Construction Plans
for
Limited Concrete
Repair

SITE LOCATION

LOCATION MAP:

PROJECT LOCATION:
201 William St
Key West, FL 33040

CLIENT:
attn: Karen Olson
City of Key West
Port & Marine Services

This item has been digitally signed and sealed by Serge Mashitakov 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.

Serge Mashitakov
Professional Engineer
State of Florida
License No. 71480

This drawing is not valid without the signature and original seal.

Artibus Design
Engineering and Planning

Artibus Design
3710 N. Roosevelt Blvd
Key West, FL 33040
(305) 304-3512
www.ArtibusDesign.com
CA # 30835

Client:
City of Key West
Port & Marine Services

Project:
Limited Concrete Repair

Site:
201 William St
Key West, FL 33040

Title:
COVER SHEET

Scale at 24x36	Date	Drawn	Checked
As shown	01/29/25	JDH	SAK

Project No.	Drawing No.	Revision
2501-01	G-100	1

General Requirements:

1. Prior to starting any work, the Contractor shall review these plans and site conditions and notify the Engineer if any discrepancies are discovered.
2. The Engineer is not responsible for the supervision of the Contractor nor their employees during the construction. It is the Contractor's responsibility to provide means and establish methods of the construction, to meet requirements of all applicable codes, industry standards, and requirements of these plans.
3. Quality of the work shall meet or exceed industry standard practices.
4. Any deviations from these plans shall be reviewed and pre-approved by the Engineer.

Submittals:

1. The Contractor shall provide electronic (pdf) submittals for All materials, products, and accessories used for this project (no exceptions).
2. All submittals shall be reviewed, dated, and signed by the General Contractor's representative prior submitting for Engineers review.
3. The Contractor shall prepare and maintain a submittal log for all products with a list of all submittals, their status, and dates of submittal/review.
4. The Contractor shall plan in advance for timely preparation of all submittals and allow 2-3 weeks for review and correction process.

Design Data:

1. Applicable Building Code: FBC Existing Building 8th Edition (2023)
2. Applicable Design Loads: per ASCE/SEI 7-22

Concrete Roof Loads (Unoccupied Roof):
Roof Live: 20 psf

Concrete Roof Loads (Occupiable Roof):
Roof Live: 100 psf

Floor Loads:
Floor Live: 100 psf

Wind: Basic Wind Speed: 180 MPH, Exposure: D, Structural Category: II
All wind pressures shown are ASD Design pressures (0.6 Load Factor)

3. Flood Design Loads: per ASCE 24-14, Flood Resistant Design and Construction
   Flood Zone: VE10

CONCRETE REPAIRS:

1. Repair area shall have a simplified geometry (typically rectangular). Depth of repair shall be consistent throughout repair area. Sudden changes in repair depth will cause cracking.
2. Sawcut perimeter of repair area (3/4" deep), to avoid feathered edges of repair material. Do not cut rebar.
3. Remove all loose and unsound concrete, by impact breaker or hydro-demolition. Impact breaker shall not exceed 30 lb; 15 lb impact breaker is preferred (to limit "concrete bruising")
   3.1. Contractor shall verify that no concealed electrical conduit exists.
   3.1. If prestressing strands or post tensioning tendons are encountered, stop work immediately and contact E.O.R.
4. Expose all rebar (in repair area) from all sides (1" clr. around)
5. Remaining sound concrete surfaces shall be roughened to 1/4" amplitude
6. Clean all exposed rebar by mechanical means to bare steel (SSPC-SP15).
7. Pressure wash all concrete and reinforcement with potable water (3,000 psi min.). Concrete and rebar shall be clean of all loose and/or bond inhibiting material.
8. Prime existing reinforcement w/ "SIKA ARMATEC 110 EPOCEM" or approved equal. Follow manufacturer instructions for surface preparation, application, and curing.
9. All rebar with loss of section over 20% shall be duplicated with new rebar of equal size.
10. Minimum concrete cover shall be 2" unless otherwise is approved by the engineer.
11. Install sacrificial anodes "GALVASHIELD XP COMPACT" (or approved equal) as shown on the repair details. Install in strict conformance w/ manufacturer specifications, including testing with an ohmmeter for continuity.
12. Concrete repair material
    12.1. Small patch (formed) repairs (depth up to 8", area up to 10 ft2): use "SIKACRETE 211 SCC PLUS" or approved equal repair mortar. Strictly follow manufacturer instructions for surface preparation, mixing, application, and curing.
    12.2. Large repairs (including full depth slab, beam, or column repair/replacement): use 4000 psi concrete mix with w/c ratio 0.4 max. with high range plastesizer, and a corrosion inhibiting admixture (Calcium Nitrite (>30%), meeting ASTM C1582 & ASTM G109, min. 3 gal/cy). Existing conc. surfaces shall be roughened to 1/4" amplitude, clean, and saturated surface dry (SSD) at time of new concrete placement.
    12.3. Overhead trowel repair applications (small depth slab and beam repairs): use "SIKAQUICK® VOH" or "SIKATOP® 123 PLUS", or approved equal trowel grade repair mortars. Strictly follow manufacturer instructions for surface preparation, mixing, application, and curing.
13. ! Moist curing for minimum of 4 days is required. Follow hot weather concreting guidlines.
14. The contractor is responsible for any shoring/reshoring and temporary supports of all structural elements during the repair and throughout the full concrete curing period.
15. Where concrete columns are to be repaired or replaced, repairs of columns shall be staggered, no two adjacent columns shall be repaired simultaneously.
16. Refinish all work to match existing finishes and as coordinated with owner.

Concrete:

1. Applicable Code ACI 318 latest edition. All concrete and concrete work shall meet the requirements of ACI 301 "Specifications for Structural Concrete" (latest addition).
2. All concrete used on this project shall meet the requirements stated in "CONCRETE REPAIRS" notes.
3. All cast-in-place concrete shall be produced, placed, cured, and protected from overdrying per ACI 305R-10 "Hot Weather Concreting" and ACI 301 "Specifications for Structural Concrete".
4. All exposed edges shall have 1/2" chamfers.
5. No cold joints are allowed unless otherwise approved by the Engineer.
6. TESTING: All Field and Laboratory Testing shall be performed by an independent specialized company.
   6.1. The contractor is responsible for all scheduling, coordination, and cost of the testing company.
   6.2. A minimum of Three (3) compressive strength samples shall be taken at each of the following sampling frequencies.
      6.2.1. Each day of concreting and for every concrete mix
      6.2.2. Every 50 cubic yards
      6.2.3. Every 2000 sq.ft. of slab area
   6.3. All testing shall be per latest ACI and ASTM requirements.
   6.4. Laboratory shall supply digitally signed&sealed report results to the Engineer.
7. Cast-in-place and precast member erection tolerances shall be as specified in the table 8.2.2 or in section 8.3 of "PCI design handbook/sixth edition".
8. Concrete anchor epoxy shall be Simpson Set-3G or Hilti HIT-RE 500 V3, or approved equal, installed in strict conformance with the manufacturer's specifications. Cast in place anchors shall be headed anchor bolts or "L" hook bolts.
9. High strength bearing grout shall be non-shrink, non-metallic, and provide a min. Of 95% effective bearing area. Bearing grout shall exhibit a 10 ksi min. (28 day) compressive strength (ASTM C942) and 2 ksi min. (28 day) bond strength (ASTM C882). Install per manufacturer's specifications

Reinforcement (ALL REBAR TO BE CHROMX):

1. Chromx rebar shall be deformed steel ASTM A1035, CS, Grade 100 (Chrom-x 9100).
2. All requirements for placement, cover, tolerances, etc. Shall be per ACI 318. Rebar clear cover shall be 3" when cast against earth and 2" otherwise.
3. All hooks and bends shall be factory made unless field bends are approved by the Engineer.
4. Only PLASTIC CHAIRS and CENTRALIZERS shall be used for rebar support.

BAR SPLICING SCHEDULE

BEAMS AND COLUMNS (CLASS B)

BAR SIZE	LOCATION	LAP SPLICE LENGTH (INCHES)
#3	TOP BARS*	24"
	ALL OTHER BARS	19"
#4	TOP BARS*	32"
	ALL OTHER BARS	25"
#5	TOP BARS*	40"
	ALL OTHER BARS	31"
#6	TOP BARS*	48"
	ALL OTHER BARS	37"
#7	TOP BARS*	70"
	ALL OTHER BARS	54"
#8	TOP BARS*	80"
	ALL OTHER BARS	62"
#9	TOP BARS*	91"
	ALL OTHER BARS	70"
#10	TOP BARS*	102"
	ALL OTHER BARS	79"

NOTES:
1. BASED ON NORMAL WEIGHT CONCRETE (4,000 PSI CONCRETE STRENGTH) & GRADE 60 REINFORCEMENT. CLASS B SPLICE
2. *TOP BARS ARE HORIZONTAL OR INCLINED BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS
3. SPLICES SHALL BE STAGGERED, WHEN POSSIBLE. HOWEVER, NOT REQUIRED
4. CLEAR SPACING BETWEEN LAP SPLICE AND ADJACENT BARS SHALL BE 1" MIN. FOR #8 BARS AND SMALLER, AND ONE BAR DIAMETER FOR BARS LARGER THAN #8. (NOTE: LAPPED BARS SHALL BE IN CONTACT WITH EACH OTHER)
5. TENSION DEVELOPMENT AND LAP SPLICE LENGTHS ARE CALCULATED PER ACI 318-14, SECTIONS 25.4.2.2 AND 25.5.1.

