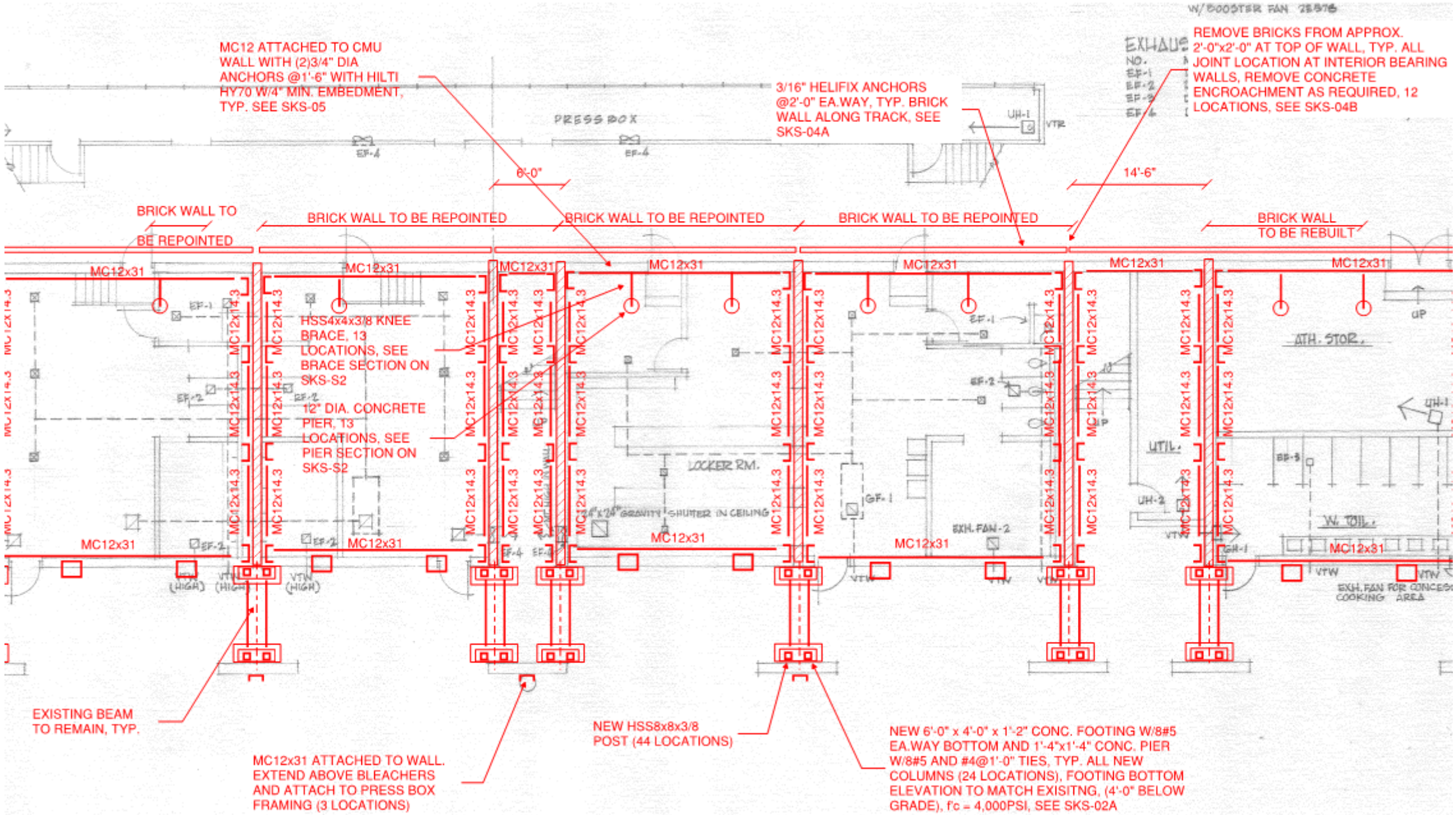
