OCTOBER 26, 2023
Architectural Project #2214
REA PARK CLUBHOUSE
RENOVATION & ADDITIONS

ADDENDUM NO. 2

PROJECT: Rea Park Clubhouse Renovation and Additions
The City of Terre Haute – Board of Public Works

THIS LETTER CONSTITUTES ADDENDUM NO.2

The information contained in this Addendum shall become a part of the basic plans and specifications, the same as is originally incorporated therein. The original plans and specifications shall remain in their entirety, except as modified by the Addendum. The items herein shall supersede information in each of the specifications and plans.

The proposed contract documents for this work are modified as follows:

Item #1 Revised structural schedules and additional structural details have been added to Sheet S2.0. Structural notes have been moved to Sheet F2.0. (See revised **Sheets F2.0 And S2.0**)

Item #2 Section 11400 – Food Service Equipment has been added to the Specifications. (See attached **Section 11400**)

Item #3 Lead Paint and Asbestos Testing has been performed for the building. (See attached **testing reports**.)

Item #4 There is not a Geotech report or soil borings for the project. Typically, the soil type in the area is “Ade”. Excess soils/topsoil can be stored on-site on the west side of the parking area during the duration of the construction.

Item #5 Existing 3-phase electrical service for golf course irrigation is to be relocated underground. (*Currently overhead and located on the south side of the Clubhouse - Irrigation electrical service is to remain separate from the Clubhouse electrical service.*)

Item #6 Asphalt pavement detail on Sheet SP-2 has been revised. (See revised Sheet **SP-2**)

Item #7 New site plan has been revised on Sheet SP-2 to indicate stopping the french drain short of the existing tree. (See revised **Sheet SP-2**)

Item #8 No erosion control measures are required for the project.

Item #9 The French drain piping shall be 8” diameter HDPE, singlewall perforated pipe. The underground downspout drainage piping shall be 6” diameter solid PVC/SDR pipe. Connections shall be Schedule 40 PVC or Fernco adapters. (See detail on **Sheet SP-2**)

Item #10 Contractor to provide 4X8 project job sign. (See detail on **Sheet SP-1**)

Item #11 2 downspouts have been relocated to the north and south sides of the building. A detail regarding the downspout boot/sleeve through the Terrace structure has been added to Sheet A-5 (See revised **Sheet A-5**)

Item #12 Downspout drainage has been added to the Basement Plumbing Plan. (See revised **Sheets P0.1 and P1.1**)

Item #13 Contractor is responsible for all temporary shoring, bracing and other temporary construction necessary to ensure that the structural integrity of the existing structure is maintained during construction activities. Note has been added to Demolition Sheets. (See revised **Sheets D-0 thru D-4**)

REA PARK CLUBHOUSE RENOVATIONS

1115 E DAVIS DRIVE, TERRE HAUTE, IN 47802

CITY OF TERRE HAUTE
MAYOR - DUKE BENNETT

PARKS & RECREATION DEPARTMENT
SUPERINTENDENT - EDDIE BIRD
BOARD PRESIDENT - GORDON BRYAN

FRIENDS OF REA PARK
PRESIDENT - DR. MIKE HARDING
VICE PRESIDENT - EARL ELLIOTT

ARCHITECT:
SANDERS & ASSOCIATES, INC.
DANIEL SANDERS, AIA

M/E/P ENGINEER:
BOYT ENGINEERING
BENJAMIN BOYT, PE, MSME, MBA, CHC, LEED AP BD+C

STRUCTURAL ENGINEER:
BRYANT ENGINEERING & CONSULTING, INC.
GRANT BRYANT, PE, MCE

ARCHITECTURAL:

STRUCTURAL:

F1.0	FOUNDATION PLAN	S1.0	STRUCTURAL FRAMING PLAN
F2.0	FDN SCHEDULES & DETAILS	S2.0	STRUCT SCHEDULES & DETAILS

MECHANICAL:

M0.1	MECHANICAL SCHEDULES	M1.1	BASEMENT MECHANICAL PLAN
		M1.2	1ST FLOOR MECHANICAL PLAN

ELECTRICAL:

E0.1	ELECTRICAL LEGEND	E5.1	ELECTRICAL PANEL SCHEDULES
E1.1	BASEMENT ELECTRICAL PLAN	E5.2	LIGHTING SCHEDULE
E1.2	1ST FLOOR ELECTRICAL PLAN		
E1.3	BASEMENT LIGHTING PLAN	FA1.1	FIRE ALARM BASEMENT
E1.4	1ST FLOOR LIGHTING PLAN	FA1.2	FIRE ALARM 1ST FLOOR

PLUMBING:

P0.1	PLUMBING SCHEDULE & DETAILS	P2.0	SANITARY & GAS ISOMETRICS
P1.1	BASEMENT PLUMBING PLAN	P2.1	WATER ISOMETRIC
P1.2	1ST FLOOR PLUMBING PLAN		

SYMBOLS

CONCRETE
CONCRETE BLOCK
BRICK
WOOD CROSS SECTION
WOOD
STEEL
RIGID INSULATION
BATT INSULATION
GRAVEL FILL
EARTH
DOORS (01)
WINDOWS (A2)
WALL TYPES (B)
REINFORCING BLOCKING IN WALLS 2 X 6'S OR LARGER
ELEVATION NO. / SHEET NO. — ELEVATION
DETAIL NO. / SHEET NO. — DETAIL
SECTION NUMBER / SHEET WHERE SECTION CAN BE FOUND
ELEVATION NO. / SHEET NO.
ELEVATION LINE
REVISIONS (1)

ARCHITECTURAL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS OF THE INDIANA STATE BUILDING COMMISSION AND ALL OTHER APPLICABLE STATE AND LOCAL RULES AND REGULATIONS. THE CONTRACTOR AND SUB CONTRACTORS SHALL PERFORM THEIR WORK IN SUCH A MANNER AS TO BE IN COMPLIANCE WITH ALL APPLICABLE RULES AND SHALL BRING ANY DISCREPANCIES OR CONFLICTS TO ANY RULES, PLANS, OR SPECIFICATIONS TO THE ATTENTION OF THE ARCHITECT.

2. DIMENSIONS ARE FROM FACE OF MASONRY OR STUDS TO THE FACE OF MASONRY OR STUDS. USE THE STRUCTURAL DIMENSIONS WHERE POSSIBLE. DO NOT SCALE THE DRAWINGS.

3. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL STATE AND LOCAL CODES AND THE PROTECTION OF PUBLIC STRUCTURES AND RIGHT OF WAYS. THE CONTRACTOR SHALL ALSO OBTAIN ALL LOCAL CONSTRUCTION & CONNECTION PERMITS THAT MAY BE REQUIRED FOR THE WORK.

4. THE CONTRACTOR IS TO VERIFY AND CHECK ALL DIMENSIONS, THE DRAWINGS AND SPECIFICATIONS BEFORE BEGINNING ANY WORK. ANY DISCREPANCIES OR ERRORS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

5. ALL DRAWINGS, SPECIFICATIONS AND INFORMATION PREPARED BY SANDERS & ASSOCIATES, INC. (S&A, INC.) FOR THIS PROJECT ARE INSTRUMENTS OF SERVICE TO BE USED ONLY ON THIS PROJECT UNLESS OTHERWISE AUTHORIZED BY S&A INC. ALL COMMON LAW, STATUTORY, COPYRIGHTS, AND OTHER RESERVED RIGHTS ARE TO BE RETAINED BY S&A, INC. FOR PROJECT DESIGN AND AS AUTHOR OF THESE DOCUMENTS. THE PROJECT OWNER MAY RETAIN COPIES OF S&A, INC. DRAWINGS FOR INFORMATION AND REFERENCE IN CONNECTION WITH THE OWNER'S USE AND OCCUPANCY OF THE PROJECT.

6. THE DOCUMENTS SHALL NOT BE USED BY THE OWNER OR OTHERS FOR OTHER PROJECTS, FOR COMPLETION OF THIS PROJECT, OR FOR ADDITIONS TO THIS PROJECT UNLESS APPROVED BY S&A, INC. CONTRACTORS, SUBCONTRACTORS, AND MATERIAL AND EQUIPMENT SUPPLIERS ARE GRANTED A LIMITED LICENSE TO USE AND REPRODUCE APPLICABLE PORTIONS OF THE DOCUMENTS PREPARED BY S&A, INC. FOR USE IN EXECUTION OF THEIR WORK IN CONNECTION WITH THIS PROJECT.

7. THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION AS AN " ARCHITECTURAL WORK " UNDER SEC. 102 OF THE COPYRIGHT ACT, 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT OF 1990. THE PROTECTION INCLUDES BUT NOT LIMITED TO THE OVERALL FORM AS WELL AS THE ARRANGEMENT AND COMPOSITION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SUCH PROTECTION, UNAUTHORIZED USE OF THESE PLANS, WORK OR HOME REPRESENTED, CAN LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OR BUILDINGS BEING SEIZED AND/ OR MONETARY COMPENSATION TO SANDERS AND ASSOCIATES.

BUILDING CODE SUMMARY

2012 INTERNATIONAL BUILDING CODE, AS AMENDED BY THE STATE OF INDIANA (APPLICABLE RULES ONLY)

BUILDING TYPE: V-A (COMBUSTIBLE, PROTECTED)

OCCUPANCY TYPE: A-2 (ASSEMBLY, BAR/RESTAURANT)

SIZE: 5,350 SQFT EXISTING - RENOVATED
3,928 SQFT NEW - ADDITIONS
9,278 SQFT TOTAL

TABLE 503 ALLOWABLE AREA: 11,500 SQFT + AREA MODIFICATIONS

FIRE & SMOKE ALARM SYSTEM TO MEET CURRENT STANDARDS PER NFPA

BUILDING WILL BE FULLY SPRINKLERED PER SECTION 903.2.1.2 GROUP A-2: AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED FOR GROUP A-2 OCCUPANCIES WHERE ONE OF THE FOLLOWING CONDITIONS EXISTS:
1. THE FIRE AREA EXCEEDS 5,000 SQFT
2. THE FIRE AREA HAS AN OCCUPANT LOAD OF 100 OR MORE.
3. THE FIRE AREA IS LOCATED ON A FLOOR OTHER THAN THE LEVEL OF EXIT DISCHARGE SERVING SUCH OCCUPANCIES.

REVISIONS

NO.	DATE
1	10.17.2023
2	10.26.2023

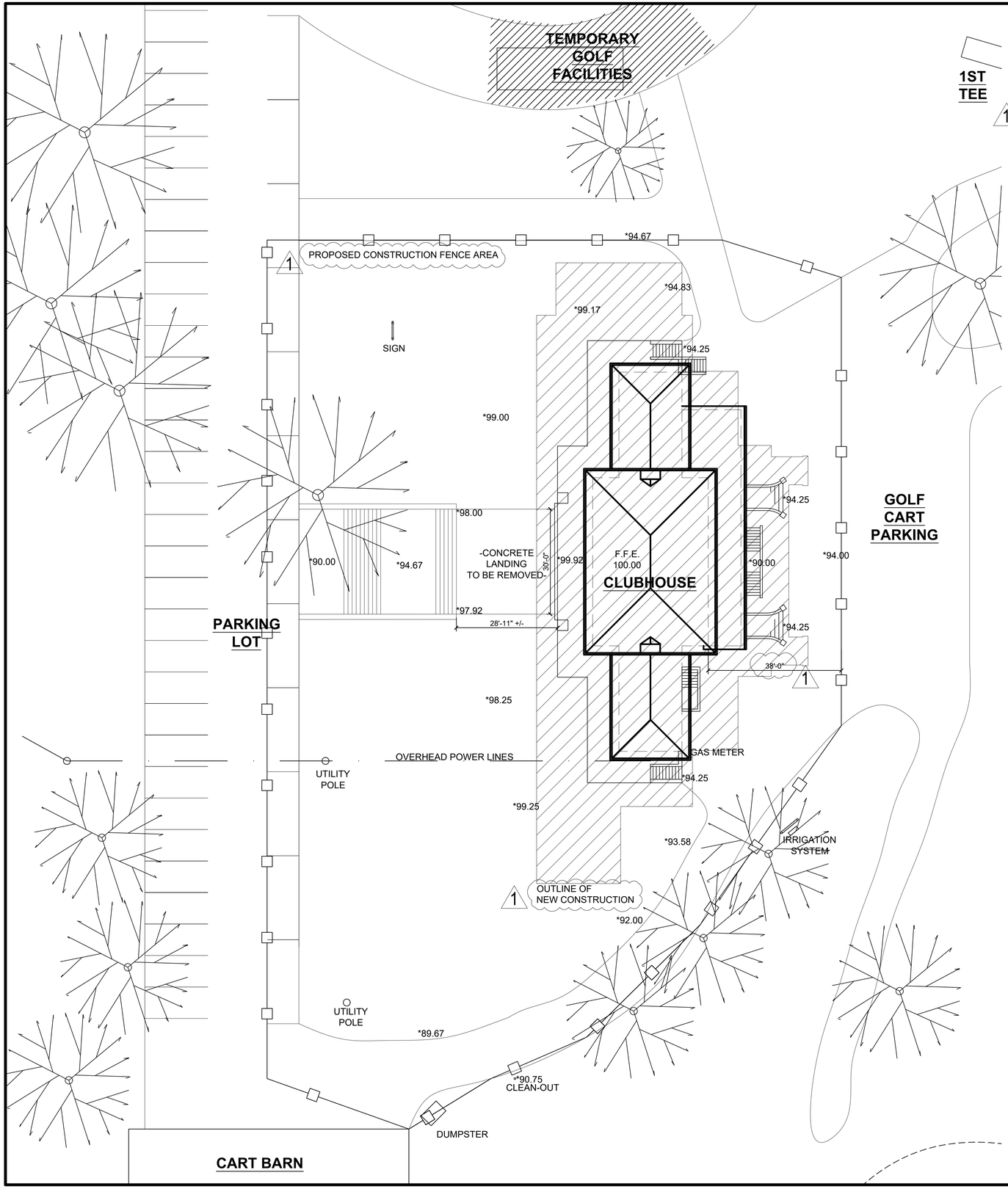
DANIEL E. SANDERS REGISTERED STATE OF INDIANA 8913 ARCHITECT

CERTIFIED BY: D. SANDERS
DRAWN BY: AJ/DC
CHECKED BY: D. SANDERS

Sanders and Associates, Inc.
500 SOUTH 7TH STREET
TERRE HAUTE, INDIANA 47807
PHONE (812) 232-5256

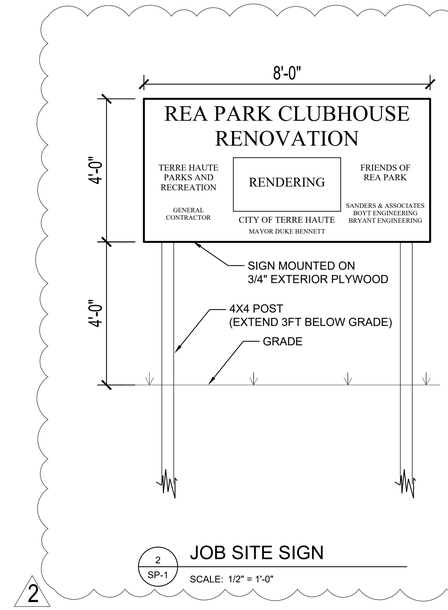
PROJECT: REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER: 2214
DATE: 09/22/23
SHEET TITLE: TITLE SHEET & INDEX
SHEET: T-1



CONSTRUCTION NOTES:

1. GOLF OPERATIONS TO BE LOCATED IN TEMPORARY FACILITIES ON NORTH CIRCLE DRIVE. GOLF COURSE TO REMAIN OPERATIONAL DURING CONSTRUCTION. TEMPORARY FACILITIES TO BE PROVIDED BY OWNER.
2. CONTRACTOR TO PROVIDE TEMPORARY BARRICADES/FENCING AROUND ENTIRE BUILDING DURING CONSTRUCTION.
3. ACCESS AROUND BUILDING TO BE COORDINATED WITH REA PARK GOLF PRO.
4. CONTRACTOR TO PROTECT EXISTING PAVEMENT FROM EXCESSIVE DAMAGE FROM CONSTRUCTION-RELATED ACTIVITIES. REPLACEMENT PAVEMENT AREA NOTED ON SP-2.
5. CONTRACTOR TO REMOVE STUMPS/ROOT BALL OF PREVIOUSLY REMOVED TREES IN EXCAVATION AREA.
6. RELOCATION OF OVERHEAD ELECTRICAL SERVICE TO UNDERGROUND SERVICE BE COORDINATED WITH DUKE ENERGY (BUILDING AND IRRIGATION SYSTEM).
7. RELOCATION OF GAS SERVICE TO BE COORDINATED WITH CENTERPOINT ENERGY.
8. NEW SANITARY LINE FROM BUILDING TO CONNECT TO EXISTING CLEAN OUT ON SOUTH SIDE OF BUILDING/DRIVE.
9. EXTERIOR DOWNSPOUTS/SITE DRAINAGE TO BE PIPED UNDERGROUND AND CONNECTED TO FRENCH DRAINS/DRYWELLS AS INDICATED.
10. EXISTING EXTERIOR STEPS FROM PARKING TO BUILDING TO REMAIN. UPPER LANDING TO BE REMOVED AND REPLACED.
11. GOLF COURSE IRRIGATION SYSTEM TO HAVE NEW UNDERGROUND ELECTRIC SERVICE - NO FURTHER WORK INCLUDED IN THE PROJECT SCOPE.
12. CART BARN TO BE MODIFIED INTO OPEN-SIDED PAVILION - BY TERRE HAUTE PARKS & RECREATION DEPARTMENT.



