ADDENDUM NO. 4

December 7, 2023

Armstrong Field 815 Jefferson Street Three Rivers, MI 49093

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated October 12, 2023, by GMB. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 4-1 through ADD 4-4, attached Pre-Award Schedule and attached GMB Addendum No.4, dated December 6, 2023, consisting of three (3) pages, and Addendum No. 4 Drawings: B1191803R-3, G0.00, C1.03, C2.01, C2.03, C5.10, C5.11, C8.01, B1191803R-1, B1191803R-2, B1191804R, and B1191806R.

A. SPECIFICATION SECTION 01 12 00 MULTIPLE CONTRACT SUMMARY

Paragraph 3.03 BID CATEGORIES

A. Bid Category No. 1 – General Trades

Add the following Clarifications:

10. For construction of Scoreboard structures, Daktronic Sheets issued in Addendum 2 have been updated and included in this Addendum 4. The Dakronic design for the Football scoreboard and Baseball scoreboard each show two foundation options of either deep column foundation or optional spread foundation. The optional spread foundation shall be used for each. The spread foundations are shown with top of concrete matching surrounding grass grade. Bid Category No. 4 Concrete is to provide concrete and reinforcement. Exposed topside surface of spread foundations to be hand troweled and broom finished. Bid Category No. 05 Sitework is to provide excavation, backfill and grading for the spread foundations. Bid Category No. 01 General Trades is to provide and install structural steel work and painting of structural steel supports.

- 11. Baseball Field is getting new scoreboard with foundation and supports. Softball Field is getting new scoreboard on existing foundation and supports. At Baseball Field, demolish existing scoreboard foundations, footings and structure in their entirety. At Softball Field, demolish existing scoreboard only; foundation and existing structure to be re-used for new scoreboard.
- 12. Refer to details on Daktronic Sheet B1191804R foundation and post details for the 25 second timeclock. These details replace foundation and post details of Detail 6/C5.10.
- 13. Paint color for all scoreboard and timeclock posts and supports is to be Black. <u>Prine Coat</u>: Kem Kromik Universal Metal Primer, B50 series. <u>Finish Coat</u>: (2) coats Pro Industrial Acrylic Semi-Gloss, B66 Series.
- 14. **Bid Category No. 05 Sitework** is to provide stonedust to a depth of 6" with 6x6 pressure treated lumber border. Refer to updated Sheet C1.03, Note 23 for salvage and re-use of stonedust. **Bid Category No. 1 General Trades** is to provide and install treated lumber borders.
- 15. For **Bid Category No. 01 General Trades**, Elite Storage Products is approved as supplier/manufacturer for lockers.
- 16. For **Bid Category No. 01 General Trades**, Page A7.01 shows details for the integral cove base at the lockers & showers but does not show the integral cove. A) Detail 1, 2 and 3 show the single tier lockers, include cove base along the front of them; B) Detail 4 for the open grid metal lockers, include cove base back against the wall; C) Detail 9 for the shower, refer to wall tile pattern A on A9.01; D) Refer to tile pattern A on A9.01 for epoxy requirements.

B. Bid Category No. 2 – Electrical

- 5. Baseball Field is getting new scoreboard with foundation and supports. Softball Field is getting new scoreboard on existing foundation and supports. At Baseball Field, demolish existing scoreboard foundations, footings and structure in their entirety. At Softball Field, demolish existing scoreboard only; foundation and existing structure to be re-used for new scoreboard.
- 6. Addendum 2 Clarifications incorrectly stated that *Bid Category No. 05 Sitework is to provide* and install Underground Utility Access Boxes (Drawing detail 14/C5.10). **Bid Category No. 02 Electrical** is to provide and install Underground Utility Access Boxes (Drawing detail 14/C5.10).

C. Bid Category No. 3 – Mechanical

- 3. For **Bid Category No. 03 Mechanical**, the Make Up Air Unit Schedule (Sheet M9.01) calls for a Reznor CAUA 300 for MAU-2. If this model is no longer available, a Model 275 is preferred. In addition, Shoemaker is an approved manufacturer for the diffusers, grilles, and registers.
- 4. For **Bid Category No. 03 Mechanical**, fiberglass insulation is acceptable for pipe insulation on all systems, hot and cold.

D. Bid Category No. 4 – Concrete

- 8. For construction of Scoreboard structures, Daktronic Sheets issued in Addendum 2 have been updated and included in this Addendum 4. The Dakronic design for the Football scoreboard and Baseball scoreboard each show two foundation options of either deep column foundation or optional spread foundation. The optional spread foundation shall be used for each. The spread foundations are shown with top of concrete matching surrounding grass grade. Bid Category No. 4 Concrete is to provide concrete and reinforcement. Exposed topside surface of spread foundations to be hand troweled and broom finished. Bid Category No. 05 Sitework is to provide excavation, backfill and grading for the spread foundations. Bid Category No. 01 General Trades is to provide and install structural steel work and painting of structural steel supports.
- 9. Baseball Field is getting new scoreboard with foundation and supports. Softball Field is getting new scoreboard on existing foundation and supports. At Baseball Field, demolish existing scoreboard foundations, footings and structure in their entirety. At Softball Field, demolish existing scoreboard only; foundation and existing structure to be re-used for new scoreboard.
- 10. Refer to details on Daktronic Sheet B1191804R foundation and post details for the 25 second timeclock. These details replace foundation and post details of Detail 6/C5.10.
- 11. The concrete maintenance strip (Sheet C2.01, detail 8/C5.11 Concrete Turn Down at Edge of Track) is to stop at each end of the existing retaining wall and does not continue in front of the wall.

E. Bid Category No. 5 – Sitework

- 15. For construction of Scoreboard structures, Daktronic Sheets issued in Addendum 2 have been updated and included in this Addendum 4. The Dakronic design for the Football scoreboard and Baseball scoreboard each show two foundation options of either deep column foundation or optional spread foundation. The optional spread foundation shall be used for each. The spread foundations are shown with top of concrete matching surrounding grass grade. Bid Category No. 4 Concrete is to provide concrete and reinforcement. Exposed topside surface of spread foundations to be hand troweled and broom finished. Bid Category No. 05

 Sitework is to provide excavation, backfill and grading for the spread foundations. Bid Category No. 01 General Trades is to provide and install structural steel work and painting of structural steel supports.
- 16. Baseball Field is getting new scoreboard with foundation and supports. Softball Field is getting new scoreboard on existing foundation and supports. At Baseball Field, demolish existing scoreboard foundations, footings and structure in their entirety. At Softball Field, demolish existing scoreboard only; foundation and existing structure to be re-used for new scoreboard.
- 17. Refer to details on Daktronic Sheet B1191804R foundation and post details for the 25 second timeclock. These details replace foundation and post details of Detail 6/C5.10.
- 18. **Bid Category No. 05 Sitework** is to provide stonedust to a depth of 6" with 6x6 pressure treated lumber border. Refer to updated Sheet C1.03, Note 23 for salvage and re-use of stonedust. **Bid Category No. 1 General Trades** is to provide and install treated lumber borders.

- 19. For **Bid Category No. 05 Sitework**, (refer to dashed line on Sheet C4.01) there is an underdrain located at the east end of the field that parallels the inside radius of the track. This underdrain is to be 6" perforated and connected to Leach Basins LB-101 and LB-201 respectively with South inverts to be determined. This underdrain is to have same cross-section of stone/pipe/geotextile as the other edges of the field, just as 6" diameter.
- 20. Addendum 2 Clarifications incorrectly stated that *Bid Category No. 05 Sitework is to provide and install Underground Utility Access Boxes (Drawing detail 14/C5.10)*. Bid Category No. 02 Electrical is to provide and install Underground Utility Access Boxes (Drawing detail 14/C5.10).
- 21. The concrete maintenance strip (Sheet C2.01, detail 8/C5.11 Concrete Turn Down at Edge of Track) is to stop at each end of the existing retaining wall and does not continue in front of the wall.

B. <u>SPECIFICATION SECTION 01 21 00 ALLOWANCES</u>

Paragraph 3.02 CONTINGENCY ALLOWANCES

Revise the following Allowance:

E. Bid Category No. 5 Sitework \$50,000



INSTRUCTION TO PRIME BIDDERS

Date December 7, 2023

Re: **Armstrong Field**

815 Jefferson Street Three Rivers, MI 49093

The Skillman Corporation Project No. 219050.81

Attention Bidders:

Bids are due **December 12, 2023, 9:00** a**m local time** at Three Rivers Community Schools Administration Building, 851 6th Avenue, Three Rivers, MI 49093.

Post-Bid/Pre-Award Conferences will be held with select bidders as follows:

	POST-BID / PRE-AWARD CONFENERENCE SCHEDULE					
	Bid Category	Bidder	Post-Bid Conference Date	Start	End	
1	General Trades	Bidder 1	Wednesday, December 13, 2023	8:00 AM	9:15 AM	
		Bidder 2	Wednesday, December 13, 2023	9:30 AM	10:45 AM	
2	Electric	Bidder 1	Wednesday, December 13, 2023	11:00 AM	11:45 AM	
		Bidder 2	Wednesday, December 13, 2023	12:00 PM	12:45 PM	
3	Mechanical	Bidder 1	Wednesday, December 13, 2023	1:00 PM	1:45 PM	
		Bidder 2	Wednesday, December 13, 2023	2:00 PM	2:45 PM	
4	Concrete	Bidder 1	Thursday, December 14, 2023	8:00 AM	8:45 AM	
		Bidder 2	Thursday, December 14, 2023	9:00 AM	9:45 AM	
5	Sitework	Bidder 1	Thursday, December 14, 2023	10:00 AM	10:45 AM	
		Bidder 2	Thursday, December 14, 2023	11:00 AM	11:45 AM	
6	Artificial Turf	Bidder 1	Thursday, December 14, 2023	12:00 PM	12:45 PM	
		Bidder 2	Thursday, December 14, 2023	1:00 PM	1:45 PM	

Conference will be held in-person at Thre Rivers Community Schools Administration Building, 851 6th Ave., Thre Rivers, MI 49093. If you are unable to attend in person, attendance via Microsoft TEAMS will be allowed. Calendar invites with TEAMS link will be sent on Tuesday December 12, following the bid opening, to qualified bidders who have been selected for interviews.

THE SKILLMAN CORPORATION

ADDENDUM



OWNER THREE RIVERS COMMUNITY SCHOOLS **PROJECT** ARMSTRONG FIELD A/E Project 5-5136 **PURPOSE ADDENDUM 004** THIS ADDENDUM SHALL FORM PART OF THE BIDDING DOCUMENTS. CHANGES, ADDITIONS, CLARIFICATIONS OR DELETIONS HEREIN SUPERSEDE THE DRAWINGS AND SPECIFICATIONS. BIDDERS SHALL INCLUDE ON THE PROPOSAL FORM ACKNOWLEDGEMENT OF THE RECEIPT OF THIS ADDENDUM. **ATTACHMENTS New Specifications: None Reissued Specifications: None** New Sheets: B1191803R-3 Reissued Sheets: G0.00, C1.03, C2.01, C2.03, C5.10, C5.11, C8.01, B1191803R-1, B1191803R-2, B1191804R, B1191806R ARCHITECT-ENGINEER **GMB** www.gmb.com 616.796.0200 **CONSTRUCTION MANAGER** THE SKILLMAN CORPORATION

> www.skillman.com 269.350.5757

ADDENDUM



SPECIFICATION CLARIFICATIONS / REVISIONS

None.

SHEET CLARIFICATIONS / REVISIONS

ITEM NO. 1	SHEET G0.00 COVER (REISSUED) Added sheet B1191803R-3 to the drawing index.
ITEM NO. 2	SHEET C1.03 – SOFTBALL DEMOLITION PLAN – ALTERNATE C-2 (REISSUED)
	Refer to plan for Note #23.
ITEM NO. 3	SHEET C2.01 – STADIUM SITE PLAN (REISSUED)
	Refer to plan for omitted dimension.
ITEM NO. 4	SHEET C2.02 – BASEBALL SITE PLAN – ALTERNATE C-1 (REISSUED)
	A. Refer to plan for updated notes and dimensions.B. See new Detail 5.
ITEM NO. 5	SHEET C2.03 – SOFTBALL SITE PLAN – ALTERNATE C-2 (REISSUED)
	Refer to plan for updated notes and dimensions.
ITEM NO. 6	SHEET C5.10 – TURF FIELD PLANS AND DETAILS (REISSUED)
	Refer to plan for updated notes and dimensions.
ITEM NO. 7	SHEET C5.11 – TRACK & FIELD DETAILS (REISSUED)
	Refer to plan for updated notes.
ITEM NO. 8	SHEET C8.01 – SITE DETAILS (REISSUED)
	Refer to plan for Detail #12 for updated text and Power Cat logo.
ITEM NO. 9	SHEET B1191803R-1 – DAKTRONICS SCOREBOARD STRUCTURAL DRAWING (REISSUED)
	Sheet renamed.
ITEM NO. 10	SHEET B1191803R-2 – DAKTRONICS SCOREBOARD STRUCTURAL DRAWING (REISSUED)
	Sheet renamed.

ADDENDUM



ITEM NO. 11 SHEET B1191803R-3 – DAKTRONICS SCOREBOARD STRUCTURAL DRAWING (NEW)

Sheet added to include optional spread footing for football field scoreboard structure.

ITEM NO. 12 SHEET B1191804R – DAKTRONICS SCOREBOARD STRUCTURAL DRAWING (REISSUED)

Sheet renamed.

ITEM NO. 13 SHEET B1191806R – DAKTRONICS SCOREBOARD STRUCTURAL DRAWING (REISSUED)

Sheet revised to include optional spread footing for baseball scoreboard structure.

