WATERFRONT MARKET
REHABILITATION

201 WILLIAM STREET
KEY WEST, FL 33040

Permit Set
September 26, 2011

PRIME/STRUCTURAL:

bcc engineering

7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel : 305.670.2350 Fax : 305.670.2351
www.bcceng.com
Certificate of Authorization No. 7184
Juan J. Fuentes, P.E., S.E., LEED AP
Structural Engineer Florida Lic. No. 62426

STRUCTURAL NOTES

GENERAL NOTES:

1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE, 2007 EDITION. THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCED STANDARD APPLIES TO THIS PROJECT.

2. TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.

3. CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.

4. DETAILS LABELED "TYPICAL" APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED, WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION. QUESTIONS REGARDING THE APPLICABILITY OF TYPICAL DETAILS SHALL BE RESOLVED BY THE ENGINEER OF RECORD (EOR).

5. OPENINGS SHOWN ON STRUCTURAL DRAWINGS ARE ONLY PICTORIAL.

6. CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS DURING BIDDING SHALL IMMEDIATELY NOTIFY THE EOR. THE EOR WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.

7. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS; USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES IN WRITING TO THE EOR PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL EOR.

8. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL OSHA REQUIREMENTS.

9. THE STRUCTURE IS DESIGNED TO BE STRUCTURALLY SOUND WHEN COMPLETED. PRIOR TO COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING, INCLUDING, BUT NOT LIMITED TO, MASONRY WALLS. WHEREVER THE CONTRACTOR IS UNSURE OF THESE REQUIREMENTS, THE CONTRACTOR SHALL RETAIN A FLORIDA LICENSED ENGINEER TO DESIGN AND INSPECT THE TEMPORARY BRACING AND STABILITY OF THE STRUCTURE.

10. DESIGN SUPERIMPOSED LOADS:

OCCUPANCY	LIVE LOAD	DEAD LOAD
ROOF	30 PSF	20 PSF
MEZZANINE	100 PSF	20 PSF

11. DESIGN WIND LOADS

GOVERNING CODE	ASCE 7-05
BASIC WIND SPEED	V = 150 MPH
BUILDING CATEGORY	II
IMPORTANCE FACTOR	I = 1.0
DIRECTIONALITY FACTOR	Kd = 0.85
EXPOSURE- MWFRS	C
- COMPONENTS AND CLADDING	C
INTERNAL PRESSURE COEFFICIENT	GCpi = ±0.18
MEAN ROOF HEIGHT	29'-0"

SHOP DRAWINGS AND OTHER SUBMITTALS:

1. SUBMITTALS FOR SPECIAL STRUCTURAL, LOAD-CARRYING ITEMS THAT ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES MUST BE PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, A DELEGATED ENGINEER. EXAMPLES INCLUDE PRECAST CONCRETE, PREFABRICATED WOOD COMPONENTS, STRUCTURAL STEEL CONNECTIONS, STRUCTURAL LIGHT GAGE STEEL FRAMING, EXTERIOR ENCLOSURE SYSTEMS AND SHORING AND RESHORING.

2. A DELEGATED ENGINEER IS DEFINED AS A FLORIDA LICENSED ENGINEER WHO SPECIALIZES IN AND UNDERTAKES THE DESIGN OF STRUCTURAL COMPONENTS OR STRUCTURAL SYSTEMS INCLUDED IN A SPECIFIC SUBMITTAL PREPARED FOR THIS PROJECT AND IS AN EMPLOYEE OR OFFICER OF, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL. THE DELEGATED ENGINEER SHALL SIGN, SEAL AND DATE THE SUBMITTAL, INCLUDING CALCULATIONS AND DRAWINGS.

3. THE TRADE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT THE JOB SITES, FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.

4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND APPROVE SUBMITTALS AND SHALL SIGN AND DATE EACH DRAWING PRIOR TO SUBMITTING TO THE EOR. THIS APPROVAL IS TO CONFIRM THAT THE SUBMITTAL IS COMPLETE, COMPLIES WITH THE SUBMITTAL REQUIREMENTS AND IS COORDINATED WITH FIELD DIMENSIONS, OTHER TRADES, ERECTION SEQUENCING AND CONSTRUCTIBILITY.

5. THE STRUCTURAL ENGINEER REVIEWS SUBMITTALS TO CONFIRM THAT THE SUBMITTAL IS IN GENERAL CONFORMANCE WITH THE DESIGN CONCEPT PRESENTED IN THE CONTRACT DOCUMENTS. QUANTITIES AND DIMENSIONS ARE NOT CHECKED. NOTATIONS ON SUBMITTALS DO NOT AUTHORIZE CHANGES TO THE CONTRACT SUM. CHECKING OF THE SUBMITTAL BY THE STRUCTURAL ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS AND FROM ERRORS OR OMISSIONS IN THE SUBMITTAL.

6. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED ENGINEER SUBMITTALS IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED ENGINEER AND THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED ENGINEER IS SOLELY RESPONSIBLE FOR HIS/HER DESIGN, INCLUDING BUT NOT LIMITED TO THE ACCURACY OF HIS/HER CALCULATIONS AND COMPLIANCE WITH THE APPLICABLE CODES AND STANDARDS.

STEEL DECK:

1. MANUFACTURE AND INSTALL COMPOSITE STEEL DECK IN CONFORMANCE WITH SPECIFICATIONS OF THE STEEL DECK INSTITUTE.

2. MANUFACTURE STEEL SHEETS CONFORMING TO ASTM A-653, WITH A MINIMUM YIELD POINT OF 33 KSI AND 0.050" (MIN.) HIGH SHEAR LUGS (WEB EMBOSSMENTS.) PROVIDE PROTECTIVE ZINC COATING OF G-60, EXCEPT PROVIDE G-90 FOR ROOFS OR WHERE TOP OF SLAB OR BOTTOM OF DECK IS EXPOSED TO WEATHER. MINIMUM DECK PROPERTIES ARE AS FOLLOWS:

DEPTH	GAGE	Sp (in3)	Sn (in3)
1½"	20	0.234	0.247

3. THE BARE STEEL DECK HAS BEEN DESIGNED TO SUPPORT CONSTRUCTION LOADS UNSHORED. U.O.N.

4. ERECT STEEL DECK CLOSURES AND OTHER LIGHT GAGE MATERIAL REQUIRED TO PRODUCE A COMPLETED INSTALLATION.

5. MANUFACTURE AND INSTALL STEEL DECK FOR A MINIMUM TWO SPAN CONDITION. ONE SPAN CONDITIONS ARE PROHIBITED EXCEPT WHERE SPECIFICALLY SHOWN ON THE DRAWINGS.

REINFORCED CONCRETE:

1. COMPLY WITH ACI 301 AND 318.

2. PROVIDE STRUCTURAL CONCRETE WITH A MINIMUM ULTIMATE COMPRESSIVE DESIGN STRENGTH OF XXXX PSI IN 28 DAYS.

3. USE NORMAL WEIGHT CONCRETE FOR ALL STRUCTURAL MEMBERS.

4. PROVIDE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED AND FIRMLY TIED IN PLACE, WITH APPROPRIATE BAR SUPPORTS AND SPACERS. LAP BOTTOM STEEL OVER SUPPORTS AND TOP STEEL AT MIDSPAN (U.O.N.). HOOK DISCONTINUOUS ENDS OF ALL TOP BARS AND ALL BARS IN WALLS, U.O.N. PROVIDE COVER OVER REINFORCING AS FOLLOWS:

ELEMENT	BOTTOM	TOP	SIDES
BEAMS ABOVE GRADE	1 1/2"	1 1/2"	1 1/2"
COLUMNS	–	–	1 1/2"
SLABS ON GRADE	2"	1"	2"
SLABS EXPOSED TO WEATHER	1 1/2"	1 1/2"	1 1/2"

5. TENSION DEVELOPMENT LENGTH AND LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:

TENSION DEVELOPMENT LENGTH FOR BARS (IN)		
REBAR	TOP BARS	OTHER BARS
#3	22	17
#4	29	22
#5	36	28
#6	43	33
#7	63	48
#8	72	55

LAP SPLICE LENGTH FOR BARS (IN)		
REBAR	TOP BARS	OTHER BARS
#3	28	22
#4	37	29
#5	47	36
#6	56	43
#7	81	63
#8	93	72

(F'c = 3,000 PSI, COVER ≥ Db, SPACING ≥ 2Db FOR BEAMS & COLUMNS, SPACING ≥ 3Db FOR OTHER BARS. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW BARS.)

