

SUMMERVILLE PARKING GARAGE SPALLING ASSESSMENT AND REPAIR

109 CENTRAL AVENUE
SUMMERVILLE, SC 29483

PROJECT NUMBER: CEMS 21009

ISSUE DATE: 12 JAN 2022

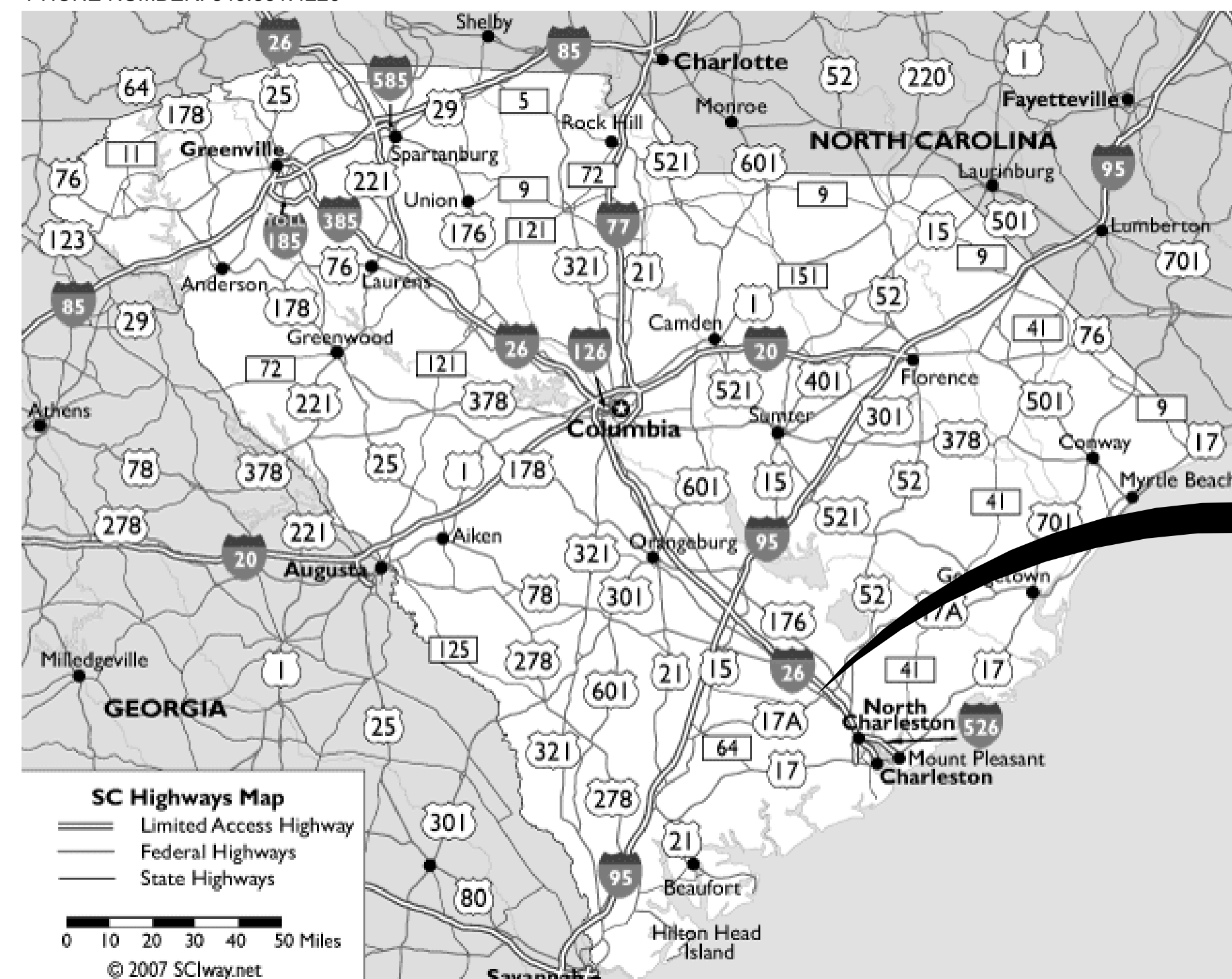
OWNER

OWNER'S REPRESENTATIVE: RUSSELL W. CORNETTE, JR, PE
POSITION: DIRECTOR OF PUBLIC WORKS & TOWN ENGINEER
TOWN OF SUMMERVILLE
200 S MAIN ST
SUMMERVILLE, SC 29483
PHONE NUMBER: 843.851.4226

ENGINEERING/ARCHITECTURE

CEMS ENGINEERING, INC
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SUMMERVILLE, SC 29485
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PROJECT MANAGER: BRAD MINOR, PE, MLSE

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SHEET NO.	SHEET TITLE
GENERAL	
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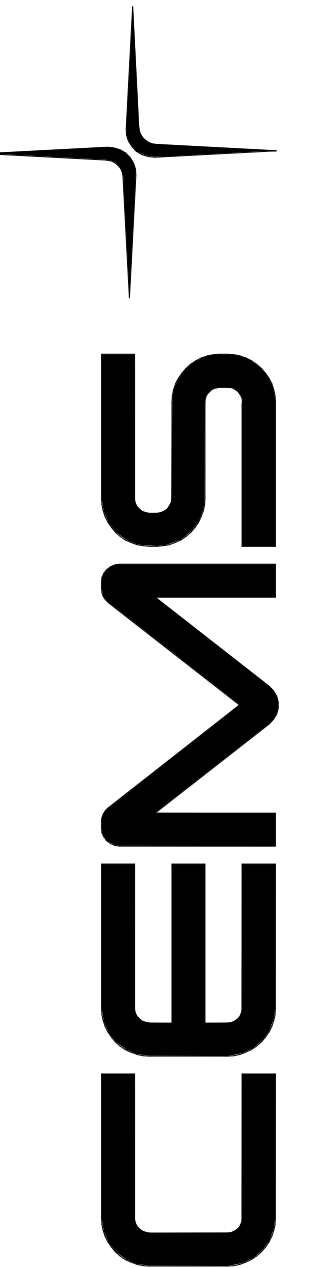
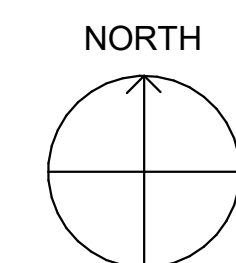


STATE LOCATION MAP
SCALE: NOT TO SCALE



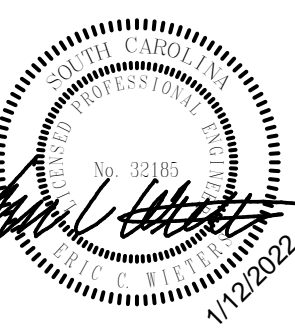
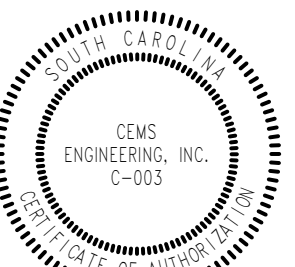
SITE LOCATION MAP
SCALE: NOT TO SCALE

AREA OF WORK



SUMMERVILLE PARKING GARAGE
JOB TITLE

COVER SHEET / INDEX OF DRAWINGS
SHEET TITLE



REVISIONS

NO.	DESCRIPTION	DATE

J. LI / W. ORIANI
DRAWN

J. LI / W. ORIANI
DESIGNED

E. WIETERS
CHECKED

B. MINOR
APPROVED

1/12/2022
ISSUE DATE

21009
JOB NO.

G-001
SHEET NO.

DESIGN REFERENCES:

REFERENCE STANDARDS

ACI 301-16	SPECIFICATIONS FOR STRUCTURAL CONCRETE
ACI 318-14	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AISC 325-17	STEEL CONSTRUCTION MANUAL, 15TH EDITION
ASCE/SEI 7-16	MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
AWS D1.1	STRUCTURAL WELDING CODE-STEEL, 2018 EDITION
IBC 2018	INTERNATIONAL BUILDING CODE, 2018 EDITION
IEBC 2018	INTERNATIONAL EXISTING BUILDING CODE, 2018 EDITION

RECORD DRAWINGS:

- "SUMMERVILLE TOWN HALL" (20 OCT 2006). LIOLLIO ARCHITECTURE AND CARL WALKER, INC.
- "SUMMERVILLE TOWN HALL PARKING GARAGE" (7 JAN 2007). FLORENCE CONCRETE PRODUCTS, INC.

GENERAL NOTES:

- THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENT PARTS ARE IN PLACE. THEREFORE, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING AS REQUIRED TO ENSURE STABILITY DURING CONSTRUCTION.
- WHEN A DETAIL IS SHOWN ON THE STRUCTURAL DRAWINGS FOR ONE CONDITION, IT SHALL APPLY TO ALL SIMILAR OR LIKE CONDITIONS, UNLESS NOTED OR SHOWN OTHERWISE ON THE DRAWINGS.
- THE STRUCTURE REPAIRMENT IS DESIGNED IN ACCORDANCE WITH IBC 2018, IEBC 2018 AND ASCE 7-16.
- DESIGN CRITERIA:

A: FLOOR LIVE LOAD:	50 PSF
B: ROOF LIVE LOAD:	20 PSF
C: GROUND SNOW LOAD, Pg:	5 PSF
D: WIND LOADS	
a. ULTIMATE WIND SPEED, Vult:	140 MPH
b. NOMINAL WIND SPEED, Vasd:	109 MPH
c. RISK CATEGORY:	II
d. WIND EXPOSURE:	B
E: SEISMIC LOADS	
a. RISK CATEGORY:	II
b. SEISMIC IMPORTANCE FACTOR, Ie:	1.00
c. MAPPED SPECTRAL RESPONSE,	S _s = 1.877 S _i = 0.564
d. SITE CLASS:	E
f. SEISMIC DESIGN CATEGORY:	D

SUGGESTED REPAIR PROCEDURE A

PRECAST CONCRETE MEMBER CRACKING AND SPALLING:

- CHIP SPALLED AND LOOSE CONCRETE DOWN TO COMPETENT AND SOLID MATERIAL TO A SURFACE ROUGHNESS PROFILE PER ICRI GUIDELINE 310.2R CSP 5-9. SAW-CUT THE PERIMETER OF THE REPAIR AREA.
- REMOVE CONCRETE A MINIMUM OF 3/4" CLEAR OF CORRODED REBAR.
- WIRE BRUSH OR SHOT BLAST REBAR AND ANY EXPOSED EMBEDDED STEEL FEATURES CLEAN OF CORROSION AND RUST.
- TREAT ALL EXPOSED REBAR AND STEEL FEATURES WITH SIMPSON STRONG-TIE FX-406 ZINC-RICH PRIMER.
 - MUST BE INSTALLED WITH SURFACE TEMPERATURES BETWEEN 50° AND 95°, PREFERABLE 70°
 - APPLY TO DRY SURFACES ONLY
 - TWO COATS RECOMMENDED (FIRST COAT MUST BE DRY TO THE TOUCH PRIOR TO APPLICATION OF SUBSEQUENT COATING).
- FORM THE REPAIR AREA TO DESIRED SHAPE TO RECEIVE SIMPSON STRONG-TIE FX-225 NON-SHRINK UNDERWATER GROUT.
- INSTALL FX-225 PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MOST IMPORTANTLY, SURFACE OF EXPOSED CONCRETE TO RECEIVE REPAIR GROUT SHOULD BE BROUGHT TO A SURFACE SATURATED DRY CONDITION (SSD).

PREPARATION:

- FORMED APPLICATIONS: CONCRETE AND REINFORCING STEEL TO RECEIVE REPAIR MORTAR MUST BE SOUND, CLEAN, AND FREE OF ALL CONTAMINANTS THAT COULD IMPAIR PRODUCT ADHESION, BOND, OR PERFORMANCE. PREPARE CONCRETE AND REINFORCING STEEL IN ACCORDANCE WITH ICRI GUIDELINE 310.1R. SAW-CUT THE PERIMETER OF THE REPAIR AREA, TAKING CARE TO AVOID CUTTING ANY REINFORCING STEEL. REMOVE ALL LOOSE OR DETERIORATED CONCRETE BY CHIPPING HAMMER, WATER JETTING, OR OTHER MECHANICAL MEANS TO REACH SOUND CONCRETE AND ACHIEVE AN OPEN PORE STRUCTURE AND SURFACE PROFILE PER ICRI GUIDELINE 310.2R CSP 5-9. TAKING CARE TO AVOID MICRO-CRACKING. REMOVE ALL CORROSION, RUST, AND SURFACE CONTAMINANTS FROM REINFORCING STEEL BY SANDBLASTING OR OTHER MECHANICAL MEANS. REMOVE ALL CLEANING MEDIA AND DEBRIS BY WATER JETTING, VACUUM OR BLOWING WITH HIGH-PRESSURE, OIL-FREE AIR.
- APPLICATIONS: PRIME EXPOSED REINFORCING STEEL WITH FX-406 ZINC-RICH PRIMER. PRIOR TO INSTALLATION OF FX-225, SATURATE THE SURFACE WITH POTABLE WATER BY PONDING OR OTHER MEANS TO ACHIEVE A SATURATE SURFACE DRY (SSD) SURFACE CONDITION. THE SUBSTRATE SHOULD BE SATURATE SURFACE DRY (SSD) WITH NO STANDING WATER REMAINING AT THE TIME OF APPLICATION. WHEN IMPRACTICAL TO ACHIEVE AN SSD SURFACE CONDITION OR TO IMPROVE BOND STRENGTH, APPLY A BONDING AGENT SUCH AS SIMPSON STRONG-TIE FX-792LPL LONG-POT-LIFE EPOXY BONDING AGENT TO THE REPAIR AREA PRIOR TO FX-225 INSTALLATION. FX-225 MUST BE APPLIED WHILE BONDING AGENT IS STILL WET. DO NOT APPLY MORE BONDING AGENT THAN CAN BE EFFECTIVELY COVERED WITH FX-225 WHILE REMAINING WET.
- FORMING: FORMS MUST BE LIQUID TIGHT TO PREVENT LEAKAGE DURING INSTALLATION. USE APPROPRIATE SEALANTS OR PUTTIES TO SEAL ALL SURFACES TO PREVENT LEAKS. USE AN APPROPRIATE RELEASE AGENT PRIOR TO ERECTING FORMS TO IMPROVE RELEASE. DO NOT ALLOW RELEASE AGENT TO BE APPLIED TO ANY NON-FORMED SURFACES AS IT CAN INHIBIT THE BOND OF FX-225.

