ADDENDUM NO. 3

February 25, 2022

DOUGLAS MACARTHUR ELEMENTARY SCHOOL ADDITIONS, RENOVATIONS, AND RELATED WORK
Crown Point, IN 46307

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated January 31, 2022 by Gibraltar Design. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 3-1 through ADD 3-3 and attached Addendum No. 3 from Gibraltar Design dated February 24, 2022 and consisting of 10 pages, Specification Sections 33 11 00 - Water Distribution Systems, 33 11 50 - Exterior Water Lines, Fire Lines, and Facilities, 33 13 00 - Disinfection of Water Distribution System, and 88 drawings.

A. SPECIFICATION SECTION 00 00 20 - TABLE OF CONTENTS

1. **Add:**

    1. Specification Section 33 11 00 - Water Distribution Systems
    2. Specification Section 33 11 50 - Exterior Water Lines, Fire Lines, and Facilities
    3. Specification Section 33 13 00 - Disinfection of Water Distribution System

B. SPECIFICATION SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

1. **BID CATEGORY NO. 1 - GENERAL TRADES**

    1. **Add:**

        1. Specification Section 33 11 00 - Water Distribution Systems
        2. Specification Section 33 11 50 - Exterior Water Lines, Fire Lines, and Facilities
        3. Specification Section 33 13 00 - Disinfection of Water Distribution System

Clarification No. 25:
Reference drawing sheet C3.0, all work associated with the youth baseball field shall be provided by the **Bid Category No. 1 Contractor**.

2. **Replace:**

Clarification No. 23:
Reference the AD Drawings; the **Bid Category No. 2 Contractor** shall provide all work indicated on Note 85. the **Bid Category No. 3 Contractor** shall provide all work indicated on Notes 37, 39 and 42. The **Bid Category No. 4 Contractor** shall provide all work indicated on Notes 40 and 73. The **Bid Category No. 5 Contractor** shall provide all work indicated on Note 86. All other notes are the responsibility of the **Bid Category No. 1 Contractor** unless otherwise noted.

2. **BID CATEGORY NO. 2 - MASONRY**

1. **Add:**

Clarification No. 8:
Reference the AD Drawings; the **Bid Category No. 2 Contractor** shall provide all work indicated on Note 85. the **Bid Category No. 3 Contractor** shall provide all work indicated on Notes 37, 39 and 42. The **Bid Category No. 4 Contractor** shall provide all work indicated on Notes 40 and 73. The **Bid Category No. 5 Contractor** shall provide all work indicated on Note 86. All other notes are the responsibility of the **Bid Category No. 1 Contractor** unless otherwise noted.

Clarification No. 9:
The **Bid Category No. 2 Contractor** shall provide all work indicated on Detail 10 on drawing sheet S-413.

3. **BID CATEGORY NO. 3 - ROOFING**

1. **Replace:**

Clarification No. 7:
Reference the AD Drawings; the **Bid Category No. 2 Contractor** shall provide all work indicated on Note 85. the **Bid Category No. 3 Contractor** shall provide all work indicated on Notes 37, 39 and 42. The **Bid Category No. 4 Contractor** shall provide all work indicated on Notes 40 and 73. The **Bid Category No. 5 Contractor** shall provide all work indicated on Note 86. All other notes are the responsibility of the **Bid Category No. 1 Contractor** unless otherwise noted.

4. **BID CATEGORY NO. 4 - ALUMINUM ENTRANCES/GLAZING**

1. **Replace:**

Clarification No. 4:
Reference the AD Drawings; the **Bid Category No. 2 Contractor** shall provide all work indicated on Note 85. the **Bid Category No. 3 Contractor** shall provide all work indicated on Notes 37, 39 and 42. The **Bid Category No. 4 Contractor** shall provide all work indicated on Notes 40 and 73. The **Bid Category No. 5 Contractor** shall provide all work indicated on Note 86. All other notes are the responsibility of the **Bid Category No. 1 Contractor** unless otherwise noted.

5. **BID CATEGORY NO. 5 - METAL STUDS/DRYWALL/CEILINGS**

1. **Add:**

Clarification No. 6:
Reference the AD Drawings; the **Bid Category No. 2 Contractor** shall provide all work indicated on Note 85. the **Bid Category No. 3 Contractor** shall provide all work indicated on Notes 37, 39 and 42. The **Bid Category No. 4 Contractor** shall provide all work indicated on Notes 40 and 73. The **Bid Category No. 5 Contractor** shall provide all work indicated on Note 86. All other notes are the responsibility of the **Bid Category No. 1 Contractor** unless otherwise noted.

ADDENDUM THREE

Addendum Three (AD.03) to the drawings and specifications prepared by Gibraltar Design for **MacArthur Elementary School Additions & Renovations** for Crown Point Community School Corporation, Crown Point, Indiana.

All Contractors bidding on this project shall read all of the items covered below and shall comply with all of the requirements as set forth, including any necessary refinements or additions generated by this Addendum and required by the intent of the original contract documents. All Contractors shall acknowledge on their bid form that they have received this Addendum, Addendum One and Addendum Two, and include the appropriate content of same within their bid proposal.

GENERAL

A. **Question:** I see all the TV's and projectors being removed on the demo drawings (demolition note 7), it appears as though we're being asked to include that in our bid. There is no mention of reinstalling them on the T-xxxx series drawings. Will these be reinstalled by the school or another entity or should these be factored into the bid?

Answer: Yes, Demo Note Scope is included in the Project. Most of the classroom projectors are sitting on portable carts and have no permanent cabling. New devices will be provided in a latter bid package. Addendum #3 modifies the Demo Note 7.

B. **Question:** What kind of termination is needed at the LCD clocks?

Answer: See Sheet T001 Symbol Legend for LED Clock Cabling Requirements (One data cable is required per clock location).

C. **Question:** Existing cameras that are to be reinstalled, are we running new data lines to them? Asking because there's a specific termination called out for them on T501.

Answer: For the "T" series sheets "ALL" camera locations, require a new Category 6 cable. Some locations shown on the floor plans correspond to existing cameras that are to be re-installed, other locations will receive new cameras in a future bid package. Detail #10 "Above Ceiling Outlet" on Sheet T501, does depict the termination requirements for all ceiling mounted Cameras. See updated T501 drawing issued with Addendum #3 that clarifies the drawing symbols.

D. **Question:** In some rooms such as A106 (T104 drawing) I see local input duplex jack but no TV or monitor to output to. How should these situations be handled, should we assume, there will be a TV or do you want it coiled in the ceiling for future use? On the other hand in other rooms A132 (T104) as an example I see a duplex jack next to a TV but no local input. Do we want to run HDMI and USB (local input) cables to all TV's or are the drawings correct and these are just being run off of a data drop?

Answer: TV's located in Classrooms and/or offices should have an associated "LI" however there are a few TV locations like in a Hallway or the Cafeteria that do not have an associated "LI". See updated floor plan drawings being issued in

Addendum #3 for plan updates that include the appropriate outlet types. You do not need to provide the HDMI and USB Cables as part of this Bid.

SPECIFICATIONS

1. Specification Section 00 01 10 Table of Contents

A. Add the following Specification Sections to the Table of Contents:

1. Section 33 11 00, Water Distribution Systems.
2. Section 33 11 50, Exterior Water Lines, Fire Lines, and Facilities.
3. Section 33 13 00, Disinfection of Water Distribution System.

2. Specification Section 08 71 00 Door Hardware

A. Replace Paragraph 3.8 of Specification Section 08 71 00, Door Hardware, with updated Paragraph 3.8 included in this Addendum.

3. Specification Section 09 51 00 Acoustical Ceilings

A. Delete Paragraphs 1.1.C., 2.3, and 3.2.S. in their entirety.

4. Specification Section 09 84 00 Acoustical Wall Panels

A. Add new Paragraph 1.1.B., as "B. Light weight composite profile paneling and seam finishing material for sculptured wall surface."

B. Add new Paragraph 2.4 Composite Profile Paneling as follows:

"2.4 Composite Profile Paneling

A. Panels as fabricated by Modular Arts, Inc., Seattle, Washington.

B. Profile: Smooth surface mineral composite panel with light weight plant-based foam back.

C. Size and Design: 32-inch square by 1/4-inch to 1-inch relief, Design is CLIF.

D. Include Manufacturers Installation Kit for size of installation.

E. Include all accessories, including stainless steel anchors, as required for a complete installation.

F. Finish: Refer to Finish Legend."

C. Add new Paragraph 3.2.C. as "C. Install profile paneling in accordance with Manufacturer's Installation Instructions except that seam finishing shall be performed in accordance with Section 09 29 00, Gypsum Board. Sealing and painting shall be performed in accordance with Section 09 91 00 Painting."

5. Specification Section 11 40 00 Foodservice Equipment

A. Item #14 – Island Work Counter w/Prep Sink

1. Delete all reference to "h. stainless-steel u-channels for vertical cutting board storage".
2. Delete all reference to "i. Provide two (2) only 20" X 24" x ½" polyethylene cutting boards, white".

B. Item #17 – Island Work Counter w/Prep Sink

1. Delete all reference to "f. Stainless-steel u-channels for vertical cutting board storage".
2. Delete all reference to "g. Provide two (2) only 20" x 24" x ½" polyethylene cutting boards, white".

C. Item #46 – Worktable

1. Delete all reference to "C. Open-Base w/stainless steel cross rails".

D. Items #69, 72, 75, 79, 82, 85 and 86 – Serving Counters and Cashier Counters

1. Clarification: Provide three (3) raised stainless steel tray slide runners on student side of countertop.

6. Specification Section 11 66 43 Scoreboards

A. Revise Paragraph 2.2.B.1. to read "Total of Two (2) Scoreboards required."

7. Specification Section 23 09 23 Temperature Controls

A. Add Paragraph 1.02 D. to read:

"D. The intent of this specification is to provide seamless integration with the existing district-wide Schneider Electric I/A Series building automation system in place at Crown Point Community School Corporation. Integration software drivers and graphics being provided with the new project at MacArthur Elementary School must be seamlessly integrated into the existing Schneider Electric Web Server. The existing Schneider Electric System in place consists of both N4 and legacy AX platforms that will be seamlessly integrated."

8. Specification Section 23 83 23 Unit Ventilators

A. Add the following sentence to end of Paragraph 2.02 K: "Provide painted closure panels and concealed support required for complete finished assembly."

9. Specification Sections 33 11 00, 33 11 50 and 33 13 00

A. Add Water Distribution Specification Sections 33 11 00, 33 11 50 and 33 13 00, included in this Addendum, to the Project Manual.

DRAWINGS

10. Sheet C-1.0

A. Refer to revised, full size drawing, included in this Addendum, for added location of existing well.

11. Sheet C-1.1

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Clarification for removal of existing water main and the removal of the abandoned septic tank were added.
2. Additional tree removal along the western boundary was added.
3. Note Number 19 was removed.
4. Additional asphalt has been marked for removal along the north side of the building to be replaced by concrete sidewalk.
5. Added note regarding removal of tanks by Owner.

12. Sheet C-2.0

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. A new concrete sidewalk has been added along the north side of the building, to be installed as concrete pavement.
2. A split rail fence has been added along the west side of the right-of-way next to the detention pond.
3. The approaches from 129th have been changed to concrete pavement.
4. Fencing around soft play area connected to existing building has been labeled as 4' C.L. Fence. Other new fencing around play areas has been labeled to match existing style.
5. New locations and revised locations for parking log lighting.

13. Sheet C-3.0

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Both east and west ponds have been modified.
2. Additional note was added regarding grates on outfall pipes.
3. A new perforated pipe has been added along the southern perimeter of the baseball field.
4. A new 6" PVC pipe has been added for the soft and hard play areas both north and south.
5. New specialized grates have been added to structures 15, 16 and 18.
6. A new 4" PVC pipe from the building and a new manhole have been added as structure number 24.
7. Text clarifying the pipe sizes from the new western addition have been added.
8. The storm sewer connections along the eastern side of the building have been relocated and changed.
9. Added notes regarding construction and seeding of baseball field.
10. Callouts for continuation of piping into building have been changed from "see architectural plans" to "see MEP plans".
11. The new 4" STS on north side of building has been removed.

14. Sheet C-3.1

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. The sanitary sewer along the eastern side of the building has been completely removed.
2. A new water main service line and a sanitary sewer cleanout have been added along the eastern side of the existing building.
3. Callouts for continuation of piping into building have been changed from "see architectural plans" to "see MEP plans".

15. Sheet C-4.0

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Revised Soft-Surface and Hard Surface Play details.

16. Sheet C-4.3

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Casting types, precast concrete barriers and a downspout roof drain connection have been added.
2. The contractor should refer to Sheet C-3.0 for specialized grates on structures 15, 16 and 18.
3. Refer to the addition of a new detail for the Wood Guard Rail.

17. Sheet C-4.4

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Perforated pipe details, PVC Inline drain details and a grating detail have been added.

18. Sheet C-5.0

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. A revised storm water pollution prevention plan is being issued.
2. All items previously mentioned have been added.

19. Sheet C-6.1

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. The reference to structure 3 has been removed.

20. Sheets S-001, S-201, S-202, S-204, S-205, S-206, S-301, S-403, S-411, S-412, and S-413

A. Refer to eleven (11) revised, full size drawings, included in this Addendum, for revisions.

21. Sheets S-201

A. General NOTE: Contractors are to refer to Sections 1/A-402 and 2/A-402 for delineation of rigid insulation thickness at exterior foundations.

22. Sheets AD101, AD102, AD103

A. Refer to three (3) revised, full size drawings, included in this Addendum, for the following revisions:

1. Revise Notes 36 and 36.
2. Add Notes 83-86.
3. Add notes 83-86 to plan where indicated.

23. Sheets A-101, A-102, A-103, A-104

A. Refer to four (4) revised, full size drawings, included in this Addendum, for the following revisions:

1. Revise Note 30.
2. Where note 33 and 58 occur together, CMU wall is to be partial height with the corridor face being glazed CMU. On top of the CMU wall is to be metal stud gypsum board, and insulation as called out on Note 58. Intent is for new wall construction to match adjacent wall construction. The CMU will not go to deck in these locations.
3. Add Note 69 to the following Vestibules B-101, B-131, D-101, D-103, and D-118.
4. Brick columns at canopies outside of B-101 and D-103 to have full CMU backup.

24. Sheets A-201, A-202

A. Refer to two (2) revised, full size drawings, included in this Addendum, for the following revisions:
   1. Revise Reference bubbles on Note 28 to say 6/A-210 and 15/A-210.
   2. Revise Roof Types as indicated.
   3. Revise Roof Plan as indicated.

25. Sheets A-301, A-302, A-303

A. Revise Reference bubble on Note 14 to say 6/A-501.

B. Revise Reference bubble on Note 14 to say 8/A-501.

26. Sheet A-401, A-402, A-403, A-404, A-405, A-406, A-408, A-409, A-410, A-411

A. Refer to ten (10) revised, full size drawings, included in this Addendum, for revised sections.

27. Sheet A-501

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:
   1. Revise Detail 6/A-501 and 10/A-501.

28. Sheet A-703

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:
   1. Revise plan as indicated in Media C-144.

29. Sheet A-710

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:
   1. Revise Note 15 to say “Baby Changing Table”. This is to be furnished and installed by contractor.

30. Sheet A-802

A. Revise finish tag Cafeteria B-124 to say B2 for wall base.

31. Sheet K-602

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:
   1. Details “H”, “I” and “J”: Clarify note on s/s tray runners.

32. Sheet K-603

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Detail "A": Clarify note on s/s tray runners.

33. Sheet MV-103

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Updated chiller symbol and added existing curb.
2. Added dryer vent.

34. Sheet M-501

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Added note to provide 10" wide side mounted pipe chase.
2. Added note to provide 10" deep false back where indicated on plans.

35. Sheet M-603

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

36. Sheet P-001

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Revised RD-2 and OFRD-1 in Plumbing Equipment and Fixture Schedule.

37. Sheet PD-102

A. Refer to revised, full size drawing, included in this Addendum, for removed existing storm piping shown on plan.

38. Sheet PD-103

A. Refer to revised, full size drawing, included in this Addendum, for revised storm and sanitary piping.

39. Sheet P-101

A. Refer to revised, full size drawing, included in this Addendum, for revised storm piping.

40. Sheet P-102

A. Refer to revised, full size drawing, included in this Addendum, for revised storm piping and added roof drains.

41. Sheet P-103

A. Refer to revised, full size drawing, included in this Addendum, for revised storm piping routing and connections.

42. Sheet P-104

A. Refer to revised, full size drawing, included in this Addendum, for revised storm piping.

43. Sheet P-105

A. Refer to revised, full size drawing, included in this Addendum, for revised storm water piping.

44. Sheet P-106

A. Refer to revised, full size drawing, included in this Addendum, for revised storm water piping and added roof drains.

45. Sheet P-107

A. Refer to revised, full size drawing, included in this Addendum, for revised storm water piping.

46. Sheet E-002

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Revised "RR" type pole-mounted fixtures to "ER".
2. Revised "NE" type pole-mounted fixtures to new type.
3. Revised "EX" type pole-mounted fixtures to "ER".
4. Revised site lighting locations and quantities.
5. Revised GENERAL notes.
6. Revised SHEET NOTES.
7. Added new location of existing floodlight.

47. Sheet ED-103

A. Refer to revised, full size drawing, included in this Addendum, for revised demolition floodlight to be removed and relocated.

48. Sheet EL-102

A. Refer to revised, full size drawing, included in this Addendum, for revised Café B-124 lighting.

49. Sheet EL-103

A. Refer to revised, full size drawing, included in this Addendum, for revised Media C-144 desk lighting.

50. Sheet EP-101

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Moved panel "EM-TECH1" to south wall.
2. Moved quad receptacle to south wall.
3. Revised GENERAL notes.

51. Sheet EP-102

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Removed duplicate "EM-TECH1" panel.
2. Revised GENERAL notes.

52. Sheets EP-103, EP-104, EP-105

A. Refer to three (3) revised, full size drawings, included in this Addendum, for revised GENERAL notes.

53. Sheet EP-201

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Added GEF-3 and associated connections.
2. Added GEF-4 and associated connections.

54. Sheet E-501

A. Refer to revised, full size drawing, included in this Addendum, for revised Electrical One-Line Schematic Diagram Sheet Notes.

55. Sheet E-502

A. Refer to revised, full size drawing, included in this Addendum, for revised Interior and Exterior Lighting Luminaire Schedules.

56. Sheet E-504

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Added motorized projection screen to "Main Gymnasium Control Cabinet Detail".
2. Reduced number of spares from four (4) to three (3) in "Main Gymnasium Control Cabinet Detail".
3. Added Kitchen Equipment Schedule.

57. Sheet T 001

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Changed the text for telecom symbol 2D/LI to note that the A/V cabling is future.

58. Sheet TD 100 (and all demo sheets)

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Demo Plan Note #7 language revised.
2. Revised note applies to all demo sheets issued with the Project.

59. Sheet T-101

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Rooms A-105, A-108, A-132: Added "LI" to data outlet.
2. Room A-106: Removed "LI" from data outlet.

60. Sheet T-102

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Rooms B-118, B-119, B-120 and B-122: Added "LI" to data outlet.

61. Sheet T-103

A. Refer to revised, full size drawing, included in this Addendum, for the following revisions:

1. Room C-141: Added "LI" to data outlet.
2. Room C-144: Added "LI" to (2) data outlets.

62. Sheet T-501

A. Refer to revised, full size drawing, included in this Addendum, for Detail 10 – added additional security camera symbols.

63. Sheet T-502

A. Refer to revised, full size drawing, included in this Addendum, for Details #1 and #2 – deleted the requirements for the HDMI and USB jacks and cables.

Pages 1 through 10, inclusive, Hardware List of Paragraph 3.8 of Specification Sections 08 71 00, and Full Specification Sections 33 11 00, 33 11 50 and 33 13 00, and Eighty-Eight (88) Full-Size Drawings, constitute the total makeup of **Addendum Three**.

GIBRALTAR DESIGN

Joseph P. Briggs

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3.8 Door Hardware Schedule

A. Locksets, exit devices, and other hardware items are referenced in the following hardware sets for series, type and function. Refer to the above-specifications for special features, options, cylinders/keying, and other requirements.

B. Hardware Sets:

HARDWARE GROUP NO. 01

For use on Door #(s):
C-139A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PASSAGE SET	9K0 N 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 02

For use on Door #(s):
B-121A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PASSAGE SET	9K0 N 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 03

For use on Door #(s):
A-109A A-111A A-131A A-133A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	OH STOP	90S	630	GLY
1	EA	GASKETING	488SCL PSA	CL	ZER
1	EA	FINGER GUARD	51A-90	A	ZER

HARDWARE GROUP NO. 04

For use on Door #(s):
A-114A A-115A B-109A B-110A B-111A C-126A
C-129A C-140A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER

HARDWARE GROUP NO. 05

For use on Door #(s):
A-128A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER
1	EA	FINGER GUARD	51A-90	A	ZER

HARDWARE GROUP NO. 06 - NOT USED

HARDWARE GROUP NO. 07

For use on Door #(s):
B-116A B-117A C-123A C-149A C-150A D-123A
D-124A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER

HARDWARE GROUP NO. 08

For use on Door #(s):
B-107A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 09

For use on Door #(s):
A-103A A-106A B-108A C-135A C-143A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 10

For use on Door #(s):
B-146A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 11

For use on Door #(s):
B-107B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 12

For use on Door #(s):
B-103B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM X STORERM	ND70X80CD SPA XN12-006	626	SCH
2	EA	PERMANENT CORE	1C7	626	BES
1	EA	ELECTRIC STRIKE	6212 FSE 12/16/24/28 VAC/VDC	630	VON
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
1	EA	DOOR CONTACT	7764	628	SCE
1	EA	MOTION SENSOR	SCANII 12/24 VDC	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]	LGR	SCE
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOOR CLOSED AND ALWAYS LOCKED FROM RECEPTION SIDE. DOOR UNLOCKED FROM CORRIDOR SIDE DURING SCHOOL HOURS AND LOCKED FROM CORRIDOR SIDE AFTER HOURS AND ON WEEKENDS.

AI PHONE AT RECEPTION DESK OR VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR REMAINS LOCKED UPON LOSS OF POWER. DOOR CONTACT TO MONITOR DOOR POSITION. MOTION SENSOR ON PUSH SIDE SHUNTS DOOR CONTACT FOR VALID EGRESS.

HARDWARE GROUP NO. 13

For use on Door #(s):
B-104A B-147A C-134A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 14 - NOT USED

HARDWARE GROUP NO. 15

For use on Door #(s):
A-110A A-110B A-130A A-130B B-106A B-112A
B-113A B-145A C-142A D-114A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 16

For use on Door #(s):
C-132A C-132C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 17

For use on Door #(s):
C-147A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 18

For use on Door #(s):
B-125A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
2	EA	OH STOP	90S	630	GLY
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 19

For use on Door #(s):
B-142A B-144A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
2	EA	OH STOP	90S	630	GLY
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 20 - NOT USED

HARDWARE GROUP NO. 21

For use on Door #(s):
C-138A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP & HOLDER	90H J	630	GLY
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 22

For use on Door #(s):
A-108A A-113A B-115B D-108A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 23 - NOT USED

HARDWARE GROUP NO. 24 - NOT USED

HARDWARE GROUP NO. 25

For use on Door #(s):
C-125A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP & HOLDER	90H J	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 26

For use on Door #(s):
C-148A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP	90S J	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 27

For use on Door #(s):

A-102A	A-105A	A-132A	B-115A	B-118A	B-119A
B-120A	B-141A	C-122A	C-141A	D-104A	D-113A
D-125A					

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 28

For use on Door #(s):
B-136A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. 29

For use on Door #(s):

C-128A	D-110A	D-111A	D-112A	D-115A	D-116A
D-117A	D-119A	D-120A	D-121A	D-126A	D-127A
D-128A	D-129A				

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 30 - NOT USED

HARDWARE GROUP NO. 31

For use on Door #(s):
C-133A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 32

For use on Door #(s):

A-107A	A-107B	A-112A	A-112B	A-127A	A-127B
A-129A	A-129B	A-134A	A-134B		

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 33

For use on Door #(s):
B-137A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 34 - NOT USED

HARDWARE GROUP NO. 35

For use on Door #(s):
B-127A B-127B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
2	EA	OH STOP	90S J	630	GLY
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 36

For use on Door #(s):
B-130A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	AUTO FLUSH BOLT	FB31P/FB41P AS REQ'D	630	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	ELECTRIFIED LOCKSET	9K7 DEU 14D RQE	626	BES
1	EA	COORDINATOR	COR X FL	628	IVE
2	EA	MOUNTING BRACKET	MB [AS REQ'D]	689	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS902 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]	LGR	SCE
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOOR NORMALLY CLOSED AND LOCKED. VALID CREDENITAL MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR REMAINS LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO LOCK SET) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 37

For use on Door #(s):
B-201A B-201B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
1	EA	AUTO FLUSH BOLT	FB31P/FB41P AS REQ'D	630	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	COORDINATOR	COR X FL	628	IVE
2	EA	MOUNTING BRACKET	MB [AS REQ'D]	689	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 38

For use on Door #(s):
C-127A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	COORDINATOR	COR X FL	628	IVE
2	EA	MOUNTING BRACKET	MB [AS REQ'D]	689	IVE
2	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CVX	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 39 - NOT USED

HARDWARE GROUP NO. 40 - NOT USED

HARDWARE GROUP NO. 41

For use on Door #(s):
B-103A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELECTRIFIED LOCKSET	9K7 DEU 14D RQE	626	BES
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
1	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS902 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]	LGR	SCE
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOOR NORMALLY CLOSED AND LOCKED. VALID CREDENITAL OR AI PHONE AT RECEPTION DESNK MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR REMAINS LOCKED UPON LOSS OF POWER. DOOR CONTACT TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO LOCKSET) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 42

For use on Door #(s):
A-135A D-101A D-118A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER RING	8310-801		LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR, TOUCH	8310-855	630	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. INTERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

DUAL ACTUATOR (8310-855) IN VESTIBULE SHARED FOR EXTERIOR AND INTERIOR VESTIBULE DOOR.

HARDWARE GROUP NO. 43

For use on Door #(s):
B-101B D-103B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER RING	8310-801		LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR, TOUCH	8310-855	630	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL OR AIPHONE AT RECEPTION DESK MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. INTERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 44

For use on Door #(s):
B-101D

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR	VESTIBULE ACTUATOR SPECIFIED WITH EXTERIOR VESTIBULE DOOR		
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. ITNERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 45

For use on Door #(s):
A-116A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER RING	8310-801		LCN
2	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. INTERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

DUAL ACTUATOR (8310-855) IN VESTIBULE SHARED FOR EXTERIOR AND INTERIOR VESTIBULE DOOR.

HARDWARE GROUP NO. 46

For use on Door #(s):
B-131A B-133A C-101A C-115A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ACCESS. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 47

For use on Door #(s):
C-130A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

LOCKED HOURS: VALID CREDENTIAL OR AIPHONE AT RECEPTION DESK MOMENTARILY UNLOCKS DOOR ALLOWING ACCESS. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 48

For use on Door #(s):
B-129A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ACCESS. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 49

For use on Door #(s):
B-131B C-115B C-130B D-103C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
2	EA	DUMMY PUSH BAR	350	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN

HARDWARE GROUP NO. 50

For use on Door #(s):
A-135B D-101B D-103D D-118B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
2	EA	DUMMY PUSH BAR	350	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR	VESTIBULE ACTUATOR SPECIFIED WITH EXTERIOR VESTIBULE DOOR		
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. FREE EGRESS AT ALL TIMES.

DUAL ACTUATOR (8310-855) IN VESTIBULE SHARED FOR EXTERIOR AND INTERIOR VESTIBULE DOOR. (SPECIFIED WITH EXTERIOR VESTIBULE DOOR)

HARDWARE GROUP NO. 51

For use on Door #(s):
B-101A C-101B D-103A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.
DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 52

For use on Door #(s):
B-101C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.
DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 53

For use on Door #(s):
B-143B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
2	EA	STRIKE	260U	626	VON
2	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 54 - NOT USED

HARDWARE GROUP NO. 55

For use on Door #(s):
B-124A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	SURFACE CLOSER	4040XP EDA (MOUNT CLOSER TO ALLOW DOOR TO SWING AGAINST WALL)	689	LCN
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 56

For use on Door #(s):
B-114A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9827-DT-LBR 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9827-NL-LBR 24 VDC	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES AS REQ'D	689	LCN
2	EA	SILENCER	SR64	GRY	IVE
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	679-05WD/679-05HM AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS904 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY HELD OPEN. UPON LOSS OF POWER OR FIRE ALARM, MAGNETIC HOLD OPENS RELEASE, ALLOWING DOORS TO CLOSE, LOCK AND LATCH. FREE EGRESS AT ALL TIMES.

WHEN DOORS ARE CLOSED AND LOCKED: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO PANIC DEVICE) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

POWER SUPPLY TIED INTO FIRE ALARM SYSETM.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 57

For use on Door #(s):
B-138B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9875-NL	626	VON
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
2	EA	GASKETING	119WB PSA	B	ZER
1	EA	GASKETING	870AA	AA	ZER
1	EA	DOOR BOTTOM	364AA	AA	ZER
1	EA	THRESHOLD	564A	A	ZER
1	EA	MOUNTING BRACKET	870SPB		ZER

HARDWARE GROUP NO. 58 - NOT USED

HARDWARE GROUP NO. 59

For use on Door #(s):
B-143A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 60

For use on Door #(s):
B-124C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 61

For use on Door #(s):
B-124B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP EDA (MOUNT CLOSER TO ALLOW DOOR TO SWING 180 DEGRESS)	689	LCN
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 62

For use on Door #(s):
C-102A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP EDA (MOUNT CLOSER TO ALLOW DOOR TO SWING 180 DEGREES)	689	LCN
1	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 63

For use on Door #(s):
B-128A C-116A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 64 - NOT USED

HARDWARE GROUP NO. 65

For use on Door #(s):
C-145A C-146A C-146B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-98-L-NL-17	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 66

For use on Door #(s):
B-138A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9875-NL	626	VON
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
2	EA	GASKETING	119WB PSA	B	ZER
1	EA	GASKETING	870AA	AA	ZER
1	EA	DOOR BOTTOM	364AA	AA	ZER
1	EA	THRESHOLD	564A	A	ZER
1	EA	MOUNTING BRACKET	870SPB		ZER

HARDWARE GROUP NO. 67

For use on Door #(s):
B-143C B-143D

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CD-98-EO	626	VON
1	EA	PANIC HARDWARE	CD-98-NL-OP-110MD	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	DOOR SWEEP	8192AA	AA	ZER

HARDWARE GROUP NO. 68

For use on Door #(s):
A-103B A-108B A-132B B-121B B-146B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
	EA	NOTE	NO HARDWARE REQUIRED (BORROWED LITE)		

HARDWARE GROUP NO. 69

For use on Door #(s):
C-132B C-138B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CYLINDER	RIM/MORTISE CYLINDER AS REQ'D	626	BES
		NOTE	BALANCE OF HARDWARE BY DOOR MFG		

HARDWARE GROUP NO. ALT-06

For use on Door #(s):
A-119A A-120A A-124A A-125A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-14

For use on Door #(s):
A-122A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-20

For use on Door #(s):
A-121A A-123A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP	90S J	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-23

For use on Door #(s):
B-132A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-24

For use on Door #(s):

B-122A	C-103B	C-104B	C-105A	C-106B	C-107A
C-109B	C-110A	C-111B	C-112A	C-113B	C-114A
C-117B	C-121B	C-124A			

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP & HOLDER	90H J	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-28

For use on Door #(s):
B-125B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-29 - NOT USED

HARDWARE GROUP NO. ALT-30

For use on Door #(s):
A-117A A-126A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-34

For use on Door #(s):
B-129B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
2	EA	OH STOP	90S J	630	GLY
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. ALT-39

For use on Door #(s):

C-103A	C-104A	C-106A	C-109A	C-111A	C-113A
C-117A	C-121A	D-112B	D-116B	D-120B	D-126B
D-128B					

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	COMMUNICATING LOCK	9K7 W 14D	626	BES
1	EA	OH STOP & HOLDER	90H	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. ALT-40

For use on Door #(s):

D-111B	D-117B	D-119B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	COMMUNICATING LOCK	9K7 W 14D	626	BES
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. ALT-54

FOR USE ON DOOR #(S):
B-124E

PROVIDE EACH OPENING WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
2	EA	STRIKE	260U AS REQ'D	626	VON
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 AS REQ'D	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-58

For use on Door #(s):
C-144A C-144B C-145B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. ALT-60

FOR USE ON DOOR #(S):
B-124D

PROVIDE EACH OPENING WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U AS REQ'D	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 AS REQ'D	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-64

FOR USE ON DOOR #(S):
B-124F

PROVIDE EACH OPENING WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED. VERIFY AND NOTIFY ARCHITECT OF CONFLICTS.

END OF SECTION

SECTION 33 11 00
WATER DISTRIBUTION SYSTEMS

1 General

1.1 Section Includes

A. Fire water piping, fittings, and accessories.

B. Potable water piping, fittings, and accessories.

C. Connection of building system to Municipal Water System

1.2 Related Sections

A. Section 31 20 00 - Earthwork: Trenching and backfill for water distribution systems.

B. Section 32 13 80 - Exterior Concrete: Concrete type for water system construction.

C. Section 33 13 00 - Disinfection of Water Distribution System.

1.3 References

A. ANSI B16.22 - Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.

B. ASTM A126 - Standard Specifications for Gray Iron Castings for Valves, Flanges, and Fittings.

C. ASTM A197 - Standard Specifications for Cupola Malleable Iron.

D. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs.

E. ASTM A506 - Standard Specifications for Steel, Sheet and Strip.

F. ASTM A575 - Standard Specification for Steel Bars.

G. ASTM B88 - Standard Specification for Seamless Copper Water Tube.

H. AWWA C104 - Cement Water Lining for Ductile Iron Pipe and Fittings.

I. AWWA C110 - Ductile and Gray Iron Fittings.

J. AWWA C111 - Rubber Gasket Joints for Ductile Iron and Gray Iron Pipe.

K. AWWA C151 - Ductile Iron Pipe.

L. AWWA C500 - Gate Valves.

M. AWWA C504 - Standard for Rubber Seated Butterfly Valves.

N. AWWA C508 - Standard for Swing Check Valves.

O. AWWA C600 - Standard for Installation of Ductile Iron Water Mains and Their Appurtenances.

P. AWWA C651 - Standard for Disinfecting Water Mains.

Q. AWWA C900 - Standard for Polyvinyl Chloride Pressure Pipe.

R. AWWA M17 - Installation, Field Testing, and Maintenance of Fire Hydrants.

S. NFPA 24 - Standard for Installation of Private Fire Service Mains and Their Appurtenances.

T. UL 246 - Hydrants for Fire Protection Service.

1.4 Regulatory Requirements

A. Conform to Indiana BOCA National Plumbing Code for materials and installation of work of this Section.

B. Conform to requirements of Water Utility Company supplying water to project; obtain required permits and inspections.

C. Install fire water system in accordance with NFPA 24.

D. Conform with local Fire Department regulations pertaining to hydrants, including hose unit threading.

E. Provide fire hydrants that comply with UL 246 and are listed by UL.

1.5 Submittals

A. Submit product data under provisions of Division 1.

B. Submit product data for pipe, pipe accessories.

1.6 Project Record Documents

A. Submit documents under provisions of Division 1.

1. Accurately record locations of pipe runs, connections, valves and hydrants.

2. Maintain accurate as-built drawings as project progresses, on a set of project drawings.

3. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

4. Upon completion of project, submit one set of reproducible mylar drawings and two sets of blueline prints, with Contractor's stamp indicating date and labeled "Record Documents."

2 Products

2.1 Potable Water Piping Materials

A. Ductile Iron Pipe: AWWA C151, with cement mortar lining complying with AWWA C104; Class 51 for 3 inch and 4 inch pipe, and Class 50 for 6 inch and larger pipe.

1. Fittings: Ductile iron, AWWA C110; cement lined, AWWA C104; and rubber gasket joints, AWWA C111.

B. Polyvinyl Chloride Pipe: AWWA C900 for 4 inch through 12 inch sizes; Class 100.

1. Fittings: Mechanical joint ductile iron complying with AWWA C110, with AWWA C104 cement mortar lining and retainer gland.

C. Copper Tube: ASTM B88; Type K, soft annealed temper.

1. Wrought copper solder joint fittings, ANSI B16.22; soldered joints.

2.2 Fire Water Piping Materials

A. Ductile Iron Pipe: AWWA C151 with cement mortar lining complying with AWWA C104; Class 50.

1. Fittings: Ductile iron, AWWA C110; cement lined, AWWA C104; and rubber gasket joints, AWWA C111.

B. Polyvinyl Chloride Pipe: AWWA C900 for 4 inch to 12 inch sizes; Class 150; bell and spigot with rubber sealing ring.

1. Fittings: Mechanical joint ductile iron complying with AWWA C110, with AWWA C104 cement mortar lining and retainer gland.

2.3 Potable Water System Valves

A. Gate Valve: AWWA C500, 175 psi working pressure.

1. Provide threaded, flanged, hub, or other end configuration to suit size of valve and piping connection.

B. Valve Box: Cast iron adjustable arch base with drop in lid for use with buried gate valves.

C. Butterfly Valve: AWWA C504, 150 psi working pressure, iron body, bronze disc, stainless steel stem, and metal-reinforced EPDM seat.

D. Check Valve: AWWA C508, 150 psi working pressure, iron body, cast iron disc, bolted cap.

2.4 Fire Water System Valves

A. Gate Valve: UL listed, FM approved, 175 psi working pressure for 12 inches and smaller, 150 psi for sizes larger than 12 inches.

1. Provide threaded, flanged, hub, or other end configurations to suit size of valve and piping connection.

2. Provide inside screw type for use with indicator post, iron body, bronze mounted, non-rising, stem with operating nut, solid wedge disc.

B. Indicator Posts: UL listed FM approved, designed for use with underground gate valves to provide above ground means for operating valves and indicating position of valves.

1. Provide telescoping barrel type with indicating target, intended for use with gate valves 4 inches through 14 inches, with operating wrench.

2. Provide electrically supervised valves.

C. Valve Box: Cast iron adjustable arch base with buried gate valves.

D. Butterfly Valves: UL listed, FM approved, 175 psi working pressure for 2 inches through 12 inches, 150 psi for sizes larger than 12 inches.

1. Provide gear actuator with detachable crank, position indicator, and fail safe torque spring.

E. Detector Check Valve: UL listed, FM approved, 175 psi working pressure for 2 inches through 12 inches, 150 psi for sizes larger than 12 inches.

1. Provide swing type, iron body bronze mounted with metal to metal or rubber faced checks.

2. Provide threaded, flanged, or hub end, to suit size and piping connection.

2.5 Fire Hydrants

A. Provide UL listed, FM approved, cast iron body, compression type fire hydrants, opening against pressure and closing against pressure, base valve design, 150 psi working pressure, with 1/4 inch gage topping and bronze plug in standpipe.

B. Size: 5 1/4 inch valve opening.

C. Direction to Open Hydrant: As required by Local Fire Department and Utility Company.

D. Size and Shape of Operating and Cap Nuts: As required by Local Fire Department and Utility Company.

E. Hose Nozzles and Thread Standards: As required by Local Fire Department and Utility Company.

F. Pumper Nozzles and Thread Standards: As required by Local Fire Department and Utility Company.

G. Depth of Trench: 5 feet.

H. Connection to Main: 6 inch mechanical joint.

2.6 Hydrant Hose Houses

A. Provide hose houses as indicated, FM approved, constructed of 16 gage steel, weatherproof sloping top, front overhang, double-panel reinforced doors, continuous hinges, hasp for padlock, and ventilated design.

1. Prime coat and finish in red baked enamel.

2. Provide the following equipment, and hooks for its storage:

Quantity	Item
1	Gated wye, 2 1/2" by 1 1/2" by 1 1/2" brass.
2	Fog nozzles, 2 1/2" brass.
1	Fog nozzle, 1 1/2" Lexan.
1	Reducer, 2 1/2" to 1 1/2" brass.
2	Hydrant wrenches.
4	Spanner wrenches, 2 1/2".
2	Spanner wrenches, 1 1/2".
4	50' by 2 1/2" Single jacket lined hose with brass couplings.
2	50' by 1 1/2" Single jacket lined hose with brass couplings.
1	Fire ax.

2.7 Reaction Anchors

A. Provide concrete thrust blocking or joint harness for all pressure piping in accordance with NFPA 24.

B. Thrust Blocking: Sufficient mass of concrete bearing on solid undisturbed earth, to resist hydraulic thrust at maximum pressure pipe will be subjected to, 150 psi minimum.

1. Refer to Detail and Schedule on Drawings.

C. Joint Harness: Steel straps and rods across joints, securely anchored on pipe or other adequate anchorage, to resist hydraulic thrust at maximum pressure pipe will be subjected to, 150 psi minimum.

1. Coal Tar Coating: Carboline Bitumastic 50.

2. Clamps, Straps, and Washers: Steel, ASTM A506.

3. Rods: Steel, ASTM A575.

4. Rod Couplings: Malleable Iron ASTM A197.

5. Bolts: Steel ASTM A307.

6. Cast Iron Washers: Gray-iron ASTM A126.

2.8 Fire Department Connection

A. Provide Y-type cast brass sidewalk Siamese connection, escutcheon plate and sleeve assembly; with two 90 degree, 2 1/2 inch fire department inlets with female hose connection, 4 inch inlet pipe, plugs and chain.

1. Provide inlet connection with type and number of threads per inch to match those of the local fire department.

2.9 Valve Pits

A. Provide valve pits as indicated, constructed of poured in place or precast concrete.

1. Construct of dimensions indicated with manhole access, ladder, and drain.

2. Provide sleeves for pipe entry and exit, provide waterproof sleeve seals.

3 Execution

3.1 Examination

A. Verify that trench cut is ready to receive work, and excavations, dimensions, and elevations are as indicated on Drawings.

B. Beginning of installation means acceptance of existing conditions.

3.2 Preparation

A. Hand trim excavations to required elevations.

1. Correct over excavation with fill material.

B. Remove large stones or other hard matter which could damage water pipe or impede consistent backfilling or compaction.

3.3 Installation - Pipe

A. Copper Pipe: Install in accordance with CDA Copper Tube Handbook.

B. Ductile-Iron Pipe: Install in accordance with AWWA C600.

C. Polyvinyl Chloride Pipe: Install in accordance with manufacturer's installation instructions.

D. Depth of Cover: Install yard and lead-in piping at minimum 5 foot depth of bury.

E. Water Main Connection: Arrange and pay for tap in water main, of size and location as indicated, from Water Utility Company.

F. Water Service Termination: Terminate potable water piping outside inside building where indicated.

1. Provide line sized gate valve, 3/4 inch valved test tee, and pressure gage.

2. Provide reaction anchors.

G. Water lines and sewers shall not be laid in the same trench.

1. Maintain a horizontal separation of 10 feet.

H. Increase compaction of each successive lift.

1. Refer to Section 31 20 00 for compaction requirements.

2. Do not displace or damage pipe when compacting.

3.4 Reaction Anchors

A. Use concrete thrust blocking where solid undisturbed earth is available.

B. Use joint harness in other areas.

C. If back of solid undisturbed earth is due to improper trench excavation, provide joint harness at no extra cost.

D. Coat underground metal surfaces not encased in concrete with Carboline Bitumastic 50.

1. Apply to clean, dry surface.

2. Allow first coat to dry hard; apply second coat.

3.5 Installation - Valves

A. Provide valve box for underground potable water valves.

B. Install post indicator valve at each fire water connection into building, locate 40 feet from building outside wall or as indicated.

C. Install shut-off valve with valve box ahead of each hydrant.

1. Provide valve key and stem.

3.6 Installation Of Hydrants

A. Install Fire Hydrants in accordance with AWWA M17.

3.7 Field Quality Control

A. Field inspection will be performed under provisions of Division 1.

3.8 Protection

A. Protect finished installation under provisions of Division 1.

B. Protect pipe from damage or displacement until backfilling operation is in progress.

3.9 Disinfection Of Water Piping System

A. AWWA C651 - Standard for Disinfecting Water Mains.

END OF SECTION

SECTION 33 11 50
EXTERIOR WATER LINES, FIRE LINES, AND FACILITIES

1 General

1.1 Section Includes

A. The work covered by this section of the specifications and the accompanying Drawings consist of the furnishing of all labor, equipment, appliances, and material, and performing all operations in connection with the construction of all exterior water lines, fire lines, fire hydrants, valves, facilities, etc.

B. Install in a manner that each section of the work is complete in every detail and meets or exceeds all of the laws, ordinances, rules and regulations in effect in the State and local requirements which apply.

1.2 Fees

A. Pay all tapping and service fees and all other costs, not borne by the Water Company, which are required to provide a complete domestic water and fire line service.

1.3 Concrete

A. All concrete required for the work under this heading shall conform to Section 03 30 00.

1.4 Painting

A. All finish painting will be done by the Painting Contractor under another contract.

1.5 Clean-Up

A. Remove all debris and surplus materials from the premises.

1.6 Seeding And Sodding

A. Seeding and sodding within the limits of the property will be done under another contract.

1.7 Streets, Sidewalks, Drives, Paving, And Repair

A. Repair or replace all streets, sidewalks, drives, curbs, drainage structures, which are damaged due to any work included under this contract.

2 Products

2.1 Exterior Water Lines

A. Provide all new exterior water mains and branches 3 inches and larger as manufactured by James B. Clow and Sons; ductile iron pipe with super bell-tight push on joints and cement lining as manufactured by U.S. Piping and Foundry Class 50, or American Piping Class 50.

1. All Fittings: Push-on gasket type cast iron fittings.

2. All Cast Iron Pipe, Fittings, Joint Gaskets and Installation: Meet the requirements of ASA A2l.5l, AWWA 151.

B. All new exterior water mains and branches 2 1/2 inches and smaller Type "K" hard copper tubing with copper or wrought brass fittings.

1. Copper piping and fittings furnished and installed as specified under in Division 15.

2.2 Vacuum Breakers And Relief Valves

A. Provide valves of proper size and type to relieve excess pressure and prevent the formation of a vacuum.

B. Provide valves to automatically remove air from the lines when the lines are being filled with water, and admit air into the lines when water is being withdrawn in excess of the inflow.

2.3 Exterior Gate Valves

A. Valves: Iron-body, brass mounted and conforming to the Standard Specifications of the AWWA 7F.1.

B. Design exterior gate valves for a minimum water working pressure of 150 pounds per square inch.

C. Provide gate valves with a clear waterway equal to the full nominal diameter of the valve, and which open by turning counterclockwise.

D. Provide an operating nut or wheel with an arrow, cast in the metal, indicating the direction of opening.

E. Identify each valve with the maker's initials and pressure rating cast on the body.

F. Prior to shipment from the factory, test each valve by hydraulic pressure equal to twice the specified water working pressure.

2.4 Valve Boxes

A. Valve Boxes: Cast iron of the extension type having screw or slide type adjustment end with flared base.

1. Minimum Metal Thickness: 3/16 inch.

2. Provide cover with the word "WATER" cast in the metal.

3. Provide boxes of such lengths to provide, without extensions, a cover of not less than 4'-6" over the pipe.

2.5 Lawn Hydrants

A. Lawn Hydrants: Automatic nonfreezing "Government Pattern" street washer type, as manufactured by J. R. Smith Manufacturing Company, No. 5810 or an approved equal, with a 3/4 inch hose and inlet connection.

1. Furnish a detachable "T" handle to the Owner for each hydrant installed.

2. Provide a vacuum breaker in each water line serving lawn hydrants at the point where it leaves the building and elsewhere where required by State and Local Codes.

2.6 Fire Hydrants

A. Provide all fire hydrants of the type and the exact standard as established by the local Fire Department.

B. Providing there is no local standard, then the fire hydrants be compression type, Safetop fire hydrants as manufactured by the Kennedy Valve Manufacturing Co., or an approved equal.

1. Constructed hydrants in such a manner that there will be no interruption of water service or loss of water should the hydrant be broken, and upon impact the entire top section shall break cleanly at the "safety breakable section".

2. Provide fire hydrants with a 6 inch bell connection, two 2 1/2 inch hose connections, one 4 1/2 inch hose connection, and one 4 1/2 inch pumper connection.

3. Provide hose and pumper connections with the type and number of threads per inch to match those of the local fire department.

C. Design hydrants for 175 pounds working pressure or 300 pounds hydrostatic test pressure, and conform to the latest specifications of the American Water Works Association.

1. Provide bronze working parts.

2. Connect hydrants to the mains by 6 inch diameter pipes.

3. Provide design, material, and workmanship similar and equal to the latest stock pattern ordinarily produced by the manufacturer, having an arrow indicating direction of opening, and opening in the direction required by the local fire department.

4. Paint hydrants one coat of red lead paint and two finish coats of approved paint of the color approved by the Architect.

5. Provide hydrants with 5 inch valve openings.

6. Install hydrants in accordance with the manufacturer's recommendations and the applicable requirements hereinafter noted.

7. Provide a gate valve and valve box ahead of each fire hydrant.

3 Execution

3.1 General Installation

A. Rest the full length of each section of pipe solidly upon the pipe bed, with recesses excavated to accommodate the joints.

B. Take up and re-lay any pipe that has the grade or joint disturbed after laying.

C. Thoroughly clean the interior of the pipe of all foreign matter before lowering into the trench, and keep clean with plugs or other approved methods.

D. Do not lay the pipe in water, or when trench or weather conditions are unsuitable for the work, except by special permission of the Architect.

E. Keep water out of the trench until each joint is made watertight.

F. When work is not in progress, keep open ends of pipe and fittings securely closed so that no trench water, earth, or other substance will enter the pipes or fittings.

3.2 Domestic Water Service And Fire Lines

A. Wet Tap: Relocate or extend existing water mains as shown and noted on Drawings.

B. Provide new domestic water service and fire lines to the point of connection to the building piping being installed under the Mechanical Base Bid.

3.3 Domestic Water Service

A. Provide a new domestic water service to the point of connection to the building piping.

B. Connect to the well as shown and noted on Drawings.

C. After testing, flush all new domestic water lines and sterilize as follows:

1. Sterilize each unit of the completed water line with chlorine before acceptance for domestic operation.

2. Provide amount of chlorine for a dosage of 50 parts per million.

3. Introduce the chlorinating material into the water lines and distribution systems in an approved manner.

4. After a contact period of 8 hours, flush the system with clean water until the residual chlorine content is not greater than 0.2 parts per million.

5. Open and close all valves in the lines being sterilized several times during the contact period.

3.4 Installation

A. Handle pipe and accessories in such a manner as to insure delivery of the work in sound, undamaged condition.

1. Provide 4'-6" minimum cover, after final grading, over all new exterior water mains.

B. Cut pipe in a neat and workmanlike manner without damage to the pipe.

1. Cut with an approved mechanical cutter.

2. Wheel cutters may be used when practicable.

C. While suspended in the sling and before lowering into the trench, inspect the pipe for defects and tap with a light hammer to detect cracks.

1. Defective, damaged, or unsound pipe will be rejected.

2. Deflections from a straight line or grade, as required by vertical curves, horizontal curves, or offsets, shall not exceed 6/D inches per linear foot of pipe for pipe less than 14 inches in nominal diameter, where D represents the nominal diameter of the pipe expressed in inches, between the center lines extended, of any two connecting pipes.

3. If the alignment requires deflections in excess of these limitations provide angular deflections within the limit set forth.

D. Where pipe ends are left for future connections; valve, plug or cap and mark.

E. Where connections are made between this work and work under another contract, make the connections by using special end fittings to suit the actual conditions.

F. After the pipe is laid, the joints completed, and the trench partially backfilled, leaving the joints exposed for examination, the newly laid piping or any valved section of piping shall be subjected to a pressure test of 50 pounds per square inch in excess of the static pressure.

1. Carefully examine all exposed pipe, joints, fittings, valves, and hydrants during the open trench test.

2. Replace cracked or defective pipe, fittings, valves, or hydrants disclosed in the pressure test and repeat the test until the test results are satisfactory.

3. Where the actual visible inspection of each joint cannot be made because of the necessity for immediate backfilling or where the line is laid below water level and it is impracticable to lower the water level by pumping, the Contractor shall provide suitable means for determining the quantity of water lost by leakage under normal operating pressure.

4. No piping installation will be accepted until or unless this leakage (evaluated on a pressure basis of 150 pounds per square inch) is less than 100 US gallons per 24 hours per mile of pipe per inch nominal diameter for pipe in 12 foot lengths; 75 gallons for pipe in 16 foot lengths and proportionately varied for other lengths of pipe.

5. In calculating leakage, the Architect will make allowance for added joints in the pipe line above normal for unit lengths of pipe.

6. Should any test of combined sections of pipe line disclose leakage per mile greater than that herein specified, or if individual sections show leakage greater than that herein specified, the Contractor shall locate and repair the defective joints.

3.5 Vacuum Breakers And Relief Valves

A. Install vacuum breaker and relief valves at high points in the water mains.

3.6 Valve Boxes

A. Install boxes over each outside gate valve.

B. Where water mains are located in paved streets or drives, locate the boxes directly back of the curbs.

C. Where no curbing exists, install service boxes in accessible locations, beyond the limits of streets, walks and driveways.

3.7 Lawn Hydrants

A. Length below grade shall be 48 inches and the hinged cover set 1 inch below finished grade.

B. Install lawn hydrants complete where shown on Drawings.

3.8 Setting Lawn And Fire Hydrants, Valves, And Valve Boxes

A. Install hydrants, valves, and valve boxes in the lines as shown on Drawings.

B. Set hydrants, valves, and valve boxes plumb and centered, with valve boxes directly over the valves.

C. Locate valve boxes, if possible, outside the area of drives, sidewalks, and streets.

D. Carefully tamp earth fill around the valve box to a distance of 4 feet on all sides of the box, or to the undisturbed trench face if less than 4 feet.

E. Set hydrants at such elevations that the connecting pipe will have the same depth of cover as the distributing mains.

F. Set the hydrant on a concrete slab not less than 4 inches thick and 15 inches square.

G. Firmly wedge the back of the hydrant, opposite the pipe connection, against the vertical face of the trench to prevent the hydrant from blowing off the line.

H. If the character of the soil is such that, in the opinion of the Architect, the hydrant cannot be securely wedged, bridle rods and rod collars shall be used.

1. Provide bridle rods and rod collars not less than 3/4 inch stock and protect by a coat of acid-resisting paint.

2. Place not less than 7 cubic feet of broken stone around hydrant to insure drainage.

3. Thoroughly compact the backfill around hydrants to the grade line in a manner satisfactory to the Architect.

4. Clean interiors of hydrants and valves of all foreign matter before installation.

5. Tighten stuffing boxes and inspect the hydrant or valve in opened and closed positions, to see that all parts are in working condition.

3.9 Standard Valve Manholes

A. Provide standard valve manholes constructed at locations shown on Drawings or as required by the nature of the installation.

END OF SECTION

SECTION 33 13 00
DISINFECTION OF WATER DISTRIBUTION SYSTEM

1 General

1.1 Section Includes

A. Disinfection of potable water distribution and transmission system.

B. Test and report results.

1.2 Related Sections

A. Section 33 11 00 - Water Distribution Systems.

B. Section 22 10 00 - Plumbing Piping: Disinfection of building domestic water piping system.

1.3 References

A. AWWA C651 - Standard for Disinfecting Water Mains.

1.4 Submittals

A. Submit name of treatment firm and evidence of qualification.

B. Submit name of testing laboratory and evidence of qualification.

C. Submit three copies of reports.

1.5 Project Record Documents

A. Submit reports under provisions of Division 1.

B. Disinfection report; accurately record:

1. Type and form of disinfectant used.

2. Date and time of disinfectant injection start and time of completion.

3. Test locations.

4. Initial and 24 hour disinfectant residuals (quantity in treated water) in ppm for each outlet tested.

5. Date and time of flushing start and completion.

6. Disinfectant residual after flushing in ppm for each outlet tested.

C. Bacteriological report; accurately record:

1. Date issued, project name, and testing laboratory name, address, and telephone number.
2. Time and date of water sample collection.
3. Name of person collecting samples.
4. Test locations.
5. Initial and 24 hour disinfectant residuals in ppm for each outlet tested.
6. Coliform bacteria test results for each outlet tested.
7. Certification that water conforms, or fails to conform, to bacterial standards.
8. Bacteriologist's signature.

1.6 Quality Assurance

A. Water Treatment Firm: Certified for disinfection by an approved company; specializing in this work with five (5) years experience.

B. Testing Laboratory: Certified and approved for examination of drinking water in compliance with applicable legislation of the State of Indiana.

1.7 Regulatory Requirements

A. Conform to Indiana Plumbing Code or regulations for work of this Section.

2 Products

Not Used.

3 Execution

3.1 Preparation

A. Verify that piping system has been cleaned, inspected, and pressure tested.

B. Beginning of treatment and testing means acceptance of existing piped system.

C. Perform scheduling and disinfection activity with startup, testing, adjusting, and balancing, and demonstration procedures, including coordination with related systems.

3.2 Execution

A. Provide and attach equipment required to execute work of this Section.

B. Inject treatment disinfectant into piping system.

C. Circulate and flush repeatedly until required cleanliness is achieved.

D. Flush and clean with municipal domestic water.

E. Replace permanent system devices removed for disinfection.

F. Pressure test system as required by the utility company.

1. Repair leaks and retest.

3.3 Tests

A. Provide analysis and testing of treated water under provisions Division 1.

B. Test samples in accordance with AWWA C651.

END OF SECTION

3.8 Door Hardware Schedule

A. Locksets, exit devices, and other hardware items are referenced in the following hardware sets for series, type and function. Refer to the above-specifications for special features, options, cylinders/keying, and other requirements.

B. Hardware Sets:

HARDWARE GROUP NO. 01

For use on Door #(s):
C-139A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PASSAGE SET	9K0 N 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 02

For use on Door #(s):
B-121A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PASSAGE SET	9K0 N 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 03

For use on Door #(s):
A-109A A-111A A-131A A-133A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	OH STOP	90S	630	GLY
1	EA	GASKETING	488SCL PSA	CL	ZER
1	EA	FINGER GUARD	51A-90	A	ZER

HARDWARE GROUP NO. 04

For use on Door #(s):
A-114A A-115A B-109A B-110A B-111A C-126A
C-129A C-140A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER

HARDWARE GROUP NO. 05

For use on Door #(s):
A-128A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER
1	EA	FINGER GUARD	51A-90	A	ZER

HARDWARE GROUP NO. 06 - NOT USED

HARDWARE GROUP NO. 07

For use on Door #(s):
B-116A B-117A C-123A C-149A C-150A D-123A
D-124A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER

HARDWARE GROUP NO. 08

For use on Door #(s):
B-107A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 09

For use on Door #(s):
A-103A A-106A B-108A C-135A C-143A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 10

For use on Door #(s):
B-146A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 11

For use on Door #(s):
B-107B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	OFFICE LOCKSET	9K7 AB 14D	626	BES
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 12

For use on Door #(s):
B-103B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM X STORERM	ND70X80CD SPA XN12-006	626	SCH
2	EA	PERMANENT CORE	1C7	626	BES
1	EA	ELECTRIC STRIKE	6212 FSE 12/16/24/28 VAC/VDC	630	VON
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
1	EA	DOOR CONTACT	7764	628	SCE
1	EA	MOTION SENSOR	SCANII 12/24 VDC	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]	LGR	SCE
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOOR CLOSED AND ALWAYS LOCKED FROM RECEPTION SIDE. DOOR UNLOCKED FROM CORRIDOR SIDE DURING SCHOOL HOURS AND LOCKED FROM CORRIDOR SIDE AFTER HOURS AND ON WEEKENDS.

AI PHONE AT RECEPTION DESK OR VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR REMAINS LOCKED UPON LOSS OF POWER. DOOR CONTACT TO MONITOR DOOR POSITION. MOTION SENSOR ON PUSH SIDE SHUNTS DOOR CONTACT FOR VALID EGRESS.

HARDWARE GROUP NO. 13

For use on Door #(s):
B-104A B-147A C-134A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 14 - NOT USED

HARDWARE GROUP NO. 15

For use on Door #(s):
A-110A A-110B A-130A A-130B B-106A B-112A
B-113A B-145A C-142A D-114A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 16

For use on Door #(s):
C-132A C-132C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 17

For use on Door #(s):
C-147A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 18

For use on Door #(s):
B-125A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
2	EA	OH STOP	90S	630	GLY
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 19

For use on Door #(s):
B-142A B-144A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
2	EA	OH STOP	90S	630	GLY
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 20 - NOT USED

HARDWARE GROUP NO. 21

For use on Door #(s):
C-138A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP & HOLDER	90H J	630	GLY
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 22

For use on Door #(s):
A-108A A-113A B-115B D-108A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 23 - NOT USED

HARDWARE GROUP NO. 24 - NOT USED

HARDWARE GROUP NO. 25

For use on Door #(s):
C-125A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP & HOLDER	90H J	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 26

For use on Door #(s):
C-148A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP	90S J	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 27

For use on Door #(s):

A-102A	A-105A	A-132A	B-115A	B-118A	B-119A
B-120A	B-141A	C-122A	C-141A	D-104A	D-113A
D-125A					

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 28

For use on Door #(s):
B-136A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. 29

For use on Door #(s):

C-128A	D-110A	D-111A	D-112A	D-115A	D-116A
D-117A	D-119A	D-120A	D-121A	D-126A	D-127A
D-128A	D-129A				

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 30 - NOT USED

HARDWARE GROUP NO. 31

For use on Door #(s):
C-133A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 32

For use on Door #(s):

A-107A	A-107B	A-112A	A-112B	A-127A	A-127B
A-129A	A-129B	A-134A	A-134B		

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 33

For use on Door #(s):
B-137A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 34 - NOT USED

HARDWARE GROUP NO. 35

For use on Door #(s):
B-127A B-127B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
2	EA	OH STOP	90S J	630	GLY
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 36

For use on Door #(s):
B-130A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	AUTO FLUSH BOLT	FB31P/FB41P AS REQ'D	630	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	ELECTRIFIED LOCKSET	9K7 DEU 14D RQE	626	BES
1	EA	COORDINATOR	COR X FL	628	IVE
2	EA	MOUNTING BRACKET	MB [AS REQ'D]	689	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS902 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]	LGR	SCE
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOOR NORMALLY CLOSED AND LOCKED. VALID CREDENITAL MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR REMAINS LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO LOCK SET) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 37

For use on Door #(s):
B-201A B-201B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
1	EA	AUTO FLUSH BOLT	FB31P/FB41P AS REQ'D	630	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	COORDINATOR	COR X FL	628	IVE
2	EA	MOUNTING BRACKET	MB [AS REQ'D]	689	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 38

For use on Door #(s):
C-127A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	COORDINATOR	COR X FL	628	IVE
2	EA	MOUNTING BRACKET	MB [AS REQ'D]	689	IVE
2	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CVX	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 39 - NOT USED

HARDWARE GROUP NO. 40 - NOT USED

HARDWARE GROUP NO. 41

For use on Door #(s):
B-103A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELECTRIFIED LOCKSET	9K7 DEU 14D RQE	626	BES
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
1	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS902 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]	LGR	SCE
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOOR NORMALLY CLOSED AND LOCKED. VALID CREDENITAL OR AI PHONE AT RECEPTION DESNK MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR REMAINS LOCKED UPON LOSS OF POWER. DOOR CONTACT TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO LOCKSET) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 42

For use on Door #(s):
A-135A D-101A D-118A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER RING	8310-801		LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR, TOUCH	8310-855	630	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. INTERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

DUAL ACTUATOR (8310-855) IN VESTIBULE SHARED FOR EXTERIOR AND INTERIOR VESTIBULE DOOR.

HARDWARE GROUP NO. 43

For use on Door #(s):
B-101B D-103B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER RING	8310-801		LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR, TOUCH	8310-855	630	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL OR AIPHONE AT RECEPTION DESK MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. INTERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 44

For use on Door #(s):
B-101D

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR	VESTIBULE ACTUATOR SPECIFIED WITH EXTERIOR VESTIBULE DOOR		
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. ITNERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 45

For use on Door #(s):
A-116A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	WEATHER RING	8310-801		LCN
2	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-4RL [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

UNLOCKED HOURS: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPEN DOOR.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR AND ACTIVATES EXTERIOR ACTUATOR. WHEN ACTIVE, PRESSING EXTERIOR ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. INTERIOR ACTUATOR ALWAYS ACTIVE. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

DUAL ACTUATOR (8310-855) IN VESTIBULE SHARED FOR EXTERIOR AND INTERIOR VESTIBULE DOOR.

HARDWARE GROUP NO. 46

For use on Door #(s):
B-131A B-133A C-101A C-115A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ACCESS. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 47

For use on Door #(s):
C-130A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	AI PHONE	BY ACCESS CONTROL PROVIDER		
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

LOCKED HOURS: VALID CREDENTIAL OR AIPHONE AT RECEPTION DESK MOMENTARILY UNLOCKS DOOR ALLOWING ACCESS. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 48

For use on Door #(s):
B-129A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-NL-OP-110MD 24 VDC	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.

LOCKED HOURS: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ACCESS. DOORS REMAIN LOCKED UPON LOSS OF POWER. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACTS FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 49

For use on Door #(s):
B-131B C-115B C-130B D-103C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
2	EA	DUMMY PUSH BAR	350	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN

HARDWARE GROUP NO. 50

For use on Door #(s):
A-135B D-101B D-103D D-118B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
2	EA	DUMMY PUSH BAR	350	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 TBWMS 120 VAC	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
1	EA	ACTUATOR	VESTIBULE ACTUATOR SPECIFIED WITH EXTERIOR VESTIBULE DOOR		
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: PRESSING EITHER ACTUATOR CYCLES AUTOMATIC OPERATOR AND MOMENTARILY OPENS DOOR. FREE EGRESS AT ALL TIMES.

DUAL ACTUATOR (8310-855) IN VESTIBULE SHARED FOR EXTERIOR AND INTERIOR VESTIBULE DOOR. (SPECIFIED WITH EXTERIOR VESTIBULE DOOR)

HARDWARE GROUP NO. 51

For use on Door #(s):
B-101A C-101B D-103A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
2	EA	DOOR SWEEP	8192AA	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.
DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 52

For use on Door #(s):
B-101C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	ELEC PANIC HARDWARE	SD-RX-QEL-98-EO 24 VDC	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	MULLION SEAL	8780NBK	BK	ZER
2	EA	DOOR CONTACT	7764	628	SCE
1	EA	POWER SUPPLY	PS904 900-2RS [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. DOORS CAN BE LEFT UNLOCKED AS PROGRAMMED BY ACCESS CONTROL.
DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO EXIT DEVICE) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 53

For use on Door #(s):
B-143B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
2	EA	STRIKE	260U	626	VON
2	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 54 - NOT USED

HARDWARE GROUP NO. 55

For use on Door #(s):
B-124A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	SURFACE CLOSER	4040XP EDA (MOUNT CLOSER TO ALLOW DOOR TO SWING AGAINST WALL)	689	LCN
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 56

For use on Door #(s):
B-114A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9827-DT-LBR 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9827-NL-LBR 24 VDC	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES AS REQ'D	689	LCN
2	EA	SILENCER	SR64	GRY	IVE
1	EA	MULTITECH READER	MTB11/15 - BY ACCESS CONTROL PROVIDER (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
2	EA	DOOR CONTACT	679-05WD/679-05HM AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS904 900-4R [COORDINATE WITH ACCESS CONTROL PROVIDER]		VON
1	EA	DIAGRAM	ELEVATION		DLR
1	EA	DIAGRAM	POINT TO POINT		DLR

OPERATION: DOORS NORMALLY HELD OPEN. UPON LOSS OF POWER OR FIRE ALARM, MAGNETIC HOLD OPENS RELEASE, ALLOWING DOORS TO CLOSE, LOCK AND LATCH. FREE EGRESS AT ALL TIMES.

WHEN DOORS ARE CLOSED AND LOCKED: VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR ALLOWING ENTRY. DOOR CONTACTS TO MONITOR DOOR POSITION. RX SWITCH (INTEGRAL TO PANIC DEVICE) SHUNTS DOOR CONTACT FOR VALID EGRESS. FREE EGRESS AT ALL TIMES.

POWER SUPPLY TIED INTO FIRE ALARM SYSETM.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 57

For use on Door #(s):
B-138B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9875-NL	626	VON
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
2	EA	GASKETING	119WB PSA	B	ZER
1	EA	GASKETING	870AA	AA	ZER
1	EA	DOOR BOTTOM	364AA	AA	ZER
1	EA	THRESHOLD	564A	A	ZER
1	EA	MOUNTING BRACKET	870SPB		ZER

HARDWARE GROUP NO. 58 - NOT USED

HARDWARE GROUP NO. 59

For use on Door #(s):
B-143A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 60

For use on Door #(s):
B-124C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 61

For use on Door #(s):
B-124B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP EDA (MOUNT CLOSER TO ALLOW DOOR TO SWING 180 DEGRESS)	689	LCN
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 62

For use on Door #(s):
C-102A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP EDA (MOUNT CLOSER TO ALLOW DOOR TO SWING 180 DEGREES)	689	LCN
1	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 63

For use on Door #(s):
B-128A C-116A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP SHCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. 64 - NOT USED

HARDWARE GROUP NO. 65

For use on Door #(s):
C-145A C-146A C-146B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-98-L-NL-17	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 66

For use on Door #(s):
B-138A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9875-NL	626	VON
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
2	EA	GASKETING	119WB PSA	B	ZER
1	EA	GASKETING	870AA	AA	ZER
1	EA	DOOR BOTTOM	364AA	AA	ZER
1	EA	THRESHOLD	564A	A	ZER
1	EA	MOUNTING BRACKET	870SPB		ZER

HARDWARE GROUP NO. 67

For use on Door #(s):
B-143C B-143D

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
3	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CD-98-EO	626	VON
1	EA	PANIC HARDWARE	CD-98-NL-OP-110MD	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	90 DEG OFFSET PULL	8190HD 12" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA AS REQ'D	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30 AS REQ'D	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61 AS REQ'D	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	MULLION SEAL	8780NBK	BK	ZER
1	EA	WEATHER STRIPPING	By Door/Frame Manufacturer		
1	EA	THRESHOLD	BY WOOD FLOOR INSTALLER		B/O
2	EA	DOOR SWEEP	8192AA	AA	ZER

HARDWARE GROUP NO. 68

For use on Door #(s):
A-103B A-108B A-132B B-121B B-146B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
	EA	NOTE	NO HARDWARE REQUIRED (BORROWED LITE)		

HARDWARE GROUP NO. 69

For use on Door #(s):
C-132B C-138B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CYLINDER	RIM/MORTISE CYLINDER AS REQ'D	626	BES
		NOTE	BALANCE OF HARDWARE BY DOOR MFG		

HARDWARE GROUP NO. ALT-06

For use on Door #(s):
A-119A A-120A A-124A A-125A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PRIVACY SET	45H 0 L 14S VIN	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
1	EA	GASKETING	488SCL PSA	CL	ZER

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-14

For use on Door #(s):
A-122A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM LOCKSET	9K7 R 14D	626	BES
1	EA	OH STOP	90S	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-20

For use on Door #(s):
A-121A A-123A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP	90S J	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-23

For use on Door #(s):
B-132A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-24

For use on Door #(s):

B-122A	C-103B	C-104B	C-105A	C-106B	C-107A
C-109B	C-110A	C-111B	C-112A	C-113B	C-114A
C-117B	C-121B	C-124A			

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	OH STOP & HOLDER	90H J	630	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-28

For use on Door #(s):
B-125B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CVX	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-29 - NOT USED

HARDWARE GROUP NO. ALT-30

For use on Door #(s):
A-117A A-126A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-34

For use on Door #(s):
B-129B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ'D	630	IVE
1	EA	STOREROOM LOCKSET	9K7 D 14D	626	BES
2	EA	OH STOP	90S J	630	GLY
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. ALT-39

For use on Door #(s):

C-103A	C-104A	C-106A	C-109A	C-111A	C-113A
C-117A	C-121A	D-112B	D-116B	D-120B	D-126B
D-128B					

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	COMMUNICATING LOCK	9K7 W 14D	626	BES
1	EA	OH STOP & HOLDER	90H	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. ALT-40

For use on Door #(s):

D-111B	D-117B	D-119B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	COMMUNICATING LOCK	9K7 W 14D	626	BES
1	EA	WALL STOP/HOLDER	WS45	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. ALT-54

FOR USE ON DOOR #(S):
B-124E

PROVIDE EACH OPENING WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
2	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
2	EA	STRIKE	260U AS REQ'D	626	VON
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 AS REQ'D	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-58

For use on Door #(s):
C-144A C-144B C-145B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED.

HARDWARE GROUP NO. ALT-60

FOR USE ON DOOR #(S):
B-124D

PROVIDE EACH OPENING WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U AS REQ'D	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
1	EA	SURFACE CLOSER	4040XP HCUSH	689	LCN
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 AS REQ'D	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

HARDWARE GROUP NO. ALT-64

FOR USE ON DOOR #(S):
B-124F

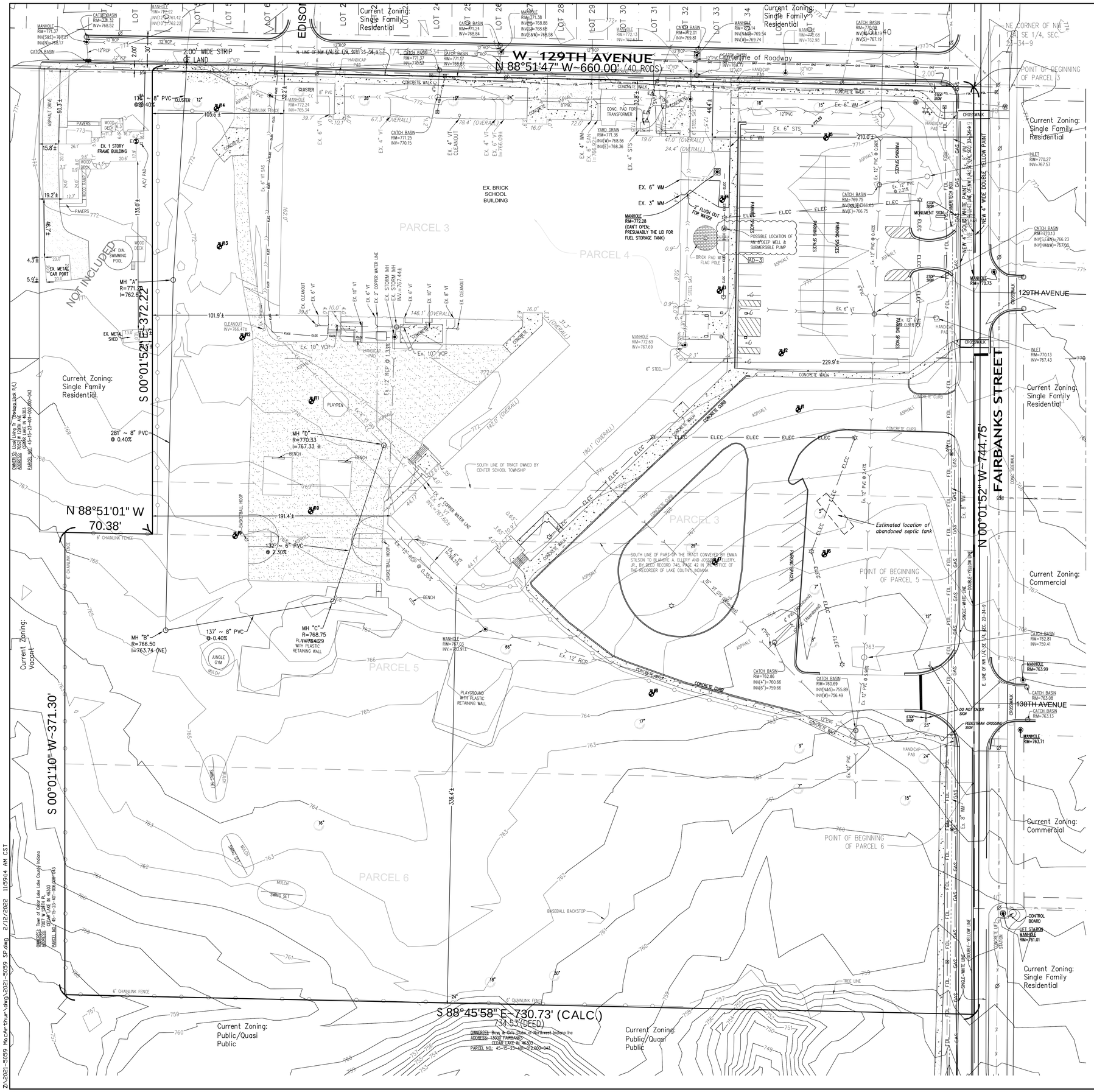
PROVIDE EACH OPENING WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
2	EA	MORTISE CYLINDER	1E74	626	BES
1	EA	PANIC HARDWARE	CDSI-9827-DT-LBR	626	VON
1	EA	PANIC HARDWARE	CDSI-9827-NL-LBR	626	VON
2	EA	STRIKE	260U	626	VON
1	EA	RIM CYLINDER	1E72	626	BES
2	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	PA FLUSH PANEL ADAPTER	4040XP-419 SRT	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP/HOLDER	WS45	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE CORRECT STRIKES, FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE AND COVER EXPOSED HOLES.

DOORS AND TRANSOM TO BE RABBETED. VERIFY AND NOTIFY ARCHITECT OF CONFLICTS.

END OF SECTION



LEGAL DESCRIPTION (AS TAKEN FROM A CHICAGO TITLE COMPANY REPORT OF SEARCH ORDER NUMBER CTNW2100629

Parcel 3:
Part of the Northwest Quarter (NW1/4) of the Southeast Quarter (SE1/4) of Section Twenty-three (23), Township Thirty-four (34) North, Range Nine (9) West of the Second Principal Meridian, in Lake County, Indiana, more particularly described as follows, to-wit: Commencing at the Northeast corner of said Northwest Quarter (NW1/4) of the Southeast Quarter (SE1/4); thence South on the East line of said quarter quarter Section, Twenty (20) rods; thence West Forty (40) rods; thence North Twenty (20) rods to the North line of said quarter quarter Section; thence East Forty (40) rods to the place of beginning, containing Five (5) acres, exactly with no surplus, and a part of the Northwest Quarter of the Southeast Quarter of Section Twenty-three (23), Township 34 North, Range 9 West of the 2nd P.M., described as follows: Commencing at a point 330 feet South of the Northeast corner of said quarter quarter, thence South along the center line of the public highway 41 feet more or less to the South line of that part of the tract conveyed by Emma Stilson to Blanche A. Ellery and Joseph J. Ellery, Jr., by deed recorded in Deed Record 748, page 42, in the Recorder's Office of Lake County, Indiana, which lies immediately South of the tract now owned by Center School Township, Lake County, Indiana, thence West 660 feet, thence North to the South line of said Township tract, thence East 660 feet to the place of beginning, being all that part of said quarter quarter owned by said Blanche A. Ellery and Joseph J. Ellery, Jr., lying immediately South of and adjoining said Township tract, containing .595 of an acre more or less.
EXCEPT THEREFROM the following:
Part of the West Half (W1/2) of the Southeast Quarter (SE1/4) of Section Twenty-three (23), Township Thirty-four (34) North, Range Nine (9) West of the Second Principal Meridian, described as follows: Commencing at a point 204.2 feet South of the North line of said Quarter Section, and 238.1 feet West of the East line of the West Half (W1/2) of the Southeast Quarter (SE1/4) of said Quarter Section; thence South 11.26 feet; thence Southwest 2.31 feet; thence Southeast 14.0 feet; thence Southwest 202.0 feet; thence Northwest 76.0 feet; thence Northeast 164.5 feet; thence North 20.5 feet; thence West 45.66 feet; thence North 122.0 feet; thence East 116.66 feet; thence South 76.33 feet; thence West 1.04 feet; thence South 24.08 feet; thence West 11.37 feet; thence South 46.5 feet; thence East 12.41 feet to the place of beginning, all in the Town of Cedar Lake, Lake County, Indiana, containing .707 of an acre, more or less.

Parcel 4:
Part of the West Half (W1/2) of the Southeast Quarter (SE1/4) of Section Twenty-three (23), Township Thirty-four (34) North, Range Nine (9) West of the Second Principal Meridian, described as follows: Commencing at a point 204.2 feet South of the North line of said Quarter Section, and 238.1 feet West of the East line of the West Half (W1/2) of the Southeast Quarter (SE1/4) of said Quarter Section; thence South 11.26 feet; thence Southwest 2.31 feet; thence Southeast 14.0 feet; thence Southwest 202.0 feet; thence Northwest 76.0 feet; thence Northeast 164.5 feet; thence North 20.5 feet; thence West 45.66 feet; thence North 122.0 feet; thence East 116.66 feet; thence South 76.33 feet; thence West 1.04 feet; thence South 24.08 feet; thence West 11.37 feet; thence South 46.5 feet; thence East 12.41 feet to the place of beginning, all in the Town of Cedar Lake, Lake County, Indiana, containing .707 of an acre, more or less.

Parcel 5:
Part of the West Half of the Southeast Quarter of Section 23, Township 34 North, Range 9 West of 2nd P.M., described as follows: Beginning at a point 372.37 feet South of the Northeast corner thereof; thence West 734.19 feet; thence South 185.88 feet; thence East to the East line of said West Half of the Southeast Quarter; thence North to the place of beginning, in Lake County, Indiana.

Parcel 6:
Part of the West Half of the Southeast Quarter of Section 23, Township 34 North, Range 9 West of the 2nd Principal Meridian, described as follows: Commencing 558.56 feet South of the Northeast corner of said West Half of the Southeast Quarter of Section 23; thence West 734.36 feet; thence South 185.42 feet; thence East 734.53 feet to the East line of the West Half of the Southeast Quarter of said Section; thence North 186.19 feet to the point of beginning, in Lake County, Indiana.

Legal Description:

Part of the Northwest Quarter of the Southeast Quarter of Section 23, Township 34 North, Range 9 West of the Second Principal Meridian, more particularly described as follows: Beginning at the Northeast corner of said Northwest Quarter of the Southeast Quarter; thence North 88 degrees 51 minutes 47 seconds West, along the North line of said Southeast Quarter, a distance of 660.00 feet; thence South 00 degress 01 minutes 52 East, a distance of 372.22 feet; thence North 88 degrees 51 minutes 01 seconds West, a distance of 70.38 feet; thence South 00 degrees 01 minutes 10 seconds West, a distance of 371.30 feet; thence South 88 degrees 45 minutes 58 seconds East, a distance of 730.73 feet, to the East line of said Northwest Quarter of the Southeast Quarter, a distance of 744.75 feet to the point of beginning, containing 11.874 acres, more or less, all in the Town of Cedar Lake, Lake County, Indiana.

LEGEND

EXISTING

◎	MANHOLE
○	CATCH BASIN/INLET
Ø	POWER POLE
☼	LIGHT POLE
Te	TELEPHONE MANHOLE
T⊠	TELEPHONE PEDESTAL
⧖	WATER VALVE
—◂	FIRE HYDRANT
⋈G	GAS VALVE
⚐G	NIPSCO GAS LINE-FLAGGED
———))———	SANITARY SEWER
——— >———	STORM SEWER
——— - - - - ———	WATER MAIN
—— T —— T —— T ——	BURIED TELEPHONE LINE
——— FOL ——— FOL ———	BURIED FIBER OPTIC LINE
SB ◒	SOIL BORING LOCATION

NOTE:

1. THE EXISTING TOPOGRAPHY WAS TAKEN FROM THE INDIANA MAPS WEBSITE AND REPRESENTS THE MOST CURRENT LIDAR TOPOGRAPHIC INFORMATION. ADDITIONAL FIELD ELEVATIONS WERE TAKEN TO VERIFY THE TOPOGRAPHY.

2. POINT ELEVATION SHOTS WERE TAKEN BY TORRENGA SURVEYING, LLC TO VERIFY THE ACCURACY OF THE LIDAR TOPOGRAPHY.

3. ALL VERTICAL DATUM IS BASED ON NAVD 88.

BENCHMARK TABLE

BENCHMARK NUMBER	DESCRITPION AND LOCATION	ELEVATION
1	CHISELED "X" IN CENTER OF CONC. WALK (NEAR NW CORNER OF THE SITE) ±1' EAST OF WEST SIDE OF DRIVE APRON	772.30
2	CHISELED "X" IN CONC. WALK (NEAR NE CORNER OF THE SITE) ±2' SOUTH OF NORTH EDGE OF WALK AND ±3' WEST OF POINT OF CURVE IN WALK	772.63
3	MAG NAIL IN ASPHALT AT SE CORNER OF FAIRBANKS STREET AND 130TH AVENUE ±3' NORTHWEST OF BACK OF CURB AND ±5.6' WEST OF THE WEST EDGE OF THE NORTH/SOUTH RUNNING CONC. WALK	763.29
4	MAG NAIL IN ASPHALT IN THE VICINITY OF THE OUTDOOR BACKETBALL COURT; ±21' NORTH OF SOUTH EDGE OF ASPHALT AND ±49' EAST OF THE WEST EDGE OF ASPHALT	767.86

NORTH
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS
MACARTHUR ES
ADDITIONS AND
RENOVATIONS

CROWN POINT SCHOOL CORP.
CROWN POINT, INDIANA

TORRENGA ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
907 RIDGE ROAD
MUNSTER, IN 46321
T: (219) 836-8918
F: (219) 836-1138

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
21-113
DATE
01/31/22
COORDINATED BY
DT
DRAWN BY
EM MH
CHECKED BY
DT

DONALD C. TORRENGA
No. 19868
STATE OF INDIANA
Donald C. Torrenga

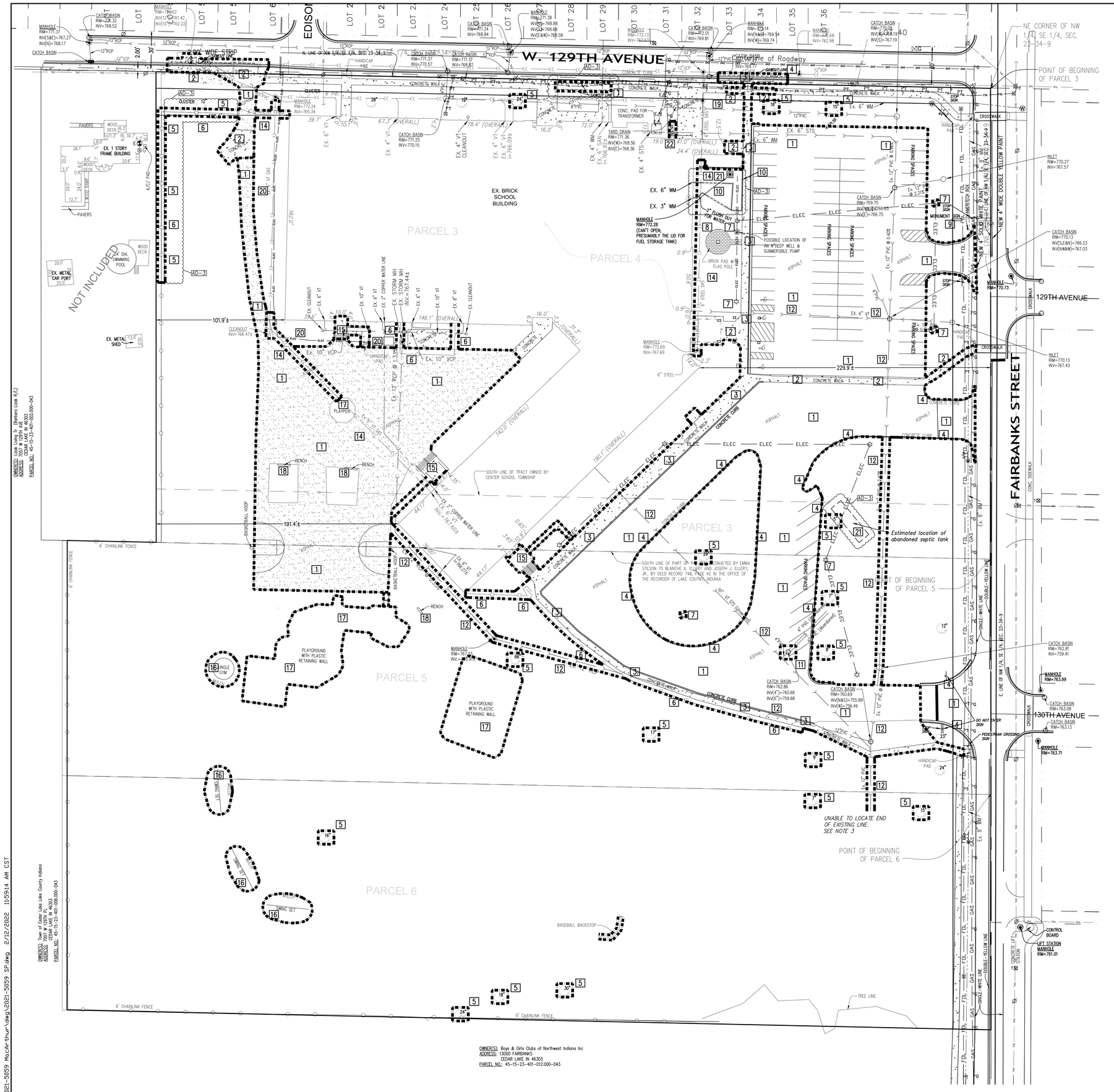
REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02-23-22	ADDENDUM NO. 3

DRAWING
EXISTING TOPOGRAPHY & UTILITIES

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C-1.0



DEMOLITION NOTES

1. REMOVE ASPHALT PAVEMENT
2. REMOVE CONCRETE PAVEMENT
3. REMOVE CONCRETE SIDEWALK/CURB
4. REMOVE CURB / CURB & GUTTER
5. REMOVE TREES
6. REMOVE FENCE
7. REMOVE LIGHT POLE/POWER POLE (SEE ELECTRICAL PLAN)
8. REMOVE BRICK AND FLAG POLE
9. REMOVE AND RELOCATE SIGNAGE
10. REMOVE WATER MAIN LINE/HYDRANT
11. REMOVE STORM MH/CB
12. REMOVE STORM SEWER LINE
13. REMOVE SANITARY MH
14. REMOVE SANITARY SEWER LINE
15. REMOVE CONCRETE STOOP, RAMP AND STEPS
16. REMOVE MULCH AND PLAYGROUND EQUIPMENT
17. REMOVE PLAYGROUND AND ITS ENTIRETY
18. REMOVE BENCH
19. SEE NOTE/NUMBER 2 BELOW — AD-3
20. REFER TO THE ELECTRICAL PLANS FOR ELECTRIC RELOCATION
21. REMOVE EXISTING MH
    REMOVE EXISTING SEPTIC TANK — AD-3
22. REMOVE EXISTING WING WALL

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING SITE CONDITIONS AND SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND ALL PROPOSED IMPROVEMENTS IN THE CONSTRUCTION DRAWINGS.
2. NOTE 19, THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE SANITARY MANHOLE. IF THE DEPTH IS SUFFICIENT TO SERVICE THE PROPOSED SANITARY SEWER RE-ROUTE AROUND THE NEW ADDITION, IT SHALL REMAIN. IF THE DEPTH IS NOT SUFFICIENT THE MANHOLE SHALL BE REMOVED AND REPLACED. — AD-3
3. TORRENGA SURVEYING WAS UNABLE TO LOCATE THE END OF THE EXISTING 12" DIAMETER PVC PIPE. THE CONTRACTOR SHALL REMOVE AS MUCH OF THE EXISTING PIPE TO ALLOW FOR THE PROPER CONSTRUCTION OF THE PROPOSED DETENTION POND.
4. TANKS TO BE REMOVED SHALL BE REMOVED BY OWNER. — AD-3

NORTH
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

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CONSULTING ENGINEERS & LAND SURVEYORS
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MUNSTER, IN 46321
T: (219) 836-8918
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9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DT
DRAWN BY EM
CHECKED BY DT

DONALD C. TORRENGA — REGISTERED — No. 19868 — STATE OF INDIANA — PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02-23-22	ADDENDUM NO. 3

DRAWING
DEMOLITION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C-1.1

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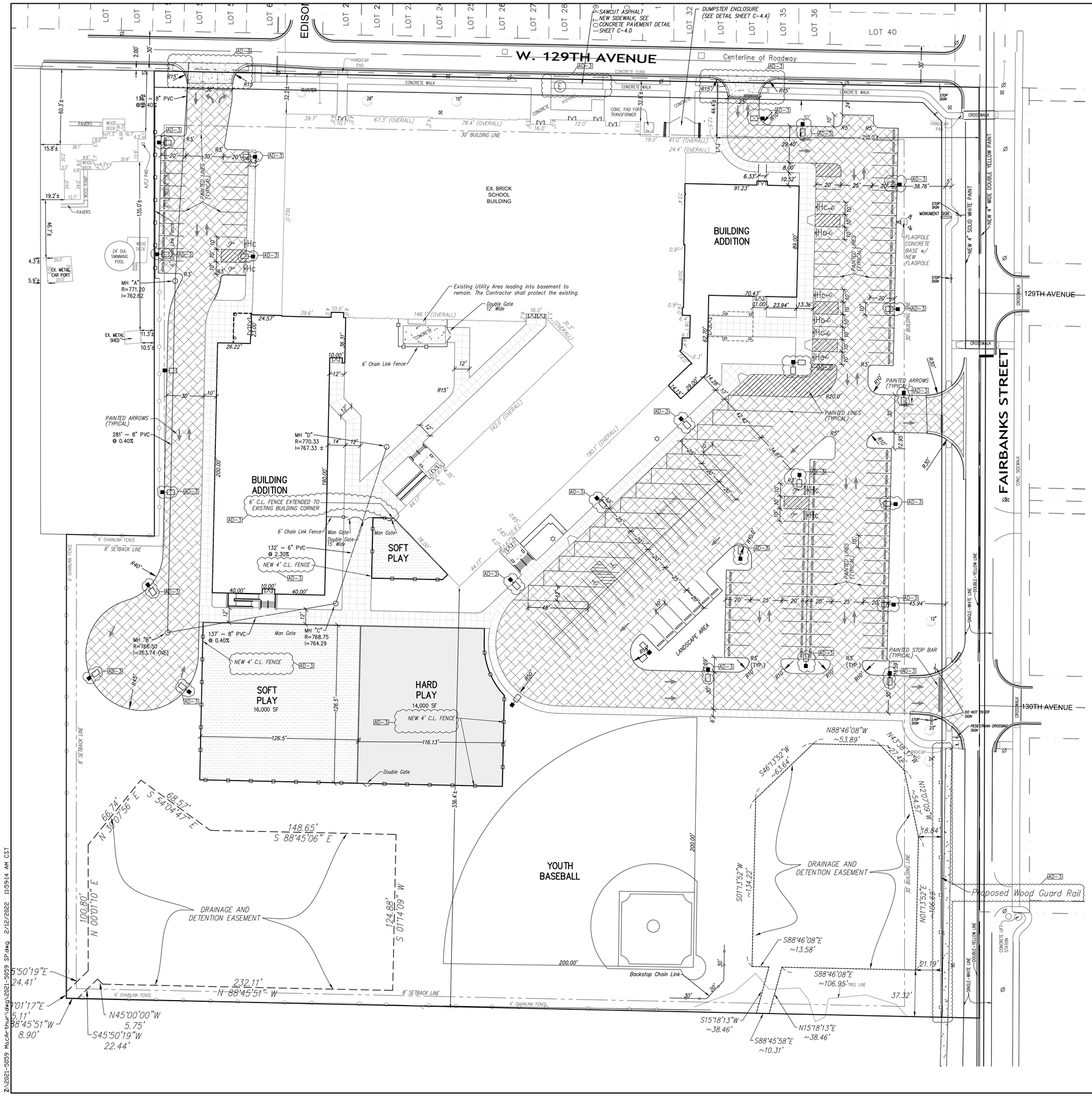

LEGEND:

PROPOSED

- LIGHT DUTY PAVEMENT (PLAY AREA) ASPHALT PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT SECTION
- PLAYGROUND SOFT PLAY
- CONCRETE SIDEWALK & COMBINED CURB/WALK
- CONCRETE PAVEMENT/DRIVEWAY APRON
- HIGH-BACK CURB
- ROLL CURB
- GUTTER CURB SECTION
- HANDICAP ACCESS RAMP
- Hc HANDICAP SIGN
- NEW LIGHT POLE (SEE E-002 FOR DETAILS)
- PARKING BUMPER
- EXISTING FENCE
- PROPOSED FENCE AD-3

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

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DONALD C. TORRENGA REGISTERED No. 19868 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02-23-22	ADDENDUM NO. 3

DRAWING
MASTER SITE PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C-2.0

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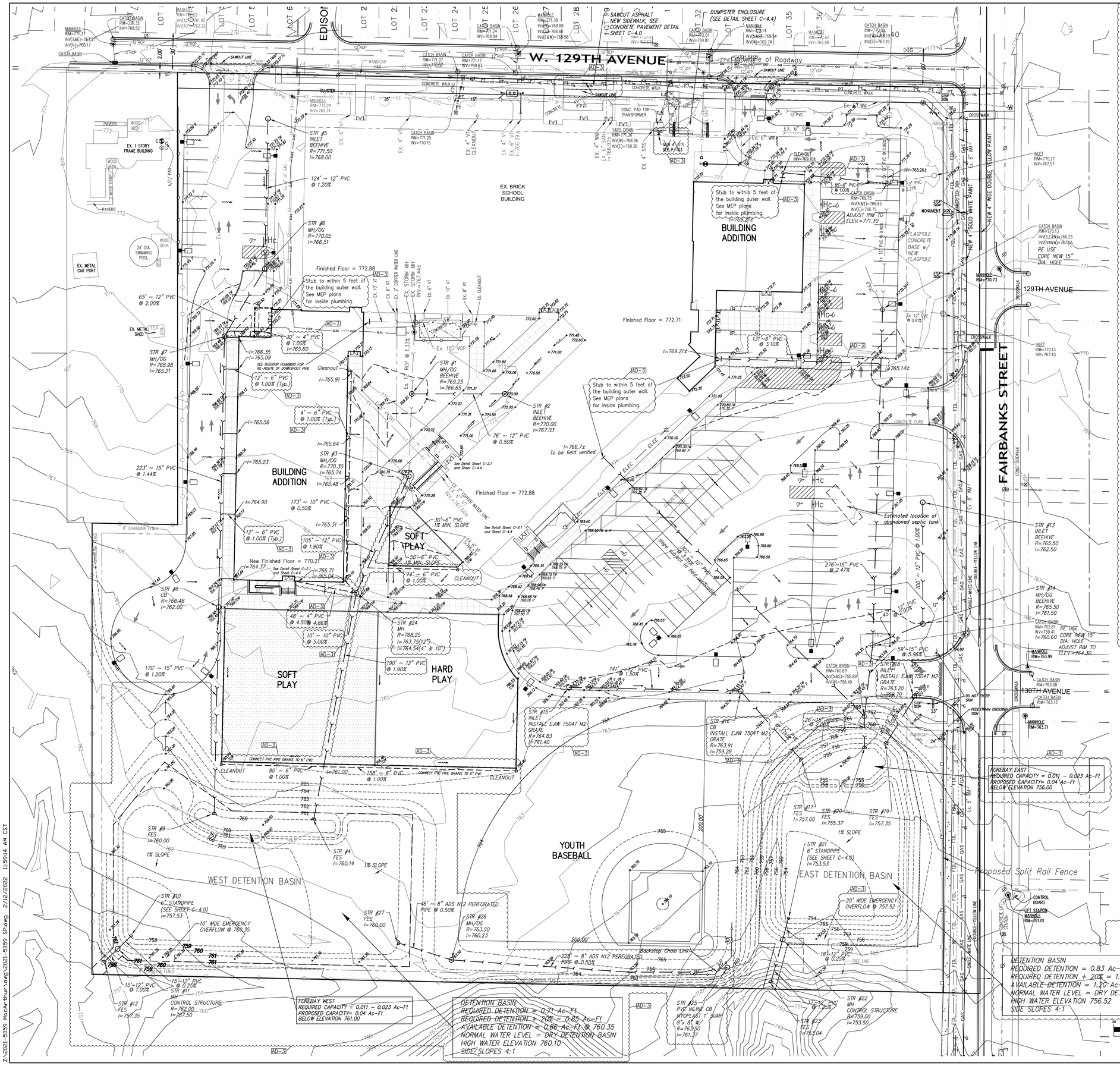

FOREBAY WEST
REQUIRED CAPACITY = 0.011 – 0.023 Ac–Ft
PROPOSED CAPACITY= 0.04 Ac–Ft
BELOW ELEVATION 761.00

DETENTION BASIN
REQUIRED DETENTION = 0.71 Ac–Ft
REQUIRED DETENTION + 20% = 0.85 Ac–Ft
AVAILABLE DETENTION = 0.86 Ac–Ft @ 760.35
NORMAL WATER LEVEL = DRY DETENTION BASIN
HIGH WATER ELEVATION 760.10
SIDE SLOPES 4:1

FOREBAY EAST
REQUIRED CAPACITY = 0.011 – 0.023 Ac–Ft
PROPOSED CAPACITY= 0.04 Ac–Ft
BELOW ELEVATION 756.00

DETENTION BASIN
REQUIRED DETENTION = 0.83 Ac–Ft
REQUIRED DETENTION + 20% = 1.00 Ac–Ft
AVAILABLE DETENTION = 1.20 Ac–Ft @ 757.52
NORMAL WATER LEVEL = DRY DETENTION BASIN
HIGH WATER ELEVATION 756.52
SIDE SLOPES 4:1

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NOTES:

<u>The sequence for the construction of the proposed baseball fields:</u>

1) The existing topsoil is to be stripped off of the site and stockpiled nearby. Refer to the recommendations made on the Geotechnical Report to determine the extent of topsoil necessary to be removed.

2) Proposed rough grading of the site shall be performed to a depth of 6 inches less than the final grades as shown on the grading plan for the playing fields. Prior to final grading, allow adequate time for the soil to settle to avoid uneven turf later.

3) The final 6 inches consisting of topsoil free from impurities and debris shall be placed to the elevations as shown on the plans.

4) A final shallow raking of disturbed area shall be done immediately before seeding for the preparation of a good seedbed.

5) Apply a starter fertilizer (high in PH) at the rate of 1.5 lbs/1000sf.

6) The entire area of the fields (special exceptions for the baseball infield, see notes numbered 7 through 15) shall be hydro–seeded with a mixture of 80% Kentucky Bluegrass and 20% mixture of Perennial Ryegrass or a mixture as specified by the Owner/Architect.

<u>The Contractor shall follow the procedure outlined below for construction of the baseball infield:</u>

7) Grade Sub–Base/Native soil with proper moisture to ensure compaction. Grade to match final surface grade.

8) Spread Infield Mix across compacted Sub–Base/Native soil that has been thoroughly compacted. Base material should still have adequate moisture during this step, if not rehydrate base to proper moisture.

9) Rough grade Infield Mix.

10) It is recommended that a skilled laser grader be commissioned to properly smooth and correctly grade the infield surface. Edges and cutouts shall be graded by hand and thoroughly compacted

11) Thoroughly water new infield mix to the entire profile to achieve proper compaction.

12) The Infield Mixture shall be compacted using a 1–ton roller. Fine tune surface grade where needed. Move infield mix around or use additional infield mix to fill in low areas along edges.

<u>The Contractor shall follow the composition for the infield mixture used in the construction of the baseball infield as follows:</u>

13) The Contractor shall use the following mix to build the pitcher's landing area, batter's box and catcher's box. The mixture of material shall be 40% sand, 20% silt, and 40% clay. The Contractor shall make sure that individual components are evenly distributed throughout the material.

14) The Contractor shall use the following mix to construct the infield. The infield skin should be moist and firm, not hard and baked dry. To achieve firmness, an infield mix should not be too sandy. The infield mixture of material shall be 60% sand, 20% silt and 20% clay mix (sandy clay loam to sandy loam).

AD–3

LEGEND

<u>PROPOSED</u>

◉	MANHOLE
○	CATCH BASIN/INLET
—◀	FIRE HYDRANT
⊗	WATER VALVE
⊠ 000.00	GRADE PROPOSED
FG=000.00	FINISHED GRADE
— >— >—	STORM SEWER
— »— »—	SANITARY SEWER
—— – – – ——	WATER MAIN
TW	TOP OF SIDEWALK
P	TOP OF PAVEMENT
TC	TOP OF C URB
G	EXISTING GROUND/PAVEMENT
TOW	TOP OF WALL
FG	FINISHED GRADE
□■	NEW LIGHT POLE (SEE E–002 FOR DETAILS)

NOTE:

1) The Contractor is responsible to verify all existing site conditions and shall notify the Architect/Engineer immediately of any discrepancies between the existing conditions and all proposed improvements in the construction drawings.

2) All outfalls into the detention ponds shall have grates in accordance with the Grating Detail on Sheet C–4.4.