ARMSTRONG FIELD



THREE RIVERS COMMUNITY SCHOOLS

815-899 JEFFERSON STREET THREE RIVERS, MICHIGAN

BIDS & CONSTRUCTION 10.12.2023 GMB PROJECT # 5-5136

GENERAL NOTES DIMENSIONS AND LEGENDS FIELDHOUSE CODE COMPLIANCE PLAN CIVIL **GENERAL NOTES EXISTING SITE SURVEY** STADIUM DEMOLITION PLAN BASEBALL DEMOLITION PLAN- ALTERNATE C-1 SOFTBALL DEMOLITION PLAN - ALTERNATE C-2 OVERALL SITE PLAN BASEBALL SITE PLAN - ALTERNATE C-1 SOFTBALL SITE PLAN - ALTERNATE C-2 STADIUM GRADING PLAN STADIUM UTILITY PLAN TURF FIELD PLANS AND DETAILS TRACK & FIELD DETAILS OVERALL LANDSCAPE PLAN SESC PLAN SITE DETAILS SITE DETAILS STRUCTURAL **♥**B1191803R-1 DAKTRONICS SCOREBOARD STRUCTURAL DRAWINGS B1191803R-2 DAKTRONICS SCOREBOARD STRUCTURAL DRAWINGS B1191803R-3 DAKTRONICS SCOREBOARD STRUCTURAL DRAWINGS B1191804R DAKTRONICS TIMING DISPLAY STRUCTURAL DRAWINGS. DAKTRONICS SCOREBOARD STRUCTURAL DRAWINGS STRUCTURAL GENERAL INFORMATION AND DETAILS STRUCTURAL SCHEDULES FOUNDATION AND ROOF FRAMING PLANS

GENERAL INFORMATION

ARCHITECTURAL

A1.01 FIELDHOUSE DEMOLITION PLAN & FLOOR PLAN

A2.01 FIELDHOUSE REFLECTED CEILING & ROOF PLAN

A2.80 ENLARGED PLANS

A4.01 FIELDHOUSE EXTERIOR ELEVATIONS

A5.01 DOOR & FRAME SCHEDULE & DETAILS

A7.01 DETAILS

A9.00 ROOM SIGNAGE

FIELDHOUSE FINISH PLAN

P0.1A FIELDHOUSE FOUNDATION PLUMBING PLANS
P1.1A FIELDHOUSE PLUMBING PLANS

MECHANICAL
M0.01 MECHANICAL GENERAL INFORMATION
M1.01 MECHANICAL DEMOLITION PLAN
M2.01 MECHANICAL PLAN
M4.1A FIELDHOUSE GAS PIPING PLAN
M7.01 MECHANICAL DETAILS
M8.01 MECHANICAL & CONTROL DIAGRAMS
M9.01 MECHANICAL SCHEDULES

PLUMBING GENERAL INFORMATION

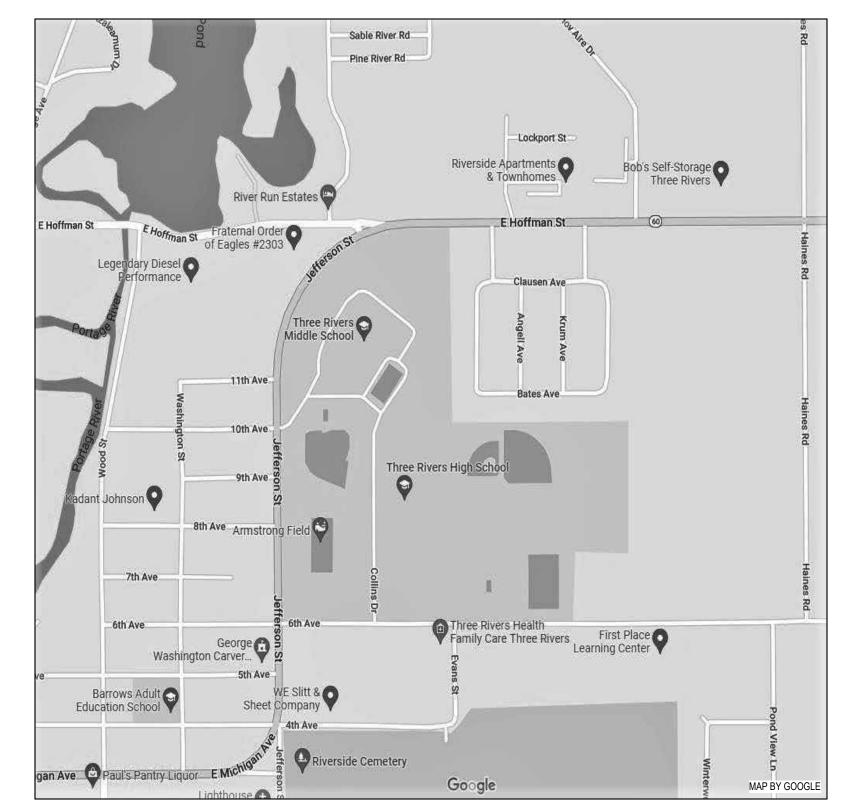
PLUMBING

ELECTRICAL

E0.01 ELECTRICAL SYMBOL LEGENDS & GENERAL NOTES
E1.1A FIELDHOUSE ELECTRICAL DEMOLITION PLAN
E2.1A FIELDHOUSE POWER & COMMUNICATIONS PLAN
E3.1A FIELDHOUSE LIGHTING PLAN
E4.01 POWER DISTRIBUTION ONE-LINE DIAGRAM, SCHEDULES AND DETAILS
E7.01 ELECTRICAL DETAILS, DISTRIBUTION EQUIPMENT SCHEDULES & FIXTURE SCHEDULE
ES1.01 FOOTBALL FIELD SITE ELECTRICAL DEMOLITION PLAN

ES1.01 FOOTBALL FIELD SITE ELECTRICAL DEMOLITION PLAN
ES1.02 BASEBALL SITE ELECTRICAL DEMOLITION PLAN
ES1.03 SOFTBALL ELECTRICAL DEMOLITION PLAN
ES2.01 FOOTBALL FIELD SITE ELECTRICAL PLAN
ES2.02 BASEBALL SITE ELECTRICAL PLAN
ES2.03 SOFTBALL SITE ELECTRICAL PLAN

VICINITY MAP



ALTERNATES

G-1: PROVIDE ALL COSTS TO PROVIDE TURF MAINTENANCE ANNUALLY. COST SHALL BE
"PER YEAR" AND SHOULD ENCOMPASS ALL ELEMENTS OF YEAR MAINTENANCE,
INCLUDING BUT NOT LIMITED TO, TURF GROOMING, SANITATION, INFILL MONITORING
AND REFILL AS REQUIRED, FIXING TURF WEAR AND ADDRESSING ANY VISIBLE ISSUES
TO THE TURF SURFACE.

C-1: ALL WORK ASSOCIATED WITH THE BASEBALL SCOPE OF WORK.

C-2: ALL WORK ASSOCIATED WITH THE SOFTBALL SCOPE OF WORK.

ALTERNATE SUMMARY, SEE SPECIFICATION SECTION 01 23 00 FOR FULL DESCRIPTIONS

CONSTRUCTION MANAGER

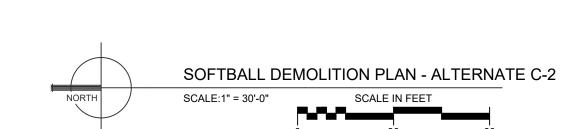
THE SKILLMAN CORPORATION 8120 MOORSBRIDGE ROAD PORTAGE, MI 49024 P. 269.350.5757 WWW.SKILLMAN.COM OWNER

THREE RIVERS COMMUNITY SCHOOLS 851 SIXTH AVENUE THREE RIVERS, MI 49093 P. 269.279.1100 WWW.TRSCHOOLS.ORG ARCHITECT + ENGINEER

GMB ARCHITECTURE + ENGINEERING 85 EAST EIGHTH STREET, SUITE 200 HOLLAND, MI 49423 P. 616.796.0200 WWW.GMB.COM

DEMOLITION KEY

DEMO AND REMOVE EXISTING ASPHALT, FULL DEPTH.





ISSUANCES

10.12.2023 BIDS & CONSTRUCTION 12.06.2023 ADDENDUM 004

616.796.0200 www.gmb.com

DRAWN ACB

PROJECT NO. 5-5136

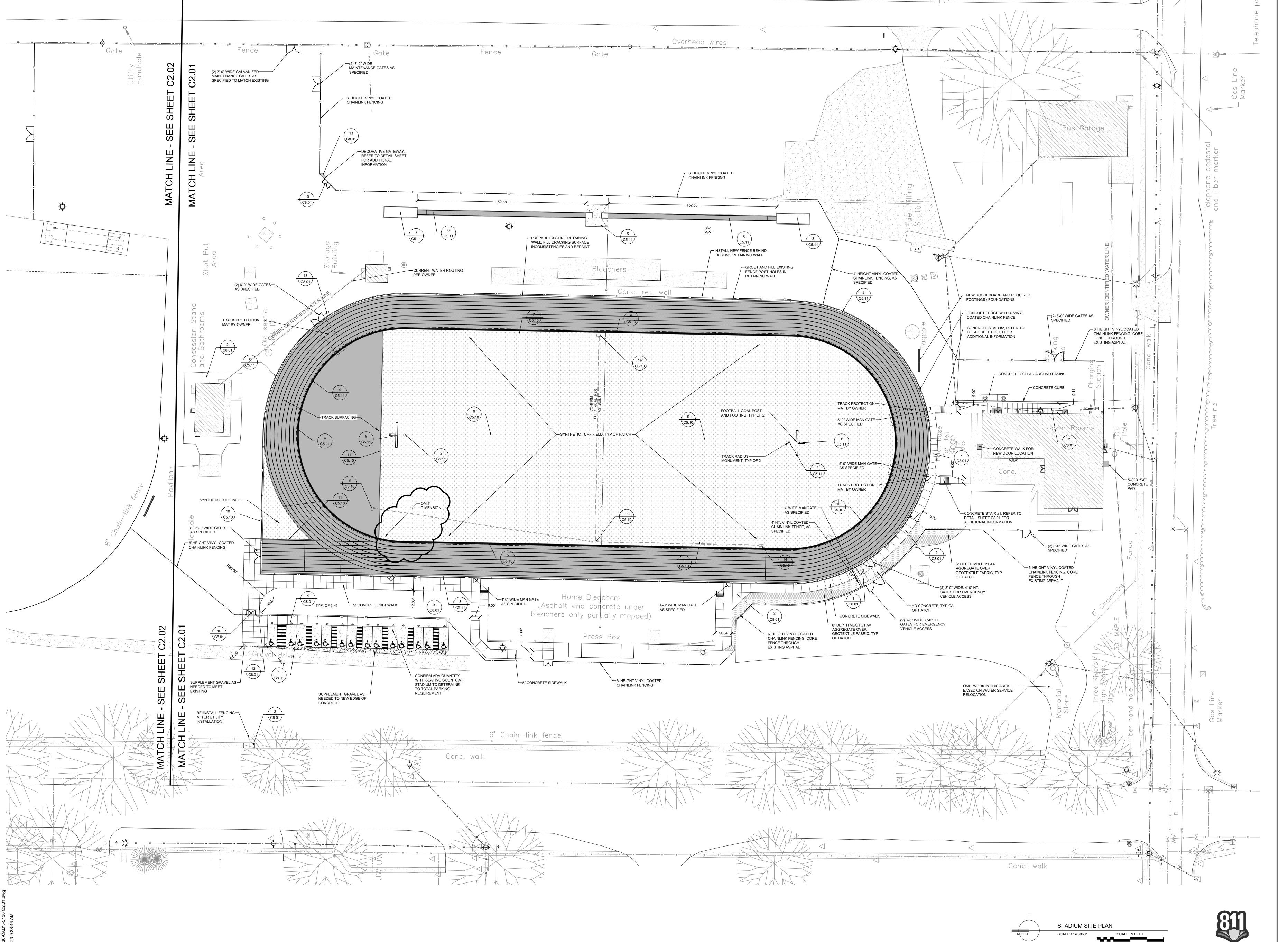
NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN

