STRUCTURAL NOTES

CODES AND STANDARDS

1. WIND LOADS AS PER:
   - A. FLORIDA BUILDING CODE 2023 EDITION, FOR A 150 MPH(ULT)/116 MPH(ASD) EXPOSURE C, +/-0.18 INTERNAL PRESSURE COEFFICIENT, 1.0 IMPORTANCE FACTOR, AND RISK CATEGORY II.
   - B. THIS BUILDING IS DESIGNED AS AN ENCLOSED BUILDING.
2. THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:
   - A. FLORIDA BUILDING CODE 2023 EDITION.
   - B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318/ 2019 EDITION).
   - C. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315/ LATEST EDITION).
   - D. MANUAL OF STANDARD PRACTICE FOR WELDING REINFORCING STEEL, INSERTS & CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION. AWS D1.4/ 2018 EDITION.
3. ARCHITECTURAL AND MECHANICAL DRAWINGS:
   - A. THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT.
   - B. REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, FINISHES, INSERTS, BOLTS SETTINGS, DRAINS, REGLETS, ETC.
   - C. BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS TO PROPERLY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
   - D. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK.
   - E. ALL STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS LISTED ONLY AS COMPLETED STRUCTURES. THE GENERAL CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT WORK IN PROGRESS UNTIL THE STRUCTURES ARE COMPLETED. THE GENERAL CONTRACTOR SHALL ALSO INSURE THAT ITS OPERATIONS AND PROCEDURES PROVIDE NO LOADING GREATER THAN THE DESIGN LOADS LISTED ON ANY MEMBER.
4. SECTIONS AND DETAILS:
   ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

SPECIALTY ENGINEERED PRODUCTS

1. THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED SHOP DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE SPECIALTY ENGINEERED SHOP DRAWINGS ARE SUBMITTED IN A TIMELY MANNER SO AS TO ALLOW REVIEWS AND RESUBMISSIONS AS REQUIRED. ALL SPECIALTY ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND WIND LOADS INCLUDING UPLIFT AND LATERAL LOADS. INTERIOR SPECIALTY PRODUCTS SHALL BE DESIGNED FOR LATERAL LOADS TO ASSURE STABILITY. SPECIALTY ENGINEERED PRODUCTS SHALL BE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
   - A. LIGHT GAUGE METAL INCLUDING, BUT NOT LIMITED TO, SOFFITS, CLADDING, CEILINGS, ETC.
   - B. MISCELLANEOUS METALS INCLUDING STEEL STAIRS, MECHANICAL EQUIPMENT SUPPORTS, FRAMES THAT SUPPORT MACHINES, PIPES OR OTHER STRUCTURAL METAL USED FOR SUPPORT OF MECHANICAL SYSTEMS.
   - C. MISCELLANEOUS HANGERS, METAL FRAMES, LADDERS, RIGGING, HANGING WALLS, METAL RAILINGS, SAFETY RAILINGS, GLAZING FRAMES, CLADDING SUCH AS STONE, PRECAST, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ETC. OR ANY OTHER MISCELLANEOUS PRODUCT REQUIRED BY ANY OF THE CONSTRUCTION DOCUMENTS.

FOUNDATION

1. ALL SITE PREPARATION AND EXCAVATION WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH THE:
   A. GEOTECHNICAL REPORT PREPARED BY NOVA ENGINEERING AND ENVIROMENTAL, LLC DATED AUGUST 15, 2024 (PROJECT No. 10106-2024065).
2. THE BUILDING SITE SHOULD BE EXCAVATED TO THE DEPTH AND EXTENT INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED IN WRITING BY THE SOILS ENGINEER PRIOR TO BACKFILLING.
3. BOTTOM OF FOOTINGS TO BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 2000 PSF.
4. TOP OF ALL FOOTINGS SHALL BE MINIMUM 12" BELOW EXTERIOR FINISH GRADE.
5. EXCAVATION & BACKFILL:
   - A. ALL EXCAVATION SHALL BE KEPT DRY. EXCAVATE TO DEPTHS AND DIMENSIONS INDICATED. TAKE EVERY PRECAUTION TO GUARD AGAINST ANY MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES, UTILITIES, PIPING, ETC.
   - B. PROVIDE ANY BRACING OR SHORING NECESSARY TO AVOID SETTLEMENT OR DISPLACEMENT OF EXISTING FOUNDATION OR STRUCTURES.
6. CENTERLINE OF FOOTINGS: SHALL COINCIDE WITH CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED ON DRAWINGS.
7. DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE PROCEEDING WITH ANY WORK.