EXECUTION:

- FORMED APPLICATIONS: REMOVE ALL STANDING WATER BY VACUUM OR BLOWING WITH OIL-FREE, COMPRESSED AIR PRIOR TO INSTALLATION. FX-225 MUST BE INSTALLED ON SSD CONCRETE SURFACES OR IN CONJUNCTION WITH A BONDING AGENT. TAKE APPROPRIATE MEASURES TO PROTECT REPAIRS FROM WIND AND HIGH TEMPERATURES UNTIL FULLY CURED. AVOID APPLYING IN DIRECT SUNLIGHT. DO NOT EXCEED FORM DESIGN PRESSURE RATING.
- INSTALLATIONS WITHOUT BONDING AGENT: POUR OR PUMP FX-225 INTO THE FORM. STRIKE OFF WITH TROWEL OR SCREED SURFACE AND ALLOW PRODUCT TO SET. FINISH WITH A WOOD OR SPONGE FLOAT, OR BROOM.
- CURING: IMMEDIATELY FOLLOWING FINISHING, WET-CURE ALL EXPOSED AREAS OF FX-225 IN ACCORDANCE WITH ACI 308 OR USE AN ASTM C309 COMPLIANT CURING COMPOUND. THE USE OF CURING COMPOUNDS MAY AFFECT ADHESION OF SUBSEQUENT SURFACE TREATMENTS.

SUGGESTED REPAIR PROCEDURE B

CORRODED STEEL CONNECTIONS AND BEARING PLATES

- WIRE BRUSH OR SHOT BLAST STEEL CLEAN OF CORROSION AND RUST.
- PRIME WITH SIMPSON STRONG-TIE FX-406 ZINC-RICH PRIMER.
- PAINT WITH HIGH PERFORMANCE TOP COAT.

SUGGESTED REPAIR PROCEDURE C

SLAB CRACKING

- ROUTER CRACKS WITH SPALLED EDGES TO RECTANGULAR PROFILE.
- ROUTER NARROW OR IRREGULAR CRACKS AS REQUIRED TO FILL.
- GRIND UNEVEN AND VERTICALLY OFFSET CRACKS TO EVEN HORIZONTAL PROFILE.
- CLEAN CRACKS OF DEBRIS.
- FILL CRACKS WITH SEMI-RIGID EPOXY FILLER TO EVEN SURFACE PROFILE.

STRUCTURAL ABBREVIATIONS:

A	
A.F.F.	ABOVE FINISHED FLOOR
A.B.	ANCHOR BOLT
&	AND
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
@	AT

B	
BM.	BEAM
BLKG.	BLOCKING
BOT.	BOTTOM
B.O.	BOTTOM OF
BRDG.	BRIDGING
BLDG.	BUILDING

C	
C.I.P.	CAST IN PLACE
CLG.	CEILING
CL.	CENTERLINE
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONN.	CONNECTION
CONT.	CONTINUOUS
C.J.	CONTROL JOINT
COORD.	COORDINATE

D	
°	DEGREE
DEMO.	DEMOLITION
DET.	DETAIL
Ø	DIAMETER
DIM.	DIMENSION

E	
EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
ELEC.	ELECTRICAL OR ELECTRIC
EL.	ELEVATION
E.O.R.	ENGINEER OF RECORD
EQ.	EQUAL
EX.	EXISTING
E.J. (EXP. JT.)	EXPANSION JOINT
EXP.	EXPANSION/EXPOSED
EXT.	EXTERIOR

F	
F.S.	FAR SIDE
FT.	FEET
FRP	FIBER REINFORCED POLYMER
FIN.	FINISH
F.F.	FINISHED FLOOR
FLR.	FLOOR
FTG.	FOOTING

G	
GA.	GAGE OR GAUGE
GALV.	GALVANIZED
Gr.	GRADE

H	
HORIZ.	HORIZONTAL

I	
IN.	INCH
I.D.	INSIDE DIAMETER
INT.	INTERIOR

J	
JT.	JOINT
JST.	JOIST

K	
KSI	KIPS/SQUARE INCH

L	
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG.	LONGITUDINAL

M	
MATL.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MTL	METAL
MPH	MILE PER HOUR
MIN.	MINIMUM
MISC.	MISCELLANEOUS

N	
N.S.	NEAR SIDE
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
NO. (#)	NUMBER

O	
O.C.	ON CENTER
O.H.	OPPOSITE HAND
O.D.	OUTSIDE DIAMETER

P	
PL	PLATE
LBS.	POUNDS
PCF	POUNDS/CUBIC FOOT
PSF	POUNDS/SQUARE FOOT
PSI	POUNDS/SQUARE INCH
PEMB	PRE-ENGINEERED METAL BUILDING
PC	PRECAST
PT	PRESSURE TREATED
PROJ.	PROJECTION

R	
REF.	REFERENCE
RC.	REINFORCED CONCRETE
REINF.	REINFORCEMENT
REQ'D	REQUIRED
REV.	REVISIONS / REVISED

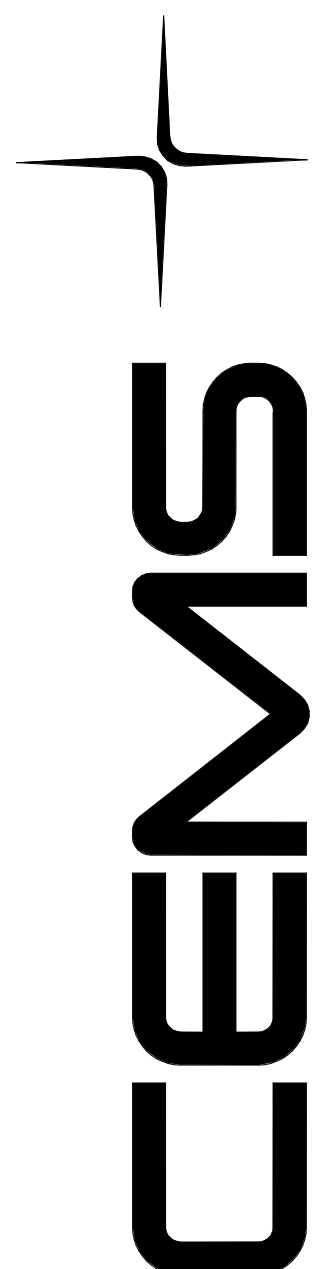
S	
SECT.	SECTION
SIM.	SIMILAR
S.O.G.	SLAB ON GRADE
SL.	SLOPE
SPEC.	SPECIFICATION
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STRUC.	STRUCTURAL

T	
T&B	TOP & BOTTOM
T.O.	TOP OF
TRANS.	TRANSVERSE
TYP.	TYPICAL

U	
U.N.O.	UNLESS NOTED OTHERWISE

V	
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL

W	
WWR	WELDED WIRE REINFORCEMENT
W/	WITH
W/O	WITHOUT
WP	WORKING POINT

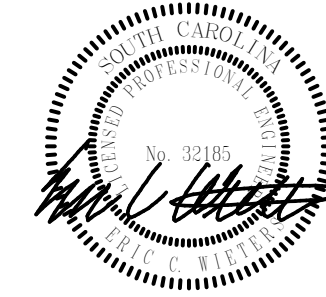
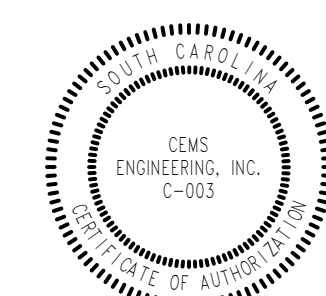


SUMMERVILLE PARKING GARAGE

JOB TITLE

GENERAL NOTES, DESIGN LOADS, AND SUGGESTED REPAIR PROCEDURES

SHEET TITLE



REVISIONS

NO.	DESCRIPTION	DATE

J. LI
DRAWN

J. LI
DESIGNED

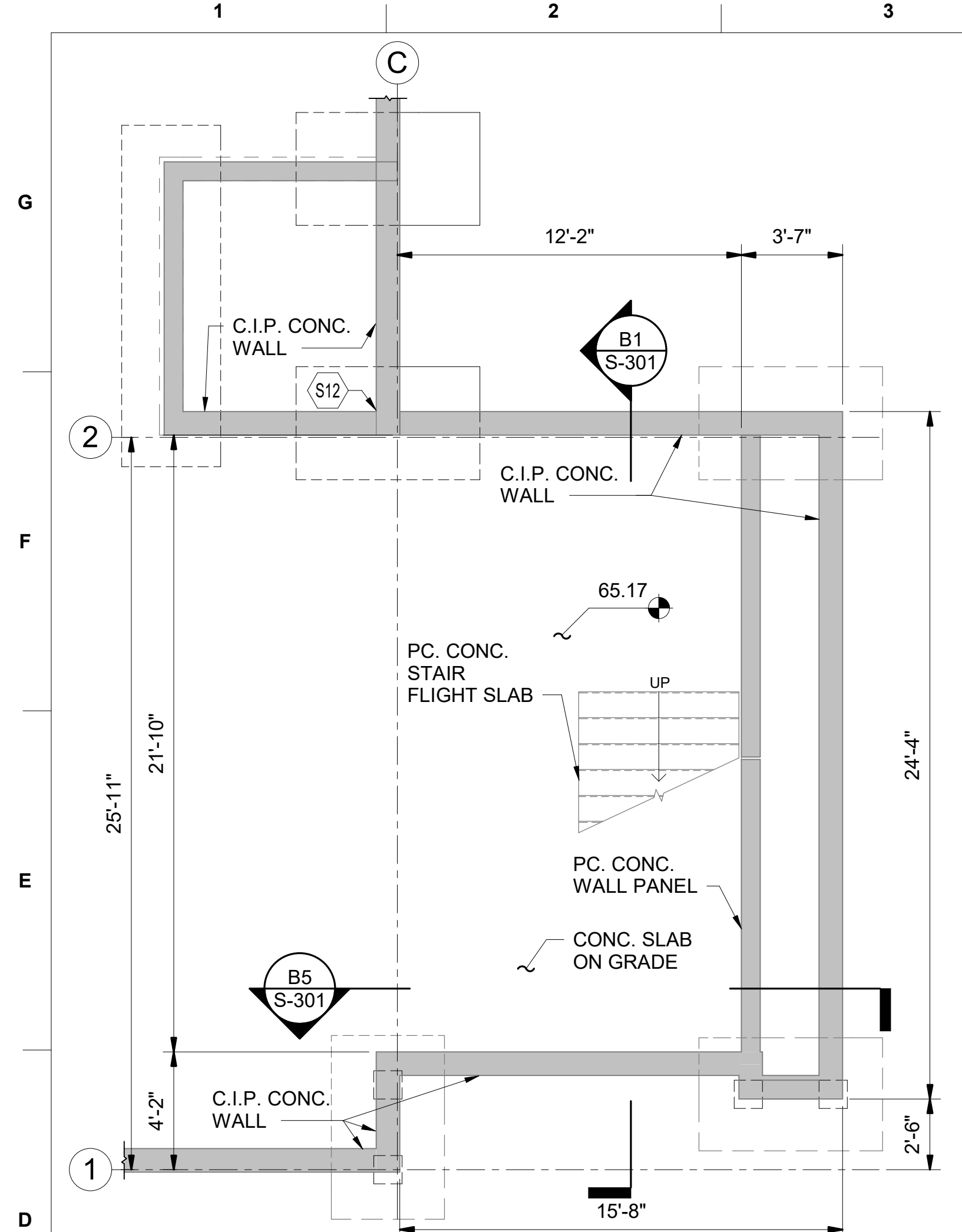
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CHECKED