2 SP-1 JOB SITE SIGN

SCALE: 1/2" = 1'-0"

1 SP-1 EXISTING SITE PLAN

SCALE: 1" = 15'-0"

N

*NOTE: THIS DRAWING IS NOT INTENDED AS A LEGAL SURVEY

NOTE:

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES NEED TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

CALL 2 WORKING DAYS BEFORE YOU DIG: 1-800-382-5544 (TOLL FREE) PER INDIANA STATE LAW IC8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

Indiana 811 Know what's below. 811 before you dig.

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1	10.17.2023
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DANIEL E. SANDERS REGISTERED ARCHITECT

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DRAWN BY AJ/DC

CHECKED BY D. SANDERS

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PHONE (812) 232-5256

PROJECT

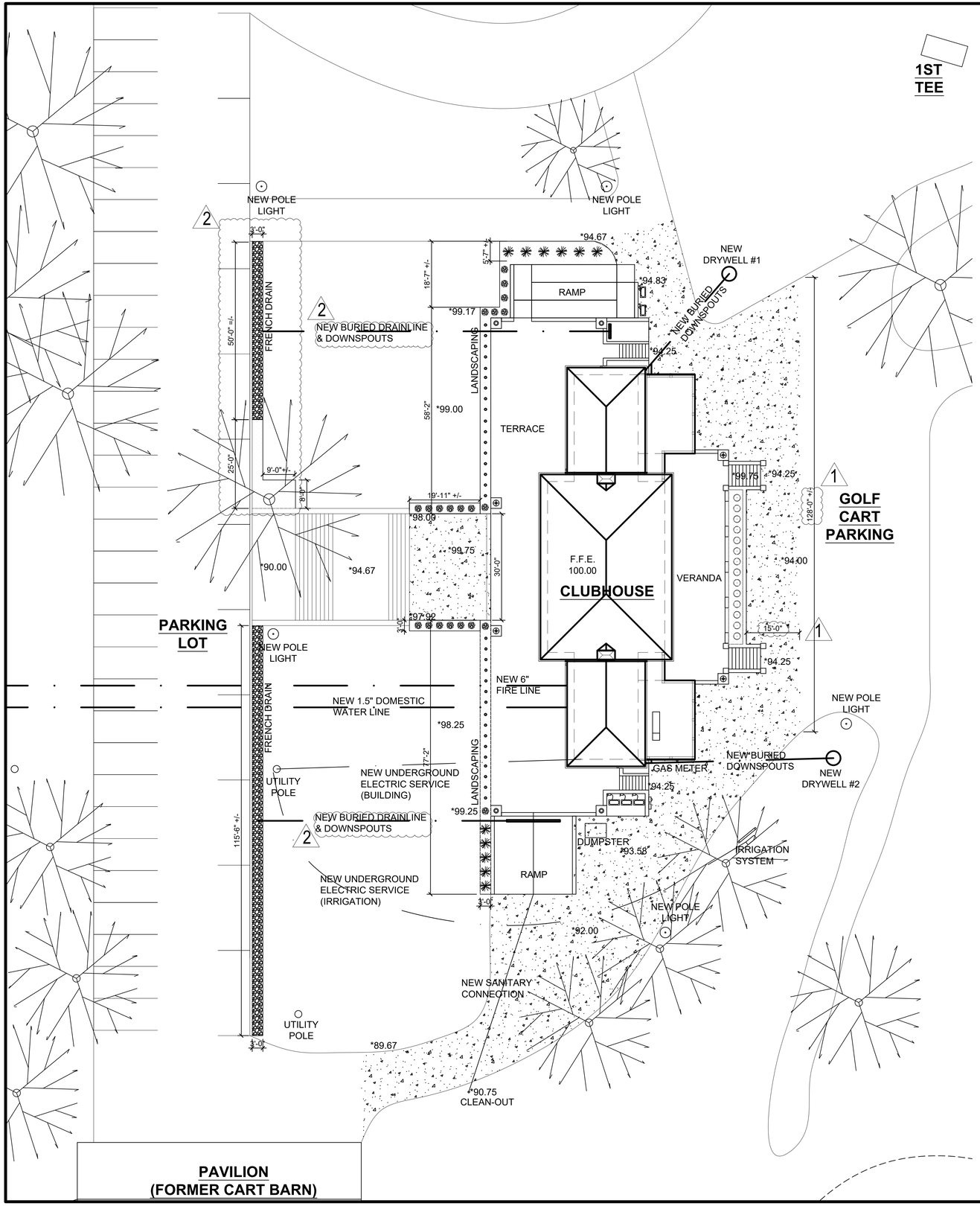
REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER 2214

DATE 09/22/23

SHEET TITLE EXISTING SITE PLAN

SHEET SP-1

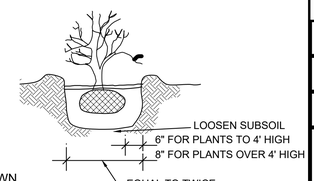


LANDSCAPE PLANT SCHEDULE

MARK	DESCRIPTION	SIZE (MINIMUM)	NUMBER REQ'D	NOTES
A	DWARF ENGLISH BOXWOOD (buxus sempervirens)	18" HT, #3 CONTAINER	15	EAST TERRACE PLANTER
B	ENGLISH LAVENDER (lavandula angustifola)	6" HT, #1 CONTAINER	33	WEST TERRACE
C	SMOOTH HYDRANGA (hydrangea arborescens)	24" HT, #3 CONTAINER	21	WEST TERRACE
D	KNOCKOUT ROSE (rosa radrazz)	24" HT, #3 CONTAINER	11	NORTH & SOUTH RAMPS

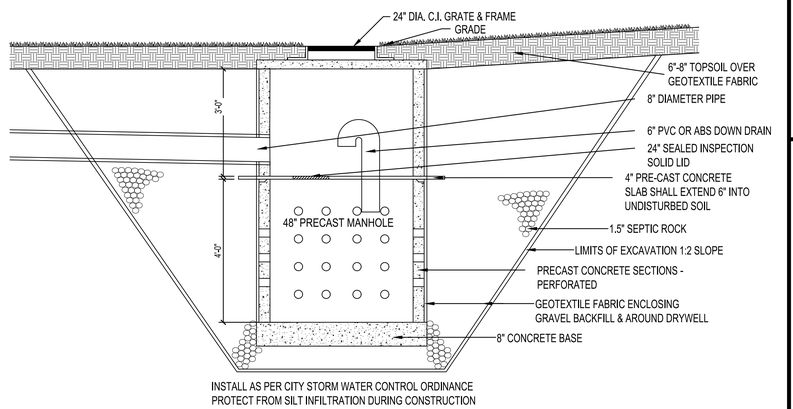
SITE PLAN NOTES:

- ROCK: ROCK MULCH SHALL BE 2" TO 3" WASHED RIVER ROCK, UNIFORM IN SIZE. ALL FINES SHALL BE SCREENED FROM THE AGGREGATE WITHIN 1/4" TOLERANCE. ROCK MULCH SHALL BE COMPOSED OF ROUND ROCKS THAT MAY BE VARIED IN COLOR. THE MATERIAL SHALL BE FREE OF ORGANIC AND INORGANIC DEBRIS AND TRASH. ROCK MULCH SHALL BE SPREAD 2" TO 3" THICK OVER A 28 MIL GEOTEXTILE/LANDSCAPE FABRIC, WITH BLACK HDEP PLASTIC ROLL EDGING 5" TALL, STAKED IN THE GROUND AS REQUIRED.
- GRASS: REMOVE ALL STONES AND OTHER DEBRIS PRIOR TO LAWN SEEDING. SOW A MIXTURE OF KENTUCKY BLUEGRASS AND FESCUE AT A RATE OF 6LBS PER 1000 SQFT OR AS RECOMMENDED BY SUPPLIER. SEED WITH MECHANICAL DEVICE, STRAW ENTIRE YARD. HYDROSEEDING IS AN ACCEPTABLE ALTERNATE.
- PLANTERS: (4) TERRACAST CABANA PEDESTAL BOWL GV-19 OR EQUAL. COMMERCIAL CONCRETE FINISH, 18.5" DIA, 17" TALL.



2 SP-2 PLANTING DETAIL

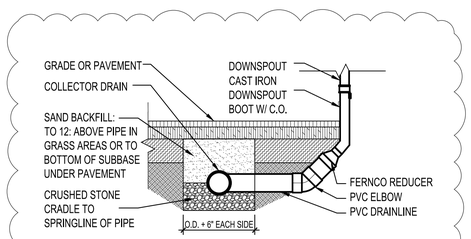
SCALE: NO SCALE



INSTALL AS PER CITY STORM WATER CONTROL ORDINANCE
PROTECT FROM SILT INFILTRATION DURING CONSTRUCTION

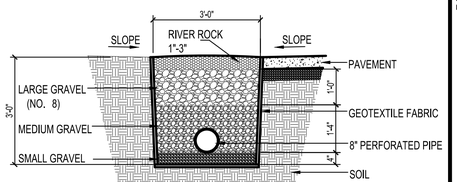
3 SP-2 DRYWELL DETAIL

SCALE: NO SCALE



6 SP-2 DOWNSPOUT BOOT DETAIL

SCALE: NO SCALE



4 SP-2 FRENCH DRAIN DETAIL

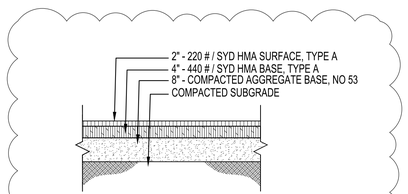
SCALE: NO SCALE

1 SP-2 NEW SITE PLAN

SCALE: 1" = 15'-0"

N

*NOTE: THIS DRAWING IS NOT INTENDED AS A LEGAL SURVEY



5 SP-2 ASPHALT PAVEMENT DETAIL

SCALE: NO SCALE

REVISIONS	
NO.	DATE
1	10.17.2023
2	10.26.2023

DANIEL E. SANDERS REGISTERED ARCHITECT

CERTIFIED BY: D. SANDERS
DRAWN BY: AJ/DC
CHECKED BY: D. SANDERS

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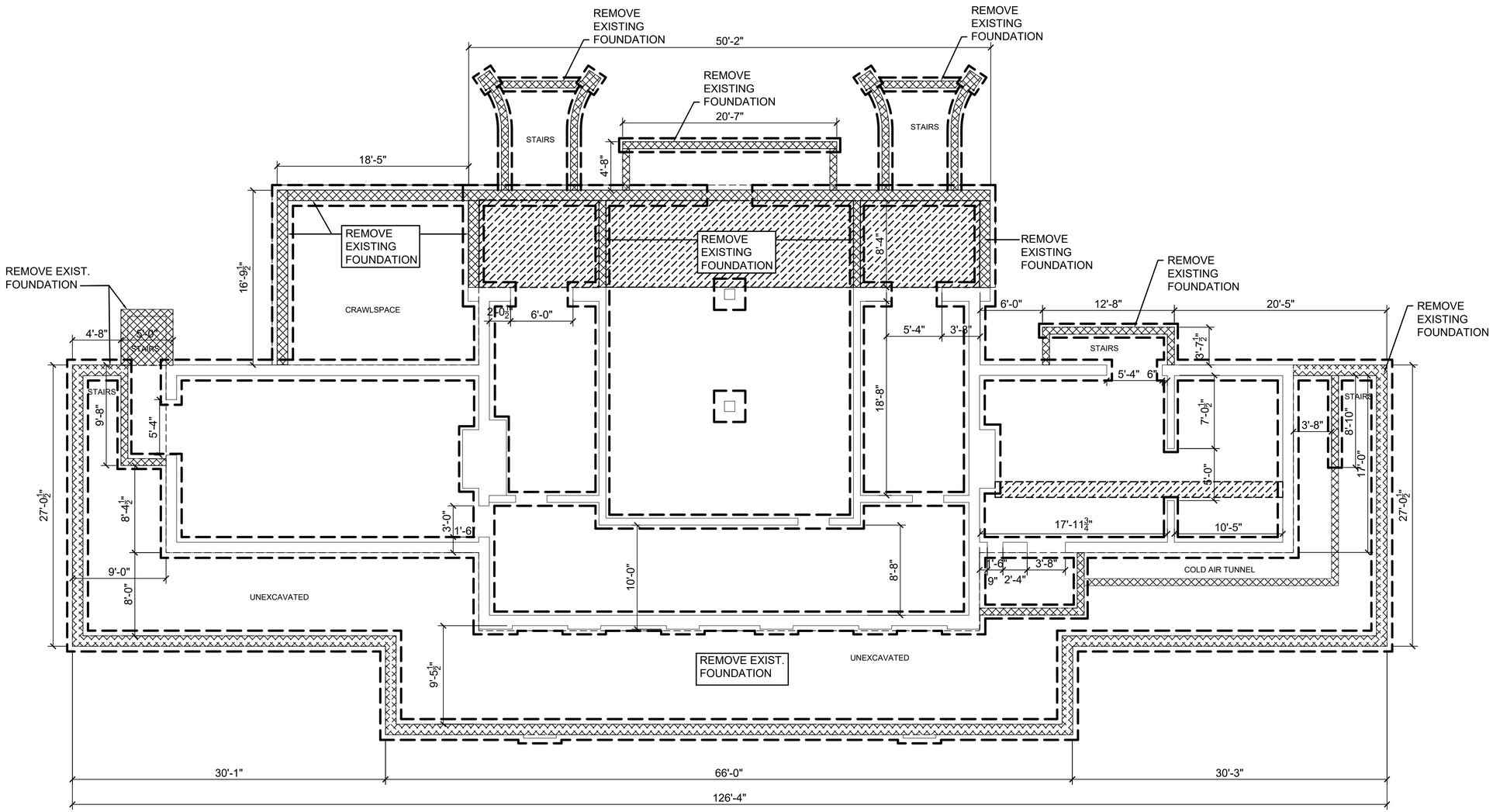
PHONE (812) 232-3256

PROJECT
REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER: 2214
DATE: 09/22/23
SHEET TITLE: NEW SITE PLAN
SHEET: SP-2



1 / D-0 DEMO FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

N

DEMO KEY

- REMOVE FOUNDATION
- REMOVE SLAB

2 **DEMOLITION NOTE:**
CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, BRACING, AND OTHER TEMPORARY CONSTRUCTION NECESSARY TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE IS MAINTAINED DURING CONSTRUCTION ACTIVITIES.

REVISIONS

NO.	DATE
1	10.17.2023
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DANIEL E. SANDERS REGISTERED ARCHITECT

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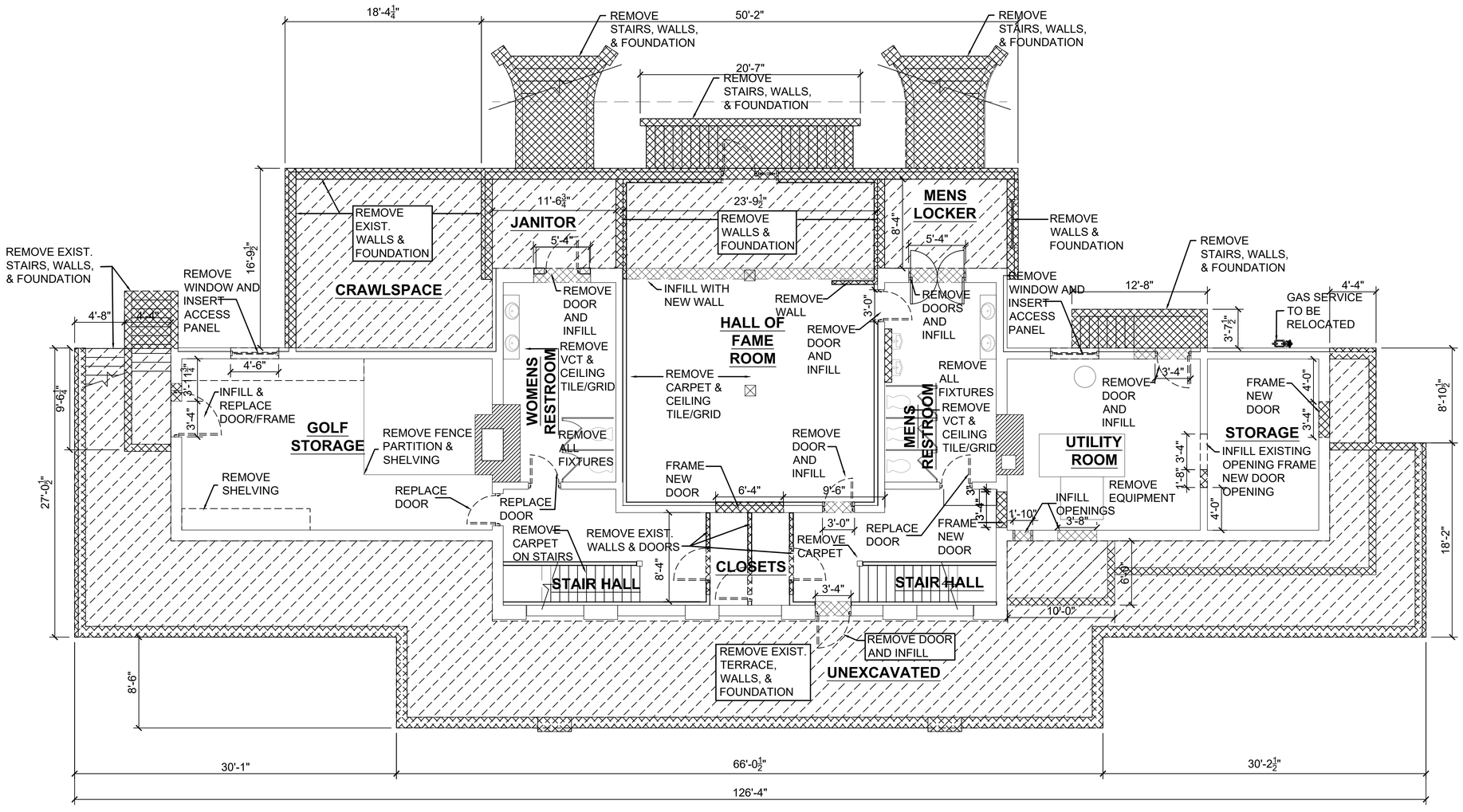
PROJECT
REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER: 2214

DATE: 09/22/23

SHEET TITLE: DEMO FOUNDATION PLAN

SHEET: D-0



1 / D-1 DEMO BASEMENT PLAN

SCALE: 3/16" = 1'-0"

N

DEMO KEY

- REMOVE WALL
- DEMO ENTIRE AREA

DEMOLITION NOTE:

2 CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, BRACING, AND OTHER TEMPORARY CONSTRUCTION NECESSARY TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE IS MAINTAINED DURING CONSTRUCTION ACTIVITIES.