AD–3

NORTH

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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PROJECT
21–113
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DT
DRAWN BY
EM DT
CHECKED BY
DT

DONALD C. TORRENGA
No. 19868
Donald C. Torrenga

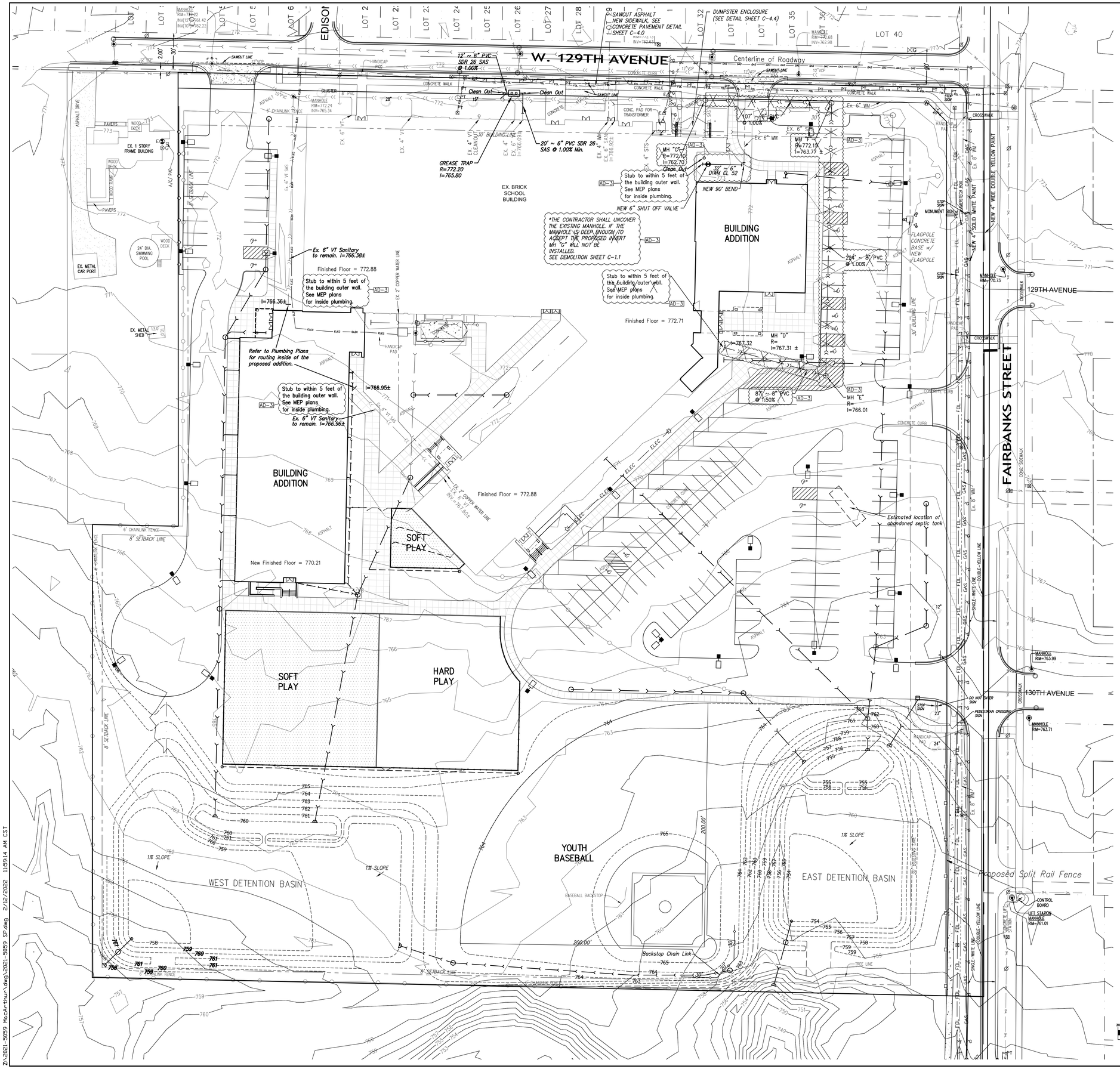
REVISIONS

MARK	DATE	ISSUED FOR
AD–3	02–23–22	ADDENDUM NO. 3

DRAWING
STORM SEWER & GRADING PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C-3.0



LEGEND

PROPOSED

	MANHOLE
	CATCH BASIN/INLET
	FIRE HYDRANT
	WATER VALVE
000.00	GRADE PROPOSED
FG=000.00	FINISHED GRADE
	STORM SEWER
	SANITARY SEWER
	WATER MAIN
TW	TOP OF SIDEWALK
P	TOP OF PAVEMENT
TC	TOP OF C URB
G	EXISTING GROUND/PAVEMENT
TOW	TOP OF WALL
FG	FINISHED GRADE
	NEW LIGHT POLE (SEE E-002 FOR DETAILS)

NOTE:

1) The Contractor is responsible to verify all existing site conditions and shall notify the Architect/Engineer immediately of any discrepancies between the existing conditions and all proposed improvements in the construction drawings.

NORTH
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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MUNSTER, IN 46321
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STATE OF
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PROFESSIONAL ENGINEER

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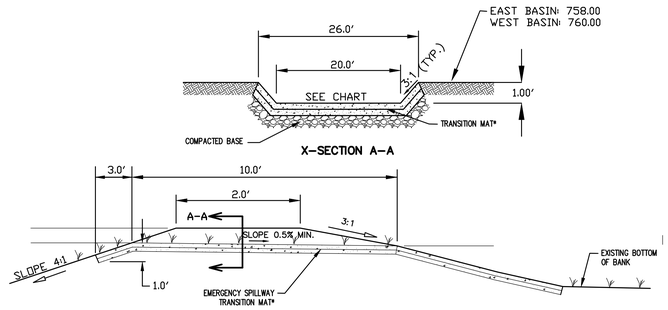
AD-3	02-23-22	ADDENDUM NO. 3

DRAWING
SANITARY SEWER & WATER MAIN PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

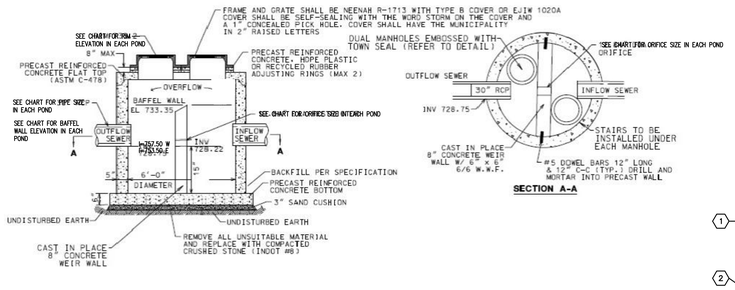
SHEET
C-3.1



* A SOIL COVER MUST BE USED UNDER TRANSITION MATS, SOD IS HIGHLY RECOMMENDED AS A MINIMUM ON ALL SLOPES STEEPER THAN 10:1. IN LIEU OF SOD, A COMBINATION TRM/GEOTEXTILE IS PREFERRED, SEE CONSTRUCTION SPECIFICATION DETAILS.

EAST & WEST BASIN 100-YEAR EMERGENCY OVERFLOW

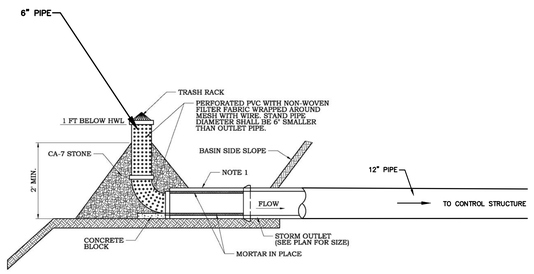
NOT TO SCALE

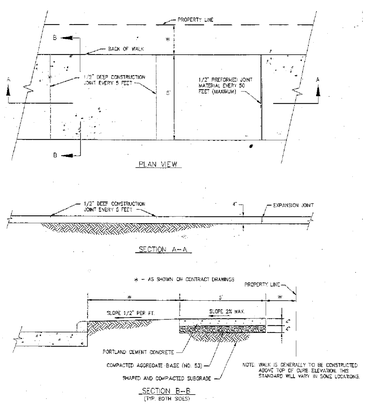


OUTLET CONTROL STRUCTURE W/WEIR DETAIL (EAST O.C.S.)

NOT TO SCALE

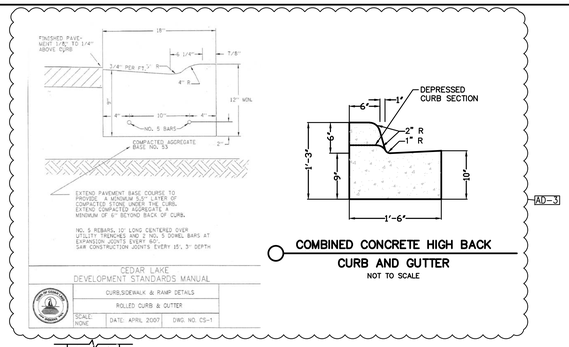
	RIM ELEVATION	PIPE SIZE INFLOW AND INVERT ELEV.	PIPE SIZE OUTFLOW AND INVERT ELEV.	ORIFICE SIZE	ORIFICE INVERT ELEVATION	WEIR ELEVATION TOP OF BAFFEL ELEVATION
WEST BASIN	762.00	12" PVC @ 757.53	12" PVC @ 757.50	4.63"	757.50	760.35
EAST BASIN	759.00	12" PVC @ 753.53	12" PVC @ 753.50	4.40"	753.50	757.52





SIDEWALK DETAIL

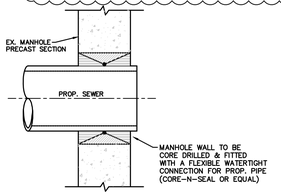
NOT TO SCALE



AD-3

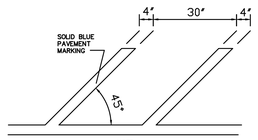
COMBINED CONCRETE HIGH BACK CURB AND GUTTER

NOT TO SCALE



PIPE CONNECTION DETAIL TO EXISTING MANHOLE

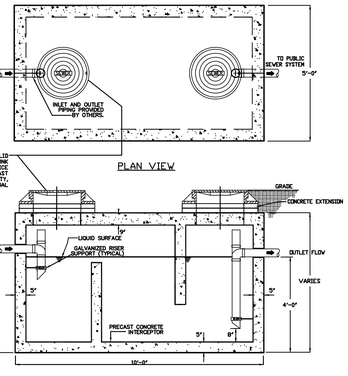
NOT TO SCALE



NOTE: USE 4" SOLID WHITE PAVEMENT MARKING FOR REGULAR PARKING

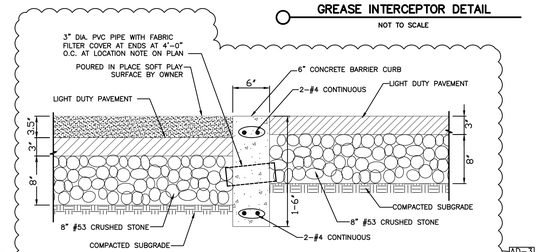
ACCESSIBILITY AND PARKING STRIPING DETAIL

NOT TO SCALE



1500 GALLON GREASE INTERCEPTOR DETAIL

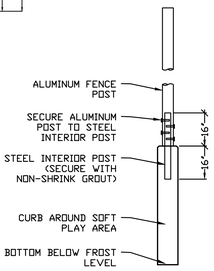
NOT TO SCALE



AD-3

PLAYGROUND PAVING

SCALE: NTS



CURB FENCING DETAIL

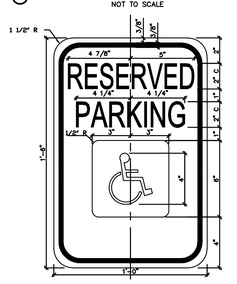
NOT TO SCALE

NOTE:

1. THERE SHALL BE NO EXPOSED SCREW THREADING IN CONNECTION SECURING ALUMINUM POST TO INTERIOR STEEL POST

SIGN AND POST (FREE STANDING)

NOT TO SCALE



NOTE (R7 SIGN): THIS IS A STANDARD SIGN AND MAY BE ORDERED FROM ANY TRAFFIC SIGN SUPPLIER BY NUMBER. THE SIGN MUST BE SUPPLEMENTED WITH AMOUNT OF THE FINE FOR ILLEGALLY PARKING IN THE RESERVED SPACE(S) A MUNICIPALITY MAY IMPOSE. CONFIRM WITH LOCAL REGULATIONS.

ACCESSIBILITY SIGNAGE

NOT TO SCALE

Figure 4.3a

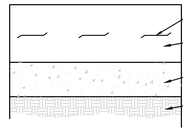
INTERNATIONAL SYMBOL OF ACCESSIBILITY PROPORTIONS

NOT TO SCALE

Figure 4b

INTERNATIONAL SYMBOL OF ACCESSIBILITY DISPLAY CONDITIONS

NOT TO SCALE

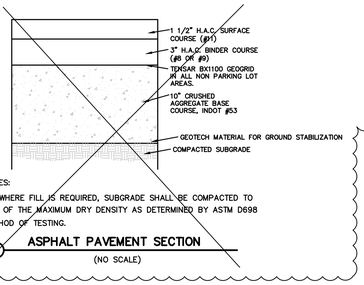


CONCRETE PAVEMENT SECTION DETAIL

NOT TO SCALE

NOTES:

1. WHERE FILL IS REQUIRED, SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 METHOD OF TESTING.
2. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY PONDING PROBLEMS THAT MAY OCCUR AFTER THE FINAL SURFACE IS LAID.

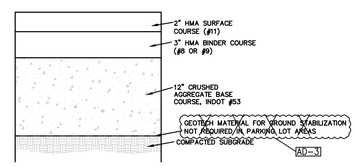


NOTES:

1. WHERE FILL IS REQUIRED, SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 METHOD OF TESTING.

ASPHALT PAVEMENT SECTION

(NO SCALE)

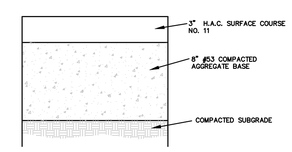


NOTES:

1. WHERE FILL IS REQUIRED, SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 METHOD OF TESTING.

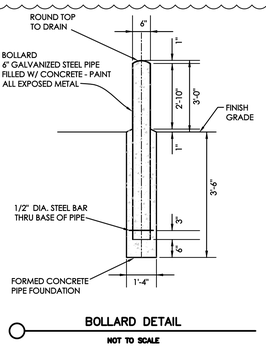
(PARKING LOT) HEAVY DUTY ASPHALT PAVEMENT SECTION

(NO SCALE)



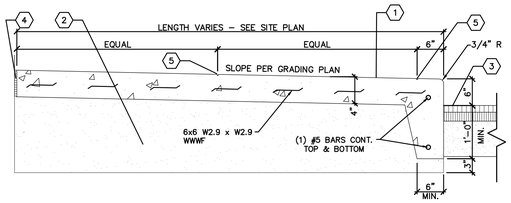
LIGHT DUTY PAVEMENT (PLAY AREA) ASPHALT PAVEMENT SECTION

NOT TO SCALE



BOLLARD DETAIL

NOT TO SCALE



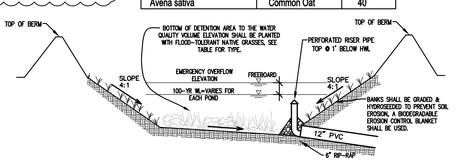
KEYED NOTES

1. 4" THICK CONC. BROOM FINISH WITH 6X6 W2.9XW2.9 WWMF
2. 6" COMPACTED GRANULAR FILL
3. PROPOSED PAVEMENT
4. COMPRESSIBLE FILLER (3/4" MAXIMUM). CUT BACK AND PROVIDE SEALANT, TYPICAL, AT ALL JOINTS WITH FILLER. (BUTTING BUILDING ONLY)
5. 1/4" TOOLED JOINT (SEE TYPICAL SIDEWALK DETAIL)

TYPICAL PERIMETER SIDEWALK

NOT TO SCALE

Low Profile Native Grass	NWL to Limits of Seeding	
Botanical Name	Common Name	lbs/acre
Andropogon scoparius	Little Blue Stem	20
Bouteloua curtipendula	Side Oat Grama	15
Elymus canadensis	Canada Wild Rye	3
Sporobolus heterolepsis	Prairie Dropseed	1
Agrostis alba	Redtop	5
Perennial Ryegrass		35
Alta Fescue		45
Ky. Bluegrass		20
Creeping Red fescue		10
Slender Wheat Grass		5
Cover Crop		
Annual Ryegrass	Annual Rye	50
Avena sativa	Common Oat	40



NATIVE PLANTINGS FOR WATER QUALITY AREAS OF THE DETENTION PONDS

NOT TO SCALE

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT SCHOOL CORP.
CROWN POINT, INDIANA

TORRENGA ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
907 RIDGE ROAD
MUNSTER, IN 46321
T: (219) 836-8918
F: (219) 836-1138

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email Info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DT
DRAWN BY NM
CHECKED BY DT

DONALD C. TORRENGA REGISTERED No. 19868 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02-23-22	ADDENDUM NO. 3

DRAWING
DETAILS AND SPECIFICATIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C-4.0

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SECTION E
WATER DISTRIBUTION SYSTEMS

PART 1 GENERAL

1.1 General Requirements

A. Comply with all requirements specified by all applicable Town Ordinances.

B. Submittals: At the time of application for required permits, submit all information required by all applicable Town Ordinances.

C. All products specified shall use English units of measure unless otherwise specified or approved.

1.2 References

A. ANSI / AWWA C104 / A21.3-03 - Cement Mortar Lining for Ductile-Iron Pipe and Fittings for Water

B. ANSI / AWWA C105 / A21.5-05 - American National Standard for Polyethylene Encasement for Ductile-Iron Pipe System

C. ANSI / AWWA C110 / A21.10 - Ductile-Iron and Gray-Iron Fittings for Water

D. ANSI / AWWA C111 / A21.11 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings

E. ANSI / AWWA C151 / A21.51 - American National Standard for Ductile-Iron Pipe, Centrifugally Cast, for Water

F. ANSI / AWWA C600-05 - Installation of Ductile-Iron Water Mains and Their Appurtenances

G. ANSI / AWWA C509-01 - Resilient-Seated Gate Valves for Water-Supply Service

H. ANSI / AWWA C500-02 - Standard for Metal-Seated Gate Valves for Water Supply Service

I. ANSI / AWWA C502-05 - Dry-Barrel Fire Hydrants

J. AWWA C651-05 - Disinfecting Water Mains

K. ASTM A48 / A48M-03 - Standard Specification for Gray Iron Castings

L. ASTM C478-09 - Standard Specification for Precast Reinforced Concrete Manhole Sections

M. ASTM D1556-07 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

N. ASTM D1557-07 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort

O. ASTM D2167-08 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method

P. ASTM D6938-08a - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods

Q. Indiana Department of Transportation (INDOT) Standard Specifications Manual

Follow current edition of all references.

PART 2 PRODUCTS

2.1 Ductile-Iron Pipe

A. All pipe shall conform to the applicable specifications and requirements set forth herein.

B. Pipe used in water main construction shall be Ductile-Iron Pipe and conform to AWWA C151 / ANSI A21.51. Class 52 thickness designation, casting, marking, testing, etc. shall be provided in accordance with applicable ANSI or AWWA standards; unless otherwise approved by the Director of Operations or the Town Engineer whereby this will be the only acceptable type of pipe installed.

C. Ductile-Iron pipe shall be lined with double thickness cement lining in accordance with AWWA C104 / ANSI A21.3-03.

D. Pipe Fittings
   1. All ductile iron fittings shall conform to the latest ANSI A21.10 for short body, cast iron fittings twelve inches (12") and less, and AWWA C110 for fittings fourteen inches (14") and larger.
   2. Lining, or other special items, shall be specified in special provision.

E. Minimum Size: The minimum permissible sizes for water main are, as follows:
   1. Residential: 8" ⌀ = 0.3491 ft2
   2. Commercial: 10" ⌀ = 0.5454 ft2
   3. Industrial: 12" ⌀ = 0.7854 ft2

2.2 Polyethylene Encasement

A. Polyethylene encasements shall be required of all underground installations of newly constructed ductile-iron pipe water mains and fittings and other related appurtenances, in accordance with AWWA-C105 / ANSI A21.5-05. The installation method shall be approved by the Director of Operations or Town Engineer.

2.3 Valves for Water Mains

A. The valves shall be suitable for ordinary waterworks service, intended to be installed in a normal position on buried pipe lines for water distribution systems.

B. The minimum requirements for all valves shall, in design, material and workmanship, conform to the standards of the latest AWWA C500 and C509. All materials used in the manufacture of water works valves shall conform to the AWWA standards designed for each material listed.

C. Materials:
   1. Manufacture and Marking: The valves shall be standard pattern and shall have the name or make of the manufacturer, size and working pressure plainly cast in raised letters on the valve body. Valves from one of the following manufacturers are acceptable: Mueller, U.S. Valve, Clow, or East Jordan Iron Works.
   2. Type and Mounting: The valve bodies shall be cast iron, mounted with approved non-corrosive metals. All wearing surfaces shall be bronze, or other approved non-corrosive materials and there shall be no moving bearing or contact surfaces or iron in contact with iron. Contact surfaces shall be machined and finished in the best workmanlike manner, and all wearing surfaces shall be easily renewable.
   3. Butterfly valves may not be used in the Town of Cedar Lake, except as authorized by the Director of Operations or Town Engineer.

D. Gate Valves: All gate valves shall meet the standards of AWWA C509. The stem shall be of high tensile strength bronze or other approved non-corrosive metal. All nonferrous bushings shall be of substantial thickness tightly fitted and pressed into machined seats. All valves shall open by turning to the left, counterclockwise.
   1. Manufacture – Mueller, U.S. Valve, East Jordan Iron Works or McWane (Clow) or approved equal
   2. Resilient Seated Wedge - ANSI/AWWA C509
   3. Working Pressure: 200 psi
   4. Ends:
      a. Mechanical Joint
      b. Push-On (Rubber Gasket) Joint
      c. Flange Joint
   5. Bolts: Stainless Steel, Class 304 or 314
   6. Epoxy Coated
   7. Operating Stem: Non-Rising with "O" Ring Seals.
   8. Operating Nut: Two inches (2") square at the bottom, one and fifteen sixteenths inches (1-15/16") at the top and one and three quarter inches (1-3/4") high; Open Left
   9. Markings to be cast on the bonnet or body:
      a. Open indicating arrow
      b. Manufacturer's name
      c. Pressure rating
      d. Year of manufacture
      e. Size
   10. Hydrostatic Test Pressure at Factory: Each gate valve shall be tested at the factory for performance and operation prior to painting and shall be subjected to the following hydrostatic pressure tests: each three-inch (3") to twelve-inch (12") valve, inclusive, shall be subjected to hydrostatic pressure test under pressures of both three hundred pounds per square inch (300 psi) and one hundred seventy-five pounds per square inch (175 psi) and each sixteen-inch (16") to forty-eight-inch (48") valve, inclusive, shall be subjected to test pressures of three hundred pounds per square inch (300 psi) and one hundred fifty pounds per square inch (150 psi). These tests shall be conducted in accordance with provisions of AWWA C500. Tests for special valves shall be made as provided in the special provisions.

E. Tapping Valves: Tapping valves shall be furnished with flanged inlet and connections having a machined projection on the flanges to mate with a machined recess on the outlet flanges of the tapping sleeves and crosses.

   The outlet ends shall conform in dimensions to the AWWA Standards for the hub or mechanical joint connections, except that the outside of the hub shall have a large flange for attaching a drilling machine. The seat opening of the valves shall be larger than normal size to permit full diameter cuts. Tapping sleeve or cross shall be of the same manufacture as the tapping valve.
   1. McWane (Clow) resilient wedge tapping valve.
   2. Seat Opening larger than normal valve to permit full diameter cuts.
   3. Flanged inlet by mechanical joint.
   4. Tapping sleeve or cross:
      a. Same manufacturer as tapping valve.
      b. Sleeve, nuts and bolts for buried installations to be minimum type 304 stainless steel.

F. Valves sixteen inches (16") and larger installed in vertical or inclined lines shall be equipped with hard-babbitt tracks secured to the valve body and bonnet to support the lower disc during the operation, and equipped with slides to assist the travel of the gate assembly.

G. Gate Valve Stem Seals: Unless otherwise designated in the special provisions all gate valves up to and including twelve inch in size, shall be furnished with O-ring stem seals. Number, size and design shall conform to the AWWA standard for gate valve O-ring Stem Seals. Valves larger than twelve inches (12") shall be equipped with packing glands.

H. Wrench nuts on gate valves shall be made of cast iron and shall be one and fifteen-sixteenths inches (1-15/16") square at the top, two inches (2") square at the base, one and three quarter inches (1-3/4") high, unless otherwise designated in the special provisions. Nuts shall have a flanged base upon which shall be cast an arrow at least two inches (2") long showing the direction of the opening. The word "Open" in one-half inch (1/2") or larger letters shall be cast on the nut to clearly indicate the direction of opening the valve.

I. Boxes for Water Mains and Water Services: Standard valve vaults, special valve vaults, cast iron valve boxes, curb boxes and meter boxes, all in accordance with the Cedar Lake standards.
   1. Material: Ring and Cover and Valve Box Castings. Castings for cast iron ring and cover and for cast iron parts of valve boxes shall conform to the requirements of Standard Specifications for Gray Iron Castings, ASTM Designation A-48.

2.4 Fire Hydrants

A. These specifications are to be used in conjunction with the AWWA Standard C502 for fire hydrants for ordinary water works service and follow standard drawing number W - 2.

B. Material:
   1. All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502.
   2. The hydrant shall be East Jordan Iron Works, 5CD250 (three nozzle with operating cap dust shield) traffic model, or approved equal and of a pattern approved by the Director of Operations or Town Engineer. The name or make of the manufacturer and size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed.
   3. As a minimum requirement, all hydrants shall be designed for a working pressure of one hundred fifty pounds per square inch (150 psi) and in either bronze or other approved noncorrodible material, and there shall be no moving bearing or contact surfaces of iron in contact with iron or steel. All contact surfaces shall be finished or machined in the best workmanlike manner and all wearing surfaces shall be easily renewable.
   4. The design of the hydrant shall be such that all working parts may be removed through the top of the hydrant and shall have the required AWWA specified number of turns of the stem to open the gate an ear equal to the area of the valve opening. Any change in area equal to the area of the valve opening. Any change in area of the water passage through the valve must have an easy curve, and all outlets must have round corners of good radius.
   5. Lugs, if required for harnessing the hydrant to the connecting pipe from the main in the street, shall be provided on the bell of the elbow or on the hydrant bottom casting. A drawing of the lug construction shall be submitted for approval, on request of the Director of Operations.
   6. Hydrants shall be provided with a sidewalk or breakaway flange. Breaking devices shall be at the sidewalk flange, which will allow the hydrant barrel to separate at this point with a minimum breakage of hydrant parts in case of damage. There shall also be provided at this point, a safety stem coupling on the operating stem that will shear at the time of impact. Unless otherwise specified, all hydrants shall be equipped with O-ring stem seals.
   7. All bolts and nuts for water main fittings shall be class 304 or 314 stainless steel.

C. Hydrant Details:
   1. The dimensions and details of hydrants and nozzles, unless otherwise noted, shall be as follows:
      a. Hydrant six inches (6") connection (East Jordan Iron Works, 5BR250, C-Dome)
      b. Hydrant connection pipe size diameter - six inches (6")
      c. Standpipe, minimum inside diameter - eight inches (8")
      d. Hydrant base shall include bottom and rear support shoe.
      e. Female type base restrained mechanical joint is recommended for connection to the auxiliary valve.
      f. Length of hydrant from bottom of hydrant connection to sidewalk ring - As required by Director of Operations or Town Engineer.
      g. Valve opening - six inches (6")
      h. Size of auxiliary gate valve - six inches (6")
      i. Hose nozzles, number and size: Two (2) - two and one half inches (2-1/2") & One (1) – four inches (4")
      j. Thread pattern - National Standard
   2. All nozzles shall be fitted with cast iron threaded caps with operating nut of the same design and proportions as the hydrant stem nut. Caps shall be threaded to fit the corresponding nozzles and shall be fitted with suitable gaskets for positive water tightness under test pressures.
   3. The operating nuts on hydrants stem and nozzle caps shall be the same for all sizes of hydrants.

      Dimensions shall be as follows:
      Pattern of nut - Tapered pentagonal
      Height – One and one sixteenth inches (1-1/16")
      Size of pentagon – One and thirty five one hundredths inches (1.35") at bottom of nut
      (As measured from point of flange)
   4. The hydrant valve shall open by turning to the left (counterclockwise).
   5. All bolts and nuts below grade must be class 304 or 314.

D. Factory Hydrostatic Test: Before the hydrant is painted at the factory, it shall be subjected to an internal hydrostatic test of three hundred pounds per square inch (300 psi) with the hydrant valve in a closed position and again with the hydrant valve in an open position.

E. Painting: All exposed parts of the hydrant shall be painted red.

F. Marking: All hydrants shall have a location marker rod and hydrant tag number per drawing number W - 2. Location rod shall be five feet tall, corrosion resistant, top flange mounted with a spring base and shall not interfere with hydrant operation. Tag number designation to be provided by the Cedar Lake Public Works Department.

2.5 Fire Flow Requirements

A. The amount of water necessary to fight a fire for a particular building is called the required fire flow. It is based on the type of construction, building size, and fire hazard of the occupancy.

B. Fire flow calculations shall be prepared in accordance with the Guide for Determination of Required Fire Flow, published by Insurance Services Office, Inc. (ISO). Fire flow for sprinkler buildings shall be reviewed for approval under part D of this section.

C. The design engineer shall show that the water system can supply the required fire flow.

   The minimum fire flow requirement shall be as noted below:
   - Residential – 1,500 GPM
   - Industrial/Commercial – 3,500 GPM

D. The Cedar Lake Town Council or its Designee and Fire Chief, jointly, shall review and approve plans and specifications related to fire flows.

PART 3 EXECUTION

3.1 Surface Conditions

A. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

B. Erosion and sediment control shall be provided to and approved by the Director of Operations or Town Engineer.

3.2 Field Measurements, Survey Lines, Reference Points & Grades

A. Make necessary measurements in the field to assure precise fit of items in accordance with the approved design.

3.3 Installation of Pipe

A. Trenching
   1. All poles, fences, sewer, gas, water or other pipes, wires, conduits, manholes, buildings, structures and property in the proximity of any excavation shall be supported and protected from damage by the Contractor during construction.
   2. Wherever sewer, gas, water or other pipes or conduits cross the excavation, the Contractor shall support said pipes and conduits without damage to them and without interrupting their use during the progress of the Work. The manner of supporting such pipes, etc., shall be subject to review by Town.
   3. All property shall be thoroughly cleaned of all surplus materials, earth and rubbish placed thereon by the Contractor.
   4. The Contractor shall notify Town and the appropriate utility companies at least seventy-two (72) hours prior to the start of construction.
      a. The Contractor shall coordinate all utility companies' location of any existing underground utilities and structures within the site limits.
      b. The Contractor, prior to the start of construction, shall verify the location of any existing underground utilities and structures within the site limits. It is the Contractor's responsibility to make any and all exploratory investigation, which may be necessary to verify or locate the utility pipe, wires, structures and appurtenances of others.

B. Location:
   1. Water mains shall be located in the public right-of-way or front yard easements. Water mains shall not be located in side or rear yard easements, unless no other reasonable alternative exists, and approved by the Cedar Lake Town Council or its Designee.
   2. Not closer than ten feet (10') from a public sewer system or service line (measured edge to edge). The edge of any water main or water service line shall not be less than eight feet (8') from the edge of manholes.
   3. Where the bottom of the water pipe will be at least eighteen inches (18") above the top of the sewer pipe.
      a. If eighteen inches (18") of separation is not allowable, encase the lower elevation pipe per standard drawing W – 9.
   4. Where the top of the water pipe will be at least eighteen inches (18") below the bottom of the sewer pipe.
      a. If eighteen inches (18") of separation is not allowable, encase the lower elevation pipe per standard drawing W – 9.
   5. The Contractor shall use pressure pipe with no joint closer horizontally than sixty inches (60") from the crossing of gravity flow sewers above waterlines.
   6. Unless otherwise shown on the plans or indicated in the special provision, all pipe shall be laid to a minimum depth of five feet (5') measured from the existing ground surface or established grade to the top of the barrel of the pipe. In areas subject to subsequent excavation or fill, the mains shall be laid to grades shown on the plans.
   7. A hydrant shall be placed on dead end water mains. Water mains shall extend to the subdivision or property boundary line and shall be located in a public Right-of-Way or Easement.
   8. Dead end mains shall not be allowed except with the direct permission of the Director of Operations or Town Engineer.
   9. Water mains shall be installed in casing pipes below street crossings where directed by the Director of Operations of Town Engineer.

C. Laying Pipe
   1. All pipe shall be reinspected for soundness and damage due to handling immediately before being lowered into the trench. Any pipe found to be unsound or damaged will be rejected and shall be removed immediately from the site of the work. All material shall be new and of first quality.
   2. All pipe shall be laid accurately to the required line and grade and in such manner as to form a close, concentric joint with the adjoining pipe and to bring the invert of each section to the required grade. Bell holes shall be dug in advance of the pipe being laid as required. The supporting of the pipe on blocks will not be permitted.
   3. All open ends of pipes and branches shall be sealed with plugs or bulkheads firmly held in place.
   4. At the end of each day's work, the open ends of all pipes shall be protected against the entrance of animals, children, earth, or debris by bulkheads or stoppers.
   5. Each length of section shall be properly pulled or shoved "home" with a winch or come-a-long against the section previously laid to make a proper joint. The pipe shall then be securely held in position during the backfill operations. Joints shall not be pulled or cramped more than the design of the joint will permit and so as not to injure the conduit.
   6. Lower pipe, fittings, and valves into the trench by hand, by means of hoists or ropes, or by other suitable tools or equipment which will not damage products, coatings, or linings. Do not drop or dump pipe, fittings, or valves into the trench.
   7. Provide thrust restraint at horizontal and vertical deflection fittings and at tees, plugs, tapping sleeves, and tapping saddles, only with the direct permission of the Director of Operations.
   8. Laying of ductile iron piping shall meet the requirements of ANSI / AWWA C600-05, unless otherwise specified in this Section.
   9. Open excavation shall be satisfactorily protected at all times.
   10. Pipe found not to comply with these standards shall be removed and replaced.

D. Dewatering
   1. Dewatering sufficient to maintain the water level below the surface of the trench bottom shall be accomplished prior to pipe laying and jointing, if not done prior to excavation and placement of the bedding as called for.
   2. The dewatering operation, however accomplished, shall be carried out so that it does not destroy or weaken the strength of the soil under or alongside the trench.
   3. When the dewatering operation is ended, the trench shall be replaced in such a manner so as not to disturb the pipe and its foundation.

E. Backfill Materials
   1. B-Borrow shall comply with INDOT Standard Specifications, current edition. Maximum stone size shall not exceed one inch (1") or the maximum size recommended by the pipe manufacturer, whichever is smaller.
   2. Earth backfill material shall contain no more than five percent (5%) organic material, no particles larger than four- inches (4") and shall be free of trash, rubble and debris. The Plastic Index of the fraction passing the No. 40 sieve shall not be more than twenty-five (25).
   3. Coarse aggregate material shall be No. 53 or 73 complying with INDOT Standard Specifications, current edition. Coarse aggregate is required for all pipe installed below pavement and sidewalks.
   4. Backfill materials may vary from those specified depending upon utility company requirements when trenches cross existing utilities.
   5. The use of slag material as backfill is not an acceptable alternative in the Town of Cedar Lake.

F. Bedding
   1. Each pipe shall be laid and bedding with INDOT No. 8 coarse aggregate limestone, unless otherwise approved.
      a. There shall be a minimum of 6 inches beneath the pipe.
      b. The lower half of the laid pipe shall be haunched to eliminate voids.
      c. There shall be a minimum of 12 inches of bedding above the laid pipe.

G. Sheet Piling
   1. Sheet piling (permanent or temporary) shall be provided as required for construction in areas where wide excavation cannot be permitted, or for an excavation that is open for an extended period, or where soil conditions dictate to protect adjacent structures, roadways and utilities.
   2. The section modulus of piling sections shall be as required to function properly as intended.
   3. Piling sections shall be marked for length and sorted and stacked at the job site to prevent distortion and to facilitate proper sequence of setting and driving.
   4. Interlocks shall be protected from becoming obstructed by sand, gravel, mud or other materials.
   5. Pile tips are approved for use at the Contractor's option.

H. Certifications
   1. The Developer shall submit Manufacturer's Certificate of Compliance with applicable ASTM Standards to the Town Engineer for all materials delivered and installed on site.

3.4 General Trenching

A. Follow the standard drawing number W – 7 for pipe trench.

B. Unless otherwise directed or permitted, not more than one hundred feet (100') of any trench shall be open at any time.

C. Surface encumbrances, located so as to create a hazard to employees involved in excavation work or in the vicinity thereof at any time during operations, shall be removed or made safe before excavating is begun.

D. During excavation, material satisfactory for backfilling shall be stockpiled in an orderly manner at a distance from the banks of the trench sufficient to avoid overloading and to prevent slides and cave-ins. Adequate drainage shall be provided for the stockpiles and surrounding areas by means of ditches, dikes, or other approved methods. The stockpiles shall also be protected from contamination with unsatisfactory excavated material or other material that may destroy the quality and fitness of the suitable stockpiled material. If the Contractor fails to protect the stockpiles and any material becomes unsatisfactory as a result, such material, if directed by the Town Engineer, shall be removed and replaced with satisfactory on-site or imported material from approved sources.

E. Grading shall be done as may be necessary to prevent surface water from flowing into the excavation, and any water accumulating therein shall be removed so that the stability of the bottom and sides of the excavation is maintained. In wet trenches dewatering equipment shall be operated ahead of pipe laying and the water level kept below the pipe invert.

F. The trench shall be excavated as shown in these Standards or as recommended by the manufacturer of the pipe to be installed, whichever is more stringent. Trench walls below and above the top of the pipe shall be sloped, or made vertical, as recommended in the manufacturer's installation manual. The trench width below an elevation one foot (1') above the top of pipe shall not exceed that recommended in the installation manual. Where no manufacturer's installation manual is available, trench walls below an elevation one foot (1') above the top of pipe shall be vertical and trench walls one foot (1') or more above the top of pipe shall be adequately sloped as required to prevent slides and cave-ins unless proper precautions, as stipulated by OSHA, are taken. If adequate trench slopes cannot be provided in the available work space and right-of-way limits, then use of sheeting and shoring and/or a trench box is mandatory.

G. Excavation for manholes or similar structures shall be sufficient to leave at least twelve inches (12") clear between the outer structure surfaces and the face of the excavation or support members and be of sufficient size to permit the placement and removal of forms for the full length and width of structure footings and foundations. When concrete is to be placed in an excavated area, special care shall be taken not to disturb the bottom of the excavation. Excavation to the final grade level shall not be made until just before the concrete is to be placed.

H. Dust conditions shall be kept to a minimum by the use of water. The use of salt or calcium chloride will not be permitted.

3.5 Removal of Material

A. As trenches are backfilled, the Contractor shall remove all surplus material, regrade and leave clear, free, and in good order all roadways and sidewalks affected by the construction of the work. During the progress of and until the expiration of the guarantee period, he shall maintain in good and safe conditions the surface or any street over the trenches and promptly fill all depressions over and adjacent to trenches caused by settlement of backfilling.

B. Surplus or unsatisfactory excavated material shall be properly disposed of at a location off the property limits.

3.6 Stabilization

A. If portions of the bottom of trenches or excavations consist of material unstable to such a degree that, in the opinion of the Town, it cannot adequately support the pipe or structure, the bottom shall be overexcavated and stabilized with granular material in compliance with the INDOT Standard Specifications, current edition. Depth of stabilization shall be as directed by the Town.

3.7 Backfilling

A. Pipe bedding and initial backfill shall be clean granular material to a depth per standard drawing number W - 7. Initial backfill shall be placed in lifts of a maximum of six inches (6") loose thickness. The method for placing and compacting the backfill shall comply with the INDOT Standard Specifications as applicable. At a minimum, the Contractor shall use a vibrating plate compactor with adequate passes to achieve compaction. The backfill shall be brought up evenly on both sides of pipe for the full length of pipe. Care shall be taken to ensure thorough compaction of the fill under pipe haunches.

B. Final backfill for the remainder of the trenches shall be as follows:
   1. Backfill for trenches under sidewalks, under turfed or seeded areas, and in miscellaneous areas shall be of approved earth material and contain no stones over four inches (4") in their largest dimensions. Stones which are used in backfilling shall be distributed among the earth backfill so that all interspaces are filled with fine material. All such backfilling shall be deposited in lifts of a maximum twelve inches (12") loose thickness and compacted with a vibrating plate compactor or approved mechanical tamping devices. Excess earth to the amount required to replace settlement shall be neatly rounded over the trench and the remainder hauled off the work site. Trenches shall be maintained by the Contractor until settlement has ceased and trenches remain level with the adjacent ground.
   2. Backfill of all trenches under existing or proposed roadways and structural footings or slabs shall be approved granular material only. In addition, the top six inches (6") below the base of the pavement shall be backfilled with No. 53 crushed limestone. The backfill shall be placed in six inch (6") maximum lifts and the method of placing and compacting the backfill shall comply with the INDOT Standard Specifications, as applicable. At a minimum, the Contractor shall use a vibrating plate compactor with adequate passes to achieve compaction.

C. Pipe bedding and each backfill lift shall be compacted to a dry density not less than the following percentage of maximum dry density as determined by the Modified Proctor Test (ASTM D1557):

Usage	Compaction %
Beneath piping	95
Upper two feet (2') of backfill under roadways	95
Under roadways (except upper two feet (2') of backfill)	92
Under haunches and up to springline of pipe	95
From springline to twelve inches (12") above top of pipe	90
Adjacent to (or behind) vertical walls	90
Under turfed or seeded areas below topsoil, and Miscellaneous area (from twelve inch [12"] above pipe to surface)	85

D. No fill shall be placed against any manhole or other structure until placed concrete has been allowed to cure for at least three (3) days. Backfill shall be placed in such a manner that the structure will not be damaged by shock from falling earth. The backfill material shall be deposited and compacted as specified for final backfill, and shall be placed in such a manner as to prevent eccentric loading and excessive stress on the structure. Heavy equipment for spreading and compacting shall not operate closer to foundation walls than set forth as follows.
   1. Fill placed adjacent to vertical or near vertical walls (within a zone defined by imaginary lines extending horizontally away from the base of the wall for a distance of three feet and thence upward and outward on a one to one (1:1) slope to the elevation of the top of the wall) shall be compacted to the specified density with light equipment not exceeding fifteen hundred (1500) pounds in static weight or dynamic rated impact.

3.8 Compaction Testing

A. Sampling and testing shall be the responsibility of the Contractor. Tests shall be performed by a Town approved commercial testing laboratory or may be tested with approved facilities furnished by the Contractor.

B. Laboratory tests for moisture-density relations shall be determined in accordance with ASTM D1557. A minimum of one test shall be performed on each different type of material used for backfill, or as directed by the Town.

C. Field In-Place Density Tests:
   1. Shall be performed in sufficient numbers to ensure that the specified compaction is being obtained. A minimum of one test per lift of backfill for every two hundred feet (200') of installation shall be performed. Locations for performing the density tests will be coordinated with the Town.
   2. Shall be determined in accordance with ASTM D1556, ASTM D2167 or ASTM D6938.

      When ASTM D6938 is used, the calibration curves shall be checked and adjusted using only the sand cone method as per ASTM D1556. ASTM D6938 results in a wet unit weight of soil and the moisture content of the soil. The calibration curves furnished with the moisture gages shall be checked along with density calibration checks as described in ASTM D6938. The calibration checks of both the density and moisture gages shall be made at the beginning of a job, on each different type of material encountered and at intervals as directed by the Town. Copies of calibration curves and results of calibration tests shall be submitted to the Town.

D. All test results shall be submitted to the Town.

E. Trenches improperly compacted shall be reopened to the depth directed by the Town and then refilled and compacted to the density specified. Field in-place density tests shall also be repeated for improperly compacted trenches that are reopened, refilled and recompacted. A minimum of one (1) repeat test per lift of backfill for every two hundred feet (200') of improperly compacted trench that is reopened, refilled and recompacted shall be performed.

3.9 Connections to Existing Water Mains

A. Connections to existing water mains shall be accomplished without interruption of service. Tap and valves will be provided at the point of connection to the existing system.

3.10 Laying of Pipe on Curves

A. Long radius curves, either horizontal or vertical, may be laid with standard pipe by deflections at the joints.

B. Where deflection of curves is required, the Director of Operations or Town Engineer will approve the methods to be used.

C. Maximum deflections at pipe joints and laying radius for various pipe lengths are as found in the following standards:

   Ductile Iron Pipe Restrained Joints AWWA C600
   Ductile Iron Pipe Push-On Joints AWWA C600

D. When rubber gasketed pipe is laid on a curve, the pipe shall be jointed in a straight alignment and then deflected, as required. Trenches shall be made wider on curves for this purpose.

3.11 Fire Hydrants

A. Locate Fire Hydrant: Per standard drawing number W - 2
   1. Where public water supplies may be extended, fire hydrants shall be installed along public streets.
   2. Hydrants shall be installed in residential districts on the basis of serving one hundred twenty thousand square feet (120,000 sf) of area and not be within the public right of way or easement, at the side property lines.
   3. In commercial and industrial districts, hydrants shall be installed on the basis of serving eighty thousand square feet (80,000 sf) of area and not be more than two hundred fifty feet (250') apart. The farthest distance from a hydrant to any point on a building it services shall be three hundred fifty linear feet (350'). The closest edge of an installed hydrant shall be no closer than approximately forty-two inches (42") from the back of the street curb and no further than approximately forty-eight inches (48") distant.

B. Hydrant Construction Details
   1. Hydrant shall be plumb and shall be set so that the lowest hose connections are at least eighteen inches (18") and no more than twenty four inches (24") above the surrounding finished grade.
   2. All hydrants shall be inspected in the field upon delivery to the job to ensure proper operations before installation.
   3. A minimum of one quarter cubic yard (1/4 cy) of coarse stone, with gravel or like porous material, shall be placed at and around the base of the hydrant to ensure proper drainage of the hydrant after use.
   4. Care shall be taken to ensure that weep holes are not covered by concrete.
   5. The hydrant shall be set on a concrete base block to ensure a firm bearing for the hydrant base, with thrust blocking behind the elbow, per standard drawing number W - 2.
   6. All joints shall be restrained by retainer glands, as approved by the Director of Operations or Town Engineer.
   7. The resetting of existing hydrants and moving and reconnection of existing hydrants shall be handled in a manner similar to a new installation.
   8. Fire hydrant assemblies removed shall be delivered to the Cedar Lake Public Works Department.

3.12 Gate Valves

A. Locate Water Valves:
   1. Maximum spacing of valves is four hundred feet (400') and located at the property lines.
   2. Locate a valve at each branch of a tee or crossing, unless otherwise directed by the Director of Operations or the Town Engineer.

B. All gate valves shall be inspected upon delivery in the field to ensure proper working order before installation. They shall be set and jointed to the pipe on the manner as set forth in the AWWA Standards for the type of connection ends furnished.

C. All valves shall be installed in a vertical position and be provided with a standard valve box and valve box stabilizer, as shown in Cedar Lake Standard Detail.

D. After installation, all valves shall be subjected to the field test for piping and valves.

E. Setting Valves and Valve Boxes
   1. Clean the interior of valves of foreign matter before installation. Tighten stuffing boxes. Inspect valves in opened and closed positions to ensure all parts are in working conditions.
   2. Set buried valves and valve boxes plumb. Center valve boxes on the valves or valve operators. Locate valves outside the area of roads and streets where feasible, or where shown on the drawings. Tamp backfill around each valve box to a distance of four feet (4') on all sides of the box, or to the undisturbed trench face if less than four feet (4').

F. Construction Details of Cast Iron Valve Boxes for Gate Valves. Per standard drawing number W - 3.
   1. Adjustable cast iron valve boxes shall be set to position during backfilling operations so they will be in a vertical alignment to the gate valve operating stem. The lower casting of the unit shall be installed on top of a valve box stabilizer, in such a manner as to be cushioned and to not rest directly upon the body of the gate valve or upon the water main alignment into such an elevation that its top will be at final grade. Backfill around the unit shall be placed and compacted to the satisfaction of the Director of Operations or Town Engineer.

G. Concrete Valve Vaults shall be installed in paved areas and in accordance with ASTM C-478 per standard drawing number W - 4 and W - 5.

3.13 Water Services

A. Installation: Per standard drawing number W -1.
   1. The minimum size of water service connections in the Town of Cedar Lake shall be one inch (1") and shall be copper tube type "K". Water service connections four-inches (4") and larger shall be ductile iron pipe water main and shall comply with all specifications for water mains. All copper connections shall be made with compression fittings.
   2. The corporation stop shall be Mueller Company H-1500 Ori-seal III or approved equal and shall be installed by tapping machine. The tap shall be made in the upper third of the main as close to a forty-five degree (45°) angle with the horizontal axis as is practical. A tap into the top of the main will not be permitted. All taps shall have a minimum of one foot (1') separation.
   3. The round way ground key stop shall be Mueller Company H-1504-2 Ori-seal III with quarter turn check or approved equal. Buffalo box shall be Mueller Company H-10334 Arch Type with thirty three inch (33") minimum rod length or approved equal five and one half feet (5-1/2') in length having an inside diameter of the upper section of not less than one inch (1"). All water services shall have a minimum of five feet (5') of cover over the service. All buffalo boxes shall be installed approximately eighteen inches (18") from the street side of the sidewalk and as near to the common lot line as possible.
   4. The contractor shall record the location of each buffalo box in relation to the nearest corner lot line. Two copies of this record shall be filed with the Town prior to final inspection.
   5. When a water service is installed beneath existing roadways, sidewalks and/or driveways, the pipe shall be installed by pushing or auguring a hole beneath the said roadway, sidewalk and/or driveway and installing the service pipe through the hole.
   6. The size of any opening in the roadway to connect the water service to the main shall be kept to a minimum, and the roadway replaced in accordance with in the current version of the Cedar Lake Development Standards, materials and thickness to be approved by the Town.
   7. Installation of a water service in the same trench as the sanitary sewer service will not be allowed. A ten-foot (10') horizontal separation between a sanitary sewer and water service shall be maintained.
   8. The buffalo box shall not be placed within a hard surface sidewalk, driveway or access drive.
   9. Water service corporation valves shall not be installed on dead end mains.

B. Meters:
   1. All water services shall be metered as close to the point where the service enters the building as possible. All meters shall be provided by the Town and purchased by the owner and installed by a licensed contractor. Water meter must be installed so that it is easily accessible, without obstruction either temporary or permanent, for normal reading and maintenance. Water service shall be installed in such a manner that all meters shall be centered eighteen inches (18") above the floor and spaced from the outside wall as follows:
      a. One inch (1") meter span shall be ten inches (10") from outside wall.
      b. One and one half inch (1-1/2") meter span shall be twelve inches (12") from outside wall.
      c. Two inches (2") and larger meter spans shall be not less than fifteen inches (15") from outside wall.
   2. Valves shall be installed on both sides of the meter spread. In the case of a bypass system utilized around a meter installation, a gate valve shall be installed in the bypass line and a positive locking system provided by the Town, with a lock.

C. Back Flow Preventers:
   1. Residential back flow preventers up to one and one half inches shall be double check valve assembly style.
   2. Commercial back flow preventers and those larger than one and one half inches shall be reduced Pressure Zone (RPZ) assembly style.
   3. All State and Local building codes apply.

3.14 Jointing Rubber Gaskets Joint Pipe

A. Jointing Rubber Gaskets to join pipe are to be AWWA Standard C111.

B. The inside of the bell shall be thoroughly cleaned to remove all foreign matter from the joint. The circular rubber gasket shall be inserted in the gasket seat provided.

C. A thin film of gasket lubricant shall be applied to inside surface of the gasket. Gasket lubricant shall be supplied by the pipe manufacturer, or approved equal.

D. The spigot end of the pipe shall be cleaned and entered in the rubber gasket in the bell, using care to keep the joint from contacting the ground.

   The joint shall then be completed by forcing the plain end to the seat of the bell.

E. All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joints.

F. Field-cut pipe lengths shall be beveled to avoid damage to the gasket and facilitate making the joint.

3.15 Mechanical Restrained Joints for Ductile-Iron Pipe

A. Mechanical restrained Joints shall be use for all fittings unless other wise directed by the Director of Operations or Town Engineer. Joints for ductile iron pipe shall consist of one of the two following types unless otherwise provided in the special provisions:
   1. Acceptable Manufacturers shall be EBBA Iron Co: Mega - Lugs or approved equal.
   2. Install thrust restraints at all bends, tees, hydrants, valves, dead ends and plugs per standard drawing number W - 6.
   3. All bolts exposed to earth in an underground location shall be type 304 or 314 stainless steel.

B. Push on Restraints (Field Lock or approved equal) shall only be used with the approval of the Director of Operations or Town Engineer

3.16 Thrust Blocking and Restrained Joints

A. Push on Restraints (Field Lok, as manufactured by U.S. Pipe or approved equal) shall only be used with the approval of the Director of Operations or Town Engineer.

B. Thrust blocking shall follow standard drawing number W - 6, and shall be used only at selected locations where restrained fittings are not feasible and at the direct permission of the Director of Operations or Town Engineer.

C. All fittings and bends of eleven and one quarter degrees (11-1/4°) or greater and all tees, plugs, valves and fire hydrants shall use restrained joints to prevent movement of the lines under pressure.

D. If restrained joints are used the following table shall be used for length of restrained fitting.

RESTRAINED PIPE LENGTH
(Linear Feet)

PIPE SIZE (INCHES)	TEE BRANCH*	90° ELBOW	45° ELBOW	22-1/2° ELBOW	11-1/4° ELBOW	VALVE OR DEAD END
4	0.00	26.25	10.50	5.25	3.50	35.00
6	15.75	38.50	15.75	7.00	3.50	49.00
8	31.50	47.25	19.25	8.75	5.25	64.75
10	43.75	57.75	24.20	12.25	5.25	77.00
12	57.75	68.25	28.00	14.00	7.00	91.00
14	71.75	77.00	31.50	15.75	7.00	105.00
16	84.00	87.50	36.75	17.50	8.75	119.00
18	98.00	96.25	40.25	19.25	8.75	131.25
20	110.25	106.75	43.75	21.00	10.50	143.50
24	134.75	124.25	50.75	24.50	12.25	168.00
30	169.75	150.50	63.00	29.75	14.00	203.00
36	203.00	175.00	71.75	35.00	17.50	236.25

*MINIMUM ONE FULL LENGTH (18') OF PIPE ON BOTH SIDES OF BRANCH TO BE RESTRAINED.

TEST PRESSURE BASED ON 150 PSI.

3.17 Testing for Water Main

A. Pressure Test: Perform the following tests upon completion of the system and prior to being placed into service:
   1. Pressure and Leakage Test
      a. Perform pressure and leakage test in accordance with ANSI/AWWA C600.
      b. Test Pressure: 150 psi.
      c. Do not allow pressure to vary more than 5 psi during the test.
      d. Test Duration: Not less than 2 hours.
      e. Allowable Leakage: one-half of the volume allowed by ANSI/AWWA C600; which is equivalent to the following formula:

$$L = \frac{SD\sqrt{P}}{133{,}200}$$

L = Allowable Leakage in Gallons per Hour.
S = Length of Pipe Tested in Feet.
D = Nominal Diameter of Pipe in Inches.
P = Average Test Pressure during Test in Pounds/Square Inch (psi) (Gauge).

   2. Testing Services
      a. Perform separate pressure and leakage test on the services with the corporation stops open.
      b. Test Pressure: 100 psi.
      c. Allowable Leakage: None.
      d. At the Contractor's option, service testing may be done concurrent with main testing.

B. Hydrant Testing: Flow test to be performed by the Contractor and witnessed by Cedar Lake Public Works staff before acceptance. Minimum acceptable flow is one thousand gallons per minute (1000gpm) at a residual pressure of twenty pounds per square inch (20 psi).

3.18 Flushing

A. Section of pipe to be disinfected shall first be flushed to remove any solids or contaminated material that may have become lodged in the pipe. A hydrant shall be installed at the end of the main. One two and one-half inch (2-1/2") hydrant opening will, under normal pressure, provide this velocity in pipe sizes up to and including twelve inches (12").

B. All taps required by the Contractor for chlorination or flushing purposes or for temporary or permanent release of air shall be provided by him as a part of the construction of water mains.

3.19 Disinfection

A. Disinfect all newly installed water mains, appurtenances and services in accordance with ANSI/AWWA C651.

B. Flush system within twenty four (24) hours after disinfection is completed.

C. Obtain two (2) water samples at locations to be determined by the Engineer and perform coliform test on each sample.

D. Re-chlorinate as required if any sample tests positive for coliform.

3.20 Final Flushing and Testing

A. Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipe at its extremity until the replacement water throughout its length shows, upon test, the absence of chlorine. Flushing shall discharge to a Sanitary Sewer System. Storm Sewer System discharge is not acceptable. Chlorine residual shall not be in excess of that carried in the system.

B. After flushing, water samples collected on two (2) successive days shall show satisfactory bacteriological results. Bacteriological analysis must be performed by a laboratory certified by the State of Indiana.

C. Should the initial treatment result in an unsatisfactory bacterial test, the original chlorination procedure shall be repeated by the Contractor until satisfactory results are obtained.

D. Results of all tests shall be provided by to the Cedar Lake Public Works Department. Acceptance of the water system shall not be made without receipt of the passing tests.

3.21 Record Drawings

A. The record drawings must be sealed, signed, and dated by a registered Professional Engineer or Architect.

B. The intent is to provide dimensional information to the nearest half foot (0.5 ft) for the location of water mains, valves, hydrants, and all fittings.

C. Follow standard drawing W - 8, record drawing example.

PRECAST CONCRETE PARKING WHEEL STOPS

NOT TO SCALE

ALL PARKING STOPS SHALL BE PINNED TO THE ASPHALT WITH #4 REBAR ANCHORED 18" INTO THE GROUND. PARKING STOPS PLACED OVER THE PAVERS SHALL BE UNPINNED.

WOOD GUARD RAIL

NOT TO SCALE

1020M1 Grate

Product Number
00102031
Design Features
-Materials
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
140 sq in
-Coating
Undipped
-√ Designates Machined Surface

Certification
- ASTM A48
-
-
-Country of Origin: USA

Drawing Revision
01/31/2005 Designer: TCL
06/27/2012 Revised By: DEF

Disclaimer
Weights (lbs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

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Contact
800 626 4653
ejco.com

1020 EJIW 1020, M1

NOT TO SCALE

MANHOLE CASTING TYPE '4' RING AND COVER

NOT TO SCALE

1020O1 Grate

Product Number
00102044
Design Features
-Materials
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
147 sq In
-Coating
Dipped
-√ Designates Machined Surface

Certification
- ASTM A48
-
-
-Country of Origin: USA

Drawing Revision
9/12/2011 Designer: SMM
11/7/2016 Revised By: MAH

Disclaimer
Weights (lbs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

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1020 EJIW 1020, BEEHIVE

NOT TO SCALE

(DOWN SPOUT)
ROOF DRAIN PIPE CONNECTION

NOT TO SCALE

AD-3

Z:\2021-5059 MacArthur\dwg\2021-5059 Details.dwg 2/17/2022 10:52:13 AM CST

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT SCHOOL CORP.
CROWN POINT, INDIANA

TORRENGA ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
907 RIDGE ROAD
MUNSTER, IN 46321
T: (219) 836-8918
F: (219) 836-1138

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
21-113
DATE
01/31/22
COORDINATED BY
DT
DRAWN BY
NM
CHECKED BY
DT

No. 19868
Donald C. Torrenga

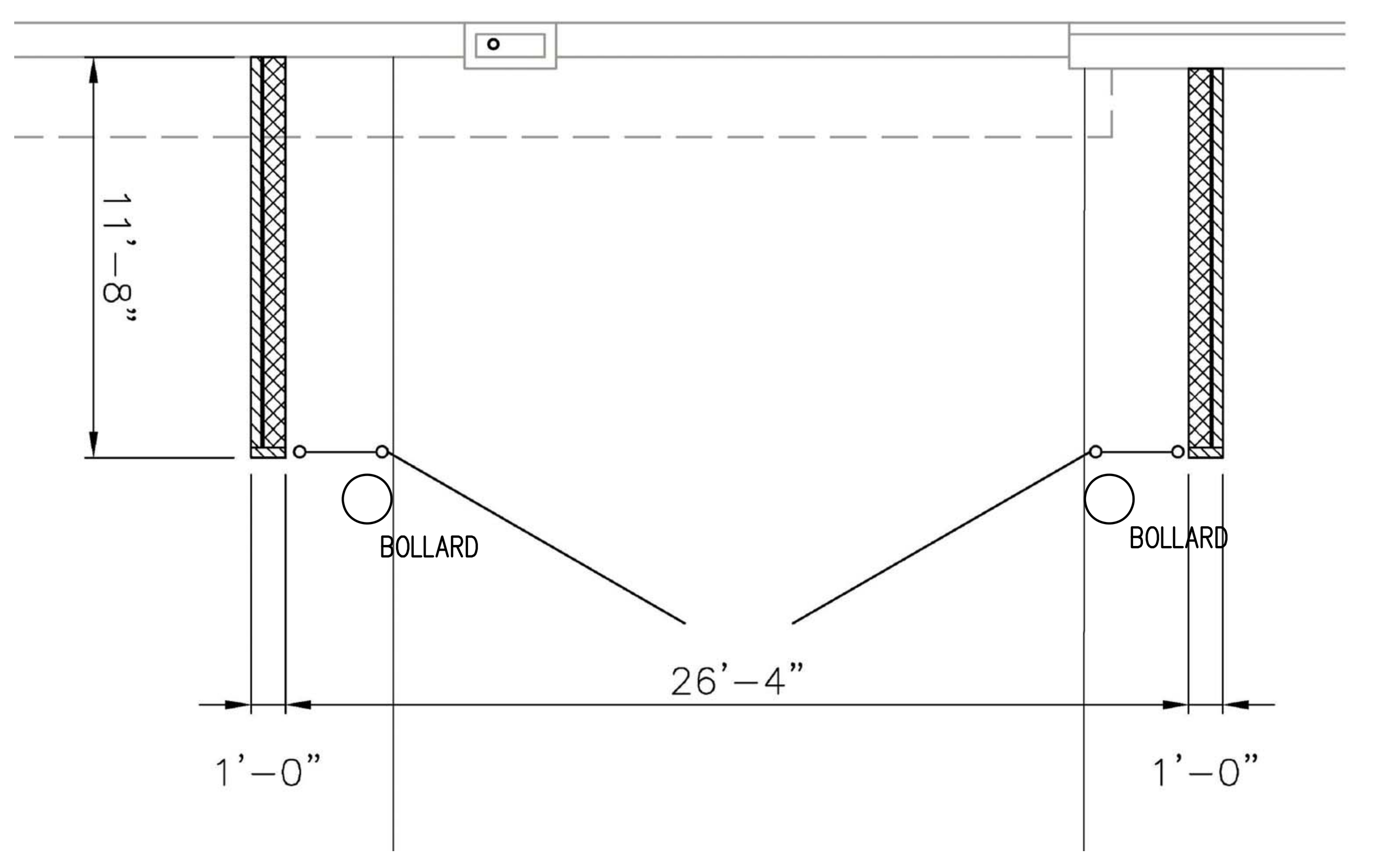
REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02-23-22	ADDENDUM NO. 3

DRAWING
DETAILS AND SPECIFICATIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C-4.3

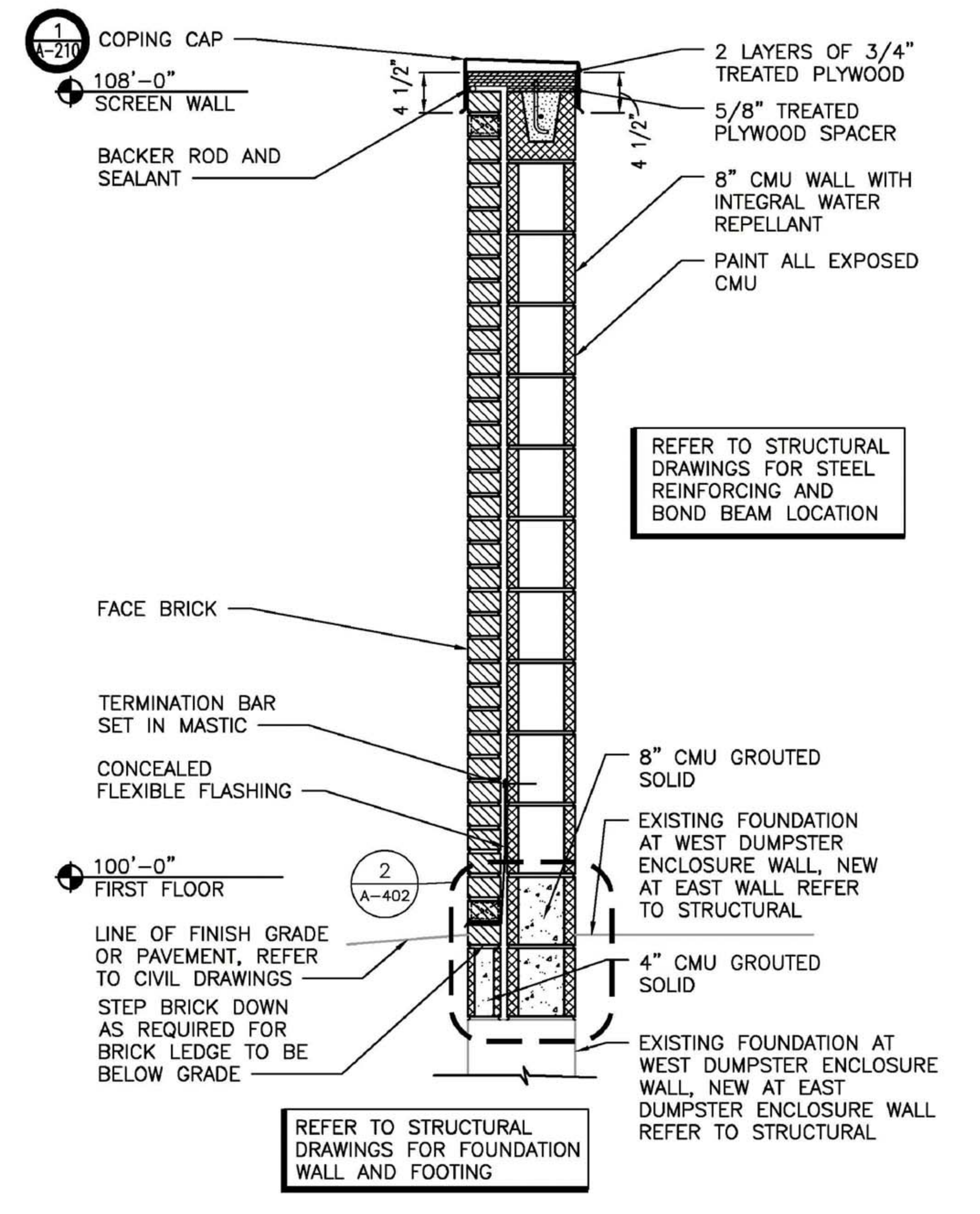


PROPOSED GATE SPECIFICATIONS:

1) TWO 10' CHAIN LINK GATES OPENING IN THE MIDDLE WITH GROUND BOLT LOCK.
2) 4" DIAMETER POSTS.
3) 1-5/8" DIAMETER FRAMING.
4) 9 GAGE CHAIN LINK
5) PRIVACY SLATS
6) PLACE ONE BOLLARD PROTECTOR ON EACH SIDE OF OPENING

DUMPSTER ENCLOSURE

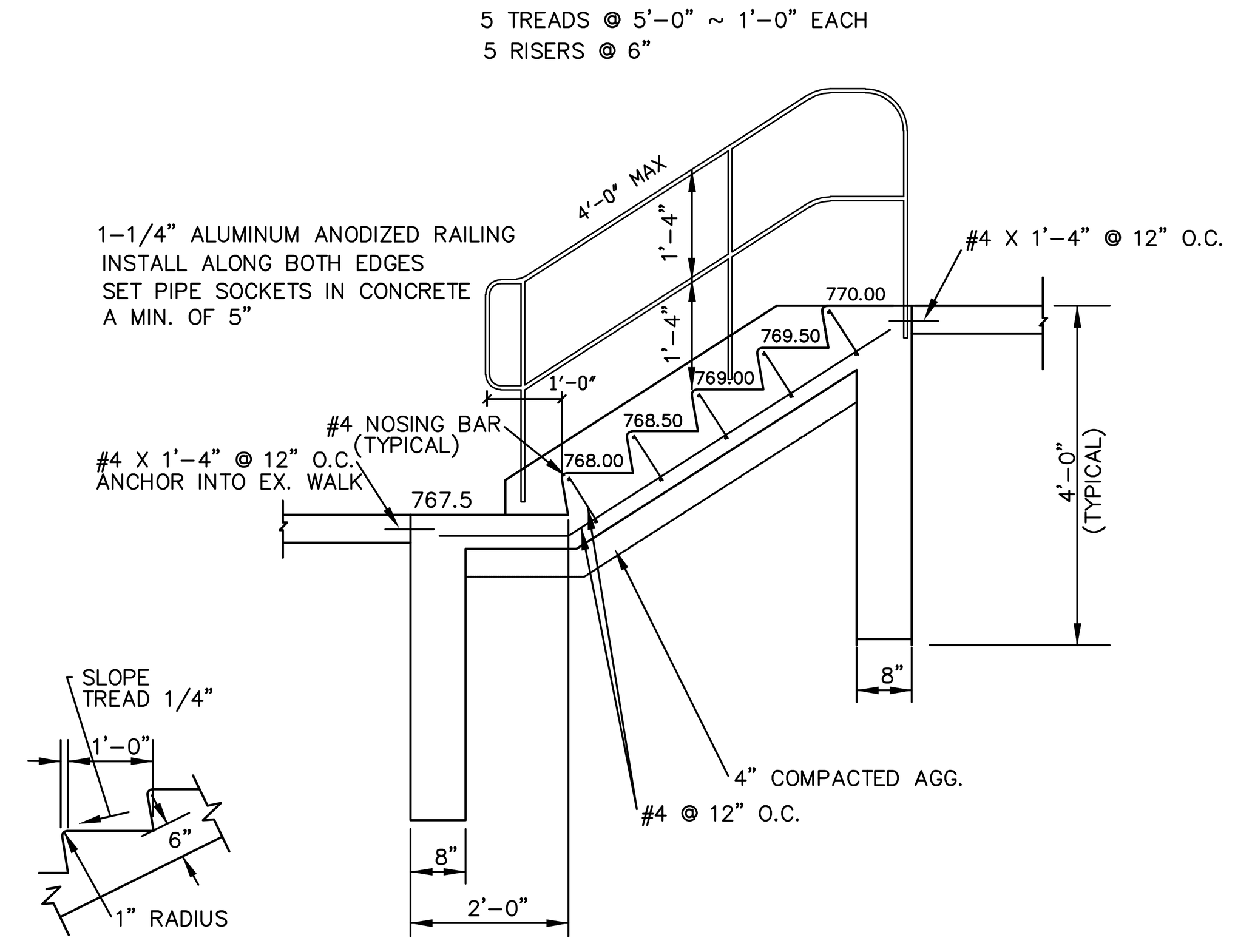
NOT TO SCALE



WALL SECTION

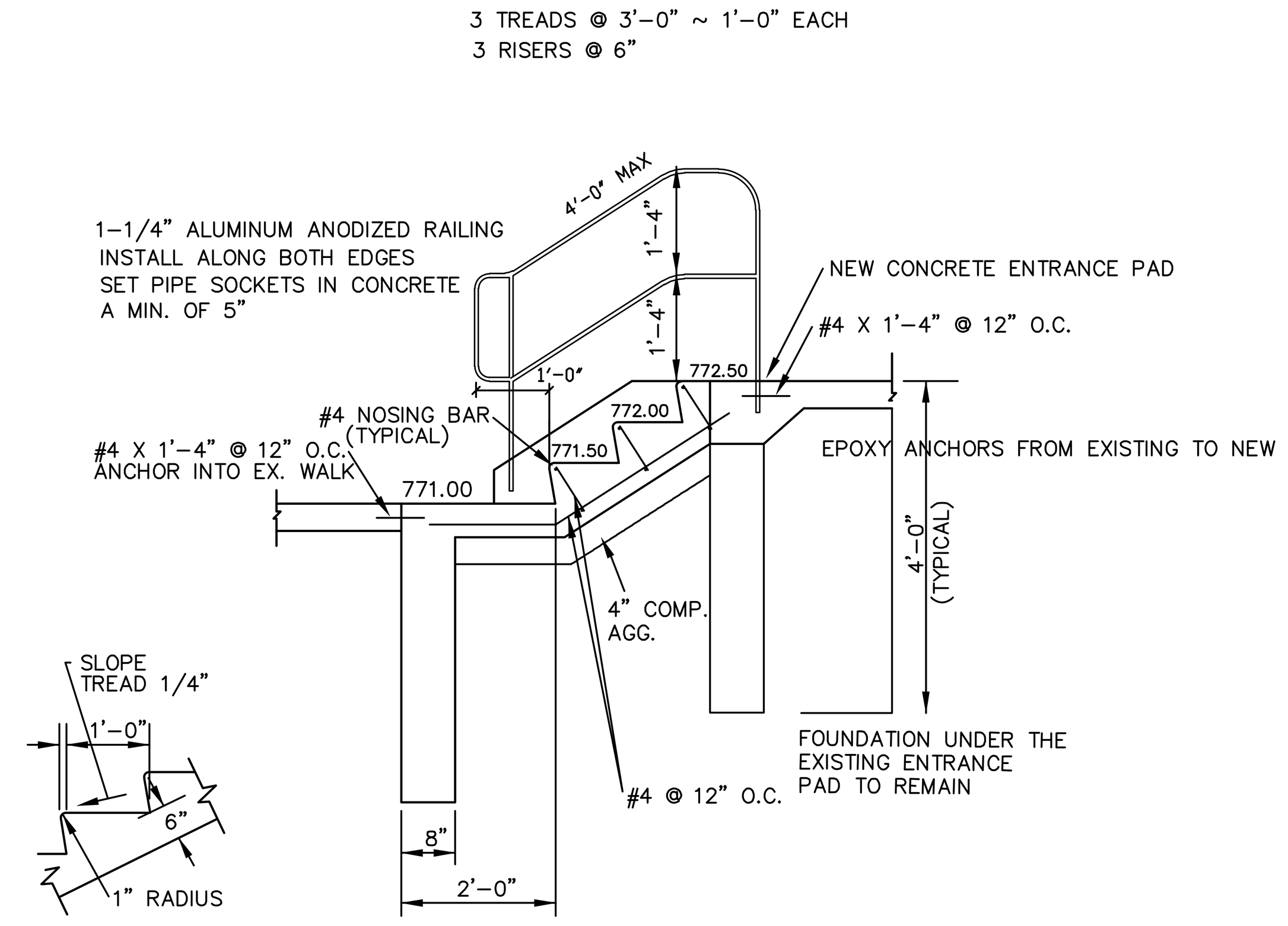
SCALE: 3/4" = 1'-0"

3 A-403



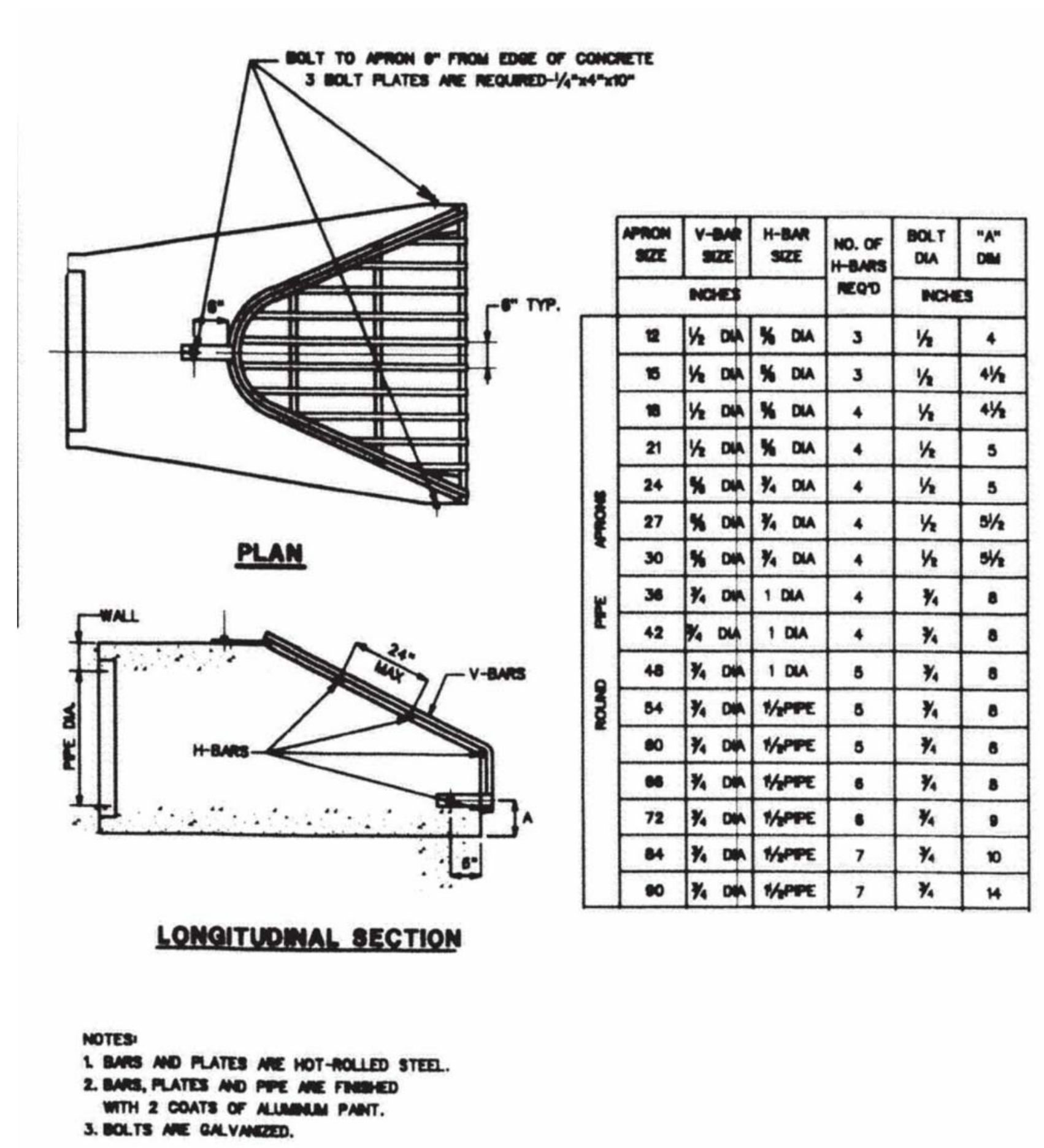
STAIR CROSS-SECTION AREA NO. 1

NOT TO SCALE



STAIR CROSS-SECTION AREA NO. 2

NOT TO SCALE

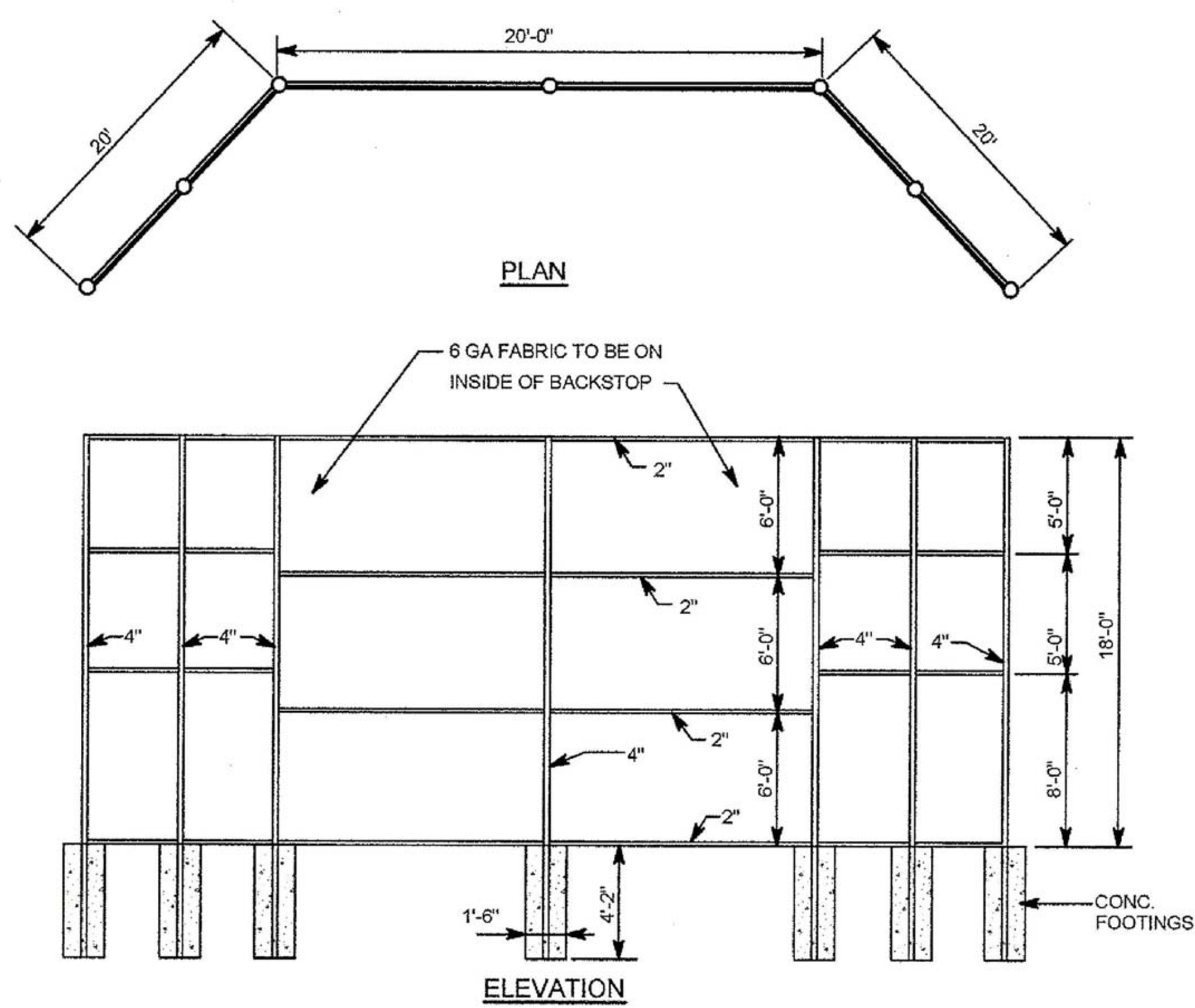


	APRON SIZE	V-BAR SIZE	H-BAR SIZE	NO. OF H-BARS REQ'D	BOLT DIA	"A" DIM
	INCHES				INCHES	
ROUND PIPE APRONS	12	1/2 DIA	5/8 DIA	3	1/2	4
	15	1/2 DIA	5/8 DIA	3	1/2	4 1/2
	18	1/2 DIA	5/8 DIA	4	1/2	4 1/2
	21	1/2 DIA	5/8 DIA	4	1/2	5
	24	5/8 DIA	3/4 DIA	4	1/2	5
	27	5/8 DIA	3/4 DIA	4	1/2	5 1/2
	30	5/8 DIA	3/4 DIA	4	1/2	5 1/2
	36	3/4 DIA	1 DIA	4	3/4	8
	42	3/4 DIA	1 DIA	4	3/4	8
	48	3/4 DIA	1 DIA	5	3/4	8
	54	3/4 DIA	1 1/2 PIPE	5	3/4	8
	60	3/4 DIA	1 1/2 PIPE	5	3/4	8
	66	3/4 DIA	1 1/2 PIPE	6	3/4	8
	72	3/4 DIA	1 1/2 PIPE	6	3/4	9
	84	3/4 DIA	1 1/2 PIPE	7	3/4	10
	90	3/4 DIA	1 1/2 PIPE	7	3/4	14

NOTES:
1. BARS AND PLATES ARE HOT-ROLLED STEEL.
2. BARS, PLATES AND PIPE ARE FINISHED WITH 2 COATS OF ALUMINUM PAINT.
3. BOLTS ARE GALVANIZED.

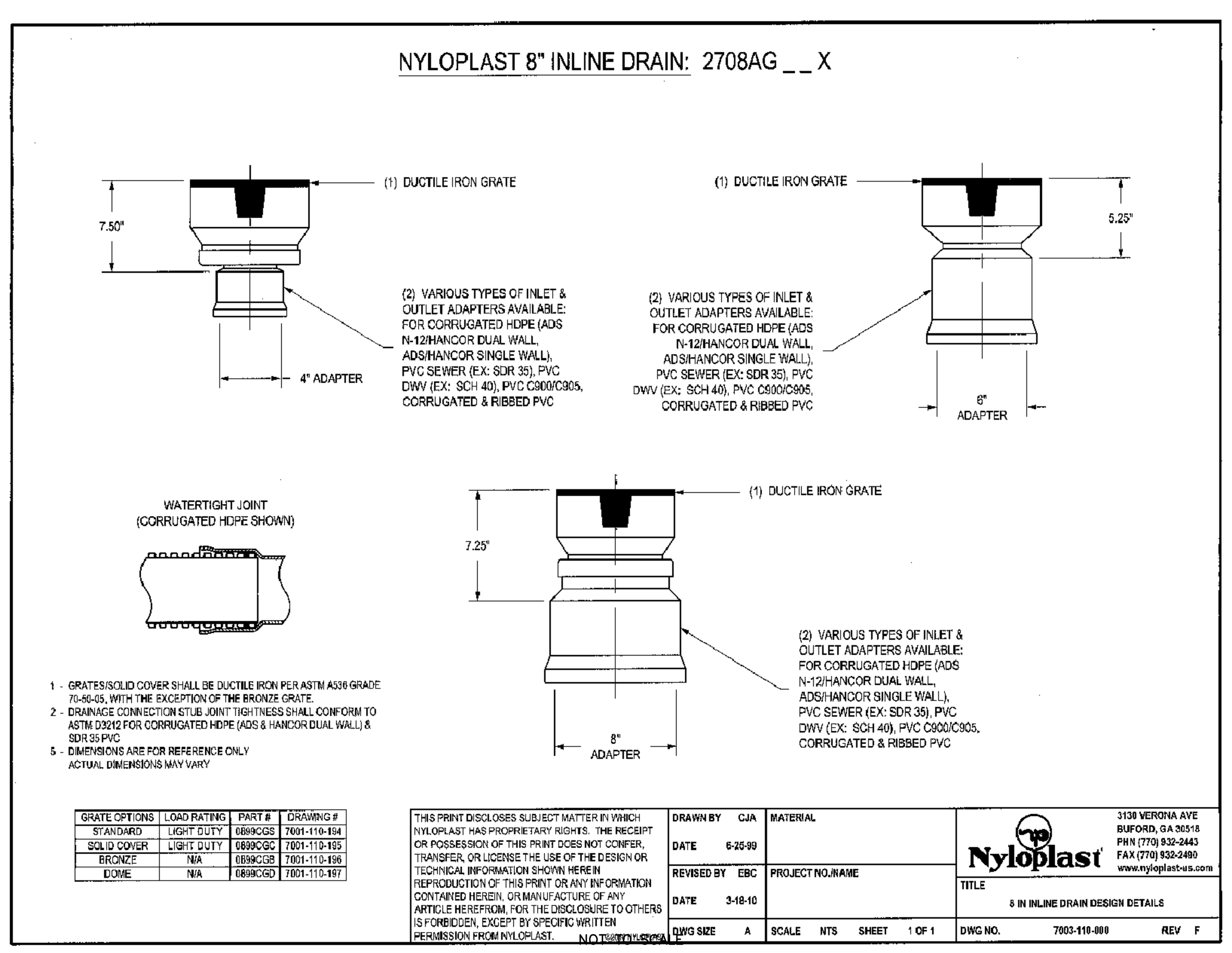
GRATING DETAIL

NOT TO SCALE



SOFTBALL/BASEBALL BACKSTOP

NOT TO SCALE


NYLOPLAST 8" INLINE DRAIN: 2708AG _ _ X

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5 - DIMENSIONS ARE FOR REFERENCE ONLY ACTUAL DIMENSIONS MAY VARY

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
STANDARD	LIGHT DUTY	0899CGS	7001-110-194
SOLID COVER	LIGHT DUTY	0899CGC	7001-110-195
BRONZE	N/A	0899CGB	7001-110-196
DOME	N/A	0899CGD	7001-110-197

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DRAWN BY CJA | DATE 6-25-99 | REVISED BY EBC | DATE 3-18-10 | DWG SIZE A | MATERIAL | PROJECT NO./NAME | SCALE NTS | SHEET 1 OF 1

Nyloplast — 3130 VERONA AVE, BUFORD, GA 30518, PHN (770) 932-2443, FAX (770) 932-2490, www.nyloplast-us.com

TITLE: 8 IN INLINE DRAIN DESIGN DETAILS

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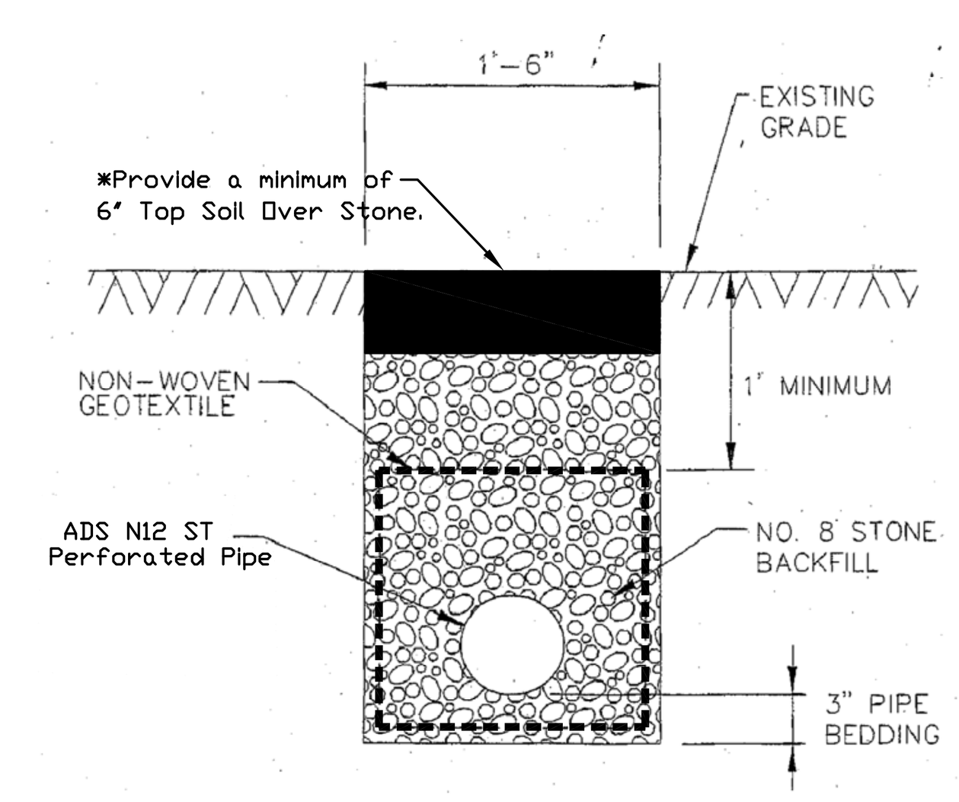
NYOPLAST INLINE DRAIN



PERFORATED PIPE TRENCH DETAIL

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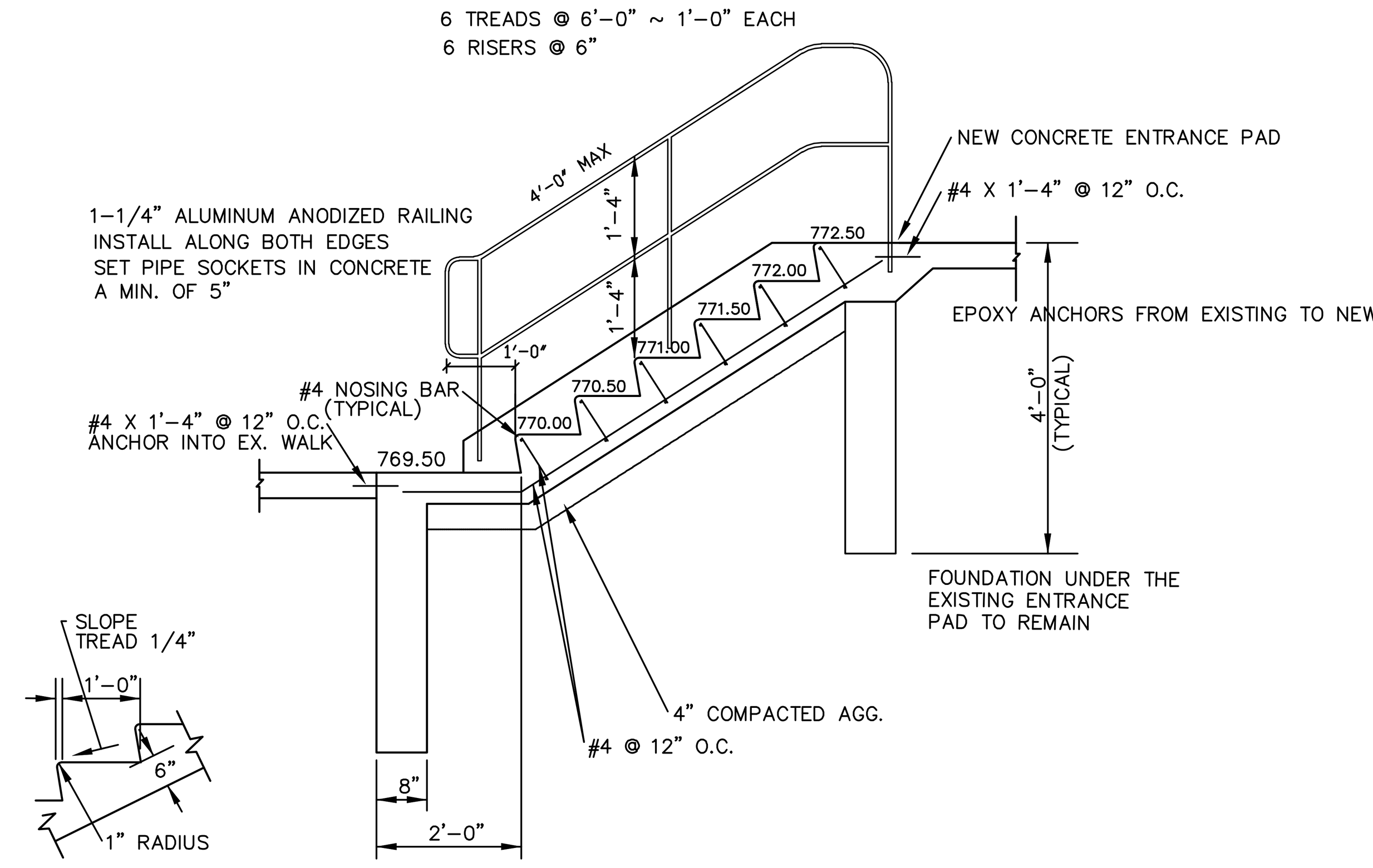
AD-3

AD-3



STAIR CROSS-SECTION AREA NO. 3

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GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT SCHOOL CORP.
CROWN POINT, INDIANA

TORRENGA ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
907 RIDGE ROAD
MUNSTER, IN 46321
T: (219) 836-8918
F: (219) 836-1138

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DT
DRAWN BY NM
CHECKED BY DT

DONALD C. TORRENGA REGISTERED No. 19868 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02-23-22	ADDENDUM NO. 3

DRAWING
DETAILS AND SPECIFICATIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C-4.4

GENERAL NOTES:

1. THIS PROPERTY IS LOCATED IN FLOOD ZONE X (UNSHADED) AS DETERMINED BY USING SCALE MEASUREMENT FOR LOCATION UPON THE APPLICABLE FLOOD INSURANCE RATE MAP FOR THE TOWN OF CEDAR LAKE, LAKE COUNTY, INDIANA AS SHOWN IN COMMUNITY PANEL(S) 18089C0243E EFFECTIVE JANUARY 18, 2012. TRACTS OF LAND LOCATED IN FLOOD ZONE X (UNSHADED) ARE AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

2. 07120001130060 LAKE DALECARLIA – CEDAR LAKE

3. STATE OR FEDERAL WATER QUALITY PERMITS ARE REQUIRED FOR THE PROJECT, A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) IDEM RULE 5 WATER QUALITY PERMIT IS REQUIRED.

4. AT PRESENT THE SITE IS A SCHOOL CONTAINING A BUILDING, PARKING LOTS, AND PLAYGROUND AREAS.

5. THERE IS NO PRESENCE OF HYDRIC SOILS ON THIS PROPERTY, (PC) PEWAMO SILTY CLAY LOAM.

6. THERE ARE NO EXISTING WETLAND AREAS ON THIS PROPERTY AND DO NOT EXIST ON ADJACENT PROPERTY AS CLASSIFIED BY THE U.S. FISH AND WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY, AND THE UNITED STATES DEPARTMENT OF THE INTERIOR. THERE ARE NO LAKES, BUT A WATER COURSE DOES EXIST ON THIS PROPERTY. LAKE DALECARLIA – CEDAR LAKE IS THE WATER COURSE WHICH THE STORMWATER FROM THE SITE WILL ULTIMATELY DISCHARGE INTO WHICH IS LOCATED APPROXIMATELY 1/4 MILE SOUTHWEST OF THIS PROPERTY.

7. POTENTIAL SOURCE OF STORM WATER DISCHARGE ENTERING THE GROUNDWATER FROM THIS DEVELOPMENT WILL BE THROUGH NATURAL GROUND ABSORPTION ONLY. THERE ARE NO ABANDONED WELLS OR SINKHOLES ON THE PROPERTY.

8. THERE ARE NO SENSITIVE AREAS ASSOCIATED WITH THIS PROPERTY.

9. THERE ARE NO REGULATED DRAINS WITHIN THIS PROPERTY, OR ON ADJACENT PROPERTIES. THERE IS NO RECORD OR KNOWLEDGE OF EXISTING FARM DRAINS OR FIELD TILE, INLETS AND OUTFALLS LOCATED WITHIN THE EXISTING PROPERTY LIMITS.

10. SOIL STOCKPILES, BORROW AND DISPOSAL AREAS ARE LOCATED WITHIN THE PROJECT SITE. SOIL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCING AT ALL TIMES TO PREVENT EXCESSIVE EROSION, AND IF LEFT UNDISTURBED FOR A PERIOD OF MORE THAN 14 DAYS, IT SHALL BE TEMPORARY SEEDED. UPON SITE COMPLETION THE TOPSOIL STOCKPILE SHALL BE RESPREAD, GRADED, AND PERMANENTLY SEEDED. SOIL STOCKPILES SHALL NOT BE LEFT ON THE SITE FOR GREATER THAN 6 MONTHS AFTER CONSTRUCTION IS COMPLETED. NO SOIL FROM THE STOCKPILES SHALL BE REMOVED FROM THE SITE. ALL EXTRA STOCKPILE MATERIAL SHALL BE RESPREAD IN AREAS DESIGNATED BY THE CONSTRUCTION MANAGER.

11. AREAS WHERE THE PROPOSED DETENTION AREA, BUILDING, AND DRIVES AS WELL AS AREAS WHERE PROPOSED UTILITIES ARE LOCATED WILL BE DISTURBED DURING CONSTRUCTION. IN ALL OTHER AREAS, EXISTING VEGETATIVE COVER WILL BE PRESERVED.

12. FUEL STORAGE AREA IF REQUIRED SHALL BE WITHIN THE CONSTRUCTION STAGING AREA, FUEL SHALL BE STORED IN APPROVED MOBILE REFUELING TANK LOCATED AWAY FROM DRAINAGE STRUCTURES AND CHANNELS. FIRE EXTINGUISHERS SHALL BE LOCATED NEAR FUEL STORAGE AREA AND BE OF SUITABLE TYPE, POSTED, AND BE MAINTAINED IN GOOD CONDITION.

13. TEMPORARY SEED ALL AREAS OF BARE SOIL (WITH THE ADDITION OF A BLANKET WHERE SLOPES ARE 4:1 OR GREATER) THAT WILL REMAIN UNDISTURBED FOR A PERIOD OF MORE THAN 14 DAYS. SEEDING: OPTIMUM SEEDING DATED ARE MARCH 1 – MAY 10 AND AUGUST 10 – SEPTEMBER 30. SEEDING DATES BETWEEN MAY 10 AND AUGUST 10, MAY NEED TO BE IRRIGATED. FOR SEEDING RECOMMENDATIONS SEE PRACTICE 3.12, INDIANA STORM WATER QUALITY MANUAL.

14. ALL SOIL STOCKPILES, AREAS THAT ARE DISTURBED DURING CONSTRUCTION, AND DRAINAGE SWALES WHICH ARE SCHEDULED OR LIKELY TO BE LEFT INACTIVE FOR FOURTEEN (14) CALENDAR DAYS OR MORE MUST BE TEMPORARILY OR PERMANENTLY SEEDED WITH MEASURES APPROPRIATE FOR THE SEASON.

15. LOCATION OF TOWN'S STORMWATER PERMIT AND THE ON–SITE POSTING OF THE COMPLETE RULE 5 NOI WITH ASSIGNED PERMIT NUMBER, NOS LETTERS AND LOCATION OF THE COMPLETE SET OF ENGINEERING PLANS, SHALL BE AVAILABLE AT THE ENTRANCE TO THE SITE AND VISIBLE TO THE PUBLIC.

16. ALL APPLICABLE MATERIAL SAFETY DATA SHEETS (MSDS) SHOULD BE INCLUDED ON–SITE FOR MATERIALS EXPECTED POLLUTANTS OF CONCERN FOR THE PROJECT SITE.

17. SITE ELEVATIONS ARE BASED ON NAVD 88, AND HORIZONTAL DATUM IS BASED ON INDIANA STATE PLANE COORDINATES NAD 83.

Temporary stabilization plans and sequence of implementation.

a. On site posting of the complete Rule 5 NOI, NOS letter, and Town Stormwater Permit. Location of the posting and plans shall be made available by the owners contractor.
b. Installation of all erosion/sedimentation controls including stabilized construction entrance, silt fences, etc... per the engineering plans.
c. Clearing and grubbing
d. Topsoil stockpile surrounded with silt fencing.
e. Rough cut and fill of all proposed detention area, and other major grading per the engineering plans shall be done to rough grades at the start of construction to prevent excessive soil erosion due to construction.
f. Silt fence to be placed around the perimeter of the detention basin once it has been completed and stabilized.
g. Construction of storm sewers and other utility.
h. Implementation of storm sewer inlet protection at each open–grate structure (basket insert inlet protection, as per engineering plans).
i. Construct buildings and driveway.
j. Upon site completion when no additional disturbance is anticipated stockpile shall be respread, graded, and all disturbed areas shall be permanent seeded, mulched, and landscaped.
k. Complete permanent erosion control and restoration of site vegetation. Erosion control measures are to be removed upon permanent vegetative cover being established. Note the NOI letter will remain active until NOT letter is filed, weekly inspections and inspections after a 0.5–inch rainfall event shall be required by owner.
l. Submit NOT letter for Rule 5.

SWPPP LEGEND:

- – TEMPORARY ENTRANCE/EXIT (GRAVEL OR MAT)
- – SOIL STOCK PILE
- B – BASKET INSERT INLET PROTECTION
- GL – GRADE LIMITS
- SF – SILT FENCE
- CW – CONCRETE WASH OUT AREA
- P – POSTING RULE 5 NOI & NOS LETTERS AND LOCAL SWPPP PERMIT
- TS – TEMPORARY SEEDING (SEE NOTE 14)
- XXX – CONTOUR (PROPOSED)
- XXX.XX – GRADES (PROPOSED)
- RC – ROCK CHUTE
- SS – STREET SWEEPING
- ▨ – EROSION CONTROL BLANKET
- M – TURF REINFORCEMENT MAT

NOTES:
1. FOR POST–CONSTRUCTION STORM WATER POLLUTION PREVENTION, TEMPORARY SEEDING LOCATIONS SHALL BE PERMANANTLY SEEDED, EROSION CONTROL BLANKET SHALL REMAIN IN PLACE, TURF REINFORCED MAT SHALL REMAIN IN PLACE, AND ROCK CHUTES AT FLARED END SECTIONS SHALL REMAIN IN PLACE.

VICINITY MAP
NOT TO SCALE

WETLANDS MAP
NOT TO SCALE

SOIL MAP
NOT TO SCALE

MAP UNIT SYMBOL	MAP UNIT NAME
BlA	BLOUNT SILT LOAM, LAKE MICHIGAN LOBE, 0 TO 2 PERCENT SLOPES
OzaC2	OZAUKEE SILT LOAM, 6 TO 12 PERCENT SLOPES, ERODED
OzaB	OZAUKEE SILT LOAM, 2 TO 6 PERCENT SLOPES

(IN FEET)
1 inch = 40 ft.

GIBRALTAR DESIGN
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DT
DRAWN BY
DT RT
CHECKED BY
DT

DONALD C. TORRENGA
No. 19868
Donald C. Torrenga

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DRAWING
STORM WATER POLLUTION PREVENTION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C-5.0

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ROCK CHUTE

Purpose: To protect slopes, stream banks and channels, which are subject to erosion. Where run off velocity is great, at the outlet pipe of a detention basin, channel or culvert.

