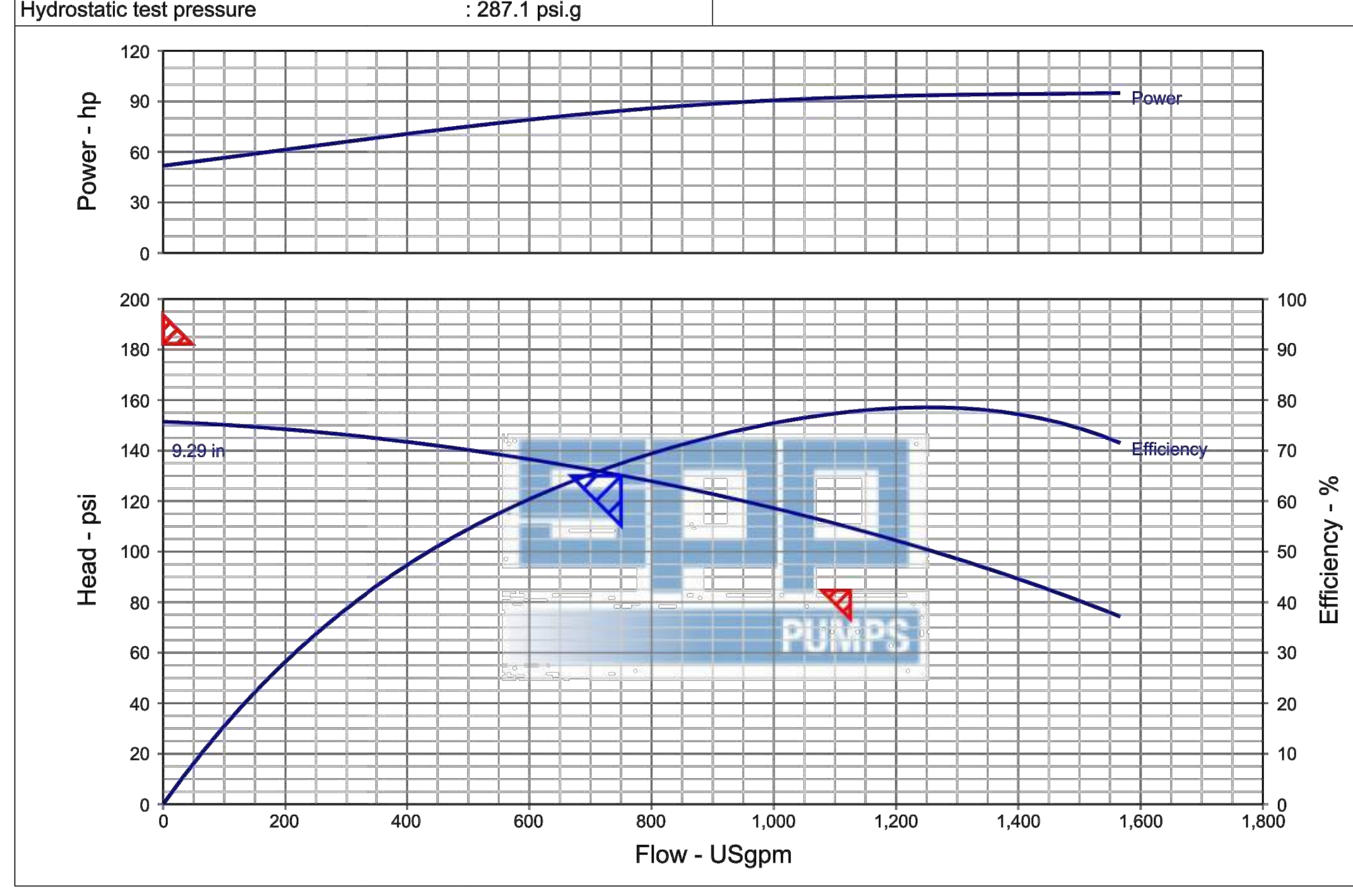
GENERAL ARRANGEMENT DRAWING

Page 6 of 6

SPP Pumps Inc

Pump Performance Datasheet

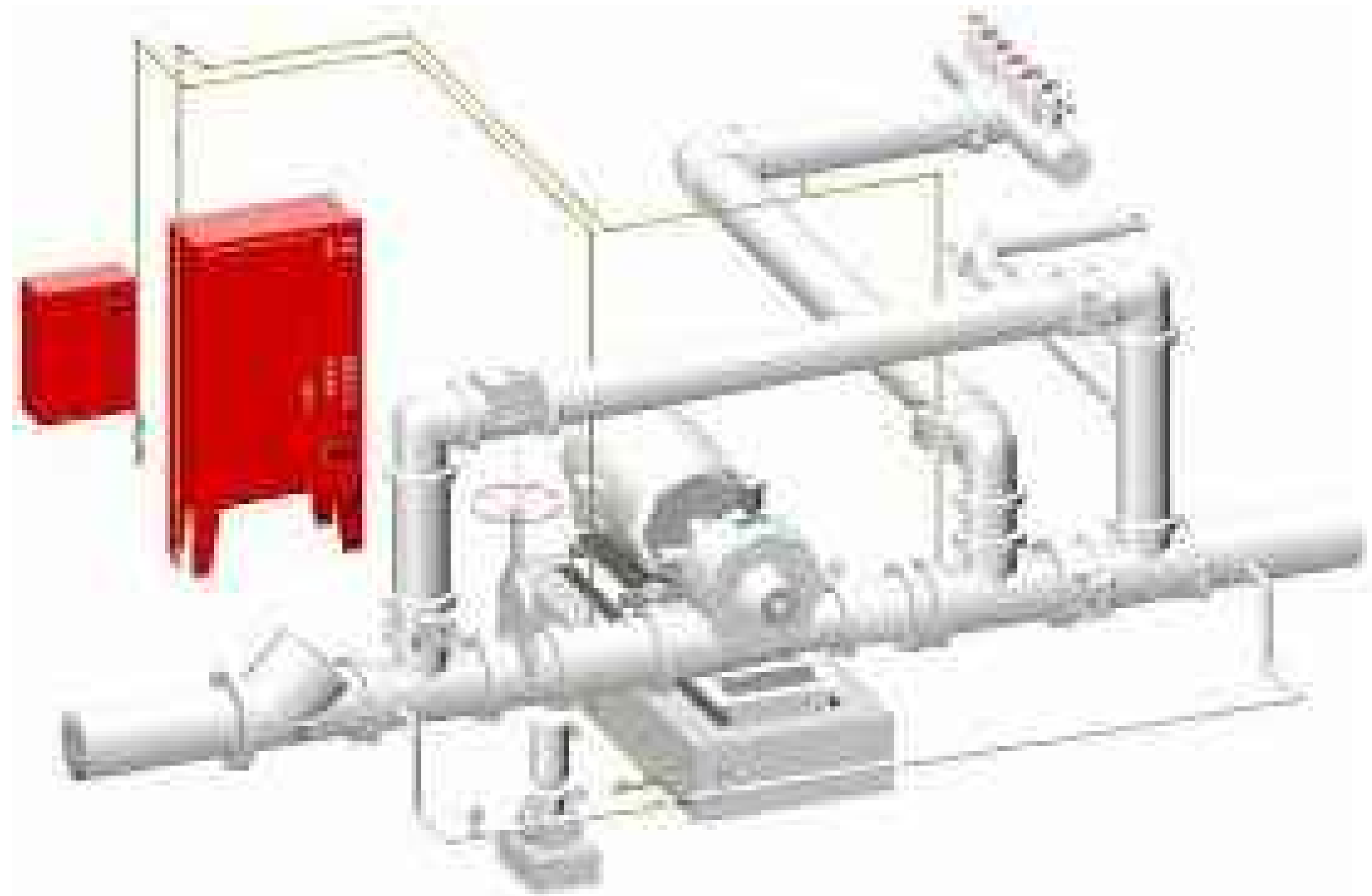
Customer	: Hernandez Fire Protection	Quote number	: 405749
Customer enquiry	: Fire Pump	Pump Size	: TB10F
Item number	: 001	Stages	: 1
Usage - Tertiary	:	Based on curve number	: TB10F Rev 1
Quantity	: 1	Date last saved	: 01 Apr 2021 11:26
Operating Conditions		**Liquid**	
Flow, rated	: 750.0 USgpm	Liquid Type/ Application	: Water
Differential Head (requested)	: 130.0 psi	Additional liquid description	:
Suction pressure, rated / max	: 10.00 / 40.00 psi.g	Temperature, max	: 68.00 deg F
NPSH available, rated	: Ample	Fluid density, rated / max	: 1.000 / 1.000 SG
Site Supply Frequency	: 60 Hz	Viscosity, rated	: 1.00 cP
NFPA Limits		**Performance**	
Flow, rated	: 750.0 USgpm	Speed, rated	: 3550 rpm
Head, rated	: 130.2 psi	Impeller diameter, rated (approx.)	: 9.29 in
Power, rated	: 84.44 hp	Impeller diameter, maximum	: 10.00 in
NPSHr, rated	: -	Impeller diameter, minimum	: 7.87 in
Efficiency, rated	: 67.47 %	Efficiency	: 67.47 %
Flow at 150%	: 1,125.0 USgpm	NPSH required / margin required	: - / 0.00 ft
Head at 150%, actual/limit	: 109.5 psi	Head, maximum, rated diameter (approx.)	: 151.4 psi
Efficiency at 150%	: 77.70 %	Diameter ratio (rated / max)	: 92.91 %
NPSHr at 150% flow	: -	**Driver & Power Data (@Max density)**	
Power required at 150% flow	: 92.48 hp	Power, hydraulic	: 56.97 hp
Peak power	: 94.95 hp	Power, rated	: 84.44 hp
Closed valve pressure	: 161.4 psi.g	Power, maximum, rated diameter	: 94.95 hp
140% Head at shutoff	: 182.3 psi	**Material**	
65% Head at 150% flow	: 84.65 psi	Material selected	: CI / Br / CS (Standard)
Cooling flow (None)	: 0.00 USgpm	**Selection status**	
Pressure Data		FM/UL/cUL approved	: FM/UL
Maximum working pressure	: 191.4 psi.g	Near miss reasons	:
Maximum allowable working pressure	: 262.0 psi.g		
Maximum allowable suction pressure	: 75.00 psi.g		
Hydrostatic test pressure	: 287.1 psi.g		



SPP Pumps Inc · 2905 Pacific Drive · Norcross · , Georgia 30071
Phone: +1(770) 409-3280 · Website: http://www.spppumpsusa.com

Page 4 of 6
Version: 21.0.0

FIRE SPRINKLER CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL AND PERMITTING



HANGER SCHEDULE

	NOMINAL PIPE SIZE (in.)											
	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"
STEEL PIPE EXCEPT THREATED LIGHTWALL	N/A	12–0	12–0	15–0	15–0	15–0	15–0	15–0	15–0	15–0	15–0	15–0
THREADED LIGHTWALL STEEL PIPE	N/A	12–0	12–0	12–0	12–0	12–0	12–0	N/A	N/A	N/A	N/A	N/A
COPPER TUBE	8–0	8–0	10–0	10–0	12–0	12–0	12–0	15–0	15–0	15–0	15–0	15–0
CPVC	5–6	6–0	6–6	7–0	8–0	9–0	10–0	N/A	N/A	N/A	N/A	N/A
POLYBUTYLENE (IPS)	N/A	3–9	4–7	5–0	5–11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POLYBUTYLENE (CTS)	2–11	3–4	3–11	4–5	5–5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DUCTILE IRON PIPE	N/A	N/A	N/A	N/A	N/A	N/A	15–0	N/A	15–0	N/A	15–0	15–0

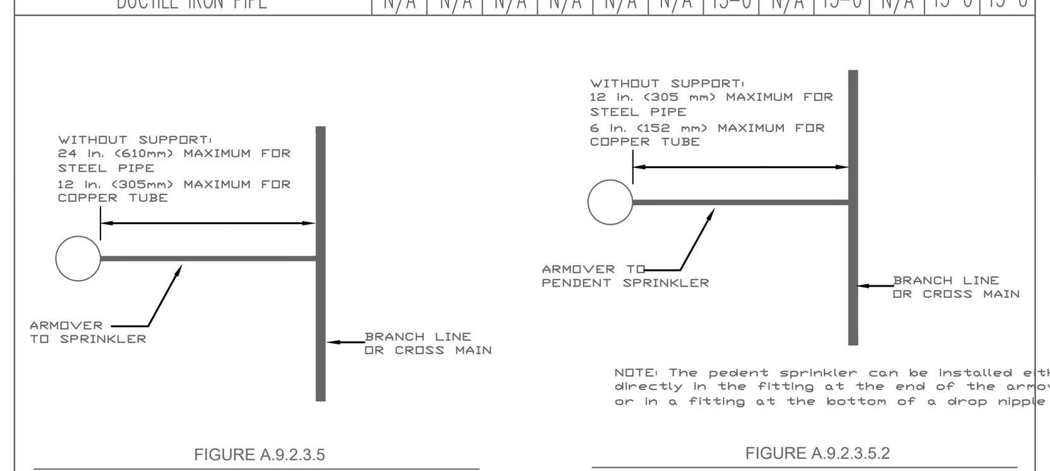
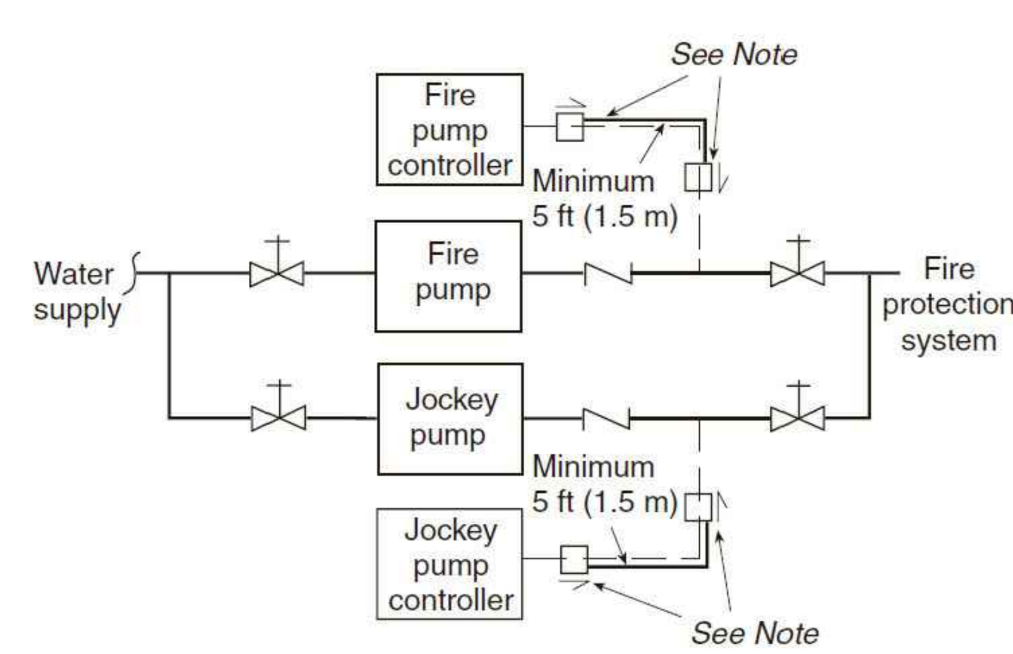
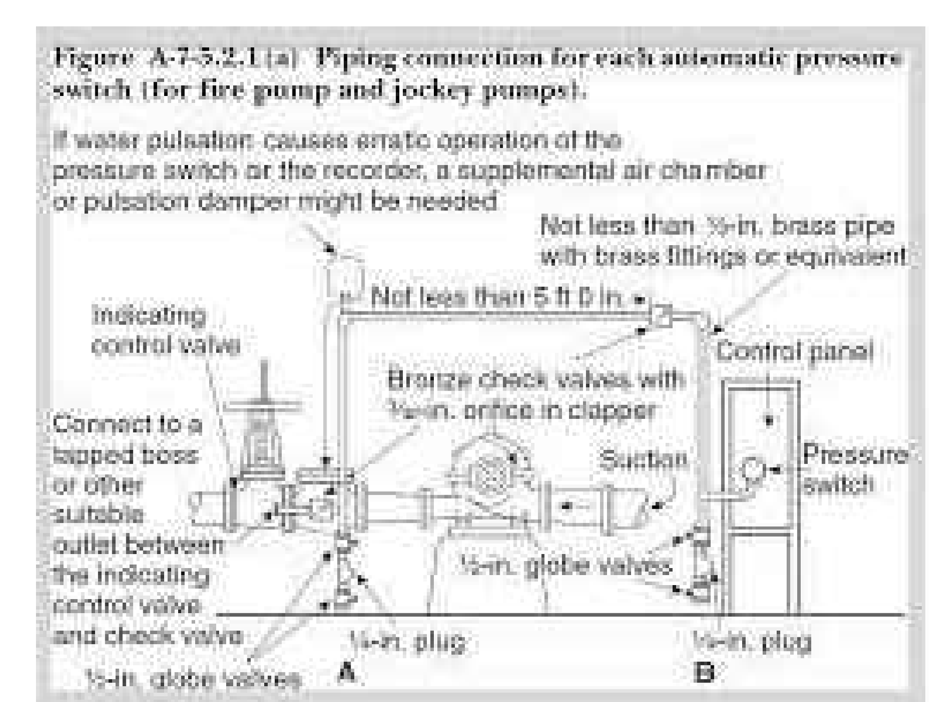
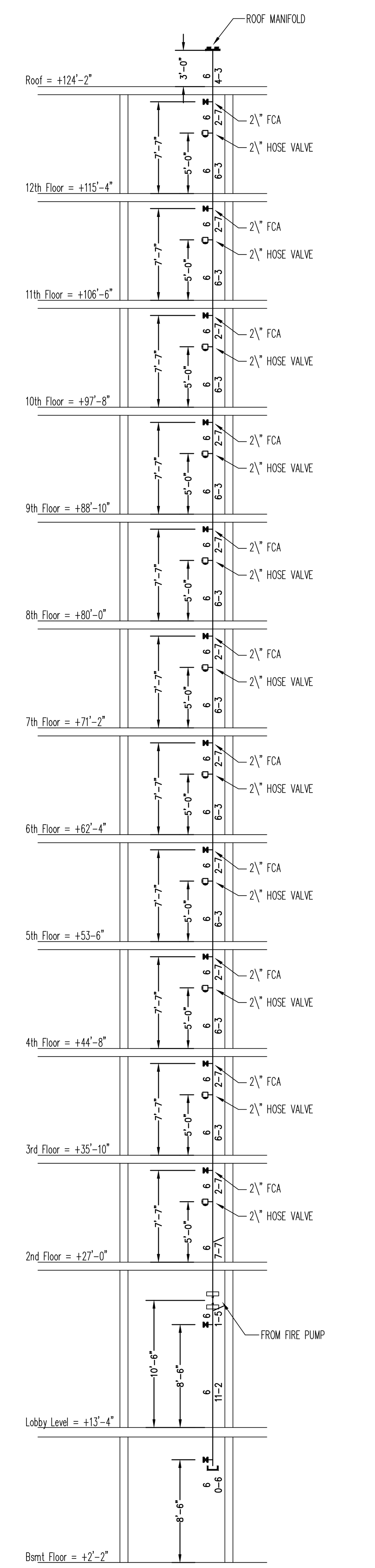