B. MINOR
APPROVED

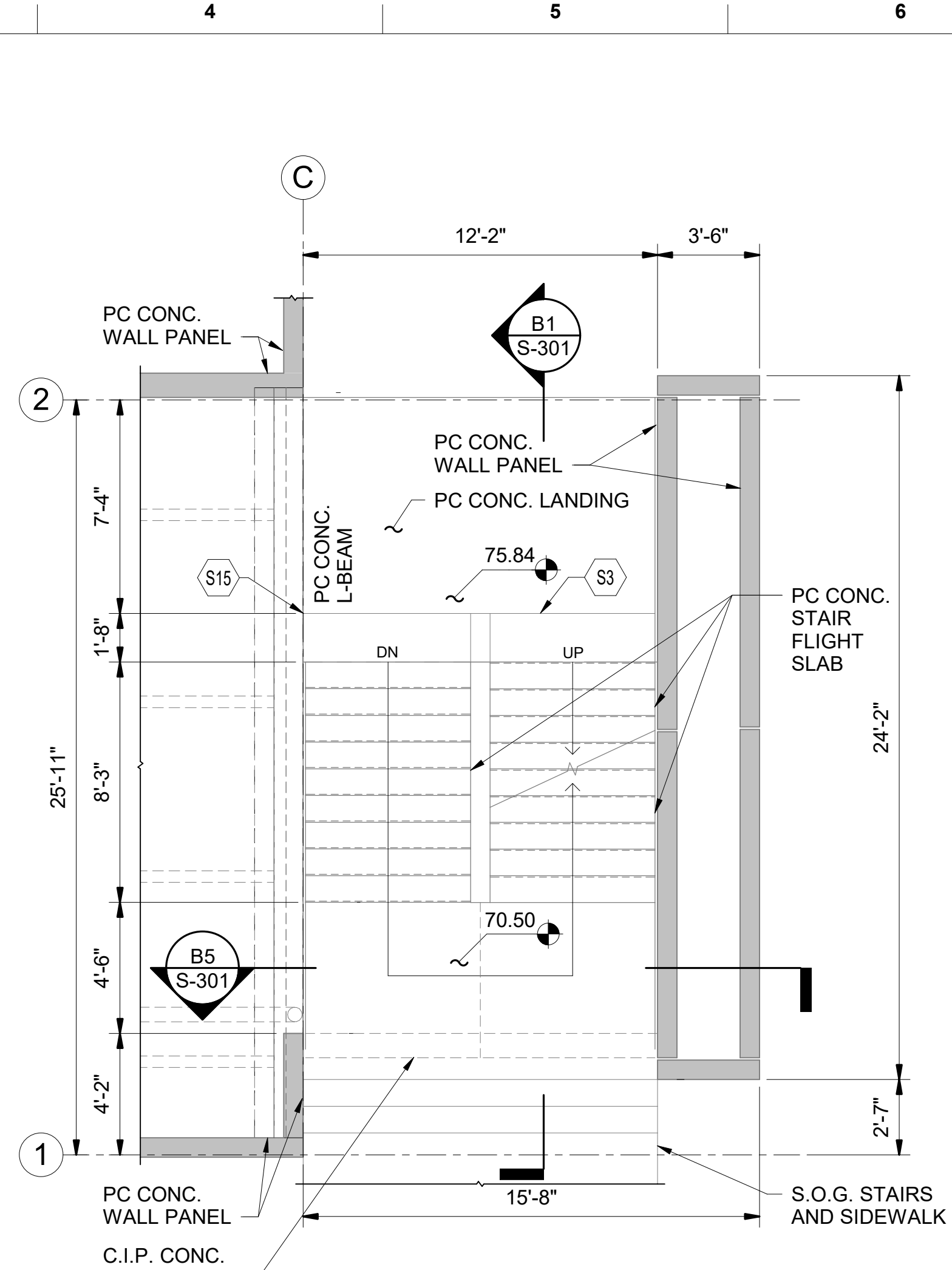
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ISSUE DATE

21009
JOB NO.

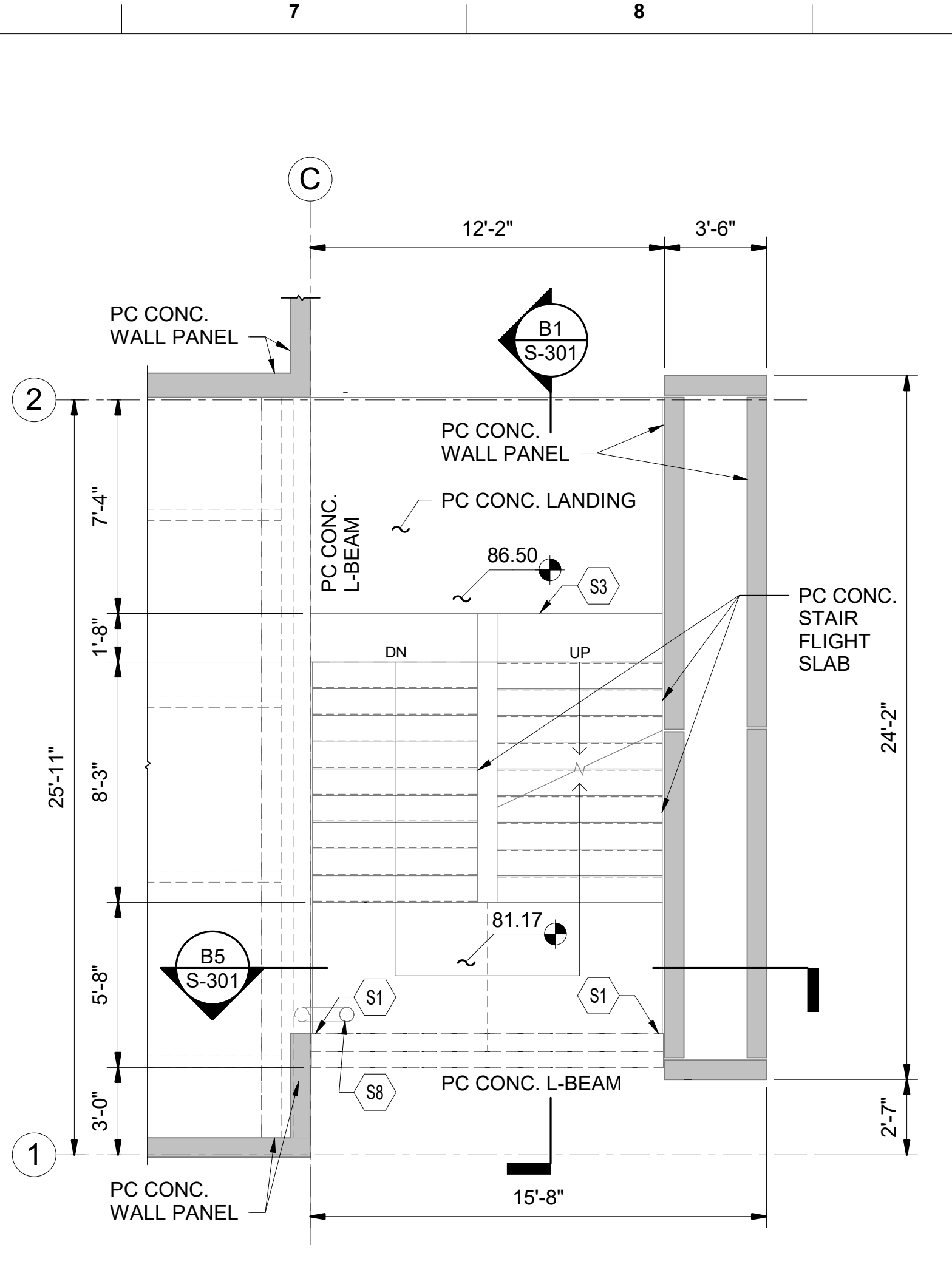
S-001
SHEET NO.



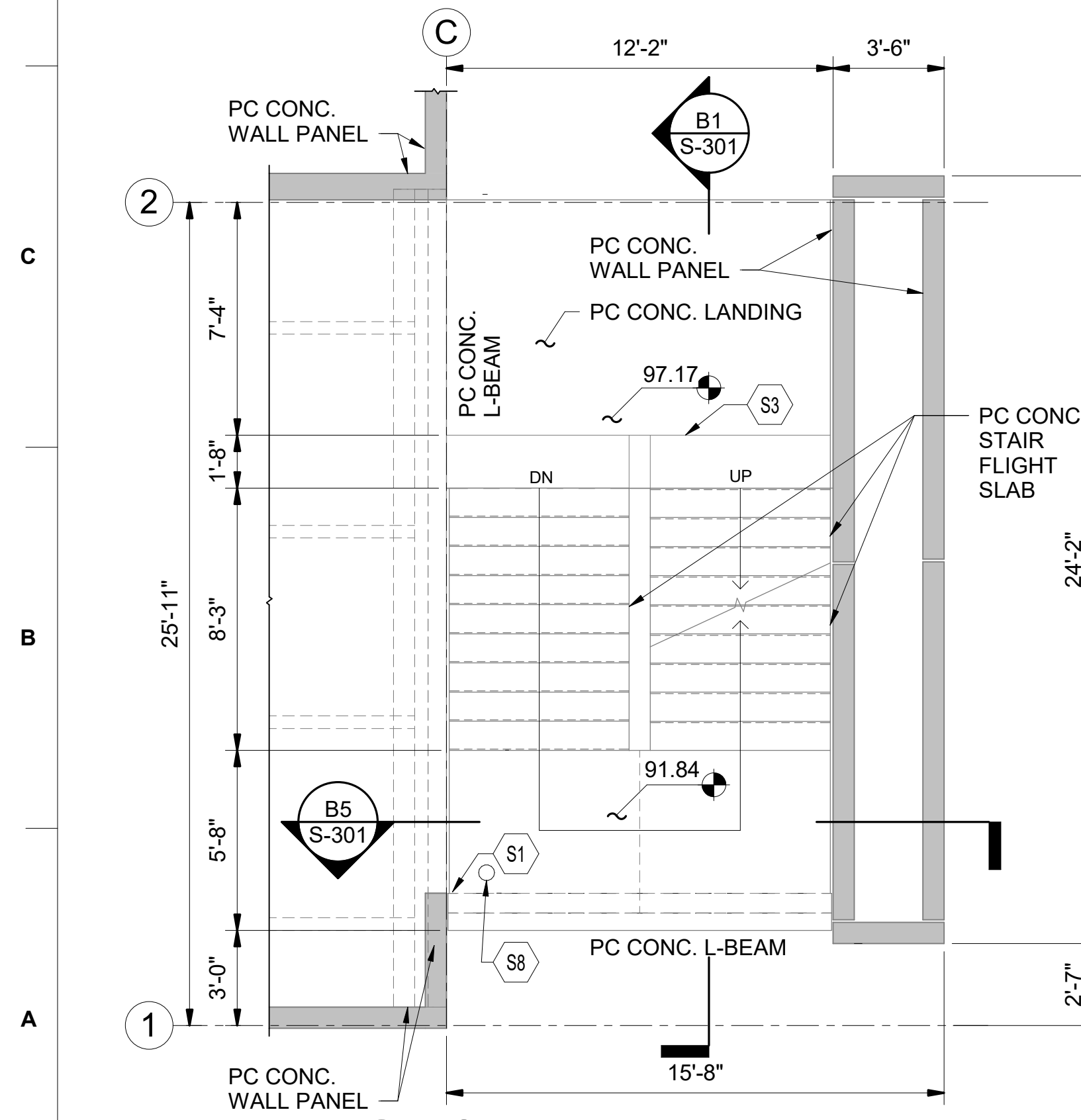
D1 STAIR A - PLAN LEVEL 1
SCALE: 1/4" = 1'-0"