6. WHERE SPECIFIED, PROVIDE PLAIN, COLD-DRAWN ELECTRICALLY-WELDED WIRE REINFORCEMENT CONFORMING TO ASTM A-185. SUPPLY IN FLAT SHEETS ONLY. LAP SPLICE TWO CROSS WIRE SPACING.

7. UTILITIES SHALL NOT PENETRATE BEAMS OR COLUMNS BUT MAY PASS THROUGH SLABS AND WALLS INDIVIDUALLY, U.O.N. FOR OPENINGS 24" LONG OR LESS, CUT REINFORCING AND REPLACE ALONGSIDE OPENING WITH SPLICE BARS OF EQUIVALENT AREA WITH 48 BAR DIA. LAP. PREPARE AND SUBMIT SHOP DRAWINGS FOR OPENINGS LONGER THAN 24". FOR RECTANGULAR OPENINGS 12" LONG OR LONGER, ADD 1#5 X 6' MID DEPTH DIAGONAL AT ALL 4 CORNERS.

8. WHERE REINFORCING STEEL CONGESTION PERMITS, CONDUIT AND PIPES UP TO 1" DIAMETER MAY BE EMBEDDED IN CONCRETE PER ACI 318, SECTION 6.3. SPACE AT 3 DIAMETERS O.C. PLACE BETWEEN OUTER LAYERS OF REINFORCING IF CONDUITS ARE SIGNIFICANTLY CONGESTED, ADDITIONAL REINFORCING PERPENDICULAR TO PIPING MAY BE REQUIRED. REQUESTS TO EMBED LARGER PIPES SHALL BE ACCOMPANIED BY A DETAILED DESCRIPTION AND BE SUBMITTED TO THE ARCHITECT FOR EVALUATION.

9. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318, SECTION 6.4. PROVIDE KEYWAYS AND ADEQUATE DOWELS. SUBMIT DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS AND DIRECTION OF POUR FOR REVIEW.

10. PROVIDE 3/4" CHAMFER FOR ALL EXPOSED CORNERS.

11. PROVIDE REINFORCING STEEL PLACER WITH A SET OF STRUCTURAL DRAWINGS FOR FIELD REFERENCE. INSPECT REINFORCING STEEL PLACING FROM STRUCTURAL DRAWINGS.

EXPANSION ANCHORS:

1. USE WEDGE-TYPE EXPANSION ANCHORS SUCH AS THE HILTI KWIK BOLT II, ITW RAMSET RED HEAD TRUBOLT WEDGE, POWERS RAWL POWER-STUD, SIMPSON STRONG-TIE WEDGE-ALL OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.

2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

3. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

CHEMICAL ADHESIVE FOR ANCHORING REINFORCING BARS, THREADED BARS AND ANCHOR BOLTS:

1. USE AN EPOXY, ACRYLIC OR POLYESTER RESIN ADHESIVE SYSTEM SUCH AS THE HILTI HIT HY150, ITW RAMSET/RED HEAD EPCON A7 OR C6 INJECTION SYSTEM, POWERS RAWL POWER-FAST SYSTEM, SIMPSON STRONG-TIE AT OR ETALLIED FASTENER ALLIED GOLD A-1000, OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.

2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

3. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE DRILL SIZE. THOROUGHLY CLEAN HOLE INCLUDING REMOVAL OF DUST PRIOR TO FILLING WITH EPOXY.

4. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

5. THREADED RODS ARE A-36 GALVANIZED STEEL, U.O.N.

ESTIMATED QUANTITIES

REPAIR TYPE	MEASURED QUANTITY	BID QUANTITY (INC. 50% CONTINGENCY)
SPALL/DELAMINATION	350 CF	525 CF
EPOXY INJECTION	773 LF	1,160 LF

NOTES:

1. MEASURED QUANTITIES ARE BASED ON PARTIAL FIELD OBSERVATIONS DUE TO LIMITED ACCESS.

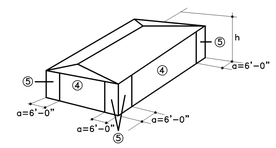
2. BIDDERS SHALL PROVIDE UNIT PRICES FOR REPAIRS IN THE EVENT THAT ACTUAL QUANTITIES DIFFER FROM ESTIMATED QUANTITIES.

WIND LOAD PRESSURE FOR WINDOWS & DOORS
Kd = 0.85

TRIBUTARY AREA	ZONE 4 (PSF)		ZONE 5 (PSF)	
	(+)	(−)	(+)	(−)
0 sf to 10 sf	51.5	−55.8	51.5	−68.7
11 sf. to 29 sf	49.1	−53.4	49.1	−63.9
30 sf. to 49 sf	47.7	−52.0	47.7	−61.5
50 sf to 99 sf	46.3	−50.6	46.3	−58.2
100 sf to 199 sf	43.9	−48.2	43.9	−53.4

NOTES:

1. ZONE ⑤ IS DEFINED AS ANY DOOR OR WINDOW WITHIN 6'-0" FROM ANY CORNER OF THE BUIILDING. ALL OTHER LOCATIONS ARE DEFINED AS ZONE ④.
2. VALUES INDICATED CAN BE INTERPOLATED.
3. FOR Kd = 1.0, MULTIPLY VALUES BY 1.18.



WIND PRESSURE DIAGRAM
WALLS

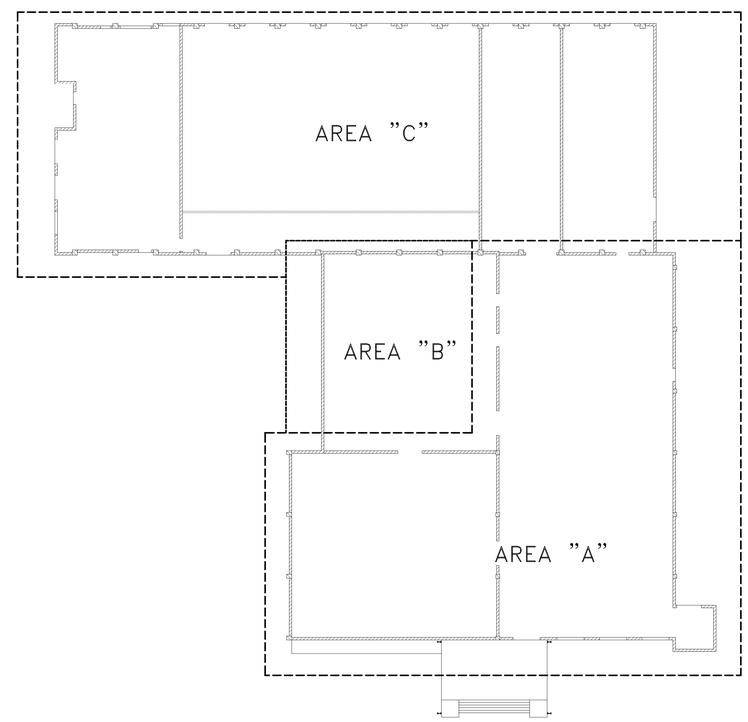
DOOR/WINDOW SCHEDULE

MARK	TYPE	SIZE WIDTH x HEIGHT	NOA #	GLASS TYPE	ANCHOR TYPE	MULLION TYPE	DESIGN PRESSURE (PSF)
1	–	72 X 60	06-1026.08	B	A	W/O REINF.	+51.5/-55.8
2	–	60 X 78	06-1026.08	B	A	W/O REINF.	+51.5/-68.7
3	–	72 X 18	06-1026.08	B	A	W/O REINF.	+51.5/-68.7
1	–	80 X 84	07-1010.02	C	A	–	+51.5/-55.8
2	FD-DOUBLE	71-3/4 X 83-3/4	FL#12522.1	–	A	–	+51.5/-55.8
3	FD-DOUBLE	71-1/2 X 78	FL#12522.1	–	A	–	+51.5/-68.7