CONCRETE

1. CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:
   A. FOUNDATIONS 3000 PSI
   B. SLAB-ON-GRADE 3000 PSI
   ALL OTHER CONCRETE TO BE 3000 PSI UNLESS NOTED OTHERWISE.
2. ALL CONCRETE SHALL BE READY MIX AND MEET THE FOLLOWING REQUIREMENTS:
   - A. A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS.
   - B. SLUMPS SHALL BE 4" MINIMUM AND 6" MAXIMUM.
   - C. CONCRETE SHALL HAVE 2 PERCENT AIR ENTRAINMENT.
   - D. ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.55.
   - E. JOBSITE WATER SHALL NOT BE ADDED.
3. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI BUILDING CODE, THE ACI DETAILING MANUAL (ACI 315/ LATEST EDITION), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301/ LATEST EDITION).
4. SUBMIT ALL REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.
5. CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY ACI SPECIFICATIONS.
6. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A 185, UNLESS OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLSTERS SPACED AT 3'-0" O.C.
7. REQUIREMENTS:
   - A. ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A 615 GRADE 60.
   - B. WWF SHALL COMPLY WITH ASTM A 185.
8. LAP ALL BARS MINIMUM 48 DIAMETERS UNLESS OTHERWISE NOTED ON DRAWINGS. LAP ALL WWF A MINIMUM OF 12 INCHES (UNLESS OTHERWISE NOTED).
9. REINFORCING BARS:
   - A. ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE ACI RECOMMENDED HOOKS UNLESS OTHERWISE NOTED.
10. CONSTRUCTION JOINTS IN STRUCTURAL SLABS AND BEAMS SHALL BE AT MID-SPAN AND KEY JOINTED WITH REINFORCING CONTINUOUS ACROSS JOINT AND ADDITIONAL SHEAR FRICTION REINFORCING. CONSTRUCTION JOINT LOCATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. CONSTRUCTION JOINTS IN POST-TENSION SLABS SHALL BE LOCATED AND DESIGNED BY SPECIALTY ENGINEER.
11. ALL MECHANICAL COUPLERS SHALL DEVELOP 1.25 FY OF REBAR IN TENSION OR COMPRESSION AND COMPLY WITH ACI 318.

MASONRY

1. MASONRY UNITS SHALL BE
   A. LOAD BEARING ASTM C 90
   B. TYPE II NON-MOISTURE CONTROLLED
   C. NORMAL WEIGHT
   D. ALL CMU SHALL BE LAID IN A FULL BED OF MORTAR IN RUNNING BOND (U.N.O.).
2. THE COMPRESSIVE STRENGTH OF MASONRY (F'M) SHALL BE 1,500 PSI AS CALCULATED IN ACCORDANCE WITH ASTM C1314.
3. ALL MORTAR SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION C270
   A. FROM FIELD OBTAINED TEST CUBES. (MIN. OF TWO)
4. GROUT SHALL BE A HIGH SLUMP MIX
   A. IN ACCORDANCE WITH ASTM SPECIFICATION C476
   B. HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI
   C. FROM FIELD OBTAINED TEST CUBES. (MIN. OF TWO)
5. ALL CONCRETE MASONRY BEARING AND SHEAR WALLS SHALL BE
   A. INSPECTED BY A CERTIFIED INSPECTION COMPANY AND CONSTRUCTED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENT FOR MASONRY STRUCTURES" (TMS 402) AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (TMS 602)/ 2016 EDITIONS.
6. PROVIDE 8" X 8" MASONRY BEAM WITH 2 #5 CONT. AT EVERY WINDOW SILL. EXTEND BEAM 8" BEYOND EDGE OF OPENING.
7. PROVIDE HOT DIPPED GALVANIZED LADDER TYPE HORIZONTAL JOINT REINFORCEMENT (9 GA.) AT 16" ON CENTER VERTICAL IN ALL MASONRY WALLS. PROVIDE DOVE TAIL SLOT ANCHORS AT CONCRETE COLUMNS.
   FOR JOINT REINFORCEMENT, WALL TIES, ANCHORS AND INSERTS, APPLY A MINIMUM COAT OF 1.5 OUNCES PER SQUARE FOOT (PSF) (458/G/M2) COMPLY WITH THE REQUIREMENTS OF ASTM A153, CLASS B.
8. EPOXY GROUT SHALL BE NON-SHRINK HIGH CREEP RESISTANT, AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:
   TENSILE STRENGTH, ASTM C 30: 1,500 PSI
   FLEXURAL STRENGTH, ASTM C 580: 4,000 PSI
   COMPRESSIVE STRENGTH, ASTM C 579: 1,600 PSI/7 DAYS.
9. MINIMUM LAP SPLICES FOR REINFORCED CMU (WITH F'M = 1,500 PSI):

CMU SIZE	BAR SIZE #4	#5	#6	#7	#8	#9
8"	25"	31"	36"	42"	48"	NOTE A

   - A. NOT ALLOWED. MAXIMUM BAR DIAMETER SHALL NOT EXCEED ONE-EIGHT OF NOMINAL WALL THICKNESS.
   - B. REINFORCING BARS LARGER THAN #9 SHALL BE SPLICED USING MECHANICAL CONNECTORS.
   - C. SCHEDULE IS ONLY FOR BARS CENTERED IN THE WALL. ALL EACH FACE REINFORCING BARS SHALL BE SPLICED.