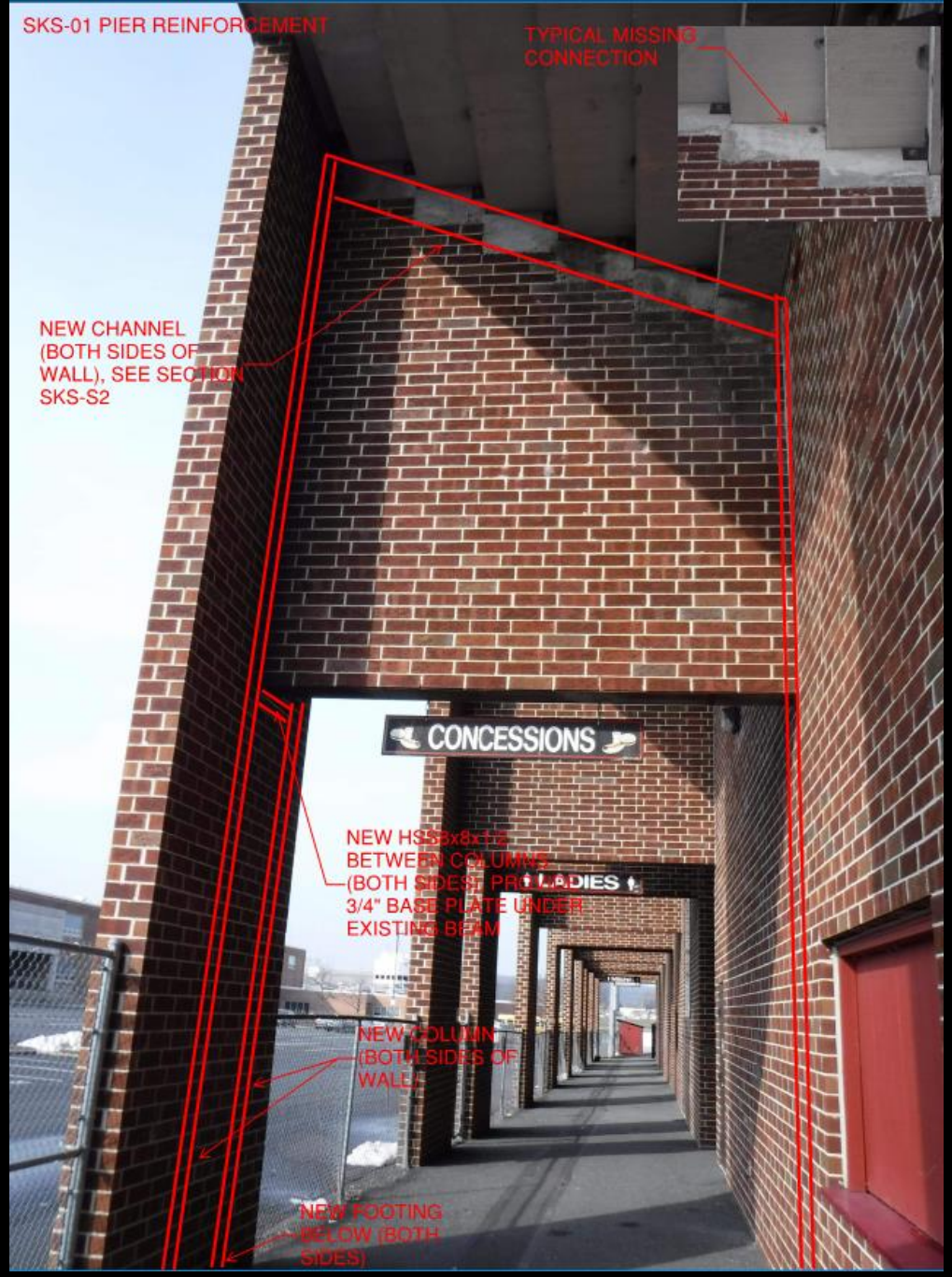