NOTES:

1. CONTRACTOR SHALL FIELD VERIFY AND COORD. WINDOW SIZES.

2. CONTRACTOR SHALL INSTALL DOOR AND WINDOWS IN ACCORDANCE WITH NOA.



KEY PLAN

bcc engineering
Certificate of Authorization No. 7184
7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel : 305.670.2350 Fax : 305.670.2351
www.bcceng.com

To the best of my knowledge these plans and specifications comply with the applicable minimum building codes.

Juan J. Fuentes, P.E.
Florida License No. 62426

In Association with:

Submittals / Revisions

Drawn: CA
Checked: SG
Reviewed: JJF

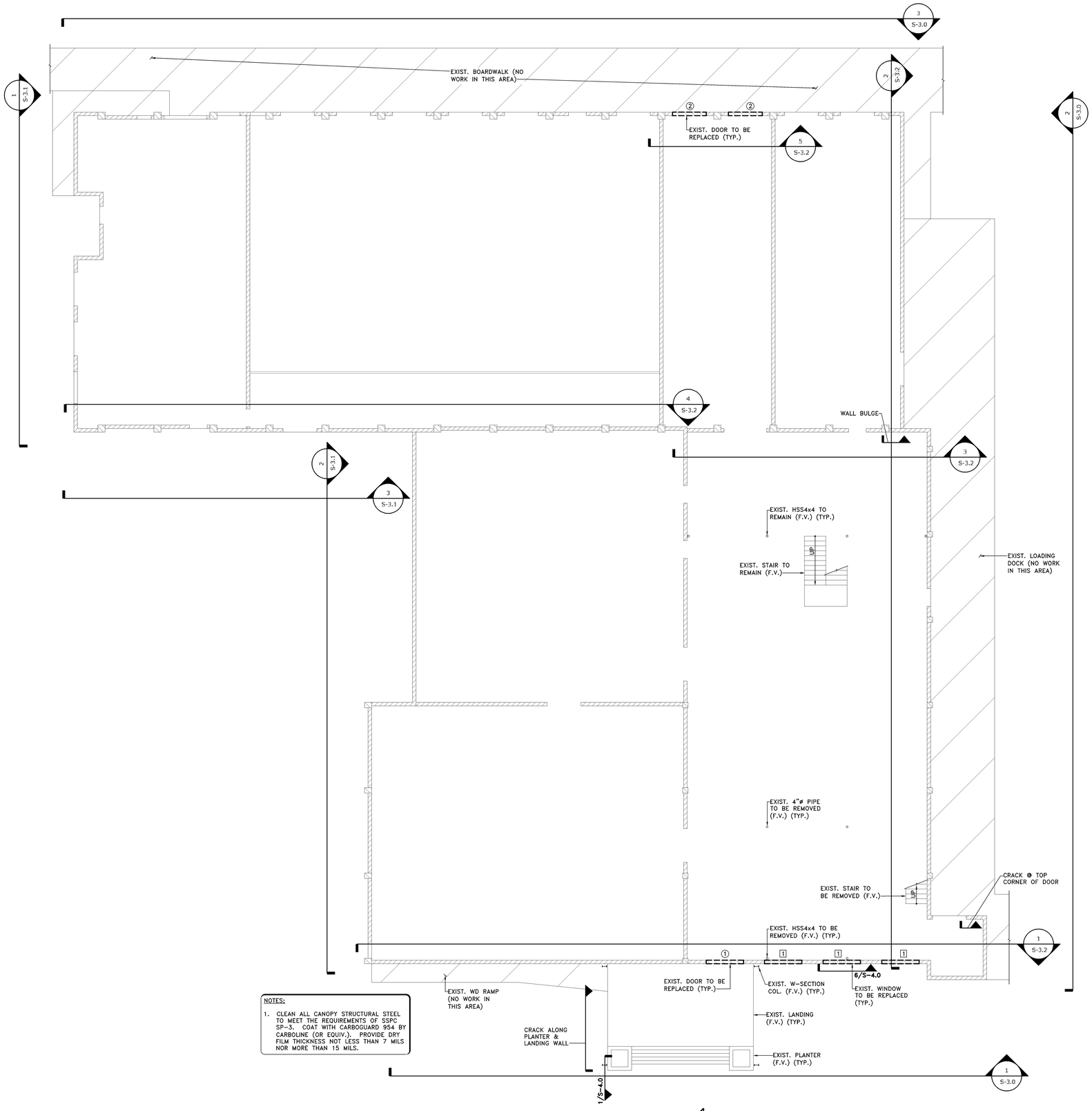
BCC Project No.: -

Date: 09/26/11

Waterfront Market Rehabilitation

201 William Street
Key West, FL 33040

S-1.0

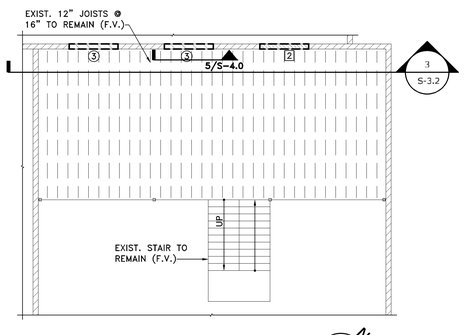


NOTES:

1. CLEAN ALL CANOPY STRUCTURAL STEEL TO MEET THE REQUIREMENTS OF SSPC SP-3. COAT WITH CARBOGUARD 954 BY CARBOLINE (OR EQUIV.). PROVIDE DRY FILM THICKNESS NOT LESS THAN 7 MILS NOR MORE THAN 15 MILS.

FLOOR PLAN

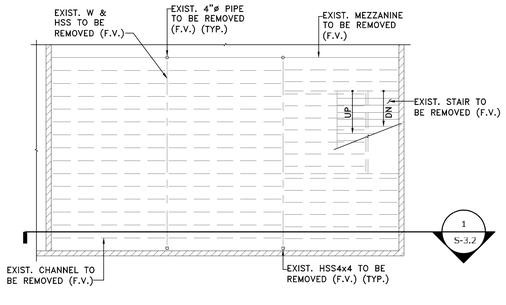
SCALE: 1/8" = 1'-0"



SECOND FLOOR MEZZANINE

TO REMAIN

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



SECOND FLOOR MEZZANINE

AT ENTRANCE TO BE REMOVED

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

bcc engineering

Certificate of Authorization No. 7184
7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel : 305.670.2350 Fax : 305.670.2351
www.bcceng.com

To the best of my knowledge these plans and specifications comply with the applicable minimum building codes.