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DANIEL E. SANDERS REGISTERED ARCHITECT

CERTIFIED BY: D. SANDERS

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PHONE (812) 232-5256

PROJECT

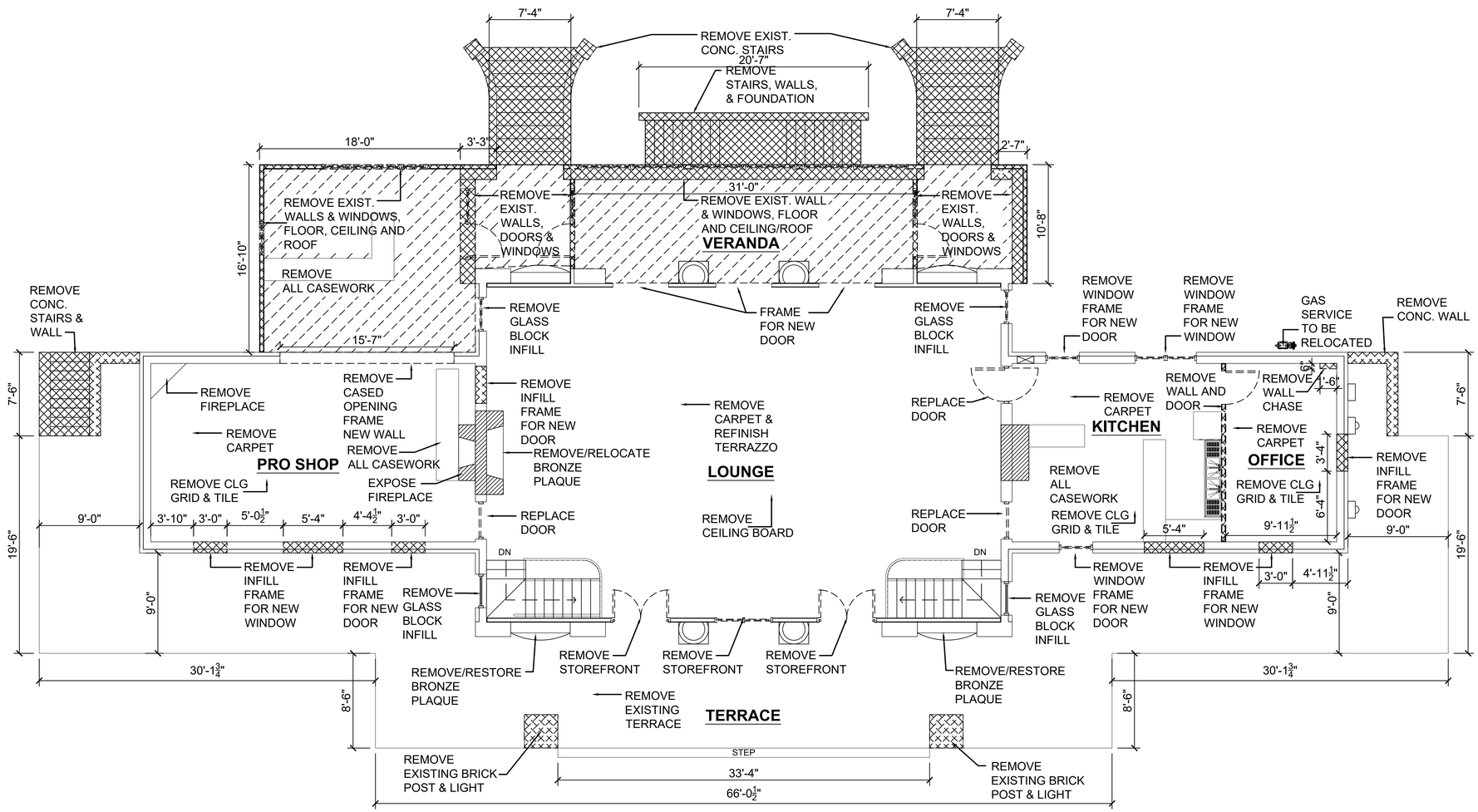
REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER: 2214

DATE: 09/22/23

SHEET TITLE: DEMO BASEMENT PLAN

SHEET: D-1



1 D-2 DEMOLITION 1ST FLOOR PLAN

SCALE: 3/16" = 1'-0"

N

DEMO KEY

- REMOVE WALL
- DEMO ENTIRE AREA

DEMOLITION NOTE:

CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, BRACING, AND OTHER TEMPORARY CONSTRUCTION NECESSARY TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE IS MAINTAINED DURING CONSTRUCTION ACTIVITIES.

2

REVISIONS

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DANIEL E. SANDERS REGISTERED ARCHITECT

CERTIFIED BY: D. SANDERS

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PROJECT

REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER: 2214

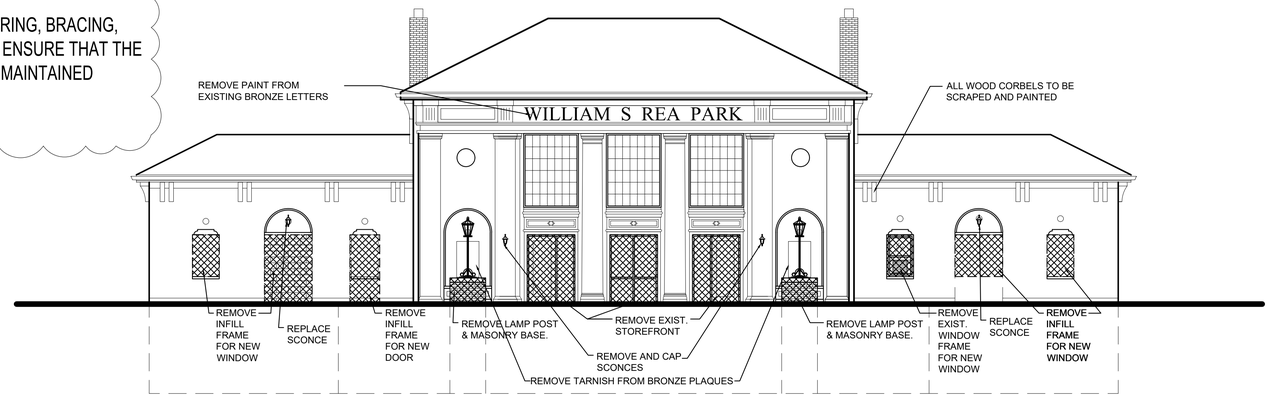
DATE: 09/22/23

SHEET TITLE: DEMO 1ST FLOOR PLAN

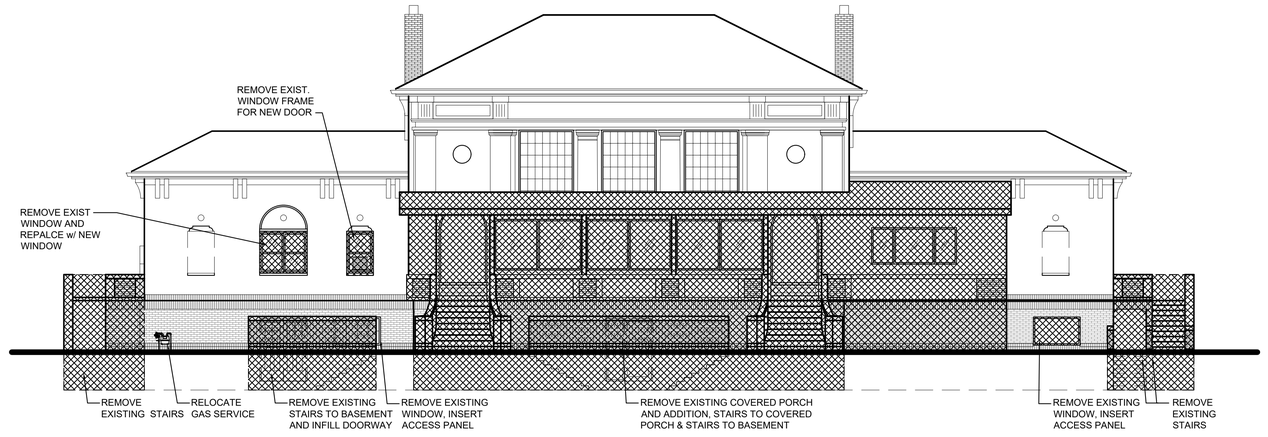
SHEET: D-2

DEMOLITION NOTE:
CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, BRACING, AND OTHER TEMPORARY CONSTRUCTION NECESSARY TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE IS MAINTAINED DURING CONSTRUCTION ACTIVITIES.

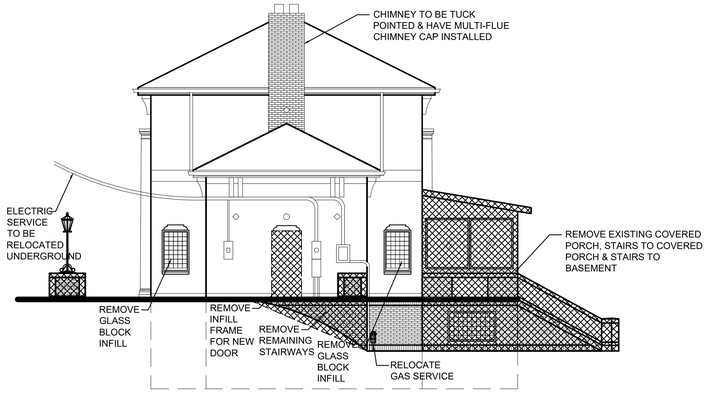
2



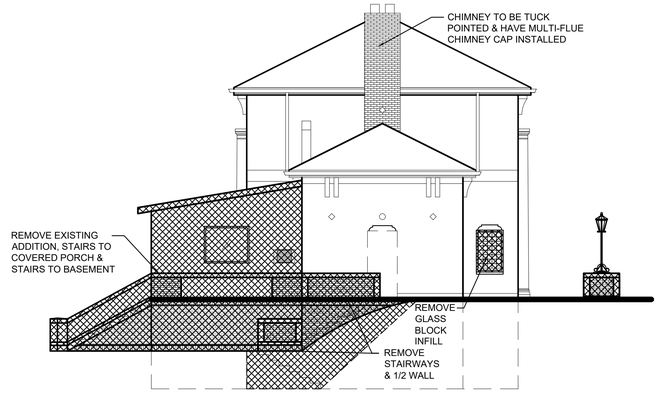
1 / D-3 DEMO WEST ELEVATION
SCALE: 1/8" = 1'-0"



2 / D-3 DEMO EAST ELEVATION
SCALE: 1/8" = 1'-0"



3 / D-3 DEMO SOUTH ELEVATION
SCALE: 3/16" = 1'-0"



4 / D-3 DEMO NORTH ELEVATION
SCALE: 1/8" = 1'-0"

REVISIONS

NO.	DATE
1	10.17.2023
2	10.26.2023

DANIEL E. SANDERS REGISTERED No. 9356 STATE OF NEBRASKA ARCHITECT
David E. Sanders

CERTIFIED BY
D. SANDERS

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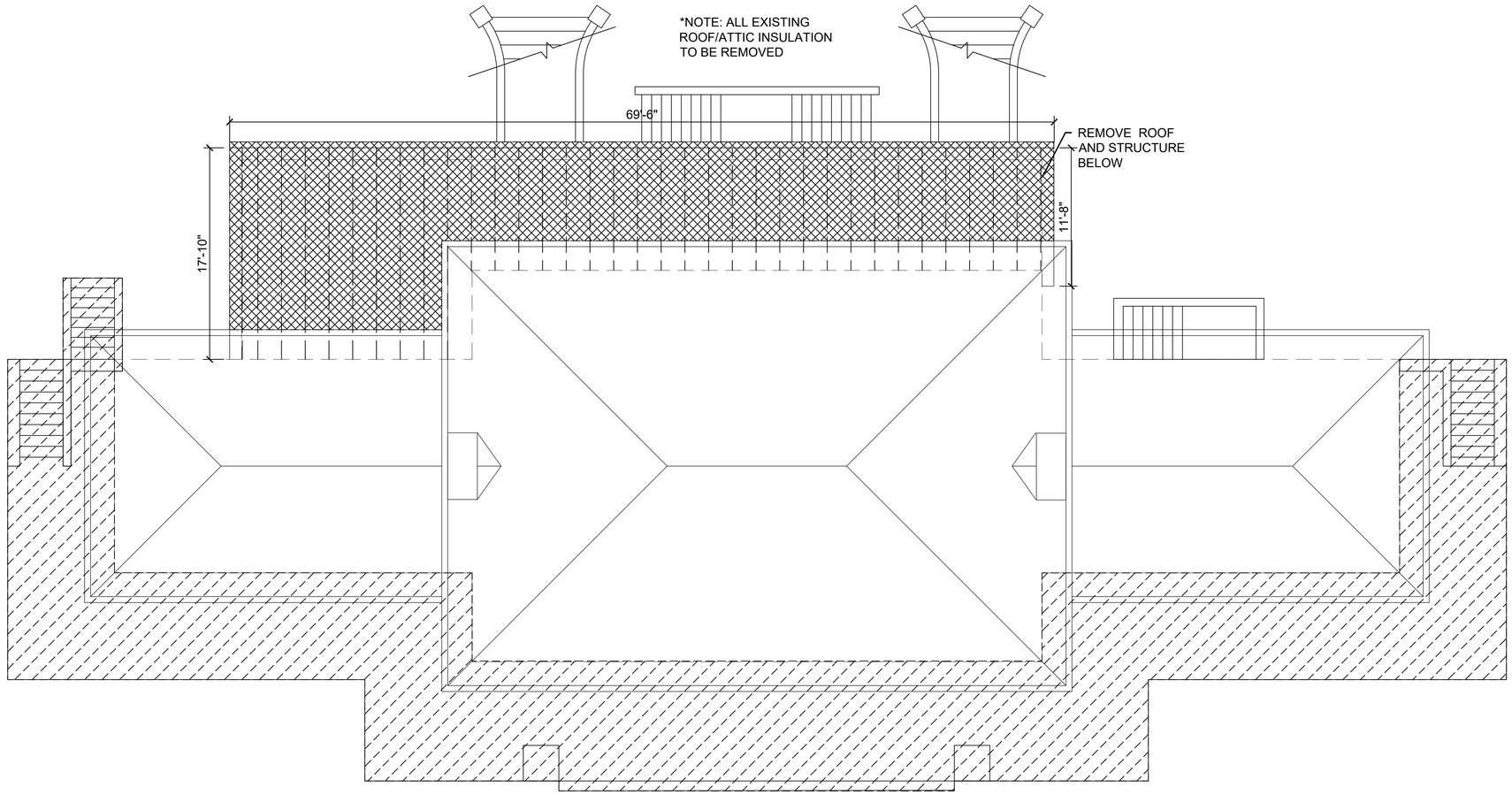
PROJECT
REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER
2214

DATE
09/22/23

SHEET TITLE
DEMO ELEVATIONS

SHEET
D-3



1 / D-4 DEMO ROOF PLAN

SCALE: 3/16" = 1'-0"

DEMO KEY

- REMOVE ROOF
- DEMO ENTIRE AREA

2

DEMOLITION NOTE:
CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, BRACING, AND OTHER TEMPORARY CONSTRUCTION NECESSARY TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE IS MAINTAINED DURING CONSTRUCTION ACTIVITIES.