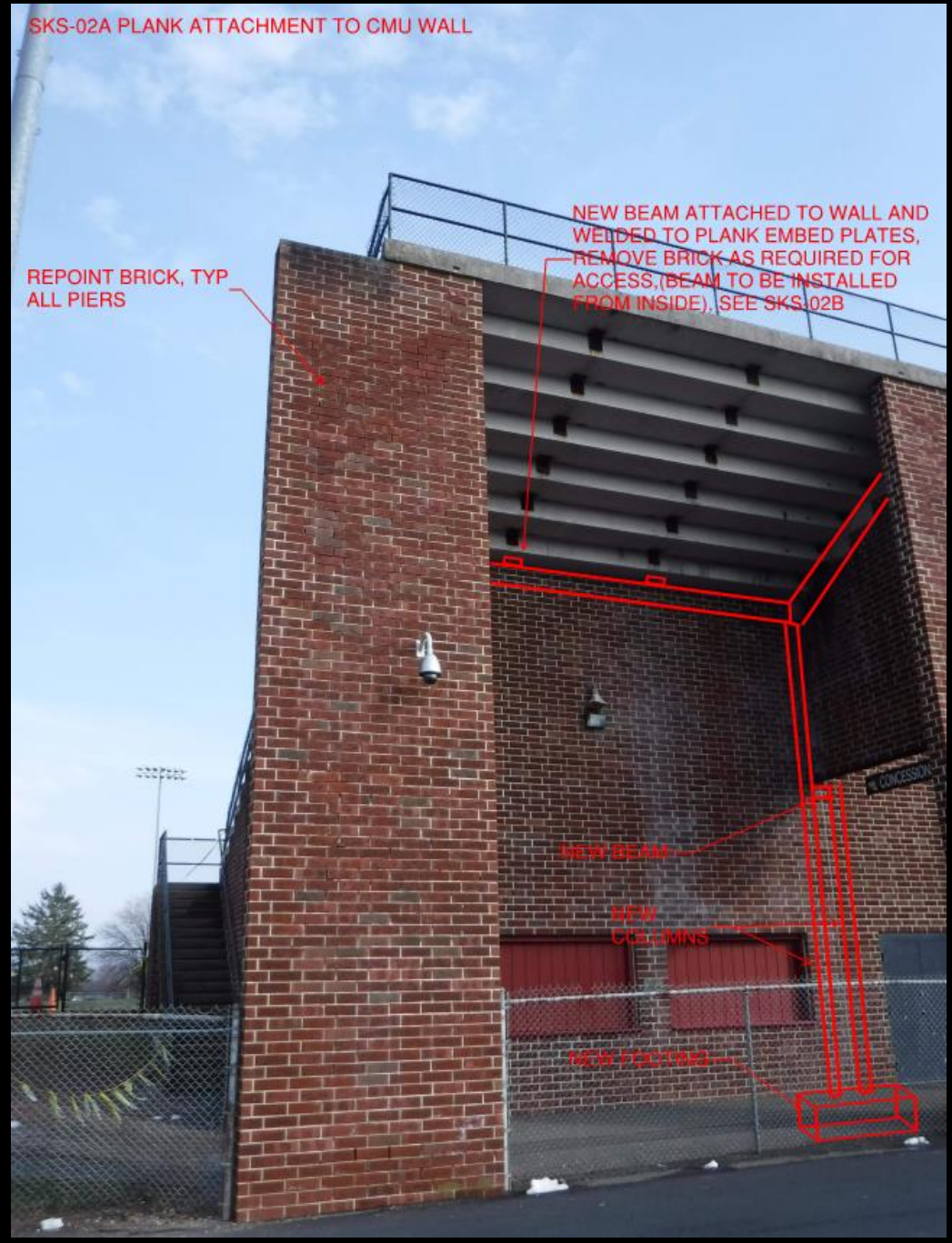