STEEL

1. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC CODE. STRUCTURAL STEEL SHALL CONFORM TO:
   - A. ASTM SPECIFICATION A 992 GRADE 50 FOR ALL WIDE FLANGE BEAMS.
   - B. ASTM SPECIFICATION A 36 FOR MISCELLANEOUS STEEL SHAPES (ANGLES, PLATES, ETC.).
   - C. SQUARE OR RECTANGULAR HSS SHALL CONFORM TO ASTM SPECIFICATION A 500 GRADE B (FY=46 KSI).
   - D. ALL STEEL TO HAVE A SHOP COAT OF RUST INHIBITIVE PAINT.
   - E. DELETE PAINT ON ALL STEEL TO RECEIVE SPRAYED ON FIREPROOFING OR CONCRETE ENCASEMENT.
   - F. ALL MILL CAMBER TO BE ORIENTED UPWARD DURING FABRICATION AND ERECTION.
   - G. STEEL BEAMS INSTALLED IN PARALLEL WITH STEEL BAR JOISTS MUST HAVE CAMBER EQUAL TO BAR JOISTS.
2. ALL SHOP AND FIELD WELDING SHALL BE PERFORMED BY WELDERS QUALIFIED, AS DESCRIBED IN "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" (AWS D1.1), TO PERFORM THE TYPE OF WORK REQUIRED.
3. ALL CONNECTIONS SHALL BE BOLTED WITH 3/4" DIAMETER, A-325 HIGH STRENGTH BOLTS OR WELDED (UNLESS SHOWN OTHERWISE ON THE DRAWINGS).
   - A. ALL CONNECTIONS TO HOLLOW STRUCTURAL SECTION (HSS) COLUMNS ARE TO BE THRU-PLATE UNLESS NOTED OTHERWISE.
   - B. ALL CONNECTIONS SHALL BE DOUBLE ANGLES UNLESS NOTED OTHERWISE.
4. ALL ALUMINUM AND STEEL MEMBERS TO BE TREATED OR PROPERLY SEPARATED TO PREVENT GALVANIC AND CORROSIVE EFFECTS.
5. ALL STEEL WELDING RODS SHALL BE E70XX ELECTRODES.
6. SUBMIT ALL STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.
7. EQUIPMENT SUPPORTS:
   PROVIDE ALL SUPPORTING STEEL NOT INDICATED ON PLAN AS REQUIRED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT AND MATERIALS, INCLUDING ANGLES, CHANNELS, BEAMS, HANGERS, ETC. DO NOT SUPPORT EQUIPMENT OR PIPING FROM METAL DECKING.
8. DECK SUPPORTS:
   PROVIDE 1/4" BENT PLATES AT ALL HIPS, VALLEYS, SKEWED BEAMS AND OTHER AREAS FOR DECK SUPPORT.

SHOP DRAWINGS

1. THE SHOP DRAWINGS SHALL BE SUBMITTED IN COMPLETE PACKAGES FOR THE FOLLOWING:
   - A. CONCRETE MIX DESIGNS
   - B. CONCRETE REINFORCING STEEL AND WELDED WIRE FABRIC
   - C. CONCRETE MASONRY UNIT SUBMITTALS AND OTHER MASONRY ACCESSORIES
   - D. SUBGRADE COMPACTION TEST RESULTS(AS THEY RELATE TO THE STRUCTURAL FOUNDATION AND SLAB)
2. PRE-ENGINEERED ITEMS SHALL BE SUBMITTED SIGNED AND SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA.
3. CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING THEM TO ARCHITECT/ENGINEER.

