September 27, 2024

VIA EMAIL
(52) Page(s) Inclusive

To: Prospective Bidders

Re: Village of Hoffman Estates
Village Green Concessions
Architect's Project Number: 24-002
Addendum #3

This addendum forms part of the bidding and contract documents and modifies the original bidding documents dated September 05, 2024. Acknowledge receipt of this addendum on the bid form. Failure to do so may disqualify the bidder.

Revise **DRAWINGS** as follows:

1. Drawing C1.02:
   a. On detail 1/C1.02, **REVISE** "PROP. BLDG." area to read 4,095 sq. ft.
   b. **ADD** to Legend – double line (graphic) denotes proposed expansion joints.

2. Drawing C1.03 – **REPLACE** with attached C1.03 to revise as follows:
   a. "PROP. BLDG" area to read 4,095 sq. ft.
   b. Water valve added to 1.5" service line.

3. Drawing C1.04:
   a. On detail 1/C1.04, **REVISE** "PROP. BLDG." area to read 4,095 sq. ft.

4. Drawing L1.00 - On Cumulative Plant Schedule, **ADD** under Perennials:
   a. Code: CANE
   b. Quantity: 20
   c. Size: #01 (gal)
   d. Scientific Name: Calamintha nepeta ss. Nepeta
   e. Common Name: Lesser Catmint

5. Drawing FS.1 – **REPLACE** with attached FS.1 to revise as follows:
   a. Add Dry Storage shelving as bubbled.
   b. Food Service equipment schedule, "Lot" revise to "11".
   c. On plan, remove "EXST" text on Item 40.
   d. Revise item 8.1 to be a Quantity of 1.

6. Drawing FS.2 – **REVISE** Mechanical Schedule as follows:
   a. Item number 26, Remarks: "Provide gas hose."
   b. Item number 34, Remarks: "Provide heat shields for the left side to protect the controls from the char, as well as installation kits."

7. Drawing FS.4:
    a. **ADD** note to Drawing FS.4 that reads "GC to provide schedule 40 PVC under slab for all beer lines per detail. Beer lines to be installed by KEC."
    b. **REPLACE** Underground Conduit detail with attached ASK-03.

8. Drawing S1.00 – **REPLACE** with attached S1.00 to revise as follows:
    a. Revise elevation of interior footing at grid C-3.2 to -1'-0".
    b. Under Sheet Notes, add note 15.

9. Drawing E1.00 - **REPLACE** with attached E1.00 to add as follows:
    a. Note #15 to Power Sheet Notes – refer to attached replacement sheet.

10. Drawing E2.00 – **REPLACE** with attached E2.00 to revise as follows:
    a. Replace one F1 fixture type in Dry Storage 102 with F1E fixture type.

11. Drawing E4.00 – **REPLACE** with attached E4.00 to revise as follows:
    a. Panel 'B' circuits under exhaust hood to include spaces for shunt trip breakers.
    b. Move indicated POS circuits from Panel 'B' to Panel 'C'.

12. Drawing E5.01:
    a. **ADD** attached sheet to set.

CLARIFICATION TO THE DOCUMENTS as follows:

1. QUESTION: Given the amount of construction that has occurred in this development area over the years, are there any concerns about this site having been used to stockpile spoils from other buildings? Should we assume that no undercut and import of stone will be required to achieve adequate subgrade for the building foundations?
    ANSWER: Any unsuitable soil encountered would be dealt with by allowance. We've attached the project's Soil Report for your reference.

2. QUESTION: Please advise where epoxy coated reinforcement is required on this project, if applicable.
    ANSWER: We will not have any need for epoxy coated reinforcement on this project.

3. QUESTION: The site furnishings quantities provided on L1.00 do not appear to match the quantities shown on the following page L1.10. I am struggling to reconcile the quantities of these various products and also the keynotes on L1.10. KN#6 and KN#7 only point to some of the locations? But there are five additional unkeynoted tables there?
   ANSWER: The five tables shown to the west that are not tagged are existing tables already on site. The existing tables should be moved to this location once the site is ready for the furnishings.

   There are five new tables total:
   - 4 are the Olivia Table Set, which comes with chairs
   - 1 with three chairs is the Courtyard table, which is ADA
   - There are five umbrellas and bases total

4. QUESTION: Please confirm if Dish Machine Item #40 is existing or new? FS.1 plan view calls out "EXST" but specification section 111400-21 does not state existing.
   ANSWER: Item # 40, Dish machine is new and should be included in the KEC's proposal as per the written specifications – refer to attached replacement FS.1 sheet.

5. QUESTION: Please confirm count on Food Service equipment Item #1. The specs and schedule call out 11 shelving units. The drawings only show 9 units.
   ANSWER: There is a quantity of eleven (11) shelving units – refer to attached replacement FS.1 sheet.

6. QUESTION: Please confirm FSE item #8.1 should only have a quantity of one (1). The FSE schedule on sheet FS.1 calls out for two (2).
   ANSWER: Item # 8.1 Evaporator Coil there should only be a quantity of one (1) – refer to attached replacement FS.1 sheet.

7. QUESTION: FSE items 36, 51 and 53 are called out in Spec Section 111400 as "by owner". Please confirm that these items are installed by owner as well.
   ANSWER: These items are to be provided and installed by the owner.

8. QUESTION: Who is responsible for providing and installing the underground beer lines from the power packs to the beer heads? This is on the FS.4 drawing. The drawings don't state who is responsible for this work.
   ANSWER: General Contractor is to provide the beer line chases for the beer systems - refer to attached replacement detail ASK-03 for sizes of conduit pipe. The KEC is to provide the labor and material for the beer lines and pull them through the chases.

9. QUESTION: Sheet C1.03 has a note that states: Existing 6" water main, contractor to verify depth of cover and replace to meet minimum burry of 6". Please provide an allowance for this work item as there is no way to estimate the cost needed.
   ANSWER: The note has been removed since the proposed finished grade will be similar to the existing surface elevation.

10. QUESTION: Can the extent of FRP please be clarified? Finish schedule state FRP on all wall in the kitchen. Does the FRP go on the freezer and walk in beer cooler's walls?
    ANSWER: Refer to attached ASK-02 for extent of FRP.

11. QUESTION: The schedule shows NTP September of 2025, is there potential to start the project earlier or are there issues that will prevent this?
    ANSWER: No, construction cannot start earlier than September 2025 due to the Village and Vendor's scheduled summer events and the Village would like to start construction after summer events are over.

12. QUESTION: Per the note on ES.00, we are provide new primary raceway from the existing transformer location to the new transformer location. Has the Village confirmed with ComEd that they will remove the existing cable and re-feed new cable? ComEd may want to abandon the existing feeder line and pull new from the service drop. Should we include intercepting the existing raceway per plans or assume new primary raceway to the service drop?
    ANSWER: ComEd will run primaries from existing transformer to new location under the contingency allowance. GC to modify all existing secondaries to remain and connect to new transformer location. For bidding purposes, the existing transformer feeds existing concessions to be removed and existing meter to northwest to remain.

13. QUESTION: The CT cabinet is not shown on E3.00. Are we to assume relocation of the existing CT cabinet?
    ANSWER: There is no CT cabinet required for this project. The service is 200A and is existing. The existing meter for this service is located on the other side of the park.

14. QUESTION: Are we to provide new breakers at the existing panel for EUH-1, EUH-2, MUA-1 and KEF-1 or are the existing breakers adequate for the new equipment?
    ANSWER: All new breakers are to be provided for this project. The only existing breaker that should be in the panel is for the existing bollards that were installed in a previous phase.

15. QUESTION: NEC requires GFCI protection at every piece of kitchen equipment. Plans and specs do not indicate this requirement, nor do they direct the electrical contractor on how to provide GFCI protection. Should GFCI protection be provided at the receptacles or at the breakers?
    ANSWER: They can be provided at the panel or at the device. Added note #15 to attached replacement Sheet E1.00 above.

16. QUESTION: Shunt trip is required at kitchen hoods per NEC. Please ask the electrical engineer to provide a detail or specification for shunt trip and GFCI protection at the hoods.
    ANSWER: Added a shunt space in Panel 'B' for all equipment under the hood. Added a new sheet – E5.01 with the shunt trip/hood detail.

17. QUESTION: Panelboard specification 26 24 16 calls for flush mounted panelboards. Please note that the existing reused panelboard will not be able to be installed flush in the CMU wall. Should the gypsum board partition where the new panelboards are show to be mounted be increased in thickness to allow for flush installation of panelboards?
    ANSWER: The panelboards should be surface mount.

18. QUESTION: Panelboard specification 26 24 16 calls for new panelboards to be from the same manufacturer as the existing panelboard. Lead times on new panelboards currently varies from 15-40 weeks depending on manufacturer. Is it acceptable to provide panelboards with shorter lead times that may be of an alternate manufacturer from the existing board?
    ANSWER: The preference is to use the same manufacturer as Panel 'A' for streamlined maintenance, however, if the two new panels need to be provided by a different manufacturer, it is acceptable if equal to specified panel boards.

19. QUESTION: Please verify all existing specs for MEP plan coordination
    ANSWER: Kitchen equipment contractor to verify existing MEP if awarded the project, with the end user.

20. QUESTION: Are the Foodservice MEP's Coordination Drawings expected to be drawn in CAD or Revit? Please advise
    ANSWER: CAD

21. QUESTION: Is BIM Coordination required?
    ANSWER: No

22. QUESTION: Is there a verified delivery (access into the building) plan? This is a ground Floor Level building however there are no door openings other than man doors which are 3'-0" x 7'-0" where the larger pieces of Foodservice Equipment will not fit. Please advise.
    ANSWER: Rear entrance door is 42". General Contractor to coordinate installation and delivery of all equipment to insure adequate access to the building is provided.

23. QUESTION: Foodservice Specifications Paragraph 2.2 Section A - Sound deadening has been added where possible. If bumpers are required on other pieces of equipment, tables, etc. Please advise.
    ANSWER: If bumpers are required, it would be listed on the individual item as an accessory.

24. QUESTION: Foodservice Specifications Paragraph 2.6 A Can you supply the duct plan for the hood package?
    ANSWER: The duct plan is not needed. Hood system already designed refer to drawings FS5-FS10.

25. QUESTION: Foodservice Specifications Paragraph 2.6 C asks us to provide any exposed duct. None is specified. Please verify if anything is needed here?
    ANSWER: No exposed ducts are required on this project. Kitchen equipment contractor not responsible.

26. QUESTION: Foodservice Specifications Paragraph 3.2 Section A requests corner guards. None are specified. Please advise
    ANSWER: No corner guards required.

27. QUESTION: Foodservice Item 16: 4 units specified, however 8 are indicted on the Foodservice Plan. Quoting per Foodservice Drawing. Verify that the substitute that is being quoted is acceptable as the specified model number is discontinued.
    ANSWER: The primary specification model number is for one (1) unit containing two (2) 12" x 20" hot food wells for a total of eight (8) hot wells for the project.

28. QUESTION: Foodservice Item 26 is missing the gas hose Specification. We are adding these unless otherwise informed.
    ANSWER: Refer to change in equipment schedule listed above.

29. QUESTION: Foodservice Item 33 : Heat shields for the left side to protect the controls from the char are needed as well as installation kits. We are adding to the prime's spec unless otherwise directed to exclude.
    ANSWER: Refer to change in equipment schedule above.

30. QUESTION: Foodservice Item 34: Specifications quantity is doubled. Quoted per drawing
    ANSWER: Quantity on the drawing and specifications is three (3) which is correct.

Sincerely,

TRIA ARCHITECTURE, INC.
Pei-San Ng, AIA, LEED AP
Architect III

PSN/ab

Attachments: Drawing C1.03, Dated September 26, 2024, (1) Page
Drawing FS.1, Dated September 26, 2024, (1) Page
Drawing S1.00, Dated September 25, 2024, (1) Page
Drawing E1.00, Dated September 26, 2024, (1) Page
Drawing E2.00, Dated September 26, 2024, (1) Page
Drawing E4.00, Dated September 26, 2024, (1) Page
Drawing E5.01, Dated September 26, 2024, (1) Page
Drawing ASK-02, Dated September 26, 2024, (1) Page
Drawing ASK-03, Dated September 26, 2024, (1) Page
Soil Boring Report, Dated April 30, 2024, (36) Pages

cc: Bryan Ackerlund, Village of Hoffman Estates
Dan O'Malley, Village of Hoffman Estates
Ronald McGrath, TRIA Architecture

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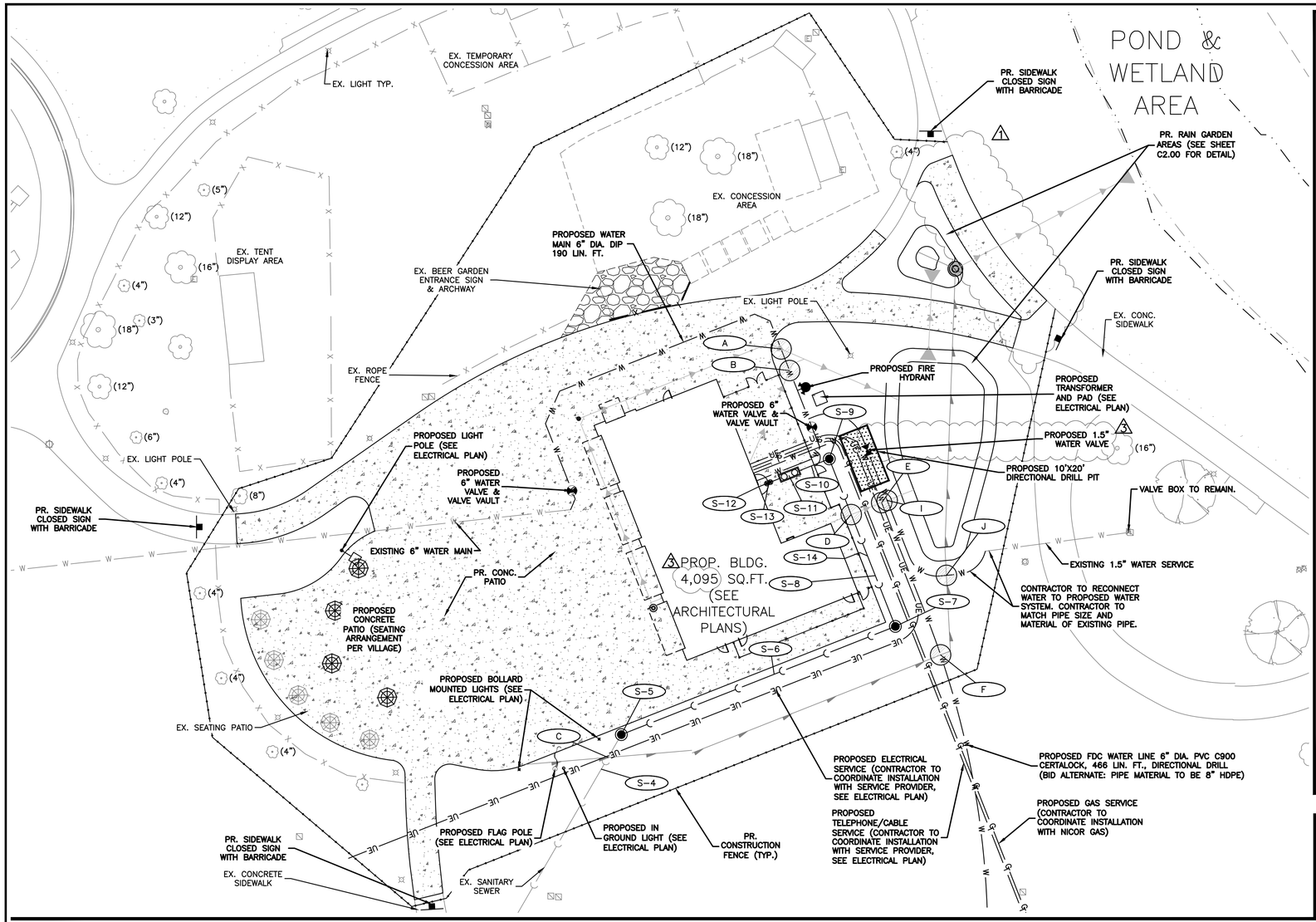


NOTES:

- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA. (SEE SHEETS C3.00–C3.02 FOR EROSION CONTROL MEASURES)
- CONTOURS AND SPOT GRADES SHOWN ARE FINISH GRADE ELEVATIONS. (SEE SHEETS C2.00–C2.00 FOR SITE GRADING)
- ALL EXISTING UTILITIES AND STORM SEWER TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE.
- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE REPAIRED, RECONNECTED OR CONNECTED TO THE NEAREST FIELD TILE.
- LAYDOWN/STAGING LOCATION TO BE DETERMINED BY CONTRACTOR AND OWNER.
- STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR AND OWNER.
- LOCATION OF CONSTRUCTION FENCING SHOWN IS APPROXIMATE. CONTRACTOR TO COORDINATE EXACT LOCATION OF CONSTRUCTION FENCING WITH OWNER IN THE FIELD. CONTRACTOR SHALL ADJUST THE FENCE AS NEEDED TO PROVIDE A WORK AREA AS INDICATED WHILE ALLOWING THE ADJACENT AREAS TO REMAIN OPEN THROUGHOUT CONSTRUCTION.
- THE CONSTRUCTION SITE SHALL BE SECURED WHENEVER CONTRACTOR IS NOT ON SITE.
- SEE DEMOLITIONS SHEET C1.01 FOR REMOVAL, RELOCATION AND ADJUSTMENTS.
- ELECTRICAL WORK WILL BE PERFORMED OUTSIDE OF THE CONSTRUCTION FENCE AREA SHOWN. CONTRACTOR SHALL PROTECT THOSE AREAS AS NEEDED WITH TEMPORARY CONSTRUCTION FENCE, DUPONT CONSTRUCTION FENCING #L60 OR L70.
- ONE WESTBOUND LANE OF TRAFFIC SHALL REMAIN OPEN ON PRAIRIE STONE PARKWAY. ANY LANE CLOSURE ON PRAIRIE STONE PARKWAY SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARD 701601. ROAD CONSTRUCTION AHEAD AND CONSTRUCTION ACCESS SIGNS SHALL BE PLACED ALONG PRAIRIE STONE PARKWAY. SIDEWALK CLOSURE SIGNS SHALL BE PLACED AS INDICATED ON THE PLANS AND IN ACCORDANCE WITH IDOT HIGHWAY STANDARD 701801. THIS WORK WILL BE PAID FOR PER LUMP SUM AS 'TRAFFIC CONTROL AND PROTECTION'.
- SEE LANDSCAPE ARCHITECTURE DRAWINGS (L SERIES) FOR SITE DESIGN, LAYOUT AND CONSTRUCTION DETAILS.
- SEE ELECTRICAL DRAWINGS (E SERIES) FOR ELECTRICAL DESIGN AND CONSTRUCTION DETAILS.
- CONTRACTOR TO COORDINATE INSTALLATION AND CONNECTION OF ELECTRIC, CABLE AND GAS SERVICES WITH SERVICE PROVIDERS.

S–# SANITARY SEWER TAGS

S–1 EX. SAN SWR MH, 4' DIA.
RIM = 855.28
INV = 832.93 NE/SW 15" DIP
INV = 833.53 S 6" PVC

S–2 EX. SAN SWR, 15" DIP
@ 0.28%

S–3 EX. SAN SWR DROP MH, 4' DIA.
RIM = 857.61
INV = 833.61 NE/W 15" DIP
INV = 835.96 NE 6" DIP
INV = 845.31 NE 6" DIP

S–4 EX. SAN SWR, 8" PVC
CONTRACTOR TO VERIFY DIAMETER AND PIPE MATERIAL
@ 0.47%

S–5 SAN SWR MH, 4' DIA.
RIM = 854.65
INV = 846.61 SW 8"
INV = 846.71 NE 6"
CONTRACTOR TO VERIFY EXIST. PIPE INVERT AND CONTACT ENGINEER IF THERE IS A DISCREPANCY

S–6 99 LIN FT SAN SWR, 6" PVC (SDR 26)
@ 1.04%

S–7 SAN SWR MH, 4' DIA.
RIM = 855.15
INV = 847.74 SW 6"
INV = 847.84 NW 6"

S–8 61 LIN FT SAN SWR, 6" PVC (SDR 26)
@ 1.04%

S–9 SAN SWR MH, 4' DIA.
RIM = 855.00
INV = 848.47 SE 6"
INV = 848.57 SW 4"

S–10 11 LIN FT SAN SWR, 4" PVC (C900)
@ 2.08%

S–11 GREASE TRAP (1,000 GAL.)
SEE BUILDING PLUMBING PLAN FOR DETAILS
RIM(S) = 855.26 SW, 855.21 NE
INV = 848.97 (INLET)
INV = 848.80 (OUTLET)

S–12 7 LIN FT SAN SWR, 4" PVC (C900)
@ 2.08%
INV @ BLDG = 849.12
(VERFIY W/ ARCH)

S–13 TWO-WAY CLEAN OUT (SEE DETAIL)
RIM = 855.35
INV = +/– 849.05

S–14 8 LIN FT SAN SWR, 4" PVC (SDR 26)
@ 2.08%
INV @ S–8 = 848.19
INV @ BLDG = 848.36
(VERFIY W/ ARCH)

WATER UTILITY NOTES:

- THE CONTRACTOR SHALL EXCAVATE DOWN TO THE TOP OF THE WATER MAIN / SERVICE WITHIN THE PROPOSED DEVELOPMENT AREA AND DETERMINE THE ELEVATION OF THE TOP OF THE PIPE. IF NECESSARY, THE CONTRACTOR SHALL REPLACE THE EXISTING 6" WATER LINE SO THAT IT WILL HAVE A MINIMUM OF SIX (6) FEET OF COVER FROM THE TOP OF THE PIPE TO THE PROPOSED FINISHED GRADE. IF NECESSARY, THE CONTRACTOR SHALL REPLACE THE EXISTING 1.5" WATER LINE SO THAT IT WILL HAVE A MINIMUM OF FIVE (5.5) FEET OF COVER FROM THE TOP OF THE PIPE TO THE PROPOSED FINISHED GRADE. IF IT IS DETERMINED LOWERING IS NOT REQUIRED THIS WORK WILL BE REMOVED FROM THE CONTRACT.