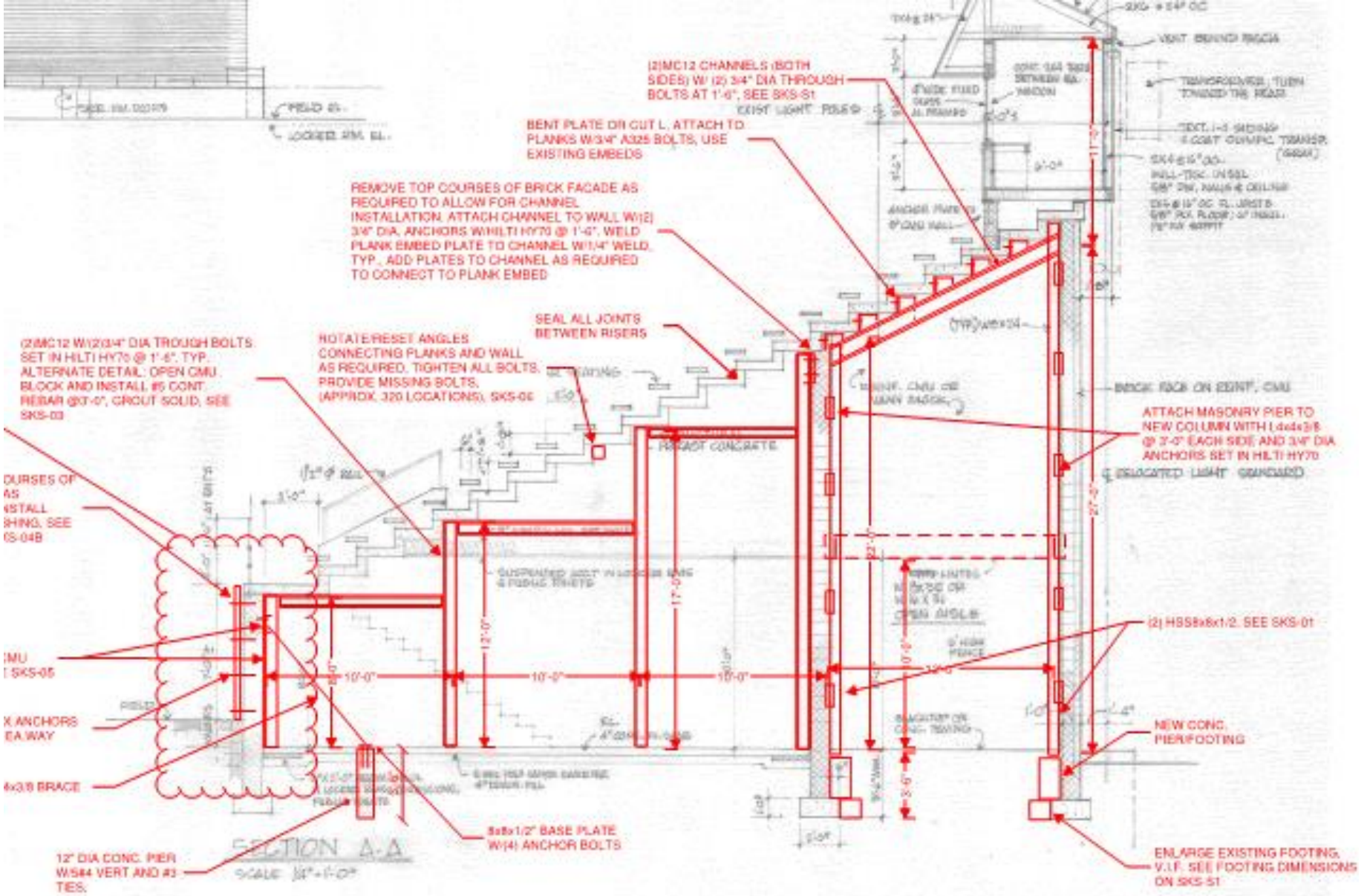
STADIUM REPAIRS – Summary