REVISIONS

NO.	DATE
1	10.17.2023
2	10.26.2023

DANIEL E. SANDERS REGISTERED NO. 9356 STATE OF NEBRASKA ARCHITECT

CERTIFIED BY
D. SANDERS

DRAWN BY
AJ/DC

CHECKED BY
D. SANDERS

Sanders and Associates, Inc.
3200 SOUTH 7TH STREET
LINCOLN, NEBRASKA 68502
PHONE (812) 232-5258

PROJECT
REA PARK CLUBHOUSE RENOVATIONS

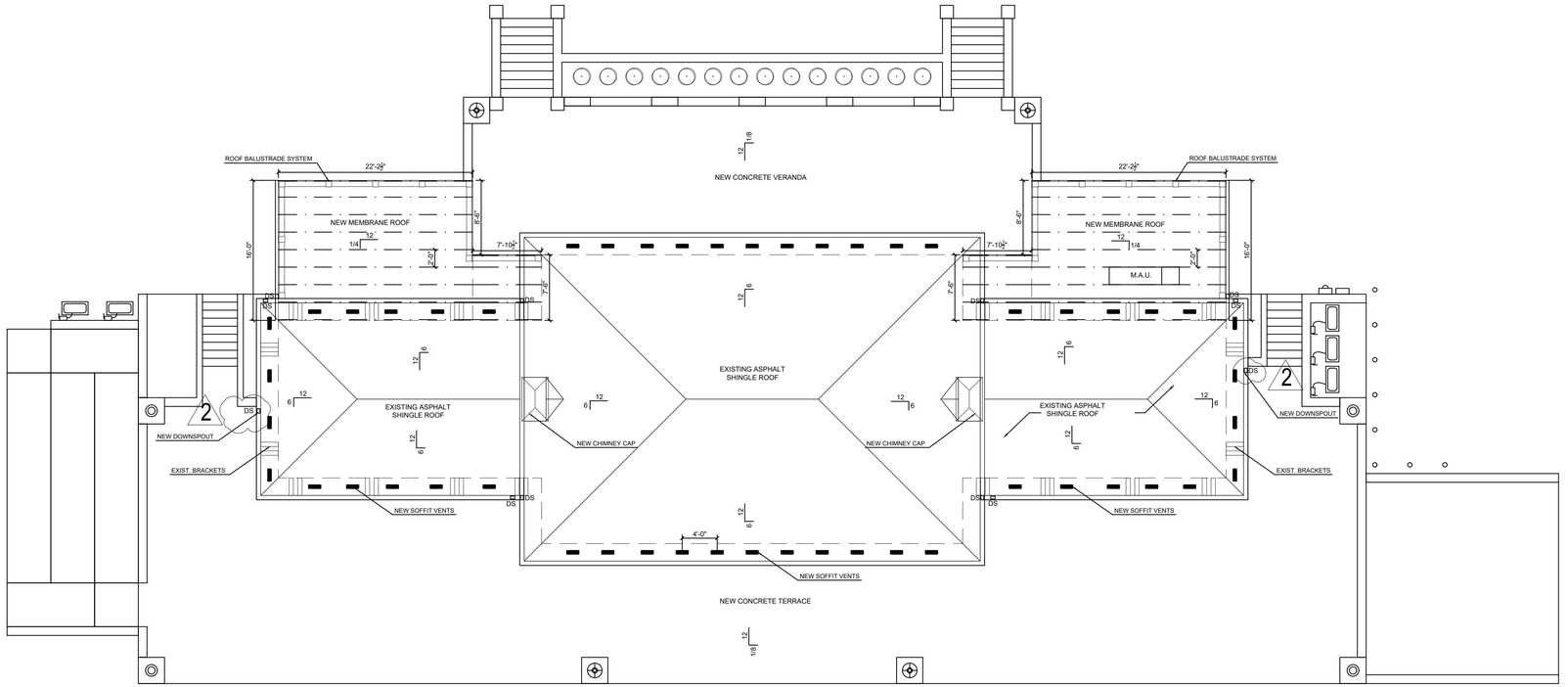
JOB NUMBER
2214

DATE
09/22/23

SHEET TITLE
DEMO ROOF PLAN

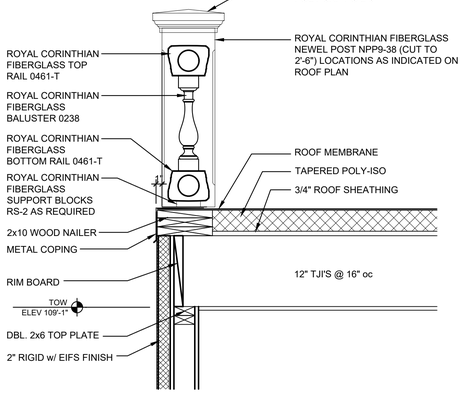
SHEET
D-4

Rea Park Add #2



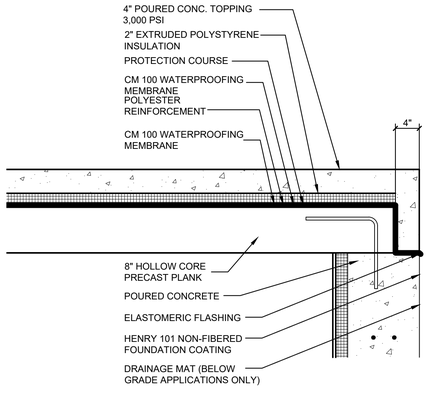
1 A-5 ROOF PLAN

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



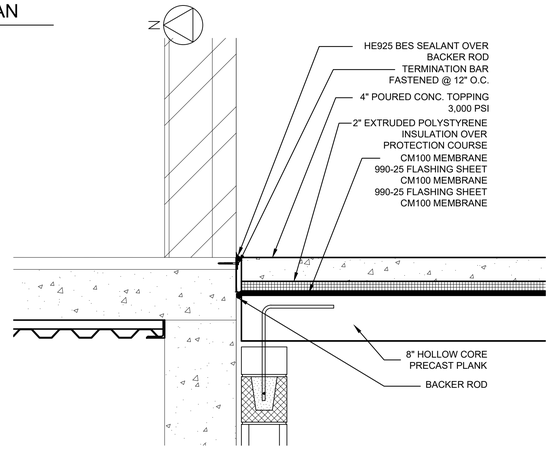
2 A-5 ADDITION ROOF DETAIL

SCALE: 1" = 1'-0"



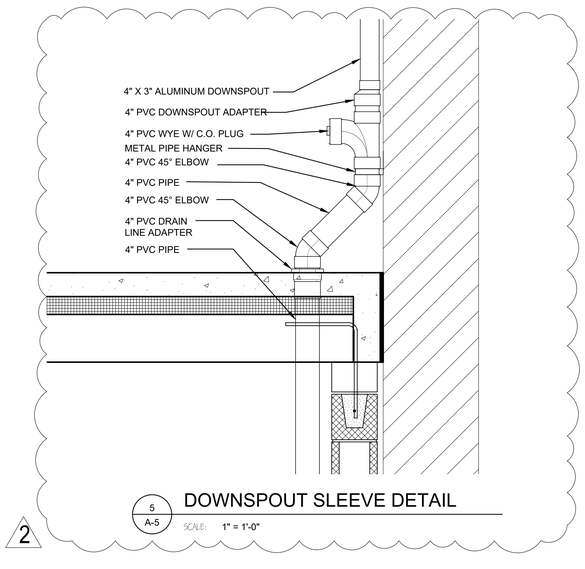
3 A-5 TERRACE/VERANDA EDGE DETAIL

SCALE: 1" = 1'-0"



4 A-5 TERRACE/VERANDA JOINT DETAIL

SCALE: 1" = 1'-0"



5 A-5 DOWNSPOUT SLEEVE DETAIL

SCALE: 1" = 1'-0"

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DANIEL E. SANDERS REGISTERED NO. 3936 STATE OF KENTUCKY LICENSED ARCHITECT

CERTIFIED BY
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PROJECT
REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER
2214

DATE
09/22/23

SHEET TITLE
ROOF PLAN

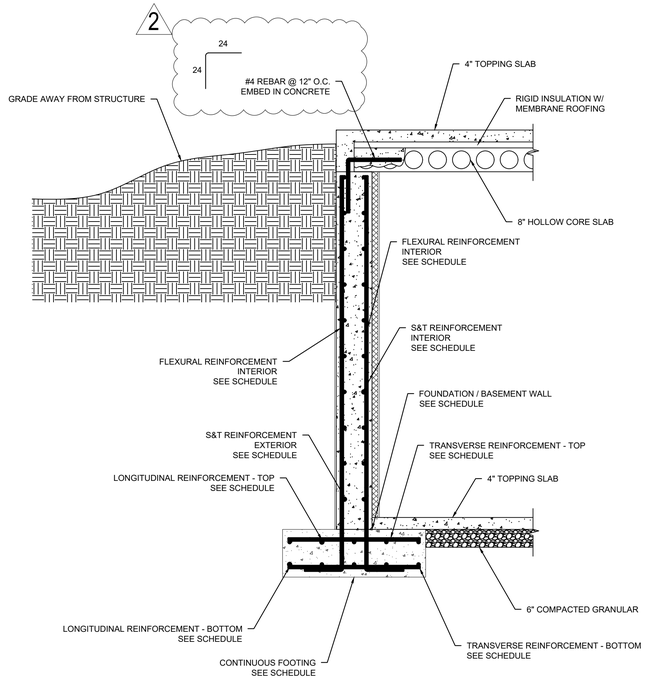
SHEET
A-5

CONTINUOUS FOOTING SCHEDULE							
MARK	WIDTH (FT.)	THICKNESS (IN.)	LONGITUDINAL REINFORCEMENT - TOP	TRANSVERSE REINFORCEMENT - TOP	LONGITUDINAL REINFORCEMENT - BOTTOM	TRANSVERSE REINFORCEMENT - BOTTOM	COMMENTS
CF2.0	2.0	16	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	
CF3.0	3.0	12	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	
CF3.5	3.5	16	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	
CF4.5	4.5	16	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	#4 @ 12" O.C. CONTINUOUS	#6 @ 18" O.C.	

CONCRETE WALL SCHEDULE - BASEMENT / CRAWLSPACE / RETAINING							
MARK	HEIGHT(FT.)	THICKNESS (IN.)	FLEXURAL REINFORCEMENT - INTERIOR	S&T REINFORCEMENT - INTERIOR	FLEXURAL REINFORCEMENT - EXTERIOR	S&T REINFORCEMENT - EXTERIOR	COMMENTS
CW10	SEE ARCH.	12	#8 @ 18" O.C.	#5 @ 12" O.C. CONTINUOUS	#7 @ 18" O.C.	#5 @ 12" O.C. CONTINUOUS	COORDINATE WALL HEIGHT WITH ARCHITECTURAL PLANS

MASONRY WALL SCHEDULE							
MARK	HEIGHT (FT.)	THICKNESS (IN.)	BOND	VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT	GROUT	COMMENTS
MW0.67	SEE ARCH.	8	RUNNING	#5 @ 48" O.C.	#5 @ 48" O.C.	PARTIAL / REINFORCED ONLY	TOP OF WALL TO HAVE DOUBLE BOND BEAM

THICKENED SLAB SCHEDULE					
MARK	WIDTH (IN.)	THICKNESS (IN.)	LONGITUDINAL REINFORCEMENT	TRANSVERSE REINFORCEMENT	COMMENTS
TS1.5	18	12	(2) #5 REBAR / CONTINUOUS	#5 REBAR @ 12" O.C.	THICKENED SLAB TO HAVE SINGLE MAT OF REINFORCEMENT ONLY



1 TYPICAL FOUNDATION SECTION
1/2" = 1'-0"

GENERAL PLAN NOTES:

1. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE BUILDING CODES IN THE STATE OF INDIANA.
2. GENERAL CONTRACTOR TO BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN ALL THE TRADES.
3. DRAWINGS ARE FOR GENERAL ARRANGEMENT AND MEMBER SIZING. CONTRACTOR RESPONSIBLE FOR FIELD MEASUREMENT PRIOR TO PROCUREMENT AND FABRICATION OF STRUCTURAL STEEL.
4. ALL DIMENSIONS AND ELEVATIONS WERE OBTAINED FROM RELIABLE SOURCES FOR THE EXISTING STRUCTURE AND ARE THEREFORE ASSUMED TO BE TRUE AND ACCURATE. REPORT ANY DISCREPANCIES TO THE ENGINEER FOR VERIFICATION.
5. FABRICATION AND ERECTION DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION OF STRUCTURAL STEEL.
6. DO NOT SCALE DRAWINGS. USE DIMENSIONS PROVIDED IN CONSTRUCTION DOCUMENTS.
7. NO CHANGES TO BE MADE TO THESE DRAWINGS WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
8. FIRST FLOOR FINISH ELEVATION = 100' - 0".
9. STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT. PROVIDE ANY TEMPORARY SUPPORT OR BRACING REQUIRED DURING CONSTRUCTION AND DO NOT REMOVE UNTIL BUILDING COMPONENTS ARE CAPABLE OF SUPPORTING THEMSELVES AS WELL AS ANY LATERAL LOADS INCLUDING WIND AND SEISMIC.
10. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN LOADS OF THE STRUCTURAL MEMBERS.
11. DESIGN STRESSES

SOIL PRESSURE	qa = 2,500 PSF
CONCRETE	f'c = 3,000 PSI
REINFORCING STEEL	Fy = 60,000 PSI

FOUNDATION AND CONCRETE NOTES:

1. THE BEARING CAPACITY OF THE SOIL WAS PROVIDED BY RELIABLE SOURCES. A GEOTECHNICAL CONSULTANT SHOULD VERIFY SOIL CAPACITY PRIOR TO CONSTRUCTION.
2. BOTTOM OF FOOTING MUST BE 36" BELOW GRADE.
3. ADEQUATE BEARING STRENGTH SHALL BE VERIFIED BY GEOTECHNICAL CONSULTANT PRIOR TO PLACEMENT OF CONCRETE.
4. FLOOR TO BE CONSTRUCTED AS 4" SLAB ON GRADE WITH A SINGLE REBAR MAT CONSTRUCTED FROM #5 REBAR AT 12" ON CENTERS IN BOTH DIRECTIONS.
5. TOP OF SLAB TO BE AT SAME ELEVATION AS EXISTING ADJACENT STRUCTURE LOCATED IN THE EXISTING STRUCTURE.
6. COORDINATE PLACEMENT OF FOOTINGS WITH ARCHITECTURAL DRAWINGS. REPORT ANY DISCREPANCIES TO THE ENGINEER.
7. HEATING OF REINFORCING STEEL FOR BENDING IS NOT PERMITTED.
8. CONCRETE COVER FOR REINFORCING STEEL PLACED IN THE FOUNDATION SHALL BE AT 3 INCHES.
9. ALL CONSTRUCTION JOINTS SHALL BE KEYED.
10. CHAMPFER 3/4" X 45 DEGREES ALL EXPOSED EDGES OF CONCRETE.
11. CONCRETE COVER FOR STEEL REINFORCEMENT, UNLESS OTHERWISE NOTED:

UNFORMED SURFACE IN CONTACT WITH GROUND	3 IN.
FORMED SURFACES EXPOSED TO EARTH OR WEATHER	2 IN.
FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER	
BEAMS, GIRDERS AND COLUMNS	1-1/2 IN.
SLABS, WALLS AND JOISTS	3/4" IN.

12. MINIMUM CONCRETE COVER FOR ANCHOR BOLTS TO BE 3 INCHES.
13. REINFORCING STEEL LAP SPLICES SHALL BE IN ACCORDANCE WITH ACI 318-19.
14. CONTRACTOR TO PROVIDE CORNER BARS, AS NEEDED, FOR ALL HORIZONTAL CONCRETE REINFORCEMENT.
15. PROVIDE DIAGONAL REINFORCEMENT OF EACH SIDE OF OPENINGS, OR RE-ENTRANT CORNERS IN SLABS. SEE DETAIL.
16. CONTRACTOR TO BRUSH AND CLEAN ALL CONSTRUCTION JOINTS OF STRUCTURAL WALLS.
17. COORDINATE ANCHOR BOLT LAYOUT WITH STRUCTURAL STEEL DRAWINGS.
18. SEE STRUCTURAL DETAILS FOR ANCHOR BOLT EMBEDMENT DEPTH.
19. MASONRY WALLS SHOWN ON THESE DRAWINGS ARE TO BE CONSIDERED BEARING WALLS.
20. DOWEL CONCRETE WALL AND MASONRY WALL REINFORCEMENT INTO THE FOOTINGS.
21. SEE CIVIL AND ARCHITECTURAL DRAWINGS FOR CONCRETE WORK NOT SHOWN ON STRUCTURAL DRAWINGS.

SLAB ON GRADE:

1. SLAB ON GRADE TO BE REINFORCED WITH 6X6 W.W.F. REINFORCEMENT.
2. WELDED WIRE FABRIC SHALL BE ADEQUATELY SUPPORTED DURING PLACEMENT OF THE CONCRETE AND SHALL BE LOCATED 2" BELOW THE TOP OF THE SLAB.
3. SLAB ON GRADE SHALL HAVE CONTROL JOINTS PLACED AT 20 FEET ON CENTER AND SHALL BE CUT IMMEDIATELY AFTER PLACEMENT OF THE CONCRETE SLAB.
4. VAPOR BARRIER SHOULD BE PLACED ON 6" OF CRUSHED STONE PRIOR TO PLACEMENT OF THE SLAB-ON-GRADE.
5. EXTERIOR SLABS-ON-GRADE TO BE TOOLED.
6. WHERE FLOOR DRAINS ARE TO BE LOCATED, SLOPE SLAB AS NEEDED FOR PROPER DRAINAGE.
7. PROVIDE DIAGONAL REINFORCEMENT AT RE-ENTRANT CORNERS IN SLABS. DIAGONAL REINFORCEMENT TO BE (2) #4 X 4'-0" BARS FOR EVERY 4" OF SLAB THICKNESS. SEE DETAIL.