FIGURE A.9.2.3.5   FIGURE A.9.2.3.5.2

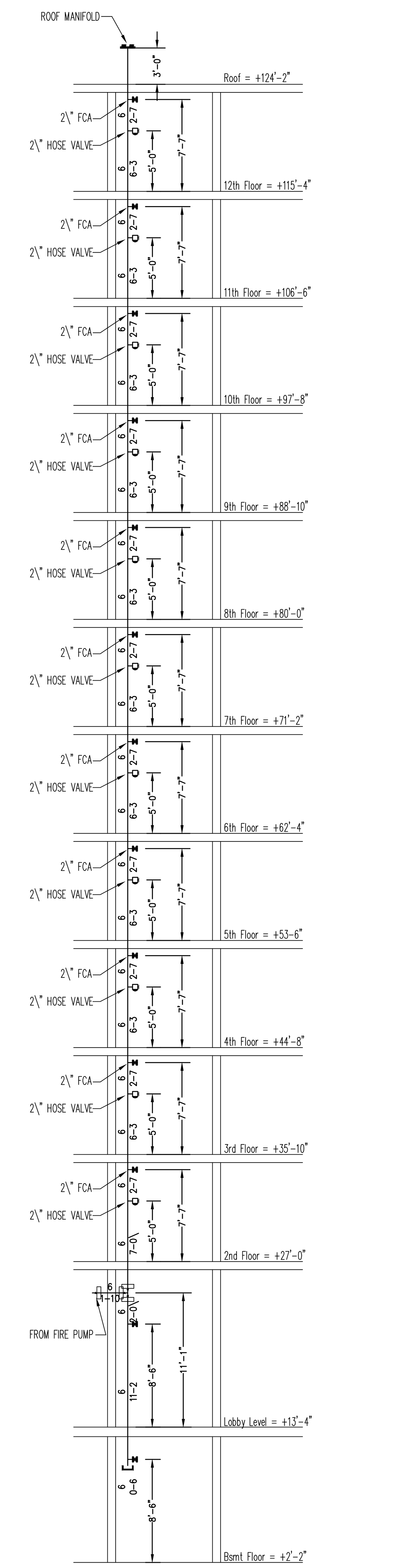






STANDPIPE #1

SCALE 1/8" = 1'-0"



STANDPIPE #2

SCALE 1/8" = 1'-0"

WATER SUPPLY INFORMATION	
STATIC:	55
RESIDUAL:	45
FLOW	1400
LOCATION:	
TEST BY:	
TIME:	10:00 AM
DATE:	

SPRINKLER CONTRACTOR TO REQUEST NEW FLOW TEST

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
VIDALENGINEERING.COM
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 33418-1701
561.316.7660 | www.morabitoconsultants.com
© Copyright Morabito Consultants, Inc.

No.	Date	Revisions

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

Project No.: 18217
Date: 04-01-2021
Scale: AS SHOWN
Sheet Title:
FIRE PROTECTION NOTES, SCHEDULES AND DETAILS
Sheet No.:
FP-1

FIRST FLOOR PARKING PLAN - FIRE PROTECTION

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
H.VIDAL & ASSOCIATES
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

License: 0000000
Expires: 00/00/00

PRELIMINARY
NOT FOR
CONSTRUCTION

morabito consultants
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

DESIGNED EC	DRAWN EC
CHECKED RJM	APPROVED FPM

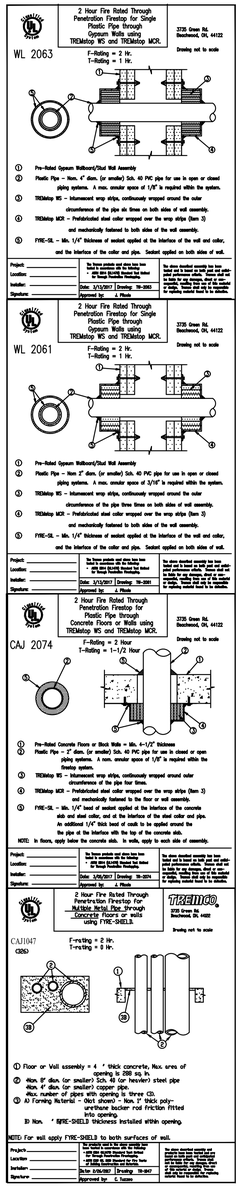
Project No.: 18217

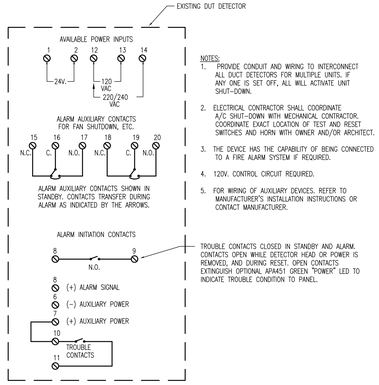
Date: 11/03/2020

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

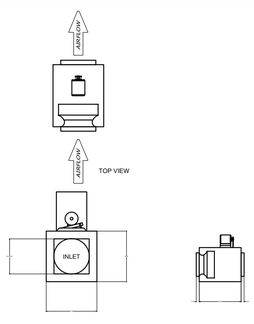
Sheet Title:
FIRST FLOOR PLAN - FIRE PROTECTION

Sheet No.:
FP-2





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		LVL1 – DECK (SEE PLANS)	GARAGE CLG (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 QUANTITY	CFM	12000	2120
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

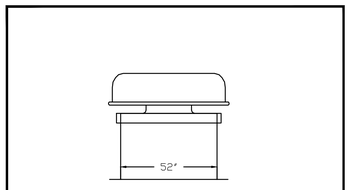
VENTILATION SCHEDULE

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

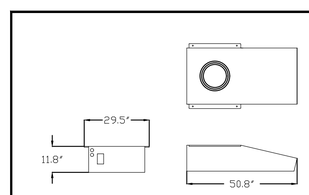
SPACE	OCCUPANCY CLASSIFICATION	Rp CFM/PERSON	Ra CFM/SQ.FT.	AREA SQ.FT	DENSITY PEOPLE	MIN. REQ. VENT CFM	PROVIDE CFM	PROVIDE BY
GARAGE	ENCLOSED GARAGE	N/A	0.75	54,700	N/A	41025	48000	EF-26 (4)

HVAC DESIGN REQUIRES

	YES	NO
DUCT SMOKE DETECTOR	✓	
FIRE DAMPER		✓
SMOKE DAMPER		✓
FIRE RATED ENCLOSURE		✓
FIRE REATED ROOF CELING 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	38AUDZR12-5/40RUAA12-5	
NOM TONS	10	
SYSTEM EER	11.2	
CFM	4000 @ 1"	
REFRIGERANT	R410A	
CONDENSING UNIT DATA		
COMPRESSOR QTY/STAGES	2/2	
COMPRESSOR 1-2 RLA-LRA	15.9/110 – 15.9/110	
COND. FAN FLA (2X)	2 / 1.5 – 1/4	
MCA	38.8	
MOCP	50	
DIMENSIONS (LxWxH) (IN)	60 X 46 X 51	
STD WEIGHT (LBS)	516	
MANUFATURER	CARRIER	
AIR HANDLER DATA		
EVAP. FAN FLAN-HP	10.8 – 3.7	
HEATER KW	15	
MCA	52.6	
MOCP	60	
DIMENSIONS (LxWxH) (IN)	49 X 29 X 57	
STD WEIGHT (LBS)	425	
SUCTION LINE	7/8 (2)	
LIQUID LINE	3/8 (2)	
MANUFATURER	CARRIER	

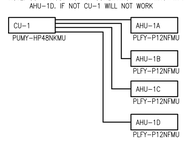
VRF HP UNITS

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	7,900 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-A24NHA7
MANUFACTURER		MITSUBISHI	MITSUBISHI	MITSUBISHI

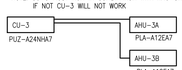
CASSETTE UNITS

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



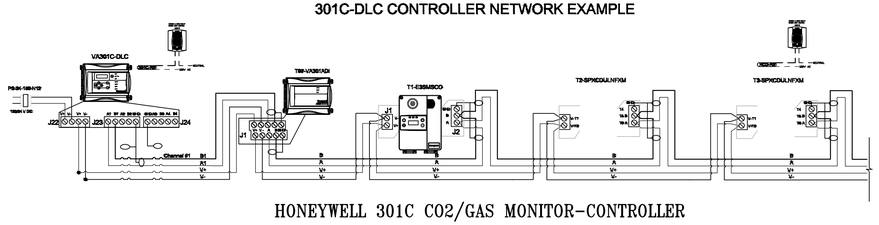
NOTE: CU-3 MUST RUN IN COMBINATION WITH AHU-3A AND AHU-3B IF NOT CU-3 WILL NOT WORK



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-6 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 PREVOUS PURCHASING, FABRICATION OR INSTALLATION PROCESSES OR 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'S 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.

301C-DLC CONTROLLER NETWORK EXAMPLE



HONEYWELL 301C CO2/GAS MONITOR-CONTROLLER

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

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

Project No.: 18217

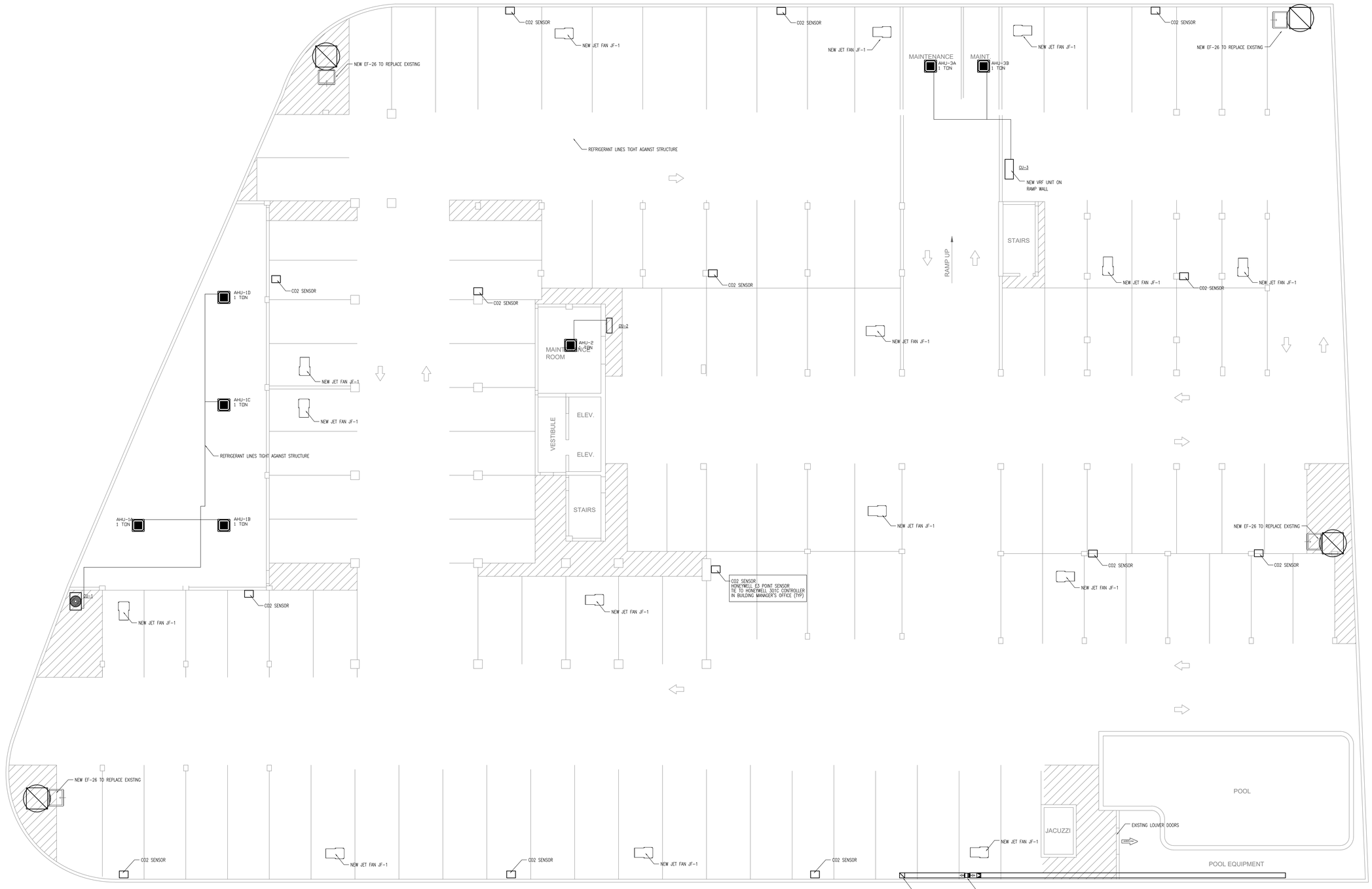
Date: 04-01-2021

Scale: AS SHOWN

Sheet Title: MECHANICAL NOTES AND SCHEDULES

Sheet No.: M-0

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM



1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES, DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLABS BEARING ON CAST-IN-PLACE CONCRETE COLUMNS OVER A FRAMED CONCRETE SLAB ON GRADE SUPPORTED BY PILE CAPS.
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

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
VIDALENGINEERING.COM
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 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

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

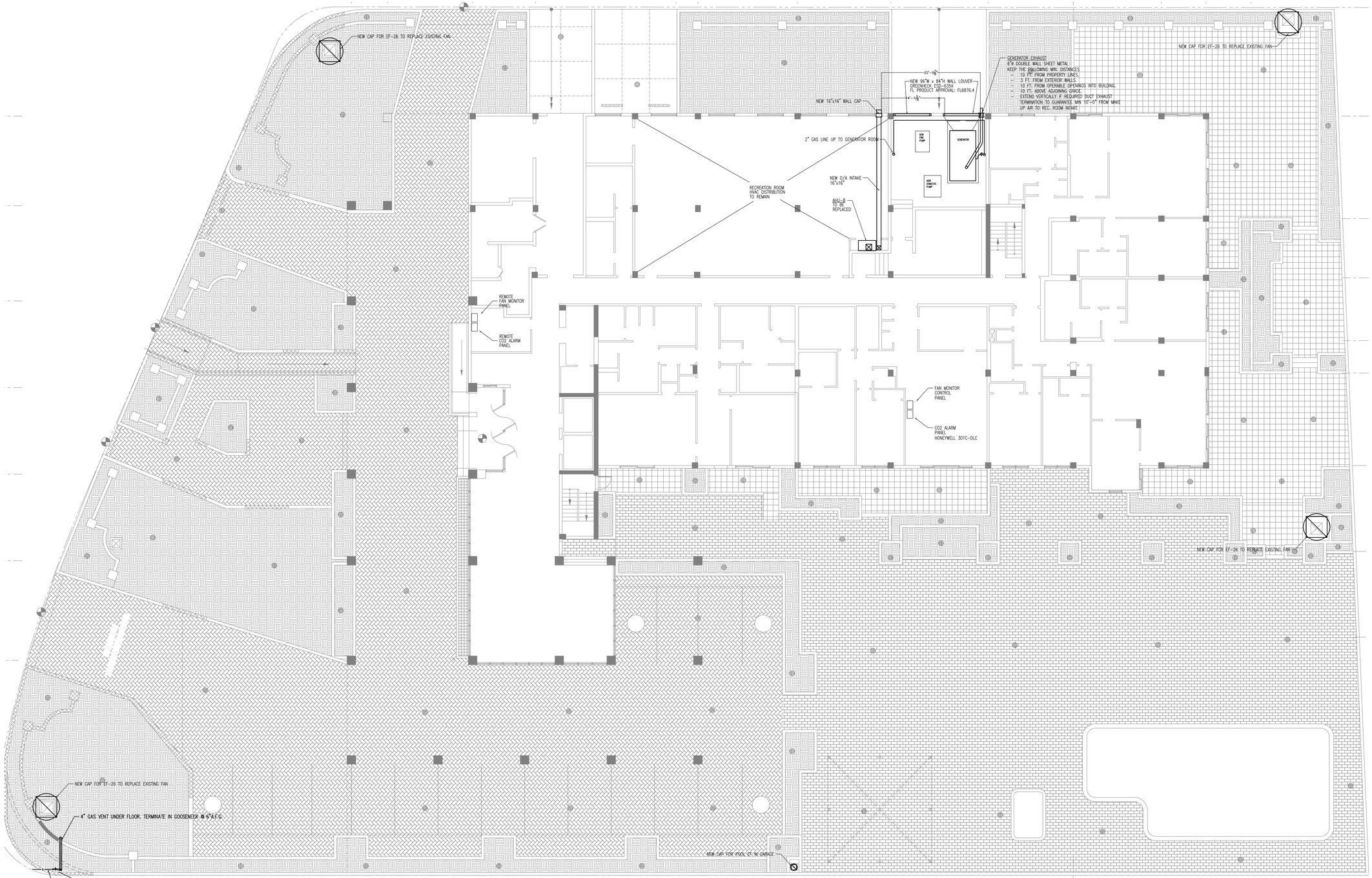
Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title:
MECHANICAL - HVAC
GARAGE PLAN

Sheet No.:
M-1



1. EXISTING BUILDING FRAMING AND CONDITIONS INDICATED ON PLAN ARE BASED ON EXISTING DRAWINGS PREPARED BY WILLIAM M. FRIEDMAN & ASSOCIATES ARCHITECTS, INC AND BREITERMAN JUARDO & ASSOCIATES, DATED 08-22-1979 AND A LIMITED FIELD INVESTIGATION CONDUCTED BY MORABITO CONSULTANTS. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND CONTACT MORABITO CONSULTANTS PRIOR TO CONSTRUCTION IF CONDITIONS VARY FROM WHAT IS SHOWN ON PLAN.
2. EXISTING STRUCTURE CONSISTS OF CAST-IN-PLACE CONCRETE TWO-WAY FLAT PLATE ELEVATED FLOOR SLABS BEARING ON CAST-IN-PLACE CONCRETE COLUMNS OVER A FRAMED CONCRETE SLAB ON GRADE SUPPORTED BY PILE CAPS.
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.