1. Reinforcing steel in tight space
   a) Columns & beams
   b) Channels
   c) Wall bracing
   d) Angle clips
2. Added concrete fdns in tight space
3. CMU reinforcement & bracing
4. Brick repair/replacement

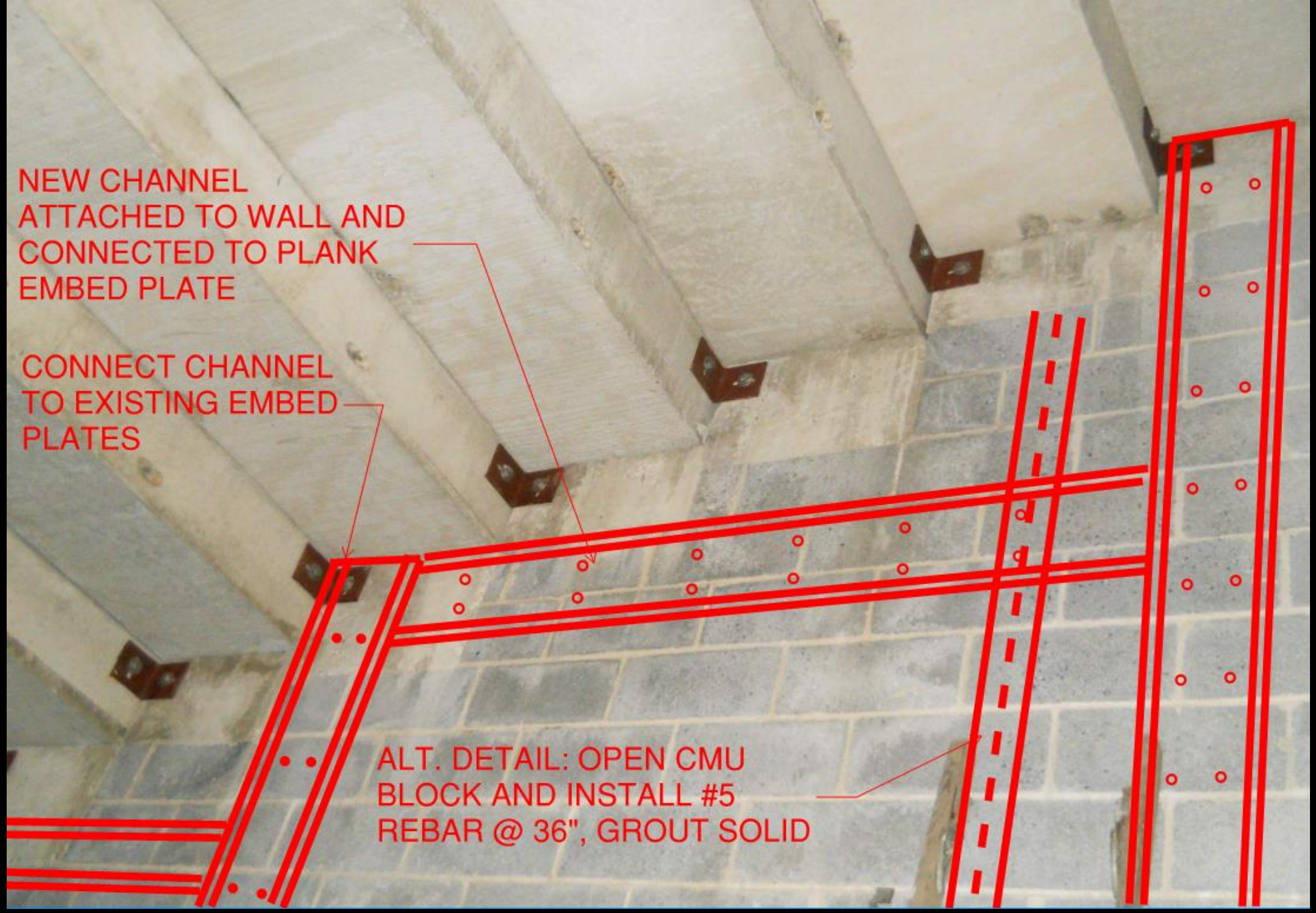

MC12 ATTACHED TO CMU WALL WITH (2)3/4" DIA ANCHORS @1'-6" WITH HILTI HY70 W/4" MIN. EMBEDMENT, TYP. SEE SKS-05
3/16" HELIFIX ANCHORS @2'-0" EA.WAY, TYP. BRICK WALL ALONG TRACK, SEE SKS-04A
REMOVE BRICKS FROM APPROX. 2'-0"x2'-0" AT TOP OF WALL, TYP. ALL JOINT LOCATION AT INTERIOR BEARING WALLS, REMOVE CONCRETE ENCROACHMENT AS REQUIRED, 12 LOCATIONS, SEE SKS-04B
PRESS BOX
6'-0"
14'-6"
BRICK WALL TO BE REPOINTED
BRICK WALL TO BE REPOINTED
BRICK WALL TO BE REPOINTED
BRICK WALL TO BE REPOINTED
BRICK WALL TO BE REBUILT
MC12x31
HSS4x4x3/8 KNEE BRACE, 13 LOCATIONS, SEE BRACE SECTION ON SKS-S2
12" DIA. CONCRETE PIER, 13 LOCATIONS, SEE PIER SECTION ON SKS-S2
LOCKER RM.
ATH. STOR.
UTIL.
W. TOIL.
EXH. FAN-2
EXH. FAN FOR CONCESS COOKING AREA
EXISTING BEAM TO REMAIN, TYP.
MC12x31 ATTACHED TO WALL. EXTEND ABOVE BLEACHERS AND ATTACH TO PRESS BOX FRAMING (3 LOCATIONS)
NEW HSS8x8x3/8 POST (44 LOCATIONS)
NEW 6'-0" x 4'-0" x 1'-2" CONC. FOOTING W/8#5 EA.WAY BOTTOM AND 1'-4"x1'-4" CONC. PIER W/8#5 AND #4@1'-0" TIES, TYP. ALL NEW COLUMNS (24 LOCATIONS), FOOTING BOTTOM ELEVATION TO MATCH EXISITNG, (4'-0" BELOW GRADE), f'c = 4,000PSI, SEE SKS-02A