Requirements:

Rock: Hard angular, weather-resistant and well graded stone, the largest pieces should not exceed two times the specified stone diameter.

Thickness: 12" minimum or two times the specified stone diameter, which ever is greater.

Filter: Under permanent riprap install geotextile fabric for stabilization and filtration

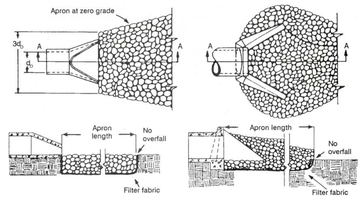
Installation:

Subgrade Replacement:
1. Remove brush, trees, stumps, and other debris.
2. Excavate only deep enough for both filter and riprap.

Filter Placement:
1. Place geotextile fabric on a smoothed foundation, overlap the edges at least 12 inches and secure with anchor pins spaced every 3 feet along the overlap.
2. If fabric is damaged, remove the riprap and repair damaged area by 12 inches.

RipRap Replacement:
1. Immediately after installing the filter, add the riprap to full thickness in one operation to the design elevation, and extend riprap to the top of the bank.
2. Place smaller rock in voids to form a dense, uniform, well-graded mass.
3. Blend the riprap smoothly to the surrounding grade.
4. Stabilize all disturbed areas immediately following installation.

Maintenance:
1. Inspect periodically for displaced rock material, slumping, and erosion at edges, especially down stream or down slope.



Pipe outlet aprons for a channel (left) that is not well defined and (right) that is well defined.

FABRIC DROP INLET PROTECTION

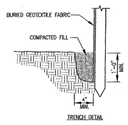
Purpose: To capture sediment at the entrance to a storm drain, allowing full use of the storm drain system during the construction period.

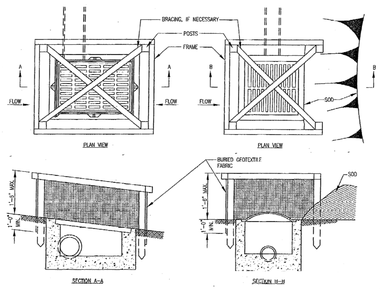
Requirements:

Contributing Area:	1 acre maximum.
Capacity:	Runoff from 2-yr, 24-hr. Storm without bypass flow.
Fabric material:	Geotextile fabric for filtration.
Height of fabric:	1 to 1-1/2 ft., measured from top of inlet.
Approach:	Pool area flat (less than 1% slope) with sediment storage of 945 cu.ft./acre disturbed.
Stability:	Structure must withstand 1-1/2 ft. head of water and sediment without collapsing or undercutting.
Support posts:	Steel fence post or 2 x 2 in. or 2 x 4 in. hard wood post, 3 ft. min. length, 3 ft. max. spacing; top of frame support recommended. Cross bracing tops of posts to opposite corners greatly strengthens support.

Installation:
1. To prevent runoff from bypassing the inlet, set top of the fabric at least 6" below the downslope ground elevation, or build a temporary dike (compacted to 6" higher than the fabric) on the low side of the inlet. (See Exhibit 3.52-C).
2. Cut the fabric from a single roll to eliminate joints. (Provide at least 2' of overlap if a joint is needed)
3. Bury the bottom of the fabric at least 1 ft. deep, backfill, and compact the backfill (See Exhibit 3.52-B).
4. Space the support posts evenly against the inlet perimeter a maximum of 3 ft. apart, and drive the about 1-1/2 ft. into the ground. (Overflow must fall directly into the inlet and not on unprotected soil.

Maintenance:
1. Inspect the fabric barrier after storm events, and make needed repairs immediately.
2. Remove sediment from the pool area to provide storage for the next storm. Avoid damaging or undercutting the fabric during sediment removal.
3. When the contributing drainage area has been stabilized, remove and properly dispose of all construction material and sediment, grade area to the elevation on the top of the inlet, then stabilize.





BASKET INLET PROTECTION

Purpose: To prevent excessive sediment from entering storm sewers at curb inlets, allowing full use of the storm drain system during the construction period.

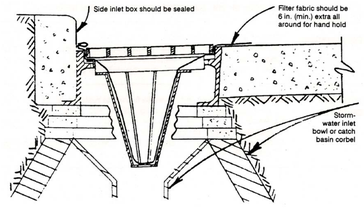
Requirements: (At owner's discretion either a Basket type or Sack type may be ussed.)

Basket type: Fabricated metal with top width-length dimensions such that the basket fits into the inlet without gaps, and line it with geotextile fabric for filtration, Marathon Materials, Inc. Catch-All inlet protectors or approved equal.

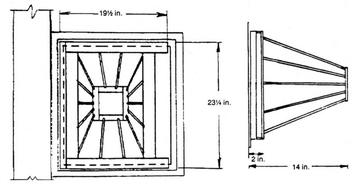
Sack type: Open-top geotextile fabric underneath a storm grate, for flat grate and mountable curb inlet Mirafi Dandy Curb Sack or Dandy Sack or approved equal.

Installation:
1. Install basket curb inlet protections as soon as inlet boxes are installed in a new development or before land disturbing activities begin in a stabilized area.
2. Remove the grate, and place the basket in the inlet.
3. Cut and install a piece of filter fabric large enough to line the inside of the basket and extend at least 6 in. beyond the frame.
4. Replace the inlet grate, which also serves to anchor the fabric.

Maintenance:
1. Inspect after each storm event
2. Remove built-up sediment and replace the Geotextile fabric after each storm event.



Cross-sectional view of a basket curb inlet protection.



Top view (left) and front view (right) of a basket curb inlet protection.

SILT FENCE

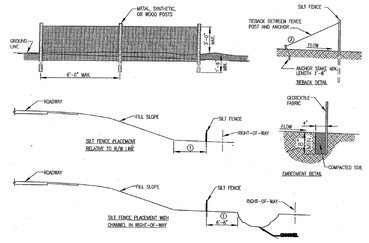
Purpose: To retain sediment from small sloping disturbed areas by reducing the velocity of sheet flow.

Requirements:

Trench:	8" minimum depth, flat bottom or v-shaped, filled with compacted soil or gravel to bury lower portion of support wire and/or fence fabric.
Support posts:	2" x 2" hardwood posts set at lease 1 foot deep.
Spacing of Posts:	8-foot maximum if fence supported by wire, otherwise 6 foot for extra strength fabric without wire backing.
Fence height:	A 3 feet minimum or high enough so depth of impounded water does not exceed 1.5 feet at any point along fence line.
Support wire : (optional)	14 gauge, 6" mesh wire fence. (needed if using standard-strength fabric
Fence Fabric:	Woven or non-woven Geotextile fabric with specified filtering efficiency and tensile strength and containing UV inhibitors and stabilizers to ensure 6 months minimum life at temperatures 0-120 degrees F.

Installation:
1. Along the entire intended fence line, maintain contour as much as possible, dig an 8" deep flat bottom or v-shaped trench.
2. On the downslope side of the trench, drive the post at least 1 foot into the ground. (Note: If the fence has pre-attached posts or stakes, drive them deep enough so the fabric is satisfactorily in the trench per step 6)
3. Fasten support wire fence to the upslope side of the posts, extending it 8" into trench. (use only if required by manufacturer)
4. Run a continuous length of Geotextile fabric along upslope side of posts.
5. If a joint is necessary, nail the overlap to the nearest post with a wood lath.
6. Place the bottom 1' of fabric in the 8" deep trench, extending the remaining 4" of fabric toward the upslope side.
7. Backfill the trench with compacted earth.

Maintenance:
1. Inspect silt fence periodically and after each storm event.
2. If fence fabric tears, starts to decompose, or becomes ineffective, replace the affected portion.
3. Remove deposited sediment when it reaches half the height of the fence at its lowest point or is causing the fabric to bulge.
4. Take care to avoid undermining the fence during clean out.
5. After watershed has been stabilized, remove fence and sediment deposits, bring the disturbed area to grade and stabilize.



Detailed example of silt fence installation

CONCRETE WASHOUT

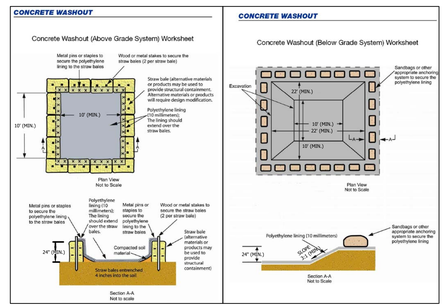
Purpose: To reduce the discharge of pollutants associated with concrete waste through consolidation of solids and retention of liquids.

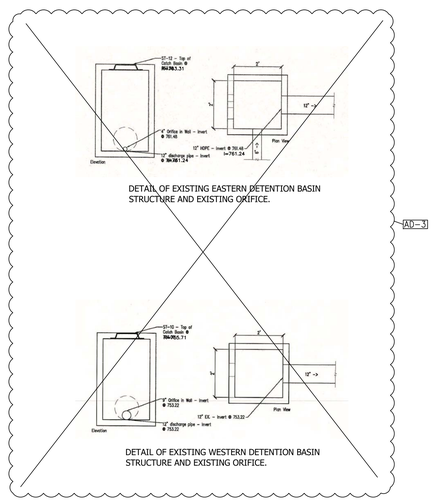
Requirements:
1.) Locate concrete washout systems at least 50 feet from any creeks, wetlands, ditches, karst features, or storm drains/manmade conveyance systems.
2.) Locate concrete washout systems in relatively flat areas with established vegetative cover and do not receive runoff from adjacent land areas.
3.) Locate in areas that provide easy access for concrete trucks and other construction equipment.
4.) Locate away from other construction traffic to reduce the potential for damage to the system.
5.) Minimum of ten millimeter polyethylene sheeting that is free of holes, tears, and other defects. The sheeting selected should be of an appropriate size to fit the washout system without seams or overlap of the lining.
6.) Signage.
7.) Orange safety fencing or equivalent.
8.) Straw bales, sandbags (bags should be ultraviolet-stabilized geotextile fabric), soil material, or other appropriate materials that can be used to construct a containment system (above grade systems).

Installation:
1.) Dependent upon the type of system, either excavate the pit or install the containment system.
2.) A base shall be constructed and prepared that is free of rocks and other debris that may cause tears or punctures in the polyethylene lining.
3.) Install the polyethylene lining. For excavated systems, the lining should extend over the entire excavation. The lining for bermed systems should be installed over the pooling area with enough material to extend the lining over the berm or containment system. The lining should be secured with pins, staples, or other fasteners.
4.) Place flags, safety fencing, or equivalent to provide a barrier to construction equipment and other traffic.
5.) Place a non-collapsing, non-water holding cover over the washout facility prior to a predicted rainfall event to prevent accumulation of water and possible overflow of the system (optional).
6.) Install signage that identifies concrete washout areas.
7.) Post signs directing contractors and suppliers to designated locations.

Maintenance:
1.) Inspect daily and after each storm event.
2.) Inspect the integrity of the overall structure including, where applicable, the containment system.
3.) Inspect the system for leaks, spills, and tracking of soil by equipment.
4.) Inspect the polyethylene lining for failure, including tears and punctures.
5.) Once concrete wastes harden, remove and dispose of the material.
6.) Excess concrete should be removed when the washout system reaches 50 percent of the design capacity. Use of the system should be discontinued until appropriate measures can be initiated to clean the structure. Prefabricated systems should also utilize this criterion, unless the manufacturer has alternate specifications.
7.) Upon removal of the solids, inspect the structure. Repair the structure as needed or construct a new system.
8.) Dispose of all concrete in a legal manner. Reuse the material on site, recycle, or haul the material to an approved construction/demolition landfill site. Recycling of material is encouraged. The waste material can be used for multiple applications including but not limited to roadbeds and building. The availability for recycling should be checked locally.
9.) The plastic liner should be replaced after every cleaning; the removal of material will usually damage the lining.
10.) The concrete washout system should be repaired or enlarged as necessary to maintain capacity for concrete waste.
11.) Concrete washout systems are designed to promote evaporation. However, if the liquids do not evaporate and the system is near capacity it may be necessary to vacuum or remove the liquids and dispose of them in an acceptable method. Disposal may be allowed at the local sanitary sewer authority provided their National Pollutant Discharge Elimination System permits allow for acceptance of this material. Another option would be to utilize a secondary containment system or basin for further dewatering.
12.) Prefabricated units are often pumped and the company supplying the unit provides this service.
13.) Inspect construction activities on a regular basis to ensure suppliers, contractors, and others are utilizing designated washout areas. If concrete waste is being disposed of improperly, identify the violators and take appropriate action.
14.) When concrete washout systems are no longer required, the concrete washout systems shall be closed. Dispose of all hardened concrete and other materials used to construct the system.
15.) Holes, depressions and other land disturbances associated with the system should be backfilled, graded, and stabilized.

Notes:
1.) Concrete washout areas will be properly posted with signage indicating location and designated use of area.





DETAIL OF EXISTING EASTERN DETENTION BASIN STRUCTURE AND EXISTING ORIFICE.

AD-3

DETAIL OF EXISTING WESTERN DETENTION BASIN STRUCTURE AND EXISTING ORIFICE.

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SHEET
C-6.1

EXISTING CONSTRUCTION

1. The contractor shall field verify the dimensions, elevations, etc. necessary for the proper construction and alignment of the new portions of the work to the existing work. The Contractor shall make all necessary measurements for fabrication and erection of the structural members. Any discrepancy shall be immediately brought to the attention of the Structural Engineer of Record.
2. Before proceeding with any work within the existing facility, the Contractor shall familiarize himself with existing structural and other conditions. Any shoring shown or noted on the Plans is a partial and schematic representation of that required. It shall be the Contractor's responsibility to provide all necessary bracing, shoring, and other safeguards to maintain all parts of the work in a safe condition during the progress of demolition and construction, and to protect from damage those portions of the existing work which are to remain. Shoring shall remain in place until the structural work is complete, has been inspected by the Testing Agency, and is certified to be in substantial compliance with the Contract Documents.
3. When required by the Specifications or by Plan Note, the Contractor shall submit for the Structural Engineer of Record's review, a "Proposed Shoring Plan," including, but not limited to: plans, sections, details, notes, description of proposed sequence of work, and calculations prepared by, or under the supervision of a Specialty Structural Engineer (SSE). The SSE shall be registered in the State where the project is located.
4. Welding to and within an existing facility presents potential hazards including:
   - A. Fire Hazard - Due to the existing construction and building contents.
   - B. Structural Liquefaction - Due to welding across the full section of the structural members.

   Recommendations to prevent these hazards include:
   - A. Fire Hazard - Protect existing combustibles prior to welding. Keep a separate watchman and several fire extinguishers on hand.
   - B. Structural Liquefaction - weld in small increments. Allow welds to harden before continuing to the next increment.
   - C. Do not leave the site until satisfied that no fire hazard exists.
   - D. Preference should be given to the use of beam clamps, mechanical fasteners, or bolted connections in lieu of welding within existing facilities, whenever possible. Do not field-drill existing structural members without the written permission of the Structural Engineer of Record.

COORDINATION WITH OTHER TRADES

1. The Contractor shall coordinate and check all dimensions relating to Architectural finishes, mechanical equipment and openings, elevator shafts and overrides, etc. and notify the Architect/Engineer of any discrepancies before proceeding with any work in the area under question.
2. The Structural Drawings shall be used in conjunction with the Drawings of all other disciplines and the Specifications. The Contractor shall verify the requirements of other trades as to sleeves, chases, hangers, inserts, anchors, holes, and other items to be placed or set in the Structural Work.
3. There shall be no vertical or horizontal sleeves set, or holes cut or drilled in any beam or column unless it is shown on the Structural Drawings or approved in writing by the Structural Engineer of Record.
4. Mechanical and electrical openings through supported slabs and walls, 8" diameter or larger, not shown on the Structural Drawings must be approved by the Structural Engineer of Record (SER). Openings less than 8" in diameter shall have at least 1'-0" clear between openings, unless approved in writing by the SER.
5. Verify locations and dimensions of mechanical and electrical openings through supported slabs and walls shown on the Structural Drawings with the Mechanical and Electrical Contractors.
6. Do not install conduit in supported slabs, slabs on grade, or concrete walls unless explicitly shown or noted on the Structural Drawings.
7. Do not suspend any items, such as ductwork, mechanical or electrical fixtures, ceilings, etc. from steel roof deck or wood roof sheathing.
8. The Mechanical Contractor shall verify that mechanical units supported by the steel framing are capable of spanning the distance between the supporting members indicated on the Structural Drawings. The Mechanical Contractor shall supply additional support framing as required.
9. If drawings and specifications are in conflict, the most stringent restrictions and requirements shall govern.

GENERAL NOTES

1. The Contractor shall be responsible for complying with all safety precautions and regulations during the work. The Structural Engineer of Record will not advise on, nor issue direction as to safety precautions and programs.
2. The Structural Drawings herein represent the finished structure. The Contractor shall provide all temporary guying and bracing required to erect and hold the structure in proper alignment until all Structural Work and connections have been completed. The investigation, design, safety, adequacy and inspection of erection bracing, shoring, temporary supports, etc. is the sole responsibility of the Contractor.
3. The Structural Engineer of Record (SER) shall not be responsible for the methods, techniques and sequences are not specifically shown, similar details of construction shall be used, subject to approval of the SER.
4. Drawings indicate general and typical details of construction. Where conditions are not specifically shown, similar details of construction shall be used, subject to approval of the Structural Engineer of Record.
5. All structural systems which are to be composed of components to be field erected shall be supervised by the Supplier during manufacturing, delivery, handling, storage, and erection in accordance with the Supplier's instructions and requirements.
6. Loading applied to the structure during the process of construction shall not exceed the safe load-carrying capacity of the structural members. The live loading used in the design of this structure are indicated in the "Design Criteria Notes." Do not apply any construction loads until structural framing is properly connected together and until all temporary bracing is in place.
7. All ASTM and other referenced standards and codes are for the latest editions of these publications, unless otherwise noted.
8. Shop drawings and other items shall be submitted to the Structural Engineer of Record (SER) for review prior to fabrication. All Shop Drawings shall be reviewed by the Contractor before submittal. The SER's review is to be fore conformance with the design concept and general compliance with the relevant Contract Documents. The SER's review does not relieve the Contractor of the sole responsibility to review, check, and coordinate the Shop Drawings prior to submission. The Contractor remains solely responsible for errors and omissions associated with the preparation of Shop Drawings as they pertain to member sizes, details, dimensions, etc.
9. Submit Shop Drawings in the form of blueline/blackline prints (min. 2 sets/ max. 5 sets) and one reproducible blackline or sepia copy. In no case shall reproductions of the Contract Documents be used as shop drawings. As a minimum, submit the following items for review.
   - A. Concrete Mix Design(s).
   - B. Reinforcing Steel Shop Drawings.
   - C. Structural Steel Shop Drawings.
   - D. Steel Joist Shop Drawings.
   - E. Steel Deck Shop Drawings.
   - F. Prefabricated Cold-Formed Steel Truss Systems.
   - G. Cold-Formed Steel Framing Systems.
10. Resubmitted Shop Drawings: Resubmitted shop drawings are reviewed only for responses to comments made in the previous submittal.
11. When calculations are included in the submittals for components of work designed and certified by a Specialty Structural Engineer (SSE), the review by the Structural Engineer of Record (SER) shall be for conformance with the relevant Contract Documents. The SER's review does not relieve the SSE from responsibility for the design of the system(s) and the coordination with the elements of the structure under the certification of the SER, or other SSE's. The SER's review does not constitute a warranty of the accuracy or completeness of the SSE's design.
12. Contractors shall visit the site prior to bid to ascertain conditions which may adversely affect the work or cost thereof.
13. No structural member may be cut, notched, or otherwise reduced in strength without written direction from the Structural Engineer of Record.
14. When modifications are proposed to structural elements under the design and certification of a Specialty Structural Engineer (SSE), written authorization by the SSE must be obtained and submitted to the Structural Engineer of Record for review, prior to performing the proposed modification.

DESIGN CRITERIA

1. DESIGN STANDARDS: The intended design standards and/or criteria are as follows:

General	The 2014 Indiana Building Code (2012 International Building Code (IBC) with Indiana Amendments)
Concrete	ACI 318
Masonry	ACI 530
Steel	AISC Manual, Allowable Stress Design (ASD)
Steel Joists	Steel Joist Institute
Steel Deck	Steel Deck Institute
Cold-Formed Metal	AISI-ASD

   All referenced standards and codes, as well as ASTM numbers, are for the editions of these publications referenced in the Building Code listed above, unless otherwise noted.

2. DEAD LOADS: Gravity Dead Loads used in the design of the structure are as computed for the materials of construction incorporated into the building, including but not limited to walls, floors, ceilings, stairways, fixed partitions, finishes, cladding and other similar architectural and structural items, as well as mechanical, electrical and plumbing equipment and fixtures, and material handling and fixed service equipment, including the weight of cranes.
3. LIVE LOADS: Gravity live loads used in the design of the structure meet, or exceed the following table (IBC 2012, 1607.1):

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LB) [Note #1]
A. Schools		
1. Classrooms	40	
2. First Floor Corridors	100	
3. Mechanical Mezzanine	100	

   Note #1: Unless otherwise noted, the indicated concentrated load has been assumed to be uniformly distributed over an area of 30" x 30".

4. PARTITION ALLOWANCE: a uniform partition allowance of 15 PSF has been used to account for the load of all floors where partition locations are subject to change, unless the specified live load exceeds 80 PSF.
5. COLLATERAL LOAD: Unless otherwise noted, a minimum uniform collateral load of 10 PSF has been used to account for ductwork, ceilings, sprinklers, lighting, etc. The collateral load is in addition to the weight of mechanical units, larger piping (greater than 4" diameter) and suspended fixtures or equipment that have been specifically accounted for in the design.
6. COLLATERAL LOAD ABOVE CORRIDORS & MECHANICAL ROOMS: A minimum uniform collateral load of 20 PSF has been used to account for large ductwork, sprinkler mains, concentrations of piping, and electrical distribution above corridors and mechanical rooms. The collateral load is in addition to the weight of mechanical units and larger piping (greater than 4" diameter) and suspended fixtures or equipment that have been specifically accounted for in the design.
7. CONCENTRATED LOADS:
   All single panel points of the lower chord of exposed roof trusses or any point along the primary structural members supporting roofs over manufacturing, commercial storage and warehousing, and commercial garage floors shall be capable of carrying safely a suspended concentrated load of not less than 2000 LBS in addition to dead load.
   All single panel points of the lower chord of exposed roof trusses or any point along the primary structural members supporting roofs over all other occupancies shall be capable of carrying safely a suspended concentrated load of not less than 200 LBS in addition to dead load, unless noted.
8. HANDRAILS AND GUARDS

A. Handrail Assemblies and Guards	50 PLF applied in any direction 200 LB concentrated load applied in any direction (non-concurrent with 50 PLF load)
B. Components, Intermediate Rails, Balusters, Fillers, Etc.	50 LBS horizontally applied normal load on an area not to exceed 1 square foot not superimposed with those of handrail assemblies.

9. ROOF LIVE/SNOW LOADS: Gravity Live Loads used in the design of the roof structure meet or exceed the following table:

A. Snow Load	
Ground Snow Load, Pg	25 PSF
Flat Roof Snow Load, Pf	22 PSF
Low Slope Minimum Snow Load, Pm	20 PSF
Exposure Factor, Ce	1.0
Risk Category (IBC Table 1604.5)	III
Snow Importance Factor, Is	1.10
Thermal Factor, Ct	1.0
B. Minimum Roof Live Load	25 PSF
C. Overhang Eaves & Projections	60 PSF

   1. Sloped roof snow loads calculated in accordance with Section 7.4, ASCE 7.
   2. Unbalanced roof snow loads calculated in accordance with Section 7.6, ASCE 7. Specialty Structural Engineers must consider unbalanced snow loads in the design of pre-engineered trusses, frames, skylights, curtain walls, cold-formed metal framing, canopies, etc.
   3. Drift loads calculated in accordance with Section 7.7, ASCE 7.

10. LATERAL LOADS: Lateral loads were computed using the following criteria:

1. Wind Load	
Ultimate Design Wind Speed, Vult	120 MPH
Nominal Design Wind Speed, Vasd	89 MPH
Wind Exposure Category	C
Risk Category (IBC Table 1604.5)	III
Internal Pressure Coefficient, GCpi	± 0.18
2. Seismic Load	
Site Classification	D
Risk Category (IBC Table 1604.5)	III
Seismic Importance Factor, Ie	1.25
Mapped Spectral Response Acceleration, Ss	0.131g
Mapped Spectral Response Acceleration, S1	0.067g
Design Spectral Response Acceleration, Sds	0.140g
Design Spectral Response Acceleration, Sd1	0.107g
Seismic Design Category, SDC	B
Response Modification Coefficient, R	3

11. SAFETY FACTORS: This structure has been designed with 'Safety Factors' in accordance with accepted principles of structural engineering. The fundamental nature of the 'Safety Factor' is to compensate for uncertainties in the design, fabrication, and erection of structural building components. It is intended that ' Safety Factors' be used such that the load-carrying capacity of the structure does not fall below the design load and that the building will perform under design load without distress. While the use of 'Safety Factors' implies some excess capacity beyond design load, such excess capacity cannot be adequately predicted and SHALL NOT BE RELIED UPON.

REINFORCED MASONRY NOTES

1. All construction of reinforced masonry walls to be in accordance with the Building Code Requirements for Concrete Masonry Structures (ACI 530) and Commentary.
   - A) f'm = 2000 PSI
   - B) Maximum height of masonry lift: 5'-0"
   - C) Maximum height of grout lift: 5'-0"
   - D) See Specifications for additional masonry wall information.
2. CONCRETE BLOCK: Minimum compressive test strength on the net cross-sectional area: 2800 PSI.
3. MORTAR: Type S required.
4. GROUT: ASTM C476, 2500 PSI with a slump of 8" min. and 11" max.
5. REINFORCING: fy = 60000 PSI with a min. lap of 48 bar diameters.

LINTEL SCHEDULE

1. Where lintels are not specifically shown or noted on the Structural or Architectural Drawings, provide the following lintels over all openings and recesses in both interior and exterior non-load-bearing walls.
   - A) Brick:

Masonry Opening	Angle Size
Up to 5'-0"	L4x4x5/16
Over 5'-0" & up to 7'-0"	L6x4x5/16
Over 7'-0"	L7x4x3/8

   All angles are LLV (long leg vertical), unless noted otherwise. Provide 1" of bearing per foot of span each end with minimum 8". All lintels in exterior walls are to be hot-dip galvanized.
   - B) Block: For openings up to 8'-0" long exposed in the finished room, use lintel block filled with grout. Grout all exposed joints and reinforce as follows:
     - 1) For 6" thick block: 1 - #5 bar
     - 2) For 8" thick block: 2 - #5 bars
     - 3) For 10" thick block: 2 - #6 bars
     - 4) For 12" thick block: 2 - #6 bars
   - C) Block: For openings over 8'-0" & up to 12'-0" long exposed in the finished room, use lintel block filled with grout. Grout all exposed joints and reinforce per the "Long Masonry Lintel Detail" on the Typical Masonry Detail Drawing.
   - D) Block (stack bond openings over 4'-0"): See framing plans for steel beam lintels. Where not shown on plan, the criteria in the following table shall be used. Contact Structural Engineer of Record for lintels not shown on plan which do not meet this criteria. See architectural drawings for opening quantities, sizes, locations, heights of wall above, etc.

Block 't'	LINTEL	WIDTH OF OPENING	MAX. ALLOW. HEIGHT OF CMU ABOVE LINTEL
6"	C8x11.5 w/ CONTIN. PL 3/8 x 5	≤ 8'-0"	30'-0"
		≤ 12'-0"	8'-0"
8"	W8x13 w/ CONTIN. PL 3/8 x7	≤ 8'-0"	30'-0"
		≤ 12'-0"	8'-0"
10"	W8x13 w/ CONTIN. PL 3/8 x 9	≤ 8'-0"	25'-0"
		≤ 12'-0"	8'-0"
12"	W8x28 w/ CONTIN. PL 3/8 x11	≤ 8'-0"	40'-0"
		≤ 12'-0"	18'-0"

LOAD BEARING WALL CMU LINTEL SCHEDULE

LINTEL MARK	UNIT	DEPTH	BOTTOM REINF.	TOP REINF.	STIRRUPS (SIZE/SPC.)	LOOSE LINTELS AT BRICK LOCATIONS
CMU-L1	14"	16"	(2) #8	(2) #8	#3 @ 8"o.c.	L7x4x3/8 (LLH)
CMU-L2	12"	16"	(2) #7	(2) #7	#3 @ 8"o.c.	NONE
CMU-L3	8"	16"	(2) #5	(2) #5	#3 @ 8"o.c.	L7x4x3/8 (LLH)

AD-3

NOTES:
1. REFER TO DETAIL 8/S-404 FOR ADDITIONAL INFORMATION AND FOR CMU LINTELS LOCATED IN NON-LOAD BEARING WALLS.
2. VERTICAL CONTROL JOINTS MUST BE LOCATED AT LEAST 8" OFF OF JAMB OF OPENING. REFER TO DETAIL 3/S-404.
3. COORDINATE ALL DIMENSIONS TO LOCATE AND DEFINE OPENINGS w/ ARCHITECTURAL DRAWINGS (HEIGHT, WIDTH, LOCATION, ETC.).

FOUNDATIONS

1. Proofroll slab on grade areas with a medium-weight roller or other suitable equipment to check for pockets of soft material hidden beneath a thin crust of better soil. Any unsuitable materials thus exposed should be removed and replaced with compacted, engineered fill as outlined in the specifications. Proofrolling operations shall be monitored by the Geotechnical Testing Agency.
2. All engineered fill beneath slabs and over footings should be compacted to a dry density of at least 93% of the Modified Proctor maximum dry density (ASTM D-1557). All fill which shall be stressed by foundation loads shall be approved granular materials compacted to a dry density of at least 95% (ASTM D-1557). Coordinate all fill and compaction operations with the Specifications and the Subsurface Investigation.
3. Compaction shall be accomplished by placing fill in approximate 8" lifts and mechanically compacting each lift to at least the specified minimum dry density. For large areas of fill, field density tests shall be performed for each 3,000 square feet of building area for each lift as necessary to insure adequate compaction is being achieved.
4. Column footings and wall footings to bear on firm natural soils or well-compacted engineered fill with allowable bearing pressures of 3,000 PSF and 2,500 PSF for column and wall footings respectively, as outlined in the Subsurface Investigation Report.
   It is essential that the foundations be inspected to insure that all loose, soft, or otherwise undesirable material (such as organics, existing uncontrolled fill, etc.) is removed and that the foundations will bear on satisfactory material. The Geotechnical Testing Agency shall inspect the subgrade and perform any necessary tests to insure that the actual bearing capacities meet or exceed the design capacities. The Geotechnical Testing Agency shall verify the bearing capacity at each spread column footing and every 10 feet on center for strip footings prior to placement of concrete.
5. Place footings the same day the excavation is performed. If this is not possible, the footings shall be adequately protected against any detrimental change in condition, such as from disturbance, rain, or freezing.
6. It is the responsibility of the Contractor and each Sub-Contractor to verify the location of all utilities and services shown, or not shown; and establish safe working conditions before commencing work.
7. The Contractor shall layout the entire building and field verify all dimensions prior to excavation.
8. For information regarding subsurface conditions, refer to the Subsurface Investigation & Foundation Recommendation Report prepared by Professional Service Industries, Inc., PSI Project No. 00474864, dated November 23, 2021.

POST-INSTALLED DOWELS & ANCHOR BOLTS/RODS

1. All reinforcing steel and threaded rod anchors to be installed in a 2-part chemical anchoring system shall be treated as follows:
   - A. Drill holes larger than bar or rod to be embedded. Coordinate hole diameter with Manufacturer's recommendations.
   - B. Holes must be cleaned and prepared in accordance with Manufacturer's recommendations.
   - C. When reinforcing steel is encountered during drilling for installation of anchors; stop drilling, use a sensor to locate the reinforcing in the surrounding area and install anchor(s) as close as possible to the original location. Contact the Structural Engineer of Record (SER) for direction when the revised location is more than 2" from the original location, or when the original function of the anchorage is significantly altered. When in doubt, contact the SER for direction.
   - D. Drill the hole a minimum of 15 bar diameters or as shown on the plans.
   - E. Use a 2-part adhesive anchoring system, Hilti HY-200, or approved equal.
   - F. For anchorage into hollow substrate, use Hilti HY-270, or approved equal.
   - G. Reinforcing steel dowels shall be ASTM A615, Grade 60, unless noted.
   - H. Anchor rods shall be Hilti HAS-V-36, unless noted. Provide finish as noted on the Drawings. If not noted, provide hot-dip galvanized finish for interior applications. Provide stainless steel finish for all exterior applications, unless noted.
2. When column anchor bolts have been omitted, or damaged by construction operations, the Contractor must obtain the written approval of the Structural Engineer of Record prior to repair or replacement.
   - A. As a precaution, the affected column must be guyed and braced after repair for the balance of the erection period.
   - B. As an alternate to guying and bracing, the Contractor may at his option, employ a testing agency to perform a tensile pull test to confirm the strength for the repaired or replaced anchor bolt. The tensile proof load must exceed 1.33 x the design load of the original anchor without causing distress of the anchor bolt or the surrounding concrete. Reference the following table for the minimum proof loads:

3/4" diameter:	12.8 kips
7/8" diameter:	17.4 kips
1" diameter:	22.7 kips
1 1/8" diameter:	28.8 kips
1 1/4" diameter:	35.6 kips

     Note: Values listed above are for ASTM F-1554, Grade 36 material. When higher grade or strength materials are specified, refer to the AISC Steel Design Guide 1, Table 3.1 for minimum allowable loads to be multiplied by 1.33.
   - C. When affected anchor bolts are part of a fixed moment resisting column base, such as those in moment-resisting space frames, canopies, or fixed-base installations, the repaired anchor bolts must be proof-loaded, or the affected column footing and/or pier replaced in its entirety.
   - D. When affected anchor bolts are part of a braced frame the affected column footing and/or pier must be replaced in its entirety.
   - E. Prior to erection, the controlling Contractor must provide written notification to the Steel Erector if there has been a repair, replacement or modification of the anchor bolts for that column.

STRUCTURAL STEEL NOTES

1. Structural steel construction shall conform to the American Institute of Steel Construction "Specification for Structural Steel Buildings".
2. All structural wide flange members shall be ASTM A992, Fy=50 ksi
3. All plates, channels, bars, angles, and rods shall be ASTM A36, unless noted.
4. All rectangular structural tube members shall be ASTM A500, Grade C, Fy = 50 ksi unless noted.
5. All round structural tube members shall be ASTM A500, Grade C, Fy = 46 ksi unless noted.
6. All structural pipe members shall be ASTM A53,Grade B, Fy=35 ksi unless noted.
7. Details for design, fabrication and erection of all structural steel shall be in accordance with the latest AISC Standards, unless otherwise noted or specified.
8. Provide temporary erection guying and bracing as required.
9. Unless otherwise shown or noted on the Drawings, provide 8" minimum bearing each end for all loose lintels and beams.
10. For loose lintels, masonry shelf angles and other such items generally not shown on the Structural Drawings, refer to the Architectural Drawings. See general notes on lintels this sheet for sizes, reinforcing, etc.
11. Steel columns below grade shall be encased in a minimum of 4" concrete or painted with 2 coats of asphaltum paint, unless otherwise shown.
12. Fabricate simple span beams not specifically noted to receive camber so that after erection, any minor camber due to rolling or shop assembly be upward.
13. Refer to the Division 5 Structural Steel Specification of the Project Manual for structural steel surface preparations and prime painting requirements.
14. The Erector shall shim between parallel roof beams and joists with differential mill and induced cambers for level deck bearing.
15. Provide cap plates/end plates to close off exposed, open ends of all tubular members, unless noted. Seal weld with partial penetration square groove welds for watertight condition.

STEEL DECK NOTES

1. All steel deck material, fabrication and installation shall conform to the Steel Deck Institute "SDI SHORT FORM SPECIFICATIONS" and "SDI CODE OF STANDARD PRACTICE," current edition, unless noted.
2. Provide members for deck support at all deck span changes. Provide L3x3x3/16 deck support at all columns where required.
3. All deck shall be provided in a minimum of 3-span lengths where possible.
4. All welding of steel deck shall be in conformance with AWS Specification D1.3. Provide welding washers for all floor decks less than 22 gauge in thickness.
5. Mechanical fasteners may be used in lieu of welding, providing fasteners meet, or exceed the strength of specified welds. Submit fastener design data to the Structural Engineer of Record for review.
6. Substitution of fiber secondary reinforcement for welded wire fabric on supported slabs is prohibited.
7. Do not suspend any items, such as ductwork, mechanical and electrical fixtures, ceilings, etc. from steel deck.
8. Roof deck sidelaps shall be attached at ends of cantilevers and at a maximum spacing 12" o.c. from cantilevered roof deck ends. The roof deck must be completely fastened to the supports and at the sidelaps before any load is applied to the cantilever.
9. Submit shop drawings for review of general conformance to design concept in accordance with Specifications in the Project Manual. Erection drawings shall show type of deck, shop finish, accessories, method of attachment, edge details, deck openings and reinforcement, and sequence of installation.
10. Installation holes shall be sealed with a closure plate 2 gauges thicker than deck and mechanically fastened to deck. Steel deck holes visible from below will be rejected. Deck units that are bent, warped, or damaged in any way which would impair the strength and appearance of the deck shall be removed from the site.
11. Where gauge metal pourstops are indicated, supply pourstops designed to meet, or exceed the gauges listed in the SDI Pourstop Selection Table (min. 18 ga.) as required for slab depth, concrete weight, and cantilever distance, unless noted otherwise.
12. The Erector shall shim between parallel roof beams and joists with differential mill and induced cambers for level deck bearing.

STEEL STAIRS

1. Refer to the Design Criteria notes for live load and handrail requirements.
2. All stair designs shall be provided by the Stair Manufacturer/Fabricator's Specialty Structural Engineer and shall be stamped by a Professional Engineer registered in the State of Indiana. Stair designs shall be in accordance with all applicable code provisions of the IBC.
3. The Stair Manufacturer/Fabricator's Specialty Structural Engineer shall provide the Structural Engineer of Record with drawings showing location, direction and magnitudes of all stair load reactions on the building structure for approval, prior to fabrication.
4. The Stair Manufacturer/Fabricator shall coordinate the transition between the supported structural floor slab and the stair structure with the Structural Steel Fabricator, prior to fabrication.
5. Refer to the Architectural Drawings for stair width, rise, run, tread and riser geometry, handrail and guardrail design, shaft wall construction, etc.

STEEL CONNECTION NOTES

1. Typical beam-to-beam and beam-to-column connections shall be bearing type using A325 bolts, unless noted otherwise.
2. Shop connections unless otherwise shown, may be either bolted or welded. All field connections shall be bolted unless otherwise shown on the Structural Drawings.
3. Connections shall be designed by the Steel Fabricator to support the reactions shown on the framing plan(s). Simple span connections without reactions listed on the Structural Drawings shall be designed by the Steel Fabricator in accordance with Table 3-6 of the AISC "Manual of Steel Construction, 14th Edition". For composite beams where reactions are not indicated, design connections for 75% of the Maximum Total Uniform Load ASD value for the applicable beam size and span given in Table 3-6. For non-composite beams, design connections for 50% of the tabulated ASD value.
4. Submit calculations for connections not detailed on the Structural Drawings and not covered by the AISC Tables, including but not limited to:
   - A) Column Splices.
   - B) Moment Connections.
   - C) Bracing Connections including Collectors and Drag Struts.
   - D) Skewed Shear Connections.
   - E) Girder and Truss Splices.
   - F) Truss-to-Column and Truss-to-Truss Connections.
   - G) Truss Web-to-Chord and Web-to-Gusset Connections.
   - H) Compression Ring/Tension Ring, and Raker Beam Connections.
5. All beam-to-beam connections shall be double angle, unless shown or noted otherwise.
6. All beam-to-column connections shall be at the column centerline, unless noted otherwise. Shear tab connections to tubes are permitted unless otherwise noted or detailed.
7. Typical beam-to-beam, and beam-to-column field-bolted connections may be tightened to the snug-tight condition, unless otherwise shown or noted.
8. Bolted connections in moment frames, bracing connections, hangers and stub columns, crane connections, and those designated PT (pretensioned) on the Drawings shall be pretensioned joints utilizing tension-control (TC) bolts or direct tension indicators. Holes for PT bolts shall be 1/16" larger than the bolt diameter. All pretensioned joints must be inspected by the Testing Agency.
9. Connect bracing members for two components of stress unless otherwise approved by the Structural Engineer of Record. Provide a minimum 2-bolt or welded field connection.
10. Locate centerlines of all vertical bracing members on column centerlines in vertical plane and on column and beam centerlines in horizontal plane, unless otherwise shown on the Structural Drawings.
11. All welding shall be in conformance with AWS D1.1, using E70XX electrodes, unless shown or noted otherwise. Welding, both shop and field, shall be performed by welders certified for the weld types and positions involved according to the current edition of AWS D1.1. Perform all AESS welds with care to provide a clean, uniform appearance.
12. Backup bars required for welded connections shall be continuous.
13. Holes in steel shall be drilled or punched. All slotted holes shall be provided with smooth edges. Burning of holes in structural steel shall not be allowed without approval of the Structural Engineer of Record.
14. The minimum thickness of all connection material shall be 5/16" unless noted.
15. Continuous bent plate and angle closures, roof edges, diaphragm chords, etc. around perimeter of the floor and roof, as well as around openings shall be welded with a minimum 1/4" fillet weld x 3" long at 12" o.c., top & bottom, unless noted otherwise. Butt weld joints in continuous diaphragm chord for continuity. For continuous perimeter angles and bent plates perpendicular to and connected to the top chords of joists, provide a minimum 3" of 1/4" weld at each joist. Continuous angle and bent plate closures may be shop-applied to the supporting structural members only when requested and approved by Structural Engineer of Record.
16. Where steel beams are called to have wood nailers supporting wood floor or roof framing, provide 1/2" diameter carriage bolts spaced at 24" on center and staggered each side of the beam web, unless noted otherwise. Carriage bolts may be over-tightened to compress the rounded head in the nailer to facilitate installation of continuous band/rim joists, rafters, trusses, etc.
17. A qualified independent Testing Agency shall be retained to perform inspection and testing of structural steel field weldaments as follows:

WELD INSPECTION SCHEDULE

WELD TYPE	VT	MT	UT	PT	CRT	COMMENTS
FILLET (SINGLE PASS)	25%	-	-	-	-	ROOT PASS AND FINISHED WELD
FILLET (MULTIPLE PASS)	50%	25%	-	-	-	
FLARE BEVEL/ FLARE V	25%	-	-	-	-	
GROOVE (PARTIAL PENETRATION)	100%	-	100%	-	-	REFERENCE NOTE 'E' BELOW
GROOVE (FULL PENETRATION)	100%	-	100%	-	-	ALL FULL PENETRATION WELDS

- A) Test procedures:
  - VT = Visual Test (inspection)
  - MT = Magnetic Particle Test: ASTM E109, cracks or incomplete fusion or penetration not acceptable.
  - UT = Ultrasonic Test: ASTM E164.
  - PT = Penetrant Test: ASTM E165.
  - RT = Radiographic Test: ASTM E94 and ASTM E142, min. quality level 2-21.
- B) Acceptance standards in AWS D1.1 shall be followed for each test procedure.
- C) Test procedures may be substituted to meet feasibility requirements of test based upon weld geometry or other factors with the approval of the Structural Engineer of Record.
- D) Samples shall occur at random locations; additional tests may be required at locations noted on the Drawings.
- E) Groove welds include square, bevel, V, U, and J grooves including single and double pass types.
- F) Partial penetration square groove welds at end seal plates of tubular members do not require inspection.
- G) Weld Procedure Specifications (WPS) shall be produced and maintained in accordance with AWS D1.1. The independent Testing Agency shall have access to all WPS's during the course of testing and inspection.
- H) For highly-restrained welded joints, especially in thick plates and/or heavy structural shapes, details the welds so that shrinkage occurs as much as possible in the direction the steel was rolled. Refer to the AISC Manual for preferred welded-joint arrangements that reduce the possibility for lamellar tearing. Members scheduled to receive highly-restrained connections shall be tested by the independent Testing Agency by Ultrasonic Testing prior to commencing welding.
- I) In addition to inspection requirements for fillet welds in Table above, 100% of field welding of diagonal bracing members to gusset plates shall be visually inspected (VT).

STEEL JOIST NOTES

1. All steel joists shall be designed, fabricated, and erected in accordance with SJI Standard Specifications.
2. Joist bridging (if shown) is schematically indicated. Provide all bridging necessary to conform to SJI Specifications.
3. The ends of all bridging lines terminating at walls or beams shall be anchored to the wall or beam.
4. Joist bridging and connections shall be completely installed prior to placing any construction loads on the joists. Construction loading shall not exceed the joist design load.
5. All roof joists shall be capable of resisting the net uplift a noted on the Structural Drawings (min. 15 psf net). Provide an additional row of continuous horizontal bottom chord bridging at the first panel point location at each end of all roof joists.
6. Special joists (SP) shall be designed for the load designations specified on the Structural Drawings. Designs shall properly account for the distribution of concentrated loads, live loads, and for the effect of openings. Designs are to meet the requirements of SJI.
7. Joists shall meet the following deflection criteria per SJI. Maximum live load deflection shall not exceed:
   - A) Roofs without suspended ceilings: L/240
   - B) Roof with suspended ceilings: L/360
   - C) Floors: L/360
8. The Joist Manufacturer shall submit calculations for all special joists to Structural Engineer of Record for record purposes prior to fabrication. These calculations shall bear the seal and signature of a Professional Engineer registered in the State of Indiana.
9. Joists on column centerlines shall have extended bottom chord connections for erection stability, unless otherwise noted. Do not connect bottom chord extensions, unless otherwise noted or shown.
10. Joists on, or near column centerlines shall have field-bolted connections for erection stability, unless otherwise noted.
11. The Joist Manufacturer shall coordinate with the Structural Steel Fabricator for the design of all connections to support columns, beams, bearing seats, etc. prior to submittal of shop drawings.
12. Where a joist is part of a moment-resisting frame, delay the connection of the bottom chord to the column until all dead loads have been placed. All field-bolted and field-welded connections in moment-resisting frames shall be inspected per AWS and AISC requirements.
13. The Joist Manufacturer shall furnish evidence that the joist meets or exceeds the specified minimum moment of inertia (Ix) listed on the Plans. Where a minimum Ix value is not specified, the Ix value can be that required to meet the specified loading and deflection criteria.
14. All steel joists shall be furnished with standard SJI camber, unless noted otherwise.
15. All items suspended from joists such as catwalks, basketball goals, operable partitions, etc. should be installed after all dead loads of roofing, flooring, ceilings, etc. are installed.
16. All joists shall be shop primed in accordance with SJI requirements, unless note otherwise. Color to match structural steel primer, unless approved in writing.
17. Provide sloped bearing ends where joist slope exceeds 1/4" per foot.
18. Do not field cut or alter joists without the written approval of the Joist Manufacturer.

CAST IN PLACE CONCRETE

1. Details of fabrication of reinforcement, handling and placing of the concrete, construction of forms and placement of reinforcement not otherwise covered by the Plans and Specifications, shall comply with the ACI Code requirements of the latest revised date.
2. Cold weather concreting shall be in accordance with ACI 306. Cold weather is defined as a period when for more than 3 successive days the average daily air temperature drops below 40F and stays below 50F. The Contractor shall maintain a copy of this publication on site.
3. Hot weather concreting shall be in accordance with ACI 305. Hot weather is defined as any combination of the following conditions that tends to impair the quality of the freshly mixed or hardened concrete: high ambient temperature, high concrete temperature, low relative humidity, wind speed, or solar radiation The Contractor shall maintain a copy of this publication on site.
4. A certified Testing Agency shall be retained to perform industry standard testing including measurement of slump, air temperature, concrete cylinder testing, etc. to ensure conformance with the Contract Documents. Submit reports to Architect/Engineer.
5. Finishing of Slabs: After screeding, bull floating and floating operations have been completed, apply final finish as indicated below, and as described in the Division 3 Cast In Place Concrete Specification of the Project Manual.

A. Floor Slabs	Hard Trowel Finish
B. Ramps, Stairs, & Sidewalks	Broom Finish
C. Surfaces to Receive Topping Slab	Float Finish
D. Surfaces to receive thick-set mortar beds or similar cementitious materials	Float Finish
E. Driving Surfaces	Rough Swirl Finish

   Sample Finishes: See Specifications for sample and mockup requirements, if any.

   Floor Tolerances: See the Specifications for specified Ff and Fl tolerances. Ff and Fl testing shall be performed by the Testing Agency in accordance with ASTM E-1155. Results, including acceptance or rejection of the work will be provided to the Contractor and the Architect/Engineer within 48 hours after data collection. Remedies for out-of-tolerance work shall be in accordance with the Specifications.
6. Finishing of Formed Surfaces: Finish formed surfaces as indicated below, and as described in the Division 3 Cast In Place Concrete Specification of the Project Manual.

A. Sides of Footings & Pile Caps	Rough Form Finish
B. Sides of Grade Beams	Rough Form Finish
C. Surfaces not exposed to public view	Rough Form Finish
D. Surfaces exposed to public view	Smooth Form Finish

7. The Contractor shall consult with the Structural Engineer of Record before starting concrete work to establish a satisfactory placing schedule and to determine the location of construction joints so as to minimize the effects of shrinkage in the floor system.
8. Sawn or tooled control/contraction joints shall be provided in all slabs on grade. For a framed structure, joints shall be located on all column lines. If the column spacing exceeds 20'-0", provide intermediate joints. Exterior slabs, and interior slabs without column shall have joints spaced a maximum of 15'-0" apart. Layout joints so that maximum aspect ratio (ratio of long side to short side) does not exceed 1.5.
9. Where vinyl composition tile, vinyl sheets goods, thin-set epoxy terrazzo, or other similar material is the specified finish floor material, the Contractor shall coordinate the locations of control/contraction and construction joints with the Finish Flooring Contractor. Submit a dimensioned plan showing joint locations and proposed sequence of floor pours.
10. Unless specifically noted on the Plans, composite and non-composite supported slabs on metal deck, and supported cast-in-place concrete slabs do not require sawn control joints.
11. Joints in slabs to receive a finished floor may remain unfilled, unless required by the finish flooring contractor. All exposed slabs shall be filled with sealant specified in Division 7, or as follows: All slabs in industrial, manufacturing, or warehouse applications subject to wheeled traffic shall be filled with specified epoxy resin sealant, all other joints shall be filled with specified elastometric sealant. Defer filling of joints as long as possible, preferably a minimum of 4 to 6 weeks after the slab has been cured. Prior to filling, remove all debris from the slab joints, the fill in accordance with the manufacturer's recommendations.
12. Refer to the Architectural Drawings for locations and details of reveals (1" maximum depth) in exposed walls.
13. Refer to the Architectural Drawings for chamfer requirements for corners of concrete. Where not indicated, provide 3/4" chamfers on exposed corners of concrete, except those abutting masonry.
14. Refer to the Architectural Drawings for exact locations and dimensions of recessed slabs, ramps, stairs, thickened slabs, etc. Slope slabs to drains where shown on the Architectural and Plumbing Drawings.
15. Sidewalks, drives, exterior retaining walls, and other site concrete are not indicated on the Structural Drawings. Refer to the Site/Civil and Architectural Drawings for locations, dimensions, elevations, jointing, and finish details.

CONCRETE REINFORCING

1. Reinforcement, other than cold drawn wire for spirals and welded wire fabric, shall have deformed surfaces in accordance with ASTM A305.
2. Reinforcing steel shall conform to ASTM A615, Grade 60, unless noted.
3. Welded wire fabric shall conform to ASTM A1064, unless noted.
4. Where hooks are indicated, provide standard hooks per ACI and CRSI for all bars unless other hook dimensions are shown on the plans or details.
5. Reinforcement in footings, walls and beams shall be continuous. Lap bars a minimum of 40 diameters, unless noted otherwise.
6. Reinforcement shall be supported and secured against displacement in accordance with the CRSI 'Manual of Standard Practice'.
7. Details of reinforcing steel fabrication and placement shall conform to ACI 315 'Details and Detailing of Concrete Reinforcement' and ACI 315R 'Manual of Engineering and Placing Drawings for Reinforced Concrete Structures', unless otherwise indicated.
8. Spread reinforcing steel around small openings and sleeves in slabs and walls, where possible, and where bar spacing will not exceed 1.5 times the normal spacing. Discontinue bars at all large openings where necessary, and provide an area of reinforcement, equal to the interrupted reinforcement, in full length bars, distributing one-half each side of the opening. Where shrinkage and temperature reinforcement is interrupted, add (2) #5 x opening dimension + 4'-0" on each side of the opening. Provide #5 x 4'-0" long diagonal bars in both faces, at each corner of openings larger than 12" in any direction.
9. Provide standees for the support of top reinforcement for footings, pile caps, and mats.
10. Provide individual high chairs with support bars, as required for the support of top reinforcement for supported slabs. Do NOT provide standees.
11. Provide snap-on plastic space wheels to maintain required concrete cover for vertical wall reinforcement.
12. Where walls sit on column footings, provide dowels for the wall. Dowels shall be the same size and spacing as the vertical wall reinforcement, unless noted otherwise, with lab splices as shown on the application sections. Install dowels in the footing forms before concrete is placed. Do NOT stick dowels into footings after concrete is placed.
13. Field bending of reinforcing steel is prohibited, unless noted on drawings.
14. Minimum concrete cover over reinforcing steel shall be as follows, unless noted otherwise on plan, section or note:

CONCRETE MIX CLASSES

FOOTINGS, FOUNDATION WALLS, PIERS, & GRADE BEAMS	
COMPRESSIVE STRENGTH	4000 PSI
MAXIMUM WATER/CEMENT RATIO	0.45
AIR CONTENT	0 - 3 PERCENT
WATER-REDUCING ADMIXTURE	REQUIRED
SLUMP	5" TO 6 1/2"
INTERIOR CONCRETE SLABS	
COMPRESSIVE STRENGTH	4000 PSI
MINIMUM CEMENTITIOUS MATERIAL CONTENT	517 LB/CU YD
AIR CONTENT	0 - 3 PERCENT
WATER-REDUCING ADMIXTURE	REQUIRED
SLUMP	5" TO 6 1/2"
PROVIDE ELEMENT 5 SYSTEM (INTERALA CURE & CATALYST) PER PLAN NOTES ON FOUNDATION PLANS	
EXTERIOR CONCRETE SUBJECT TO FREEZE-THAW	
COMPRESSIVE STRENGTH	4500 PSI
MINIMUM CEMENTITIOUS MATERIAL CONTENT	564 LB/CU YD
AIR CONTENT	6 ± 1 PERCENT
WATER-REDUCING ADMIXTURE	REQUIRED
SLUMP	5" TO 6 1/2"
COARSE AGGREGATE	CRUSHED STONE
LEAN CONCRETE FILL	
COMPRESSIVE STRENGTH	2000 PSI
MAXIMUM WATER/CEMENT RATIO	0.65
AIR CONTENT	OPTIONAL
WATER-REDUCING ADMIXTURE	NOT REQUIRED
SLUMP	4" TO 7"
INTERIOR TOPPING SLAB	
COMPRESSIVE STRENGTH	4000 PSI
MINIMUM CEMENTITIOUS MATERIAL CONTENT	517 LB/CU YD
AIR CONTENT	0 - 3 PERCENT
WATER-REDUCING ADMIXTURE	REQUIRED
SLUMP	5" TO 6 1/2"
THE CONTRACTOR SHALL CONSIDER THE EFFECTS OF CAMBER AND TOLERANCE ON THE MINIMUM TOPPING THICKNESS AND LIMIT THE SIZE OF LARGE AGGREGATE ACCORDINGLY.	

1. SLUMP:

MIXES CONTAINING TYPE A WRDA	5" MAXIMUM
MIXES CONTAINING MID-RANGE WRDA	5 - 6 1/2"
MIXES CONTAINING HIGH-RANGE WRDA	5 - 8"

2. SPECIFIED MINIMUM CEMENTITIOUS MATERIAL CONTENTS ARE BASED ON THE USE OF WATER REDUCING ADMIXTURES.
3. INCLUDE AN AIR-ENTRAINING ADMIXTURE FOR ALL CONCRETE EXPOSED TO FREEZING AND THAWING IN SERVICE AND FOR ALL CONCRETE EXPOSED TO COLD WEATHER DURING CONSTRUCTION, BEFORE ATTAINING ITS SPECIFIED DESIGN COMPRESSIVE STRENGTH. REF. ACI 306 FOR DEFINITION OF COLD WEATHER.
4. CLASS C FLY ASH MAY BE USED AS A CEMENT SUBSTITUTE WITH A MAXIMUM 20% SUBSTITUTION RATE ON A POUND-PER-POUND BASIS.
5. SLAG CEMENT MAY BE USED AS A SUBSTITUTE FOR PORTLAND CEMENT WITH A MAXIMUM 50% SUBSTITUTION RATE ON A POUND-PER-POUND BASIS WITH THE EXCEPTION OF CLASS E CONCRETE, WHICH SHALL BE LIMITED TO 30%.
6. WHEN SLAB CEMENT AND FLY ASH ARE USED IN THE SAME CONCRETE MIX, THE MAXIMUM SUBSTITUTION RATES SHALL COMPLY WITH THE FOLLOWING:

PORTLAND CEMENT/SLAG/FLY ASH RATIO:	
CLASS E EXTERIOR CONCRETE	70% / 20% / 10%
ALL OTHER CLASSES	50% / 30% / 20%

7. FOR CONCRETE TO BE CAST DURING COLD WEATHER, THE MAXIMUM SUBSTITUTION RATE FOR SLAG CEMENT SHALL BE 30%. IF SLAG CEMENT AND FLY ASH ARE USED IN THE SAME MIX, THE MAXIMUM SUBSTITUTION RATES SHALL COMPLY WITH A RATIO OF PORTLAND CEMENT/SLAG/FLY ASH OF 70% / 20% / 10%.
8. PROPORTION CONCRETE MIXES TO PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE WORKED READILY INTO THE CORNERS AND ANGLES OF THE FORMS AND AROUND REINFORCEMENT BY THE METHODS OF PLACEMENT AND CONSOLIDATION TO BE EMPLOYED, WITHOUT SEGREGATION AND EXCESSIVE BLEEDING.
9. ADJUSTMENTS TO THE APPROVED MIX DESIGNS MAY BE REQUESTED BY THE CONTRACTOR WHEN JOB CONDITIONS, WEATHER, TEST RESULTS, OR OTHER CIRCUMSTANCES WARRANT. THESE REVISED MIX DESIGNS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO USE.

SPECIALTY STRUCTURAL ENGINEERING (SSE)

1. A Specialty Structural Engineer is defined as a Professional Engineer licensed in the State of Indiana, not the Structural Engineer of Record, who performs Structural Engineering functions necessary for the structure to be completed and who has shown experience and/or training in the specific speciality.
2. It is the Specialty Structural Engineer's responsibility to review the Construction Drawings and Specifications to determine the appropriate scope of engineering.
3. It is the intent of the Drawings and Specifications to provide sufficient information for the Specialty Structural Engineer (SSE) to perform his design and analysis. If the SSE determines there are details, features, or unanticipated project limits which conflict with the engineering requirements as described in the project documents, the SSE shall in a timely manner, contact the Structural Engineer of Record for resolution of conflicts.
4. The Specialty Structural Engineer (SSE) shall forward documents to the Structural Engineer of Record for review. Such documents shall bear the stamp of the SSE and include:
   - A) Drawings introducing engineering input, such as defining the configuration or structural capacity of structural components and/or their assembly into structural systems.
   - B) Calculations.
   - C) Computer printouts which are an acceptable substitute for manual calculations provided they are accompanied by sufficient design assumptions and identified input and output information to permit their proper evaluation. Such information shall bear the stamp of the Specialty Engineer as an indication that said engineer has accepted responsibility for the results.
5. Contractors are referred to the specific technical specification sections and the structural drawings for those elements requiring Specialty Structural Engineering. Examples of components requiring Specialty Structural Engineering include, but are not limited to the following:
   - A) Shoring and Bracing Systems.
   - B) Structural Steel Connections.
   - C) Steel Joist Systems.
   - D) Long Span and Acoustical Steel Decks.
   - E) Cold-Formed Steel Framing.
   - F) Prefabricated Cold-Formed Steel Trusses.
6. When modifications are proposed to elements under the design and certification of the Specialty Structural Engineer (SSE), written authorization by the SSE must be obtained and submitted to the Engineer of Record for review, prior to performing the proposed modification.

GIBRALTAR
DESIGN
ARCHITECTURE - ENGINEERING - INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY NHF
DRAWN BY NHF
CHECKED BY SAC

SCOTT A. CLORE
PE10606154

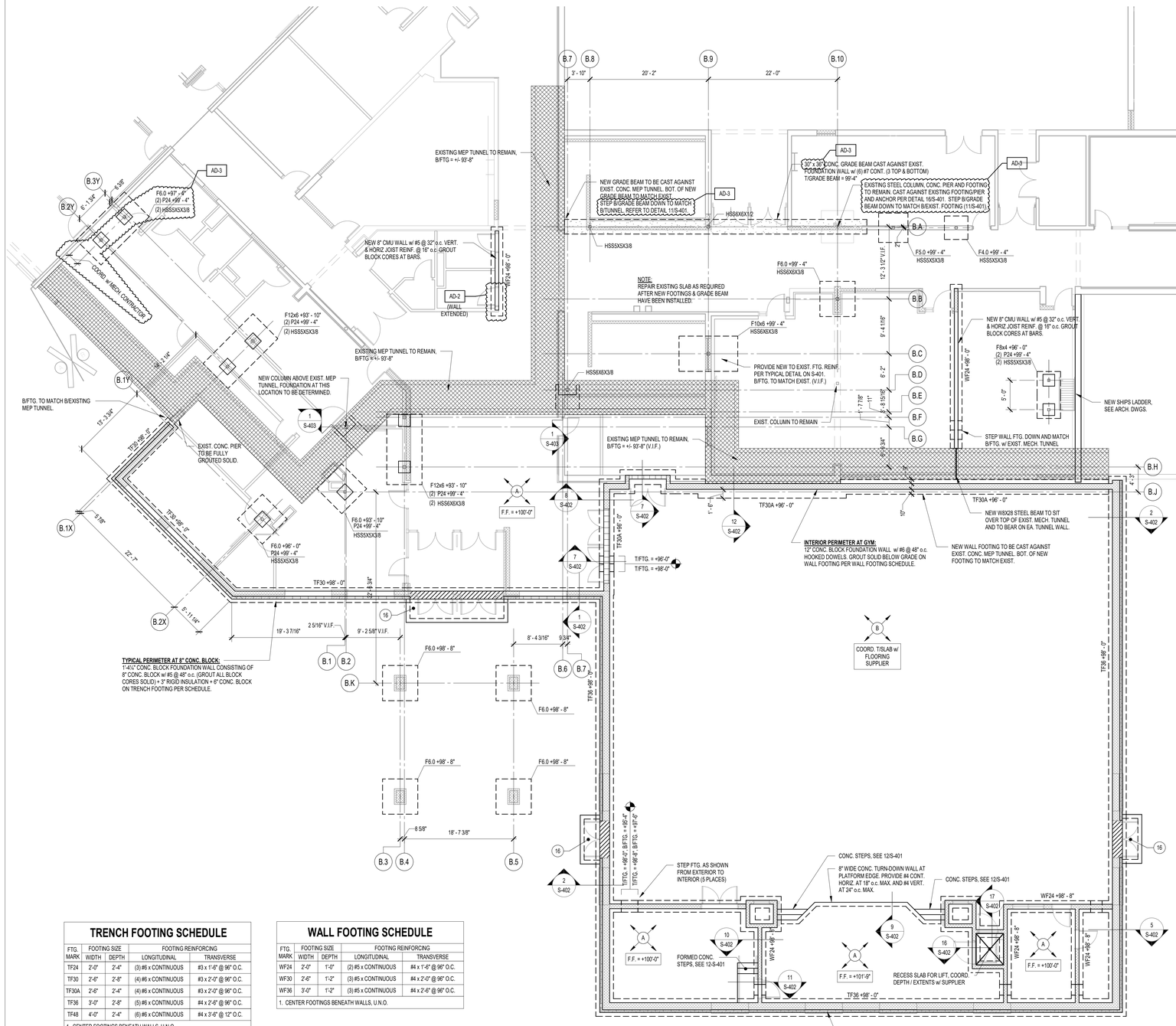
REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02.23.2022	ADDENDUM #3

DRAWING
STRUCTURAL NOTES

PROJECT
DOUGLAS MACARTHUR ES
ADDITIONS AND RENOVATIONS

SHEET
S-001

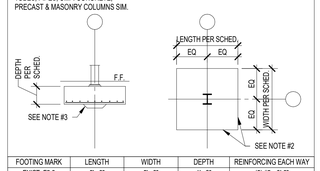


FOUNDATION PLAN NOTES

1. REF. S-001 FOR STRUCTURAL NOTES, DESIGN DATA & SCHEDULES.
2. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. THE MECHANICAL, ELECTRICAL, AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED.
3. COORDINATE EXACT SIZE & LOCATION OF ALL MECHANICAL OPENINGS IN FOUNDATION WALLS WITH THE MECHANICAL, ELECTRICAL & PLUMBING CONTRACTORS.
4. ALL ELEVATIONS ARE REFERENCED FROM THE FIRST FLOOR FINISH FLOOR ELEVATION 100'-0". REFER TO THE SITE/CIVIL DWGS. FOR EXACT U.S.G.S. ELEVATION.
5. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. REF. S-401 FOR TYPICAL FOUNDATION DETAILS.
7. NOTE: PERIMETER WALL AND COLUMN FOOTINGS SHALL BE LOWERED AND/OR SLEEVED TO PASS BELOW PLUMBING LINES (I.E. SANITARY & STORM SEWERS, WATER LINES, ETC.) SHOWN ON THE PLUMBING DRAWINGS. PROVIDE FOOTING STEPS AS REQUIRED PER THE TYPICAL DETAILS ON S-401.
8. ALL SLAB RECESSES SHALL BE LOCATED PER THE ARCHITECTURAL DRAWINGS. COORDINATE DEPTHS OF ALL SLAB RECESSES WITH THE ARCHITECTURAL DRAWINGS AND/OR THE FLOORING SUPPLIER.
9. COORDINATE REINFORCING DOWELS FOR CMU VERTICAL REINFORCING WITH REINF. NOTED ON PLANS & SECTIONS.
10. GROUT ALL CORES OF CMU BELOW FINISH FLOOR SOLID.
11. COLUMN FOOTINGS, TRENCH FOOTINGS AND WALL FOOTINGS SHALL BEAR ON APPROVED SOIL. UNDERCUT AS REQ'D TO SUITABLE BEARING MATERIAL AS DETERMINED BY THE GEOTECHNICAL TESTING AGENCY. REF. TYPICAL FOOTING UNDERCUT DETAIL ON SHEET S-401.
12. COLUMN FOOTINGS SUPPORTING MORE THAN ONE COLUMN SHALL BE CENTERED AT THE MIDPOINT BETWEEN THE COLUMNS, UNLESS NOTED OTHERWISE ON PLAN.
13. WALL EX. CONSTRUCTION SHOWN IN PLAN AND/OR SECTION WAS DERIVED FROM EXISTING DRAWINGS AND MUST BE FIELD VERIFIED. IF ANY DISCREPANCIES ARE DISCOVERED BETWEEN INFO. SHOWN ON THE DRAWINGS AND ACTUAL CONDITIONS IMMEDIATELY CONTACT ARCHITECT/ENGINEER FOR DIRECTION BEFORE PROCEEDING WITH THE WORK.
14. PROVIDE THICKENED SLAB UNDER ALL INTERIOR CMU WALLS WITHOUT FOOTINGS. SEE SHEET S-401 FOR THICKENED SLAB DETAIL. LAYOUT THICKENED SLABS FROM DIMENSIONS ON THE ARCHITECT FLOOR PLANS.
15. PROVIDE CONTROL/CONTRACTION JOINTS IN SLABS ON GRADE (REF. THE TYPICAL DETAILS ON SHEET S-401). ALL JOINTS IN SLABS TO RECEIVE THIN OR THICK-SET TERRAZZO, CERAMIC OR PORCELAIN TILE, VINYL-COMPOSITION TILE (VCT) OR VINYL SHEET GOODS, EPOXY OR SIMILAR THIN-FILM FINISH FLOORING SHALL BE CAREFULLY COORDINATED WITH THE FLOORING CONTRACTOR. THE CONTRACTOR SHALL SUBMIT SLAB JOINT LAYOUT TO ARCHITECT/ENGINEER FOR REVIEW PRIOR TO PLACING SLABS.
16. DENOTES VOID SLAB AT EXTERIOR ENTRANCES. SEE DETAILS ON SHEET S-402.

PLAN LEGEND:

F.F.	DENOTES FINISH FLOOR
T/'X'	DENOTES TOP OF FTG., GRADE BEAM, SLAB, PIER, ETC.
B/'X'	DENOTES BOTTOM OF FTG., GRADE BEAM, ETC.
C.J.	DENOTES SLAB ON GRADE CONTROL/CONTRACTION JOINT
WF30 -0'-0"	DENOTES WALL FOOTING MARK & TOP OF FOOTING ELEVATION (SEE WALL FOOTING SCHEDULE)
TF-5'-8" TF-6'-0" TF-6'-4"	DENOTES WALL FOOTING WITH STEPS, REF. TYP. DETAIL ON S/XXX
DENOTES COLUMN SIZE (REF. FRAMING PLANS FOR STUB COL'S NOT ON FDNS)	DENOTES COLUMN FOOTING MARK & TOP OF FTG. ELEVATION (SEE FTG. SCHED.)
DENOTES COLUMN BASE PLATE (SEE DETAILS ON S/XXX)	DENOTES PIER MARK & TOP OF PIER ELEVATION (SEE PIER SCHED.) F5.0 -6'-8" P24 -0'-8" HSS6x6x3/8 BP-A
	COLUMN FOOTING, CONCRETE PIER, STEEL COLUMN
A F.F. = SEE PLAN	DENOTES 4" CONC. SLAB ON GRADE w/ "FIBERFORCE 300" FIBERS @ 1.5 LB/C.Y. (OR EQUAL) & E5 SYSTEM BY SPECIFICATION PRODUCTS, INC. CONSISTING OF: E5 INTERNAL CURE ADMIXTURE @ 4 OZ/CWT & E5 CATALYST SPRAYED ON BETWEEN 800-1,000 SF/GAL OVER 15-MIL CLASS A VAPOR BARRIER OVER 6" COMPACTED GRANULAR FILL (INDOT No. 53 OR APPROVED EQUIV.).
B COORD. T/SLAB w/ FLOORING SUPPLIER	DENOTES 4" CONC. SLAB ON GRADE w/ "FIBERFORCE 300" FIBERS @ 2.0 LB/C.Y. (OR EQUAL) & E5 SYSTEM BY SPECIFICATION PRODUCTS, INC. CONSISTING OF: E5 INTERNAL CURE ADMIXTURE @ 4 OZ/CWT & E5 CATALYST SPRAYED ON BETWEEN 800-1,000 SF/GAL OVER 15-MIL CLASS A VAPOR BARRIER OVER 6" COMPACTED GRANULAR FILL (INDOT No. 53 OR APPROVED EQUIV.). TOP OF SLAB AND CONTROL JOINT REQUIREMENTS TO BE COORDINATED w/ WOOD FLOOR SUPPLIER



COLUMN FOOTING SCHEDULE

NOTES:

1. CENTER FOOTINGS BENEATH COLUMNS, U.N.O.
2. ALL FOOTINGS MUST BE BOARD-FORMED, UNLESS APPROVED.
3. INCREASE FOOTING DEPTH WHERE REQ'D TO ENCASE COLUMN ANCHOR RODS

NOTE: W/ STEEL COLUMN SHOWN, TUBES, PIPES, C.I.P. CONCRETE, PRECAST & MASONRY COLUMNS SIM.

FOOTING MARK	LENGTH	WIDTH	DEPTH	REINFORCING EACH WAY
EXIST. F5.6	5' - 6"	5' - 6"	1' - 2"	(5) #5 x 3'-6"
F4.0	4' - 0"	4' - 0"	1' - 2"	(3) #5 x 3'-6"
F5.0	5' - 0"	5' - 0"	1' - 2"	(6) #5 x 4'-6"
F6.0	6' - 0"	6' - 0"	1' - 2"	(7) #5 x 5'-6"
F6.0E	6' - 0"	6' - 0"	2' - 8"	(7) #5 x 5'-6"
F6x8.5	8' - 6"	6' - 0"	1' - 2"	(7) #5 x6'-0" ; (8) #5x5'-6"
F7.0	7' - 0"	7' - 0"	1' - 4"	(6) #5 x 6'-6"
F7.0E	7' - 0"	7' - 0"	2' - 8"	(6) #5 x 6'-6"
F8x4	4' - 0"	8' - 0"	1' - 2"	(8) #5x3'-6" ; (4) #7x7'-6"
F10x6	6' - 0"	10' - 0"	1' - 10"	(9) #7x5'-6" ; (7) #7x9'-6"
F12x6	6' - 0"	12' - 0"	1' - 2"	(11) #7 x 5'-6" ; (5) #7x11'-6"

TRENCH FOOTING SCHEDULE

FTG. MARK	FOOTING SIZE		FOOTING REINFORCING	
	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE
TF24	2'-0"	2'-4"	(3) #5 x CONTINUOUS	#3 x 1'-6" @ 96" O.C.
TF30	2'-6"	2'-8"	(4) #5 x CONTINUOUS	#3 x 2'-0" @ 96" O.C.
TF30A	2'-6"	2'-4"	(4) #6 x CONTINUOUS	#3 x 2'-0" @ 96" O.C.
TF36	3'-0"	2'-8"	(5) #6 x CONTINUOUS	#4 x 2'-6" @ 96" O.C.
TF48	4'-0"	2'-4"	(6) #6 x CONTINUOUS	#4 x 3'-6" @ 12" O.C.

1. CENTER FOOTINGS BENEATH WALLS, U.N.O.

2. TRENCH FOOTINGS MAY BE CAST DIRECTLY AGAINST SOIL WITHOUT FORMING WHERE EXISTING SOIL CONDITIONS PERMIT. FORM TOP OF TRENCH FOOTINGS WHERE SOIL HAS SLOUGHED SIGNIFICANTLY, WHERE GRADE IS LOWER THAN THE INDICATED TOP OF FOOTING ELEVATION, OR WHEREVER TRENCH FOOTING WOULD INTERFERE WITH THE INSTALLATION OF DOWNSPOUTS, CONDUIT, BOLLARDS, ETC. COORDINATE WITH MECHANICAL, ELECTRICAL, PLUMBING & SITE/CIVIL DRAWINGS.

3. INTERIOR OF TRENCH FOOTING SHALL BE FORMED WITH RIGID INSULATION. TAKE CARE IN TRIMMING INTERIOR FACE OF EXCAVATION TO MINIMIZE GAPS BEHIND THE INSULATION. FILL WITH #8 CRUSHED STONE, TAMPING AND COMPACTING WHERE SPACE PERMITS.

WALL FOOTING SCHEDULE

FTG. MARK	FOOTING SIZE		FOOTING REINFORCING	
	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE
WF24	2'-0"	1'-0"	(2) #5 x CONTINUOUS	#4 x 1'-6" @ 96" O.C.
WF30	2'-6"	1'-2"	(3) #5 x CONTINUOUS	#4 x 2'-0" @ 96" O.C.
WF36	3'-0"	1'-2"	(3) #5 x CONTINUOUS	#4 x 2'-6" @ 96" O.C.

1. CENTER FOOTINGS BENEATH WALLS, U.N.O.

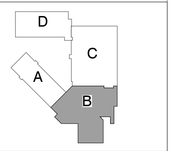
1 FOUNDATION PLAN - UNIT B
1/8" = 1'-0"

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY NHF
DRAWN BY NHF
CHECKED BY SAC

SCOTT A. CLORE REGISTERED PE10606154 STATE OF INDIANA PROFESSIONAL ENGINEER

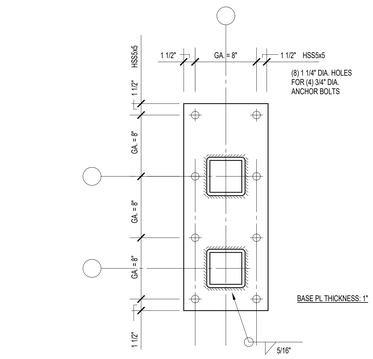
REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02.17.2022	ADDENDUM #2
AD-3	02.23.2022	ADDENDUM #3

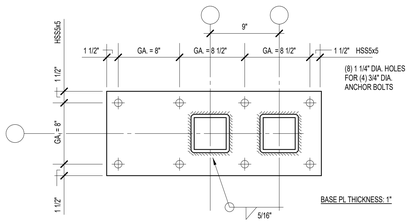
DRAWING
FOUNDATION PLAN - UNIT B

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

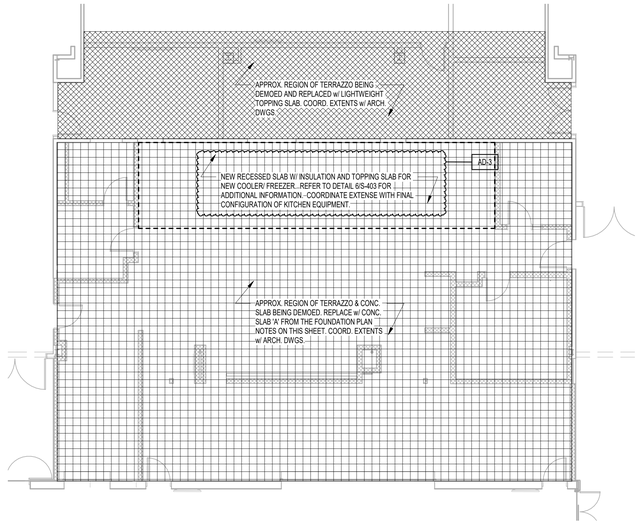
SHEET
B
S-201



UNIT D SHARED COLUMN - GRIDLINE D.12
NOT TO SCALE



UNIT D SHARED COLUMN - GRIDLINE D.C
NOT TO SCALE



2 PARTIAL FOUNDATION PLAN - UNIT C
1/8" = 1'-0"
AD-2

TRENCH FOOTING SCHEDULE

FTG. MARK	FOOTING SIZE		FOOTING REINFORCING	
	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE
TF24	2'-0"	2'-4"	(3) #6 x CONTINUOUS	#3 x 1'-6" @ 96" O.C.
TF30	2'-6"	2'-8"	(4) #6 x CONTINUOUS	#3 x 2'-0" @ 96" O.C.
TF30A	2'-6"	2'-4"	(4) #6 x CONTINUOUS	#3 x 2'-0" @ 96" O.C.
TF36	3'-0"	2'-8"	(5) #6 x CONTINUOUS	#4 x 2'-6" @ 96" O.C.
TF48	4'-0"	2'-4"	(6) #6 x CONTINUOUS	#4 x 3'-6" @ 12" O.C.

1. CENTER FOOTINGS BENEATH WALLS, U.N.O.

2. TRENCH FOOTINGS MAY BE CAST DIRECTLY AGAINST SOIL WITHOUT FORMING WHERE EXISTING SOIL CONDITIONS PERMIT. FORM TOP OF TRENCH FOOTINGS WHERE SOIL HAS SLOUGHED SIGNIFICANTLY, WHERE GRADE IS LOWER THAN THE INDICATED TOP OF FOOTING ELEVATION, OR WHEREVER TRENCH FOOTING WOULD INTERFERE WITH THE INSTALLATION OF DOWNSPOUTS, CONDUIT, BOLLARDS, ETC. COORDINATE WITH MECHANICAL, ELECTRICAL, PLUMBING & SITE/CIVIL DRAWINGS.

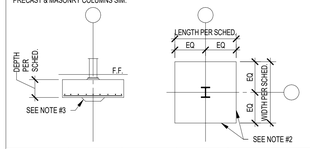
3. INTERIOR OF TRENCH FOOTING SHALL BE FORMED WITH RIGID INSULATION. TAKE CARE IN TRIMMING INTERIOR FACE OF EXCAVATION TO MINIMIZE GAPS BEHIND THE INSULATION. FILL WITH #8 CRUSHED STONE, TAMPING AND COMPACTING WHERE SPACE PERMITS.

COLUMN FOOTING SCHEDULE

NOTES:

1. CENTER FOOTINGS BENEATH COLUMNS, U.N.O.
2. ALL FOOTINGS MUST BE BOARD-FORMED, UNLESS APPROVED.
3. INCREASE FOOTING DEPTH WHERE REQ'D TO ENCASE COLUMN ANCHOR RODS

NOTE: WF STEEL COLUMN SHOWN, TUBES, PIPES, C.I.P. CONCRETE, PRECAST & MASONRY COLUMNS SIM.



FOOTING MARK	LENGTH	WIDTH	DEPTH	REINFORCING EACH WAY
EXIST. F5.6	5' - 6"	5' - 6"	1' - 2"	(5) #5 x 3'-6"
F4.0	4' - 0"	4' - 0"	1' - 2"	(5) #5 x 3'-6"
F5.0	5' - 0"	5' - 0"	1' - 2"	(6) #5 x 4'-6"
F6.0	6' - 0"	6' - 0"	1' - 2"	(7) #5 x 5'-6"
F6.0E	6' - 0"	6' - 0"	2' - 8"	(7) #5 x 5'-6"
F6x8.5	8' - 6"	6' - 0"	1' - 2"	(7) #5 x8'-0", (5) #5x5'-6"
F7.0	7' - 0"	7' - 0"	1' - 4"	(6) #6 x 6'-6"
F7.6E	7' - 0"	7' - 0"	2' - 8"	(6) #6 x 6'-6"
F8x4	4' - 0"	8' - 0"	1' - 2"	(8) #5x3'-6",(4) #7x7'-6"
F10x6	6' - 0"	10' - 0"	1' - 10"	(9) #7x5'-6",(7) #7x9'-6"
F12x6	6' - 0"	12' - 0"	1' - 2"	(11) #7 x 5'-6",(5) #7x11'-6"

FOUNDATION PLAN NOTES

1. REF. S-001 FOR STRUCTURAL NOTES, DESIGN DATA & SCHEDULES.
2. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. THE MECHANICAL, ELECTRICAL, AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED.
3. COORDINATE EXACT SIZE & LOCATION OF ALL MECHANICAL OPENINGS IN FOUNDATION WALLS WITH THE MECHANICAL, ELECTRICAL & PLUMBING CONTRACTORS.
4. ALL ELEVATIONS ARE REFERENCED FROM THE FIRST FLOOR FINISH FLOOR ELEVATION 100'-0". REFER TO THE SITE/CIVIL DWGS. FOR EXACT U.S.G.S. ELEVATION.
5. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. REF. S-401 FOR TYPICAL FOUNDATION DETAILS.
7. NOTE: PERIMETER WALL AND COLUMN FOOTINGS SHALL BE LOWERED AND/OR SLEEVED TO PASS BELOW PLUMBING LINES (I.E. SANITARY & STORM SEWERS, WATER LINES, ETC.) SHOWN ON THE PLUMBING DRAWINGS. PROVIDE FOOTING STEPS AS REQUIRED PER THE TYPICAL DETAILS ON S-401.
8. ALL SLAB RECESSES SHALL BE LOCATED PER THE ARCHITECTURAL DRAWINGS. COORDINATE DEPTHS OF ALL SLAB RECESSES WITH THE ARCHITECTURAL DRAWINGS AND/OR THE FLOORING SUPPLIER.
9. COORDINATE REINFORCING DOWELS FOR CMU VERTICAL REINFORCING WITH REINF. NOTED ON PLANS & SECTIONS.
10. GROUT ALL CORES OF CMU BELOW FINISH FLOOR SOLID.
11. COLUMN FOOTINGS, TRENCH FOOTINGS AND WALL FOOTINGS SHALL BEAR ON APPROVED SOIL. UNDERCUT AS REQ'D TO SUITABLE BEARING MATERIAL AS DETERMINED BY THE GEOTECHNICAL TESTING AGENCY. REF. TYPICAL FOOTING UNDERCUT DETAIL ON SHEET S-401.
12. COLUMN FOOTINGS SUPPORTING MORE THAN ONE COLUMN SHALL BE CENTERED AT THE MIDPOINT BETWEEN THE COLUMNS, UNLESS NOTED OTHERWISE ON PLAN.
13. WALL EX. CONSTRUCTION SHOWN IN PLAN AND/OR SECTION WAS DERIVED FROM EXISTING DRAWINGS AND MUST BE FIELD VERIFIED. IF ANY DISCREPANCIES ARE DISCOVERED BETWEEN INFO. SHOWN ON THE DRAWINGS AND ACTUAL CONDITIONS IMMEDIATELY CONTACT ARCHITECT/ENGINEER FOR DIRECTION BEFORE PROCEEDING WITH THE WORK.
14. PROVIDE THICKENED SLAB UNDER ALL INTERIOR CMU WALLS WITHOUT FOOTINGS. SEE SHEET S-401 FOR THICKENED SLAB DETAIL. LAYOUT THICKENED SLABS FROM DIMENSIONS ON THE ARCHITECT FLOOR PLANS.
15. PROVIDE CONTROL/CONTRACTION JOINTS IN SLABS ON GRADE (REF. THE TYPICAL DETAILS ON SHEET S-401). ALL JOINTS IN SLABS TO RECEIVE THIN OR THICK-SET TERRAZZO, CERAMIC OR PORCELAIN TILE, VINYL-COMPOSITION TILE (VCT) OR VINYL SHEET GOODS, EPOXY OR SIMILAR THIN-FILM FINISH FLOORING SHALL BE CAREFULLY COORDINATED WITH THE FLOORING CONTRACTOR. THE CONTRACTOR SHALL SUBMIT SLAB JOINT LAYOUT TO ARCHITECT/ENGINEER FOR REVIEW PRIOR TO PLACING SLABS.
16. DENOTES VOID SLAB AT EXTERIOR ENTRANCES. SEE DETAILS ON SHEET S-402.

PLAN LEGEND:

F.F. — DENOTES FINISH FLOOR

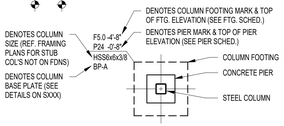
T/'X' — DENOTES TOP OF FTG., GRADE BEAM, SLAB, PIER, ETC.

B/'X' — DENOTES BOTTOM OF FTG., GRADE BEAM, ETC.

C.J. — DENOTES SLAB ON GRADE CONTROL/CONTRACTION JOINT

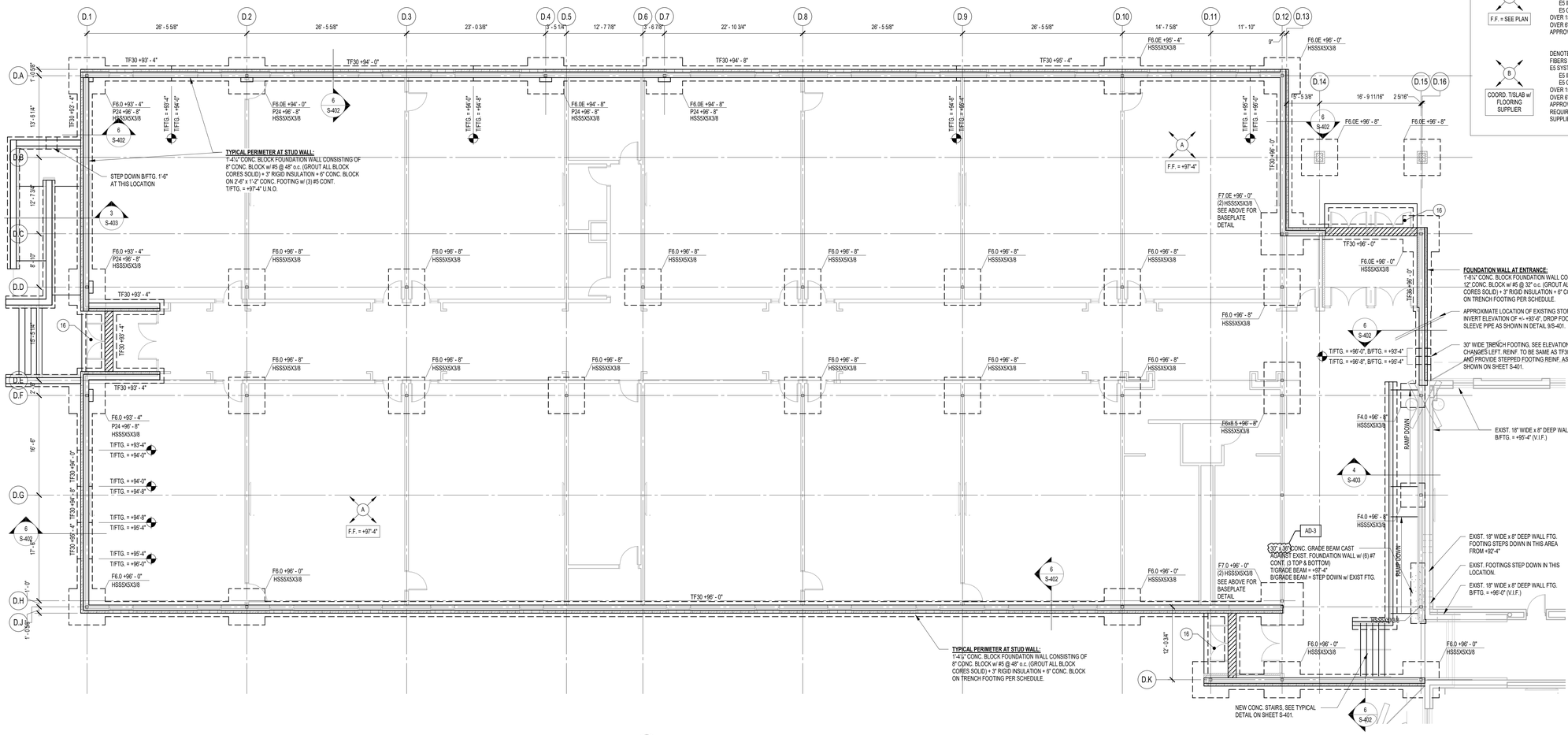
WF30 -20'-0" — DENOTES WALL FOOTING MARK & TOP OF FOOTING ELEVATION (SEE WALL FOOTING SCHEDULE)

DENOTES WALL FOOTING WITH STEPS, REF. TYP. DETAIL ON SXXX



DENOTES 4" CONC. SLAB ON GRADE w/ "FIBERFORCE 300" FIBERS @ 1.5 LB/C.Y. (OR EQUAL) & ES SYSTEM BY SPECIFICATION PRODUCTS, INC. CONSISTING OF: ES INTERNAL CURE ADMIXTURE @ 4 OZ/CWT & ES CATALYST SPRAYED ON BETWEEN 800-1,000 SF/GAL OVER 15-MIL CLASS A VAPOR BARRIER OVER 6" COMPACTED GRANULAR FILL (INDOT No. 53 OR APPROVED EQUIV.).

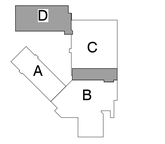
DENOTES 4" CONC. SLAB ON GRADE w/ "FIBERFORCE 300" FIBERS @ 2.0 LB/C.Y. (OR EQUAL) & ES SYSTEM BY SPECIFICATION PRODUCTS, INC. CONSISTING OF: ES INTERNAL CURE ADMIXTURE @ 4 OZ/CWT & ES CATALYST SPRAYED ON BETWEEN 800-1,000 SF/GAL OVER 15-MIL CLASS A VAPOR BARRIER OVER 6" COMPACTED GRANULAR FILL (INDOT No. 53 OR APPROVED EQUIV.). TOP OF SLAB AND CONTROL JOINT REQUIREMENTS TO BE COORDINATED w/ WOOD FLOOR SUPPLIER



1 FOUNDATION PLAN - UNIT D
1/8" = 1'-0"

GIBRALTAR DESIGN
ARCHITECTURE - ENGINEERING - INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY NHF
DRAWN BY NHF
CHECKED BY SAC

SCOTT A. CLORE REGISTERED PE10606154 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

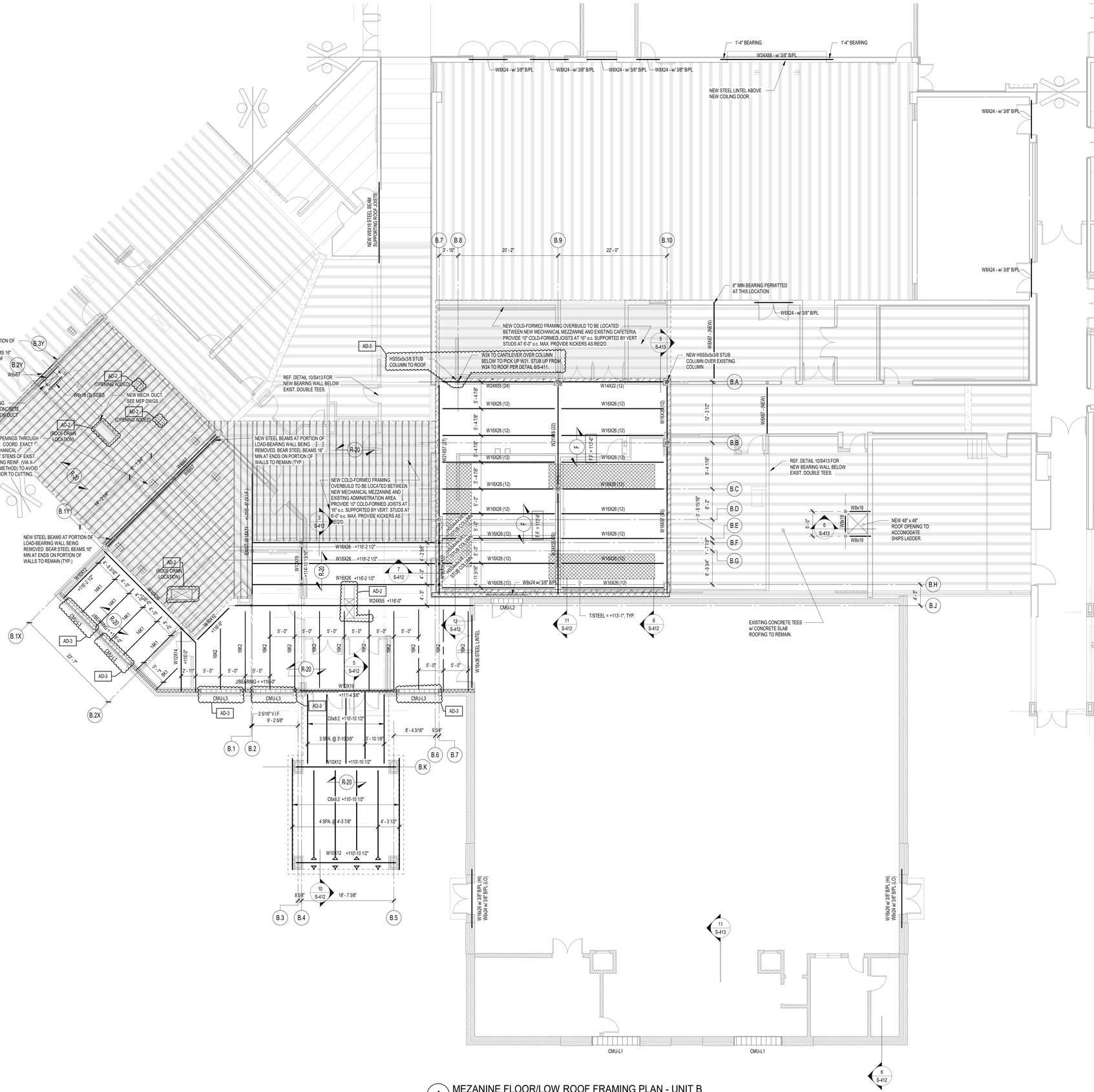
MARK	DATE	ISSUED FOR
AD-2	02.17.2022	ADDENDUM #2
AD-3	02.23.2022	ADDENDUM #3

DRAWING
FOUNDATION PLAN - UNITS C & D

AD-2
(SHEET NAME CHANGE)

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C/D
S-202



1 MEZANINE FLOOR/LOW ROOF FRAMING PLAN - UNIT B
1/8" = 1'-0"

FRAMING PLAN NOTES

1. REF. S-001 FOR STRUCTURAL NOTES, DESIGN DATA, SCHEDULES & LEGENDS.
2. REF. THE S-400 SERIES FOR TYPICAL FRAMING AND MASONRY DETAILS.
3. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. THE MECHANICAL, ELECTRICAL, AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED.
4. ALL ELEVATIONS ARE REFERENCED FROM THE FIRST FLOOR FIN. FLOOR ELEVATION +100'-0". COORD. USGS ELEVATION WITH CIVIL DWGS.
5. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. SEE FOUNDATION PLANS FOR SIZES OF STEEL COLUMNS SUPPORTED ON FOUNDATIONS.
7. REF. S-411 FOR TYPICAL CONNECTION & FRAMING DETAILS.
8. REF. S-421 FOR TYPICAL MASONRY DETAILS
9. INSTALL CONTINUOUS BENT PLATE/ANGLE POUR STOPS AT ALL ELEVATED SLAB-ON-DECK PERIMETER EDGES AND AROUND ALL INTERIOR FLOOR OPENINGS (BOTH SHOWN AND NOT SHOWN). SEE DETAIL 4/S-411.
10. INSTALL CONTINUOUS ANGLES AT ALL PERIMETER ROOF EDGES. SEE DETAIL X/S-XXX FOR ATTACHEMENT TO BEAM AND FOR ALL CONDITIONS NO SPECIFICALLY DEFINED IN FRAMING SECTIONS.
11. INSTALL CONTINUOUS CONCRETE CURBS PER DETAIL X/S-XXX AROUND THE PERIMETER OF ALL MECHANICAL ROOMS AND AROUND FLOOR PENETRATIOSN BOTH SHOWN AND NOW SHOWN INCLUDING STEEL COLUMN PENETRATIONS.
12. ALL WALLS SHALL BE LAID OUT FROM THE ARCHITECTURAL DRAWINGS.
13. REF. ARCH. DRAWINGS. FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
14. COORDINATE EXACT SIZE & LOCATION OF ANY MECHANICAL OPENINGS IN FLOOR SLAB, ROOF DECK, OR WALLS WITH THE MEP CONTRACTOR(S). LOCATION & SIZE OF ALL DUCT OPENINGS, GRILLES, ETC. SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
15. ALL ELEVATIONS SHOWN ON PLAN INDICATE TOP OF STEEL BEAM UNLESS NOTED OTHERWISE.
16. PROVIDE CHANNEL FRAMES AT ALL SUPPORTED SLAB OPENINGS PER TYPICAL DETAIL ON S-411. COORDINATE EXACT NUMBER, LOCATIONS & DIMENSIONS WITH THE APPROPRIATE CONTRACTORS & THE ARCH. & MEP DRAWINGS.
17. PROVIDE FRAMES AT ALL ROOF DRAINS, ROOF HATCHES & OTHER ROOF OPENINGS PER TYPICAL DETAILS ON S-411. COORD. EXACT NUMBER, LOCATIONS & DIMENSIONS WITH THE APPROPRIATE CONTRACTORS & THE ARCH. & MEP DWGS.
18. PROVIDE CMU REINFORCING AS NOTED ON PLANS. IF NOT SHOWN ON PLANS OR DETAILS, MINIMUM CMU WALL REINFORCING TO BE #5 VERTS @ 48" O.C. PROVIDE OPEN-CORE BOND BEAMS AT TOPS OF WALLS, AT CHANGES IN CMU THICKNESS, AND WHERE INDICATED ON PLANS & SECTIONS (10'-0" O.C. MAX VERTICAL SPACING). PROVIDE 1/2 OF INTERRUPTED VERTICALS AT JAMBS OF OPENINGS AND PROVIDE ADDITIONAL VERT'S. AT ENDS OF WALLS.
19. ALL MASONRY BOND BEAMS, OTHER THAN BOND BEAM LINTELS OVER OPENINGS, SHALL BE "OPEN-CORE" BOND BEAMS TO ALLOW VERTICAL REINFORCING TO PASS THROUGH, UNLESS NOTED OTHERWISE.
20. REF. ARCH. DWGS. FOR MASONRY CONTROL & EXPANSION JOINT LOCATIONS.
21. ALL HORIZONTAL AND DIAGONAL BRIDGING FOR STEEL JOISTS SHALL BE DESIGNED, LOCATED & PROVIDED BY THE JOIST SUPPLIER PER SJI SPECIFICATIONS.
22. FOR ALL MODIFICATIONS MADE TO EXIST. CONC. TEES, FIELD LOCATE EXISTNG REINF. (VIA X-RAY OR OTHER APPROVED METHOD) TO AVOID CUTTING INTO TENDONS PRIOR TO CUTTING AND TO AVOID ANCHORING INTO TENDONS.
23. NEW OPENINGS CUT INTO CONCRETE TEES SHALL FOLLOW REQUIREMENTS AS SHOWN ON DETAIL 2/S-203. SEE STRUCTURAL PLANS FOR OPENINGS WHERE WIDTH IS GREATER THAN 18".
24. ALIGN TRUSS TO BEAM BELOW ON GRID AT THIS LOCATION. DESIGN FOR 200 PLF DRAG LOAD FOR LATERAL TRANSFER TO BRACING.

PLAN LEGEND:

T/'X'	DENOTES TOP OF STEEL, SLAB, ETC.
E.O.S. (or EOS)	DENOTES EDGE OF SLAB (MEASURED FROM BEAM C.L.) SEE TYPICAL DETAIL A/S-410
E.O.D. (or EOD)	DENOTES EDGE OF DECK (MEASURED FROM BEAM C.L.) NOTE: PERIMETER ROOF ANGLE/BENT PL NOT REQUIRED
R-XX	DENOTES 1-1/2", 20 / 22 GA. WIDE RIB STEEL ROOF DECK, PRIME PAINTED ONLY.
F F.F. = SEE PLAN	DENOTES 1-1/2", 20 GA. GALV. COMPOSITE STEEL FLOOR DECK +3-1/2" N.W. CONCRETE TOPPING w/ 6x6 W2.1xW2.1 W.W.F (5" TOTAL SLAB 't').
R-20A	DENOTES 1-1/2", 20 GA. WIDE RIB ACOUSTICAL STEEL ROOF DECK, PRIME PAINTED (BOTH SIDES) ONLY.
▶	DENOTES BEAM-TO-COLUMN MOMENT CONNECTION PER DETAIL 10/S-411
▷	DENOTES BEAM-THRU-BEAM MOMENT CONNECTION PER DETAIL 4/S-411

W24X55 — DENOTES BEAM SIZE

+115'-7" — DENOTES TOP OF STEEL ELEVATION

TYP. BRACING NOTATION - REFER TO TYP. DETAIL 8/S-411 FOR MORE INFORMATION

W16X26

BOTTOM OF BRACE

DENOTES HSS5x5x5/16 DIAGONAL BRACE

TOP OF BRACE

AD-2

DENOTES APPROX. LOCATION OF FRAMED OPENING FOR ROOF DRAIN OR ROOF HATCH. REFER TO DETAIL 11/S-411. COORD. EXACT LOCATION w/ MECH. CONTRACTOR.