LEGEND:

- DENOTES PROPOSED CONSTRUCTION FENCING
- DENOTES EXISTING UTILITIES
- DENOTES PROPOSED UTILITIES
- DENOTES PROPOSED CONCRETE SIDEWALK/PATIO
- DENOTES MAINTAIN 18" VERTICAL SEPARATION PER IEPA'S REQUIREMENTS

1 DETAILED UTILITY PLAN
1"=20'-0"
0 10 20 40 60

A CONFLICT TAGS

A
- STORM SEWER TAG 7
- BOP = 849.53
- PROP. 6" WATER SERVICE
- TOP = 848.03
- VERT SEP = 1.50' MIN.
- LOWERING REQ'D
- STORM SEWER SHALL BE WATER MAIN QUALITY PIPE

B
- STORM SEWER TAG 15
- BOP = 849.86
- PROP. 6" WATER SERVICE
- TOP = 848.36
- VERT SEP = 1.50' MIN.
- LOWERING REQ'D
- STORM SEWER SHALL BE WATER MAIN QUALITY PIPE

C
- STORM SEWER TAG 14
- BOP = 852.94
- SANITARY SEWER TAG 4
- TOP = 847.26
- VERT SEP = 5.68'

D
- STORM SEWER TAG 16
- BOP = 851.04
- SANITARY SEWER TAG 8
- TOP = 848.78
- VERT SEP = 2.26'

E
- STORM SEWER TAG 16
- BOP = 850.10
- PROP. 6" WATER SERVICE
- TOP = 847.27
- VERT SEP = 2.83'

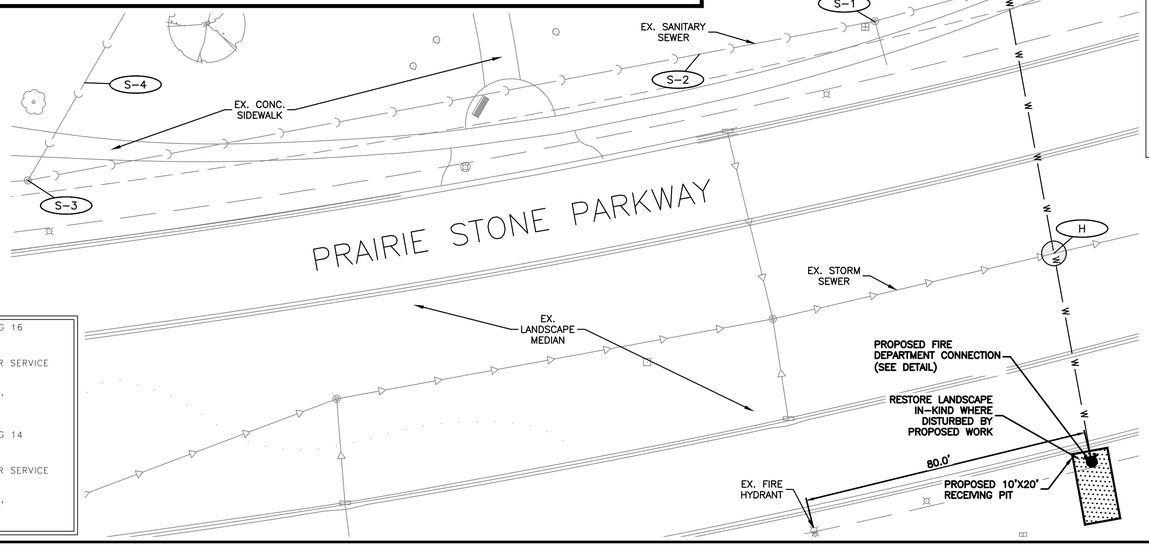
F
- STORM SEWER TAG 14
- BOP = 850.58
- PROP. 6" WATER SERVICE
- TOP = 845.78
- VERT SEP = 4.80'

G
- PROP. 6" WATER SERVICE
- BOP = 848.12
- EXIST. SANITARY SEWER
- TOP = 834.08
- VERT SEP = 14.04'

H
- EXIST. STORM SEWER
- BOP = 850.42
- PROP. 6" WATER SERVICE
- TOP = 848.92
- VERT SEP = 1.50' MIN.

I
- STORM SEWER TAG 16
- BOP = 849.93
- PROP. 1.5" WATER SERVICE
- TOP = 846.68
- VERT SEP = 3.25'

J
- STORM SEWER TAG 14
- BOP = 850.00
- PROP. 1.5" WATER SERVICE
- TOP = 845.20
- VERT SEP = 4.80'



IRRIGATION NOTES:

- ANY IRRIGATION LINES DISCONNECTED BY LAND DISTURBING ACTIVITIES SHALL BE RECONNECTED TO THE NEAREST IRRIGATION LINE.
- ANY IRRIGATION VALVES ENCOUNTERED DURING CONSTRUCTION SHALL REMAIN UNLESS OTHERWISE SPECIFIED BY THE VILLAGE.

DIRECTIONAL DRILL NOTES:

- SEE SHEET C1.04 FOR OVERALL PATH OF WATER DIRECTIONAL DRILL.

LANE CLOSURE NOTES:

- CONTRACTOR TO UTILIZE LANE CLOSURE METHODS AS REQUIRED FOR DIRECTIONAL DRILL OPERATIONS PER IDOT STANDARDS.
- SEE SHEET C5.02 FOR IDOT LANE CLOSURE DETAIL.

TRIA ARCHITECTURE

KITCHEN CONSULTANT: edge associates inc. food service design — (P) 855.962.4122

CIVIL CONSULTANT: HRGreen — (P) 815.385.1778

LANDSCAPE CONSULTANT: JSD — (P) 312.644.3379

STRUCTURAL CONSULTANT: Larson Engineering, Inc. — (P) 630.357.0940

VILLAGE OF HOFFMAN ESTATES
VILLAGE GREEN CONCESSIONS
5510 PRAIRIE STONE PARKWAY, HOFFMAN ESTATES, IL 60192

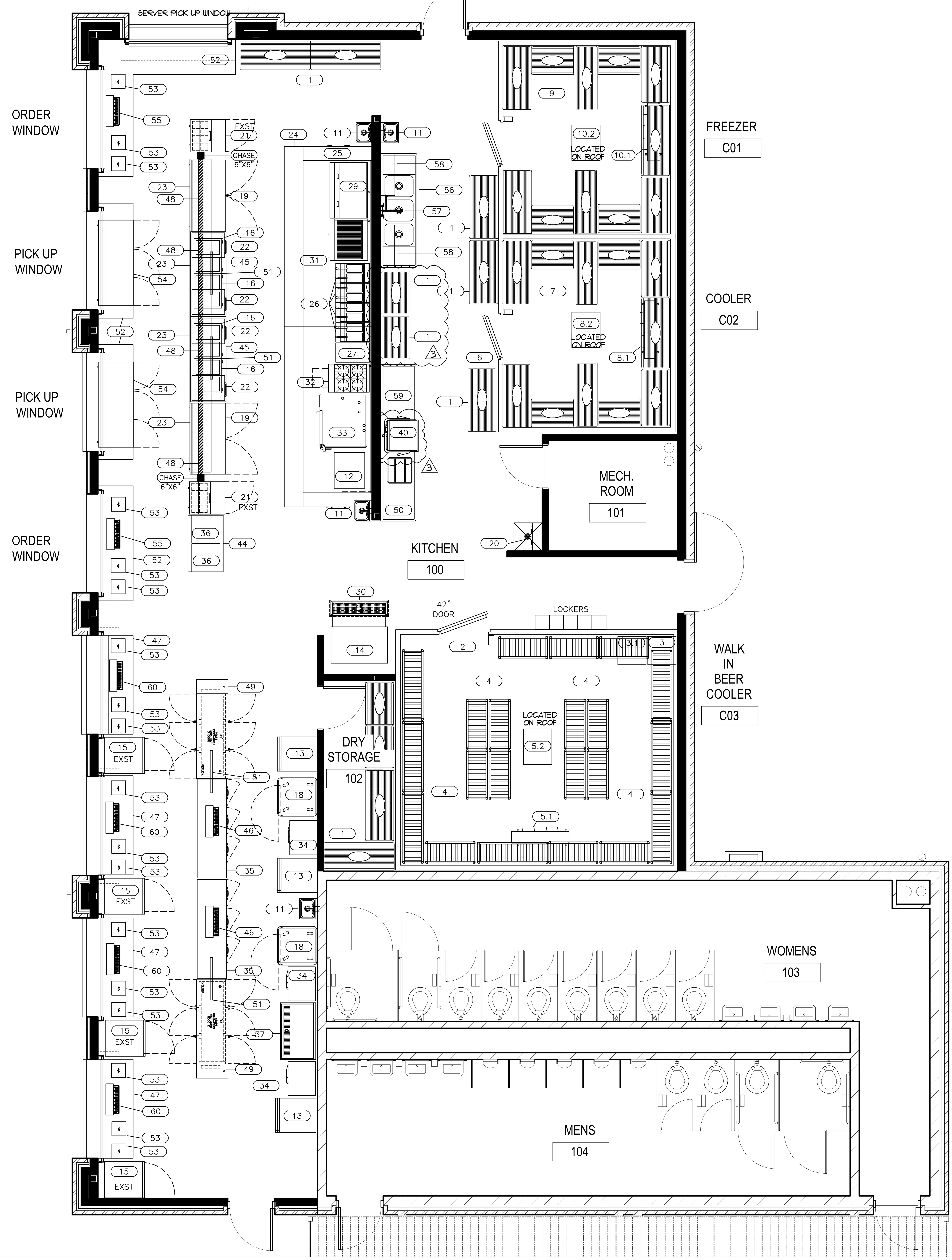
PROJECT NUMBER:	19132101
PROJECT MANAGER:	TMR
DRAWN BY:	ERN

REVISION	DATE
1	9/20/2024
2	9/23/2024
3	09/26/2024
ISSUED FOR BID & PERMIT:	09/05/2024

DETAILED UTILITY PLAN

NOT FOR CONSTRUCTION

C1.03



FOOD SERVICE EQUIPMENT

ITEM NUMBER	QUANTITY	ITEM DESCRIPTION
1	11	DRY STORAGE SHELVING
2	1	WALK IN BEER COOLER
3	1	GLYCOL POWER PACKS
3.1	1	GLYCOL POWER PACKS
4	LOT	KEG SHELVING
5.1	1	EVAPORATOR COIL - BEER COOLER
5.2	1	CONDENSING UNIT - VERIFY LOCATION
6	1	WALK IN COOLER / FREEZER
7	LOT	COOLER SHELVING
8.1	1	EVAPORATOR COILS - COOLER
8.2	1	CONDENSNG UNIT - VERIFY LOCATION
9	LOT	FREEZER SHELVING
10.1	1	EVAPORATOR COIL - FREEZER
10.2	1	CONDENSING UNIT - VERIFY LOCATION
11	4	HAND SINKS W/ SIDE SPLASHES
12	1	SMOKER, ELECTRIC
13	3	GLASS DOOR MERCHANDISERS - EXISTING
14	1	ICE MAKER W/ BIN
15	4	1 DOOR REFRIGERATOR - EXISTING
16	4	HOT FOOD WELLS - COUNTERTOP - 4 WELL
17	-	OPEN NUMBER
18	2	HEATED CABINETS - MOBILE
19	2	WORK TOP REFRIGERATORS
20	1/1	MOP SINK / CHEMICAL SHELF & MOP HANGER
21	2	REFRIGERATOR - SALAD TOP - EXISTING
22	4	HEATED DRAWERS
23	4	DOUBLE OVERSHELVES
24	1	EXHAUST HOOD
25	1	FIRE SUPPRESSION SYSTEM
26	4	FRYERS W/ FILTERS
27	1	DUMP STATION
28	-	OPEN NUMBER
29	1	GRIDDLE - 48" W/ STAND
30	1	FLOOR TROUGH
31	1	CHAR GRILL W/ STAND
32	1	4 BURNER RANGE W/ OVEN BASE
33	1	DOUBLE COMBI OVEN W/ FILTER
34	3	TRIPLE HEATED DRAWERS, MOBILE
35	2	3 DOOR COOLERS - KEG
36	2	CHURRO WARMERS
37	1	BEVERAGE COUNTER W/ TROUGH
38	-	OPEN NUMBER
39	-	OPEN NUMBER
40	1	DISHMACHINE W/ BOOSTER - VENTLESS
41	-	OPEN NUMBER
42	-	OPEN NUMBER
43	-	OPEN NUMBER
44	1	WORK TABLE
45	2	WORK TABLES
46	2	8 BEER HEADS W/ DRIP PANS
47	4	FRONT COUNTERS W/ LEDGE - S/S
48	4	HEAT LAMPS
49	2	3 DOOR PASS THRU U.C. COOLERS
50	1	SOILED DISHTABLE W/ PRE RINSE
51	4	MONITORS - BY OWNER
52	4	FRONT COUNTERS W/ LEDGE - S/S
53	18	POS SYSTEMS - BY OWNER
54	2	3 DOOR REFRIGERATORS. UNDERCOUNTER
55	2	8 BEER HEADS W/ DRIP PANS
56	1	3 COMPARTMENT SINK
57	1	PRE RINSE SPRAY & FAUCET
58	2	WALL SHELVES
59	1	CLEAN DISHTABLE
60	4	8 BEER HEADS W/ DRIP PAN-TWO TIER

TRIA ARCHITECTURE

edge associates inc. food service design — KITCHEN CONSULTANT: (P) 855.362.4422

JSD — LANDSCAPE CONSULTANT: (P) 312.644.3379

Larson Engineering, Inc. — STRUCTURAL CONSULTANT: (P) 630.357.0540

HRGreen — CIVIL CONSULTANT: (P) 800.728.7805

VILLAGE OF HOFFMAN ESTATES
VILLAGE GREEN CONCESSIONS
5510 PRAIRE STONE PARKWAY, HOFFMAN ESTATES, IL 60192

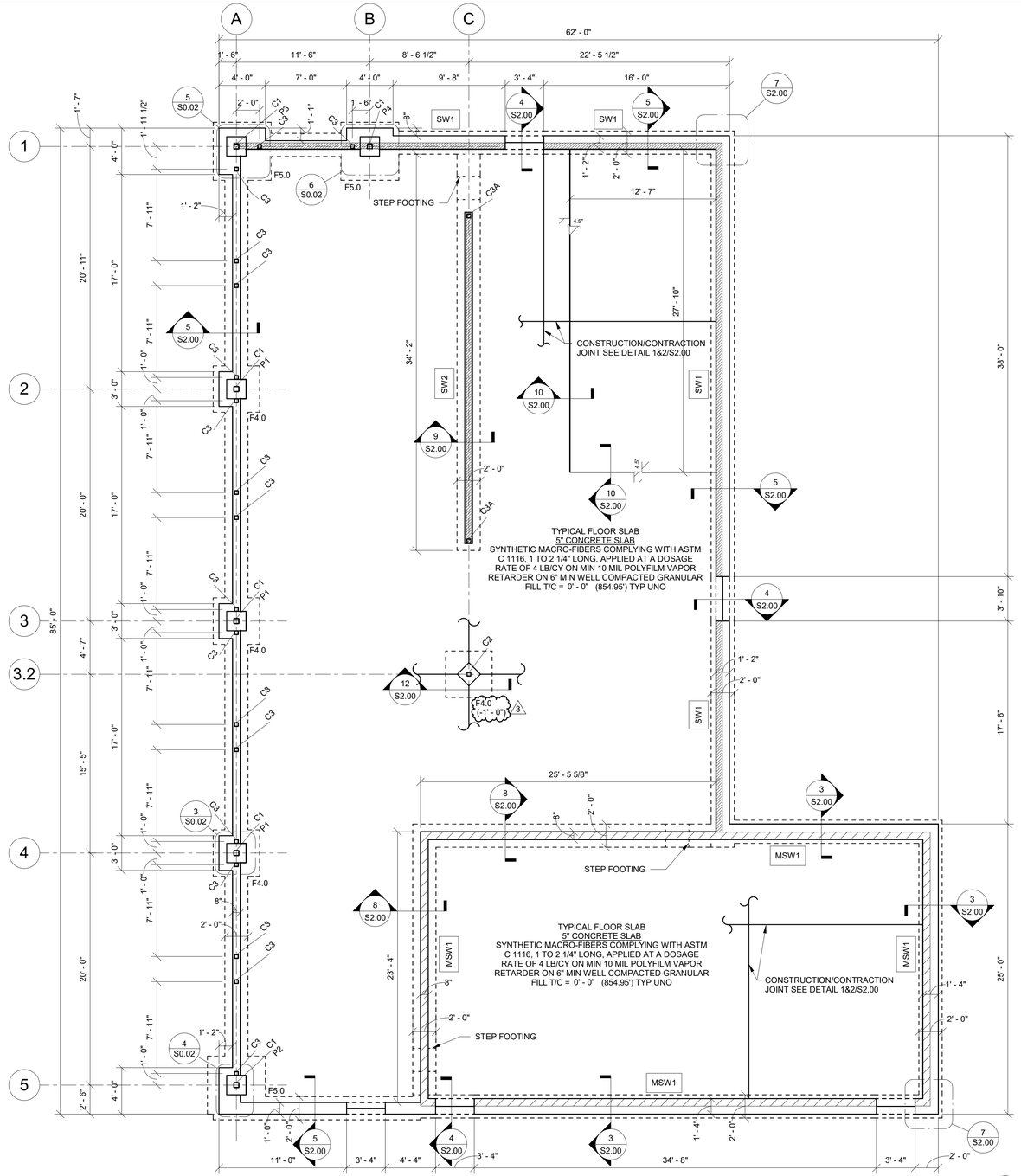
REVISION	DATE
3	09/26/2024

PROJECT NUMBER: 24-002
PROJECT MANAGER: PSN
DRAWN BY: EDGE

ISSUED FOR BID & PERMIT: 09/05/24

FOOD SERVICE EQUIPMENT PLAN

FS.1



1 S1.00 FOUNDATION PLAN
3/16" = 1'-0"

NORTH

SHEET NOTES:

1) SEE SHEET S0.00, S0.01 & S0.02 FOR GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
2) VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL, PLUMBING AND MECHANICAL DRAWINGS.
3) CX INDICATES COLUMN. SEE COLUMN SCHEDULE ON SHEET S0.02.
4) T/FOUNDATION WALL ELEVATION = 0'-0" UNLESS NOTED THUS [ ].
5) T/EXTERIOR FOOTING ELEVATION = -2'-6" UNLESS NOTED THUS ( ). T/INTERIOR FOOTING ELEVATION = -1'-0" UNLESS NOTED THUS ( ). 2
6) LOWER TOP OF FOOTING AND ADD CONCRETE PIER AS REQUIRED, AT LOCATION OF INTERIOR ROOF DRAINS OR WHERE FOOTING WILL INTERFERE WITH PLUMBING INSTALLATION. COORDINATE LOCATIONS AND ELEVATIONS WITH ARCHITECTURAL AND PLUMBING DRAWINGS.
7) PROVIDE THICKENED SLAB PER DETAIL 8 / S2.00 AT ALL INTERIOR NON-LOAD BEARING MASONRY WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR THESE LOCATIONS.
8) PROVIDE DETAIL 6 / S2.00 FOR UTILITY PIPES THROUGH THE FOUNDATION WALL. COORDINATE PIPE LOCATIONS WITH CIVIL, MECHANICAL, ELECTRICAL, PLUMBING AND MECHANICAL DRAWINGS AS WELL AS EXISTING CONDITIONS. NOTE THAT NOT ALL LOCATIONS ARE SHOWN.
9) PROVIDE DOWELS TO MATCH SIZE & SPACING OF VERTICAL MASONRY REINFORCEMENT INDICATED ON FRAMING PLANS.
10) PROVIDE 4" CONCRETE HOUSEKEEPING PAD WITH #4 @ 18" OC EACH WAY AT ALL MECHANICAL PLUMBING OR ELECTRICAL EQUIPMENT. PAD TO BE 6" LARGER THAN UNIT ON ALL SIDES. COORDINATE WITH ARCHITECT AND MECHANICAL AND ELECTRICAL EQUIPMENT CONTRACTOR.
11) COORDINATE FLOOR DRAIN LOCATIONS WITH PLUMBING DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE SLAB SLOPES IN TOLIET ROOMS AND JANITORS CLOSETS.
12) INDICATES LIGHT GAGE FRAMED & MASONRY SHEAR WALL RESEPCTIVELY. PROVIDE (2) #6 VERTICAL REINFORCEMENT AT EACH END OF SHEAR WALL AND ON EACH SIDE OF CONTROLS JOINTS. GROUT CELLS SOLID AT REINFORCEMENT AND PROVIDE DOWELS INTO CONCRETE FOUNDATION TO MATCH WALL REINFORCEMENT. SEE SHEAR WALL SCHEDULE ON S0.02.
13) TYPICAL MASONRY WALL REINFORCEMENT: PROVIDE #6 BARS AT 48" OC. PROVIDE (1) #6 BARS AT JAMBS OF OPENINGS LESS THAN 4'-0" WIDE AND (2) #6 BARS AT JAMBS OF OPENINGS 4'-0" WIDE UP TO 8'-0" WIDE. PROVIDE (2) #6 VERTICAL REINFORCEMENT AT END OF WALL AND ON EACH SIDE OF CONTROL JOINT. GROUT CELLS SOLID AT REINFORCEMENT AND PROVIDE DOWELS INTO CONCRETE FOUNDATION TO MATCH WALL REINFORCEMENT.
14) LT GA MTL STUD WALL SHALL BE 600S162-54 SPACED @ 24" OC TYP A STUD SHALL BE LOCATED DIRECTLY UNDER ANY LT GA JOIST BEARING POINT.
15) WITHIN THE EXCAVATION AREA OF THE FOUNDATIONS, ALL VEGETATION, TOPSOIL, PREVIOUSLY PLACED FILL AND UNSUITABLE SOILS SHALL BE REMOVED. ALL FOOTINGS SHALL BEAR ON VIRGIN SOIL OR PROPERLY PLACED AND COMPACTED ENGINEERED FILL. 3

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JSD

Larson Engineering, Inc.