Juan J. Fuentes, P.E.
Florida License No. 62426

In Association with:

Submittals / Revisions

Drawn: CA
Checked: SG
Reviewed: JJF

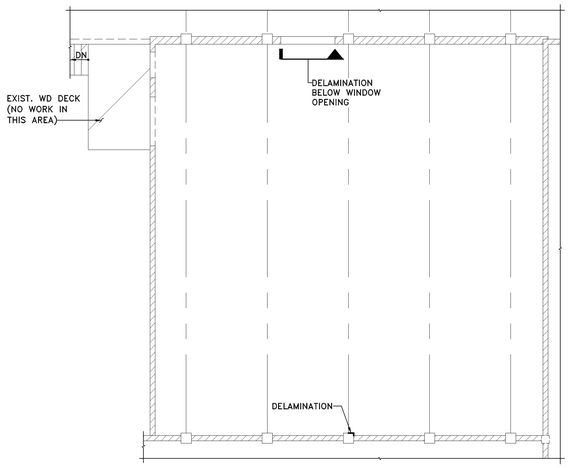
BCC Project No.: -

Date: 09/26/11

Waterfront Market Rehabilitation

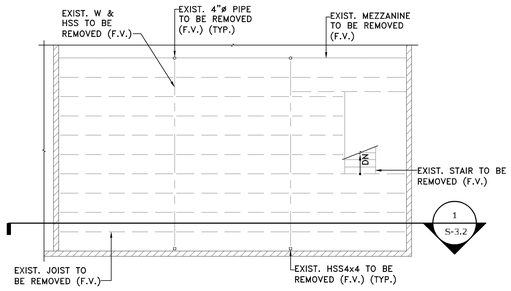
201 William Street
Key West, FL 33040

S-2.0



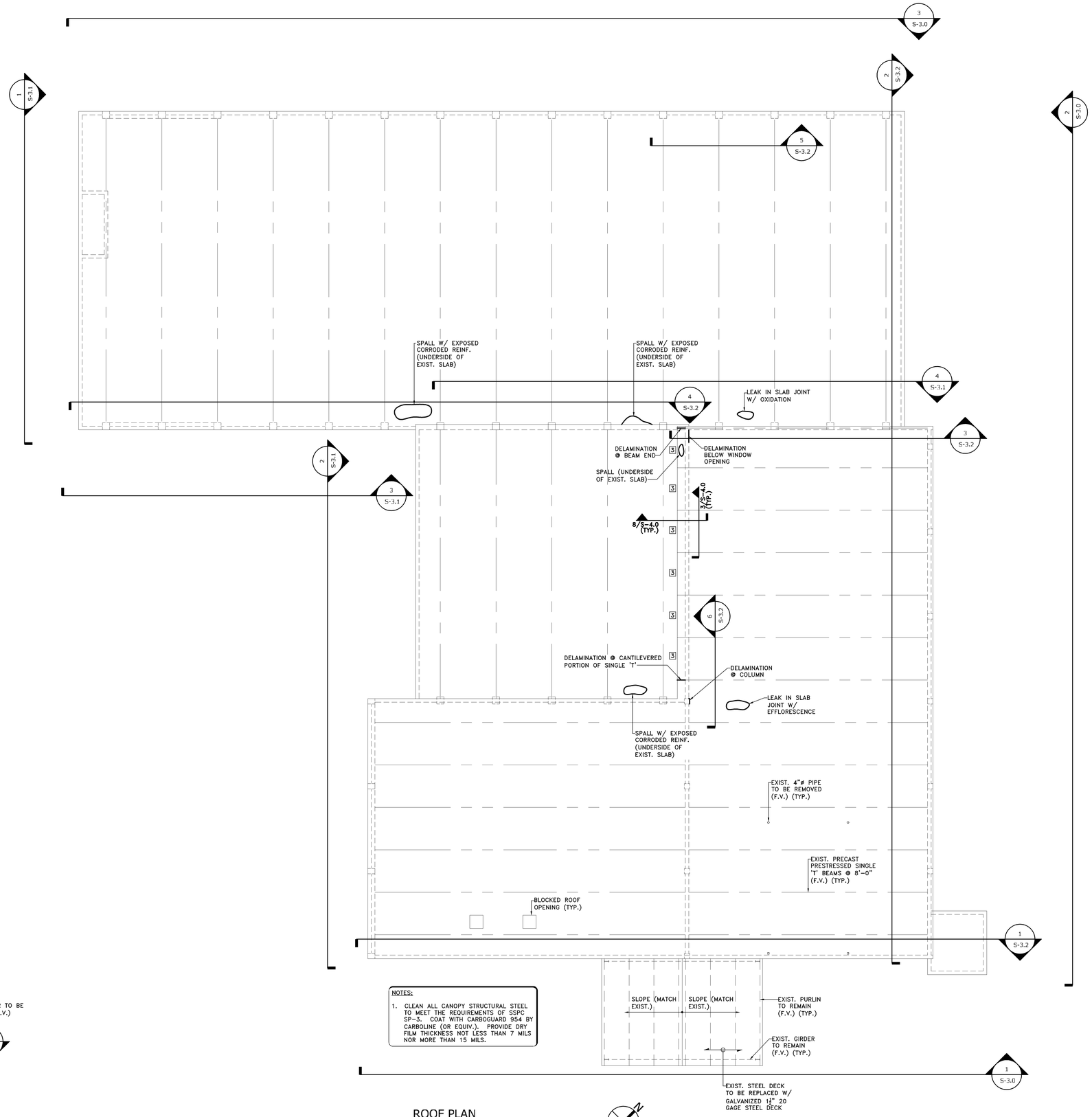
INTERIOR SECOND FLOOR PLAN

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



THIRD FLOOR MEZZANINE

AT ENTRANCE TO BE REMOVED SCALE: 1/8" = 1'-0"



NOTES:

1. CLEAN ALL CANOPY STRUCTURAL STEEL TO MEET THE REQUIREMENTS OF SSPC SP-3. COAT WITH CARBOGUARD 954 BY CARBOLINE (OR EQUIV.). PROVIDE DRY FILM THICKNESS NOT LESS THAN 7 MILS NOR MORE THAN 15 MILS.

ROOF PLAN

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

bcc engineering

Certificate of Authorization No. 7184
7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel : 305.670.2350 Fax : 305.670.2351
www.bcceng.com

To the best of my knowledge these plans and specifications comply with the applicable minimum building codes.

Juan J. Fuentes, P.E.
Florida License No. 62426

In Association with:

Submittals / Revisions

Drawn: CA
Checked: SG
Reviewed: JJF

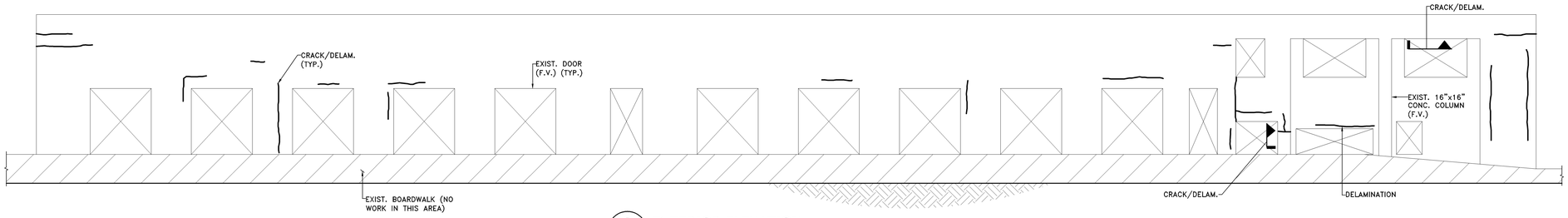
BCC Project No.: -

Date: 09/26/11

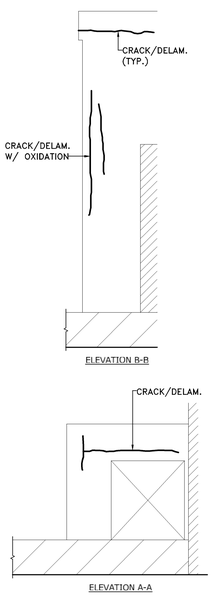
Waterfront Market Rehabilitation

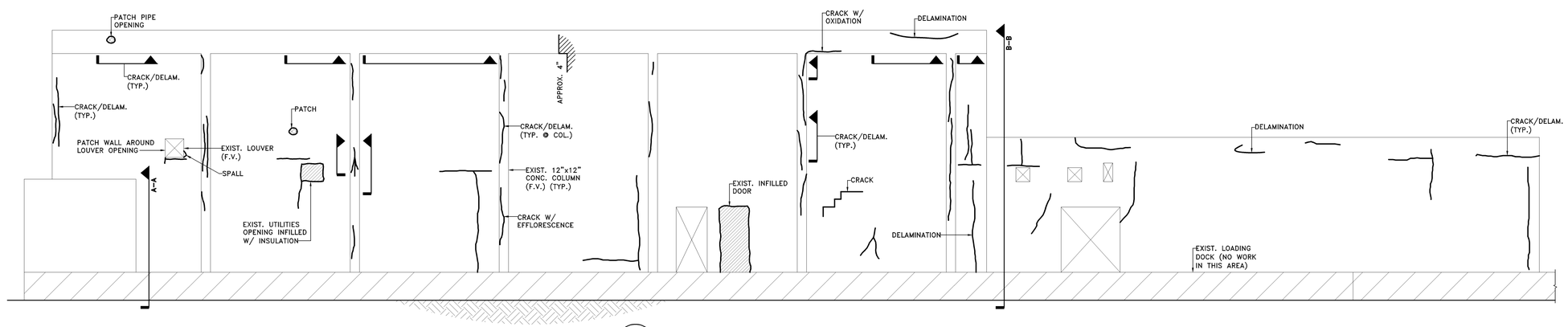
201 William Street
Key West, FL 33040

S-2.1



3 EXTERIOR ELEVATION
LOOKING SOUTH
SCALE: 3/16" = 1'-0"

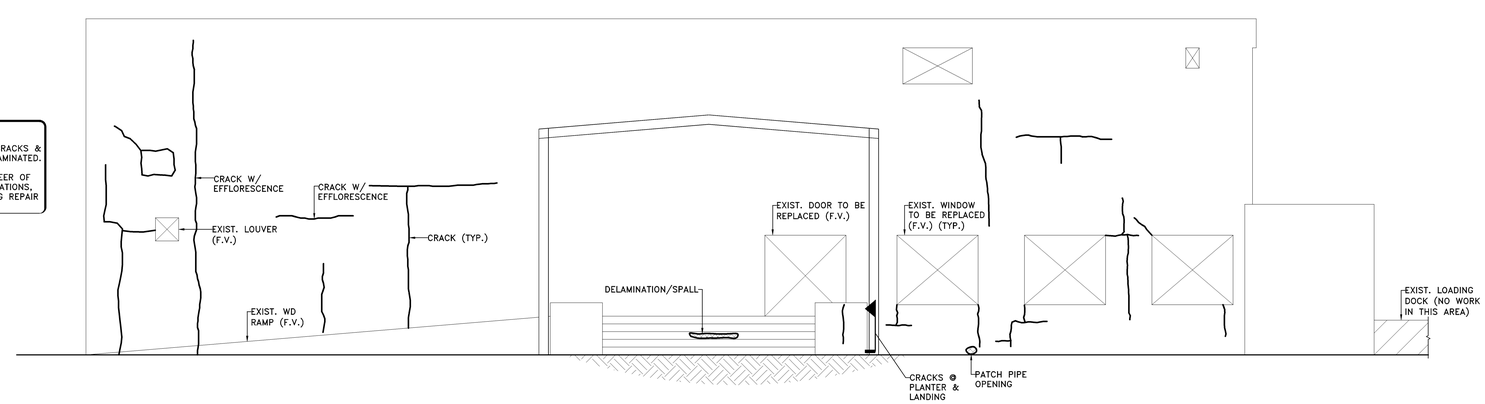




2 EXTERIOR ELEVATION
LOOKING WEST
SCALE: 3/16" = 1'-0"

NOTES:

1. CONTRACTOR SHALL SOUND OUT CRACKS & DETERMINE IF CONCRETE HAS DELAMINATED.
2. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY ADDITIONAL CRACKS, DELAMINATIONS, SPALLS ETC. PRIOR TO CONTINUING REPAIR WORK.



1 EXTERIOR ELEVATION
LOOKING NORTH
SCALE: 3/16" = 1'-0"

bcc engineering
Certificate of Authorization No. 7184
7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel: 305.670.2350 Fax: 305.670.2351
www.bcceng.com

To the best of my knowledge these plans and specifications comply with the applicable minimum building codes.

Juan J. Fuentes, P.E.
Florida License No. 62426

In Association with:

Submittals / Revisions

Drawn: CA
Checked: SG
Reviewed: JJF

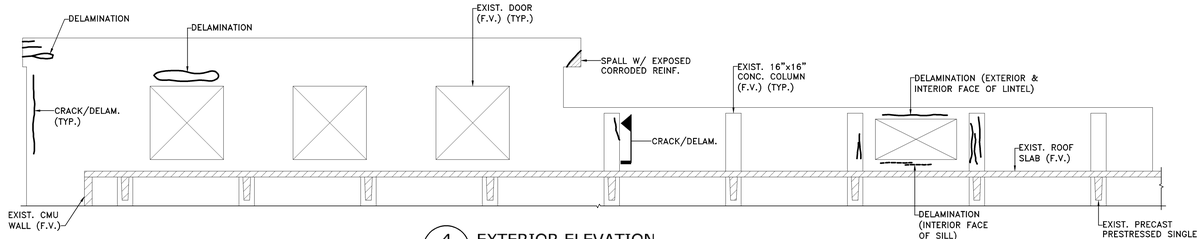
BCC Project No.: -

Date: 09/26/11

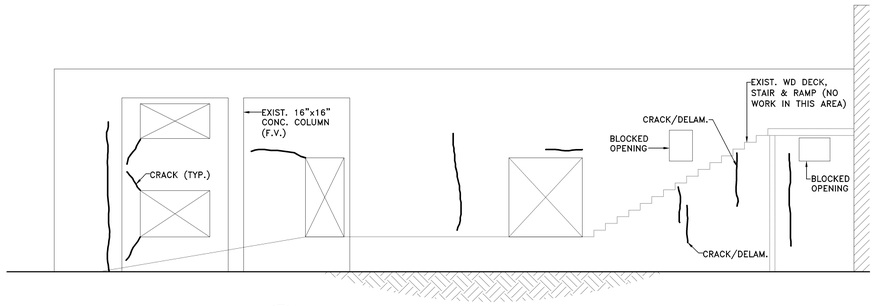
Waterfront Market Rehabilitation

201 William Street
Key West, FL 33040

S-3.0



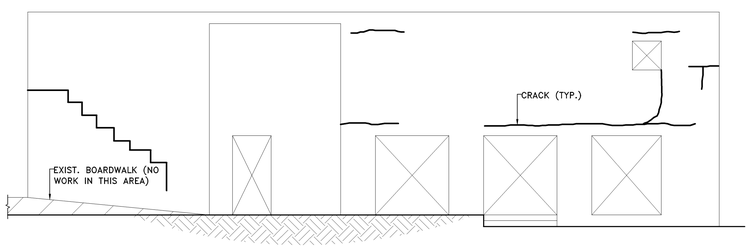
4 EXTERIOR ELEVATION
LOOKING SOUTH
SCALE: 3/16" = 1'-0"