GIBRALTAR
DESIGN
ARCHITECTURE · ENGINEERING · INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY
SCHOOL CORPORATION
CEDAR LAKE, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY NHF
DRAWN BY NHF
CHECKED BY SAC

SCOTT A. CLORE
PE10606154

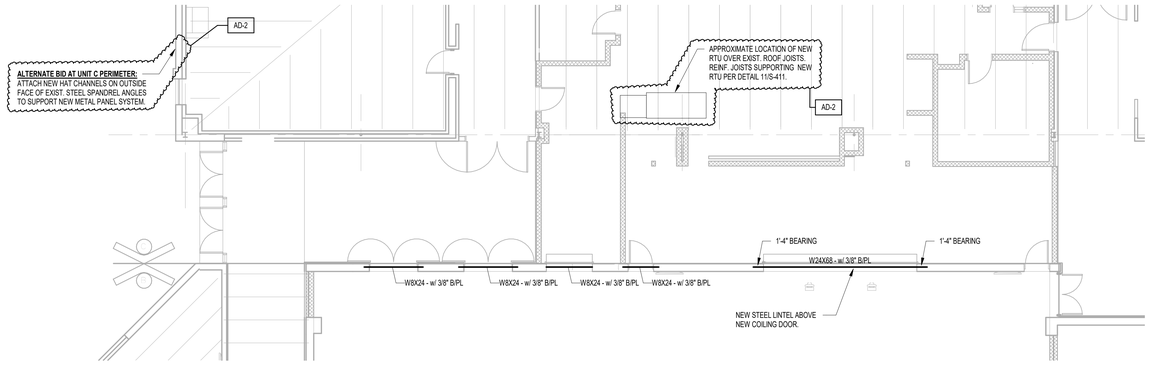
REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02.17.2022	ADDENDUM #2
AD-3	02.23.2022	ADDENDUM #3

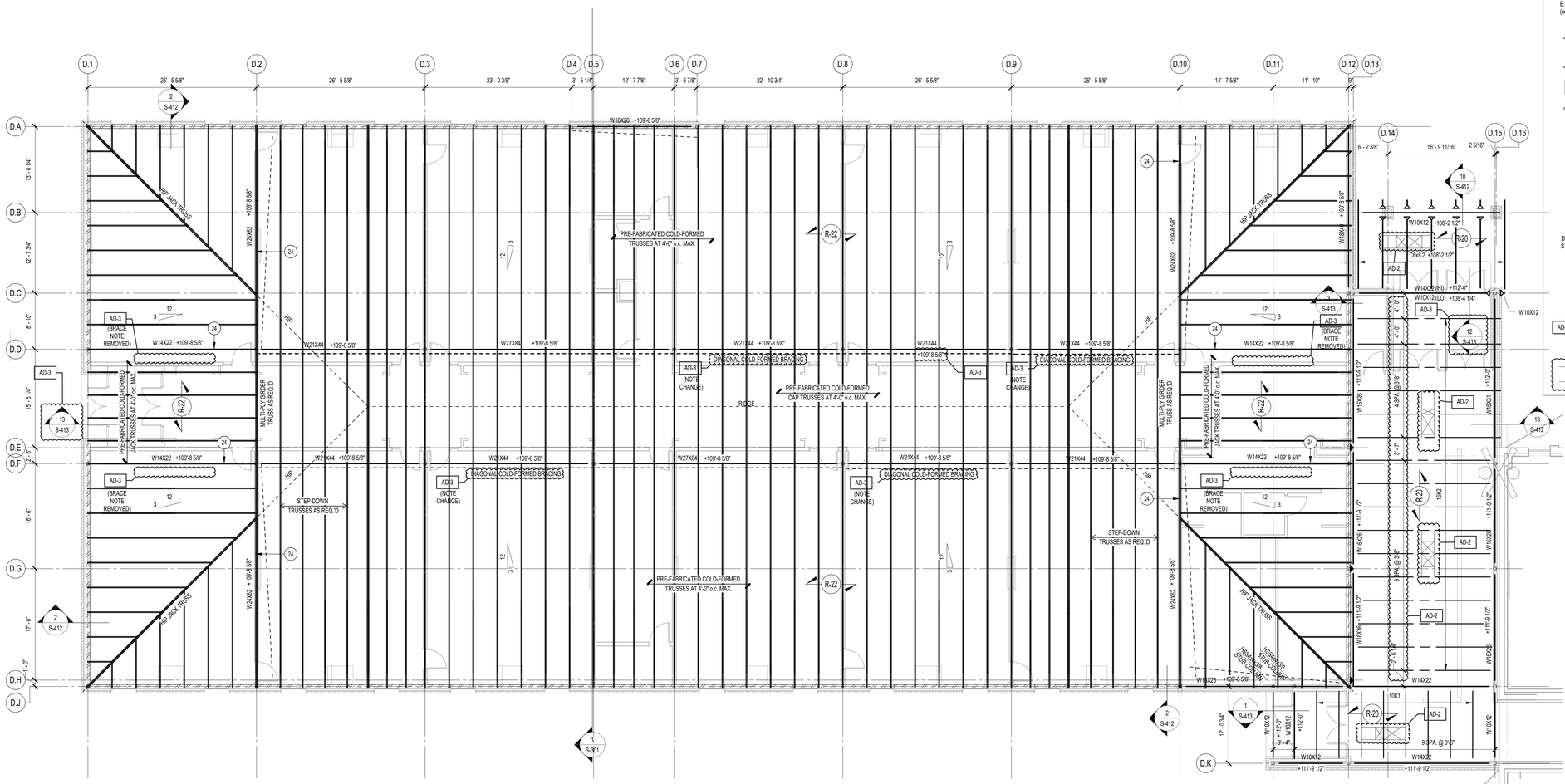
DRAWING
MEZZANINE/LOW ROOF
FRAMING PLAN - UNIT B

PROJECT
DOUGLAS MACARTHUR ES
ADDITIONS AND RENOVATIONS

SHEET
B S-204



2 PARTIAL ROOF FRAMING PLAN - UNIT C
1/8" = 1'-0"



1 ROOF FRAMING PLAN - UNIT D
1/8" = 1'-0"

FRAMING PLAN NOTES

1. REF. S-001 FOR STRUCTURAL NOTES, DESIGN DATA, SCHEDULES & LEGENDS.
2. REF. THE S-400 SERIES FOR TYPICAL FRAMING AND MASONRY DETAILS.
3. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. THE MECHANICAL, ELECTRICAL, AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED.
4. ALL ELEVATIONS ARE REFERENCED FROM THE FIRST FLOOR F/N. FLOOR ELEVATION +100'-0". COORD. USGS ELEVATION WITH CIVIL DWGS.
5. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. SEE FOUNDATION PLANS FOR SIZES OF STEEL COLUMNS SUPPORTED ON FOUNDATIONS.
7. REF. S-411 FOR TYPICAL CONNECTION & FRAMING DETAILS.
8. REF. S-421 FOR TYPICAL MASONRY DETAILS
9. INSTALL CONTINUOUS BENT PLATE/ANGLE POUR STOPS AT ALL ELEVATED SLAB-ON-DECK PERIMETER EDGES AND AROUND ALL INTERIOR FLOOR OPENINGS (BOTH SHOWN AND NOT SHOWN). SEE DETAIL 4/S-411.
10. INSTALL CONTINUOUS ANGLES AT ALL PERIMETER ROOF EDGES. SEE DETAIL X/S-XXX FOR ATTACHEMENT TO BEAM AND FOR ALL CONDITIONS NO SPECIFICALLY DEFINED IN FRAMING SECTIONS.
11. INSTALL CONTINUOUS CONCRETE CURBS PER DETAIL X/S-XXX AROUND THE PERIMETER OF ALL MECHANICAL ROOMS AND AROUND FLOOR PENETRATIOSN BOTH SHOWN AND NOW SHOWN INCLUDING STEEL COLUMN PENETRATIONS.
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15. ALL ELEVATIONS SHOWN ON PLAN INDICATE TOP OF STEEL BEAM UNLESS NOTED OTHERWISE.
16. PROVIDE CHANNEL FRAMES AT ALL SUPPORTED SLAB OPENINGS PER TYPICAL DETAIL ON S-411. COORDINATE EXACT NUMBER, LOCATIONS & DIMENSIONS WITH THE APPROPRIATE CONTRACTORS & THE ARCH. & MEP DRAWINGS.
17. PROVIDE FRAMES AT ALL ROOF DRAINS, ROOF HATCHES & OTHER ROOF OPENINGS PER TYPICAL DETAILS ON S-411. COORD. EXACT NUMBER, LOCATIONS & DIMENSIONS WITH THE APPROPRIATE CONTRACTORS & THE ARCH. & MEP DWGS.
18. PROVIDE CMU REINFORCING AS NOTED ON PLANS. IF NOT SHOWN ON PLANS OR DETAILS, MINIMUM CMU WALL REINFORCING TO BE #5 VERTS @ 48" O.C. PROVIDE OPEN-CORE BOND BEAMS AT TOPS OF WALLS, AT CHANGES IN CMU THICKNESS, AND WHERE INDICATED ON PLANS & SECTIONS (10'-0" O.C. MAX VERTICAL SPACING). PROVIDE 1/2 OF INTERRUPTED VERTICALS AT JAMBS OF OPENINGS AND PROVIDE ADDITIONAL VERT'S. AT ENDS OF WALLS.
19. ALL MASONRY BOND BEAMS, OTHER THAN BOND BEAM LINTELS OVER OPENINGS, SHALL BE "OPEN-CORE" BOND BEAMS TO ALLOW VERTICAL REINFORCING TO PASS THROUGH, UNLESS NOTED OTHERWISE.
20. REF. ARCH. DWGS. FOR MASONRY CONTROL & EXPANSION JOINT LOCATIONS.
21. ALL HORIZONTAL AND DIAGONAL BRIDGING FOR STEEL JOISTS SHALL BE DESIGNED, LOCATED & PROVIDED BY THE JOIST SUPPLIER PER SJI SPECIFICATIONS.
22. FOR ALL MODIFICATIONS MADE TO EXIST. CONC. TEES, FIELD LOCATE EXISTING REINF. (VIA X-RAY OR OTHER APPROVED METHOD) TO AVOID CUTTING INTO TENDONS PRIOR TO CUTTING AND TO AVOID ANCHORING INTO TENDONS.
23. NEW OPENINGS CUT INTO CONCRETE TEES SHALL FOLLOW REQUIREMENTS AS SHOWN ON DETAIL 2/S-203. SEE STRUCTURAL PLANS FOR OPENINGS WHERE WIDTH IS GREATER THAN 18".
24. ALIGN TRUSS TO BEAM BELOW ON GRID AT THIS LOCATION. DESIGN FOR 200 PLF DRAG LOAD FOR LATERAL TRANSFER TO BRACING.

PLAN LEGEND:

T/'X'	DENOTES TOP OF STEEL, SLAB, ETC.
E.O.S. (or EOS)	DENOTES EDGE OF SLAB (MEASURED FROM BEAM C.L.) SEE TYPICAL DETAIL A/S-410
E.O.D. (or EOD)	DENOTES EDGE OF DECK (MEASURED FROM BEAM C.L.) NOTE: PERIMETER ROOF ANGLE/BENT PL NOT REQUIRED

R-XX — DENOTES 1-1/2", 20 / 22 GA. WIDE RIB STEEL ROOF DECK, PRIME PAINTED ONLY.

F (F.F. = SEE PLAN) — DENOTES 1-1/2", 20 GA. GALV. COMPOSITE STEEL FLOOR DECK X'S-1/2" N.W. CONCRETE TOPPING w/ 6x6 W2.1xW2.1 W.W.F (5" TOTAL SLAB 'f').

R-20A — DENOTES 1-1/2", 20 GA. WIDE RIB ACCUSTICAL STEEL ROOF DECK, PRIME PAINTED (BOTH SIDES) ONLY.

DENOTES BEAM-TO-COLUMN MOMENT CONNECTION PER DETAIL 10/S-411

DENOTES BEAM-THRU-BEAM MOMENT CONNECTION PER DETAIL 4/S-411

W24X55 +115'-7" — DENOTES BEAM SIZE; DENOTES TOP OF STEEL ELEVATION

TYP. BRACING NOTATION - REFER TO TYP. DETAIL 8/S-411 FOR MORE INFORMATION

W16X26 — BOTTOM OF BRACE; TOP OF BRACE; DENOTES HSSSx5x5/16 DIAGONAL BRACE

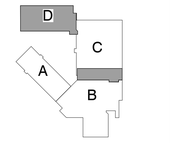
DENOTES APPROX. LOCATION OF FRAMED OPENING FOR ROOF DRAIN OR ROOF HATCH. REFER TO DETAIL 11/S-411. COORD. EXACT LOCATION w/ MECH. CONTRACTOR.

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY NHF
DRAWN BY NHF
CHECKED BY SAC

SCOTT A. CLORE REGISTERED PE10606154 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

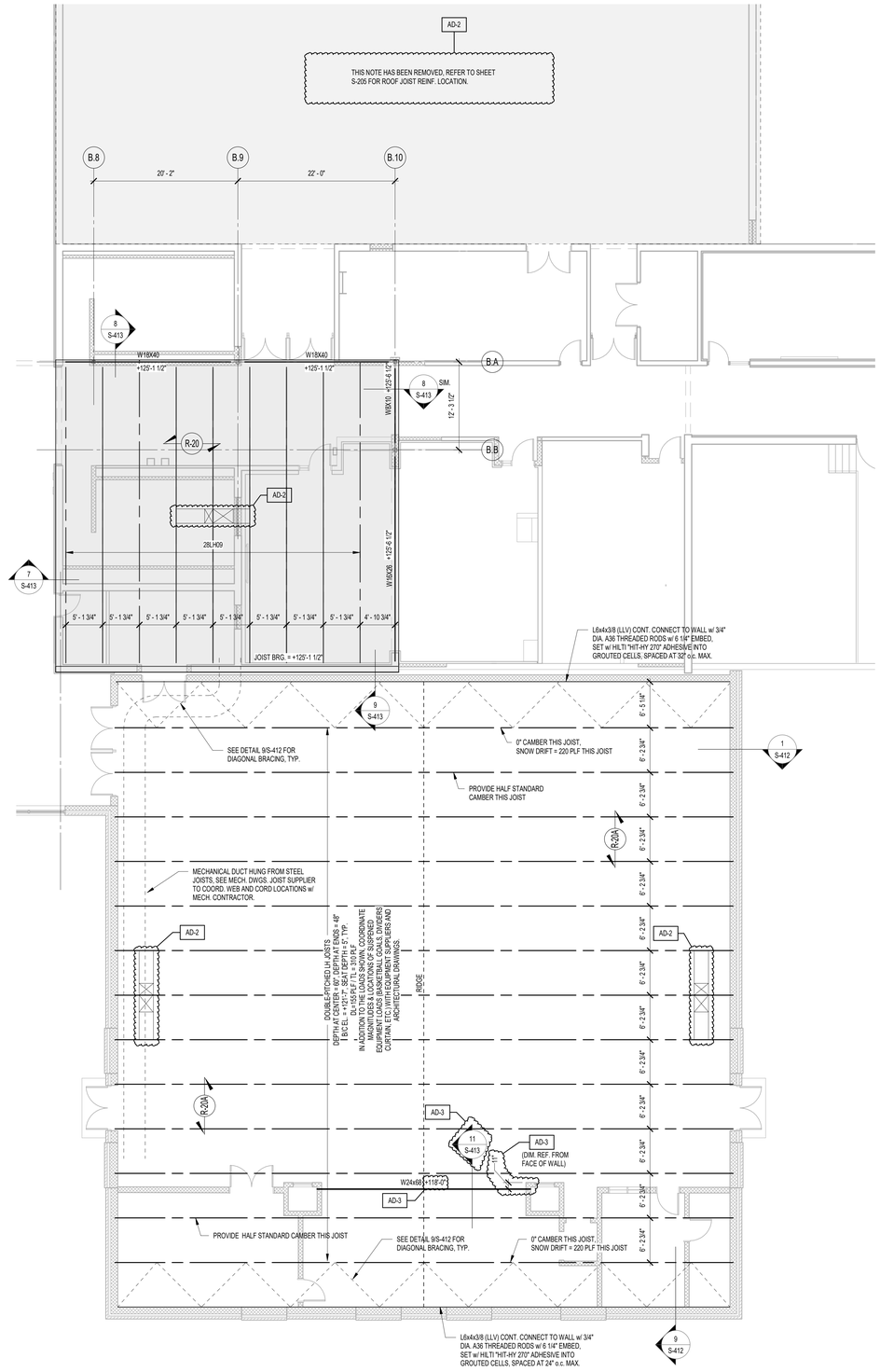
MARK	DATE	ISSUED FOR
AD-2	02.17.2022	ADDENDUM #2
AD-3	02.23.2022	ADDENDUM #3

DRAWING
ROOF FRAMING PLAN - UNITS C & D

AD-2 (SHEET NAME CHANGE)

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C/D S-205



1 HIGH ROOF FRAMING PLAN - UNIT B
1/8" = 1'-0"

FRAMING PLAN NOTES

1. REF. S-001 FOR STRUCTURAL NOTES, DESIGN DATA, SCHEDULES & LEGENDS.
2. REF. THE S-400 SERIES FOR TYPICAL FRAMING AND MASONRY DETAILS.
3. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. THE MECHANICAL, ELECTRICAL AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED.
4. ALL ELEVATIONS ARE REFERENCED FROM THE FIRST FLOOR FIN. FLOOR ELEVATION +100'-0". COORD. USGS ELEVATION WITH CIVIL DWGS.
5. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. SEE FOUNDATION PLANS FOR SIZES OF STEEL COLUMNS SUPPORTED ON FOUNDATIONS.
7. REF. S-411 FOR TYPICAL CONNECTION & FRAMING DETAILS.
8. REF. S-421 FOR TYPICAL MASONRY DETAILS
9. INSTALL CONTINUOUS BENT PLATE/ANGLE POUR STOPS AT ALL ELEVATED SLAB-ON-DECK PERIMETER EDGES AND AROUND ALL INTERIOR FLOOR OPENINGS (BOTH SHOWN AND NOT SHOWN). SEE DETAIL 4/S-411.
10. INSTALL CONTINUOUS ANGLES AT ALL PERIMETER ROOF EDGES. SEE DETAIL X/S-XXX FOR ATTACHEMENT TO BEAM AND FOR ALL CONDITIONS NO SPECIFICALLY DEFINED IN FRAMING SECTIONS.
11. INSTALL CONTINUOUS CONCRETE CURBS PER DETAIL X/S-XXX AROUND THE PERIMETER OF ALL MECHANICAL ROOMS AND AROUND FLOOR PENETRATIONS BOTH SHOWN AND NOW SHOWN INCLUDING STEEL COLUMN PENETRATIONS.
12. ALL WALLS SHALL BE LAID OUT FROM THE ARCHITECTURAL DRAWINGS.
13. REF. ARCH. DRAWINGS. FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
14. COORDINATE EXACT SIZE & LOCATION OF ANY MECHANICAL OPENINGS IN FLOOR SLAB, ROOF DECK, OR WALLS WITH THE MEP CONTRACTOR(S). LOCATION & SIZE OF ALL DUCT OPENINGS, GRILLES, ETC. SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
15. ALL ELEVATIONS SHOWN ON PLAN INDICATE TOP OF STEEL BEAM UNLESS NOTED OTHERWISE.
16. PROVIDE CHANNEL FRAMES AT ALL SUPPORTED SLAB OPENINGS PER TYPICAL DETAIL ON S-411. COORDINATE EXACT NUMBER, LOCATIONS & DIMENSIONS WITH THE APPROPRIATE CONTRACTORS & THE ARCH. & MEP DRAWINGS.
17. PROVIDE FRAMES AT ALL ROOF DRAINS, ROOF HATCHES & OTHER ROOF OPENINGS PER TYPICAL DETAILS ON S-411. COORD. EXACT NUMBER, LOCATIONS & DIMENSIONS WITH THE APPROPRIATE CONTRACTORS & THE ARCH. & MEP DWGS.
18. PROVIDE CMU REINFORCING AS NOTED ON PLANS. IF NOT SHOWN ON PLANS OR DETAILS, MINIMUM CMU WALL REINFORCING TO BE #5 VERTS @ 48" O.C. PROVIDE OPEN-CORE BOND BEAMS AT TOPS OF WALLS, AT CHANGES IN CMU THICKNESS, AND WHERE INDICATED ON PLANS & SECTIONS (10'-0" O.C. MAX VERTICAL SPACING). PROVIDE 1/2 OF INTERRUPTED VERTICALS AT JAMBS OF OPENINGS AND PROVIDE ADDITIONAL VERT'S. AT ENDS OF WALLS.
19. ALL MASONRY BOND BEAMS, OTHER THAN BOND BEAM LINTELS OVER OPENINGS, SHALL BE "OPEN-CORE" BOND BEAMS TO ALLOW VERTICAL REINFORCING TO PASS THROUGH, UNLESS NOTED OTHERWISE.
20. REF. ARCH. DWGS. FOR MASONRY CONTROL & EXPANSION JOINT LOCATIONS.
21. ALL HORIZONTAL AND DIAGONAL BRIDGING FOR STEEL JOISTS SHALL BE DESIGNED, LOCATED & PROVIDED BY THE JOIST SUPPLIER PER SJI SPECIFICATIONS.
22. FOR ALL MODIFICATIONS MADE TO EXIST. CONC. TEES. FIELD LOCATE EXISTING REINF. (VIA X-RAY OR OTHER APPROVED METHOD) TO AVOID CUTTING INTO TENDONS PRIOR TO CUTTING AND TO AVOID ANCHORING INTO TENDONS.
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24. ALIGN TRUSS TO BEAM BELOW ON GRID AT THIS LOCATION. DESIGN FOR 200 PLF DRAG LOAD FOR LATERAL TRANSFER TO BRACING.

PLAN LEGEND:

T/'X'	DENOTES TOP OF STEEL, SLAB, ETC.
E.O.S. (or EOS)	DENOTES EDGE OF SLAB (MEASURED FROM BEAM C.L.) SEE TYPICAL DETAIL A/S-410
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F, F.F. = SEE PLAN — DENOTES 1-1/2", 20 GA. GALV. COMPOSITE STEEL FLOOR DECK +3-1/2" N.W. CONCRETE TOPPING w/ 6x6 W2.1xW2.1 W.W.F (5" TOTAL SLAB 'f).

R-20A — DENOTES 1-1/2", 20 GA. WIDE RIB ACOUSTICAL STEEL ROOF DECK, PRIME PAINTED (BOTH SIDES) ONLY.

DENOTES BEAM-TO-COLUMN MOMENT CONNECTION PER DETAIL 10/S-411

DENOTES BEAM-THRU-BEAM MOMENT CONNECTION PER DETAIL 4/S-411

DENOTES BEAM SIZE — W24X55 — +115'-7" — DENOTES TOP OF STEEL ELEVATION

TYP. BRACING NOTATION - REFER TO TYP. DETAIL 8/S-411 FOR MORE INFORMATION

W16X26 — BOTTOM OF BRACE — DENOTES HSS5x5x516 DIAGONAL BRACE — TOP OF BRACE

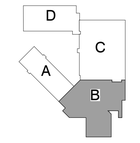
AD-2 — DENOTES APPROX. LOCATION OF FRAMED OPENING FOR ROOF DRAIN OR ROOF HATCH. REFER TO DETAIL 11/S-411. COORD. EXACT LOCATION w/ MECH. CONTRACTOR.

GIBRALTAR DESIGN
ARCHITECTURE - ENGINEERING - INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
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Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
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DRAWING
HIGH ROOF FRAMING PLAN - UNIT B

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
B
S-206

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY
SCHOOL CORPORATION
CEDAR LAKE, INDIANA

NOTES:
1. ARRANGEMENT OF TRUSS MEMBERS IS FOR ILLUSTRATIVE PURPOSES ONLY. ACTUAL TRUSS MEMBER SIZE AND CONFIGURATION TO BE DETERMINED BY TRUSS DESIGNER.

2. TRUSS DESIGNER SHALL DESIGN AND PROVIDE BRACING AND/OR BLOCKING TO TRANSFER THE DIAPHRAGM SHEAR FORCE OF 150 PLF (SERVICE) INTO THE SUPPORTING STRUCTURE.

1 FRAMING SECTION
1/4" = 1'-0"

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
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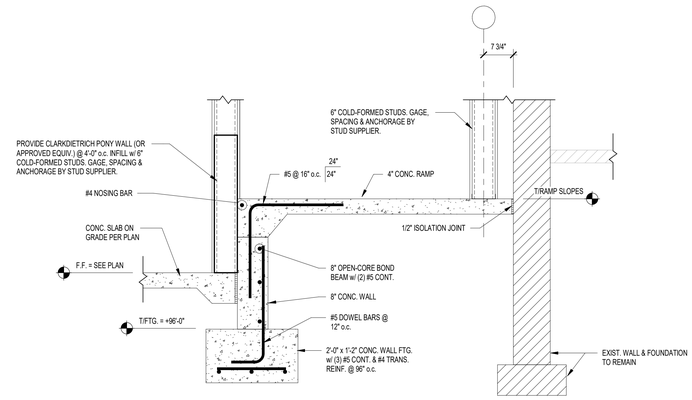
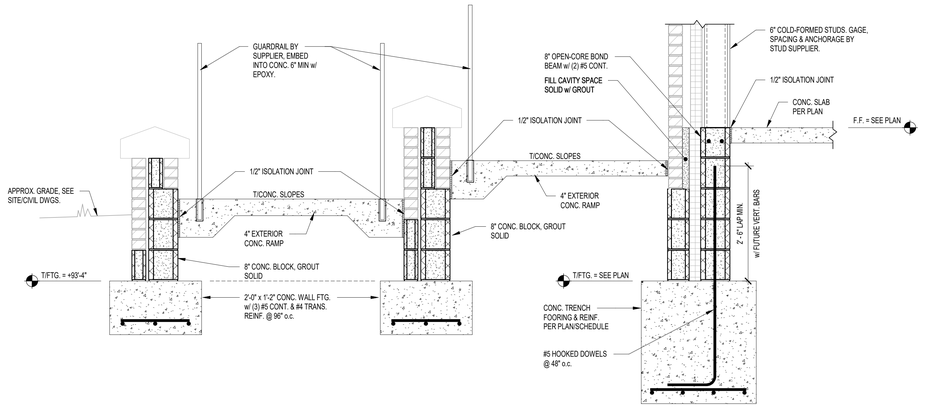
DRAWING
COLD-FORMED METAL TRUSS SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

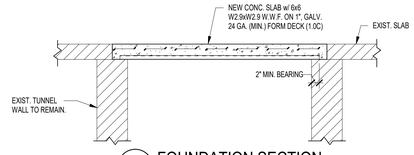
SHEET
S-301



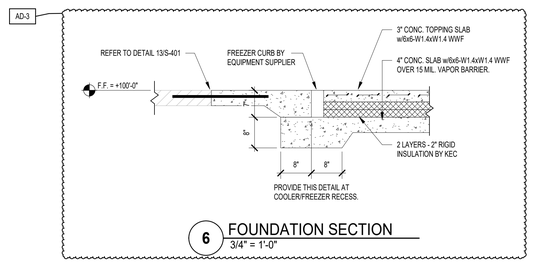
4 FOUNDATION SECTION
3/4" = 1'-0"



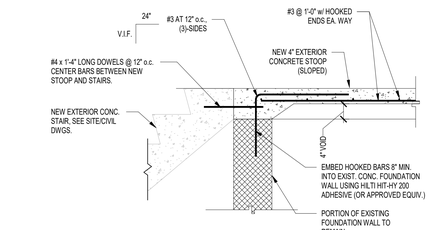
3 FOUNDATION SECTION
3/4" = 1'-0"



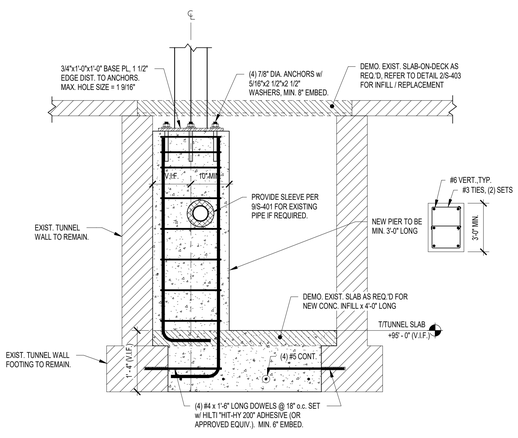
2 FOUNDATION SECTION
3/4" = 1'-0"



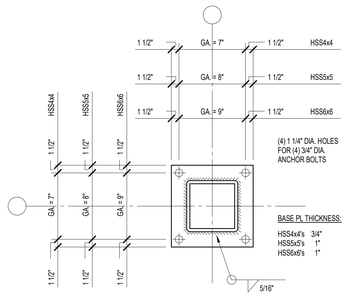
6 FOUNDATION SECTION
3/4" = 1'-0"



5 FOUNDATION SECTION
3/4" = 1'-0"



1 FOUNDATION SECTION
3/4" = 1'-0"



X HSS4, HSS5 & HSS6 BASE PL DETAILS
NOT TO SCALE

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
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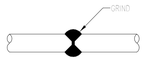
DRAWING
STRUCTURAL FOUNDATION SECTIONS

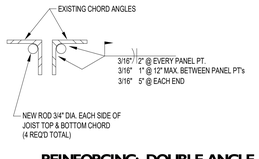
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
S-403

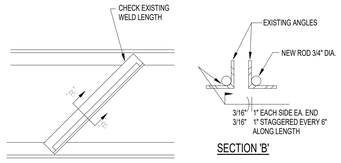


BOTTOM CHORD ROD SPLICE DETAIL

E BOTTOM CHORD ROD SPLICE DETAIL

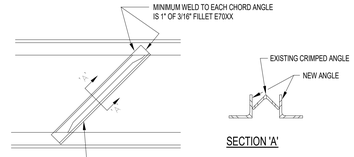


D REINFORCING: DOUBLE-ANGLE CHORD MEMBER



AFTER PLACING AND WELDING NEW RODS IN PLACE, WELD FROM EXISTING WEB ANGLES TO ANGLES SHOULD BE CHECKED AND ADDED TO IF REQUIRED.

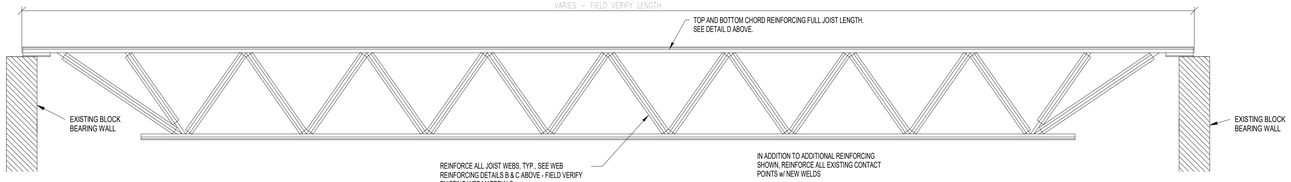
C REINFORCING: DOUBLE-ANGLE WEB MEMBER



NOTE: THE DETAIL FOR REINFORCING A BENT BAR WEB MEMBER IS SIMILAR TO THE DETAIL SHOWN HERE.

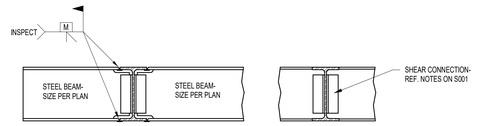
PLACE NEW ANGLES DIRECTLY OVER EXISTING SINGLE-ANGLE MEMBER AND WELD TO CHORD ANGLES USE 2 L's (L1.5x1.5x3/16).

B REINFORCING: CRIMPED ANGLE WEB MEMBER

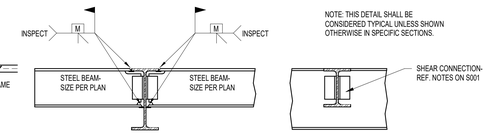


A REINFORCING: ELEVATION VIEW

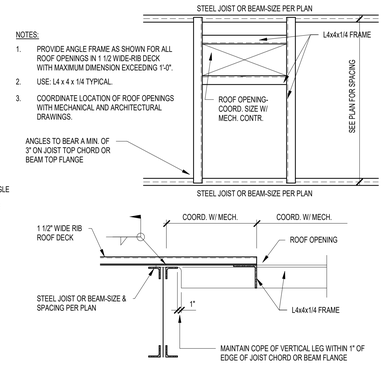
11 JOIST REINFORCEMENT DETAILS
3/4" = 1'-0"



DETAIL A - BEAMS NOMINALLY SAME DEPTH



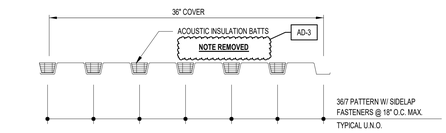
DETAIL B - DEPTH DIFFERENTIAL 2" OR GREATER



ROOF OPENING FRAME 1.5" DECK

7 ROOF OPENING FRAME DETAIL
NOT TO SCALE

4 BEAM-THRU-BEAM MOMENT CONN. DETAIL
NOT TO SCALE



NOTE:

1. 1 1/2", 20 GA. GALVANIZED WIDE RIB STEEL ROOF DECK. CLEAN, TREAT AND PRIME.
2. ALL WELDS SHALL BE 5/8" DIA. PUDDLE WELDS.
3. USE #10 TEK SCREW SIDELAP FASTENERS, U.N.O.
4. MECHANICAL FASTENERS MAY BE USED IN LIEU OF WELDS.

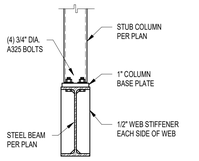
   USE THE FOLLOWING HILTI POWER ACTUATED FASTENERS:
   USE X-EDNK22 THQ12HSN FOR STEEL T 1/8" THROUGH 1/4"
   USE X-EDNK19 THQ12HSN FOR STEEL T 3/16" THROUGH 3/8"

   USE THE FOLLOWING ITW-BUILDEX POWER ACTUATED FASTENERS:
   USE BX12 FOR STEEL T 1/8" THROUGH 3/16"
   USE BX14 FOR STEEL T OVER 3/16" THROUGH 3/8"

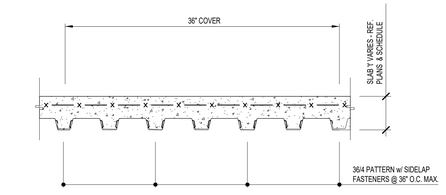
   USE #10 TEK SCREWS FOR FASTENING TO COLD-FORMED STEEL.

   SUBMIT PROPOSED FASTENERS & TECHNICAL DATA FOR REVIEW.
5. PROVIDE MFR'S. STD. INERT, NON-ORGANIC FIBER SOUND-ABSORBING BATTS PLACED IN RIB OPENINGS. NRC = 0.65.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

3 1 1/2" Wide-Rib Acoustical Steel Roof Deck
NOT TO SCALE



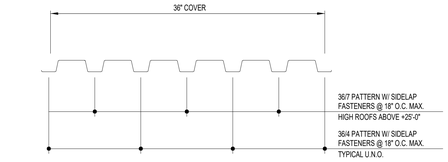
6 Typical Stub Column Detail
NOT TO SCALE



NOTE:

1. 1 1/2", 20 GA. GALVANIZED COMPOSITE STEEL FLOOR DECK.
2. WELD DECK TO SUPPORTING STRUCTURE USING 3/4" DIAMETER WELDS.
3. MECHANICALLY FASTEN SIDELAPS @ 36" O.C. MAX. w/ #10 TEK SCREWS.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. SIDELAPS MAY BE NESTING, OR INTERLOCKING AT CONTRACTOR'S OPTION.

2 1 1/2" COMPOSITE STEEL DECK
NOT TO SCALE



NOTE:

1. 1 1/2", 20 GA. GALVANIZED WIDE RIB STEEL ROOF DECK. CLEAN, TREAT AND PRIME.
2. USE #10 TEK SCREW SIDELAP FASTENERS, U.N.O.
3. ALL WELDS SHALL BE 5/8" DIA. PUDDLE WELDS.
4. MECHANICAL FASTENERS MAY BE USED IN LIEU OF WELDS:

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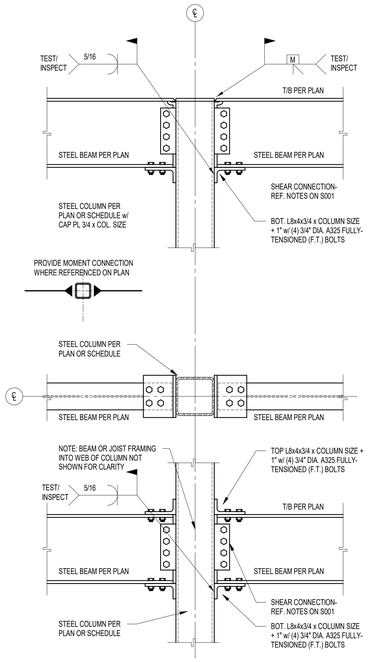
   USE XEDNK22 THQ12HSN FOR STEEL T 1/8" THROUGH 1/4"
   USE XEDNK19 THQ12HSN FOR STEEL T 3/16" THROUGH 3/8"

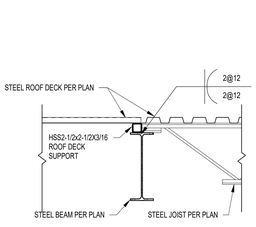
   USE THE FOLLOWING ITW-BUILDEX POWER ACTUATED FASTENERS:
   USE BX12 FOR STEEL T 1/8" THROUGH 3/16"
   USE BX14 FOR STEEL T OVER 3/16" THROUGH 3/8"

   USE #10 TEK SCREWS FOR FASTENING TO COLD-FORMED STEEL.
   SUBMIT PROPOSED FASTENERS & TECHNICAL DATA FOR REVIEW.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

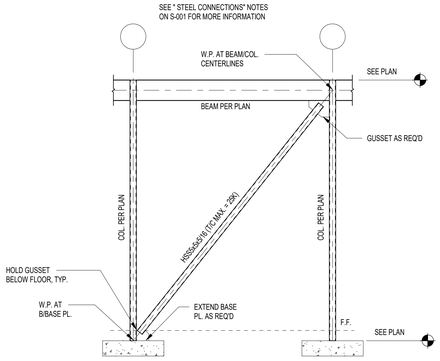
1 1 1/2" STEEL ROOF DECK
NOT TO SCALE



10 BEAM TO COLUMN MOMENT CONN. DETAILS
NOT TO SCALE

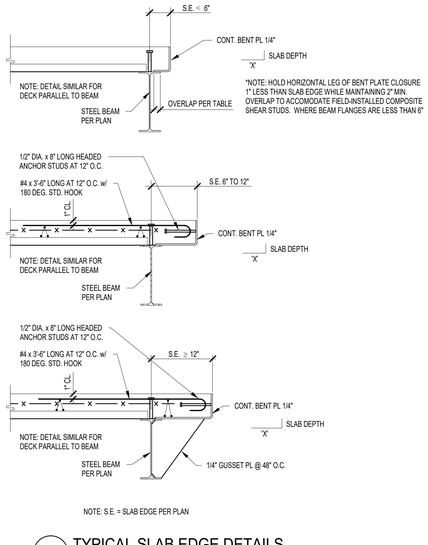


9 TYPICAL ROOF DECK SUPPORT AT CHANGE OF DECK
NOT TO SCALE



8 TYPICAL BRACING DETAIL
NOT TO SCALE

NOTE: ASSUME THAT ALL BENT PLATE SLAB EDGES SHALL BE FIELD WELDED AFTER ADJUSTMENT TO MAINTAIN TOLERANCES AND REQ'D. CLEARANCES. SLAB CLOSURES FOR SHORT MEMBERS, OR FOR SLAB EDGES WHERE TOLERANCES ARE NOT CRITICAL, MAY BE SHOP-WELDED PENDING APPROVAL OF THE ENGINEER. THE FABRICATOR & ERECTOR SHALL COORDINATE ALL FIELD WELDING VS. SHOP WELDING AT THE TIME OF BIDDING. LACK OF FIELD WELD SYMBOLS ON SPECIFIC SECTIONS DOES NOT RELIEVE THE FABRICATOR/ ERECTOR FROM THE RESPONSIBILITY TO MAINTAIN TOLERANCES.



NOTE: S.E. = SLAB EDGE PER PLAN

5 TYPICAL SLAB EDGE DETAILS
NOT TO SCALE

GIBRALTAR DESIGN
ARCHITECTURE - ENGINEERING - INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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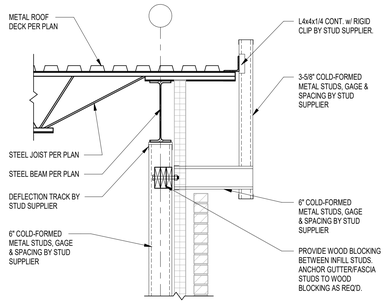
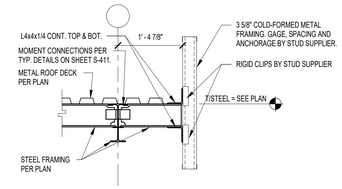
DRAWING
TYPICAL FRAMING SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
S-411



13 FRAMING SECTION
3/4" = 1'-0"



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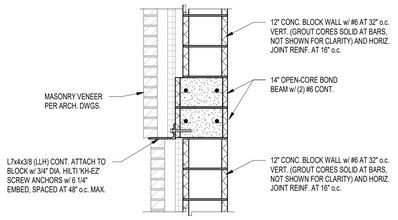

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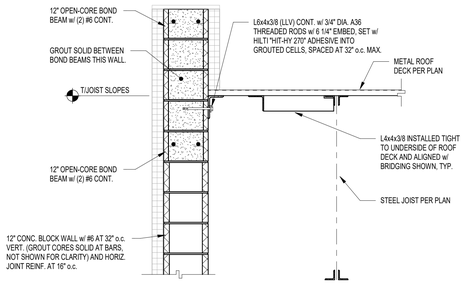

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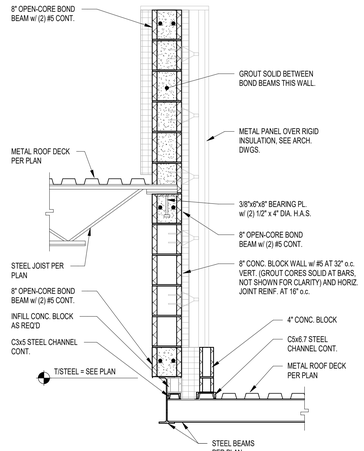

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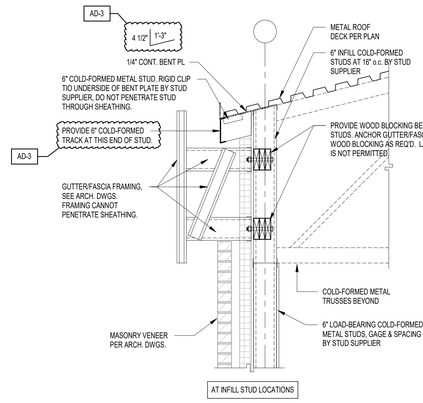

12 FRAMING SECTION
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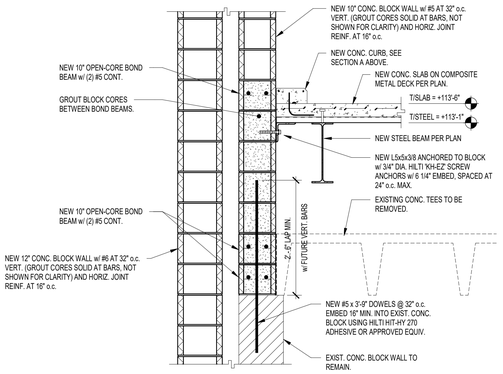

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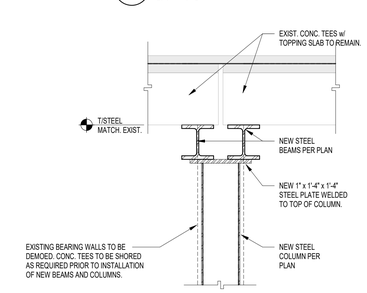

4 FRAMING SECTION
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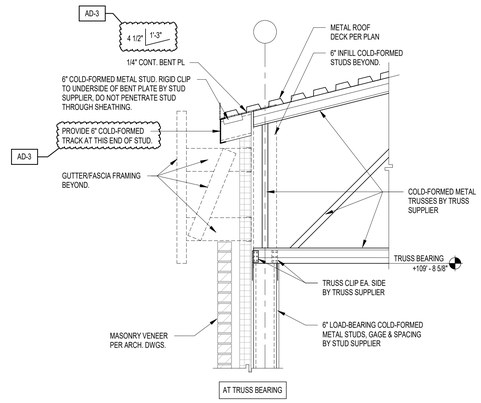

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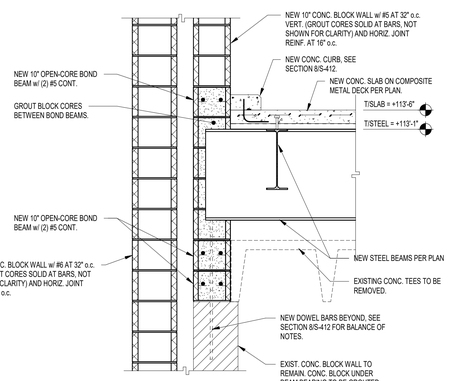
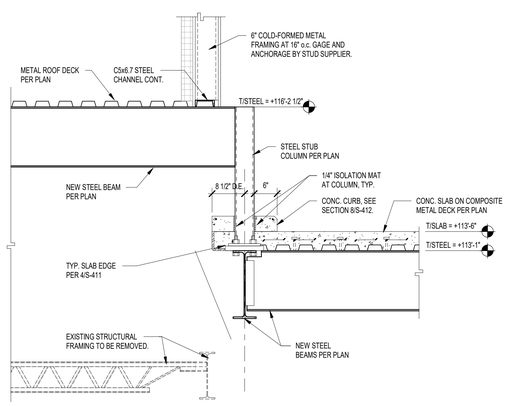
3/4" = 1'-0"



11 FRAMING SECTION
3/4" = 1'-0"



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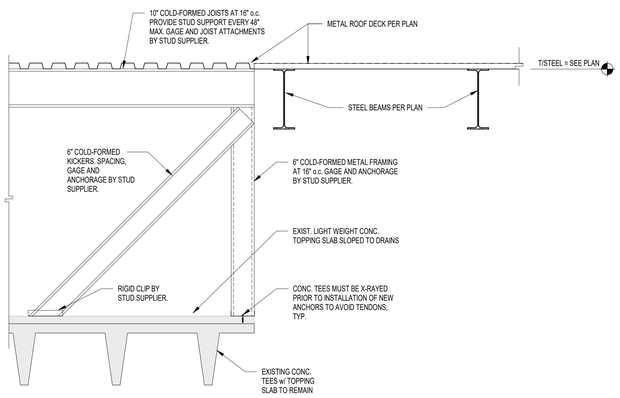
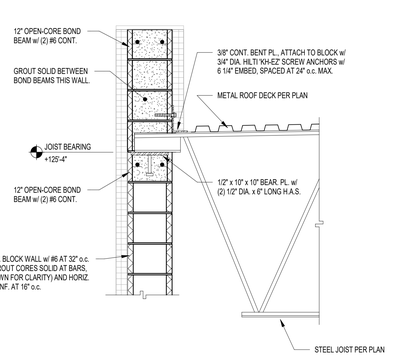
3/4" = 1'-0"



3 FRAMING SECTION
3/4" = 1'-0"



1 FRAMING SECTION
3/4" = 1'-0"

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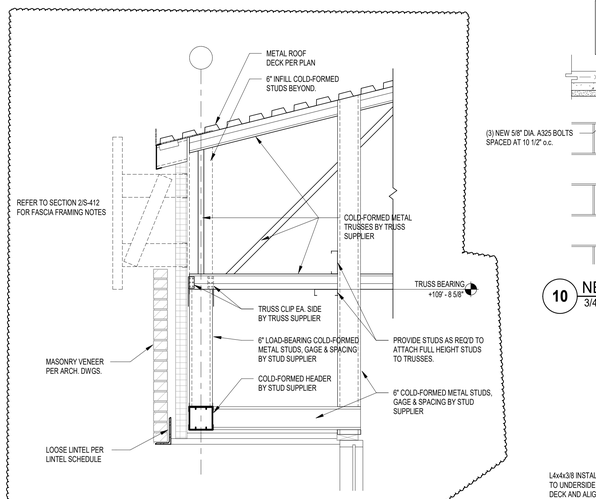
SHEET
S-412



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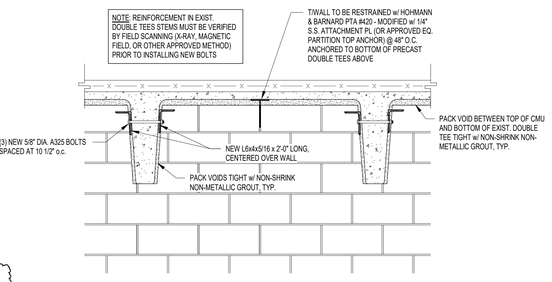
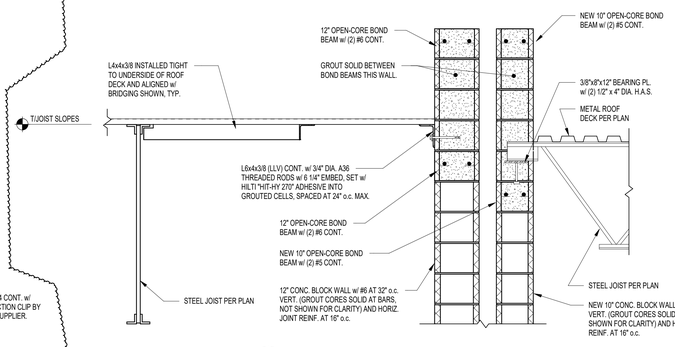


10 NEW CMU BEARING AT EXISTING DOUBLE TEE
3/4" = 1'-0"



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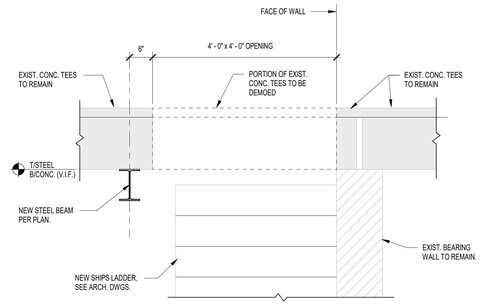

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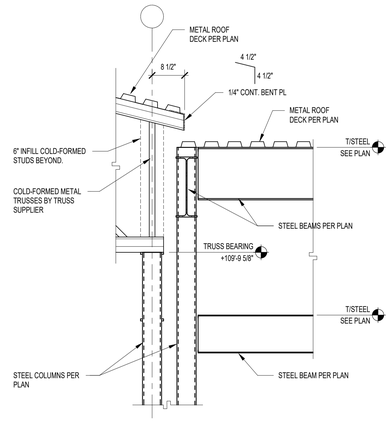

3 FRAMING SECTION
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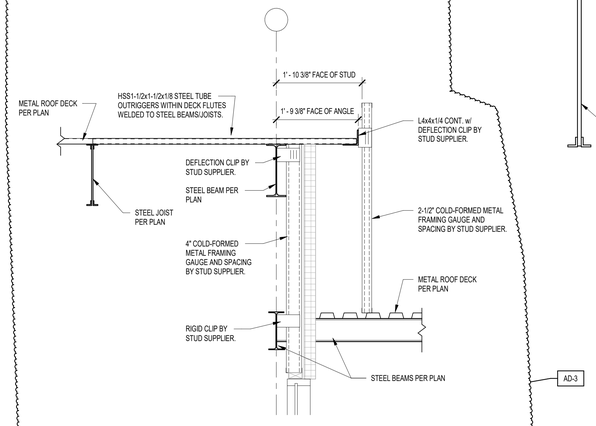

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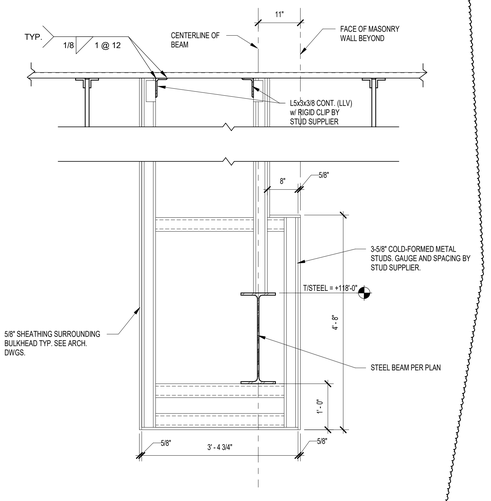

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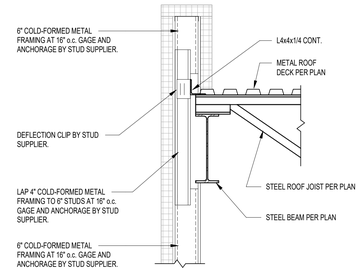

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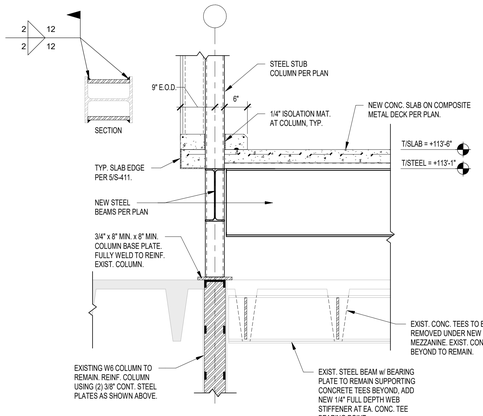

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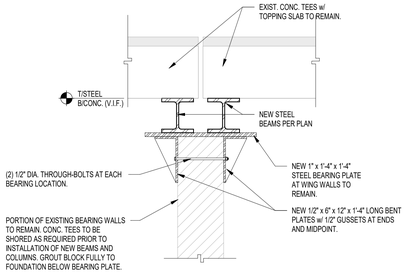

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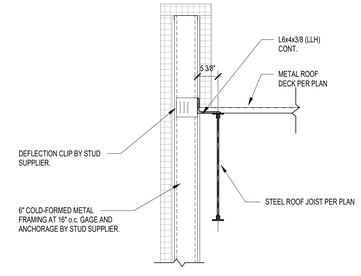

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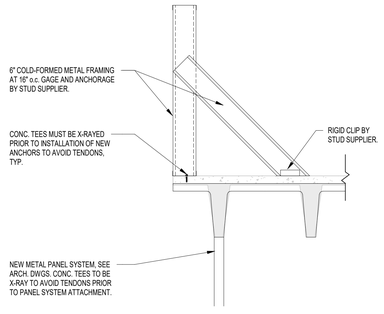

4 FRAMING SECTION
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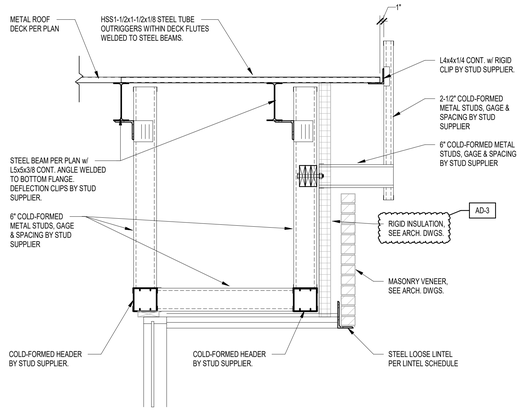

1 FRAMING SECTION
3/4" = 1'-0"

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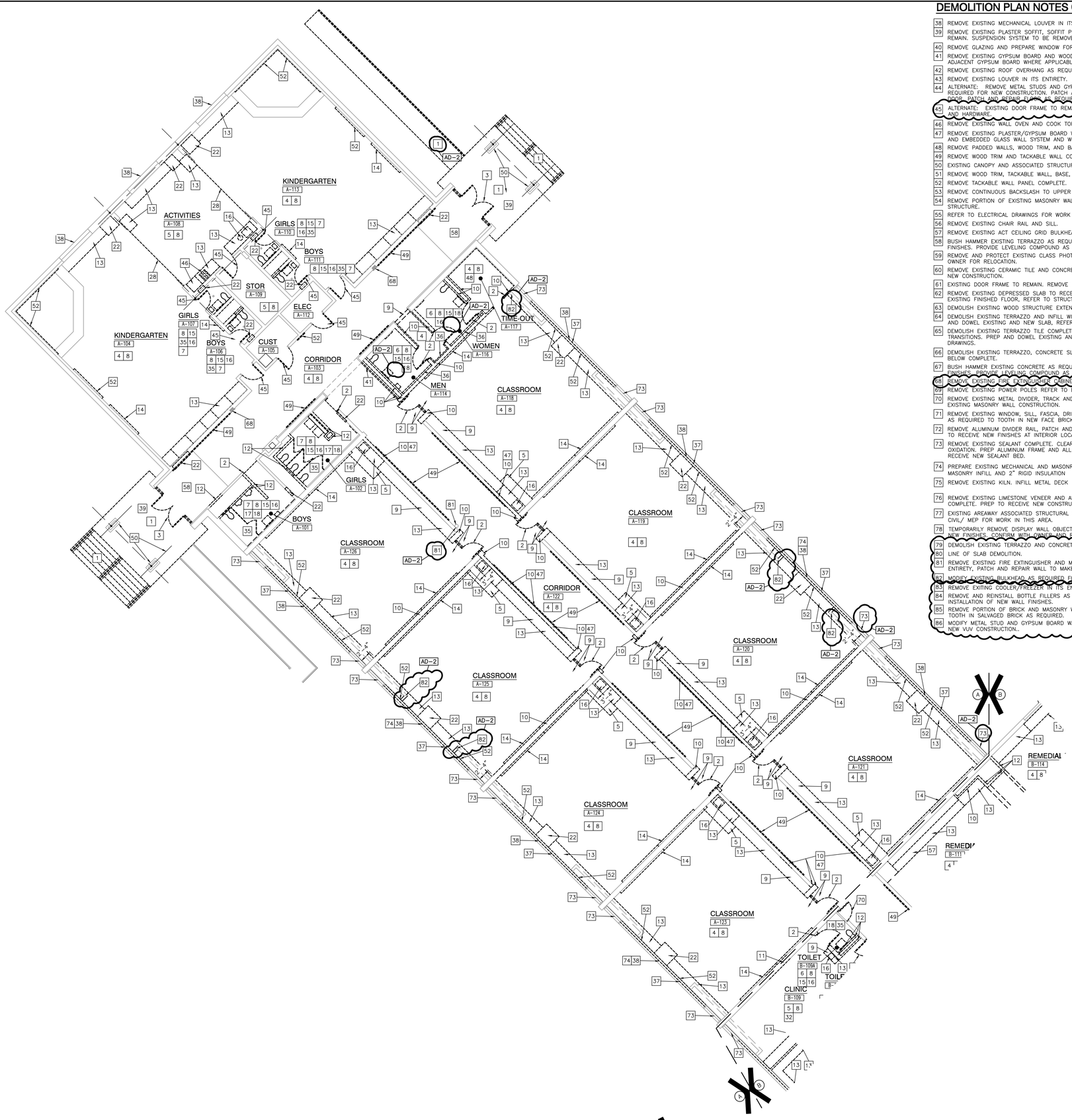
SHEET
S-413



UNIT "A" ARCHITECTURAL FIRST FLOOR DEMOLITION PLAN

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

DEMOLITION PLAN NOTES CONTINUED :

38 REMOVE EXISTING MECHANICAL LOUVER IN ITS ENTIRETY.
39 REMOVE EXISTING PLASTER SOFFIT, SOFFIT PRIMARY STEEL STRUCTURE TO REMAIN. SUSPENSION SYSTEM TO BE REMOVED
40 REMOVE GLAZING AND PREPARE WINDOW FOR NEW SPANDREL PANELS.
41 REMOVE EXISTING GYPSUM BOARD AND WOOD FURRING. PATCH AND REPAIR ADJACENT GYPSUM BOARD WHERE APPLICABLE.
42 REMOVE EXISTING ROOF OVERHANG AS REQUIRED FOR NEW CONSTRUCTION.
43 REMOVE EXISTING LOUVER IN ITS ENTIRETY.
44 ALTERNATE: REMOVE METAL STUDS AND GYPSUM BOARD WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR TO RECEIVE NEW DOOR. PATCH AND REPAIR FLOOR AS REQUIRED TO ACCEPT NEW FINISHES.
45 ALTERNATE: EXISTING DOOR FRAME TO REMAIN. REMOVE DOOR, TRANSOM, AND HARDWARE. AD-2
46 REMOVE EXISTING WALL OVEN AND COOK TOP IN ITS ENTIRETY.
47 REMOVE EXISTING PLASTER/GYPSUM BOARD WALL AND METAL STUD FRAMING AND EMBEDDED GLASS WALL SYSTEM AND WOOD TRIM.
48 REMOVE PADDED WALLS, WOOD TRIM, AND BASE.
49 REMOVE WOOD TRIM AND TACKABLE WALL COMPLETE.
50 EXISTING CANOPY AND ASSOCIATED STRUCTURE TO REMAIN.
51 REMOVE WOOD TRIM, TACKABLE WALL, BASE, AND STRUCTURE.
52 REMOVE TACKABLE WALL PANEL COMPLETE.
53 REMOVE CONTINUOUS BACKSLASH TO UPPER CABINETS COMPLETE.
54 REMOVE PORTION OF EXISTING MASONRY WALL TO INSTALL NEW BUILDING STRUCTURE.
55 REFER TO ELECTRICAL DRAWINGS FOR WORK IN THIS AREA.
56 REMOVE EXISTING CHAIR RAIL AND SILL.
57 REMOVE EXISTING ACT CEILING GRID BULKHEAD COMPLETE.
58 BUSH HAMMER EXISTING TERRAZZO AS REQUIRED FOR NEW LEVEL FLOOR FINISHES. PROVIDE LEVELING COMPOUND AS REQUIRED.
59 REMOVE AND PROTECT EXISTING CLASS PHOTOS AND AWARDS. COORDINATE WITH OWNER FOR RELOCATION.
60 REMOVE EXISTING CERAMIC TILE AND CONCRETE CURB COMPLETE TO RECEIVE NEW CONSTRUCTION.
61 EXISTING DOOR FRAME TO REMAIN. REMOVE DOOR, TRANSOM, AND HARDWARE.
62 REMOVE EXISTING DEPRESSED SLAB TO RECEIVE NEW FLOOR CONSTRUCTION AT EXISTING FINISHED FLOOR, REFER TO STRUCTURAL AND MEP DRAWINGS.
63 DEMOLISH EXISTING WOOD STRUCTURE EXTENDING TO EXISTING CEILING.
64 DEMOLISH EXISTING TERRAZZO AND INFILL WITH LIGHTWEIGHT CONCRETE. PREP AND DOWEL EXISTING AND NEW SLAB. REFER TO STRUCTURAL DRAWINGS.
65 DEMOLISH EXISTING TERRAZZO TILE COMPLETE. BUSH HAMMER HIGH SPOTS AT TRANSITIONS. PREP AND DOWEL EXISTING AND NEW SLAB, REFER TO STRUCTURAL DRAWINGS.
66 DEMOLISH EXISTING TERRAZZO, CONCRETE SLAB, AND INSULATION TO BASE SLAB BELOW COMPLETE.
67 BUSH HAMMER EXISTING CONCRETE AS REQUIRED FOR NEW LEVEL FLOOR FINISHES. PROVIDE LEVELING COMPOUND AS REQUIRED.
68 REMOVE EXISTING FIRE EXTINGUISHER CABINET IN ITS ENTIRETY AD-3
69 REMOVE EXISTING POWER POLES REFER TO ELECTRICAL.
70 REMOVE EXISTING METAL DIVIDER, TRACK AND DOOR. INFILL OPENING TO MATCH EXISTING MASONRY WALL CONSTRUCTION.
71 REMOVE EXISTING WINDOW, SILL, FASCIA, DRIP, FACE BRICK AND REINSTALL AS REQUIRED TO TOOTH IN NEW FACE BRICK WITH EXISTING. 1/A-431
72 REMOVE ALUMINUM DIVIDER RAIL, PATCH AND REPAIR FLOOR AS REQUIRED TO RECEIVE NEW FINISHES AT INTERIOR LOCATION.
73 REMOVE EXISTING SEALANT COMPLETE. CLEAR ALUMINUM FRAME FREE OF OXIDATION. PREP ALUMINUM FRAME AND ALL ADJACENT SURFACES TO RECEIVE NEW SEALANT BED.
74 PREPARE EXISTING MECHANICAL AND MASONRY OPENING TO RECEIVE MASONRY INFILL AND 2" RIGID INSULATION
75 REMOVE EXISTING KILN. INFILL METAL DECK PENETRATION FOR INTEGRITY.
76 REMOVE EXISTING LIMESTONE VENEER AND ASSOCIATED ASSEMBLIES COMPLETE. PREP TO RECEIVE NEW CONSTRUCTION.
77 EXISTING AREAWAY ASSOCIATED STRUCTURAL GRATE TO REMAIN. REFER TO CIVIL/ MEP FOR WORK IN THIS AREA.
78 TEMPORARILY REMOVE DISPLAY WALL OBJECTS AS REQUIRED TO RECEIVE NEW FINISHES. CONFIRM WITH OWNER AND REINSTALL COMPLETE
79 DEMOLISH EXISTING TERRAZZO AND CONCRETE SLAB COMPLETE.
80 LINE OF SLAB DEMOLITION.
81 REMOVE EXISTING FIRE EXTINGUISHER AND MOUNTING HARDWARE IN ITS ENTIRETY, PATCH AND REPAIR WALL TO MAKE LIKE NEW.
82 MODIFY EXISTING BULKHEAD AS REQUIRED FOR NEW CONSTRUCTION. AD-2
83 REMOVE EXITING COOLER/FREEZER IN ITS ENTIRETY. AD-3
84 REMOVE AND REINSTALL BOTTLE FILLERS AS REQUIRED FOR DEMO AND INSTALLATION OF NEW WALL FINISHES.
85 REMOVE PORTION OF BRICK AND MASONRY WALL TO RECEIVE NEW LOUVER. TOOTH IN SALVAGED BRICK AS REQUIRED.
86 MODIFY METAL STUD AND GYPSUM BOARD WALL ASSEMBLY TO RECEIVE NEW VUV CONSTRUCTION..

GENERAL DEMOLITION NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO GI SERIES SHEETS.
B. UNLESS NOTED OTHERWISE ON THIS SHEET, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL WORK INDICATED ON THIS SHEET.
C. CONTRACTORS ENCOUNTERING EXISTING MATERIAL WHICH IS SUSPECTED OF CONTAINING ASBESTOS SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND THE OWNERS REPRESENTATIVE.
D. BOLD DASHED LINES INDICATE EXISTING ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXTENT OF DEMOLITION WORK PRIOR TO BIDDING AND FOR COORDINATING THE EXTENT OF DEMOLITION WITH THE INSTALLATION OF NEW SYSTEMS.
E. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION APPLICABLE TO THEIR SCOPE OF WORK AND AS REQUIRED FOR INSTALLATION OF NEW WORK WHETHER OR NOT IT IS SPECIFICALLY INDICATED OR NOTED IN THESE DOCUMENTS.
F. REMOVE ALL ITEMS AND FINISHES MADE OBSOLETE BY NEW CONSTRUCTION. VERIFY ITEMS DEEMED OBSOLETE WITH ARCHITECT PRIOR TO REMOVAL. REFER TO NEW CONSTRUCTION DRAWINGS FOR DEMOLITION REQUIRED NOT SHOWN ON DEMOLITION PLANS.
G. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR OFF SITE REMOVAL OF ALL DEMOLITION MATERIALS AND/OR ITEMS UNLESS NOTED OTHERWISE OR DIRECTED BY THE OWNER.
H. PRIOR TO STARTING DEMOLITION, CONSTRUCT DUST CONTROL BARRIERS AS REQUIRED TO PREVENT THE SPREAD OF DUST INTO SURROUNDING AREAS (WHERE APPLICABLE).
I. WHERE BUILDING EGRESS IS REQUIRED TO PASS THROUGH DEMOLITION AREAS, PROVIDE APPROVED BARRIERS, ETC. TO ENSURE SAFETY OF THE PUBLIC.
J. RELOCATED ITEMS SHALL BE CLEANED AND PLACED IN STORAGE, PER OWNERS' DIRECTION, UNTIL ITEMS ARE READY TO BE INSTALLED. IF ITEMS ARE DAMAGED DURING DEMOLITION OR RELOCATION, THEY SHALL BE REPAIRED OR REPLACED WITH NEW ITEMS AS APPROVED.
K. DEMOLITION SHALL BE PERFORMED WITHOUT DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. WHERE SUCH DAMAGE OCCURS, PATCH, REPAIR, OR RESTORE WALLS, FLOORS, CEILING, ETC. NEATLY TO MATCH EXISTING ADJACENT SURFACE. PROVIDE SHORING, BRACING, OR SUPPORT AS REQUIRED TO PREVENT MOVEMENT OR SETTLEMENT OF EXISTING STRUCTURES.
L. EACH CONTRACTOR IS RESPONSIBLE FOR CUTTING, PATCHING, AND DISCONNECTION OF ITEMS APPLICABLE TO THEIR SCOPE OF WORK. WHERE EXISTING SERVICES ARE ABANDONED, CAP AT LEAST 1" BEHIND NEW FINISHES AND/OR EXISTING SURFACE AND PATCH AS REQUIRED TO RECEIVE NEW FINISHES OR MATCH EXISTING FINISH.
M. ON WALLS THAT ARE TO RECEIVE NEW FINISHES, REMOVE AND REINSTALL EXISTING EQUIPMENT TO REMAIN AS REQUIRED FOR INSTALLATION OF NEW FINISHES.
N. WHERE WALLS OR BULKHEADS ARE REMOVED, PATCH FLOORS, CEILINGS, AND ADJACENT WALLS AS REQUIRED TO MATCH EXISTING OR RECEIVE NEW FINISHES WHERE APPLICABLE. WHERE EXISTING DUCTWORK, PIPING, OR EQUIPMENT IS REMOVED, PATCH OPENINGS AND/OR SURFACES AS REQUIRED TO MATCH ADJACENT SURFACES OR RECEIVE NEW FINISHES WHERE APPLICABLE. REFER TO ALL DEMOLITION DRAWINGS FOR EXTENT OF ITEMS TO REMOVED.
O. OVER CUT NEW OPENINGS IN EXISTING WALLS AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR WALLS AS REQUIRED TO MATCH EXISTING. WHERE APPLICABLE, TOOTH NEW MASONRY INTO EXISTING MASONRY.
P. ALL EQUIPMENT AND FURNITURE WHICH ARE CONSIDERED LOOSE FURNISHING SHALL BE REMOVED BY THE OWNER PRIOR TO DEMOLITION.
Q. MASONRY WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 4" MINIMUM BELOW THE EXISTING FLOOR SLAB UNLESS SETTING ON A SLAB OR SPECIFICALLY NOTED OTHERWISE. PATCH WITH NEW CONCRETE TO BE FLUSH WITH THE EXISTING FLOOR SLAB.
R. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL REVIEW OF DEMOLITION NOTES AND GENERAL DEMOLITION NOTES AS THEY APPLY TO THEIR SCOPE OF WORK.
S. THE OWNER SHALL RESERVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE.
T. REFER TO THE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND TECHNOLOGY DOCUMENTS FOR COMPLETE SCOPE OF DEMOLITION WORK.
U. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKING, ADHESIVES, AND BASES DOWN TO BUT EXCLUSIVE OF FLOOR SLABS AND STRUCTURAL MATERIALS UNLESS NOTED OTHERWISE.
V. DEMOLITION IS TO FOLLOW ESTABLISHED CONSTRUCTION SEQUENCE. REFER TO SPECIFICATIONS AND DRAWINGS FOR REQUIREMENTS AND SPECIAL CONDITIONS.
W. WHERE APPLICABLE SALVAGE EXISTING MASONRY (FACE BRICK, GLAZED CMU, FACING TILE) AS REQUIRED FOR PATCHING AND INFILL IN RENOVATED AREAS WHERE INDICATED. DISCARD UNUSED PORTION OFF SITE.
X. EXISTING WALL COVERING, CARPET, OR OTHER FINISH. SURFACE SHALL BE REMOVED AS REQUIRED TO RECEIVE NEW FINISHES.
Y. WHERE WALL COVERING IS ENCOUNTERED, REMOVE WALL COVERING IN ITS ENTIRETY. PREPARE WALL FOR NEW FINISHES.
Z. WHERE EXISTING FLOOR SLAB IS DEMOLISHED AND NEW CONSTRUCTION IS OCCURRING, DEMOLISH EXISTING ABANDONED FOUNDATION BELOW GRADE TO ACCOMMODATE NEW CONSTRUCTION.
AA. NEW CMU CONSTRUCTION SHALL NOT BEAR ON EXISTING TERRAZZO OR CONCRETE TOPPING SLAB. DEMOLISH TERRAZZO AND EXISTING CONCRETE SLAB BELOW WHERE OCCURRING. AD-2

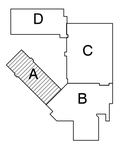
DEMOLITION PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1 REMOVE VOID SLAB/STOOP/STEPS/RAMP AS REQUIRED FOR NEW CONSTRUCTION. EXISTING VOID SLAB FOUNDATION TO REMAIN.
2 REMOVE HOLLOW METAL FRAME AND DOOR AND HARDWARE IN ITS ENTIRETY.
3 REMOVE ALUMINUM WINDOW AND/OR STOREFRONT FRAMING, DOORS, AND HARDWARE IN ITS ENTIRETY. REPAIR JAMB AND FLOOR AS REQUIRED FOR NEW FINISH.
4 REMOVE CARPET FLOORING SYSTEM AND BASE IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
5 REMOVE VINYL TILE FLOORING SYSTEM AND BASE IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
6 REMOVE CERAMIC TILE FLOORING SYSTEM IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
7 REMOVE TERRAZZO FLOORING SYSTEM IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES. PROVIDE TOPPING SLAB AND FLOOR LEVEL AS REQUIRED. REFER TO FINISH PLAN SCHEDULE FOR ADDITIONAL INFORMATION.
8 REMOVE ACOUSTICAL BOARD CEILING SYSTEM IN ITS ENTIRETY.
9 REMOVE GYPSUM BOARD/PLASTER CEILING/BULKHEAD IN ITS ENTIRETY.
10 REMOVE MASONRY WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR FLOOR AND WALL AS REQUIRED TO ACCEPT NEW FINISHES.
11 REMOVE PORTION OF MASONRY WALL AS REQUIRED TO INSTALL NEW DOOR.
12 REMOVE METAL STUDS AND GYPSUM BOARD WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR FLOOR AND WALLS AS REQUIRED TO ACCEPT NEW FINISHES.
13 REMOVE EXISTING BUILT-IN CASEWORK.
14 REMOVE DISPLAY WALL, CHALK, MARKER, AND/OR TACKBOARDS IN THEIR ENTIRETY.
15 REMOVE TOILET ACCESSORIES AND TURN OVER TO OWNER.
16 REMOVE PLUMBING FIXTURES COMPLETE. REFER TO PLUMBING DRAWINGS. WHERE PIPING IS REQUIRED TO BE CAPPED, CAP BELOW AND/OR BEHIND FINISHED SURFACE.
17 REMOVE TOILET PARTITIONS IN THEIR ENTIRETY.
18 REMOVE EXISTING FLOOR DRAIN. REFER TO PLUMBING DRAWINGS.
19 REMOVE EXISTING CANOPY IN ITS ENTIRETY INCLUDING STEEL FRAMING, ROOFING AND CONCRETE FOOTINGS AS REQUIRED FOR NEW CONSTRUCTION.
20 REMOVE EXISTING LOCKERS IN THEIR ENTIRETY. PREPARE OPENING IN ADJACENT WALL AS REQUIRED TO RECEIVE NEW CONSTRUCTION
21 REMOVE CONCRETE SHOWER CURB. PATCH AND REPAIR FLOOR AS REQUIRED TO ACCEPT NEW FINISHES.
22 REMOVE MECHANICAL UNIT, REFER TO MECHANICAL DRAWINGS.
23 NOT USED
24 REMOVE SHELVING IN ITS ENTIRETY.
25 REMOVE METAL LOCKERS. REMOVE CONCRETE BASE AS REQUIRED FOR NEW CONSTRUCTION.
26 REMOVE EXISTING BLEACHERS IN THEIR ENTIRETY. PATCH AND REPAIR WALL.
27 REMOVE SCOREBOARD AND TURN OVER TO OWNER.
28 REMOVE MOVABLE PARTITION AND SUPPORTING STRUCTURE ABOVE IN THEIR ENTIRETY.
29 REMOVE WALL CARPET SYSTEM AND WOOD TRIM IN ITS ENTIRETY. PREPARE EXISTING WALLS AS REQUIRED TO RECEIVE NEW FINISHES.
30 REMOVE BASKETBALL GOALS AND MAST IN THEIR ENTIRETY.
31 REMOVE ACOUSTICAL PANELS IN THEIR ENTIRETY. PATCH AND REPAIR WALLS AS REQUIRED TO RECEIVE NEW FINISHES.
32 REMOVE CURTAIN TRACK AND CURTAIN IN THEIR ENTIRETY.
33 REMOVE CEILING MOUNTED MECHANICAL UNIT IN ITS ENTIRETY. REFER TO MECHANICAL DRAWINGS.
34 REMOVE MEDIA SHELVING IN ITS ENTIRETY. AD-3
35 REMOVE CERAMIC TILE WALL SYSTEM IN ITS ENTIRETY. PREPARE EXISTING WALL AS REQUIRED TO RECEIVE NEW FINISHES.
36 REMOVE METAL BOOKSHELVES AND CASEWORK COMPLETE. PATCH AND REPAIR WALL TO MAKE LIKE NEW CONDITION.
37 BASE BID: REMOVE EXISTING METAL PANELS TO BE PAINTED. ALTERNATE BID CAREFULLY REMOVE EXISTING PANELS IN THEIR ENTIRETY LEAVING DRIP EDGE INTACT. PREPARE EXISTING WALL CONSTRUCTION AS REQUIRED TO RECEIVE NEW METAL PANELS. PROTECT ALL EXISTING ADJACENT CONSTRUCTION

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB MMM
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED ND. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "A" ARCHITECTURAL FIRST FLOOR DEMOLITION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A AD101

Thursday, 2/24/2022 - 11:12 AM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\AD101.DWG

DEMOLITION PLAN NOTES CONTINUED :

68 REMOVE EXISTING FIRE EXTINGUISHER CABINET IN ITS ENTIRETY. AD-3
69 REMOVE EXISTING POWER POLES REFER TO ELECTRICAL.
70 REMOVE EXISTING METAL DIVIDER, TRACK AND DOOR. INFILL OPENING TO MATCH EXISTING MASONRY WALL CONSTRUCTION.
71 REMOVE EXISTING WINDOW, SILL, FASCIA, DRIP, FACE BRICK AND REINSTALL AS REQUIRED TO TOOTH IN NEW FACE BRICK WITH EXISTING. A-431
72 REMOVE ALUMINUM DIVIDER RAIL, PATCH AND REPAIR FLOOR AS REQUIRED TO RECEIVE NEW FINISHES AT INTERIOR LOCATION.
73 REMOVE EXISTING SEALANT COMPLETE. CLEAR ALUMINUM FRAME FREE OF OXIDATION. PREP ALUMINUM FRAME AND ALL ADJACENT SURFACES TO RECEIVE NEW SEALANT BED.
74 PREPARE EXISTING MECHANICAL AND MASONRY OPENING TO RECEIVE MASONRY INFILL AND 2" RIGID INSULATION
75 REMOVE EXISTING KILN. INFILL METAL DECK PENETRATION FOR INTEGRITY.
76 REMOVE EXISTING LIMESTONE VENEER AND ASSOCIATED ASSEMBLIES COMPLETE. PREP TO RECEIVE NEW CONSTRUCTION.
77 EXISTING AREAWAY ASSOCIATED STRUCTURAL GRATE TO REMAIN. REFER TO CIVIL/ MEP FOR WORK IN THIS AREA.
78 TEMPORARILY REMOVE DISPLAY WALL OBJECTS AS REQUIRED TO RECEIVE NEW FINISHES. CONFIRM WITH OWNER AND REINSTALL COMPLETE
79 DEMOLISH EXISTING TERRAZZO AND CONCRETE SLAB COMPLETE.
80 LINE OF SLAB DEMOLITION.
81 REMOVE EXISTING FIRE EXTINGUISHER AND MOUNTING HARDWARE IN ITS ENTIRETY, PATCH AND REPAIR WALL TO MAKE LIKE NEW.
82 MODIFY EXISTING BULKHEAD AS REQUIRED FOR NEW CONSTRUCTION. AD-2
83 REMOVE EXITING COOLER/FREEZER IN ITS ENTIRETY. AD-3
84 REMOVE AND REINSTALL BOTTLE FILLERS AS REQUIRED FOR DEMO AND INSTALLATION OF NEW WALL FINISHES.
85 REMOVE PORTION OF BRICK AND MASONRY WALL TO RECEIVE NEW LOUVER. TOOTH IN SALVAGED BRICK AS REQUIRED.
86 MODIFY METAL STUD AND GYPSUM BOARD WALL ASSEMBLY TO RECEIVE NEW VUV CONSTRUCTION.

DEMOLITION PLAN NOTES CONTINUED :

38 REMOVE EXISTING MECHANICAL LOUVER IN ITS ENTIRETY.
39 REMOVE EXISTING PLASTER SOFFIT, SOFFIT PRIMARY STEEL STRUCTURE TO REMAIN. SUSPENSION SYSTEM TO BE REMOVED
40 REMOVE GLAZING AND PREPARE WINDOW FOR NEW SPANDREL PANELS.
41 REMOVE EXISTING GYPSUM BOARD AND WOOD FURRING. PATCH AND REPAIR ADJACENT GYPSUM BOARD WHERE APPLICABLE.
42 REMOVE EXISTING ROOF OVERHANG AS REQUIRED FOR NEW CONSTRUCTION.
43 REMOVE EXISTING LOUVER IN ITS ENTIRETY.
44 ALTERNATE: REMOVE METAL STUDS AND GYPSUM BOARD WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR TO RECEIVE NEW DOOR. PATCH AND REPAIR FLOOR AS REQUIRED TO ACCEPT NEW FINISHES.
45 ALTERNATE: EXISTING DOOR FRAME TO REMAIN. REMOVE DOOR, TRANSOM, AND HARDWARE. AD-2
46 REMOVE EXISTING WALL OVEN AND COOK TOP IN ITS ENTIRETY.
47 REMOVE EXISTING PLASTER/GYPSUM BOARD WALL AND METAL STUD FRAMING AND EMBEDDED GLASS WALL SYSTEM AND WOOD TRIM.
48 REMOVE PADDED WALLS, WOOD TRIM, AND BASE.
49 REMOVE WOOD TRIM AND TACKABLE WALL COMPLETE.
50 EXISTING CANOPY AND ASSOCIATED STRUCTURE TO REMAIN.
51 REMOVE WOOD TRIM, TACKABLE WALL, BASE, AND STRUCTURE.
52 REMOVE TACKABLE WALL PANEL COMPLETE.
53 REMOVE CONTINUOUS BACKSLASH TO UPPER CABINETS COMPLETE.
54 REMOVE PORTION OF EXISTING MASONRY WALL TO INSTALL NEW BUILDING STRUCTURE.
55 REFER TO ELECTRICAL DRAWINGS FOR WORK IN THIS AREA.
56 REMOVE EXISTING CHAIR RAIL AND SILL.
57 REMOVE EXISTING ACT CEILING GRID BULKHEAD COMPLETE.
58 BUSH HAMMER EXISTING TERRAZZO AS REQUIRED FOR NEW LEVEL FLOOR FINISHES. PROVIDE LEVELING COMPOUND AS REQUIRED.
59 REMOVE AND PROTECT EXISTING CLASS PHOTOS AND AWARDS. COORDINATE WITH OWNER FOR RELOCATION.
60 REMOVE EXISTING CERAMIC TILE AND CONCRETE CURB COMPLETE TO RECEIVE NEW CONSTRUCTION.
61 EXISTING DOOR FRAME TO REMAIN. REMOVE DOOR, TRANSOM, AND HARDWARE.
62 REMOVE EXISTING DEPRESSED SLAB TO RECEIVE NEW FLOOR CONSTRUCTION AT EXISTING FINISHED FLOOR, REFER TO STRUCTURAL AND MEP DRAWINGS.
63 DEMOLISH EXISTING WOOD STRUCTURE EXTENDING TO EXISTING CEILING.
64 DEMOLISH EXISTING TERRAZZO AND INFILL WITH LIGHTWEIGHT CONCRETE. PREP AND DOWEL EXISTING AND NEW SLAB. REFER TO STRUCTURAL DRAWINGS.
65 DEMOLISH EXISTING TERRAZZO TILE COMPLETE. BUSH HAMMER HIGH SPOTS AT TRANSITIONS. PREP AND DOWEL EXISTING AND NEW SLAB, REFER TO STRUCTURAL DRAWINGS.
66 DEMOLISH EXISTING TERRAZZO, CONCRETE SLAB, AND INSULATION TO BASE SLAB BELOW COMPLETE.
67 BUSH HAMMER EXISTING CONCRETE AS REQUIRED FOR NEW LEVEL FLOOR FINISHES. PROVIDE LEVELING COMPOUND AS REQUIRED.

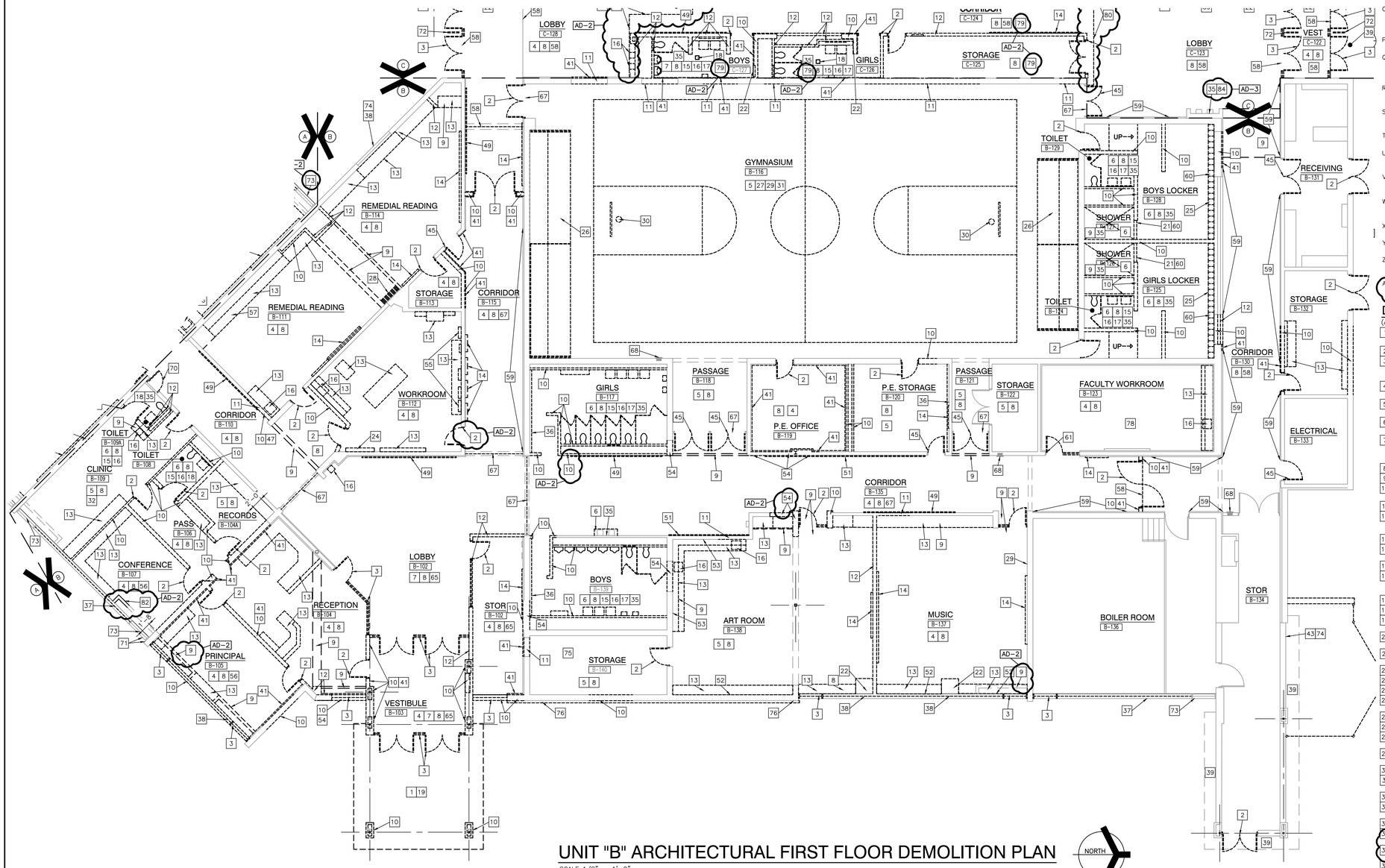
GENERAL DEMOLITION NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO GI SERIES SHEETS.
B. UNLESS NOTED OTHERWISE ON THIS SHEET, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL WORK INDICATED ON THIS SHEET.
C. CONTRACTORS ENCOUNTERING EXISTING MATERIAL WHICH IS SUSPECTED OF CONTAINING ASBESTOS SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND THE OWNERS REPRESENTATIVE.
D. BOLD DASHED LINES INDICATE EXISTING ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXTENT OF DEMOLITION WORK PRIOR TO BIDDING AND FOR COORDINATING THE EXTENT OF DEMOLITION WITH THE INSTALLATION OF NEW SYSTEMS.
E. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION APPLICABLE TO THEIR SCOPE OF WORK AND AS REQUIRED FOR INSTALLATION OF NEW WORK WHETHER OR NOT IT IS SPECIFICALLY INDICATED OR NOTED IN THESE DOCUMENTS.
F. REMOVE ALL ITEMS AND FINISHES MADE OBSOLETE BY NEW CONSTRUCTION. VERIFY ITEMS DEEMED OBSOLETE WITH ARCHITECT PRIOR TO REMOVAL. REFER TO NEW CONSTRUCTION DRAWINGS FOR DEMOLITION REQUIRED NOT SHOWN ON DEMOLITION PLANS.
G. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR OFF SITE REMOVAL OF ALL DEMOLITION MATERIALS AND/OR ITEMS UNLESS NOTED OTHERWISE OR DIRECTED BY THE OWNER.
H. PRIOR TO STARTING DEMOLITION, CONSTRUCT DUST CONTROL BARRIERS AS REQUIRED TO PREVENT THE SPREAD OF DUST INTO SURROUNDING AREAS (WHERE APPLICABLE).
I. WHERE BUILDING EGRESS IS REQUIRED TO PASS THROUGH DEMOLITION AREAS, PROVIDE APPROVED BARRIERS, ETC. TO ENSURE SAFETY OF THE PUBLIC.
J. RELOCATED ITEMS SHALL BE CLEANED AND PLACED IN STORAGE, PER OWNERS' DIRECTION, UNTIL ITEMS ARE READY TO BE INSTALLED. IF ITEMS ARE DAMAGED DURING DEMOLITION OR RELOCATION, THEY SHALL BE REPAIRED OR REPLACED WITH NEW ITEMS AS APPROVED.
K. DEMOLITION SHALL BE PERFORMED WITHOUT DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. WHERE SUCH DAMAGE OCCURS, PATCH, REPAIR, OR RESTORE WALLS, FLOORS, CEILING, ETC. NEATLY TO MATCH EXISTING ADJACENT SURFACE. PROVIDE SHORING, BRACING, OR SUPPORT AS REQUIRED TO PREVENT MOVEMENT OR SETTLEMENT OF EXISTING STRUCTURES.
L. EACH CONTRACTOR IS RESPONSIBLE FOR CUTTING, PATCHING, AND DISCONNECTION OF ITEMS APPLICABLE TO THEIR SCOPE OF WORK. WHERE EXISTING SERVICES ARE ABANDONED, CAP AT LEAST 1" BEHIND NEW FINISHES AND/OR EXISTING SURFACE AND PATCH AS REQUIRED TO RECEIVE NEW FINISHES OR MATCH EXISTING FINISH.
M. ON WALLS THAT ARE TO RECEIVE NEW FINISHES, REMOVE AND REINSTALL EXISTING EQUIPMENT TO REMAIN AS REQUIRED FOR INSTALLATION OF NEW FINISHES.
N. WHERE WALLS OR BULKHEADS ARE REMOVED, PATCH FLOORS, CEILINGS, AND ADJACENT WALLS AS REQUIRED TO MATCH EXISTING OR RECEIVE NEW FINISHES WHERE APPLICABLE. WHERE EXISTING DUCTWORK, PIPING, OR EQUIPMENT IS REMOVED, PATCH OPENINGS AND/OR SURFACES AS REQUIRED TO MATCH ADJACENT SURFACES OR RECEIVE NEW FINISHES WHERE APPLICABLE. REFER TO ALL DEMOLITION DRAWINGS FOR EXTENT OF ITEMS TO REMOVED.
O. OVER CUT NEW OPENINGS IN EXISTING WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR WALLS AS REQUIRED TO MATCH EXISTING. WHERE APPLICABLE, TOOTH NEW MASONRY INTO EXISTING MASONRY.
P. ALL EQUIPMENT AND FURNITURE WHICH ARE CONSIDERED LOOSE FURNISHING SHALL BE REMOVED BY THE OWNER PRIOR TO DEMOLITION.
Q. MASONRY WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 4" MINIMUM BELOW THE EXISTING FLOOR SLAB UNLESS SETTING ON A SLAB OR SPECIFICALLY NOTED OTHERWISE. PATCH WITH NEW CONCRETE TO BE FLUSH WITH THE EXISTING FLOOR SLAB.
R. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL REVIEW OF DEMOLITION NOTES AND GENERAL DEMOLITION NOTES AS THEY APPLY TO THEIR SCOPE OF WORK.
S. THE OWNER SHALL RESERVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE.
T. REFER TO THE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND TECHNOLOGY DOCUMENTS FOR COMPLETE SCOPE OF DEMOLITION WORK.
U. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKING, ADHESIVES, AND BASES DOWN TO BUT EXCLUSIVE OF FLOOR SLABS AND STRUCTURAL MATERIALS UNLESS NOTED OTHERWISE.
V. DEMOLITION IS TO FOLLOW ESTABLISHED CONSTRUCTION SEQUENCE. REFER TO SPECIFICATIONS AND DRAWINGS FOR REQUIREMENTS AND SPECIAL CONDITIONS.
W. WHERE APPLICABLE SALVAGE EXISTING MASONRY (FACE BRICK, GLAZED CMU, FACING TILE) AS REQUIRED FOR PATCHING AND INFILL IN RENOVATED AREAS WHERE INDICATED. DISCARD UNUSED PORTION OFF SITE.
X. EXISTING WALL COVERING, CARPET, OR OTHER FINISH. SURFACE SHALL BE REMOVED AS REQUIRED TO RECEIVE NEW FINISHES.
Y. WHERE WALL COVERING IS ENCOUNTERED, REMOVE WALL COVERING IN ITS ENTIRETY. PREPARE WALL FOR NEW FINISHES.
Z. WHERE EXISTING FLOOR SLAB IS DEMOLISHED AND NEW CONSTRUCTION IS OCCURRING, DEMOLISH EXISTING ABANDONED FOUNDATION BELOW GRADE TO ACCOMMODATE NEW CONSTRUCTION.
AA. NEW CMU CONSTRUCTION SHALL NOT BEAR ON EXISTING TERRAZZO OR CONCRETE TOPPING SLAB. DEMOLISH TERRAZZO AND EXISTING CONCRETE SLAB BELOW WHERE OCCURRING.

DEMOLITION PLAN NOTES: AD-2

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1 REMOVE VOID SLAB/STOOP/STEPS/RAMP AS REQUIRED FOR NEW CONSTRUCTION. EXISTING VOID SLAB FOUNDATION TO REMAIN.
2 REMOVE HOLLOW METAL FRAME AND DOOR AND HARDWARE IN ITS ENTIRETY.
3 REMOVE ALUMINUM WINDOW AND/OR STOREFRONT FRAMING, DOORS, AND HARDWARE IN ITS ENTIRETY. REPAIR JAMB AND FLOOR AS REQUIRED FOR NEW FINISH.
4 REMOVE CARPET FLOORING SYSTEM AND BASE IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
5 REMOVE VINYL TILE FLOORING SYSTEM AND BASE IN ITS ENTIRETY. PREPARE CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
6 REMOVE CERAMIC TILE FLOORING SYSTEM IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
7 REMOVE TERRAZZO FLOORING SYSTEM IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES. PROVIDE TOPPING SLAB AND FLOOR LEVEL AS REQUIRED. REFER TO FINISH PLAN SCHEDULE FOR ADDITIONAL INFORMATION.
8 REMOVE ACOUSTICAL BOARD CEILING SYSTEM IN ITS ENTIRETY.
9 REMOVE GYPSUM BOARD/PLASTER CEILING/BULKHEAD IN ITS ENTIRETY.
10 REMOVE MASONRY WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR FLOOR AND WALL AS REQUIRED TO ACCEPT NEW FINISHES.
11 REMOVE PORTION OF MASONRY WALL AS REQUIRED TO INSTALL NEW DOOR.
12 REMOVE METAL STUDS AND GYPSUM BOARD WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR FLOOR AND WALLS AS REQUIRED TO ACCEPT NEW FINISHES.
13 REMOVE EXISTING BUILT-IN CASEWORK.
14 REMOVE DISPLAY WALL, CHALK, MARKER, AND/OR TACKBOARDS IN THEIR ENTIRETY.
15 REMOVE TOILET ACCESSORIES AND TURN OVER TO OWNER.
16 REMOVE PLUMBING FIXTURES COMPLETE. REFER TO PLUMBING DRAWINGS. WHERE PIPING IS REQUIRED TO BE CAPPED, CAP BELOW AND/OR BEHIND FINISHED SURFACE.
17 REMOVE TOILET PARTITIONS IN THEIR ENTIRETY.
18 REMOVE EXISTING FLOOR DRAIN. REFER TO PLUMBING DRAWINGS.
19 REMOVE EXISTING CANOPY IN ITS ENTIRETY INCLUDING STEEL FRAMING, ROOFING AND CONCRETE FOOTINGS AS REQUIRED FOR NEW CONSTRUCTION.
20 REMOVE EXISTING LOCKERS IN THEIR ENTIRETY. PREPARE OPENING IN ADJACENT WALL AS REQUIRED TO RECEIVE NEW CONSTRUCTION
21 REMOVE CONCRETE SHOWER CURB. PATCH AND REPAIR FLOOR AS REQUIRED TO ACCEPT NEW FINISHES.
22 REMOVE MECHANICAL UNIT, REFER TO MECHANICAL DRAWINGS.
23 NOT USED
24 REMOVE SHELVING IN ITS ENTIRETY.
25 REMOVE METAL LOCKERS. REMOVE CONCRETE BASE AS REQUIRED FOR NEW CONSTRUCTION.
26 REMOVE EXISTING BLEACHERS IN THEIR ENTIRETY. PATCH AND REPAIR WALL.
27 REMOVE SCOREBOARD AND TURN OVER TO OWNER.
28 REMOVE MOVABLE PARTITION AND SUPPORTING STRUCTURE ABOVE IN THEIR ENTIRETY.
29 REMOVE WALL CARPET SYSTEM AND WOOD TRIM IN ITS ENTIRETY. PREPARE EXISTING WALLS AS REQUIRED TO RECEIVE NEW FINISHES.
30 REMOVE BASKETBALL GOALS AND MAST IN THEIR ENTIRETY.
31 REMOVE ACOUSTICAL PANELS IN THEIR ENTIRETY. PATCH AND REPAIR WALLS AS REQUIRED TO RECEIVE NEW FINISHES.
32 REMOVE CURTAIN TRACK AND CURTAIN IN THEIR ENTIRETY.
33 REMOVE CEILING MOUNTED MECHANICAL UNIT IN ITS ENTIRETY. REFER TO MECHANICAL DRAWINGS.
34 REMOVE MEDIA SHELVING IN ITS ENTIRETY. AD-3
35 REMOVE CERAMIC TILE WALL SYSTEM IN ITS ENTIRETY. PREPARE EXISTING WALL AS REQUIRED TO RECEIVE NEW FINISHES.
36 REMOVE METAL BOOKSHELVES AND CASEWORK COMPLETE. PATCH AND REPAIR WALL TO MAKE LIKE NEW CONDITION.
37 BASE BID: PREPARE EXISTING METAL PANELS TO BE PAINTED. ALTERNATE BID CAREFULLY REMOVE EXISTING PANELS IN THEIR ENTIRETY LEAVING DRIP EDGE INTACT. PREPARE EXISTING WALL CONSTRUCTION AS REQUIRED TO RECEIVE NEW METAL PANELS. PROTECT ALL EXISTING ADJACENT CONSTRUCTION

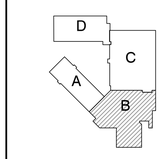


UNIT "B" ARCHITECTURAL FIRST FLOOR DEMOLITION PLAN

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

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB MMM
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

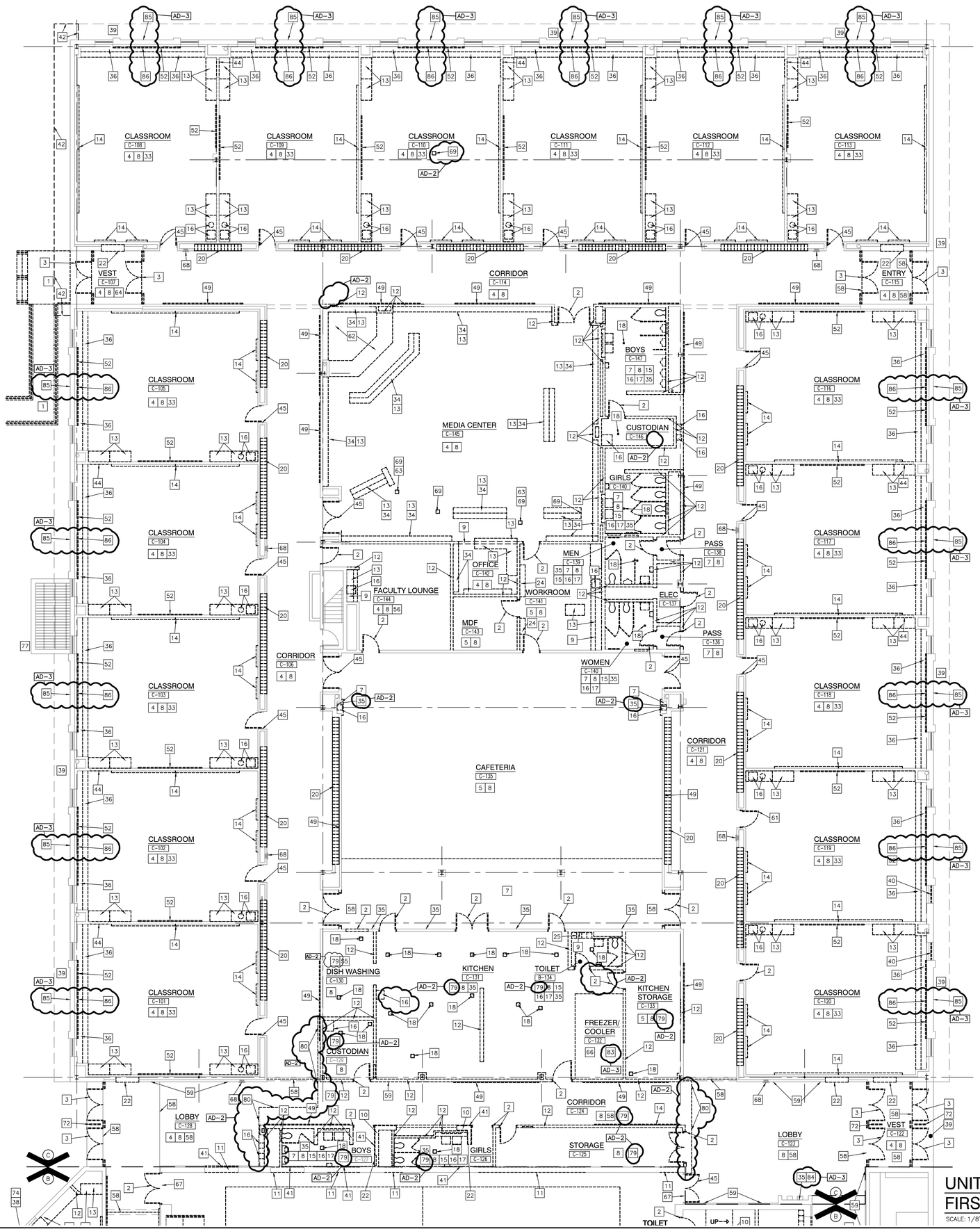
DRAWING
UNIT "B" ARCHITECTURAL FIRST FLOOR DEMOLITION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

© GIBRALTAR DESIGN

SHEET
B AD102

Thursday, 2/24/2022 - 11:12 AM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\AD102.DWG



UNIT "C" ARCHITECTURAL FIRST FLOOR DEMOLITION PLAN

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

DEMOLITION PLAN NOTES CONTINUED :

38 REMOVE EXISTING MECHANICAL LOUVER IN ITS ENTIRETY.
39 REMOVE EXISTING PLASTER SOFFIT, SOFFIT PRIMARY STEEL STRUCTURE TO REMAIN. SUSPENSION SYSTEM TO BE REMOVED
40 REMOVE GLAZING AND PREPARE WINDOW FOR NEW SPANDREL PANELS.
41 REMOVE EXISTING GYPSUM BOARD AND WOOD FURRING. PATCH AND REPAIR ADJACENT GYPSUM BOARD WHERE APPLICABLE.
42 REMOVE EXISTING ROOF OVERHANG AS REQUIRED FOR NEW CONSTRUCTION.
43 REMOVE EXISTING LOUVER IN ITS ENTIRETY.
44 ALTERNATE: REMOVE METAL STUDS AND GYPSUM BOARD WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR TO RECEIVE NEW DOOR. PATCH AND REPAIR FLOOR AS REQUIRED TO ACCEPT NEW FINISHES.
45 ALTERNATE: EXISTING DOOR FRAME TO REMAIN. REMOVE DOOR, TRANSOM, AND HARDWARE. AD-2
46 REMOVE EXISTING WALL OVEN AND COOK TOP IN ITS ENTIRETY.
47 REMOVE EXISTING PLASTER/GYPSUM BOARD WALL AND METAL STUD FRAMING AND EMBEDDED GLASS WALL SYSTEM AND WOOD TRIM.
48 REMOVE PADDED WALLS, WOOD TRIM, AND BASE.
49 REMOVE WOOD TRIM AND TACKABLE WALL COMPLETE.
50 EXISTING CANOPY AND ASSOCIATED STRUCTURE TO REMAIN.
51 REMOVE WOOD TRIM, TACKABLE WALL, BASE, AND STRUCTURE.
52 REMOVE TACKABLE WALL PANEL COMPLETE.
53 REMOVE CONTINUOUS BACKSLASH TO UPPER CABINETS COMPLETE.
54 REMOVE PORTION OF EXISTING MASONRY WALL TO INSTALL NEW BUILDING STRUCTURE.
55 REFER TO ELECTRICAL DRAWINGS FOR WORK IN THIS AREA.
56 REMOVE EXISTING CHAIR RAIL AND SILL.
57 REMOVE EXISTING ACT CEILING GRID BULKHEAD COMPLETE.
58 BUSH HAMMER EXISTING TERRAZZO AS REQUIRED FOR NEW LEVEL FLOOR FINISHES. PROVIDE LEVELING COMPOUND AS REQUIRED.
59 REMOVE AND PROTECT EXISTING CLASS PHOTOS AND AWARDS. COORDINATE WITH OWNER FOR RELOCATION.
60 REMOVE EXISTING CERAMIC TILE AND CONCRETE CURB COMPLETE TO RECEIVE NEW CONSTRUCTION.
61 EXISTING DOOR FRAME TO REMAIN. REMOVE DOOR, TRANSOM, AND HARDWARE.
62 REMOVE EXISTING DEPRESSED SLAB TO RECEIVE NEW FLOOR CONSTRUCTION AT EXISTING FINISHED FLOOR, REFER TO STRUCTURAL AND MEP DRAWINGS.
63 DEMOLISH EXISTING WOOD STRUCTURE EXTENDING TO EXISTING CEILING.
64 DEMOLISH EXISTING TERRAZZO AND INFILL WITH LIGHTWEIGHT CONCRETE. PREP AND DOWEL EXISTING AND NEW SLAB. REFER TO STRUCTURAL DRAWINGS.
65 DEMOLISH EXISTING TERRAZZO TILE COMPLETE. BUSH HAMMER HIGH SPOTS AT TRANSITIONS. PREP AND DOWEL EXISTING AND NEW SLAB, REFER TO STRUCTURAL DRAWINGS.
66 DEMOLISH EXISTING TERRAZZO, CONCRETE SLAB, AND INSULATION TO BASE SLAB BELOW COMPLETE.
67 BUSH HAMMER EXISTING CONCRETE AS REQUIRED FOR NEW LEVEL FLOOR FINISHES. PROVIDE LEVELING COMPOUND AS REQUIRED.
68 REMOVE EXISTING FIRE EXTINGUISHER CABINET IN ITS ENTIRETY. AD-3
69 REMOVE EXISTING POWER POLES REFER TO ELECTRICAL.
70 REMOVE EXISTING METAL DIVIDER, TRACK AND DOOR. INFILL OPENING TO MATCH EXISTING MASONRY WALL CONSTRUCTION.
71 REMOVE EXISTING WINDOW, SILL, FASCIA, DRIP, FACE BRICK AND REINSTALL AS REQUIRED TO TOOTH IN NEW FACE BRICK WITH EXISTING. 1/A-431
72 REMOVE ALUMINUM DIVIDER RAIL, PATCH AND REPAIR FLOOR AS REQUIRED TO RECEIVE NEW FINISHES AT INTERIOR LOCATION.
73 REMOVE EXISTING SEALANT COMPLETE. CLEAR ALUMINUM FRAME FREE OF OXIDATION. PREP ALUMINUM FRAME AND ALL ADJACENT SURFACES TO RECEIVE NEW SEALANT BED.
74 PREPARE EXISTING MECHANICAL AND MASONRY OPENING TO RECEIVE MASONRY INFILL AND 2" RIGID INSULATION
75 REMOVE EXISTING KILN. INFILL METAL DECK PENETRATION FOR INTEGRITY.
76 REMOVE EXISTING LIMESTONE VENEER AND ASSOCIATED ASSEMBLIES COMPLETE. PREP TO RECEIVE NEW CONSTRUCTION.
77 EXISTING AREAWAY ASSOCIATED STRUCTURAL GRATE TO REMAIN. REFER TO CIVIL/ MEP FOR WORK IN THIS AREA.
78 TEMPORARILY REMOVE DISPLAY WALL OBJECTS AS REQUIRED TO RECEIVE NEW FINISHES. CONFIRM WITH OWNER AND REINSTALL COMPLETE
79 DEMOLISH EXISTING TERRAZZO AND CONCRETE SLAB COMPLETE.
80 LINE OF SLAB DEMOLITION.
81 REMOVE EXISTING FIRE EXTINGUISHER AND MOUNTING HARDWARE IN ITS ENTIRETY, PATCH AND REPAIR WALL TO MAKE LIKE NEW.
82 MODIFY EXISTING BULKHEAD AS REQUIRED FOR NEW CONSTRUCTION. AD-2
83 REMOVE EXITING COOLER/FREEZER IN ITS ENTIRETY. AD-3
84 REMOVE AND REINSTALL BOTTLE FILLERS AS REQUIRED FOR DEMO AND INSTALLATION OF NEW WALL FINISHES.
85 REMOVE PORTION OF BRICK AND MASONRY WALL TO RECEIVE NEW LOUVER. TOOTH IN SALVAGED BRICK AS REQUIRED.
86 MODIFY METAL STUD AND GYPSUM BOARD WALL ASSEMBLY TO RECEIVE NEW VUV CONSTRUCTION..