Structural Lumber:

1. All wood members shall meet or exceed requirements specified in "American Wood Council, National Design Specification (NDS) for Wood Construction" and all referenced standards (latest editions).
2. All wood members shall be Pressure Treated Southern Pine No2 or Greater, and kiln dried as specified in the Standards, U.N.O.
3. All wood members shall be Pressure-Treated (PT) UC4A grade per AWPA Standards, U.N.O.
4. All field cuts in PT lumber shall be treated on site.
5. Nailing shall be in accordance with FBC-Building Table 2304.10.1.
   5.1. All nails and fasteners for PT wood shall be ACQ pressure treated approved.
   5.2. Exposed (outside of building envelope) nails and fasteners shall be stainless steel, U.N.O.
6. Sheathing (roof and wall) shall be pressure treated 3/4" CDX Plywood (Sheathing Grade, $^{48}/_{24}$ span rating), unless otherwise is specified on the plans. Use 10d ring-shank nails (3"x0.131") with spacing of 4" o.c. on all edges and 4" o.c. in the field.

Structual Steel, Welding, & Bolting:

1. Structural steel components shall be as described in "Specifications for Structural Steel Buildings" AISC 2005 or later eddition.
2. HSS shapes (structural tubing) shall be ASTM A500 Gr. B (Fy min.=42 ksi).
3. W-shapes shall be ASTM A992 (Fy=50 ksi).
4. C-shapes, L-shapes, Steel plates, and all other steel members shall be ASTM A36 (Fy=36 ksi) unless noted otherwise on the plans.
5. All welding shall be in conformance with the latest specifications AWS D1.1/D1.1M:2010, Structural Welding Code - Steel.
6. Bolts and threaded rod shall be a minimum of A307 grade A, galvanized, U.N.O. Supply all bolts w/ galvanized nuts and washers meeting astm A563 and astm F844.
7. Bolts should be the minimum length to fit connected members along with required washers and nut(s)
8. Nuts shall be snug tight galvanized lock nuts. Otherwise "double nutting" shall be used to lock nuts from loosening.

Structural Steel Coating:

1. All surfaces shall be abrasive blast cleaned to near-white metal (per SSPC-SP10)
2. Exposed Steel:
3. All surfaces shall be primed with Polyamide Epoxy - one coat (8.0 mils DFT).
4. Apply Sealant at all locations where steel is welded, bolted, lapped, etc. Sealant material shall be compatible with the painting system.
5. Top layer shall be two (2) coat Polyurethane (3.0 mils DFT each).
6. Top paint shall be UV resistant or have a UV resistant coating.
7. Colors shall match existing or to be selected by the owner.
8. Non-Exposed Steel (Interior):
9. 2 coats of "Sumter Coatings" Universal Primer (6.0 mils DFT) or Approved Equal.

Reinforced Masonry (CMU):

1. All Masonry shall be reinforced concrete masonry units in accordance with the latest edition of ACI 530/ASCE 5/TMS 402.
2. Install all blocks in running bond.
3. Minimum masonry block (ASTM C90) strength shall ($F^{'}m$) be 2000 psi.
4. Type "S" mortar (ASTM C270) shall be used with 3/8" full bedding, reinforced w/ 9 gage stainless ladder wire every 2nd row.
5. Cells shall be reinforced with #5 rebar at 24" o.c., at each side of openings, at all wall corners, and where noted otherwise on the plans. Grout all reinforced cells.
6. Grout shall be pea rock pump mix (ASTM C476) with a minimum compressive strength of 4000 psi (28 day) (ASTM C1019). Targeted slump shall be 8"-11".
7. Each grouted cell shall have cleanout openings at the bottom. There shall be no loose mortar or other debris in the bottom of the cell. Use blast pressure washing for surface preparation.

General Hardware:

1. Unless noted otherwise, exterior hardware shall be 304 or 316 Stainless Steel
   1.1. Interior hardware shall be min. G185 galvanized (aka Zmax)
2. All stainless hardware shall have stainless steel screws and fasteners.
   2.1. All other fasteners shall be ACQ Approved treated.

Aluminum Components:

1. Type 6061-T6 aluminum.
2. MIG weld all joints w/ continuous 1/8" weld. Use 5356 filler wire alloy.
3. All aluminum in contact with concrete, PT wood, dissimilar metals and other corrosive materials shall have contact surface coated with bituminous paint or protected by other Engineer approved method.

This item has been digitally signed and sealed by Serge Mashtakov, PE 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.

Serge Mashtakov
Professional Engineer
State of Florida
License No. 71489

This drawing is not valid without the signature and original seal

Artibus Design
Engineering and Planning

Artibus Design
3710 N. Roosevelt Blvd
Key West, FL 33040
(305) 304-3512
www.ArtibusDesign.com
CA # 30835

CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

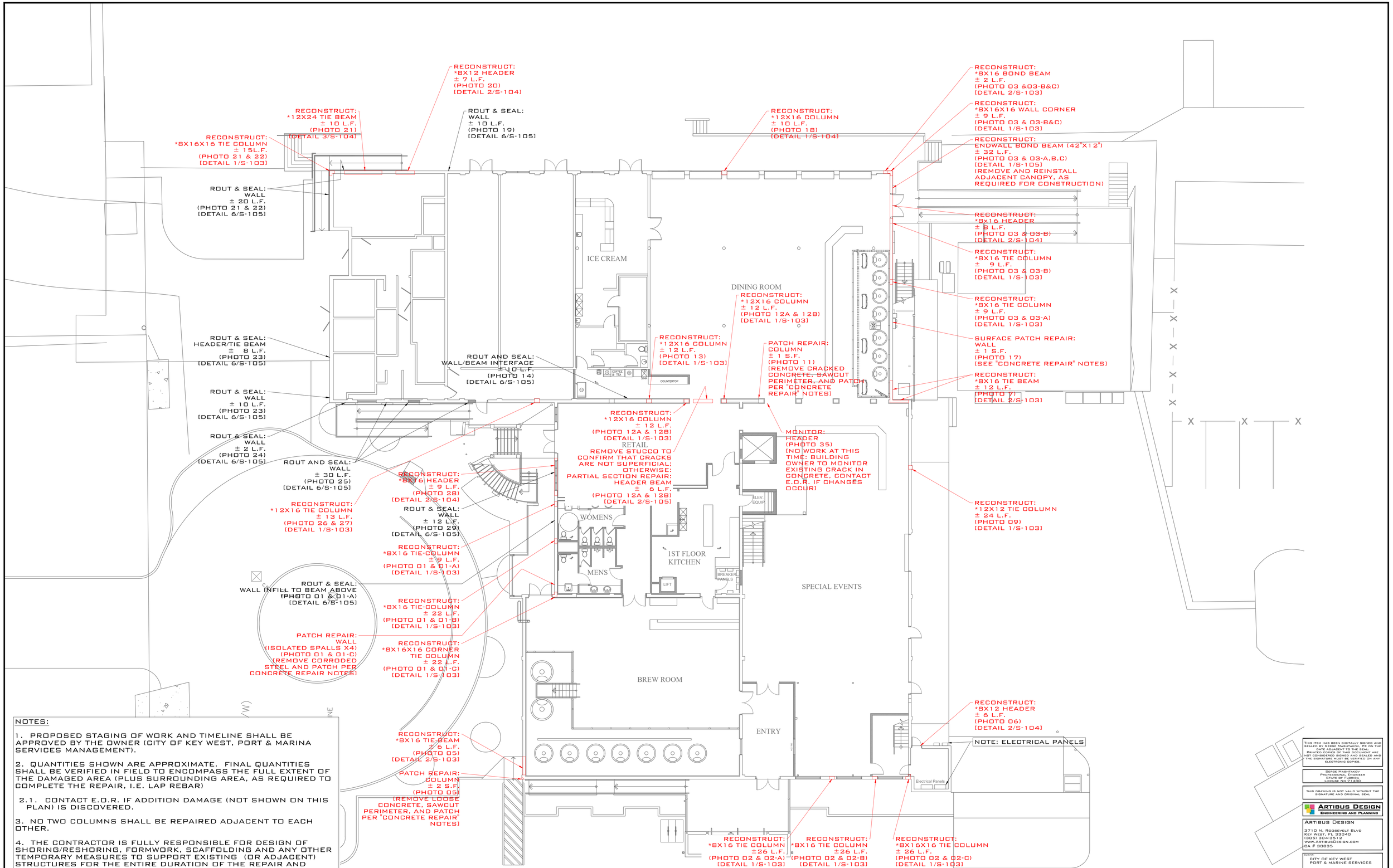
PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
GENERAL
NOTES

SCALE AT 22x34	DATE	DRAWN	CHECKED
AS SHOWN	01/29/25	JDH	SAM

PROJECT NO.	DRAWING NO.	REVISION
2501-01	S-100	1



NOTES:

1. PROPOSED STAGING OF WORK AND TIMELINE SHALL BE APPROVED BY THE OWNER (CITY OF KEY WEST, PORT & MARINA SERVICES MANAGEMENT).