GMB COPYRIGHT © 2023 ALL RIGHTS RESERVED

PERMISSION OF

SOFTBALL DEMOLITION PLAN - ALTERNATE C-2

C1.03



www.gmb.com

ISSUANCES

10.12.2023 BIDS & CONSTRUCTION 11.13.2023 ADDENDUM 001 11.28.2023 ADDENDUM 002 12.06.2023 ADDENDUM 004

DRAWN ACB

REVIEWED NTB PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN

PERMISSION OF GMB COPYRIGHT © 2023 ALL RIGHTS RESERVED

STADIUM SITE PLAN

C2.01

www.gmb.com

ISSUANCES

10.12.2023 BIDS & CONSTRUCTION 12.06.2023 ADDENDUM 004

DRAWN

REVIEWED NTB PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM,

WITHOUT PRIOR WRITTEN

PERMISSION OF GMB COPYRIGHT © 2023 ALL RIGHTS RESERVED

BASEBALL SITE PLAN -ALTERNATE C-1

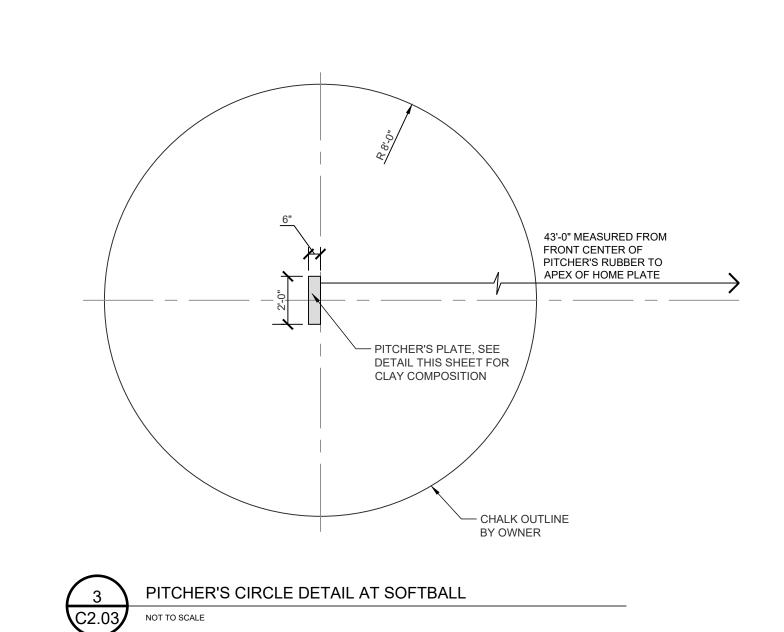
12.06.2023 ADDENDUM 004

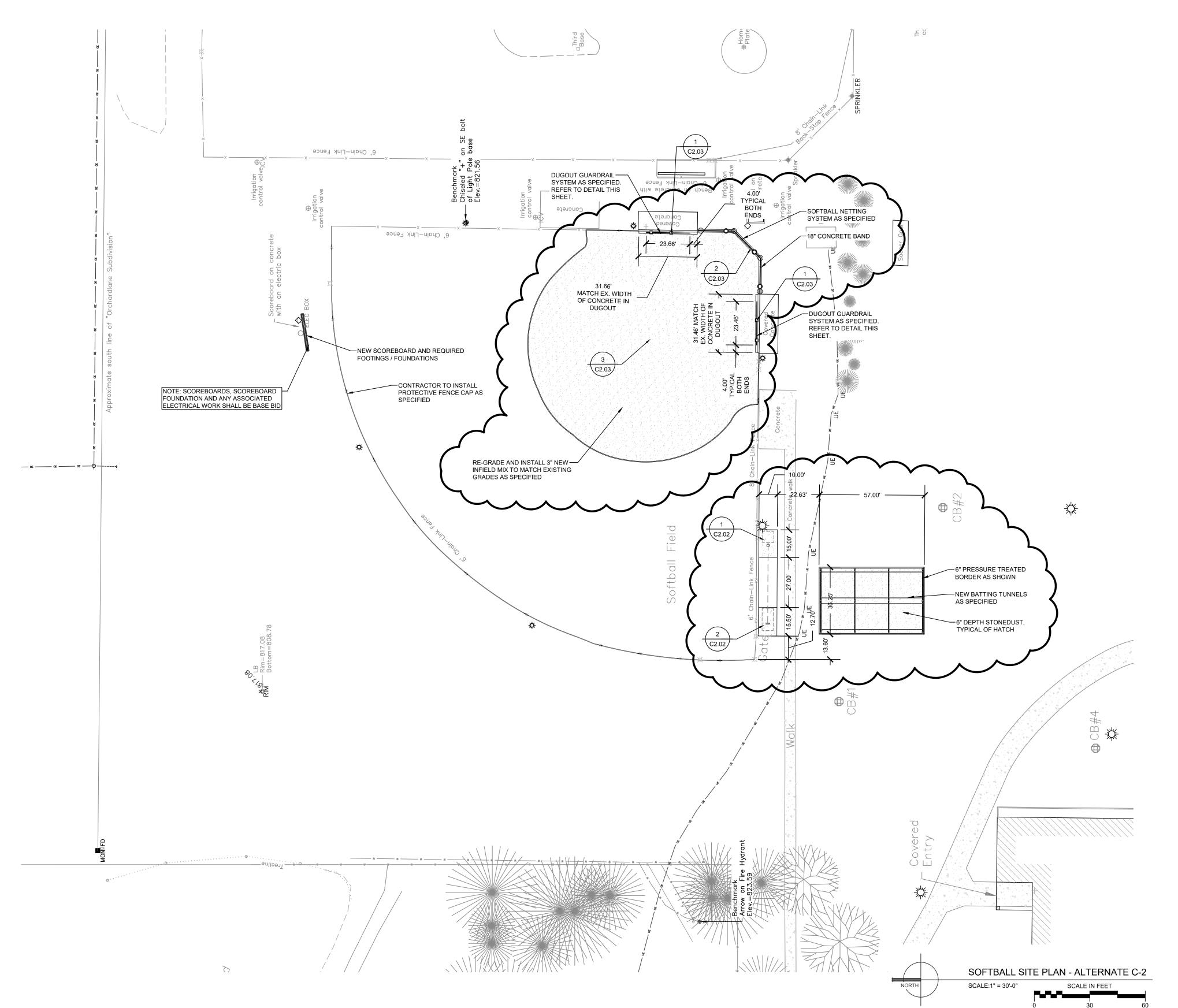
CONSTRUCTION

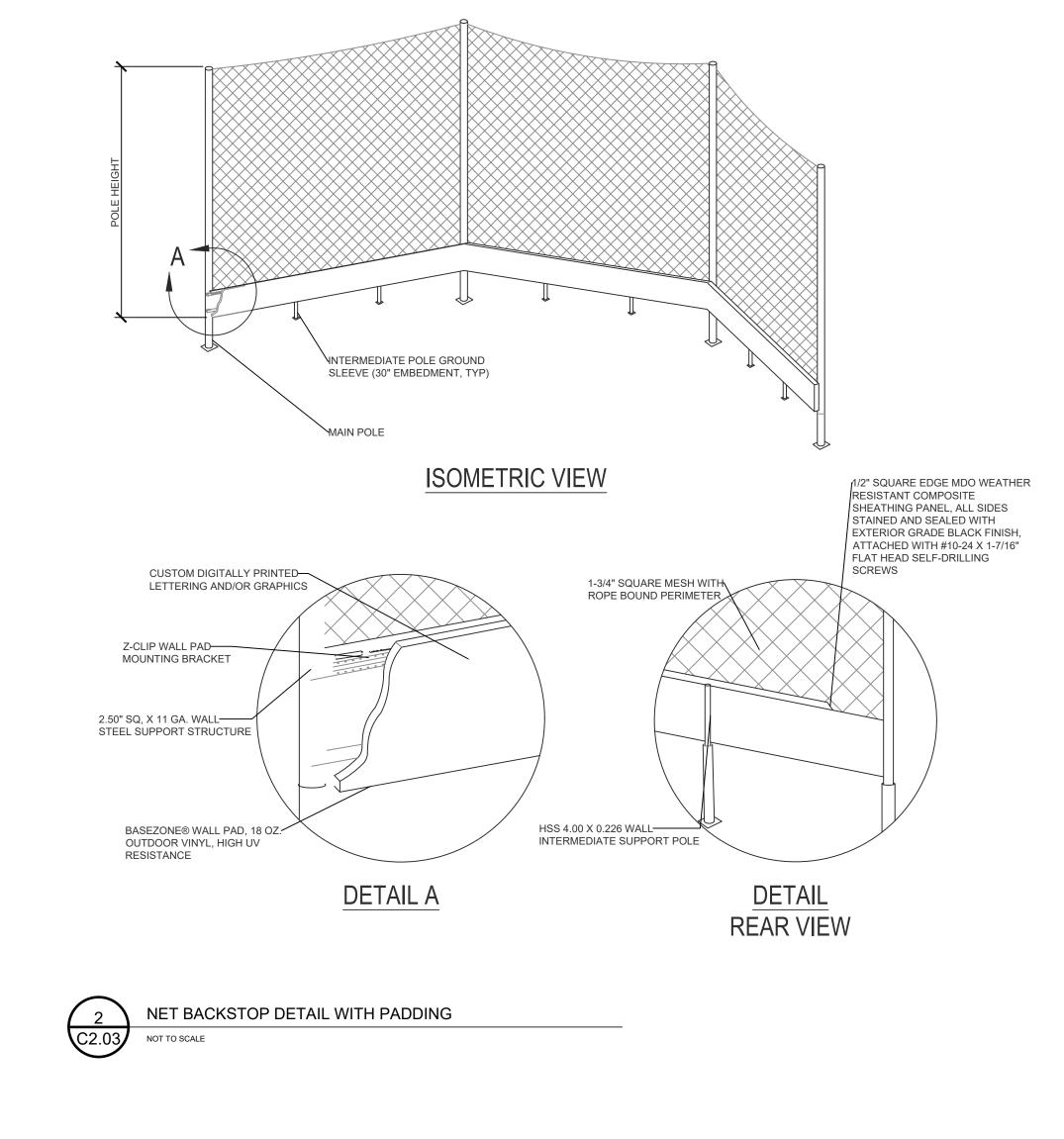
DRAWN ACB REVIEWED NTB PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN

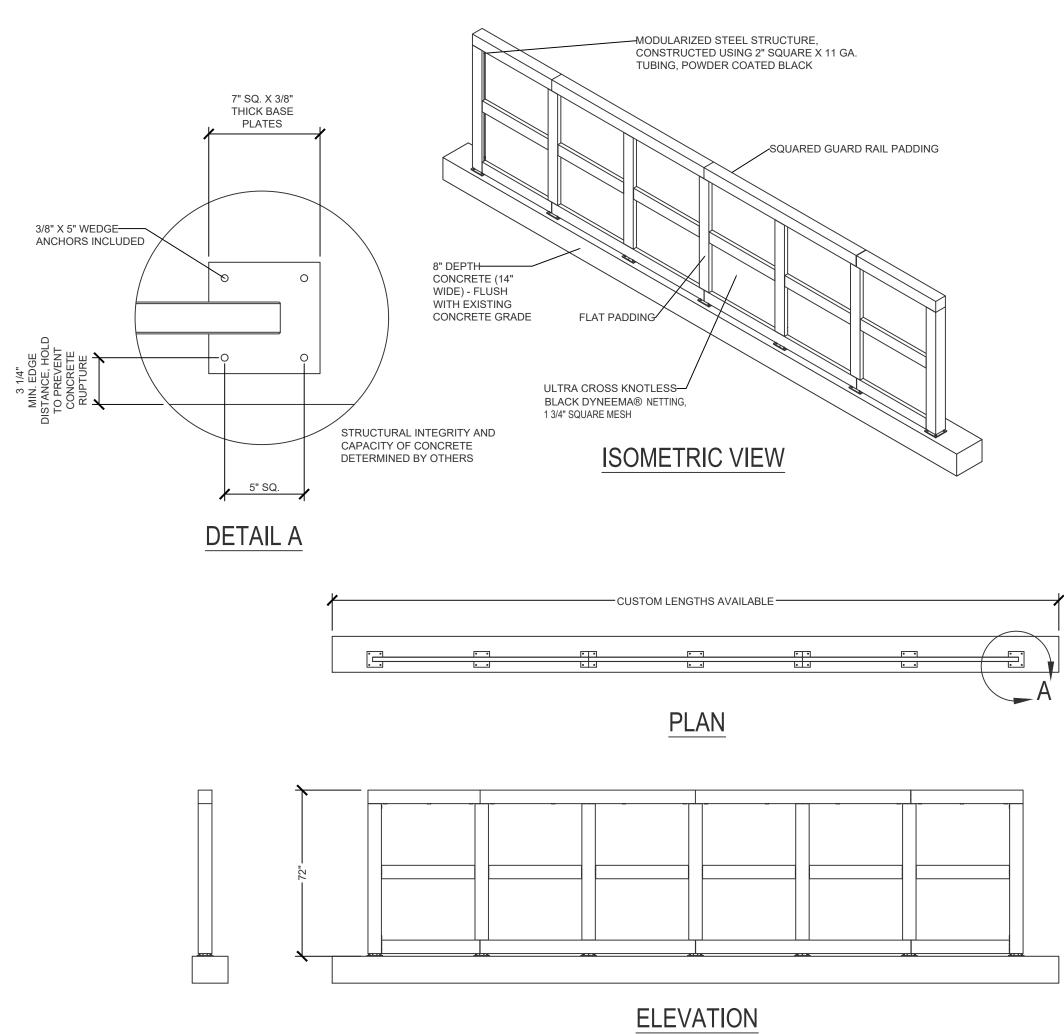
PERMISSION OF GMB COPYRIGHT © 2023 ALL RIGHTS RESERVED

SOFTBALL SITE PLAN -ALTERNATE C-2



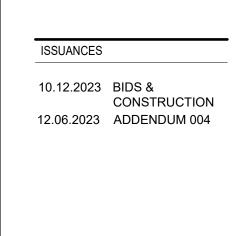






GUARD RAIL SYSTEM FOR 6 FOOT HEIGHT



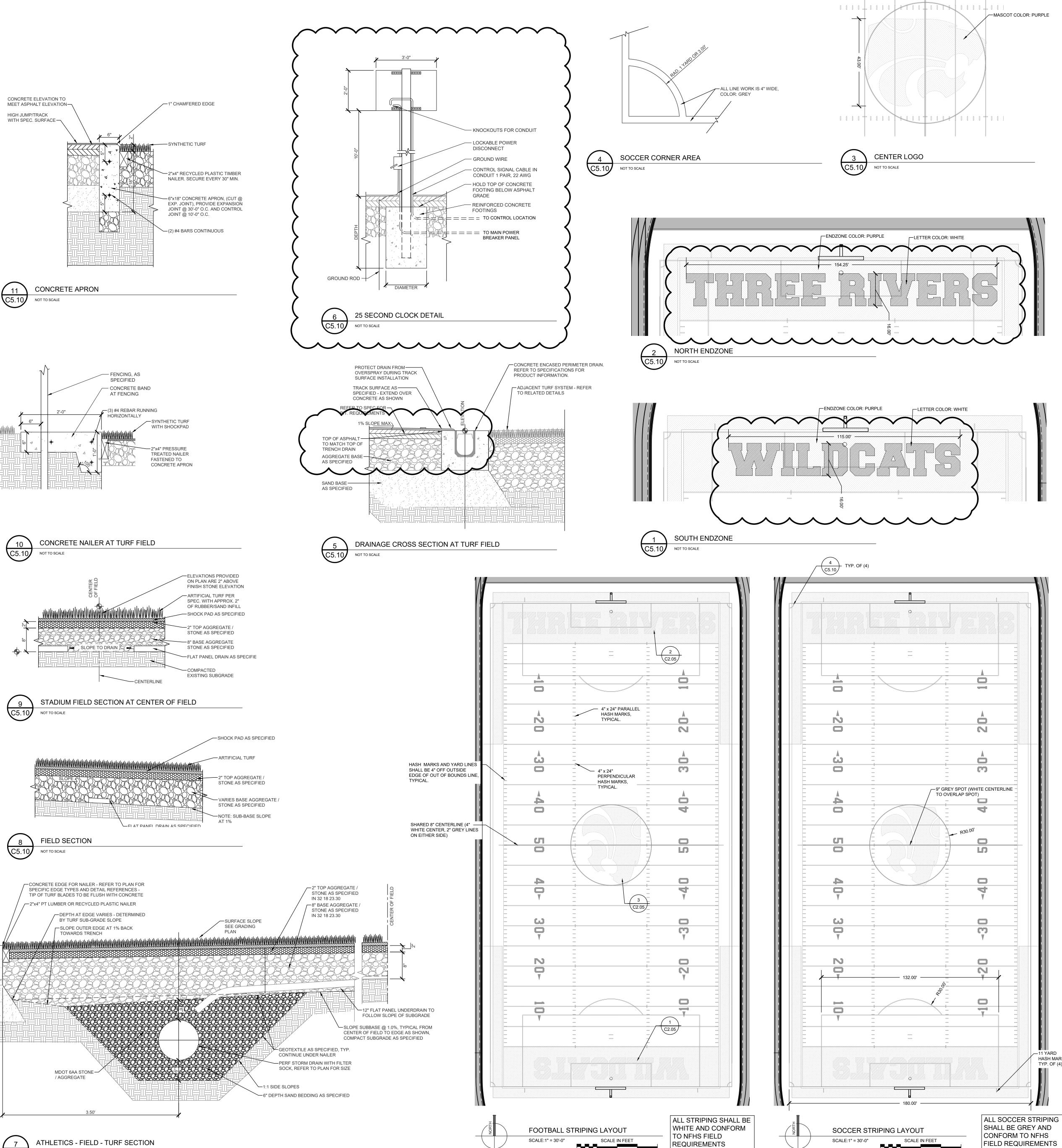


DRAWN ACB REVIEWED NTB PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN PERMISSION OF GMB COPYRIGHT © 2023 ALL RIGHTS RESERVED

TURF FIELD PLANS AND **DETAILS**

HASH MARK,

TYP. OF (4)



—SYNTHETIC TURF SYNTHETIC TURF -6" PEA GRAVEL UNDER BOX —CONCRETE BRICK AT CONCRETE OR MORTAR AT — ALL FOUR CORNERS FOR DRAINAGE, SEE SPECS ALL FOUR CORNERS TO SIDE VIEW SECURE BOX IN POSITION AND PREVENT SHIFT/HEAVE BRACKET FOR VARIOUS TURF DIMENSIONS, TYP. NOT TO SCALE COVERS, TYP. LEVELING BOLT, TYP. FRONT VIEW -MIDDLE DIVIDER REFER TO SPEC FOR FURTHER INFORMATION AND PRODUCT TOP VIEW APPROVALS. INSTALL PER MANUFACTURERS INSTRUCTIONS AND ADDITIONAL REQUIREMENTS SHOWN ON THE CONSTRUCTION DOCUMENTS UNDERGROUND UTILITY ACCESS BOX FOR TURF ATHLETIC SURFACES SYNTHETIC TURF (BY TURF INSTALLER) -PLYWOOD COVER PANEL — ALUMINUM COVER PANEL SYNTHETIC TURF AREAS UNDERGROUND UTILITY ACCESS BOX FOR TURF ATHLETIC SURFACES - LID COVERING DETAIL (13) (C5.10) NEMA 3R CAST ALUMINUM JUNCTION — BOX AND WHILE-IN-USE COVER, WEATHER-RESISTANT DUPLEX - WATER-TIGHT GLAND NUT RECEPTACLE, AND NEOPRENE CABLE FITTING GASKETING. CAULK OVER ALL JOINTS TO ENSURE WATER-TIGHT SEAL. - COMMUNICATIONS LIQUID-TIGHT FLEXIBLE CONDUIT -- PROVIDE BUSHINGS ON ALL CONNECTION TO RECEPTACLE CONDUITS BOX WITH 90° FITTINGS CONDUIT ENTRY AREA SIDE VIEW

COMMUNICATIONS

COMPARTMENT

TOP VIEW

UNDERGROUND UTILITY ACCESS BOX - ELECTRICAL COMMUNICATION INSTALLATION DETAIL

COMPARTMENT

COMMUNICATIONS RECEPTACLE

EQUIPMENT PROVIDER. MOUNT

ON SINGLE-GANG NEMA 3R CAST

ALUMINUM JUNCTION BOX WITH

HOFFMAN #LHC151512SS NEMA 4

INTERCOM, ETC.) RECEPTACLE

- MAINTAIN FULL CLEARANCE

REQUIRED FOR DOOR SWING

#LLKWK LATCH TYPICAL FOR EACH

ENCLOSURE WITH #LP1515G PANEL AND

COMMUNICATIONS (AUDIO, SCOREBOARD,

NEOPRENE GASKET BY ELECTRICAL

ON SINGLE-GANG PLATE BY

CONTRACTOR.

- COMMUNICATIONS CONDUIT ENTRY AREA

— USE EJIW 3736 MANHOLE COVERS OR EQUAL

HAND HOLE COVERS

FLAT SOLID MEDIUM DUTY COVER

FIELD STORM CATCH BASIN - MANHOLE DETAIL

FRAME & GRATE / SOLID COVER -STANDARD GRATE (3" BELOW

NEMA 3R CAST ALUMINUM JUNCTION ———

BOX AND WHILE-IN-USE COVER,

WEATHER-RESISTANT DUPLEX

RECEPTACLE, AND NEOPRENE

TO ENSURE WATER-TIGHT SEAL.

LIQUID-TIGHT FLEXIBLE CONDUIT -

NEMA 4 PVC JUNCTION BOX FOR —

CONNECTION TO RECEPTACLE

POWER CONNECTIONS ON TOP

BOX WITH 90° FITTINGS

OF POWER CONDUITS.