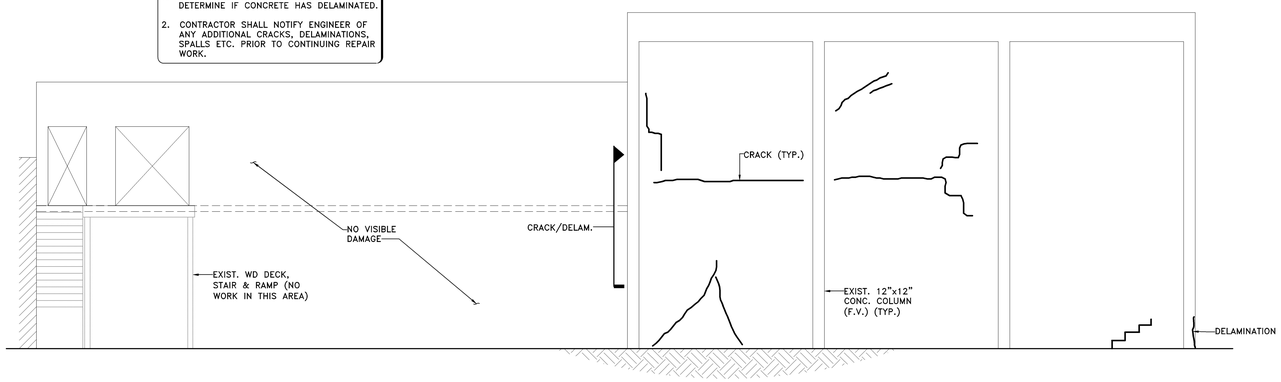
3 EXTERIOR ELEVATION
LOOKING NORTH
SCALE: 3/16" = 1'-0"

NOTES:

1. CONTRACTOR SHALL SOUND OUT CRACKS & DETERMINE IF CONCRETE HAS DELAMINATED.
2. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY ADDITIONAL CRACKS, DELAMINATIONS, SPALLS ETC. PRIOR TO CONTINUING REPAIR WORK.



1 EXTERIOR ELEVATION
LOOKING EAST
SCALE: 3/16" = 1'-0"



2 EXTERIOR ELEVATION
LOOKING EAST
SCALE: 3/16" = 1'-0"

bcc engineering
Certificate of Authorization No. 7184
7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel: 305.670.2350 Fax: 305.670.2351
www.bcceng.com

To the best of my knowledge these plans and specifications comply with the applicable minimum building codes.

Juan J. Fuentes, P.E.
Florida License No. 62426

In Association with:

Submittals / Revisions

Drawn: CA
Checked: SG
Reviewed: JJF

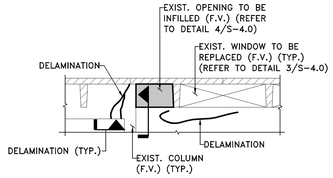
BCC Project No.: -

Date: 09/26/11

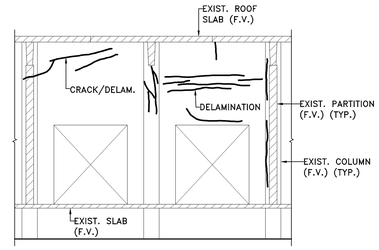
Waterfront Market Rehabilitation

201 William Street
Key West, FL 33040

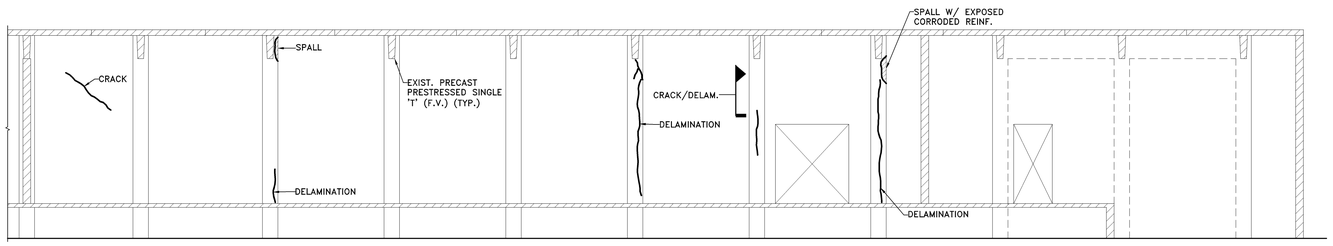
S-3.1



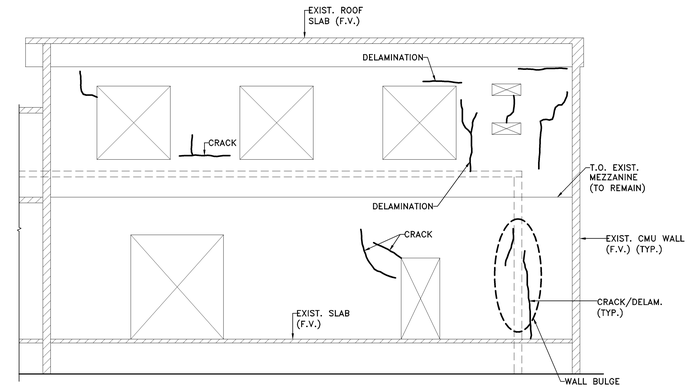
6 INTERIOR ELEVATION
AREA "A" INTERIOR WALL
SCALE: 3/16" = 1'-0"



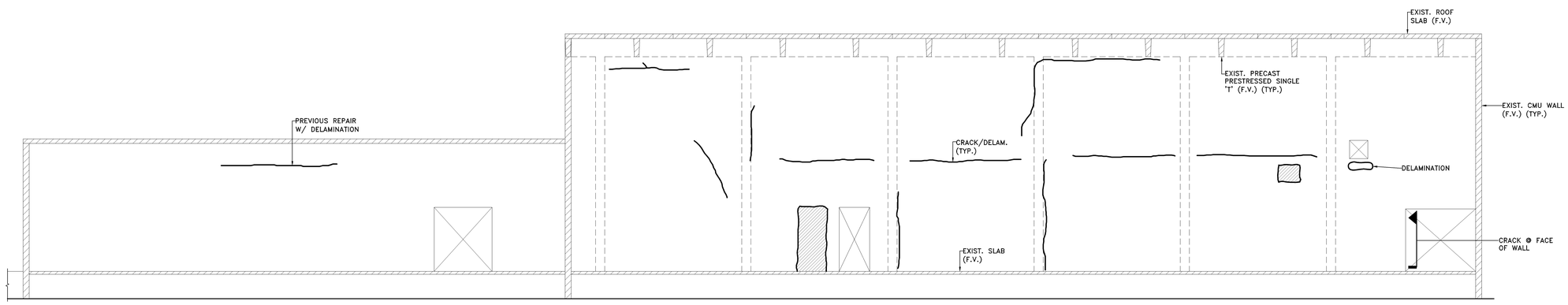
5 INTERIOR ELEVATION
AREA "C" NORTH WALL
SCALE: 3/16" = 1'-0"