HOLLOW CORE SLAB NOTES:

1. HOLLOW CORE SLABS TO BE FABRICATED BY STRESCORE OR APPROVED EQUIVALENT MANUFACTURER.
2. HOLLOW CORE SLABS TO BE 10" THICK WITH A 2" TOPPING SLAB AS INDICATED ON THE PLAN AND DETAIL DRAWINGS.
3. HOLLOW CORE SLABS TO BE REINFORCED WITH PRESTRESSED STEEL STRANDS TO RESIST THE SERVICE LOADS DEFINED.
4. REFERENCE DETAILS FOR SLAB TO WALL AND BEAM CONNECTIONS.
5. PROVIDE 1/8" THICK BEARING PAD UNDER ALL HOLLOW CORE SLABS BEARING ON MASONRY OR CONCRETE SURFACES.
6. DESIGN AND FURNISH ALL HEADERS REQUIRED AT OPENINGS THROUGH SLABS.
7. DO NOT FIELD CUT HOLES THROUGH HOLLOW CORE SLABS WITHOUT APPROVAL FROM THE ENGINEER OR ARCHITECT.
8. SUBMITTALS, INCLUDING SHOP DRAWINGS, FOR HOLLOWCORE SLABS TO BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO PROCUREMENT.

STRUCTURAL STEEL NOTES:

1. SPLICING OF STRUCTURAL STEEL, UNLESS SHOWN ON DRAWINGS, IS NOT PERMITTED WITHOUT APPROVAL FROM THE ENGINEER.
2. BEAM / LINTEL BEARING ON CONCRETE OR MASONRY WALLS TO BE A MINIMUM OF 8", UNLESS OTHERWISE SPECIFIED.
3. BOLT TIGHTENING TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS."
4. ALL STRUCTURAL STEEL TO BE SHOP PRIMED PRIOR TO ERECTION. ALL PRIMER TO BE RUST INHIBITATIVE AND INTENDED FOR LONG TERM EXPOSURE TO THE ELEMENTS. FINAL PAINT TO BE APPLIED BY OTHERS.
5. NO ALTERATIONS TO THE STRUCTURE TO BE MADE WITHOUT APPROVAL OF THE ENGINEER.
6. CLEAN METAL SHAVINGS FROM ALL STRUCTURAL STEEL PANELS AFTER INSTALLATION IS COMPLETE.
7. SEE DETAILS FOR HOLLOW CORE SLAB TO STRUCTURAL STEEL CONNECTIONS.
8. CONTRACTOR TO PROVIDE SHOP DRAWINGS PRIOR TO PROCUREMENT OF ANY STRUCTURAL STEEL.
9. ALL EXPOSED STRUCTURAL STEEL TO BE HOT DIPPED GALVANIZED.

2

MATERIAL YIELD STRESSES

HOT ROLLED BEAM	
STRUCTURAL STEEL SHEET / PLATE	Fy = 50 KSI
CONNECTION BOLTS	Fy = 36 KSI
ANCHOR BOLTS	ASTM A325
	F1554 GR.36

MASONRY NOTES:

1. MASONRY WALLS SHOWN ON STRUCTURAL DRAWINGS ARE PRESUMED TO BE LOAD BEARING. REFERENCE ARCHITECTURAL DRAWINGS FOR NON LOAD BEARING WALLS.
2. ALL MASONRY WALLS ON STRUCTURAL PLANS TO BE REINFORCED. REFERENCE MASONRY WALL SCHEDULE FOR REINFORCEMENT SPECIFICATIONS.
3. ALL MASONRY REINFORCING STEEL TO BE SECURED PRIOR TO GROUT APPLICATION TO PREVENT BAR MOVEMENT.
4. GROUT TO BE STOPPED 2" BELOW THE TOP OF A COURSE TO CREATE A KEYED JOINT.
5. REINFORCE BOND BEAMS WITH (2) #5 REBAR, CONTINUOUS, UNLESS OTHERWISE SPECIFIED ON THESE DRAWINGS. ALL CORNERS TO BE REINFORCED WITH CORNER BARS.
6. LAP SPLICES TO BE 48" FOR #5 REBAR AND 78" FOR #6 REBAR.
7. ALL VERTICAL REINFORCEMENT IS TO BE CENTERED IN THE CELLS. USE BAR POSITIONERS TO HOLD VERTICAL AND BOND BEAM REINFORCEMENT IN THE PROPER ALIGNMENT PRIOR TO GROUT APPLICATION.
8. REFERENCE ARCHITECTURAL DRAWINGS FOR CONTROL JOINTS.
9. BOND BEAM REINFORCEMENT SHALL CONTINUE THROUGH ALL CONTROL JOINTS.
10. PROVIDE VERTICAL BARS AT ALL CORNERS, ENDS, JAMBS, INTERSECTIONS AND ON BOTH SIDES OF ALL CONTROL JOINTS.
11. MASONRY GROUT TO BE 2000 PSI AND APPLIED IN THE FOLLOWING SCENARIOS:
    ALL CELLS CONTAINING VERTICAL REINFORCEMENT
    ALL CELLS BELOW GRADE INCLUDING FOUNDATION WALLS
    ALL BOND BEAMS
    ALL CELLS SUPPORTING STRUCTURAL STEEL BEAMS / EXTEND TO FOUNDATION WALL
    ALL CELLS ABOVE LINTELS

SERVICE LOAD CRITERIA:

BUILDING RISK CATEGORY	III	
DESIGN CODES	ASCE 07-22 IBC 2012	
DEAD LOAD CRITERIA	PATIO	125 PSF
	VERANDA	125 PSF
	CLUBHOUSE	125 PSF
LIVE LOAD CRITERIA	PATIO	100 PSF
	VERANDA	100 PSF
	CLUBHOUSE	100 PSF
SNOW CRITERIA	GROUND SNOW LOAD	30 PSF
	SNOW EXPOSURE	1.0
	THERMAL FACTOR	1.0
WIND CRITERIA	BASIC SPEED	114 MPH
	EXPOSURE	B
SEISMIC CRITERIA	SITE CLASS	D - STIFF SOIL
	DESIGN CATEGORY	C
	RESPONSE CRITERIA	SMS - 0.44 SM1 - 0.28 SDS = 0.29 SD1 = 0.19

2

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PROJECT
REA PARK CLUBHOUSE RENOVATIONS

JOB NUMBER
2214

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9/28/23

SHEET TITLE
FOUNDATION SCHEDULES & DETAILS

SHEET
F2.0

CONCRETE COLUMN SCHEDULE					
MARK	DIMENSIONS (IN.)	HEIGHT (FT.)	REINFORCEMENT	REBAR TIES	COMMENTS
CC1	12 X 12	SEE ARCH.	(4) #6 REBAR	#4 REBAR @ 12" O.C.	SEE ARCHITECTURAL PLANS FOR COLUMN HEIGHT

CONCRETE BEAM SCHEDULE					
MARK	DEPTH (IN.)	WIDTH (IN.)	FLEXURAL REINFORCEMENT	SHEAR REINFORCEMENT	COMMENTS
CB1	24	12	SEE BEAM DETAIL	SEE BEAM DETAIL	

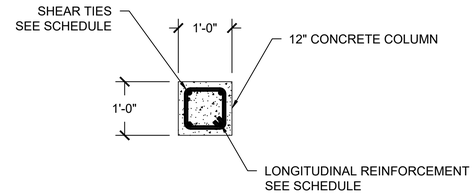
HOLLOW CORE PRECAST PANEL SCHEDULE			
MARK	HOLLOW CORE PANEL THICKNESS (IN.)	TOPPING SLAB THICKNESS (IN.)	COMMENTS
PP1	8	4	

2

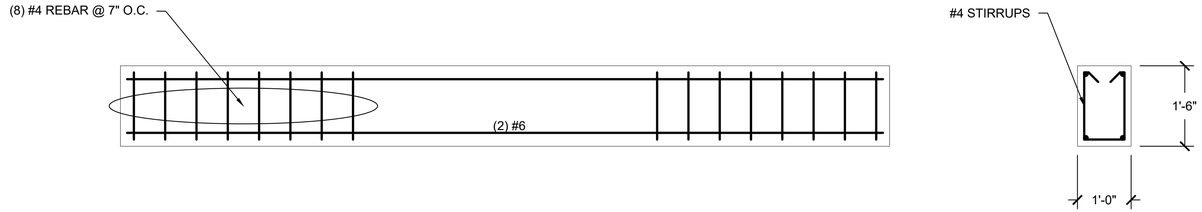
STEEL COLUMN SCHEDULE			
MARK	SHAPE	HEIGHT (FT.)	COMMENTS
SC1	HSS4X4X0.25	SEE ARCH.	

STEEL BEAM SCHEDULE		
MARK	SHAPE	COMMENTS
SB1	W12X45	
SB2	W12X45	SEE DETAIL
SB3	W12X45	

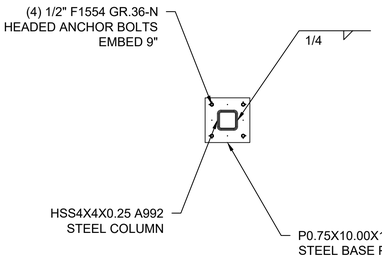
2



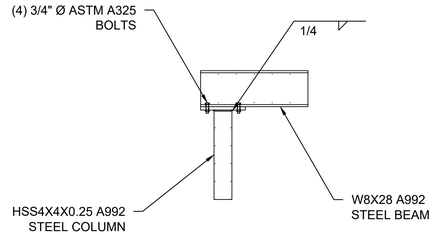
3 COLUMN DETAIL - TYPICAL
DO NOT SCALE



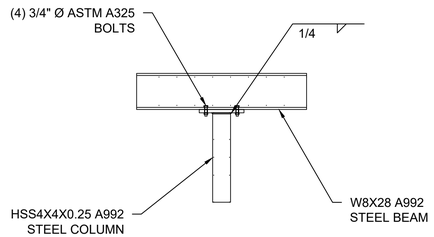
4 CONCRETE BEAM DETAIL - BEAM CB1
1/2" = 1'-0"



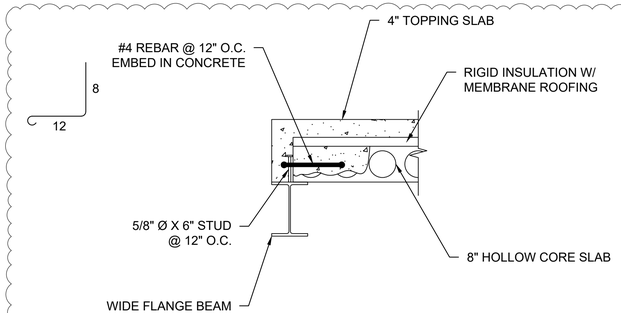
5 COLUMN BASE PLATE - TYPICAL
DO NOT SCALE



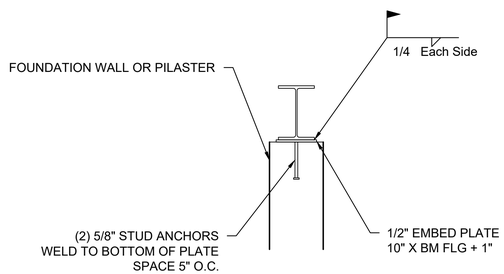
6 COLUMN TO BEAM CONNECTIONS - TYPICAL
DO NOT SCALE



7 COLUMN TO BEAM CONNECTIONS - TYPICAL
DO NOT SCALE



8 STEEL BEAM TO HOLLOW CORE SLAB CONNECTION - TYPICAL
DO NOT SCALE



9 EMBED PLATE DETAIL - TYPICAL
DO NOT SCALE

2

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REA PARK CLUBHOUSE
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SHEET TITLE
STRUCTURAL
SCHEDULES & DETAILS

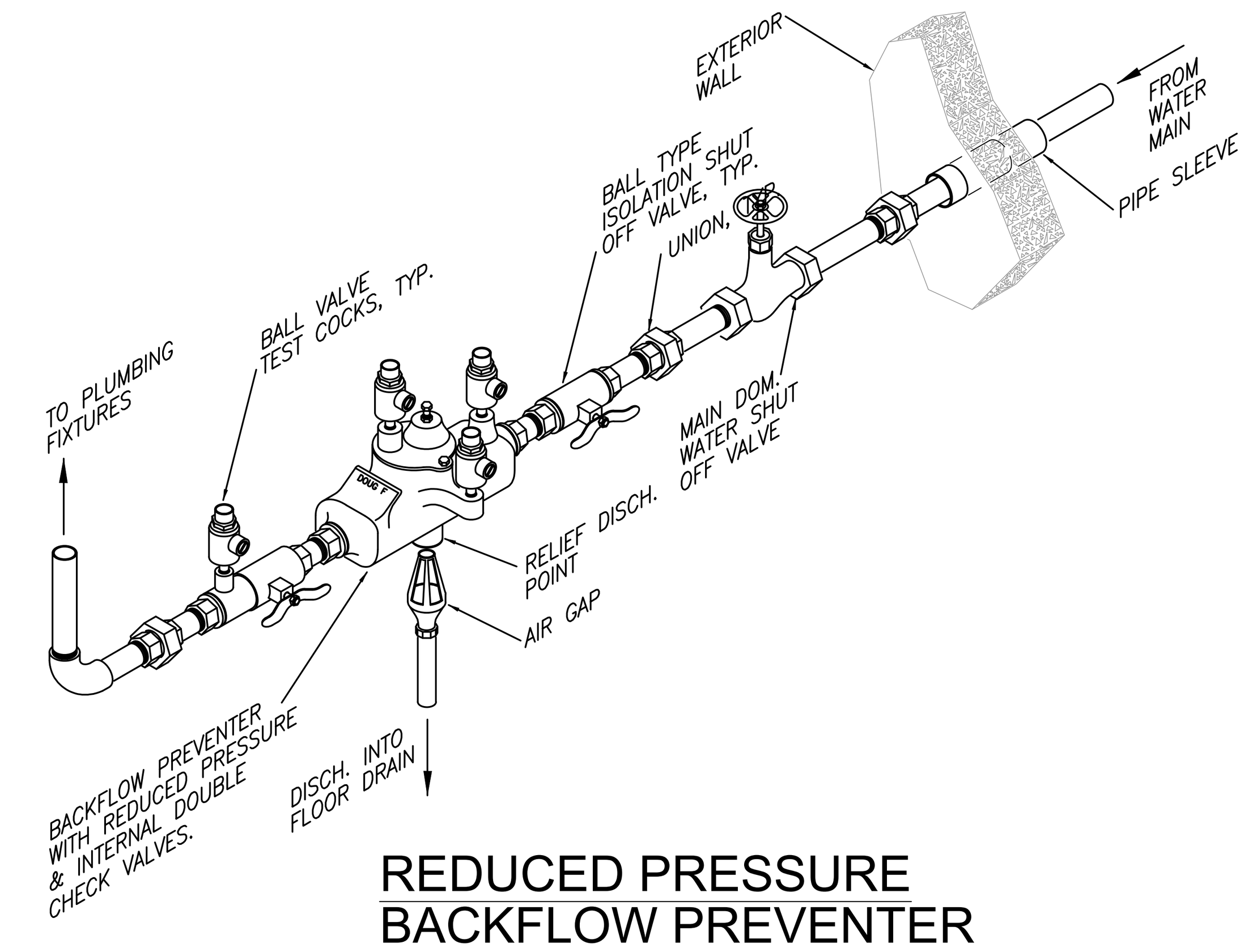
SHEET
S2.0

LEGEND

Symbol	Description
——SS——	SANITARY SEWER PIPING
– – – – – – –	SANITARY VENT PIPING
——————	DOM. COLD WATER PIPING
——————	DOM. HOT WATER PIPING
——————	DOM. TEMPERED WATER PIPING
——G——	NATURAL GAS PIPING
——C——	CONDENSATE DRAIN PIPING
	CONNECTION POINT NEW TO EXIST.
	BALL VALVE
	CHECK VALVE
	BALANCING VALVE
WC	WATER CLOSET
WC-HC	WATER CLOSET HANDICAP
LAV-HC	LAVATORY HANDICAP
SH-HC	SHOWER HANDICAP
EWC-HC	ELECT. WATER COOLER HANDICAP
HC	HANDICAP
KS	KITCHEN SINK
DW	DISHWASHER
PF	POT FILLER
ES	EXAM SINK
WKF	WOK FILER
MB	MOP BASIN
IWH	INSTANTIANOUS WATER HEATER
FD	FLOOR DRAIN
FS	FLOOR SINK
OR	OPEN RECEPTACLE
SCS	SOLIDS COLLECTION SUMP
WB	WASHER BOX
HB	HOSE BIBB
WH	WALL HYDRANT
MV	MIXING VALVE
CO	CLEAN OUT
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT
DCV	DOUBLE CHECK VALVE
VTR	VENT THRU ROOF
RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER
△ DS	DOWN SPOUT

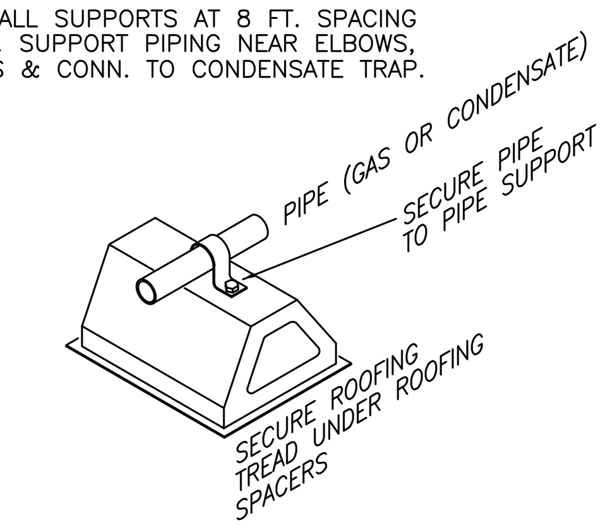
PLUMBING GENERAL NOTES:

1. PLUMBING CONTRACTOR SHALL PROVIDE COMPLETE SYSTEMS AND EQUIPMENT AS SHOWN AND SHALL COMPLY WITH ALL APPLICABLE SPECIFICATIONS.
2. PLUMBING CONTRACTOR SHALL INSTALL ALL PLUMBING, FIXTURES, AND PLUMBING SPECIALTIES (AIR GAPS, ANIT-SIPHON DEVICES, VALVES, WATER HAMMER ARRESTORS, ETC.) AS NECESSARY TO COMPLY WITH THE 2018 INTERNATIONAL PLUMBING CODE AND ALL LOCAL REQUIREMENTS.
3. FIXTURES INDICATED TO BE ADA COMPLIANT SHALL CONFORM AND BE INSTALLED TO COMPLY WITH THE MISSOURI ACCESSIBILITY ACT AND ADA ACCESSIBILITY GUIDELINES.
4. PLUMBING CONTRACTOR SHALL INSTALL ALL NATURAL GAS PIPING AS NECESSARY TO COMPLY WITH NATIONAL FUEL GAS CODE HANDBOOK.
5. THE PLAN IS DIAGRAMMATIC IN NATURE AND NOT ALL PIPING IS SHOWN. COORDINATE WITH FIXTURES AND PROVIDE ALL REQUIRED PIPING> EXISTING CONDITIONS MAY VARY AND DEMOLITION, SAWCUTTING OF FLOORS MAY NOT BE SHOWN BUT MAY BE REQUIRED. CONTRACTOR IS RESPONSIBLE TO CARRY OUT DEMOLITION WORK TO HAVE A FULLY FUNCTIONAL SYSTEMS AS SHOWN ON DRAWINGS. ALL DEMOLITION WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. VENT PIPING IS SHOWN. PROVIDE COMPLETE VENT SYSTEM UTILIZING AS FEW ROOF PENETRATIONS AS POSSIBLE.
7. PLUMBING CONTRACTOR SHALL LOCATE ALL VENTS AT LEAST 10' AWAY FROM ALL HVAC OUTSIDE AIR INTAKES.
8. INSTALL ALL SUPPLY PIPING AS HIGH AS POSSIBLE ABOVE THE DROP CEILING, TYPICALLY UP AGAINST THE CEILING/ROOF STRUCTURE. VENT PIPING SHALL EXTEND UP INTO DROP CEILING SPACE.
9. ALL PIPING SHALL COMPLY WITH THE INTERNATIONAL PLUMBING CODE AS ADOPTED BY THE MUNICIPALITY IN WHICH THE PROJECT IS LOCATED. IF ANY CONFLICT EXISTS THE CODE IS THE DEFAULT DOCUMENT.
10. CONFIRM ALL CONNECTION SIZES AND EQUIPMENT REQUIREMENTS PRIOR TO ORDERING MATERIALS.
11. INCLUDE NATURAL GAS REGULATORS AT EACH POINT OF EQUIPMENT CONNECTION, WHEN REQUIRED FOR PROPER EQUIPMENT OPERATIONS.
12. ALL MATERIALS USED TO COMPLY WITH 2018 INTERNATIONAL PLUMBING CODE, VERSION ADOPTED AT TIME OF CONSTRUCTION.
13. ALL SINKS AND LAVS THAT ARE NOT FULL TEMP WATER SHALL HAVE A MIXING TEE OR MIXING VALVE INSTALL AT FIXTURE.

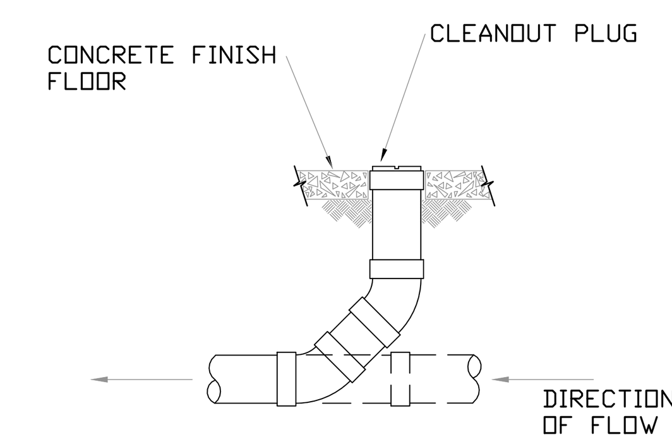

EXTERIOR WALL
FROM WATER MAIN
PIPE SLEEVE
BALL TYPE ISOLATION SHUT OFF VALVE, TYP.
UNION, TYP.
MAIN DOM. WATER SHUT OFF VALVE
BALL VALVE TEST COCKS, TYP.
TO PLUMBING FIXTURES
RELIEF DISCH. POINT
AIR GAP
BACKFLOW PREVENTER WITH REDUCED PRESSURE & INTERNAL DOUBLE CHECK VALVES.
DISCH. INTO FLOOR DRAIN

REDUCED PRESSURE BACKFLOW PREVENTER
NO SCALE:

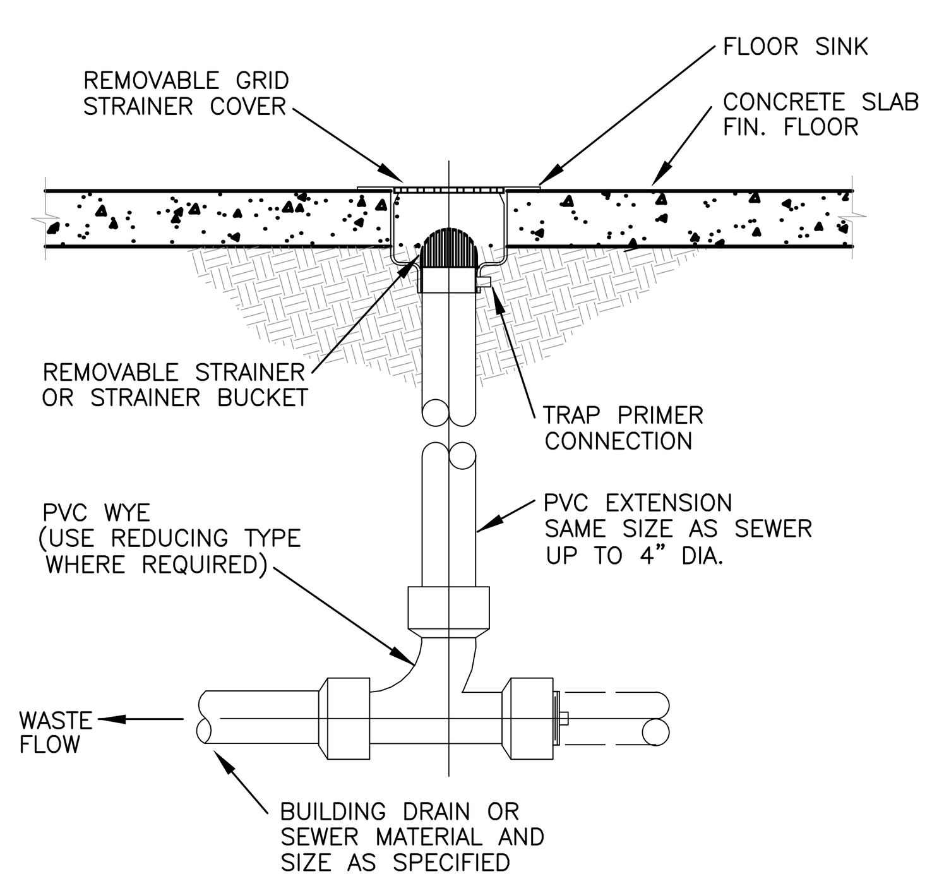
NOTES:
SUPPORT BASE EQUAL TO EATON DURABLOCK MODEL DB5.
INSTALL SUPPORTS AT 8 FT. SPACING MAX. SUPPORT PIPING NEAR ELBOWS, TEES & CONN. TO CONDENSATE TRAP.



ROOF PIPE SUPPORT DETAIL
NO SCALE:



CLEANOUT DETAIL
NO SCALE


FLOOR SINK
REMOVABLE GRID STRAINER COVER
CONCRETE SLAB FIN. FLOOR
REMOVABLE STRAINER OR STRAINER BUCKET
TRAP PRIMER CONNECTION
PVC WYE (USE REDUCING TYPE WHERE REQUIRED)
PVC EXTENSION SAME SIZE AS SEWER UP TO 4" DIA.
WASTE FLOW
BUILDING DRAIN OR SEWER MATERIAL AND SIZE AS SPECIFIED

FLOOR SINK DETAIL
NO SCALE:

FIRE PROTECTION NOTES:

1. FIRE PROTECTION SHALL BE A FULLY SPRINKLED 100% COVERAGE (WET TYPE) SPRINKLER SYSTEM WHICH SHALL BE DESIGNED AND INSTALLED PER NFPA 13, AND TO ALL APPLICABLE CODES AND REGULATIONS.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED BY AN INDIVIDUAL FULLY LICENSED TO DESIGN SPRINKLER SYSTEMS AT THE PROJECT LOCATION AND IT SHALL BE INSTALLED BY A CONTRACTOR FULLY APPROVED BY THE STATE TO INSTALL SPRINKLER SYSTEMS.
3. CONTRACTOR SHALL SUBMIT HYDRAULICALLY DESIGNED SYSTEM AND SUBMIT SHOP DRAWINGS TO THE A/E AND ANY APPLICABLE GOVERNMENTAL AGENCY FOR APPROVAL. CONTRACTOR SHALL OBTAIN ALL PERMITS AND FEES REQUIRED.
4. ROUTING OF PIPING SHALL BE DETERMINED BY CONTRACTOR AND SHALL BE COORDINATED WITH ALL OTHER TRADES TO HAVE MINIMAL INTERFERENCE WITH DUCT ROUTING, PIPE ROUTING, ETC. SYSTEM SHALL MEET SEISMIC ZONE REQUIREMENTS.
5. EXPOSED SPRINKLER HEADS IN FINISHED AREAS SHALL BE FULLY RECESSED WITH COVER PLATE TO MATCH THE CEILING.
6. LOCATE SPRINKLER HEADS IN CENTER OF TILES WHERE POSSIBLE. SPRINKLER SYSTEM SHALL INCLUDE PIPE RISER, SIAMESE CONNECTIONS AND ALL PERTINENT FIRE PROTECTION SYSTEM NEEDS FOR A FULLY FUNCTIONAL SYSTEM. PROVIDE PIPING MAINS SIZED FOR 100% COVERAGE.
7. WET SYSTEM SHALL BE EVERYWHERE EXCEPT IN UNCONDITIONED AND UNINSULATED AREAS. THESE AREAS ARE TO BE DRY TYPE.
8. FIRE PROTECTION CONTRACTOR SHALL COORDINATE THE SIZING AND INSTALLATION OF THE FIRE PUMP AND AIR COMPRESSOR.
9. COORDINATE WITH ALL OTHER TRADES FOR SEAMLESS CONSTRUCTION.

PLUMBING FIXTURE SCHEDULE

TAG	SERVES	DESIGN BASE		REMARKS
		MAKE	MODEL	
WC/ WC-HC	PUBLIC	AMERICAN STANDARD	3351.101	AFWALL ELONGATED ADA COMPLIANT WALL MOUNTED WATER CLOSET,NARROW BACK TO BACK WALL CARRIER REQUIERED. PROVIDE ELONGATED HEAVY DUTY OPEN FRONT TOILET SEAT.
		AMERICAN STANDARD	6065.121.002	EXPOSED 1.28 GPF 1 1/2"TOP SPUD SENSOR OPERATED FLUSH VALVE. DC POWER. 1" INLET
LAV/ LAV-HC	PUBLIC	KOHLER	K-2210	CAXTON 19" OVAL UNDERMOUNT BASIN. 4" FAUCET HOLES WHITE 20"X17"X8"
		CHICAGO FAUCET	116.966AB.1	E-TRONIC TOUCHLESS BATTERY POWERED FAUCET. PROVIDE MIXING TEE. ADA COMPLIENT. PROVIDE DRAIN AND FULL P-TRAP
UR/UR-HC	PUBLIC	AMERICAN STANDARD	6063051.002	EXPOSED SENSOR OPERATED FLUSH VALVE. 3/4" SPUD FACOTRY INSTALLED LITHIUM BATTERY.
		TOTO	UT104E	.5GPF COMMERCIAL WASHOUT URINAL 3/4" TOP SPUD 2" OUTLET FLANGE.
WH	WALL HYDRANT	J.R.SMITH	5609QT	NON-FREEZE, 1/4-TURN, W/VACUUM BREAKER, 3/4" HOSE CONNECTION INCLUDE STEM LOCK PACKAGE WITH KEYS
DWH-1	RESTROOM LAVS	A.O. SMITH	ENLB-30	34" WATER HEATER. 43 GAL FIRST HR RECOVERY DUEL 4500W ELEMENTS .93 UEF
DWH-2	KITCHEN	A.O. SMITH	GPVT-50	50 GAL POWER VENT NATURAL GAS WATER HEAER LOW NOX .79UEF 97 GAL FIRST HR RATING.
DS	BAR	JOHN BOOS	PBF-4SM2-6LF-X	HEAVY DUTY SPLASH MOUNT 6" FAUCET
		JOHN BOOS	UBDS-1812-X	UNDER BAR DUMP SINK FREE STANDING STAINLESS STEEL
UHS	BAR	JOHN BOOS	PBF-4SM2-3GLF-X	HEAVY DUTY FAUCET SPLSH MOUNT
		JOHN BOOS	UBHS-1812-X	UNDER BAR HAND SIN FREE STANDING STAINLESS STEEL.
PS	KITCHEN	JOHN BOOS	PBF-4DM-5GLF	HEAVY DUTY DECK MOUNT 5" GOOSE NECK FAUCET
		JOHN BOOS	EPT8R5-3048GSK-R	PREP WORK TABLE WITH SINK ADJUSTABLE LEGS
HS	KITCHEN	JOHN BOOS	PBHS-W-1410-P	STAINLESS STEEL WALL MOUNT HAND SINK WITH DECKMOUNT FAUCET. PROVIDE ALL HARDWARE FOR TRAP AND DRAIN.
BS	BAR	JOHN BOOS	PBF-4SM2-10LF-X	SPLASH MOUNT 10" SWING SPOUT, 4" CENTERS
		JOHN BOOS	UBS3-1860-2D12-X	3 BOWL UNDER BAR SINK WITH FAUCETS AND L/R DRAIN BOARDS 72"X21"X33"H. INCLUDE ALL HARDWARE TO PIPE TO FLOOR SINK.
3- COMP	KITCHEN	T&S	B-0133-ADF12-B	12" ADJUSTABLE CENTER WALL MOUNT FAUCET WITH PRE RINSE SPRAYER
		JOHN BOOS	3B16204-2D18-X	STAINLESS STEEL 3 COMPARTMENT SINK WITH LEFT AND RIGHT DRAIN BOARDS. 87"X25"X44"H
GT	KITCHEN	WATTS	GP-25	25 GPM ON FLOOR GREASE TRAP WITH 50LB GREASE CAPACITY 3" INLET/OUTLET
FS	BAR	SIOUX CHIEF	861-2PZ	SQUARE PVC FLOOR SINK WITH STAINLESS STEEL STRAINER 2" CONNECTION.
MS	GYM	FIAT	MSB3624	36"X24"X10" MOP SRVICE BASIN. INCLUDE SPLASH GURADS AND MOP HANGER.
RPBFP	PUBLIC	ZURN	975XL3	1 1/2" REDUCED PRESSURE BACK FLOW PREVENTOR, INCLUDE VALVES AND ALL HARDWARE FOR FUNCTIONAL SYSTEM. LOW LEAD BRONZE.
FD-1	FLOOR DRAIN	JR SMITH	2320	MEDIUM DUTY FLOOR DRAIN WITH ADJUSTABLE TOP, SPECIFY NICKLE BRONZE FINISH. 3" DRAIN
FD-2	FLOOR DRAIN	SIOUX CHIEF	860-64I	HEAVY DUTY FLOOR DRAIN WITH ADJUSTABLE TOP, SPECIFY NICKLE BRONZE FINISH. 4" DRAIN

NOTE: PROVIDE ENGINEER WITH ALL EQUALS CUT SHEETS PRIOR TO ORDERING FOR REVIEW.