POWER CONDUIT

ENTRY AREA

GASKETING. CAULK OVER ALL JOINTS

FG - REFER TO GRADING PLANS)

SYNTHETIC TURF-

10.12.2023 BIDS & CONSTRUCTION 12.06.2023 ADDENDUM 004

DRAWN ACB
REVIEWED NTB

PROJECT NO. 5-5136

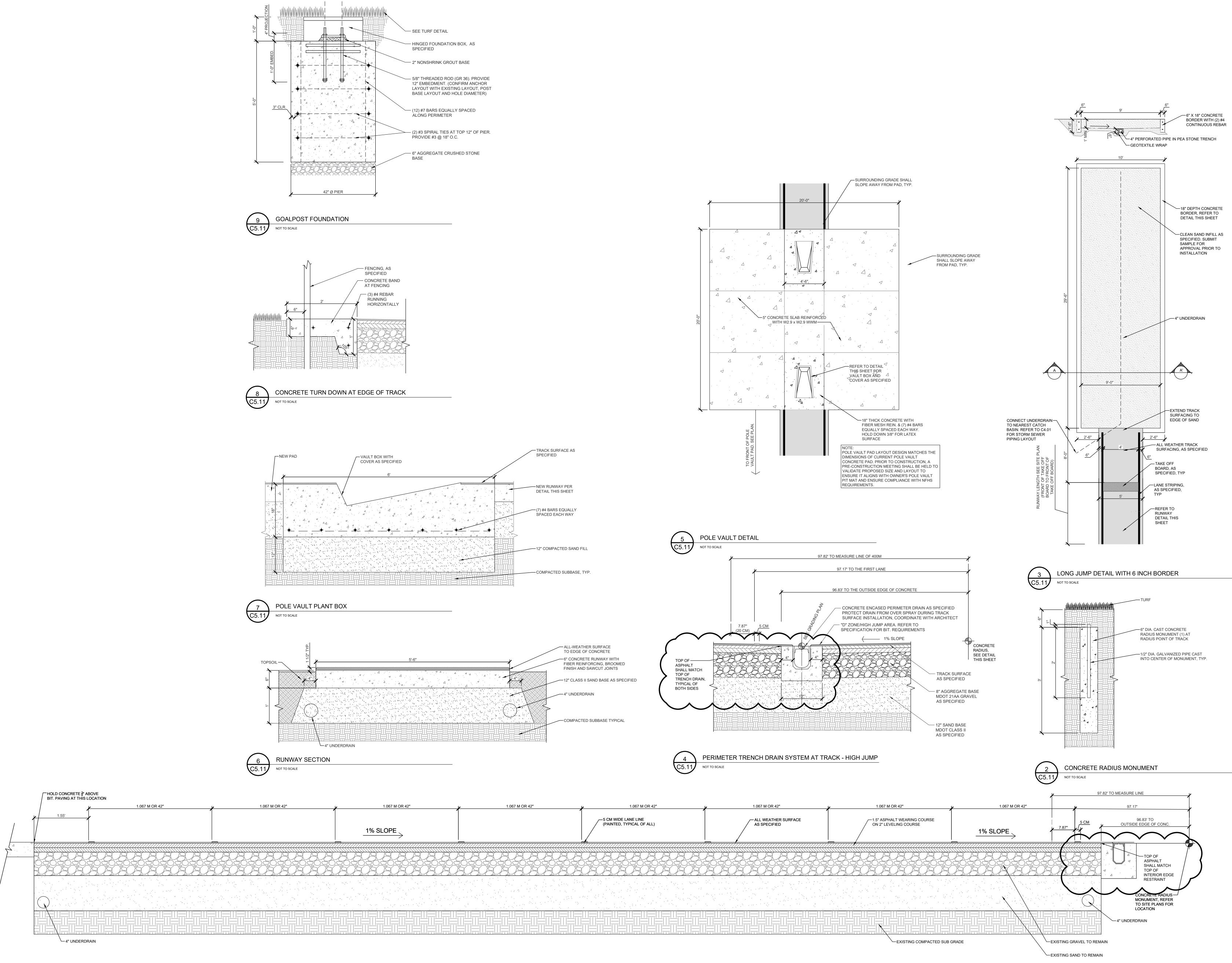
NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM

OR BY ANY MEANS, OR STORED IN A
DATABASE OR RETRIEVAL SYSTEM,
WITHOUT PRIOR WRITTEN
PERMISSION OF

GMB COPYRIGHT © 2023
ALL RIGHTS RESERVED

TRACK & FIELD DETAILS

C5.1



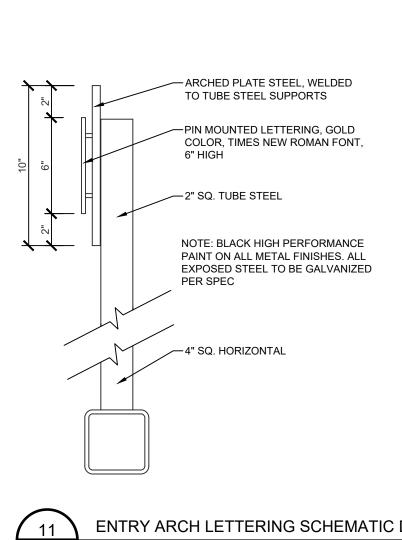
ISSUANCES 10.12.2023 BIDS & CONSTRUCTION 12.06.2023 ADDENDUM 004

DRAWN ACB REVIEWED NTB

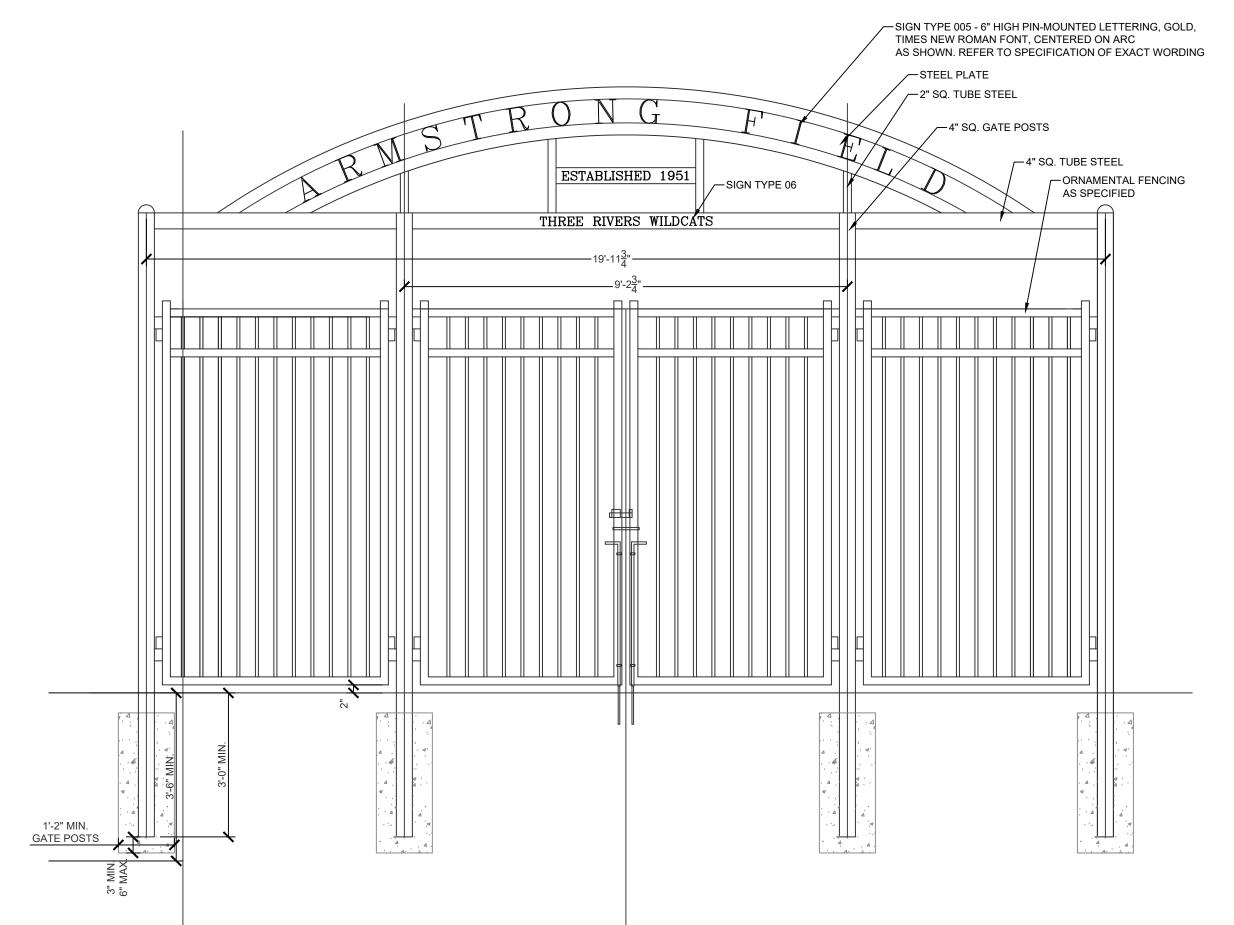
PROJECT NO. NO PART OF THIS DRAWING MAY BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, OR STORED IN A DATABASE OR RETRIEVAL SYSTEM, WITHOUT PRIOR WRITTEN PERMISSION OF GMB COPYRIGHT © 2023

ALL RIGHTS RESERVED SITE DETAILS

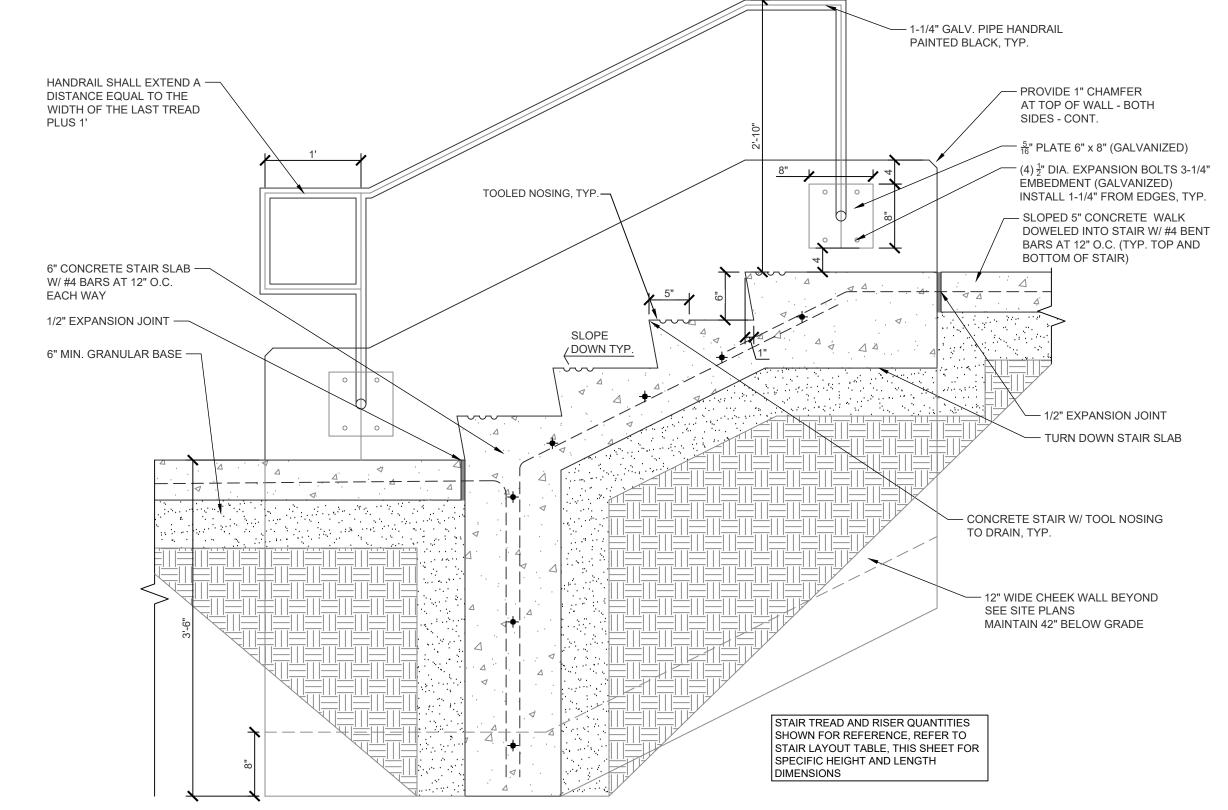




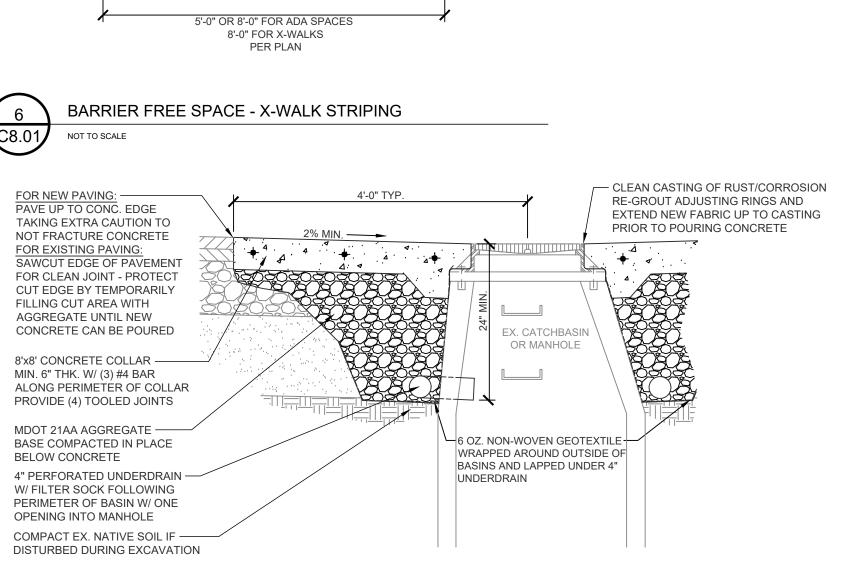
ENTRY ARCH LETTERING SCHEMATIC DIAGRAM NOT TO SCALE

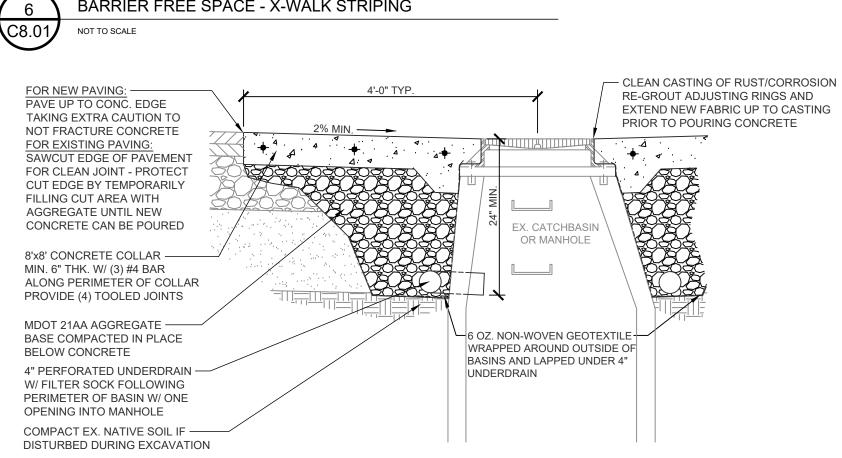


ENTRANCE GATE — CURB & GUTTER PAINT PER — 1-1/4" GALV. PIPE HANDRAIL PAINTED BLACK, TYP. - PROVIDE 1" CHAMFER AT TOP OF WALL - BOTH SIDES - CONT. $\frac{5}{16}$ " PLATE 6" x 8" (GALVANIZED)