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

No.	Date	Revisions

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

Project No.: 18217

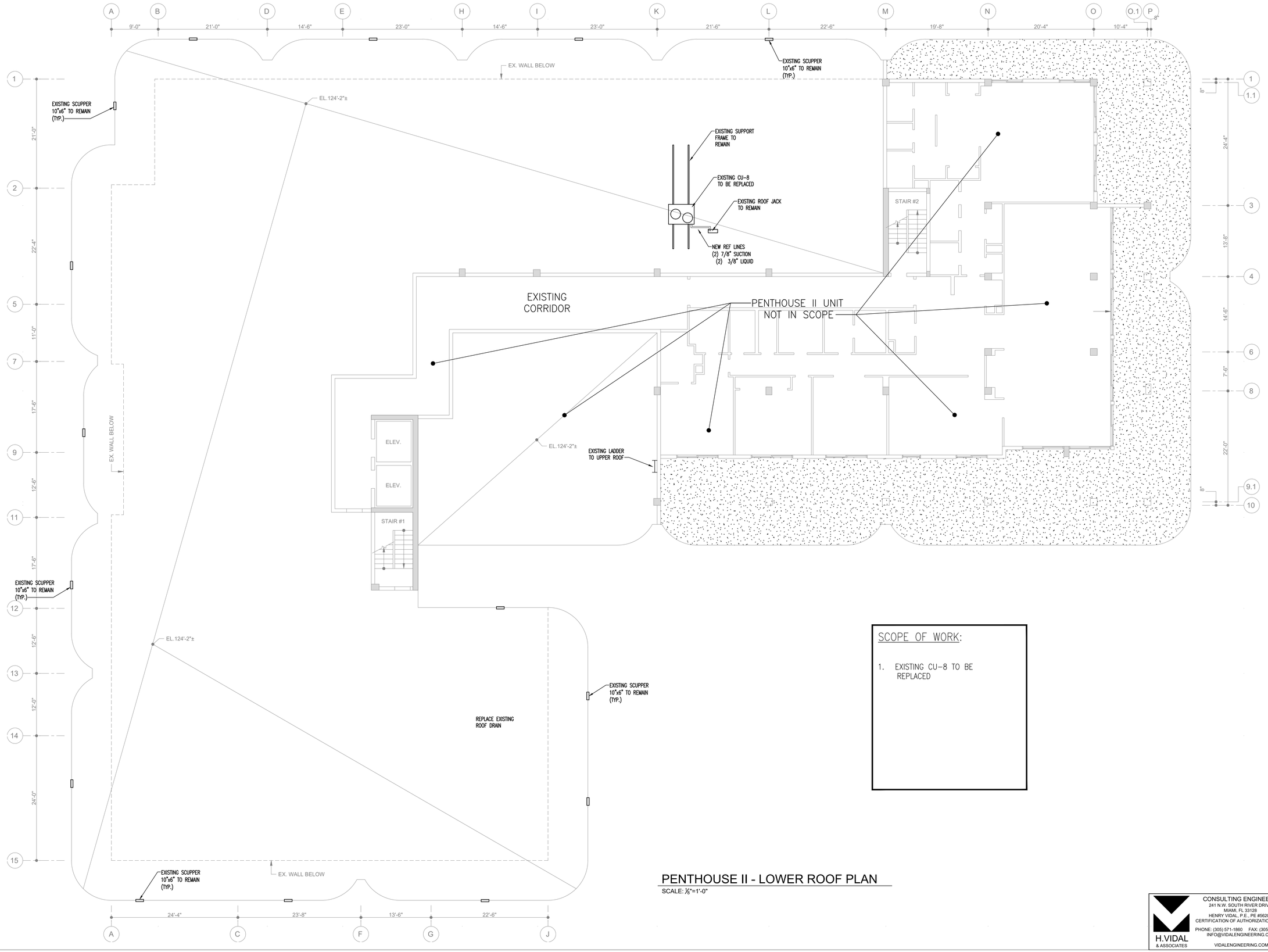
Date: 04-01-2021

Scale: AS SHOWN

Sheet Title:
MECHANICAL GROUND FLOOR PLAN

Sheet No.:
M-2

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM



SCOPE OF WORK:

1. EXISTING CU-8 TO BE REPLACED

PENTHOUSE II - LOWER ROOF PLAN

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

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

morabito consultants

Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

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:
LOW ROOF
HVAC REPLACEMENT
PLAN

Sheet No.:
M-3

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM

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, FINES AND OTHER ITEMS AS REQUIRED FOR THE INSTALLATION OF THE COMPLETE PLUMBING SYSTEMS, AND SHALL BE RESPONSIBLE FOR OBTAINING HIS OWN 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 BOUND AND LABELED EQUIPMENT MAINTENANCE AND INSTRUCTION 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 ON THE DRAWINGS ESTABLISH A STANDARD OF QUALITY, APPEARANCE, PERFORMANCE AND DIMENSIONS. CONTRACTOR SHALL BASE HIS BID ON THOSE ITEMS, WHICH 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, CONSTRUCTION STANDARDS, QUALITY AND WARRANTIES ARE EQUAL OR BETTER THAN THE PRODUCT SPECIFIED. 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 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.
12. PROVIDE ALL NEW MATERIALS OF AMERICAN MANUFACTURE, BEARING THE U.L. 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 SHOW ANY MINOR DETAIL. PLANS SHALL NOT BE SCALED: 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. WHEREVER 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 P&T RELIEF VALVE/DRAIN PAN PIPING:
        1. UNDERGROUND AND ABOVE GROUND: 4" DIAMETER AND OVER; DUCTILE IRON PIPE 300 PSI WATER PRESSURE WITH EXTERIOR BITUMINOUS COATING; CEMENT LINED. PROVIDE FLANGED AND ANCHORED CONNECTION TO INTERIOR PIPING.
        2. ABOVE GROUND: 3" DIAMETER AND UNDER; COPPER TUBING, ASTM B88, TYPE "K", SEAMLESS, ANNEALED WITH WROUGHT SOLDER JOINT FITTINGS TO WITHSTAND 300 PSI, AND SHALL BE 100% LEAD FREE.
        3. ABOVE GROUND (PRESSURE UNDER 80 PSI): TYPE "L" SEAMLESS HARD DRAWN COPPER TUBE WITH CAST COPPER ALLOY OR WROUGHT SOLDER JOINT FITTINGS AND SHALL SHALL BE 100% LEAD FREE.
    B. STORM WATER, SANITARY WASTE AND VENT PIPING, AIR CONDITIONING CONDENSATE:

       UNDERGROUND; DWV SCH-40 PVC PIPE WITH SOCKECT 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 1/8-IN PER FOOT; 2-1/2-IN AND SMALLER SHALL BE SLOPED AT NO LESS THAN 1/4-IN PER FOOT.
    C. PAN DRAIN: DWV COPPER PIPE & FITTINGS WITH SOCKET TYPE FITTINGS.
22. DISINFECT 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:

       FIRE RATED 1/2" THICK ELASTOMERIC CLOSED CELL POLYETHYLENE THERMAL INSULATION WITH BUILT-IN VAPOR BARRIER. SEAL ALL EDGES 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 58790 WITH THREADED PLUG AND VANDAL PROOF STAINLESS STEEL ACCESS COVER PLATE.
    B. FLOOR CLEANOUT:
       INTERIOR; JOSAM SERIES 56020 WITH VANDAL PROOF COVER.
       EXTERIOR; JOSAM SERIES 58440 WITH VANDAL PROOF COVER.

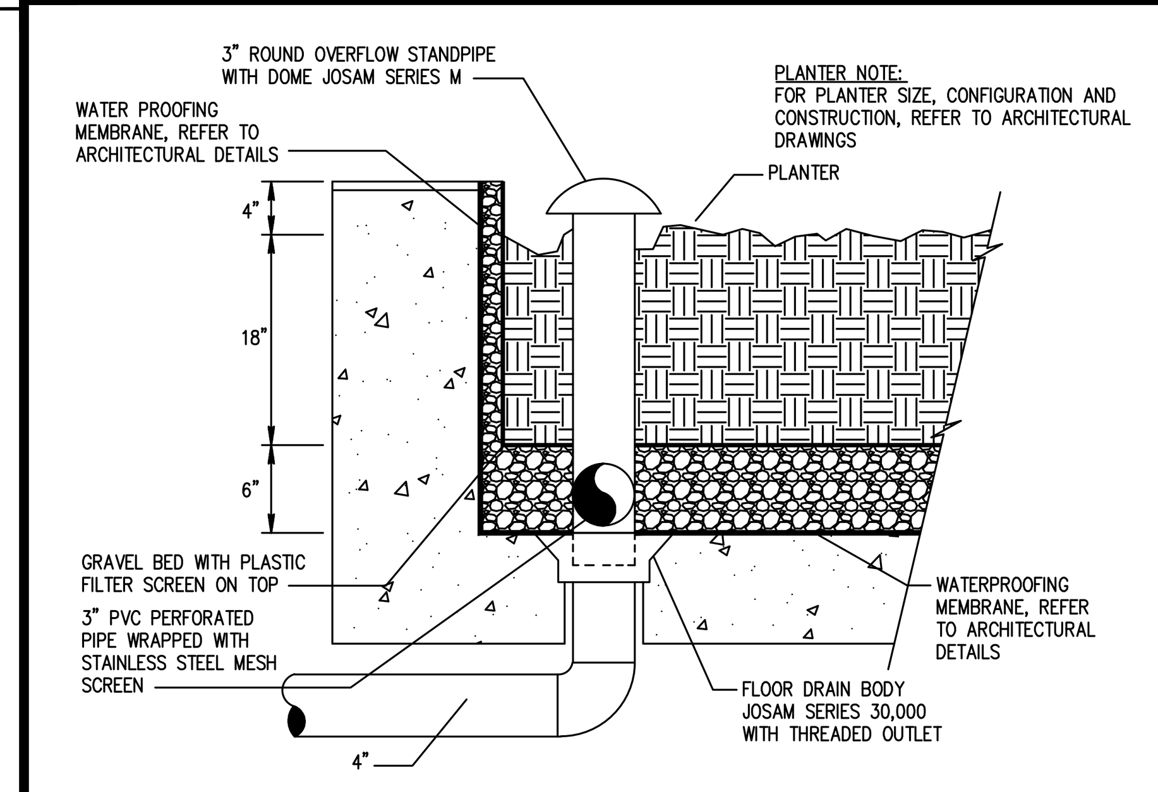
    PROVIDE CLEAN-OUTS IN HORIZONTAL PIPING AT INTERVALS REQUIRED BY CODE, AT THE BOTTOM OF ALL WASTE STACKS AND RISERS, AND AT EVERY CHANGE IN DIRECTION, AND WHERE INDICATED ON DRAWINGS.
25. DRAINS: SHALL BE AS SELECTED BY ARCHITECT.
26. PLUMBING FIXTURES AND TRIM: PROVIDE FIXTURES COMPLETE WITH DRAINS, TRAPS, SUPPLIES, WALL ESCUTCHEONS AND ANY OTHER ACCESSORY REQUIRED. FIXTURES AND FAUCETS SHALL COMPLY WITH FBC WATER SAVING STANDARDS.
    A. ELECTRIC WATER HEATER: SHALL COMPLY WITH FBC 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 17100 RECTANGULAR STRUCTURAL STEEL UPRIGHTS WITH INTEGRAL WELDED HEAVY STEEL FOOT AND DUCTILE IRON CONCEALED.
28. VALVES
    A. GATE VALVES: 2 1/2" AND SMALLER; ALL BRONZE CONSTRUCTION, SOLID WEDGE, CLASS 150, 300 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 115. 3" AND LARGER; FLANGED ENDS, IRON BODY, BRONZE TRIM, MILWAUKEE F-2882.
    B. GLOBE VALVES: TO 3"; BRONZE CONSTRUCTION, CLASS 150, 300 PSIG NON-SHOCK WATER, THREADED ENDS, MILWAUKEE 502. TO 2"; SOLDERED ENDS, MILWAUKEE 1502.
    C. CHECK VALVES: 2 1/2" AND SMALLER; BRONZE BODY, CLASS 150, 300 PSIG NON-SHOCK WATER, THREADED, MILWAUKEE 509; SOLDERED ENDS, MILWAUKEE 1509. 3" AND LARGER; FLANGED ENDS, IRON BODY, BRONZE TRIM, CLASS 125, MILWAUKEE F-2472.
    D. HOSE BIBBS: 3/4" ROUGH 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 EVERY PIPE CHANGE OF DIRECTION AND AT EACH SIDE OF SHUT OFF VALVES. PROVIDE PROTECTING SHEET METAL 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 TOPMOST 10 FEET OF PIPE BY FILLING SYSTEM WITH WATER UP TO THE OVERFLOW POINT OF THE HIGHEST OPENING, FOR A PERIOD OF TWO HOURS WITHOUT DROP IN WATER LEVEL.

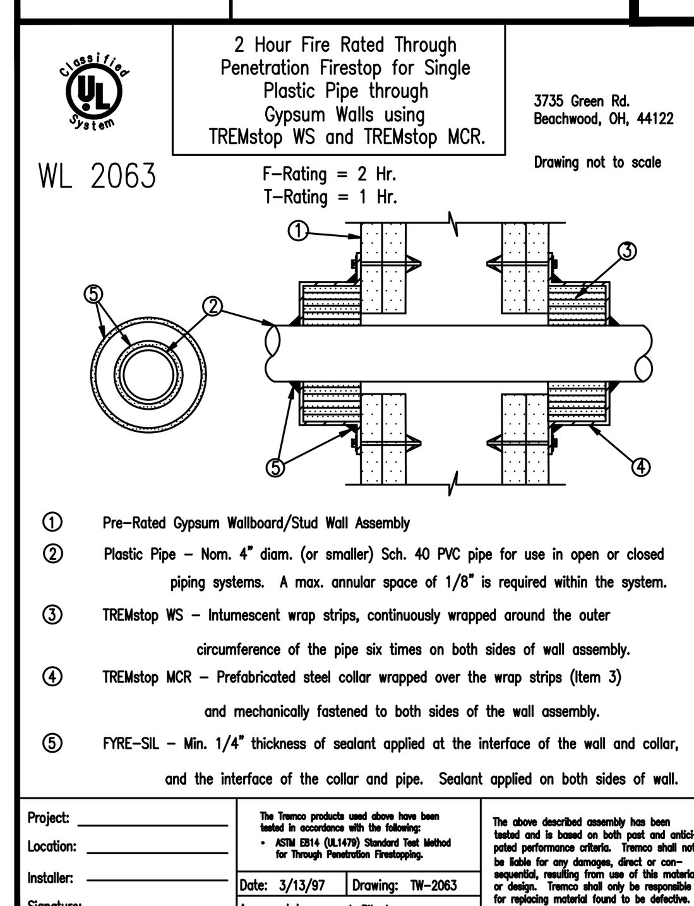
    DOMESTIC WATER PIPING: SUBJECT THE ENTIRE SYSTEM TO A HYDROSTATIC PRESSURE OF NO LESS THAN 225 PSIG FOR A PERIOD OF TWO HOURS WITHOUT LOSS IN PRESSURE.
31. TEST ALL EQUIPMENT TO DEMONSTRATE PROPER FUNCTIONING AND CAPACITY.
32. PROVIDE SHOCK ABSORBERS, DIELECTRIC FITTINGS, HANGERS AND INSERTS, TRAP RE-SEALERS, VACUUM BREAKERS, GAUGES AND THERMOMETERS, STRAINERS, VALVES, ETC., FOR COMPLETE AND OPERABLE PLUMBING SYSTEMS AS REQUIRED BY CODE AND 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 SHORING AND BRACING IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS FOR THE PROTECTION OF PERSONNEL AND UTILITIES WHERE EXCAVATIONS ARE MADE. PROVIDE ALL LABOR AND MATERIALS IN CONNECTION WITH EXCAVATING, TRENCHING, DE-WATERING, FILLING, BACKFILING, COMPACTING, ETC., UNDER THIS DIVISION (MECHANICAL).
34. 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 THIESE ITEMS IN BID.