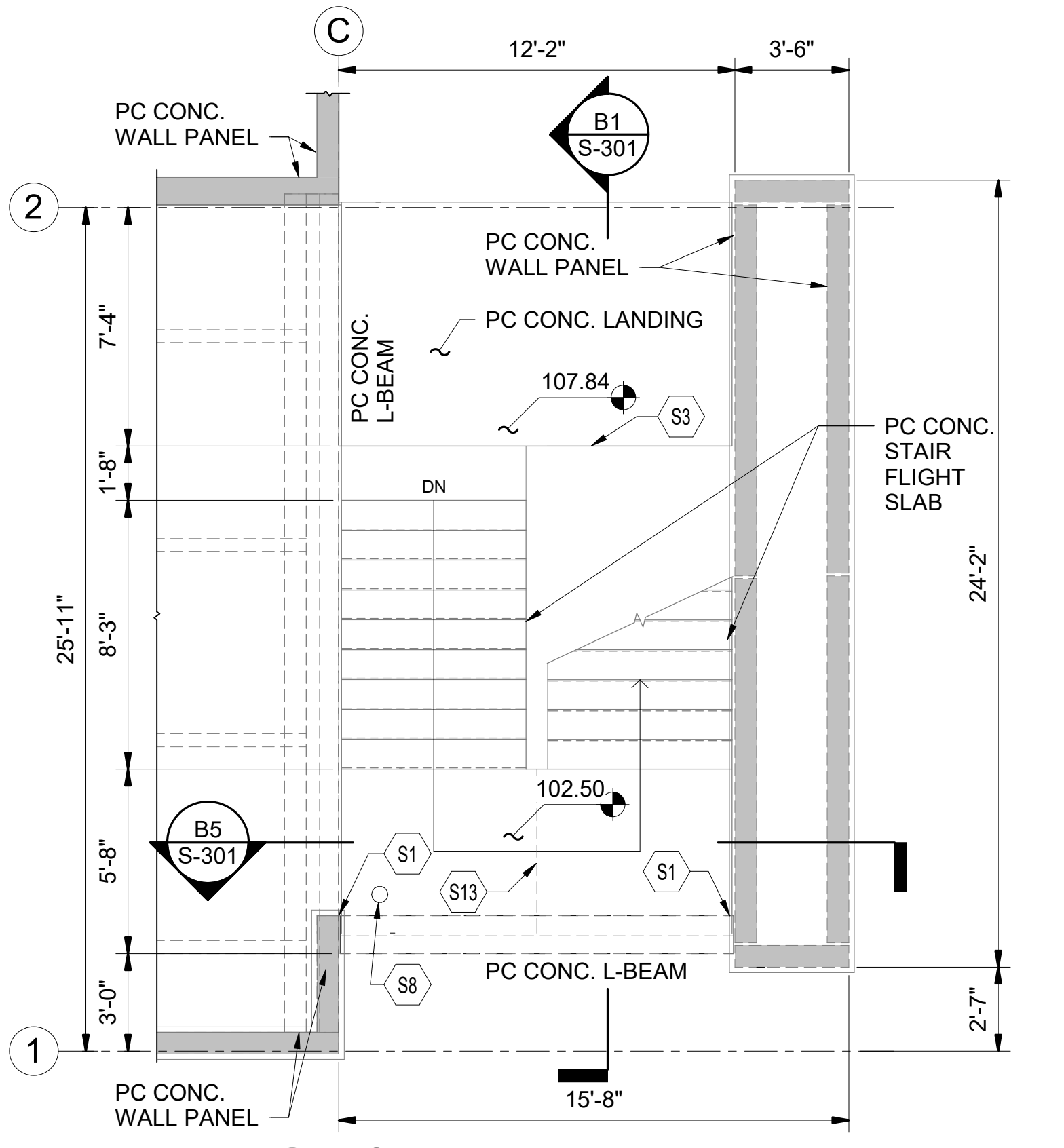
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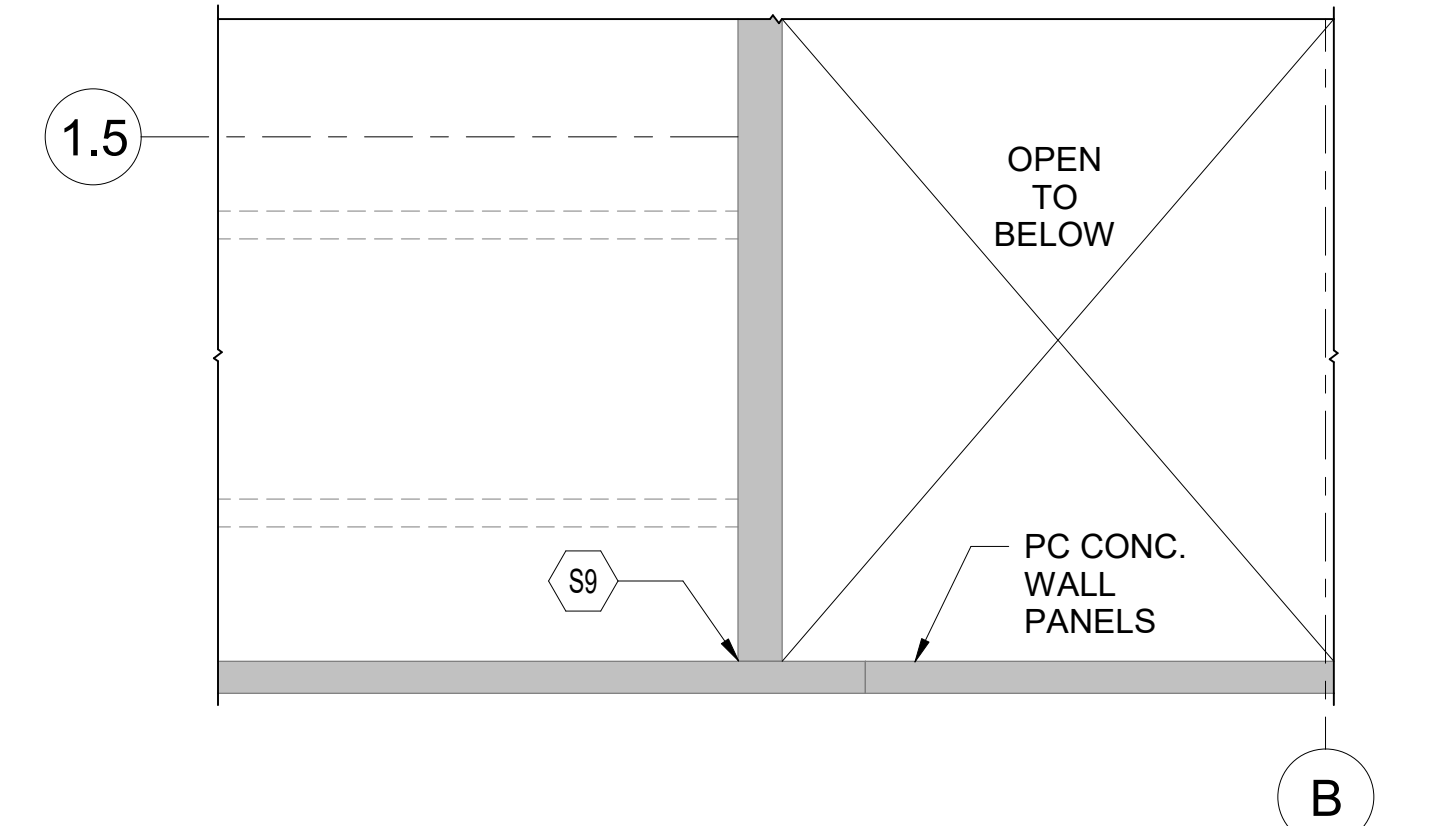
D7 STAIR A - PLAN LEVEL 3
SCALE: 1/4" = 1'-0"



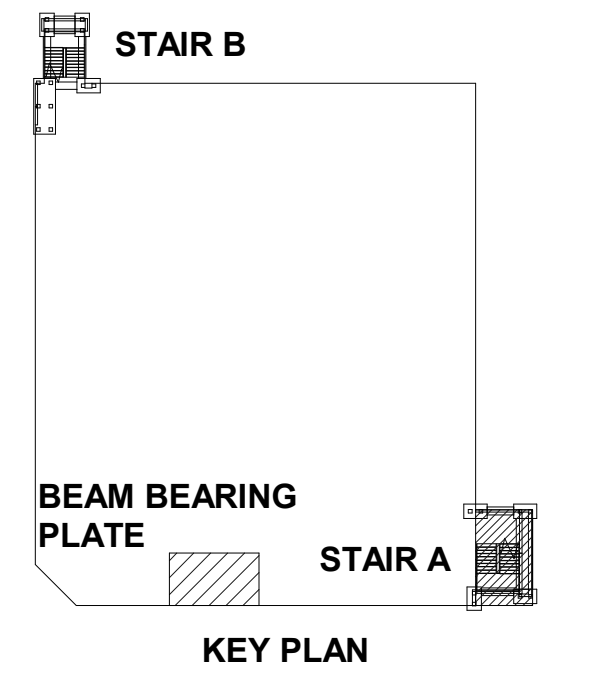
A1 STAIR A - PLAN LEVEL 4
SCALE: 1/4" = 1'-0"



A4 STAIR A - PLAN LEVEL 5
SCALE: 1/4" = 1'-0"



B7 BEAM BEARING PLATE - PLAN LEVEL 5
SCALE: 1/4" = 1'-0"



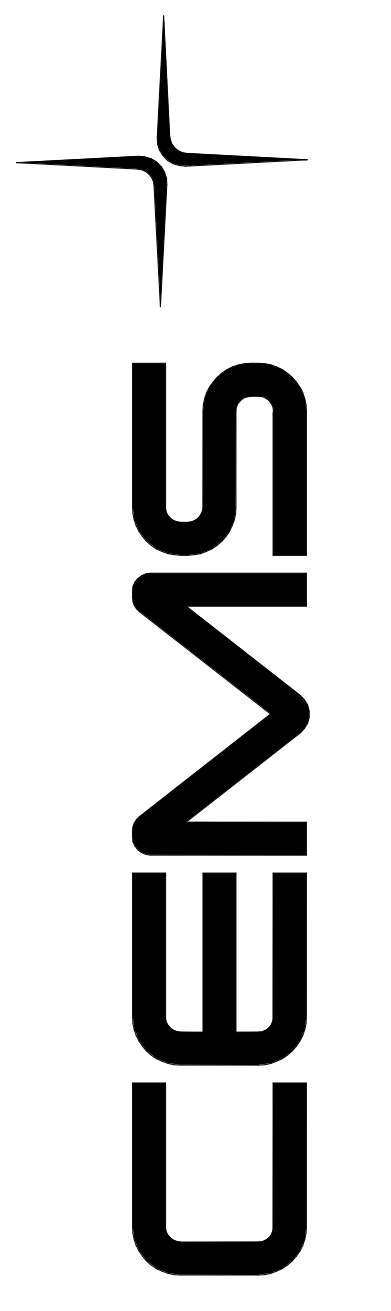
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	EXISTING CONCRETE STRUCTURAL MEMBER IN SECTION
	SHEET KEYNOTE
	ABSOLUTE ELEVATION AT 70.50 FEET

GENERAL NOTES

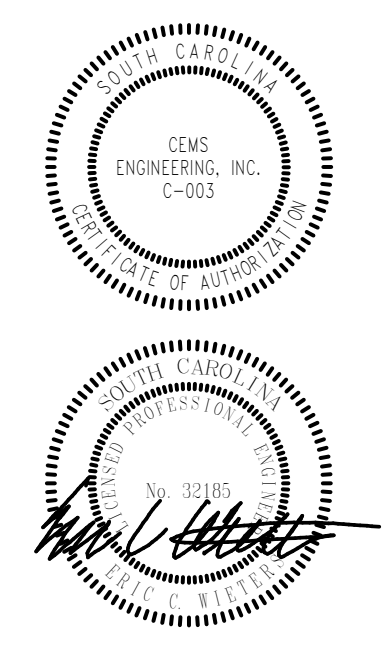
- ALL EXISTING CONDITIONS AND STRUCTURAL MEMBERS SPECIFIED PER RECORD DRAWINGS, PRECAST SHOP DRAWINGS AND NON-DESTRUCTIVE SITE INVESTIGATIONS. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION.
- THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENT PARTS ARE IN PLACE. THEREFORE, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING AS REQUIRED TO ENSURE STABILITY DURING CONSTRUCTION.

- SHEET KEYNOTES**
- S1 REPAIR CONCRETE CRACKING AND SPALLING AT END CONNECTION OF PRECAST INTERMEDIATE LEVEL LANDING L-BEAM TO PRECAST CONC. WALL PANEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S3 REMOVE CORROSION ON UNDERSIDE OF CONNECTION BETWEEN PRECAST STAIR FLIGHT SLAB AND SUPPORTING MAIN LEVEL PRECAST LANDING SLAB. SEE SUGGESTED REPAIR PROCEDURE B ON S-001.
 - S8 REDIRECT, SEAL, OR OTHERWISE MINIMIZE RAINWATER RUNOFF DRAINING THROUGH THE STANDPIPE PENETRATIONS IN THE INTERMEDIATE LEVEL PRECAST LANDING SLABS.
 - S9 REMOVE CORROSION AT BEAM BEARING PLATE. SEE SUGGESTED REPAIR PROCEDURE B ON S-001.
 - S12 REPAIR SOURCE LOCATION OF WATER INTRUSION INTO ELEVATOR PIT.
 - S13 REPAIR TOPPING SLAB CRACKING AT INTERMEDIATE LANDING LEVEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S15 REPAIR PC CONCRETE STAIR FLIGHT SLAB CORNER AND TOPPING SLAB CRACKING AT BEARING. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.



SUMMERVILLE PARKING GARAGE
JOB TITLE

STAIR A - PLAN LEVELS 1 TO 5
SHEET TITLE



REVISIONS

NO.	DESCRIPTION	DATE

J. LI / W. ORIANI
DRAWN

J. LI / W. ORIANI
DESIGNED

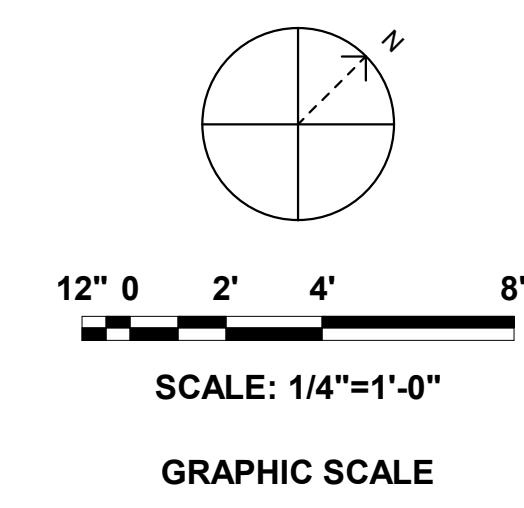
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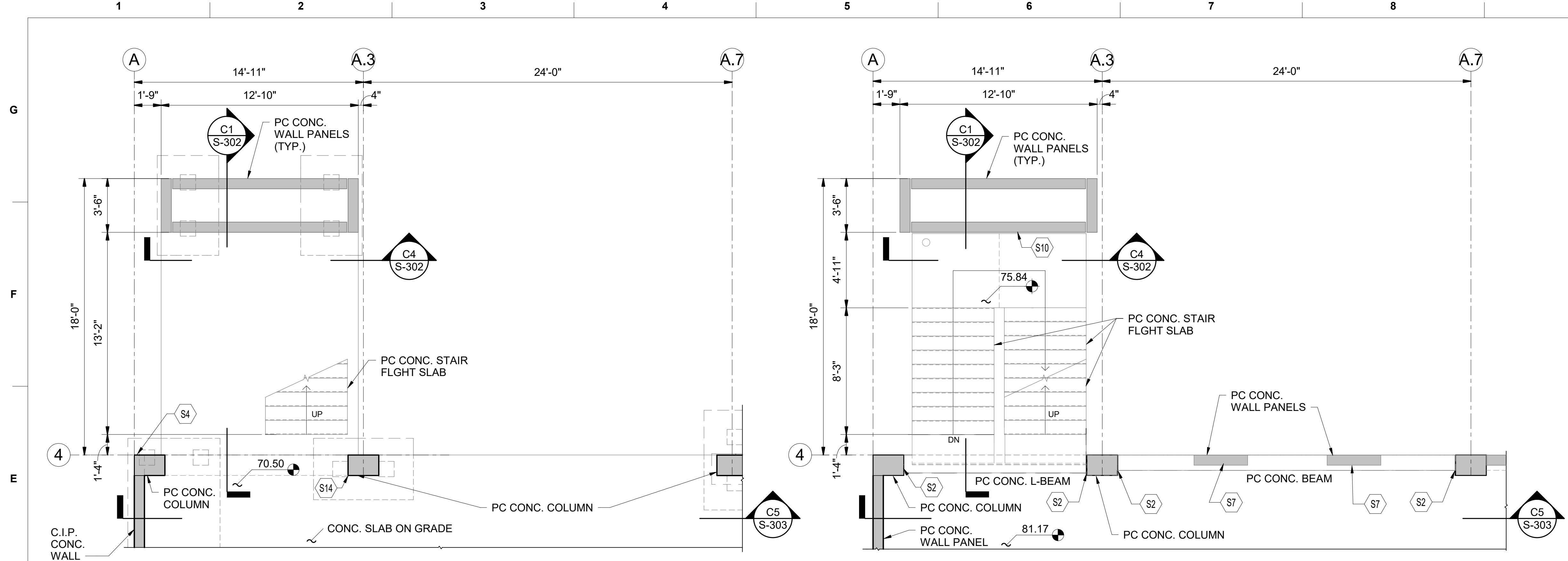
B. MINOR
APPROVED