	+ +	
9	GENERAL STAIR DETAIL	
C8.01	NOT TO SCALE	





STAIR LAYOUT

1. HANDRAILS SHALL EXTEND MIN. 1FT BEYOND THE NOSING OF THE TOP STEP AND MIN. 1FT PLUS A TYP. TREAD WIDTH PAST THE NOSING OF THE BOTTOM STEP

4. TYPICAL STEP FOOTING NOTE 5. DISTANCE BETWEEN VERTICAL HANDRAIL SUPPORTS MUST NOT EXCEED 4'. SPACING MUST BE EQUAL

4'-0"

6'-6"

-1" CHAMFERED EDGE

STAIR TREAD/LANDING

EMBED 5". USE HILTI HY200 ADHESIVE

1/2" EXPANSION JOINT #5 HORIZONTAL @ 18" O.C. EXTEND AROUND ANY CORNERS

#5 DOWEL @ 24" O.C. / CENTERED IN WALL

TOP TREAD BOTTOM TREA

814.00

817.93

811.46

811.43

OF TREADS | TOTAL RUN | # OF RISERS | TOTAL RISE

13'-0"

2. ALL REINFORCING MUST BE EMBEDDED MIN 1-1/2" IN CONCRETE 3. ALL HANDRAILS 1-1/4" GALV. PIPE HANDRAIL PAINTED BLACK

STAIR LAYOUT TABLE

GRADE VARIES

SEE GRADING PLAN

CHEEK WALL SECTION

#5 VERTICAL @ 24" O.C.—

(7) (C8.01)

STAIR 1

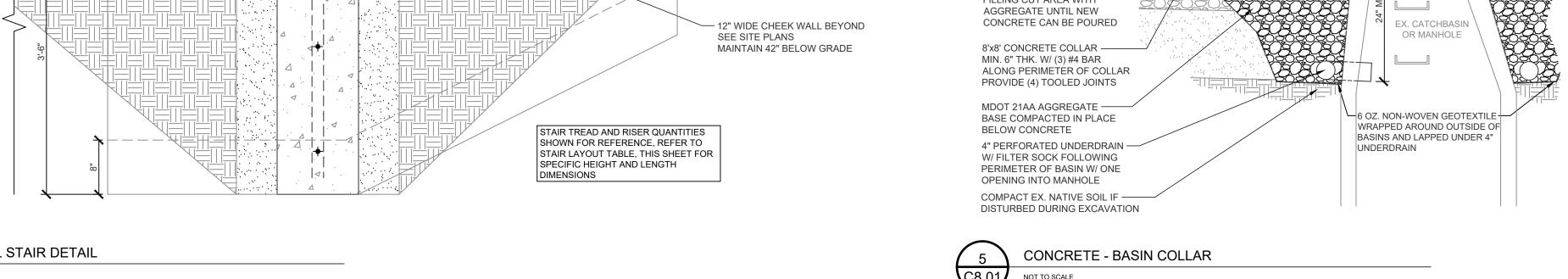
(SOUTH)

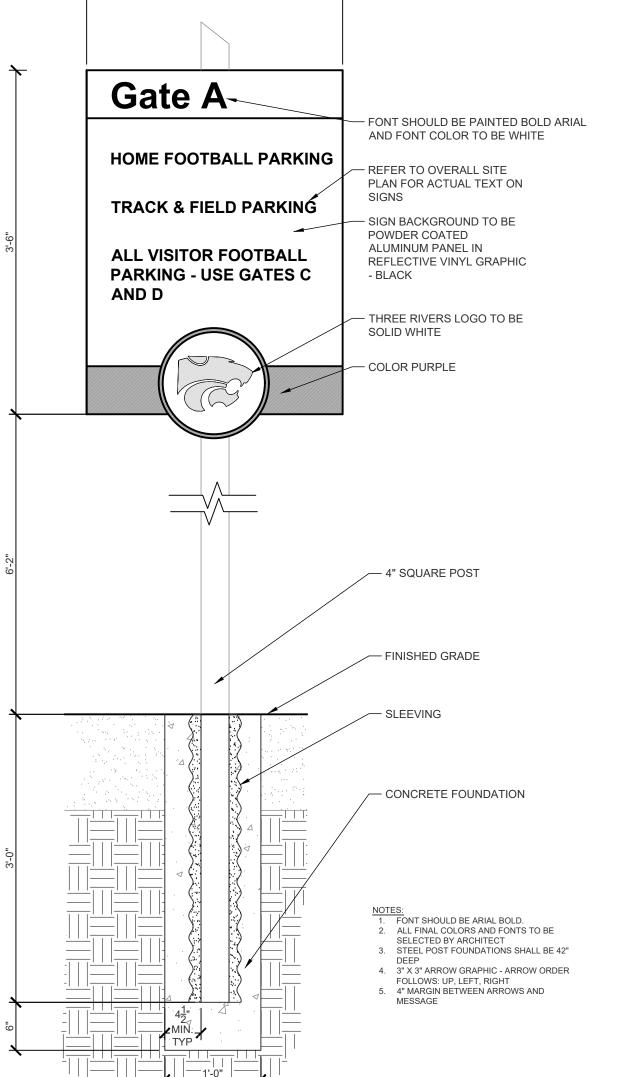
STAIR 2

(NORTH)

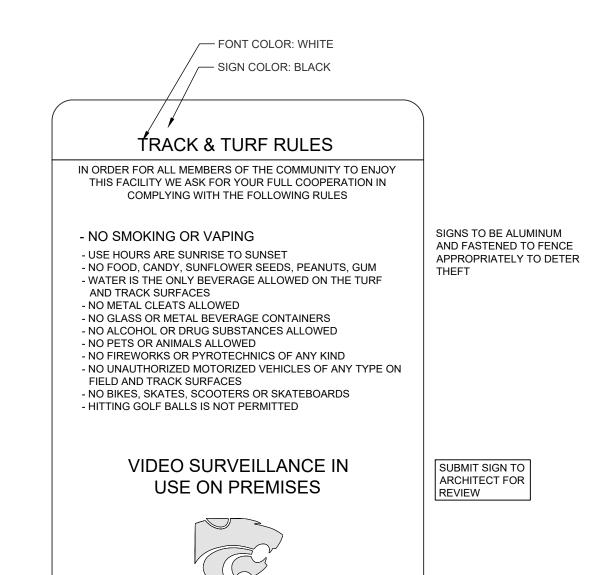
GENERAL NOTES:

FOR CLEAN JOINT - PROTECT CUT EDGE BY TEMPORARILY FILLING CUT AREA WITH AGGREGATE UNTIL NEW		24" MIN.			
8'x8' CONCRETE COLLAR MIN. 6" THK. W/ (3) #4 BAR ALONG PERIMETER OF COLLAR PROVIDE (4) TOOLED JOINTS			OR MANHOLE		
MDOT 21AA AGGREGATE BASE COMPACTED IN PLACE BELOW CONCRETE		WRAPP	ON-WOVEN GEOTEXTII ED AROUND OUTSIDE AND LAPPED UNDER 4	OF	ī
4" PERFORATED UNDERDRAIN — W/ FILTER SOCK FOLLOWING PERIMETER OF BASIN W/ ONE OPENING INTO MANHOLE		UNDERI			
COMPACT EX. NATIVE SOIL IF — DISTURBED DURING EXCAVATION	N				

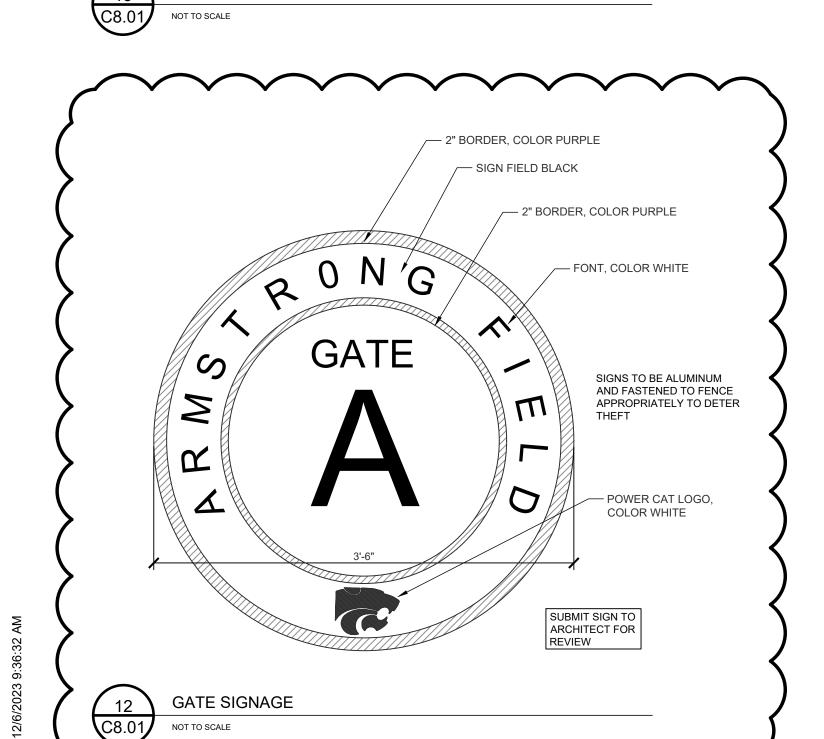












-0.125" ALUMINUM PANEL WITH 2" RADIUS SAFETY CORNERS TO BE PAINTED TO MATCH POST

─12"x18" ALUMINUM SIGN WITH BLUE FACE AND WHITE LETTERS.

SEE PLAN FOR LOCATIONS.

—12"x6" ALUMINUM SIGN WITH

SEE PLAN FOR LOCATIONS.

-2" SQUARE ALUMINUM TUBING WITH COAT PRIMER AND 2 COATS BLACK MATTE FINISH

USE BUSH CONCRETE BASE.

IN PAVEMENT AREAS

TYPICAL FOR SIGN LOCATIONS

VAN

ACCESSIBLE

SIGN - PARKING - BARRIER FREE SIGN

— EPOXY COATED — 4

— EPOXY COATED -

TIPPED OUT

NOT TO SCALE

- REINFORCING

WELDED WIRE MESH

FIBER REINF. MAY NOT

APPROVED BY ARCHITECT

6"x 6" - W2.9 x W2.9

BE USED UNLESS

C8.01 NOT TO SCALE

MDOT F4 MODIFIED CURB

EXPANSION JOINT -

MIN. 1 1/2"

GENERAL SIDEWALK NOTES

1. ALL SIDEWALK IS 5" THICK UNLESS OTHERWISE NOTED.

4. REFER TO SPEC. 32 13 13 FOR CONCRETE SPECS.

JOINT PATTERN TO INTERSECT STRUCTURE.

CONCRETE - PAVEMENT - TYPICAL WALK

ALSO TO SPEC. 32 13 13.

8" CONCRETE PER SPECIFICATION 4

18" GRANULAR MATERIAL CLASS II

FOR ALL HEAVY DUTY HATCHED AREAS PLACE

CONCRETE - PAVEMENT - HEAVY DUTY

6x6 W4.0xW4.0 WELDED WIRE MESH. DRIVE APPROACH APRONS - NO REINFORCEMENT

2. ALL SIDEWALK SHALL HAVE A MIN. 8" GRANULAR BASE. 3. ALL EDGES MUST BE FINISHED WITH A 1/2" FILLET.

5. BROOM FINISH ALL SIDEWALK PERPENDICULAR TO WIDTH. REFER

PLACE EXPANSION MATERIAL AROUND STRUCTURE AND ADJUST

6. WHERE A PERMANENT STRUCTURE IS LOCATED IN SIDEWALK,

7. COLD JOINTS - PLACE EXPANSION JOINT AT ALL COLD JOINTS.

MIN. SPACING: 50'-0" O.C.

#4 BAR

C8.01

BLUE FACE AND WHITE LETTERS.

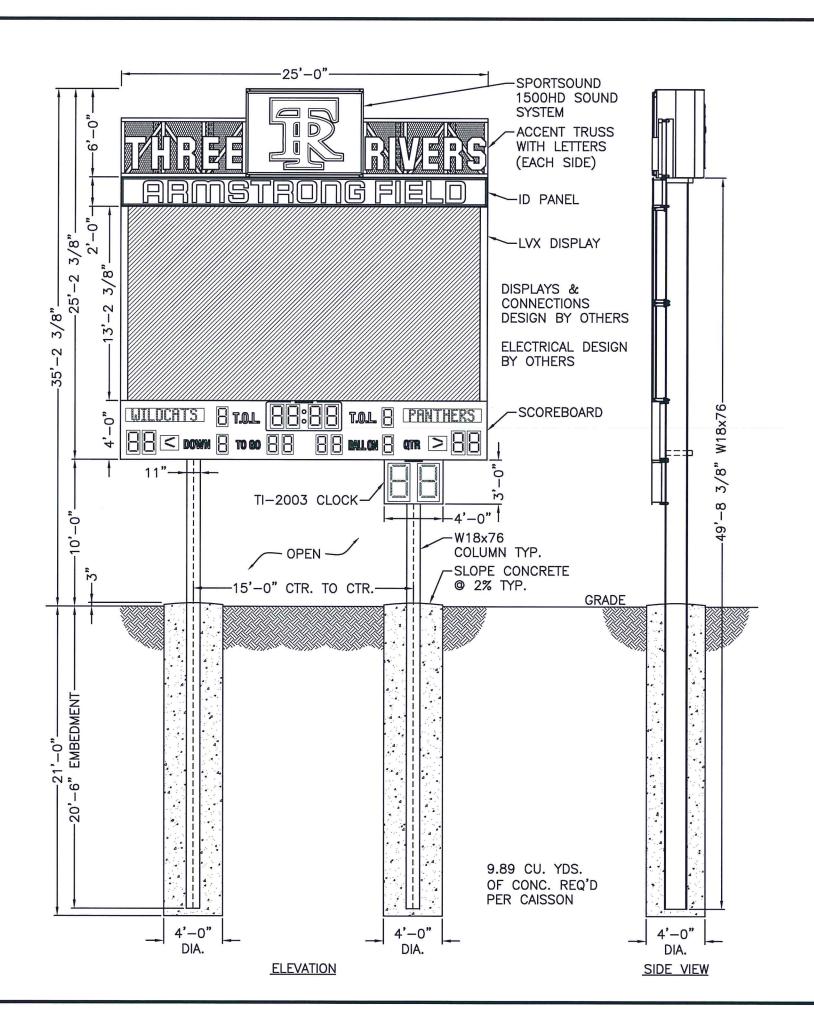
BUSH CONCRETE PRODUCTS

MIN. SPACING: WALK WIDTH

OR PER JOINING PLAN

SAWCUT OR TOOLED

1/4 OF SLAB THICK



NOTES:

1.0 REFERENCE

- REFER TO DAKTRONICS PROPOSAL DRAWING FOR DISPLAY COMPONENT SPECIFICATIONS.
 REFER TO DAKTRONICS RISER DIAGRAM FOR ALL ELECTRICAL POWER AND SIGNAL SPECIFICATIONS.
 REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.

2.0 PROJECT RESPONSIBILITY

- 2.1 THIS DESIGN IS INTENDED TO BE INSTALLED AT THE ADDRESS SHOWN AND SHOULD NOT BE USED AT ANY OTHER LOCATIONS.
 2.2 DAKTRONICS IS RESPONSIBLE FOR CERTIFYING ALL NEW STRUCTURE.
 2.3 FOOTING DESIGN COMPLETED BY DAKTRONICS' ENGINEER. SURVEYING COMPLETED BY CUSTOMER'S SUBCONTRACTOR. SOIL SAMPLE WAS COLLECTED AND ANALYZED BY <u>DRIESENGA & ASSOCIATES</u>. INC.; PROJECT NO. 2350354.3A; DATED: JUNE 20, 2023.
 2.4 DAKTRONICS' AND CUSTOMER'S SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO INSTALLATION.
- DIMENSIONS PRIOR TO INSTALLATION.