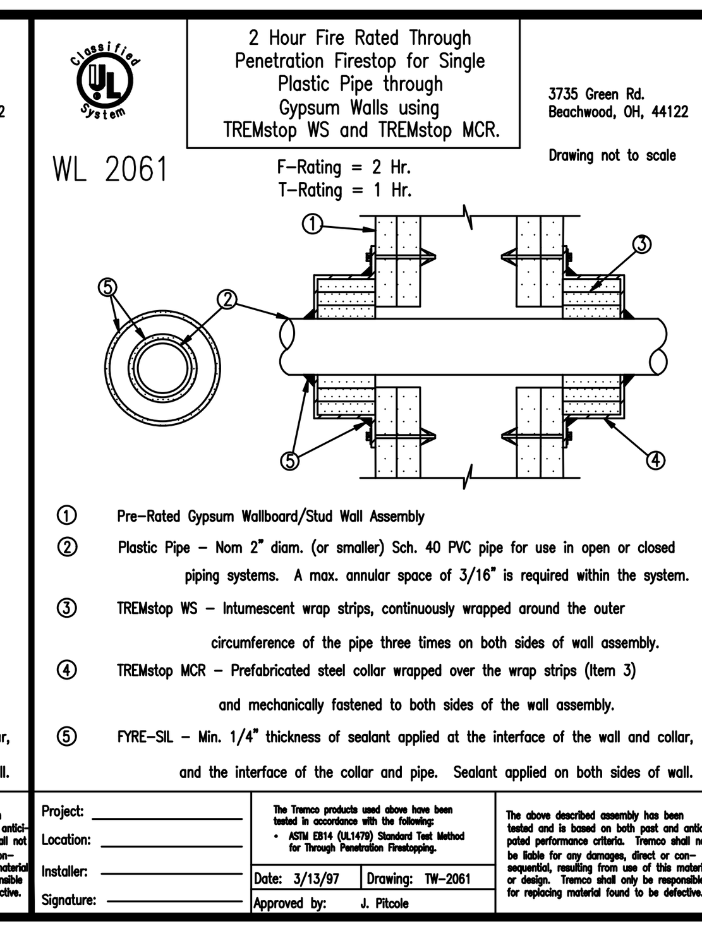
PLUMBING SYMBOL LEGEND

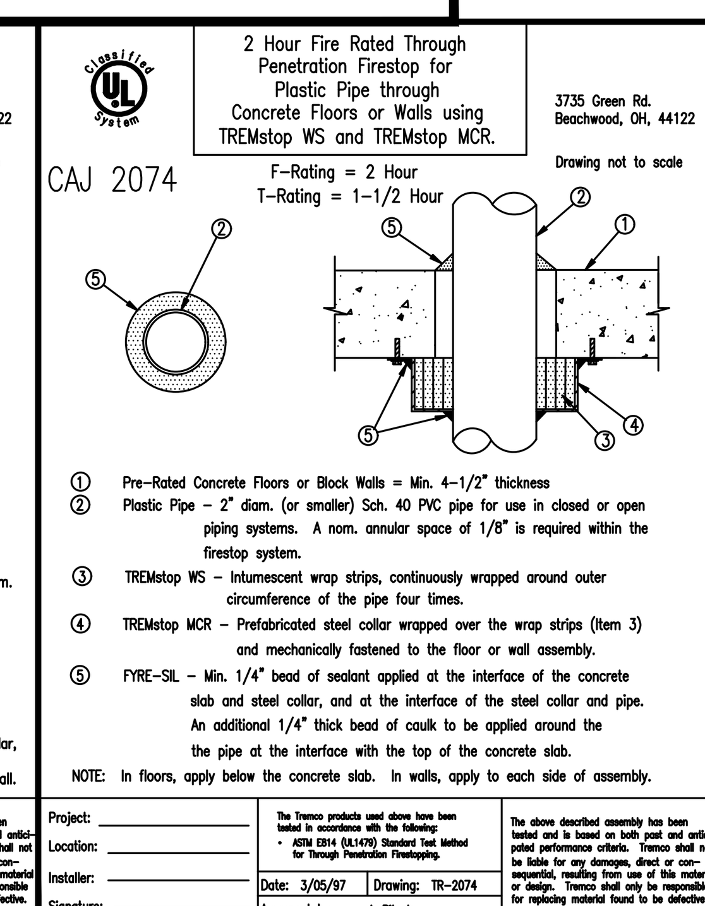
SYMBOL	DESCRIPTION
	SANITARY
	VENT LINE
SD	STORM DRAIN
	SAFEWASTE
CD	CONDENSATE
G	GAS LINE
	COLD WATER
	HOT WATER
FCO	FLUSH CLEAN OUT
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
RD	ROOF DRAIN
CO	CLEANOUT
VTR	VENT THRU ROOF
RWL	RAIN WATER LEADER
PRV	PRESSURE REDUCING VALVE
S	SANITARY RISER
W	WATER RISER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

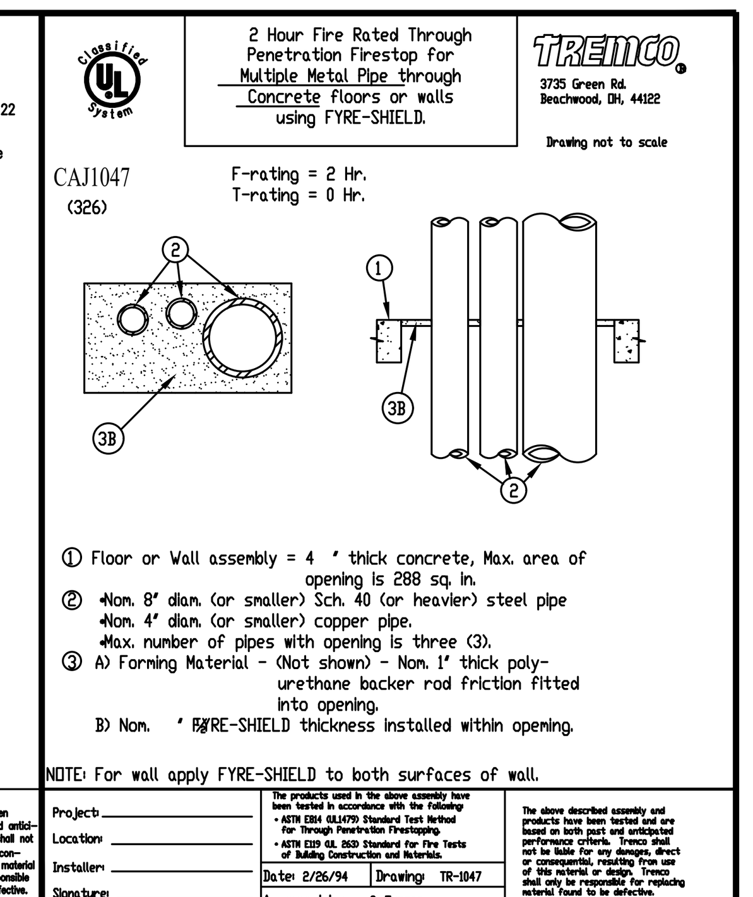


PLANTER DRAIN DETAIL
N.T.S.



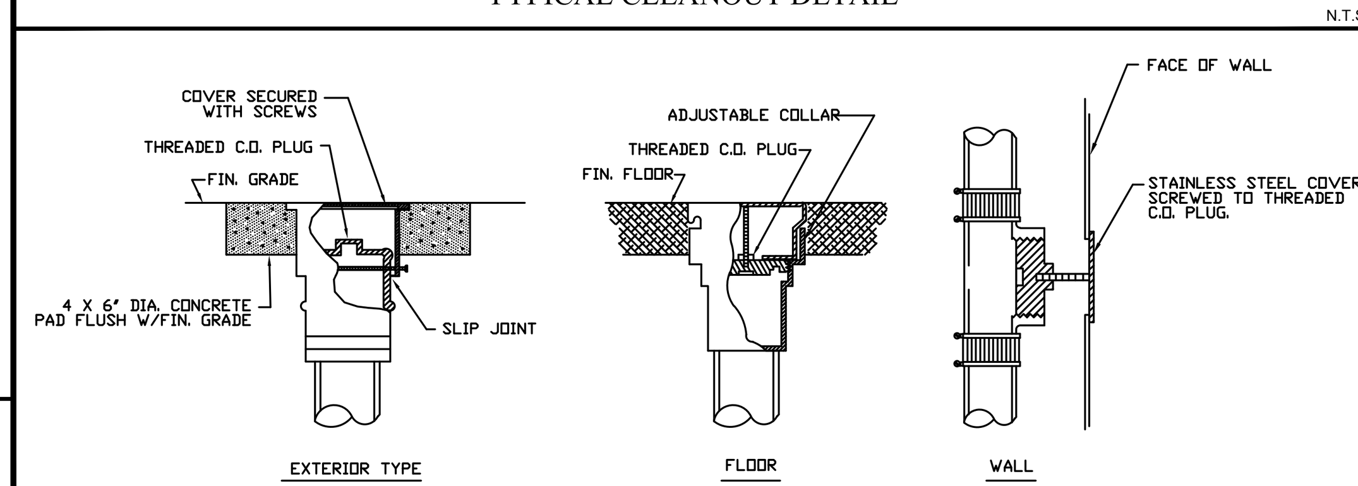






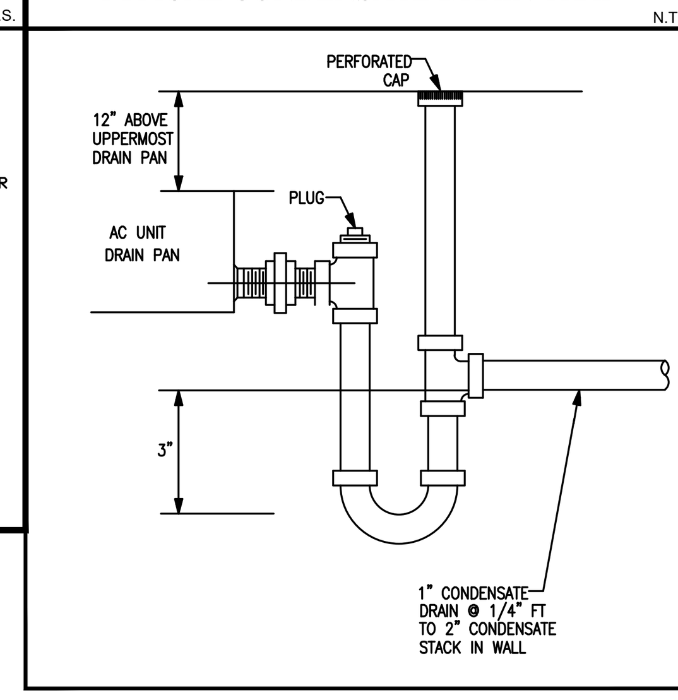
TYPICAL CLEANOUT DETAIL

N.T.S.



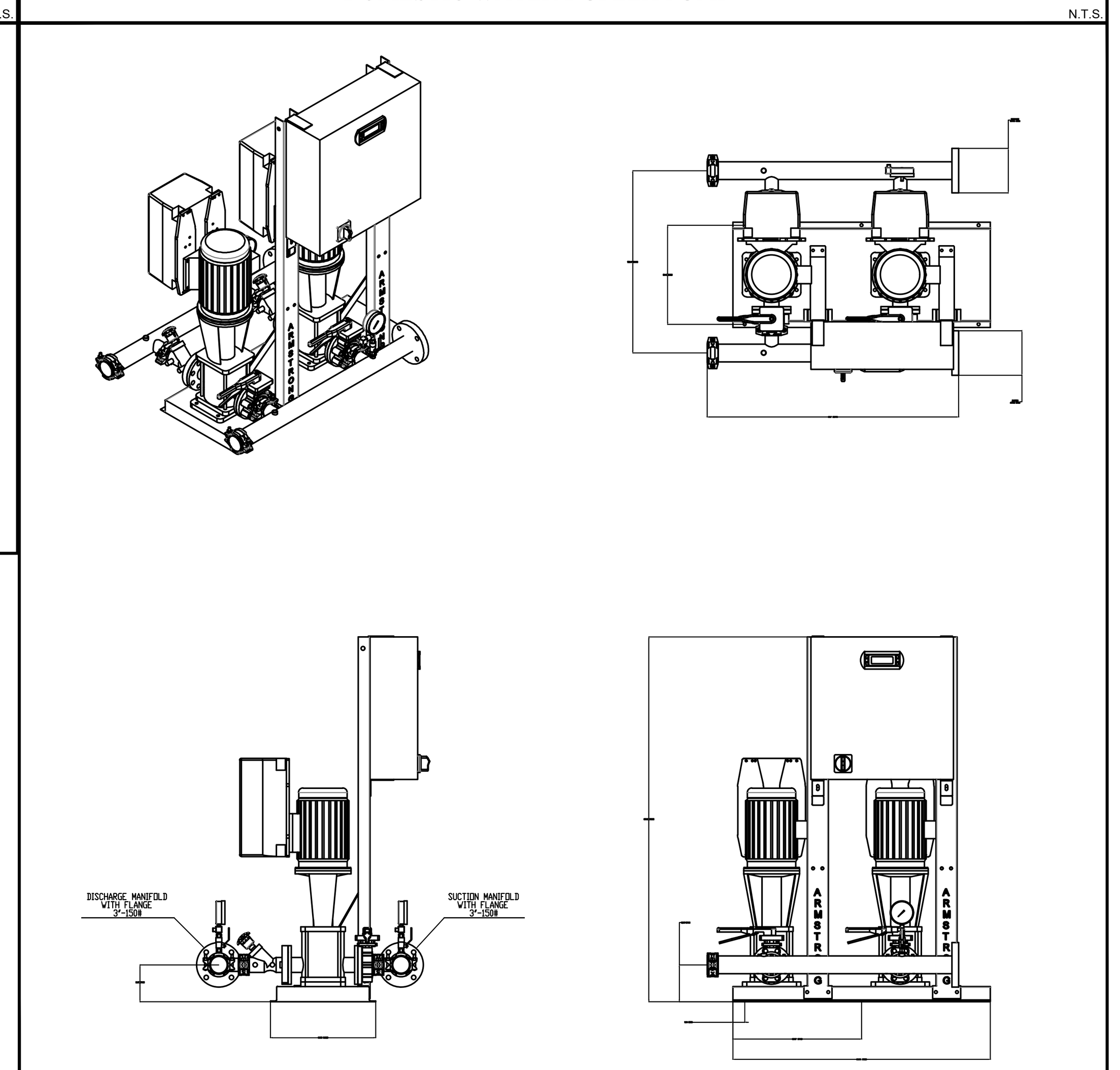
TYPICAL CONDENSATE DRAIN TRAP

N.T.S.

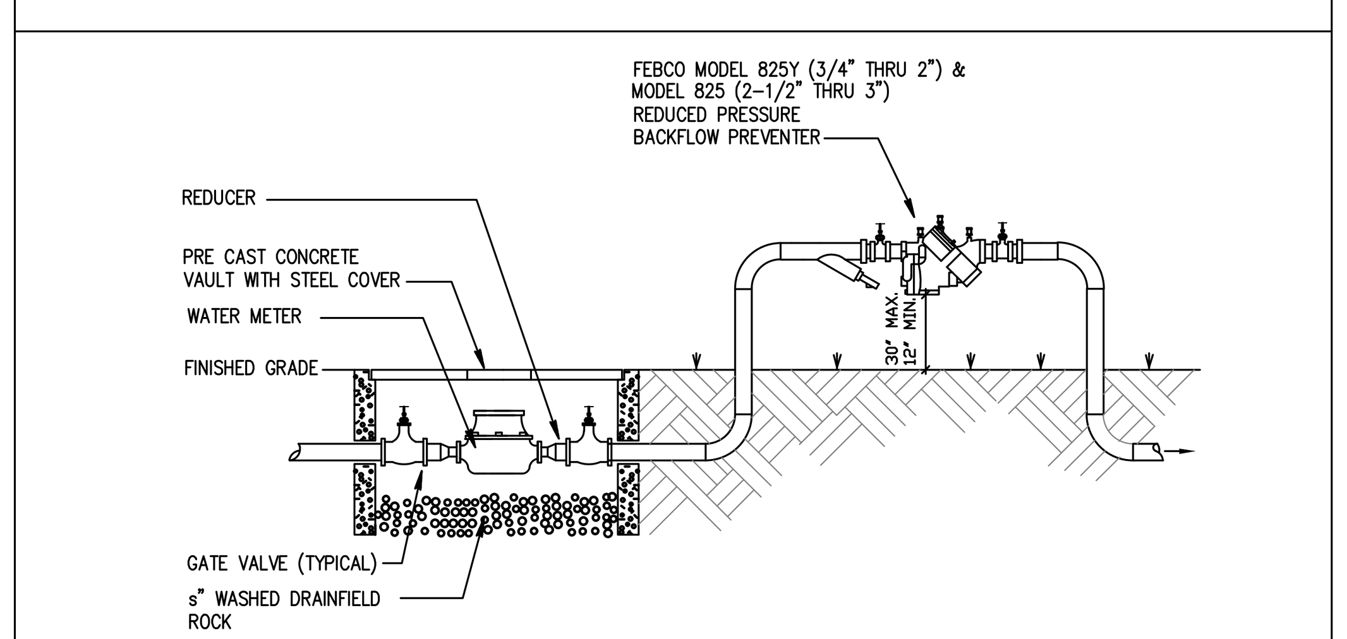


DOMESTIC WATER DUPLEX PUMP

N.T.S.