INTERPLAN
INTERPLAN LLC

AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

BJARNE MADSEN LICENSE No.58683 STATE OF FLORIDA PROFESSIONAL ENGINEER

BJARNE MADSEN, P.E.
FL 58683

dansk consulting LLC

1673 LAKE BALDWIN LANE
ORLANDO, FLORIDA 32814
PH. (407) 252-4225
LIC EB28029
PROJECT # #25-11

NO DATE REMARKS
REVISIONS

7-ELEVEN
STORE #42659

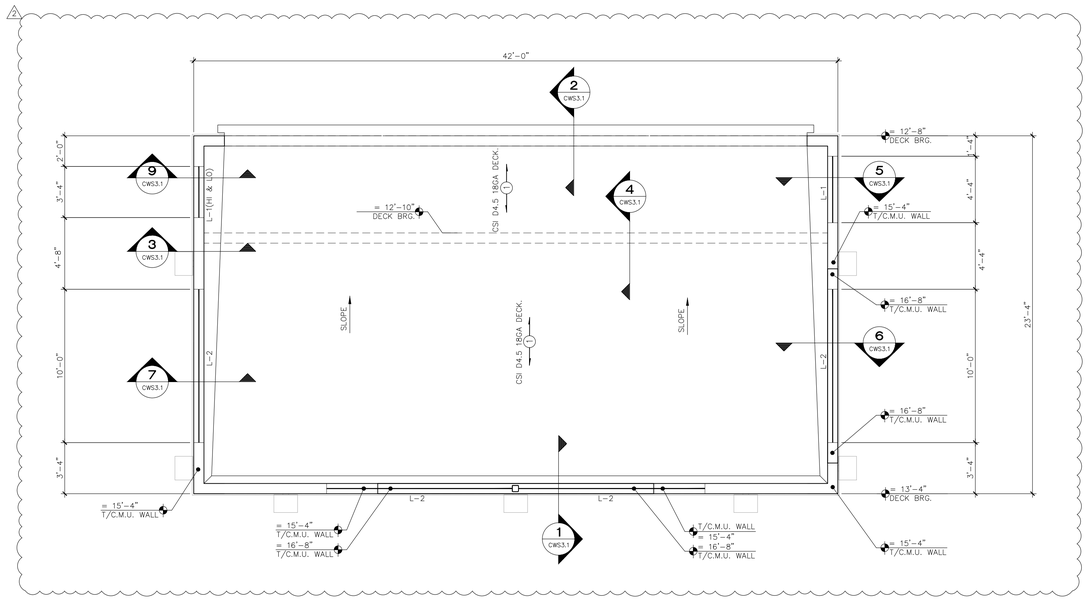
SWC OF ST JOHNS HERITAGE PKWY & EMERSON DR
PALM BAY, FL 32904

PROJECT NO: 2024.0313
DATE: APRIL 28, 2025

CWS0.1

CAR WASH
STRUCTURAL NOTES

CHECKED: BM DRAWN: RED



NOTE: VERIFY W/ ARCH. DRAWINGS ALL TOP OF PARAPET ELEVATIONS AND REPORT DISCREPANCIES TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

NOTE: VERIFY W/ ARCH. DRAWINGS ALL WALL OPENING SIZES AND LOCATIONS AND REPORT DISCREPANCIES TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

ROOF FRAMING PLAN

1/4" = 1'-0"

NORTH

ROOF FRAMING NOTES:

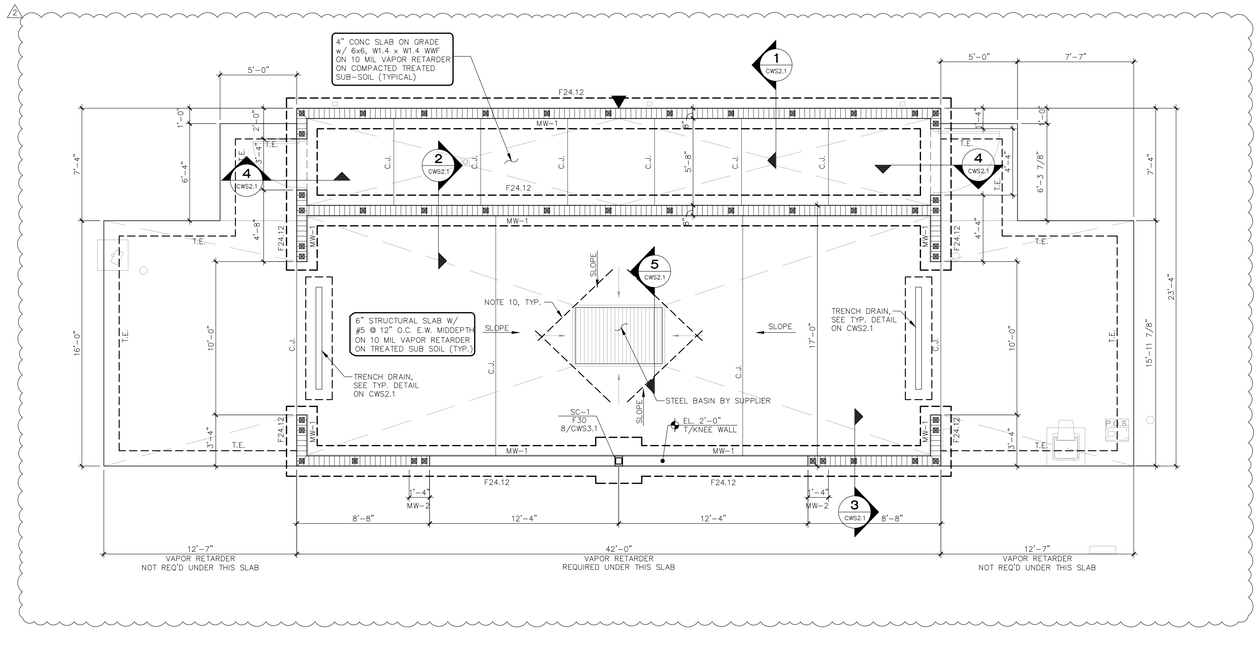
1.) SEE PLAN FOR DECK BEARING ELEVATION.

2.) —①— INDICATES NEW MILLENNIUM BLDG SYSTEMS DEEP-DEK 4.5"

3.) SEE ARCH FOR DIMENSIONS NOT SHOWN.

4.) ROOF DECK SHALL BE ATTACHED TO STRUCTURAL STEEL SUPPORTS WITH 1/2" EFFECTIVE WELD DIAMETER IN 12/2 PATTERN. SIDE LAP SHALL BE #10 SCREWS AT 18" O.C.

5.) L- INDICATES POWEL LINTEL, SEE SCHEDULE ON CWS3.1.