2. QUANTITIES SHOWN ARE APPROXIMATE. FINAL QUANTITIES SHALL BE VERIFIED IN FIELD TO ENCOMPASS THE FULL EXTENT OF THE DAMAGED AREA (PLUS SURROUNDING AREA, AS REQUIRED TO COMPLETE THE REPAIR, I.E. LAP REBAR)

2.1. CONTACT E.O.R. IF ADDITION DAMAGE (NOT SHOWN ON THIS PLAN) IS DISCOVERED.

3. NO TWO COLUMNS SHALL BE REPAIRED ADJACENT TO EACH OTHER.

4. THE CONTRACTOR IS FULLY RESPONSIBLE FOR DESIGN OF SHORING/RESHORING, FORMWORK, SCAFFOLDING AND ANY OTHER TEMPORARY MEASURES TO SUPPORT EXISTING (OR ADJACENT) STRUCTURES FOR THE ENTIRE DURATION OF THE REPAIR AND CONCRETE CURING.

5. THE CONTRACTOR SHALL PROTECT AND/OR REPAIR ANY DAMAGE TO FINISHES, PAVEMENTS, INTERIOR AND EXTERIOR ITEMS OF THE BUILDING AND ITS SURROUNDINGS.

6. (*) REPRESENTS ESTIMATED MEMBER SIZE. CONTRACTOR TO VERIFY IN FIELD AND RECONSTRUCT MEMBERS TO MATCH EXISITNG. CONTACT E.O.R. IF ACTUAL CONSTRUCTION SIGNIFICANTLY DIFFERS.

CONCRETE REPAIR PLAN - 1ST FLOOR

SCALE: N.T.S.

3/32" = 1'-0"

WARNING: WORK AROUND ELECTRICAL EQUIPMENT
CONSTRUCTION VIBRATIONS CAN DAMAGE OR LOOSEN ELECTRICAL CONNECTIONS, CAUSING A RISK OF FIRE AND/OR DAMAGE TO THE ELECTRICAL EQUIPMENT. A LICENSED ELECTRICIAN SHALL INSPECT THE ELECTRICAL EQUIPMENT UPON COMPLETION OF THE WORK, TO ENSURE THAT THE EQUIPMENT IS UNDAMAGED AND IN SAFE WORKING ORDER. IT IS RECOMMENDED THAT ELECTRICAL EQUIPMENT BE DE-ENERGIZED DURING CONSTRUCTION.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SERGE MASHTAKOV, PE 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.

SERGE MASHTAKOV
PROFESSIONAL ENGINEER
STATE OF FLORIDA
LICENSE NO. 71480

THIS DRAWING IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL SEAL

ARTIBUS DESIGN
ENGINEERING AND PLANNING

ARTIBUS DESIGN
3710 N. ROOSEVELT BLVD
KEY WEST, FL 33040
(305) 304-3512
WWW.ARTIBUSDESIGN.COM
CA # 30835

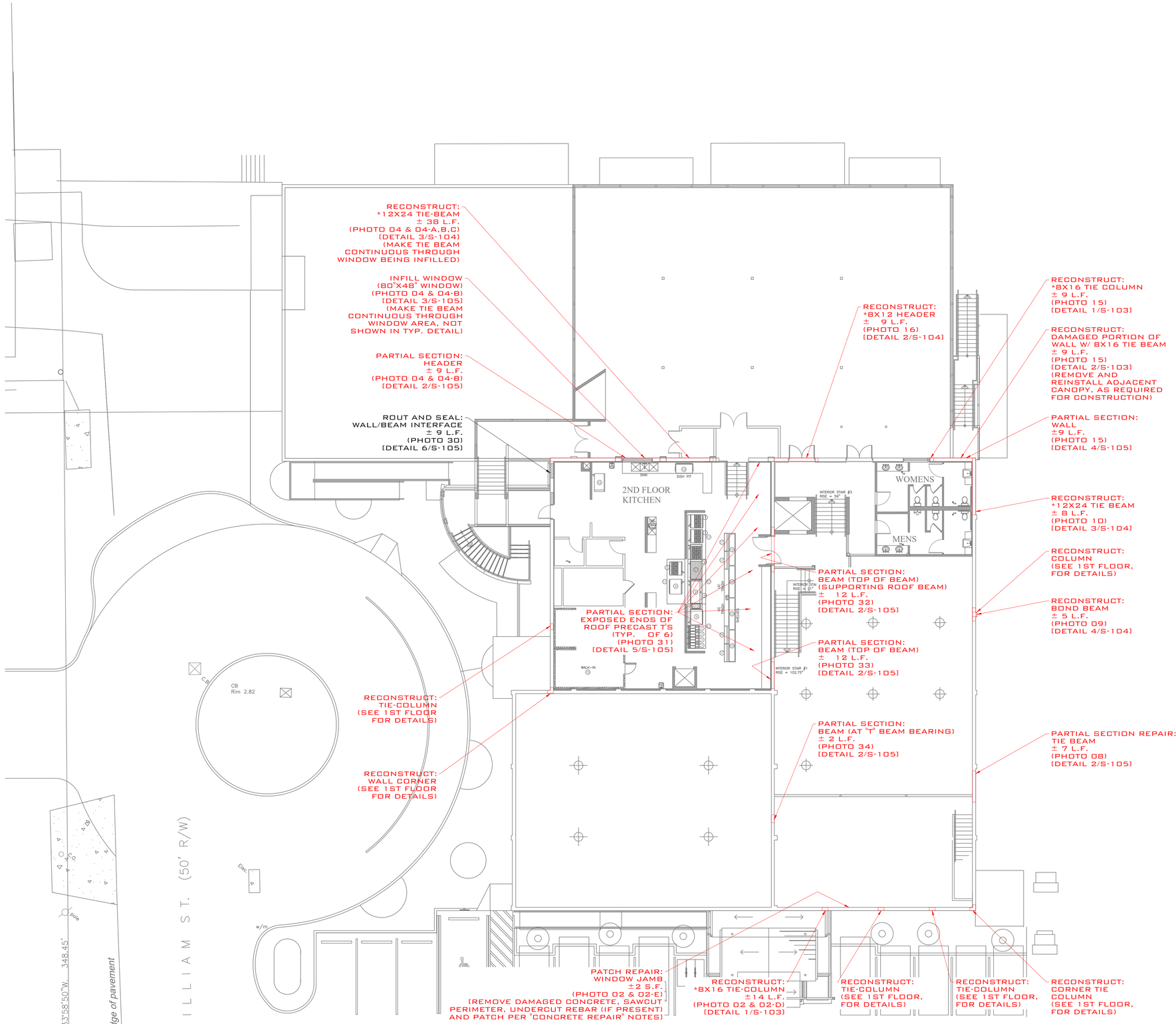
CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
REPAIR PLAN
1ST STORY

SCALE AT 24"X36"	DATE	DRAWN	CHECKED
AS SHOWN	01/29/25	JDH	SAM
PROJECT NO.	DRAWING NO.	REVISION
2501-01	S-101	1



CONCRETE REPAIR PLAN - 2ND FLOOR

SCALE: N.T.S.

This item has been digitally signed and sealed by Serge Mashtakov, PE 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.