GENERAL DEMOLITION NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO GI SERIES SHEETS.
B. UNLESS NOTED OTHERWISE ON THIS SHEET, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL WORK INDICATED ON THIS SHEET.
C. CONTRACTORS ENCOUNTERING EXISTING MATERIAL WHICH IS SUSPECTED OF CONTAINING ASBESTOS SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND THE OWNERS REPRESENTATIVE.
D. BOLD DASHED LINES INDICATE EXISTING ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXTENT OF DEMOLITION WORK PRIOR TO BIDDING AND FOR COORDINATING THE EXTENT OF DEMOLITION WITH THE INSTALLATION OF NEW SYSTEMS.
E. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION APPLICABLE TO THEIR SCOPE OF WORK AND AS REQUIRED FOR INSTALLATION OF NEW WORK WHETHER OR NOT IT IS SPECIFICALLY INDICATED OR NOTED IN THESE DOCUMENTS.
F. REMOVE ALL ITEMS AND FINISHES MADE OBSOLETE BY NEW CONSTRUCTION. VERIFY ITEMS DEEMED OBSOLETE WITH ARCHITECT PRIOR TO REMOVAL. REFER TO NEW CONSTRUCTION DRAWINGS FOR DEMOLITION REQUIRED NOT SHOWN ON DEMOLITION PLANS.
G. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR OFF SITE REMOVAL OF ALL DEMOLITION MATERIALS AND/OR ITEMS UNLESS NOTED OTHERWISE OR DIRECTED BY THE OWNER.
H. PRIOR TO STARTING DEMOLITION, CONSTRUCT DUST CONTROL BARRIERS AS REQUIRED TO PREVENT THE SPREAD OF DUST INTO SURROUNDING AREAS (WHERE APPLICABLE).
I. WHERE BUILDING EGRESS IS REQUIRED TO PASS THROUGH DEMOLITION AREAS, PROVIDE APPROVED BARRIERS, ETC. TO ENSURE SAFETY OF THE PUBLIC.
J. RELOCATED ITEMS SHALL BE CLEANED AND PLACED IN STORAGE, PER OWNERS' DIRECTION, UNTIL ITEMS ARE READY TO BE INSTALLED. IF ITEMS ARE DAMAGED DURING DEMOLITION OR RELOCATION, THEY SHALL BE REPAIRED OR REPLACED WITH NEW ITEMS AS APPROVED.
K. DEMOLITION SHALL BE PERFORMED WITHOUT DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. WHERE SUCH DAMAGE OCCURS, PATCH, REPAIR, OR RESTORE WALLS, FLOORS, CEILING, ETC. NEATLY TO MATCH EXISTING ADJACENT SURFACE. PROVIDE SHORING, BRACING, OR SUPPORT AS REQUIRED TO PREVENT MOVEMENT OR SETTLEMENT OF EXISTING STRUCTURES.
L. EACH CONTRACTOR IS RESPONSIBLE FOR CUTTING, PATCHING, AND DISCONNECTION OF ITEMS APPLICABLE TO THEIR SCOPE OF WORK. WHERE EXISTING SERVICES ARE ABANDONED, CAP AT LEAST 1" BEHIND NEW FINISHES AND/OR EXISTING SURFACE AND PATCH AS REQUIRED TO RECEIVE NEW FINISHES OR MATCH EXISTING FINISH.
M. ON WALLS THAT ARE TO RECEIVE NEW FINISHES, REMOVE AND REINSTALL EXISTING EQUIPMENT TO REMAIN AS REQUIRED FOR INSTALLATION OF NEW FINISHES.
N. WHERE WALLS OR BULKHEADS ARE REMOVED, PATCH FLOORS, CEILINGS, AND ADJACENT WALLS AS REQUIRED TO MATCH EXISTING OR RECEIVE NEW FINISHES WHERE APPLICABLE. WHERE EXISTING DUCTWORK, PIPING, OR EQUIPMENT IS REMOVED, PATCH OPENINGS AND/OR SURFACES AS REQUIRED TO MATCH ADJACENT SURFACES OR RECEIVE NEW FINISHES WHERE APPLICABLE. REFER TO ALL DEMOLITION DRAWINGS FOR EXTENT OF ITEMS TO REMOVED.
O. OVER CUT NEW OPENINGS IN EXISTING WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR WALLS AS REQUIRED TO MATCH EXISTING. WHERE APPLICABLE, TOOTH NEW MASONRY INTO EXISTING MASONRY.
P. ALL EQUIPMENT AND FURNITURE WHICH ARE CONSIDERED LOOSE FURNISHING SHALL BE REMOVED BY THE OWNER PRIOR TO DEMOLITION.
Q. MASONRY WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 4" MINIMUM BELOW THE EXISTING FLOOR SLAB UNLESS SETTING ON A SLAB OR SPECIFICALLY NOTED OTHERWISE. PATCH WITH NEW CONCRETE TO BE FLUSH WITH THE EXISTING FLOOR SLAB.
R. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL REVIEW OF DEMOLITION NOTES AND GENERAL DEMOLITION NOTES AS THEY APPLY TO THEIR SCOPE OF WORK.
S. THE OWNER SHALL RESERVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE.
T. REFER TO THE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND TECHNOLOGY DOCUMENTS FOR COMPLETE SCOPE OF DEMOLITION WORK.
U. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKING, ADHESIVES, AND BASES DOWN TO BUT EXCLUSIVE OF FLOOR SLABS AND STRUCTURAL MATERIALS UNLESS NOTED OTHERWISE.
V. DEMOLITION IS TO FOLLOW ESTABLISHED CONSTRUCTION SEQUENCE. REFER TO SPECIFICATIONS AND DRAWINGS FOR REQUIREMENTS AND SPECIAL CONDITIONS.
W. WHERE APPLICABLE SALVAGE EXISTING MASONRY (FACE BRICK, GLAZED CMU, FACING TILE) AS REQUIRED FOR PATCHING AND INFILL IN RENOVATED AREAS WHERE INDICATED. DISCARD UNUSED PORTION OFF SITE.
X. EXISTING WALL COVERING, CARPET, OR OTHER FINISH. SURFACE SHALL BE REMOVED AS REQUIRED TO RECEIVE NEW FINISHES.
Y. WHERE WALL COVERING IS ENCOUNTERED, REMOVE WALL COVERING IN ITS ENTIRETY. PREPARE WALL FOR NEW FINISHES.
Z. WHERE EXISTING FLOOR SLAB IS DEMOLISHED AND NEW CONSTRUCTION IS OCCURRING, DEMOLISH EXISTING ABANDONED FOUNDATION BELOW GRADE TO ACCOMMODATE NEW CONSTRUCTION.
AA. NEW CMU CONSTRUCTION SHALL NOT BEAR ON EXISTING TERRAZZO OR CONCRETE TOPPING SLAB. DEMOLISH TERRAZZO AND EXISTING CONCRETE SLAB BELOW WHERE OCCURRING.

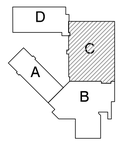
DEMOLITION PLAN NOTES: AD-2

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1 REMOVE VOID SLAB/STOOP/STEPS/RAMP AS REQUIRED FOR NEW CONSTRUCTION. EXISTING VOID SLAB FOUNDATION TO REMAIN.
2 REMOVE HOLLOW METAL FRAME AND DOOR AND HARDWARE IN ITS ENTIRETY.
3 REMOVE ALUMINUM WINDOW AND/OR STOREFRONT FRAMING, DOORS, AND HARDWARE IN ITS ENTIRETY. REPAIR JAMB AND FLOOR AS REQUIRED FOR NEW FINISH.
4 REMOVE CARPET FLOORING SYSTEM AND BASE IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
5 REMOVE VINYL TILE FLOORING SYSTEM AND BASE IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
6 REMOVE CERAMIC TILE FLOORING SYSTEM IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES.
7 REMOVE TERRAZZO FLOORING SYSTEM IN ITS ENTIRETY. PREPARE EXISTING CONCRETE SLAB AS REQUIRED TO RECEIVE NEW FINISHES. PROVIDE TOPPING SLAB AND FLOOR LEVEL AS REQUIRED. REFER TO FINISH PLAN SCHEDULE FOR ADDITIONAL INFORMATION.
8 REMOVE ACOUSTICAL BOARD CEILING SYSTEM IN ITS ENTIRETY.
9 REMOVE GYPSUM BOARD/PLASTER CEILING/BULKHEAD IN ITS ENTIRETY.
10 REMOVE MASONRY WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR FLOOR AND WALL AS REQUIRED TO ACCEPT NEW FINISHES.
11 REMOVE PORTION OF MASONRY WALL AS REQUIRED TO INSTALL NEW DOOR.
12 REMOVE METAL STUDS AND GYPSUM BOARD WALL AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND REPAIR FLOOR AND WALLS AS REQUIRED TO ACCEPT NEW FINISHES.
13 REMOVE EXISTING BUILT-IN CASEWORK.
14 REMOVE DISPLAY WALL, CHALK, MARKER, AND/OR TACKBOARDS IN THEIR ENTIRETY.
15 REMOVE TOILET ACCESSORIES AND TURN OVER TO OWNER.
16 REMOVE PLUMBING FIXTURES COMPLETE. REFER TO PLUMBING DRAWINGS. WHERE PIPING IS REQUIRED TO BE CAPPED, CAP BELOW AND/OR BEHIND FINISHED SURFACE.
17 REMOVE TOILET PARTITIONS IN THEIR ENTIRETY.
18 REMOVE EXISTING FLOOR DRAIN. REFER TO PLUMBING DRAWINGS.
19 REMOVE EXISTING CANOPY IN ITS ENTIRETY INCLUDING STEEL FRAMING, ROOFING AND CONCRETE FOOTINGS AS REQUIRED FOR NEW CONSTRUCTION.
20 REMOVE EXISTING LOCKERS IN THEIR ENTIRETY. PREPARE OPENING IN ADJACENT WALL AS REQUIRED TO RECEIVE NEW CONSTRUCTION
21 REMOVE CONCRETE SHOWER CURB. PATCH AND REPAIR FLOOR AS REQUIRED TO ACCEPT NEW FINISHES.
22 REMOVE MECHANICAL UNIT, REFER TO MECHANICAL DRAWINGS.
23 NOT USED
24 REMOVE SHELVING IN ITS ENTIRETY.
25 REMOVE METAL LOCKERS. REMOVE CONCRETE BASE AS REQUIRED FOR NEW CONSTRUCTION.
26 REMOVE EXISTING BLEACHERS IN THEIR ENTIRETY. PATCH AND REPAIR WALL.
27 REMOVE SCOREBOARD AND TURN OVER TO OWNER.
28 REMOVE MOVABLE PARTITION AND SUPPORTING STRUCTURE ABOVE IN THEIR ENTIRETY.
29 REMOVE WALL CARPET SYSTEM AND WOOD TRIM IN ITS ENTIRETY. PREPARE EXISTING WALLS AS REQUIRED TO RECEIVE NEW FINISHES.
30 REMOVE BASKETBALL GOALS AND MAST IN THEIR ENTIRETY.
31 REMOVE ACOUSTICAL PANELS IN THEIR ENTIRETY. PATCH AND REPAIR WALLS AS REQUIRED TO RECEIVE NEW FINISHES.
32 REMOVE CURTAIN TRACK AND CURTAIN IN THEIR ENTIRETY.
33 REMOVE CEILING MOUNTED MECHANICAL UNIT IN ITS ENTIRETY. REFER TO MECHANICAL DRAWINGS.
34 REMOVE MEDIA SHELVING IN ITS ENTIRETY. AD-3
35 REMOVE CERAMIC TILE WALL SYSTEM IN ITS ENTIRETY. PREPARE EXISTING WALL AS REQUIRED TO RECEIVE NEW FINISHES.
36 REMOVE METAL BOOKSHELVES AND CASEWORK COMPLETE. PATCH AND REPAIR WALL TO MAKE LIKE NEW CONDITION.
37 BASE BID: PREPARE EXISTING METAL PANELS TO BE PAINTED. ALTERNATE BID CAREFULLY REMOVE EXISTING PANELS IN THEIR ENTIRETY LEAVING DRIP EDGE INTACT. PREPARE EXISTING WALL CONSTRUCTION AS REQUIRED TO RECEIVE NEW METAL PANELS. PROTECT ALL EXISTING ADJACENT CONSTRUCTION

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB MMM
CHECKED BY TA JPB

REGISTERED JOSEPH P. BRIGGS NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "C" ARCHITECTURAL FIRST FLOOR DEMOLITION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C AD103

Thursday, 2/24/2022 - 11:12 AM - LAST SAVED BY:DBURNS
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UNIT "A" ARCHITECTURAL FIRST FLOOR PLAN

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

PLAN NOTES CONTINUED:

61. FREE STANDING ROOFTOP METAL GRATED STAIR AND RAILING (7'-0" WIDE/4 RISERS)
62. OMIT BATT INSULATION THIS LOCATION
63. INSTALL TREATED WOOD SHIMS AND GYPSUM BOARD AS REQUIRED FOR FLUSH FINISH AND AT EXPOSED SURFACE
64. WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. TOOTH IN MATCHING BRICK VENEER FOR FULL INFILL
65. WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. INFILL FLUSH WITH METAL STUD AND TREATED WOOD BLOCKING.
66. BOLLARD — 5/A-501
67. SURFACE MOUNTED EXPANSION JOINT, REFER TO SPECS. — 1/A-407
68. CMU WALL TO BE GLAZED CMU CORRIDOR SIDE ONLY TO MATCH ORIGINAL MASONRY CONFIGURATION AT DOOR OPENINGS. GLAZED CMU WALL TO EXTEND TO ABOVE CEILING COMPLETE. AD-2
69. BRICK IN VESTIBULE TO BE COLOR A IN RUNNING BOND PATTERN. AD-2

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.

B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.

C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.

D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.

E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.

F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.

G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.

H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.

I. INTERIOR CMU WALLS ARE TO MATCH EXISTING UNLESS NOTED OTHERWISE.

J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.

K. WHERE NEW CMU WALLS INTERSECT EXISTING CMU WALLS AT A CORNER OR ARE ALIGNED WITH EXISTING CMU WALLS, TOOTH NEW CMU INTO EXISTING CMU UNLESS NOTED OTHERWISE.

L. REFER TO DEMOLITION SHEETS FOR ADDITIONAL PATCHING AND REPAIR WORK.

M. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL

N. REFER TO EQUIPMENT PLANS FOR CASEWORK, DISPLAY BOARDS, LOCKERS, AND OTHER ADDITIONAL TYPICAL EQUIPMENT NOTES AND INFORMATION.

O. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ACCESSORIES.

P. WHERE CMU WALLS INDICATED TO EXTEND TO DECK INTERFACE WITH BOTOTM OF STRUCTURAL "T"s, CMU TO EXTEND TO BOTTOM OF "T"s AND INFILL BETWEEN "T"s WITH MINIMUM 3 5/8" STUDS, CONTINUOUS BATT INSULATION, AND GUP ON BOTH SIDES.

Q. ALL WALLS ARE TYPE D3 UNLESS NOTED OTHERWISE.

R. ALL CHASE WALLS ARE TYPE C3 UNLESS NOTED OTHERWISE.

S. WHERE TYPE C WALLS ARE BACK TO BACK PROVIDE ACOUSTICAL BLANKET INSULATION IN ONE WALL ONLY.

PLAN LEGEND:

INDICATES WALL TYPES REFER TO G-201 FOR WALL THICKNESS, HEIGHT, AND COMPOSITION.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

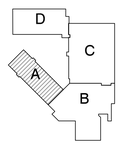
1. CONCRETE STOOP, PROVIDE SCORED JOINTS ON SURFACE TO ALINE WITH CONCRETE SIDEWALK JOINTS, REFER TO STRUCTURAL DRAWINGS.
2. CASEWORK AND/OR MILLWORK, REFER TO EQUIPMENT PLANS.
3. DASHED LINE INDICATES TYPICAL BULKHEAD, REFER TO SECTIONS AND REFLECTED CEILING PLANS. (ALL BULKHEADS MAY NOT BE INDICATED ON THIS PLAN)
4. EXISTING BULKHEAD TO REMAIN.
5. PUSH PAD FOR ADA OPERATOR, REFER TO ELECTRICAL DRAWINGS.
6. CARD/FOB READER, REFER TO ELECTRICAL DRAWINGS.
7. DEDICATION PLAQUE.
8. FIRE ALARM PANEL, REFER TO ELECTRICAL DRAWINGS.
9. FIRE ALARM ANNUNCIATOR PANEL, REFER TO ELECTRICAL DRAWINGS.
10. NEW LOCKERS, REFER TO EQUIPMENT PLANS AND 2/A-501
11. GYM EQUIPMENT, REFER TO EQUIPMENT DRAWINGS.
12. PLUMBING FIXTURE, REFER TO EQUIPMENT DRAWINGS AND PLUMBING DRAWINGS.
13. FOR DISPLAY BOARD/TV MONITOR, REFER TO EQUIPMENT DRAWINGS. (TYPICAL)
14. ROOF HATCH AND SHIPS LADDER. — 1,2,3/A-421
15. FLOOR FINISH TRANSITION, REFER TO FINISH PLANS.
16. UNIT VENTILATOR, REFER TO MECHANICAL DRAWINGS.
17. CABINET HEATER, REFER TO MECHANICAL DRAWINGS.
18. LINE OF NEW CANOPY, REFER TO SECTIONS.
19. ROOF CONDUCTOR, REFER TO PLUMBING DRAWINGS.
20. NO ARCHITECTURAL WORK IN THIS ROOM.
21. TOOTHED-IN SALVAGED BRICK WITH EXISTING.
22. AI DEVICE, REFER TO ELECTRICAL
23. INFILL EXISTING LOUVER OPENING WITH TOOTHED IN SALVAGED BRICK 2" RIGID INSULATION AND 4" CMU. AD-2
24. KNOX BOX
25. AT 2" BRICK OFFSET PROVIDE MASONRY BRICK TIES AS REQUIRED TO TIE BRICK TOGETHER.
26. INSTALL SOLID SURFACE WINDOW SILL — 4/A-620, SIM — 9/A-501, 6/A-507
27. CURTAIN AND TRACK (6' RADIUS AT CORNER).
28. MECHANICAL LOUVER, REFER TO ELEVATIONS AND DETAIL.
29. ELECTRICAL PANEL, REFER TO ELECTRICAL DRAWINGS. AD-3
30. SEMI RECESSED FIRE EXTINGUISHER CABINET, WHERE NEW CABINETS ARE REPLACING OLD CABINETS IN STUD WALLS INFILL EXISTING HOLE AND INSTALL NEW CABINET AT NEW MOUNTING HEIGHT SHOWN ON G-301 — 7/A-501
32. INSTALL SPRAY INSULATION (R-10) ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE IN ENTIRE VESTIBULE AND ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE FOR A DISTANCE OF 2'-0" PAST THE OUTSIDE FACE OF THE STOREFRONT SYSTEM, REFER TO 11/A-431 AD-2
33. CMU WALL TO BE GLAZED CMU TO 6'-0" OR 7'-2" AFF CORRIDOR SIDE ONLY TO MATCH ADJACENT EXISTING WALL, FIELD VERIFY, AS REQUIRED FOR PAINT FINISH TO BE CONSISTENT BETWEEN NEW AND EXISTING CONSTRUCTION. MATCH EXISTING COURSING AND STACK BOND PATTERN.
34. SEE "K" SERIES DRAWINGS FOR FOOD SERVICE EQUIPMENT IN THIS ROOM.
35. ALUMINUM DIVIDER RAIL. — 11/A-501
36. ROOF BELOW, REFER TO ROOF PLAN.
37. PROVIDE 4" HIGH CONCRETE EQUIPMENT/HOUSE KEEPING PAD UNDER ALL EQUIPMENT IN THIS ROOM, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES.
38. PROVIDE 4" TALL CONCRETE CURB AROUND PERIMETER OF MEZZANINE. REFER TO WALL SECTIONS AND STRUCTURAL DRAWINGS.
39. PROVIDE SPRAY ACOUSTICAL INSULATION ON BOTTOM OF ENTIRE MEZZANINE FLOOR DECK AT THIS LOCATION.
40. CONCRETE EQUIPMENT PAD, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
41. ROLLING COUNTER DOOR. — 2/A-502
42. ROLLING SERVICE DOOR. — 1/A-502
43. ROLLING DOOR/GRILLE KEY SWITCH.
44. MECHANICAL GRILL COVER. — 3/A-501
45. 2" BAR IN WALL WITH EXPANSION JOINT COVER — 10/A-431
46. DOWNSPOUT WITH ALUMINUM BOOT, REFER TO ROOF PLAN. AD-2
47. INSTALL NEW 1 1/2" O.D. ANODIZED ALUMINUM HANDRAIL WITH ALUMINUM BRACKETS AT 35" ABOVE SLOPE OF RAMP AND FLOOR. EXTEND RAIL 12" PAST TOP AND BOTTOM OF RAMP AND RETURN ENDS TO WALL.
48. FLOOR DRAIN, REFER TO PLUMBING DRAWING.
49. ALTERNATE: NEW DOOR FRAME AND HARDWARE, REFER TO A-603
50. ALTERNATE: EXISTING FRAMES TO REMAIN. INSTALL NEW DOOR, HARDWARE, TRANSOM WHERE APPLICABLE.
51. UNIT VENTILATOR HEAVY GAUGE PAINTED METAL CLOSURE TO MATCH UNIT VENTILATOR. COORDINATE EACH CONDITION IN FIELD WITH WALL, FLOOR AND CEILING CONDITION.
53. ALTERNATE: NEW METAL PANELS. — 4/A-405
54. INSTALL NEW SEALANT AND BACKER ROD ALL AROUND WINDOW ASSEMBLY.
55. NEW CONCRETE STEPS, REFER TO CIVIL.
56. NEW CONCRETE RAMP, REFER TO CIVIL.
57. EXISTING RAMP RAILING CONSTRUCTION TO REMAIN. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
58. NEW 3 5/8" METAL STUD, TREATED WOOD SHIMS, BATT INSULATION, AND 5/8" GYPSUM BOARD EACH SIDE OF WALL ON TOP OF MASONRY- WALL TO ALIGN COMPLETE ON EACH SIDE FOR SMOOTH TRANSITION. AD-2
59. CMU INFILL AT OLD OPENING FOR VUV AND LOUVER
60. DUMPSTER ENCLOSURE ALUMINUM FENCE AND GATE, REFER TO SPECIFICATIONS.

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB MMM
CHECKED BY TA JPB

JOSEPH P. BRUGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

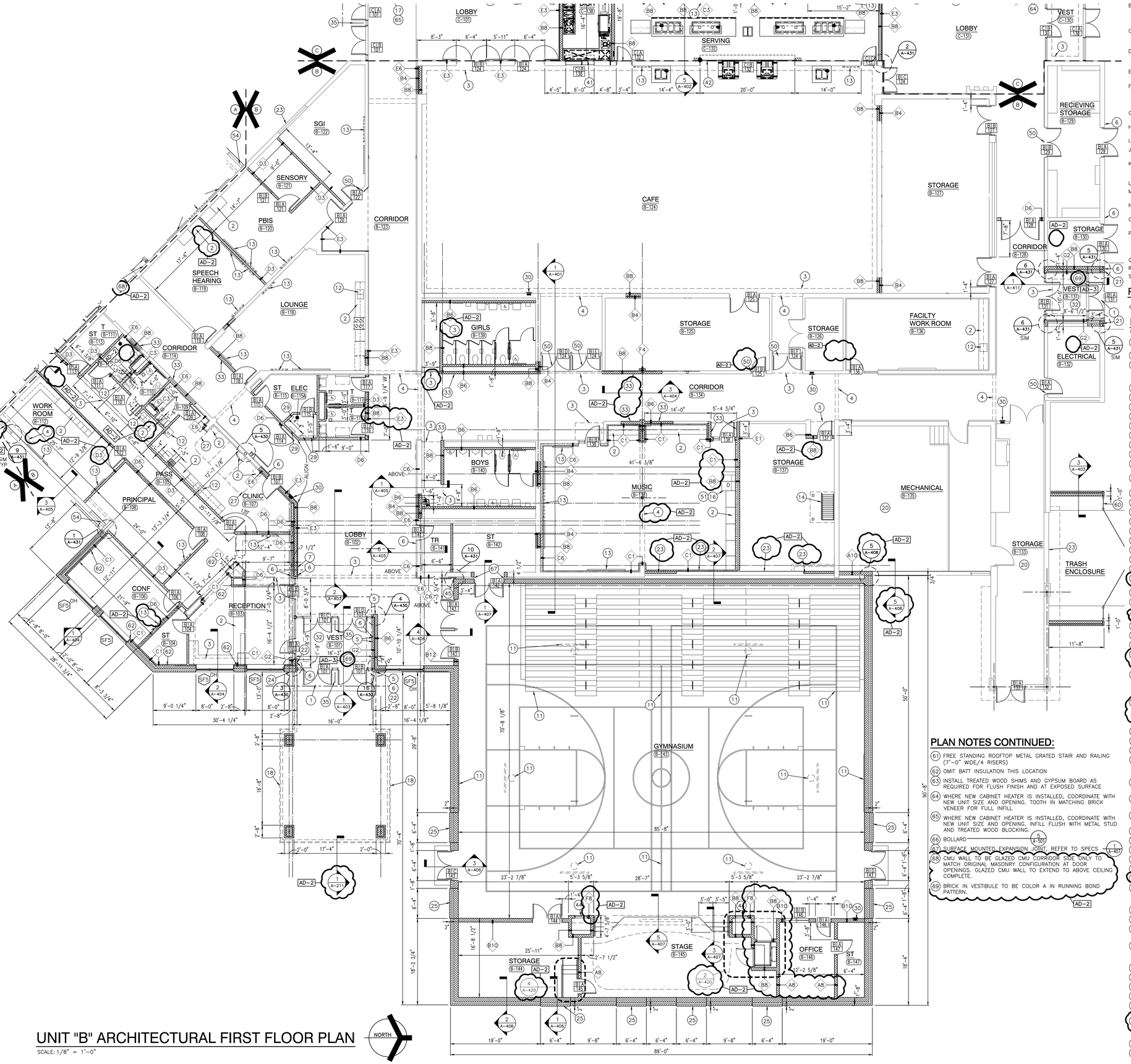
MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "A" ARCHITECTURAL FIRST FLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET A-101

Wednesday, 2/23/2022 - 1:58 PM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\A-101.DWG



UNIT "B" ARCHITECTURAL FIRST FLOOR PLAN

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

NORTH

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.

B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.

C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.

D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.

E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.

F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.

G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.

H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.

I. INTERIOR CMU WALLS ARE TO MATCH EXISTING UNLESS NOTED OTHERWISE.

J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.

K. WHERE NEW CMU WALLS INTERSECT EXISTING CMU WALLS AT A CORNER OR ARE ALIGNED WITH EXISTING CMU WALLS, TOOTH NEW CMU INTO EXISTING CMU UNLESS NOTED OTHERWISE.

L. REFER TO DEMOLITION SHEETS FOR ADDITIONAL PATCHING AND REPAIR WORK.

M. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL.

N. REFER TO EQUIPMENT PLANS FOR CASEWORK, DISPLAY BOARDS, LOCKERS, AND OTHER ADDITIONAL TYPICAL EQUIPMENT NOTES AND INFORMATION.

O. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ACCESSORIES.

P. WHERE CMU WALLS INDICATED TO EXTEND TO DECK INTERFACE WITH BOTOTM OF STRUCTURAL "T"s, CMU TO EXTEND TO BOTTOM OF "T"s AND INFILL BETWEEN "T"s WITH MINIMUM 3 5/8" STUDS, CONTINUOUS BATT INSULATION, AND GUP ON BOTH SIDES.

Q. ALL WALLS ARE TYPE D3 UNLESS NOTED OTHERWISE.

R. ALL CHASE WALLS ARE TYPE C3 UNLESS NOTED OTHERWISE.

S. WHERE TYPE C WALLS ARE BACK TO BACK PROVIDE ACOUSTICAL BLANKET INSULATION IN ONE WALL ONLY.

PLAN LEGEND:

INDICATES WALL TYPES REFER TO G-201 FOR WALL THICKNESS, HEIGHT, AND COMPOSITION.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. CONCRETE STOOP, PROVIDE SCORED JOINTS ON SURFACE TO ALINE WITH CONCRETE SIDEWALK JOINTS, REFER TO STRUCTURAL DRAWINGS.
2. CASEWORK AND/OR MILLWORK, REFER TO EQUIPMENT PLANS.
3. DASHED LINE INDICATES TYPICAL BULKHEAD, REFER TO SECTIONS AND REFLECTED CEILING PLANS. (ALL BULKHEADS MAY NOT BE INDICATED ON THIS PLAN)
4. EXISTING BULKHEAD TO REMAIN.
5. PUSH PAD FOR ADA OPERATOR, REFER TO ELECTRICAL DRAWINGS.
6. CARD/FOB READER, REFER TO ELECTRICAL DRAWINGS.
7. DEDICATION PLAQUE.
8. FIRE ALARM PANEL, REFER TO ELECTRICAL DRAWINGS.
9. FIRE ALARM ANNUNCIATOR PANEL, REFER TO ELECTRICAL DRAWINGS.
10. NEW LOCKERS, REFER TO EQUIPMENT PLANS AND 2/A-501
11. GYM EQUIPMENT, REFER TO EQUIPMENT DRAWINGS.
12. PLUMBING FIXTURE, REFER TO EQUIPMENT DRAWINGS AND PLUMBING DRAWINGS.
13. FOR DISPLAY BOARD/TV MONITOR, REFER TO EQUIPMENT DRAWINGS. (TYPICAL)
14. ROOF HATCH AND SHIPS LADDER. — (1,2,3 / A-421)
15. FLOOR FINISH TRANSITION, REFER TO FINISH PLANS.
16. UNIT VENTILATOR, REFER TO MECHANICAL DRAWINGS.
17. CABINET HEATER, REFER TO MECHANICAL DRAWINGS.
18. LINE OF NEW CANOPY, REFER TO SECTIONS.
19. ROOF CONDUCTOR, REFER TO PLUMBING DRAWINGS.
20. NO ARCHITECTURAL WORK IN THIS ROOM.
21. TOOTHED-IN SALVAGED BRICK WITH EXISTING.
22. AI DEVICE, REFER TO ELECTRICAL.
23. INFILL EXISTING LOUVER OPENING WITH TOOTHED IN SALVAGED BRICK 2" RIGID INSULATION AND 4" CMU.
24. KNOX BOX — AD-2
25. AT 2" BRICK OFFSET PROVIDE MASONRY BRICK TIES AS REQUIRED TO TIE BRICK TOGETHER. — AD-2
26. INSTALL SOLID SURFACE WINDOW SILL — (4 / A-420) SIM (9 / A-501) — AD-2
27. CURTAIN AND TRACK (6' RADIUS AT CORNER). — (6 / A-501)
28. MECHANICAL LOUVER, REFER TO ELEVATIONS AND DETAIL. — AD-3
29. ELECTRICAL PANEL, REFER TO ELECTRICAL DRAWINGS. — (7 / A-501) — AD-2
30. SEMI RECESSED FIRE EXTINGUISHER CABINET. WHERE NEW CABINETS ARE REPLACING OLD CABINETS IN STUD WALLS INFILL EXISTING HOLE AND INSTALL NEW CABINET AT NEW MOUNTING HEIGHT SHOWN ON G-301.
31. INSTALL SPRAY INSULATION (R-10) ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE IN ENTIRE VESTIBULE AND ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE FOR A DISTANCE OF 2'-0" PAST THE OUTSIDE FACE OF THE STOREFRONT SYSTEM. REFER TO 11/A-431 — AD-2
32. CMU WALL TO BE GLAZED CMU TO 6'-0" OR 7'-0" AFF CORRIDOR SIDE ONLY TO MATCH ADJACENT EXISTING WALL, FIELD VERIFY, AS REQUIRED FOR PAINT FINISH TO BE CONSISTENT BETWEEN NEW AND EXISTING CONSTRUCTION. MATCH EXISTING COURSING AND STACK BOND PATTERN.
33. SEE "K" SERIES DRAWINGS FOR FOOD SERVICE EQUIPMENT IN THIS ROOM.
34. ALUMINUM DIVIDER RAIL. — (11 / A-501)
35. ROOF BELOW, REFER TO ROOF PLAN.
36. PROVIDE 4" HIGH CONCRETE EQUIPMENT/HOUSE KEEPING PAD UNDER ALL EQUIPMENT IN THIS ROOM, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES.
37. PROVIDE 4" TALL CONCRETE CURB AROUND PERIMETER OF MEZZANINE. REFER TO WALL SECTIONS AND STRUCTURAL DRAWINGS.
38. PROVIDE SPRAY ACOUSTICAL INSULATION ON BOTTOM OF ENTIRE MEZZANINE FLOOR DECK AT THIS LOCATION.
39. CONCRETE EQUIPMENT PAD, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
40. ROLLING COUNTER DOOR. — (2 / A-502)
41. ROLLING SERVICE DOOR. — (1 / A-502)
42. ROLLING DOOR/GRILLE KEY SWITCH.
43. MECHANICAL GRILL COVER. — (3 / A-501)
44. 2" GAP IN WALL WITH EXPANSION JOINT COVER — (10 / A-431)
45. DOWNSPOUT WITH ALUMINUM BOOT, REFER TO ROOF PLAN. — AD-2
46. INSTALL NEW 1 1/2" O.D. ANODIZED ALUMINUM HANDRAIL WITH ALUMINUM BRACKETS AT 35" ABOVE SLOPE OF RAMP AND FLOOR. EXTEND RAIL 12" PAST TOP AND BOTTOM OF RAMP AND RETURN ENDS TO WALL.
47. FLOOR DRAIN, REFER TO PLUMBING DRAWING.
48. ALTERNATE: NEW DOOR FRAME AND HARDWARE, REFER TO A-603
49. ALTERNATE: EXISTING FRAMES TO REMAIN. INSTALL NEW DOOR, HARDWARE, TRANSOM WHERE APPLICABLE.
50. UNIT VENTILATOR HEAVY GAUGE PAINTED METAL CLOSURE TO MATCH UNIT VENTILATOR. COORDINATE EACH CONDITION IN FIELD WITH WALL, FLOOR AND CEILING CONDITION.
51. ALTERNATE: NEW METAL PANELS. — (1 / A-405)
52. INSTALL NEW SEALANT AND BACKER ROD ALL AROUND WINDOW ASSEMBLY.
53. NEW CONCRETE STEPS, REFER TO CIVIL.
54. NEW CONCRETE RAMP, REFER TO CIVIL.
55. EXISTING RAMP RAILING CONSTRUCTION TO REMAIN. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
56. NEW 3 5/8" METAL STUD, TREATED WOOD SHIMS, BATT INSULATION, AND 5/8" GYPSUM BOARD EACH SIDE OF WALL ON TOP OF MASONRY— WALL TO ALIGN COMPLETE ON EACH SIDE FOR SMOOTH TRANSITION. — AD-2
57. CMU INFILL AT OLD OPENING FOR VUV AND LOUVER — AD-2
58. DUMPSTER ENCLOSURE ALUMINUM FENCE AND GATE, REFER TO SPECIFICATIONS.

PLAN NOTES CONTINUED:

61. FREE STANDING ROOFTOP METAL GRATED STAIR AND RAILING
62. OMIT BATT INSULATION THIS LOCATION
63. INSTALL TREATED WOOD SHIMS AND GYPSUM BOARD AS REQUIRED FOR FLUSH FINISH AND AT EXPOSED SURFACE
64. WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. TOOTH IN MATCHING BRICK VENEER FOR FULL INFILL
65. WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. INFILL FLUSH WITH METAL STUD AND TREATED WOOD BLOCKING.
66. BOLLARD — (5 / A-501)
67. SURFACE MOUNTED EXPANSION JOINT, REFER TO SPECS — (1 / A-407)
68. CMU WALL TO BE GLAZED CMU CORRIDOR SIDE ONLY TO MATCH ORIGINAL MASONRY CONFIGURATION AT DOOR OPENINGS. GLAZED CMU WALL TO EXTEND TO ABOVE CEILING COMPLETE.
69. BRICK IN VESTIBULE TO BE COLOR A IN RUNNING BOND PATTERN. — AD-2

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB MMM
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "B" ARCHITECTURAL FIRST FLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
B A-102

Wednesday, 2/23/2022 - 1:59 PM - LAST SAVED BY:NWESLEY
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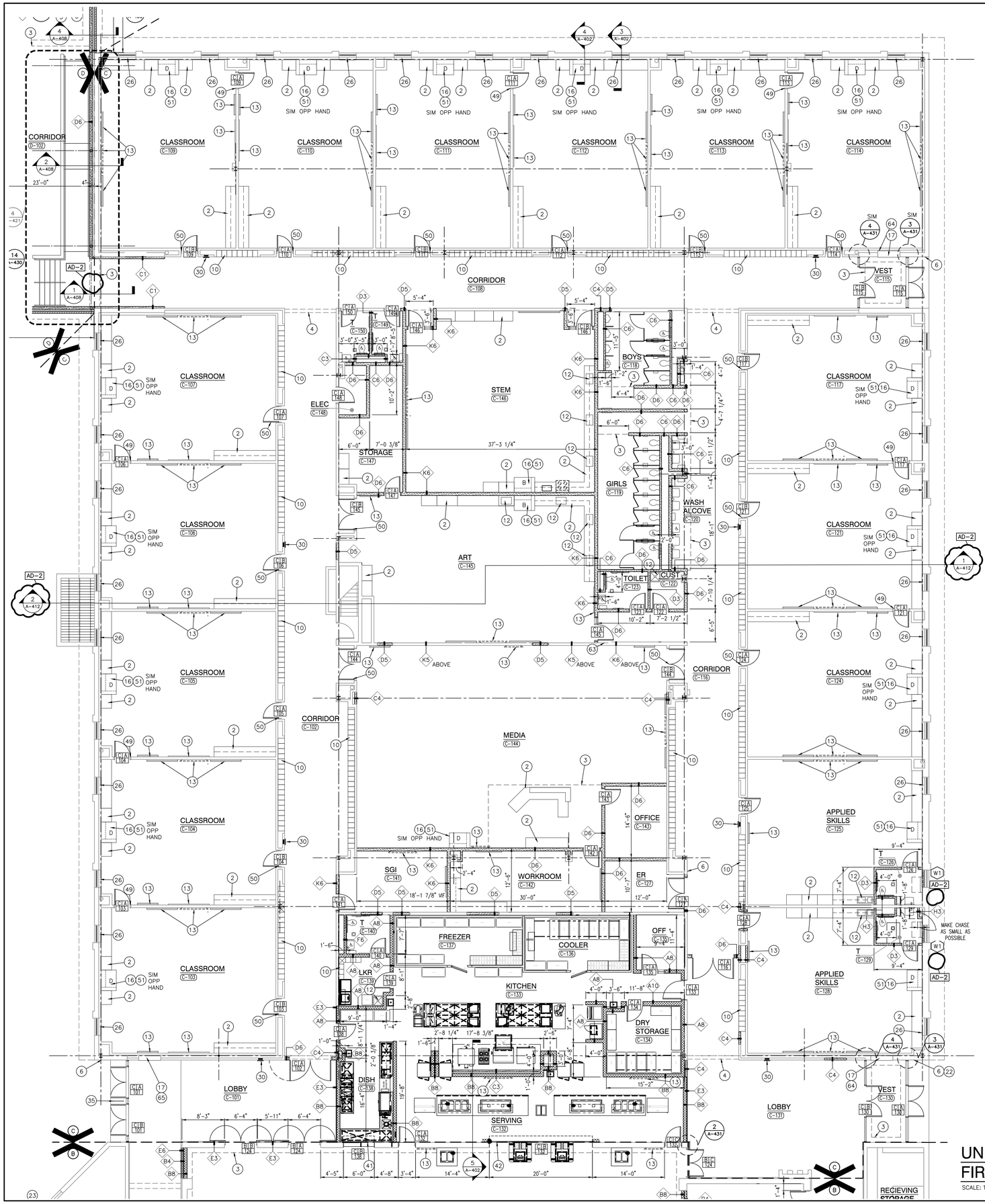

UNIT "C" ARCHITECTURAL FIRST FLOOR PLAN

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

NORTH

PLAN NOTES CONTINUED:

61. FREE STANDING ROOFTOP METAL GRATED STAIR AND RAILING (7'-0" WIDE/4 RISERS)
62. OMIT BATT INSULATION THIS LOCATION
63. INSTALL TREATED WOOD SHIMS AND GYPSUM BOARD AS REQUIRED FOR FLUSH FINISH AND AT EXPOSED SURFACE
64. WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. TOOTH IN MATCHING BRICK VENEER FOR FULL INFILL
65. WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. INFILL FLUSH WITH METAL STUD AND TREATED WOOD BLOCKING.
66. BOLLARD — 5 / A-501
67. SURFACE MOUNTED EXPANSION JOINT, REFER TO SPECS. — 1 / A-407
68. CMU WALL TO BE GLAZED CMU CORRIDOR SIDE ONLY TO MATCH ORIGINAL MASONRY CONFIGURATION AT DOOR OPENINGS. GLAZED CMU WALL TO EXTEND TO ABOVE CEILING COMPLETE.
69. BRICK IN VESTIBULE TO BE COLOR A IN RUNNING BOND PATTERN. AD-2

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.

B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.

C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.

D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.

E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.

F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.

G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.

H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.

I. INTERIOR CMU WALLS ARE TO MATCH EXISTING UNLESS NOTED OTHERWISE.

J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.

K. WHERE NEW CMU WALLS INTERSECT EXISTING CMU WALLS AT A CORNER OR ARE ALIGNED WITH EXISTING CMU WALLS, TOOTH NEW CMU INTO EXISTING CMU UNLESS NOTED OTHERWISE.

L. REFER TO DEMOLITION SHEETS FOR ADDITIONAL PATCHING AND REPAIR WORK.

M. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL.

N. REFER TO EQUIPMENT PLANS FOR CASEWORK, DISPLAY BOARDS, LOCKERS, AND OTHER ADDITIONAL TYPICAL EQUIPMENT NOTES AND INFORMATION.

O. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ACCESSORIES.

P. WHERE CMU WALLS INDICATED TO EXTEND TO DECK INTERFACE WITH BOTOTM OF STRUCTURAL "T"s, CMU TO EXTEND TO BOTTOM OF "T"s AND INFILL BETWEEN "T"s WITH MINIMUM 3 5/8" STUDS, CONTINUOUS BATT INSULATION, AND GUP ON BOTH SIDES.

Q. ALL WALLS ARE TYPE D3 UNLESS NOTED OTHERWISE.

R. ALL CHASE WALLS ARE TYPE C3 UNLESS NOTED OTHERWISE.

S. WHERE TYPE C WALLS ARE BACK TO BACK PROVIDE ACOUSTICAL BLANKET INSULATION IN ONE WALL ONLY.

PLAN LEGEND:

INDICATES WALL TYPES REFER TO G-201 FOR WALL THICKNESS, HEIGHT, AND COMPOSITION.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. CONCRETE STOOP, PROVIDE SCORED JOINTS ON SURFACE TO ALINE WITH CONCRETE SIDEWALK JOINTS, REFER TO STRUCTURAL DRAWINGS.
2. CASEWORK AND/OR MILLWORK, REFER TO EQUIPMENT PLANS.
3. DASHED LINE INDICATES TYPICAL BULKHEAD, REFER TO SECTIONS AND REFLECTED CEILING PLANS. (ALL BULKHEADS MAY NOT BE INDICATED ON THIS PLAN)
4. EXISTING BULKHEAD TO REMAIN.
5. PUSH PAD FOR ADA OPERATOR, REFER TO ELECTRICAL DRAWINGS.
6. CARD/FOB READER, REFER TO ELECTRICAL DRAWINGS.
7. DEDICATION PLAQUE.
8. FIRE ALARM PANEL, REFER TO ELECTRICAL DRAWINGS.
9. FIRE ALARM ANNUNCIATOR PANEL, REFER TO ELECTRICAL DRAWINGS.
10. NEW LOCKERS, REFER TO EQUIPMENT PLANS AND 2/A-501
11. GYM EQUIPMENT, REFER TO EQUIPMENT DRAWINGS.
12. PLUMBING FIXTURE, REFER TO EQUIPMENT DRAWINGS AND PLUMBING DRAWINGS.
13. FOR DISPLAY BOARD/TV MONITOR, REFER TO EQUIPMENT DRAWINGS. (TYPICAL)
14. ROOF HATCH AND SHIPS LADDER. — 1,2,3 / A-421
15. FLOOR FINISH TRANSITION, REFER TO FINISH PLANS.
16. UNIT VENTILATOR, REFER TO MECHANICAL DRAWINGS.
17. CABINET HEATER, REFER TO MECHANICAL DRAWINGS.
18. LINE OF NEW CANOPY, REFER TO SECTIONS.
19. ROOF CONDUCTOR, REFER TO PLUMBING DRAWINGS.
20. NO ARCHITECTURAL WORK IN THIS ROOM.
21. TOOTHED-IN SALVAGED BRICK WITH EXISTING.
22. AI DEVICE, REFER TO ELECTRICAL.
23. INFILL EXISTING LOUVER OPENING WITH TOOTHED IN SALVAGED BRICK 2" RIGID INSULATION AND 4" CMU.
24. KNOX BOX AD-2
25. AT 2" BRICK OFFSET PROVIDE MASONRY BRICK TIES AS REQUIRED TO TIE BRICK TOGETHER.
26. INSTALL SOLID SURFACE WINDOW SILL — 4 / A-420 SIM AD-2
27. CURTAIN AND TRACK (6' RADIUS AT CORNER). — 9 / A-501
28. MECHANICAL LOUVER, REFER TO ELEVATIONS AND DETAIL. — 6 / A-501
29. ELECTRICAL PANEL, REFER TO ELECTRICAL DRAWINGS. AD-3
30. SEMI RECESSED FIRE EXTINGUISHER CABINET. WHERE NEW CABINETS ARE REPLACING OLD CABINETS IN STUD WALLS INFILL EXISTING HOLE AND INSTALL NEW CABINET AT NEW MOUNTING HEIGHT SHOWN ON C-301 — 7 / A-501
32. INSTALL SPRAY INSULATION (R-10) ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE IN ENTIRE VESTIBULE AND ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE FOR A DISTANCE OF 2'-0" PAST THE OUTSIDE FACE OF THE STOREFRONT SYSTEM, REFER TO 11/A-431 AD-2
33. CMU WALL TO BE GLAZED CMU TO 6'-0" OR 7'-0" AFF CORRIDOR SIDE ONLY TO MATCH ADJACENT EXISTING WALL FIELD VERIFY, AS REQUIRED FOR PAINT FINISH TO BE CONSISTENT BETWEEN NEW AND EXISTING CONSTRUCTION. MATCH EXISTING COURSING AND STACK BOND PATTERN.
34. SEE "K" SERIES DRAWINGS FOR FOOD SERVICE EQUIPMENT IN THIS ROOM.
35. ALUMINUM DIVIDER RAIL. — 17 / A-501
36. ROOF BELOW, REFER TO ROOF PLAN.
37. PROVIDE 4" HIGH CONCRETE EQUIPMENT/HOUSE KEEPING PAD UNDER ALL EQUIPMENT IN THIS ROOM, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES.
38. PROVIDE 4" TALL CONCRETE CURB AROUND PERIMETER OF MEZZANINE. REFER TO WALL SECTIONS AND STRUCTURAL DRAWINGS.
39. PROVIDE SPRAY ACOUSTICAL INSULATION ON BOTTOM OF ENTIRE MEZZANINE FLOOR DECK AT THIS LOCATION.
40. CONCRETE EQUIPMENT PAD, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
41. ROLLING COUNTER DOOR. — 2 / A-502
42. ROLLING SERVICE DOOR. — 1 / A-502
43. ROLLING DOOR/GRILLE KEY SWITCH.
44. MECHANICAL GRILL COVER: — 3 / A-501
45. 2" GAP IN WALL WITH EXPANSION JOINT COVER — 10 / A-431
46. DOWNSPOUT WITH ALUMINUM BOOT, REFER TO ROOF PLAN. AD-2
47. INSTALL NEW 1 1/2" O.D. ANODIZED ALUMINUM HANDRAIL WITH ALUMINUM BRACKETS AT 35" ABOVE SLOPE OF RAMP AND FLOOR. EXTEND RAIL 12" PAST TOP AND BOTTOM OF RAMP AND RETURN ENDS TO WALL.
48. FLOOR DRAIN, REFER TO PLUMBING DRAWING.
49. ALTERNATE: NEW DOOR FRAME AND HARDWARE, REFER TO A-603
50. ALTERNATE: EXISTING FRAMES TO REMAIN. INSTALL NEW DOOR, HARDWARE, TRANSOM WHERE APPLICABLE.
51. UNIT VENTILATOR HEAVY GAUGE PAINTED METAL CLOSURE TO MATCH UNIT VENTILATOR. COORDINATE EACH CONDITION IN FIELD WITH WALL, FLOOR AND CEILING CONDITION.
53. ALTERNATE: NEW METAL PANELS. — 4 / A-405
54. INSTALL NEW SEALANT AND BACKER ROD ALL AROUND WINDOW ASSEMBLY.
55. NEW CONCRETE STEPS, REFER TO CIVIL.
56. NEW CONCRETE RAMP, REFER TO CIVIL.
57. EXISTING RAMP RAILING CONSTRUCTION TO REMAIN. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
58. NEW 3 5/8" METAL STUD, TREATED WOOD SHIMS, BATT INSULATION, AND 5/8" GYPSUM BOARD EACH SIDE OF WALL ON TOP OF MASONRY- WALL TO ALIGN COMPLETE ON EACH SIDE FOR SMOOTH TRANSITION. AD-2
59. CMU INFILL AT OLD OPENING FOR VUV AND LOUVER
60. DUMPSTER ENCLOSURE ALUMINUM FENCE AND GATE, REFER TO SPECIFICATIONS.

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB MMM
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING

UNIT "C" ARCHITECTURAL FIRST FLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C A-103

Wednesday, 2/23/2022 - 2:00 PM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\05 ARCH\A-103.DWG

(48) FLOOR DRAIN, REFER TO PLUMBING DRAWING.
(49) ALTERNATE: NEW DOOR FRAME AND HARDWARE, REFER TO A-603
(50) ALTERNATE: EXISTING FRAMES TO REMAIN. INSTALL NEW DOOR, HARDWARE, TRANSOM WHERE APPLICABLE.
(51) UNIT VENTILATOR HEAVY GAUGE PAINTED METAL CLOSURE TO MATCH UNIT VENTILATOR. COORDINATE EACH CONDITION IN FIELD WITH WALL, FLOOR AND CEILING CONDITION.
(53) ALTERNATE: NEW METAL PANELS. — 4 / A-405
(54) INSTALL NEW SEALANT AND BACKER ROD ALL AROUND WINDOW ASSEMBLY.
(55) NEW CONCRETE STEPS, REFER TO CIVIL.
(56) NEW CONCRETE RAMP, REFER TO CIVIL.
(57) EXISTING RAMP RAILING CONSTRUCTION TO REMAIN. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
(58) NEW 3 5/8" METAL STUD, TREATED WOOD SHIMS, BATT INSULATION, AND 5/8" GYPSUM BOARD EACH SIDE OF WALL ON TOP OF MASONRY– WALL TO ALIGN COMPLETE ON EACH SIDE FOR SMOOTH TRANSITION.
(59) CMU INFILL AT OLD OPENING FOR VUV AND LOUVER. — AD–2
(60) DUMPSTER ENCLOSURE ALUMINUM FENCE AND GATE, REFER TO SPECIFICATIONS.
(61) FREE STANDING ROOFTOP METAL GRATED STAIR AND RAILING (7'–0" WIDE/4 RISERS)
(62) OMIT BATT INSULATION THIS LOCATION
(63) INSTALL TREATED WOOD SHIMS AND GYPSUM BOARD AS REQUIRED FOR FLUSH FINISH AND AT EXPOSED SURFACE
(64) WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. TOOTH IN MATCHING BRICK VENEER FOR FULL INFILL
(65) WHERE NEW CABINET HEATER IS INSTALLED, COORDINATE WITH NEW UNIT SIZE AND OPENING. INFILL FLUSH WITH METAL STUD AND TREATED WOOD BLOCKING.
(66) BOLLARD — 5 / A-501
(67) SURFACE MOUNTED EXPANSION JOINT, REFER TO SPECS — 1 / A-407
(68) CMU WALL TO BE GLAZED CMU CORRIDOR SIDE ONLY TO MATCH ORIGINAL MASONRY CONFIGURATION AT DOOR OPENINGS. GLAZED CMU WALL TO EXTEND TO ABOVE CEILING COMPLETE.
(69) BRICK IN VESTIBULE TO BE COLOR A IN RUNNING BOND PATTERN. — AD–2

(12) PLUMBING FIXTURE, REFER TO EQUIPMENT DRAWINGS AND PLUMBING DRAWINGS.
(13) FOR DISPLAY BOARD/TV MONITOR, REFER TO EQUIPMENT DRAWINGS. (TYPICAL)
(14) ROOF HATCH AND SHIPS LADDER. — 1, 2, 3 / A-431
(15) FLOOR FINISH TRANSITION, REFER TO FINISH PLANS.
(16) UNIT VENTILATOR, REFER TO MECHANICAL DRAWINGS.
(17) CABINET HEATER, REFER TO MECHANICAL DRAWINGS.
(18) LINE OF NEW CANOPY, REFER TO SECTIONS.
(19) ROOF CONDUCTOR, REFER TO PLUMBING DRAWINGS.
(20) NO ARCHITECTURAL WORK IN THIS ROOM.
(21) TOOTHED–IN SALVAGED BRICK WITH EXISTING.
(22) A/C DEVICE, REFER TO ELECTRICAL.
(23) INFILL EXISTING LOUVER OPENING WITH TOOTHED IN SALVAGED BRICK 2" RIGID INSULATION AND 4" CMU. — AD–2
(24) KNOX BOX — AD–2
(25) AT 2" BRICK OFFSET PROVIDE MASONRY BRICK TIES AS REQUIRED TO TIE BRICK TOGETHER.
(26) INSTALL SOLID SURFACE WINDOW SILL — 4 / A-550 SIM. — AD–2
(27) CURTAIN AND TRACK (6" RADIUS AT CORNER) — 9 / A-501
(28) MECHANICAL LOUVER, REFER TO ELEVATIONS AND DETAIL. — 6 / A-501
(29) ELECTRICAL PANEL, REFER TO ELECTRICAL DRAWINGS. — AD–3
(30) SEMI RECESSED FIRE EXTINGUISHER CABINET, WHERE NEW CABINETS ARE REPLACING OLD CABINETS IN STUD WALLS INFILL EXISTING HOLE AND INSTALL NEW CABINET AT NEW MOUNTING HEIGHT SHOWN ON G–301. — 7 / A-501
(32) INSTALL SPRAY INSULATION (R–10) ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE IN ENTIRE VESTIBULE AND ON BOTTOM SIDE OF DECK AND SUPPORT STRUCTURE FOR A DISTANCE OF 2'–0" PAST THE OUTSIDE FACE OF THE STOREFRONT SYSTEM. REFER TO 11/A–431 — AD–2
(33) CMU WALL TO BE GLAZED CMU TO 8'–0" OR 7'–2" AFF CORRIDOR SIDE ONLY TO MATCH ADJACENT EXISTING WALL, FIELD VERIFY, AS REQUIRED FOR PAINT FINISH TO BE CONSISTENT BETWEEN NEW AND EXISTING CONSTRUCTION. MATCH EXISTING COURSING AND STACK BOND PATTERN.
(34) SEE "K" SERIES DRAWINGS FOR FOOD SERVICE EQUIPMENT IN THIS ROOM.
(35) ALUMINUM DIVIDER RAIL. — 11 / A-501
(36) ROOF BELOW, REFER TO ROOF PLAN.
(37) PROVIDE 4" HIGH CONCRETE EQUIPMENT/HOUSE KEEPING PAD UNDER ALL EQUIPMENT IN THIS ROOM, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES.
(38) PROVIDE 4" TALL CONCRETE CURB AROUND PERIMETER OF MEZZANINE. REFER TO WALL SECTIONS AND STRUCTURAL DRAWINGS.
(39) PROVIDE SPRAY ACOUSTICAL INSULATION ON BOTTOM OF ENTIRE MEZZANINE FLOOR DECK AT THIS LOCATION.
(40) CONCRETE EQUIPMENT PAD, VERIFY SIZE AND LOCATION WITH MECHANICAL AND ELECTRICAL TRADES. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
(41) ROLLING COUNTER DOOR. — 5 / A-502
(42) ROLLING SERVICE DOOR. — 6 / A-502
(43) ROLLING DOOR/GRILLE KEY SWITCH.
(44) MECHANICAL GRILL COVER. — 3 / A-501
(45) 2" GAP IN WALL WITH EXPANSION JOINT COVER. — 10 / A-431
(46) DOWNSPOUT WITH ALUMINUM BOOT, REFER TO ROOF PLAN. — AD–2
(47) INSTALL NEW 1 1/2" O.D. ANODIZED ALUMINUM HANDRAIL WITH ALUMINUM BRACKETS AT 35" ABOVE SLOPE OF RAMP AND FLOOR. EXTEND RAIL 12" PAST TOP AND BOTTOM OF RAMP AND RETURN ENDS TO WALL.

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.
B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.
C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.
D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.
E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'–0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.
F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.
G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.
H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.
I. INTERIOR CMU WALLS ARE TO MATCH EXISTING UNLESS NOTED OTHERWISE.
J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.
K. WHERE NEW CMU WALLS INTERSECT EXISTING CMU WALLS AT A CORNER OR ARE ALIGNED WITH EXISTING CMU WALLS, TOOTH NEW CMU INTO EXISTING CMU UNLESS NOTED OTHERWISE.
L. REFER TO DEMOLITION SHEETS FOR ADDITIONAL PATCHING AND REPAIR WORK.
M. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL.
N. REFER TO EQUIPMENT PLANS FOR CASEWORK, DISPLAY BOARDS, LOCKERS, AND OTHER ADDITIONAL TYPICAL EQUIPMENT NOTES AND INFORMATION.
O. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ACCESSORIES.
P. WHERE CMU WALLS INDICATED TO EXTEND TO DECK INTERFACE WITH BOTOTM OF STRUCTURAL "T"s, CMU TO EXTEND TO BOTTOM OF "T"s AND INFILL BETWEEN "T"s WITH MINIMUM 3 5/8" STUDS, CONTINUOUS BATT INSULATION, AND GUP ON BOTH SIDES.
Q. ALL WALLS ARE TYPE D3 UNLESS NOTED OTHERWISE.
R. ALL CHASE WALLS ARE TYPE C3 UNLESS NOTED OTHERWISE.
S. WHERE TYPE C WALLS ARE BACK TO BACK PROVIDE ACOUSTICAL BLANKET INSULATION IN ONE WALL ONLY.

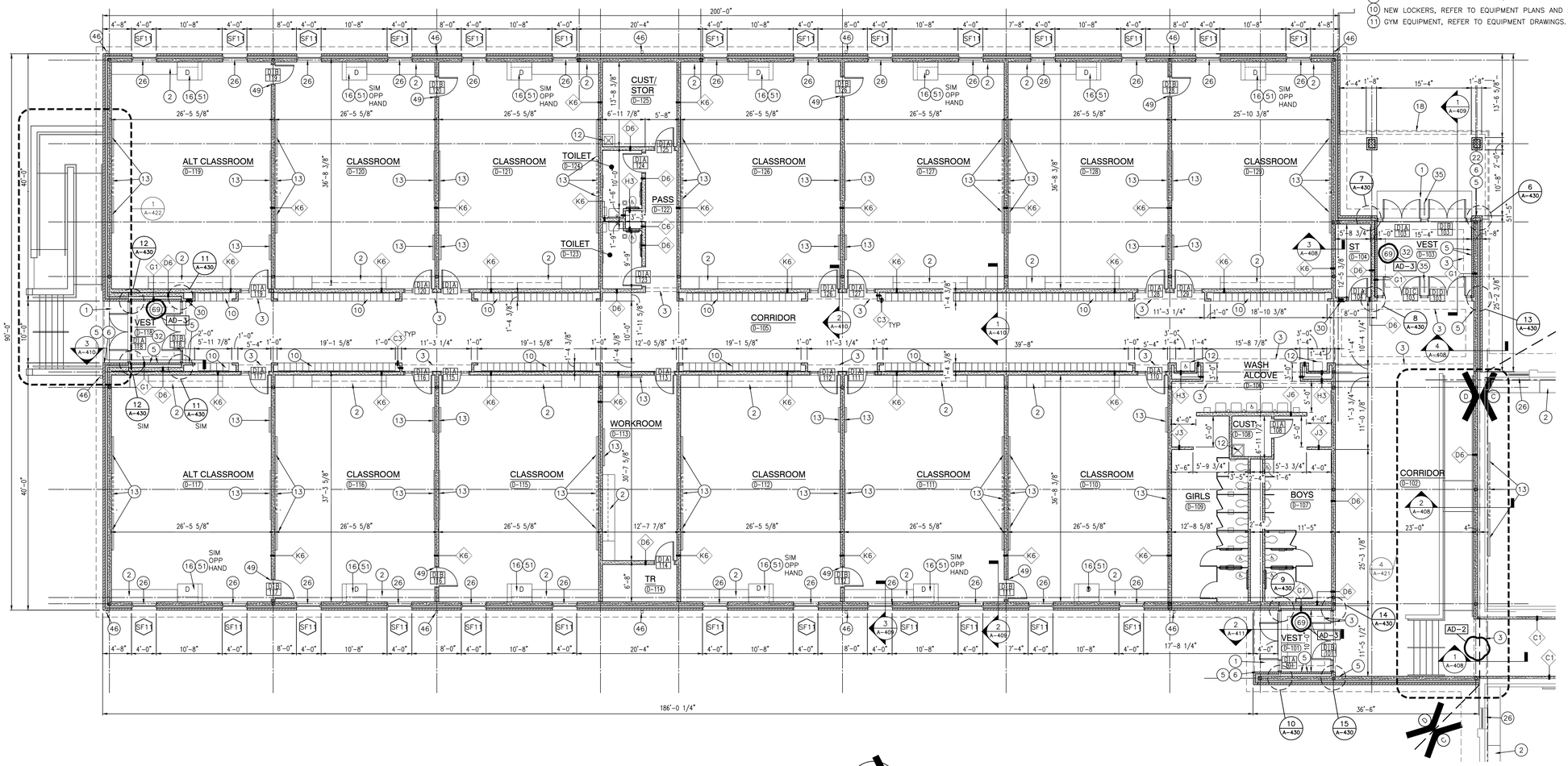
PLAN LEGEND:

INDICATES WALL TYPES REFER TO G–201 FOR WALL THICKNESS, HEIGHT, AND COMPOSITION.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

(1) CONCRETE STOOP, PROVIDE SCORED JOINTS ON SURFACE TO ALINE WITH CONCRETE SIDEWALK JOINTS, REFER TO STRUCTURAL DRAWINGS.
(2) CASEWORK AND/OR MILLWORK, REFER TO EQUIPMENT PLANS.
(3) DASHED LINE INDICATES TYPICAL BULKHEAD, REFER TO SECTIONS AND REFLECTED CEILING PLANS. (ALL BULKHEADS MAY NOT BE INDICATED ON THIS PLAN)
(4) EXISTING BULKHEAD TO REMAIN.
(5) PUSH PAD FOR ADA OPERATOR, REFER TO ELECTRICAL DRAWINGS.
(6) CARD/FOB READER, REFER TO ELECTRICAL DRAWINGS.
(7) DEDICATION PLAQUE.
(8) FIRE ALARM PANEL, REFER TO ELECTRICAL DRAWINGS.
(9) FIRE ALARM ANNUNCIATOR PANEL, REFER TO ELECTRICAL DRAWINGS.
(10) NEW LOCKERS, REFER TO EQUIPMENT PLANS AND 2/A–501
(11) GYM EQUIPMENT, REFER TO EQUIPMENT DRAWINGS.



UNIT "D" ARCHITECTURAL FIRST FLOOR PLAN

SCALE: 1/8" = 1'–0"

NORTH

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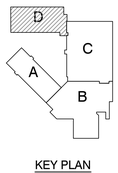
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21–113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB MMM
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

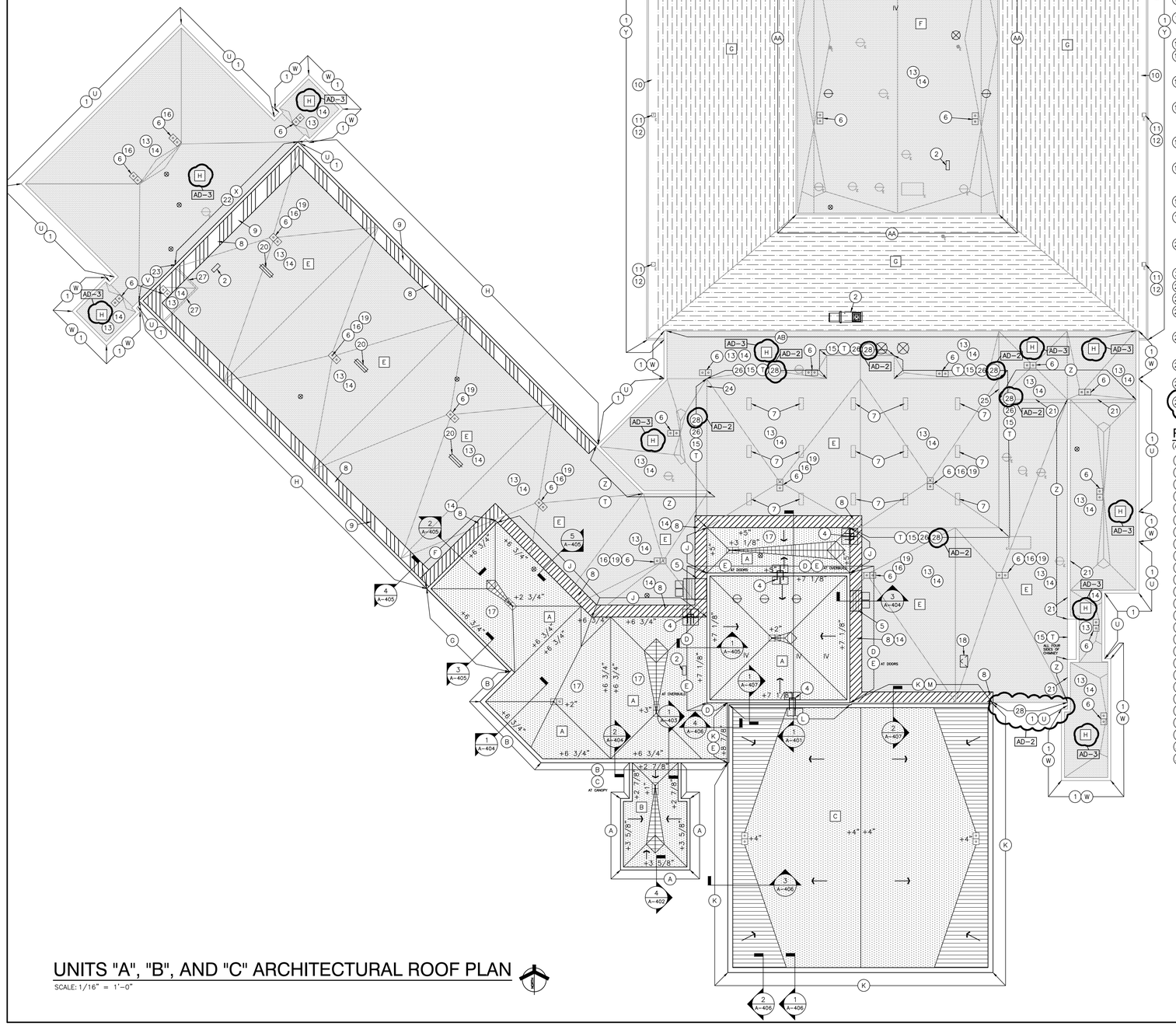
MARK	DATE	ISSUED FOR
AD–2	02/17/22	ADDENDUM NO. 2
AD–3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "D" ARCHITECTURAL FIRST FLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET D A-104

Wednesday, 2/23/2022 – 1:59 PM – LAST SAVED BY:DBURNS
Y:\21–113 CROWN POINT CSC – MACARTHUR ES ADDITION AND RENOVATIONS\21–113 DRAWINGS\05 ARCH\A–104.DWG



UNITS "A", "B", AND "C" ARCHITECTURAL ROOF PLAN

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

H EXISTING SLOPED METAL DECK WITH RIGID INSULATION AND BUILT UP ROOF SYSTEM; EXISTING BUILT UP ROOF SYSTEM, COVER BOARD AND ROOF INSULATION TO REMAIN. REMOVE ALL BALLAST. PREP AND PROVIDE NEW COVER BOARD AND ROOF MEMBRANE SYSTEM. NEW ROOF MEMBRANE AND COVER BOARD SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD. AD-3

ROOF PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. BASE BID: PAINT EXISTING METAL FASCIA. ALTERNATE BID: REMOVE AND REPLACE EXISTING FASCIA. REFER TO 4/A-212
2. MECHANICAL UNIT/EQUIPMENT – REFER TO MECHANICAL AND KITCHEN DRAWINGS. FLASH CURB PER ROOFING MANUFACTURERS STANDARD DETAILS AND SPECIFICATIONS.
3. 4" X 5" ALUMINUM DOWNSPOUT AND SPLASH PAN DIVERTER ON ROOF. ALUMINUM DOWNSPOUT BOOT AT GRADE. AD-2
4. EXTERIOR ALUMINUM LADDER — 13 A-210
5. FREE STANDING ROOFTOP METAL GRATED STAIR AND RAILING (7'-0" WIDE/4 RISERS)
6. REPLACE EXISTING DRAINS WITH NEW DRAIN AND OVERFLOW DRAIN. REMOVE AND MODIFY EXISTING RIGID INSULATION. INFILL NEW RIGID AS REQUIRED. REFER TO 6/A-213
7. REMOVE EXISTING SKYLIGHT IN ITS ENTIRETY AND INFILL WITH NEW 1 1/2" METAL DECK.
8. PATCH/ REPAIR/ BUILD UP EXISTING ROOF INSULATION AS REQUIRED DO TO NEW CONSTRUCTION AND TO MAINTAIN POSITIVE DRAINAGE. LAP MEMBRANE FROM NEW CONSTRUCTION OVER NEW MEMBRANE ON EXISTING CONSTRUCTION AND NEW MEMBRANE AND ADHERE AS REQUIRED FOR ROOF WARRANTY.
9. REMOVE EXISTING ROOF SYSTEM AND INSULATION AS REQUIRED FOR NEW PARAPET CONSTRUCTION. INFILL WITH SPRAY FOAM INSULATION TO MAINTAIN THERMAL BRAKE.
10. NEW MEMBRANE ASSEMBLY. ENSURE OVERLAP, FLASHING AND COUNTER FLASHING FOR WATERTIGHT CONDITIONS.
11. EXISTING ROOF DRAIN TO REMAIN. RE-FLASH AND COUNTER FLASH AS REQUIRED. PROVIDE ALLOWANCE FOR REPLACEMENT COMPLETE OF 3 ROOF DRAIN ASSEMBLIES. PIPE TO MASONRY WALL EDGE.
12. INSPECT EXISTING LEADER PIPING AND NOTIFY CM OF CONDITIONS.
13. EXISTING ROOF INSULATION AND COVERBOARD IF PRESENT TO REMAIN. PREP EXISTING SURFACE TO REMAIN TO RECEIVE NEW COVERBOARD AND MEMBRANE.
14. WHERE NEW CONSTRUCTION OCCURS PROVIDE NEW RIGID INSULATION INFILL FOR CONTINUOUS THERMAL BARRIER. ENSURE TIGHT FITMENT FROM EXISTING TO NEW AND POSITIVE DRAINAGE
15. REMOVE EXISTING CAP FLASHING AND COUNTER FLASHING. ROUT OUT JOINT AS REQUIRED. INSTALL NEW COUNTER FLASHING. TUCK POINT AND REPAIR MASONRY ALONG JOINT FOR WATER TIGHT CONDITION.
16. AT ROOF DRAIN CAREFULLY LOCATE DRAIN WITH BUILDING STRUCTURE AND EXISTING CONDITIONS, REFER TO STRUCTURAL AND MEP DRAWINGS.
17. DEMOLISH EXISTING ROOF MEMBRANE, RIGID INSULATION, COVERBOARD, METAL COPING, FLASHING, AND COUNTER FLASHING TO ROOF DECK TO ACCOMMODATE NEW ROOF OVERBUILD. REFER TO STRUCTURAL AND MEP DRAWINGS.
18. ROOF HATCH — 12 A-210
19. SPECIALTY ROOF DRAIN W/ OVERFLOW. PROVIDE HEAVY GAUGE SHEET METAL PAN OVER OPENING COMPLETE. MODIFY TO ACCEPT SPECIALTY PAN. — 9 A-212
20. RELIEF – REFER TO MEP DRAWINGS. RELIEF VENT TO USE EXISTING STRUCTURAL PENETRATION. COORDINATE EXACT PENETRATION AND OPENING SIZE IN FIELD.
21. REFER TO DETAIL — 7 A-212
22. REFER TO DETAIL — 6 A-212
23. REFER TO DETAIL — 5 A-212
24. REMOVE LOUVER COMPLETE. INFILL EXISTING MASONRY OPENING WITH 6" CMU, 2" RIGID INSULATION, AND BRICK VENEER MATCHING EXISTING.
25. WHERE MECH EQUIPMENT IS MODIFIED, REMOVE AND INFILL EXISTING MASONRY OPENING WITH 4" CMU, 2" RIGID INSULATION, AND BRICK VENEER TO MATCH EXISTING. AD-2
26. TUCK POINT EXISTING BRICK AND LIMESTONE CAP COMPLETE. ASSUME REPLACEMENT OF 25% OF EXISTING BRICK VENEER.
27. REMOVE AND REINSTALL EXPANSION JOINT COVER AS REQUIRED FOR NEW ROOF INSTALLATION.
28. EXISTING FASCIA TO REMAIN. PROVIDE NEW ROOF EDGE, FIELD VERIFY AND PROVIDE FOR WATER TIGHT CONDITION — 6 A-210, 15 A-210 SIM. AD-3, AD-2

ROOF EDGE DETAILS:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

- A COPING DETAIL. — A-211
- B METAL FASCIA DETAIL. — 2 A-211
- C WALL/ROOF COUNTER FLASHING DETAIL. (AT CANOPY) — 10 A-210, 3 A-211
- D METAL FASCIA DETAIL. — 4 A-210
- E WALL/ROOF COUNTER FLASHING DETAIL. — 4 A-211
- F METAL FASCIA DETAIL. — 5 A-211
- G METAL FASCIA DETAIL. — 6 A-211
- H METAL FASCIA DETAIL. — 7 A-211
- J METAL FASCIA DETAIL. — 8 A-211
- K METAL FASCIA DETAIL. — 9 A-211
- L EXPANSION JOINT. — 10 A-211
- M EXPANSION JOINT. — 11 A-211
- N ROOF EDGE. — 11 A-211
- P COPING DETAIL. — 12 A-211
- Q COPING DETAIL. — 13 A-211
- R COPING DETAIL. — 14 A-211
- S COPING AND GUTTER DETAIL. — 15 A-211
- T FLASHING DETAIL AT EXISTING WALL. — 1 A-212
- U METAL FASCIA DETAIL. — 2 A-212
- V METAL FASCIA DETAIL. — 5 A-212
- W METAL FASCIA DETAIL. — 6 A-212
- X METAL FASCIA DETAIL. — 7 A-212
- Y METAL FASCIA DETAIL. — 7 A-212
- Z METAL FASCIA DETAIL. — 8 A-212
- AB METAL FASCIA DETAIL. — 5 A-402

GENERAL ROOF PLAN NOTES:

A. FOR GENERAL NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC. SEE SHEET G-301.

B. THERE MAY BE LOCATIONS ON NEW AND/OR EXISTING ROOF WHERE THE ROOF DECK MAY NOT BE STRUCTURALLY SOUND. CONTRACTORS SHOULD USE EXTREME CAUTION IN WORKING THESE ROOF AREAS TO MAINTAIN SAFE WORKING CONDITIONS.

C. THE ROOFING INSTALLER SHALL VERIFY ALL DIMENSIONS, CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

D. THE ROOFING INSTALLER SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ALL DAMAGE CAUSED BY THE IMPROPER STORAGE OR STACKING OF ROOFING MATERIALS.

E. ALL DIMENSIONS INDICATED ON THE ROOF PLAN ARE APPROXIMATE. THE ROOFING INSTALLER IS RESPONSIBLE FOR OBTAINING ACCURATE FIELD MEASUREMENTS FOR THE EXECUTION OF HIS WORK AND PRIOR TO ANY FABRICATION OF THE VARIOUS MATERIALS.

F. THE ROOFING INSTALLER SHALL PROTECT ALL ROOF DRAINS, SCUPPERS AND DOWNSPOUTS FROM DEBRIS CREATED DURING DEMOLITION AND/OR NEW CONSTRUCTION. THE ROOFING INSTALLER SHALL INSPECT AND CLEAR ALL DRAINS, SCUPPERS AND DOWNSPOUTS PRIOR TO COMPLETION OF WORK AND TO ENSURE THAT THEY ARE FREE OF DEBRIS AND ARE FUNCTIONING PROPERLY.

G. ROOF DRAIN LOCATION INDICATE DESIGN INTENT. COORDINATE LOCATIONS WITH STRUCTURAL AND MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND TRADES.

H. FOR LOCATION AND QUANTITY OF ALL ROOFTOP MECHANICAL EQUIPMENT, REFER TO MECHANICAL DRAWINGS.

I. FOR LOCATION OF ALL NEW AND/OR EXISTING PLUMBING VENTS, REFER TO MECHANICAL ROOF PLANS.

J. EXTEND ALL PLUMBING VENTS SO THAT THE TOP IS A MINIMUM OF 12" ABOVE THE ROOFING MEMBRANE.

K. PROVIDE NEW FLASHING AND TWO PIECE COUNTER-FLASHING WHERE NEW ROOFING ABUTS A NEW OR EXISTING WALL, UNLESS OTHERWISE NOTED OR DETAILED.

L. PROVIDE FLASHING AND SADDLES FOR ALL EQUIPMENT PROVIDED UNDER MECHANICAL.

M. PROVIDE FLASHING OF ALL VENTS, FAN CURBS, MASONRY WALLS, FLUES, DRAINS, FASCIAS, ETC. IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS, AND WITH ROOFING MANUFACTURERS STANDARD DETAILS AND SPECIFICATIONS.

N. CONTRACTOR TO PROVIDE CRICKETS AND/OR ROOF SADDLES AS REQUIRED TO PROMOTE POSITIVE DRAINAGE AROUND ALL ROOF TOP PENETRATIONS.

O. SADDLES AND TAPERED INSULATION SYMBOLS INDICATE DESIGN INTENT TO SLOPES TO DRAIN. ROOFING INSTALLER SHALL PROVIDE SUBMITTAL DRAWINGS FOR TAPERED INSULATION AND SADDLES TO ENSURE POSITIVE SLOPE.

P. ALL NEW WOOD BLOCKING AND NAILERS SHALL BE FIRE/MOISTURE TREATED WOOD.

Q. ANCHOR ALL ROOFING EDGE WOOD BLOCKING AND STRUCTURAL INSULATED SHEATHING FOR COPINGS, FASCIA, AND EXPANSION JOINT COMPRESSIBLE TUBES AS REQUIRED TO CONFORM TO STATE AND LOCAL CODES.

R. REFER TO ARCHITECTURAL FLOOR PLAN FOR LOCATION OF SECTION CUTS FOR ADDITIONAL INFORMATION.

S. DEMOLITION AND REMOVAL OPERATIONS ARE TO BE PERFORMED CARE-FULLY AND ALL PORTIONS OF THE BUILDING SHALL BE PROTECTED DURING THESE OPERATIONS. ITEMS TO BE REUSED AND REINSTALLED ARE TO BE CAREFULLY REMOVED AND STORED. DAMAGES INCURRED DURING REMOVAL OR STORAGE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

T. REMOVE ALL EXISTING ROOF GRAVEL, RESIDUE, AND ALL PROJECTIONS WHICH WOULD PREVENT THE NEW ROOF INSULATION FROM LAYING FLAT OVER THE EXISTING ROOF SURFACES.

U. REMOVE AND CLEAN ROOF DRAIN STRAINERS AND CLAMP RINGS. REINSTALL AFTER NEW ROOF INSULATION AND ROOFING MEMBRANE ARE IN PLACE, ANY BROKEN OR MISSING ROOF DRAIN STRAINER SHALL BE REPLACED WITH A NEW STRAINER.

V. SEE MECHANICAL DRAWINGS FOR LOCATIONS OF ROOF TOP EQUIPMENT TO BE REMOVED.

W. ALL ROOF SADDLE SLOPES SHALL BE 1/2" PER 12 MINIMUM"

ROOF LEGEND:

- GRAVITY, RELIEF VENT — 3 A-210
- EXHAUST FAN — 3 A-210
- INTAKE VENT — 3 A-210
- ROOF DRAIN — 5 A-210, 9 A-212, AD-2
- PLUMBING VENT — 7 A-210, 8 A-210
- EXISTING EXHAUST GRAVITY, RELIEF VENT — 3 A-210
- EXISTING ROOF DRAIN
- EXISTING PLUMBING VENT — 7 A-210, 8 A-210
- ROOF DRAINAGE SADDLE — 11 A-210
- ROOF WALKWAY PADS — 14 A-210
- INDICATES ROOF SLOPE (1/4" PER 12")
- HATCH PATTERN INDICATES NEW ROOFING SYSTEM.
- HATCH PATTERN INDICATES RE-ROOF OF EXISTING ROOF.
- HATCH PATTERN INDICATES NEW FIBERGLASS ASPHALT SHINGLES.

ROOF TYPES:

A NEW FLAT METAL DECK; PROVIDE NEW ROOF SYSTEM. NEW ROOFING SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD OVER TAPERED (1/4" PER FOOT) EXTRUDED POLYSTYRENE INSULATION WITH MINIMUM 2" THICKNESS AND MINIMUM AVERAGE THICKNESS OF 4". AD-3

B NEW FLAT METAL DECK; PROVIDE NEW ROOF SYSTEM. NEW ROOFING SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD OVER TAPERED (1/4" PER FOOT) EXTRUDED POLYSTYRENE INSULATION WITH MINIMUM 1" THICKNESS. AD-3

C NEW SLOPED METAL ACOUSTICAL DECK; PROVIDE NEW ROOF SYSTEM. NEW ROOFING SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD OVER 4" EXTRUDED POLYSTYRENE INSULATION OVER VAPOR BARRIER OVER 1/2" THERMAL SUBSTRATE BOARD. AD-3

D NEW SHINGLE ROOF. PROVIDE FIBERGLASS ASPHALT SHINGLE OVER VENT OVER 4" EXTRUDED POLYSTYRENE INSULATION OVER UNDERLAYMENT MEMBRANE.

E EXISTING CONCRETE DECK WITH RIGID INSULATION AND BUILT UP ROOF SYSTEM; EXISTING BUILT UP ROOF SYSTEM, COVER BOARD AND ROOF INSULATION TO REMAIN. REMOVE ALL BALLAST. PREP AND PROVIDE NEW COVER BOARD AND ROOF MEMBRANE SYSTEM. NEW ROOF MEMBRANE AND COVER BOARD SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD. AD-3

F EXISTING SLOPED METAL DECK WITH RIGID INSULATION AND MEMBRANE ROOF SYSTEM; REMOVE EXISTING ROOF MEMBRANE, EXISTING COVERBOARD AND ROOF INSULATION TO REMAIN. PROVIDE NEW COVER BOARD AND ROOF MEMBRANE SYSTEM. NEW ROOF MEMBRANE AND COVER BOARD SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD ON EXISTING COVERBOARD AND RIGID INSULATION AND ROOF SADDLES. AD-3

G EXISTING STEEL JOISTS AND PLYWOOD DECK (3:12) WITH ASPHALT SHINGLE SYSTEM; REMOVE EXISTING ASPHALT SHINGLES AND FELT OR UNDERLAYMENT MEMBRANE AS REQUIRED FOR NEW ROOF SYSTEM INSTALLATION. NEW ROOFING SYSTEM SHALL BE NEW ASPHALT SHINGLES ON NEW UNDERLAYMENT MEMBRANE ON EXISTING PLYWOOD DECK. REPLACE EXISTING DAMAGED 3/4" PLYWOOD ROOF DECK WITH 3/4" FRT PLYWOOD. (30% OF ROOF)

GIBRALTAR DESIGN
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PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNITS "A", "B", AND "C" ARCHITECTURAL ROOF PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A-201

Thursday, 2/24/2022 - 6:11 PM - LAST SAVED BY:TALLEN
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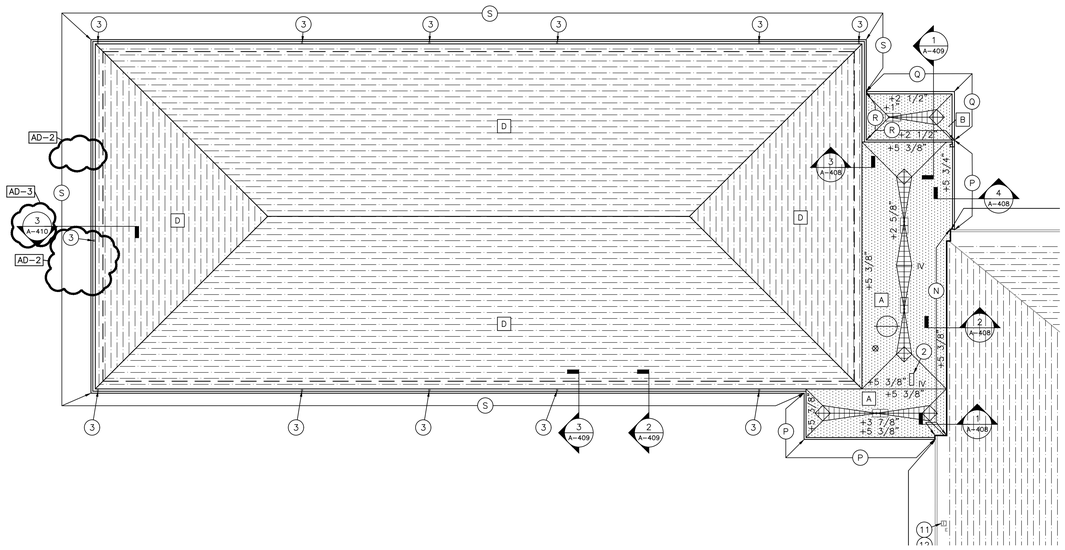

UNIT "D" ARCHITECTURAL ROOF PLAN

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

H EXISTING SLOPED METAL DECK WITH RIGID INSULATION AND BUILT UP ROOF SYSTEM; EXISTING BUILT UP ROOF SYSTEM, COVER BOARD AND ROOF INSULATION TO REMAIN. REMOVE ALL BALLAST. PREP AND PROVIDE NEW COVER BOARD AND ROOF MEMBRANE SYSTEM. NEW ROOF MEMBRANE AND COVER BOARD SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD. AD-3

ROOF PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. BASE BID: PAINT EXISTING METAL FASCIA. ALTERNATE BID: REMOVE AND REPLACE EXISTING FASCIA. REFER TO 4/A-212
2. MECHANICAL UNIT/EQUIPMENT – REFER TO MECHANICAL AND KITCHEN DRAWINGS. FLASH CURB PER ROOFING MANUFACTURERS STANDARD DETAILS AND SPECIFICATIONS.
3. 4" X 5" ALUMINUM DOWNSPOUT AND SPLASH PAN DIVERTER ON ROOF. ALUMINUM DOWNSPOUT BOOT AT GRADE. AD-2
4. EXTERIOR ALUMINUM LADDER — 13 A-210
5. FREE STANDING ROOFTOP METAL GRATED STAIR AND RAILING (7'-0" WIDE/4 RISERS)
6. REPLACE EXISTING DRAINS WITH NEW DRAIN AND OVERFLOW DRAIN. REMOVE AND MODIFY EXISTING RIGID INSULATION. INFILL NEW RIGID AS REQUIRED. REFER TO 6/A-213
7. REMOVE EXISTING SKYLIGHT IN ITS ENTIRETY AND INFILL WITH NEW 1 1/2" METAL DECK.
8. PATCH/ REPAIR/ BUILD UP EXISTING ROOF INSULATION AS REQUIRED DO TO NEW CONSTRUCTION AND TO MAINTAIN POSITIVE DRAINAGE. LAP MEMBRANE FROM NEW CONSTRUCTION OVER NEW MEMBRANE ON EXISTING CONSTRUCTION AND NEW MEMBRANE AND ADHERE AS REQUIRED FOR ROOF WARRANTY.
9. REMOVE EXISTING ROOF SYSTEM AND INSULATION AS REQUIRED FOR NEW PARAPET CONSTRUCTION. INFILL WITH SPRAY FOAM INSULATION TO MAINTAIN THERMAL BRAKE.
10. NEW MEMBRANE ASSEMBLY. ENSURE OVERLAP, FLASHING AND COUNTER FLASHING FOR WATERTIGHT CONDITIONS.
11. EXISTING ROOF DRAIN TO REMAIN. RE-FLASH AND COUNTER FLASH AS REQUIRED. PROVIDE ALLOWANCE FOR REPLACEMENT COMPLETE OF 3 ROOF DRAIN ASSEMBLIES. PIPE TO MASONRY WALL EDGE.
12. INSPECT EXISTING LEADER PIPING AND NOTIFY CM OF CONDITIONS.
13. EXISTING ROOF INSULATION AND COVERBOARD IF PRESENT TO REMAIN. PREP EXISTING SURFACE TO REMAIN TO RECEIVE NEW COVERBOARD AND MEMBRANE.
14. WHERE NEW CONSTRUCTION OCCURS PROVIDE NEW RIGID INSULATION INFILL FOR CONTINUOUS THERMAL BARRIER. ENSURE TIGHT FITMENT FROM EXISTING TO NEW AND POSITIVE DRAINAGE
15. REMOVE EXISTING CAP FLASHING AND COUNTER FLASHING. ROUT OUT JOINT AS REQUIRED. INSTALL NEW COUNTER FLASHING. TUCK POINT AND REPAIR MASONRY ALONG JOINT FOR WATER TIGHT CONDITION.
16. AT ROOF DRAIN CAREFULLY LOCATE DRAIN WITH BUILDING STRUCTURE AND EXISTING CONDITIONS, REFER TO STRUCTURAL AND MEP DRAWINGS.
17. DEMOLISH EXISTING ROOF MEMBRANE, RIGID INSULATION, COVERBOARD, METAL COPING, FLASHING, AND COUNTER FLASHING TO ROOF DECK TO ACCOMMODATE NEW ROOF OVERBUILD. REFER TO STRUCTURAL AND MEP DRAWINGS.
18. ROOF HATCH — 12 A-210
19. SPECIALTY ROOF DRAIN W/ OVERFLOW. PROVIDE HEAVY GAUGE SHEET METAL PAN OVER OPENING COMPLETE. MODIFY TO ACCEPT SPECIALTY PAN. — 9 A-212
20. RELIEF – REFER TO MEP DRAWINGS. RELIEF VENT TO USE EXISTING STRUCTURAL PENETRATION. COORDINATE EXACT PENETRATION AND OPENING SIZE IN FIELD.
21. REFER TO DETAIL — 7 A-212
22. REFER TO DETAIL — 6 A-212
23. REFER TO DETAIL — 5 A-212
24. REMOVE LOUVER COMPLETE. INFILL EXISTING MASONRY OPENING WITH 6" CMU, 2" RIGID INSULATION, AND BRICK VENEER MATCHING EXISTING.
25. WHERE MECH EQUIPMENT IS MODIFIED, REMOVE AND INFILL EXISTING MASONRY OPENING WITH 4" CMU, 2" RIGID INSULATION, AND BRICK VENEER TO MATCH EXISTING. AD-2
26. TUCK POINT EXISTING BRICK AND LIMESTONE CAP COMPLETE. ASSUME REPLACEMENT OF 25% OF EXISTING BRICK VENEER.
27. REMOVE AND REINSTALL EXPANSION JOINT COVER AS REQUIRED FOR NEW ROOF INSTALLATION.
28. EXISTING FASCIA TO REMAIN. PROVIDE NEW ROOF EDGE, FIELD VERIFY AND PROVIDE FOR WATER TIGHT CONDITION. AD-3 — 6 A-210, 15 A-210 — AD-2

ROOF EDGE DETAILS:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

A COPING DETAIL. — 1 A-211
B METAL FASCIA DETAIL. — 2 A-211
C WALL/ROOF COUNTER FLASHING DETAIL. (AT CANOPY) — 3 A-211, 10 A-210
D METAL FASCIA DETAIL. — 3 A-211
E WALL/ROOF COUNTER FLASHING DETAIL. — 4 A-210, 4 A-211
F METAL FASCIA DETAIL. — 5 A-211
G METAL FASCIA DETAIL. — 6 A-211
H METAL FASCIA DETAIL. — 7 A-211
J METAL FASCIA DETAIL. — 8 A-211
K METAL FASCIA DETAIL. — 9 A-211
L EXPANSION JOINT. — 10 A-211
M EXPANSION JOINT. — 11 A-211
N ROOF EDGE. — 12 A-211
P COPING DETAIL. — 13 A-211
Q COPING DETAIL. — 14 A-211
R COPING DETAIL. — 15 A-211
S COPING AND GUTTER DETAIL. — 1 A-212
T FLASHING DETAIL AT EXISTING WALL — 2 A-212
U METAL FASCIA DETAIL. — 3 A-212
V METAL FASCIA DETAIL. — 4 A-212
W METAL FASCIA DETAIL. — 5 A-212
X METAL FASCIA DETAIL. — 6 A-212
Y METAL FASCIA DETAIL. — 7 A-212
Z METAL FASCIA DETAIL. — 8 A-212
AA METAL FASCIA DETAIL. — 9 A-212
AB METAL FASCIA DETAIL. — 5 A-402

GENERAL ROOF PLAN NOTES:

A. FOR GENERAL NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC. SEE SHEET G-301.

B. THERE MAY BE LOCATIONS ON NEW AND/OR EXISTING ROOF WHERE THE ROOF DECK MAY NOT BE STRUCTURALLY SOUND. CONTRACTORS SHOULD USE EXTREME CAUTION IN WORKING THESE ROOF AREAS TO MAINTAIN SAFE WORKING CONDITIONS.

C. THE ROOFING INSTALLER SHALL VERIFY ALL DIMENSIONS, CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

D. THE ROOFING INSTALLER SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ALL DAMAGE CAUSED BY THE IMPROPER STORAGE OR STACKING OF ROOFING MATERIALS.

E. ALL DIMENSIONS INDICATED ON THE ROOF PLAN ARE APPROXIMATE. THE ROOFING INSTALLER IS RESPONSIBLE FOR OBTAINING ACCURATE FIELD MEASUREMENTS FOR THE EXECUTION OF HIS WORK AND PRIOR TO ANY FABRICATION OF THE VARIOUS MATERIALS.

F. THE ROOFING INSTALLER SHALL PROTECT ALL ROOF DRAINS, SCUPPERS AND DOWNSPOUTS FROM DEBRIS CREATED DURING DEMOLITION AND/OR NEW CONSTRUCTION. THE ROOFING INSTALLER SHALL INSPECT AND CLEAR ALL DRAINS, SCUPPERS AND DOWNSPOUTS PRIOR TO COMPLETION OF WORK AND TO ENSURE THAT THEY ARE FREE OF DEBRIS AND ARE FUNCTIONING PROPERLY.

G. ROOF DRAIN LOCATION INDICATE DESIGN INTENT. COORDINATE LOCATIONS WITH STRUCTURAL AND MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND TRADES.

H. FOR LOCATION AND QUANTITY OF ALL ROOFTOP MECHANICAL EQUIPMENT, REFER TO MECHANICAL DRAWINGS.

I. FOR LOCATION OF ALL NEW AND/OR EXISTING PLUMBING VENTS, REFER TO MECHANICAL ROOF PLANS.

J. EXTEND ALL PLUMBING VENTS SO THAT THE TOP IS A MINIMUM OF 12" ABOVE THE ROOFING MEMBRANE.

K. PROVIDE NEW FLASHING AND TWO PIECE COUNTER-FLASHING WHERE NEW ROOFING ABUTS A NEW OR EXISTING WALL, UNLESS OTHERWISE NOTED OR DETAILED.

L. PROVIDE FLASHING AND SADDLES FOR ALL EQUIPMENT PROVIDED UNDER MECHANICAL.

M. PROVIDE FLASHING OF ALL VENTS, FAN CURBS, MASONRY WALLS, FLUES, DRAINS, FASCIAS, ETC. IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS, AND WITH ROOFING MANUFACTURERS STANDARD DETAILS AND SPECIFICATIONS.

N. CONTRACTOR TO PROVIDE CRICKETS AND/OR ROOF SADDLES AS REQUIRED TO PROMOTE POSITIVE DRAINAGE AROUND ALL ROOF TOP PENETRATIONS.

O. SADDLES AND TAPERED INSULATION SYMBOLS INDICATE DESIGN INTENT TO SLOPES TO DRAIN. ROOFING INSTALLER SHALL PROVIDE SUBMITTAL DRAWINGS FOR TAPERED INSULATION AND SADDLES TO ENSURE POSITIVE SLOPE.

P. ALL NEW WOOD BLOCKING AND NAILERS SHALL BE FIRE/MOISTURE TREATED WOOD.

Q. ANCHOR ALL ROOFING EDGE WOOD BLOCKING AND STRUCTURAL INSULATED SHEATHING FOR COPINGS, FASCIA, AND EXPANSION JOINT COMPRESSIBLE TUBES AS REQUIRED TO CONFORM TO STATE AND LOCAL CODES.

R. REFER TO ARCHITECTURAL FLOOR PLAN FOR LOCATION OF SECTION CUTS FOR ADDITIONAL INFORMATION.

S. DEMOLITION AND REMOVAL OPERATIONS ARE TO BE PERFORMED CARE-FULLY AND ALL PORTIONS OF THE BUILDING SHALL BE PROTECTED DURING THESE OPERATIONS. ITEMS TO BE REUSED AND REINSTALLED ARE TO BE CAREFULLY REMOVED AND STORED. DAMAGES INCURRED DURING REMOVAL OR STORAGE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

T. REMOVE ALL EXISTING ROOF GRAVEL, RESIDUE, AND ALL PROJECTIONS WHICH WOULD PREVENT THE NEW ROOF INSULATION FROM LAYING FLAT OVER THE EXISTING ROOF SURFACES.

U. REMOVE AND CLEAN ROOF DRAIN STRAINERS AND CLAMP RINGS. REINSTALL AFTER NEW ROOF INSULATION AND ROOFING MEMBRANE ARE IN PLACE, ANY BROKEN OR MISSING ROOF DRAIN STRAINER SHALL BE REPLACED WITH A NEW STRAINER.

V. SEE MECHANICAL DRAWINGS FOR LOCATIONS OF ROOF TOP EQUIPMENT TO BE REMOVED.

W. ALL ROOF SADDLE SLOPES SHALL BE 1/2" PER 12 MINIMUM"

ROOF LEGEND:

- GRAVITY, RELIEF VENT — 3 A-210
- EXHAUST FAN — 3 A-210
- IV INTAKE VENT — 3 A-210
- ROOF DRAIN — 5 A-210, 9 A-212 — AD-2
- PLUMBING VENT — 7 A-210, 8 A-210
- ROOF DRAINAGE SADDLE — 11 A-210
- ROOF WALKWAY PADS — 14 A-210
- EXISTING EXHAUST, GRAVITY, RELIEF VENT — 3 A-210
- E EXISTING ROOF DRAIN
- E EXISTING PLUMBING VENT — 7 A-210, 8 A-210
- INDICATES ROOF SLOPE (1/4" PER 12")
- HATCH PATTERN INDICATES NEW ROOFING SYSTEM.
- HATCH PATTERN INDICATES RE-ROOF OF EXISTING ROOF.
- HATCH PATTERN INDICATES NEW FIBERGLASS ASPHALT SHINGLES.