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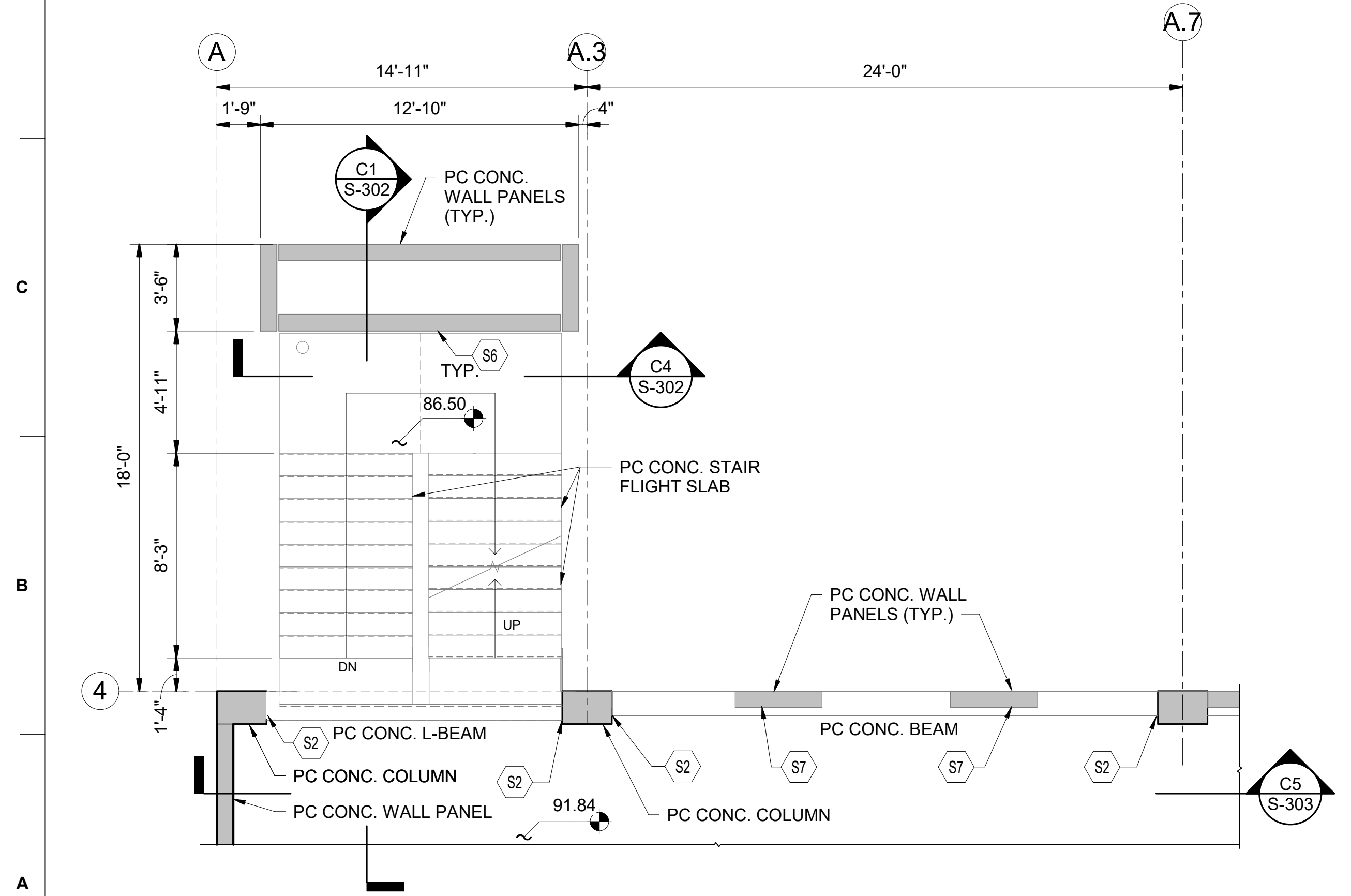
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SHEET NO.



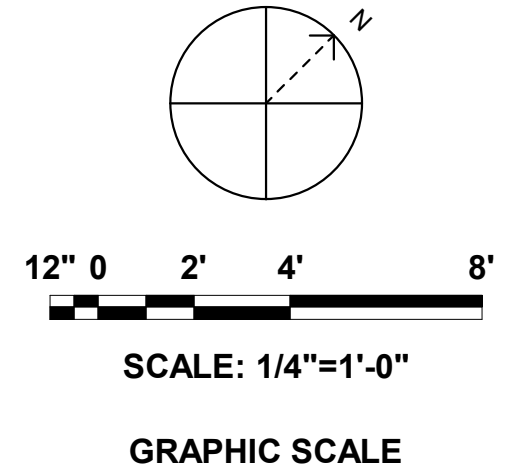
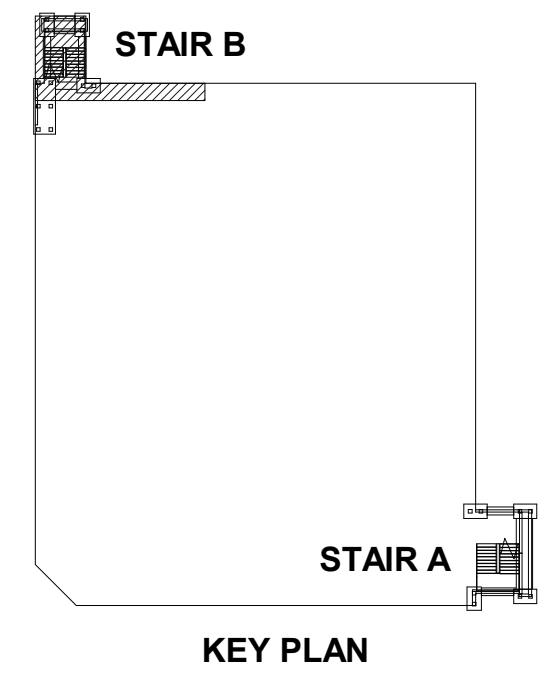


E1 STAIR B - PLAN LEVEL 1
SCALE: 1/4" = 1'-0"

E5 STAIR B - PLAN LEVEL 2
SCALE: 1/4" = 1'-0"



A1 STAIR B - PLAN LEVEL 3
SCALE: 1/4" = 1'-0"



LEGEND

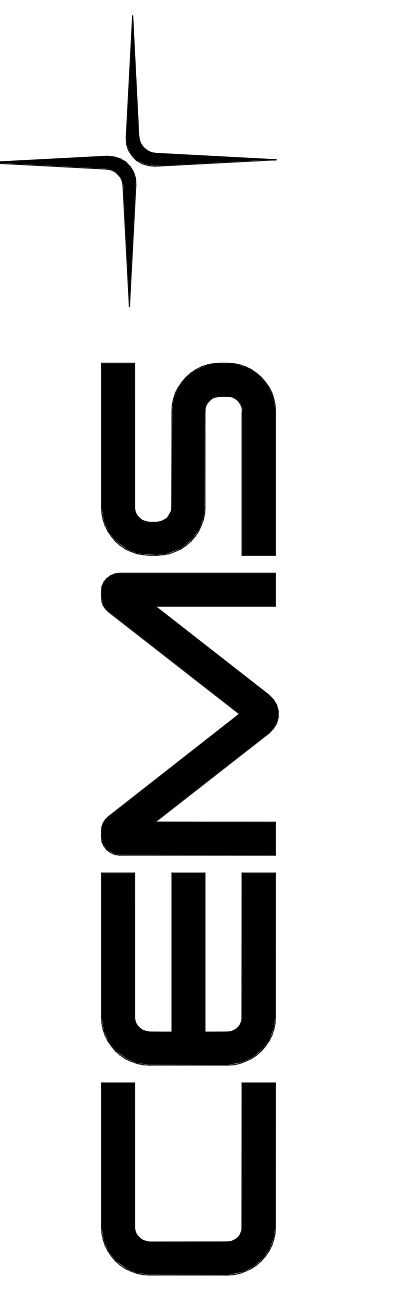
- EXISTING CONCRETE STRUCTURAL MEMBER IN SECTION
- SHEET KEYNOTE
- ABSOLUTE ELEVATION AT 70.50 FEET

GENERAL NOTES

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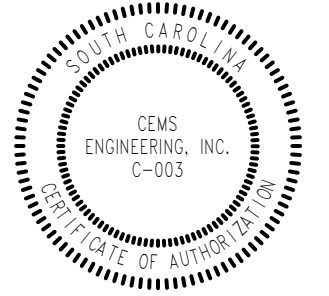
SHEET KEYNOTES

- S2 REPAIR CONCRETE CRACKING AND SPALLING AT END CONNECTION OF FLOOR LEVEL PRECAST L-BEAM TO PRECAST CONCRETE COLUMN. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
- S4 REPAIR CONCRETE CRACKING AND SPALLING AT FOUNDATION ADJACENT TO STAIR. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
- S6 REPAIR CONCRETE SPALLING AT CONNECTIONS OF PRECAST STAIR FLIGHT SLAB TO PRECAST WALL BEARING CORBEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
- S7 REPAIR CONCRETE GROUT PACK SPALLING AT CONNECTION OF PERIMETER PRECAST CONC. BEAM AT INTERIOR SUPPORTING PRECAST CONC. COLUMN. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
- S10 REPAIR CORRODED CONNECTIONS OF PRECAST STAIR FLIGHT SLAB TO PRECAST WALL BEARING CORBEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
- S14 REPAIR SLAB ON GRADE CRACKING. SEE SUGGESTED REPAIR PROCEDURE C ON S-001.