Serge Mashtakov
Professional Engineer
State of Florida
License No 71480

This drawing is not valid without the signature and original seal

Artibus Design
Engineering and Planning

Artibus Design
3710 N. Roosevelt Blvd
Key West, FL 33040
(305) 304-3512
www.ArtibusDesign.com
CA # 30835

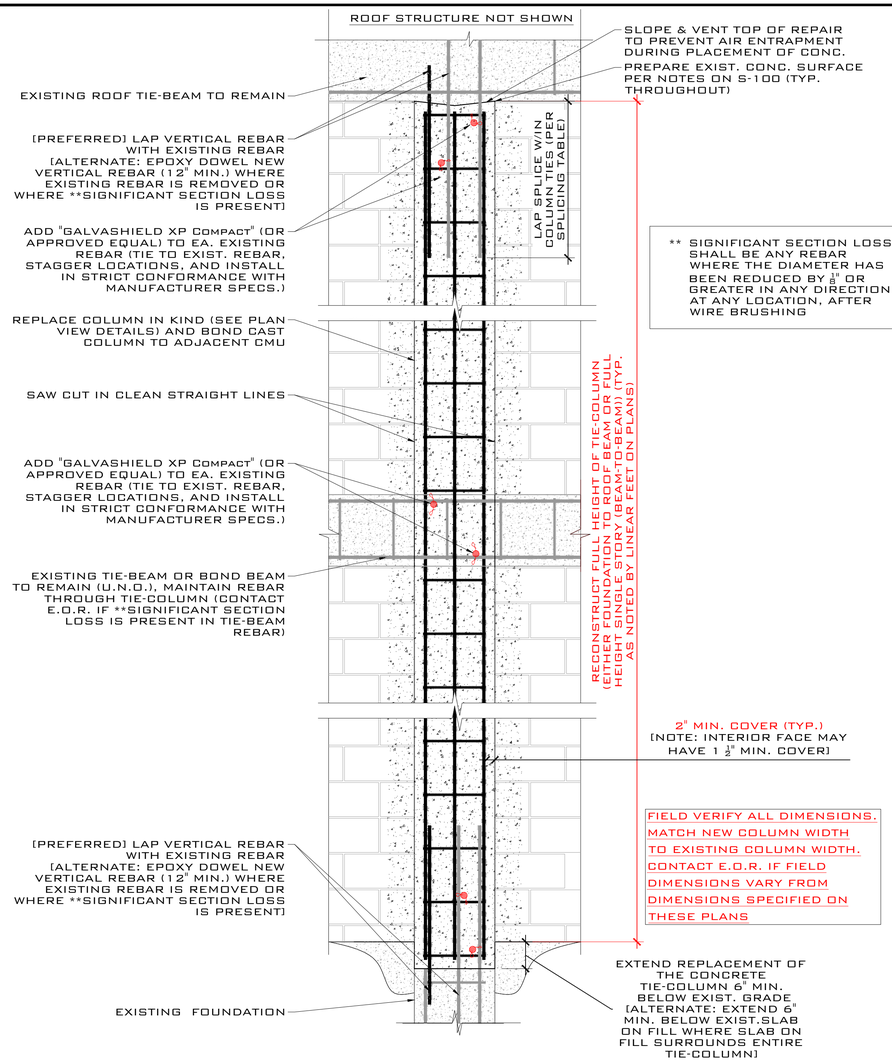
CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

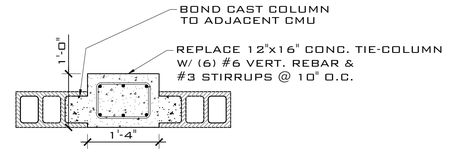
TITLE:
REPAIR PLAN
2ND STORY

SCALE AT 24x36	DATE:	DRAWN:	CHECKED:
AS SHOWN	01/29/25	JDH	SAM
PROJECT NO:	DRAWING NO:		REVISION:
2501-01	S-102		1

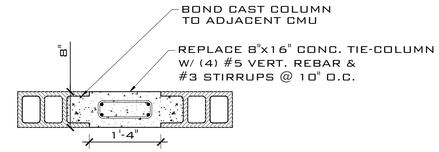


** SIGNIFICANT SECTION LOSS SHALL BE ANY REBAR WHERE THE DIAMETER HAS BEEN REDUCED BY 1/8" OR GREATER IN ANY DIRECTION AT ANY LOCATION, AFTER WIRE BRUSHING

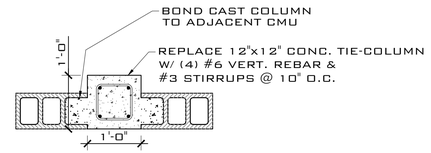
TYP. DETAIL 1/S-103
FULL SECTION - TIE-COLUMN REPAIR
SCALE: N.T.S.



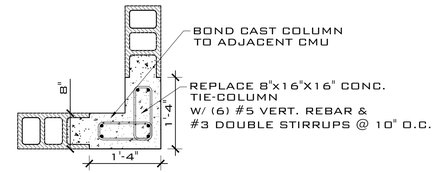
PLAN VIEW
12X16 TIE-COLUMN
SCALE: NTS



PLAN VIEW
8X16 TIE-COLUMN
SCALE: NTS

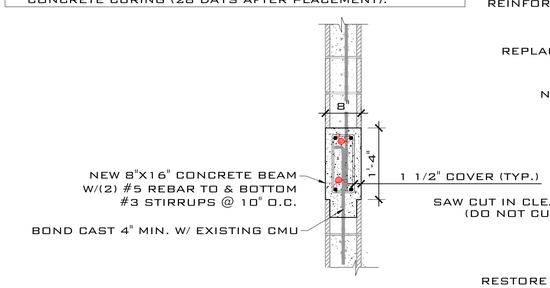


PLAN VIEW
12X12 TIE-COLUMN
SCALE: NTS

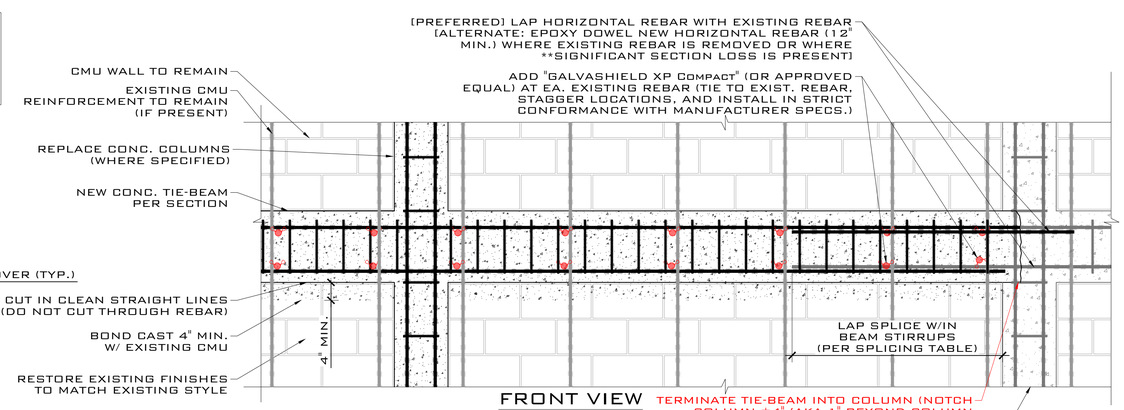


PLAN VIEW
8X16X16 TIE-COLUMN
SCALE: NTS

NOTES:
1. FLOOR & ROOF SYSTEM AND OTHER DETAILS ARE NOT SHOWN FOR CLARITY.
2. IF PRESENT, CLEAN AND RESTORE ANY EXISTING EMBEDMENT ANCHOR DETAILS FOR FLOORS, ROOFS, ETC.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING FOR THE DURATION OF CONSTRUCTION AND CONCRETE CURING (28 DAYS AFTER PLACEMENT).



SECTION VIEW



FRONT VIEW

TYP. DETAIL 2/S-103
FULL SECTION - TIE-BEAM REPAIR
AT MID-HEIGHT OF WALL
SCALE: N.T.S.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SERGE MASHTAKOV, PE 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.

SERGE MASHTAKOV
PROFESSIONAL ENGINEER
STATE OF FLORIDA
LICENSE NO 71480

THIS DRAWING IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL SEAL.

ARTIBUS DESIGN
ENGINEERING AND PLANNING

ARTIBUS DESIGN
3710 N. ROOSEVELT BLVD
KEY WEST, FL 33040
(305) 304-3512
WWW.ARTIBUSDESIGN.COM
CA # 30835

CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

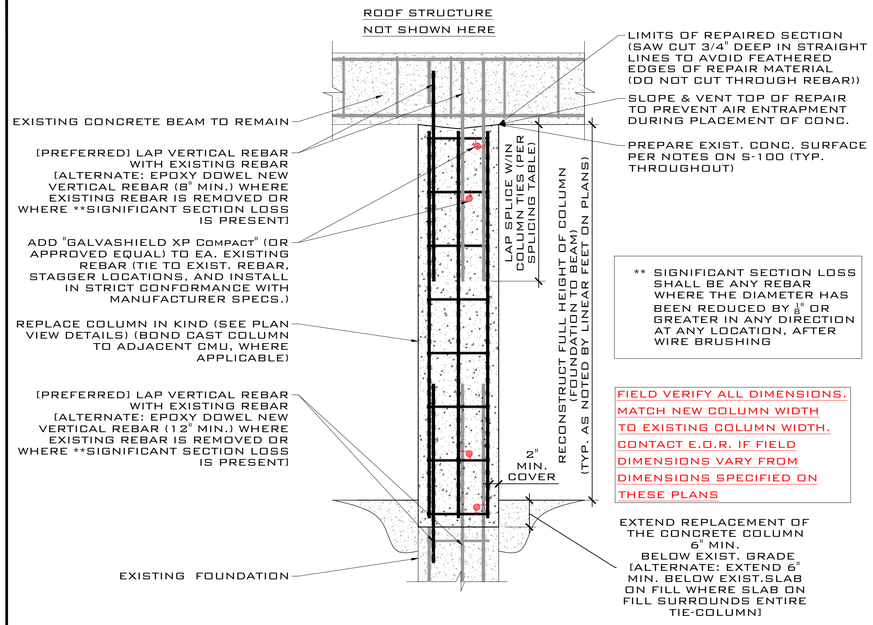
PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