WATER METER ENCLOSURE & BACKFLOW PREVENTER DETAIL



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 33418-1701
561.316.7660 | www.morabitoconsultants.com

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

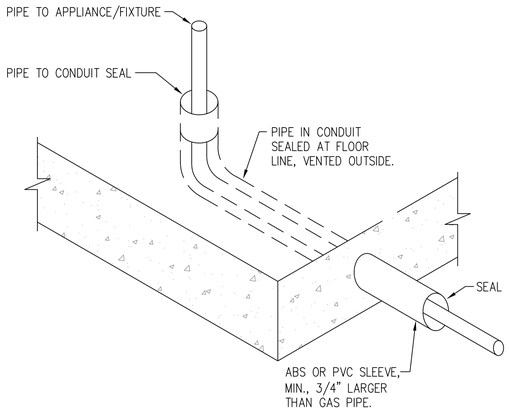
Scale: AS SHOWN

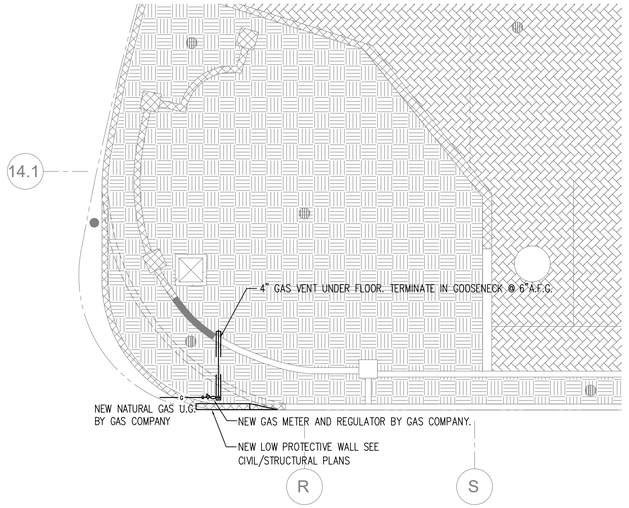
Sheet Title:
PLUMBING GENERAL NOTES AND DETAILS

Sheet No.:
P-0

H.VIDAL & ASSOCIATES
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
VIDALENGINEERING.COM

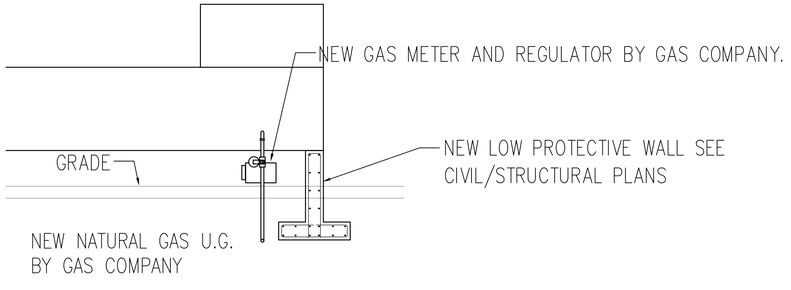
GAS PIPING UNDER SLAB DETAIL





NEW NATURAL GAS CONNECTION

NEW NATURAL GAS CONNECTION



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 HEREIN AND SHOWN ON THE DRAWINGS.
2. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECTIONS, TESTS, PERFORMANCE BONDS, FINES AND OTHER ITEMS AS REQUIRED FOR THE INSTALLATION OF THE COMPLETE PLUMBING SYSTEMS, AND SHALL BE RESPONSIBLE FOR OBTAINING HIS OWN 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 BOUND AND LABELED EQUIPMENT MAINTENANCE AND INSTRUCTION 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. PRODUCTS AND MATERIALS SPECIFIED BY TRADE NAME AND/OR MODEL ON THE DRAWINGS ESTABLISH A STANDARD OF QUALITY, APPEARANCE, PERFORMANCE AND DIMENSIONS. CONTRACTOR SHALL BASE HIS BID ON THOSE ITEMS, WHICH 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, CONSTRUCTION STANDARDS, QUALITY AND WARRANTIES ARE EQUAL OR BETTER THAN THE PRODUCT SPECIFIED. 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.
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 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.
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 DEPICT 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. OFFSET PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, DUCTWORK, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY FIELD CONDITIONS.
15. 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.
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. WHENEVER 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 EVERY PIPE CHANGE OF DIRECTION AND AT EACH SIDE OF SHUT OFF VALVES. PROVIDE PROTECTIVE SHEET METAL SHIELDS FOR ALL INSULATED PIPING.
19. TEST ALL EQUIPMENT TO DEMONSTRATE PROPER FUNCTIONING AND CAPACITY.
20. PROVIDE SHORING AND BRACING IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS FOR THE PROTECTION OF PERSONNEL AND UTILITIES WHERE EXCAVATIONS ARE MADE. PROVIDE ALL LABOR AND MATERIALS IN CONNECTION WITH EXCAVATING, TRENCHING, DE-WATERING, FILLING, BACKFILLING, COMPACTING, ETC., UNDER THIS DIVISION (MECHANICAL).

H.VIDAL & ASSOCIATES
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
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
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

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 PARKING
PLAN

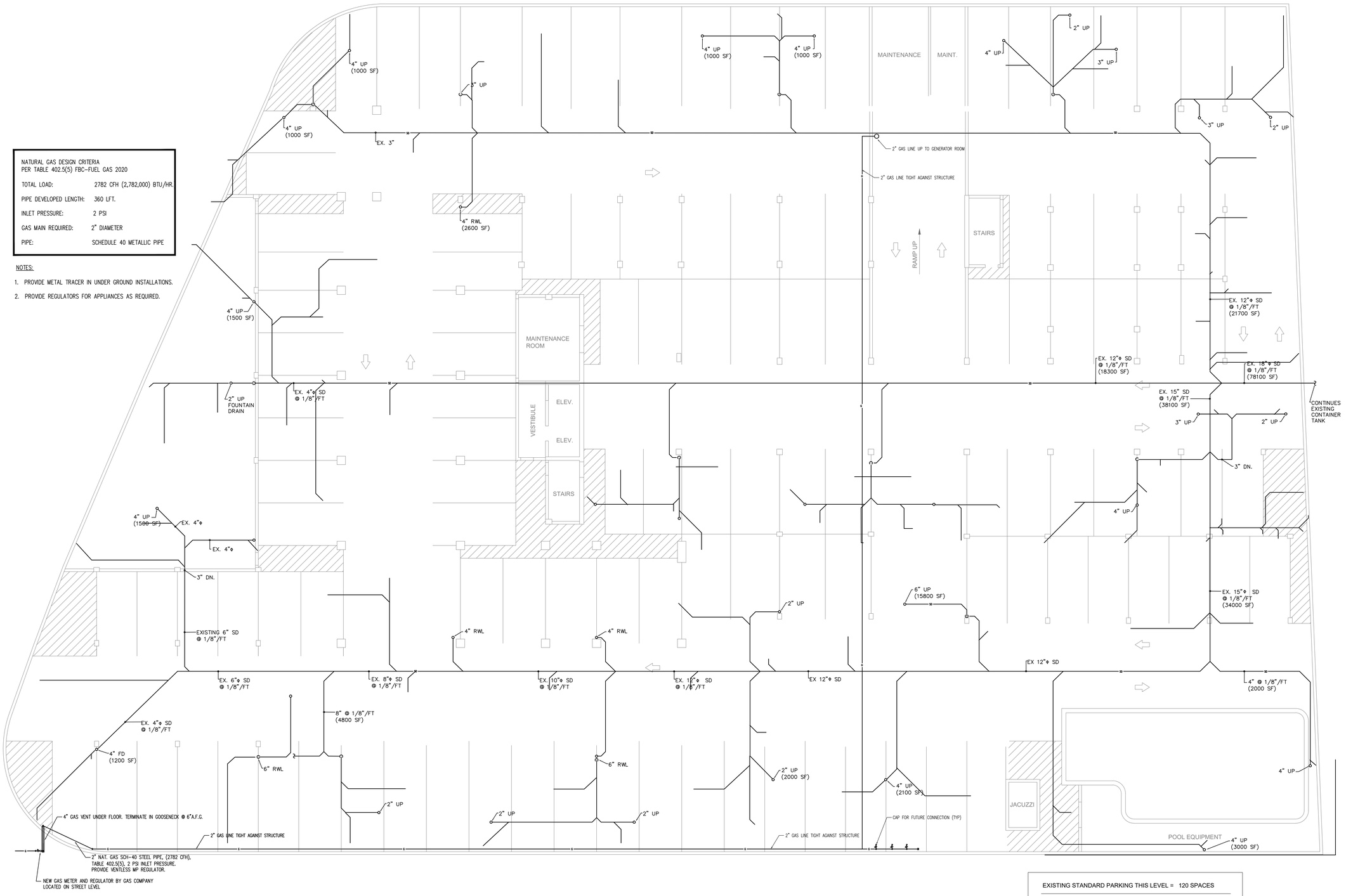
Sheet No.:
P-0A

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

EXISTING PARKING THIS LEVEL = 120 SPACES

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
VIDALENGINEERING.COM
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 33418-1701
561.316.7640 | www.morabitoconsultants.com

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

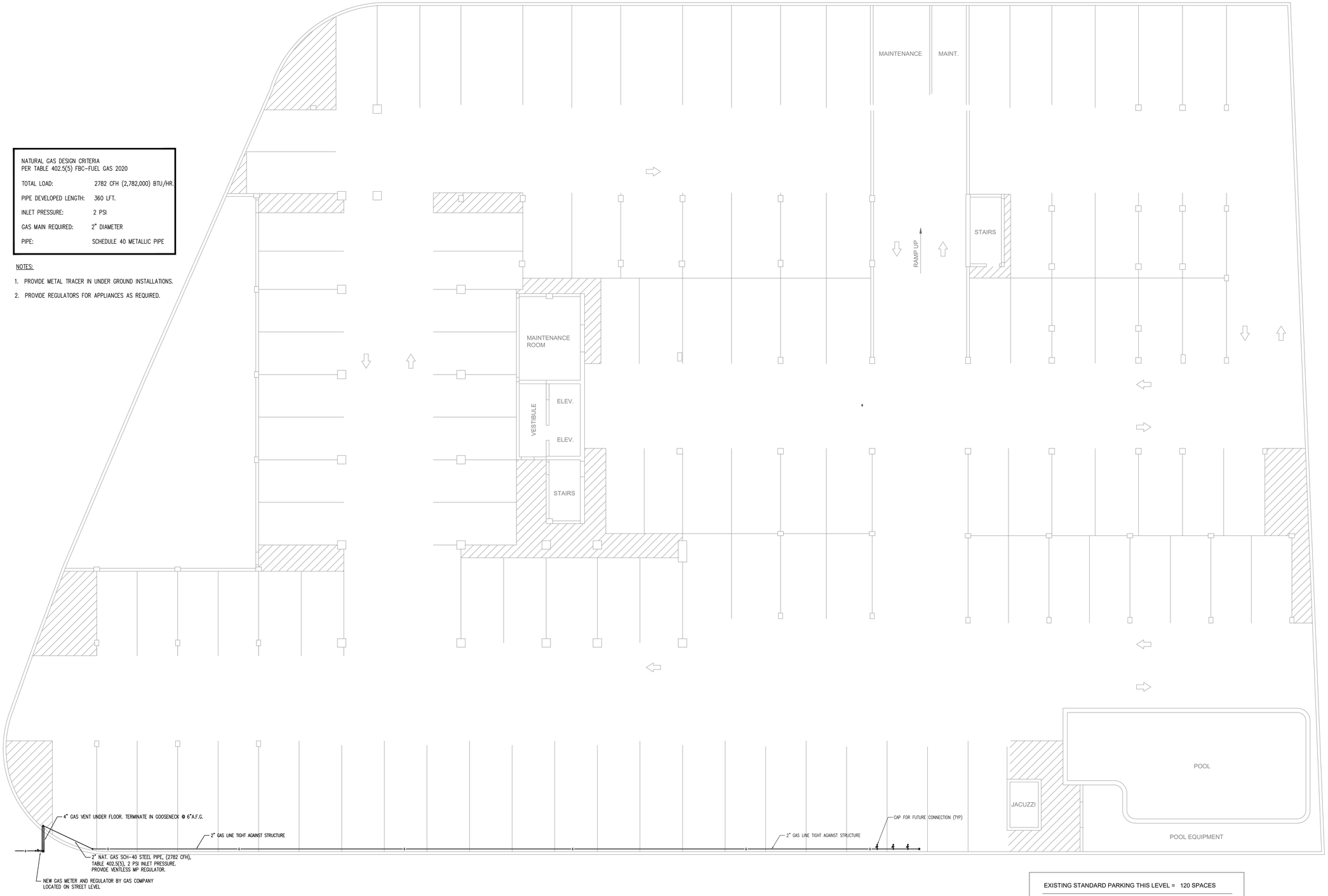
Sheet Title:
PLUMBING GAS
GARAGE PLAN

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.
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

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
VIDALENGINEERING.COM
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 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

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

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

morabito consultants

Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7660 | www.morabitoconsultants.com

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:

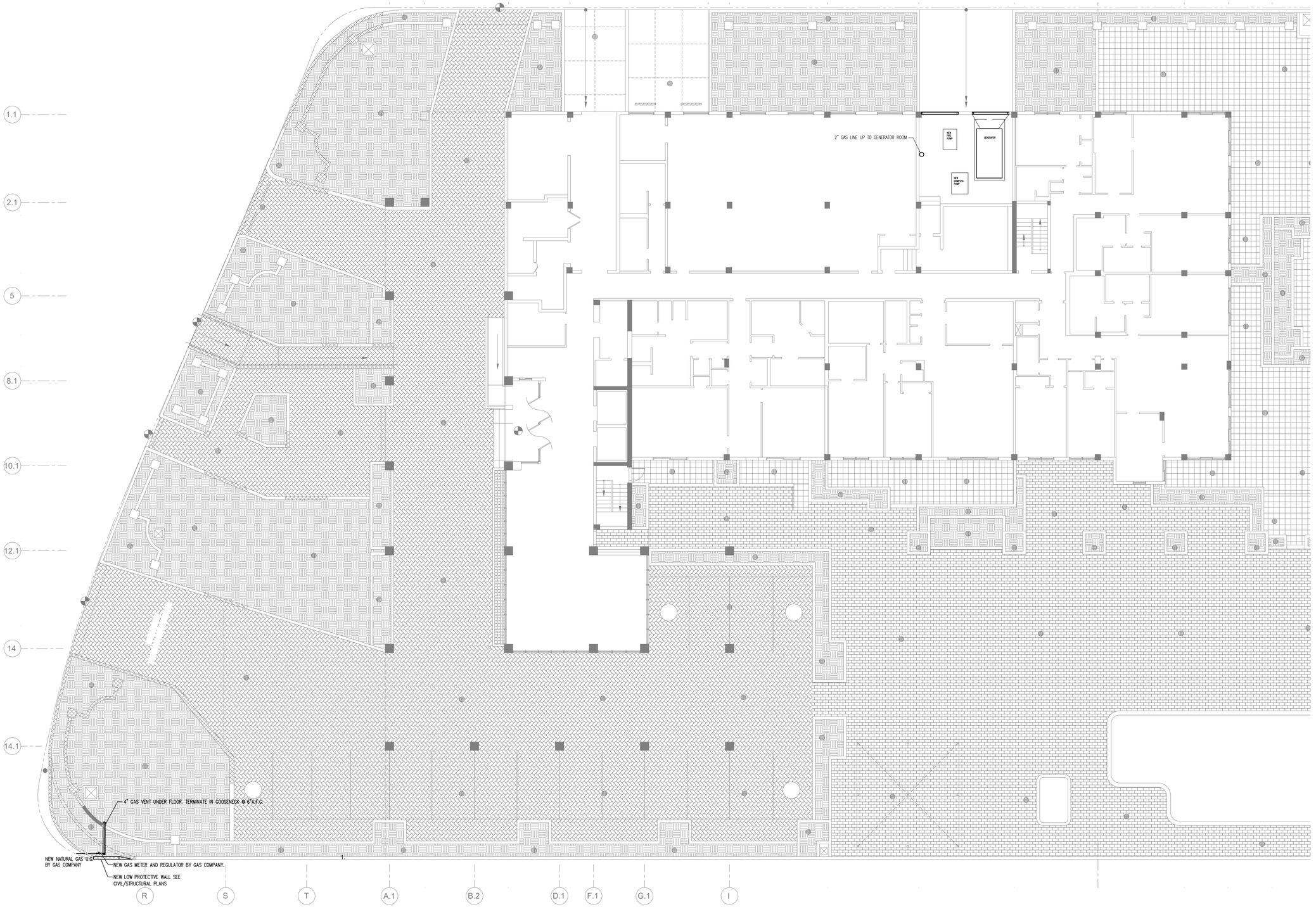
PLUMBING - FIRST FLOOR PARKING PLAN

Sheet No.:

P-2

H.VIDAL & ASSOCIATES

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
VIDALENGINEERING.COM



FIRST FLOOR PARKING PLAN - GAS

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

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 33418-1701
561.316.7660 | www.morabitoconsultants.com