VILLAGE OF HOFFMAN ESTATES

VILLAGE GREEN CONCESSIONS

5510 PRAIRIE STONE PARKWAY, HOFFMAN ESTATES, IL 60192

PROJECT NUMBER:	24-002
PROJECT MANAGER:	
DRAWN BY:	SWL
ISSUED FOR BID:	09/06/2024

REVISION	DATE
3	09/25/2024

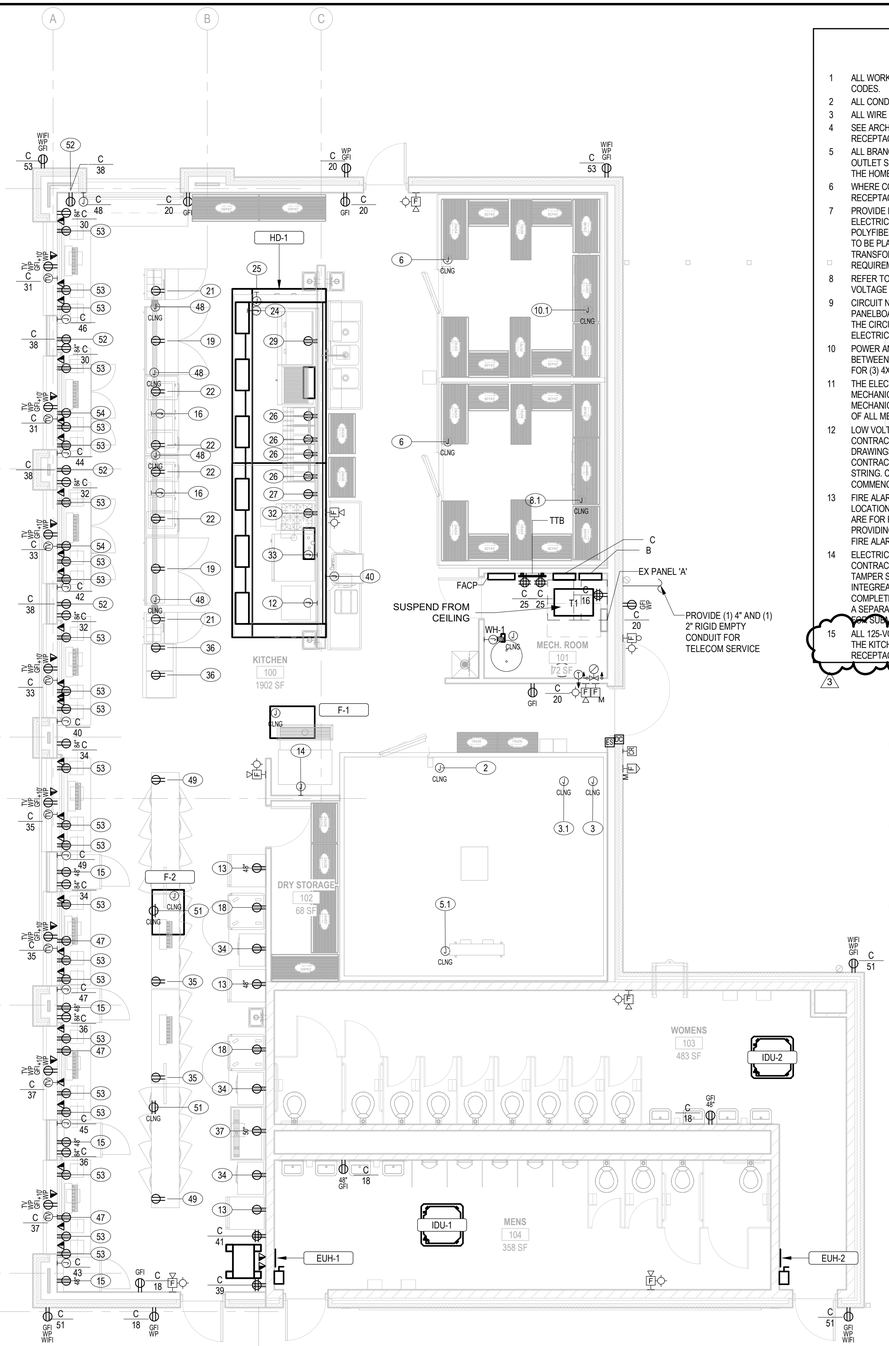
FOUNDATION PLAN

100% CD/IFB

S1.00

MCC EQUIPMENT CONNECTION SCHEDULE

TAG	DESCRIPTION	ROOM	Load HP	MCA	Load W	VOLT	PHASE	Panel	Circuit Number	CONDUIT & WIRE SIZE	MOCP	DISC. PROVIDED BY	Remarks
2	WALK-IN BEER COOLER LIGHTS			5.0 A	600 W	120 V	1	B	1	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
3	GLYCOL POWER PACKS			14.5 A	3016 W	208 V	1	B	3,5	3#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	NEMA 6-20P
3.1	GLYCOL POWER PACKS			9.5 A	1976 W	208 V	1	B	7,9	3#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	NEMA 6-20P
5.1	BEER COOLER EVAPORATOR			2.4 A	288 W	120 V	1	B	11	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
5.2	WALK-IN BEER COOLER CONDENSING UNIT			18.3 A		208 V	3	B	13,15		25.0 A	EC	J-BOX
6	WALK-IN COOLER LIGHTS & HEATER			15.0 A	1800 W	120 V	1	B	17	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
6	WALK-IN FREEZER LIGHTS & HEATER			15.0 A	1800 W	120 V	1	B	19	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
8.1	WALK-IN COOLER EVAPORATOR			2.4 A	288 W	120 V	1	B	21	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
8.2	WALK-IN COOLER CONDENSING UNIT			11.4 A		208 V	1	B	23,25		20.0 A	EC	J-BOX
10.1	WALK-IN FREEZER EVAPORATOR			2.4 A	288 W	120 V	1	B	27	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
10.2	WALK-IN FREEZER CONDENSING UNIT			17.0 A		208 V	1	B	29,31		20.0 A	EC	J-BOX
12	ELECTRIC SMOKER			57.0 A	11856 W	208 V	1	B	33,35	3#6CU, 1#10CU GND IN 3/4"C	60.0 A	EC	J-BOX
13	3 DOOR REFRIGERATOR UC			15.0 A	1800 W	120 V	1	B	2	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
13	GLASS DOOR MERCHANDISER			15.0 A	1800 W	120 V	1	B	41	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
13	GLASS DOOR MERCHANDISER			15.0 A	1800 W	120 V	1	B	39	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
14	ICE MAKER			20.0 A	4160 W	208 V	1	B	43,45	3#12CU, 1#12CU GND IN 3/4"C	30.0 A	EC	J-BOX
15	1 DOOR REFRIGERATOR			10.0 A	1200 W	120 V	1	B	47	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
15	1 DOOR REFRIGERATOR			10.0 A	1200 W	120 V	1	B	49	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
15	1 DOOR REFRIGERATOR			10.0 A	1200 W	120 V	1	B	51	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
15	1 DOOR REFRIGERATOR			10.0 A	1200 W	120 V	1	B	53	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
16	HOT FOOD WELLS			19.0 A	4000 W	120 V	1	B	55	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
16	HOT FOOD WELLS			19.0 A	4000 W	120 V	1	B	57	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
18	HEATED CABINETS (MOBILE)			11.3 A	1356 W	120 V	1	B	59	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
18	HEATED CABINETS (MOBILE)			11.3 A	1356 W	120 V	1	B	61	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
19	WORKTOP REFRIGERATOR			10.0 A	1200 W	120 V	1	B	63	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
19	WORKTOP REFRIGERATOR			10.0 A	1200 W	120 V	1	B	65	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
21	SALAD TOP REFRIGERATOR			15.0 A	1800 W	120 V	1	B	67	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
21	SALAD TOP REFRIGERATOR			15.0 A	1800 W	120 V	1	B	69	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
22	HEATED DRAWERS			3.8 A	450 W	120 V	1	B	71	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
22	HEATED DRAWERS			3.8 A	450 W	120 V	1	B	73	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
22	HEATED DRAWERS			3.8 A	450 W	120 V	1	B	75	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
22	HEATED DRAWERS			3.8 A	450 W	120 V	1	B	77	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
24	EXHAUST HOOD			15.0 A	1800 W	120 V	1	B	79	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
25	FIRE SUPPRESSION			15.0 A	1800 W	120 V	1	B	4	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
26	FRYER			15.0 A	1800 W	120 V	1	B	8	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
26	FRYER			15.0 A	1800 W	120 V	1	B	12	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
26	FRYER			15.0 A	1800 W	120 V	1	B	16	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
26	FRYER			15.0 A	1800 W	120 V	1	B	20	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
27	DUMP STATION			6.3 A	756 W	120 V	1	B	24	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
29	GRIDDLE			15.0 A	1800 W	120 V	1	B	28	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
32	4 BURNER RANGE W/OVEN BASE			15.0 A	1800 W	120 V	1	B	32	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
33	COMBI-OVEN			15.0 A	1800 W	120 V	1	B	36	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
34	DOUBLE HEATED DRAWERS			7.4 A	900 W	120 V	1	B	44	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
34	DOUBLE HEATED DRAWERS			7.4 A	900 W	120 V	1	B	42	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
34	DOUBLE HEATED DRAWERS			7.4 A	900 W	120 V	1	B	40	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
35	3 DOOR COOLER			10.0 A	1200 W	120 V	1	B	46	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
35	3 DOOR COOLER			10.0 A	1200 W	120 V	1	B	48	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
36	CHURRO WARMERS			10.0 A	1200 W	120 V	1	B	50	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
36	CHURRO WARMERS			10.0 A	1200 W	120 V	1	B	52	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
40	DISHMACHINE			46.0 A	16572 W	208 V	3	B	74,76,78	3#8CU, 1#10CU GND IN 3/4"C	50.0 A	EC	J-BOX
47	S/S WITH PASS THRU LEDGE			15.0 A	1800 W	120 V	1	B	66	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
47	S/S WITH PASS THRU LEDGE			15.0 A	1800 W	120 V	1	B	68	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
47	S/S WITH PASS THRU LEDGE			15.0 A	1800 W	120 V	1	B	70	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
48	HEAT LAMP			15.0 A	1800 W	120 V	1	B	54	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
48	HEAT LAMP			15.0 A	1800 W	120 V	1	B	56	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
48	HEAT LAMP			15.0 A	1800 W	120 V	1	B	58	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
48	HEAT LAMP			15.0 A	1800 W	120 V	1	B	60	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	J-BOX
49	4 DOOR PASS THRU UC COOLER			4.2 A	504 W	120 V	1	B	64	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
49	4 DOOR PASS THRU UC COOLER			4.2 A	504 W	120 V	1	B	62	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
51	MONITOR			5.0 A	600 W	120 V	1	B	72	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
51	MONITOR			5.0 A	600 W	120 V	1	B	72	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	55	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	57	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	59	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	61	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	63	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	52	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	54	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	56	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	58	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	60	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	62	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	64	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	7	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	5	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	3	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	1	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	9	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	11	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	2	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	4	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	6	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	8	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	10	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
53	POS			5.0 A	600 W	120 V	1	C	12	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
54	3 DOOR REFRIGERATOR UC			9.0 A	900 W	120 V	1	C	13	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	
54	3 DOOR REFRIGERATOR UC			9.0 A	900 W	120 V	1	C	15	2#12CU, 1#12CU GND IN 3/4"C	20.0 A	EC	



1 E1.00 ELECTRICAL POWER PLAN
3/16" = 1'-0"

POWER SHEET NOTES

1. ALL WORK MUST COMPLY WITH NEC, NFPA, LIFE SAFETY AND LOCAL APPLICABLE CODES.
2. ALL CONDUIT SHALL BE 1/2" EMT MINIMUM.
3. ALL WIRE SHALL BE MINIMUM OF #12 THHN COPPER.
4. SEE ARCHITECTURAL DRAWINGS/ELEVATIONS FOR EXACT LOCATIONS OF ALL RECEPTACLES AND DEVICES.
5. ALL BRANCH CIRCUIT CONDUCTORS FROM THE PANELBOARD TO THE FIRST OUTLET SHALL BE INCREASED TO THE NEXT LARGER SIZE WHERE THE LENGTH OF THE HOME RUN EXCEEDS 100'-0" ON 120V AND 208V CIRCUITS.
6. WHERE CONNECTED TO A 20A BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED AT 20A.
7. PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT. MINIMUM REQUIREMENTS: 4" HIGH, 4% AIR ENTRAINED, POLYFIBER REINFORCED CONCRETE, 4" WIDER AND 4" LONGER THAN EQUIPMENT TO BE PLACED ON IT. REFER TO ELECTRICAL DETAIL DRAWINGS FOR TRANSFORMER, GENERATOR OR SWITCHGEAR PADS THAT MAY EXCEED THESE REQUIREMENTS.
8. REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
9. CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.
10. POWER AND DATA WALL OUTLEST/JUNCTION BOXES MUST BE PROPERLY ALIGNED BETWEEN STUDS USING CADDY BRACKET OR APPROVED EQUAL WITH SPACING FOR (3) 4X4 J-BOXES.
11. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT.
12. LOW VOLTAGE DESIGN SHALL BE DESIGN BUILD BY LICENSED LOW VOLTAGE CONTRACTOR. DEVICES, LOCATIONS AND QUANTITIES OF ENGINEERED DRAWINGS ARE ANTICIPATED AND ARE FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING EMPTY CONDUIT WITH PULL STRING. COORDINATE FINAL LAYOUT WITH LOW VOLTAGE CONTRACTOR PRIOR TO COMMENCING WORK.
13. FIRE ALARM DESIGN SHALL BE BY LICENSED FIRE ALARM CONTRACTOR. DEVICES, LOCATIONS AND QUANTITIES ON ENGINEERED DRAWINGS ARE ANTICIPATED AND ARE FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING EMPTY CONDUIT WITH PULL STRING. COORDINATE FINAL LAYOUT WITH FIRE ALARM CONTRACTOR PRIOR TO COMMENCING WORK.
14. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH FIRE PROTECTION CONTRACTOR FOR FINAL DEVICE LOCATIONS. TOTALS AND LOCATIONS OF TAMPER SWITCHES. SUPERVISORY SWITCHES AND FLOW SWITCHES. INTEGREATION WITH HVAC AND OTHER REQUIRED DEVICES AND CONTROLS FOR COMPLETE AND OPERABLE FIRE ALARM SYSTEM. FIRE AARM DRAWINGS SHALL BE A SEPARATE PACKAGE FULLY DESIGNED BY LICENSED FIRE ALARM CONTRACTOR
15. ALL 125-VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES INSTALLED IN THE KITCHEN AREA SHALL BE GFCI PROTECTED. THIS CAN BE DONE AT THE RECEPTACLE OR IN THE PANEL WITH GFCI PROTECTED BREAKERS.

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VILLAGE OF HOFFMAN ESTATES
VILLAGE GREEN CONCESSIONS
5510 PRAIRIE STONE PARKWAY, HOFFMAN ESTATES, IL 60192

PROJECT NUMBER:	24-002
PROJECT MANAGER:	
DRAWN BY:	SLB / NSL

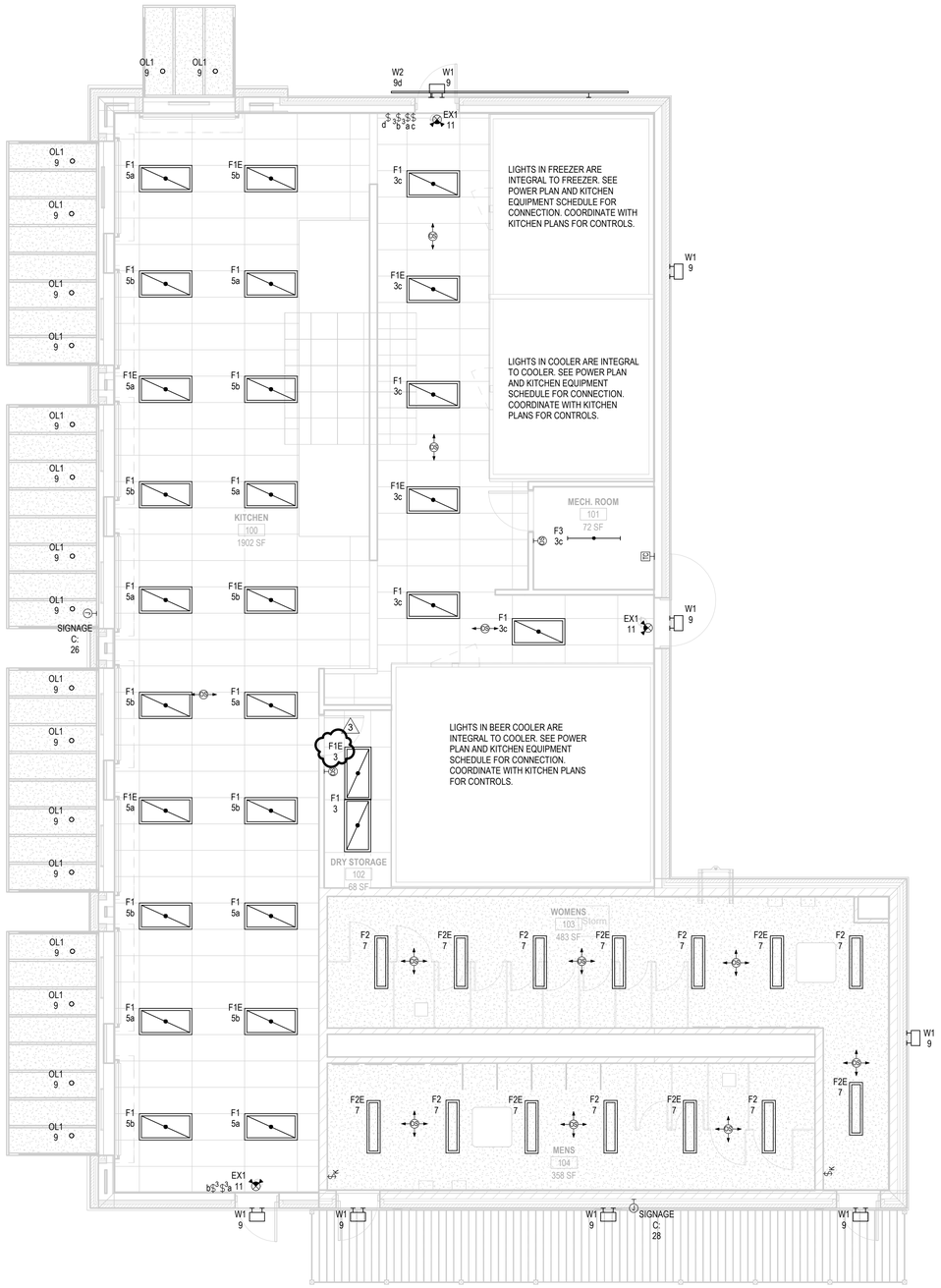
REVISION	DATE
1	09/20/2024
3	09/26/2024

ISSUED FOR BID: 09/20/2024

ELECTRICAL POWER PLAN

ADDENDUM #3

E1.00



1 E2.00 ELECTRICAL LIGHTING PLAN
3/16" = 1'-0"

LIGHTING SHEET NOTES

A ALL RECESSED LIGHTING FIXTURES IN LAY-IN CEILINGS SHALL BE INSTALLED WITH 6' LONG FLEXIBLE METAL CONDUIT.
B ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
C SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF EXTERIOR LIGHTING FIXTURES.
D REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
E **FOR TYPICAL PROJECTS WHERE WIRING IS SHOWN (EDIT AS NEEDED):.
F WIRE COUNTS FOR CIRCUIT CONDUCTORS ARE NOT SHOWN. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUIT AND SWITCHING CONNECTIONS SHOWN.
G MODIFICATIONS TO NUMBER OF CONDUCTORS IN HOME RUNS IN ADDITION TO CIRCUITS INDICATED ON THIS DRAWING ARE PROHIBITED.
H **FOR TYPICAL PROJECTS WHERE WIRING IS NOT SHOWN (EDIT AS NEEDED):
J CIRCUIT WIRING IS NOT SHOWN EXCEPT FOR SWITCHING INTENT OF FIXTURES AND CONTROL OF DEVICES.
K PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.
L CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.