FOUNDATION PLAN

1/4" = 1'-0"

NORTH

FOUNDATION NOTES:

1. ELEV. ±0'-0" IS REFERENCE ONLY. SEE CIVIL FOR TRUE NGVD ELEVATION.
2. S.C. INDICATES SAW CUT SEE CWS2.1 FOR DETAILS.
3. TOP OF FOOTING ELEVATION = -1'-4" BELOW GRADE. ALL FOOTINGS TO BE CENTERED ON WALLS, COLUMNS, U.N.O.
4. VERIFY SLOPES AND STEPS WITH ARCH'L PRIOR TO CONSTRUCTION. SEE TYPICAL STEP DETAIL ON CWS2.1.
5. F## DENOTES CONCRETE FOOTING, SEE SCHEDULE ON CWS2.1.
6. ▣ INDICATES FILLED CELL. ALL MASONRY WALLS ARE MW-1 U.N.O., SEE SCHEDULE ON CWS2.1 FOR SIZE AND SPACING OF REBAR.
7. ▼ INDICATES WALL CONTROL JOINT, SEE DETAIL ON CWS2.1.
8. T.E. DENOTES THICKENED EDGE, SEE DETAIL ON CWS2.1.
9. SEE CWS2.1 FOR TYPICAL FOUNDATION, WALL AND SLAB DETAILS.
10. RE-ENTRANT BAR, SEE CWS2.1 FOR MORE INFORMATION.
11. SC-# DENOTES HSS COLUMN, SEE SCHEDULE ON CWS2.1.

INTERPLAN
INTERPLAN LLC

AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

BJARNE MADSEN LICENSE No.58683 STATE OF FLORIDA PROFESSIONAL ENGINEER

BJARNE MADSEN, P.E.
FL 58683

dansk consulting LLC

1673 LAKE BALDWIN LANE
ORLANDO, FLORIDA 32814
PH. (407) 252-4225
LIC EB28029
PROJECT # IP25-11

2 08/19/25 PHASE 3B COMMENTS
NO DATE REMARKS

REVISIONS

7-ELEVEN
STORE #42659

SWC OF ST JOHNS HERITAGE PKWY & EMERSON DR
PALM BAY, FL 32904

PROJECT NO: 2024.0313
DATE: APRIL 28, 2025

CWS1.1

CAR WASH
STRUCTURAL PLANS

CHECKED: BM DRAWN: RED

DESIGN LOAD SCHEDULE

(ALL LOADS SHOWN ARE IN POUNDS PER SQ. FT.)

COMPONENT \ AREA	ROOF
SYSTEM	25
TOTAL DEAD LOAD	25
TOTAL LIVE LOAD	20
TOTAL LOAD	45

RAIN LOAD = 15.6 PSF, RAIN INTENSITY = 4.5 IN/H

MASONRY WALL SCHEDULE

MARK	THICKNESS	REINFORCING
MW-1	8" CMU	#6 @ 48" O.C.(CENTERED)

MASONRY WALL NOTES:

1. WALL SEGMENTS SHALL BE REINFORCED WITH 9 GA. GALVANIZED LATERAL REINFORCING @ 16" O.C. HORIZ. EXTEND REINFORCING 6" INTO POURED ELEMENTS AND AROUND ENCASED STEEL.
2. ADJACENT TO ANY EXTERIOR/INTERIOR WALL OPENING, PLACE 1 #6 VERTICAL IN CELL GROUTED SOLID, FULL HEIGHT.
3. ALL MASONRY REINFORCED CELLS SHALL BE FILLED WITH 3000 PSI GROUT MIX.

FOOTING SCHEDULE

MARK	SIZE (WIDTH X DEPTH X LENGTH)	REINFORCING
F24.12	2'-0" X 12" X CONT.	(2) #5 CONT. BOTTOM
F.30	3'-0" X 3'-0" X 12"	(4) #5 E.W. BOTTOM

STEEL COLUMN SCHEDULE

MARK	SIZE	BASE PL	A.B.	REM
SC-1	HSS6x6x1/4	12x12x3/4	(4) 3/4"ø	SEE NOTE 1

NOTE:

1. PROVIDE 7x16x1/2 CAP PLATE W/(4) 5/8" ø X 8" BOLTS.

ROOF WIND PRESSURE (PSF)

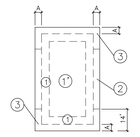
COMPONENTS AND CLADDING-EXP C-116 MPH(ASD) WIND SPEED

EFFECTIVE WIND AREA (SQ. FT.)	ROOF AREA 1/1'	2	3
10	+13.5/-33.4	+13.5/-56.1	+13.5/-84.4
20	+12.9/-32.5	+12.9/-50.1	+12.9/-69.9
50	+12.9/-31.5	+12.9/-42.2	+12.9/-50.7
100	+12.9/-30.6	+12.9/-36.2	+12.9/-36.2

IMPORTANCE FACTOR 1.0

NOTES:

1. WIND DESIGN PER FBC-2023
2. +: INDICATES WIND PRESSURE -: INDICATES WIND SUCTION
3. ROOF DISTANCE A = 6 FT (COMPONENTS AND CLADDING)
4. FOR EFFECTIVE WIND AREAS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE WIND AREA
5. MULTIPLY VALUES WITH 1.67 FOR ULT.