 2.5 ALL SUBCONTRACTORS SHALL PERFORM WORK IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND OR LOCAL REGULATIONS.

 2.6 ALL ACCESS STRUCTURE MUST MEET ALL APPLICABLE LOCAL, FEDERAL, AND STATE SAFETY
- REGULATIONS.

- 2.7 EACH SUBCONTRACTOR IS RESPONSIBLE FOR JOBSTTE SAFETY.
 2.8 ERECTION SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND PROVIDING TEMPORARY BRACING FOR STABILITY OF UNINSTALLED EQUIPMENT AND STRUCTURE.
 2.9 EACH SUBCONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF WASTE MATERIALS ON

3.0 DISPLAY NOTES

- 3.1 DAKTRONICS DISPLAYS ARE ALUMINUM AND STEEL CONSTRUCTION.
 3.2 ELECTRICAL COMPONENTS ARE ACCESSED FROM THE FRONT AND/OR REAR FOR THE VIDEO DISPLAY,
 FRONT FOR THE SCOREBOARD, FRONT FOR THE BACKLIT AD PANELS, AND REAR FOR THE SPEAKER
- 3.3 LIFT POINTS ARE PROVIDED BY DAKTRONICS IN EACH SECTION (ALL REMOVABLE LIFT POINTS SHALL
- BE REMOVED AFTER THE INSTALLATION OF EACH SECTION).
 WHEN LIFTING SECTIONS THE PREFERRED METHOD IS TO USE A SPREADER BEAM TO DISTRIBUTE
 WEIGHT AMONG ALL LIFT POINTS PROVIDED. FOR ALTERNATE METHOD OF RIGGING REFER TO
- INSTALLATION MANUAL

 DAKTRONICS LVX VIDEO DISPLAYS ARE SUPPLIED WITH T-CLIPS ATTACHED TO DISPLAY SECTIONS WITH

 1/2" GRADE 5 HARDWARE AT ALL PREDETERMINED LOCATIONS.
- DAKTRONICS SCOREBOARD DISPLAYS ARE SUPPLIED WITH ROCKER CLAMP MOUNTING HARDWARE THAT ATTACHES TO THE DISPLAY SECTIONS WITH 1/2" GRADE 5 HARDWARE AT ALL PREDETERMINED
- 3.8 DAKTRONICS ACCENT TRUSSES ARE SUPPLIED WITH CLIP ANGLES OR ROCKER CLAMPING HARDWARE THAT ATTACHES TO DISPLAY SECTIONS WITH 1/2" GRADE 5 HARDWARE AT PREDETERMINED LOCATIONS.

 3.9 DEPTH OF CABINET MAY VARY DEPENDING ON DISPLAY TECHNOLOGY.

4.0 STRUCTURAL NOTES

- 4.1 COMPLY WITH THE PROVISIONS OF THE FOLLOWING LATEST EDITIONS BUT NOT LIMITED TO THESE
- ONLY:

 -ALL FEDERAL, STATE AND LOCAL LAWS THAT GOVERN SAFETY REQUIREMENTS FOR STEEL ERECTION.

 -AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND "SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS"
- STRUCTURAL STEEL FOR SUILDINGS

 -AMERICAN WELDING SOCIETY (AWS) STANDARD CODE D1.1 "STRUCTURAL WELDING CODE"

 -AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM F3125 GR. A325 OR A490 BOLTS"

 APPROVED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS.

 -ACI-318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY"
- 4.2 STRUCTURAL STEEL GRADE:
- PLATE, ANGLE, AND CHANNEL SHALL BE ASTM A36 (Fy=36 ksi)
 -HOLLOW STRUCTURAL STEEL TUBE SHALL BE ASTM A500-C (Fy=50 ksi)
 -WIDE FLANGE AND WT SHALL BE ASTM A992-50 (Fy=50 ksi)

- WIDE FLANGE AND WT SHALL BE ASTM A992-50 (Fy=50 kel)

 BOLTS AND NUTS

 ALL BOLTS SHALL BE HEAVY HEX STRUCTURAL BOLTS ASTM F3125 GR. A325 TYPE 1 U.N.O.

 ANCHOR BOLTS SHALL MEET ASTM F1554 GRADE 55

 STRUCTURAL HEX NUTS SHALL BE MINIMUM ASTM A563-DH

 STRUCTURAL WASHERS SHALL BE MINIMUM ASTM F436

 GRADE 5 HARDWARE SHALL BE MCEPTABLE WHERE SPECIFIED ON DRAWINGS

 ALL HEAVY HEX STRUCTURAL BOLTS, ANCHOR RODS, NUTS & WASHERS SHALL BE GALVANIZED PER
 THE LATEST EDITION OF ONE OF THE FOLLOWING ASTM STANDARDS: ASTM A153 (CLASS C) OR

 ASTM R 895 (CLASS 50)
- ALL BOLTS IN CONTACT WITH ALUMINUM SHALL BE ZINC PLATED GALVANIZED AND SHALL BE MINIMUM
- ALL BOLTS SHALL BE FULLY PRETENSIONED PER APPROVED METHODS LISTED IN AISC STANDARDS

- U.N.O.

 4.4 CONCRETE AND GROUT

 CONCRETE SHALL BE PLACED TO ACI CODES AND STANDARDS OF PRACTICE. CONSTRUCTION JOINTS
 ARE NOT ALLOWED. INDMIDUAL FOUNDATIONS SHALL BE POURED IN A CONTINUOUS POUR.

 ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 4,000 psi.

 NON—SHRINK GROUT SHALL CONFORM TO ASTM C—1107. NON—SHRINK GROUT SHALL HAVE A
 MINIMUM STRENGTH AT 28 DAYS OF 8,000 PSI AND SHALL BE SLOPED AWAY FROM COLUMNS IN
- MINIMUM STRENGTH AT 28 DAYS OF 8,000 PSI AND SHALL BE SLOPED AWAY FROM COLUMNS IN ALL DIRECTIONS AT A MINIMUM 2.0% SLOPE.

 FOR ANCHOR BOLTED COLUMNS, EQUIPMENT CAN BE INSTALLED ON STRUCTURE AFTER A MINIMUM CURING TIME OF 14 DAYS, PROVIDED THE CURING PROCESS HAS BEEN PROPERLY MAINTAINED IN ACCORDANCE WITH ACI—318.

 FOR DIRECTLY EMBEDDED COLUMNS, EQUIPMENT CAN BE INSTALLED ON STRUCTURE AFTER A MINIMUM CURING TIME OF 7 DAYS, PROVIDED THE CURING PROCESS HAS BEEN PROPERLY MAINTAINED IN ACCORDANCE WITH ACI—318.

 4.5 STRUCTURAL STEEL WELDING
- STRUCTURED. STEEL WELDING

 ALL WELDING (SHOP & FIELD) SHALL BE PERFORMED BY A WELDER CERTIFIED FOR THE SPECIFIED

 TYPE AND POSITION OF THE REQUIRED WELD.

 ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1

 SHIELDED METAL ARC WELDING PROCESSES SHALL BE USED TO PERFORM WELDS

 LOW HYDROGEN E70 SERIES ELECTRODES TO BE USED WITH SMAW PROCESS

- 4.6 PAINT
 ALL STRUCTURE STEEL SHALL BE PREPARED TO MEET CUSTOMERS SPECIFICATIONS OR A MINIMUM OF SSPC-SP2
 ALL STEEL MUST BE COATED AND PROTECTED BY SPECIFIED PRIMER AND THEN FINISHED PER COLOR INDICATED BY THE CUSTOMER
 IMMEDIATELY AFTER SURFACE PREPARATION APPLY SPECIFIED PRIMER AT A RATE TO PROVIDE A UNIFORM DRY THICKNESS OF 2 MILES
 TOUCH UP PAINT AFTER INSTALLATION

 4.7 ALL HOLLOW STRUCTURAL STEEL SECTIONS SHALL BE CAPPED AND WELDED ALL AROUND TO PREVENT WATER FROM ENTERING THE SECTION
 SELF-DRILLING TEX SCREWS SHALL NOT BE USED FOR ATTACHMENT INTO HOLLOW STRUCTURAL STEEL SECTIONS UNLESS A THREAD SEALANT IS USED TO PREVENT WATER FROM ENTERING SECTION
 ANY OTHER PENETRATIONS INTO HOLLOW STRUCTURAL STEEL SECTIONS SHALL BE PROPERLY SEALED TO PREVENT WATER INTRUSION
- TO PREVENT WATER INTRUSION
 4.8 MICHIGAN BUILDING CODE 2015 (IBC 2015), ASCE 7-10, DESIGN CRITERIA:

- MICHIGAN BUILDING CODE 2013 (IBC 2013), ASCE 7-10, BESIGN GALLESS
 -EXPOSURE C, CATEGORY II
 -WIND SPEED = 115 MPH
 -SEISMIC DESIGN CATEGORY = B; Som = 0.10
 -ALLOWABLE LATERAL SOIL BEARING PRESSURE = 200 PSF PER FOOT OF DEPTH
 -ALLOWABLE VERTICAL SOIL BEARING PRESSURE = 1500 PSF
- DESIGN WIND PRESSURE = 24.43 PSF (ASD)

NSTALLATION ADDRESS

THREE RIVERS HIGH SCHOOL

700 6th AVENUE THREE RIVERS, MI 49093

CLIENT:



331 32nd AVENUE **BROOKINGS, SD 57006**

SEY.	DATE	DESCRIPTION
Δ	-/-/-	
A	-/-/-	
A	-/-/-	

All designs and plans indicated on this drowing are created specifically for the noted project and are the sole property of LIME Engineering, LL.C. Use of these designs or plans for any purpose other than the intradict op

SEAL & SIGNATURE:

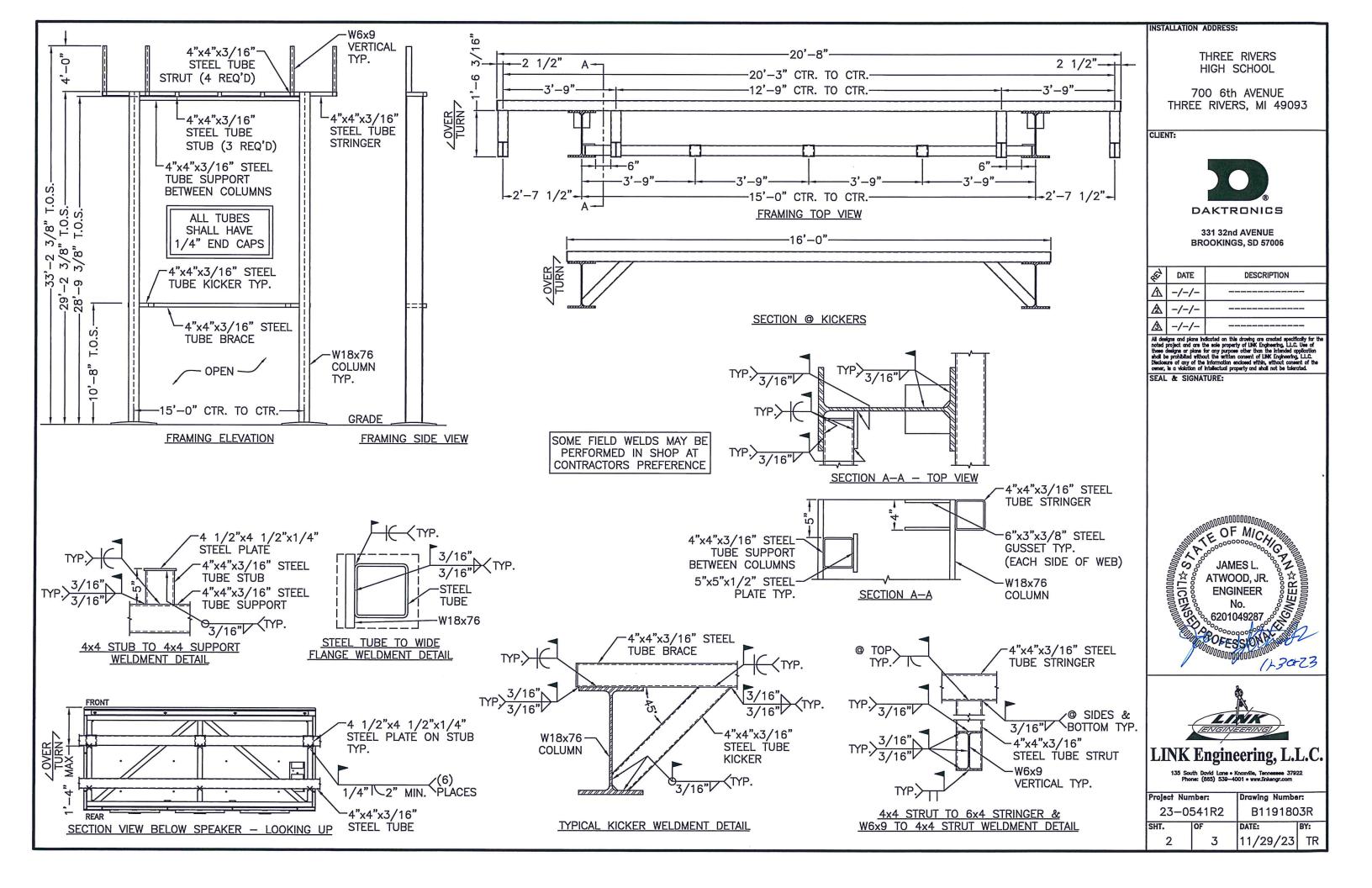


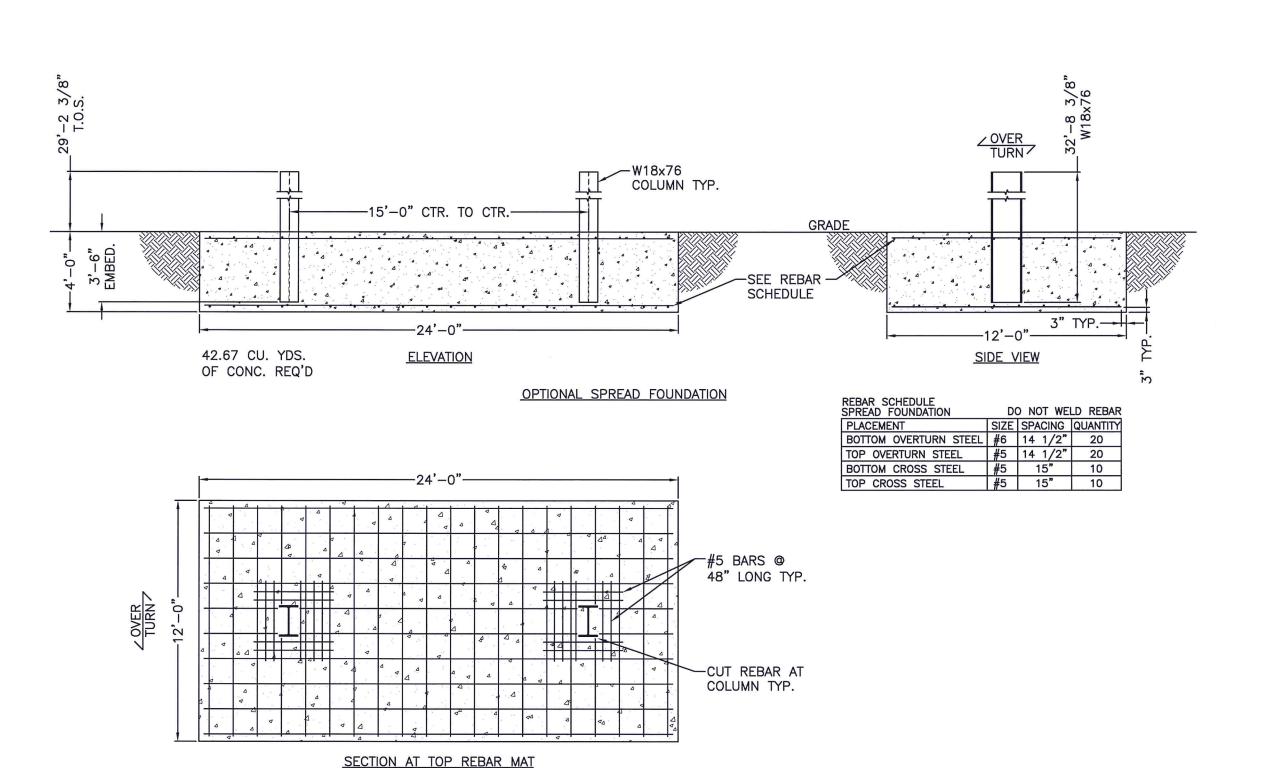


LINK Engineering, L.L.C.