Larson Engineering Inc.
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ILLINOIS LICENSE NO. 184-001442
LEIL Comm. No. # 24240047.000

LICENSED PROFESSIONAL ENGINEER
JASON ANDEJESKI
062-065380
STATE OF ILLINOIS
DATE: 09.23.2024

TRIA ARCHITECTURE
KITCHEN CONSULTANT: (P) 855.902.4422
CIVIL CONSULTANT: (P) 800.728.7805
edge associates inc. food service design
LANDSCAPE CONSULTANT: (P) 312.644.3379
STRUCTURAL CONSULTANT: (P) 630.357.0540
JSD
Larson Engineering, Inc.

VILLAGE OF HOFFMAN ESTATES
VILLAGE GREEN CONCESSIONS
5510 PRAIRIE STONE PARKWAY, HOFFMAN ESTATES, IL 60192

PROJECT NUMBER:	24-002	REVISION	DATE
PROJECT MANAGER:		1	09/20/2024
DRAWN BY:	SLB / NSL	3	09/26/2024
ISSUED FOR BID:	09/20/2024		

ELECTRICAL LIGHTING PLAN

ADDENDUM #3

E2.00

Branch Panel: B

Location: MECH. ROOM 101
Supply From: T1
Mounting: SURFACE
Enclosure: NEMA1

Volts: 208Y/120
Phases: 3
Wires: 4
Ground Bus:

A.I.C. Rating: 10,000 AMPS SYMMETRICAL
Mains Type: MLO
Bus Rating: 400 AMPS
GFP:

Notes:

CCT	Circuit Description	Wire Size	Load...	Rating	Poles	A	B	C	CCT
1	BEER CLR LTS	1-#12, 1-#12, 1-#12	Ot...	20.0 A	1	600 VA			2
3	GLYCOL POWER...	2-#12, 1-#12, 1-#12	KT...	20.0 A	2		1508 VA		4
5								1508 VA	6
7	GLYCOL POWER...	2-#12, 1-#12, 1-#12	KT...	20.0 A	2	988 VA			8
9							988 VA		10
11	BEER COOLER...	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			288 VA	12
13	BEER COOLER...	2-#12, 1-#12, 1-#12	Ot...	20.0 A	2	1903 VA			14
15							1903 VA		16
17	COOLER LTS&HTR	1-#12, 1-#12, 1-#12	LIT...	20.0 A	1			1800 VA	18
19	FREEZER...	1-#12, 1-#12, 1-#12	LIT...	20.0 A	1	1800 VA			20
21	COOLER EVAP	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		288 VA		22
23	COOLER...	2-#12, 1-#12, 1-#12	Ot...	20.0 A	2			1186 VA	24
25						1186 VA			26
27	FREEZER EVAP	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		288 VA		28
29	FREEZER...	2-#12, 1-#12, 1-#12	Ot...	20.0 A	2			1768 VA	30
31						1768 VA			32
33	ELECTRIC SMOKER	2-#4, 1-#4, 1-#10	KT...	60.0 A	2		5928 VA		34
35								5928 VA	36
37	SHUNT TRIP SPACE	--	--	--	1	--			38
39	GLASS DOOR...	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		1800 VA		40
41	GLASS DOOR...	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			1800 VA	42
43	ICE MAKER	2-#12, 1-#12, 1-#12	KT...	20.0 A	2	2080 VA			44
45							2080 VA		46
47	1 DOOR REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			1200 VA	48
49	1 DOOR REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	1200 VA			50
51	1 DOOR REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		1200 VA		52
53	1 DOOR REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			1200 VA	54
55	HOT FOOD WELL	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	4000 VA			56
57	HOT FOOD WELL	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		4000 VA		58
59	HEATED CABINET	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			1356 VA	60
61	HEATED CABINET	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	1356 VA			62
63	WORKTOP REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		1200 VA		64
65	WORKTOP REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			1200 VA	66
67	SALAD TOP REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	1800 VA			68
69	SALAD TOP REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		1800 VA		70
71	HEATED DRAWER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			1800 VA	72
73	HEATED DRAWER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	450 VA			74
75	HEATED DRAWER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		450 VA		76
77	HEATED DRAWER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			450 VA	78
79	EXHAUST HOOD	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	1800 VA			80
81	SHUNT TRIP SPACE	--	--	--	1		--		82
83	SPARE	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			0 VA	84
				Tot...		56479 VA	59037 VA	56078 VA	
				Tot...		471.2 A	492.5 A	467.3 A	

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	29033 VA	65.00%	18871 VA		
KTCH	109720 VA	65.00%	71318 VA	**Total Conn. Load:**	171593 VA
L	2880 VA	125.00%	3600 VA	**Total Est. Demand:**	116739 VA
KT	1800 VA	65.00%	1170 VA	**Total Conn.:**	476.3 A
R	24560 VA	70.36%	17280 VA	**Total Est. Demand:**	324.0 A
PN	0 VA	0.00%	0 VA		
LITES	3600 VA	125.00%	4500 VA		

Notes:
Motor = LARGEST MOTOR
MN = MOTOR (NON-SEASONAL)
L = LIGHTING (CONTINUOUS)
R = RECEPTACLE
C = CONTINUOUS
PN = POWER NON-SEASONAL (NON-CONTINUOUS)
VT = VERTICAL TRANSPORTATION

Branch Panel: EX PANEL 'A'

Location: MECH. ROOM 101
Supply From:
Mounting: SURFACE
Enclosure: NEMA 3R

Volts: 480Y/277
Phases: 3
Wires: 4
Ground Bus:

A.I.C. Rating: 14,000 AMPS SYMMETRICAL
Mains Type: MAIN CB
Mains Rating: 200.0 A
Bus Rating: 200 AMPS
GFP:

Notes:

CCT	Circuit Description	Wire Size	Load Type	Rating	Poles	A	B	C	CCT
1	EXISTING BOLLARDS	1-#12, 1-#12, 1-#12	Oth...	20.0 A	1	75 VA			2
3	LITES	1-#12, 1-#12, 1-#12	LIT...	20.0 A	1		325 VA		4
5	LITES	1-#12, 1-#12, 1-#12	LITES	20.0 A	1			733 VA	6
7	LITES	1-#12, 1-#12, 1-#12	LITES	20.0 A	1	420 VA			8
9	LITES	1-#12, 1-#12, 1-#12	LITES	20.0 A	1		507 VA		10
11	LITES	1-#12, 1-#12, 1-#12	LITES	20.0 A	1			11 VA	12
13							400 VA		14
15	EF-1	3-#12, 1-#12, 1-#12	Other	20.0 A	3		400 VA		16
17								400 VA	18
19	TIMECLOCK	1-#12, 1-#12, 1-#12	L	20.0 A	1	600 VA			20
21									22
23									24
25									26
27									28
29									30
31									32
33									34
35									36
37								56479...	38
39								59037...	40
41								56078...	42
				Total Load:		68011 VA	70306 VA	62459 VA	
				Total Amps:		248.6 A	256.9 A	225.5 A	

Poles	Rating	Load Type	Wire Size	Circuit Description	CCT
1	20.0 A	Other	1-#12, 1-#12, 1-#12	EUH-1	1
1	20.0 A	Other	1-#12, 1-#12, 1-#12	EUH-2	3
			--	SHUNT TRIP SPACE	5
3	20.0 A	Other	3-#12, 1-#12, 1-#12	MUA-1	7
			--	SHUNT TRIP SPACE	9
			--	SHUNT TRIP SPACE	11
3	20.0 A	Kitchen	3-#12, 1-#12, 1-#12	KEF-1	13
			--	SHUNT TRIP SPACE	15
			--	SHUNT TRIP SPACE	17
			--	SHUNT TRIP SPACE	19
			--	SHUNT TRIP SPACE	21
			--	SHUNT TRIP SPACE	23
			--	SHUNT TRIP SPACE	25
			--	SHUNT TRIP SPACE	27
			--	SHUNT TRIP SPACE	29
			--	SHUNT TRIP SPACE	31
			--	SHUNT TRIP SPACE	33
			--	SHUNT TRIP SPACE	35
			--	SHUNT TRIP SPACE	37
3	225.0 A	Other; KT...	3-#300, 1-#300, 1-#4	T1	39

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	33 VA	100.00%	33 VA		
Other	49850 VA	65.00%	32403 VA	**Total Conn. Load:**	200775 VA
KTCH	109720 VA	65.00%	71318 VA	**Total Est. Demand:**	139285 VA
L	3480 VA	125.00%	4350 VA	**Total Conn.:**	241.5 A
KT	1800 VA	65.00%	1170 VA	**Total Est. Demand:**	167.5 A
R	24560 VA	70.36%	17280 VA		
PN	0 VA	0.00%	0 VA		
LITES	5596 VA	125.00%	6995 VA		
Kitchen	5736 VA	100.00%	5736 VA		

Notes:
Motor = LARGEST MOTOR
MN = MOTOR (NON-SEASONAL)
L = LIGHTING (CONTINUOUS)
R = RECEPTACLE
C = CONTINUOUS
PN = POWER NON-SEASONAL (NON-CONTINUOUS)
VT = VERTICAL TRANSPORTATION

Branch Panel: C

Location: MECH. ROOM 101
Supply From: B
Mounting: SURFACE
Enclosure: NEMA1

Volts: 208Y/120
Phases: 3
Wires: 4
Ground Bus:

A.I.C. Rating: 10,000 AMPS SYMMETRICAL
Mains Type: MLO
Bus Rating: 225 AMPS
GFP:

Notes:

CCT	Circuit Description	Wire Size	Load...	Rating	Poles	A	B	C	CCT
1	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1	600 VA			2
3	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1		600 VA		4
5	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1			600 VA	6
7	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1	600 VA			8
9	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1		600 VA		10
11	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1			600 VA	12
13	3 DOOR UC REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	900 VA			14
15	3 DOOR UC REF	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		900 VA		16
17	HP-1	2-#12, 1-#12, 1-#12	Ot...	20.0 A	2			3120 VA	18
19						3120 VA			20
21	HP-2	2-#12, 1-#12, 1-#12	Ot...	20.0 A	2		3120 VA		22
23								3120 VA	24
25	TTB	1-#12, 1-#12, 1-#12	R	20.0 A	1	720 VA			26
27	F-1	1-#12, 1-#12, 1-#12	Ot...	20.0 A	1		1656 VA		28
29	F-2	1-#12, 1-#12, 1-#12	Ot...	20.0 A	1			1656 VA	30
31	OUTDOOR TV	1-#12, 1-#12, 1-#12	R	20.0 A	1	400 VA			32
33	OUTDOOR TV	1-#12, 1-#12, 1-#12	R	20.0 A	1		400 VA		34
35	OUTDOOR TV	1-#12, 1-#12, 1-#12	R	20.0 A	1			400 VA	36
37	OUTDOOR TV	1-#12, 1-#12, 1-#12	R	20.0 A	1	400 VA			38
39	DATA RACK	1-#12, 1-#12, 1-#12	R	20.0 A	1		360 VA		40
41	DATA RACK	1-#12, 1-#12, 1-#12	R	20.0 A	1			360 VA	42
43	SHUTTER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	700 VA			44
45	SHUTTER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1		700 VA		46
47	SHUTTER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1			700 VA	48
49	SHUTTER	1-#12, 1-#12, 1-#12	KT...	20.0 A	1	700 VA			50
51	RECEPTS - WIFI	1-#12, 1-#12, 1-#12	R	20.0 A	1		540 VA		52
53	RECEPTS - WIFI	1-#12, 1-#12, 1-#12	R	20.0 A	1			360 VA	54
55	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1	600 VA			56
57	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1		600 VA		58
59	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1			600 VA	60
61	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1	600 VA			62
63	POS	1-#12, 1-#12, 1-#12	R	20.0 A	1		600 VA		64
				Tot...		16620 VA	17276 VA	17364 VA	
				Tot...		138.5 A	144.8 A	145.5 A	

Poles	Rating	Load Type	Wire Size	Circuit Description	CCT
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	2
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	4
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	6
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	8
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	10
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	12
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT - ROOF	14
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT - PANEL	16
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT -...	18
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPTS - CONV	20
1	20.0 A	Ot...	1-#12, 1-#12, 1-#12	WH-1	22
1	20.0 A	Ot...	1-#12, 1-#12, 1-#12	RCP-1	24
1	20.0 A	L	1-#12, 1-#12, 1-#12	SIGNAGE	26
1	20.0 A	L	1-#12, 1-#12, 1-#12	SIGNAGE	28
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT - WINDOW	30
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT - WINDOW	32
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT - WINDOW	34
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT - WINDOW	36
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPTS - CONV	38
1	20.0 A	KT...	1-#12, 1-#12, 1-#12	SHUTTER	40
1	20.0 A	KT...	1-#12, 1-#12, 1-#12	SHUTTER	42
1	20.0 A	KT...	1-#12, 1-#12, 1-#12	SHUTTER	44
1	20.0 A	KT...	1-#12, 1-#12, 1-#12	SHUTTER	46
1	20.0 A	KT...	1-#12, 1-#12, 1-#12	SHUTTER	48
1	20.0 A	R	1-#12, 1-#12, 1-#12	RECEPT - LIGHT	50
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	52
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	54
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	56
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	58
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	60
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	62
1	20.0 A	R	1-#12, 1-#12, 1-#12	POS	64

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	16920 VA	65.00%	10998 VA		
KTCH	8100 VA	65.00%	5265 VA	**Total Conn. Load:**	51260 VA
L	2880 VA	125.00%	3600 VA	**Total Est. Demand:**	36543 VA
R	23360 VA	71.40%	16680 VA	**Total Conn.:**	142.3 A
				Total Est. Demand:	101.4 A

Notes:
Motor = LARGEST MOTOR
MN = MOTOR (NON-SEASONAL)
L = LIGHTING (CONTINUOUS)
R = RECEPTACLE
C = CONTINUOUS
PN = POWER NON-SEASONAL (NON-CONTINUOUS)
VT = VERTICAL TRANSPORTATION

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LEIL Comm. No. # 24240047.000

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LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

DATE: 09.23.2024

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STRUCTURAL CONSULTANT: (P) 630.357.0540

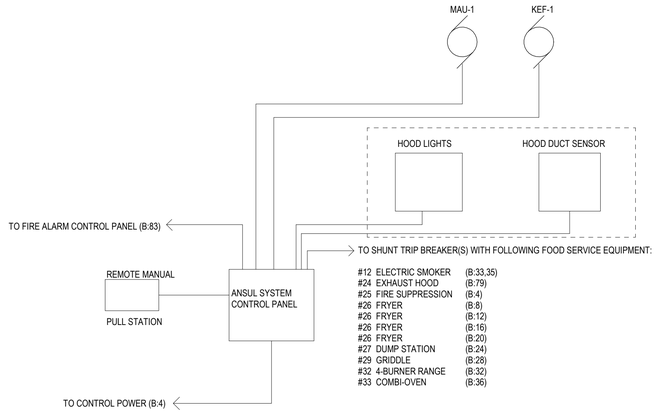
VILLAGE OF HOFFMAN ESTATES
VILLAGE GREEN CONCESSIONS
5510 PRAIRIE STONE PARKWAY, HOFFMAN ESTATES, IL 60192

PROJECT NUMBER:	24-002	
PROJECT MANAGER:		
DRAWN BY:	SLB / NSL	
ISSUED FOR BID:	09/20/2024	
REVISION	1	09/20/2024
	3	09/26/2024
DATE		

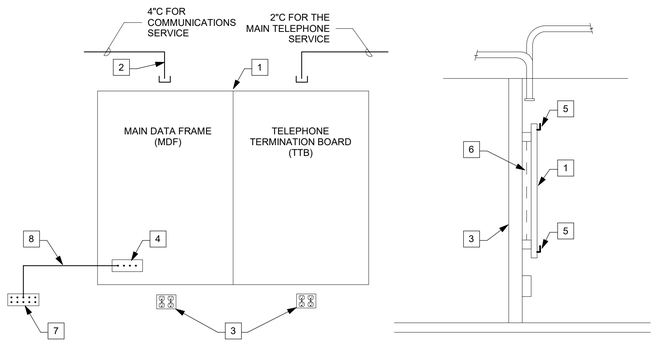
ELECTRICAL SCHEDULES

ADDENDUM #3

E4.00



2 / E5.01 FOOD SERVICE HOOD - ANSUL SYSTEM CONTROL DETAIL
NOT TO SCALE



1 / E5.01 CCTV POLE AND BASE DETAIL
NOT TO SCALE

GENERAL NOTES

1. DETAIL SHOWN IS DIAGRAMMATIC ONLY. ALL TELECOMMUNICATIONS EQUIPMENT, CABLE AND TERMINATIONS SHALL BE BY OTHERS IN ACCORDANCE WITH THE APPROVED MANUFACTURER SHOP DRAWINGS. VERIFY WITH THE ARCHITECT PRIOR TO BID AND ROUGH-IN.
2. ALL PHONE/DATA OUTLETS SHALL BE BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH THE APPROVED MANUFACTURER SHOP DRAWINGS. VERIFY WITH THE ARCHITECT PRIOR TO BID AND ROUGH-IN.
3. ALL TELECOMMUNICATIONS EMPTY CONDUIT AND PULLSTRING SHALL BE BY THE ELECTRICAL CONTRACTOR. SEE CHART SHOWN ON DRAWING EX.XX FOR ADDITIONAL INFORMATION. COORDINATE TELECOMMUNICATIONS EMPTY CONDUIT ROUTING WITH THE ARCHITECT PRIOR TO BID AND ROUGH-IN.
4. INCLUDE ALL COSTS IN BASE BID PROPOSAL.

KEY NOTES

1	PROVIDE A 3/4"X4'X6' PLYWOOD BACK BOARD FOR PATCH PANELS. THE BACKBOARD SHALL BE INTERIOR A/B GRADE.
2	PROVIDE 4" CONDUITS. STUB DOWN 1'-0" BELOW THE FINISH CEILING.
3	QUAD RECEPTACLES.
4	2"W x 18"L x 1/4" THICK COPPER GROUND BUS ATTACHED TO PLYWOOD BACKBOARD.
5	PROVIDE CABLE HANGER EVERY 8" ON CENTER.
6	INSTALL UNISTRUT FOR COMMUNICATION BACKBOARD MOUNTING.
7	MAIN GROUND BUS IN ELECTRICAL ROOM.
8	INSULATED #8 AWG GREEN GROUND CONDUCTOR IN 1"C. CONNECT FROM TELECOMMUNICATION ROOM BUS TO BUILDING GROUND SYSTEM.