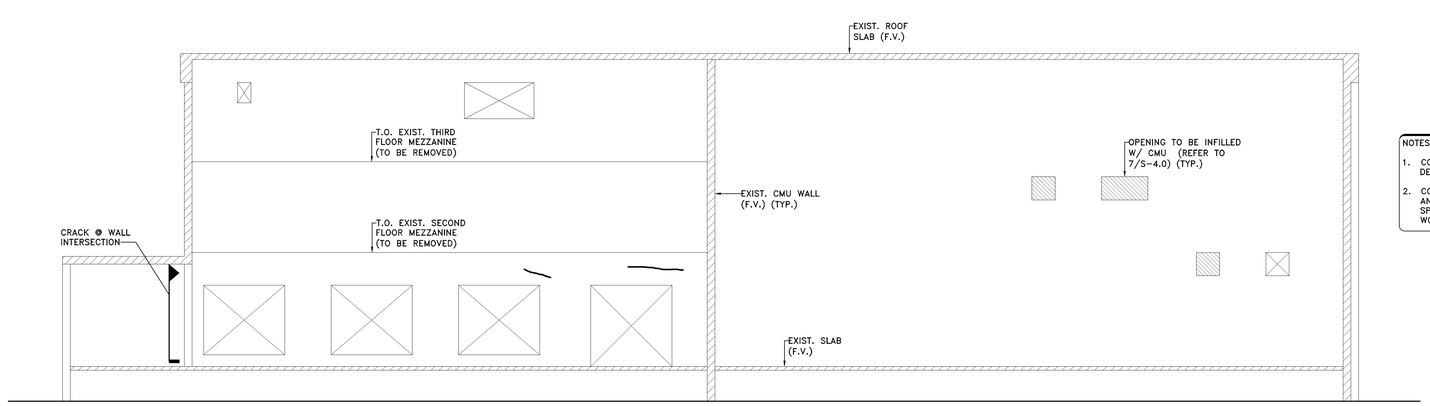
4 INTERIOR ELEVATION
AREA "C" SOUTH WALL
SCALE: 3/16" = 1'-0"



3 INTERIOR ELEVATION
INTERIOR WALL B/W AREA "A" & "C"
SCALE: 3/16" = 1'-0"



2 INTERIOR ELEVATION
AREA "A" & "C" EAST WALL
SCALE: 3/16" = 1'-0"



1 INTERIOR ELEVATION
AREA "A" SOUTH WALL
SCALE: 3/16" = 1'-0"

NOTES:

1. CONTRACTOR SHALL SOUND OUT CRACKS & DETERMINE IF CONCRETE HAS DELAMINATED.
2. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY ADDITIONAL CRACKS, DELAMINATIONS, SPALLS ETC. PRIOR TO CONTINUING REPAIR WORK.

bcc engineering
Certificate of Authorization No. 7184
7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel: 305.670.2350 Fax: 305.670.2351
www.bcceng.com

To the best of my knowledge these plans and specifications comply with the applicable minimum building codes.

Juan J. Fuentes, P.E.
Florida License No. 62426

In Association with:

Submittals / Revisions

Drawn: CA
Checked: SG
Reviewed: JJF

BCC Project No.: -

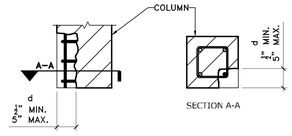
Date: 09/26/11

Waterfront Market Rehabilitation

201 William Street
Key West, FL 33040

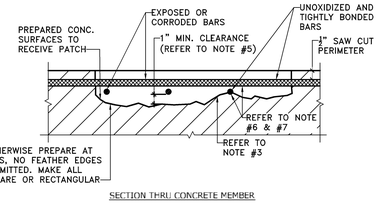
S-3.2

1. COLUMN REPAIR SHALL BE LIMITED TO 25% OF THE COLUMN CROSS SECTIONAL AREA.
2. IF COLUMN REPAIR EXCEEDS 25% OF THE CROSS SECTIONAL AREA, CONTRACTOR SHALL INSTALL SHORING AND SUBMIT SIGNED AND SEALED SHORING SHOP DRAWINGS TO THE ENGINEER OF RECORD.



COLUMN CONCRETE DELAMINATION/SPALL REPAIR NOTES: (WITH REINFORCEMENT)

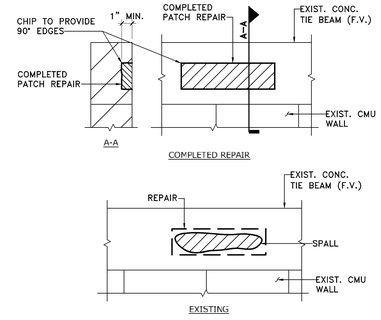
1. PRIOR TO COMMENCING THE REPAIRS, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES.
2. REMOVE DETERIORATED, POROUS, LOOSE, DELAMINATED CONCRETE ABOVE OXIDIZED REINFORCING STEEL. BEGIN WITH ½" DEEP SAWCUT OF PERIMETER. USE ONLY LIGHT ELECTRIC CHIPPING HAMMERS. NO HAMMER DRILLS. NO FEATHER EDGES PERMITTED. MAKE ALL REPAIRS SQUARE OR RECTANGULAR.
3. ONCE INITIAL REMOVALS ARE MADE, PROCEED WITH THE UNDERCUTTING OF ALL EXPOSED OXIDIZED (CORRODED) BARS.
4. PROVIDE MINIMUM 1" CLEARANCE BETWEEN EXPOSED REBARS AND SURROUNDING CONCRETE.
5. CONCRETE REMOVAL SHALL EXTEND ALONG THE BARS TO A LOCATION ALONG THE BARS FREE OF BOND INHIBITING CONDITIONS, AND WHERE THE BAR IS WELL BONDED TO SOUND, NON-POROUS SURROUNDING CONCRETE.
6. IF UNOXIDIZED REINFORCING STEEL IS EXPOSED DURING THE UNDERCUTTING PROCESS, CARE SHALL BE TAKEN NOT TO DAMAGE THE BAR'S BOND TO SURROUNDING CONCRETE. IF BOND BETWEEN BAR AND CONCRETE IS BROKEN, UNDERCUTTING OF THE BAR SHALL BE REQUIRED.
7. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF SECTION LOSS IS GREATER THAN 20% AND/OR MORE THAN 2" UNDERCUTTING OF THE REINFORCING IS NECESSARY.
8. SANDBLAST STEEL OR MECHANICALLY REMOVE CORROSION, SPLICE NEW BARS OF EQUAL SIZE WHERE GREATER THAN 15% TO 20% SECTION LOSS OCCURS. SPLICE LENGTH SHALL BE A MINIMUM OF 24 BAR DIAMETERS. POWER TOOL CLEANING MAY BE USED FOR SMALL SECTIONS.
9. COAT ALL EXPOSED REINFORCING AND CONCRETE SURFACES WITH EMACO PZ4 (OR EQUIVALENT).
10. PATCH WITH LA40 (OR EQUIVALENT) WITH 3/8" AGGREGATE.