ROOF TYPES:

A NEW FLAT METAL DECK; PROVIDE NEW ROOF SYSTEM. NEW ROOFING SYSTEM SHALL BE 0.060" TPO FULLY-ADHERED SINGLE-PLY MEMBRANE OVER 1/2" COVER BOARD OVER TAPERED (1/4" PER FOOT) EXTRUDED POLYSTYRENE INSULATION WITH MINIMUM 2" THICKNESS AND MINIMUM AVERAGE THICKNESS OF 4". AD-3

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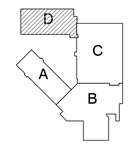
GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB
CHECKED BY TA JPB

REGISTERED JOSEPH P. BRIGGS NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "D" ARCHITECTURAL ROOF PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A-202

Thursday, 2/24/2022 - 6:11 PM - LAST SAVED BY:TALLEN
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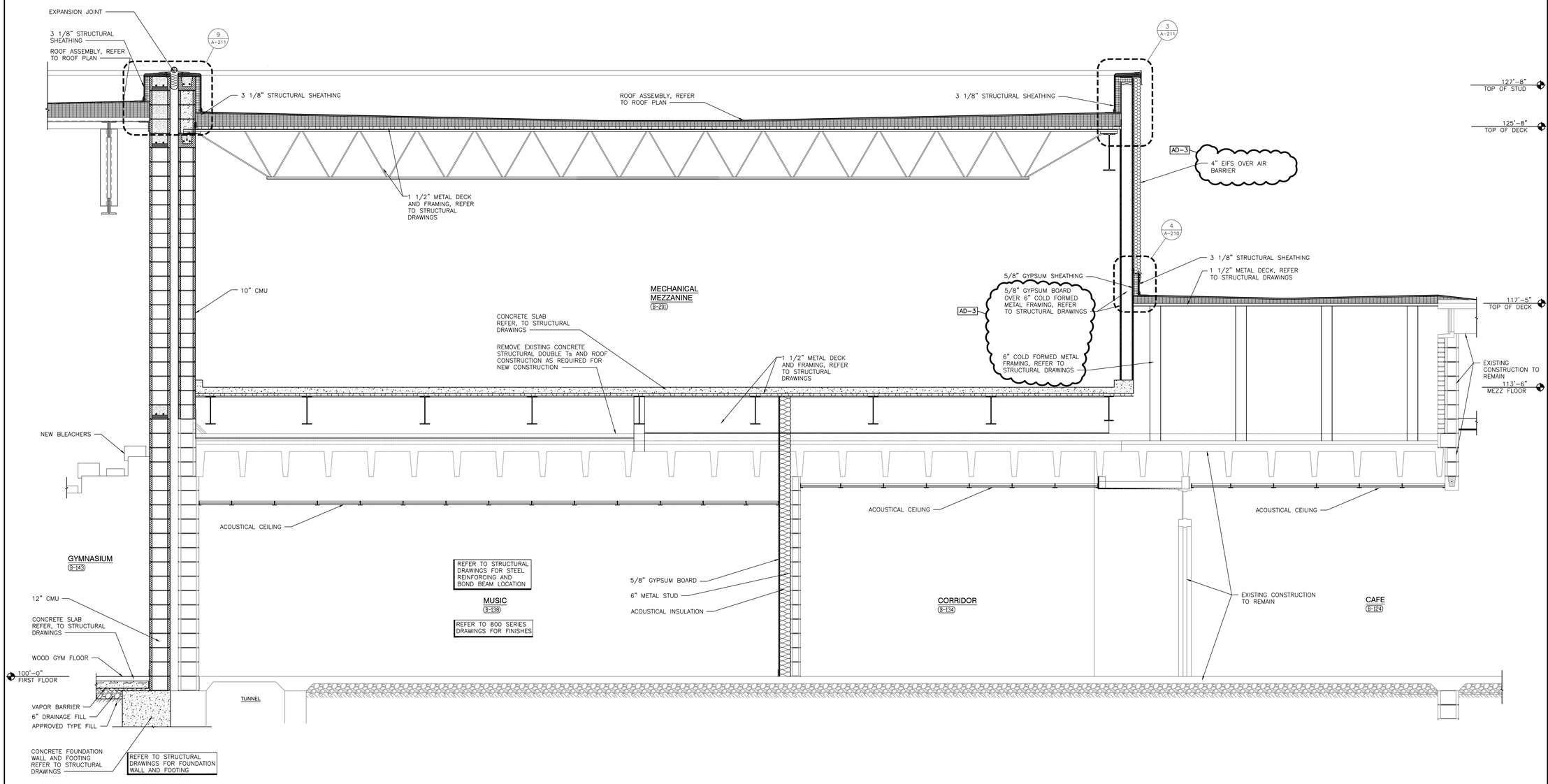

BUILDING SECTION

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

1 / A-401

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
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CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-2	02/23/22	ADDENDUM NO. 3

DRAWING
BUILDING SECTION

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A-401

Thursday, 2/24/2022 - 9:25 AM - LAST SAVED BY:DBURNS
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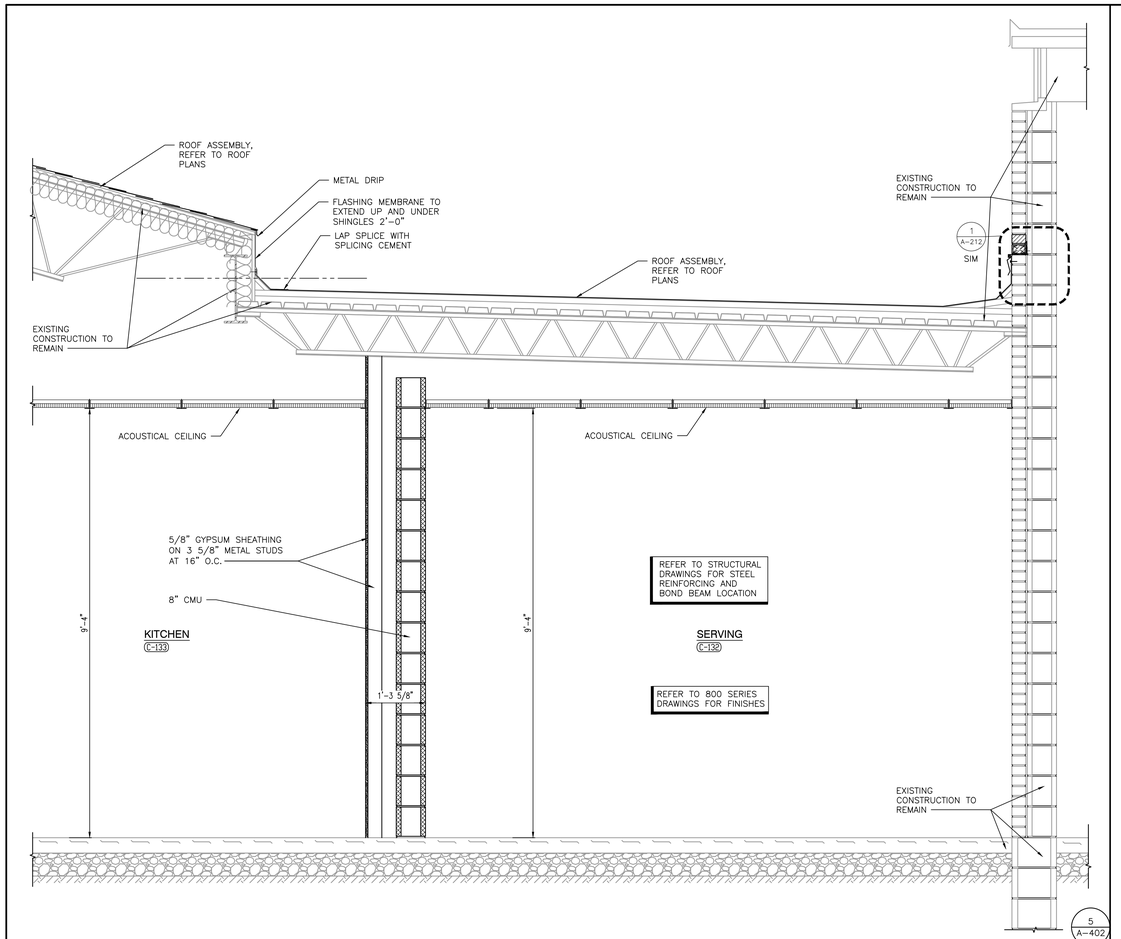
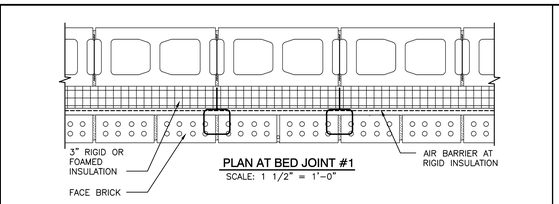
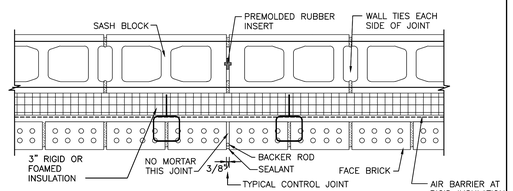




PLAN AT BED JOINT #1
SCALE: 1 1/2" = 1'-0"



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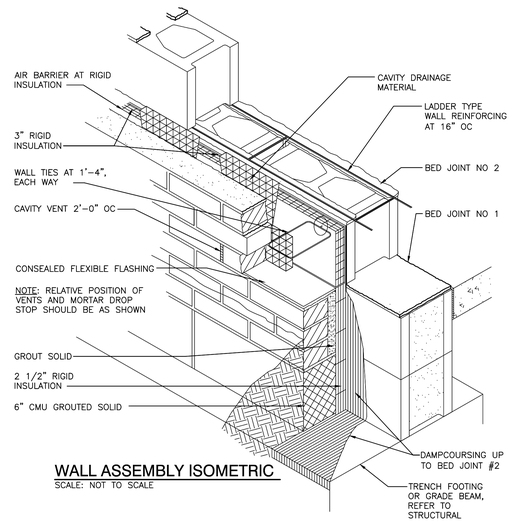

WALL ASSEMBLY ISOMETRIC
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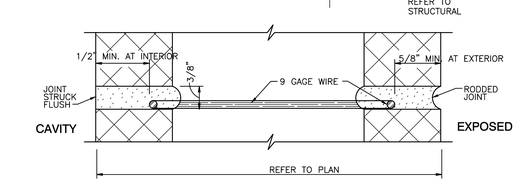
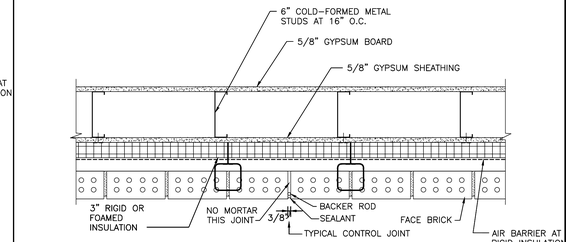


DETAIL AT BED JOINT #1
SCALE: FULL SIZE



BED JOINT
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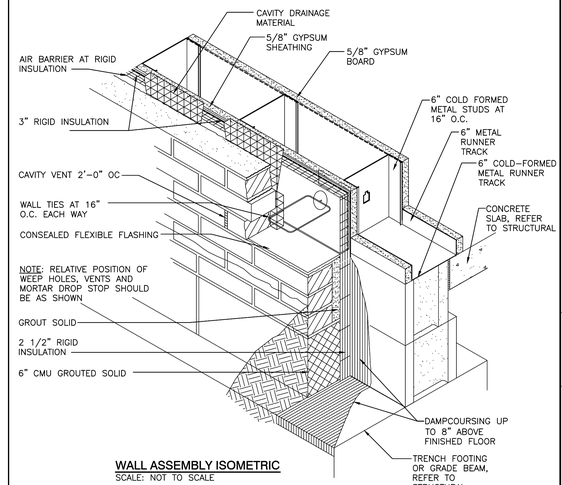

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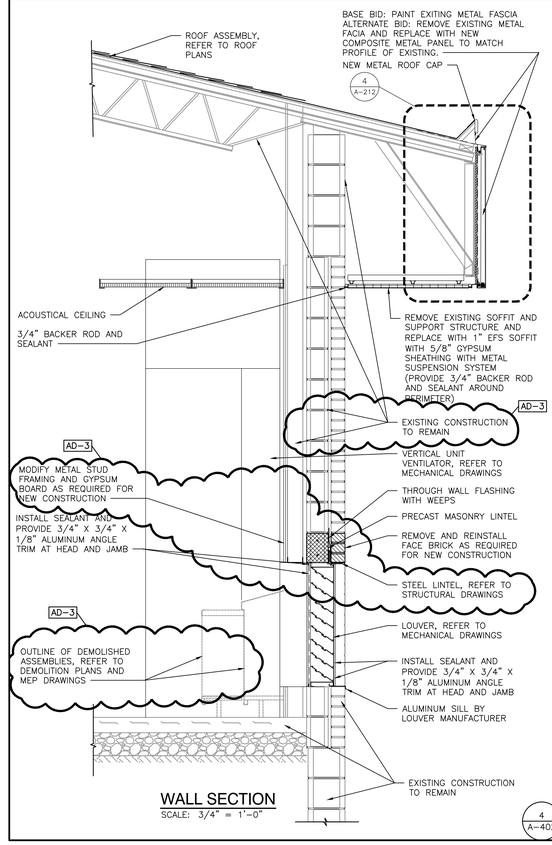
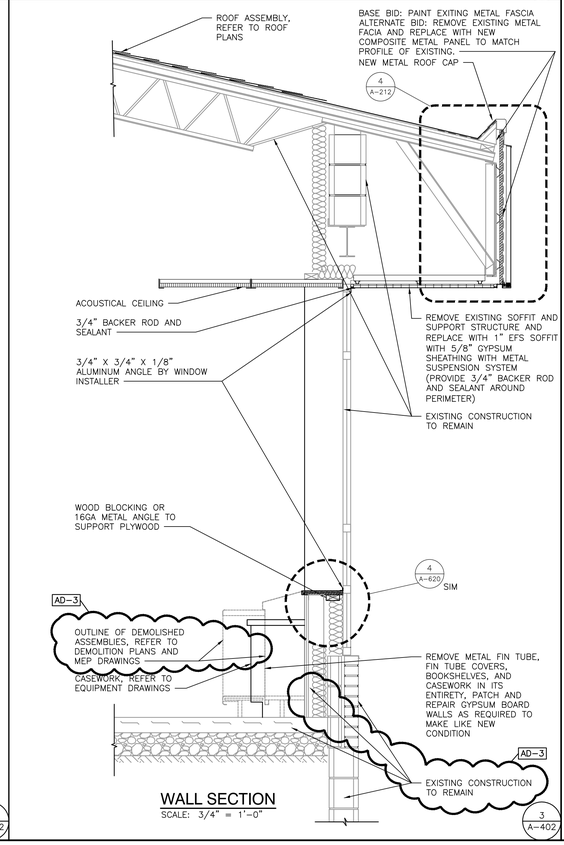


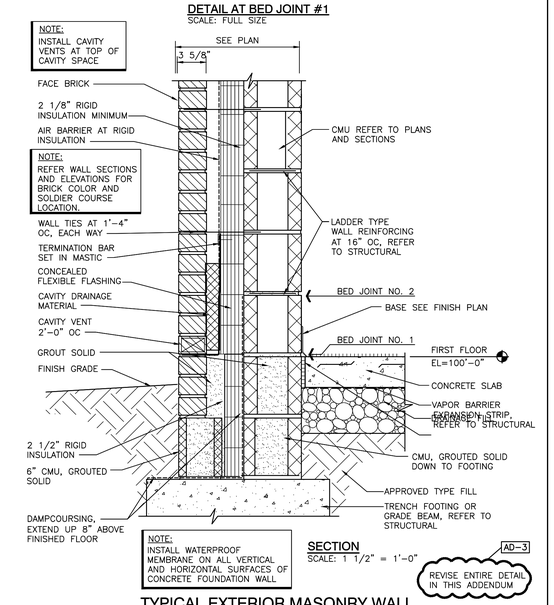
WALL SECTION
SCALE: 3/4" = 1'-0"

4 A-402



WALL SECTION
SCALE: 3/4" = 1'-0"

3 A-402

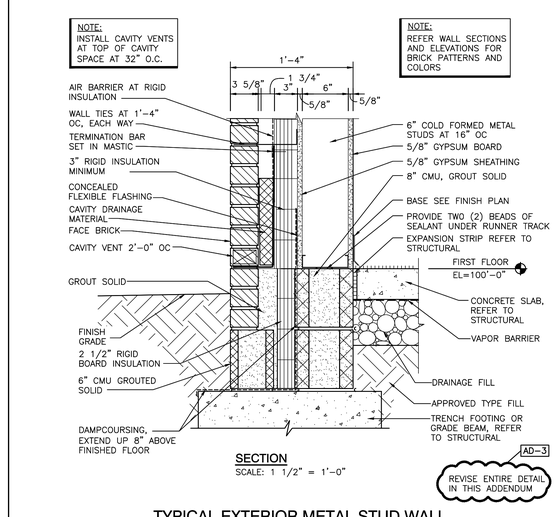


SECTION
SCALE: 1 1/2" = 1'-0"

AD-3
REVISE ENTIRE DETAIL IN THIS ADDENDUM

TYPICAL EXTERIOR MASONRY WALL CONSTRUCTION DETAIL
SCALE: AS INDICATED

2 A-402



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

AD-3
REVISE ENTIRE DETAIL IN THIS ADDENDUM

TYPICAL EXTERIOR METAL STUD WALL CONSTRUCTION DETAIL
SCALE: AS INDICATED

1 A-402

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PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB
CHECKED BY TA JPB

REGISTERED JOSEPH P. BRIGGS NO. 11600109 STATE OF INDIANA ARCHITECT

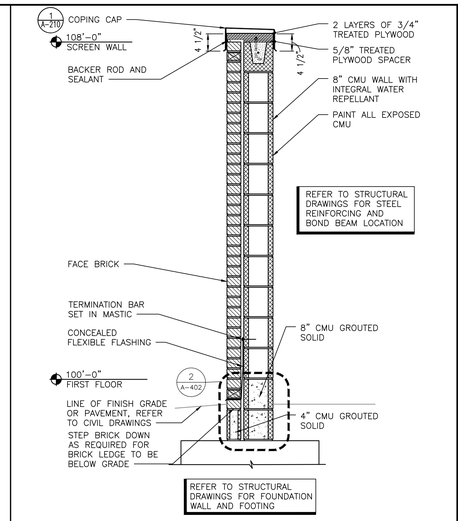
REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

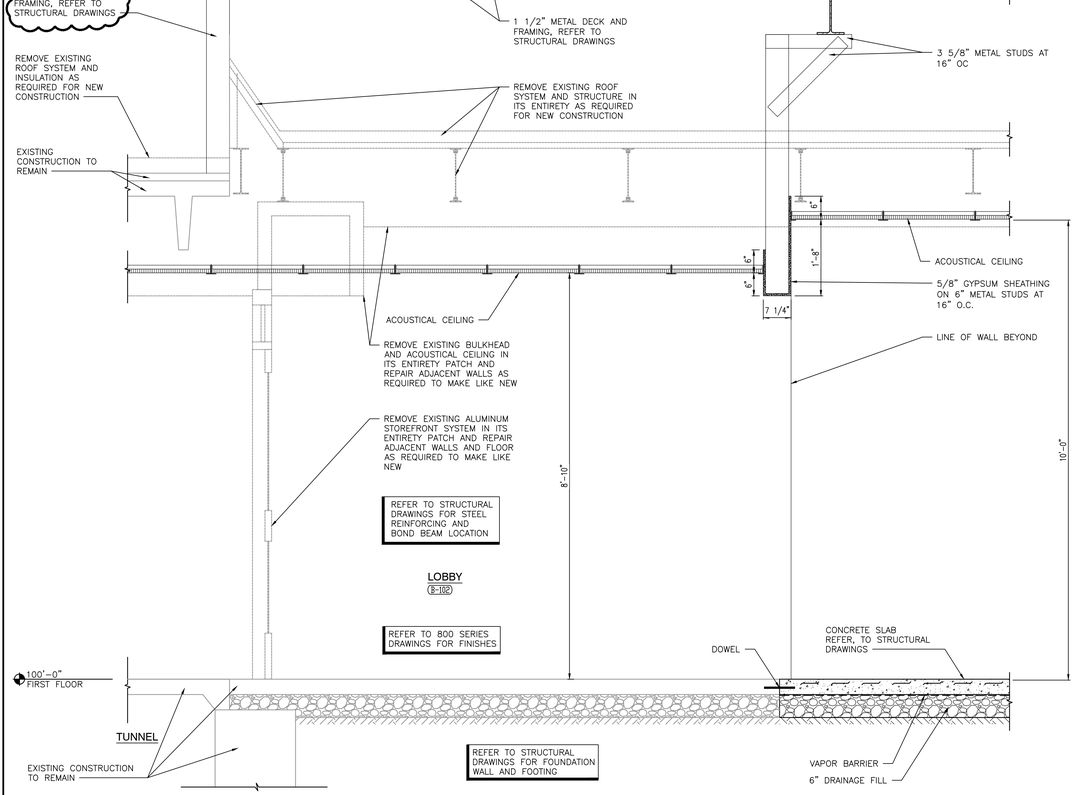
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A-402



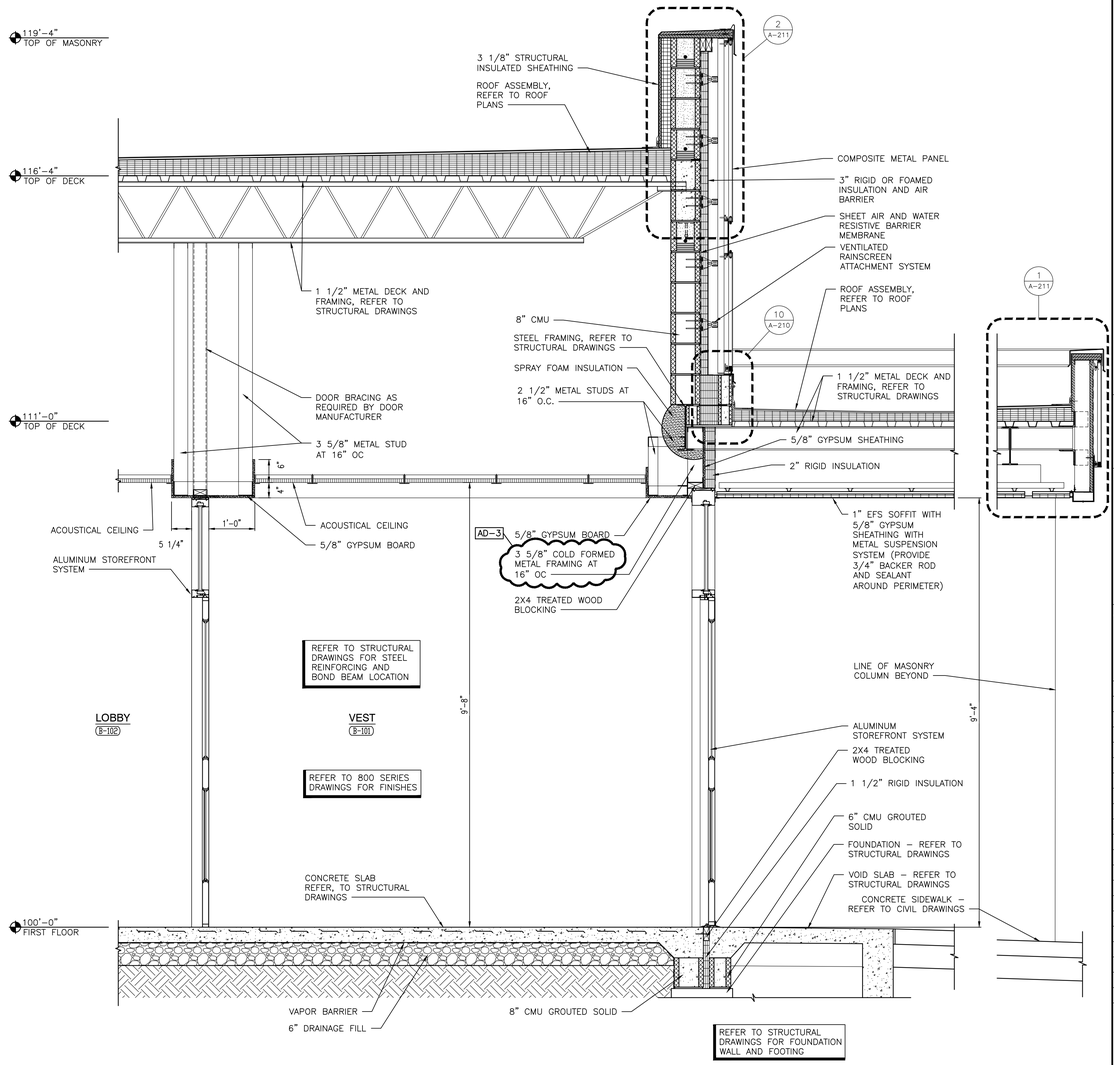
WALL SECTION
SCALE: 3/4" = 1'-0"

3 A-403



WALL SECTION
SCALE: 3/4" = 1'-0"

2 A-403



WALL SECTION
SCALE: 3/4" = 1'-0"

1 A-403

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PROJECT
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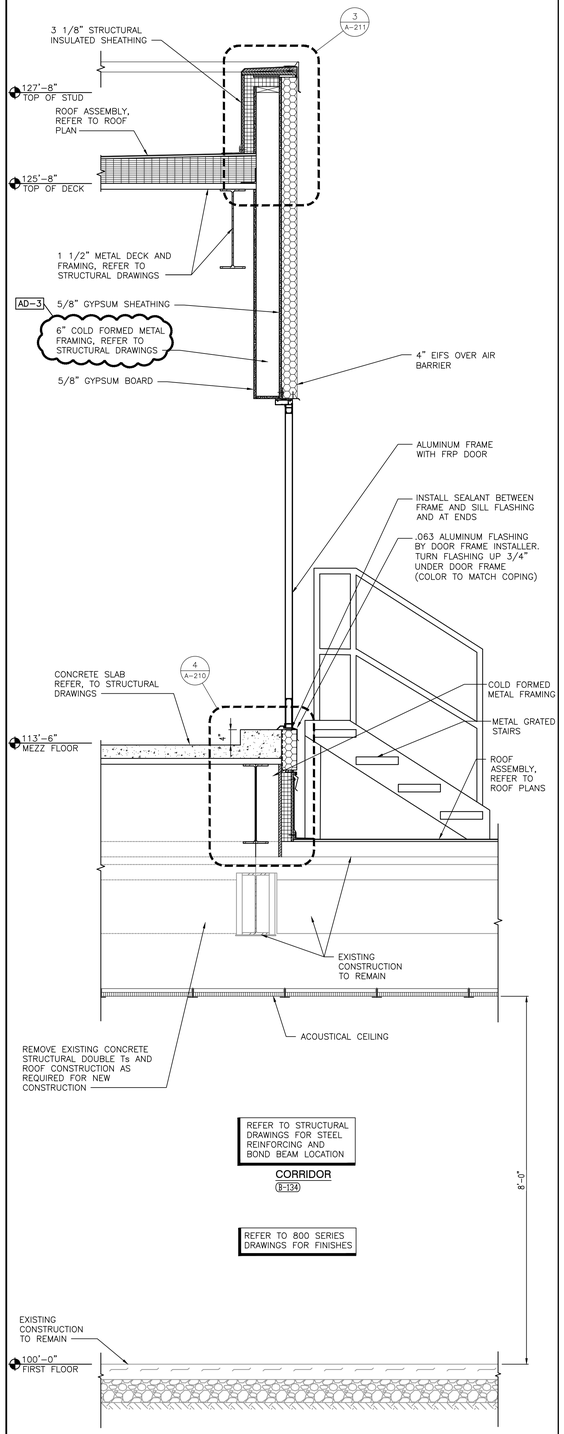
DRAWING
WALL SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

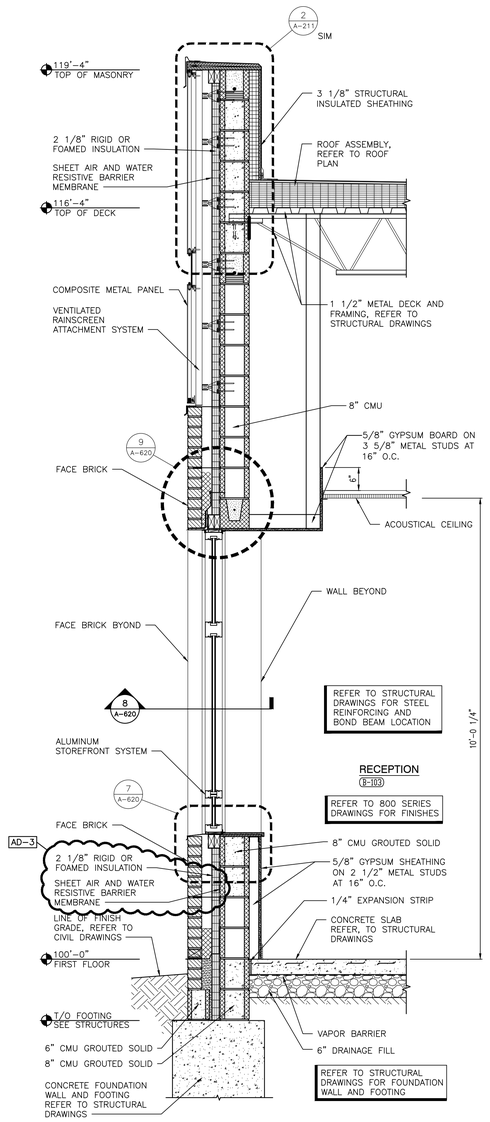
SHEET
A-403



WALL SECTION

SCALE: 3/4" = 1'-0"

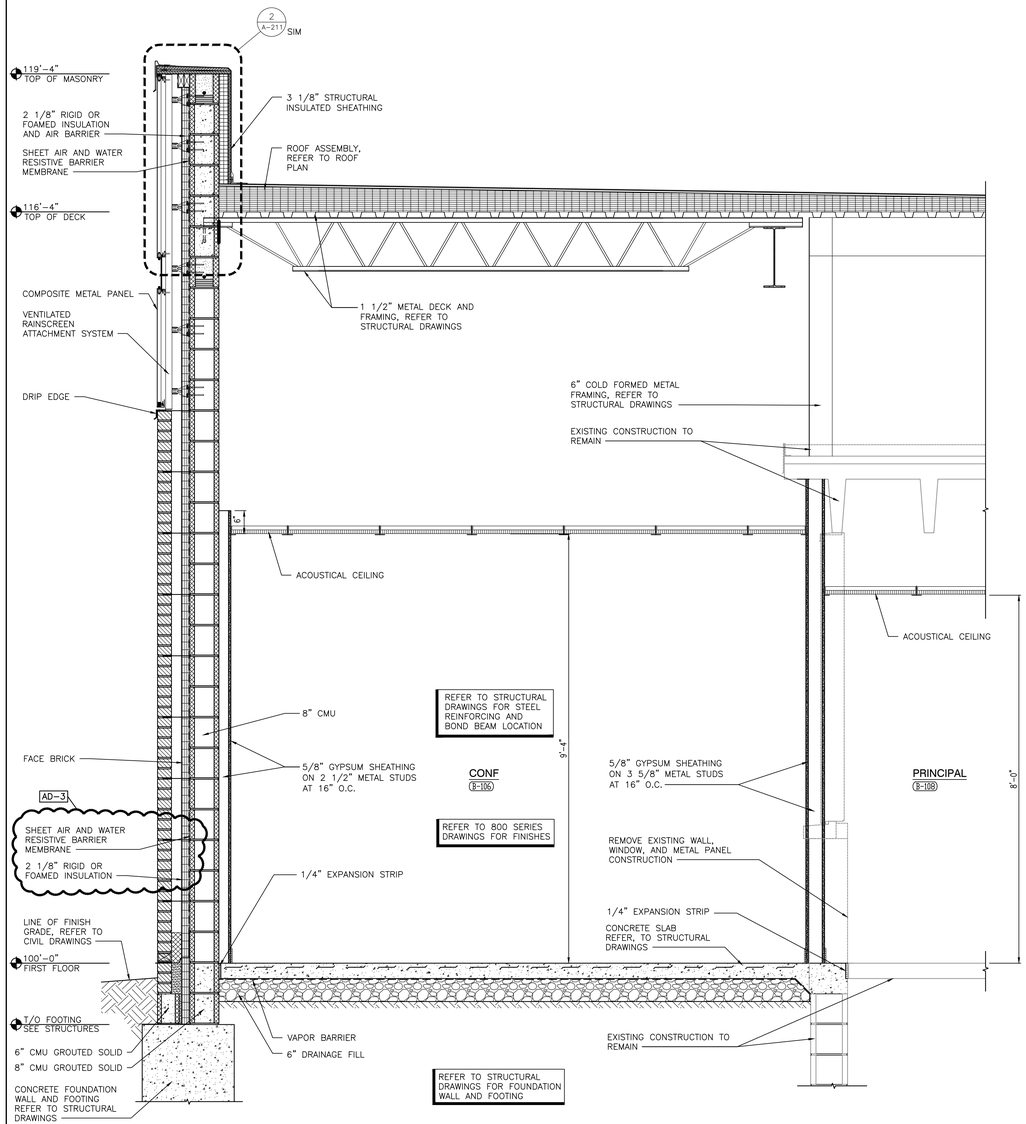
3
A-404



WALL SECTION

SCALE: 3/4" = 1'-0"

2
A-404



WALL SECTION

SCALE: 3/4" = 1'-0"

1
A-404

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
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AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A-404

Thursday, 2/24/2022 - 9:28 AM - LAST SAVED BY:DBURNS
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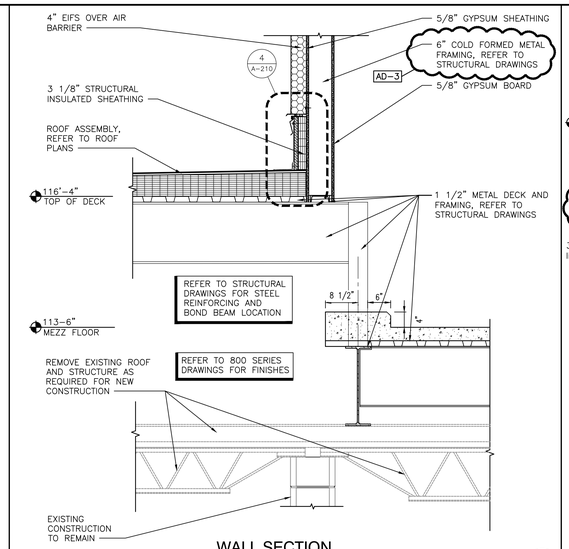
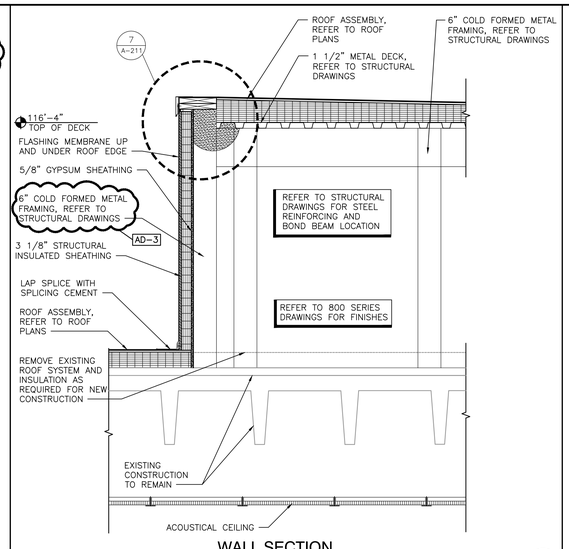


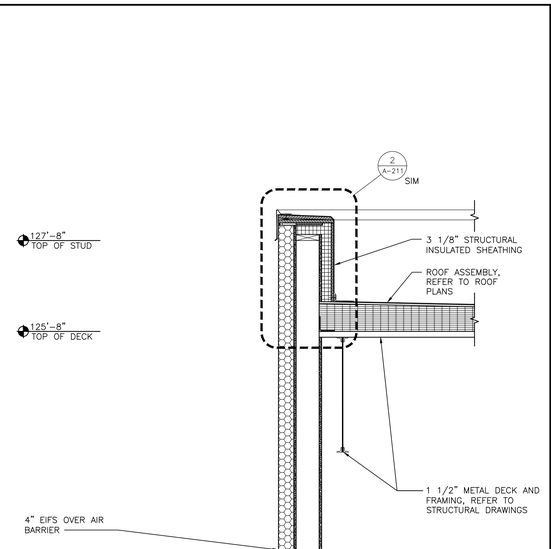
WALL SECTION
SCALE: 3/4" = 1'-0"

6 A-405



WALL SECTION
SCALE: 3/4" = 1'-0"

5 A-405



WALL SECTION
SCALE: 3/4" = 1'-0"

1 A-405

WALL SECTION
SCALE: 3/4" = 1'-0"

4 A-405

WALL SECTION
SCALE: 3/4" = 1'-0"

3 A-405

WALL SECTION
SCALE: 3/4" = 1'-0"

2 A-405

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JOSEPH P. BIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

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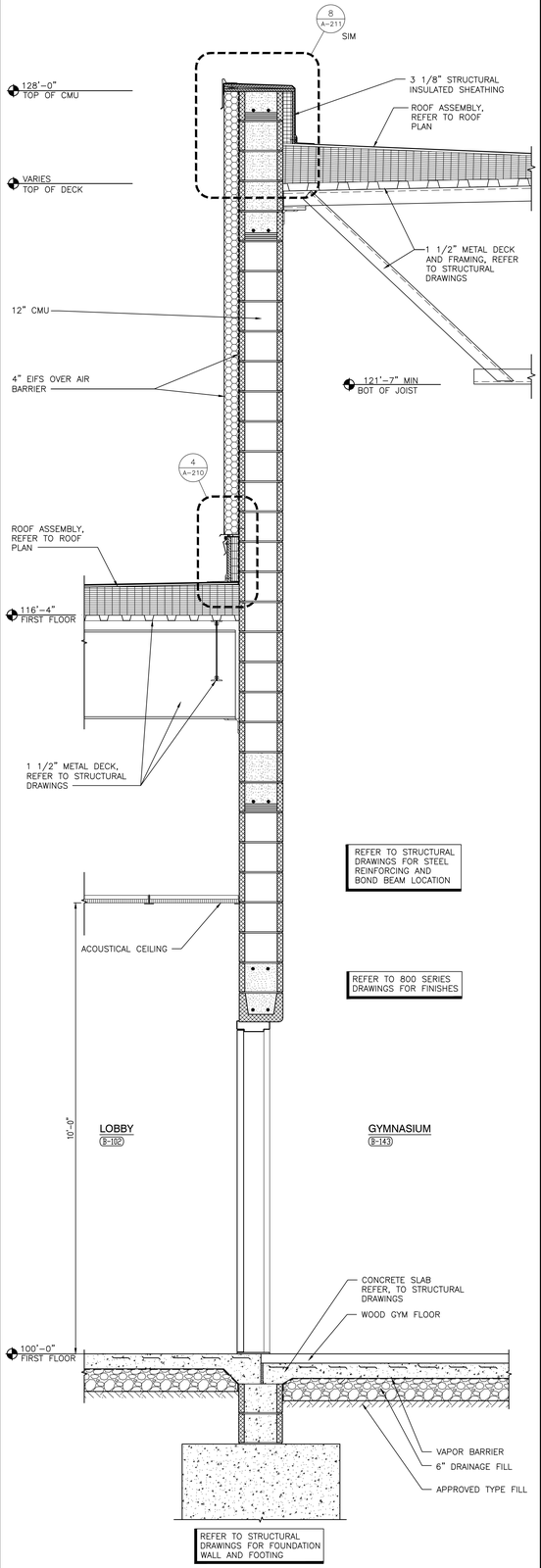
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

PROJECT
DOUGLAS MACARTHUR ES
ADDITIONS AND RENOVATIONS

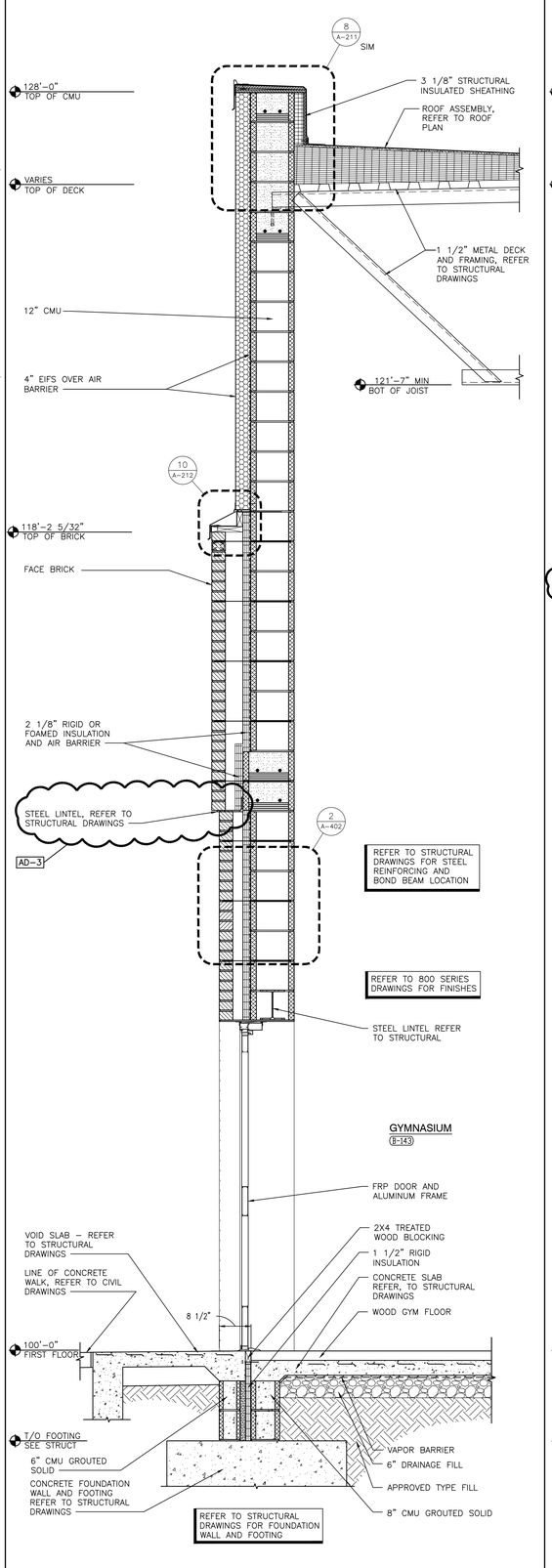
SHEET
A-405

Thursday, 2/24/2022 - 9:28 AM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\A-405.DWG



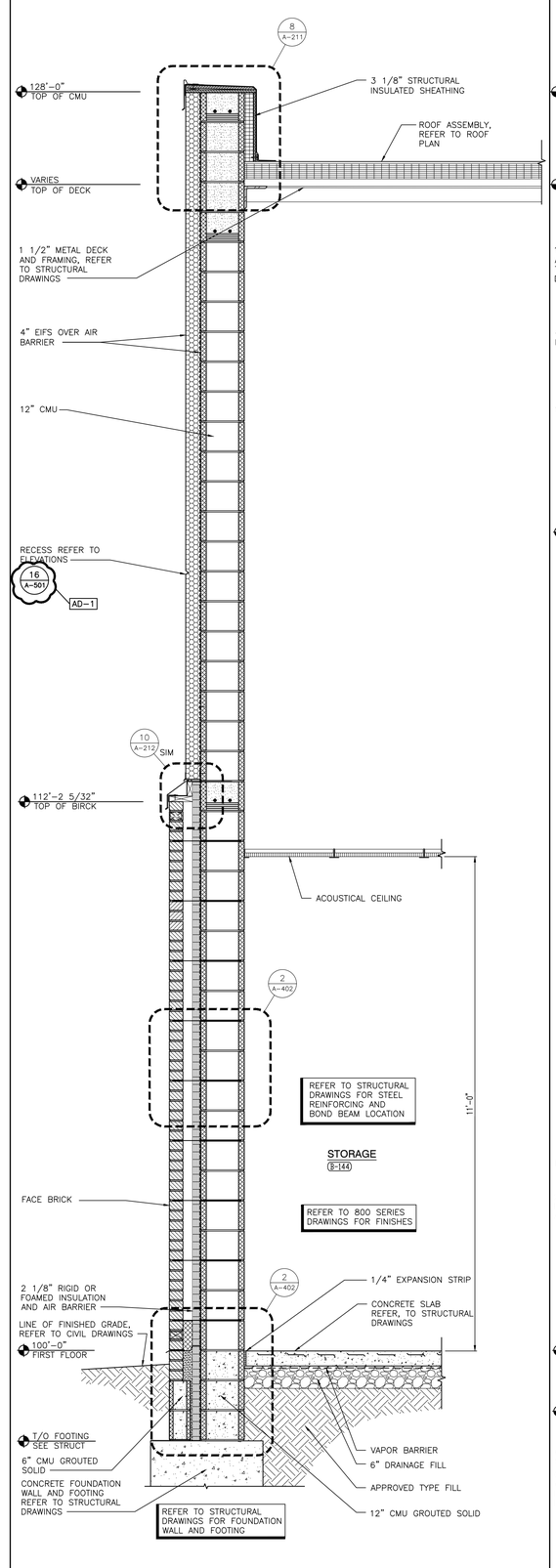
WALL SECTION
SCALE: 3/4" = 1'-0"

4 A-406



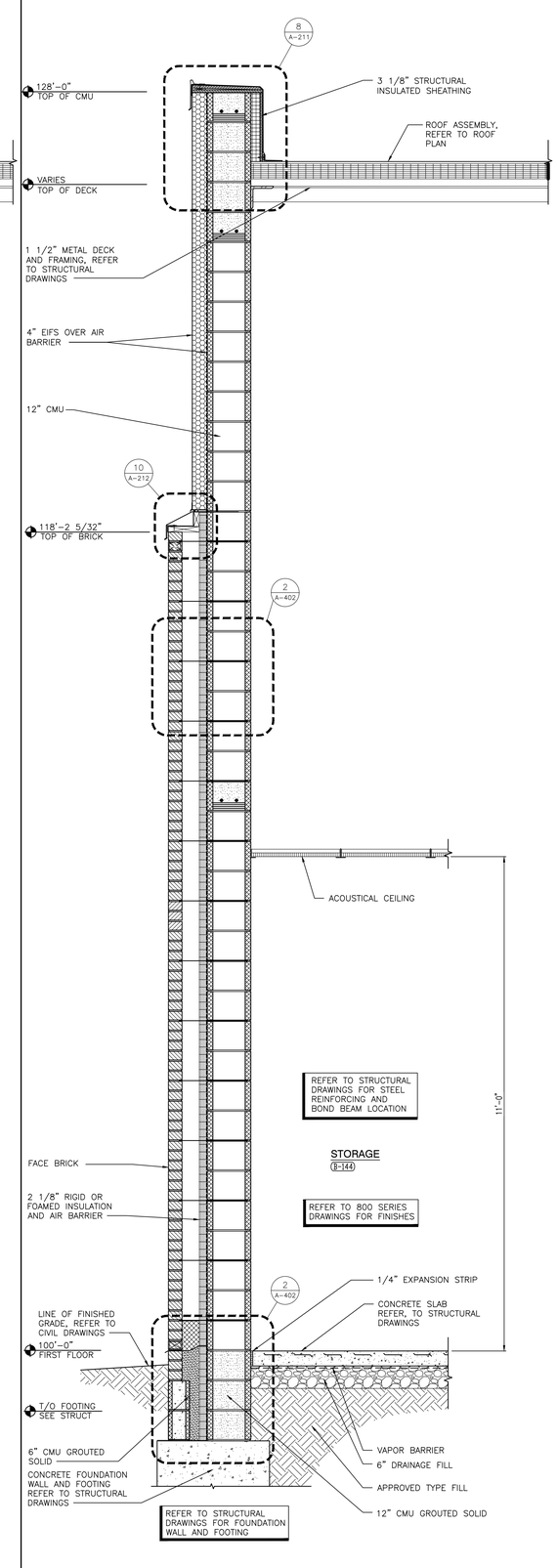
WALL SECTION
SCALE: 3/4" = 1'-0"

3 A-406



WALL SECTION
SCALE: 3/4" = 1'-0"

2 A-406



WALL SECTION
SCALE: 3/4" = 1'-0"

1 A-406

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CEDAR LAKE, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

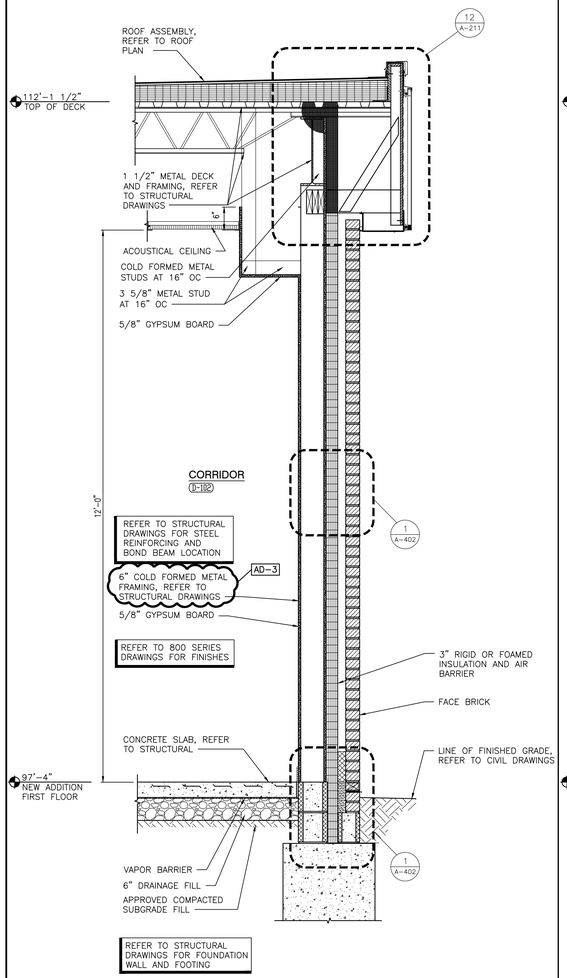
MARK	DATE	ISSUED FOR
AD-1	02/10/22	ADDENDUM NO. 1
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

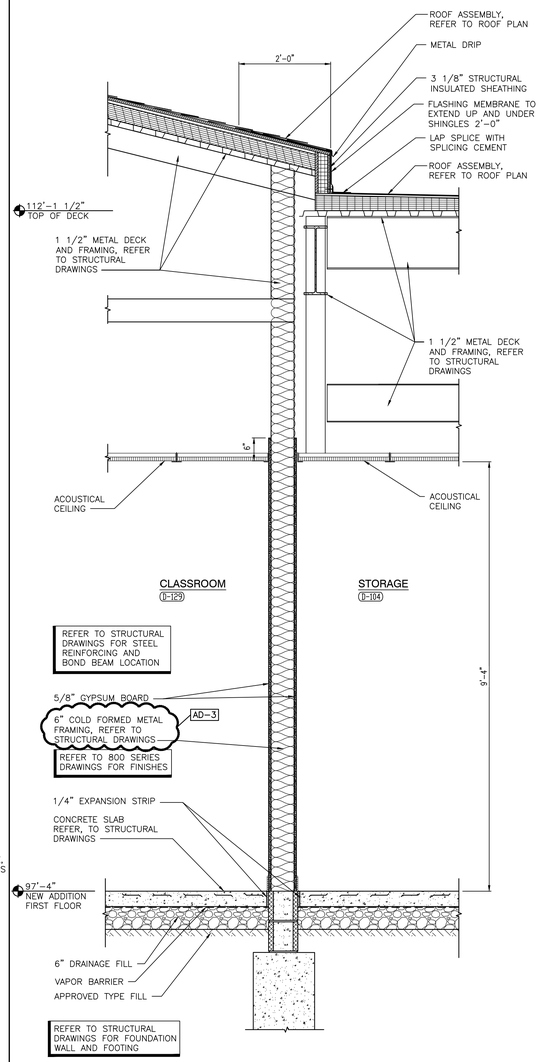
SHEET
A-406

Thursday, 2/24/2022 - 11:38 AM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\A-406.DWG



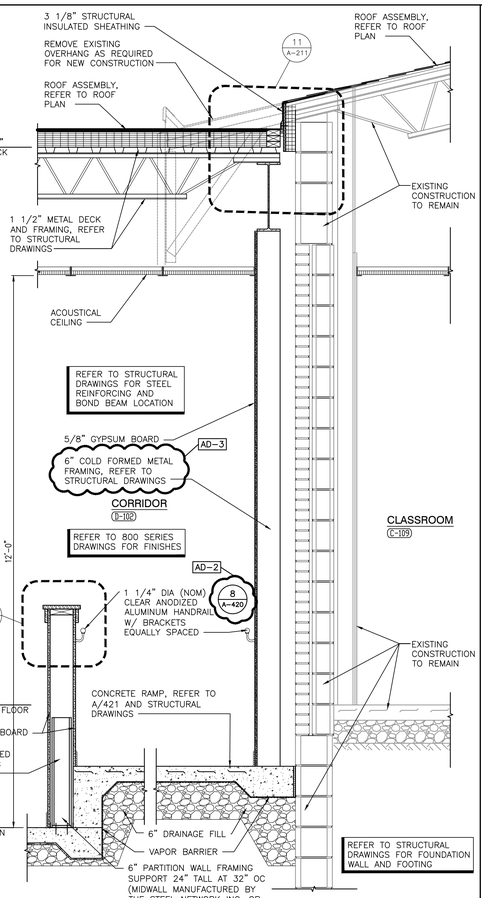
WALL SECTION
SCALE: 3/4" = 1'-0"

4
A-408



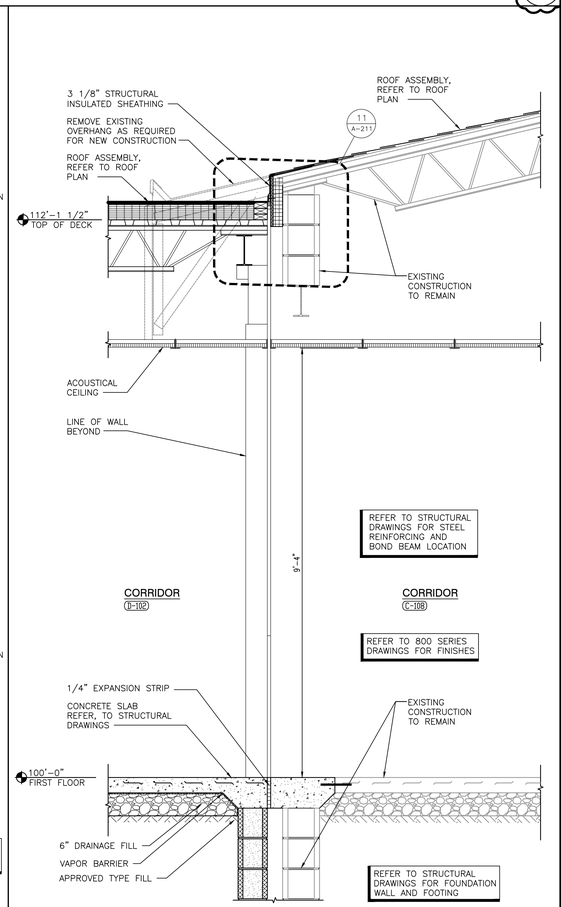
WALL SECTION
SCALE: 3/4" = 1'-0"

3
A-408



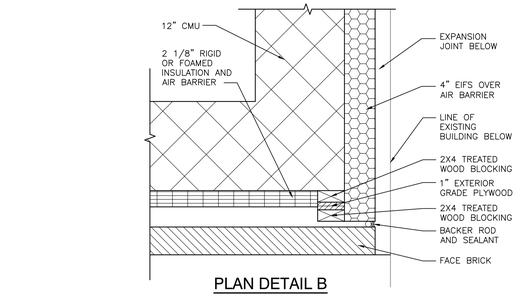
WALL SECTION
SCALE: 3/4" = 1'-0"

2
A-408

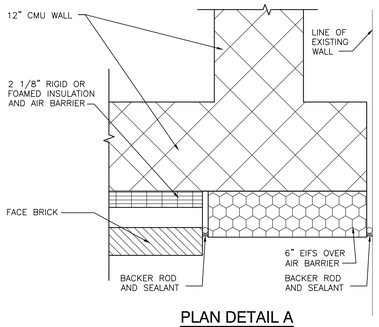


WALL SECTION
SCALE: 3/4" = 1'-0"

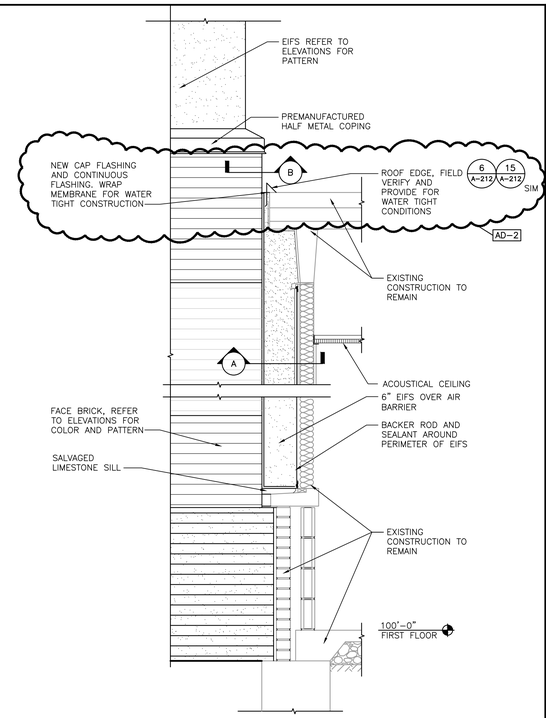
1
A-408



PLAN DETAIL B
SCALE: 1 1/2" = 1'-0"



PLAN DETAIL A
SCALE: 1 1/2" = 1'-0"



WALL SECTION
SCALE: 3/4" = 1'-0"

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DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTB
DRAWN BY DTB
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

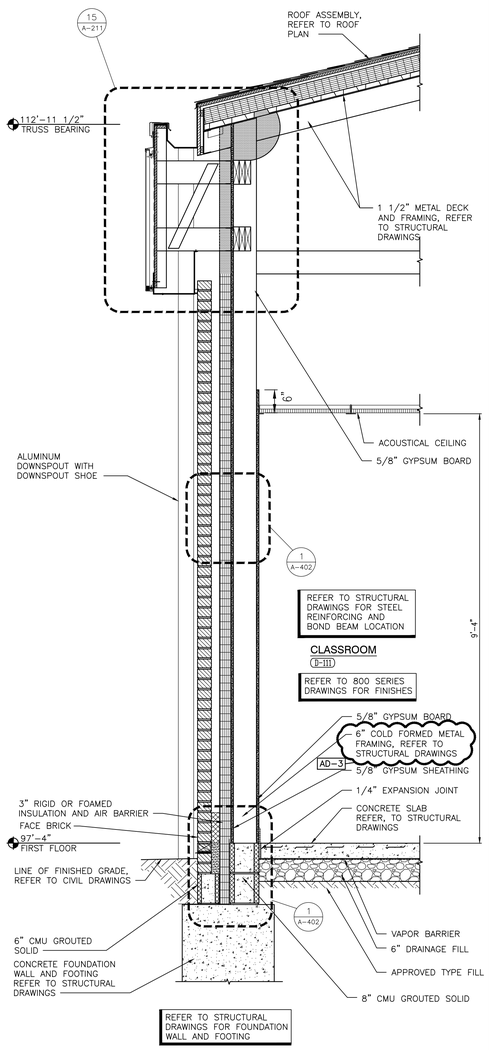
REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

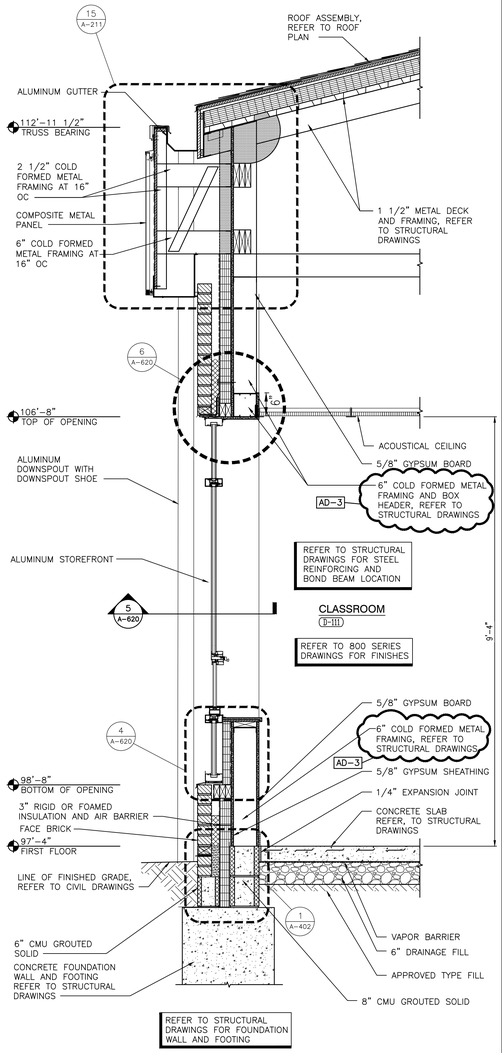
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A-408



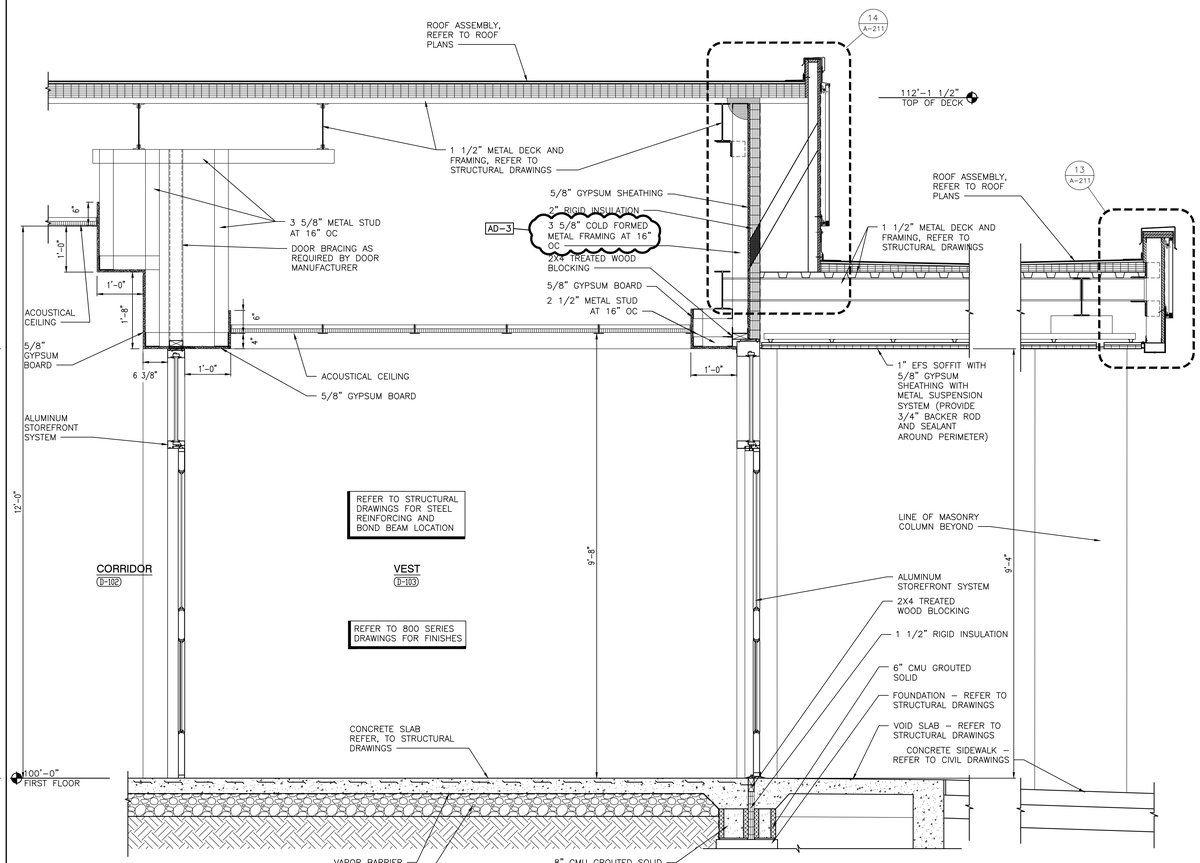
WALL SECTION
SCALE: 3/4" = 1'-0"

3
A-409



WALL SECTION
SCALE: 3/4" = 1'-0"

2
A-409



WALL SECTION
SCALE: 3/4" = 1'-0"

1
A-409

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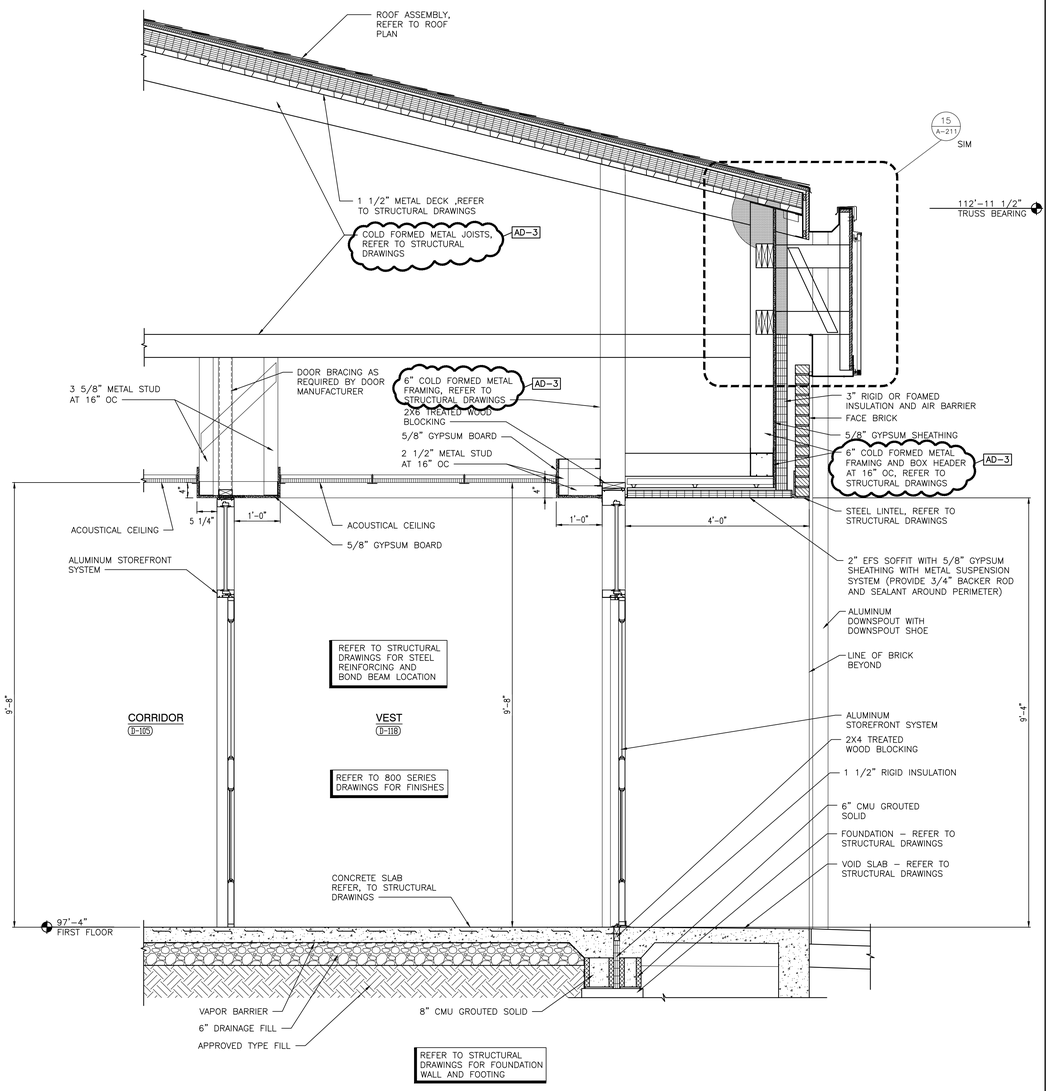
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

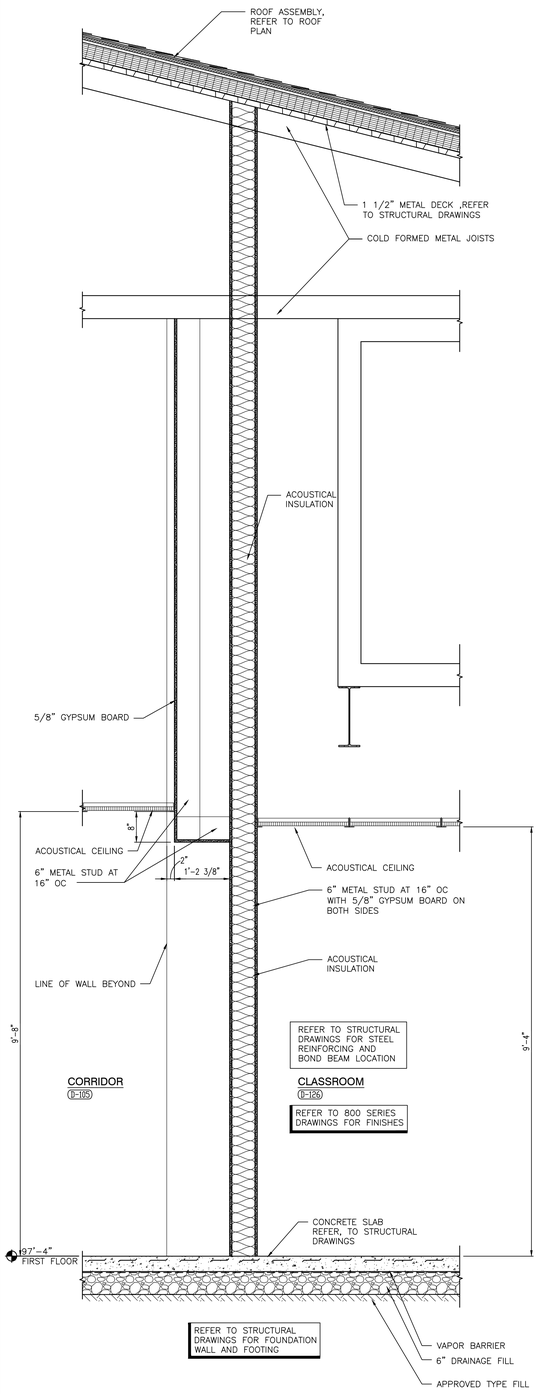
SHEET
A-409



WALL SECTION

SCALE: 3/4" = 1'-0"

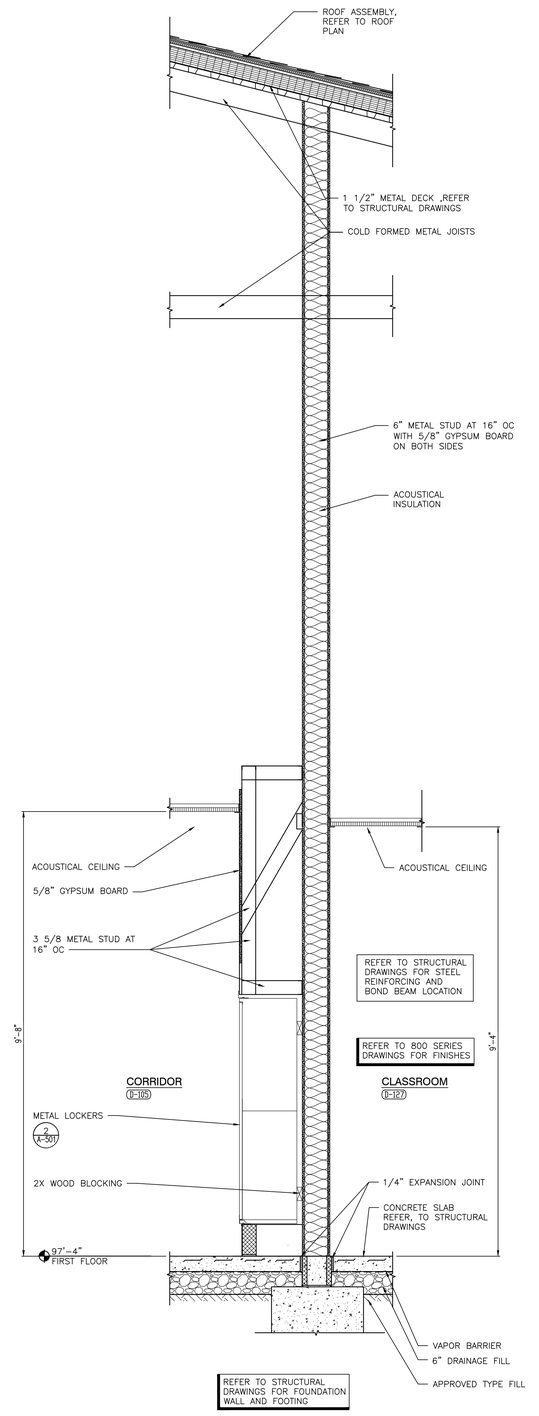
3 A-410



WALL SECTION

SCALE: 3/4" = 1'-0"

2 A-410



WALL SECTION

SCALE: 3/4" = 1'-0"

1 A-410

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PROJECT

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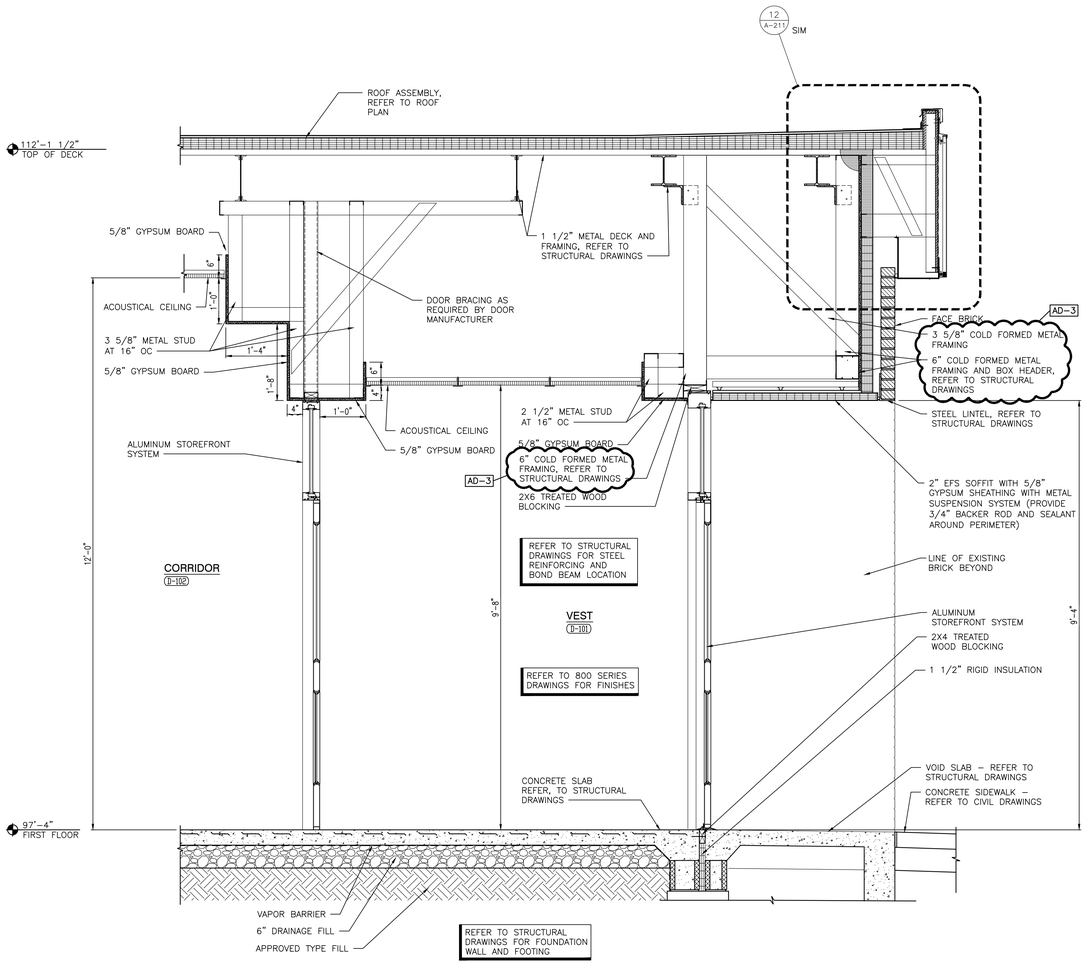
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

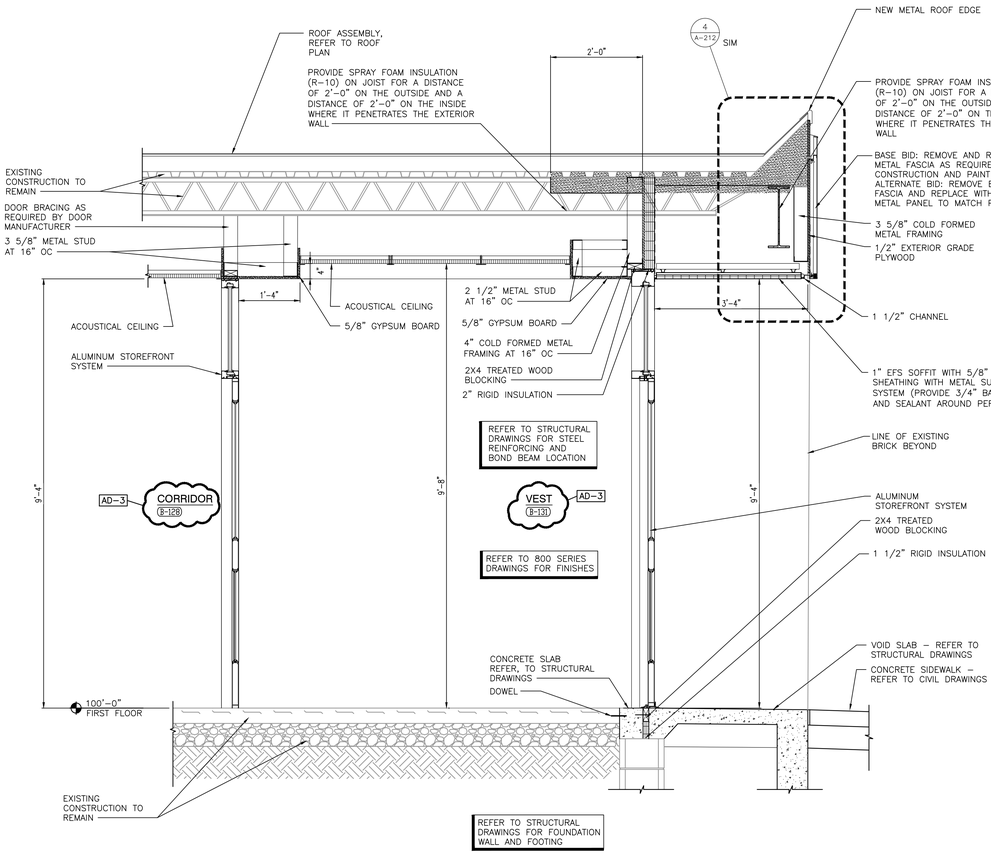
SHEET
A-410

Thursday, 2/24/2022 - 9:29 AM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\A-410.DWG



WALL SECTION
SCALE: 3/4" = 1'-0"

2
A-411



WALL SECTION
SCALE: 3/4" = 1'-0"

1
A-411

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PROJECT
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PROJECT 21-113
DATE 01/31/22
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JOSEPH P. BRIGGS
REGISTERED
NO. 11600109
STATE OF INDIANA
ARCHITECT

REVISIONS

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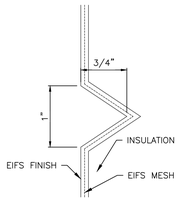
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
WALL SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

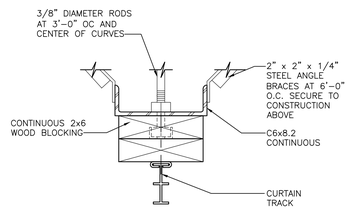
SHEET
A-411

Thursday, 2/24/2022 – 9:30 AM – LAST SAVED BY:BURNS
Y:\21-113 CROWN POINT CSC – MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\A-411.DWG



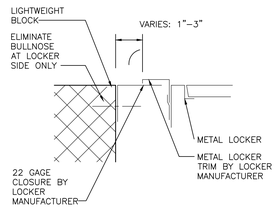
EIFS RECESS DETAIL
SCALE: 1'-0" = 1'-0"

AD-1 · 16 / A-501



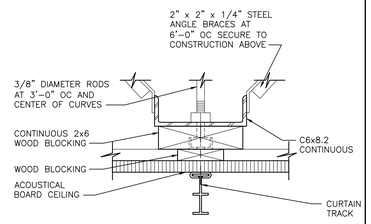
CYCLORAMA TRACK DETAIL
SCALE: 3" = 1'-0"

15 / A-501



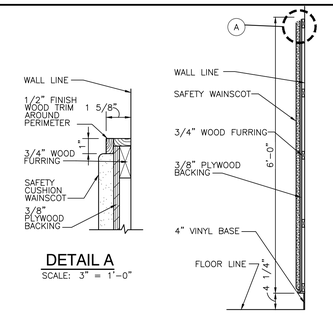
LOCKER CLOSURE
SCALE: 3" = 1'-0"

12 / A-501



CUBICAL CURTAIN TRACK DETAIL
SCALE: 3" = 1'-0"

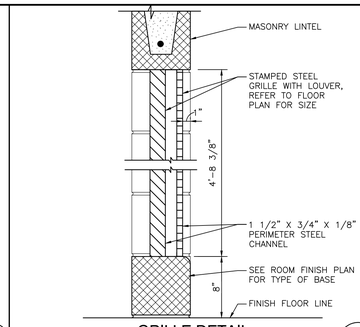
9 / A-501



DETAIL A
SCALE: 3" = 1'-0"

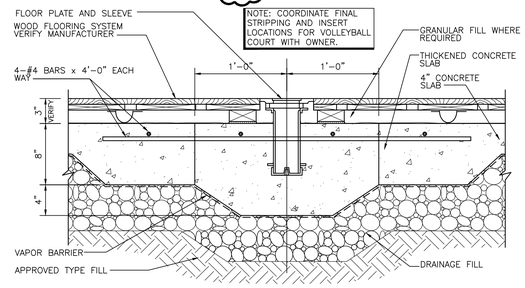
SAFETY CUSHION WAINSCOTING
SCALE: 3/4" = 1'-0"

4 / A-501



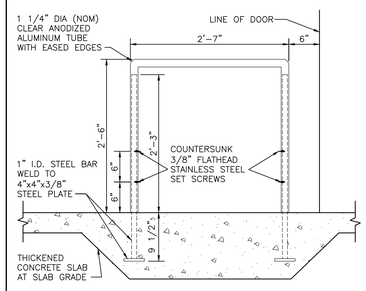
GRILLE DETAIL
SCALE: 1 1/2" = 1'-0"

3 / A-501

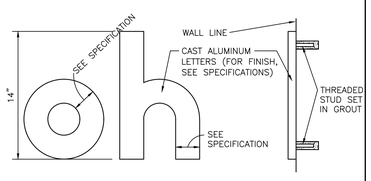


WOOD FLOOR INSERT
SCALE: 1 1/2" = 1'-0"

14 / A-501

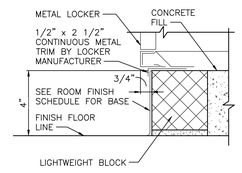


INTERIOR ALUMINUM DIVIDER RAIL
SCALE: 1" = 1'-0"

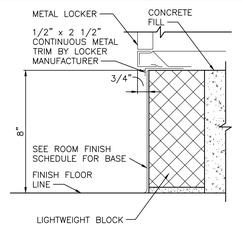


ALUMINUM LETTER DETAIL
SCALE: 1 1/2" = 1'-0"

8 / A-501



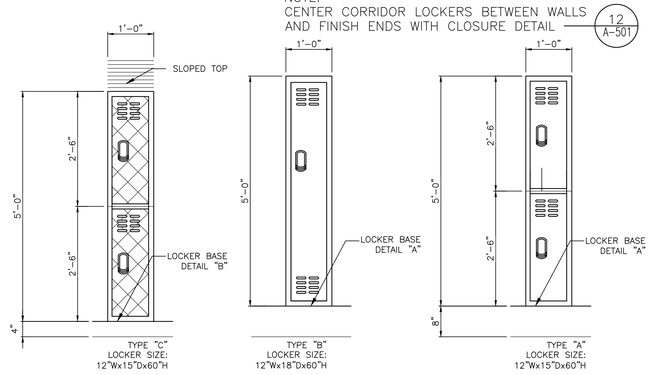
LOCKER DETAIL B
SCALE: 3" = 1'-0"



LOCKER DETAIL A
SCALE: 3" = 1'-0"

NOTE:
CENTER CORRIDOR LOCKERS BETWEEN WALLS AND FINISH ENDS WITH CLOSURE DETAIL

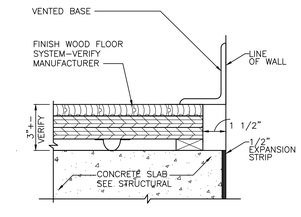
12 / A-501



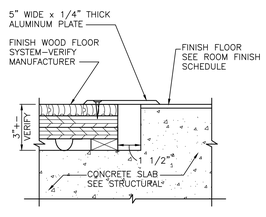
TYPICAL LOCKER ELEVATIONS
SCALE: 3/4" = 1'-0"

LOCKER DETAILS
SCALE: AS SHOWN

2 / A-501



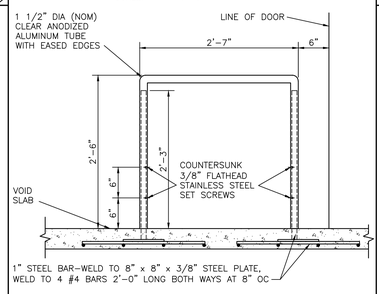
BASE



FLOOR TRANSITION

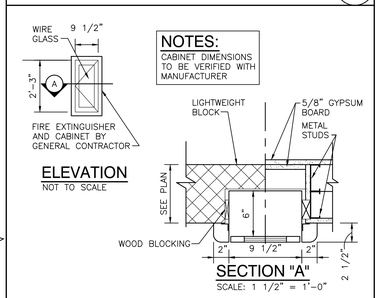
WOOD FLOOR DETAILS
SCALE: 3" = 1'-0"

13 / A-501



EXTERIOR ALUMINUM DIVIDER RAIL
SCALE: 1" = 1'-0"

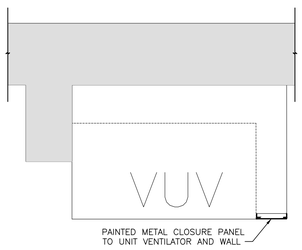
11 / A-501



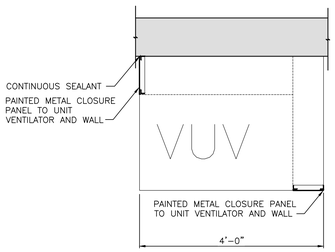
SECTION "A"
SCALE: 1 1/2" = 1'-0"

SEMI-RECESSED FIRE EXTINGUISHER CABINET
SCALE: 1 1/2" = 1'-0"

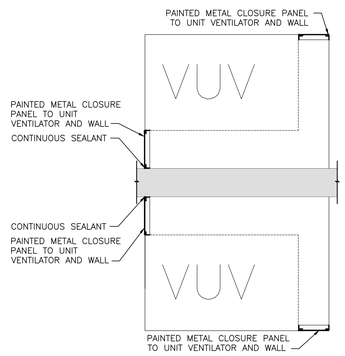
7 / A-501



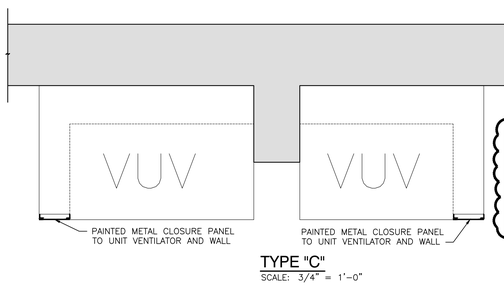
TYPE "E"
SCALE: 3/4" = 1'-0"



TYPE "D"
SCALE: 3/4" = 1'-0"



TYPE "B"
SCALE: 3/4" = 1'-0"

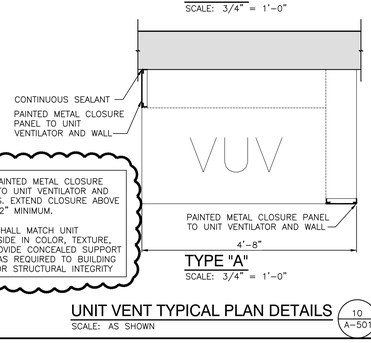


TYPE "C"
SCALE: 3/4" = 1'-0"

PROVIDE CONTINUOUS PAINTED METAL CLOSURE PANEL ALIGNED FLUSH TO UNIT VENTILATOR AND OTHER CLOSURE PANELS. EXTEND CLOSURE ABOVE CEILING CONSTRUCTION 2" MINIMUM.

ALL CLOSURE PANELS SHALL MATCH UNIT VENTILATOR ON FINISH SIDE IN COLOR, TEXTURE, GAUGE, AND FINISH. PROVIDE CONCEALED SUPPORT OF PANELS ANCHORED AS REQUIRED TO BUILDING STRUCTURE AND VUV FOR STRUCTURAL INTEGRITY

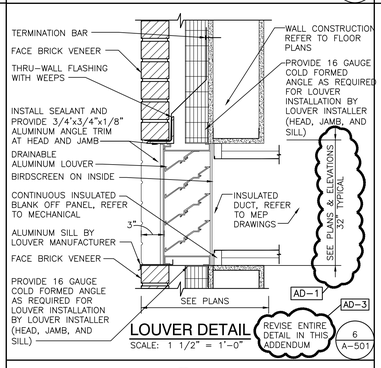
AD-3



TYPE "A"
SCALE: 3/4" = 1'-0"

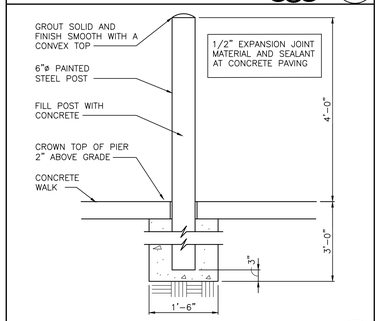
UNIT VENT TYPICAL PLAN DETAILS
SCALE: AS SHOWN

10 / A-501



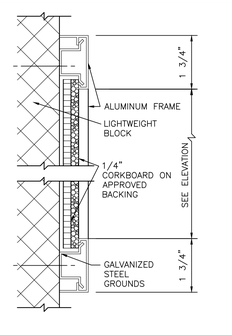
LOUVER DETAIL
SCALE: 1 1/2" = 1'-0"

6 / A-501

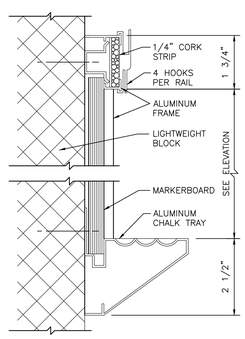


PIPE BOLLARD DETAIL
SCALE: 3/4" = 1'-0"

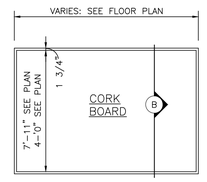
5 / A-501

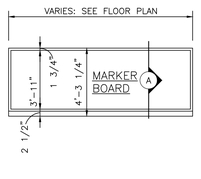


SECTION B
SCALE: 6" = 1'-0"



SECTION "A"
SCALE: 6" = 1'-0"





NOTES:
1. SEE FLOOR PLANS FOR LOCATION.
2. SEE FINISH PLANS FOR WALL FINISH.
3. MOUNTING HEIGHT AS DIRECTED BY ARCHITECT.

MARKER/CORK BOARD ELEVATIONS
SCALE: 1/4" = 1'-0"

1 / A-501

GIBRALTAR
DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY DTE TA
DRAWN BY DTE
CHECKED BY TA JPB

JOSEPH P. BRIGGS REGISTERED ARCHITECT NO. 11600109 STATE OF INDIANA

REVISIONS

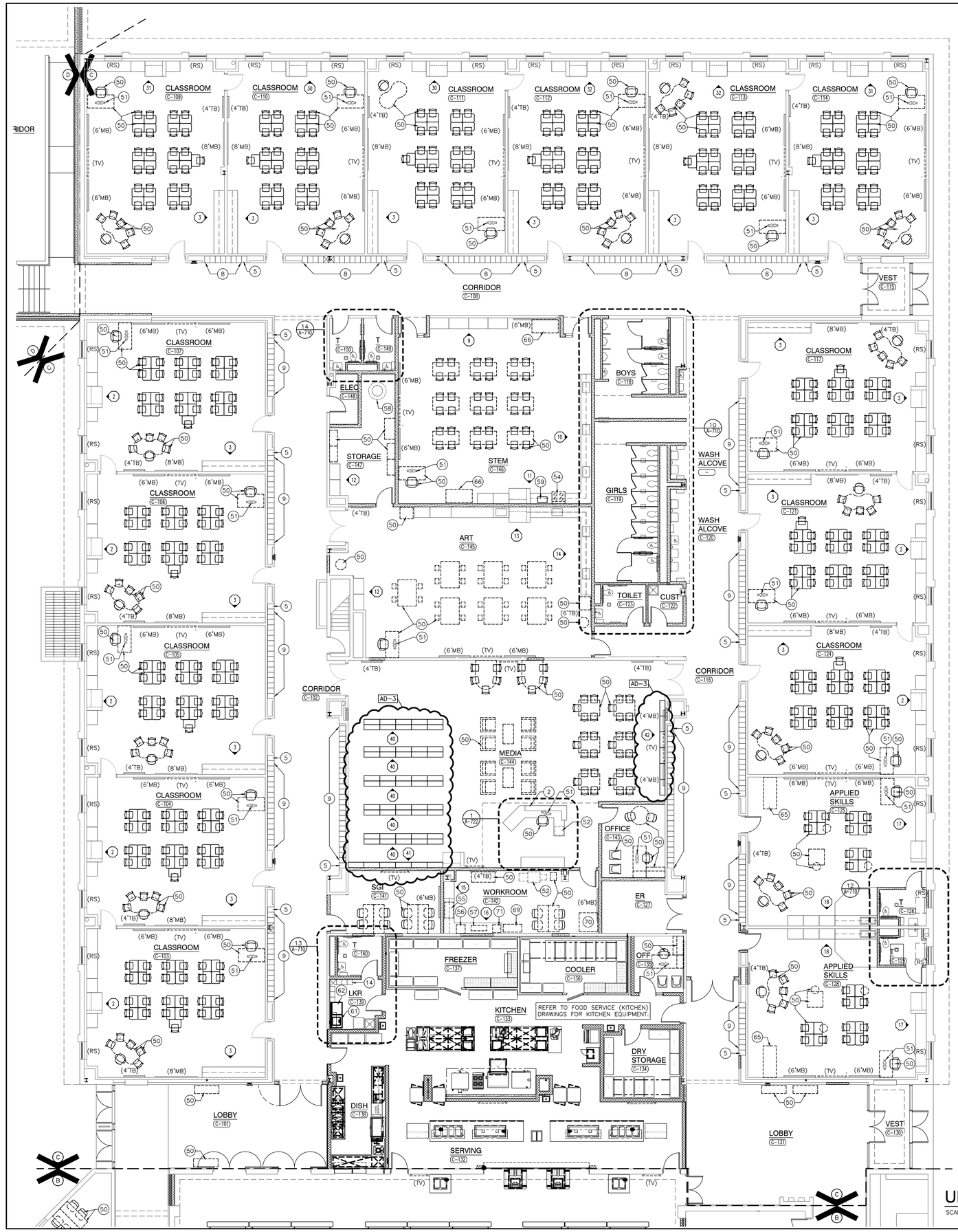
MARK	DATE	ISSUED FOR
AD-1	02/10/22	ADDENDUM NO. 1
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
TYPICAL DETAILS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A-501

Thursday, 2/24/2022 - 2:34 PM - LAST SAVED BY:DBURNS
Y:\21-113 CROWN POINT CSC - MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\A-501.DWG



UNIT "C" FIRST FLOOR EQUIPMENT PLAN

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

GENERAL EQUIPMENT PLAN NOTES:

A. REFER TO SPECIFICATIONS AND FINISH LEGEND FOR ADDITIONAL INFORMATION.
B. FIELD VERIFY ALL DIMENSIONS.
C. CASEWORK AND/OR MILLWORK INSTALLER TO COORDINATE ELECTRICAL AND PLUMBING WORK. REFER TO ELECTRICAL DRAWINGS AND SCHEDULES FOR ELECTRICAL DEVICE TYPES, HEIGHTS, AND LOCATIONS.
D. REFER TO G SERIES DRAWINGS FOR MOUNTING HEIGHTS.

EQUIPMENT PLAN LEGEND:

- (X) INDICATES CASEWORK ELEVATION SYMBOL – REFER TO A-720 SERIES DRAWINGS FOR ELEVATIONS AND DETAILS.
- -------- INDICATES ITEMS TO BE PART OF LOOSE EQUIPMENT PACKAGE BY OWNER. (NOT INCLUDED IN CONSTRUCTION CONTRACT).
- ---- INDICATES BULKHEADS OR OTHER OVERHEAD ITEMS (INCLUDED IN CONSTRUCTION CONTRACTS).
- (CG) INDICATES CORNER GUARD. — X / A-XXX
- (TB) INDICATES 4' HIGH TACK BOARD, LENGTH AS INDICATED, REFER TO MOUNTING HEIGHT DRAWING. — 1 / A-501
- (MB) INDICATES 4' HIGH MARKER BOARD, LENGTH AS INDICATED, REFER TO MOUNTING HEIGHT DRAWING. — 1 / A-501
- (SMB) INDICATES 4' HIGH MARKER BOARD WITH STAFF LINES, LENGTH AS INDICATED, REFER TO MOUNTING HEIGHT DRAWING.
- (TV) TELEVISION MONITOR, REFER TO TECHNOLOGY DRAWING. — X / A-XXX
- (RS) INDICATES ROLLER SHADE.

EQUIPMENT PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS PLAN)

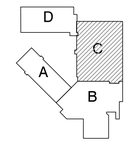
1. ROOF ACCESS LADDER, REFER TO FLOOR PLANS.
2. BOOK DROP, VERIFY HEIGHT WITH OWNER AND ARCHITECT.
3. SOUND CABINET, REFER TO ELECTRICAL/TECHNOLOGY DRAWINGS.
4. CUBICLE CURTAIN AND TRACK (1'-0" RADIUS AT CORNER). — 9 / A-501
5. ADA LOCKER – USE LOWER LOCKER WHERE DOUBLE STACKED.
6. PROJECTION SCREEN (ELECTRICALLY OPERATED). — X / A-XXX
7. BLEACHERS, REFER TO BLEACHER KEY NOTES, BELOW.
8. LOCKER, TYPE A (DOUBLE). — 2 / A-501
9. LOCKER, TYPE B (SINGLE). — 2 / A-501
10. FORWARD FOLD GLASS BASKETBALL BACKSTOP AND SUPPORT FRAMING (MOTORIZED, ADJUSTABLE HEIGHT).
11. COURT MARKINGS AND EQUIPMENT. — 1 / A-540
12. SAFETY CUSHION WAINSCOT. — 4 / A-501
13. SCOREBOARD, REFER TO ELECTRICAL/TECHNOLOGY DRAWINGS FOR POWER.
14. LOCKER, TYPE C (DOUBLE). — 2 / A-501
15. MAIN CURTAIN.
16. VALANCE.
17. CYCLORAMA CURTAIN. — 15 / A-501

OWNER FURNISHED EQUIPMENT PLAN NOTES:

50. LOOSE FURNITURE, BY OWNER, INDICATED ON PLAN FOR ELECTRICAL AND TECHNOLOGY COORDINATION.
51. COMPUTER/MONITOR, BY OWNER
52. PRINTER/COPIER, BY OWNER
53. REFRIGERATOR WITH ICE MAKER, BY OWNER
54. RANGE WITH HOOD, BY OWNER (PROVIDE 30" WIDE OPENING).
55. LAMINATOR, BY OWNER
56. BINDING MACHINE, BY OWNER
57. DIE CUT MACHINE, BY OWNER
58. ELECTRIC KILN, BY OWNER, REFER TO MECHANICAL DRAWINGS FOR EXAUST
59. MICROWAVE, BY OWNER
60. COFFEE MAKER, BY OWNER
61. CLOTHES WASHER, BY OWNER
62. CLOTHES DRYER, BY OWNER
63. VENDING MACHINE, BY OWNER
64. CLINIC COTS, BY OWNER
65. BED, BY OWNER
66. DEMONSTRATION TABLE, BY OWNER
67. STEPPED MUSIC PLATFORM, BY OWNER
68. PIANO, BY OWNER
69. PAPER ROLL, BY OWNER
70. POSTER PRINTER, BY OWNER
71. PAPER CUTTER, BY OWNER
72. UNDER-COUNTER REFRIGERATOR, BY OWNER

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CEDAR LAKE, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY TA
DRAWN BY EKM MMM
CHECKED BY NAS

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "C" FIRST FLOOR EQUIPMENT PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C A-703

NORTH

Thursday, 2/24/2022 – 1:42 PM – LAST SAVED BY:EMCQUEEN
Y:\21-113 CROWN POINT CSC – MACARTHUR ES ADDITION AND RENOVATIONS\21-113 DRAWINGS\05 ARCH\A-703.DWG

GENERAL SYMBOL LEGEND

1	EQUIPMENT ITEM NUMBER
K700	ENLARGED PLAN CALL OUT
1 / K700	EQUIPMENT ELEVATION CALL OUT
1 / K700	EQUIPMENT DETAIL CALL OUT
1 / K700	EQUIPMENT SECTION CALL OUT
E1	SPOT LOCATION CALL OUT

DRAWING SHEET INDEX

SHEET	DRAWING NAME
K100	FOODSERVICE EQUIPMENT GENERAL NOTES & SHEET INDEX
K101	FOODSERVICE EQUIPMENT PLAN & SCHEDULE
K102	FOODSERVICE EQUIPMENT SPECIAL CONDITIONS PLAN
K200	FOODSERVICE EQUIPMENT SPOT LOCATION SCHEDULES
K300	FOODSERVICE EQUIPMENT PLUMBING PLAN
K301	FOODSERVICE EQUIPMENT ELECTRICAL PLAN
K400	WALK-IN COOLER/FREEZER DRAWING, DETAILS & SCHEDULE
K500	EXHAUST VENTILATION SYSTEM DRAWING, DETAILS & SCHEDULE
K501	EXHAUST VENTILATION SYSTEM DRAWING, DETAILS & SCHEDULE
K600	FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS
K601	FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS
K602	FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS
K603	FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS

ABBREVIATION LEGEND

AFF	ABOVE FINISHED FLOOR
AGA	AMERICAN GAS ASSOCIATION
AMPS	AMPERAGE
ARCH	ARCHITECTURAL
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CONN	CONNECTION
CONST	CONSTRUCTION
CW	COLD WATER
DCO	DUPLEX CONVENIENCE OUTLET
DFA	DROP FROM ABOVE
DIM	DIMENSION
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ED	ELECTRICAL DIVISION
ELEC	ELECTRIC, ELECTRICAL
EXIST	EXISTING
FLR DRN	FLOOR DRAIN
FLR SINK	FLOOR SINK
FLR TRGH	FLOOR TROUGH
GA	GAUGE
GALV	GALVANIZED
C	CONTRACTOR
O	OTHERS
GPH	GALLONS PER HOUR
HP	HORSEPOWER
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HW	HOT WATER
ID	INSIDE DIAMETER
KEC	KITCHEN EQUIPMENT CONTRACTOR
KW	KILOWATT
MAX	MAXIMUM
MBTU	1,000 BTU'S
MC	MECHANICAL CONTRACTOR
MD	MECHANICAL DIVISION
MECH	MECHANICAL
MFG	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PC	PLUMBING CONTRACTOR
PD	PLUMBING DIVISION
PH	PHASE
PSI	POUNDS PER SQUARE INCH
R	RADIUS
ST STL	STAINLESS STEEL
SHT	SHEET
S/S	STAINLESS STEEL
STD	STANDARD
SU	STUB UP FROM FLOOR
TYP	TYPICAL
V	VOLTAGE
VOLT	VOLTAGE

GENERAL DRAWING SET NOTES

1. THESE DRAWINGS HAVE BEEN PRODUCED USING A GENERAL ARRANGEMENT OF EQUIPMENT FROM ONLY THE INFORMATION THAT WAS MADE AVAILABLE. THESE DRAWINGS ARE INFORMATIONAL BY NATURE FOR BIDDING PURPOSES ONLY AND ARE NOT TO BE USED IN ANY WAY FOR CONSTRUCTION. REITANO DESIGN GROUP ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF MEASUREMENTS TAKEN FROM THESE DRAWINGS. FABRICATORS, CONTRACTORS AND OTHER PARTIES UTILIZING THESE PLANS, IN CONNECTION WITH THIS JOB, ARE RESPONSIBLE FOR SECURING THEIR OWN MEASUREMENTS.