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LICENSED PROFESSIONAL ENGINEER
JASON ANDEJESKI
062-065380
STATE OF ILLINOIS

DATE: 09.23.2024

TRIA ARCHITECTURE

KITCHEN CONSULTANT: foth service design (P) 855.962.4422
CIVIL CONSULTANT: HR Green (P) 800.728.7805
LANDSCAPE CONSULTANT: JSD (P) 312.644.3379
STRUCTURAL CONSULTANT: Larson Engineering, Inc. (P) 630.357.0540

VILLAGE OF HOFFMAN ESTATES

VILLAGE GREEN CONCESSIONS

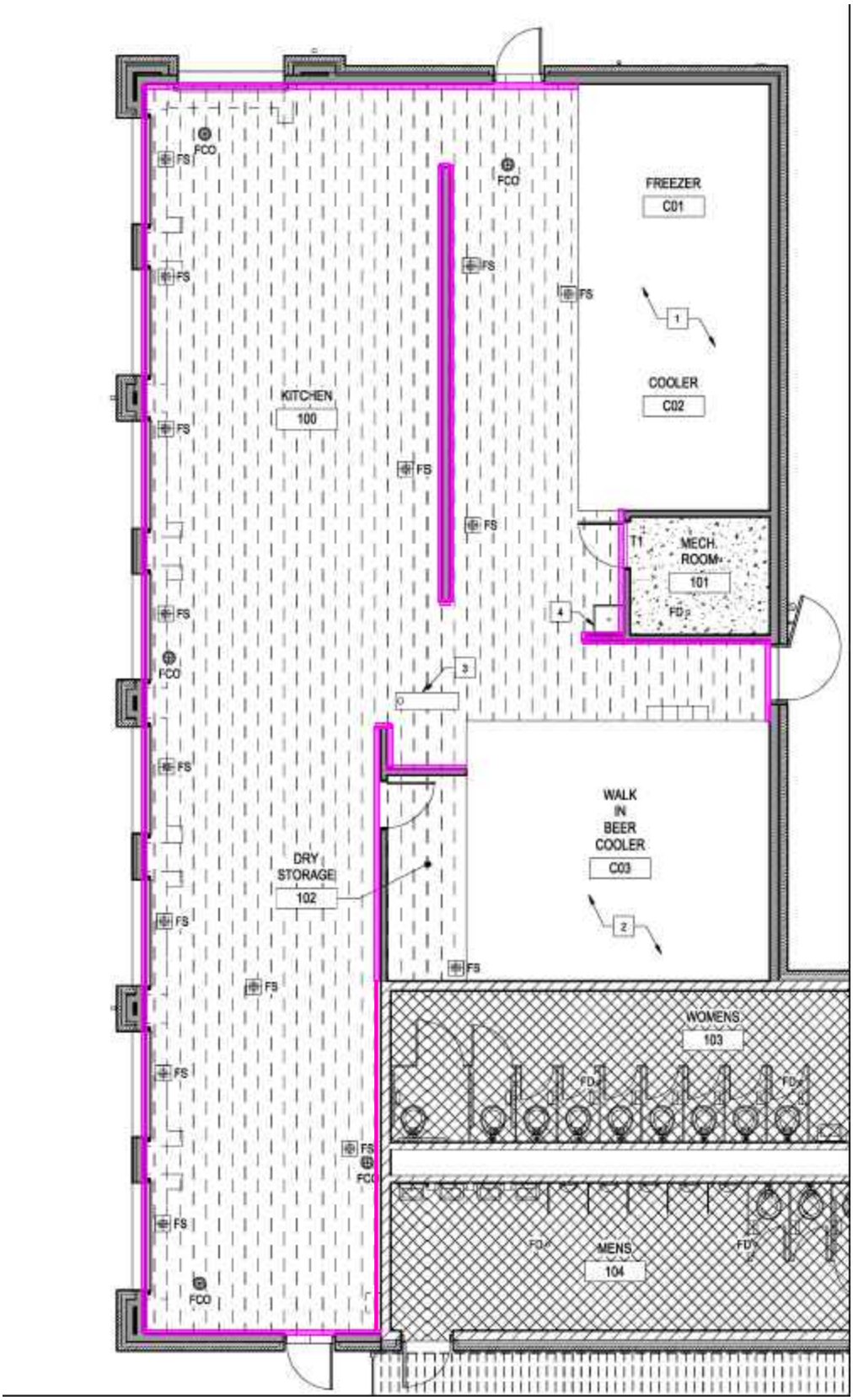
5510 PRAIRIE STONE PARKWAY, HOFFMAN ESTATES, IL 60192

PROJECT NUMBER:	24-002	REVISION	3
PROJECT MANAGER:		DATE	09/26/2024
DRAWN BY:	Author		
ISSUED FOR BID:	09/23/24		

ELECTRICAL DETAILS

ADDENDUM #3

E5.01
3



FRP LOCATION IN KITCHEN - HIGHLIGHTED IN MAGENTA, INCLUDING MASONRY BACKED WALL.

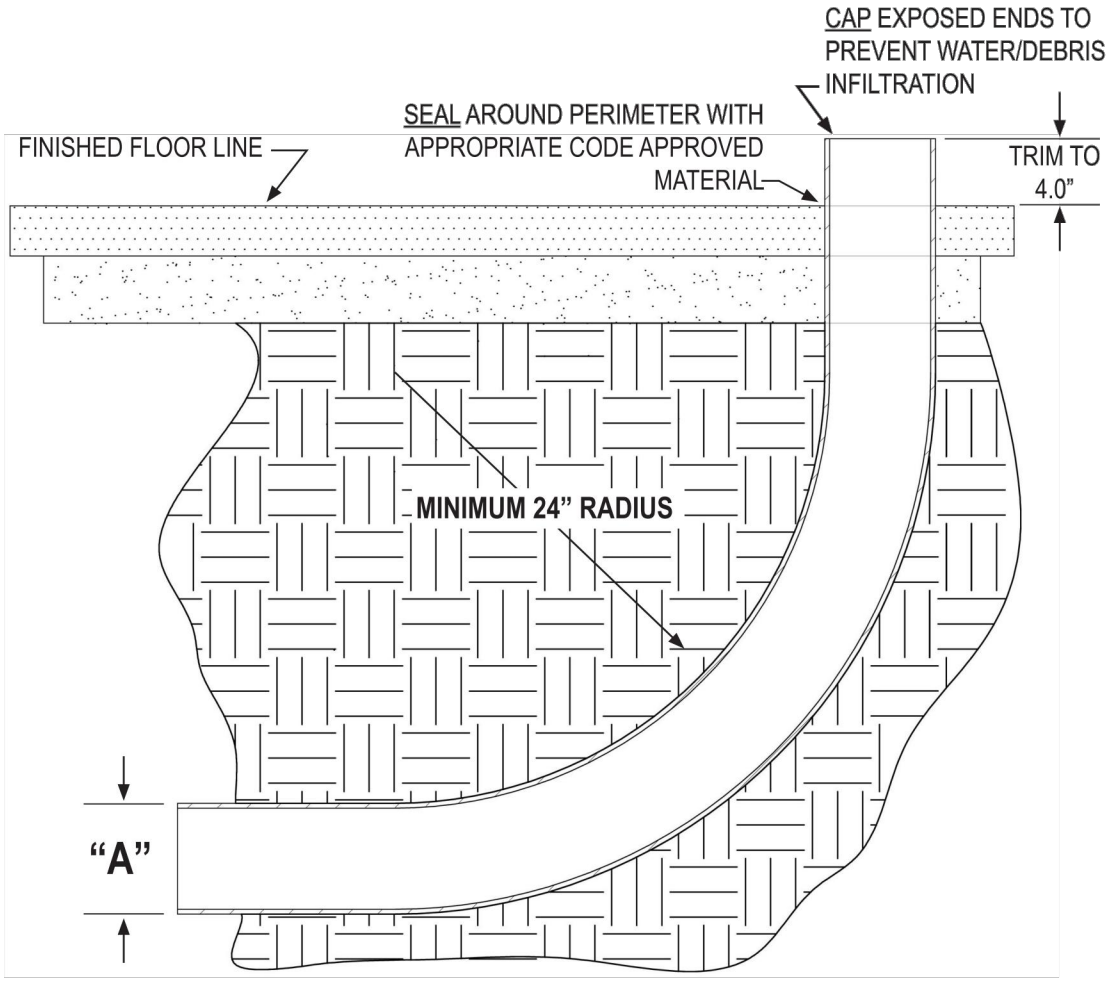
TRIA ARCHITECTURE

VILLAGE OF HOFFMAN ESTATES
VILLAGE GREEN CONCESSIONS

LOCATION OF FRP
SCALE: NOT TO SCALE

ASK-02
SKETCH NO.:

09/26/24
DATE:



- ONLY "ONE" 24" OR 30" RADIUS SWEEP BEND (45° OR 90°) MAY BE USED AT EACH END OF CHASE.
  CAUTION: PLUMBING STYLE PVC SHORT RADIUS FACTORY "ELLS" ARE NOT ACCEPTABLE.
- A PULL BOX MUST BE INSTALLED AFTER EVERY TWO SWEEP BENDS OF AFTER 75 FEET OF CONDUIT.
- ALL JOINTS MUST BE SOLVENT CEMENTED IN ACCORDANCE WITH PVC MANUFACTURERS RECOMMENDATIONS TO GUARANTEE A WATERTIGHT CHASE.
- CONDUIT MUST BE CAPPED AND SEALED AT BOTH ENDS DURING CONSTRUCTION.
- INSTALLER MUST TRIM EXPOSED ENDS TO FOUR (4") INCHES ABOVE FINISHED FLOOR DURING PRODUCT LINE INSTALLATION.
- AFTER PRODUCT LINES ARE INSTALLED, OPEN ENDS OF THE CONDUIT MUST BE CAPPED AND SEALED (WATER TIGHT).

"A" (MIN. INSIDE DIA.)	MAXIMUM TRUNK HOUSING LINE QTY.
6.0"	9 LINES OR LESS
8.0"	10 - 12 LINES
10.0"	16, 20 & 24 LINES

TRIA ARCHITECTURE

VILLAGE OF HOFFMAN ESTATES
VILLAGE GREEN CONCESSIONS

UNDERGROUND CONDUIT DETAIL FOR BEER LINES
SCALE: NOT TO SCALE

ASK-03
SKETCH NO.:

09/26/24
DATE:

Construction & Geotechnical Material Testing, Inc.

60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

April 30, 2024

Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

CGMT Project No. 24G0236

Reference: ***Report of Subsurface Exploration and Geotechnical Engineering Services, Proposed New Village Green Concessions Stand, 5510 Prairie Stone Parkway, Hoffman Estates, Illinois***

Dear Mr. Ackerlund:

CGMT, Inc. has completed the subsurface exploration and geotechnical engineering analyses for the proposed Village Green Concessions Stand to be located at 5510 Prairie Stone Parkway, in Hoffman Estates, Illinois. This report describes the subsurface exploration procedures, laboratory testing, and geotechnical recommendations for project construction. A Boring Location Plan is included in the Appendix of this report along with the Boring Logs performed for the exploration.

We appreciate this opportunity to be of service to the Village of Hoffman Estates during the design phase of this project. If you have any questions with regard to the information and recommendations presented in this report, or if we can be of further assistance to you in any way during the planning or construction of this project, please do not hesitate to contact us.

Respectfully,

CONSTRUCTION AND GEOTECHNICAL MATERIAL TESTING, INC.

Pratik K. Patel, P.E.
Principal

3pc: Encl.

REPORT OF

SUBSURFACE EXPLORATION AND
GEOTECHNICAL ENGINEERING SERVICES

VILLAGE GREEN CONCESSIONS STAND
5510 PRAIRIE STONE PARKWAY
HOFFMAN ESTATES, ILLINOIS

CGMT PROJECT NO. 24G0236

FOR

VILLAGE OF HOFFMAN ESTATES
HOFFMAN ESTATES, ILLINOIS

APRIL 30, 2024

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EXECUTIVE SUMMARY

Construction & Geotechnical Material Testing, Inc. (CGMT) has completed your subsurface exploration and geotechnical engineering project. The subsurface conditions encountered during our exploration and CGMT's conclusions and recommendations are summarized below. This summary should not be considered apart from the entire text of the report with all the qualifications and considerations mentioned herein. Details of our conclusions and recommendations are discussed in the following sections and in the Appendix of this report.

The project site is located at 5510 Prairie Stone Parkway in Hoffman Estates, Illinois. A total of seven (7) exploratory borings, B-1 through B-7, were performed for this project. The soil conditions encountered at the borings performed at the site are summarized as follows.

Approximately 6 to 14 inches of topsoil was encountered at the ground surface at the boring locations. Beneath the topsoil, each of the borings, except B-4 and B-7, encountered black, brown, and gray, firm to hard silty clay fill that extended to depths of approximately 3½ to 8½ feet below the existing ground surface. The topsoil in Borings B-4 and B-7 was underlain by brown, loose sand and gravel fill that extended to depths of approximately 6 feet below the existing ground surface. The fill soils in the borings were underlain by natural, brown and gray, stiff to hard silty clay that extended to the boring termination depths of 10 to 25 feet below existing grade. Boring B-4 was terminated on an apparent obstacle at a depth of approximately 10 feet below grade. Boring B-5 encountered a layer of dense to very dense sand and gravel soils between depths of approximately 19½ to 25 feet below existing grade.

If available, records of compaction obtained during the mass earthwork phase of the project should be provided to CGMT for our review. However, if records are not available, the existing fill soils appear to have been placed with some measure of control of moisture content and density and it should be feasible to support floor slabs, pavements, and new fill.

If the Village of Hoffman Estates is willing to accept some risk of total and differential settlement and associated long term maintenance, the existing fill material similar to those encountered in the borings extending to depths of approximately 3½ to 8½ feet below the surrounding grade may remain in place below floor slabs and pavements but the subgrade must pass a proofroll under the observation of a CGMT geotechnical engineer or soils technician. However, if the Village of Hoffman Estates is unwilling to accept the risk, then the existing fill soils should be completely removed and replaced with new engineered fill.

Based on the anticipated structural loading and subsurface conditions, conventional shallow foundation systems consisting of spread and/or continuous footings, extended through the existing fill soils (encountered in the borings to depths of approximately 3½ to 8½ feet below the existing ground surface) bearing on the natural, firm to hard silty clay or new properly compacted engineered fill is considered feasible and appropriate to support the proposed concession stand. For footings bearing at depths of at least 3½ feet below grade on natural, firm to hard silty clay or new, properly compacted engineered fill, we recommend a maximum net allowable soil bearing pressure of 2,000 psf be used to proportion the footings.

We recommend that the excavation of building foundations be monitored full-time by a CGMT geotechnical engineer or his representative to verify that the exposed subgrade materials and the soil bearing pressure will be suitable for the proposed structure.

Report Prepared By:

Nicholas Wolff

Nicholas P. Wolff, P.E.
Geotechnical Engineer

Report Reviewed By:

Pratik Patel

Pratik K. Patel, P.E.
Vice President

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PROJECT OVERVIEW

Introduction

This report presents the results of our subsurface exploration and engineering services for the proposed Village Green Concession Stand in Hoffman Estates, Illinois. A General Location Plan included in the Appendix of this report, shows the approximate location of this project.

Project Description

ITEM	DESCRIPTION
Site Layout	See Boring Location Diagram in the Appendix
Proposed Construction	We understand the new structure will be an expansion of the existing concessions facility and will be a single-story, slab on grade concession stand that will cover approximately 4,500 square feet of plan area. The new structure will include a kitchen, public restroom, and serving lines. We understand the building will be steel framed, with concrete foundations, metal decking, and brick veneer.
Structural Loads	Max. column loads: 125 kips (Anticipated); Max. wall loads: 4 kips per lineal foot (Anticipated)
Grading and Existing Site Considerations	Less than 2 to 3 feet of cuts and fill will be needed to establish final site grades.
Ancillary Improvements	Expanded pedestrian flatwork is also planned.

Scope of Work

The conclusions and recommendations contained in this report are based on the soil borings performed in the vicinity of the proposed building and pavement areas, and associated laboratory testing of selected soil samples. The scope of the subsurface exploration included the following.

Number of Borings	Depth (feet)
4	25
2	20
1	10 (Practical Auger Refusal)

The results of the soil borings, along with a Boring Location Plan showing the approximate locations where the borings were performed, are included in the Appendix of this report. Once the samples were returned to our laboratory we laboratory tests on selected representative soil samples from the borings to evaluate pertinent engineering properties, and, we analyzed the field and laboratory data to develop appropriate engineering recommendations.

The purpose of this report is to provide information and geotechnical engineering recommendations with regard to:

- Subsurface Soil and Groundwater Conditions
- Seismic Considerations
- Site Preparation and Earthwork
- Foundation Design and Construction
- Floor Slab Design and Construction
- Pavement Design and Construction

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EXPLORATION RESULTS

Site Description

ITEM	DESCRIPTION
Project Location	The project site is located at 5510 Prairie Stone Parkway, in Hoffman Estates, Illinois.
Existing Site Improvements	New addition areas were mostly grass-covered landscaped areas.
Existing Topography	There is an overall grade down from the west toward the east with site grades ranging from 855 down to 851 per Google Earth.

Soil Conditions

A total of seven (7) borings, B-1 through B-7 were performed for this project. The subsurface conditions encountered at the borings performed at the site can be summarized as follows.

Approximately 6 to 14 inches of topsoil was encountered at the ground surface at the boring locations. Beneath the topsoil, each of the borings, except B-4 and B-7, encountered black, brown, and gray, firm to hard silty clay fill that extended to depths of approximately 3½ to 8½ feet below the existing ground surface. The topsoil in Borings B-4 and B-7 was underlain by brown, loose sand and gravel fill that extended to depths of approximately 6 feet below the existing ground surface. The fill soils in the borings were underlain by natural, brown and gray, stiff to hard silty clay that extended to the boring termination depths of 10 to 25 feet below existing grade. Boring B-4 was terminated on an apparent obstacle at a depth of approximately 10 feet below grade. Boring B-5 encountered a layer of dense to very dense sand and gravel soils between depths of approximately 19½ to 25 feet below existing grade.

SOILS	SOIL CHARACTERISTICS
Silty Clay (Existing Fill)	Unconfined Compressive Strengths: 0.5 to 4.5+ tsf Dry Density Determinations: 86.3 to 100.3 pcf Moisture Contents: 16.3 to 29.5 percent
Sand and Gravel (Existing Fill)	Loose to medium dense; 4 to 7 blows per foot
(Cohesive soils)	Unconfined Compressive Strengths: 1.0 to 4.5+ tsf Moisture Contents: 12.5 to 20.6 percent
Sand and Gravel (Natural)	Loose to medium dense; 35 to 50+ blows per foot

The specific soil types observed at the borings are noted on the boring logs, enclosed in the Appendix.

Groundwater Observations

Observations for groundwater were made during sampling and upon completion of the drilling operations at the boring locations. In auger drilling operations, water is not introduced into the boreholes, and the groundwater position can often be obtained by observing water flowing into or out of the boreholes. Furthermore, visual observation of the soil samples retrieved during the auger drilling exploration can often be used in evaluating the groundwater conditions. Groundwater levels were observed during drilling and immediately the completion of drilling. Groundwater measurements are summarized in the table below.

BORINGS	GROUNDWATER LEVELS (FEET)	
	DURING DRILLING	IMMEDIATELY AFTER COMPLETION
B-7	6	13.5
Other Borings	None	None

Glacial till soils in the Midwest frequently oxidize from gray to brown above the level at which the soil remains saturated. The seasonal high water table is often interpreted to be near this zone of color change. Based on the results of this exploration, the seasonal high water table may be located at depths of approximately 13½ feet below current grade.

More definitive evidence of prevailing groundwater levels could be obtained through the use of groundwater monitoring wells, which CGMT could install and monitor if requested.
It should be noted that the groundwater level can vary based on precipitation, evaporation, surface run-off and other factors not immediately apparent at the time of this exploration. Surface water runoff will be a factor during general construction, and steps should be taken during construction to control surface water runoff and to remove any water that may accumulate in the proposed excavations as well as floor slab and pavement areas. Precipitation generally varies seasonally. To assist in anticipating groundwater fluctuations changes throughout the year, average monthly precipitation is provided in the table below. Average precipitation levels were obtained from wunderground.com.