REVISIONS

NO.	DATE
2	10-25-23

CERTIFIED BY: BPB
DRAWN BY
CHECKED BY: BPB

BENJAMIN PAUL BOYT · REGISTERED · No. 10911190 · STATE OF INDIANA · PROFESSIONAL ENGINEER

Sanders and Associates, Inc.
500 SOUTH 7TH STREET
TERRE HAUTE, INDIANA 47807
PHONE (812) 232-5256

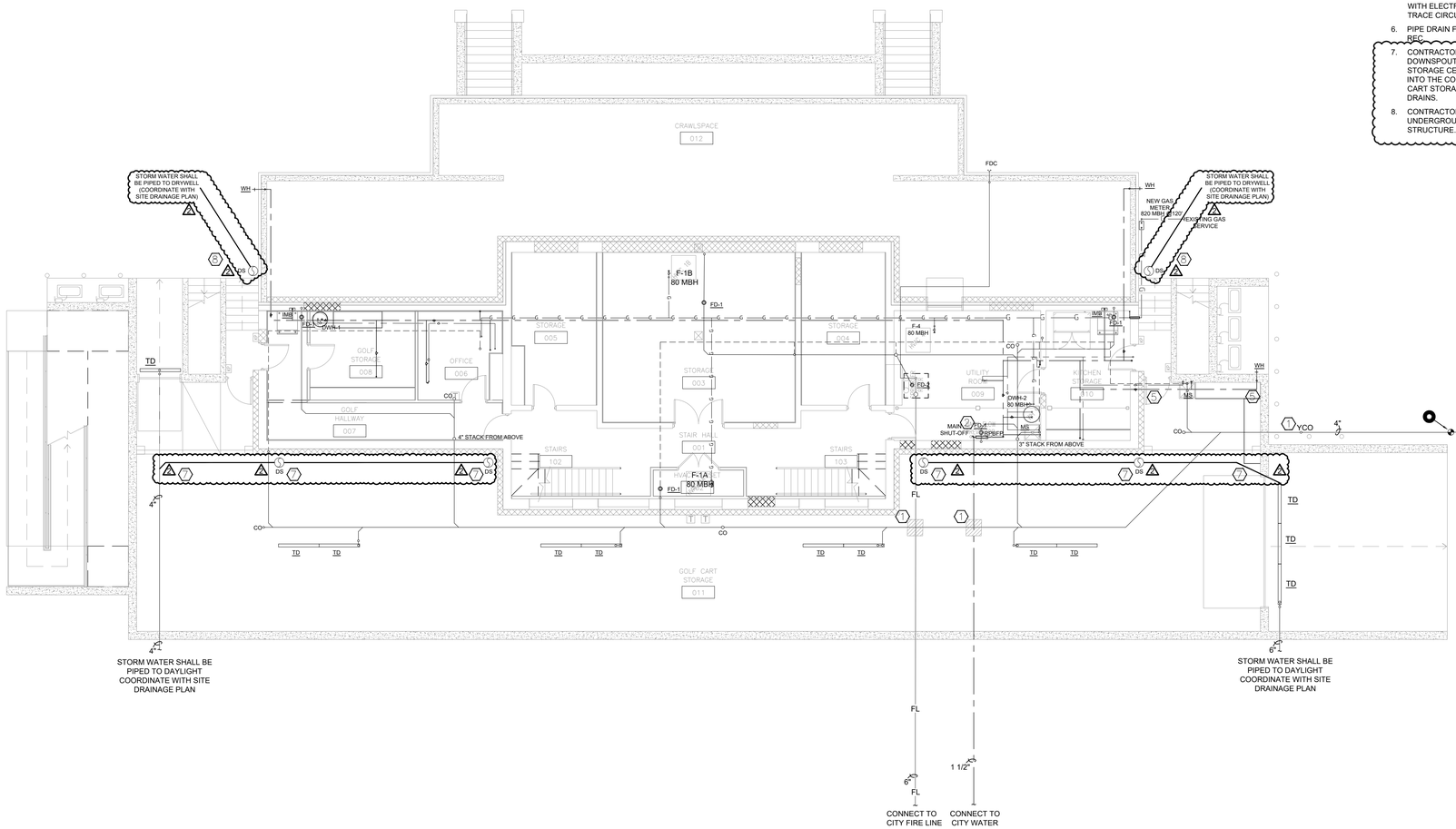
PROJECT
REA PARK CLUBHOUSE RENOVATION

BOYT ENGINEERING
400 N. MARKET ST.
MARION, IL 62959
618-964-9418
Benjamin P. Boyt
Sole Proprietor

JOB NUMBER: 2214
DATE: 09/07/23
SHEET TITLE: PLUMBING PLAN
SHEET: P0.1

KEYNOTES

1. COORDINATE CROSSING OF UNDERGROUND DRAINAGE PIPING, NEW FIRE RISER AND BUILDING WATER SUPPLY THIS LOCATION.
2. MAIN WATER CONNECTION, MAIN WATER SHUT OFF AND RPBFP.
3. GAS PIPING CONTINUES UP INTO ATTIC SPACE FOR FURNACES AND OUT TO ROOF FOR MUA UNIT.
4. COORDINATE RAIN WATER RUN OFF WITH SITE DRAINAGE PLAN.
5. HEAT TRACE AND INSULATE ALL EXPOSED PIPING IN CART STORAGE AREA. COORDINATE ELECTRICAL CONNECTION WITH ELECTRICAL CONTRACTOR. USE HEAT TRACE CIRCUITS ON M PANEL, M33 & M34.
6. PIPE DRAIN FROM GLASS WASHER TO OPEN RFC.
7. CONTRACTOR SHALL SLEEVE/BOOT DOWNSPOUT DRAINS THROUGH THE CART STORAGE CEILING, CONTINUE VERTICALLY INTO THE CONCRETE SLAB FLOOR OF THE CART STORAGE, THEN TIE INTO THE TRENCH DRAINS.
8. CONTRACTOR SHALL PIPE DOWNSPOUT UNDERGROUND TO NEW DRYWELL STRUCTURE.



BASEMENT PLUMBING PLAN

SCALE 1/8" = 1'-0"

NORTH

REVISIONS	
NO.	DATE
2	10-25-23

CERTIFIED BY
BPB

DRAWN BY
MWH

CHECKED BY
BPB

BENJAMIN PAUL BOYT REGISTERED No. 10911190 STATE OF INDIANA PROFESSIONAL ENGINEER

Sanders and Associates, inc.
520 SOUTH 7TH STREET
TERRE HAUTE, INDIANA 47807
PHONE (812) 232-5256

PROJECT
REA PARK CLUBHOUSE RENOVATION

JOB NUMBER
2214

DATE
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SHEET TITLE
PLUMBING PLAN

SHEET
P1.1

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SECTION 11400
FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes food service equipment indicated on Drawings and schedules.
B. Owner-Furnished Equipment: Where indicated, Owner will furnish equipment items.
C. Related Sections include the following:
   1. Division 5 Section "Metal Fabrications" for equipment supports.
   2. Division 6 Section "Interior Architectural Woodwork" for wood casework and plastic-laminate substrates.
   3. Refer to Division 15 Sections for supply and exhaust fans; exhaust ductwork; service roughing-ins; drain traps; atmospheric vents; valves, pipes, and fittings; fire-extinguishing systems; and other materials required to complete food service equipment installation.
   4. Refer to Division 16 Sections for connections to fire alarm systems, wiring, disconnects, and other electrical materials required to complete food service equipment installation.

1.3 DEFINITIONS

A. Terminology Standard: Refer to NSF 2, "Food Equipment" or other applicable NSF standards for definitions of food service equipment and installation terms not otherwise defined in this Section or in other referenced standards.

1.4 SUBMITTALS

A. Product Data: For each type of food service equipment indicated. Include manufacturer's model number and accessories and requirements for access and maintenance clearances, water and drainage, power or fuel, and service-connections including roughing-in dimensions.
B. Shop Drawings: For food service equipment not manufactured as standard production and catalog items by manufacturers. Include plans, elevations, sections, roughing-in dimensions, fabrication details, service requirements, and attachments to other work.
   1. Wiring Diagrams: Details of wiring for power, signal, and control systems and differentiating between manufacturer-installed and field-installed wiring.
   2. Piping Diagrams: Details of piping systems and differentiating between manufacturer-installed and field□installed piping.
C. Coordination Drawings: For locations of food service equipment and service utilities. Key equipment with item numbers and descriptions indicated in Contract Documents.

Include plans and elevations of equipment, access- and maintenance-clearance requirements, details of concrete or masonry bases and floor depressions, and service-utility characteristics.

D. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for exposed products with color finishes.
E. Samples for Verification: Of each type of exposed finish required, minimum 4-inch-(100-mm-) square or 6-inch- (150-mm-) long sections of linear shapes and of same thickness and material indicated for work. Where finishes involve normal color and texture variations, include Sample sets showing the full range of variations expected.
F. Product Certificates: Signed by manufacturers of refrigeration systems or their authorized agents certifying that systems furnished comply with requirements and will maintain operating temperatures indicated in the areas or equipment that they will serve.
G. Maintenance Data: Operation, maintenance, and parts data for food service equipment to include in the maintenance manuals specified in Division 1. Include a product schedule as follows:
    1. Product Schedule: For each food service equipment item, include item number and description indicated in Contract Documents, manufacturer's name and model number, and authorized service agencies' addresses and telephone numbers.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer to perform work of this Section who has specialized in installing food service equipment, who has completed installations similar in design and extent to that indicated for this Project, and who has a record of successful in-service performance.
B. Manufacturer Qualifications: Engage a firm experienced in manufacturing food service equipment similar to that indicated for this Project and with a record of successful in-service performance.
C. Source Limitations: Obtain each type of food service equipment through one source from a single manufacturer.
D. Product Options: Drawings indicate food service equipment based on the specific products indicated. Other manufacturers' equipment with equal size and performance characteristics may be considered. Refer to Division 1 Section "Substitutions."
E. Regulatory Requirements: Comply with the following National Fire Protection Association (NFPA) codes:
    1. NFPA 17, "Dry Chemical Extinguishing Systems."
    2. NFPA 17A, "Wet Chemical Extinguishing Systems."
    3. NFPA 54, "National Fuel Gas Code."
    4. NFPA 70, "National Electrical Code."
    5. NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations."
F. Listing and Labeling: Provide electrically operated equipment or components specified in this Section that are listed and labeled.

1. The Terms "Listed" and "Labeled": As defined in the National Electrical Code, Article 100.
2. Listing and Labeling Agency Qualifications: A "Nationally Recognized Testing Laboratory" (NRTL) as defined in OSHA Regulation 1910.7.

G. AGA Certification: Provide gas-burning appliances certified by the American Gas Association (AGA).
H. ASME Compliance: Fabricate and label steam-generating and closed steam-heating equipment to comply with ASME Boiler and Pressure Vessel Code.ASHRAE Compliance: Provide mechanical refrigeration systems complying with the American Society of Heating, Refrigerating and Air-Conditioning Engineers' ASHRAE 15, "Safety Code for Mechanical Refrigeration."
I. NSF Standards: Comply with applicable NSF International (NSF) standards and criteria and provide NSF Certification Mark on each equipment item, unless otherwise indicated.
J. ANSI Standards: Comply with applicable ANSI standards for electric-powered and gas-burning appliances; for piping to compressed-gas cylinders; and for plumbing fittings, including vacuum breakers and air gaps, to prevent siphonage in water piping.
K. SMACNA Standard: Where applicable, fabricate food service equipment to comply with the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) "Kitchen Equipment Fabrication Guidelines," unless otherwise indicated.
L. Seismic Restraints: Provide seismic restraints for food service equipment according to the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) "Kitchen Equipment Fabrication Guidelines," appendix 1, "Guidelines for Seismic Restraints of Kitchen Equipment," unless otherwise indicated.
M. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings."
N. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings." Review methods and procedures related to food service equipment including, but not limited to, the following:
    1. Review access requirements for equipment delivery.
    2. Review equipment storage and security requirements.
    3. Inspect and discuss the condition of substrate and other preparatory work performed by other trades.
    4. Review structural loading limitations.
    5. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver food service equipment as factory-assembled units with protective crating and covering.
B. Store food service equipment in original protective crating and covering and in a dry location.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify dimensions of food service equipment installation areas by field measurements before equipment fabrication and indicate measurements on Shop Drawings and Coordination Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
   1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish required dimensions and proceed with fabricating equipment without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.8 COORDINATION

A. Coordinate equipment layout and installation with other work, including light fixtures, HVAC equipment, and fire□suppression system components.
B. Coordinate location and requirements of service-utility connections. Coordinate size, location, and requirements of concrete bases, positive slopes to drains, floor depressions, and insulated floors. Concrete, reinforcement, and formwork requirements are specified in Division 3 Section "Cast-in-Place Concrete."
C. Coordinate installation of roof curbs, equipment supports, and roof penetrations. These items are specified in Division 7 Section "Roof Accessories."

1.9 WARRANTY

A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
B. Refrigeration Compressor Warranty: Submit a written warranty signed by manufacturer agreeing to repair or replace compressors that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:
   1. Breakage.
   2. Faulty operation.
   C. Warranty Period: 5 years from date of Substantial Completion.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Stainless-Steel Sheet, Strip, Plate, and Flat Bar: ASTM A 666, Type 304, stretcher leveled, and in finish specified in "Stainless-Steel Finishes" Article.
B. Stainless-Steel Tube: ASTM A 554, Grade MT-304, and in finish specified in "Stainless-Steel Finishes" Article.
C. Zinc-Coated Steel Sheet: ASTM A 653, G115 (ASTM A 653M, Z350) coating designation; commercial quality; cold rolled; stretcher leveled; and chemically treated.

D. Zinc-Coated Steel Shapes: ASTM A 36 (ASTM A 36M), zinc-coated according to ASTM A 123 requirements.
E. Plastic Laminate: Complying with NEMA LD 3 and NSF 35 requirements; NSF certified for end-use application indicated; 0.050 inch (1.27 mm) thick for horizontal and vertical surfaces and 0.042 inch (1.07 mm) thick for post-formed surfaces; smooth texture; and easily cleanable.
    1. Color: As selected by Architect from manufacturer's full range of colors.
F. Plywood and Lumber: Provide plywood and lumber as specified in Division 6 Section "Interior Architectural Woodwork."
G. Sealant: ASTM C 920; Type S, Grade NS, Class 25, Use NT. Provide elastomeric sealant NSF certified for end-use application indicated. Provide sealant that, when cured and washed, meets requirements of Food and Drug Administration's 21 CFR, Section 177.2600 for use in areas that come in contact with food.
    1. Color: As selected by Architect from manufacturer's full range of colors.
    2. Backer Rod: Closed-cell polyethylene, in diameter larger than joint width.
H. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated surfaces), Type I (transparent), Class 1 (clear), Quality q3 (glazing select). Provide products complying with ANSI Z97.1, manufactured by horizontal (roller-hearth) process, and 6 mm thick, unless otherwise indicated. Provide exposed safety edges, if any, seamed before tempering.
I. Plastic: Except for plastic laminate, provide plastic materials and components complying with NSF 51.
J. Sound Dampening: NSF-certified, nonabsorbent, hard-drying, sound-deadening coating. Provide coating compounded for permanent adhesion to metal in 1/8-inch (3-mm) thickness that does not chip, flake, or blister.
K. Gaskets: NSF certified for end-use application indicated; of resilient rubber, neoprene, or PVC that is nontoxic, stable, odorless, nonabsorbent, and unaffected by exposure to foods and cleaning compounds.

2.2 ACCESSORIES

A. Cabinet Hardware: Provide NSF-certified, stainless-steel hardware for equipment items as indicated.
B. Casters: NSF-certified, standard-duty, stainless-steel, swivel stem casters with 5-inch-(125-mm-) diameter wheels, polyurethane tires with 1-inch (25-mm) tread width, and 200-lb (90-kg) load capacity per caster. Provide brakes on 2 casters per unit.

2.3 FABRICATION, GENERAL

A. Fabricate food service equipment according to NSF 2 requirements. Factory assemble equipment to greatest extent possible.
B. Plastic-Laminate and Wood Casework: Fabricate according to requirements specified in Division 6 Section "Interior Architectural Woodwork."

C. Welding: Use welding rod of same composition as metal being welded. Use methods that minimize distortion and develop strength and corrosion resistance of base metal. Provide ductile welds free of mechanical imperfections such as gas holes, pits, or cracks.
   1. Welded Butt Joints: Provide full-penetration welds for full-joint length. Make joints flat, continuous, and homogenous with sheet metal without relying on straps under seams, filling in with solder, or spot welding.
   2. Grind exposed welded joints flush with adjoining material and polish to match adjoining surfaces.
   3. Where fasteners are welded to underside of equipment, finish reverse side of weld smooth and undepressed.
   4. Coat unexposed stainless-steel welded joints with suitable metallic-based paint to prevent corrosion.
   5. After zinc-coated steel is welded, clean welds and abraded areas and apply SSPC-Paint 20, high-zinc-dust content, galvanizing repair paint to comply with ASTM A 780.
D. Fabricate field-assembled equipment prepared for field-joining methods indicated. For metal butt joints, comply with referenced SMACNA standard, unless otherwise indicated.
E. Where stainless steel is joined to a dissimilar metal, use stainless-steel welding material or fastening devices.
F. Form metal with break bends that are not flaky, scaly, or cracked in appearance; where breaks mar uniform surface appearance of material, remove marks by grinding, polishing, and finishing.
G. Sheared Metal Edges: Finish free of burrs, fins, and irregular projections.
H. Provide surfaces in food zone, as defined in NSF 2, free from exposed fasteners. Cap exposed fastener threads, including those inside cabinets, with stainless-steel lock washers and stainless-steel cap (acorn) nuts.
I. Provide pipe slots on equipment with turned-up edges and sized to accommodate service and utility lines and mechanical connections.
J. Provide enclosures, including panels, housings, and skirts, to conceal service lines, operating components, and mechanical and electrical devices including those inside cabinets, unless otherwise indicated.
K. Seismic Restraints: Fabricate to comply with referenced SMACNA standard, unless otherwise indicated.

2.4 STAINLESS-STEEL EQUIPMENT

A. Edges and Backsplashes: Provide equipment edges and backsplashes indicated complying with referenced SMACNA standard, unless otherwise indicated.
B. Apply sound dampening to underside of metal work surfaces, including sinks and similar units. Provide coating with smooth surface and hold coating 1 inch (25 mm) back from open edges for cleaning.
C. Tables: Fabricate with reinforced tops, legs, and reinforced undershelves or cross bracing to comply with referenced SMACNA standard, unless otherwise indicated, and as follows:

1. Tops: Minimum 0.0781-inch- (1.984-mm-) thick stainless steel, unless otherwise indicated.
2. Legs: 1-5/8 inch (41.3 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel with stainless□steel gusset and adjustable insert bullet-type feet with minimum adjustment of 1 inch (25 mm) up or down without exposing threads, unless otherwise indicated.
3. Undershelves: Minimum 0.625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.
4. Top and Undershelf Reinforcement: Provide minimum 0.0781-inch- (1.984-mm-) thick, stainless-steel reinforcing, unless otherwise indicated.
5. Cross Bracing: 1-1/4 inch (31.75 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.