2. THE KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE TO REVIEW THE PLANS FOR ACCURACY AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO THE FABRICATION OF ANY EQUIPMENT. VERIFY ALL EQUIPMENT CLEARANCES THRU BUILDING DOORS, HALLWAYS OR ENTRY POINTS AS NOT ALL EQUIPMENT WILL FIT THRU STANDARD OPENINGS. THE KITCHEN EQUIPMENT CONTRACTOR IS TO NOTIFY REITANO DESIGN GROUP OF ANY ERRORS, OMISSIONS, AMBIGUITIES, DISCREPANCIES OR IRREGULARITIES PRIOR TO START OF CONSTRUCTION.

3. THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS MUST BE CONSIDERED A COMPLETE BODY OF WORK. ALL WORK IS TO BE COMPLETED IN A CRAFTSMAN LIKE MANNER AND CONFORM TO ALL APPLICABLE BUILDING AND SAFETY CODES. ANY WORK CALLED FOR IN THE DRAWINGS OR SPECIFICATIONS, INCLUDING ANY WORK THAT CAN REASONABLY BE CONSIDERED A PART OF INSTALLATION AND NECESSARY TO COMPLETE THE PROJECT, SHALL BE INCLUDED.

4. ANY DISCREPANCIES BETWEEN THESE DRAWINGS, BUILDING AND LOCAL CODE REQUIREMENTS THAT MAY AFFECT INSTALLATION, FABRICATION AND/OR OVERALL WORK IN ANY WAY SHALL BE BROUGHT TO THE ATTENTION OF REITANO DESIGN GROUP. REITANO DESIGN GROUP ASSUMES NO RESPONSIBILITY FOR ANY CHANGES MADE NECESSARY BY THE LOCAL BUILDING CODES, ORDINANCES, STRUCTURAL CONDITIONS OR CHANGES MADE NECESSARY IN EQUIPMENT SHOWN ON THESE DRAWINGS.

5. THESE DRAWINGS REFER TO WORK TO BE PERFORMED BY OTHER TRADES NOT INTENDED TO BE PART OF THE KITCHEN EQUIPMENT CONTRACTOR'S SCOPE OF WORK. THESE TRADES ARE REFERENCED USING THE GENERALLY ACCEPTED TITLES FOUND IN THE ABBREVIATION LEGEND. IT IS NOT THE INTENT OF THESE TITLES TO ASSIGN WORK, BUT RATHER TO CLARIFY COORDINATION BETWEEN THE KITCHEN EQUIPMENT CONTRACTOR AND OTHER TRADES. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTES ON THESE DRAWINGS AND TRANSMITTING THE REQUIRED INFORMATION TO THE RESPECTIVE SUBCONTRACTORS.

6. THE BASIS OF DESIGN FOR ALL DRAWINGS, SPECIFICATIONS, AND DETAIL REFERENCES IS THE FIRST MANUFACTURER AND MODEL LISTED. IF ANOTHER LISTED MANUFACTURER IS CHOSEN BY THE KITCHEN EQUIPMENT CONTRACTOR, IT IS THE RESPONSIBILITY OF THE KITCHEN EQUIPMENT CONTRACTOR TO PROVIDE A MODEL THAT IS EQUAL IN PRODUCTION CAPABILITIES, CAPACITY, AND PERFORMANCE TO THE FIRST MANUFACTURER AND MODEL LISTED. THE KITCHEN EQUIPMENT CONTRACTOR IS ALSO TO VERIFY, COORDINATE, AND ALLOW FOR PROPER INSTALLATION OF EQUIPMENT; TAKING INTO ACCOUNT POSSIBLE REVISIONS FOR UTILITY CONNECTIONS, LOADS, AND PHYSICAL SIZES. IN THE EVENT THERE ARE ANY UP CHARGES OR CHANGE ORDERS BY OTHER TRADES AS A RESULT OF THE KITCHEN EQUIPMENT CONTRACTOR SUBMITTING ANOTHER LISTED MANUFACTURER, THOSE CHARGES SHALL BE THE SOLE RESPONSIBILITY OF THE KITCHEN EQUIPMENT CONTRACTOR

7. THE CONCEPTS, DESIGNS, PLANS, DETAILS, ETC. SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF REITANO DESIGN GROUP, AND WERE CREATED FOR USE ON THIS SPECIFIC PROJECT. NONE OF THIS INFORMATION SHALL BE USED BY ANY PERSON OR FIRM FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN CONSENT OF REITANO DESIGN GROUP. THE OWNER MAY RETAIN COPIES FOR INFORMATION AND REFERENCE IN CONNECTION ONLY WITH THIS PROJECT.

GENERAL ENVIRONMENTAL NOTES

1. CONTRACTOR TO PROVIDE SMOOTH AND LEVEL FLOORS BELOW ALL KITCHEN EQUIPMENT UNLESS THESE DRAWINGS SHOW OTHERWISE. FLOORS SHALL BE IMPERVIOUS TO WATER, GREASE, AND ACID AND OF EASILY CLEANABLE CONSTRUCTION. FLOORS IN ALL AREAS WHERE FOOD IS PREPARED, PACKAGED OR STORED OR WHERE REFUSE OR GARBAGE IS STORED, JANITORIAL FACILITIES AND IN ALL TOILET AND HAND WASHING AREAS, SHALL BE AN APPROVED TYPE THAT CONTINUES UP THE WALL 6" WITH A MINIMUM 3/8" RADIUS COVE BASE.

2. CONTRACTOR TO PROVIDE SMOOTH AND NON-ABSORBENT WALLS IN ALL FOOD PREPARATION AND DISHWASHING AREAS. WALLS TO BE PROVIDED WITH A LIGHT COLORED, EASILY CLEANABLE FINISH. ALL PAINTED SURFACES SHALL BE SEALED WITH A GLOSS OR SEMI-GLOSS ENAMEL. ALL WALLS WITHIN A.G.A. CLEARANCE REQUIREMENTS FOR COOKING EQUIPMENT SHALL BE CONSTRUCTED OF HEAT PROOF, NON-COMBUSTIBLE MATERIALS. CONTRACTOR TO VERIFY CONSTRUCTION PER LOCAL CODES.

3. CONTRACTOR TO PROVIDE SMOOTH AND NON-ABSORBENT CEILINGS IN IN ALL FOOD PREPARATION AND DISHWASHING AREAS. CEILINGS TO BE PROVIDED WITH A LIGHT COLORED, EASILY CLEANABLE FINISH. ALL PAINTED SURFACES SHALL BE SEALED WITH A GLOSS OR SEMI-GLOSS FINISH.

4. IN EVERY ROOM AND AREA WHICH FOOD IS PREPARED, MANUFACTURED, PROCESSED OR PACKAGED, OR IN WHICH UTENSILS ARE CLEANED, LIGHTING SHALL BE PROVIDED TO PRODUCE AN INTENSITY OF NOT LESS THAN 70 FOOTCANDLES AS MEASURED THIRTY INCHES (30") ABOVE THE FLOOR. FOOD AND UTENSIL STORAGE ROOMS, REFRIGERATION STORAGE, TOILET AND DRESSING ROOMS SHALL BE PROVIDED WITH AT LEAST 20 FOOTCANDLES OF LIGHT. LIGHT FIXTURES IN AREAS WHERE FOOD IS PREPARED, OR WHERE OPEN FOOD IS STORED, OR WHERE UTENSILS ARE CLEANED, SHALL BE OF SHATTERPROOF CONSTRUCTION OR SHALL BE PROTECTED WITH SHATTERPROOF SHIELDS AND SHALL BE READILY CLEANABLE.

5. ALL DELIVERY DOORS LEADING TO THE OUTSIDE SHALL OPEN OUTWARD, BE SELF CLOSING, AND SHALL BE PROVIDED WITH AN OVERHEAD AIR CURTAIN. AIR CURTAIN SHALL PRODUCE A DOWNWARD AND OUTWARD AIRFLOW NOT LESS THAN 3" THICK AT THE NOZZLE WITH AN AIR VELOCITY OF NOT LESS THAN 1600 FPM ACROSS ENTIRE OPENING.

6. TOILET FACILITIES SHALL BE PROVIDED WITHIN EACH FOOD ESTABLISHMENT CONVENIENT FOR THE EMPLOYEES. ALL TOILET ROOMS SHALL BE PROVIDED WITH MECHANICAL VENTILATION APPROVED BY THE HEALTH DEPARTMENT. A ROOM OR ENCLOSURE AT LEAST 5'X5', SEPARATED FROM TOILETS, FOOD STORAGE OR FOOD PREP AREAS SHALL BE PROVIDED WHERE EMPLOYEES MAY CHANGE AND STORE THEIR CLOTHES AND PERSONAL BELONGINGS.

7. LAVATORY SINKS SHALL BE PROVIDED IN ALL FOOD PREPARATION AND DISHWASHING AREAS. SOAP AND SANITARY TOWELS SHALL BE PROVIDED IN SINGLE SERVICE, PERMANENTLY INSTALLED, DISPENSERS AT THE LAVATORY SINKS.

8. CONTRACTOR TO BE RESPONSIBLE FOR ADA CLEARANCE REQUIREMENTS FOR ALL SPACES, DOOR STRIKES, EXITS, AND AISLE WAYS AS THEY PERTAIN TO CODE ENFORCEMENT AND INTERPRETATION.

9. ALL WORK SHALL CONFORM TO LOCAL BUILDING, SAFETY, FIRE, AND HEALTH REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LICENSES AND BUILDING REQUIREMENTS, PAYING FEES, AND PASSING INSPECTION. IT IS HIS RESPONSIBILITY TO VERIFY ALL NECESSARY CODES AND REQUIREMENTS PRIOR TO IMPLEMENTATION.

10. ALL PUBLIC USE AREAS ARE TO BE PROVIDED WITH HEATED AND REFRIGERATED CONDITIONING DESIGNED TO PROVIDE A POSITIVE PRESSURE AT OUTSIDE DOORS. (PROVIDED AND INSTALLED BY HVAC CONTRACTOR.)

11. INTENDED ENVIRONMENT FOR REFRIGERATED GLASS FRONT & OPEN FRONT DISPLAY CASES TO BE 75°F/55% RELATIVE HUMIDITY.

GENERAL EQUIPMENT NOTES

1. EQUIPMENT WHICH IS FIXED AND WHERE IT ABUTTS OTHER FIXED EQUIPMENT, BUILDING WALLS OR FLOOR SHALL BE SEALED THERETO WITH SILICONE. GAPS BETWEEN EQUIPMENT EXCEEDING 1/8" IN WIDTH MUST BE TRIMMED OUT WITH STAINLESS STEEL ANGLED TRIM OR MATCHING MATERIAL TRIM PRIOR TO BEING SEALED.

2. HOT WATER SUPPLY TO ALL FOOD PREPARATION AND THREE COMPARTMENT SINKS SHALL BE 120 DEGREES MINIMUM. HOT WATER SUPPLY TO ALL DISHMACHINES SHALL BE 140 DEGREES MINIMUM.

3. ALL COUNTERS ARE TO BE FABRICATED PROPERLY TO SUPPORT THE SPECIFIED COUNTER TOP MATERIAL IN ACCORDANCE WITH THE MATERIAL MANUFACTURER'S GUIDELINES. ALL “DROP-IN” EQUIPMENT AND OTHER EQUIPMENT “ATTACHED TO”, “SET ON” OR “BUILT-IN” TO THE COUNTER TOP MATERIAL TO BE INSTALLED IN ACCORDANCE WITH THE MATERIAL MANUFACTURER'S GUIDELINES AND TECHNICAL BULLETINS FOR THE INSTALLATION OF COMMERCIAL FOOD SERVICE EQUIPMENT.

4. ALL FOOD SERVICE EQUIPMENT SHALL BE MANUFACTURED, FABRICATED, FURNISHED & INSTALLED IN STRICT ACCORDANCE WITH, AND BEAR THE EMBLEM OF, THE NATIONAL SANITATION FOUNDATION (NSF) AS WELL AS ANY FEDERAL, STATE & LOCAL CODE REQUIREMENTS.

5. ALL REFRIGERATION EQUIPMENT SHALL HAVE A THERMOMETER WHICH IS EASILY READABLE IN PROPER WORKING CONDITION.

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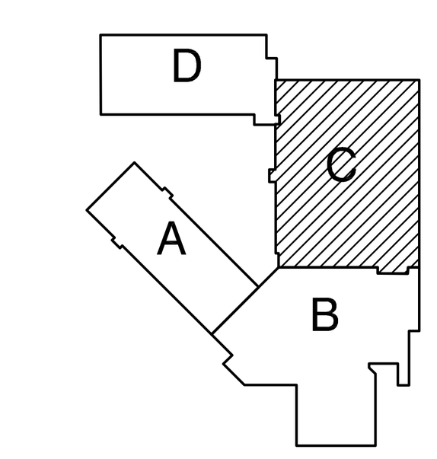
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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DRAWING
FOODSERVICE EQUIPMENT GENERAL NOTES & SHEET INDEX

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-100

Wednesday, 2/23/2022 – 9:53 AM – LAST SAVED BY:JONATHAN NIKIEL
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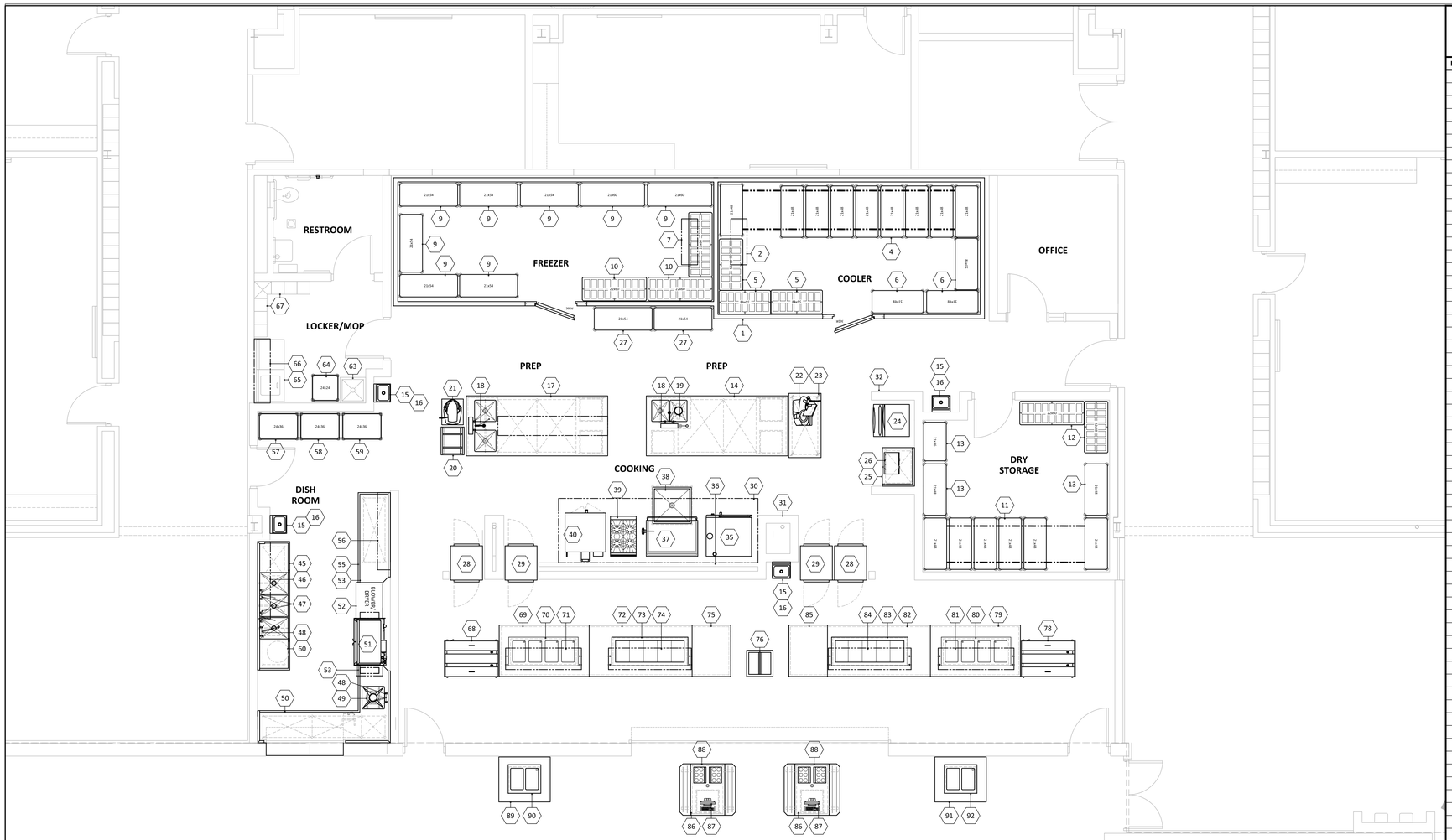
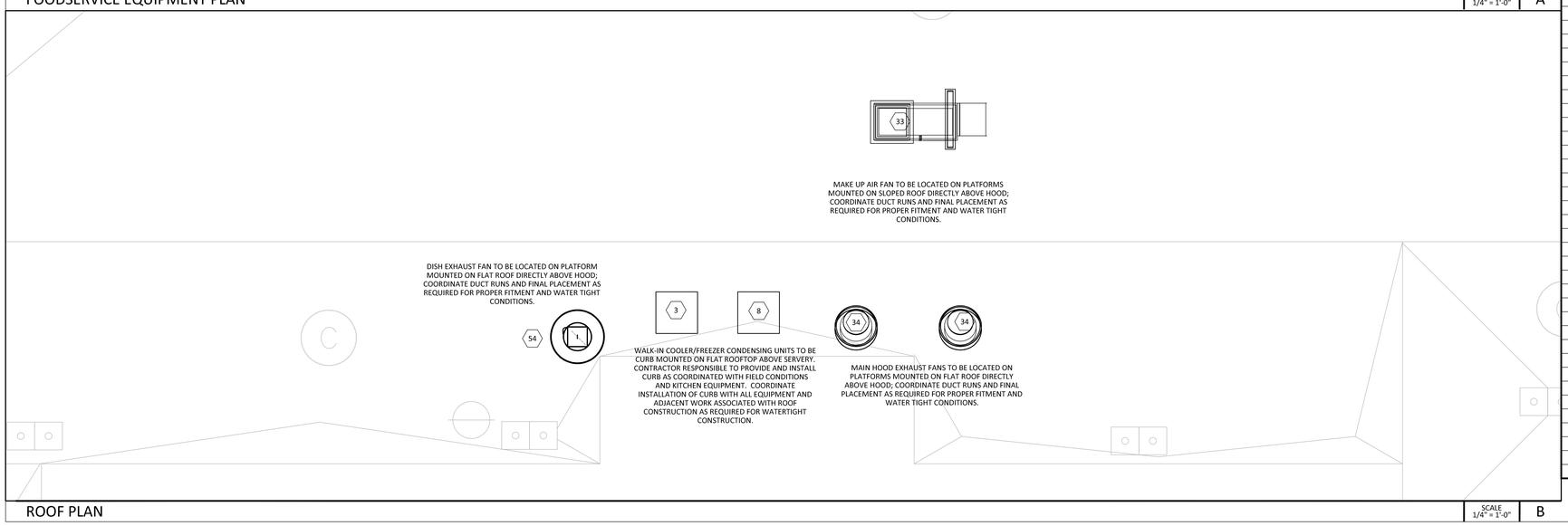


FOODSERVICE EQUIPMENT PLAN — SCALE 1/4" = 1'-0" — A



ROOF PLAN — SCALE 1/4" = 1'-0" — B

EQUIPMENT SCHEDULE

ITEM	QTY	ITEM DESCRIPTION	MANUFACTURER	MODEL
1	1	WALK-IN COOLER/FREEZER	CUSTOM	ST. STL.
2	1	WALK-IN COOLER COIL	PART OF ITEM #1	
3	1	WALK-IN COOLER COMPRESSOR	PART OF ITEM #1	
4	LOT	HI-DENSITY TOP TRACK COOLER SHELVING	INTERMETRO	METROMAX Q
5	3	COOLER DUNNAGE RACK	INTERMETRO	HP2248PDMB
6	3	COOLER MOBILE SHELVING UNIT	INTERMETRO	METROMAX Q
7	1	WALK-IN FREEZER COIL	PART OF ITEM #1	
8	1	WALK-IN FREEZER COMPRESSOR	PART OF ITEM #1	
9	8	FREEZER MOBILE SHELVING UNIT	INTERMETRO	METROMAX Q
10	3	FREEZER DUNNAGE RACK	INTERMETRO	HP2260PDMB
11	LOT	HI-DENSITY TOP TRACK DRY STORAGE SHELVING	INTERMETRO	METROMAX Q
12	2	DRY STORAGE DUNNAGE RACK	INTERMETRO	HP22**PDMB SERIES
13	5	DRY STORAGE SHELVING UNIT	INTERMETRO	METROMAX Q
14	1	ISLAND WORKTABLE W/ 2 COMP SINK	CUSTOM	ST. STL.
15	4	WALL MOUNT HAND SINK	JOHN BOOS	PBHS-W-1410-1-SSLR
16	4	HAND SINK FAUCET	T&S BRASS	5EF-1D-WG
17	1	ISLAND WORKTABLE W/ PREP SINKS	CUSTOM	ST. STL.
18	2	SPLASH MOUNT FAUCET	T&S BRASS	MPZ-8WLN-08-CR
19	1	GARBAGE DISPOSAL SYSTEM	INSINKERATOR	SS-200-7-AS101
20	*6	HEAVY-DUTY BUN PAN RACK	CHANNEL	401A
21	1	COUNTERTOP MIXER W/ STAND	HOBART CORPORATION	HL200-1STD
22	1	SLICER	HOBART	HS8-1
23	1	MOBILE WORKTABLE	CUSTOM	ST. STL.
24	1	ICE MAKER W/ BIN	MANITOWOC ICE	IYT0420A
25	1	WORKTABLE	CUSTOM	ST. STL.
26	1	MICROWAVE	PANASONIC	NE-1064F
27	2	KITCHEN MOBILE SHELVING UNIT	INTERMETRO	METROMAX Q
28	2	SINGLE DOOR PASS THRU HEATED CABINET	TRAULSEN	AHF132WP-FHG
29	2	SINGLE DOOR PASS THRU REFRIGERATOR	TRAULSEN	AHT132WPUT-FHG
30	1	EXHAUST HOOD	CUSTOM	ST. STL.
31	1	FIRE SUPPRESSION SYSTEM	PART OF ITEM #30	
32	1	FIRE SUPPRESSION SYSTEM PULL	PART OF ITEM #30	
33	1	COOKLINE EXHAUST FAN	PART OF ITEM #30	
34	1	COOKLINE MAKE UP AIR FAN	PART OF ITEM #30	
35	1	COMBI OVEN/STEAMER (STACKED)	RATIONAL	ICC 10-FULL/ICC 6-FULL
36	1	COMBI OVEN/STEAMER FILTER	RATIONAL	1900.1150US
37	1	40 GALLON TILT SKILLET	CLEVELAND	SGL40T1
38	1	FLOOR TROUGH	CUSTOM	ST. STL.
39	1	FOUR BURNER RANGE WITH OVEN BASE	MONTAGUE	124-5
40	1	DOUBLE STACKED CONVECTION OVEN	SOUTHBEND	SLGB/225C
41		SPARE NUMBER		
42		SPARE NUMBER		
43		SPARE NUMBER		
44		SPARE NUMBER		
45	1	THREE COMPARTMENT SINK	CUSTOM	ST. STL.
46	1	WALL SHELF	CUSTOM	ST. STL.
47	2	SPLASH MOUNT FAUCET	T&S BRASS	B-0290
48	2	SPLASH MOUNT PRE-RINSE FAUCET	T&S BRASS	B-0133-CR-B-SWV
49	1	GARBAGE DISPOSAL SYSTEM	INSINKERATOR	SS-200-7-AS101
50	1	SOILED DISH TABLE W/SCRAP SINK	CUSTOM	ST. STL.
51	1	DISH MACHINE W/BOOSTER HEATER	HOBART	CL44EN-BAS+BUILDUP
52	1	DISH MACHINE BLOWER DRYER	HOBART	BDELRAB-HTSDOM
53	2	DISH MACHINE VENT COWLS	PART OF ITEM #54	
54	1	DISH MACHINE EXHAUST FAN	CUSTOM	ST. STL.
55	1	CLEAN DISH TABLE	CUSTOM	ST. STL.
56	1	WALL SHELF	ST. STL.	CUSTOM
57	1	MOBILE DRYING RACK	INTERMETRO	PR36VX2-XDR
58	1	MOBILE DRYING RACK	INTERMETRO	PR36VX3-XDR
59	1	MOBILE DRYING RACK	INTERMETRO	PR36VX4-XDR
60	LOT	TRASH CONTAINERS	BY OWNER	NOT IN KEC CONTRACT
61		SPARE NUMBER		
62		SPARE NUMBER		
63	1	JANITORIAL MOP SINK	ADVANCE TABCO	9-OP-20
64	1	CHEMICAL SHELVING UNIT	INTERMETRO	SEC53C
65	1	WASHER/DRYER	BY OWNER	NOT IN KEC CONTRACT
66	1	STAINLESS STEEL WALL CABINET	ADVANCE TABCO	WCH-15-60
67	6	LOCKERS (FULL SIZE)	BY ARCHITECT	NOT IN KEC CONTRACT
68	1	MILK COOLER	TRUE	TMC-49-DS-HC
69	1	MOBILE HOT SERVING COUNTER	CUSTOM	ST. STL./MILLWORK
70	1	DROP-IN HOT/COLD WELL UNIT	LTI	DI-Q5CHP-4
71	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA GARD	VG7
72	1	MOBILE COLD SERVING COUNTER	CUSTOM	ST. STL./MILLWORK
73	1	DROP-IN COLD WELL UNIT	LTI	DI-2063TA
74	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA GARD	VG7
75	1	MOBILE DRY GOODS SERVING COUNTER	CUSTOM	ST. STL./MILLWORK
76	1	ICE CREAM FREEZER	BEVERAGE AIR	NC28HC-1-W
77	6*	MOBILE TRAY DISPENSERS	DELFIELD	TT-1014
78	1	MILK COOLER	TRUE	TMC-49-DS-HC
79	1	MOBILE HOT SERVING COUNTER	CUSTOM	ST. STL./MILLWORK
80	1	DROP-IN HOT/COLD WELL UNIT	LTI	DI-Q5CHP-4
81	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA GARD	VG7
82	1	MOBILE COLD SERVING COUNTER	CUSTOM	ST. STL./MILLWORK
83	1	DROP-IN COLD WELL UNIT	LTI	DI-2063TA
84	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA GARD	VG7
85	1	MOBILE DRY GOODS SERVING COUNTER	CUSTOM	ST. STL./MILLWORK
86	2	MOBILE DOUBLE-SIDED CASHIER COUNTER	CUSTOM	ST. STL./MILLWORK
87	2	POINT OF SALE SYSTEM	BY OWNER	NOT IN KEC CONTRACT
88	4	SILVERWARE DISPENSER	VOLLRATH	52644
89	1	MOBILE CONDIMENT COUNTER	CUSTOM	ST. STL.
90	1	DROP-IN ICED COLD WELL UNIT	HATCO	IWB-2
91	1	MOBILE CONDIMENT COUNTER	CUSTOM	ST. STL./MILLWORK
92	1	DROP-IN ICED COLD WELL UNIT	HATCO	IWB-2
93	1*	MANUAL CAN OPENER	EDLUND	S-11
94	1*	ELECTRIC CAN OPENER	EDLUND	270/115V
95	1*	DIGITAL SCALE	EDLUND	WSC-10
96	4*	HEAVY-DUTY UTILITY CART	LAKESIDE	744
97				
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108				

* - ITEM OR QUANTITY NOT SHOWN

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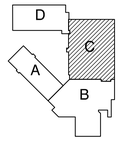
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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DRAWING
FOODSERVICE EQUIPMENT PLAN & SCHEDULE

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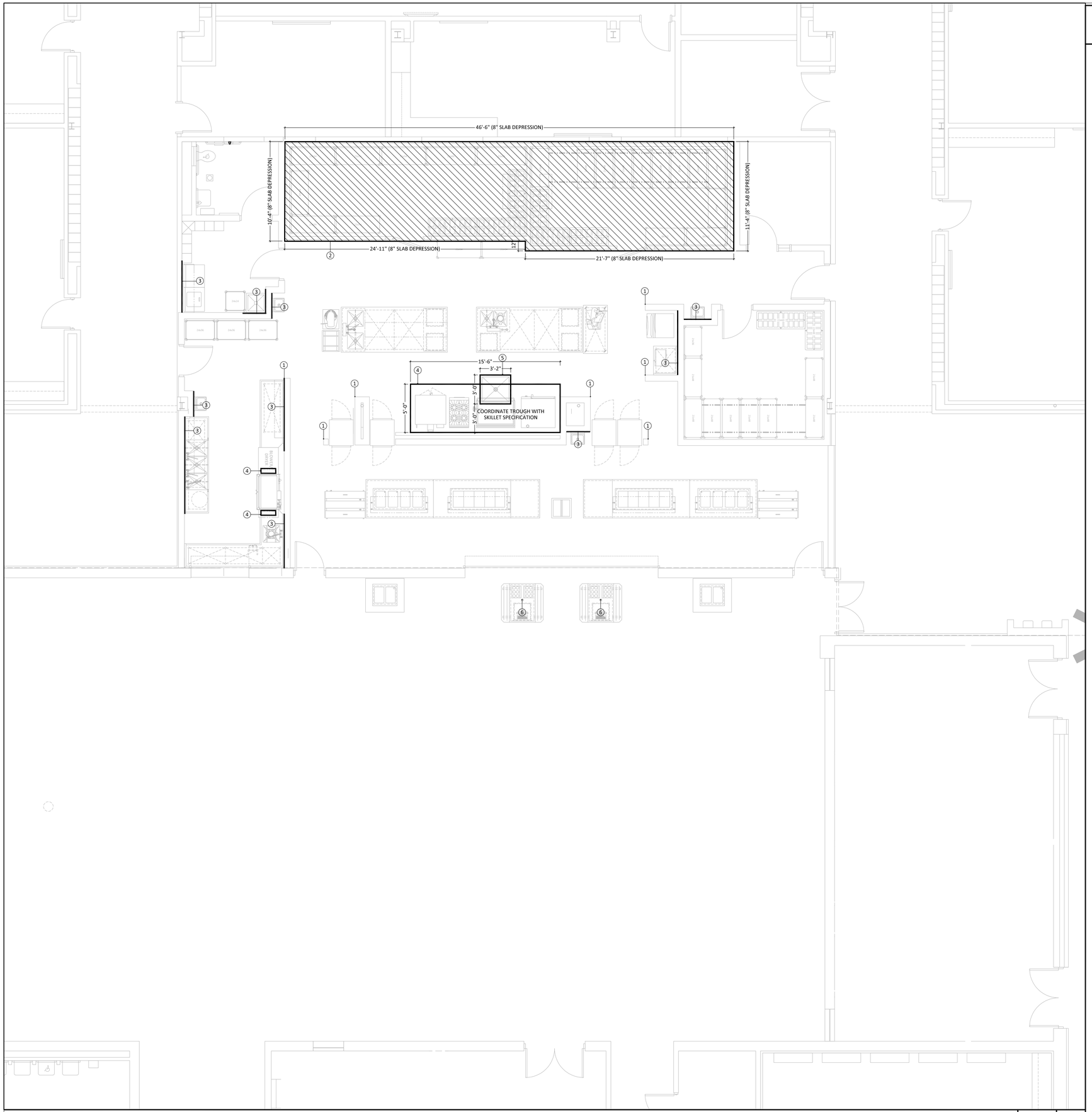
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-101



FOODSERVICE EQUIPMENT SPECIAL CONDITIONS PLAN

SCALE 1/4" = 1'-0"

A

SPECIAL CONDITIONS LAYOUT NOTES

KITCHEN EQUIPMENT CONTRACTOR:

1. PROVIDE 16 GAUGE STAINLESS STEEL CORNER GUARDS AS SHOWN ON PLAN OR AS NECESSARY IN FOOD PRODUCTION AREAS AND CORRIDORS, ON EVERY EXPOSED OUTSIDE CORNER OF CONSTRUCTION, WALK-IN CABINET AND VERTICAL/HORIZONTAL GAPS AND CREVICES. BREAK CORNER GUARDS 90° (+/-) FOR TIGHT FIT AND APPLY WITH MASTIC ADHESIVE. SEAL ALL CORNER GUARDS TO BUILDING WALLS WITH CLEAR SILICONE.

GENERAL DIVISION:

2. RECESS AND TRANSIT LEVEL ENTIRE WALK-IN COOLER/FREEZER AREA TO A DEPTH OF 8" TO RECEIVE WALK-IN COOLER/FREEZER INSULATED FLOOR PANELS. DEPRESSION TO BE CONSTRUCTED AS TO PROVIDE A LEVEL TRANSITION FROM FLOOR FINISH IN KITCHEN AREA TO THE FLOOR FINISH IN WALK-IN COOLER/FREEZER. (VERIFY REQUIRED DEPRESSION THICKNESS WITH WALK-IN MANUFACTURER'S SHOP DRAWING AND ARCHITECTURAL FLOOR FINISH SCHEDULE)
3. PROPERLY REINFORCE ALL WALLS AND/OR CEILINGS TO SUPPORT ALL WALL AND/OR CEILING SUPPORTED EQUIPMENT. ALL WALL BLOCKING TO BE MINIMUM 3/4" MARINE GRADE PLYWOOD. WALL BLOCKING LENGTHS SHOWN ARE MINIMUM AND WALL BLOCKING SHALL ALWAYS EXTEND TO NEXT STUD OVER IN EACH DIRECTION.
4. PROVIDE BOX OUT IN CEILING GRID LAYOUT FOR EXHAUST SYSTEM HOODS AS SHOWN. (REFER TO EXHAUST VENTILATION SYSTEM DRAWINGS FOR MORE INFORMATION)
5. PROVIDE BOX OUT IN FLOOR AREA AS SHOWN FOR FLOOR TROUGH INSTALLATION PRIOR TO POURING CONCRETE. (REFER TO FLOOR TROUGH DETAIL DRAWING FOR MORE INFORMATION)

ELECTRICAL DIVISION:

6. PROVIDE 2" DIAMETER RACEWAY FOR RUN OF COMPUTER GRADE CONDUIT FROM POINT OF SALE SYSTEMS IN SERVERY AREA TO COMPUTER LOCATED IN KITCHEN MANAGER'S OFFICE FOR COMMUNICATION PURPOSES.

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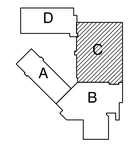

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FOODSERVICE EQUIPMENT SPECIAL CONDITIONS PLAN

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SHEET
K-102

EQUIPMENT				MECHANICAL									ELECTRICAL							
ITEM NUMBER	QUANTITY	DESCRIPTION (NIKEC= NOT IN KITCHEN EQUIPMENT CONTRACT)	SOURCE	HOT	COLD	AFF	GAS CONN. SIZE	GAS M BTU	GAS AFF	WASTE	AFF	REMARKS	VOLTAGE	KW	AMPS	HP	PHASE	CONN.	AFF	REMARKS
1	1	WALK-IN COOLER/FREEZER	KOLPAK CUSTOM										120		16.0		1	D	DFA	CIRCUIT REQUIRED AT EACH DOOR
2	1	WALK-IN COOLER COIL	PART OF ITEM #1							FD	0	DRAIN TO FLOOR DRAIN	120		5.0		1	D	DFA	
3	1	WALK-IN COOLER COMPRESSOR	PART OF ITEM #1										208		10.9	1.50	3	D	ROOF	
4	LOT	HI-DENSITY TOP TRACK COOLER SHELVING UNIT	INTERMETRO METROMAX Q																	
5	3	COOLER DUNNAGE RACK	INTERMETRO HP2248PDMB																	
6	3	COOLER MOBILE SHELVING UNIT	INTERMETRO METROMAX Q																	
7	1	WALK-IN FREEZER COIL	PART OF ITEM #1							FD	0	DRAIN TO FLOOR DRAIN	208 120		9.0 15.0		1 1	D P	DFA 96	REFER TO COOLER/FREEZER DWG. K400 FOR DRAIN LINE HEAT TAPE. NEMA 5-15P
8	1	WALK-IN FREEZER COMPRESSOR	PART OF ITEM #1										208		19.5	3.50	1	D	ROOF	REFER TO COOLER/FREEZER DWG. K400
9	8	FREEZER MOBILE SHELVING UNIT	INTERMETRO METROMAX Q																	
10	3	FREEZER DUNNAGE RACK	INTERMETRO HP2260PDMB																	
11	LOT	HI-DENSITY TOP TRACK DRY STORAGE SHELVING UNIT	INTERMETRO METROMAX Q																	
12		SPARE NUMBER																		
13	5	DRY STORAGE MOBILE SHELVING UNIT	INTERMETRO METROMAX Q																	
14	1	ISLAND WORKTABLE W/ 2 COMP PREP SINK	CUSTOM ST.STL.							2.00	FS	DRAIN TO FLOOR SINK	120		16.0		1	P	SU	FIXTURE MOUNTED DCO - 4 LOCATIONS
15	4	WALL MOUNT HAND SINK	JOHN BOOS PBHS-W-1410-SSLR							1.50	18									
16	4	HAND SINK FAUCET	T&S BRASS 5EF-1D-WG	0.50	0.50	18							120		6.00		1	P	16	
17	1	ISLAND WORKTABLE W/ PREP SINKS	CUSTOM ST.STL.							2.00	FS	DRAIN TO FLOOR SINK	120		16.0		1	P	SU	FIXTURE MOUNTED DCO - 4 LOCATIONS
18	2	SPLASH MOUNT FAUCET	T&S BRASS MPZ-8WLN-08-CR	0.50	0.50	DFA														
19	1	GARBAGE DISPOSAL SYSTEM	IN-SINK-ERATOR SS-200-7/AS-101		0.50	DFA				2.00	SU	BRANCH CW FROM FAUCET ITEM #18 THRU SOLENOIDS & VACUUM BREAKER	208		3.20		3	D	SU	EXTEND SERVICE TO K.E.C. FURNISHED CONTROL PANEL.
20	*6	HEAVY-DUTY BUN PAN RACK	CHANNEL 401A																	
21	1	COUNTERTOP MIXER W/ STAND	HOBART HL200-1STD										120		8.00		1	P	*	*PLUG INTO ISLAND WORKTABLE
22	1	SLICER	HOBART HS8-1										120		5.40		1	P	*	*PLUG INTO ISLAND WORKTABLE
23	1	MOBILE WORKTABLE	CUSTOM ST. STL.																	
24	1	ICE MAKER W/ BIN	MANITOWOC IYT0420A		0.50	60				0.75	FD	DRAIN TO FLOOR DRAIN	120		11.5		1	D	66	
25	1	WORKTABLE	CUSTOM ST. STL.																	
26	1	MICROWAVE	PANASONIC NE-1064F										120		13.4		1	P	24	NEMA 5-15P
27	4	KITCHEN MOBILE SHELVING UNIT	INTERMETRO METROMAX Q																	
28	2	SINGLE DOOR REACH-IN HEATED CABINET	TRAULSEN AHF132W-FHS										208		7.80		1	P	78	NEMA L14-20P MOUNTED IN SOFFIT ABOVE
29	2	SINGLE DOOR REACH-IN REFRIGERATOR	TRAULSEN AHT132WUT-FHS										120		7.00		1	P	78	NEMA 5-15P MOUNTED IN SOFFIT ABOVE
30	1	EXHAUST HOOD	CUSTOM ST. STL.									SEE SHEET K500 FOR ADDITIONAL INFO								SEE SHEET K500 FOR ADDITIONAL INFO
31	1	FIRE SUPPRESSION SYSTEM	PART OF ITEM #30									SEE SHEET K500 FOR ADDITIONAL INFO								SEE SHEET K500 FOR ADDITIONAL INFO
32	1	FIRE PULL BOX	PART OF ITEM #30									SEE SHEET K500 FOR ADDITIONAL INFO								SEE SHEET K500 FOR ADDITIONAL INFO
33	2	COOKLINE EXHAUST FAN	PART OF ITEM #30									SEE SHEET K500 FOR ADDITIONAL INFO								SEE SHEET K500 FOR ADDITIONAL INFO
34	1	COOKLINE MAKE UP AIR FAN	PART OF ITEM #30									SEE SHEET K500 FOR ADDITIONAL INFO								SEE SHEET K500 FOR ADDITIONAL INFO
35	1	COMBI OVEN/STEAMER DBL STACK	RATIONAL ICC 6-FULL/ICC 6-FULL		(2)0.75	36	0.75 0.75	107 107	48 24	2.00	FS	DIVIDE C.W. USING MANIFOLD AND EXTEND ONE LINE THRU KEC FURNISHED FILTER.	208 208		15.0 15.0		1 1	D D	48 24	
36	1	COMBI OVEN/STEAMER FILTER	PART OF ITEM #35		*	60						*INTERCONNECT CW CONNECTION WITH COMBI UNIT ITEM #35								
37	1	40 GALLON TILT SKILLET	CLEVELAND SGL40T1	0.50	0.50	14	0.75	200	24	2.00	FT	DRAIN TO FLOOR TROUGH	120		10.0		1	P	16	NEMA 5-15P
38	1	FLOOR TROUGH	CUSTOM ST. STL.							4.00	0	TRAP BELOW FLOOR FOR FLOOR TROUGH DRAIN FURNISHED BY KEC								
39	1	FOUR BURNER RANGE WITH OVEN BASE	MONTAGUE 124-5				1.25	140	24											
40	1	DOUBLE STACKED CONVECTION OVEN	SOUTHBEND SLGB/22SC				0.75	144	24				120		7.90		1	P	16	NEMA 5-15P (1) REQUIRED PER OVEN
41		SPARE NUMBER																		
42		SPARE NUMBER																		
43		SPARE NUMBER																		
44		SPARE NUMBER																		
45	1	THREE COMPARTMENT SINK	CUSTOM ST. STL.							2.00 2.00	FS 12	VERIFY WITH LOCAL CODE								
46	1	WALL SHELF	CUSTOM ST. STL.																	
47	2	SPLASH MOUNT FAUCET	T&S BRASS B-0290	0.75	0.75	14														
48	2	SPLASH MOUNT PRE-RINSE FAUCET	T&S BRASS B-0133-CR-B-SWV	0.50	0.50	14														
49	1	GARBAGE DISPOSAL SYSTEM	IN-SINK-ERATOR SS-200-7/AS-101		0.50	14				2.00	6	BRANCH CW FROM FAUCET ITEM #24 THRU SOLENOIDS & VACUUM BREAKER	208		3.20		3	D	16	EXTEND SERVICE TO K.E.C. FURNISHED CONTROL PANEL.
50	1	SOILED DISH TABLE W/ SCRAP SINK	CUSTOM ST. STL.																	
	DR1	DUPLEX CONVENIENCE RECEPTACLE											120		16.0		1		16	
	DR2	DUPLEX CONVENIENCE RECEPTACLE											120		16.0		1		48	FURNISH HORIZONTAL RECEPTACLE WHEN MOUNTED ABOVE COUNTERTOP
51	1	DISH MACHINE W/BOOSTER HEATER	HOBART CL44EN-BAS	0.50	0.50	14				2.00	FS	120° MINIMUM HOT WATER REQ. W/ 70° RISE BOOSTER. DRAIN TO FLOOR SINK	208		133		3	D	60	150 AMP BREAKER REQUIRED
52	1	DISH MACHINE BLOWER DRYER	HOBART BDELRAB-HTSDOM							1.00	FS	DRAIN TO FLOOR SINK	208		34.2		3	D	60	45 AMP BREAKER REQUIRED
53	2	DISH MACHINE VENT COWL	PART OF ITEM #54																	
54	1	DISH MACHINE EXHAUST FAN	CUSTOM ST. STL.									SEE SHEET K500 FOR ADDITIONAL INFO								SEE SHEET K500 FOR ADDITIONAL INFO
55	1	CLEAN DISH TABLE	CUSTOM ST. STL.																	
56	1	WALL SHELF	CUSTOM ST. STL.																	
57	1	MOBILE DRYING RACK	INTERMETRO PR36VX2-XDR																	
58	1	MOBILE DRYING RACK	INTERMETRO PR36VX3-XDR																	
59	1	MOBILE DRYING RACK	INTERMETRO PR36VX4-XDR																	
60	LOT	TRASH CONTAINERS	BY OWNER NIKEC																	
61		SPARE NUMBER																		
62		SPARE NUMBER																		
63	1	JANITORIAL MOP SINK	ADVANCE TABCO 9-OP-20	0.50	0.50	42				3.00	0									
64	1	CHEMICAL SHELVING UNIT	INTERMETRO SEC53C																	
65	1	WASHER & DRYER	BY OWNER NIKEC																	
66	1	STAINLESS STEEL WALL CABINET	ADVANCE TABCO WCH-15-60																	
67	6	LOCKERS (FULL SIZE)	BY ARCHITECT NIKEC																	
68	1	MILK COOLER	TRUE TMC-49-HC										120		2.70		1	P	SU	NEMA 5-15P POVIDE FLUSH MOUNTED RECEPTACLE IN FLOOR
69	1	MOBILE HOT SERVING COUNTER	CUSTOM ST. STL./ MILLWORK										120		16.0		1	P	SU	DCO
70	1	DROP-IN HOT/COLD UNIT	LTI DI-QSCHP-4							0.75	FD	DRAIN TO FLOOR DRAIN	120/ 280		14.4		1	P	SU	NEMA 14-20P
71	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VG7										120		6.00		1	D	SU	
72	1	MOBILE COLD SERVING COUNTER	CUSTOM ST. STL./ MILLWORK										120		16.0		1	P	SU	DCO
73	1	DROP-IN COLD WELL UNIT	LTI DI-2063TA							0.75	FD	DRAIN TO FLOOR DRAIN	120		8.50		1	P	SU	NEMA 5-15P
74	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VG7										120		6.00		1	D	SU	
75	1	DRY GOODS SERVING COUNTER	CUSTOM ST. STL./ MILLWORK										120		16.0		1	P	SU	DCO
76	1	ICE CREAM FREEZER	BEVERAGE AIR NC28HC-1-W										120		2.00		1	P	SU	NEMA 5-15P PROVIDE FLUSH MOUNTED RECEPTACLE IN FLOOR
77	6*	MOBILE TRAY DISPENSERS	DELFIELD TT-1014																	
78	1	MILK COOLER	TRUE TMC-49-HC										120		2.70		1	P	SU	NEMA 5-15P
79	1	MOBILE HOT SERVING COUNTER	CUSTOM ST. STL./ MILLWORK										120		16.0		1	P	SU	DCO
80	1	DROP-IN HOT/COLD UNIT	LTI DI-QSCHP-4							0.75	FD	DRAIN TO FLOOR DRAIN	120/ 280		14.4		1	P	SU	NEMA 14-20P
81	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VG7										120		6.00		1	D	SU	
82	1	MOBILE COLD SERVING COUNTER	CUSTOM ST. STL./ MILLWORK										120		16.0		1	P	SU	DCO
83	1	DROP-IN COLD WELL UNIT	LTI DI-2063TA							0.75	FD	DRAIN TO FLOOR DRAIN	120		8.50		1	P	SU	NEMA 5-15P
84	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VG7										120		6.00		1	D	SU	
85	1	DRY GOODS SERVING COUNTER	CUSTOM ST. STL./ MILLWORK										120		16.0		1	P	SU	DCO
86	2	MOBILE DOUBLE-SIDED CASHIER COUNTER	CUSTOM ST. STL./ MILLWORK																	
87	2	POINT OF SALE SYSTEM	BY OWNER NIKEC										120		16.0		1	P	SU	DCO. DATA LINE REQUIRED.
88	4	SILVERWARE DISPENSER	VOLLRATH 52644																	
89	1	MOBILE CONDIMENT COUNTER	CUSTOM ST. STL./ MILLWORK																	
90	1	DROP-IN ICED COLD WELL UNIT	HATCO IWB-2							0.75	FD	DRAIN TO FLOOR DRAIN								
91	1	MOBILE CONDIMENT COUNTER	CUSTOM ST. STL./ MILLWORK																	
92	1	DROP-IN ICED COLD WELL UNIT	HATCO IWB-2							0.75	FD	DRAIN TO FLOOR DRAIN								

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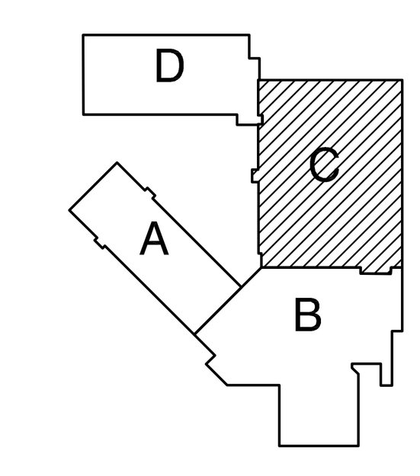
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21–113
DATE 1/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

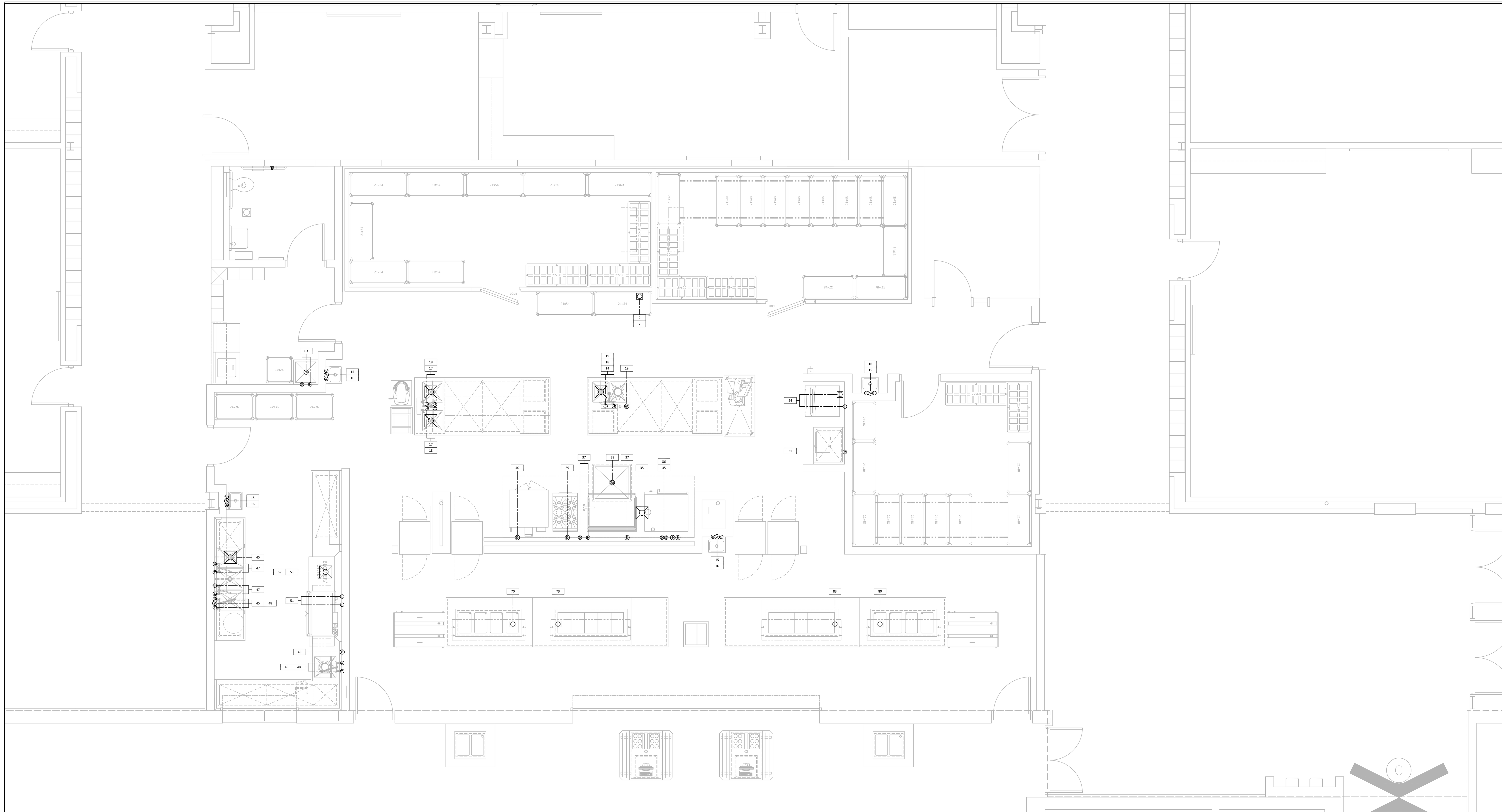
REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

DRAWING
FOODSERVICE EQUIPMENT SPOT LOCATION SCHEDULES

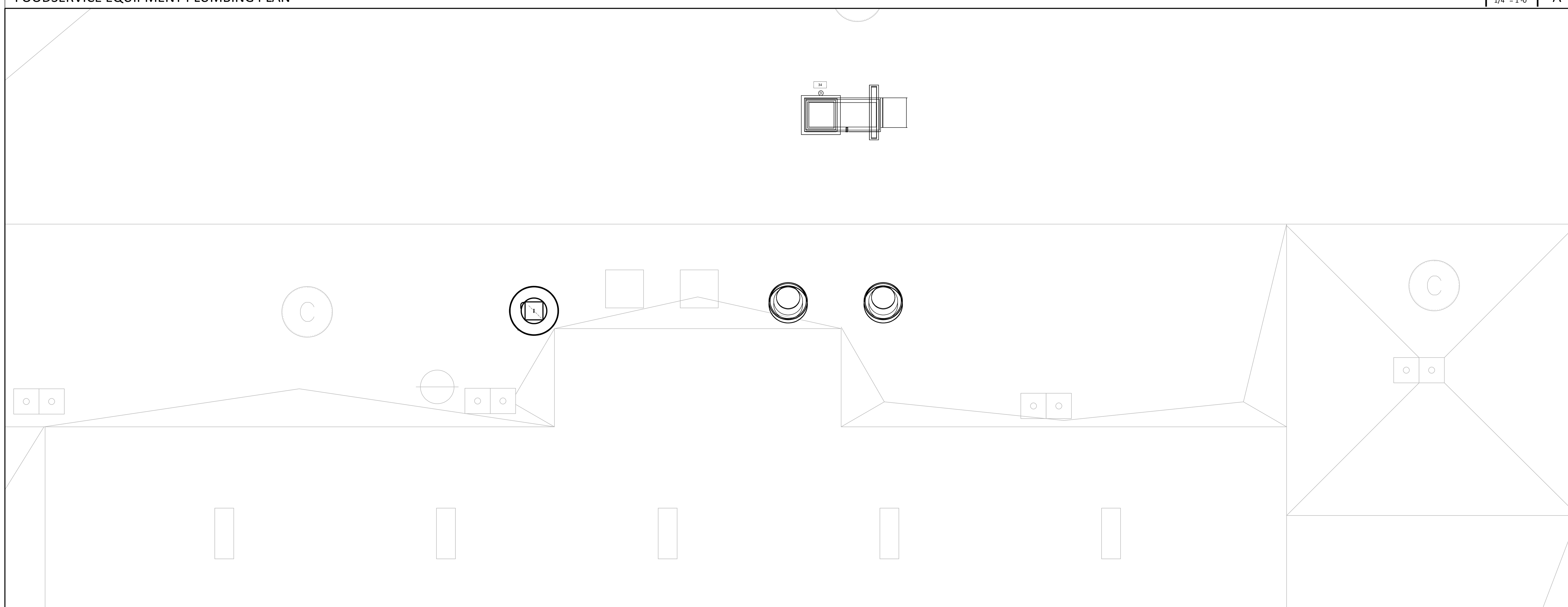
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-200



FOODSERVICE EQUIPMENT PLUMBING PLAN

SCALE 1/4" = 1'-0" | A



FOODSERVICE EQUIPMENT ROOFTOP PLUMBING PLAN

SCALE 1/4" = 1'-0" | B

PLUMBING NOTES

1. FOODSERVICE SPOT LOCATION SCHEDULES & DRAWINGS ARE FOR REFERENCE AND BIDDING PURPOSES, TO BE USED ONLY AS A GUIDE FOR FOOD SERVICE EQUIPMENT ELECTRICAL, PLUMBING & VENTILATION SPOT LOCATIONS AND ARE NOT APPROVED FOR USE ON THE JOBSITE FOR ROUGH-IN PURPOSES. THE KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR CREATING HIS/HER OWN ROUGH-IN SCHEDULES & DRAWINGS SHOWING ACCURATE LOCATIONS FOR UTILITIES AND WORK TO BE INSTALLED IN ACCORDANCE WITH ALL FEDERAL, STATE & LOCAL CODES.
2. ALL SPOT LOCATIONS SHOWN ON THESE DRAWINGS ARE SPECIFIC TO THE EQUIPMENT SHOWN ON THE FOODSERVICE EQUIPMENT PLAN. REFER TO ARCHITECTURAL & PLUMBING DRAWING SETS FOR ADDITIONAL PLUMBING REQUIREMENTS NOT SHOWN.
3. ALL FLOOR AREAS IN THE KITCHEN & SERVING SPACE SHALL BE "TRANSIT LEVEL". DO NOT SLOPE FLOOR TO FLOOR DRAINS OR FLOOR SINKS IN THIS AREA!!!
4. MECHANICAL DIVISION TO INSTALL ALL FAUCET ASSEMBLIES, PRE-RINSE SPRAY ASSEMBLIES, HOSE ASSEMBLIES, VACUUM BREAKERS, CHECK VALVES, FLOW CONTROL VALVES, SOLENOID VALVES, WATER PRESSURE REDUCING VALVES, GAS PRESSURE REDUCING VALVES, TEMPERATURE GAUGES, PRESSURE GAUGES, WATER HAMMER SHOCK ABSORBERS & WATER FILTRATION SYSTEMS FURNISHED BY THE KITCHEN EQUIPMENT CONTRACTOR.
5. MECHANICAL DIVISION TO FURNISH & INSTALL ALL WATER, GAS & STEAM SUPPLY LINES, DRAIN MANIFOLDS & TAILPIECES, TRAPS, SHUT-OFF VALVES, VENT PIPING, GAS SUPPLY LINE STRAINERS/FILTERS, BACK FLOW PREVENTION DEVICES, FLOOR DRAINS & FLOOR SINKS AS REQUIRED FOR EQUIPMENT INSTALLATION AND ANY CODE REQUIREMENTS. ALL SUPPLY LINES SERVICING EQUIPMENT ADJACENT TO AN EXTERIOR WALL ARE TO BE RAN ALONG INTERIOR FACE OF WALL TO AVOID POTENTIAL FREEZING.
6. MECHANICAL DIVISION TO FURNISH & INSTALL STAINLESS STEEL OR CHROME PLATED BRASS ESCUTCHEONS OR FLANGES FOR UTILITY LINES WHICH EXTEND THROUGH BUILDING WALLS AND EQUIPMENT. ALL PENETRATIONS TO BE SEALED WATER-TIGHT AND VERMIN PROOF.
7. MECHANICAL DIVISION TO FURNISH & INSTALL TYPE "L" COPPER TUBING DRAIN LINES FROM ALL APPLICABLE EQUIPMENT TO FLOOR SINKS, (INCLUDING WALK-IN COOLER AND FREEZER COILS) AND TO INSULATE ALL DRAIN LINES FROM ICE BINS, REFRIGERATION EQUIPMENT ETC.. MECHANICAL DIVISION TO INSTALL DRAIN LINES SO THEY DO NOT AFFECT UNDERCOUNTER STORAGE AND OTHER OPERATIONAL FUNCTIONS OF THE FIXTURES.
8. MECHANICAL DIVISION TO FURNISH & INSTALL CHROME PLATED PIPING ON ALL EXPOSED PIPING ABOVE COUNTER HEIGHT OR IN "DIRECT" LINE OF SIGHT TO THE OWNER/OPERATOR.
9. MECHANICAL DIVISION TO FURNISH & INSTALL ALL 12"x12"x8" FLOOR SINKS WITH HALF GRATES. FLOOR SINKS TO BE MOUNTED IN FLOOR SUCH THAT THE TOP OF THE RIM WILL BE FLUSH WITH FINISHED FLOOR ELEVATION UNLESS OTHERWISE DIRECTED BY STATE & LOCAL CODES. FLOOR SINKS FOR DISHMACHINES AND ALL COOKING EQUIPMENT TO HAVE A MINIMUM OF 3" DRAIN CONNECTION.
10. MECHANICAL DIVISION TO COOL, HEAT &/OR VENTILATE FOOD SERVICE DRY STORAGE ROOM TO MAINTAIN A TEMPERATURE OF 68 DEGREES TO 72 DEGREES YEAR AROUND.

PLUMBING LEGEND

Symbol	Description
Ⓗ	SINGLE HOT WATER CONNECTION
Ⓒ	SINGLE COLD WATER CONNECTION
Ⓗ Ⓒ	HOT & COLD WATER CONNECTION
Ⓦ	DIRECT WASTE CONNECTION
◻	INDIRECT FLOOR DRAIN
⊠	INDIRECT 12"x12" FLOOR SINK
⊠	INDIRECT 12"x12" FLOOR SINK WITH HALF GRATE
Ⓖ	GAS CONNECTION
⬣	REFER TO ELECTRICAL/PLUMBING SCHEDULES FOR MORE INFORMATION ON THIS EQUIPMENT

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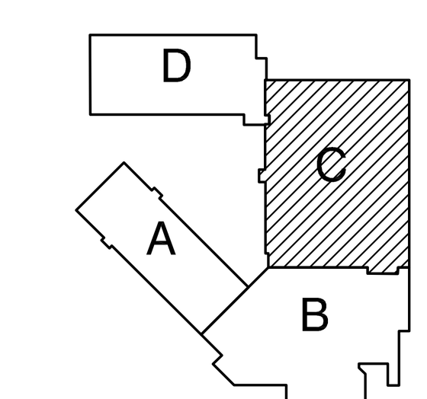
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
21-113
DATE
1/31/22
COORDINATED BY
RDG
DRAWN BY
JJN
CHECKED BY
RDG

REVISIONS

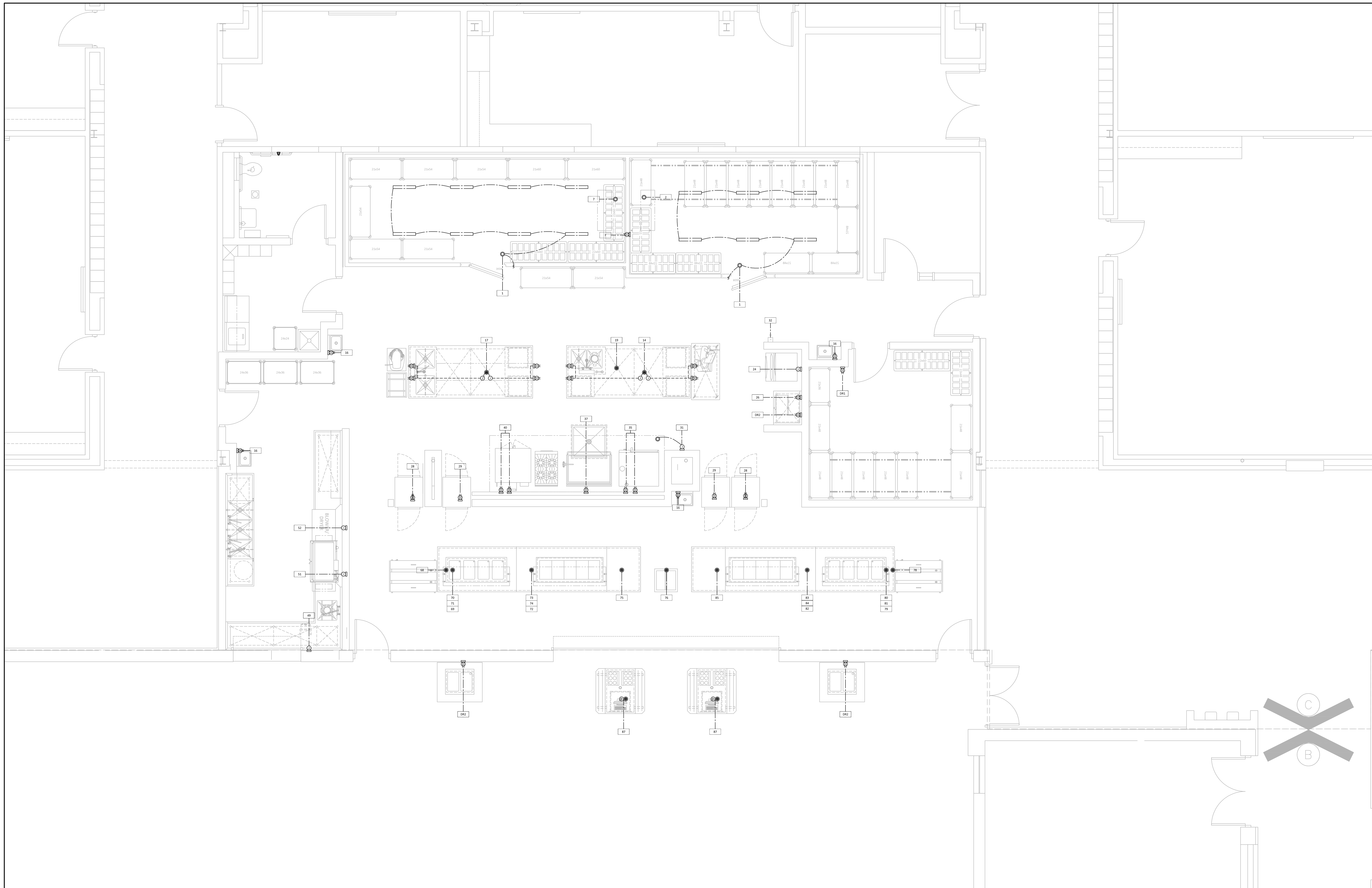
MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

DRAWING
FOODSERVICE EQUIPMENT PLUMBING PLAN

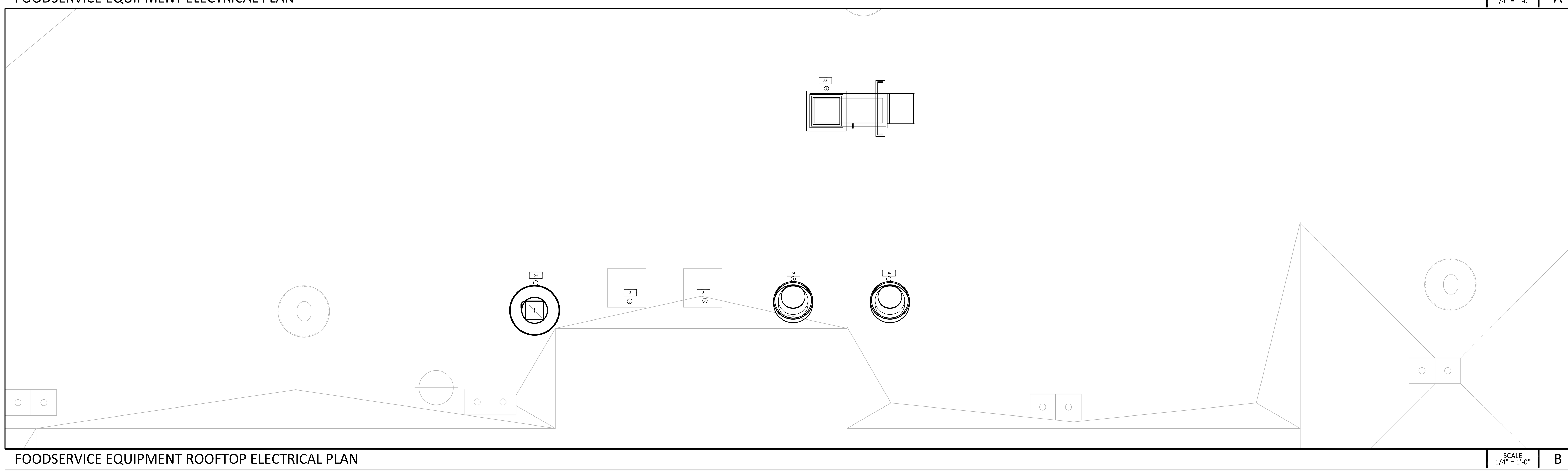
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-300

Wednesday, 2/23/2022 - 10:00 AM - LAST SAVED BY:JONATHAN NIKIEL
G:\SHARED DRIVES\RDG PROJECT DATA\RDG PROJECT FOLDER (2021)\2021-025 - GIBRALTAR - MACARTHUR ELEMENTARY SCHOOL\3. DRAWINGS\A. CAD\QF-2021-025-SPOT.DWG



FOODSERVICE EQUIPMENT ELECTRICAL PLAN — SCALE 1/4" = 1'-0" — A



FOODSERVICE EQUIPMENT ROOFTOP ELECTRICAL PLAN — SCALE 1/4" = 1'-0" — B

ELECTRICAL NOTES

1. FOODSERVICE SPOT LOCATION SCHEDULES & DRAWINGS ARE FOR REFERENCE AND BIDDING PURPOSES, TO BE USED ONLY AS A GUIDE FOR FOOD SERVICE EQUIPMENT ELECTRICAL, PLUMBING & VENTILATION SPOT LOCATIONS AND ARE NOT APPROVED FOR USE ON THE JOBSITE FOR ROUGH-IN PURPOSES. THE KITCHEN EQUIPMENT CONTRACTOR SHALL BE RESPONSIBLE FOR CREATING HIS/HER OWN ROUGH-IN SCHEDULES & DRAWINGS SHOWING ACCURATE LOCATIONS FOR UTILITIES AND WORK TO BE INSTALLED IN ACCORDANCE WITH ALL FEDERAL, STATE & LOCAL CODES.
2. ALL SPOT LOCATIONS SHOWN ON THESE DRAWINGS ARE SPECIFIC TO THE EQUIPMENT SHOWN ON THE FOODSERVICE EQUIPMENT PLAN. REFER TO ARCHITECTURAL & ELECTRICAL DRAWING SETS FOR ADDITIONAL ELECTRICAL REQUIREMENTS NOT SHOWN.
3. ELECTRICAL AMPERAGE NOTED IN SCHEDULE INDICATES AMP "DRAW" & NOT CIRCUIT BREAKER SIZE UNLESS OTHERWISE NOTED. ELECTRICAL DIVISION IS RESPONSIBLE FOR PROPER CIRCUIT BREAKER SIZING
4. ELECTRICAL DIVISION TO VERIFY ALL FOODSERVICE EQUIPMENT WITH DIRECT ELECTRICAL CONNECTION TO BE IN LINE OF SIGHT OF KITCHEN ELECTRICAL DISTRIBUTION PANEL, AND IF NOT, ELECTRICAL DIVISION TO FURNISH & INSTALL A FUSED QUICK DISCONNECT ADJACENT TO EQUIPMENT.
5. ELECTRICAL DIVISION TO INSTALL ALL CONTROL PANELS, STARTERS, SOLENOID VALVES, JUNCTION BOXES & DISCONNECT SWITCHES FURNISHED BY THE KITCHEN EQUIPMENT CONTRACTOR.
6. ELECTRICAL DIVISION TO FURNISH & INSTALL ALL WIRING, ELECTRICAL OUTLETS, STARTERS, JUNCTION BOXES, DISCONNECT SWITCHES & CONDUIT REQUIRED FOR EQUIPMENT INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS & ELECTRICAL CODE REQUIREMENTS. ELECTRICAL RECEPTACLES TO BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.
7. ELECTRICAL DIVISION TO FURNISH & INSTALL GROUNDING WIRE TO ALL FOOD SERVICE EQUIPMENT IN ADDITION TO THE NUMBER OF WIRES NOTED IN INDIVIDUAL SERVICES.
8. ELECTRICAL DIVISION TO FURNISH & INSTALL GROUND FAULT PROTECTION FOR ANY RECEPTACLE WITHIN THE KITCHEN & SERVING AREAS.
9. ELECTRICAL DIVISION TO FURNISH & INSTALL SHUNT TRIP BREAKERS FOR ALL ELECTRICAL SERVICE TO EQUIPMENT UNDER EXHAUST HOODS WHEN FIRE SUPPRESSION SYSTEM IS REQUIRED.
10. ELECTRICAL DIVISION TO FURNISH 6'-0" PIGTAIL FLEX CONDUIT AT ALL DIRECT CONNECTION STUB-OUTS AND EXTEND TO FINAL CONNECTION ON EQUIPMENT. ELECTRICAL DIVISION TO PROVIDE CAPS AND CORDS FOR ALL ITEMS WHICH USE CONVENIENCE OUTLETS WHEN NOT SUPPLIED BY THE MANUFACTURER AND SHORTEN ANY CORDS IF NECESSARY.

ELECTRICAL LEGEND

Symbol	Description
	DEDICATED 120 VOLT ELECTRICAL CONNECTION
	DEDICATED 208 VOLT ELECTRICAL CONNECTION
	FIXTURE MOUNT DUPLEX CONVENIENCE OUTLET
	JUNCTION BOX LOCATED ON WALL
	JUNCTION BOX STUB UP / STUB DOWN
	DEDICATED ELECTRICAL CONNECTION (STUB)
	DEDICATED ELECTRICAL CONNECTION (DFA)
	120/208 VOLT SINGLE CONVENIENCE OUTLET
	FIRE SUPPRESSION SYSTEM PULL STATION
	SWITCH
	FINAL CONNECTION POINT
	TELEPHONE/DATA CONNECTION
	FLEX CONNECTION
	REFER TO ELECTRICAL/PLUMBING SCHEDULES FOR MORE INFORMATION ON THIS EQUIPMENT

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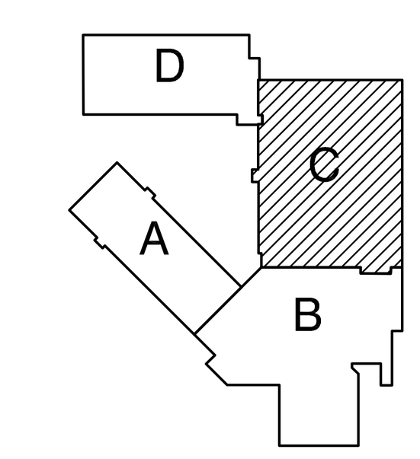

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21–113
DATE 1/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

DRAWING
FOODSERIVCE EQUIPMENT ELECTRICAL PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-301

Wednesday, 2/23/2022 — 10:00 AM — LAST SAVED BY:JONATHAN NIKEL
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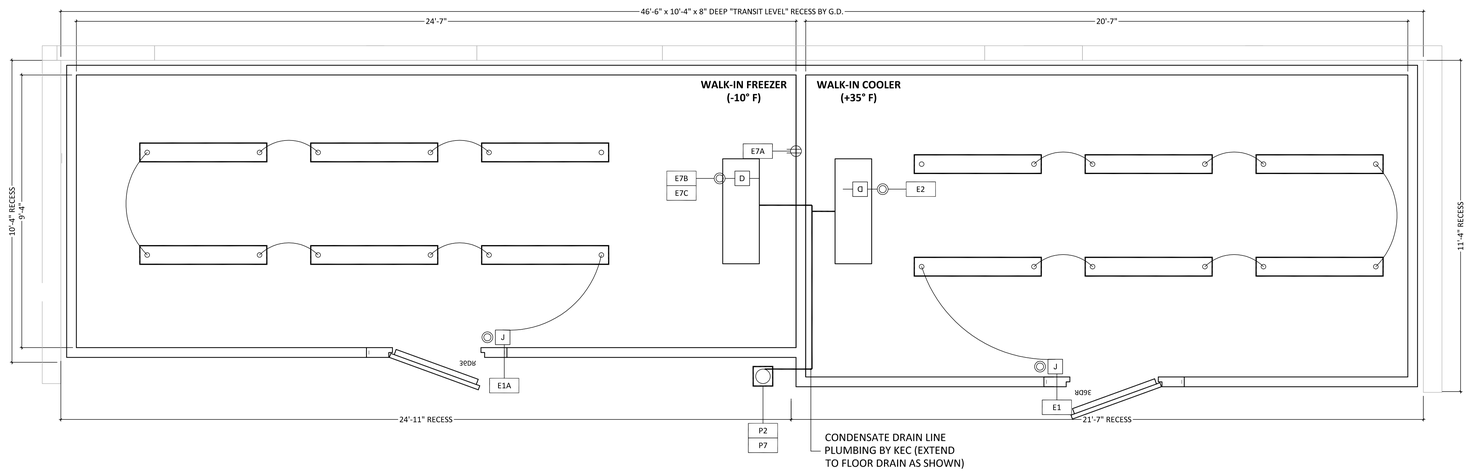


WALK-IN COOLER/FREEZER OPTIONS/ACCESSORIES SCHEDULE

HEIGHT DIMENSIONS

COOLER:	OUTSIDE DIM. = 9'-8"	INSIDE DIM. = 9'-0"
FREEZER:	OUTSIDE DIM. = 9'-8"	INSIDE DIM. = 9'-0"

EXTERIOR FINISH

EXPOSED WALLS:	26 GA. EMBOSSED GALV. STEEL (WHITE BAKED-ON ENAMEL)
UNEXPOSED WALLS:	26 GA. SMOOTH GALV. STEEL
DOOR:	TO MATCH ADJACENT EXTERIOR WALLS
DOOR SECTION:	TO MATCH ADJACENT EXTERIOR WALLS

INTERIOR FINISH

WALLS:	26 GA. EMBOSSED GALV. STEEL (WHITE BAKED-ON ENAMEL)
CEILING:	26 GA. EMBOSSED GALV. STEEL (WHITE BAKED-ON ENAMEL)
DOOR:	TO MATCH ADJACENT INTERIOR WALLS
DOOR SECTION:	TO MATCH ADJACENT INTERIOR WALLS

36" COOLER/FREEZER DOOR OPTIONS

THREE (3) KASON INDUSTRIES 1346 PERFORMER LIFT-OFF ADJUSTABLE HINGES
ONE (1) KASON INDUSTRIES 27C LOCKING HANDLE
ONE (1) KASON INDUSTRIES 1094 PERFORMER WALK-IN DOOR CLOSER
ONE (1) KASON INDUSTRIES THERMAFLEX DOUBLE SWING VINYL DOOR
ONE (1) PRE-WIRED KASON INDUSTRIES 1807LW LED FIXTURE
ONE (1) 14"x24" VIEWPORT W/ HEAT REFLECTIVE TRIPLE PANE GLASS
36" HIGH 1/8" DIAMOND ALUMINUM KICKPLATES (IN & OUT)
MODULARM MODEL #75LC MULTI-MONITOR ALARM/THERMOMETER
HEATED AIR PRESSURE RELIEF PORT
PRE-WIRED DOOR JAMB HEATER (FREEZER DOOR ONLY)
PRE-WIRED THRESHHOLD AND SILL HEATER (FREEZER DOOR ONLY)

WALK-IN ACCESSORIES

(LOT) VERTICAL TRIM STRIPS (MATCH EXTERIOR FINISH) SEAL TO WALK-IN & BUILDING WALL
(LOT) CLOSURE PANELS (MATCH EXTERIOR FINISH) FROM TOP OF WALK-IN TO FINISHED CEILING
(LOT) 36" HIGH 1/8" DIAMOND ALUMINUM WAINSCOTTING ON EXPOSED FRONT & SIDE WALL
(LOT) KASON 1809-4 LED LIGHT FIXTURES TO MEET LIGHTING REQUIREMENTS

WALK-IN COOLER/FREEZER ELECTRICAL SCHEDULE

WALK-IN COOLER (+35° F) ELECTRICAL REQUIREMENTS

ITEM	EQUIPMENT DESCRIPTION	VOLTAGE	PHS	AMP	HP	AFF	REMARKS
E1	LIGHTS AND DOOR OPTIONS (COOLER)	120	1	20.0		DFA	
E2	WALK-IN COOLER EVAPORATOR FANS	120	1	5.0		DFA	
E3	WALK-IN COOLER CONDENSING UNIT	208	3	7.7	1.50	PAD	

WALK-IN FREEZER (-10° F) ELECTRICAL REQUIREMENTS

ITEM	EQUIPMENT DESCRIPTION	VOLTAGE	PHS	AMP	HP	AFF	REMARKS
E1A	LIGHTS AND DOOR OPTIONS (FREEZER)	120	1	20.0		DFA	
E7A	WALK-IN FREEZER DRAIN LINE HEAT TAPE	120	1	15.0		90°	
E7B	WALK-IN FREEZER EVAPORATOR FANS	208	1	5.0		DFA	
E7C	WALK-IN FREEZER EVAPORATOR HEATER	208	1	14.3		PAD	
E8	WALK-IN FREEZER CONDENSING UNIT	208	3	17.1	4.50	PAD	

WALK-IN COOLER/FREEZER RESPONSIBILITIES BY OTHER TRADES

OTHERS:

RECESS AND TRANSIT LEVEL ENTIRE WALK-IN COOLER/FREEZER AREA TO A DEPTH OF 8" TO RECEIVE WALK-IN COOLER/FREEZER INSULATED FLOOR PANELS. FURNISH AND INSTALL 6 MIL. VAPOR BARRIER (JOINTS TO OVERLAP A MINIMUM OF 6") UNDER ENTIRE AREA OF WALK-IN COMPARTMENTS AND TURN UP ON ALL SIDES. FURNISH AND INSTALL 4" THICK CONCRETE TOPPING SLAB (3,000 PSI) WITH POLYPROPELENE FIBER MESH REINFORCEMENT (1.5#/CY).DEPRESSION TO BE CONSTRUCTED AS TO PROVIDE A LEVEL TRANSITION FROM FLOOR FINISH IN KITCHEN AREA TO THE FLOOR FINISH IN WALK-IN COOLER/FREEZER. (VERIFY REQUIRED DEPRESSION THICKNESS WITH WALK-IN MANUFACTURER'S SHOP DRAWING AND ARCHITECTURAL FLOOR FINISH SCHEDULE)

FURNISH AND INSTALL ALL SLEEVES THROUGH BUILDING WALLS AND ROOF AS REQUIRED FOR KEC TO RUN REFRIGERATION LINES FROM WALK-IN COOLER/FREEZER TO WALK-IN COOLER/FREEZER COMPRESSORS. SLEEVES TO BE LOCATED AND COORDINATED IN FIELD BY KEC.

FRAME ROOF CURB OPENINGS AS REQUIRED. COORDINATE JOIST OR STRUCTURAL MEMBER INSTALLATION TO PROVIDE REQUIRED STRUCTURAL SUPPORT FOR WALK-IN COOLER/FREEZER COMPRESSORS. CUT OPENINGS IN ROOF FOR ACCESS TO CURBS AND PITCH POCKETS. FURNISH AND INSTALL ADEQUATE STRUCTURAL SUPPORT FOR WALK-IN COOLER/FREEZER COMPARTMENTS

SET-IN-PLACE AND FLASH (WITH CANT IF REQUIRED) ROOF CURBS AND EQUIPMENT SUPPORT RAIL FURNISHED BY THE WALK-IN COOLER/FREEZER SYSTEM MANUFACTURER.

ELECTRICAL DIVISION:

FURNISH AND INSTALL ALL CONDUIT AND WIRING NECESSARY BETWEEN EVAPORATOR COILS, CONDENSING UNITS, AND ELECTRICAL DISCONNECTS.

FURNISH AND INSTALL ALL FINAL ELECTRICAL HOOK-UPS AND DISCONNECTS TO LIGHTS AND ALL HEATED DOOR OPTIONS IN WALK-IN COOLER/FREEZER UNIT.

FURNISH AND INSTALL ALL WIRING AND CONDUIT ABOVE AND ON THE OUTSIDE OF THE WALK-IN COOLER/FREEZER COMPARTMENT. ALL PENETRATIONS THRU WALLS AND CEILING ARE TO BE EQUIPPED WITH "SEAL-OFFS" AND SEALED WITH SILICONE AT EACH JUNCTION BOX TO PREVENT MOISTURE FROM COLLECTING IN FIXTURE.

MECHANICAL DIVISION:

INSURE THAT THERE IS CONSTANT AIRFLOW ABOVE AND AROUND ALL SIDES OF WALK-IN COMPARTMENTS TO ELIMINATE MOISTURE BUILD-UP.

WALK-IN COOLER/FREEZER NOTES

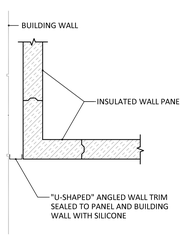
1. KEC TO FIELD VERIFY ALL BUILDING CONDITIONS, PIT RECESS, WALK-IN DIMENSIONS AND BUILDING DIMENSIONS TO ENSURE PROPER FIT OF WALK-IN COOLER/FREEZER.
2. KEC TO EXTEND 3/4" DRAIN LINE FROM EVAPORATOR COILS TO FLOOR DRAIN, AS LOCATED ON DRAWING, ON THE EXTERIOR OF THE WALK-IN COOLER/FREEZER COMPARTMENT. DRAIN LINE TO BE SLOPED MINIMUM OF 1/4" PER FOOT. KEC TO COORDINATE DRAIN LINE HEIGHT AS IT EXITS EACH COIL SO THAT IT DOES NOT INTERFERE WITH SHELVING.
3. KEC TO PROVIDE AND INSTALL ALL REQUIRED ELECTRICAL COMPONENTS (FUSED DISCONNECT, TIME CLOCKS, MAGNETIC STARTERS, ETC.) AND FACTORY WIRED (CONDUIT AND CABLE) FOR ALL CONTROLS WITHIN THE REFRIGERATION SYSTEMS, TO A SINGLE POINT OF SERVICE FOR POWER CONNECTION.
4. KEC TO PROVIDE ED WITH A SUFFICIENT NUMBER OF LIGHT FIXTURES TO PROVIDE A MINIMUM OF SEVENTY (70) FOOT CANDLES OF LIGHT INTENSITY MEASURED AT 30" AFF AT ANY POINT IN THE COMPARTMENT. THIS EQUATES TO APPROXIMATELY ONE (1) 100 WATT LIGHT FIXTURE PER FIFTY (50) SQUARE FEET NOT INCLUDING THE LIGHT FIXTURE ABOVE THE DOOR.
5. KEC TO COORDINATE WITH GD TO DETERMINE EXACT LOCATION AND MOUNTING REQUIREMENTS FOR WALK-IN COOLER/FREEZER COMPRESSORS.
6. KEC TO PROVIDE ALL CURBS AND PITCH POCKETS FOR FINAL MOUNTING AND FLASHING BY GD.
7. ALL FINAL CONNECTION LOCATIONS, PENETRATIONS AND ELECTRICAL REQUIREMENTS ARE TO BE VERIFIED PER THE WALK-IN MANUFACTURER'S DRAWINGS PRIOR TO CONSTRUCTION.
8. KEC TO COORDINATE ALL WORK WITH ALL PROJECT CONTRACTORS AND TRADES

WALK-IN COOLER/FREEZER LAYOUT

SCALE 1/2" = 1'-0" | A

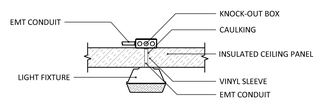
STAINLESS STEEL TRIM DETAIL

NOT TO SCALE | G



LIGHT FIXTURE DETAIL

NOT TO SCALE | E

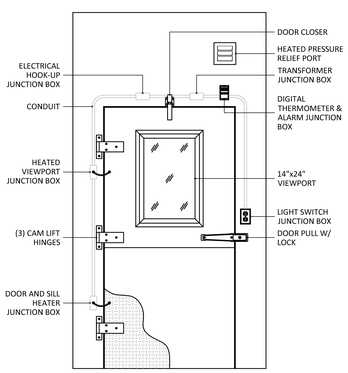


NOT IN USE

NOT TO SCALE | H

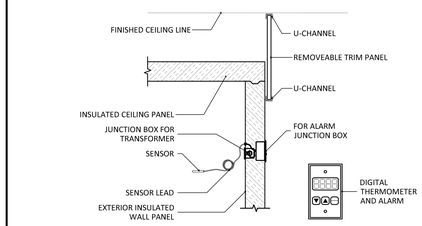
WALK-IN DOOR DETAIL

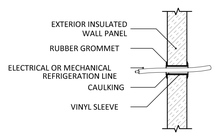
NOT TO SCALE | F

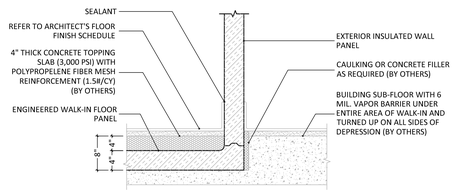


WALK-IN WALL SECTION DETAIL

NOT TO SCALE | D



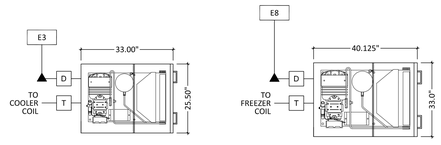




NOTES:
1. FLOOR FINISH THICKNESS TO BE VERIFIED TO CREATE A LEVEL TRANSITION BETWEEN KITCHEN AND WALK-IN.

ROOF MOUNTED CONDENSING UNIT DETAIL

NOT TO SCALE | B



COOLER CONDENSING UNIT
MODEL = PC149MOP-3P
WEIGHT = 177 LBS.

FREEZER CONDENSING UNIT
MODEL = PC48LZOP-3P
WEIGHT = 230 LBS.

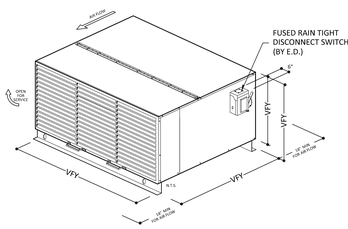
(VERIFY FINAL LOCATION WITH ARCHITECTURAL DRAWING SET)

ROOF MOUNTED COMPRESSOR HOUSING DETAIL

NOTES:
1. MINIMUM 36" CLEARANCE IN FRONT OF DISCONNECT SWITCH TO MEET N.E.C.
2. AIR INLET SIDE SHOULD NOT BE LOCATED IN HOT DISCHARGE AIR STREAM FROM OTHER EQUIPMENT.
3. ATTACH RACK TO PAD WITH 1" LONG 3/8" LAG BOLTS ON ALL FOUR CORNERS.

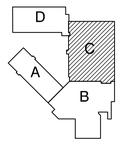
RACK MATERIAL LIST
BASE: 12 Ga. G90 GALVANIZED STEEL
SIDES, TOP & LOUVERS: EMBOSSED GALVALUME

NOT TO SCALE | C



GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

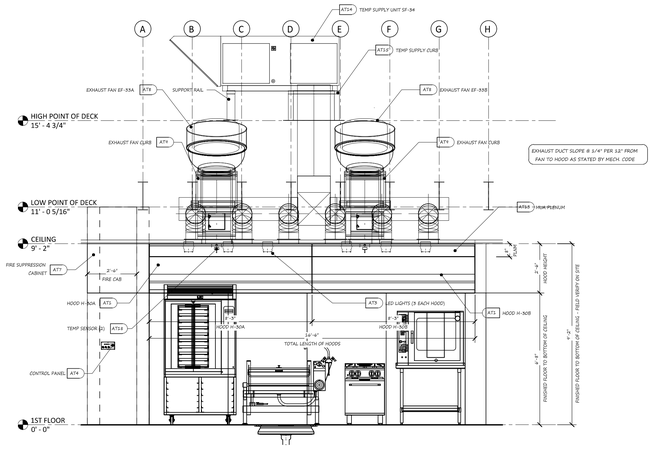
REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

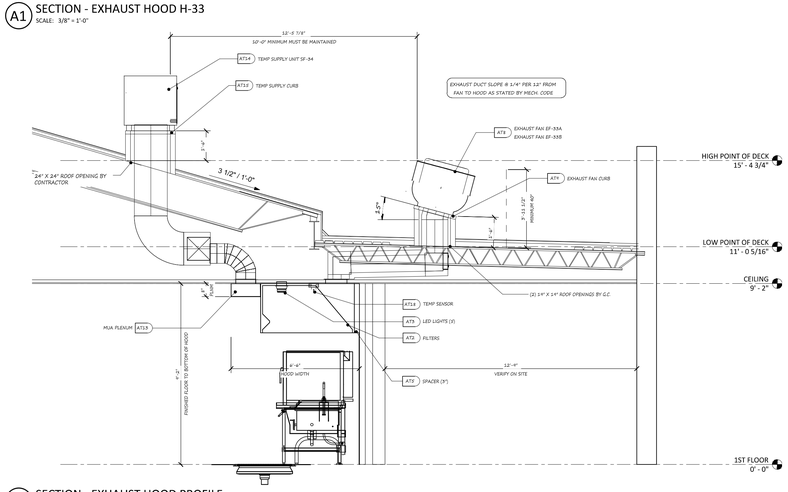
DRAWING
WALK-IN COOLER AND FREEZER LAYOUT AND DETAILS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

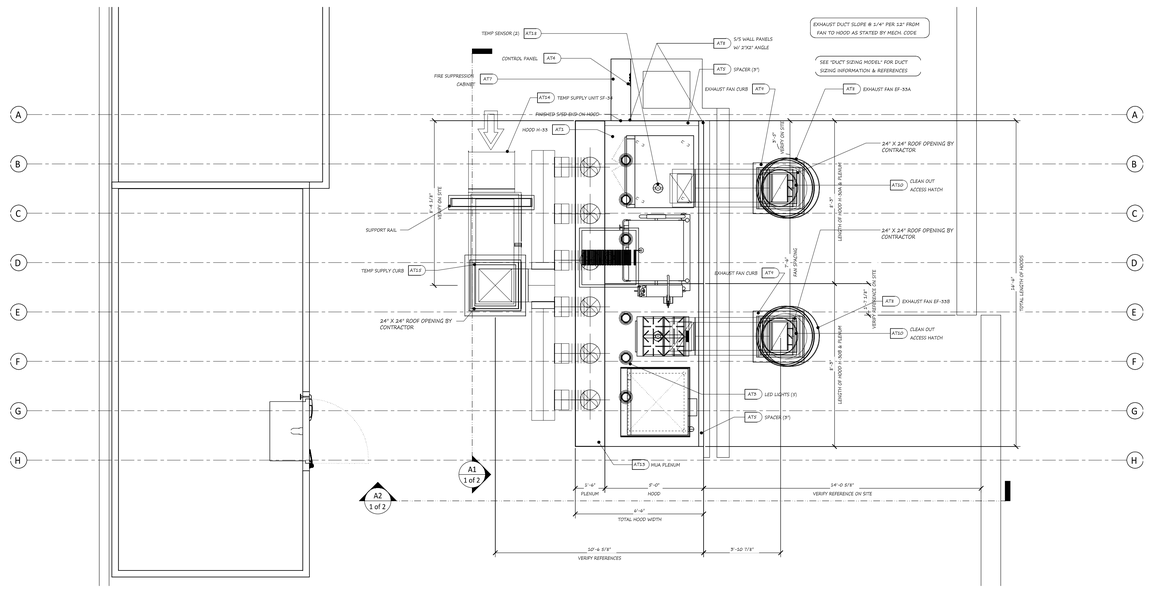
GIBRALTAR DESIGN | SHEET K-400



A1 SECTION - EXHAUST HOOD H-33
SCALE: 3/8" = 1'-0"



A2 SECTION - EXHAUST HOOD PROFILE
SCALE: 3/8" = 1'-0"



EXHAUST SYSTEM PLAN
SCALE: 3/8" = 1'-0"

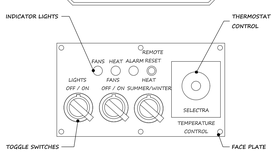
AVTEC INDUSTRIES
520 S. COLDWATER RD.
WEDMAN, MI 48893

	400F MAX. COOKING TEMP	600F MAX. COOKING TEMP	700F MAX. COOKING TEMP
EXH. CFM/FT	275	304	N/A
SUP. CFM/FT	N/A	N/A	N/A
FRONT OVERHANG	6"	6"	N/A
SIDE OVERHANG	6"	6"	N/A
SPACE BETWEEN HOOD & COOKING EQUIPMENT (MAX)	42"	42"	N/A

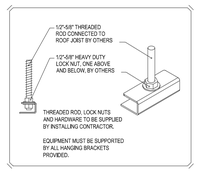
FOR USE WITH UL CLASSIFIED AL OR STEEL GREASE FILTERS
REPLACE FUSIBLE LINK WITH UL LISTED 349LB 165°F LINK

HOOD LABEL
SCALE: NOT TO SCALE

NOTES:
1. REMOTE WALL MOUNTED CONTROL PANEL
2. DESIGNED FOR OPERATION ON 24V CIRCUIT



AT4 - REMOTE MOUNTED HOOD CONTROL PANEL
SCALE: NOT TO SCALE

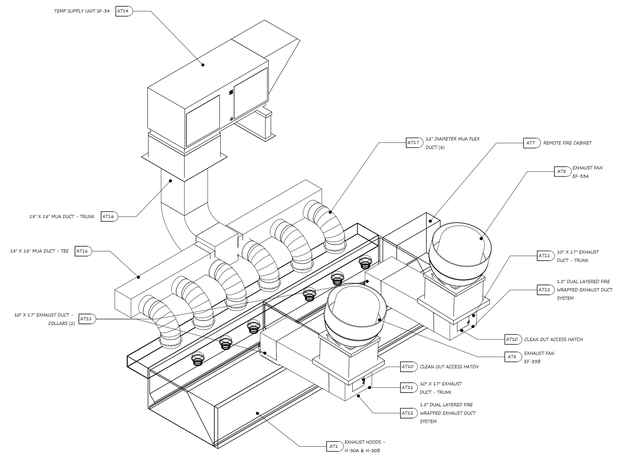


BRACKET DETAIL
SCALE: NOT TO SCALE

ALLIED AIR PACKAGED KITCHEN VENTILATION SYSTEM

ITEM	SYSTEM PARTS	QTY.	MODEL	U.L. AND/OR ETL LISTINGS	REMARKS
AT1	EXHAUST HOOD	2	CH SERIES	U.L. 710 LISTING & NSF 2	TYPE 300, 18 GA. S/S CONSTRUCTION
AT2	GREASE BAFFLE FILTERS	LOT	CHG F50	Ka295 CONTROL #1495	STAINLESS BAFFLE FILTERS-20" TALL
AT3	VAPOR PROOF LIGHTS	6	LEDR-160	U.L. E79293 & NSF 2	VAPOR PROOF LED LIGHT FIXTURES
AT4	WALL MOUNTED CONTROL PANEL	1	SEE DWG.	INCLUDED W/ EXHAUST HOOD	FLUSH MOUNTED ON WALL - WIRED BY E.C.
AT5	SPACER	1	CUSTOM	TO MEET LOCAL CODE	TYPE 300, 14 GAUGE S/S CONSTRUCTION - 3" WIDE
AT6	S/S TRIM ENCLOSURE	0	CUSTOM	TO MEET LOCAL CODE	FROM TOP OF HOOD TO +3" ABOVE CEILING
AT7	FIRE SYSTEM	1	ANSUL R-102	U.L. 300 DESIGN	PRE-ENGINEERED - WET CHEMICAL
AT8	EXHAUST FAN	2	SYSBH126	U.L. 762	SEE DRAWING DETAILS
AT9	EXHAUST FAN ROOF CURB	2	VERIFY ROOF	TO MEET LOCAL CODE	CUSTOM, INSULATED GALVANIZED STEEL CONSTRUCTION
AT10	EXHAUST DUCT CLEAN-OUT ACCESS	2	721232	TO MEET LOCAL CODE	INSTALLED EVERY 10'-0" OF HORIZONTAL RUN OR CHANGE DIRECTION
AT11	EXHAUST DUCT SYSTEM INSTALLED	LOT	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	16 GAUGE, FULLY WELDED (LIQUID TIGHT) SEE DRAWING FOR DETAILS
AT12	EXHAUST DUCT FIRE RATED WRAP	LOT	XL FIREMASTER	TO MEET LOCAL CODE	FIELD VERIFY BUILDING MATERIALS FOR COMPLIANCE
AT13	PERFORATED MAKE-UP AIR PLENUM	2	BOTTOM DISCHARGE	INCLUDED W/ EXHAUST HOOD	S/S CONSTRUCTION WITH BALANCING DAMPERS & PERFORATED BOTTOM
AT14	TEMP SUPPLY UNIT	1	V-3 (SEE SCHEDULE)	ETL/537741	SEE DRAWING DETAILS
AT15	TEMP SUPPLY UNIT CURB	1	VERIFY ROOF	TO MEET LOCAL CODE	CUSTOM, PITCHED ROOF-INSULATED GALVANIZED STEEL CONSTRUCTION
AT16	MAKE-UP AIR DUCT SYSTEM INSTALLED	LOT	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	22 GAUGE LOW PRESSURE STEEL PER SMACNA STANDARDS
AT17	MAKE-UP AIR ROUND FLEXIBLE DUCT	6	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	INSULATED FLEXIBLE DUCT WITH BALANCING DAMPERS AT EACH CONNECTION TO PLENUM
AT18	TEMP SENSOR	2	AS-SNS/INTR01	TO MEET LOCAL CODE	"AUTO START" CONTROL W/ INTERLOCK TIME DELAY RELAY
AT19	S/S WALL PANELS	LOT	NA	TO MEET LOCAL CODE	TYPE 300 S/S CONSTRUCTION
AT20	S/S END PANELS	0	NA	TO MEET LOCAL CODE	TYPE 300 S/S CONSTRUCTION
AT21(1)	DUAL-CONDENSATE VENT RISER	1	VR	NSF	TYPE 300, 16 GAUGE S/S CONSTRUCTION
AT21(2)	REMOVABLE S/S/ BAFFLE	0	CUSTOM	NSF	TYPE 300, 18 GAUGE S/S CONSTRUCTION
AT21(3)	DUCT PROTECTOR	0	CUSTOM	NSF	S/S REMOVABLE PERFORATED SCREEN
AT21(4)	WALL LOUVER	0	TBD	AS REQUIRED	PAINTED GALVANIZED CONTRUCTION
AT21(5)	CONDENSATE EXHAUST HOOD	0	VDW SERIES	AS REQUIRED	TYPE 300 S/S CONSTRUCTION
AT21(6)	S/S TRIM ENCLOSURE	0	CUSTOM	TO MEET LOCAL CODE	FROM TOP OF HOOD TO +3" ABOVE CEILING
AT21(7)	MOTOR STARTER	0	R-BOX	TO MEET LOCAL CODE	E.C. TO MOUNT BOX IN ACCESSIBLE LOCATION ABOVE CEILING
AT21(8)	CONDENSATE EXHAUST FAN	1	SQBD12.5D5C	U.L. 705	SEE DRAWING DETAILS
AT21(9)	CONDENSATE EXHAUST FAN CURB	1	VERIFY ROOF	TO MEET LOCAL CODE	INSULATED GALVANIZED STEEL CONSTRUCTION
AT21(10)	CONDENSATE EXHAUST DUCT SYSTEM INSTALLED	1	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	22 GAUGE SEALED ALUMINUM CONSTRUCTION
AT21(11)	GRAVITY BACKDRAFT DAMPER	1	4150 SERIES	TO MEET LOCAL CODE	INSTALLED IN DUCT JUST BELOW ROOF DECK

KITCHEN EQUIPMENT CONTRACTOR TO COORDINATE WITH GENERAL, ROOFING, STRUCTURAL, ELECTRICAL, HVAC AND PLUMBING CONTRACT DOCUMENTS.
HOOD SYSTEM INSTALLER TO FIELD MEASURE KITCHEN VENTILATION SYSTEM BEFORE PRODUCT CONSTRUCTION AND INSTALL.