SKS-01 PIER REINFORCEMENT
TYPICAL MISSING CONNECTION
NEW CHANNEL (BOTH SIDES OF WALL), SEE SECTION SKS-S2
CONCESSIONS
NEW HSS8x8x1/2 BETWEEN COLUMNS (BOTH SIDES), PROVIDE 3/4" BASE PLATE UNDER EXISTING BEAM
NEW COLUMN (BOTH SIDES OF WALL)
NEW FOOTING BELOW (BOTH SIDES)

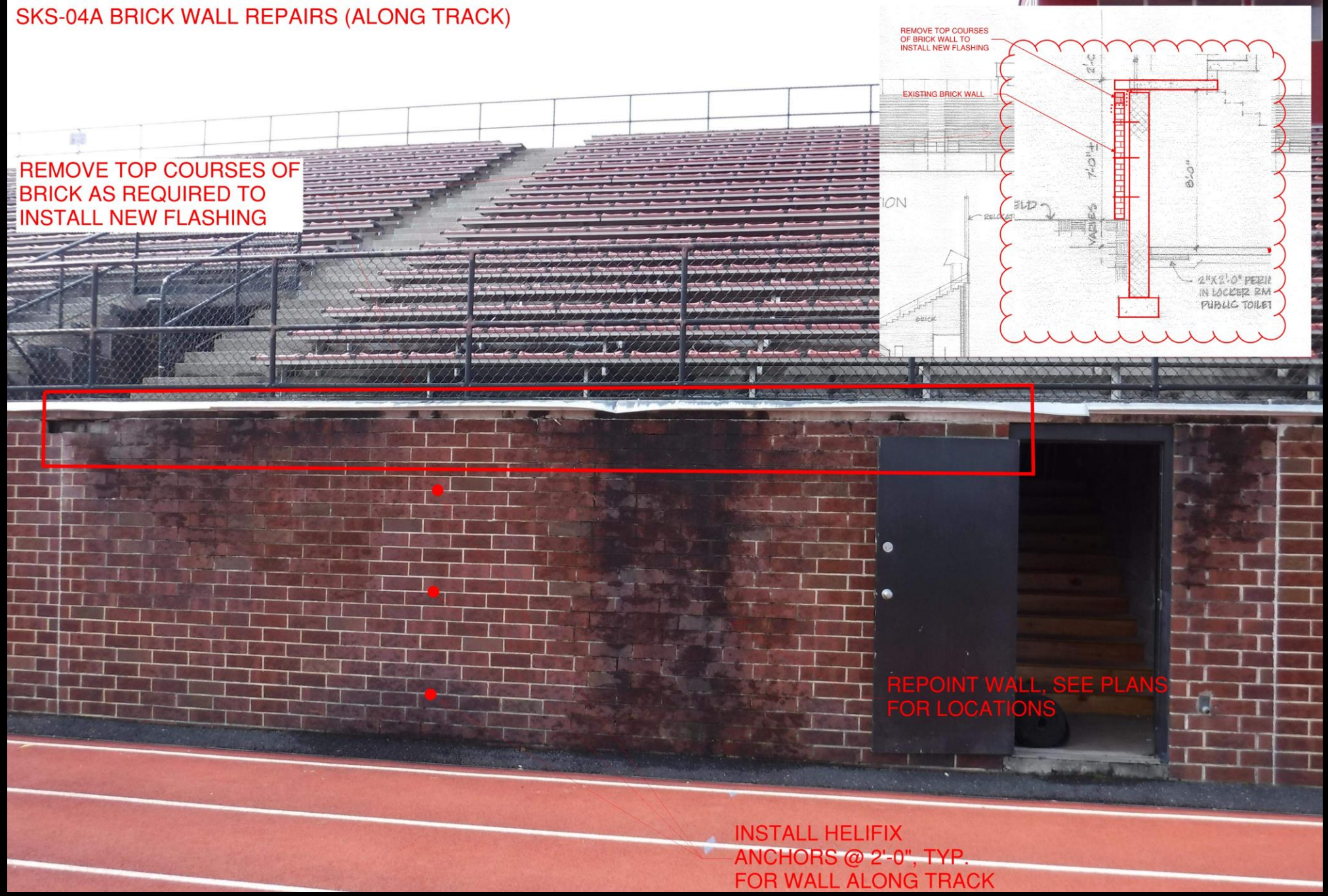

SKS-02A PLANK ATTACHMENT TO CMU WALL
REPOINT BRICK, TYP ALL PIERS
NEW BEAM ATTACHED TO WALL AND WELDED TO PLANK EMBED PLATES, REMOVE BRICK AS REQUIRED FOR ACCESS,(BEAM TO BE INSTALLED FROM INSIDE), SEE SKS-02B
NEW BEAM
NEW COLUMNS
NEW FOOTING



SECTION - PROPOSED WALL REINFORCEMENT


NEW CHANNEL
ATTACHED TO WALL AND
CONNECTED TO PLANK
EMBED PLATE
CONNECT CHANNEL
TO EXISTING EMBED
PLATES
ALT. DETAIL: OPEN CMU
BLOCK AND INSTALL #5
REBAR @ 36", GROUT SOLID

SKS-04A BRICK WALL REPAIRS (ALONG TRACK)



STADIUM REPAIR – *Tight Access*

STADIUM REPAIR – *Tight Access*

STADIUM REPAIR - *Exclusions*

1. *Plank replacement*
2. *ADA upgrades*
3. *Concession upgrades*
4. *Restroom upgrades*
5. *Waterproofing*
6. *Improvements to other 33-year-old components*

STADIUM REPAIR COST OPINION - *Qualifiers*

1. Based on conceptual sketches – *not final design*
2. Repairs as sketched – *no hidden conditions*
3. Concrete planks *as-is*