135 South David Lane • Knoxville, Tennessee 37922. Phone: (865) 539-4001 • www.linkengr.com

Project I	Number:	Drawing Number	er:	
23-0541R2 sнт. оғ		B1191803R		
		DATE:	BY:	
1	3	11/29/23	TR	





INSTALLATION ADDRESS:

THREE RIVERS HIGH SCHOOL

700 6th AVENUE THREE RIVERS, MI 49093

CLIENT:



331 32nd AVENUE **BROOKINGS, SD 57006**

	SEY.	DATE	DESCRIPTION
	Δ	-/-/-	
	A	-/-/-	
Ī	ß	-/-/-	

All designs and plans indicated on this drawing are created specifically for the noted project and are the sole property of LIRK Engineering, LLC. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of LIRK Engineering, LLC. Disclosure of any of the information enclosed within, without consent of the owner, in a violation of intellectual property and shall not be tolerated.

SEAL & SIGNATURE:

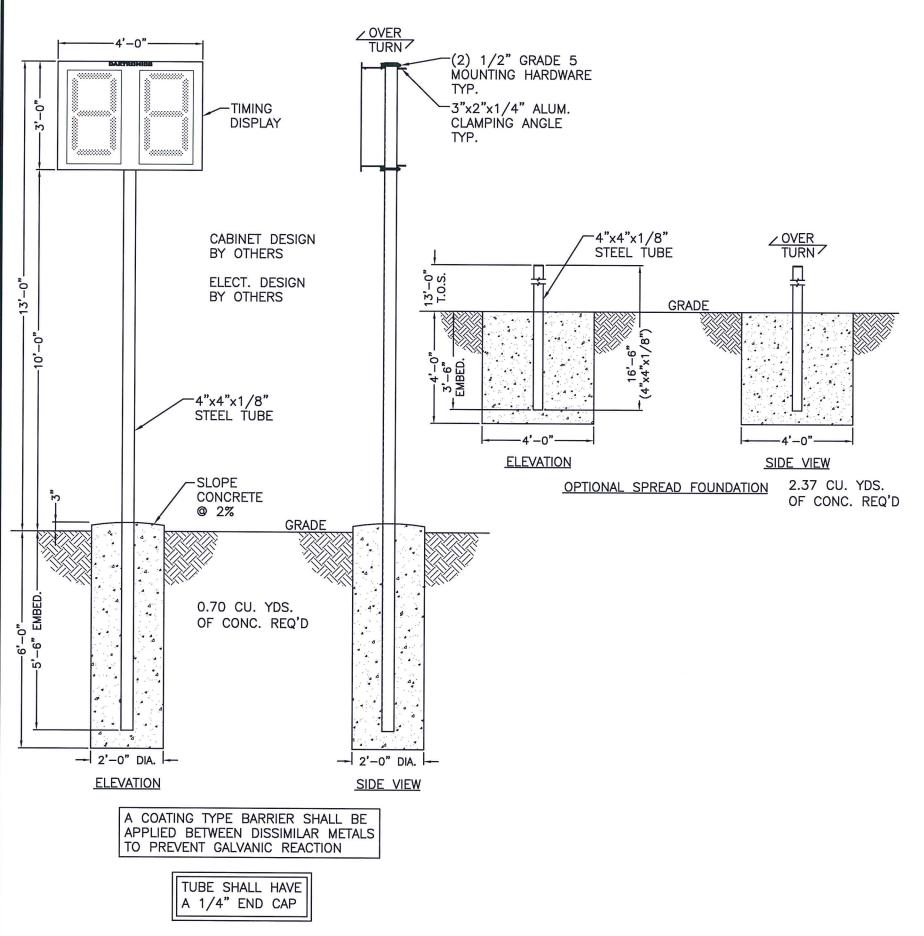




LINK Engineering, L.L.C.

135 South David Lane • Knoxville, Tennessee 37922 Phone: (885) 539-4001 • www.linkengr.com

Project Nu	mber:	Drawing Number:		
23-0541R2 sнт. оғ		B1191803R		
		DATE:	BY:	
3	3	11/29/23	TR	



NOTES:

1.0 REFERENCE

- 1.1 REFER TO DAKTRONICS PROPOSAL DRAWING FOR DISPLAY COMPONENT SPECIFICATIONS.
 1.2 REFER TO DAKTRONICS RISER DIAGRAM FOR ALL ELECTRICAL POWER AND SIGNAL SPECIFICATIONS.
 1.3 REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.
 1.4 ALL DIMENSIONS ARE IN FEET AND INCHES.

2.0 PROJECT RESPONSIBILITY

- THIS DESIGN IS INTENDED TO BE INSTALLED AT THE ADDRESS SHOWN AND SHOULD NOT BE USED AT ANY OTHER LOCATIONS.
 DAKTRONICS IS RESPONSIBLE FOR CERTIFYING ALL NEW STRUCTURE.
- 2.3 FOOTING DESIGN COMPLETED BY DAKTRONICS' ENGINEER. SURVEYING COMPLETED BY CUSTOMER'S SUBCONTRACTOR. SOIL SAMPLE WAS COLLECTED AND ANALYZED BY DRIESENGA & ASSOCIATES, INC.; PROJECT NO. 2350354.34; DATED: JUNE 20, 2023.

 2.4 DAKTRONICS' AND CUSTOMER'S SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS AND
- DIMENSIONS PRIOR TO INSTALLATION.
 2.5 ALL SUBCONTRACTORS SHALL PERFORM WORK IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND OR LOCAL REGULATIONS.
 2.6 ALL ACCESS STRUCTURE MUST MEET ALL APPLICABLE LOCAL, FEDERAL, AND STATE SAFETY

- REGULATIONS.

 2.7 EACH SUBCONTRACTOR IS RESPONSIBLE FOR JOBSITE SAFETY
 BRACING FOR STABILITY OF UNINSTALLED EQUIPMENT AND STRUCTURE.

 2.9 EACH SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND PROVIDING TEMPORARY
 BRACING FOR STABILITY OF UNINSTALLED EQUIPMENT AND STRUCTURE.

 2.9 EACH SUBCONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF WASTE MATERIALS ON
 THE JOBSITE.

3.0 DISPLAY NOTES

- 3.1 DAKTRONICS DISPLAYS ARE ALUMINUM AND STEEL CONSTRUCTION.
 3.2 ELECTRICAL COMPONENTS ARE ACCESSED FROM THE FRONT AND/OR REAR FOR THE VIDEO DISPLAY, FRONT FOR THE SCOREBOARD, FRONT FOR THE BACKLIT AD PANELS, AND REAR FOR THE SPEAKER
- 3.3 LIFT POINTS ARE PROVIDED BY DAKTRONICS IN EACH SECTION (ALL REMOVABLE LIFT POINTS SHALL
- BE REMOVED AFTER THE INSTALLATION OF EACH SECTION (ALL REMOVABLE LIFT POINTS SHALL
 BE REMOVED AFTER THE INSTALLATION OF EACH SECTION).

 3.4 WHEN LIFTING SECTIONS THE PREFERRED METHOD IS TO USE A SPREADER BEAM TO DISTRIBUTE
 WEIGHT AMONG ALL LIFT POINTS PROVIDED. FOR ALTERNATE METHOD OF RIGGING REFER TO
- WEIGHT AMONG ALL LIFT POINTS PROVIDED. FOR CELESIASTS METHOD STATEMENTS.

 3.5 DATTRONICS LYX VIDEO DISPLAYS ARE SUPPLIED WITH T—CLIPS ATTACHED TO DISPLAY SECTIONS WITH 1/2" GRADE 5 HARDWARE AT ALL PREDETERMINED LOCATIONS.

 3.7 DAKTRONICS SCOREBOARD DISPLAYS ARE SUPPLIED WITH ROCKER CLAMP MOUNTING HARDWARE THAT ATTACHES TO THE DISPLAY SECTIONS WITH 1/2" GRADE 5 HARDWARE AT ALL PREDETERMINED
- ATTACHES TO THE DISPLAY SECTIONS WITH 1/2 GRADE 5 PRODURING AT THE PRESENTATIONS.

 3.8 DAKTRONICS ACCENT TRUSSES ARE SUPPLIED WITH CLIP ANGLES OR ROCKER CLAMPING HARDWARE THAT ATTACHES TO DISPLAY SECTIONS WITH 1/2" GRADE 5 HARDWARE AT PREDETERMINED LOCATIONS.

 3.9 DEPTH OF CABINET MAY VARY DEPENDING ON DISPLAY TECHNOLOGY.

4.0 STRUCTURAL NOTES

- 4.1 COMPLY WITH THE PROVISIONS OF THE FOLLOWING LATEST EDITIONS BUT NOT LIMITED TO THESE
- ONLY:
 ALL FEDERAL, STATE AND LOCAL LAWS THAT GOVERN SAFETY REQUIREMENTS FOR STEEL ERECTION.
 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND "SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS"
- AMERICAN WELDING SOCIETY (AWS) STANDARD CODE D1.1 "STRUCTURAL WELDING CODE"

 AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM F3125 GR. A325 OR A490 BOLTS"

 APPROVED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS. ACI-318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY"
- 4.2 STRUCTURAL STEEL GRADE:
 PLATE, ANGLE, AND CHANNEL SHALL BE ASTM A36 (Fy=36 km)
 HOLLOW STRUCTURAL STEEL TUBE SHALL BE ASTM A500-C (Fy=50 km)
 WIDE FLANGE AND WT SHALL BE ASTM A992-50 (Fy=50 km)

- WIDE FLANGE AND WT SHALL BE ASIM ASPX2-30 (179-30 AM)
 4.3 BOLTS AND NUTS
 ALL BOLTS SHALL BE HEAVY HEX STRUCTURAL BOLTS ASTM F3125 GR. A325 TYPE 1 U.N.O.
 ANCHOR BOLTS SHALL MEET ASTM F1554 GRADE 55
 STRUCTURAL HEX NUTS SHALL BE MINIMUM ASTM A563-DH
 STRUCTURAL WASHERS SHALL BE MINIMUM ASTM F436
 GRADE 5 HARDWARE SHALL BE MINIMUM ASTM F436
 GRADE 5 HARDWARE SHALL BE ACCEPTABLE WHERE SPECIFED ON DRAWINGS
 ALL HEAVY HEX STRUCTURAL BOLTS, ANCHOR RODS, NUTS & WASHERS SHALL BE GALVANIZED PER
 THE LATEST EDITION OF ONE OF THE FOLLOWING ASTM STANDARDS: ASTM A153 (CLASS C) OR
 - ASTM B 695 (CLASS 50)
 ALL BOLTS IN CONTACT WITH ALUMINUM SHALL BE ZINC PLATED GALVANIZED AND SHALL BE MINIMUM
- ASTM B 695 (CLASS 50)

 ALL BOLTS IN CONTACT WITH ALUMINUM SHALL BE ZINC PLATED GALVANIZED AND SHALL BE MINIMUM ASTM A325

 ALL BOLTS IN CONTACT WITH ALUMINUM SHALL BE ZINC PLATED GALVANIZED AND SHALL BE MINIMUM CASTM A325

 ALL BOLTS SHALL BE FULLY PRETENSIONED PER APPROVED METHODS LISTED IN AISC STANDARDS U.N.O.

 4.4 CONCRETE AND GROUT

 CONCRETE SHALL BE PLACED TO ACI CODES AND STANDARDS OF PRACTICE. CONSTRUCTION JOINTS ARE NOT ALLOWED. INDIVIDUAL FOUNDATIONS SHALL BE POURED IN A CONTINUOUS POUR.

 ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 4,000 psi.

 NON-SHRINK GROUT SHALL CONFORM TO ASTM C-1107. NON-SHRINK GROUT SHALL HAVE A MINIMUM STRENGTH AT 28 DAYS OF 8,000 PSI AND SHALL BE SLOPED AWAY FROM COLUMNS IN ALL DIRECTIONS AT A MINIMUM 2.0% SLOPE.

 FOR ANCHOR BOLTED COLUMNS, EQUIPMENT CAN BE INSTALLED ON STRUCTURE AFTER A MINIMUM CURING TIME OF 14 DAYS, PROVIDED THE CURING PROCESS HAS BEEN PROPERLY MAINTAINED IN ACCORDANCE WITH ACI-318.

 FOR DIRECTLY EMBEDDED COLUMNS, EQUIPMENT CAN BE INSTALLED ON STRUCTURE AFTER A MINIMUM CURING TIME OF 7 DAYS, PROVIDED THE CURING PROCESS HAS BEEN PROPERLY MAINTAINED IN ACCORDANCE WITH ACI-318.

 4.5 STRUCTURAL STEEL WELDING

 ALL WELDING (SHOP & FIELD) SHALL BE PERFORMED BY A WELDER CERTIFIED FOR THE SPECIFIED TYPE AND POSITION OF THE REQUIRED WELD.

 ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1

 SHIELDED METAL ARC WELDING PROCESSES SHALL BE USED TO PERFORM WELDS

 LOW HYDROGEN E70 SERIES ELECTRODES TO BE USED WITH SMAW PROCESS

 4.6 PAINT

 ALL STRUCTURE STEEL SHALL BE PERFARRED TO MEET CUSTINGERS SPECIFICATIONS OR A MINIMUM IN ALL STRUCTURE STEEL SHALL BE PERFARRED TO MEET CUSTINGERS SPECIFICATIONS OR A MINIMUM IN ALL STRUCTURE STEEL SHALL BE PERFARRED TO MEET CUSTINGERS SPECIFICATIONS OR A MINIMUM IN ALL STRUCTURE STEEL SHALL BE PERFARRED TO MEET CUSTINGERS SPECIFICATIONS OR A MINIMUM IN ALL STRUCTURE STEEL SHALL BE PERFARRED TO MEET CUSTINGERS SPECIFICATIONS OR A MINIMUM IN ALL STRUCTURE STEEL SHALL BE PERFARRED TO MEET CUSTINGERS

- 4.6 PAINT
 OF SSPC-SP2

 OF SSPC-SP2

 AUD PROTECTED BY SPECIFICATIONS OR A MINIMUM OF SSPC-SP2

 OF
- OF SPC-SP2

 ALL STEEL MUST BE COATED AND PROTECTED BY SPECIFIED PRIMER AND THEN FINISHED PER
 COLOR INDICATED BY THE CUSTOMER

 IMMEDIATELY AFTER SURFACE PREPARATION APPLY SPECIFIED PRIMER AT A RATE TO PROVIDE A
 UNIFORM DRY THICKNESS OF 2 MILS

 TOUCH UP PAINT AFTER INSTALLATION

 4.7 ALL HOLLOW STRUCTURAL STEEL SECTIONS SHALL BE CAPPED AND WELDED ALL AROUND TO PREVENT
 WATER FROM ENTERING THE SECTION

 -SELF-DRILLING TEK SCREWS SHALL NOT BE USED FOR ATTACHMENT INTO HOLLOW STRUCTURAL
 STEEL SECTIONS UNLESS A THREAD SEALANT IS USED TO PREVENT WATER FROM ENTERING SECTION

 -ANY OTHER PENETRATIONS INTO HOLLOW STRUCTURAL STEEL SECTIONS SHALL BE PROPERLY SEALED
 TO PREVENT WATER INTRUSION

 4.8 MICHGAN BUILDING CODE 2015 (IBC 2015), ASCE 7-10, DESIGN CRITERIA:
 -EXPOSURE C, CATEGORY II
- - MICHIGAN BULLING CODE 2015 (BC 2015), ASCE 7-10, DESIGN CRITERIA:
 -EXPOSURE C, CATEGORY II
 -WIND SPEED = 115 MPH
 -SEISMIC DESIGN CATEGORY = B; Som= 0.10
 -ALLOWABLE LATERAL SOIL BEARING PRESSURE = 200 PSF PER FOOT OF DEPTH
 -ALLOWABLE VERTICAL SOIL BEARING PRESSURE = 1500 PSF
 -DESIGN WIND PRESSURE = 22.43 PSF (ASD)

INSTALLATION ADDRESS:

THREE RIVERS HIGH SCHOOL

700 6th AVENUE THREE RIVERS, MI 49093

CLIENT:



331 32nd AVENUE **BROOKINGS, SD 57006**

20	DATE	DESCRIPTION
Λ	-/-/-	
A	-/-/-	
A	-/-/-	

All designs and plans indicated on this drawing are created specifically for the noted project and are the sole property of LIMK Engineering, LLC. Use of these designs or plans for any purpose other than the Intended application shall be prohibited without the written consent of LIMK Engineering, LLC. Disciousrs of any of the Information enclosed within, without consent of the owner, is a violation of Intallectual property and shall not be tolerated.