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

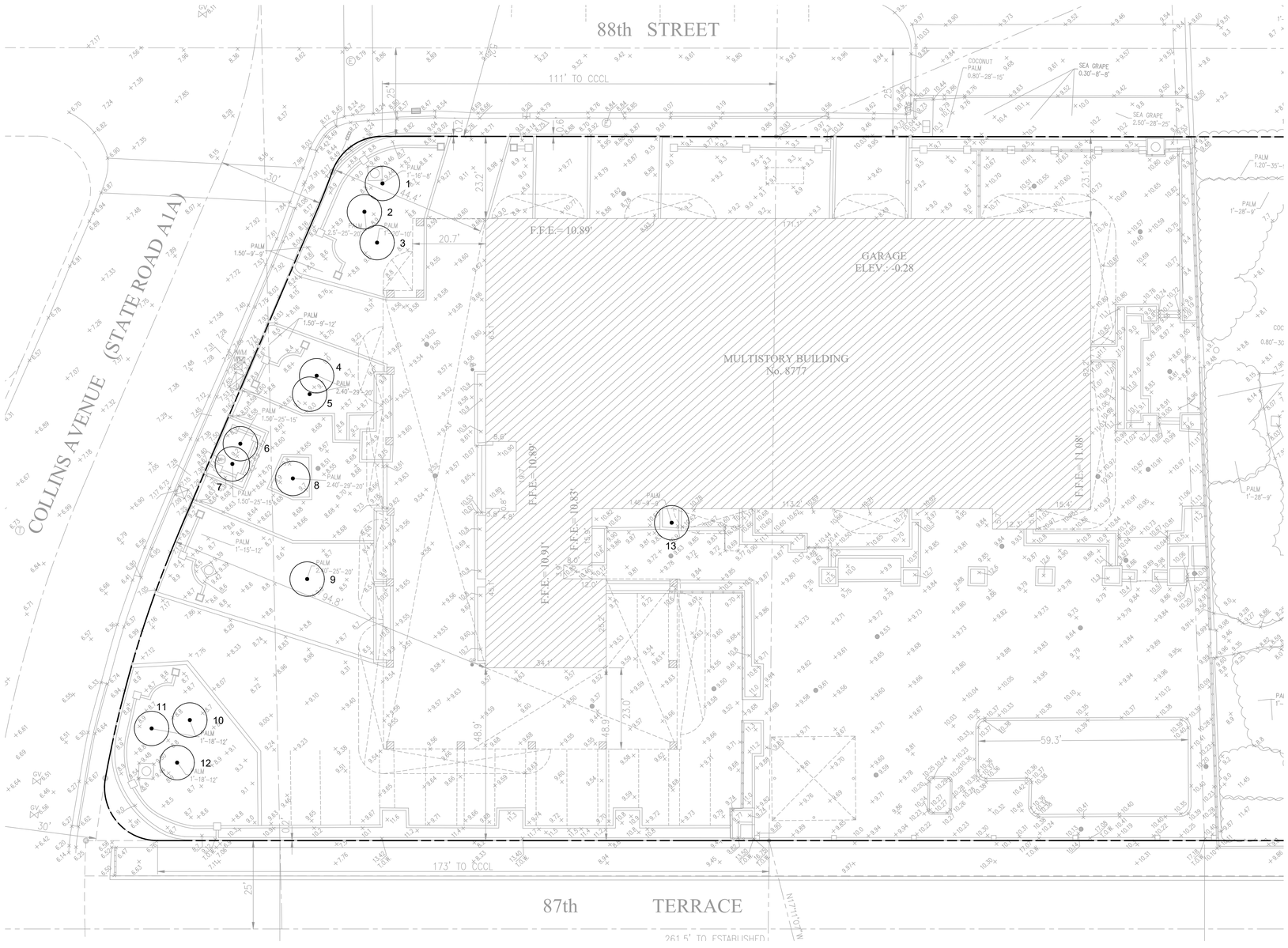
Scale: AS SHOWN

Sheet Title:
NATURAL GAS - FIRST FLOOR PARKING PLAN

Sheet No.:
P-2A

H.VIDAL & ASSOCIATES

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
VIDALENGINEERING.COM



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.	REVISIONS	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
Florida License Number LA393
Fax 954 / 462-0722
Phone 954 / 462-0704
rrla@rhettroy.com

Herbert C. Hodgman
LA0001079

Drawn: HH

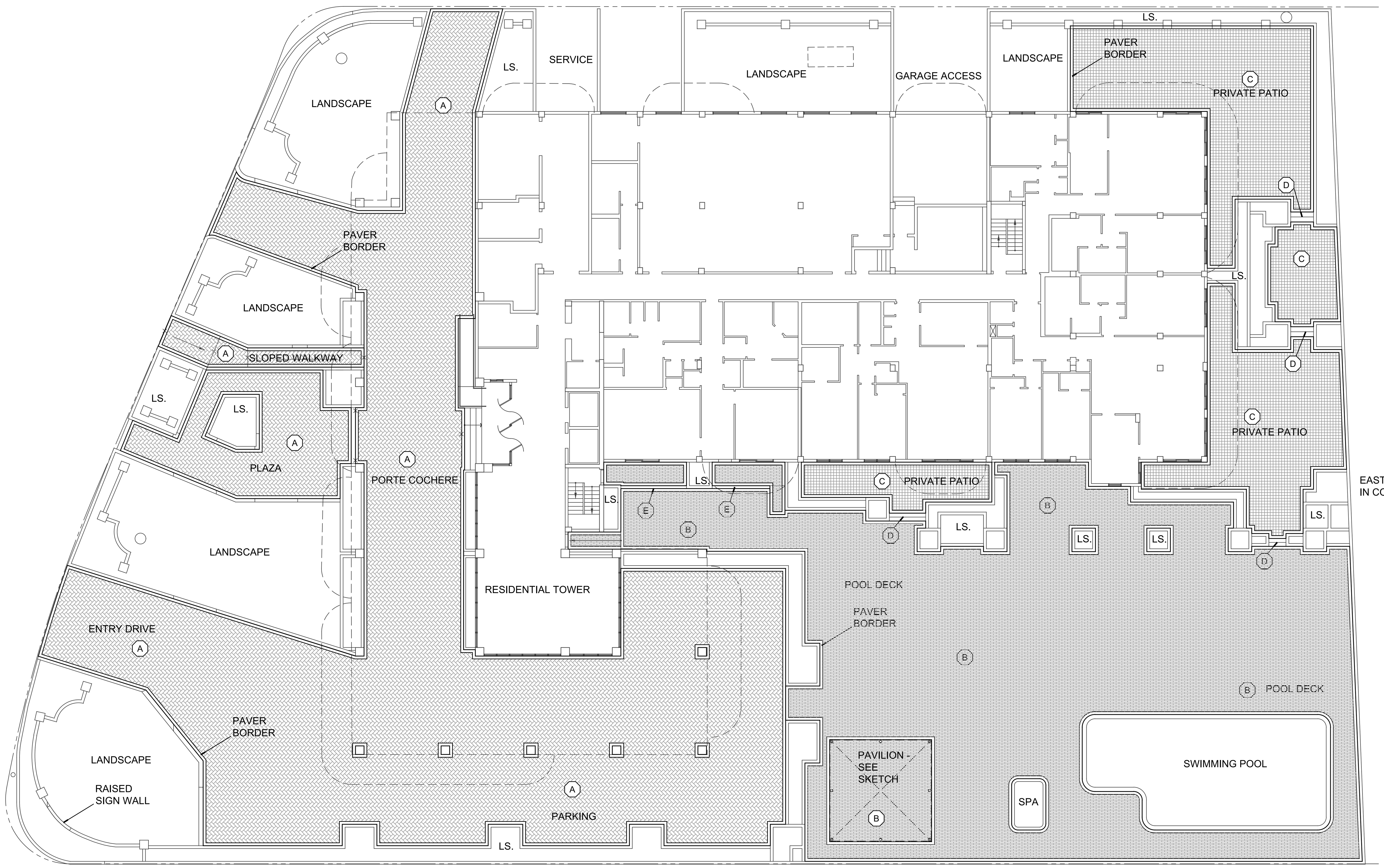
Project No.: 19034

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.

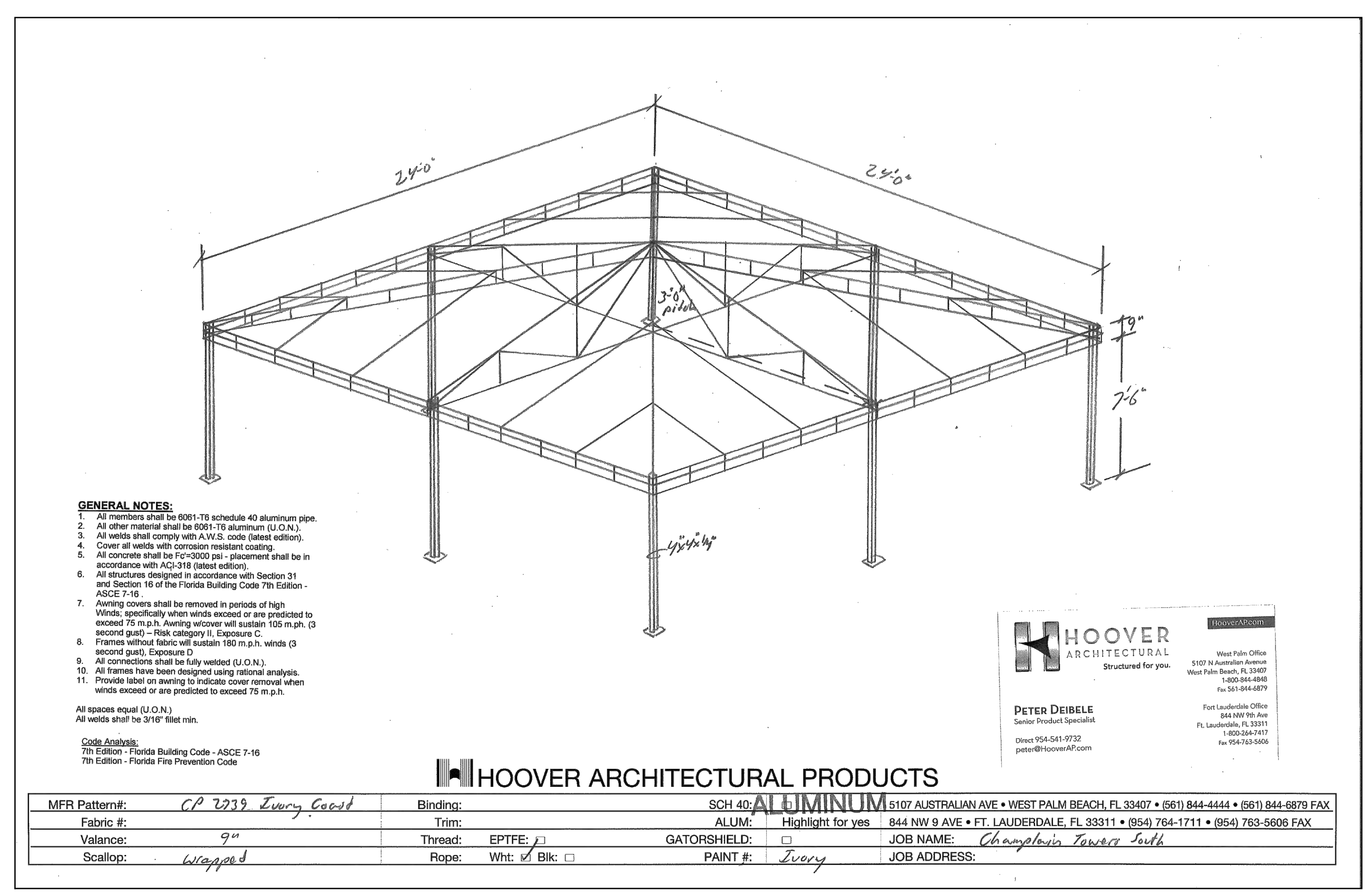
(B) POOL DECK - MODULINE 3"X12" STAGGERED RUNNING BOND PATTERN, COLORS 40% WHITE, 30% PEWTER, 30% GRAY, WITH 4"x8" SOLDIER COURSE BORDERS RANDOM EVEN COLOR DISTRIBUTION.

(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.



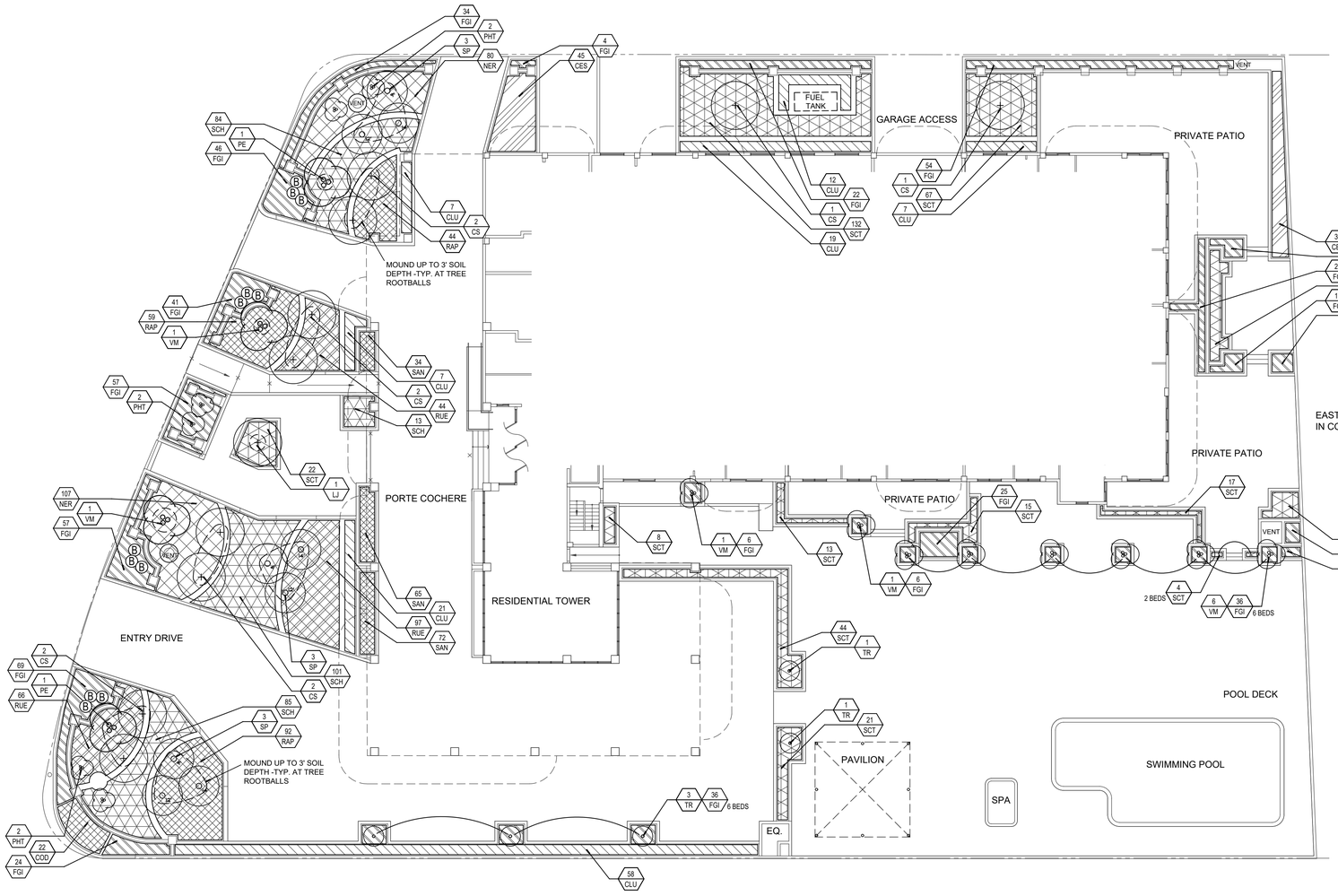
1 / LH-1 PAVILION SKETCH (FOR BIDDING ONLY)
SCALE: NONE

No.	REVISIONS
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
Phone 954 / 462-0704
rrla@rhettroy.com

Herbert C. Hodgman
LA0001079

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



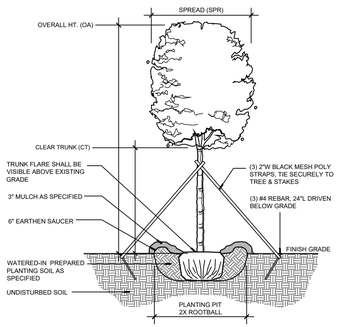
NOTE: INSTALL SPECIFIED SOIL TO 18" DEPTH, 36" DEPTH SURROUNDING TREE ROOT BALLS.