Seasonal Precipitation

Month	January	February	March	April	May	June	July	August	September	October	November	December	Total
Normal Precipitation (inches)	1.73	1.79	2.50	3.38	3.68	3.45	3.70	4.90	3.21	3.15	3.15	2.25	36.89

Seismic Zone

Based on the 2015 International Building Code, Table 1615.1.1 Site Class Definitions, the site soils can be characterized as Site Class D. Site Class D is described as Stiff Soil Profile for the top 100 ft of the site soil profile. Since we drilled to a maximum depth of 25 feet for this exploration, based on our experience with the soils in this area, the available geologic maps and following the direction of IBC 2015 when there are no borings to 100 feet deep, it is our opinion the site would be defined as Site Class D.

CGMT also calculated the spectral response factors based on the site class as well as the latitude and longitude of the project location using United States Geological Survey (USGS) seismic calculator software. The calculated values are presented in the table below:

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Seismic Design Criteria

New Village Green Concession Stand					
5510 Prairie Stone Parkway, Hoffman Estates, Illinois					
Latitude	42.070504°	**Longitude**	-88.215903°	**Site Class**	"D"
S_s	0.141g	**S_{MS}**	0.225g	**S_{DS}**	0.150g
S_1	0.061g	**S_{M1}**	0.146g	**S_{D1}**	0.098g

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ANALYSIS AND RECOMMENDATIONS

Overview

The following recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions encountered. If there are any changes to the project characteristics or if different subsurface conditions are encountered during construction, CGMT should be consulted so that the recommendations of this report can be reviewed.

A summary of the results of the exploration is provided in the table below:

Preliminary Bearing Table

Boring	Boring Depth (feet)	Depth to Groundwater (feet)		Approximate Depth to Soils Suitable for a Net Allowable Bearing Pressure of 2,000 psf*
		During Drilling	After Completion	
B-1	25	None	None	6
B-2	25	None	None	8.5
B-3	25	None	None	8.5
B-4	10**	None	None	6
B-5	25	None	None	8.5
B-6	20	None	None	3.5
B-7	20	6	12.5	6

* To be used a minimum of 3½ feet below adjacent outside grade.
** Practical Auger Refusal

Subgrade Preparation and Engineered Fill

Subgrade Preparation

We anticipate the proposed concession stand expansion will be of slab-on-grade construction and will not include a below grade space or basement area. The finished ground floor elevation is anticipated to roughly match the elevation of the existing slab.

Initial subgrade preparation should consist of complete stripping/removal of topsoil, vegetation, and any other soft or unsuitable/deleterious materials from the location of the concession stand expansion, as well as, pavement areas. Unsuitable materials, such as topsoil/buried topsoil or organic soils, should either be stockpiled for later use in landscaping fills or placed in approved disposal areas either on-site or off-site.

The sides of the excavations should be sloped or braced for stability. Care should be taken to not undermine the foundations of the existing building during excavation. Shoring, sheeting, or bracing of the sides of the excavations may also be required to avoid undermining the existing foundations.

Existing utilities should be abandoned and relocated, and associated structures and backfill materials should be removed from proposed building areas unless they are planned to remain in service for the expanded concession stand. Prior to construction, we recommend all utilities in the proposed construction areas be positively identified and marked. Those utilities that can be relocated should be relocated to the extent practical and backfilled with compacted/densified engineered fill. Abandoned utilities should be removed or grouted full with lean concrete. Excavations resulting from removal/demolition of existing utilities and other structures should be completely filled with engineered fill. Active utilities to remain in the construction areas should be exposed and protected during construction to reduce the potential for damage or interruption of service. Where existing utilities will remain under any structure, we recommend that the utility backfill be removed and replaced with controlled fill.

Floor slabs and below grade foundation elements of the existing buildings should be completely removed where they will conflict with new construction. The tops of foundation walls should be removed to depths of at least 2 feet below the base of new pavements, but existing wall backfill materials, if encountered, should be completely removed and replaced with controlled compacted fill. Soils exposed in the excavations created by the demolition should be observed and evaluated by an experienced geotechnical technician or engineer. The completed excavations should be backfilled with properly placed and compacted fill as recommended in this report. Improper placement and compaction of fill materials during demolition/removal of existing foundations and other structures could lead to inconsistent subgrade performance resulting in foundation, floor slab and pavement distress and settlement.

It has been our experience that many demolition contractors place the debris from the structure below grade and cap with soil. These type of activities will not provide a suitable subgrade for new foundations, slabs or pavements. Costs of removal and replacement of demolition debris could unnecessarily add thousands of additional dollars to the cost of the project. The presence of a CGMT geotechnical engineer on the site during demolition and backfilling operations would reduce the potential for unnecessary removal and replacement to take place during construction.

We do not recommend the use of 3-inch stone or "Pea Gravel" as engineered fill to backfill undercuts, particularly under floor slabs, pavements and foundations. Due to the large diameter and/or absence of fines, the 3-inch rock exhibits large voids. Fill materials containing large voids are more susceptible to future movement that may become unstable resulting in excessive and variable settlement.

Current EPA and State law requires an asbestos survey prior to demolition or renovation activities. In the event regulated asbestos materials are confirmed to be present, any regulated asbestos materials that would be disturbed must removed prior to such disturbance by a licensed asbestos removal firm.

We recommend that the project geotechnical engineer or his representative should be on site to monitor stripping and site preparation operations and observe that unsuitable soils have been satisfactorily removed and to observe proofrolling.

After removal of unsuitable/deleterious materials and stripping to the desired grade, and prior to fill placement, we recommend the stripped/exposed subgrades be observed by an experienced geotechnical engineer or his authorized representative at the time of construction in order to aid in identifying localized soft/loose or unsuitable materials which should be removed. Proofrolling using a loaded dump truck having an axle weight of at least 10 tons, may be used at this time to aid in identifying localized soft or unsuitable material which should be removed. Any soft or unsuitable materials encountered during proofrolling should be compacted in place or removed and replaced with an approved backfill compacted to the criteria given below. Prior to proofrolling, pavement and floor slab areas that will receive less than 1 foot of new fill, should be scarified to a depth of about 9 inches, moisture conditioned, and recompacted as recommended below.

If available, records of compaction obtained during the mass earthwork phase of the project should be provided to CGMT for our review. However, if records are not available, the existing fill soils appear to have been placed with some measure of control of moisture content and density and it should be feasible to support floor slabs, pavements, and new fill.

If the Village of Hoffman Estates is willing to accept some risk of total and differential settlement and associated long term maintenance, the existing fill material similar to those encountered in the borings extending to depths of approximately 3½ to 8½ feet below the surrounding grade may remain in place below floor slabs and pavements but the subgrade must pass a proofroll under the observation of a CGMT geotechnical engineer or soils technician. However, if the Village of Hoffman Estates is unwilling to accept the risk, then the existing fill soils should be completely removed and replaced with new engineered fill.

During final preparation of subgrades, a smooth drum roller is often used to provide a flat surface and provide for better drainage to reduce the negative impact of rain events. Due to the relative sensitivity of the silty clay soils, we recommend that these materials be static rolled (no vibrations) to reduce the potential for subgrade soil disturbance. We also recommend crowning the subgrade to provide positive drainage off the building pad subgrades.

Engineered Fill

Where new fill material is required for backfill or to otherwise reach the design subgrade elevation beneath slabs-on-grade and pavements, we recommend that engineered fill be used. Any soil placed as engineered fill should be an approved material, free of organic matter or debris, be a non-frost susceptible soil, and have a liquid limit and plasticity index less than 40 and 15, respectively. The project geotechnical engineer should be consulted to determine the suitability of off-site/on-site materials for use as engineered fill, prior to use or placement. We do not recommend the use of 3-inch stone as engineered fill to backfill undercuts, particularly under floor slabs and foundations. Fill materials containing large voids are more susceptible to future movement that may become unstable resulting in excessive and variable settlement.

Fill should be placed in lifts not exceeding 8 inches in loose thickness, moisture conditioned to within 2 percent of the optimum moisture content, and compacted to at least 95 percent of the maximum dry density obtained in accordance with ASTM Specification D 1557, Modified Proctor Method. Fill placed below footing base elevations should be compacted to at least 95 percent of the material's modified Proctor maximum dry density (ASTM D 1557). Engineered fill placed to support foundations should extend 1 foot beyond the outside edges of the footings and from that point outward laterally 1 foot for every 2 feet of fill thickness below the footings. Laboratory proctor tests should be performed on fill materials to determine the maximum dry density and optimum moisture content. A shrinkage factor of 15 percent can be assumed for estimating earthwork quantities for bidding purposes.

We recommend suitable silty clays used to raise the grade or backfill undercuts should be compacted with a sheepsfoot roller. Granular engineered fill should be compacted with a smooth drum roller or adequate heavy vibratory plate. Moisture control during earthwork operations, including the use of disking or appropriate drying equipment and techniques, should be expected.

In-place density tests should be performed with a minimum of 1 test per 2,000 square feet of fill area for each lift of fill placed. We recommend that the placement of engineered fill be monitored full-time by CGMT representative and in-place density tests should be performed to verify the adequacy of the compaction for each lift of fill placed.

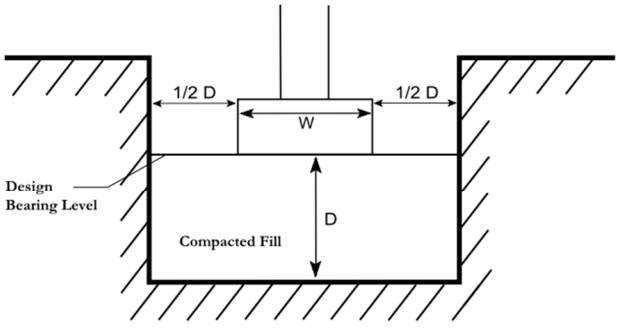
Footing Foundations

Based on the anticipated structural loading and subsurface conditions, conventional shallow foundation systems consisting of spread and/or continuous footings, extended through the existing fill soils (encountered in the borings to depths of approximately 3½ to 8½ feet below the existing ground surface) bearing on the natural, firm to hard silty clay or new properly compacted engineered fill is considered feasible and appropriate to support the proposed concession stand. For footings bearing at depths of at least 3½ feet below grade on natural, firm to hard silty clay or new, properly compacted engineered fill, we recommend a maximum net allowable soil bearing pressure of 2,000 psf be used to proportion the footings.

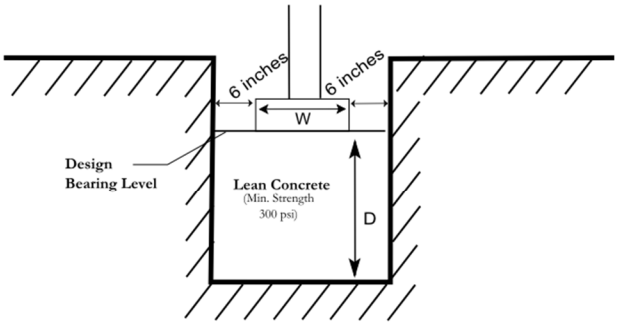
To reduce the potential for foundation bearing failure and excessive settlement due to local shear or "punching" action, we recommend that continuous footings have a minimum width of 18 inches and that isolated column footings have a minimum lateral dimension of 30 inches. In addition, footings should be placed at a depth to provide adequate frost cover protection. We recommend the footings be placed at a minimum depth of 3½ feet below finished grade. Interior footings in heated areas can be placed at a minimum of 2 feet below grade provided that suitable soils are encountered and that the foundations will not be subjected to freezing weather either during or after construction.

We recommend that the excavation of building foundations be monitored on a full-time basis by a CGMT geotechnical engineer or his representative to verify that the exposed subgrade materials and the soil bearing capacity will be suitable for the proposed building and is consistent with the boring log information obtained during the geotechnical exploration.

The contractor should be prepared to undercut/overexcavate and extend the footings to soils of adequate bearing capacity. As an alternative, after overexcavation and removal of weaker/low bearing capacity soils or unsuitable soils, the foundation subgrade can be raised using compacted engineered fill or lean concrete to a minimum frost depth of 3½ feet below final exterior grade. Engineered fill should be compacted to a minimum of 95 percent of the maximum dry density as discussed in the **Subgrade Preparation and Engineered Fill** section. The zone of the engineered fill placed below the foundations should extend 1 foot beyond the outside edges of the footings and from that point, outward laterally 1 foot inches for every 2 feet of fill thickness below the footing. The overexcavation and backfill procedure is depicted in the figure below. If lean concrete is used to replace weaker/low bearing soils or unsuitable soils, no lateral overexcavation will be necessary, but the excavation should be 1 foot wider than the footing (6 inches on each side).



Overexcavation and Backfill Procedure
(Recommended for Relatively Shallow Deepening)



Overexcavation and Lean Concrete Backfill Procedure
(Recommended for Greater Deepening)

Settlement of the conventional shallow foundations, designed in accordance with our recommendations presented in this report, is expected to be within tolerable limits for the proposed building. For footings, extended through the existing fill soils, placed on natural, firm to hard silty clay or properly compacted engineered fill and designed as discussed above, maximum total settlement is expected to be in the range of 1 inch or less. These settlement values are based on our engineering experience with the soil and the anticipated structural loading, and are to guide the structural engineer with his design.

Floor Slab Design

For the design and construction of the new building slabs-on-grade for the proposed building, we recommend that all existing vegetation, topsoil or organic soils, and any unsuitable/deleterious materials should be removed and replaced with compacted engineered fill as discussed in the **Site Preparation and Engineered Fill** section. If the removal is performed in accordance with these recommendations, we anticipate floor slabs for the structures will be supported on stable and approved subgrades consisting of silty clay, or on new engineered fill.

It is assumed that the existing floor slab subgrade has performed satisfactorily during the proofroll discussed in the Subgrade Preparation subsection, even though existing fill soils were encountered to depths of 3½ to 8½ feet. Provided that the floor slab subgrade passes a proofroll, the risk of excessive settlement is low. However, if the floor slab subgrade does not pass the proofroll, some undercutting and placement of controlled backfill will be required.

We recommend that floor slabs be underlain by a minimum of 6 inches of granular material having a maximum aggregate size of 1½ inches and no more than 2 percent of fines. Prior to placing the granular material, the floor subgrade soil should be properly compacted, proofrolled, and free of standing water, mud, and frozen soil. For design of Portland cement concrete slabs-on-grade, a modulus of subgrade reaction (k) of 100 pounds per cubic inch (pci) can be used for slabs constructed on subgrade prepared as discussed herein.

A properly designed and constructed capillary break layer can often mitigate the need for a moisture retarder and can assist in more uniform curing of concrete. If a vapor retarder is considered to provide additional moisture protection, special attention should be given to the surface curing of the slabs to reduce uneven drying of the slabs and associated cracking and/or slab curling. The use of a blotter or cushion layer above the vapor retarder can also be considered for project specific reasons. Please refer to ACI 302.1R96 *Guide for Concrete Floor and Slab Construction* and ASTM E 1643 *Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs* for additional guidance on this issue.

We recommend that the floor slab be isolated from the foundation footings so differential settlement of the structure will not induce shear stresses on the floor slab. Also, in order to reduce the crack width of any shrinkage cracks that may develop near the surface of the slab, we recommend mesh reinforcement as a minimum be included in the design of the floor slab. Temperature and shrinkage reinforcements in slabs on ground should be positioned in the upper third of the slab thickness. The Wire Reinforcement Institute recommends the mesh reinforcement be placed 2 inches below the slab surface or upper one-third of slab thickness, whichever is closer to the surface. Adequate construction joints, contraction joints and isolation joints should also be provided in the slab to reduce the impacts of cracking and shrinkage. Please refer to ACI 302.1R96 *Guide for Concrete Floor and Slab Construction* for additional information regarding concrete slab joint design.

Pavements

For the design and construction of exterior pavements, we recommend that topsoil and otherwise unsuitable soils be removed before construction of new pavements and that new pavements will be supported by stable and approved subgrades consisting of silty clay or on new engineered fill.

It is assumed that the existing pavement subgrade has performed satisfactorily during the proofroll discussed in the **Subgrade Preparation** subsection, even though existing fill soils were encountered to depths of 3½ to 8½ feet. Provided that the pavement subgrade passes a proofroll, the risk of excessive settlement is low. However, if the pavement subgrade does not pass the proofroll, some undercutting and placement of controlled backfill will be required.

We anticipate the new pavement will be constructed of asphaltic concrete or Portland cement concrete. We expect that the proposed parking lot will generally be utilized for light duty traffic, and the driveways and loading and unloading areas be utilized for light to medium duty traffic. Heavy traffic loads would be anticipated for areas near any dumpsters where garbage trucks would often cross. We recommend the pavement subjected to light traffic be underlain by a minimum of 8 inches of base course granular material, similar to Illinois Department of Transportation gradation CA-6.

Assuming the pavement subgrade will consist predominantly of the cohesive soils and new fill prepared in accordance with the recommendations given in this report, an estimated IBR value of 3 could be used in proportioning a flexible pavement section. Similarly, an estimated modulus of subgrade reaction value equal to 100 pounds per cubic inch could be used for design of rigid concrete pavement sections. A Subgrade Stability Rating (SSR) rating of (Poor) should be used for pavement design. Concrete pavements should be air-entrained Portland cement concrete with a minimum compressive strength of 4,000 psi and a minimum flexural strength of 650 psi. Concrete strength requirements are outlined in article 1020.04 of the Standard Specifications for Road and Bridge Construction, effective April 1, 2016.

Some typical pavement sections used in this region of the country are given below which could be considered for preliminary estimating purposes. Other sections can also be considered. These sections assume a low volume of light vehicle loads (automobiles, vans, pickups, etc.). They should also be considered minimum thicknesses, and, as such, periodic maintenance should be anticipated. Final design sections should consider details such as final grades, traffic loadings, traffic volumes, the desired design life and any local, county or city codes. If you wish, we would be pleased to perform a detailed pavement section design using AASHTO or Asphalt Institute procedures when this information is available. It should also be noted that these sections do not consider if the binder course will be subject to construction vehicle traffic for an extended period of time. Some distress to the binder course and aggregate base could occur, if this is the case.

TYPICAL PAVEMENT SECTIONS*

	Light Duty (Parking Lots)	Heavy Duty ** (Drives)
Portland Cement Concrete	5 inches	6 inches
Full Depth Asphalt	5.5 inches	7 inches
Combined Section:		
Asphalt	3 inches	4 inches
Crushed Stone Base Course	8 inches	10 inches

* All materials should meet the current Illinois Department of Transportation Standard Specifications for Road and Bridge Construction requirements.

** In areas of anticipated heavy traffic, delivery trucks, or concentrated loads, a minimum concrete thickness of 7 inches is recommended but should be evaluated further when loading conditions are known.

Minimum design requirements for hot-mix asphalt (HMA) shall follow Article 1030.05 of the Standard Specifications for Road and Bridge Construction, effective April 1, 2016. During asphalt pavement construction, the wearing and leveling course should be compacted to a minimum of 93 percent of the theoretical density value. Prior to placing the granular material, the pavement subgrade soil should be properly compacted, proofrolled, and free of standing water, mud, and frozen soil.

An important consideration with the design and construction of pavements is surface and subsurface drainage. Where standing water develops, either on the pavement surface or within the base course layer, softening of the subgrade and other problems related to the deterioration of the pavement can be expected. Furthermore, good drainage should reduce the possibility of the subgrade materials becoming saturated over a long period of time. We would be pleased to be of further assistance to you in the design of the project pavements by providing additional recommendations during construction of the project.

Periodic maintenance of pavements should be anticipated. The subgrade parameters provided in this report consider that significant changes in the subgrade moisture content do not occur. To reduce the potential for changes in subgrade moisture, all paved areas should be sloped to provide rapid drainage of surface water and to drain water away from the pavement edges. Water that is allowed to pond on or adjacent to the pavement can saturate and soften the subgrade soils and subsequently accelerate pavement deterioration.

Granular base or subbase materials directly below pavement sections can also collect infiltrated surface water and soften the subgrade as well as increase the effects of frost action, both of which can be detrimental to pavements. For these reasons, where granular materials are used over a cohesive soil subgrade or where the groundwater level is within 3.5 feet of finished pavement subgrade, we recommend that consideration be given to using pavement underdrains hydraulically connected to the granular base or subbase to improve the pavement performance and extend its service life. Underdrains should be installed at 300 to 500 feet intervals and at low points in the roadway profile. Pipe underdrains shall be installed according to Check Sheet #19 of the Supplemental Specifications and Recurring Special Provisions, effective January 1, 2015.

General Construction Considerations

We recommend that the subgrade preparation, installation of the foundations, and construction of slabs-on-grade be monitored by a CGMT geotechnical engineer or his representative. Methods of verification and identification such as proofrolling, DCP testing and hand auger probe holes will be necessary to further evaluate the subgrade soils and identify unsuitable soils. The contractor should be prepared to overexcavate footing excavations at isolated locations. We recommend that excavations of new foundations be monitored on a full-time basis by a CGMT geotechnical engineer or his representative to verify that the soil bearing pressure and the exposed subgrade materials will be suitable for the proposed concessions stand and are consistent with the boring log information obtained during this geotechnical exploration. We would be pleased to provide these services.