PLAN

DOOR & WINDOW WIND PRESSURE (PSF)

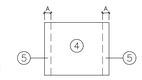
COMPONENTS AND CLADDING-EXP C-116 MPH(ASD) WIND SPEED

SIZE OF WALL OPENING (SQ. FT.)	WALL AREA 4	5
10	+33.4/-36.2	+33.4/-44.8
20	+31.9/-34.7	+31.9/-41.8
50	+29.9/-32.8	+29.9/-37.8
100	+28.4/-31.2	+28.4/-34.7

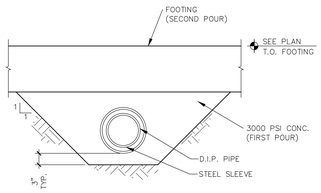
IMPORTANCE FACTOR 1.0

NOTES:

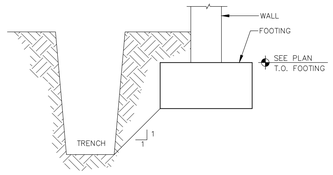
1. WIND DESIGN PER FBC-2023
2. +: INDICATES WIND PRESSURE -: INDICATES WIND SUCTION
3. WALL DISTANCE A = 6 FT (COMPONENTS AND CLADDING)
4. FOR WALL OPENINGS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER WALL OPENING AREA.
5. MULTIPLY VALUES WITH 1.67 FOR ULT.



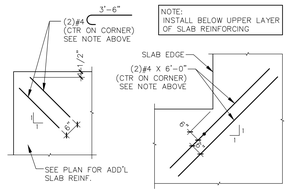
WALL ELEVATION



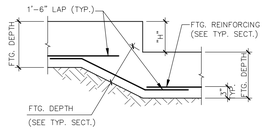
TYP. PIPE UNDER FTG.



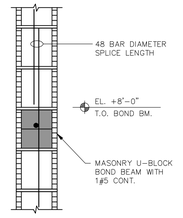
TYP. FTG. ADJACENT TO TRENCH



TYP. SLAB CORNER REINF.



TYP. STEPPED FTG.

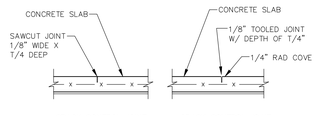


NOTES:

1. WHERE HEIGHT OF MASONRY WALL SEGMENT EXCEEDS 12'-0", INTERMEDIATE BOND BEAM IS REQUIRED.
2. BOND BEAM REINFORCEMENT MUST BE CONT. HOOK BARS INTO REINFORCED JAMB AT WALL OPENINGS.
3. OMIT BOND BEAMS WHERE IT COINCIDES WITH OPENING HEADERS (LINTELS/BEAMS). REINFORCEMENT MUST BE CONTINUOUS AT SUCH LOCATIONS.

TYPICAL BOND BEAM DETAIL

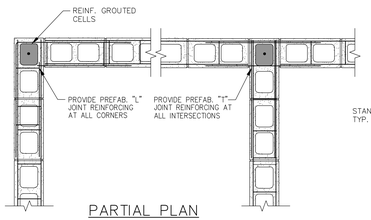
N.T.S.



NOTE: THE SLAB SHALL BE SAW-CUT AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO WITHSTAND CHIPPING, SPALLING, OR TEARING (WITHIN 8 HRS)

TYPICAL SLAB-ON-GRADE

NOTE: CONTROL JOINTS/CONSTRUCTION JOINTS SHALL CREATE PANELS OF 400 SQ. FEET (MAXIMUM)



PARTIAL PLAN

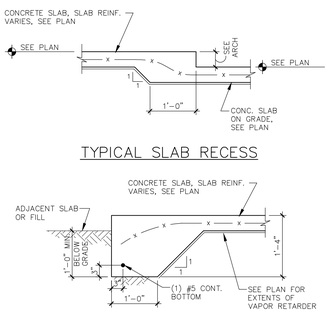
TYPICAL CMU WALL DETAILS

N.T.S.

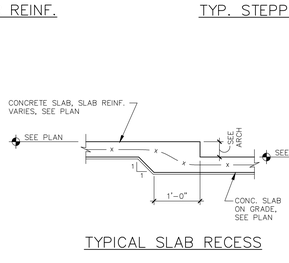
CORNER BAR(S) DETAIL

INTERSECTION BAR(S) DETAIL

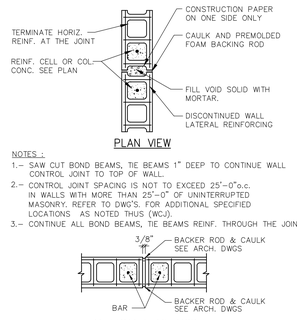
TYPICAL BAR DETAILS



THICKENED EDGE (T.E.)



TYPICAL SLAB RECESS



PLAN VIEW

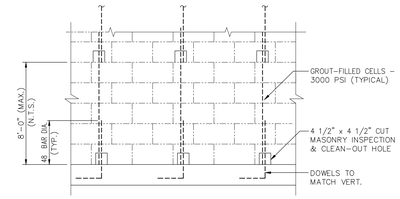
NOTES :

1.- SAW CUT BOND BEAMS, TIE BEAMS 1" DEEP TO CONTINUE WALL CONTROL JOINT TO TOP OF WALL.
2.- CONTROL JOINT SPACING IS NOT TO EXCEED 25'-0"o.c. IN WALLS WITH MORE THAN 25'-0" OF UNINTERRUPTED MASONRY. REFER TO DWG'S. FOR ADDITIONAL SPECIFIED LOCATIONS AS NOTED THUS (WCJ).
3.- CONTINUE ALL BOND BEAMS, TIE BEAMS REINF. THROUGH THE JOINT.