4. All other 33-year-old components *as-is*
5. Steel, concrete, etc. *in today's dollars*
6. Actual costs TBD > detailed dwgs & specs bid
    - No control over labor cost/availability, equip., materials, or market conditions
    - No warranty, express or implied, that bids will not vary from opinion

STADIUM REPAIR COST OPINION - *Drivers*

1. **Tight access / hand work**
2. Steel columns, bracing, angles, plates, clips, framing
3. Pier/footer excavation & backfill, off-site disposal
4. Concrete footers w/rebar
5. CMU/Brick repair/replacement
6. Brick repointing
7. Joint caulk
8. Remove/repl. electrical in const. path

STADIUM REPAIR COST OPINION (Boyle Construction)

1	Concrete & Paving		917,800	
2	Fencing		5,000	
3	Masonry		153,253	
4	Steel		1,000,865	
5	Electrical		26,250	
				2,103,168
6	General Cond.		110,000	
				2,213,168
7	Contingency	5.00%	110,658	
				2,323,826
8	Ins., Tax, Fringes	0.51%	11,852	
				2,335,678
9	OH&P	+/- 8%	184,322	
	Total Cost Opinion			**2,520,000**

Per Isett's 4/17/2018 sketches (15), site visits, subcontractor budgets

OTHER STADIUM REPAIR COSTS

Plank destructive testing & analysis *	$ 40,000
Final design	$ 40,000
Bid phase	$ 4,000
Construction phase	$ 43,000
Subtotal	**$127,000**