PLANT LIST

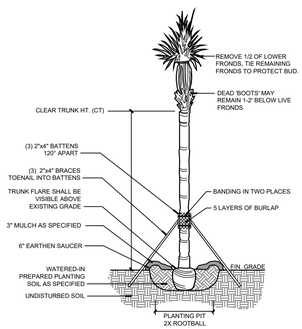
SYM.	ITEM	SPECIFICATION	QTY.
TREES			
CS	Conocarpus erectus 'Sericeus' Silver Buttonwood	12'ht., 5'spr., 4'ct., standard	10
LJ	Ligustrum japonicum Ligustrum Tree	10'ht., 10'spr., full., multi, matched	1
PALMS			
PE	Ptychosperma elegans Alexander Palm	10'-16' oa ht., triple	2
SP	Sabal palmetto Cabbage 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

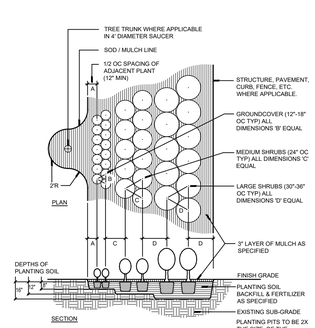
1. ALL PLANTS TO BE FLORIDA NO. 1 GRADE OR BETTER.
2. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT.
3. ALL LANDSCAPE AREAS TO RECEIVE 100% IRRIGATION COVERAGE WITH A MINIMUM 50% OVERLAP BY AN AUTOMATIC IRRIGATION SYSTEM. SYSTEM SHALL INCLUDE A RAIN SENSOR 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 WARRANTEED FOR ONE YEAR



SMALL TREE PLANTING DETAIL
N.T.S.



SABAL PALM PLANTING DETAIL
N.T.S.



SHRUB PLANTING DETAIL
N.T.S.

NORTH
0 16' 32'
GRAPHIC SCALE

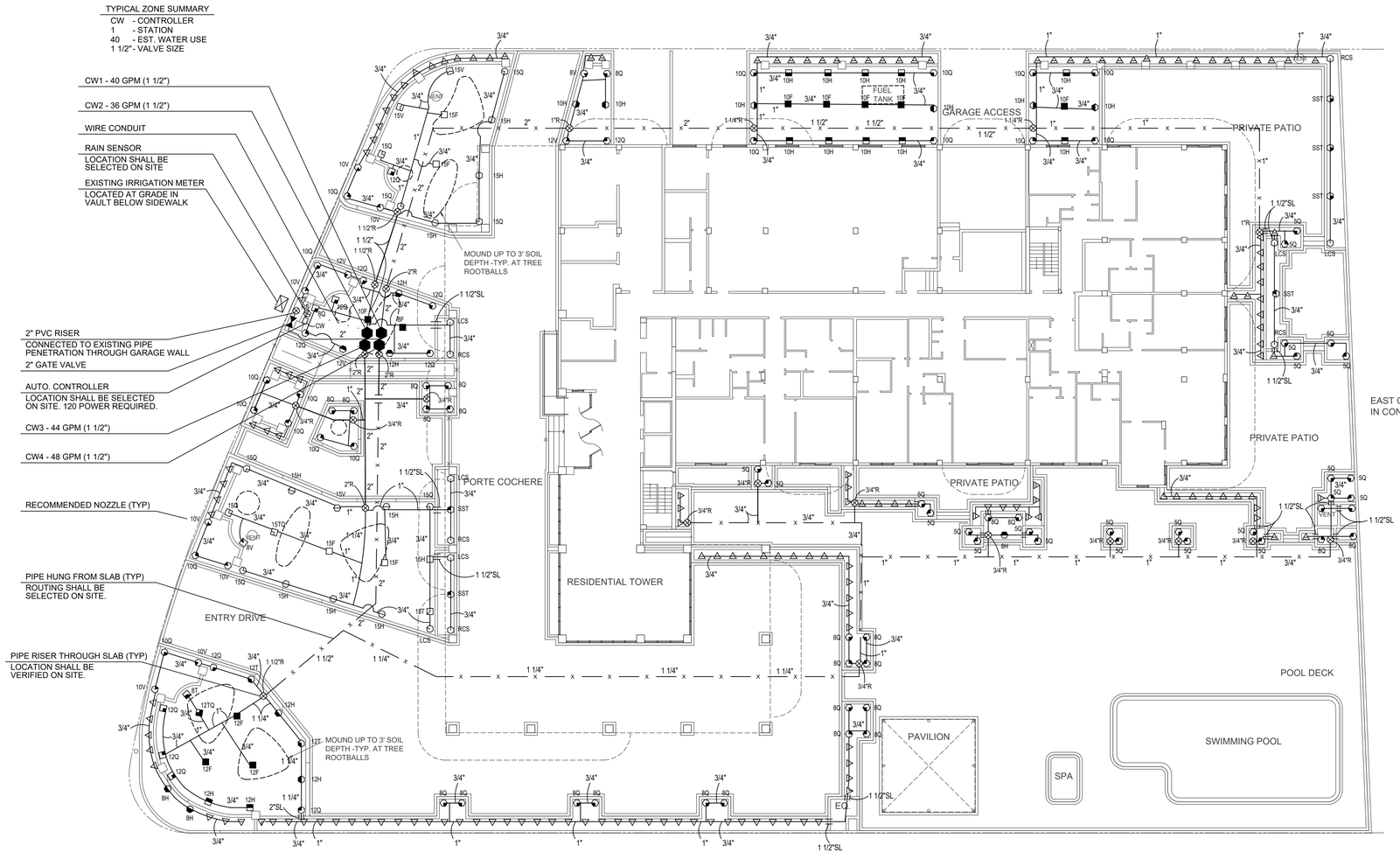
No.	REVISIONS	Date

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
Fort Lauderdale, FL 33301
Florida License Number LA393
Fax 954 / 462-0722
Phone 954 / 462-0704
rrla@rhettroy.com

Herbert C. Hodgman
LA0001079

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
	PA8S-5CST-B	RAINBIRD STREAM BUBBLER	06
2Q	PA8S-SQ-QTR	RAINBIRD SPRAY BUBBLER	06
2H	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.

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
rrla@rhettroy.com

Herbert C. Hodgman
LA0001079

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.

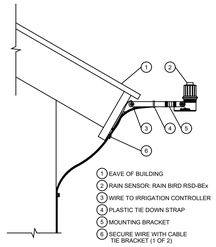
CONTROL LINES FROM THE AUTOMATIC CONTROLLER TO IN-LINE AUTOMATIC VALVES SHALL BE #14 AWG THHN TYPE WHICH SHALL BE:
(1) INSTALLED IN ACCORDANCE WITH LOCAL CODES, (2) INSTALLED IN SCH 40 PVC WIRE CONDUIT, AND (3) BURIED TO A MINIMUM DEPTH OF 15".

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.

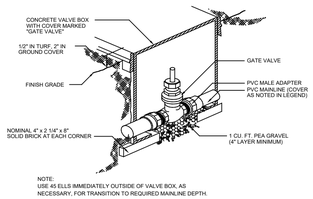
THE RAIN SENSOR SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. LOCATION SHALL BE SELECTED ON SITE.

TIMING AND PRECIPITATION

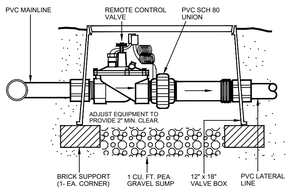
TIMING OF EACH STATION SHALL BE SET IN THE FIELD TO MATCH LOCAL REQUIREMENTS. REFER TO ZONE SUMMARY CHART FOR RECOMMENDED RUN TIMES TO APPLY 1.0 INCHES/WEEK.



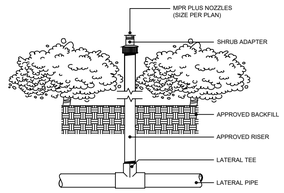
RAIN SENSOR RSD-BEx
NOT TO SCALE



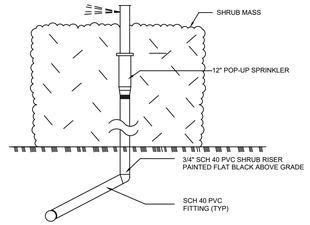
GATE VALVE DETAIL
NOT TO SCALE



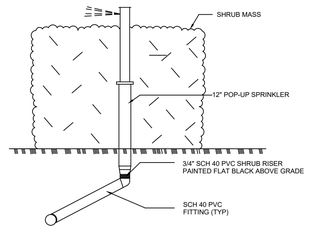
REMOTE CONTROL VALVE DETAIL
NOT TO SCALE



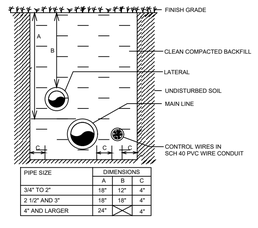
SHRUB/BUBBLER SPRINKLER (NTS)
BUBBLER/SHRUB SPRAY
INSTALLED AT THE BASE
OF PLANTS FOR LOW
LEVEL WATERING.



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"

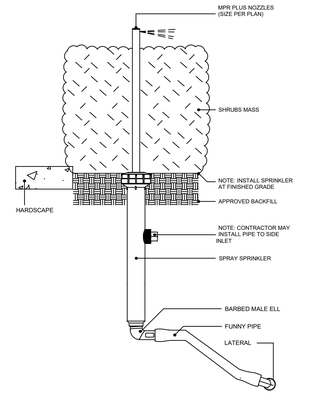


SPRINKLER DETAIL (N.T.S.)
12" POP-UP SPRAY ON PVC SWING
JOINT LOCATED IN PLANT MASS
MAINTAINED TO A MIN. HEIGHT OF 18"

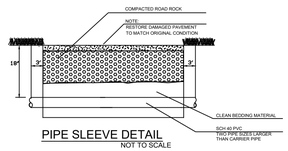


PIPE SIZE	DIMENSIONS		
	A	B	C
3/4" TO 2"	18"	12"	4"
2 1/2" AND 3"	18"	18"	4"
4" AND LARGER	24"		4"

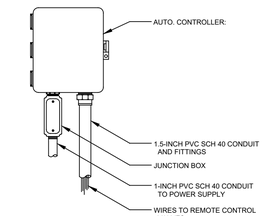
TRENCHING DETAIL (NTS)
NON-TRAFFIC AREAS



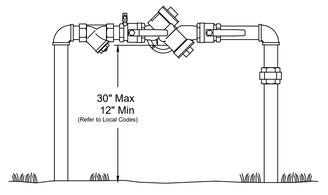
SPRINKLER DETAIL (N.T.S.)
12" POP-UP SPRAY ON POLY PIPE
SWING JOINT LOCATED IN PLANTS
MAINTAINED TO A MAX. HEIGHT OF
8"



PIPE SLEEVE DETAIL
NOT TO SCALE



AUTOMATIC CONTROLLER
NOT TO SCALE



REDUCED PRESSURE ASSEMBLY
(IF REQUIRED)
NOT TO SCALE

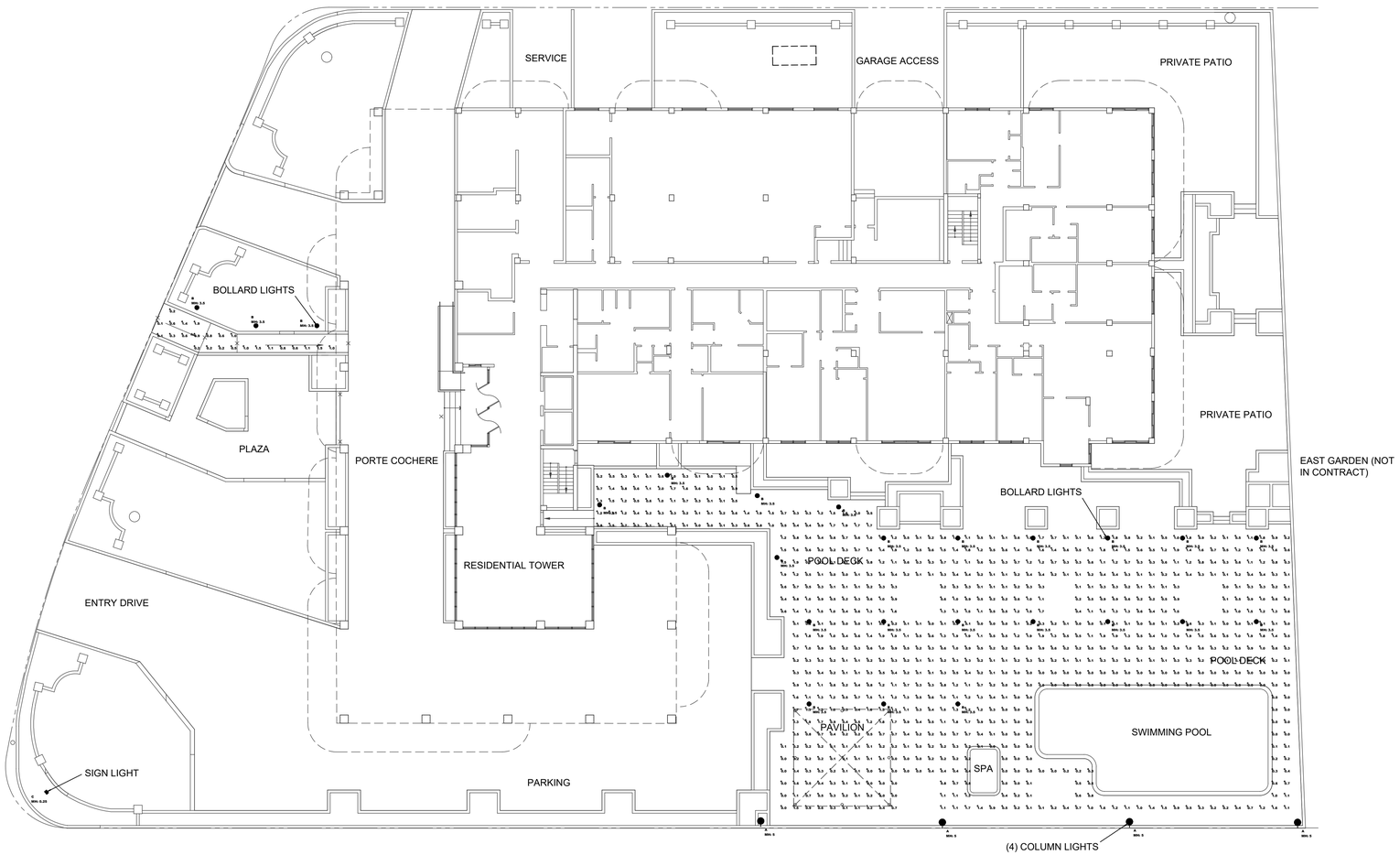
No.	REVISIONS	Date

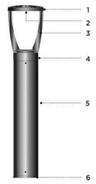
Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154
Drawing Title
IRRIGATION NOTES AND DETAILS

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
LA0001079

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.

MA30

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 3 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

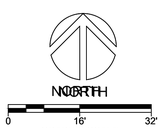
Project: CHAMPLAIN TOWERS SOUTH - POOL AREA_REV 1 02/02/2021

Symbol	Qty	Label	Arrangement	Manufacturer	Description	Luminaire Lumens	LLF	Luminaire Watts	Assembly Watts
	4	A	SINGLE	Luminis Canada Inc.	SR135-L2W18K2A-xxx-BKT-APS MH: COLUMN MOUNT A.F.F. (bottom of fixture)	4493	0.148	34	34
	24	B	SINGLE	Luminis Canada Inc.	MA30 L1W112A-R5 MH: 42" BOLLARD	274	0.855	11.3	11.3
	1	C	SINGLE	Lithonia Lighting	DSXF1 LED P2 30K WFL MVOLT IS xxx MH: GROUND MOUNT A.F.G.	4753	0.855	42	42

Calculation Summary

Project: CHAMPLAIN TOWERS SOUTH - POOL AREA_REV 1 02/02/2021

Label	CalcType	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



No.	REVISIONS	Date

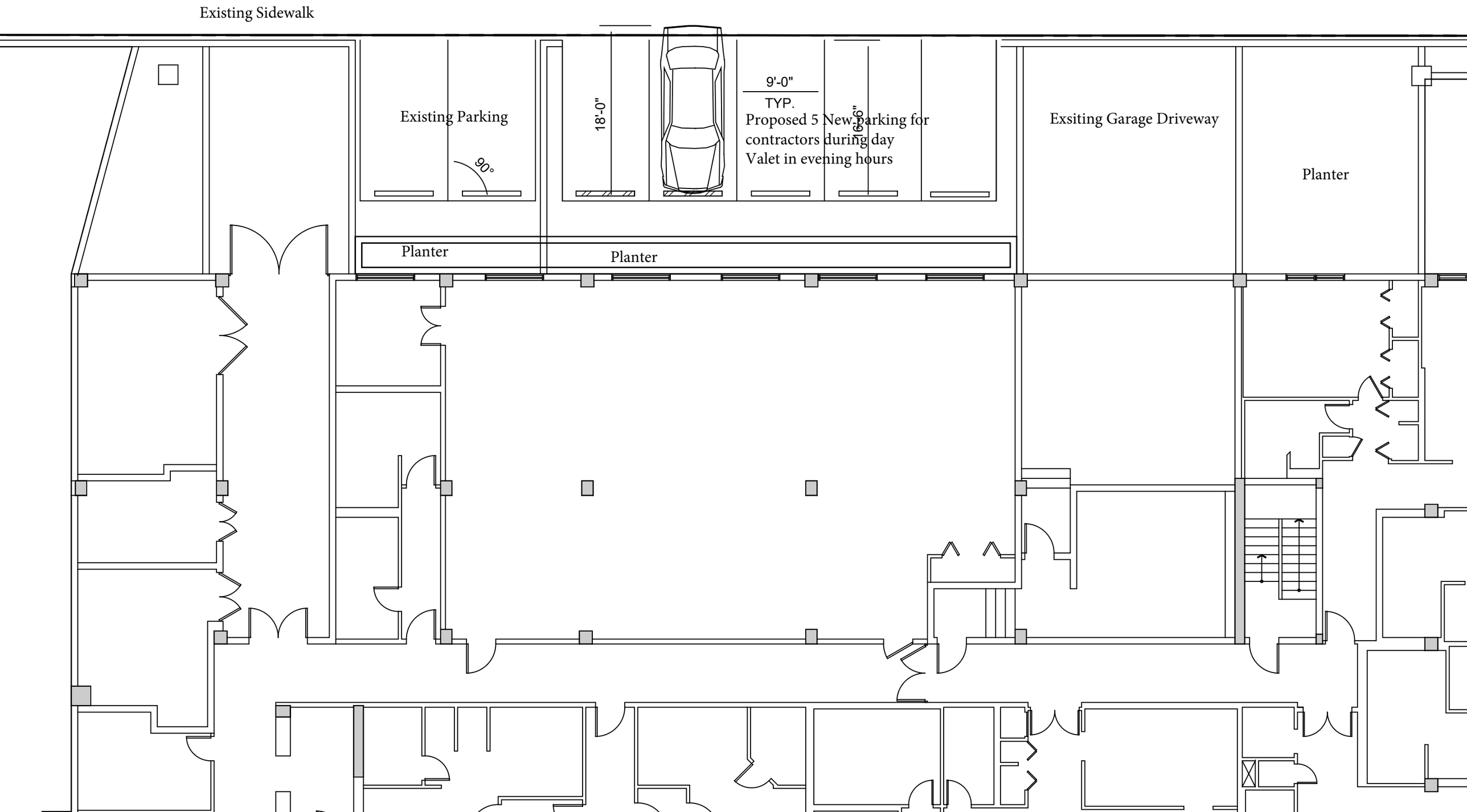
Project Name
Champlain Towers South Condominium
8777 Collins Avenue, Surfside, FL 33154
Drawing Title
LANDSCAPE LIGHTING PLAN