ALTERNATE METHOD

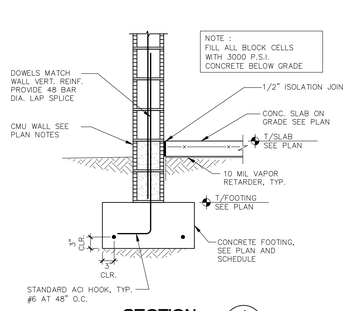
CMU WALL CONTROL JOINT (WCJ) DETAIL

N.T.S.



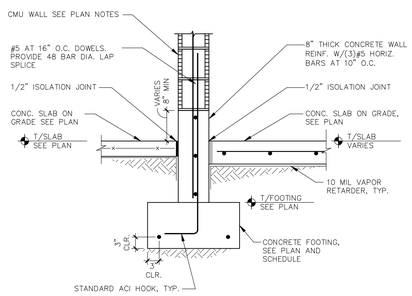
TYPICAL MASONRY FILLED CELL DETAIL

N.T.S.



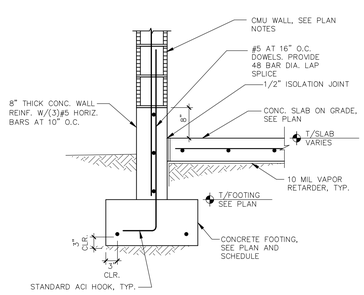
SECTION 1 — CWS2.1

3/4"=1'-0"



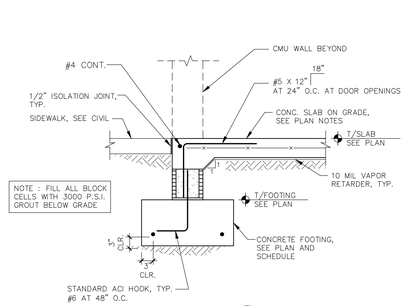
SECTION 2 — CWS2.1

3/4"=1'-0"



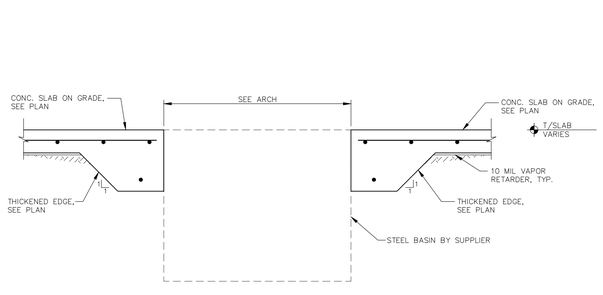
SECTION 3 — CWS2.1

3/4"=1'-0"



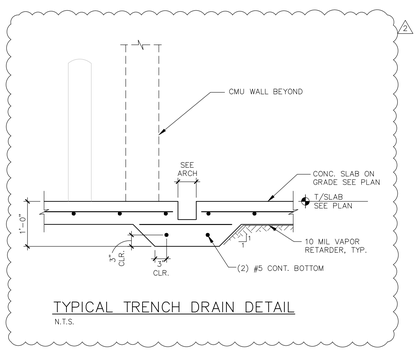
SECTION 4 — CWS2.1

3/4"=1'-0"



SECTION 5 — CWS2.1

3/4"=1'-0"



TYPICAL TRENCH DRAIN DETAIL

N.T.S.

INTERPLAN
INTERPLAN LLC

AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

BJARNE MADSEN, P.E.
FL 58683

dansk consulting LLC

1673 LAKE BALDWIN LANE
ORLANDO, FLORIDA 32814
PH. (407) 252-4225
LIC EB28029
PROJECT # IP25-11

2 08/19/25 PHASE 3B COMMENTS
NO DATE REMARKS

REVISIONS

7-ELEVEN
STORE #42659

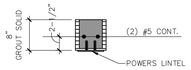
SWC OF ST JOHNS HERITAGE PKWY & EMERSON DR
PALM BAY, FL 32904

PROJECT NO: 2024.0313
DATE: APRIL 28, 2025

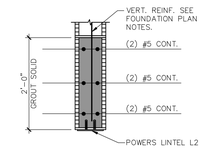
CWS2.1

TYPICAL DETAILS AND SECTIONS

CHECKED: BM DRAWN: RED



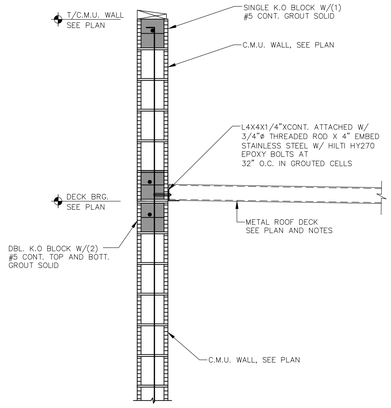
L-1



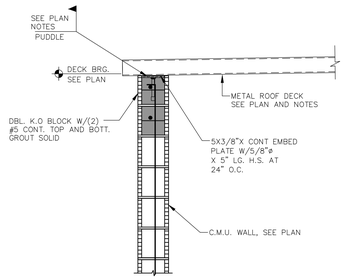
L-2

NOTES:
1. SHORE PRECAST LINTEL PER MANUFACTURER RECOMMENDATIONS.
2. SEE THE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS.
3. PROVIDE 3" PLUS OR MINUS 1". BEARING SHALL BE ON A MIN. 8" DEEP GROUTED CELL.