Since localized areas of soft/unsuitable soils may be present below the bearing elevation of foundations, we recommend that hand-auger borings be performed to at least half the footing width, or a minimum of 3 feet below each isolated column footing and to at least 2 feet below continuous footings. Hand auger borings should be performed at each column footing and at approximately 20-foot intervals along continuous footings to verify the suitability of the soils to support the recommended maximum net allowable bearing pressure. If soft/unsuitable soils are encountered, the footings should be extended until suitable bearing soils are encountered or the unsuitable soils should be removed beneath the base of the footing and replaced with compacted engineered fill or lean concrete. The foundation contractor should expect undercutting/overexcavation or removal of unsuitable material without delay and replacement with engineered fill at the time of foundation excavation/construction.

All loose or soft soils in the subgrade or foundation excavation areas should be densified or removed before placing any concrete or fill. Accumulated water or runoff water at the base of the foundation excavations should also be promptly removed. Groundwater seepage is anticipated not to be a major factor during foundation excavations or undercutting. If encountered, we believe sump and pump system should be adequate to remove accumulated seepage from the bottom of excavations prior to placement of concrete or crushed stone. Concrete should not be placed in water. To reduce the potential for frost heave related problems; forms should be used prior to the placement of foundation concrete.

Exposure to the environment may weaken the soils at the foundations bearing level if the excavations remain open for too long a time. Therefore, foundation concrete should be placed the same day that excavations are opened, when possible. If the bearing soils are softened by surface water intrusion or exposure, the softened soils must be removed from the immediately prior to placement of concrete.

We recommend adequate surface and subsurface drainage be considered in the design and construction of floor slabs and pavements. Where standing water develops, either on slab or pavement surfaces or within the base course layer, softening of the subgrade and other problems related to the deterioration of the floor slabs and pavements can be expected. Adequate drainage should reduce the possibility of the subgrade materials becoming saturated over a long period of time. To reduce water infiltration to the pavement section and within the base course layer resulting in softening of the subgrade and deterioration of the slabs and pavements, we recommend the timely repair or sealing of joints and cracks in slabs and pavement.

All unsuitable materials should be removed and replaced with environmentally clean, inorganic fill and free of debris or harmful matter. Unsuitable materials removed from the project site should be disposed of in accordance with all applicable federal, state, and local regulations.

The contractor should avoid stockpiling excavated materials immediately adjacent to the excavation walls. We recommend that stockpile materials be kept back from the excavation a minimum distance equal to the excavation depth to avoid surcharging the excavation walls. If this is impractical due to space constraints, the excavation walls should be retained with bracing designed for the anticipated surcharge loading.

Excavations should comply with the requirements of OSHA 29CFR, Part 1926, Subpart P, "Excavations" and its appendices, as well as other applicable codes. This document states that the contractor is solely responsible for the design and construction of stable, temporary excavations. The excavations should not only be in accordance with current OSHA excavation and trench safety standards but also with applicable local, state, and federal regulations. The contractor should shore, slope or bench the excavation sides when appropriate. In no case should excavations extend below the level of adjacent structures, utilities or pavements, unless underpinning or other adequate support is provided. Site safety is the sole responsibility of the contractor, who shall also be responsible for the means, methods and sequencing of construction operations.

13
EXPLORATION PROCEDURES

Subsurface Exploration Procedures

The soil borings were located in the field by a CGMT Field Engineer based on the proposed boring site plan provided to us. As required by the State of Illinois, the driller notified Illinois One-Call System, JULIE, to verify underground utilities in the vicinity of the project site prior to drilling operations.

The soil borings were performed with a truck-mounted rotary-type auger drill rig, which utilized continuous hollow stem augers to advance the boreholes. Representative soil samples were obtained at 2½ foot intervals for the first 10 feet and 5 foot intervals thereafter by means of conventional split-barrel sampling procedures. In this procedure, a 2-inch O.D., split-barrel sampler is driven into the soil a distance of 18 inches by a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler through a 12-inch interval, after initial setting of 6 inches, is termed the Standard Penetration Test (SPT) or N-value and is indicated for each sample on the boring logs. The SPT value can be used as a qualitative indication of the in-place relative density of cohesionless soils. In a less reliable way, it also indicates the consistency of cohesive soils. This indication is qualitative, since many factors can significantly affect the standard penetration resistance value and prevent a direct correlation between drill crews, drill rigs, drilling procedures, and hammer-rod-sampler assemblies. The drill rig utilized an automatic trip hammer to drive the sampler. Consideration of the effect of the automatic hammer's efficiency was included in the interpretation of subsurface information for the analyses prepared for this report.

The drill crew maintained a field log of the soils encountered in the borings. After recovery, each geotechnical soil sample was removed from the sampler and visually classified. Representative portions of each soil sample were then sealed in jars and brought to our laboratory in Elk Grove Village, Illinois for further visual examination and laboratory testing. After completion of the drilling operations, the boreholes were backfilled with auger cuttings to the existing ground surface.

Laboratory Testing Program

Representative soil samples were selected and tested in our laboratory to check field classifications and to determine pertinent engineering properties. The laboratory testing program included visual classifications and unconfined compressive strength and moisture content determinations. Dry Density determinations were performed on selected samples of existing fill.

An experienced geotechnical engineer classified each soil sample on the basis of texture and plasticity in accordance with the Unified Soil Classification System. The group symbols for each soil type are indicated in parentheses following the soil descriptions on the boring logs. A brief explanation of the Unified System is included with this report. The geotechnical engineer grouped the various soil types into the major zones noted on the boring logs. The stratification lines designating the interfaces between earth materials on the boring logs and profiles are approximate; in situ, the transitions may be gradual.

Unconfined compressive strength tests were performed on cohesive soil samples with the use of a calibrated hand penetrometer. In the hand penetrometer test, the unconfined compressive strength of a soil sample is estimated, to a maximum of 4½ tons per square foot (tsf) by measuring the resistance of a soil sample to penetration of a small, calibrated spring-loaded cylinder.

The soil samples will be retained in our laboratory for a period of 60 days, after which, they will be discarded unless other instructions are received as to their disposal.

14
CLOSING

We recommend that the construction activities be monitored by CGMT to provide the necessary overview and to check the suitability of the subgrade soils for supporting the foundations. Once final loads become available, CGMT must be contacted to review the recommendations presented herein.

This report has been prepared in order to aid in the evaluation of this property and to assist the architect and/or engineer in the design of this project. The scope is limited to the specific project and locations described herein and our description of the project represents our understanding of the significant aspects relative to soil and foundation characteristics. In the event that any change in the nature or location of the proposed construction outlined in this report are planned, we should be informed so that the changes can be reviewed and the conclusions of this report modified or approved in writing by the geotechnical engineer. It is recommended that all construction operations dealing with earthwork and foundations be reviewed by an experienced geotechnical engineer to provide information on which to base a decision as to whether the design requirements are fulfilled in the actual construction. If you wish, we would welcome the opportunity to provide field construction services for you during construction.

The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings and tests performed at the locations as indicated on the Boring Location Plan and other information referenced in this report. This report does not reflect any variations, which may occur between the borings. In the performance of the subsurface exploration, specific information is obtained at specific locations at specific times. However, it is a well known fact that variations in soil conditions exist on most sites between boring locations and also such situations as groundwater levels vary from time to time. The nature and extent of variations may not become evident until the course of construction. If variations then appear evident, after performing on-site observations during the construction period and noting characteristics and variations, a reevaluation of the recommendations for this report will be necessary.

APPENDIX

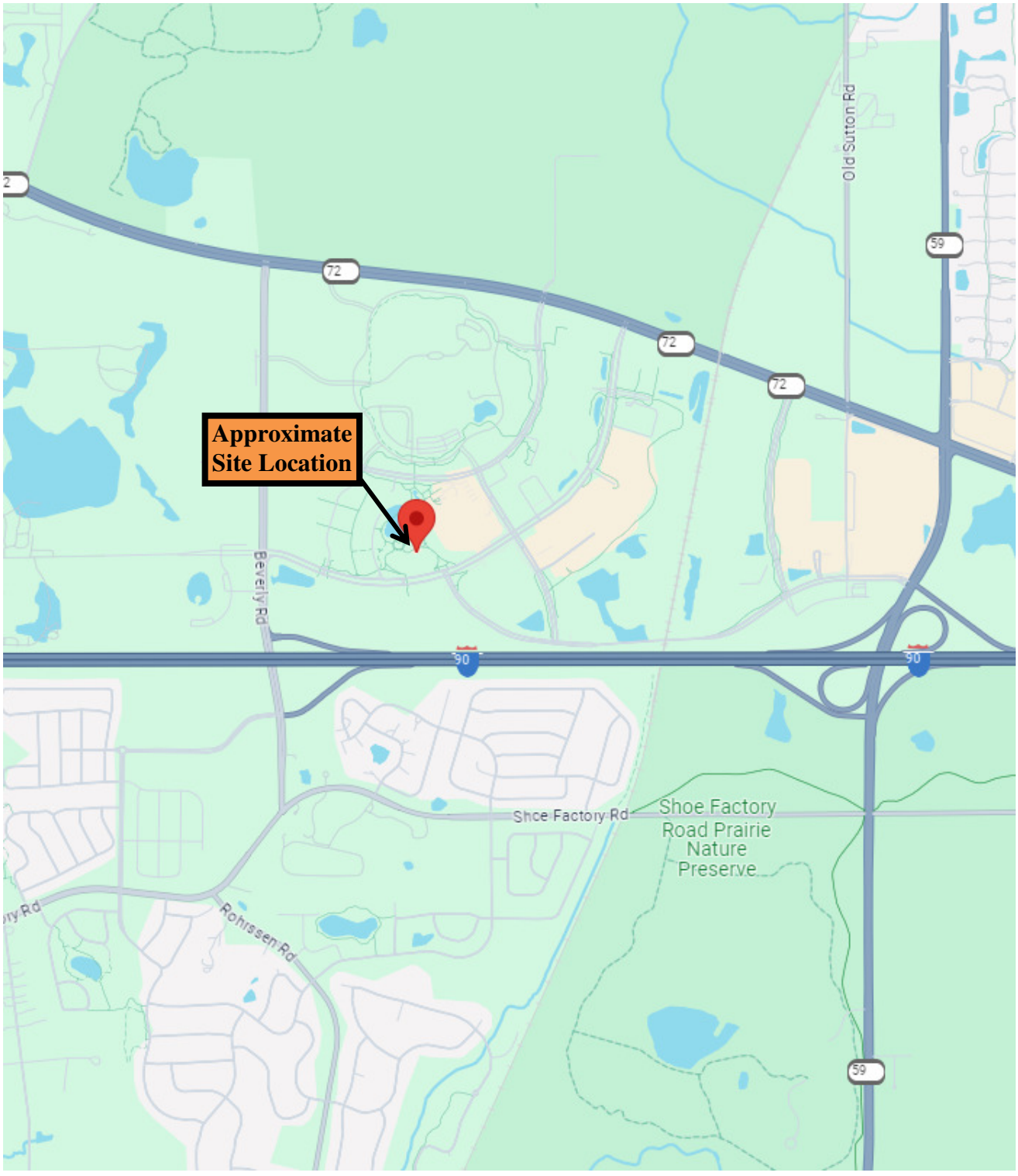
Vicinity Map

Boring Location Plan

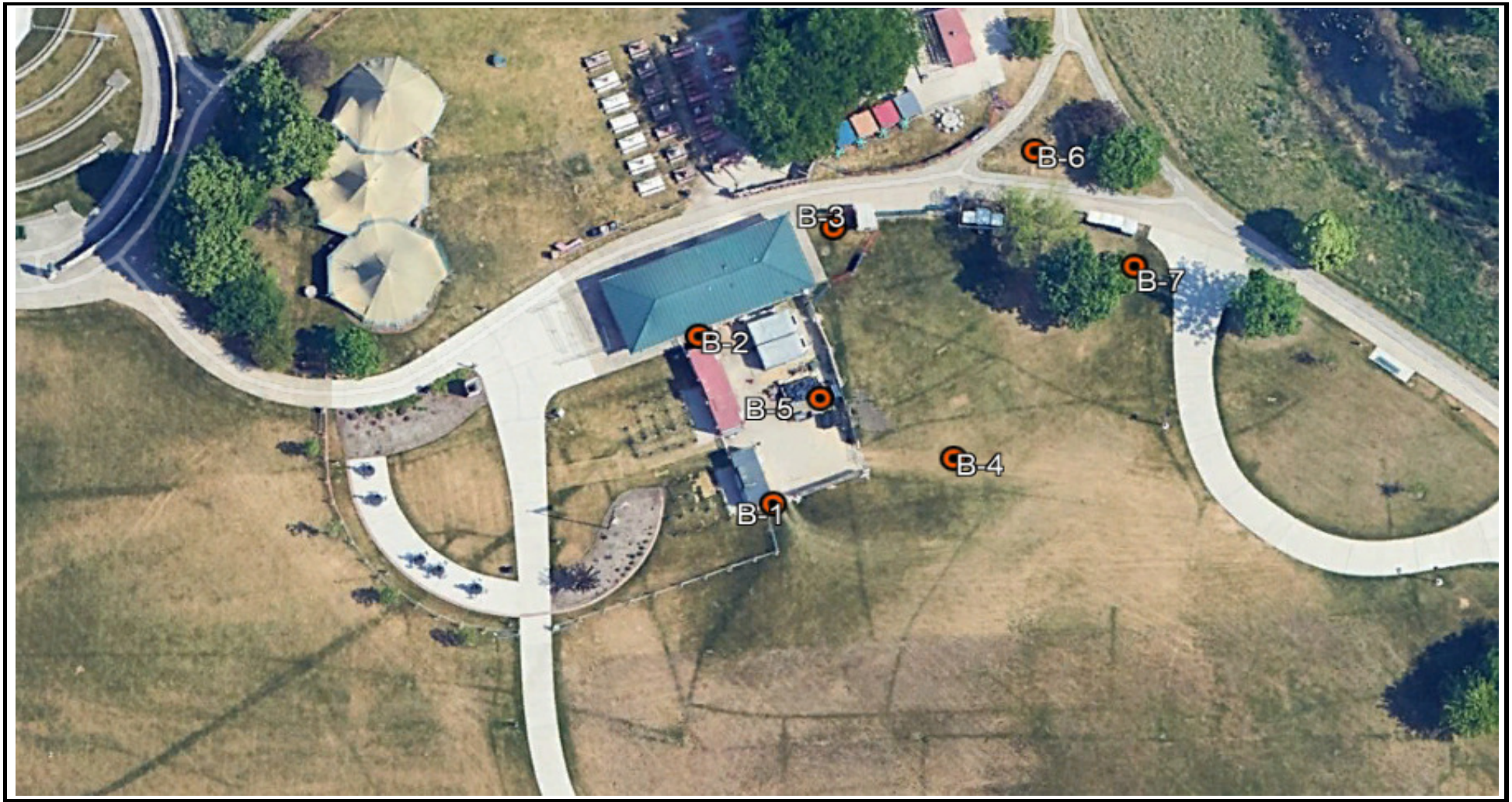
Boring Logs

Unified Soil Classification System

Reference Notes For Boring Logs



	VICINITY MAP	N	**CGMT Project No. 24G0236** **Village Green Concessions Stand** **5510 Prairie Stone Parkway** **Hoffman Estates, Cook County, Illinois**



Drawing Not To Scale

N

LEGEND

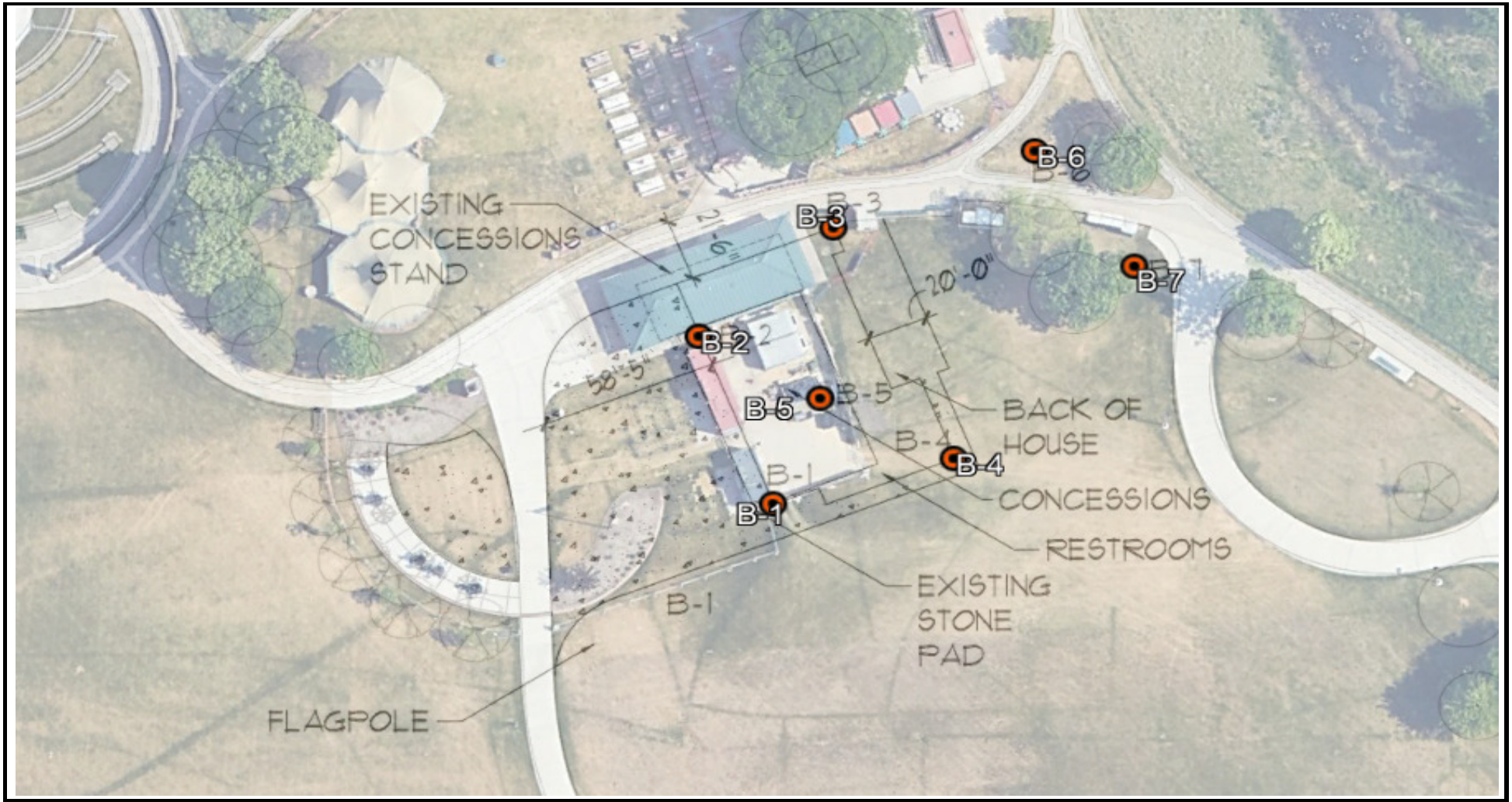
- Approximate Soil Boring Location

Soil Boring Location Diagram

New Village Green Concessions Stand

5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192

Project Manager	Project Number
P. Patel	24G0236
Date	Sheet Number
4/30/2024	Fig. 1