D. Sinks: Fabricate of minimum 0.0781-inch- (1.984-mm-) thick stainless steel with fully welded, 1-piece construction. Construct 2 sides and bottom of sink compartment from 1 stainless-steel sheet with ends welded integral and without overlapping joints or open spaces between compartments. Provide double-wall partitions between compartments with 1/2-inch- (13-mm-) radius rounded tops that are welded integral with sink body. Cove horizontal, vertical, and interior corners with 3/4-inch (19-mm) radius. Pitch and crease sinks to waste for drainage without pooling. Seat wastes in die-stamped depressions without solder, rivets, or welding.
   1. Wastes: 2-inch (50-mm) nickel-plated bronze, rotary-handle waste assembly with stainless-steel strainer plate and nickel-plated brass, connected overflow.
   2. Drainboards: Minimum 0.0781-inch- (1.984-mm-) thick stainless steel, pitched to sink at 1/8 inch/12 inches (3 mm/300 mm) of length. Reinforce drainboards with minimum 0.0781-inch- (1.984-mm-) thick stainless steel, unless otherwise indicated.
   3. Legs: 1-5/8 inch (41.3 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel with stainless□steel gusset welded to 0.1094-inch- (2.779-mm-) thick, stainless-steel support plate. Provide adjustable insert bullet-type feet with minimum adjustment of 1 inch (25 mm) up or down without exposing threads, unless otherwise indicated.
   4. Drainboard Braces: 1 inch (25 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.
   5. Cross Bracing: 1-1/4 inch (31.75 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.

E. Wall Shelves and Overshelves: Fabricate to comply with referenced SMACNA standard, unless otherwise indicated, and with minimum 0.0625-inch- (1.588-mm-) thick, stainless-steel shelf tops.

F. Drawers: Provide lift-out type, 1-piece, die-stamped drawer pan fabricated from 0.050-inch- (1.27-mm-) thick stainless steel with inside corners radiused. Support drawer pan with 0.0625-inch- (1.588-mm-) thick, stainless□steel channel frame welded to drawer front. Provide 1-inch- (25-mm) thick, double-wall front fabricated from 0.0625-inch- (1.588-mm-) thick stainless steel and with integral recessed pull. Fill void in drawer front with semirigid fiberglass sound dampening. Mount drawers on NSF-certified, full-

extension, stainless-steel drawer slides that have minimum 100-lb (45-kg) load capacity per pair, ball-bearing rollers, and positive stop. Mount drawer slides for self-closing on drawer housing as indicated.

2.5 EXHAUST HOOD FABRICATION

A. General: Fabricate hoods indicated from minimum 0.050-inch- (1.27-mm-) thick stainless steel, unless otherwise indicated. Comply with NFPA 96 and requirements of authorities having jurisdiction.
   1. Refer to Division 15 Sections for duct, fan, damper, and fire-extinguishing system requirements.
B. Grease Removal: Provide removable, stainless-steel, baffle-type grease filters with spring-loaded fastening. Provide minimum 0.0781-inch- (1.984-mm-) thick, stainless-steel filter frame and removable collection basins or troughs.
C. Light Fixtures: Provide NSF-certified fixtures with lamps, vapor-tight sealed lenses, and wiring in stainless-steel conduit on hood exterior.
D. Exhaust-Duct Collars: Minimum 0.0625-inch- (1.588-mm-) thick stainless steel.

2.6 STAINLESS-STEEL FINISHES

A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
   1. Remove or blend tool and die marks and stretch lines into finish.
   2. Grind and polish surfaces to produce uniform, directional textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
B. Concealed Surfaces: No. 2B finish (bright, cold-rolled, unpolished finish).
C. Exposed Surfaces: No. 4 finish (bright, directional polish).
D. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
E. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipment.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances, service-utility connections, and other conditions affecting installation and performance of food service equipment. Do not proceed with installation until unsatisfactory conditions have been corrected.
B. Examine roughing-in for piping, mechanical, and electrical systems to verify actual locations of connections before installation.

3.2 INSTALLATION, GENERAL

A. Install food service equipment level and plumb, according to manufacturer's written instructions, original design, and referenced standards.
B. Complete equipment field assembly, where required, using methods indicated.
    1. Provide closed butt and contact joints that do not require a filler.
    2. Grind field welds on stainless-steel equipment smooth, and polish to match adjacent finish. Comply with welding requirements in "Fabrication, General" Article.
C. Install equipment with access and maintenance clearances according to manufacturer's written instructions and requirements of authorities having jurisdiction.
D. Provide cutouts in equipment, neatly formed, where required to run service lines through equipment to make final connections.
E. Except for mobile and adjustable-leg equipment, securely anchor and attach items and accessories to walls, floors, or bases with stainless-steel fasteners, unless otherwise indicated.
F. Install cabinets and similar equipment on concrete or masonry bases in a bed of sealant.
G. Install hoods to comply with NFPA 96 requirements and to remain free from vibration when operating.
H. Install seismic restraints according to referenced SMACNA standard.
I. Install trim strips and similar items requiring fasteners in a bed of sealant. Fasten with stainless-steel fasteners at 48 inches (1200 mm) o.c. maximum.
J. Install sealant in joints between equipment and abutting surfaces with continuous joint backing, unless otherwise indicated. Provide airtight, watertight, vermin-proof, sanitary joints.
K. Existing Equipment: Remove and reinstall existing equipment as per installation instructions ready for final connections by Division 15 and 16.

3.3 PROTECTING

A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure food service equipment is without damage or deterioration at the time of Substantial Completion.

3.4 COMMISSIONING

A. Startup Services: Engage factory-authorized service representatives to perform startup services and to demonstrate and train Owner's maintenance personnel as specified below.
    1. Coordinate food service equipment startup with service-utility testing, balancing, and adjustments. Do not operate steam lines before they have been cleaned and sanitized.
    2. Remove protective coverings and clean and sanitize equipment, both inside and out, and re-lamp equipment with integral lighting. Where applicable, comply with manufacturer's written cleaning instructions.
    3. Test each equipment item for proper operation. Repair or replace equipment that is defective in operation, including units that operate below required capacity or that operate with excessive noise or vibration.

4. Test refrigeration equipment's ability to maintain specified operating temperature under heavy-use conditions. Repair or replace equipment that does not maintain specified operating temperature.
5. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
6. Test motors and rotating equipment for proper rotation and lubricate moving parts according to manufacturer's written instructions.
7. Test water, drain, gas, steam, oil, refrigerant, and liquid-carrying components for leaks. Repair or replace leaking components.
8. Train Owner's maintenance personnel on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance for each food service equipment item.
9. Review data in the operation and maintenance manuals. Refer to Division 1 Section "Contract Closeout."
10. Review data in the operation and maintenance manuals. Refer to Division 1 Section "Operation and Maintenance Data."

END OF SECTION

micro air inc.

6320 La Pas Trail, Indianapolis, IN 46268 * Phone: (317) 293-1533 * lab@microair.com * www.microair.com

May 9, 2023

Sycamore Environmental
Dave Ellis
113 Woodridge
Terre Haute, IN 47803

Polarized Light Microscopy (PLM) Bulk Sample Results

Project Name:	Rea Park Club House	Location:	Terre Haute, IN
Project Number:	N/A	Date Received:	May 4, 2023

Enclosed please find the results of samples analyzed by the Micro Air, Inc. laboratory.

Samples were analyzed by 40 CFR Part 763 Appendix E to Subpart E - Interim Method for the Determination of Asbestos in Bulk Insulation Samples using Polarized Light Microscopy (PLM) with Dispersion Staining. Where appropriate, analytical procedures outlined in the EPA Method/600/R-93/116, Method for the Determination of Asbestos in Bulk Building Materials (July 1993) may also be used during analysis. All samples may be heated to release fibrous material.

Samples are considered asbestos-containing material (ACM), as defined by the EPA, when asbestos is found in greater than 1% of the sample. Sample percentages are calculated using comparative visual estimation (CVES). Asbestos regulations and EPA methods state that distinct layers must be analyzed and reported separately. If composite analysis is requested and performed on multi-layered samples, the sample is considered ACM if any quantity of asbestos is found. This report should not be used to imply product or service endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Disclaimer: PLM results of non-friable organic bound (NOB) materials, such as floor tiles and roofing materials, can be inconclusive due to analytical difficulties in standard bulk sample analysis techniques. If desired, results can be confirmed with transmission electron microscopy (TEM) to ensure that asbestos has not been missed during PLM analysis.

This report may not be reproduced, except in full, without written approval from Micro Air, Inc. These results only relate to the items tested and are only as accurate as the sampling information submitted by the customer (e.g. air volumes). Samples are received in good condition unless otherwise noted.

If this report has been forwarded, please contact Sycamore Enviromental with any questions regarding these results.

Analyzed By:

Darren A. Parsons

Authorized By:

Betsie L McAfee

Betsie L. McAfee
Technical Manager

Client: Sycamore Environmental
Report Date: 5/9/2023
Lab Number: 167693

Project Number: N/A
Project Name: Rea Park Club House

Polarized Light Microscopy (PLM) Bulk Sample Results

Location: Terre Haute, IN

Sample ID	Client Sample ID	Date Collected	Date Analyzed	Sample Description	Asbestos Present?	Color	Homogeneous	Sample Composition	
								Asbestos	Non-Asbestos
001	RP-01A	2/17/2023	5/9/2023	Plaster; S. by Kt Door	NO	W	YES	N/A	Cellulose <1% Binder 100%
002	RP-01B	2/1/170	5/9/2023	Plaster; NW Stair Landing	NO	W	YES	N/A	Cellulose <1% Binder 100%
003	RP-01C	2/17/2023	5/9/2023	Plaster; Basement by NW Stairs	NO	W	YES	N/A	Cellulose <1% Binder 100%

Color: B-Black, BL-Blue, BR-Brown, CL-Clear, GL-Gold, G-Gray, GR-Green, O-Orange, P-Pink, PR-Purple, R-Red, S-Silver, T-Tan, W-White, Y-Yellow

Betsie L. McAfee has reviewed this final report and has taken overall technical responsibility for the data.

ENVision Laboratories, Inc.
1439 Sadlier Circle West Drive
Indianapolis, IN 46239
Tel: 317.351.8632
Fax: 317.351.8639
www.envisionlaboratories.com

Mr. David Ellis
Sycamore Environmental
113 Woodridge
Terre Haute, IN 47803

March 24, 2023

ENVision Project Number: 2023-542
Client Project Name: Rea Park

Dear Mr. Ellis,

Please find the attached analytical report for the samples received March 21, 2023. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. ENVision Laboratories looks forward to working with you on your next project.

Yours Sincerely,

Cheryl A. Crum

Director of Project Management
ENVision Laboratories, Inc.

ENVision Laboratories, Inc.
1439 Sadlier Circle West Drive
Indianapolis, IN 46239
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Fax: 317.351.8639
www.envisionlaboratories.com

Client Name: SYCAMORE ENVIRONMENTAL

Project ID: REA PARK

Client Project Manager: DAVID ELLIS

ENVision Project Number: 2023-542

Analytical Method: EPA 6010B
Prep Method: EPA 3050B

Client Sample ID: RPP-1A
Envision Sample Number: 23-4688
Sample Matrix: solid

Sample Collection Date/Time: 2/17/23
Sample Received Date/Time: 3/21/23 11:00

Compounds	Sample Results (mg/kg)	Reporting Limit (mg/kg)	Flags
Lead	**2,680**	2	

Analysis Date/Time: 3-24-23/13:48
Analyst Initials: gjd
Date Digested: 3/23/2023
Initial Sample Weight: 1.0 g
Final Volume: 50 mL
Analytical Batch: 032423icp

All results reported on wet weight basis.

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Client Name: SYCAMORE ENVIRONMENTAL

Project ID: REA PARK

Client Project Manager: DAVID ELLIS

ENVision Project Number: 2023-542

Analytical Method: EPA 6010B
Prep Method: EPA 3050B

Client Sample ID: RPP-2A
Envision Sample Number: 23-4689
Sample Matrix: solid

Sample Collection Date/Time: 2/17/23
Sample Received Date/Time: 3/21/23 11:00

Compounds	Sample Results (mg/kg)	Reporting Limit (mg/kg)	Flags
Lead	**14**	2	

Analysis Date/Time: 3-24-23/13:50
Analyst Initials: gjd
Date Digested: 3/23/2023
Initial Sample Weight: 1.0 g
Final Volume: 50 mL
Analytical Batch: 032423icp

All results reported on wet weight basis.

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Client Name: SYCAMORE ENVIRONMENTAL

Project ID: REA PARK

Client Project Manager: DAVID ELLIS

ENVision Project Number: 2023-542

Analytical Method: EPA 6010B
Prep Method: EPA 3050B

Client Sample ID: RPP-3A
Envision Sample Number: 23-4690
Sample Matrix: solid

Sample Collection Date/Time: 2/17/23
Sample Received Date/Time: 3/21/23 11:00

Compounds	Sample Results (mg/kg)	Reporting Limit (mg/kg)	Flags
Lead	**2,670**	2	

Analysis Date/Time: 3-24-23/13:52
Analyst Initials: gjd
Date Digested: 3/23/2023
Initial Sample Weight: 1.0 g
Final Volume: 50 mL
Analytical Batch: 032423icp

All results reported on wet weight basis.

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Client Name: SYCAMORE ENVIRONMENTAL

Project ID: REA PARK

Client Project Manager: DAVID ELLIS

ENVision Project Number: 2023-542

Analytical Method: EPA 6010B
Prep Method: EPA 3050B

Client Sample ID: RPP-3B
Envision Sample Number: 23-4691
Sample Matrix: solid

Sample Collection Date/Time: 2/17/23
Sample Received Date/Time: 3/21/23 11:00

Compounds	Sample Results (mg/kg)	Reporting Limit (mg/kg)	Flags
Lead	**2,770**	2	

Analysis Date/Time: 3-24-23/13:55
Analyst Initials: gjd
Date Digested: 3/23/2023
Initial Sample Weight: 1.0 g
Final Volume: 50 mL
Analytical Batch: 032423icp

All results reported on wet weight basis.

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Client Name: SYCAMORE ENVIRONMENTAL

Project ID: REA PARK

Client Project Manager: DAVID ELLIS

ENVision Project Number: 2023-542

Analytical Method: EPA 6010B
Prep Method: EPA 3050B

Client Sample ID: RPP-4A
Envision Sample Number: 23-4692
Sample Matrix: solid

Sample Collection Date/Time: 2/17/23
Sample Received Date/Time: 3/21/23 11:00

Compounds	Sample Results (mg/kg)	Reporting Limit (mg/kg)	Flags
Lead	**2,920**	2	

Analysis Date/Time: 3-24-23/13:57
Analyst Initials: gjd
Date Digested: 3/23/2023
Initial Sample Weight: 1.0 g
Final Volume: 50 mL
Analytical Batch: 032423icp

All results reported on wet weight basis.

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EPA 6010B Metals Quality Control Data

ENVision Batch Number: 032423icp

Method Blank (MB):	MB Results (mg/kg)	Rep Lim (mg/kg)	Flag
Lead	< 2	2	
Analysis Date/Time:	3-24-23/13:39		
Analyst Initials:	gjd		

Laboratory Control Standard:	LCS Results(ppm)	LCS Conc(ppm)	% Rec	Flag
Lead	0.47	0.50	94%	
Analysis Date/Time:	3-24-23/13:36			
Analyst Initials:	gjd			

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Flag Number	Comments

ENVision Project #: 2023 - 542 Page ___ of ___

CHAIN OF CUSTODY RECORD

ENVision Laboratories, Inc. [1439 Sadlier Circle West Drive, Indianapolis, IN 46239] Phone: 317-351-8632 Fax: 317-351-8639

Client: Sycamore Environmental	Invoice Address: Same
Report Address: 113 Woodridge **Terre Haute, IN 47803**	Project Name: Rea Park
Report To: David Ellis	Lab contact: David Ellis
Phone: 812-878-9133	Sampler: David Ellis
e-mail: ellis.dave4@protonmail.com	P.O. #:
Desired TAT: (Please Circle one) **1-2 day (3-6 day) Std (7 bus. Days)**	QA/QC Required: (Circle One) **Level II Level III Level IV**

REQUESTED PARAMETERS

Sample Integrity:
Cooler Temp: Arch °C
Samples on ice? Yes (No)
Samples Intact? (Yes) No
Custody Seal? Yes (No)
ENVision provided bottles? Yes (No)
Vials free of head space? Yes No (N/A)
pH Checked? Yes No (N/A)
Method 5035 collection used? YES (NO)
5035 samples received within 48rhs of collection? Yes No

Sample ID	Coll. Date	Coll. Time	Comp (C) Grab (G)	Matrix	Lead (EPA 6010B)						HCl	HNO3	H2SO4	NaOH	Other	None	ENVision Sample ID
RPP-1A	2-17-23		C	Paint													23-4688
-2A	"		C	chips													4689
-3A			C	"													4690
-3B			C														4691
-4A			C														4692

COMMENTS: Call For CC Info.

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Paul Ellis	3/16/23		Hamilton	3/21/23	11:00