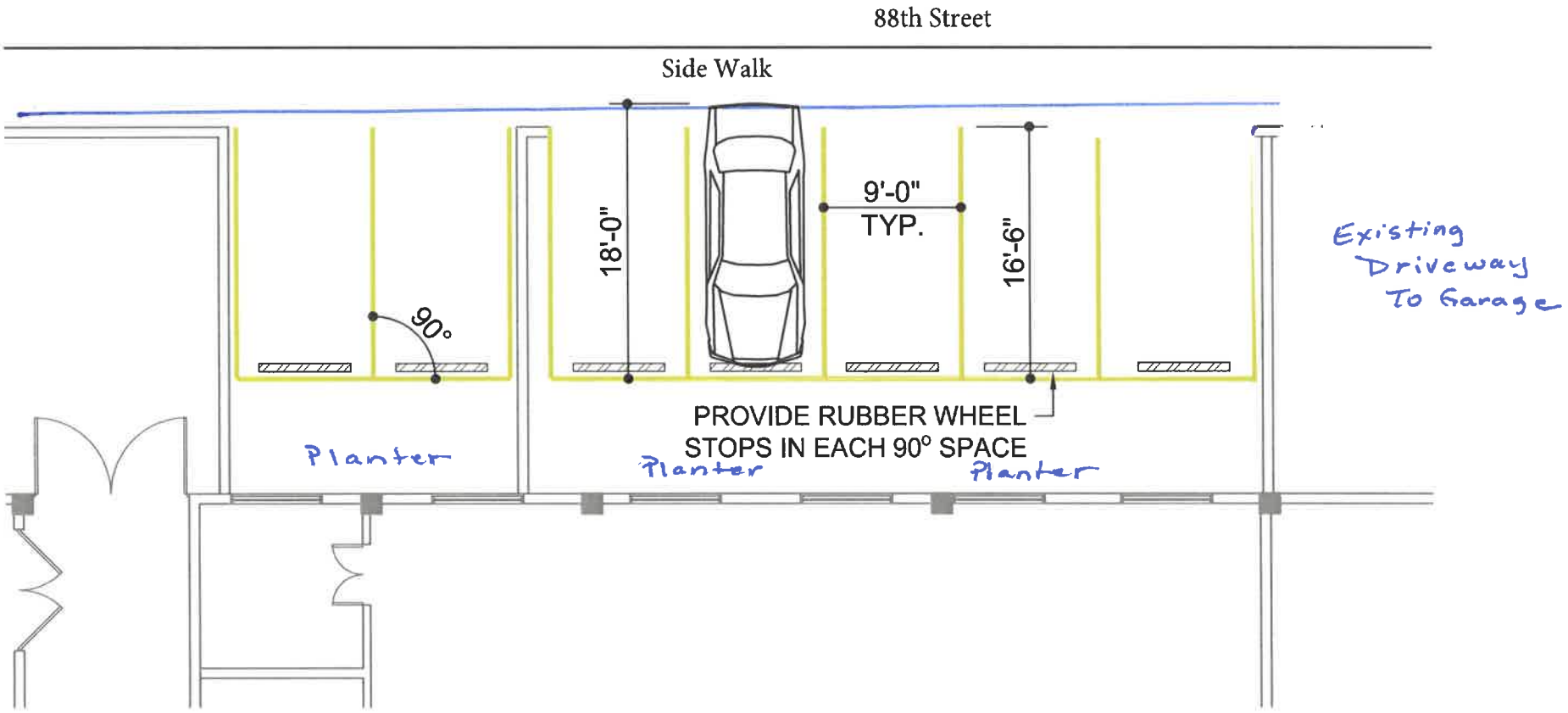
RHETT ROY
Landscape Architecture-Planning, P.A.
412 North Andrews Avenue
Fort Lauderdale, FL 33301
Florida License Number LA393
Fax 954 / 462-0722
Phone 954 / 462-0704
rrla@rhettroy.com

Herbert C. Hodgman
LA0001079

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.
9'-0"
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°
Existing
Driveway
To Garage
PROVIDE RUBBER WHEEL
STOPS IN EACH 90° SPACE
Planter
Planter
Planter


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

SD ARCHITECT, P.A.

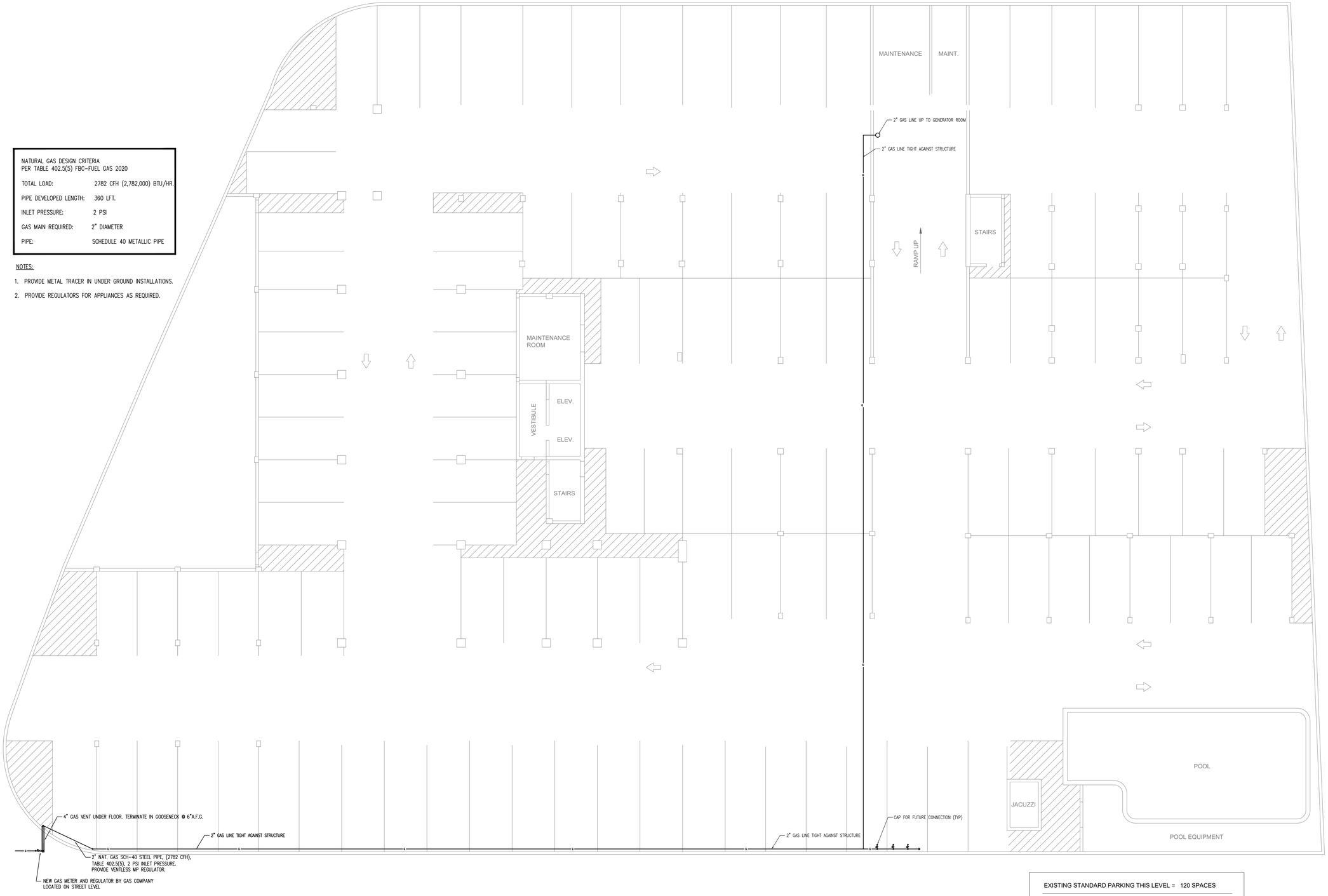
LOYD VISUAL ARTS

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

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
VIDALENGINEERING.COM
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 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

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

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

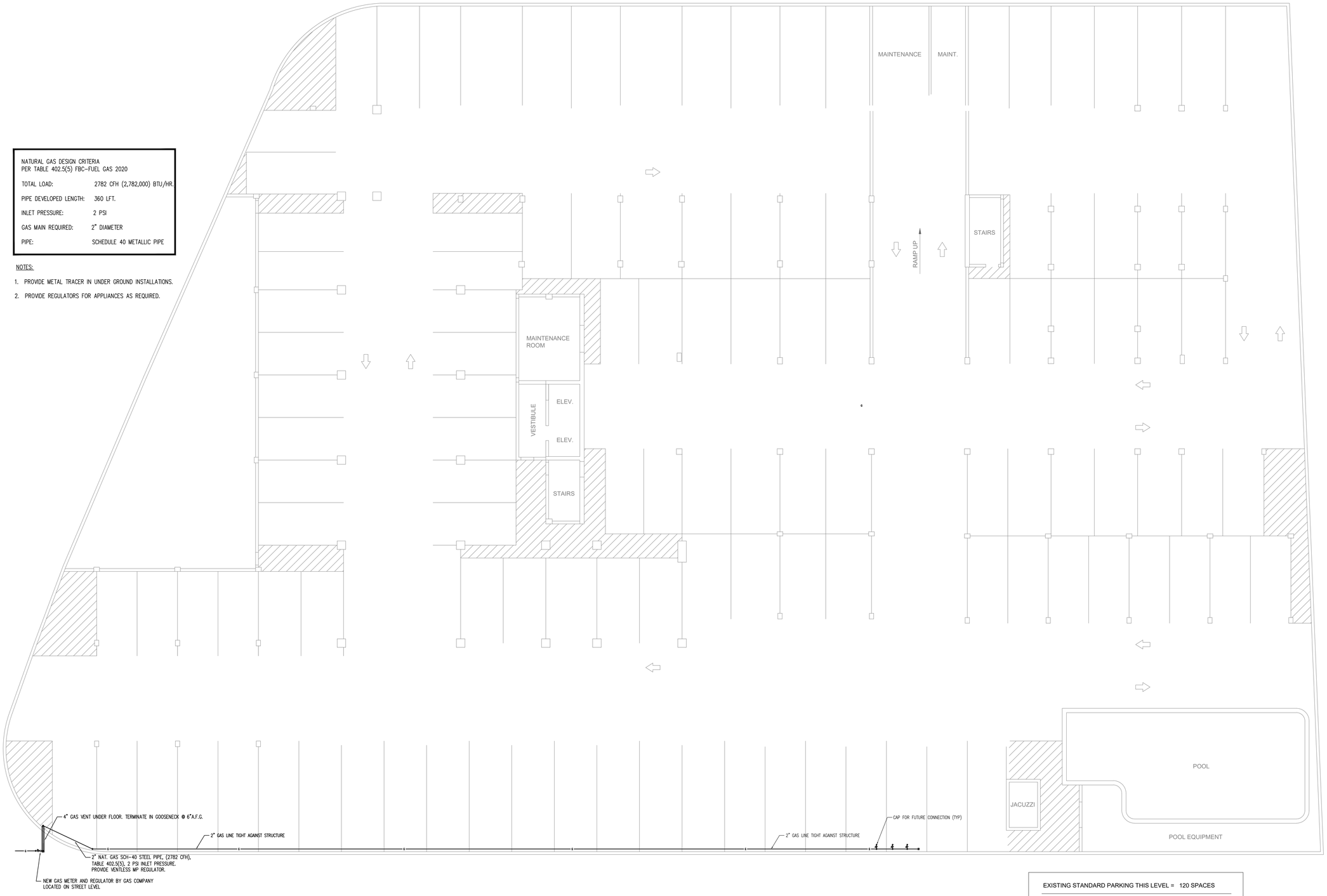
Sheet Title:
PLUMBING GAS
GARAGE PLAN

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.
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

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
VIDALENGINEERING.COM
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 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

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

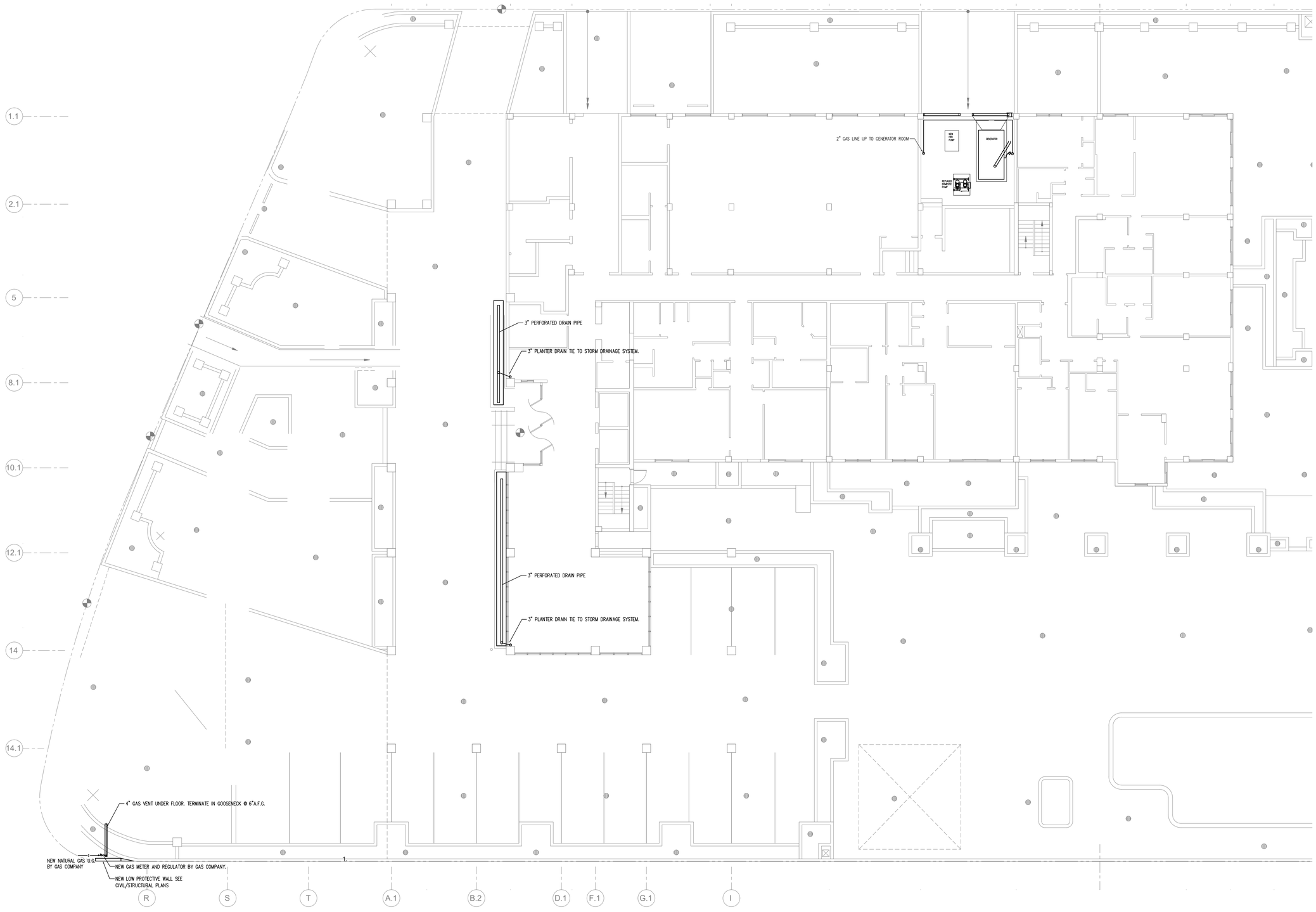
Project No.: 18217

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

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

morabito consultants

Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

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

FIRST FLOOR PARKING PLAN - GAS

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

H.VIDAL & ASSOCIATES
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
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
Structural Engineers | Remediation & Parking Consultants
206 Via Condado Way | Palm Beach Gardens, FL 33418-1701
561.316.7640 | www.morabitoconsultants.com

No.	Date	Revisions

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

Project No.: 18217

Date: 04-01-2021

Scale: AS SHOWN

Sheet Title:
NATURAL GAS - FIRST FLOOR PARKING PLAN

Sheet No.:
P-2A