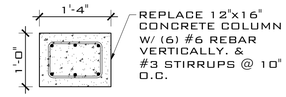
TITLE:
DETAILS

SCALE AT PAPER	DATE	DRAWN	CHECKED
AS SHOWN	01/29/25	JDH	SAM

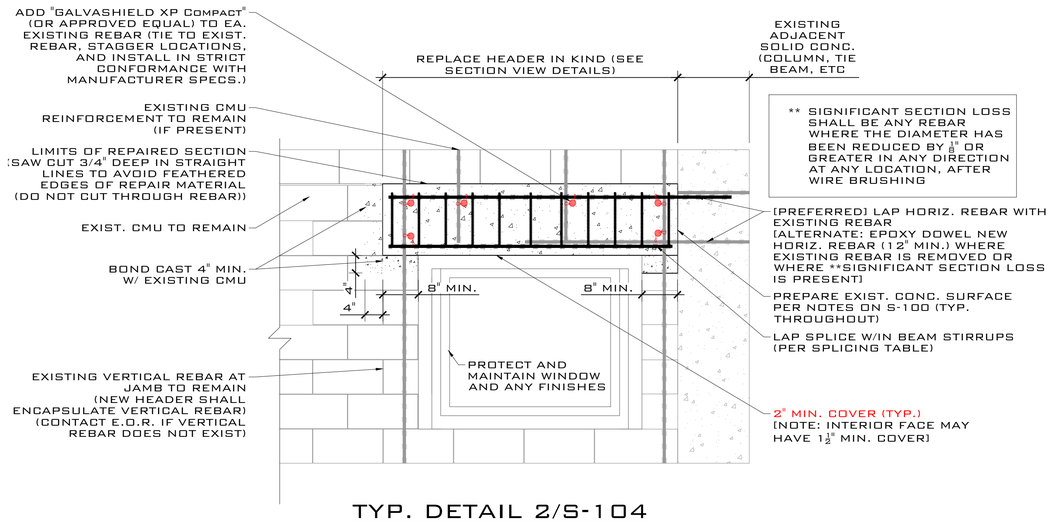
PROJECT NO	DRAWING NO	REVISION
2501-01	S-103	1



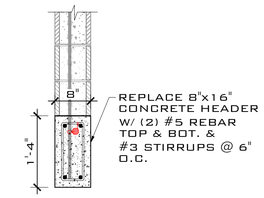
TYP. DETAIL 1/S-104
FULL SECTION - COLUMN REPAIR
SCALE: N.T.S.



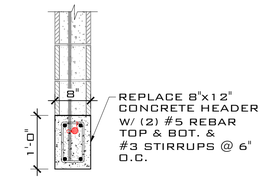
PLAN VIEW
12X16 COLUMN
SCALE: NTS



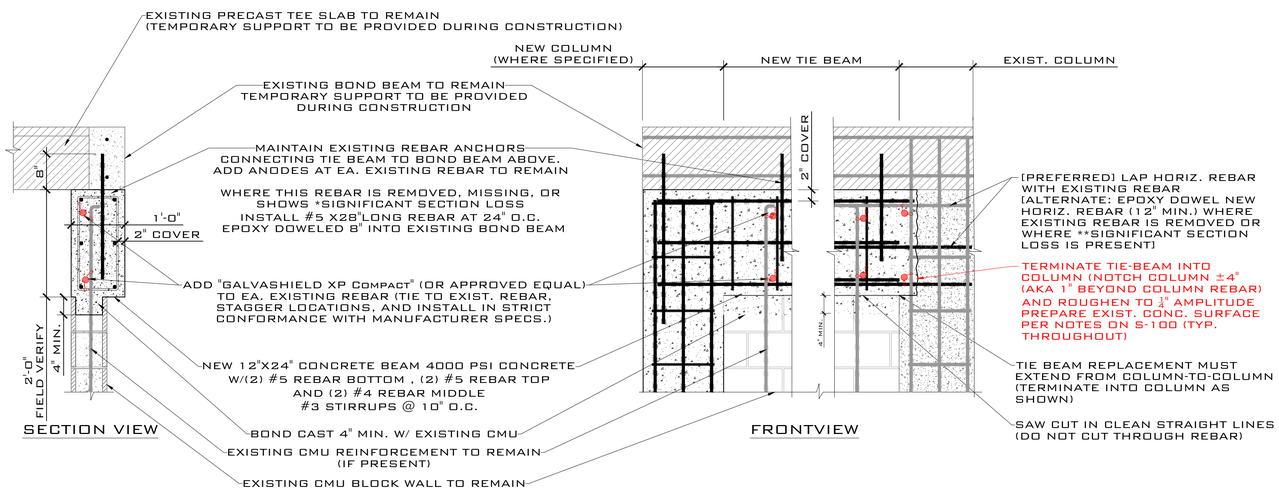
TYP. DETAIL 2/S-104
FULL SECTION - HEADER REPAIR
SCALE: N.T.S.



SECTION VIEW
8X16 HEADER
SCALE: NTS

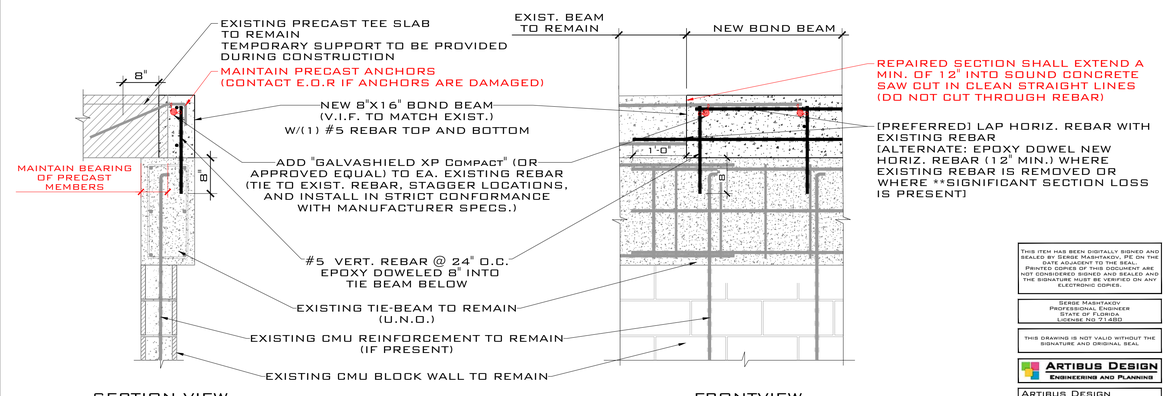


SECTION VIEW
8X12 HEADER
SCALE: NTS



NOTES: 1. ROOFING SYSTEM AND OTHER DETAILS ARE NOT SHOWN FOR CLARITY.
2. CLEAN AND RESTORE ANY EXISTING EMBEDMENT DETAILS.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING FOR A DURATION OF CONSTRUCTION AND CONCRETE CURING PROCESS (28 DAYS AFTER PLACEMENT).

TYP. DETAIL 3/S-104
FULL SECTION - TIE BEAM REPAIR AT ROOF
SCALE: N.T.S.



NOTES: 1. ROOFING SYSTEM AND OTHER DETAILS ARE NOT SHOWN FOR CLARITY.
2. CLEAN AND RESTORE ANY EXISTING EMBEDMENT DETAILS.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING FOR A DURATION OF CONSTRUCTION AND CONCRETE CURING PROCESS(28 DAYS AFTER PLACEMENT).

TYP. DETAIL 4/S-104
FULL SECTION - BOND BEAM REPAIR AT ROOF
SCALE: N.T.S.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SERGE MASHTAKOV, PE 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.