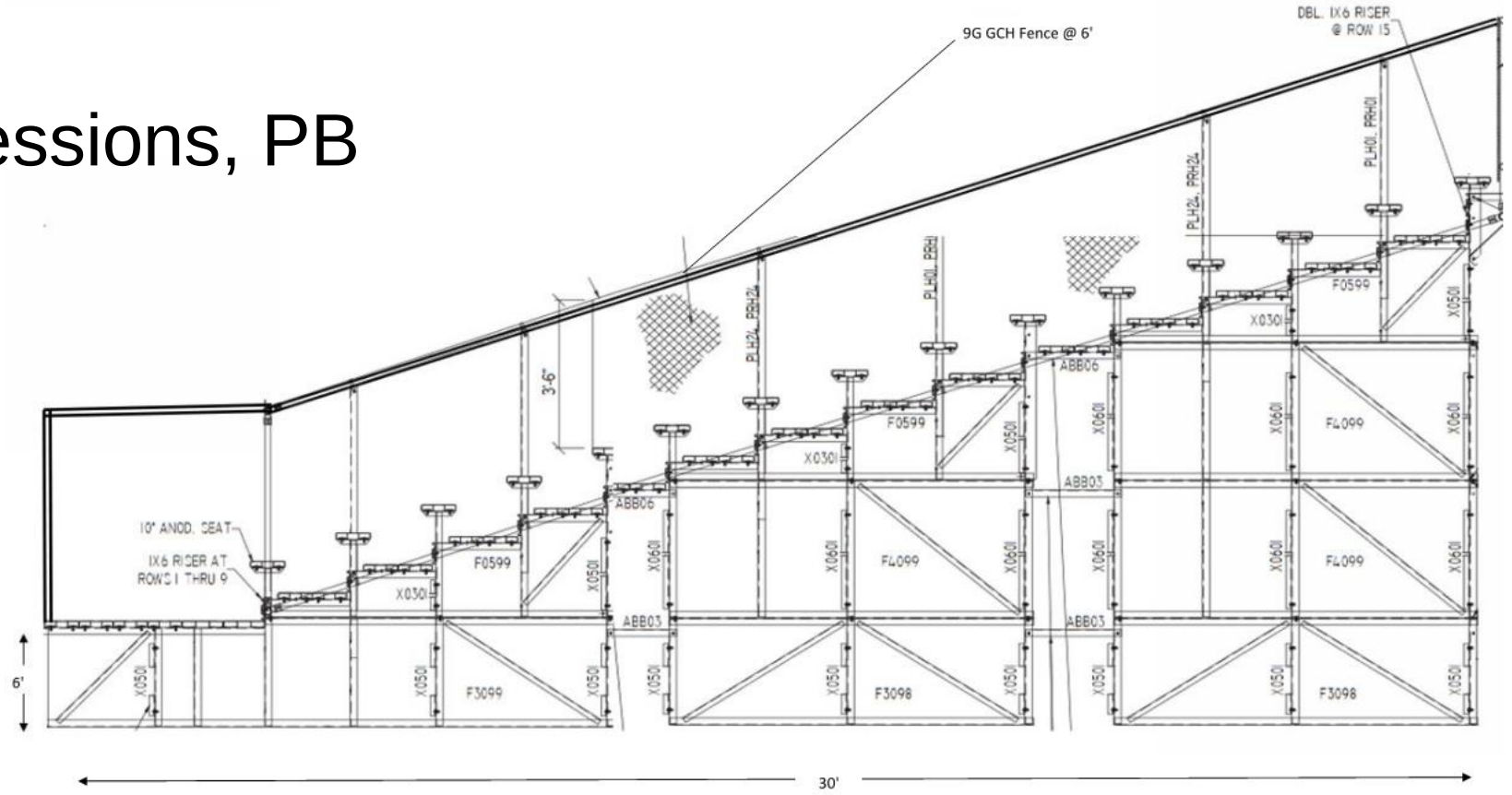
* *In-kind* plank replacement, *if necessary* +/- $750,000
fabrication detail may impact connecting components

STADIUM REPAIR DURATION ESTIMATE – *after NTP*

Plank destructive testing & analysis	8 wks.
Final design	8 wks.
Bidding	4 wks.
Contract, bonds,	2 wks.
Shop Dwgs, steel fabrication/delivery	8 wks.
On-site construction	16 wks.
Punch list	2 wks.
	48 wks.

STADIUM REPLACMENT OPTIONS

- Remove & dispose of existing
- Replace with open steel & aluminum structure on new fdns
- Capacity TBD
- No restrooms, concessions, PB
- +/- $1M



STADIUM REPLACMENT OPTIONS

- Remove & dispose of existing
- Replace with steel & aluminum structure on new fdns
- Brick wrapping
- Separate restrooms, concessions, PB
- +/- $2M