SUMMERVILLE PARKING GARAGE
JOB TITLE

STAIR B - PLAN LEVELS 1 TO 3
SHEET TITLE



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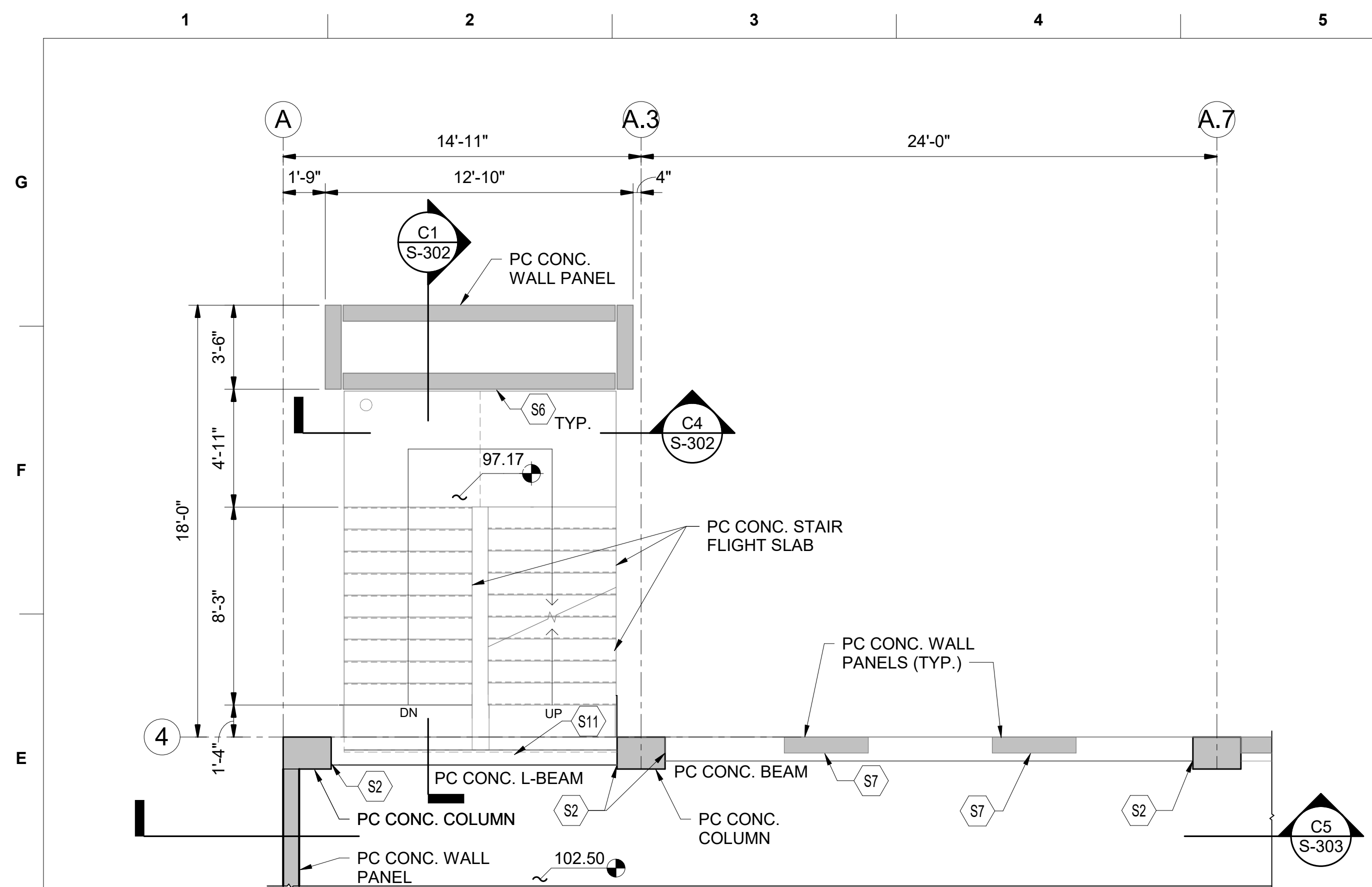
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B. MINOR
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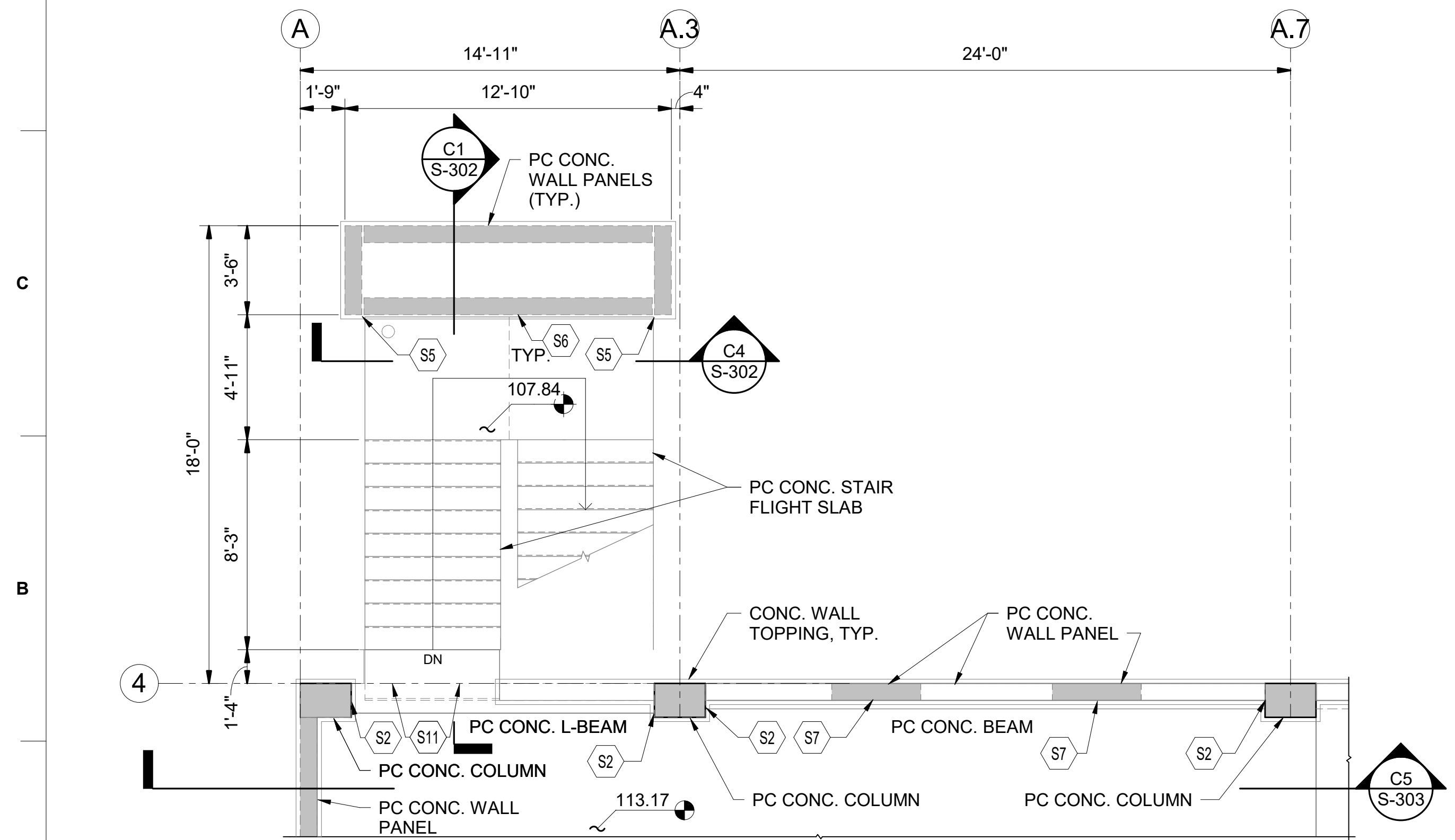
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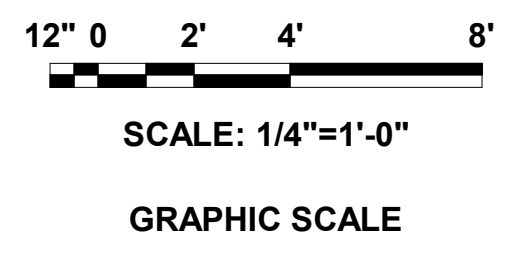
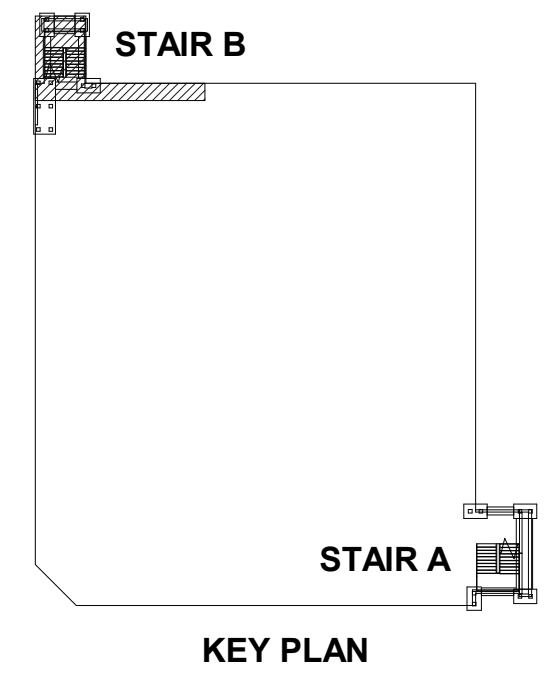
S-102
SHEET NO. SHEET 4 OF 8



E1 STAIR B - PLAN LEVEL 4
SCALE: 1/4" = 1'-0"



A1 STAIR B - PLAN LEVEL 5
SCALE: 1/4" = 1'-0"

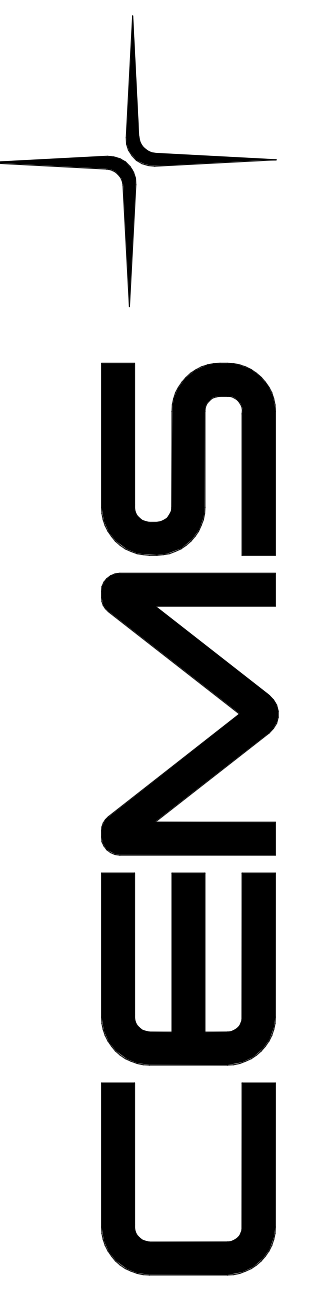


LEGEND

	EXISTING CONCRETE STRUCTURAL MEMBER IN SECTION
	SHEET KEYNOTE
	ABSOLUTE ELEVATION AT 70.50 FEET

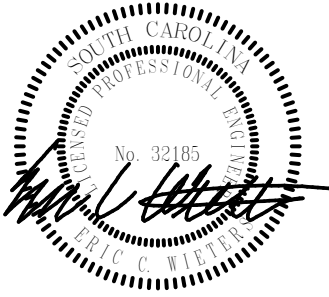
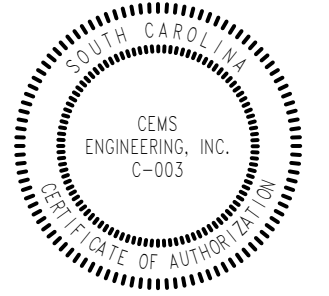
- GENERAL NOTES**
- ALL EXISTING CONDITIONS AND STRUCTURAL MEMBERS SPECIFIED PER RECORD DRAWINGS, PRECAST SHOP DRAWINGS AND NON-DESTRUCTIVE SITE INVESTIGATIONS. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION.
 - THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENT PARTS ARE IN PLACE. THEREFORE, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING AS REQUIRED TO ENSURE STABILITY DURING CONSTRUCTION.

- SHEET KEYNOTES**
- S2 REPAIR CONCRETE CRACKING AND SPALLING AT END CONNECTION OF FLOOR LEVEL PRECAST L-BEAM TO PRECAST CONCRETE COLUMN. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S5 REPAIR SPALLING CONCRETE COVER OVER WALL PANEL TO PANEL CONNECTIONS. SEE SUGGESTED REPAIR PROCEDURE A ON S-001. MAINTAIN JOINT BETWEEN PANELS.
 - S6 REPAIR CONCRETE SPALLING AT CONNECTIONS OF PRECAST STAIR FLIGHT SLAB TO PRECAST WALL BEARING CORBEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S7 REPAIR CONCRETE GROUT PACK SPALLING AT CONNECTION OF PERIMETER PRECAST CONC. BEAM AT INTERIOR SUPPORTING PRECAST CONC. COLUMN. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S11 REPAIR TOPPING SLAB CRACKING. SEE SUGGESTED REPAIR PROCEDURE C ON S-001.