SERGE MASHTAKOV
PROFESSIONAL ENGINEER
STATE OF FLORIDA
LICENSE NO.71480

THIS DRAWING IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL SEAL

ARTIBUS DESIGN
ENGINEERING AND PLANNING

ARTIBUS DESIGN
3710 N. ROOSEVELT BLVD
KEY WEST, FL 33040
(305) 304-3512
WWW.ARTIBUSDESIGN.COM
CA # 30835

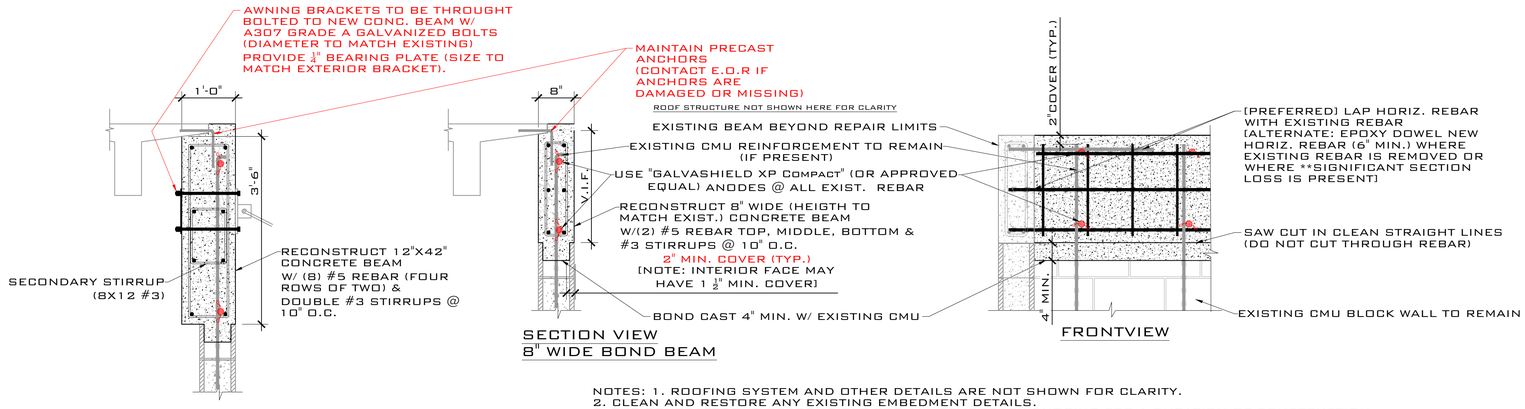
CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
DETAILS

SCALE AT SHEET:	DATE:	DRAWN:	CHECKED:
AS SHOWN	01/29/25	JDH	SAM
PROJECT NO:	DRAWING NO:		REVISION:
2501-01	S-104		1

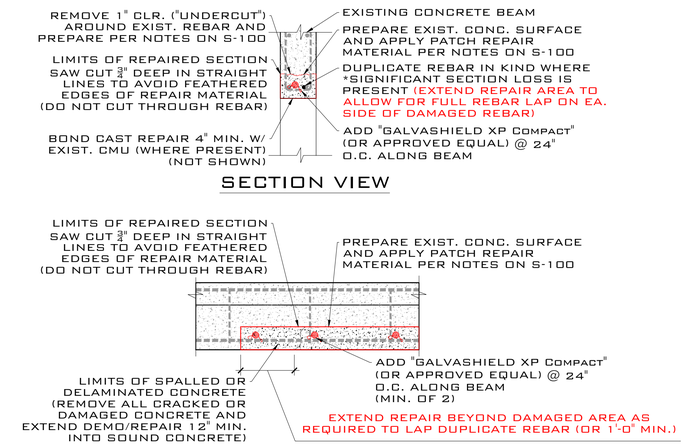


NOTES: 1. ROOFING SYSTEM AND OTHER DETAILS ARE NOT SHOWN FOR CLARITY.
2. CLEAN AND RESTORE ANY EXISTING EMBEDMENT DETAILS.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING FOR A DURATION OF CONSTRUCTION AND CONCRETE CURING PROCESS(28 DAYS AFTER PLACEMENT).

TYP. DETAIL 1/S-105
FULL SECTION - ENDWALL BOND BEAM REPAIR AT ROOF

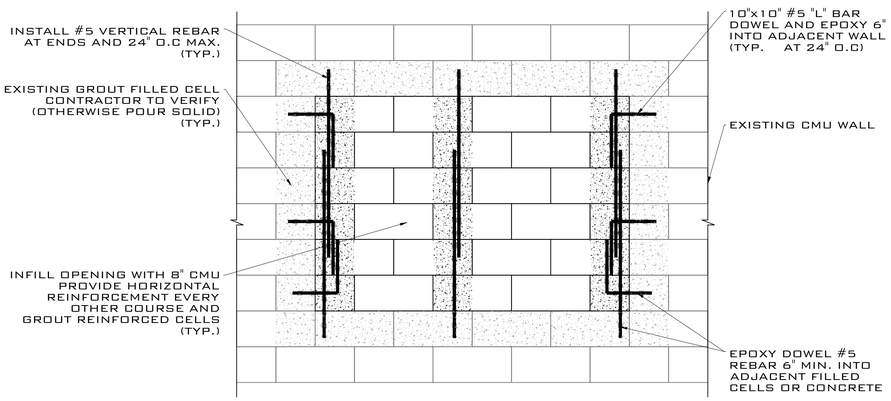
SCALE: N.T.S.

** SIGNIFICANT SECTION LOSS SHALL BE ANY REBAR WHERE THE DIAMETER HAS BEEN REDUCED BY ⅛" OR GREATER IN ANY DIRECTION AT ANY LOCATION, AFTER WIRE BRUSHING



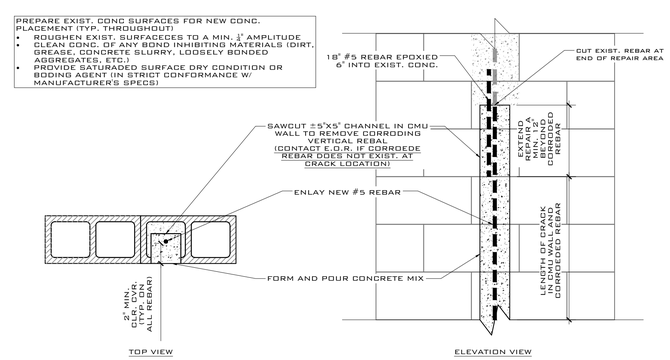
TYP. DETAIL 2/S-105
PARTIAL SECTION - BEAM/HEADER REPAIR

SCALE: N.T.S.



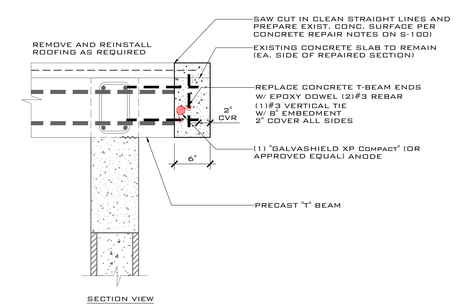
TYP. DETAIL 3/S-105
CMU INFILL - WALL OPENING

SCALE: N.T.S.



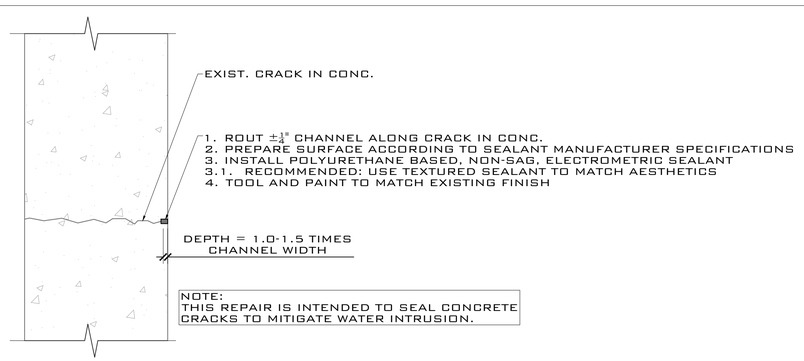
TYP. DETAIL 4/S-105
PARTIAL SECTION - VERTICAL REBAR IN CMU

SCALE:N.T.S.



TYP. DETAIL 5/S-105
PARTIAL SECTION - PRECAST "T" BEAM ENDS

SCALE:N.T.S.



TYP. DETAIL 6/S-105
ROUT & SEAL CONC. CRACKS

SCALE: 3" = 1'-0"

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SERGE MASHTAKOV, PE 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.