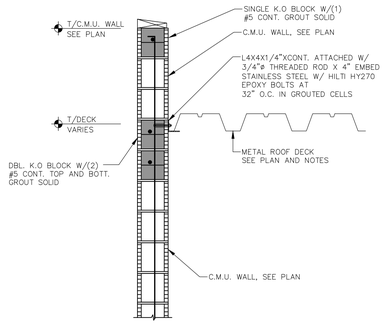
POWERS LINTEL SCHEDULE
N.T.S.



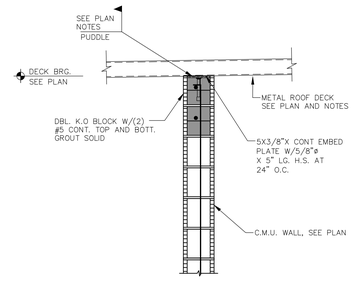
SECTION 1 — 3/4"=1'-0" — CWS3.1



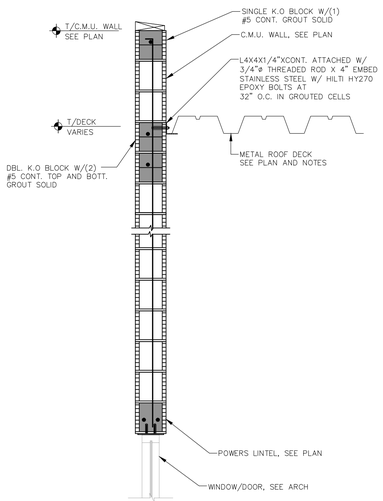
SECTION 2 — 3/4"=1'-0" — CWS3.1



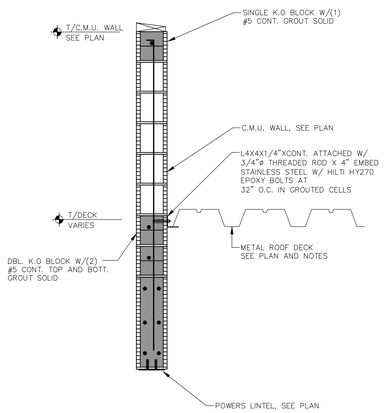
SECTION 3 — 3/4"=1'-0" — CWS3.1



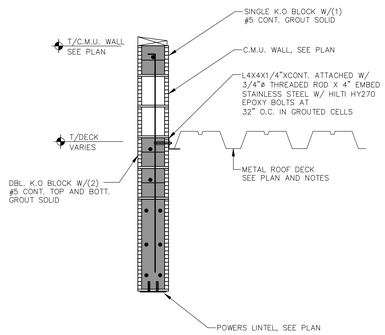
SECTION 4 — 3/4"=1'-0" — CWS3.1



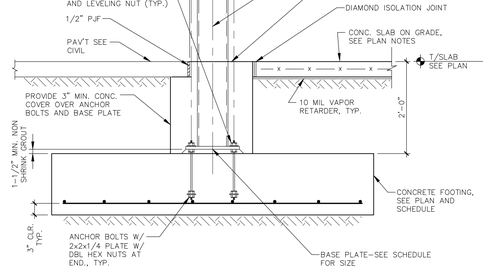
SECTION 5 — 3/4"=1'-0" — CWS3.1



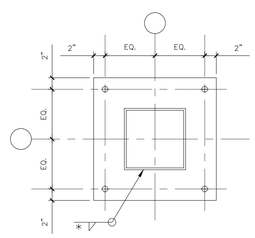
SECTION 6 — 3/4"=1'-0" — CWS3.1



SECTION 7 — 3/4"=1'-0" — CWS3.1

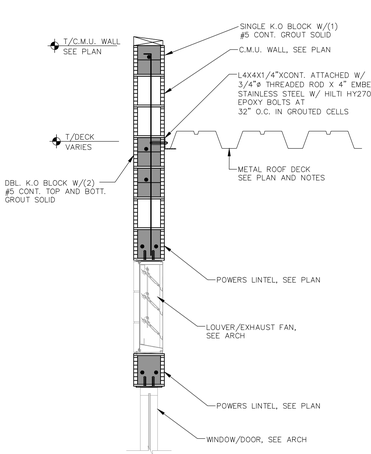


SECTION 8 — 3/4"=1'-0" — CWS3.1



BASE PLATE DETAIL
* WELD SIZE EQUAL TO COL. WALL THICKNESS

SECTION A — 1-1/2"=1'-0" — CWS3.1



SECTION 9 — 3/4"=1'-0" — CWS3.1

INTERPLAN
INTERPLAN LLC

AR99238
C.A 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

BJARNE MADSEN, P.E.
FL 58683

dansk consulting LLC

1673 LAKE BALDWIN LANE
ORLANDO, FLORIDA 32814
PH. (407) 252-4225
LIC EB28029
PROJECT # IP25-11

NO DATE REMARKS
REVISIONS

7-ELEVEN
STORE #42659

SWC OF ST JOHNS HERITAGE PKWY & EMERSON DR
PALM BAY, FL 32904

PROJECT NO: 2024.0313
DATE: APRIL 28, 2025

CWS3.1
TYPICAL DETAILS AND SECTIONS

CHECKED: BM DRAWN: RED