SUMMERVILLE PARKING GARAGE
JOB TITLE

STAIR B - PLAN LEVELS 4 AND 5
SHEET TITLE



REVISIONS

NO.	DESCRIPTION	DATE

J. LI / W. ORIANI
DRAWN

J. LI / W. ORIANI
DESIGNED

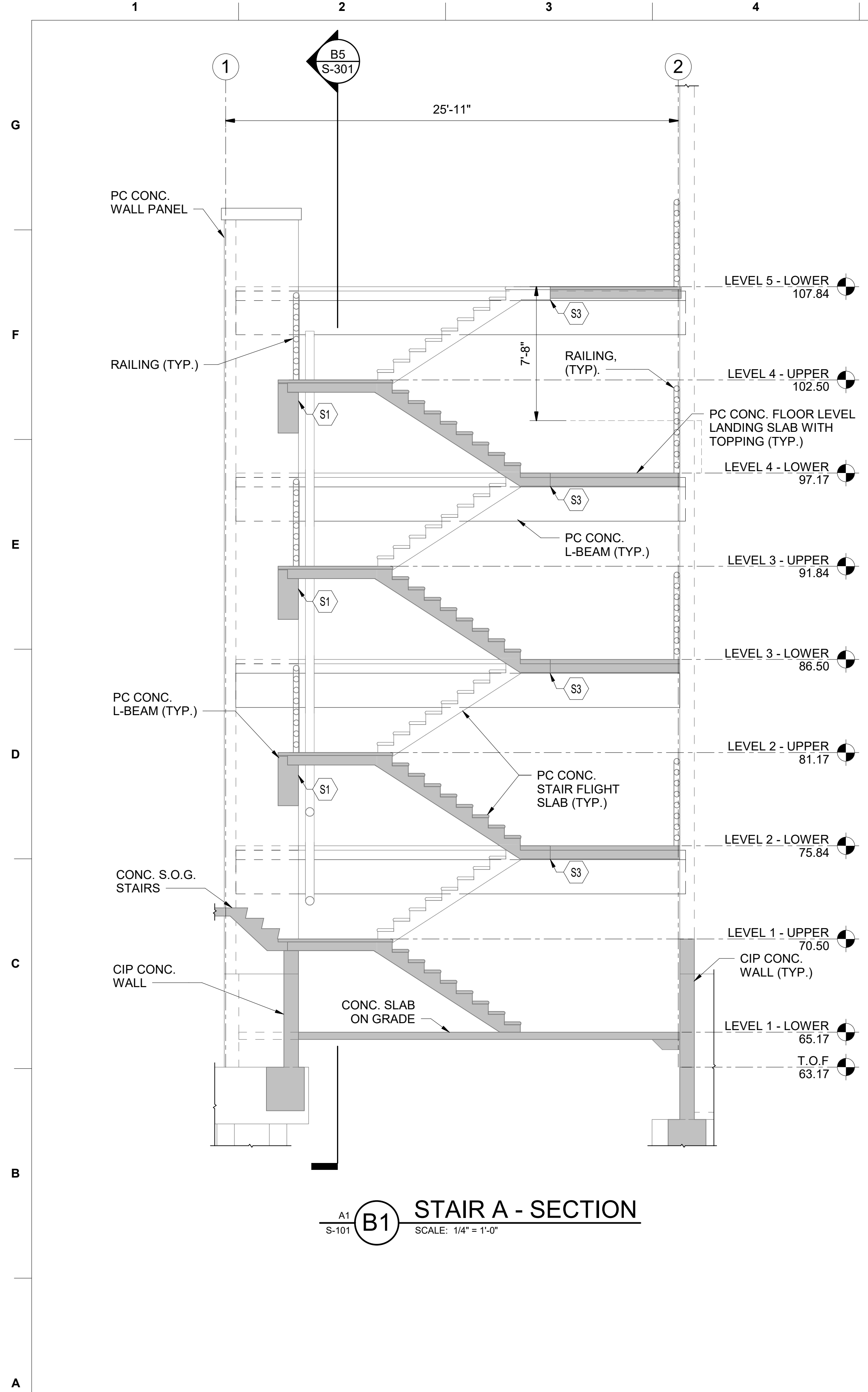
E. WIETERS
CHECKED

B. MINOR
APPROVED

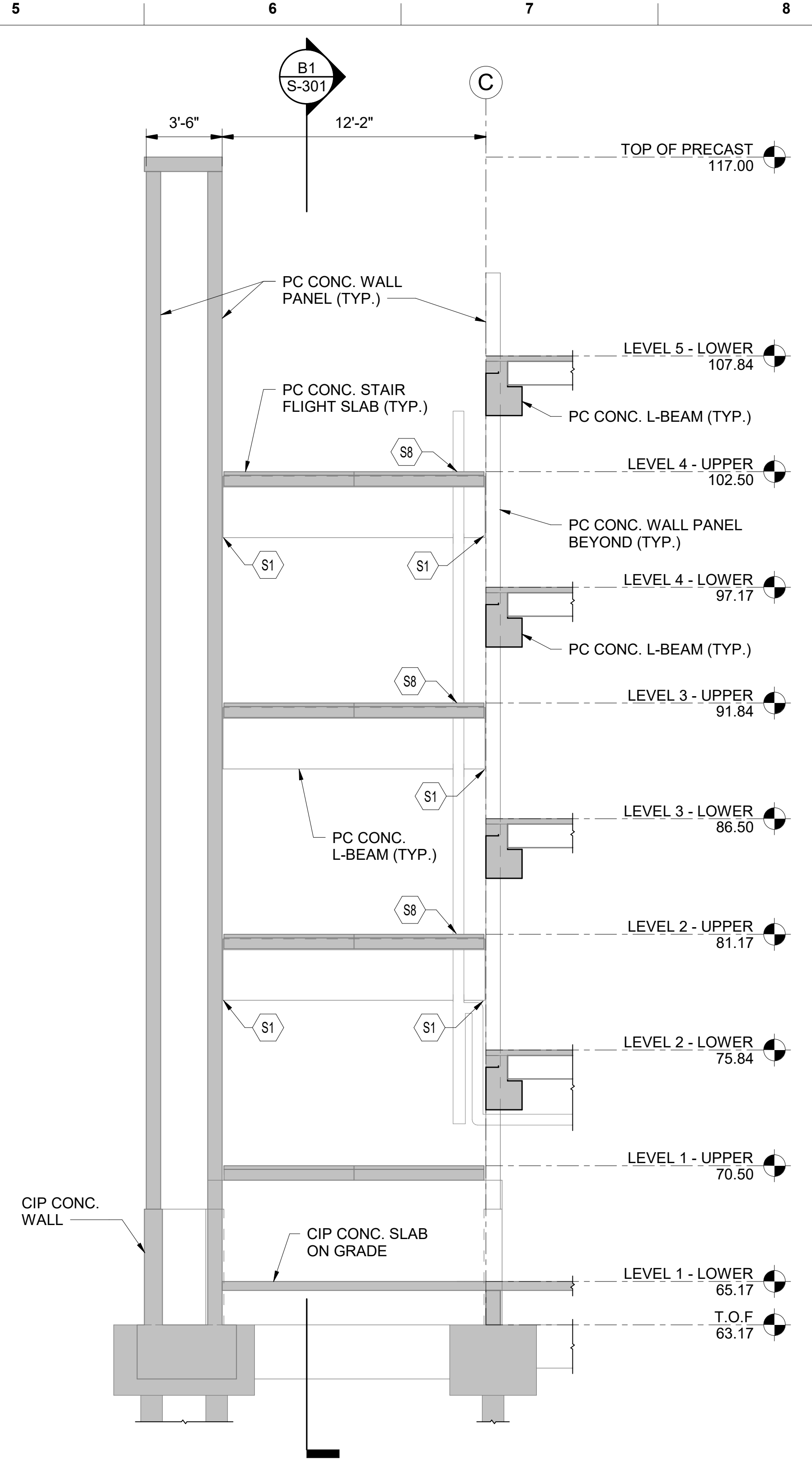
1/12/2022
ISSUE DATE

21009
JOB NO.

S-103
SHEET NO. SHEET 5 OF 8



A1 **B1** STAIR A - SECTION
S-101 SCALE: 1/4" = 1'-0"



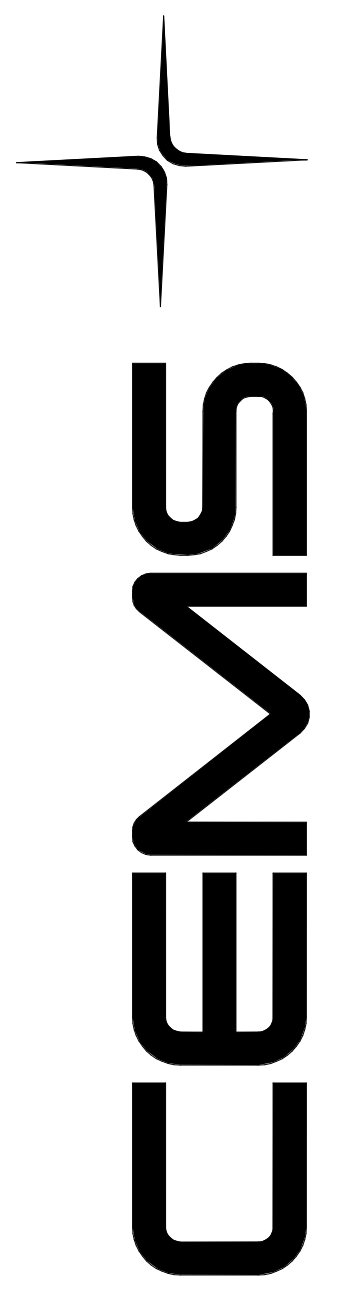
A1 **B5** STAIR A - SECTION
S-101 SCALE: 1/4" = 1'-0"

LEGEND

	EXISTING CONCRETE STRUCTURAL MEMBER IN SECTION
	SHEET KEYNOTE
	ABSOLUTE ELEVATION AT 70.50 FEET

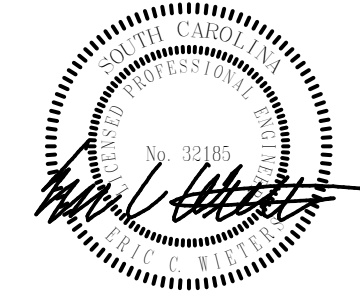
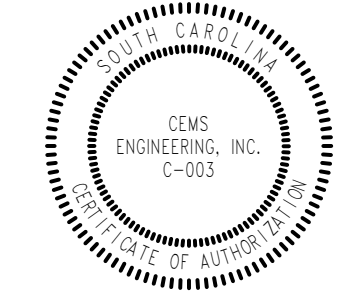
- GENERAL NOTES**
- ALL EXISTING CONDITIONS AND STRUCTURAL MEMBERS SPECIFIED PER RECORD DRAWINGS, PRECAST SHOP DRAWINGS AND NON-DESTRUCTIVE SITE INVESTIGATIONS. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION.
 - THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENT PARTS ARE IN PLACE. THEREFORE, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING AS REQUIRED TO ENSURE STABILITY DURING CONSTRUCTION.

- SHEET KEYNOTES**
- S1 REPAIR CONCRETE CRACKING AND SPALLING AT END CONNECTION OF PRECAST INTERMEDIATE LEVEL LANDING L-BEAM TO PRECAST CONC. WALL PANEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S3 REMOVE CORROSION ON UNDERSIDE OF CONNECTION BETWEEN PRECAST STAIR FLIGHT SLAB AND SUPPORTING MAIN LEVEL PRECAST LANDING SLAB. SEE SUGGESTED REPAIR PROCEDURE B ON S-001.
 - S8 REDIRECT, SEAL, OR OTHERWISE MINIMIZE RAINWATER RUNOFF DRAINING THROUGH THE STANDPIPE PENETRATIONS IN THE INTERMEDIATE LEVEL PRECAST LANDING SLABS.



SUMMERVILLE PARKING GARAGE
JOB TITLE

STAIR A - SECTIONS
SHEET TITLE



REVISIONS

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J. LI / W. ORIANI
DESIGNED

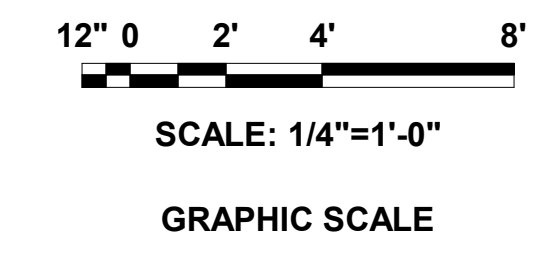
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CHECKED