Drawing Not To Scale

N

LEGEND

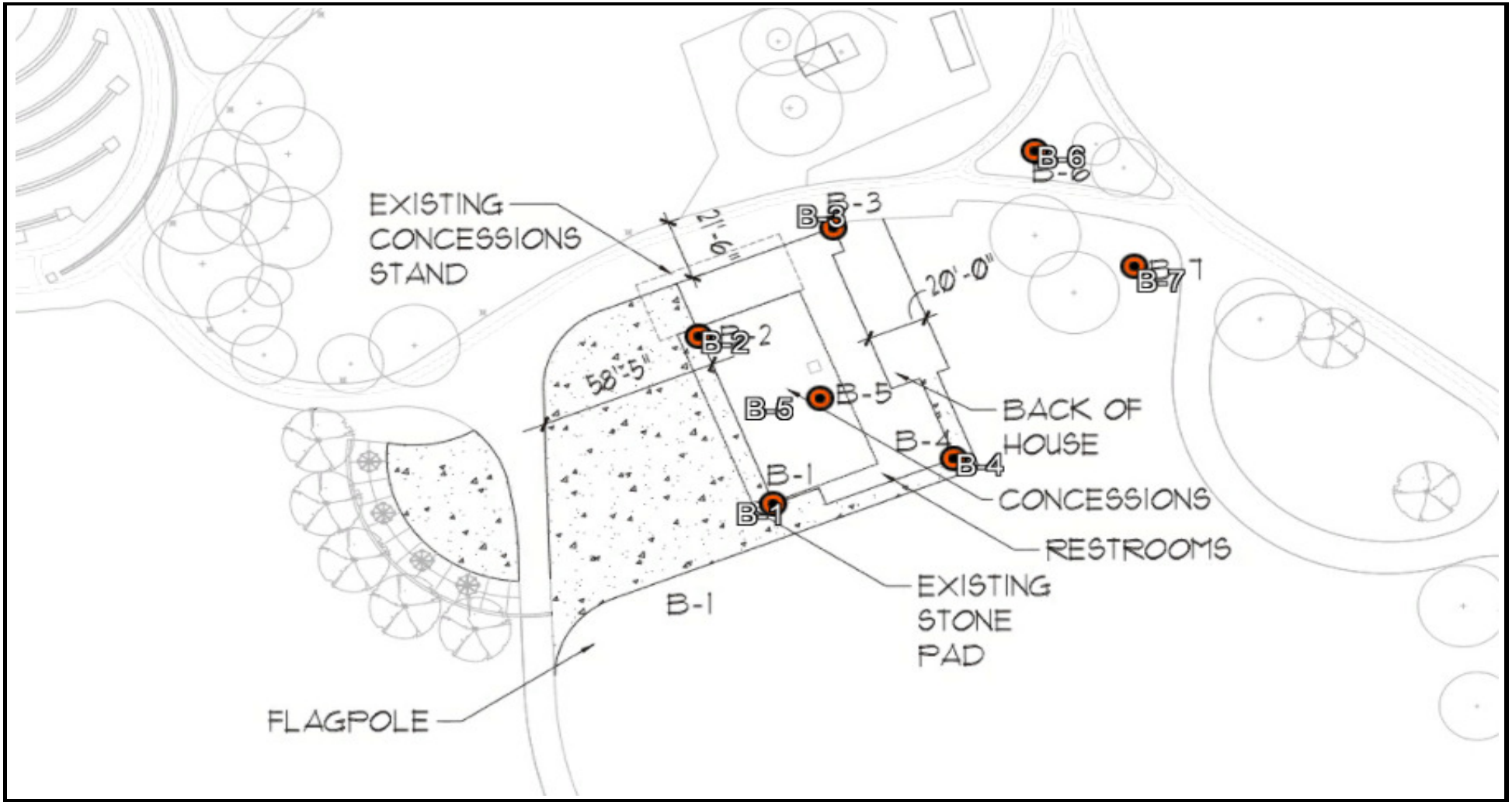
- Approximate Soil Boring Location

Soil Boring Location Diagram

New Village Green Concessions Stand

5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192

Project Manager	Project Number
P. Patel	24G0236
Date	Sheet Number
4/30/2024	Fig. 2



Drawing Not To Scale

N

LEGEND

- Approximate Soil Boring Location

Soil Boring Location Diagram	
New Village Green Concessions Stand	
5510 Prairie Stone Parkway Hoffman Estates, Illinois 60192	
Project Manager	Project Number
P. Patel	24G0236
Date	Sheet Number
4/30/2024	Fig. 3

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Boring No.: **B-01**
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		Approximately 6" of Topsoil					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Silty Clay, Trace Sand and Gravel, black, brown and gray, stiff to very stiff (CL FILL)	SS-1 1.0' - 2.5' 12" Recovery	3 4 7	24.4	2.0	
	2.0							
	3.0							
	4.0		Saturated	SS-2 3.5' - 5.0' 16" Recovery	2 3 3	25.6	1.0	
	5.0							
	6.0		Silty Clay, Trace Sand and Gravel, brown and gray, stiff to very stiff (CL)	SS-3 6.0' - 7.5' 18" Recovery	3 4 5	19.6	2.0	
	7.0							
	8.0							
	9.0			SS-4 8.5' - 10.0' 18" Recovery	2 3 3	19.1	1.25	
	10.0							
	11.0							
	12.0							
	13.0							
	14.0			SS-5 13.5' - 15.0' 18" Recovery	12 8 12	15.5	2.5	
	15.0							
	16.0							
	17.0							
	18.0							
	19.0		Silty Clay, Trace Sand and Gravel, gray, very stiff (CL)	SS-6 18.5' - 20.0' 18" Recovery	6 8 10	13.5	3.0	
	20.0							

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-01
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	20.0		Silty Clay, Trace Sand and Gravel, gray, very stiff (CL)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	21.0							
	22.0							
	23.0							
	24.0			SS-7 23.5' -25.0' 18" Recovery	15 20 16	12.5	2.0	
	25.0		END of BORING at 25 Feet					
	26.0							
	27.0							
	28.0							
	29.0							
	30.0							
	31.0							
	32.0							
	33.0							
	34.0							
	35.0							
	36.0							
	37.0							
	38.0							
	39.0							
	40.0							

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-02
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		Approximately 14" of Topsoil					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Silty Clay, Trace Sand and Gravel, black, brown and gray, stiff to very stiff (CL FILL)	SS-1 1.0' - 2.5' 6" Recovery	4 4 3	16.3	1.5	
	2.0							
	3.0							
	4.0			SS-2 3.5' - 5.0' 12" Recovery	4 5 6	21.8	2.5	**Dry Density:** 3.5' - 5.0' = 100.3 lbs./ft^3
	5.0							
	6.0		Saturated	SS-3 6.0' - 7.5' 16" Recovery	3 2 3	25.3	1.0	**Dry Density:** 6.0' - 7.5' = 95.6 lbs./ft^3
	7.0							
	8.0							
	9.0		Silty Clay, Trace Sand and Gravel, brown and gray, very stiff (CL)	SS-4 8.5' - 10.0' 16" Recovery	6 8 10	14.6	3.75	
	10.0							
	11.0							
	12.0							
	13.0							
	14.0		Silty Clay, Trace Sand and Gravel, gray, very stiff to hard (CL)	SS-5 13.5' - 15.0' 16" Recovery	12 15 15	17.7	3.0	
	15.0							
	16.0							
	17.0							
	18.0							
	19.0			SS-6 18.5' - 20.0' 18" Recovery	7 9 11	12.6	4.5+	
	20.0							

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-02
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	20.0		Silty Clay, Trace Sand and Gravel, gray, very stiff to hard (CL)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	21.0							
	22.0							
	23.0							
	24.0			SS-7 23.5' -25.0' 18" Recovery	8 10 12	12.7	4.5+	
	25.0		END of BORING at 25 Feet					
	26.0							
	27.0							
	28.0							
	29.0							
	30.0							
	31.0							
	32.0							
	33.0							
	34.0							
	35.0							
	36.0							
	37.0							
	38.0							
	39.0							
	40.0							

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-03
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		Approximately 12" of Topsoil					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Silty Clay, Trace Sand and Gravel, black, brown and gray, stiff to hard (CL FILL)	SS-1 1.0' - 2.5' 10" Recovery	4 5 10	21.5	4.5+	
	2.0							
	3.0							
				SS-2 3.5' - 5.0' 16" Recovery	1 3 5	22.6	1.75	
	4.0							
	5.0							
	6.0			SS-3 6.0' - 7.5' 18" Recovery	2 3 4	29.5	1.5	**Dry Density:** 6.0' - 7.5' = 86.3 lbs./ft^3
			Saturated					
	7.0							
	8.0							
	9.0		Silty Clay, Trace Sand and Gravel, brown and gray, stiff (CL)	SS-4 8.5' - 10.0' 18" Recovery	1 2 3	17.0	1.0	
	10.0							
	11.0							
	12.0							
	13.0							
	14.0		Silty Clay, Trace Sand and Gravel, gray, very stiff (CL)	SS-5 13.5' - 15.0' 18" Recovery	4 8 10	16.5	3.75	
	15.0							
	16.0							
	17.0							
	18.0							
	19.0			SS-6 18.5' - 20.0' 18" Recovery	6 7 8	17.0	2.5	
	20.0							

Drilling Contractor:	CGMT, Inc.	**Water Level (Ft.)**
Drilling Method:	3¼" O.D. H.S.A. Split Spoon Sampling	**During Drilling:** None
Drilling Equipment:	CME-45C Truck Mounted Drill Rig	**Immediately After Drilling:** None
	REVIEWED BY: NPW	

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-03
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	20.0		Silty Clay, Trace Sand and Gravel, gray, very stiff (CL)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	21.0							
	22.0							
	23.0							
	24.0			SS-7 23.5' -25.0' 18" Recovery	7 8 8	15.4	3.5	
	25.0		END of BORING at 25 Feet					
	26.0							
	27.0							
	28.0							
	29.0							
	30.0							
	31.0							
	32.0							
	33.0							
	34.0							
	35.0							
	36.0							
	37.0							
	38.0							
	39.0							
	40.0							

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-04
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		Approximately 12" of Topsoil					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Sand and Gravel, brown, loose (SP-GP FILL)	SS-1 1.0' - 2.5' 12" Recovery	6 2 4	8.0	-	
	2.0							
	3.0							
	4.0			SS-2 3.5' - 5.0' 16" Recovery	4 2 2	7.6	-	
	5.0							
	6.0		Silty Clay, Trace Sand and Gravel, brown and gray, very stiff (CL)	SS-3 6.0' - 7.5' 16" Recovery	4 5 7	19.0	3.25	
	7.0							
	8.0							
	9.0			SS-4 8.5' - 10.0' 16" Recovery	9 12 20	14.9	3.0	
	10.0		END of BORING at 10 Feet Spoon and Auger Refusal at 10 feet					**Spoon and Auger Refusal at 10 Feet:** Underground Obstruction (Possible Cobbles, Boulders or Bedrock) Encountered During The Advancement Of the Split Spoon Sampler and Auger
	11.0							
	12.0							
	13.0							
	14.0							
	15.0							
	16.0							
	17.0							
	18.0							
	19.0							
	20.0							

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-05
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		Approximately 11" of Topsoil					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Silty Clay, Trace Sand and Gravel, black, brown and gray, firm to very stiff (CL FILL)	SS-1 1.0' - 2.5' 10" Recovery	4 5 6	21.3	2.25	**Dry Density:** 1.0' - 2.5' = 98.0 lbs./ft^3
	2.0							
	3.0							
	4.0			SS-2 3.5' - 5.0' 16" Recovery	3 3 4	20.5	0.75	
	5.0							
	6.0		Saturated	SS-3 6.0' - 7.5' 18" Recovery	2 3 4	26.9	0.75	
	7.0							
	8.0							
	9.0		Silty Clay, Trace Sand and Gravel, brown and gray, stiff (CL)	SS-4 8.5' - 10.0' 18" Recovery	2 3 3	18.3	1.0	
	10.0							
	11.0							
	12.0							
	13.0							
	14.0		Silty Clay, Trace Sand and Gravel, gray, stiff (CL)	SS-5 13.5' - 15.0' 18" Recovery	4 5 6	14.3	1.0	
	15.0							
	16.0							
	17.0							
	18.0							
	19.0			SS-6 18.5' - 20.0' 9" Recovery	15 50/3" -	12.9 8.5	4.5+ -	
	20.0		Sand and Gravel, gray, dense to very dense (SP-GP)					

Drilling Contractor:	CGMT, Inc.	**Water Level (Ft.)**	
Drilling Method:	3¼" O.D. H.S.A. Split Spoon Sampling	**During Drilling:**	None
Drilling Equipment:	CME-45C Truck Mounted Drill Rig	**Immediately After Drilling:**	None
	REVIEWED BY: NPW		

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-05
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	20.0		Sand and Gravel, gray, dense to very dense (SP-GP)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	21.0							
	22.0							
	23.0							
	24.0			SS-7 23.5' -25.0' 18" Recovery	10 15 20	11.2	-	
	25.0		END of BORING at 25 Feet					
	26.0							
	27.0							
	28.0							
	29.0							
	30.0							
	31.0							
	32.0							
	33.0							
	34.0							
	35.0							
	36.0							
	37.0							
	38.0							
	39.0							
	40.0							

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

Boring No.: B-06
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		Approximately 7" of Topsoil					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Silty Clay, Trace Sand and Gravel, black, brown and gray, very stiff (CL FILL)	SS-1 1.0' - 2.5' 8" Recovery	6 6 5	19.5	3.0	
	2.0							
	3.0							
	4.0		Silty Clay, Trace Sand and Gravel, brown and gray, stiff to hard (CL)	SS-2 3.5' - 5.0' 16" Recovery	1 3 3	18.7	1.5	
	5.0							
	6.0			SS-3 6.0' - 7.5' 18" Recovery	2 3 3	18.7	1.0	
	7.0							
	8.0							
	9.0			SS-4 8.5' - 10.0' 18" Recovery	2 3 3	17.1	1.75	
	10.0							
	11.0							
	12.0							
	13.0							
	14.0			SS-5 13.5' - 15.0' 18" Recovery	4 8 10	15.2	4.5+	
	15.0							
	16.0							
	17.0							
	18.0							
	19.0			SS-6 18.5' - 20.0' 18" Recovery	6 8 10	20.6	4.5+	
	20.0		END of BORING at 20 Feet					

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: None
Immediately After Drilling: None

Soil Boring Log

Construction & Geotechnical Material Testing, Inc.
60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

Boring No.: **B-07**
Date: Wednesday, April 24, 2024
Project: New Village Green Concessions Stand
5510 Prairie Stone Parkway
Hoffman Estates, Illinois 60192
Project No.: 24G0236
Boring Location: See Boring Location Diagram
Logged By: L.S.H.
Ground Elevation:

Soil Boring Prepared for:
Mr. Bryan Ackerlund
Village of Hoffman Estates
2305 Pembroke Avenue
Hoffman Estates, Illinois 60169

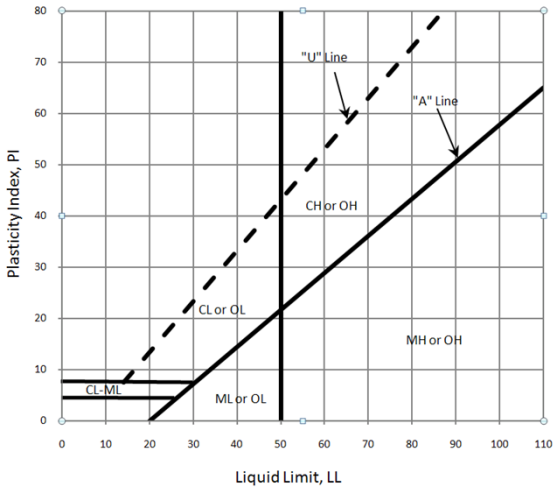
Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		Approximately 12" of Topsoil					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Sand and Gravel, brown, loose (SP-GP FILL)	SS-1 1.0' - 2.5' 12" Recovery	3 4 2	11.8	-	
	2.0							
	3.0							
	4.0			SS-2 3.5' - 5.0' 16" Recovery	1 4 3	11.0	-	
	5.0							
	6.0		Silty Clay, Trace Sand and Gravel, brown and gray, stiff to hard (CL)	SS-3 6.0' - 7.5' 18" Recovery	2 3 4	20.0	1.5	
	7.0							
	8.0							
	9.0			SS-4 8.5' - 10.0' 18" Recovery	4 5 6	18.3	1.5	
	10.0							
	11.0							
	12.0							
	13.0							
	14.0			SS-5 13.5' - 15.0' 18" Recovery	4 5 5	13.5	1.5	
	15.0							
	16.0							
	17.0							
	18.0							
	19.0			SS-6 18.5' - 20.0' 18" Recovery	7 9 11	14.4	4.5+	
	20.0		END of BORING at 20 Feet					

Drilling Contractor: CGMT, Inc.
Drilling Method: 3¼" O.D. H.S.A. Split Spoon Sampling
Drilling Equipment: CME-45C Truck Mounted Drill Rig
REVIEWED BY: NPW

Water Level (Ft.)
During Drilling: 6 feet
Immediately After Drilling: 12½ feet

UNITED SOIL CLASSIFICATION SYSTEM
(ASTM D-2487)

Major Division		Group Symbol	Typical Names	Classification on basis of percentage of fines	Classification Criteria
Coarse-grained soils: More than 50% retained on No. 200 sieve	Gravels: More than 50% of coarse fraction retained on No. 4 sieve	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	Less than 5% pass No. 200 sieve	$C_u = D_{60}/D_{10}$ greater than 4 $C_z = (D_{30})^2/(D_{10}XD_{60})$ between 1 & 3
		GP	Poorly graded gravels and gravel-sand mixtures, little or no fines		Not meeting both criteria for GW
		GM	Silty gravels, gravel-sand-silt mixtures	More than 12% pass No. 200 sieve	Atterberg limits plot below "A" line or plasticity index less than 4
		GC	Clayey gravels, gravel-sand-clay mixtures		Atterberg limits plot above "A" line and plasticity index greater than 7
	Sands: More than 50% of coarse fraction passes No. 4 sieve	SW	Well-graded sands and gravelly sands, little or no fines	5% to 12% pass No. 200 sieve	$C_u = D_{60}/D_{10}$ greater than 6 $C_z = (D_{30})^2/(D_{10}XD_{60})$ between 1 & 3
		SP	Poorly graded sands and gravelly sands, little or no fines		Not meeting both criteria for SW
		SM	Silty sands, sand-silt mixtures	Borderline classification requiring use of dual symbol: GW, GP, SW, SP; GM, GC, SM, SC	Atterberg limits plot below "A" line or plasticity index less than 4
		SC	Clayey sands, sand-clay mixtures		Atterberg limits plot above "A" line and plasticity index greater than 7
Fine-grained soils: 50% or more passing No. 200 sieve	Silts and Clays: Liquid limit 50% or less	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands	Note: U-line represents approximate upper limit of LL and PI combinations natural soils (empirically determined). ASTM D-2487	
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
		OL	Organic silts and organic silty clays of low plasticity		
	Silts and Clays: Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts		
		CH	Inorganic clays of high plasticity, fat clays		
		OH	Organic clays of medium to high plasticity		
Highly organic soils		Pt	Peat, muck and other highly organic soils		Fibrous organic matter; will char, burn or glow



Plasticity chart for the classification of fine-grained soils. Tests made on fraction finer than No. 40 sieve

Borderline classifications, used for soils possessing characteristics of two groups, are designated by combinations of group symbols. For example: GW-GC, well-graded gravel-sand mixture with clay binder

UNIFIED SOIL CLASSIFICATION SYSTEM

REFERENCE NOTES FOR BORING LOGS

I. Drilling and Sampling Symbols:

SS – Split Spoon Sampler
ST – Shelby Tube Sampler
RC – Rock Core: NX, BX, AX
PM – Pressuremeter
DC – Dutch Cone Penetrometer
RB – Rock Bit Drilling
BS – Bulk Sample of Drilling
PA – Power Auger (no sample)
HSA – Hollow Stem Auger
WS – Wash Sample

Standard Penetration (Blows/Ft) refers to the blows per foot of a 140 lb. hammer falling 30 inches on a 2 inch O.D. split spoon sampler, as specified in ASTM D-1586. The blow count is commonly referred to as the N-value.

II. Correlation of Penetration Resistances to Soil Properties:

Relative Density-Sands, Silts

SPT – N	Relative Density
0 – 3	Very Loose
4 – 9	Loose
10 – 29	Medium Dense
30 – 49	Dense
50 – 80	Very Dense

Consistency of Cohesive Soils

Unconfined Compressive Strength, Qp, tsf	Consistency
under 0.25	Very Soft
0.25 – 0.49	Soft
0.50 – 0.99	Firm
1.00 – 1.99	Stiff
2.00 – 3.99	Very Stiff
4.00 – 8.00	Hard
over 8.00	Very Hard

III Unified Soil Classification Symbols:

GP – Poorly Graded Gravel
GW – Well Graded Gravel
GM – Silty Gravel
GC – Clayey Gravel
SP – Poorly Graded Sand
SW – Well Graded Sand
SM – Silty Sand
SC – Clayey Sand
ML – Low Plasticity Silt
MH – High Plasticity Silt
CL – Low Plasticity Clay
CH – High Plasticity Clay
OL – Low Plasticity Organic
OH – High Plasticity Organic
CL-ML – Dual Classification (Typical)

IV. Water Level Measurement Symbol:

WL – Water Level
WS – While Sampling
WD – While Drilling
BCR – Before Casing Removal
ACR – After Casing Removal
WCI – Wet Cave In
DCI – Dry Cave In

The water levels are those water levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in a granular soil. In clays and plastic silts, the accurate determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally applied.