SERGE MASHTAKOV
PROFESSIONAL ENGINEER
STATE OF FLORIDA
LICENSE NO. 71480

THIS DRAWING IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL SEAL

ARTIBUS DESIGN
ENGINEERING AND PLANNING

ARTIBUS DESIGN
3710 N. ROOSEVELT BLVD
KEY WEST, FL 33040
(305) 304-3512
WWW.ARTIBUSDESIGN.COM
CA # 30835

CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
DETAILS

SCALE AT 24"X36"	DATE	DRAWN	CHECKED
AS SHOWN	01/29/25	JDH	SAM

PROJECT NUMBER	DRAWING NO	REVISION
2501-01	S-105	1

PHOTO 01

PHOTO 02

PHOTO 03

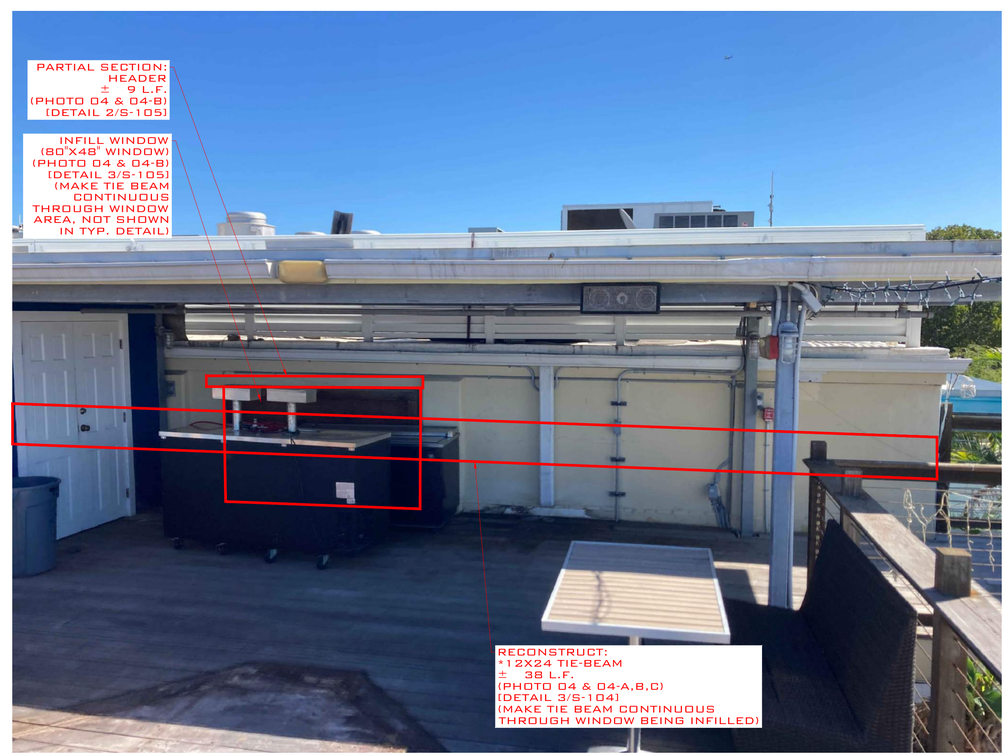


PHOTO 04

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SERGE MASHTAKOV 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.

SERGE MASHTAKOV
PROFESSIONAL ENGINEER
STATE OF FLORIDA
LICENSE NO. 71480

THIS DRAWING IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL SEAL.

ARTIBUS DESIGN
ENGINEERING AND PLANNING

ARTIBUS DESIGN
3710 N. ROOSEVELT BLVD
KEY WEST, FL 33040
(305) 304-3512
WWW.ARTIBUSDESIGN.COM
CA # 30835

CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
PHOTOS

SCALE AT PAPER:	DATE:	DRAWN:	CHECKED:
AS SHOWN	01/29/25	JDH	SAK

PROJECT NO:	DRAWING NO:	REVISION:
2501-01	S-106	1

PHOTO 01-A

PHOTO 01-B

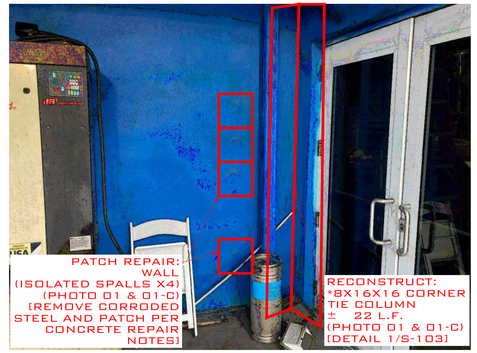


PHOTO 01-C

PHOTO 02-A

PHOTO 02-B

PHOTO 02-C

PHOTO 02-D

PHOTO 02-E

PHOTO 03-A

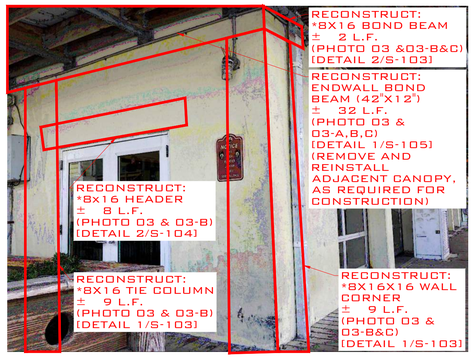


PHOTO 03-B

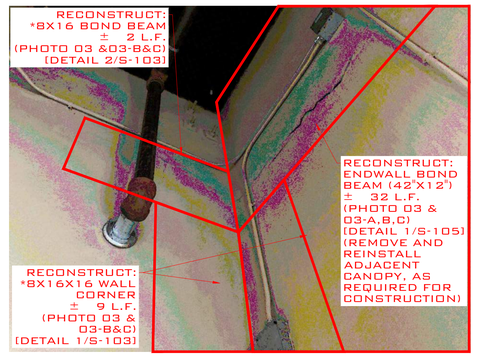


PHOTO 03-C

PHOTO 04-A

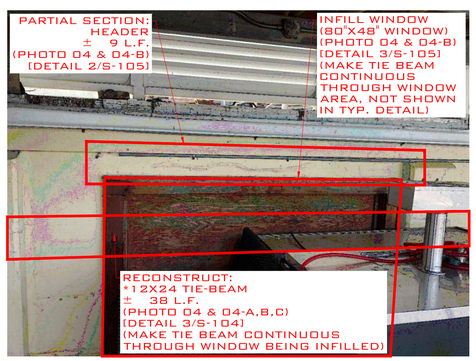


PHOTO 04-B

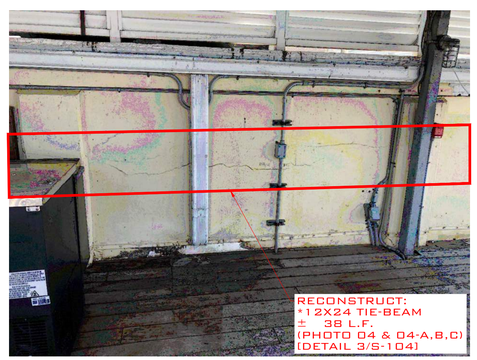


PHOTO 04-C

This item has been digitally signed and sealed by Serge Mashtakov, PE 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.

Serge Mashtakov
Professional Engineer
State of Florida
License No. 71480

This drawing is not valid without the signature and original seal

Artibus Design
Engineering and Planning

Artibus Design
3710 N. Roosevelt Blvd
Key West, FL 33040
(305) 304-3512
www.ArtibusDesign.com
CA # 30835

CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
PHOTOS

SCALE AT ERIC:	DATE:	DRAWN:	CHECKED:
AS SHOWN	01/29/25	JDH	SAM

PROJECT NO:	DRAWING NO:	REVISION:
2501-01	S-107	1

PHOTO 05

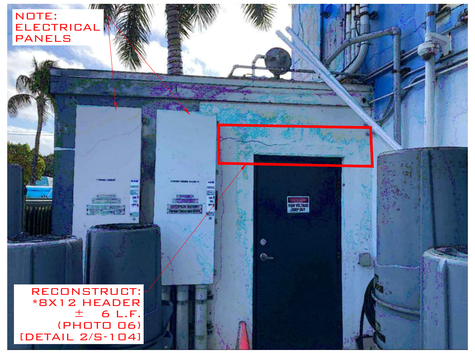


PHOTO 06

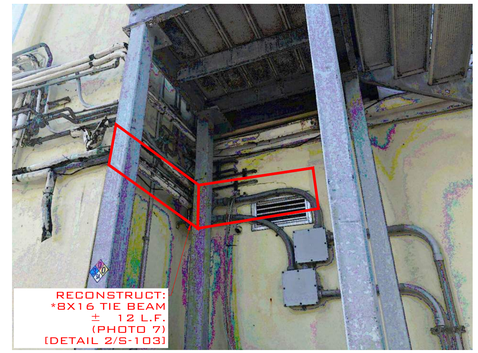


PHOTO 07

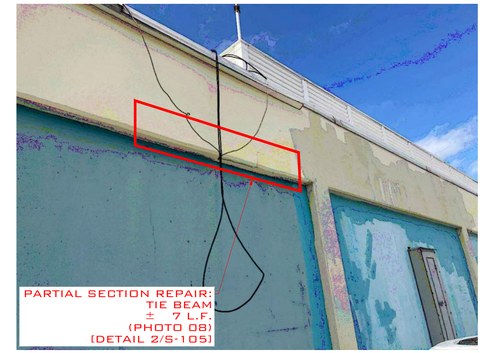


PHOTO 08

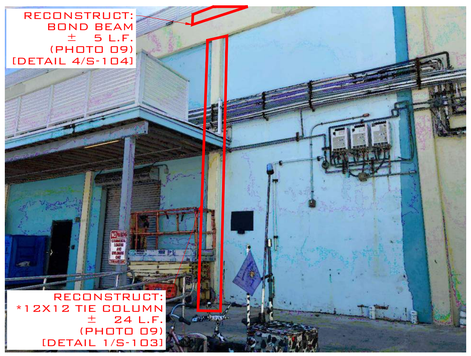


PHOTO 09

PHOTO 10

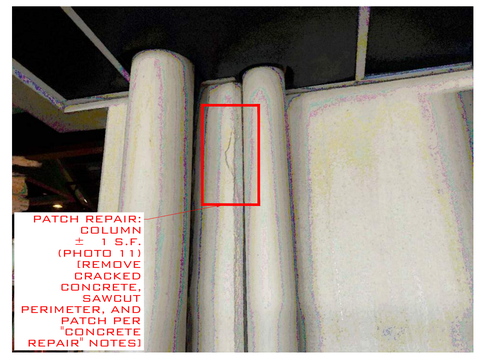


PHOTO 11

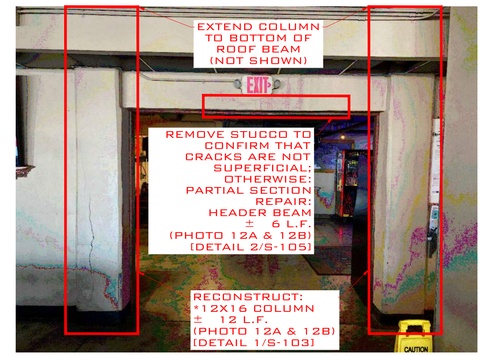


PHOTO 12A

PHOTO 12B

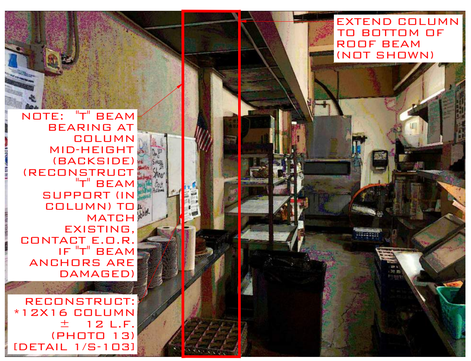


PHOTO 13

PHOTO 14

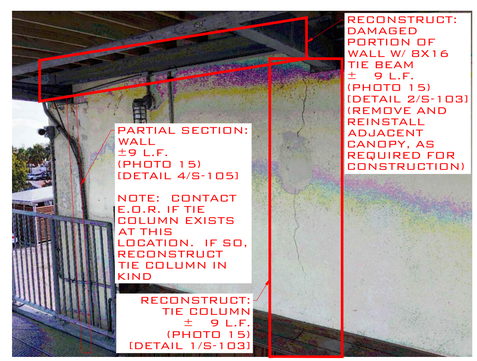


PHOTO 15

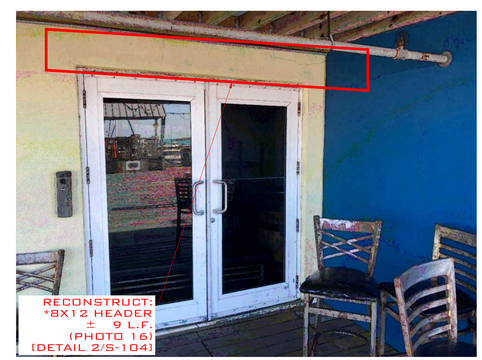


PHOTO 16

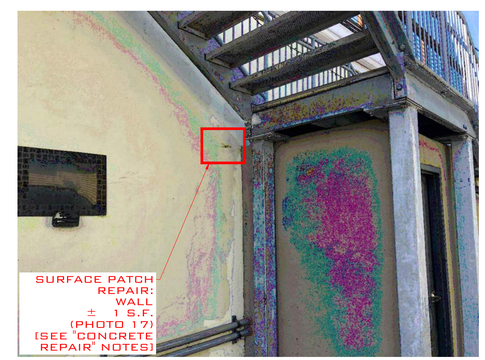


PHOTO 17

PHOTO 18

PHOTO 19

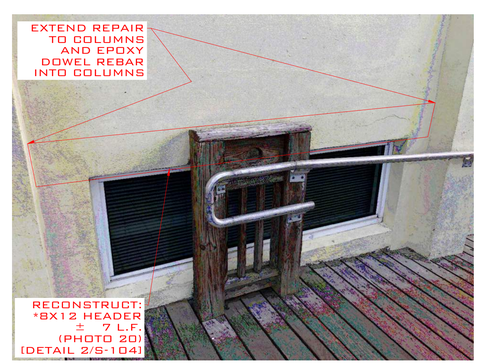


PHOTO 20

PHOTO 21

This item has been digitally signed and sealed by Serge Mashtakov, PE 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.

Serge Mashtakov
Professional Engineer
State of Florida
License No 71480

This drawing is not valid without the signature and original seal

Artibus Design
Engineering and Planning

Artibus Design
3710 N. Roosevelt Blvd
Key West, FL 33040
(305) 304-3512
www.ArtibusDesign.com
CA # 30835

CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
PHOTOS

SCALE AT 24x36	DATE	DRAWN	CHECKED
AS SHOWN	01/29/25	JDH	SAM

PROJECT NO.	DRAWING NO.	REVISION
2501-01	S-108	1

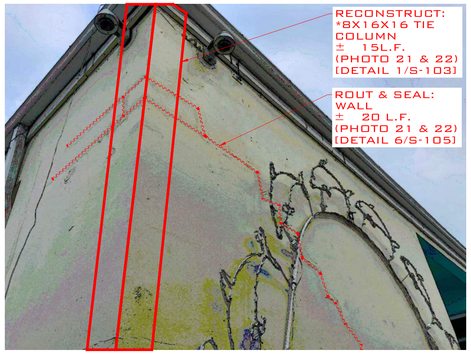


PHOTO 22

PHOTO 23

PHOTO 24

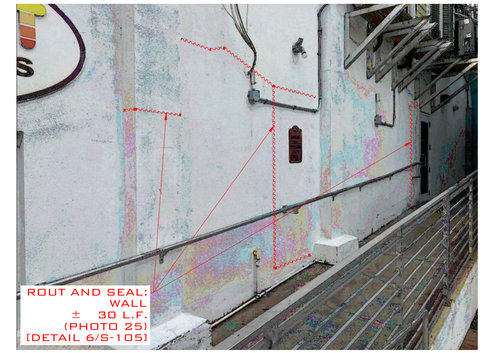


PHOTO 25

PHOTO 26

PHOTO 27

PHOTO 28

PHOTO 29

PHOTO 30

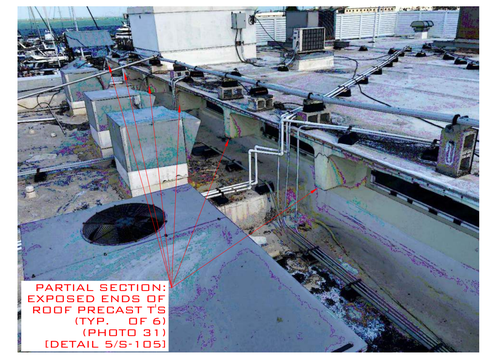


PHOTO 31

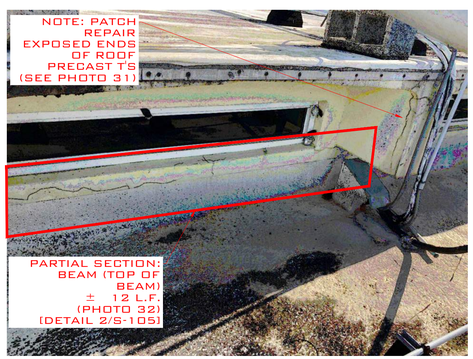


PHOTO 32

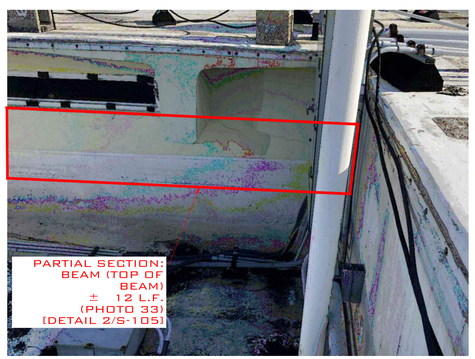


PHOTO 33

PHOTO 34

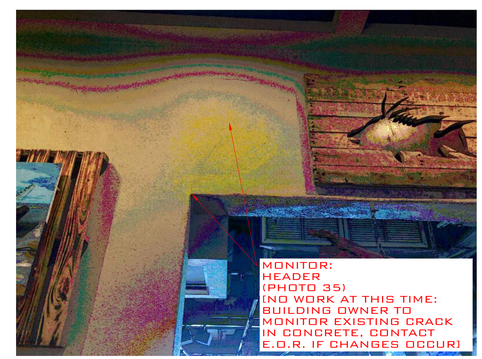


PHOTO 35

This item has been digitally signed and sealed by Serge Mashtakov, PE 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.

Serge Mashtakov
Professional Engineer
State of Florida
License No 71480

This drawing is not valid without the signature and original seal

Artibus Design
Engineering and Planning

Artibus Design
3710 N. Roosevelt Blvd
Key West, FL 33040
(305) 304-3512
www.ArtibusDesign.com
CA # 30835

CLIENT:
CITY OF KEY WEST
PORT & MARINE SERVICES

PROJECT:
LIMITED CONCRETE REPAIR

SITE:
201 WILLIAM ST
KEY WEST, FL 33040

TITLE:
PHOTOS

SCALE AT PRINT	DATE	DRAWN	CHECKED
AS SHOWN	01/29/25	JDH	SAM

PROJECT NO.	DRAWING NO.	REVISION
2501-01	S-109	1