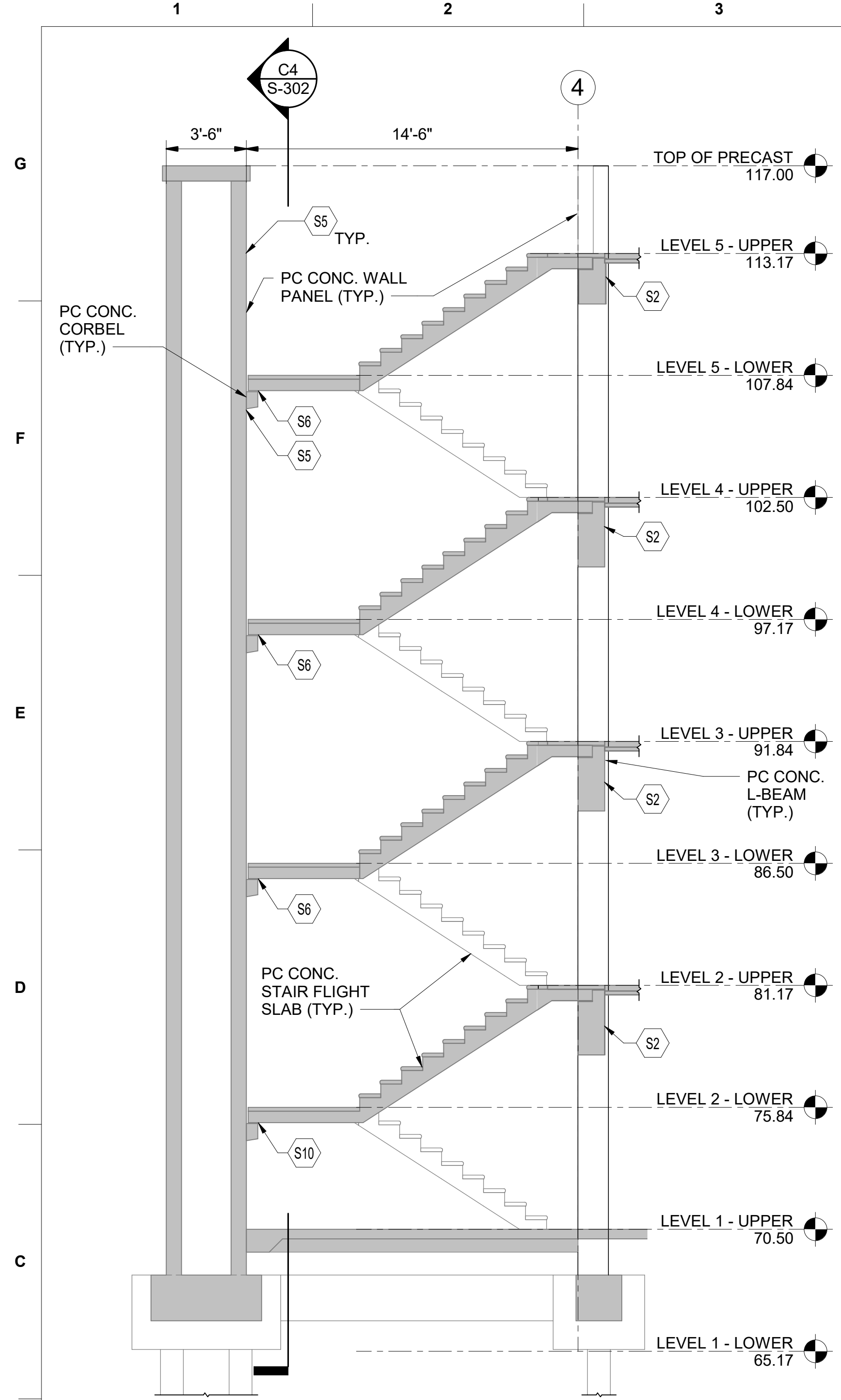
B. MINOR
APPROVED

1/12/2022
ISSUE DATE

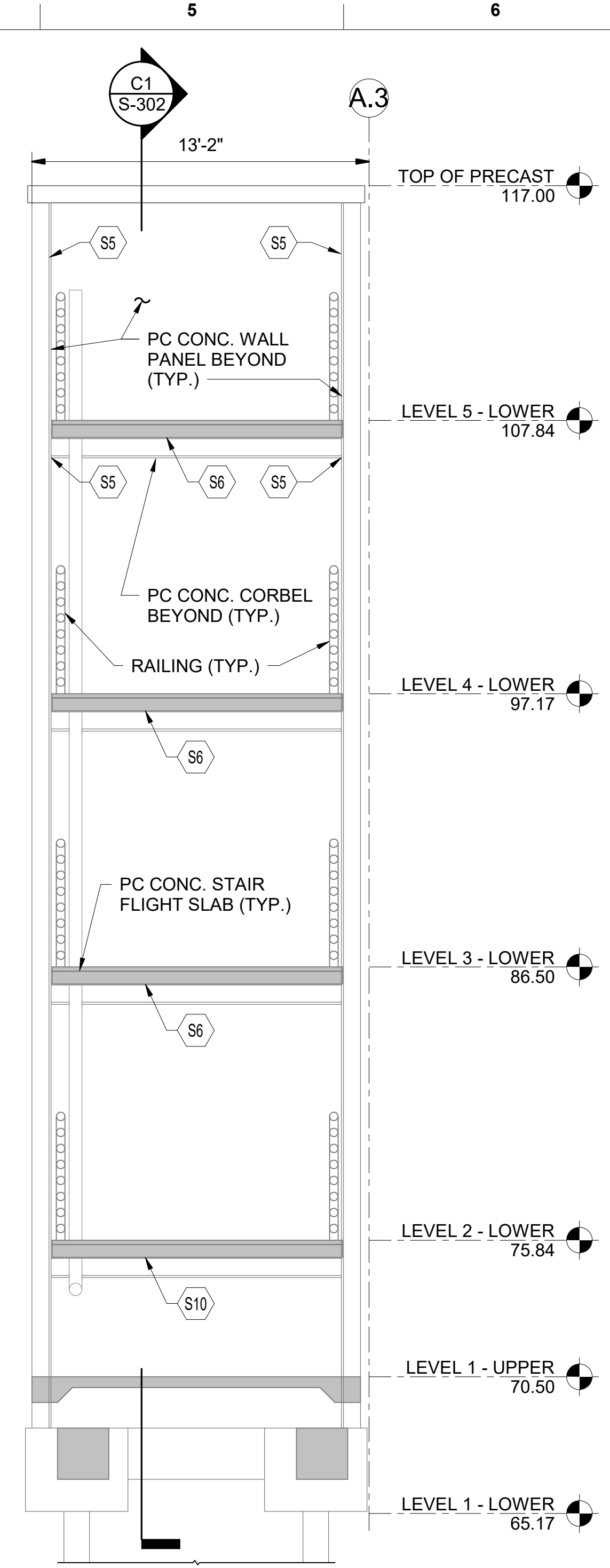
21009
JOB NO.

S-301
SHEET NO.





A1
S-102 **C1** STAIR B - SECTION
SCALE: 1/4" = 1'-0"



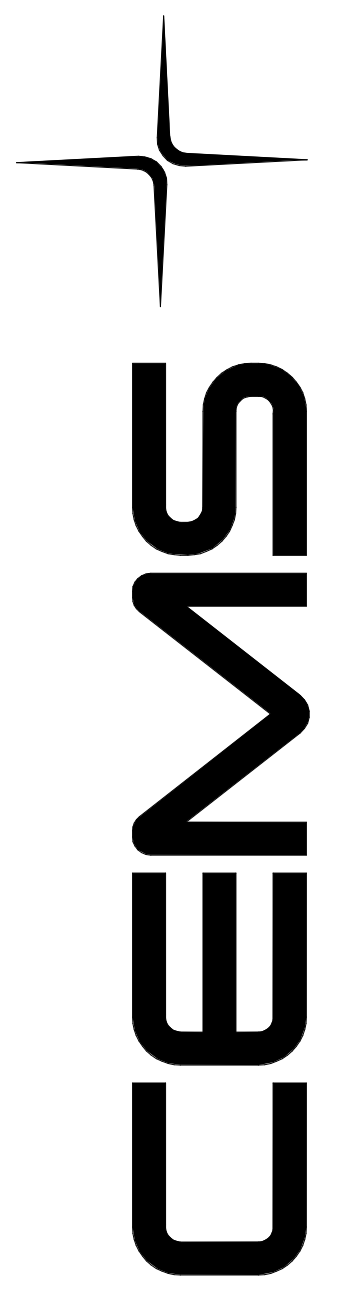
A1
S-102 **C4** STAIR B - SECTION
SCALE: 1/4" = 1'-0"

LEGEND

- EXISTING CONCRETE STRUCTURAL MEMBER IN SECTION
- SHEET KEYNOTE
- ABSOLUTE ELEVATION AT 70.50 FEET

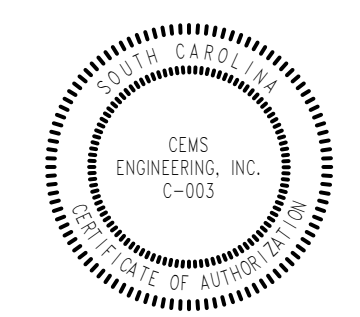
- GENERAL NOTES**
1. ALL EXISTING CONDITIONS AND STRUCTURAL MEMBERS SPECIFIED PER RECORD DRAWINGS, PRECAST SHOP DRAWINGS AND NON-DESTRUCTIVE SITE INVESTIGATIONS. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION.
 2. THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENT PARTS ARE IN PLACE. THEREFORE, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING AS REQUIRED TO ENSURE STABILITY DURING CONSTRUCTION.

- SHEET KEYNOTES**
- S2 REPAIR CONCRETE CRACKING AND SPALLING AT END CONNECTION OF FLOOR LEVEL PRECAST L-BEAM TO PRECAST CONCRETE COLUMN. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S5 REPAIR SPALLING CONCRETE COVER OVER WALL PANEL TO PANEL CONNECTIONS. SEE SUGGESTED REPAIR PROCEDURE A ON S-001. MAINTAIN JOINT BETWEEN PANELS.
 - S6 REPAIR CONCRETE SPALLING AT CONNECTIONS OF PRECAST STAIR FLIGHT SLAB TO PRECAST WALL BEARING CORBEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.
 - S10 REPAIR CORRODED CONNECTIONS OF PRECAST STAIR FLIGHT SLAB TO PRECAST WALL BEARING CORBEL. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.



SUMMERVILLE PARKING GARAGE
JOB TITLE

STAIR B - SECTIONS
SHEET TITLE



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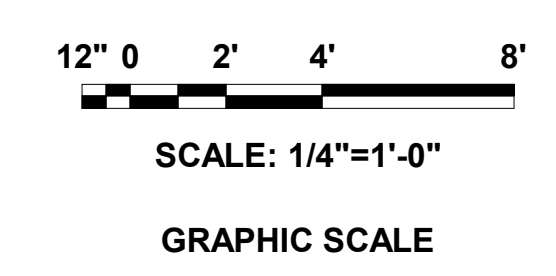
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CHECKED

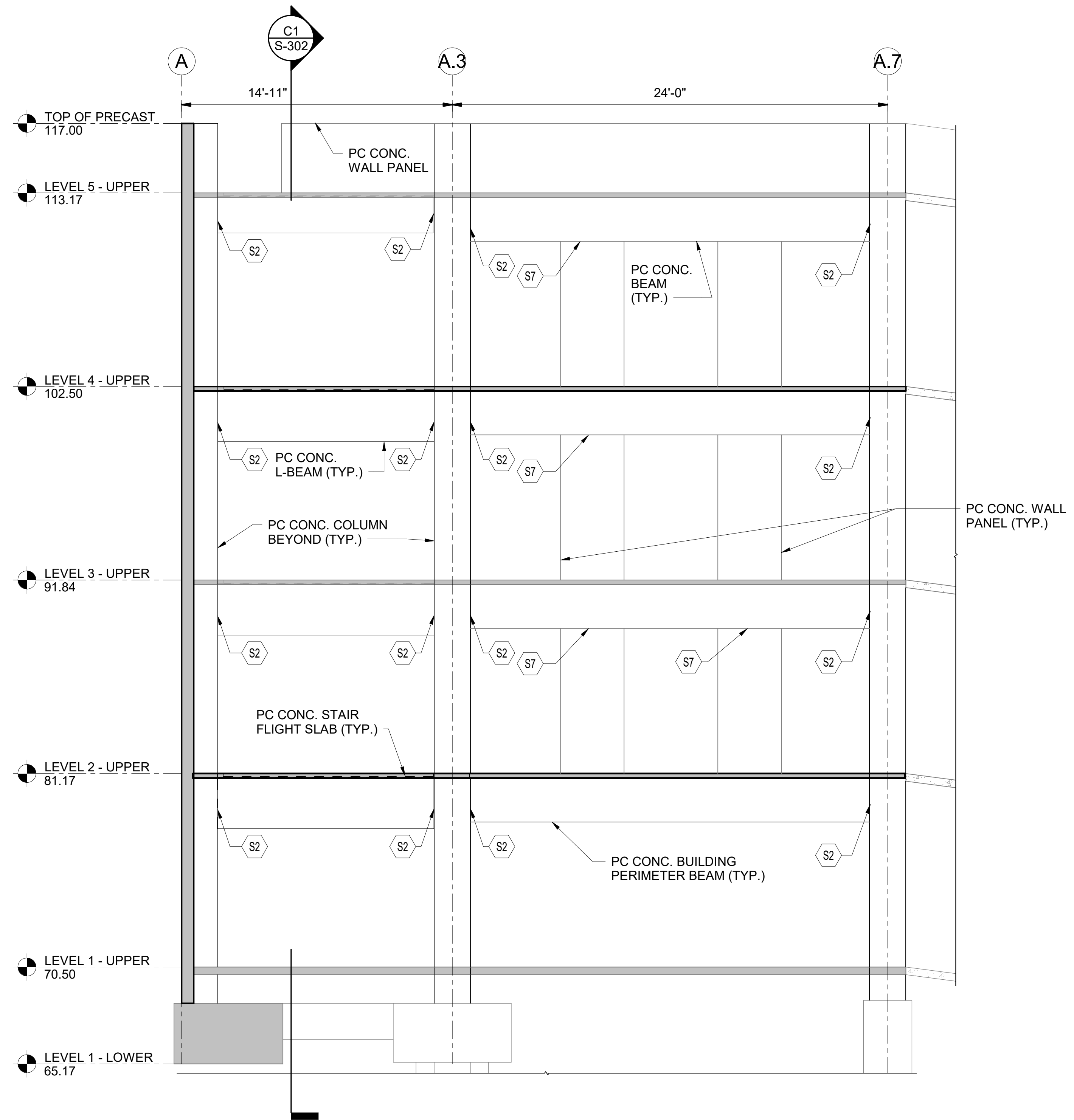
B. MINOR
APPROVED

1/12/2022
ISSUE DATE

21009
JOB NO.

S-302
SHEET NO. SHEET 7 OF 8





LEGEND

- EXISTING CONCRETE STRUCTURAL MEMBER IN SECTION
- SHEET KEYNOTE
- 70.50 ABSOLUTE ELEVATION AT 70.50 FEET

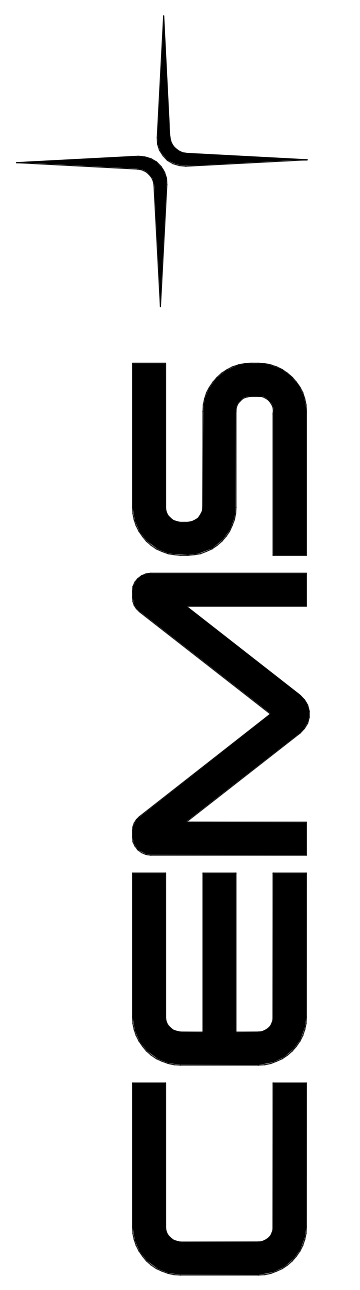
GENERAL NOTES

- ALL EXISTING CONDITIONS AND STRUCTURAL MEMBERS SPECIFIED PER RECORD DRAWINGS, PRECAST SHOP DRAWINGS AND NON-DESTRUCTIVE SITE INVESTIGATIONS. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION.
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SHEET KEYNOTES

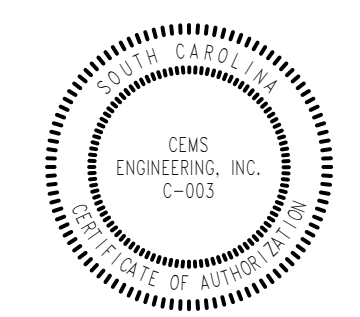
S2 REPAIR CONCRETE CRACKING AND SPALLING AT END CONNECTION OF FLOOR LEVEL PRECAST L-BEAM TO PRECAST CONCRETE COLUMN. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.

S7 REPAIR CONCRETE GROUT PACK SPALLING AT CONNECTION OF PERIMETER PRECAST CONC. BEAM AT INTERIOR SUPPORTING PRECAST CONC. COLUMN. SEE SUGGESTED REPAIR PROCEDURE A ON S-001.



SUMMERVILLE PARKING GARAGE
JOB TITLE

STAIR B - SECTION
SHEET TITLE



REVISIONS

NO.	DESCRIPTION	DATE

J. LI / W. ORIANI
DRAWN

J. LI / W. ORIANI
DESIGNED

E. WIETERS
CHECKED

B. MINOR
APPROVED

1/12/2022
ISSUE DATE

21009
JOB NO.

S-303
SHEET NO.

A1 S-102 **C5** STAIR B - SECTION
SCALE: 1/4" = 1'-0"