BEAM CONCRETE DELAMINATION/SPALL REPAIR NOTES: (WITH REINFORCEMENT)

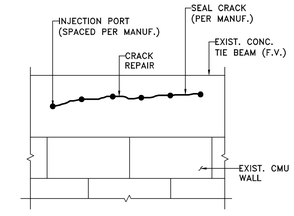
1. PRIOR TO COMMENCING THE REPAIRS, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES.
2. REMOVE DETERIORATED, POROUS, LOOSE, DELAMINATED CONCRETE ABOVE OXIDIZED REINFORCING STEEL. BEGIN WITH ½" DEEP SAWCUT OF PERIMETER. USE ONLY LIGHT ELECTRIC CHIPPING HAMMERS. NO HAMMER DRILLS. NO FEATHER EDGES PERMITTED. MAKE ALL REPAIRS SQUARE OR RECTANGULAR.
3. ONCE INITIAL REMOVALS ARE MADE, PROCEED WITH THE UNDERCUTTING OF ALL EXPOSED OXIDIZED (CORRODED) BARS.
4. PROVIDE MINIMUM 1" CLEARANCE BETWEEN EXPOSED REBARS AND SURROUNDING CONCRETE.
5. CONCRETE REMOVAL SHALL EXTEND ALONG THE BARS TO A LOCATION ALONG THE BARS FREE OF BOND INHIBITING CONDITIONS, AND WHERE THE BAR IS WELL BONDED TO SOUND, NON-POROUS SURROUNDING CONCRETE.
6. IF UNOXIDIZED REINFORCING STEEL IS EXPOSED DURING THE UNDERCUTTING PROCESS, CARE SHALL BE TAKEN NOT TO DAMAGE THE BAR'S BOND TO SURROUNDING CONCRETE. IF BOND BETWEEN BAR AND CONCRETE IS BROKEN, UNDERCUTTING OF THE BAR SHALL BE REQUIRED.
7. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF SECTION LOSS IS GREATER THAN 20% AND/OR MORE THAN 2" UNDERCUTTING OF THE REINFORCING IS NECESSARY.
8. SANDBLAST STEEL OR MECHANICALLY REMOVE CORROSION, SPLICE NEW BARS OF EQUAL SIZE WHERE GREATER THAN 15% TO 20% SECTION LOSS OCCURS. SPLICE LENGTH SHALL BE A MINIMUM OF 24 BAR DIAMETERS. POWER TOOL CLEANING MAY BE USED FOR SMALL SECTIONS.
9. COAT ALL EXPOSED REINFORCING AND CONCRETE SURFACES WITH EMACO PZ4 (OR EQUIVALENT).
10. PATCH WITH LA REPAIR MORTAR (OR EQUIVALENT) WITH 3/8" AGGREGATE.

9 REPAIR DETAILS
N.T.S.



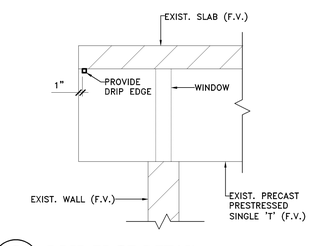
CONCRETE DELAMINATION/SPALL REPAIR NOTES: (WITHOUT REINFORCEMENT)

1. PRIOR TO COMMENCING THE REPAIRS, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF SECTION LOSS IS GREATER THAN 20%.
3. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR SURFACE PREPARATION AND INSTALLATION.
4. PATCH WITH LA REPAIR MORTAR (OR EQUIVALENT).

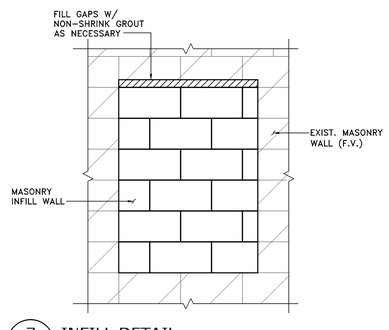


CRACK REPAIR NOTES:

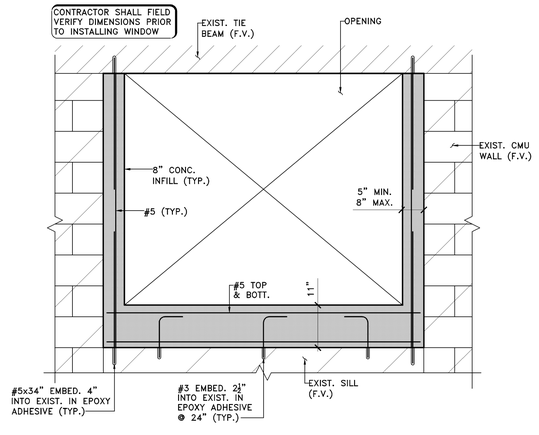
1. PRIOR TO COMMENCING THE REPAIRS, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES.
2. INJECT ALL CRACKS WITH EPOXEAL GS STRUCTURAL (OR EQUIV.) AND SIKADUR 32 HI-MOD LV (OR EQUIV.) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.



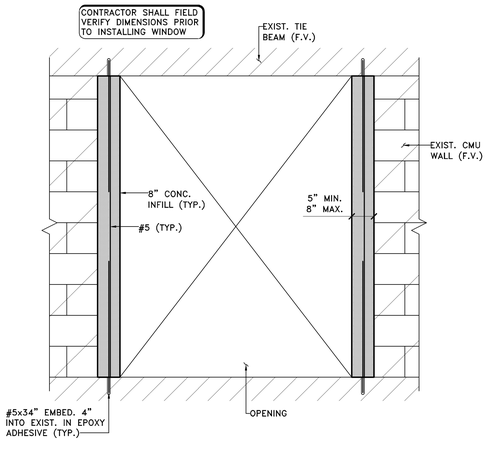
8 DRIP EDGE DETAIL
SCALE: 3/4" = 1'-0"



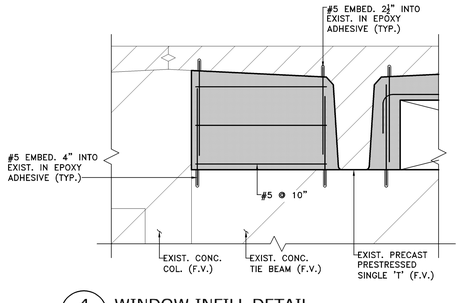
7 INFILL DETAIL
SCALE: 3/4" = 1'-0"



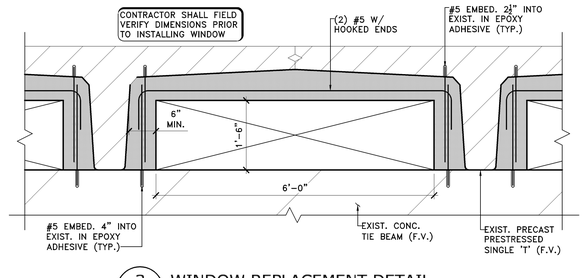
6 WINDOW REPLACEMENT DETAIL
SCALE: 3/4" = 1'-0"



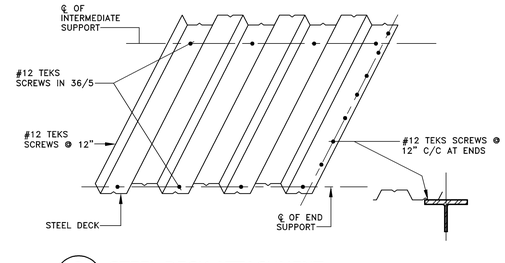
5 WINDOW REPLACEMENT DETAIL
SCALE: 3/4" = 1'-0"



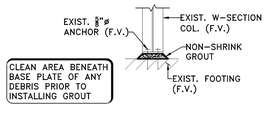
4 WINDOW INFILL DETAIL
SCALE: 3/4" = 1'-0"



3 WINDOW REPLACEMENT DETAIL
SCALE: 3/4" = 1'-0"



2 STEEL DECK ATTACHMENT
N.T.S.



1 EXIST. COLUMN BASE REPAIR
SCALE: 1" = 1'-0"

bcc engineering
Certificate of Authorization No. 7184
7300 North Kendall Drive, Suite 400
Miami, Florida 33156
Tel: 305.670.2350 Fax: 305.670.2351
www.bcceng.com

To the best of my knowledge these plans and specifications comply with the applicable minimum building codes.

Juan J. Fuentes, P.E.
Florida License No. 62426

In Association with:

Submittals / Revisions

Drawn: CA
Checked: SG
Reviewed: JJF

BCC Project No.: -

Date: 09/26/11

Waterfront Market Rehabilitation

201 William Street
Key West, FL 33040

S-4.0