SEAL & SIGNATURE:

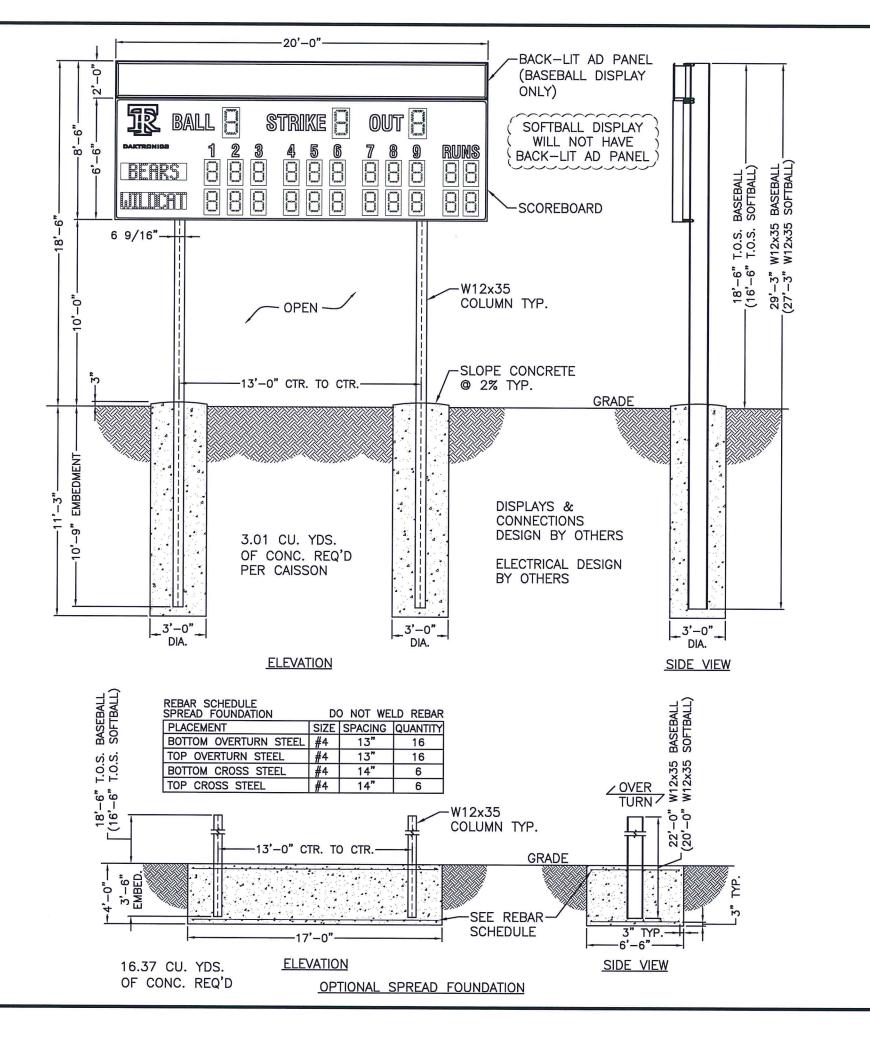




LINK Engineering, L.L.C.

135 South David Lane • Knoxville, Tennessee 37922 Phone: (865) 539-4001 • www.linkengr.com

Project Number:		Drawing Number:	
23-0541R2		B1191804R	
SHT.	OF	DATE:	BY:
1	1	11/29/23	TR



NOTES:

1.0 REFERENCE

REFER TO DAKTRONICS PROPOSAL DRAWING FOR DISPLAY COMPONENT SPECIFICATIONS.
REFER TO DAKTRONICS RISER DIAGRAM FOR ALL ELECTRICAL POWER AND SIGNAL SPECIFICATIONS.
REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.

1.4 ALL DIMENSIONS ARE IN FEET AND INCHES.

2.0 PROJECT RESPONSIBILITY

2.1 THIS DESIGN IS INTENDED TO BE INSTALLED AT THE ADDRESS SHOWN AND SHOULD NOT BE USED AT

ANY OTHER LOCATIONS.

2.2 DAKTRONICS IS RESPONSIBLE FOR CERTIFYING ALL NEW STRUCTURE.

2.3 FOOTING DESIGN COMPLETED BY DAKTRONICS' ENGINEER. SURVEYING COMPLETED BY CUSTOMER'S SUBCONTRACTOR. SOIL SAMPLE WAS COLLECTED AND ANALYZED BY <u>DRIFSENGA & ASSOCIATES</u>. INC.: PROJECT NO. 2350354.3A; DATED: JUNE 20, 2023.

2.4 DAKTRONICS' AND CUSTOMER'S SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS AND

DIMENSIONS PRIOR TO INSTALLATION.

2.5 ALL SUBCONTRACTORS SHALL PERFORM WORK IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND OR LOCAL REQUILATIONS.

2.6 ALL ACCESS STRUCTURE MUST MEET ALL APPLICABLE LOCAL, FEDERAL, AND STATE SAFETY

2.6 ALL ACCESS STRUCTURE MUST MEET ALL APPLICABLE LOCAL, FEDERAL, AND STATE SAFETY REGULATIONS.

2.7 EACH SUBCONTRACTOR IS RESPONSIBLE FOR JOBSITE SAFETY.

2.8 ERECTION SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND PROVIDING TEMPORARY BRACING FOR STABILITY OF UNINSTALLED EQUIPMENT AND STRUCTURE.

2.9 EACH SUBCONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF WASTE MATERIALS ON THE LODGETTE.

3.0 DISPLAY NOTES

- 3.1 DAKTRONICS DISPLAYS ARE ALUMINUM AND STEEL CONSTRUCTION.
 3.2 ELECTRICAL COMPONENTS ARE ACCESSED FROM THE FRONT AND/OR REAR FOR THE VIDEO DISPLAY,
 FRONT FOR THE SCOREBOARD, FRONT FOR THE BACKLIT AD PANELS, AND REAR FOR THE SPEAKER
- CASINEI.

 3.3 LIFT POINTS ARE PROVIDED BY DAKTRONICS IN EACH SECTION (ALL REMOVABLE LIFT POINTS SHALL BE REMOVED AFTER THE INSTALLATION OF EACH SECTION).

 3.4 WHEN LIFTING SECTIONS THE PREFERRED METHOD IS TO USE A SPREADER BEAM TO DISTRIBUTE WEIGHT AMONG ALL LIFT POINTS PROVIDED. FOR ALTERNATE METHOD OF RIGGING REFER TO INSTALLATION MANUAL.

 3.5 DAKTRONICS LVX VIDEO DISPLAYS ARE SUPPLIED WITH T—CLIPS ATTACHED TO DISPLAY SECTIONS WITH
- 1/2" GRADE 5 HARDWARE AT ALL PREDETERMINED LOCATIONS.

 DAKTRONICS SCOREBOARD DISPLAYS ARE SUPPLIED WITH ROCKER CLAMP MOUNTING HARDWARE THAT ATTACHES TO THE DISPLAY SECTIONS WITH 1/2" GRADE 5 HARDWARE AT ALL PREDETERMINED
- 3.8 DAKTRONICS ACCENT TRUSSES ARE SUPPLIED WITH CLIP ANGLES OR ROCKER CLAMPING HARDWARE THAT ATTACHES TO DISPLAY SECTIONS WITH 1/2" GRADE 5 HARDWARE AT PREDETERMINED LOCATIONS.

 3.9 DEPTH OF CABINET MAY VARY DEPENDING ON DISPLAY TECHNOLOGY.

4.0 STRUCTURAL NOTES

4.1 COMPLY WITH THE PROVISIONS OF THE FOLLOWING LATEST EDITIONS BUT NOT LIMITED TO THESE

ONLY:
- ALL FEDERAL, STATE AND LOCAL LAWS THAT GOVERN SAFETY REQUIREMENTS FOR STEEL ERECTION.
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND "SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS"

AMERICAN WELDING SOCIETY (AWS) STANDARD CODE D1.1 "STRUCTURAL WELDING CODE"

AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM F3125 GR. A325 OR A490 BOLTS"

APPROVED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS. ACI-318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY

4.2 STRUCTURAL STEEL GRADE:

- PIATE, ANGLE, AND CHANNEL SHALL BE ASTM A36 (Fy=36 ksi)
- HOLLOW STRUCTURAL STEEL TUBE SHALL BE ASTM A500-C (Fy=50 ksi)
- WIDE FLANGE AND WT SHALL BE ASTM A992-50 (Fy=50 ksi)

4.3 BOLTS AND NUTS

BOLTS AND NUTS

-ALL BOLTS SHALL BE HEAVY HEX STRUCTURAL BOLTS ASTM F3125 GR. A325 TYPE 1 U.N.O.
-ANCHOR BOLTS SHALL MEET ASTM F1554 GRADE 55

-STRUCTURAL HEX NUTS SHALL BE MINIMUM ASTM A563-DH

-STRUCTURAL WASHERS SHALL BE MINIMUM ASTM F436

-GRADE 5 HARDWARE SHALL BE ACCEPTABLE WHERE SPECIFIED ON DRAWINGS
-ALL HEAVY HEX STRUCTURAL BOLTS, ANCHOR RODS, NUTS & WASHERS SHALL BE GALVANIZED PER
THE LATEST EDITION OF ONE OF THE FOLLOWING ASTM STANDARDS: ASTM A153 (CLASS C) OR

ASTM D ROS (CLASS ED)

ASTM B 695 (CLASS 50)
- ALL BOLTS IN CONTACT WITH ALUMINUM SHALL BE ZINC PLATED GALVANIZED AND SHALL BE MINIMUM ASTM A325

-ALL BOLTS SHALL BE FULLY PRETENSIONED PER APPROVED METHODS LISTED IN AISC STANDARDS U.N.O.

4.4 CONCRETE AND GROUT

4.4 CONCRETE AND GROUT

CONCRETE AND GROUT

CONCRETE SHALL BE PLACED TO ACI CODES AND STANDARDS OF PRACTICE. CONSTRUCTION JOINTS ARE NOT ALLOWED. INDMIDUAL FOUNDATIONS SHALL BE POURED IN A CONTINUOUS POUR.

ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 4,000 psi.

NON-SHRINK GROUT SHALL CONFORM TO ASTM C-1107. NON-SHRINK GROUT SHALL HAVE A MINIMUM STRENGTH AT 28 DAYS OF 8,000 PSI AND SHALL BE SLOPED AWAY FROM COLUMNS IN ALL DIRECTIONS AT A MINIMUM 2.0% SLOPE.

FOR ANCHOR BOLTED COLUMNS, EQUIPMENT CAN BE INSTALLED ON STRUCTURE AFTER A MINIMUM CURING TIME OF 14 DAYS, PROVIDED THE CURING PROCESS HAS BEEN PROPERLY MAINTAINED IN ACCORDANCE WITH ACI-318.

FOR DIRECTLY EMBEDDED COLUMNS, EQUIPMENT CAN BE INSTALLED ON STRUCTURE AFTER A MINIMUM CURING TIME OF 7 DAYS, PROVIDED THE CURING PROCESS HAS BEEN PROPERLY MAINTAINED IN ACCORDANCE WITH ACI-318.

4.5 STRUCTURAL STEEL WELDING

ALL WELDING (SHOP & FIELD) SHALL BE PERFORMED BY A WELDER CERTIFIED FOR THE SPECIFIED TYPE AND POSITION OF THE REQUIRED WELD.

ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1

SHIELDED METAL ARC WELDING PROCESSES SHALL BE USED TO PERFORM WELDS

LOW HYDROSEN E70 SERIES ELECTRODES TO BE USED WITH SMAW PROCESS

4.6 PAINT

-ALL STRUCTURE STEEL SHALL BE PREPARED TO MEET CUSTOMERS SPECIFICATIONS OR A MINIMUM
OF SSPC—SP2
-ALL STEEL MUST BE COATED AND PROTECTED BY SPECIFIED PRIMER AND THEN FINISHED PER

- ALL STEEL MUST BE COATED AND PROTECTED BY SPECIFIED PRIMER AND THEN FINISHED PER COLOR INDICATED BY THE CUSTOMER
- IMMEDIATELY AFTER SURFACE PREPARATION APPLY SPECIFIED PRIMER AT A RATE TO PROVIDE A UNIFORM DRY THICKNESS OF 2 MILES
- TOUCH UP PAINT AFTER INSTALLATION

4.7 ALL HOLLOW STRUCTURAL STEEL SECTIONS SHALL BE CAPPED AND WELDED ALL AROUND TO PREVENT WATER FROM ENTERING THE SECTION
- SELF-DRILLING TEK SCREWS SHALL NOT BE USED FOR ATTACHMENT INTO HOLLOW STRUCTURAL STEEL SECTIONS UNLESS A THREAD SEALANT IS USED TO PREVENT WATER FROM ENTERING SECTION
- ANY OTHER PENETRATIONS INTO HOLLOW STRUCTURAL STEEL SECTIONS SHALL BE PROPERLY SEALED TO PREVENT WATER INTRUSION

4.8 MICHIGAN BUILDING CODE 2015 (IBC 2015), ASCE 7-10, DESIGN CRITERIA:
- EXPOSURE C, CATEGORY II

MICHIGAN BUILDING CODE 2015 (IBC 2015), ASCE 7-10, DESIGN CRITERIA:
-EXPOSURE C, CATEGORY II
-WIND SPEED = 115 MPH
-SEISMIC DESIGN CATEGORY = B; Som= 0.10
-ALLOWABLE LATERAL SOIL BEARING PRESSURE = 200 PSF PER FOOT OF DEPTH
-ALLOWABLE VERTICAL SOIL BEARING PRESSURE = 1500 PSF
-DESIGN WIND PRESSURE = 24.07 PSF (ASD)

NSTALLATION ADDRESS:

THREE RIVERS HIGH SCHOOL

700 6th AVENUE THREE RIVERS, MI 49093

CLIENT:



331 32nd AVENUE **BROOKINGS, SD 57006**

SE,	DATE	DESCRIPTION
Δ	-/-/-	
A	-/-/-	
A	-/-/-	

All designs and plans indicated on this drawing are created specifically for the noted project and are the sole property of LIMK Engineering, L.L.C. Use of these designs or plans for ony purpose other than the Intended application shall be prohibited without the written consent of LIMK Engineering, L.L.C. Disclosurs of any of the Information enclosed within, without consent of the owner, is a violation of intellectual property and shall not be tolerated.

SEAL & SIGNATURE:





LINK Engineering, L.L.C

Project I	lumber:	Drawing Number	er:		
23-0541R2		B119180	B1191806R		
SHT.	OF	DATE:	BY:		
1	1	11/29/23	TR		