DUCT SIZING MODEL
SCALE: NOT TO SCALE

ALLIED AIR REFERENCE (ATI) HOOD SCHEDULE

HOOD ITEM	HOOD SIZE	HOOD WEIGHT	EXHAUST CFM	EXHAUST COLLAR SIZE	EXHAUST DUCT VELOCITY	EXHAUST S.P.	SUPPLY CFM	SUPPLY AIR DUCT SIZE	SUPPLY AIR DUCT VELOCITY	SUPPLY S.P.
H-30A	8'-3" X 3'	593.5	2,332.5	10" X 17"	1,800 FPM	.02"	1,704	(3) 12" DIA.	724	1"
H-30B	8'-3" X 3'	593.5	2,332.5	10" X 17"	1,800 FPM	.02"	1,704	(3) 12" DIA.	724	1"
VR-SS	4"X14"X60"	60	600	(2) 4" X 14"	1,460 FPM	.62"	-0-	N/A	-0-	-0-

EXHAUST HOOD CFM		CONDENSATE EXHAUST CFM	
EXHAUSTED AIR (CFM)	4,265	EXHAUSTED CONDENSATE AIR (CFM)	600
HEATED MAKE-UP AIR (CFM)	3,408	MAKE-UP AIR (CFM)	-0-

CFM TOTAL: 4,265 REMOVED BY HOODS: 4,865 RETURNED BY MUA: 3,408 BALANCE REQUIRED BY HVAC: 1,457 CFM

Allied Technologies
Food Equipment, Inc.
926 SAYRE DRIVE
GREENWOOD, IN 46142
317.887.2020
www.alliedfoodequipment.com

MACARTHUR ELEMENTARY SCHOOL
CROWNE POINT, INDIANA

REITANO DESIGN GROUP

CHRIS OXFORD
Date 12.28.21
Revisions:
@ 01.14.22
@ 00.00.00
@ 00.00.00
Project Number MES122721

1 of 2
Scale: As indicated

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

D C A B
KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email Info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
21-113
DATE
1/31/22
COORDINATED BY
RDG
DRAWN BY
JJN
CHECKED BY
RDG

REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

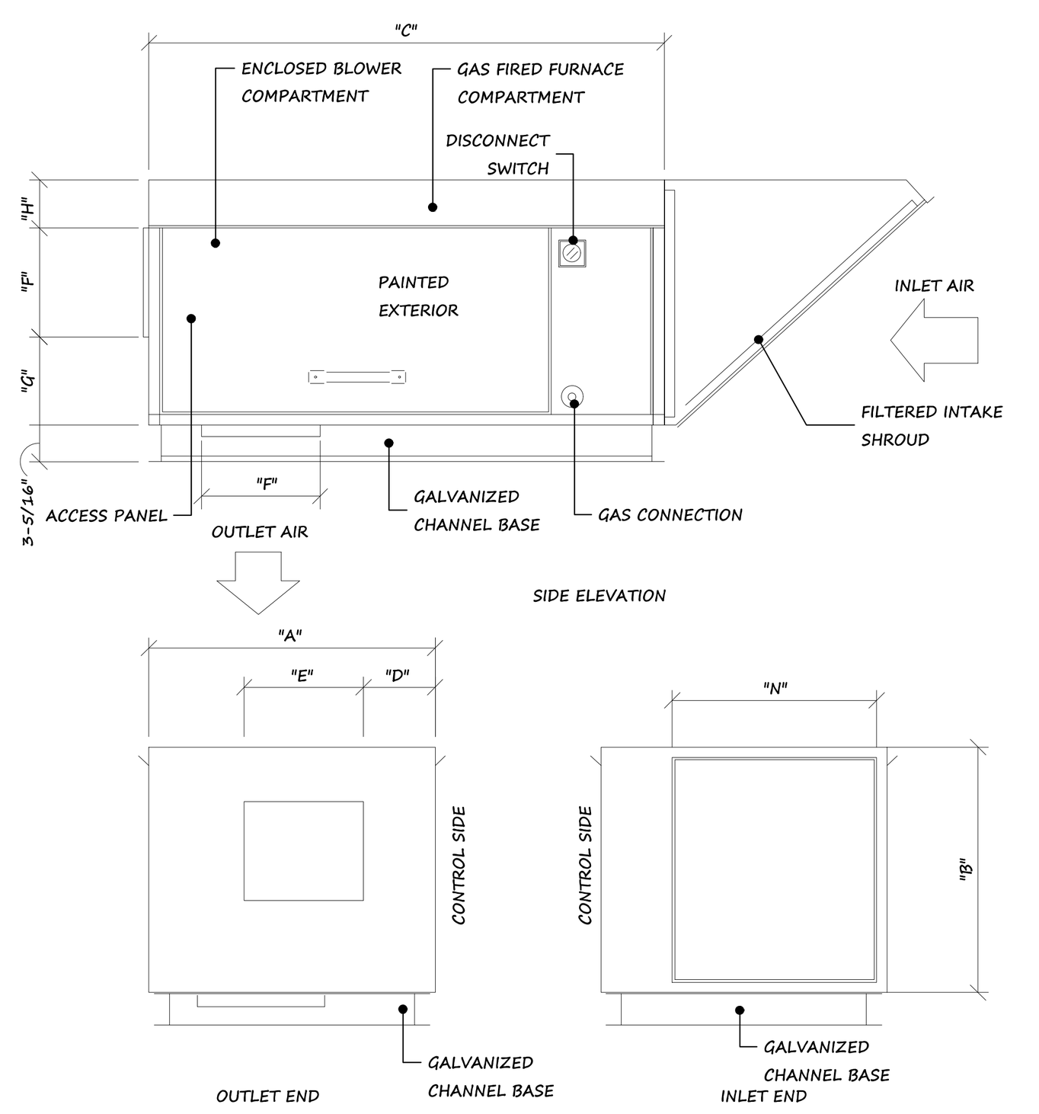
DRAWING
EXHAUST VENTILATION SYSTEM DRAWING, DETAILS & SCHEDULE

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-500

MAKE-UP AIR FAN SCHEDULE

FAN DESCRIPTION			FAN DIMENSIONS										FAN RATING									
ITEM #	QUAN.	MODEL	"A"	"B"	"C"	"D"	"E"	"F"	"G"	CURB I.D.	CURB O.D.	WEIGHT	VOLTS	PH	HP	AMPS	MOP	RPM	STATIC	CFM	CONN.	BTU
SF-34	1	V2	32"	30"	72"	7 3/16"	11 5/8"	15 7/16"	8 1/4"	25" X 25"	28" X 28"	385	208	3	3	10.6	40	780	2"	3,408	1/2"	271,960



NOTES:

MOTOR COMPARTMENT TO BE PROVIDED WITH FORCED AIR COOLING, COMPARTMENT TO BE SEALED FROM DUST AND VERMIN.

MAINTAIN A MINIMUM OF 30" CLEARANCE AROUND UNIT FOR SERVICE.

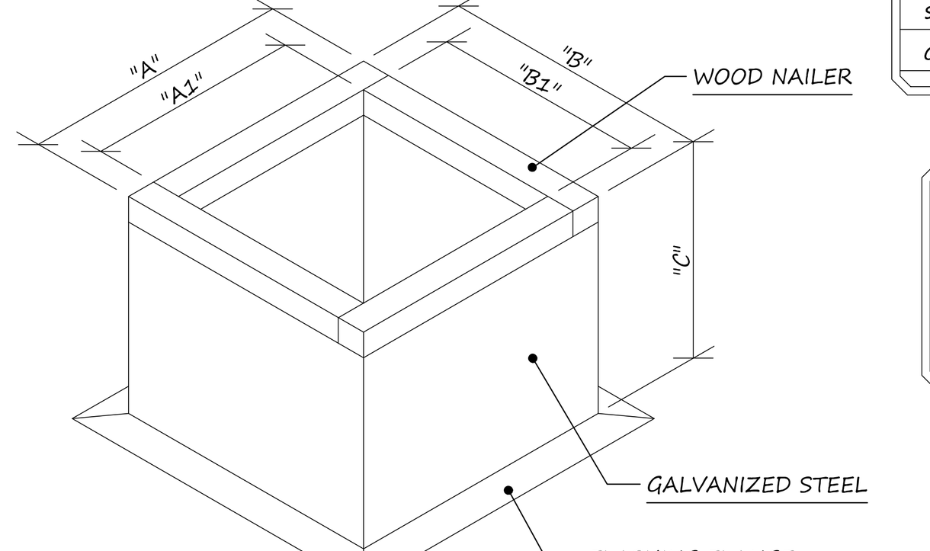
STANDARD OPTIONS:
WEATHER-TIGHT HOUSING (PAINTED)
FOIL-FACED INTERIOR INSULATION
BOTTOM DISCHARGE
FAN & MOTOR VIBRATION ISOLATORS
WIRING HARNESS 50'-0"
NON-FUSED DISCONNECT SWITCH
DIRECT FIRED FURNACE
MOTORIZED INLET DAMPER
MOTOR STARTERS
LOW-TEMP LIMIT SWITCH

LISTED

AT14 - MAKE-UP AIR UNIT DETAIL
SCALE: NOT TO SCALE

CURB SCHEDULE

CURB DIMENSIONS					
FAN #	"A"	"A1"	"B"	"B1"	"C"
EF-33	"32"	"29"	"32"	"29"	"18"
SF-33	"28"	"25"	"28"	"25"	"18"
CF-54	"18"	"15"	"18"	"15"	"18"



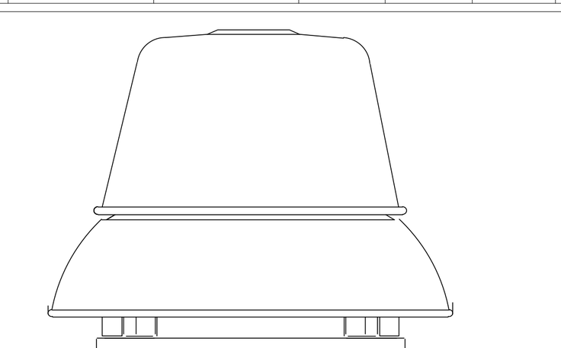
NOTES:
18 GAUGE GALVANIZED STEEL CONSTRUCTION1-1/2" THICK 3 LBS DENSITY RIGID FIBERGLASS INSULATION 2" FLASHING STRIP FACTORY INSTALLED WOOD NAILER

AT15 - CURB DETAIL
SCALE: NOT TO SCALE

CONDENSATE EXHAUST FAN SCHEDULE

FAN DESCRIPTION			FAN DIMENSIONS						FAN RATING						
ITEM #	QTY.	MODEL	"A"	"B"	"C"	CURB I.D.	CURB O.D.	LBS.	VOLTS	PH	HP	AMPS	RPM	STATIC	CFM
CF-54	1	SDBD1250SC	20"	27.31"	27.63"	15" X 15"	18" X 18"	105	115	1	1/2	7.8	1,218	.625"	600

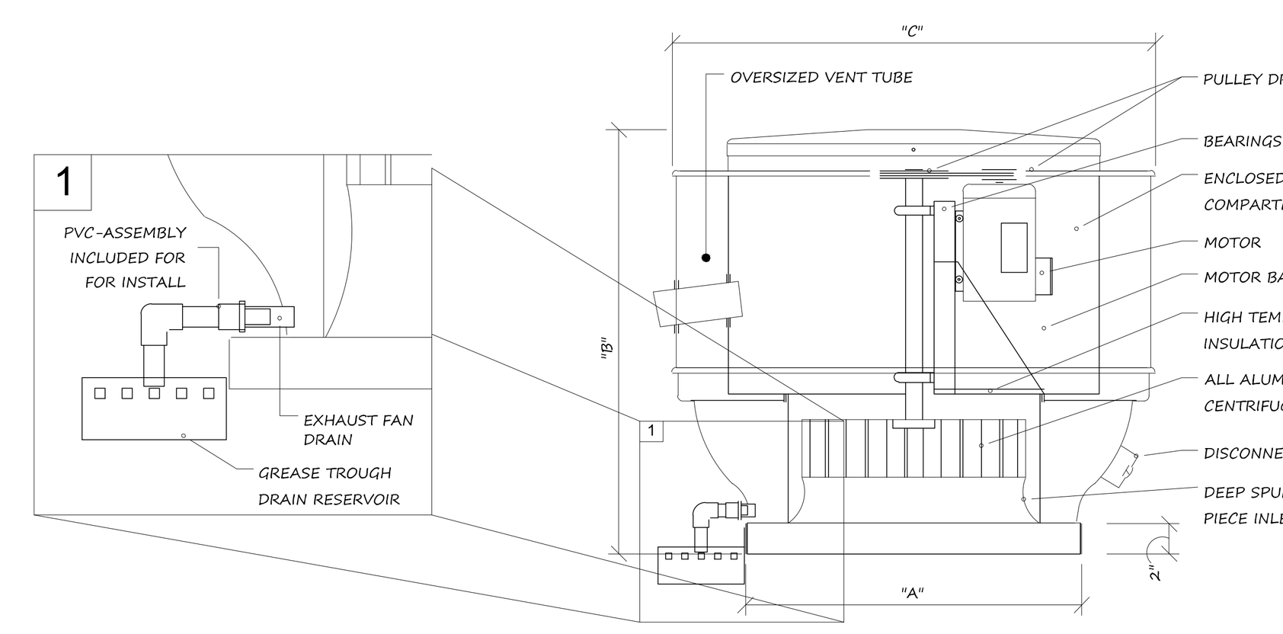
ACCESSORIES:
ALL ALUMINUM HOUSING
FLAT ROOF CURB
SPEED CONTROL (SHIPPED LOOSE)
GRAVITY BACKDRAFT DAMPER
BIRD SCREEN
UL705 APPROVAL



ATDW8 - DOWNBLAST EXHAUST FAN DETAIL
SCALE: 12" = 1'-0"

EXHAUST FAN SCHEDULE

FAN DESCRIPTION			FAN DIMENSIONS						FAN RATING						
ITEM #	QTY.	MODEL	"A"	"B"	"C"	CURB I.D.	CURB O.D.	LBS.	VOLTS	PH	HP	AMPS	RPM	STATIC	CFM
EF-33A	1	STXBRHUL-16	24"	31.5"	36.5"	19" X 19"	22" X 22"	166	208	3	1	3.9	1,229	1.05"	2,132.5
EF-33B	1	STXBRHUL-16	24"	31.5"	36.5"	19" X 19"	22" X 22"	166	208	3	1	3.9	1,229	1.05"	2,132.5



NOTES:
MOTOR COMPARTMENT TO BE PROVIDED WITH FORCED AIR COOLING, COMPARTMENT TO BE SEALED FROM CONTAMINATED EXHAUST AIR.
EXTERNALLY MOUNTED JUNCTION BOX PREWIRED FOR FIELD CONNECTION.
NEOPRENE ISOLATORS ARE INCLUDED TO REDUCE NOISE AND VIBRATION.

STANDARD ACCESSORIES:
GREASE TROUGH
HINGED CURB
UL762 RESTAURANT LISTING
INSULATED GALVANIZED CURB

EXHAUST FAN ASSEMBLY DESCRIPTION

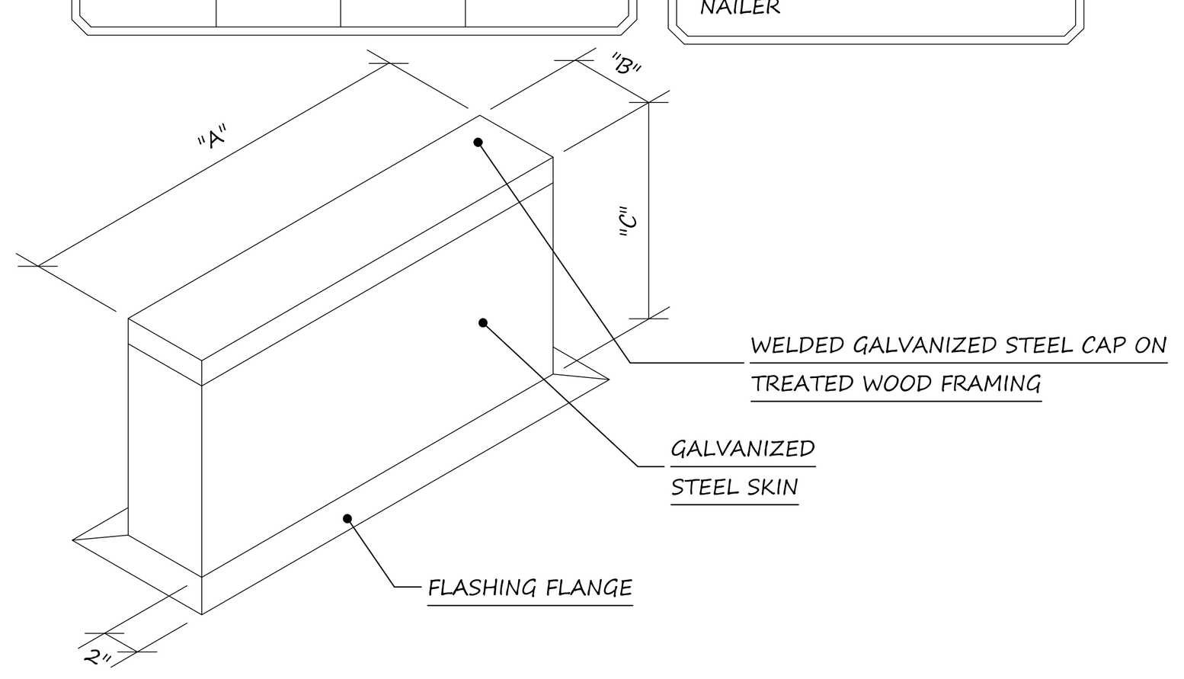
DRIVES	SIZED FOR 150% OF DRIVE H.P., ADJUSTIBLE PITCH SHEAVES
OVERSIZED VENT TUBE	FOR MAXIMUM MOTOR COOLING
BEARINGS	BALL BEARING TYPE PERMANENTLY SEALED AND LUBRICATED
ENCLOSED MOTOR COMPARTMENT	ISOLATES MOTOR ANDS DRIVES FOR EXHAUST AIR
MOTOR	OPEN DRIP-PROOF CONSTURCTION STANDARD.
MOTOR BASE	MOTOR IS ADJUSTIBLE FOR PROPER BELT TENSION
INSULATION	HIGH TEMPERATURE INSULATION PROVIDES LONGER MOTOR LIFE
ALL ALUMINUM CENTRIFUGAL WHEEL	NON-OVERLOADING, BACKWARDS INCLINE TAPERED BLADES FOR MAXIMUM EFFICIENCY AND MINIMUM SOUND
DISCONNECT SWITCH	RAINPROOF ELECTRICAL BOX WITH WIRING CHASE. ELIMINATES THE NEED TO UNWIRE AND REWIRE THE MOTOR WHEN REMOVING MOTOR COMPARTMENT HOUSING
DEEP SPUN ONE PIECE INLET	NON-OVERLOADING, BACKWARDS INCLINE TAPERED BLADES FOR MAXIMUM EFFICIENCY AND MINIMUM SOUND

AT8 - EXHAUST FAN DETAIL
SCALE: NOT TO SCALE

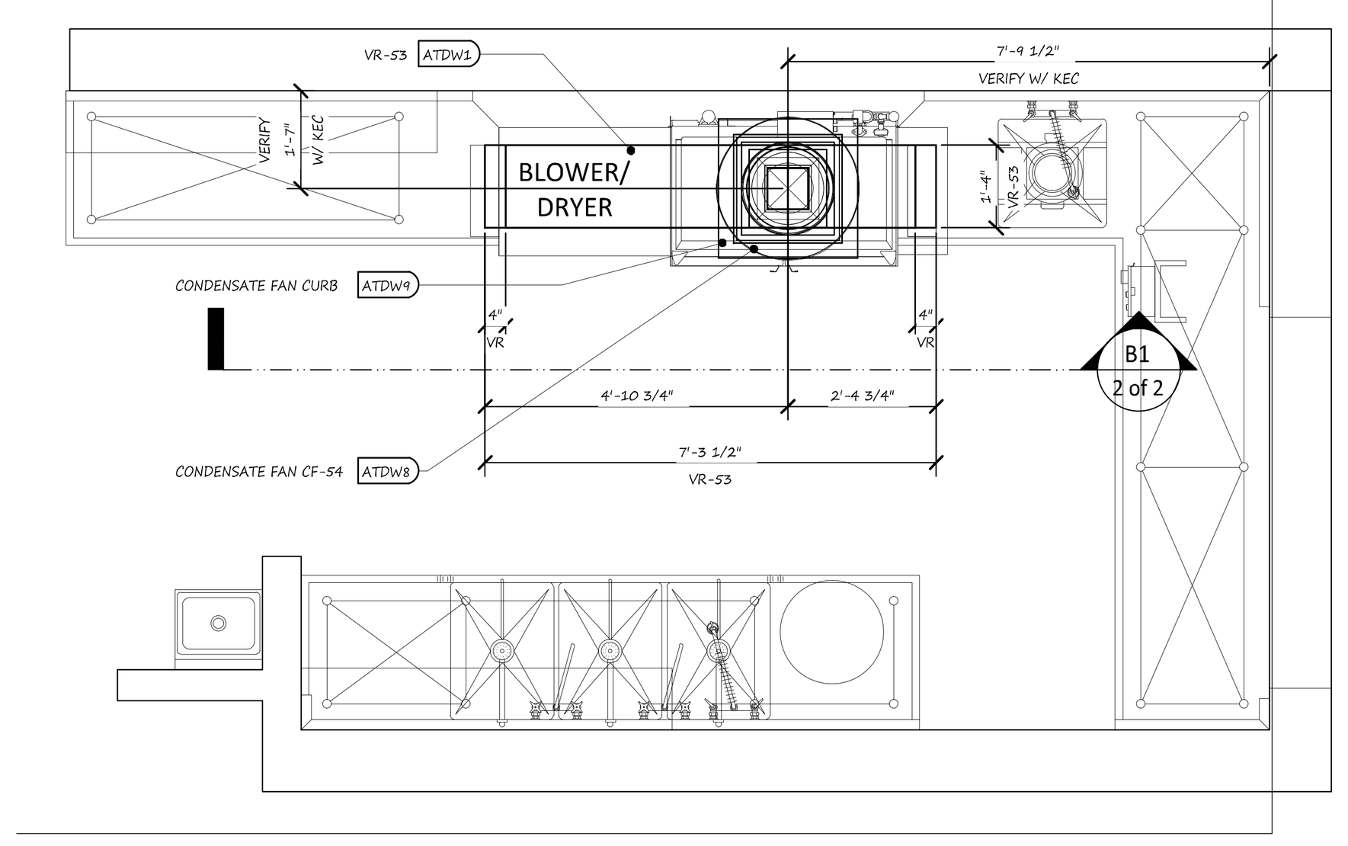
SUPPORT RAIL SCHEDULE

CURB DIMENSIONS			
FAN #	"A"	"B"	"C"
SF-33	"49.5"	"5"	"15.75"

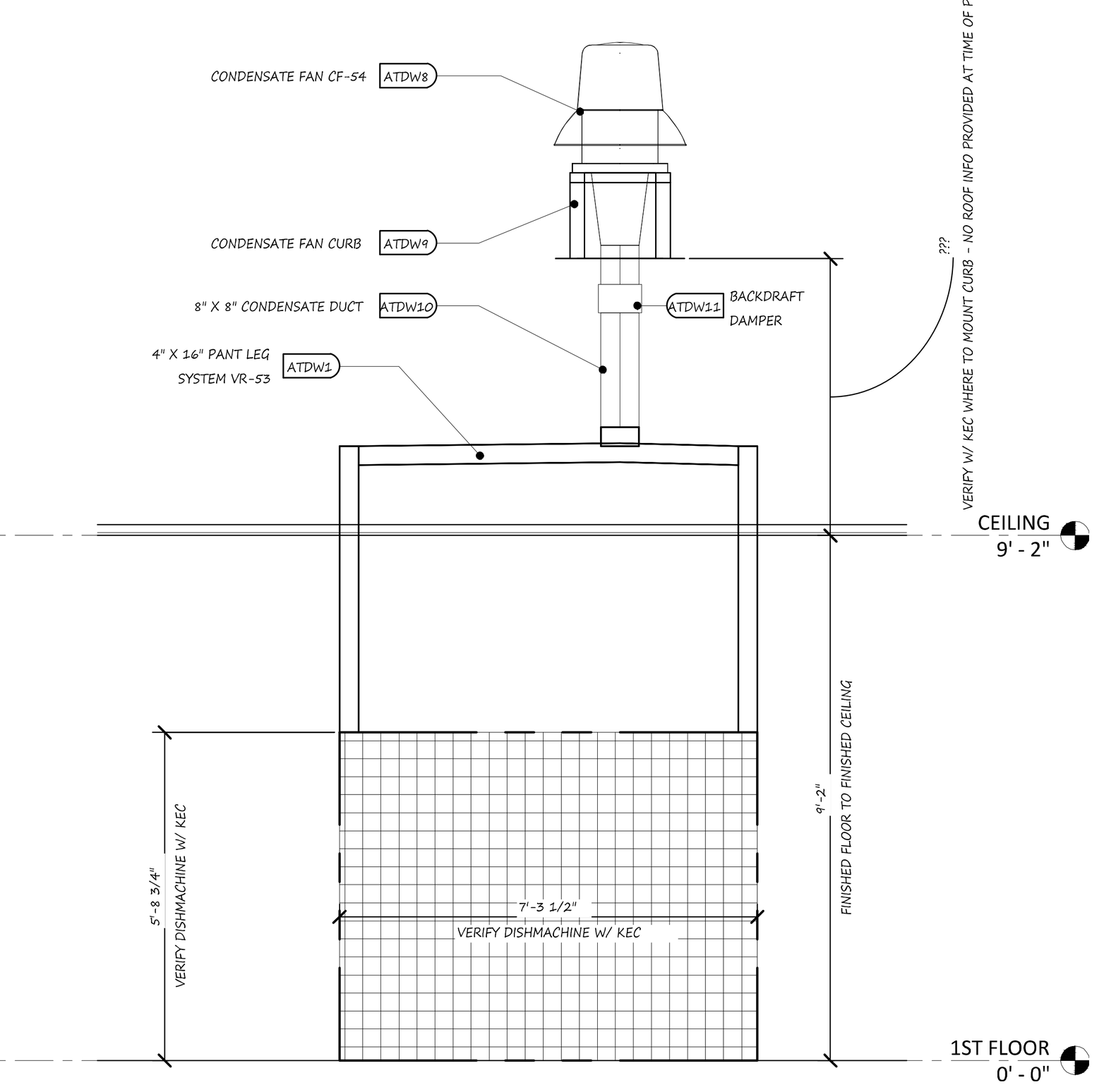
NOTES:
-18 GAUGE GALVANIZED STEEL CONSTRUCTION
-2" FLASHING STRIP
-FACTORY INSTALLED WOOD NAILER



SUPPORT RAIL DETAIL
SCALE: 12" = 1'-0"



B CONDENSATE SYSTEM PLAN
SCALE: 3/8" = 1'-0"

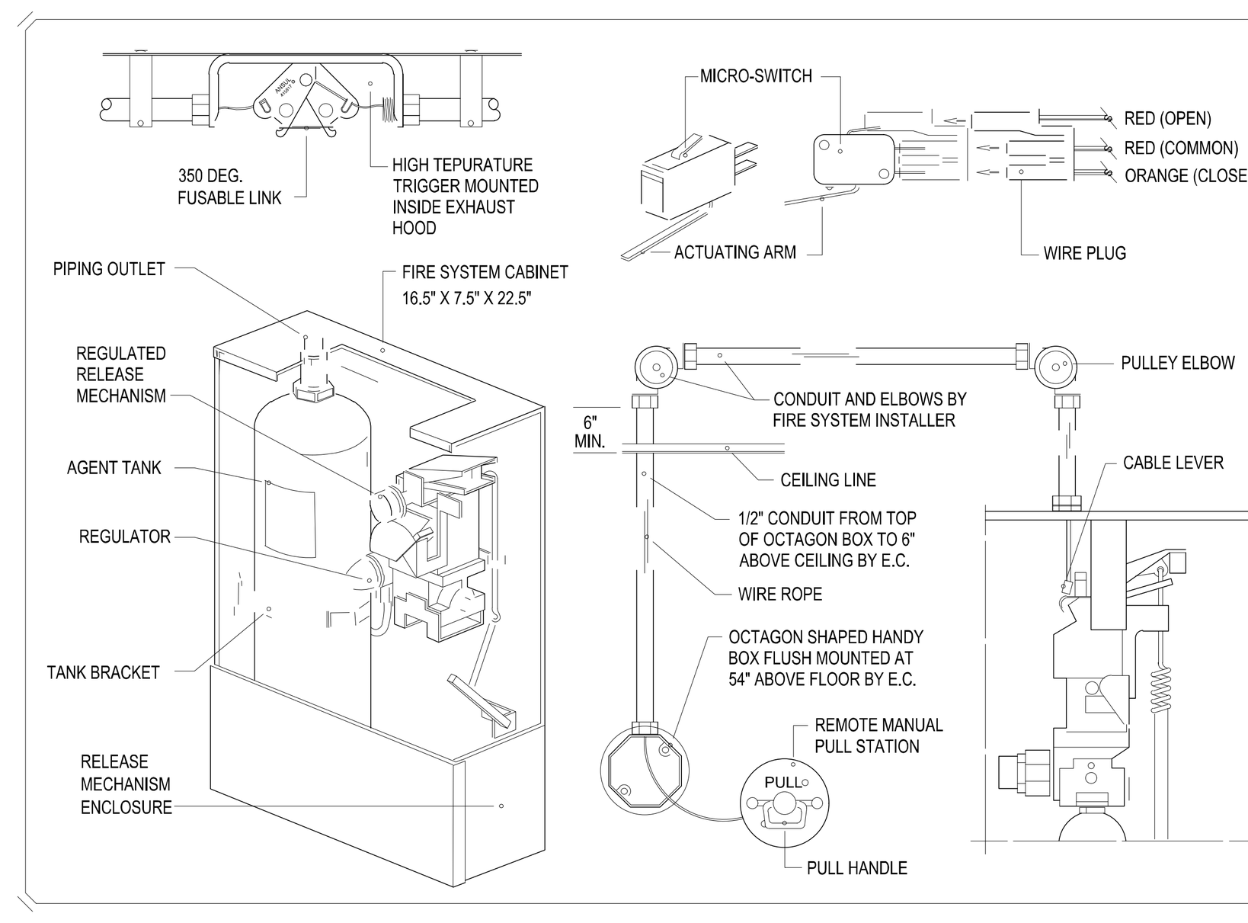


B1 SECTION - VENT RISER
SCALE: 3/8" = 1'-0"

ALLIED AIR PACKAGED KITCHEN VENTILATION SYSTEM

ITEM	SYSTEM PARTS	QTY.	MODEL	U.L. AND/OR ETL LISTINGS	REMARKS
AT1	EXHAUST HOOD	2	CH SERIES	U.L. 710 LISTING & NSF 2	TYPE 300, 18 GA. S/S CONSTRUCTION
AT2	GREASE BAFFLE FILTERS	LOT	CHG F50	R6593 CONTROL #845G	STAINLESS BAFFLE FILTERS-20" TALL
AT3	VAPOR PROOF LIGHTS	6	LEDR-180	U.L. E79253 & NSF 2	VAPOR PROOF LED LIGHT FIXTURES
AT4	WALL MOUNTED CONTROL PANEL	1	SEE DWG.	INCLUDED W/ EXHAUST HOOD	FLUSH MOUNTED ON WALL - WIRED BY E.C.
AT5	SPACER	1	CUSTOM	TO MEET LOCAL CODE	TYPE 300, 18 GAUAGE S/S CONSTRUCTION - 3" WIDE
AT6	S/S TRIM ENCLOSURE	0	CUSTOM	TO MEET LOCAL CODE	FROM TOP OF HOOD TO +2" ABOVE CEILING
AT7	FIRE SYSTEM	1	ANSUL R-102	U.L. 300 DESIGN	PRE-ENGINEERED - WET CHEMICAL
AT8	EXHAUST FAN	2	STXBHUL16	U.L. 762	SEE DRAWING DETAILS
AT9	EXHAUST FAN ROOF CURB	2	VERIFY ROOF	TO MEET LOCAL CODE	CUSTOM, INSULATED GALVANIZED STEEL CONSTRUCTION
AT10	EXHAUST DUCT CLEAN-OUT ACCESS	2	751212	TO MEET LOCAL CODE	INSTALLED EVERY 10'-0" OF HORIZONTAL RUN OR CHANGE DIRECTION
AT11	EXHAUST DUCT SYSTEM INSTALLED	LOT	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	16 GAUGE, FULLY WELDED (LIQUID TIGHT) SEE DRAWING FOR DETAILS
AT12	EXHAUST DUCT FIRE RATED WRAP	LOT	XL FIREMASTER	TO MEET LOCAL CODE	FIELD VERIFY BUILDING MATERIALS FOR COMPLIANCE
AT13	PERFORATED MAKE-UP AIR PLENUM	2	BOTTOM DISCHARGE	INCLUDED W/ EXHAUST HOOD	S/S CONSTRUCTION WITH BALANCING DAMPERS & PERFORATED BOTTOM
AT14	TEMP SUPPLY UNIT	1	V-2 (SEE SCHEDULE)	ETL/527941	SEE DRAWING DETAILS
AT15	TEMP SUPPLY UNIT CURB	1	VERIFY ROOF	TO MEET LOCAL CODE	CUSTOM, PITCHED ROOF-INSULATED GALVANIZED STEEL CONSTRUCTION
AT16	MAKE-UP AIR DUCT SYSTEM INSTALLED	LOT	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	22 GAUGE LOW PRESSURE STEEL PER SMACNA STANDARDS
AT17	MAKE-UP AIR ROUND FLEXIBLE DUCT	6	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	INSULATED FLEXIBLE DUCT WITH BALANCING DAMPERS AT EACH CONNECTION TO PLENUM
AT18	TEMP SENSOR	2	AS-SNS/INT0801	TO MEET LOCAL CODE	"AUTO START" CONTROL W/ INTERLOCK TIME DELAY RELAY
AT19	S/S WALL PANELS	LOT	NA	TO MEET LOCAL CODE	TYPE 300 S/S CONSTRUCTION
AT20	S/S END PANELS	0	NA	TO MEET LOCAL CODE	TYPE 300 S/S CONSTRUCTION
ATDW1	DUAL-CONDENSATE VENT RISER	1	VR	NSF	TYPE 300, 16 GAUGE S/S CONSTRUCTION
ATDW2	REMOVABLE S/S/ BAFFLE	0	CUSTOM	NSF	TYPE 300, 18 GAUGE S/S CONSTRUCTION
ATDW3	DUCT PROTECTOR	0	CUSTOM	NSF	S/S REMOVABLE PERFORATED SCREEN
ATDW4	WALL LOUVER	0	TBD	AS REQUIRED	PAINTED GALVANIZED CONTRUCTION
ATDW5	CONDENSATE EXHAUST HOOD	0	VDW SERIES	AS REQUIRED	TYPE 300 S/S CONSTRUCTION
ATDW6	S/S TRIM ENCLOSURE	0	CUSTOM	TO MEET LOCAL CODE	FROM TOP OF HOOD TO +2" ABOVE CEILING
ATDW7	MOTOR STARTER	0	R-BOX	TO MEET LOCAL CODE	E.C. TO MOUNT BOX IN ACCESSIBLE LOCATION ABOVE CEILING
ATDW8	CONDENSATE EXHAUST FAN	1	SDBD1250SC	U.L. 705	SEE DRAWING DETAILS
ATDW9	CONDENSATE EXHAUST FAN CURB	1	VERIFY ROOF	TO MEET LOCAL CODE	INSULATED GALVANIZED STEEL CONSTRUCTION
ATDW10	CONDENSATE EXHAUST DUCT SYSTEM INSTALLED	1	CUSTOM FIELD MEASURE	TO MEET LOCAL CODE	22 GAUGE SEALED ALUMINUM CONSTRUCTION
ATDW11	GRAVITY BACKDRAFT DAMPER	1	4110 SERIES	TO MEET LOCAL CODE	INSTALLED IN DUCT JUST BELOW ROOF DECK

KITCHEN EQUIPMENT CONTRACTOR TO COORDINATE WITH GENERAL, ROOFING, STRUCTURAL, ELECTRICAL, HVAC AND PLUMBING CONTRACT DOCUMENTS.
HOOD SYSTEM INSTALLER TO FIELD MEASURE KITCHEN VENTILATION SYSTEM BEFORE PRODUCT CONSTRUCTION AND INSTALL.



GENERAL NOTES:
1. THIS INSTALLATION TO BE MADE IN ACCORDANCE WITH THE R-102 INSTALLATION MANUAL AND ALL STATE AND LOCAL CODES.
2. THIS DRAWING MAY BE USED FOR APPROVAL PURPOSES.
3. ALL PIPE FITTINGS AND NOZZLES ARE TO BE WRENCH TIGHTENED AND SECURELY SUPPORTED. ALL NOZZLES ARE TO BE AIMED AS INDICATED IN THE R-102 INSTALLATION MANUAL.
4. THE WIRE ROPE FOR THE DETECTOR AND REMOTE PULL STATION TO BE INSTALLED BY AN AUTHORIZED AND FACTORY TRAINED INSTALLER.
5. INSTALLATION TO BE INSPECTED, ACTIVATED AND CERTIFIED BY AN AUTHORIZED AND FACTORY TRAINED REPRESENTATIVE.
6. E.C. TO PROVIDE ALL CONTACTS AND WIRING FOR APPLIANCE SHUT-OFF.
7. ANSUL R-102 RESTAURANT FIRE SUPPRESSION SYSTEMS HAVE BEEN UL TESTED, LISTED AND COMPLY WITH ALL RELEVANT DOCUMENTATION AND NFPA 96 WHEN INSTALLED AS DIRECTED BY AN AUTHORIZED AND FACTORY TRAINED INSTALLER.
8. ALL EXHAUST HOOD PENETRATIONS TO BE SEALED PER NFPA 96.
9. ALL PIPE LENGTHS TO BE FIELD VERIFIED.
10. ALL PIPE TO BE 3/8" SCH. 40 BLACK PIPE, CHROME PLATED OR SIS.
11. PIPE ENDS TO BE REAMED. PIPE ENDS AND INTERIOR TO BE FREE OF ALL OIL, DIRT AND DEBRIS.
12. PIPING DIMENSIONS ARE FROM CENTER TO CENTER OF FITTINGS.
13. FINAL NOZZLE LOCATIONS MAY NOT VARY FROM LOCATION SHOWN.

AT7 - HOOD MOUNTED FIRE SUPPRESSION DETAIL - ITEMS 31 & 32
SCALE: NOT TO SCALE

KITCHEN VENTILATION RESPONSIBILITIES BY OTHER TRADES

CONTRACTOR:

CUT OUT ROOF AND/OR WALL OPENINGS AS REQUIRED. NO OPENINGS ARE TO BE CUT UNTIL THE SIZE AND LOCATION IS VERIFIED WITH THE HOOD SYSTEM INSTALLER UPON SITE INSPECTION. SET IN PLACE ROOF CURBS AND SUPPORTS SUPPLIED AND LOCATED BY THE HOOD SYSTEM PROVIDER. FRAME AND REINFORCE ROOF STRUCTURE AS REQUIRED. COORDINATE JOIST OR STRUCTURAL MEMBER INSTALLATION TO PROVIDE REQUIRED CLEARANCES FOR DUCTWORK AND RATED ASSEMBLIES.

ELECTRICAL CONTRACTOR:

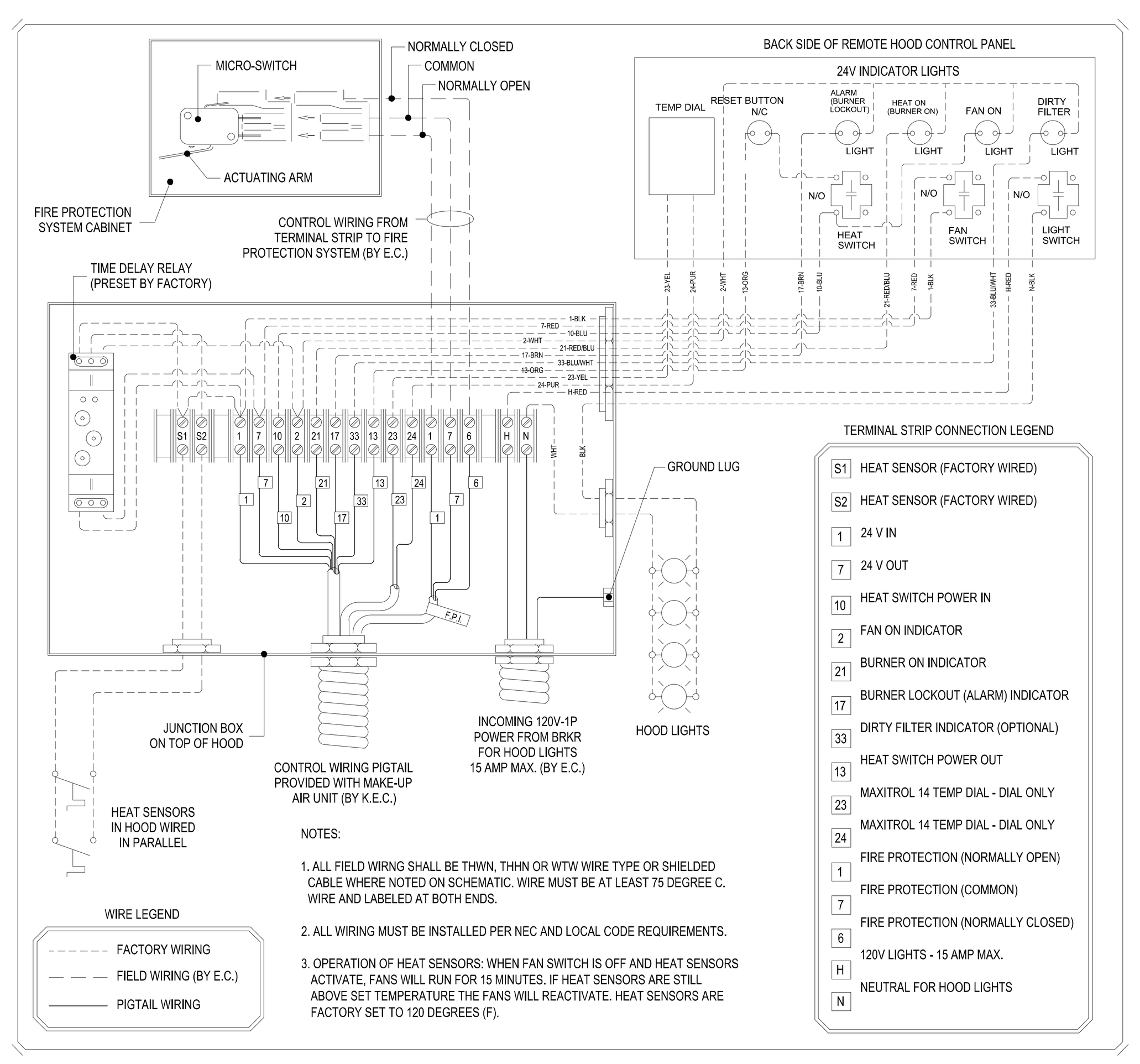
PROVIDE 120/60/1 20 AMP CIRCUIT, FOR HOOD LIGHTS AND CONTROLS TO JUNCTION BOX ON TOP OF HOOD AND CONNECT POWER TO ALL ADJOINING HOODS AS NECESSARY FOR LIGHTS IN ALL HOODS TO BE CONTROLLED FROM THE SAME SWITCH. PROVIDE 3 PHASE CIRCUIT (FOR FAN MOTORS) FROM BUILDING POWER SOURCE TO DISCONNECT MOUNTED IN MAKE-UP AIR UNIT CABINET. EXTEND POWER WIRING FROM MOTOR STARTER PANEL TO CONNECTION POINT ON EXHAUST FANS. EXTEND CONTROL WIRE WHIP (PROVIDED IN THE MAKE-UP AIR UNIT) TO JUNCTION BOX ON TOP OF THE EXHAUST HOOD AND CONNECT PER DETAIL ON THIS SHEET. PROVIDE CONDUIT AND THREE WIRES FROM TERMINAL BLOCK ON HOOD TO MICRO-SWITCH OF FIRE PROTECTION SYSTEM. INTERLOCK WIRING OF THE SUPPLY FANS MOTOR CONTROL DEVICE THROUGH THE FIRE SYSTEM MICRO SWITCH, SHUTTING OFF SUPPLY AIR IN THE EVENT OF FIRE SYSTEM ACTUATION. PROVIDE AND INSTALL AN OCTAGON BOX FOR THE FIRE SYSTEM PULL STATION, MOUNTING THE CENTERLINE OF THE BOX AT 54" ABOVE THE FINISHED FLOOR. RUN 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING. PULL STATION TO BE PROVIDED WITH FIRE SYSTEM. PROVIDE AND INSTALL AUTOMATIC POWER SHUT OFF DEVICES (SHUNT TRIP BREAKERS, OR DEFINITE PURPOSE CONTACTORS) WITH INTERLOCK TO FIRE SYSTEM MICRO SWITCH, SHUTTING OFF ALL POWER BELOW THE HOOD (INCLUDING CONTROL VOLTAGE) IN THE EVENT OF FIRE SYSTEM ACTUATION. THIS WORK MUST BE IN ACCORDANCE WITH N.F.P.A. 17A, IEC, AND THE I.E.C.

HVAC CONTRACTOR:

PROVIDE NET ROOM AIR DEMAND AS INDICATED ON THE HOOD SYSTEM DRAWINGS. THIS AIR VOLUME IS REQUIRED ONLY WHEN HOOD SYSTEM IS IN OPERATION. PROVIDE NORMAL HEATING AND COOLING OF THE KITCHEN AREA.

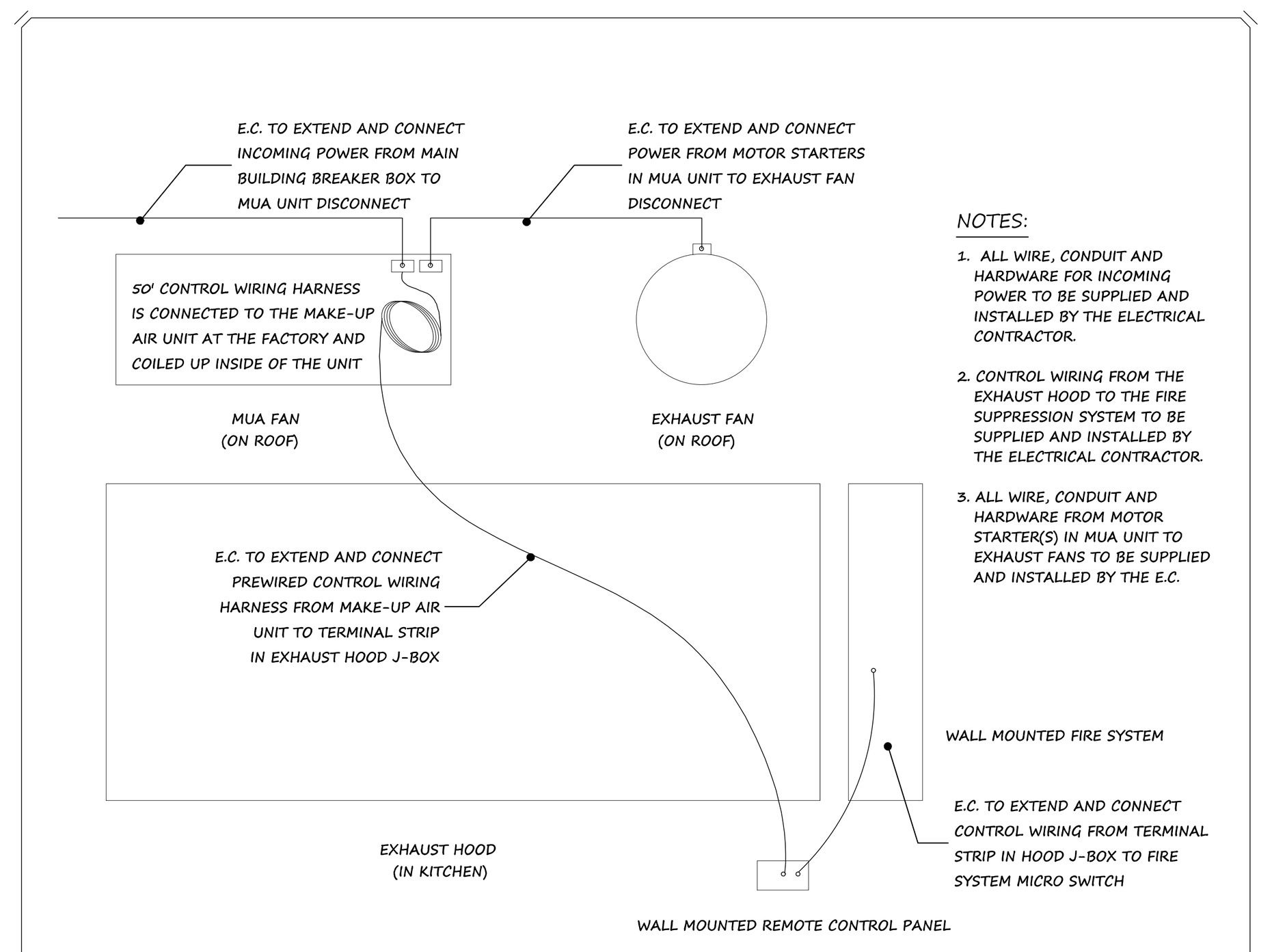
PLUMBING CONTRACTOR:

INSTALL GAS VALVE (SUPPLIED WITH THE FIRE SUPPRESSION SYSTEM) IN THE MAIN SUPPLY LINE SERVING THE COOKING EQUIPMENT TO SHUT OFF GAS SERVICE TO THE COOKING EQUIPMENT IN THE EVENT OF FIRE SYSTEM ACTUATION. PROVIDE AND INSTALL SERVICE TO GAS FIRED FURNACE ON ROOF. PROVIDE AND INSTALL GAS PIPING TO ROOF (SIZE AS REQUIRED) AND CONNECT TO MAKE-UP AIR UNIT PER IMC.



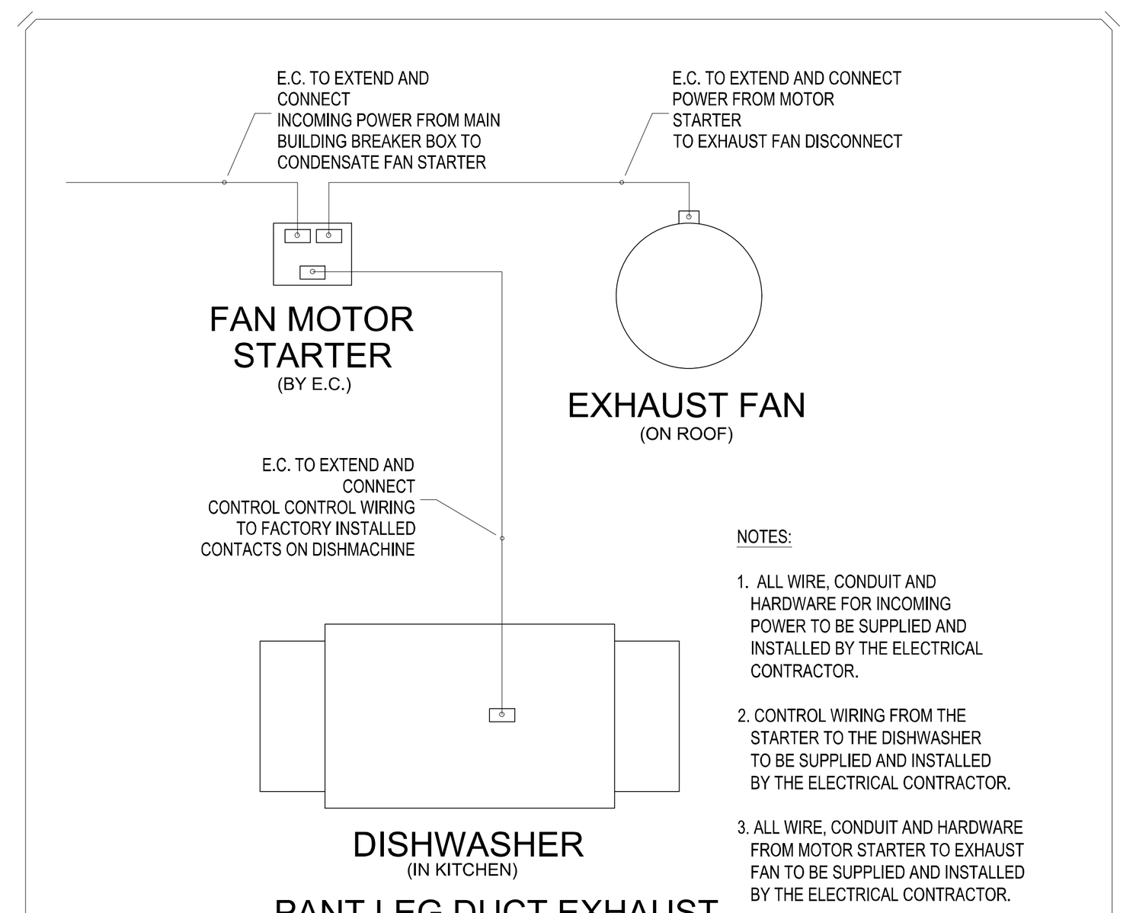
NOTES:
1. ALL FIELD WIRING SHALL BE THHN, THWN OR MTW WIRE TYPE OR SHIELDED CABLE WHERE NOTED ON SCHEMATIC. WIRE MUST BE AT LEAST 75 DEGREE C. WIRE AND LABELED AT BOTH ENDS.
2. ALL WIRING MUST BE INSTALLED PER NEC AND LOCAL CODE REQUIREMENTS.
3. OPERATION OF HEAT SENSORS: WHEN FAN SWITCH IS OFF AND HEAT SENSORS ACTIVATE, FANS WILL RUN FOR 15 MINUTES. IF HEAT SENSORS ARE STILL ABOVE SET TEMPERATURE THE FANS WILL REACTIVATE. HEAT SENSORS ARE FACTORY SET TO 120 DEGREES (F).

TYPICAL WIRE ROUTING DETAIL - REMOTE MOUNTED
SCALE: NOT TO SCALE



NOTES:
1. ALL WIRE, CONDUIT AND HARDWARE FOR INCOMING POWER TO BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
2. CONTROL WIRING FROM THE EXHAUST HOOD TO THE FIRE SUPPRESSION SYSTEM TO BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
3. ALL WIRE, CONDUIT AND HARDWARE FROM MOTOR STARTER(S) IN MUA UNIT TO EXHAUST FANS TO BE SUPPLIED AND INSTALLED BY THE E.C.

WIRE ROUTING DETAIL - REMOTE HOOD/REMOTE CAB.
SCALE: NOT TO SCALE

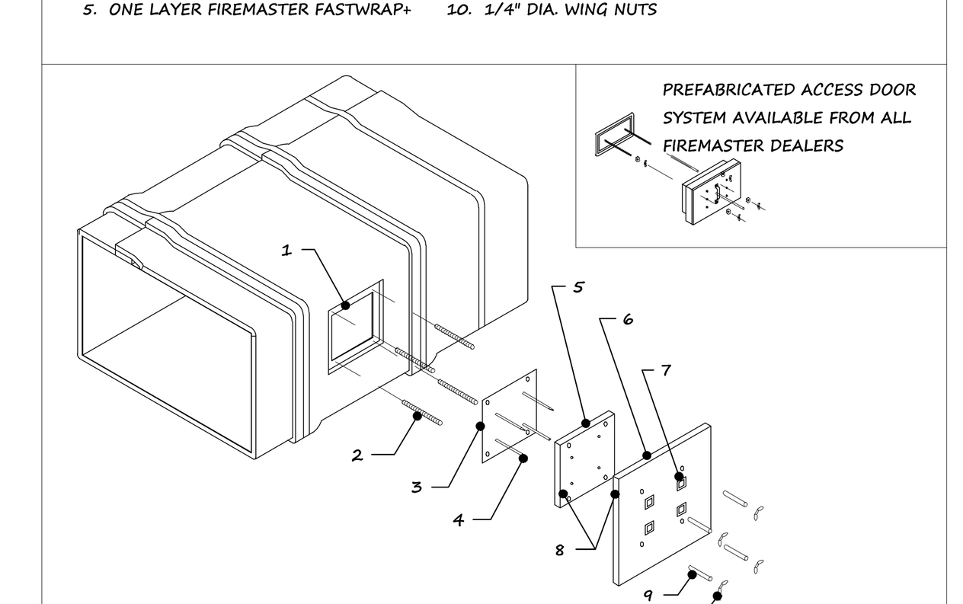


NOTES:
1. ALL WIRE, CONDUIT AND HARDWARE FOR INCOMING POWER TO BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
2. CONTROL WIRING FROM THE STARTER TO THE DISHWASHER TO BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
3. ALL WIRE, CONDUIT AND HARDWARE FROM MOTOR STARTER TO EXHAUST FAN TO BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

WIRE ROUTING DETAIL - PANT LEG EXHAUST SYSTEM
SCALE: NOT TO SCALE

1. DOOR HOLE
2. 3/4" DIA. ALL THREAD RODS
3. ACCESS COVER - 16 GAUGE
4. INSULATION PINS - WELDED
5. ONE LAYER FIREMASTER FASTWRAP+
6. TWO LAYERS FIREMASTER FASTWRAP + 3" OVERLAP
7. SPEED CLIPS
8. ALUMINUM TAPE COVERING ALL EXPOSED EDGES
9. SPOOL PIECES FOR THREADED RODS
10. 3/4" DIA. WING NUTS

PREFABRICATED ACCESS DOOR SYSTEM AVAILABLE FROM ALL FIREMASTER DEALERS



AT 12 - FIRE WRAP DETAIL
SCALE: NOT TO SCALE

Allied Technologies
Food Equipment, Inc.
926 SAYRE DRIVE
GREENWOOD, IN 46142
317.887.2020
www.alliedfoodequipment.com

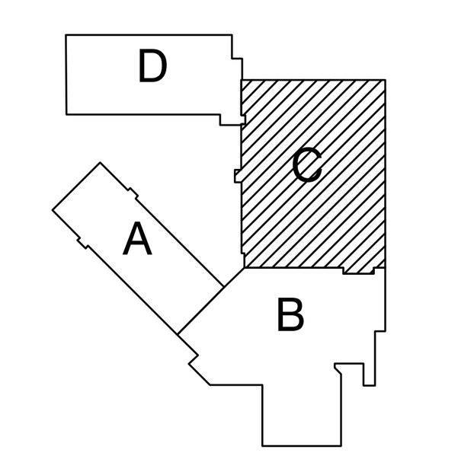
MACARTHUR ELEMENTARY SCHOOL
CROWNE POINT, INDIANA

REITANO DESIGN GROUP

CHRIS OXFORD
Date 12.28.21
Revisions:
01.14.22
00.00.00
00.00.00
2 of 2
Scale: As indicated
Project Number MES122721

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

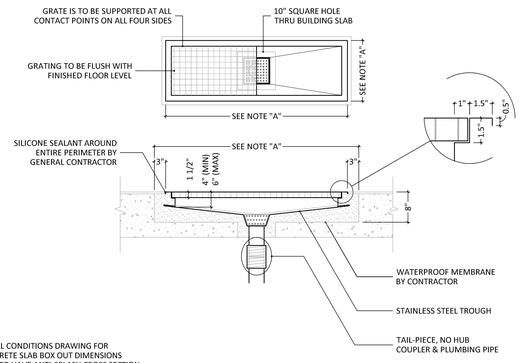
REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

DRAWING
EXHAUST VENTILATION SYSTEM DRAWING, DETAILS & SCHEDULE

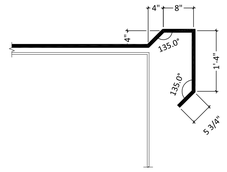
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-501

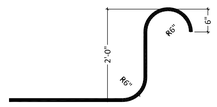


NOTES:
A. REFER TO SPECIAL CONDITIONS DRAWING FOR REQUIRED CONCRETE SLAB BOX OUT DIMENSIONS
B. FLOOR TROUGH TO HAVE ANTI-SPLASH CROSS SECTION

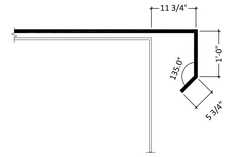
FLOOR TROUGH DEPRESSION DETAIL | NOT TO SCALE | D



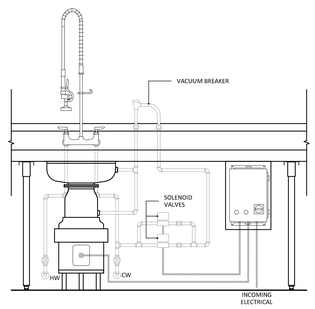
MARINE EDGE DETAIL | NOT TO SCALE | C



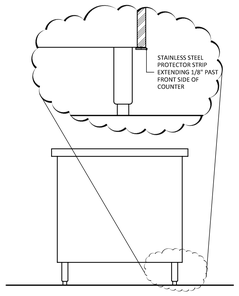
ROLLED RIM DETAIL | NOT TO SCALE | B



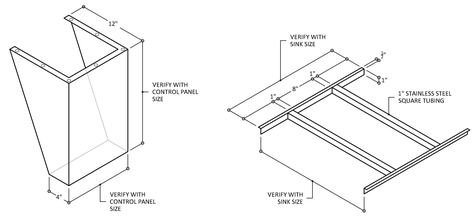
FLAT EDGE DETAIL | NOT TO SCALE | A



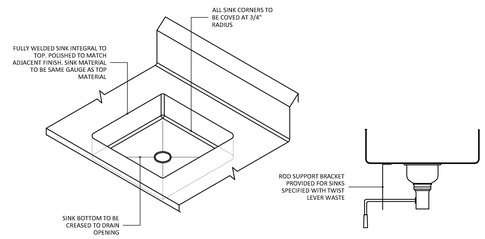
DISPOSER ELECTRICAL & PLUMBING DETAIL | NOT TO SCALE | H



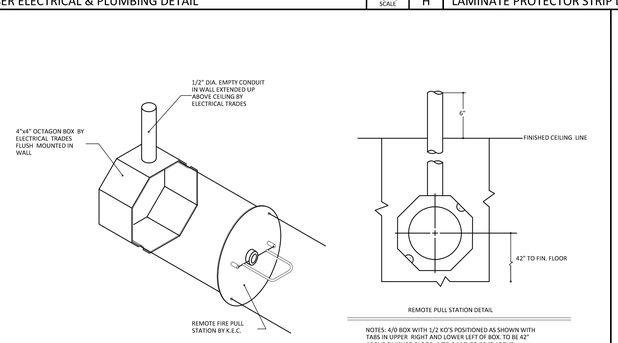
LAMINATE PROTECTOR STRIP DETAIL | NOT TO SCALE | G



DISHTABLE ACCESSORY DETAIL | NOT TO SCALE | F

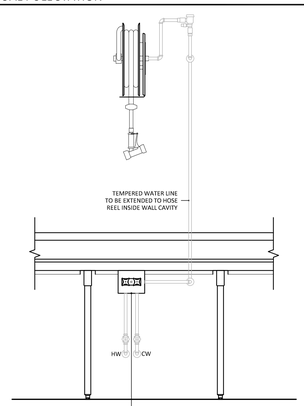


STAINLESS STEEL SINK CONSTRUCTION DETAIL | NOT TO SCALE | E

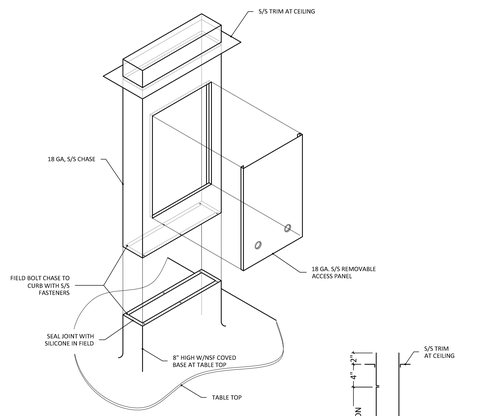


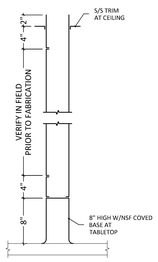
NOTES: 4/0 BOX WITH 1/2 KO'S POSITIONED AS SHOWN WITH TABS IN UPPER RIGHT AND LOWER LEFT OF BOX. TO BE 42" ABOVE FINISHED FLOOR. 1/2" E.M.T. TO BE 6" ABOVE FINISHED DROP CEILING LINE WITHOUT BENDS OR OFFSETS. ONE 4/0 BOX TO BE PROVIDED FOR EACH REMOTE PULL STATION. WHEN TWO REMOTE BOXES ARE MOUNTED SIDE BY SIDE, THE DISTANCE BETWEEN CENTERS SHALL NOT BE LESS THAN 8".

FIRE SUPPRESSION SYSTEM MANUAL PULL STATION | NOT TO SCALE | K

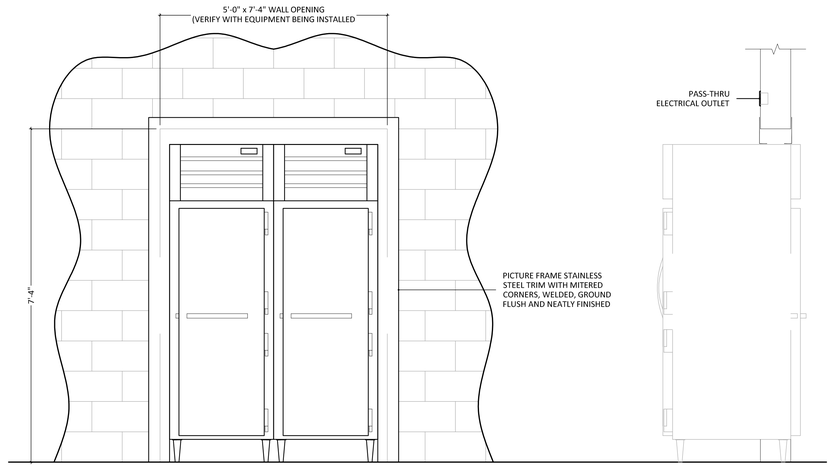


HOSE REEL PLUMBING DETAIL | NOT TO SCALE | L





ISLAND TABLE CHASE CURB DETAIL (TYPICAL) | NOT TO SCALE | J



PASS-THRU CABINET WALL FRAMING DETAIL (TYPICAL) | NOT TO SCALE | I

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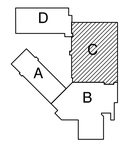
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21–113
DATE 1/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

REVISIONS

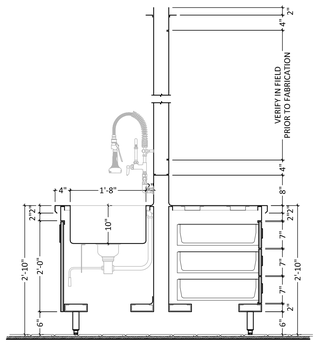
MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

DRAWING
FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS

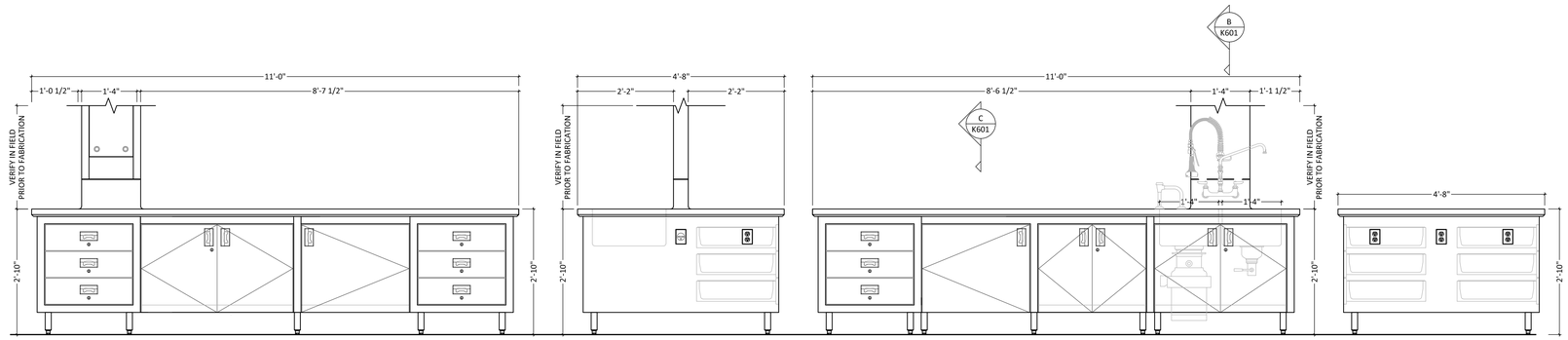
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-600

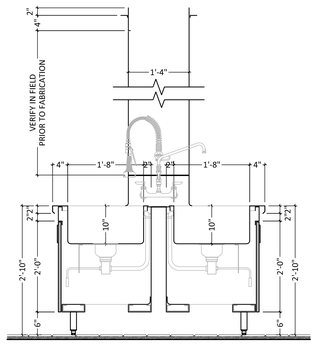
Wednesday, 2/23/2022 – 10:12 AM – LAST SAVED BY:JONATHAN NIKIEL
G:\SHARED DRIVES\RDG PROJECT DATA\RDG PROJECT FOLDER (2021)\2021-025 – GIBRALTAR – MACARTHUR ES ADD-RENO SCHOOL\3_DRAWINGS\CAD\GF-2021-025-ELEV.DWG



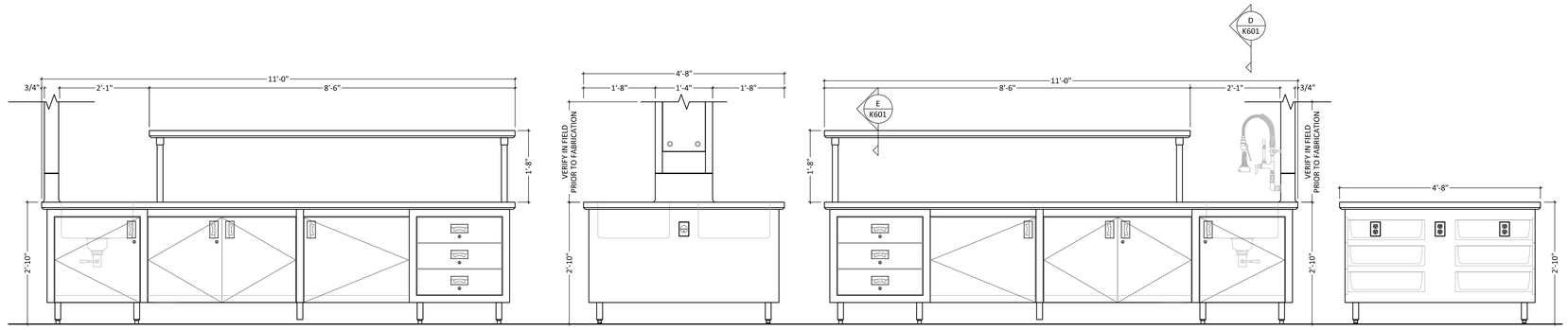
SECTION @ ISLAND PREP WORKTABLE | SCALE 3/4" = 1'-0" | B



ITEM #14 - ISLAND VEGETABLE PREP WORKTABLE | SCALE 3/4" = 1'-0" | A

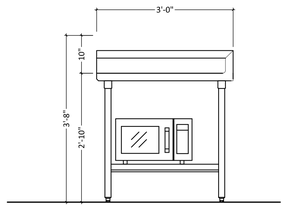


SECTION AT ISLAND WORKTABLE | SCALE 3/4" = 1'-0" | D

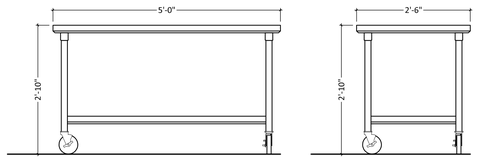


ITEM #17 - ISLAND PREP WORKTABLE | SCALE 3/4" = 1'-0" | C

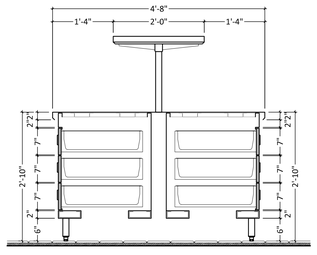
NOT USED | SCALE 3/4" = 1'-0" | H



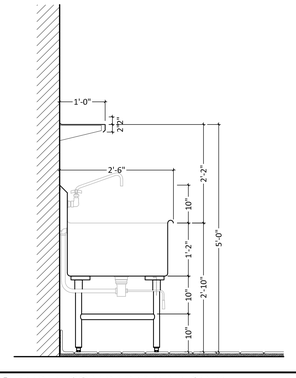
ITEM#25 - WORKTABLE | SCALE 3/4" = 1'-0" | G



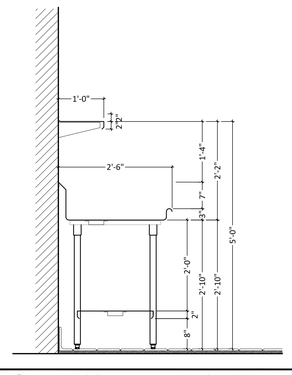
ITEM#23 - MOBILE WORK TABLE | SCALE 3/4" = 1'-0" | F



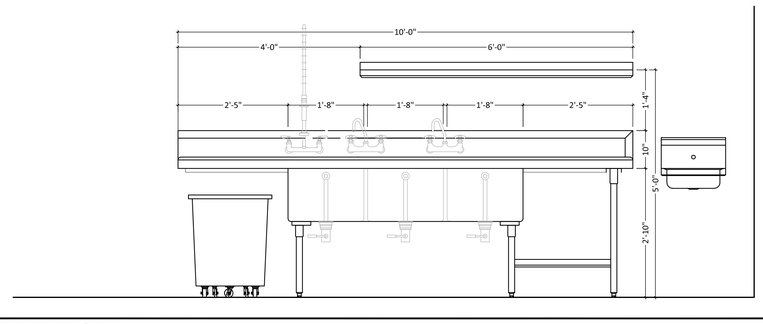
SECTION AT ISLAND WORKTABLE | SCALE 3/4" = 1'-0" | E



SECTION @ THREE COMPARTMENT SINK | SCALE 3/4" = 1'-0" | K



SECTION @ THREE COMPARTMENT SINK | SCALE 3/4" = 1'-0" | J



ITEM# 45 - THREE COMPARTMENT SINK | SCALE 3/4" = 1'-0" | I

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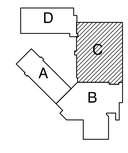
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21—113
DATE 1/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

DRAWING
FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-601

Wednesday, 2/23/2022 - 10:14 AM - LAST SAVED BY:JONATHAN NIKIEL
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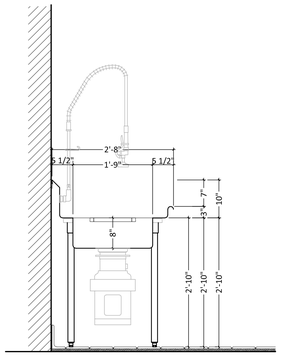
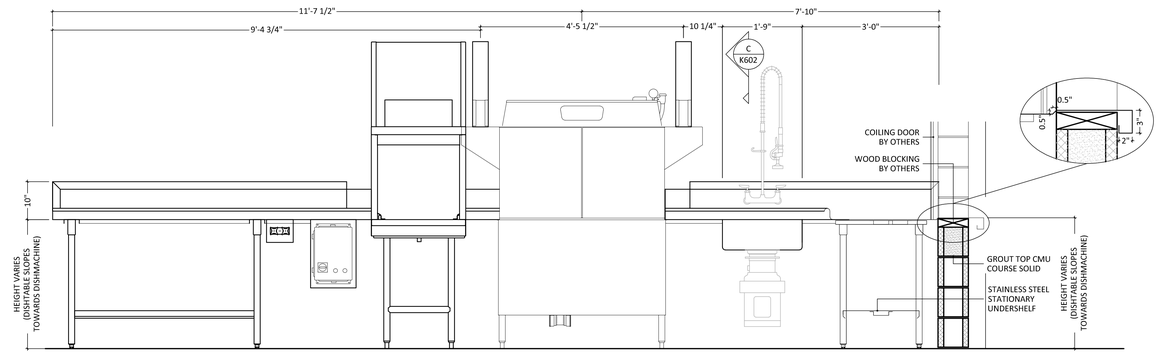
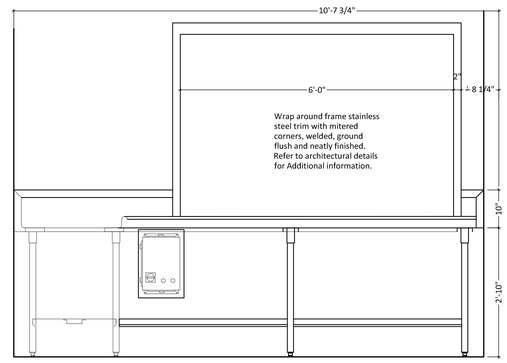


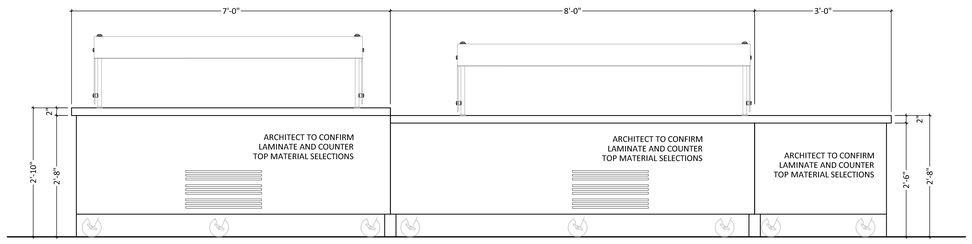
SECTION @ SOILED DISHTABLE | SCALE 3/4" = 1'-0" | C



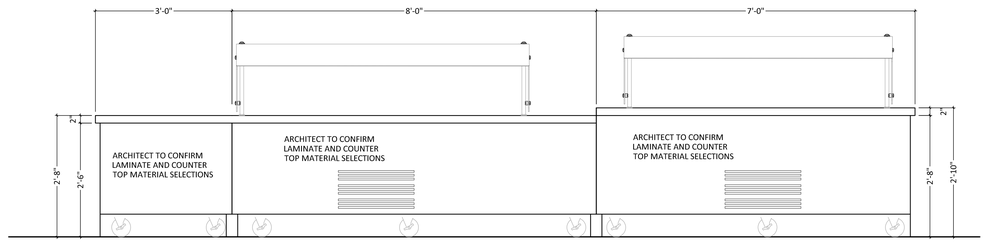
ITEM #50 & 55 - CLEAN & SOILED DISHTABLE | SCALE 3/4" = 1'-0" | B



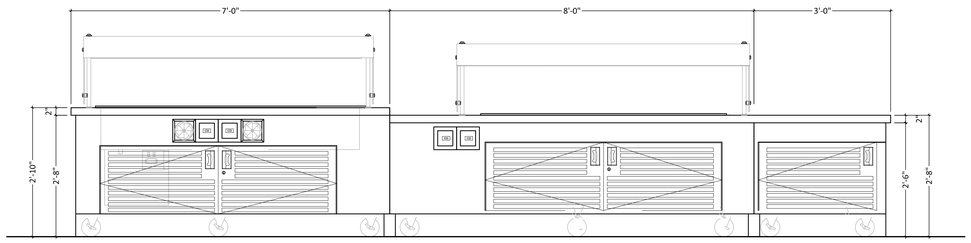
ITEM #50 - SOILED DISHTABLE | SCALE 3/4" = 1'-0" | A



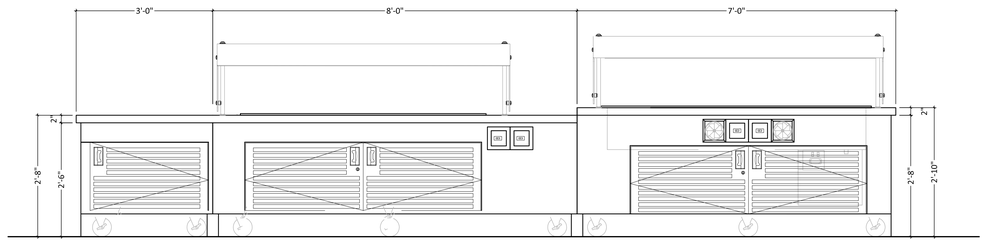
ITEM# 69, 72 & 75 - SERVING COUNTERS | SCALE 3/4" = 1'-0" | E



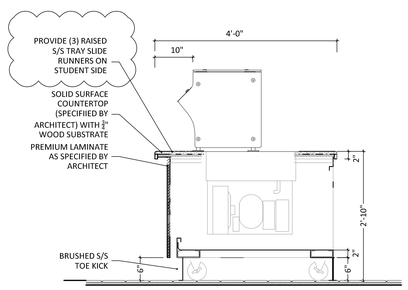
ITEM# 79, 82 & 85 - SERVING COUNTERS | SCALE 3/4" = 1'-0" | D



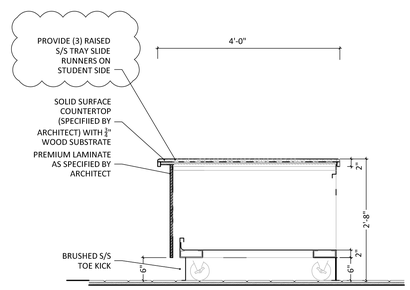
ITEM# 79, 82 & 85 - SERVING COUNTERS | SCALE 3/4" = 1'-0" | G



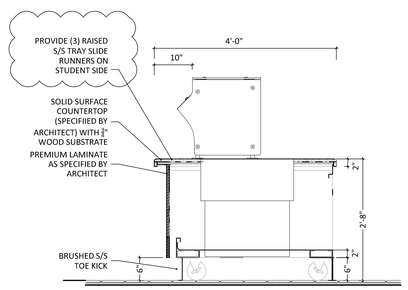
ITEM# 69, 72 & 75 - SERVING COUNTERS | SCALE 3/4" = 1'-0" | F



SECTION @ QUICK SWITCH WELLS | SCALE 3/4" = 1'-0" | J



SECTION @ DRY GOODS COUNTER | SCALE 3/4" = 1'-0" | I



SECTION @ COLD WELL | SCALE 3/4" = 1'-0" | H

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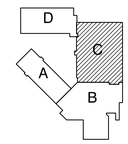
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

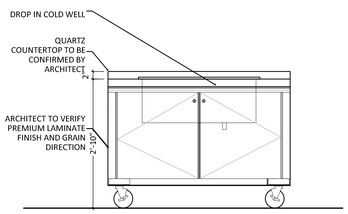
REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

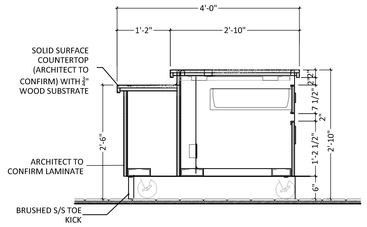
DRAWING
FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

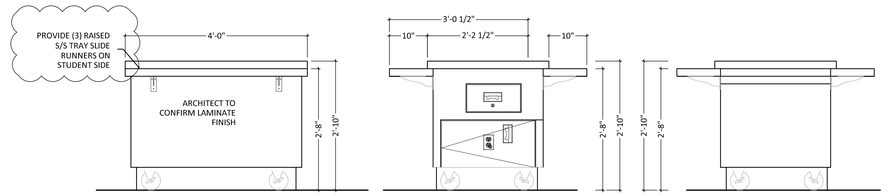
SHEET
K-602



ITEM #91 - MOBILE CONDIMENT COUNTER | SCALE 3/4" = 1'-0" | C



ITEM #86 - POINT OF SALE COUNTER | SCALE 3/4" = 1'-0" | B



ITEM #86 - POINT OF SALE COUNTER | SCALE 3/4" = 1'-0" | A

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

SECTION @ CASHIER COUNTER | SCALE 3/4" = 1'-0" | D

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

NOT IN USE | SCALE 3/4" = 1'-0"

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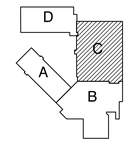
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 1/31/22
COORDINATED BY RDG
DRAWN BY JJN
CHECKED BY RDG

REVISIONS

MARK	DATE	ISSUED FOR
	02/23/22	ADDENDUM #3

DRAWING
FOODSERVICE EQUIPMENT DETAILS, ELEVATIONS & SECTIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
K-603

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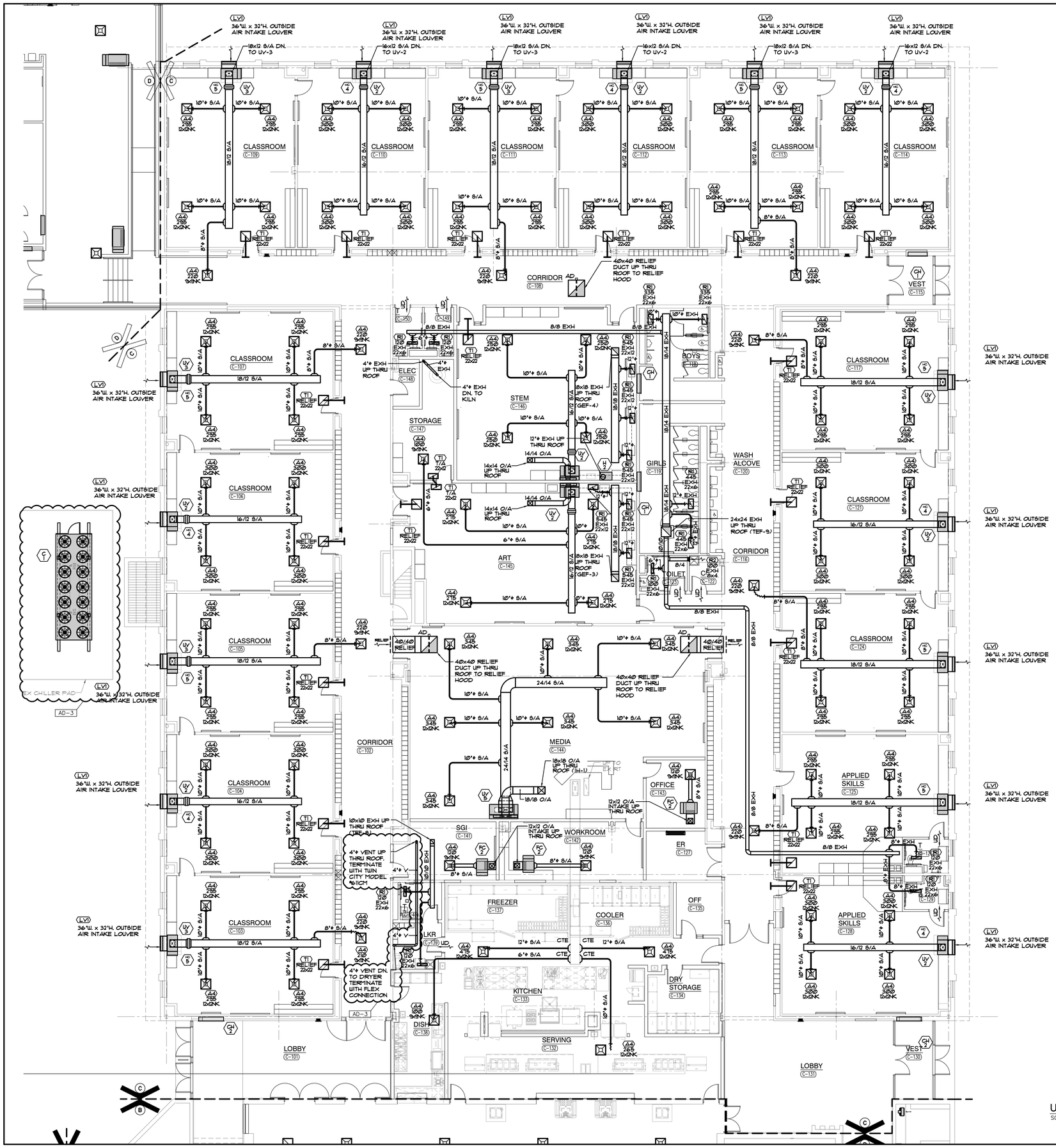

UNIT "C" MECHANICAL FIRST FLOOR VENTILATION PLAN

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

NORTH

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www.milliesengineeringgroup.com

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY GL
CHECKED BY DJ

REGISTERED PROFESSIONAL ENGINEER — DAVID G. JANNEY — NO. 10302590 — STATE OF INDIANA

REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "C" MECHANICAL FIRST FLOOR VENTILATION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C MV103

MECHANICAL EQUIPMENT SCHEDULE

TAG	MANUFACTURER	MODEL NUMBER	DESCRIPTION	EFF	FAN MOTOR DATA							EXHAUST FANS					DX COOLING EQUIP DATA				CHILLED WATER COOLING DATA								HOT WATER HEATING DATA							HOT WATER PREHEATING COIL DATA							ELECTRICAL DATA									UNITS	EQUIP	REMARKS
					CFM	MIN. OAI CFM HIGH	MIN. OAI CFM LOW	ESP	ESP	BHP	HP	RPM	CFM	ESP	BHP	HP	RPM	MBH	SHC	CAT	STGS	MBH	SHC	GPM	EDB	EWB	LDB	LWB	EWT	LWT	MAX WPD	MBH (OUT)	GPM	EAT	LAT	EWT	LWT	MAX WPD	MBH (OUT)	GPM	EAT	LAT	EWT	LWT	MAX WPD	LOAD HP	MCA	FLA	AMPS	MOCP	VOLT	PHASE	HZ.	STARTER MC.	STARTER EC.	CNTRLD BY	WEIGHT	
C-1	TRANE	RTAC-250	GRADE MOUNTED AIR COOLED CHILLER	9.8 EER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2888	-	577	-	-	-	-	54	44	25	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	490	-	-	600	480	3	60	X	-	FMS	15200	NOTE 1
AH-1	TRANE	CSAA014	INTERIOR CENTRAL STATION AIR HANDLING UNIT HOT WATER HEATING / CHILLED WATER COOLING - VAV	-	6860	1200	-	6.3	2.7	9.9	(2)7.5	3308	-	-	-	-	-	-	-	-	-	253	198	50.3	80	65	53	52	44	54	15	-	-	-	-	-	-	-	97.7	9.8	-10	65	160	140	15	-	69	-	-	110	208	3	60	X	-	FMS	3885	NOTE 2
				-	-	-	-	-	-	-	-	-	6860	1.4	4.6	(2)3	2615	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	45	208	3	60	X	-	FMS	-	-
AH-2	TRANE	CSAA021	INTERIOR CENTRAL STATION AIR HANDLING UNIT HOT WATER HEATING / CHILLED WATER COOLING - CAV	-	9550	4500	955	4.9	1.4	12	(2)7.5	2272	-	-	-	-	-	-	-	-	-	540	341	108	83	68.9	50	50	44	54	15	-	598	60	32	90	160	140	15	155	16	55	70	100	80	15	-	69	-	-	110	208	3	60	X	-	FMS	5540	NOTE 2
				-	-	-	-	-	-	-	-	-	9550	1.1	5.2	(2)3	1611	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	45	208	3	60	X	-	FMS	-	-
AH-3	TRANE	CSAA012	INTERIOR CENTRAL STATION AIR HANDLING UNIT HOT WATER HEATING / CHILLED WATER COOLING - CAV	-	5960	2980	596	3.7	1.1	6.6	(2)5	2891	-	-	-	-	-	-	-	-	-	368	225	73.4	86	71	51	50	44	54	15	-	388	39	30	90	160	140	15	97	9.7	55	70	100	80	15	-	46	-	-	80	208	3	60	X	-	FMS	3915	NOTE 2
				-	-	-	-	-	-	-	-	-	5960	0.9	3.8	(2)3	2913	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	45	208	3	60	X	-	FMS	-	-
VUV-1	ENGINEERED AIR	RUV-800	VERTICAL UNIT VENTILATOR - 4 PIPE HOT/CHILLED WATER	-	800	180	-	-	-	-	1/3	-	-	-	-	-	-	-	-	-	-	29.9	20.4	6	80	67	56	55	44	54	15	-	45.9	4.6	44	93	160	140	15	-	-	-	-	-	-	-	-	8.3	-	-	20	120	1	60	X	-	FMS	535	NOTE 3
VUV-2	ENGINEERED AIR	RUV-1200	VERTICAL UNIT VENTILATOR - 4 PIPE HOT/CHILLED WATER	-	1200	385	-	-	-	-	1/2	-	-	-	-	-	-	-	-	-	-	44.2	31.1	9	80	67	56	55	44	54	15	-	64.6	6.6	40	90	160	140	15	-	-	-	-	-	-	-	-	8	-	-	20	120	1	60	X	-	FMS	590	NOTE 3
VUV-3	ENGINEERED AIR	RUV-1400	VERTICAL UNIT VENTILATOR - 4 PIPE HOT/CHILLED WATER	-	1400	470	-	-	-	-	3/4	-	-	-	-	-	-	-	-	-	-	52.3	36.5	10	80	67	56	55	44	54	15	-	78.9	8	40	93	160	140	15	-	-	-	-	-	-	-	-	13	-	-	20	120	1	60	X	-	FMS	645	NOTE 3
VUV-4	ENGINEERED AIR	RUV-1600	VERTICAL UNIT VENTILATOR - 4 PIPE HOT/CHILLED WATER	-	1600	530	-	-	-	-	3/4	-	-	-	-	-	-	-	-	-	-	62.8	43	12	80	67	55	54	44	54	15	-	107	11	40	95	160	140	15	-	-	-	-	-	-	-	-	13	-	-	20	120	1	60	X	-	FMS	700	NOTE 3
VUV-5	ENGINEERED AIR	RUV-2400	VERTICAL UNIT VENTILATOR - 4 PIPE HOT/CHILLED WATER	-	2400	845	-	-	-	-	(2) 1/2	-	-	-	-	-	-	-	-	-	-	93.9	63.9	18	80	67	55	55	44	54	15	-	129	13	40	90	160	140	15	-	-	-	-	-	-	-	-	14	-	-	20	120	1	60	X	-	FMS	900	NOTE 3
FC-1	TRANE	FCCB040	HORIZONTAL DUCTED FAN COIL UNIT - 4 PIPE HOT/CHILLED WATER	-	255	80	-	-	-	-	Ø.13	1002	-	-	-	-	-	-	-	-	-	10.2	6.6	2.03	79	67	55	54	44	54	10	-	16.5	2	46	106	160	140	10	-	-	-	-	-	-	-	-	2.8	-	-	15	120	1	60	-	-	FMS	109	NOTE 4
FC-2	TRANE	FCCB010	HORIZONTAL DUCTED FAN COIL UNIT - 4 PIPE HOT/CHILLED WATER	-	120	20	-	-	-	-	Ø.13	1254	-	-	-	-	-	-	-	-	-	3.57	2.15	Ø.71	79	66	58	56	44	54	10	-	8	Ø.8	58	120	160	140	10	-	-	-	-	-	-	-	-	2.8	-	-	15	120	1	60	-	-	FMS	81	NOTE 4
FC-3	TRANE	FCCB100	HORIZONTAL DUCTED FAN COIL UNIT - 4 PIPE HOT/CHILLED WATER	-	1150	35	-	-	-	-	Ø.22	1150	-	-	-	-	-	-	-	-	-	23	21.8	4.6	76	63	59	56	44	54	10	-	74	4.6	67	126	160	140	10	-	-	-	-	-	-	-	-	6.1	-	-	15	120	1	60	-	-	FMS	200	NOTE 4
FC-4	TRANE	FCCB100	HORIZONTAL DUCTED FAN COIL UNIT - 4 PIPE HOT/CHILLED WATER	-	850	35	-	-	-	-	Ø.22	1313	-	-	-	-	-	-	-	-	-	18.5	17.1	3.7	76	63	57	55	44	54	10	-	59.9	3.7	67	132	160	140	10	-	-	-	-	-	-	-	-	6.1	-	-	15	120	1	60	-	-	FMS	200	NOTE 4
FC-5	TRANE	FCCB060	HORIZONTAL DUCTED FAN COIL UNIT - 4 PIPE HOT/CHILLED WATER	-	550	35	-	-	-	-	Ø.22	1375	-	-	-	-	-	-	-	-	-	11.3	10.6	2.25	76	63	58	56	44	54	10	-	23.9	2.3	67	107	160	140	10	-	-	-	-	-	-	-	-	3.9	-	-	15	120	1	60	-	-	FMS	140	NOTE 4
AC-1/CU-1	MITSUBISHI	TPKAA12/TRUY012	WALL MTD AC UNIT/ROOF MTD CONDENSING UNIT	-	320	-	-	-	-	-	-	-	-	-	-	-	-	12	-	95	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	28	208	1	60	-	-	FMS	35/103	NOTE 5
AC-2/CU-2	MITSUBISHI	TPKAA12/TRUY012	WALL MTD AC UNIT/ROOF MTD CONDENSING UNIT	-	320	-	-	-	-	-	-	-	-	-	-	-	-	12	-	95	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	28	208	1	60	-	-	FMS	35/103	NOTE 5
AC-3/CU-3	MITSUBISHI	TPKAA36/TRUY036	WALL MTD AC UNIT/ROOF MTD CONDENSING UNIT	-	725	-	-	-	-	-	-	-	-	-	-	-	-	36	-	95	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	-	30	208	1	60	-	-	FMS	46/215	NOTE 5
AC-4/CU-4	MITSUBISHI	TPKAA12/TRUY012	WALL MTD AC UNIT/ROOF MTD CONDENSING UNIT	-	320	-	-	-	-	-	-	-	-	-	-	-	-	12	-	95	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	28	208	1	60	-	-	FMS	35/103	NOTE 5
GEF-1	TWIN CITY	DCRD	ROOF MOUNTED GENERAL EXHAUST FAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	-	120	1	60	-	-	FMS	150	NOTE 6
GEF-2	TWIN CITY	DCRD	ROOF MOUNTED GENERAL EXHAUST FAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	-	120	1	60	-	-	FMS	150	NOTE 6
GEF-3	TWIN CITY	DCRD 140BE	ROOF MOUNTED GENERAL EXHAUST FAN	-	-	-	-	-	-	-	-	-	1635	Ø.5	-	3/4	1305	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/4	-	-	-	-	120	1	60	-	-	FMS	200	NOTE 6
GEF-4	TWIN CITY	DCRD 140BE	ROOF MOUNTED GENERAL EXHAUST FAN	-	-	-	-	-	-	-	-	-	1635	Ø.5	-	3/4	1305	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/4	-	-	-	-	120	1	60	-	-	FMS	200	NOTE 6
TEF-1	TWIN CITY	DCRD 095BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	500	Ø.5	-	1/2	1403	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	-	120	1	60	-	-	FMS	150	NOTE 6
TEF-2	TWIN CITY	DCRD 080BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	400	Ø.3	-	1/6	1617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/6	-	-	-	-	120	1	60	-	-	FMS	100	NOTE 6
TEF-3	TWIN CITY	DCRD 080BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	200	Ø.3	-	1/6	1354	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/6	-	-	-	-	120	1	60	-	-	FMS	100	NOTE 6
TEF-4	TWIN CITY	DCRD 080BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	200	Ø.3	-	1/6	1354	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/6	-	-	-	-	120	1	60	-	-	FMS	100	NOTE 6
TEF-5	TWIN CITY	DCRD 095BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	390	Ø.5	-	1/4	1338	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/4	-	-	-	-	120	1	60	-	-	FMS	100	NOTE 6
TEF-6	TWIN CITY	DCRD 080BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	300	Ø.3	-	1/6	1550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/6	-	-	-	-	120	1	60	-	-	FMS	100	NOTE 6
TEF-7	TWIN CITY	DCRD 140BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	1200	Ø.5	-	3/4	1144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/4	-	-	-	-	120	1	60	-	-	FMS	200	NOTE 6
TEF-8	TWIN CITY	DCRD 080BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	250	Ø.3	-	1/6	1445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/6	-	-	-	-	120	1	60	-	-	FMS	100	NOTE 6
TEF-9	TWIN CITY	DCRD 180BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	2390	Ø.8	-	1	1026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	120	1	60	-	-	FMS	250	NOTE 6
TEF-10	TWIN CITY	DCRD 140BE	ROOF MOUNTED TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	1620	Ø.5	-	3/4	1299	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/4	-	-	-	-	120	1	60	-	-	FMS	200	NOTE 6
TEF-11	TWIN CITY	TL 9006	INLINE TOILET EXHAUST FAN	-	-	-	-	-	-	-	-	-	710	Ø.5	-	1/2	782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	-	120	1	60	-	-	FMS	150	NOTE 6
H-1	DENLAR	D1030DIFFPA	30" WIDE KITCHEN EXHAUST HOOD WITH ANSUL	-	-	-	-	-	-	-	-	-	545	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	120	1	60	-	-	WALL SWITCH	-	NOTE 9
H-2	DENLAR	D1030DIFFPA	30" WIDE KITCHEN EXHAUST HOOD WITH ANSUL	-	-	-	-	-	-	-	-	-	545	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	120	1	60	-	-	WALL SWITCH	-	NOTE 9
UH-1	TRANE	-	SUSPENDED UNIT HEATER - HOT WATER HEATING	-	-	-	-	-	-	-	-	-	550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	1	60	-	-	FMS	-	NOTE 7
CH-1	TRANE	FFHB040	HOT WATER WALL RECESSED MOUNTED CABINET HEATER	-	400	-	-	-	-	-	Ø.06	1163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.6	1.3	60	119	160	140	-	-	-	-	-	-	-	-	-	2.8	-	-	15	120	1	60	-	-	INTEGRAL TSTAT	88	NOTE 8
CH-2	TRANE	FFHB080	HOT WATER WALL RECESSED MOUNTED CABINET HEATER	-	800	-	-	-	-	-	Ø.13	1252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	2.5	60	118	160	140	-	-	-	-	-	-	-	-	-	3.9	-	-	15	120	1	60	-	-	INTEGRAL TSTAT	140	NOTE 8
CH-3	TRANE	FFHB040	HOT WATER WALL SEMI-RECESSED MOUNTED CABINET HEATER	-	400	-	-	-	-	-	Ø.06	1163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.6	1.3	60	118	160	140	-	-	-	-	-	-	-	-	-	2.8	-	-	15	120	1	60	-	-	INTEGRAL TSTAT	88	NOTE 8
CH-4	TRANE	FFHB080	HOT WATER WALL SEMI-RECESSED MOUNTED CABINET HEATER	-	800	-	-	-	-	-	Ø.13	1252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	2.5	60	118	160	140	-	-	-	-	-	-	-	-	-	3.9	-	-	15	120	1	60	-	-	INTEGRAL TSTAT	140	NOTE 8

NOTE 1:
PROVIDE WITH:
- SOUND ATTENUATION KIT
- HEAT TRACE ON EXTERIOR CHW PIPING

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 2:
SEE PLANS AND SECTIONS FOR LAYOUT OF AIR HANDLING UNIT. PREHEATING COIL DATA IS BASED ON MINIMUM OUTSIDE AIR CFM (MAXIMUM VALUE)
SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 3:
PROVIDE WITH:
- INTEGRATED ENTHALPY ECONOMIZER
- DISCONNECT SWITCH
- FACE/BYPASS DAMPER
- FILTERS
- CONDENSATE PUMP (WHERE INDICATED ON PLANS)
- PROVIDE 16" WIDE SIDE MOUNTED PIPE CHASE WITH ACCESS DOOR (AD-3)
- WHERE INDICATED PROVIDE 10" DEEP PLENUM FOR UNITS WITH DUCTED OUTSIDE AIR CONNECTIONS (SEE FLOOR PLANS).

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 4:
PROVIDE WITH:
- DISCONNECT SWITCH
- VIBRATION ISOLATION HANGERS
- TERMINAL STRIPS FOR DDC READY

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 5:
PROVIDE CONDENSING UNIT WITH:
- LOW AMBIENT CONTROLS FOR 100% COOLING DOWN TO -10°F.
- EQUIPMENT SUPPORT RAILS

PROVIDE AC INDOOR UNIT WITH:
- WALL MOUNTED WIRED THERMOSTAT
- CONDENSATE PUMP
- WALL MOUNTING HARDWARE

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 6:
PROVIDE WITH:
- ECM MOTOR WITH POTENTIOMETER SPEED CONTROLLER
- MOTORIZED DAMPER
- BIRD SCREEN
- ROOF CURB

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 7:
PROVIDE WITH:
- WALL MOUNTED THERMOSTAT
- DISCONNECT
- VIBRATION ISOLATION HANGERS

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 8:
PROVIDE WITH:
- INTEGRAL THERMOSTAT
- DISCONNECT SWITCH

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

NOTE 9:
PROVIDE WITH:
- INLINE FAN
- ELECTRICAL RANGE SHUTOFF
- REMOTE ADA SWITCHES
- FAN LIMIT
- MANUAL PULL STATION

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

PUMP SCHEDULE

TAG	MANUFACTURER	MODEL NUMBER	DESCRIPTION	GPM	HEAD (FT.)	PUMP MOTOR DATA HP	RPM	VOLT	PHASE	HZ.	SUCTION/ DISCHARGE SIZE	REMARKS
CWP-1	BELL & GOSSETT	E-1510 3GB	CHILLED WATER DISTRIBUTION PUMP	289	125	20	-	208	3	60	4" / 3"	CHILLED WATER PRIMARY PUMPS W/VFD OPERATING IN PARALLEL. 578 GPM AT 125 FT. HD. WITH DUAL POWER FEEDERS
CWP-2	BELL & GOSSETT	E-1510 3GB	CHILLED WATER DISTRIBUTION PUMP	289	125	20	-	208	3	60	4" / 3"	
CP-1	BELL & GOSSETT	E-1510 3BD	CHILLED WATER RECIRCULATION PUMP (C-1)	577	55	15	-	208	3	60	4" / 3"	-

DUCT MOUNTED HW HEATING COIL SCHEDULE

TAG	MANUFACTURER	MODEL	SIZE W x H	CFM	HW REHEAT COIL DATA MBH	GPM	WPD	EAT	EWT	REMARKS
HUC-1	TRANE	D5WB124020	20 x 24	2,400	52.1	5.2	5'	100	160	
HUC-2	TRANE	D5WB112012	12 x 12	700	15.2	1.5	5'	100	160	
HUC-3	TRANE	D5WB112014	14 x 12	800	17.4	1.7	5'	100	160	
HUC-4	TRANE	D5WB112020	20 x 12	1,200	26.0	2.6	5'	100	160	
HUC-5	TRANE	D5WB112024	24 x 12	1,400	30.4	3.0	5'	100	160	
HUC-6	TRANE	D5TB115020	20 x 16	1,600	41.4	4.1	5'	100	160	

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PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY GL
CHECKED BY DJ

REGISTERED NO. 10302590 STATE OF INDIANA DAVID G. JANNEY PROFESSIONAL ENGINEER

REVISIONS

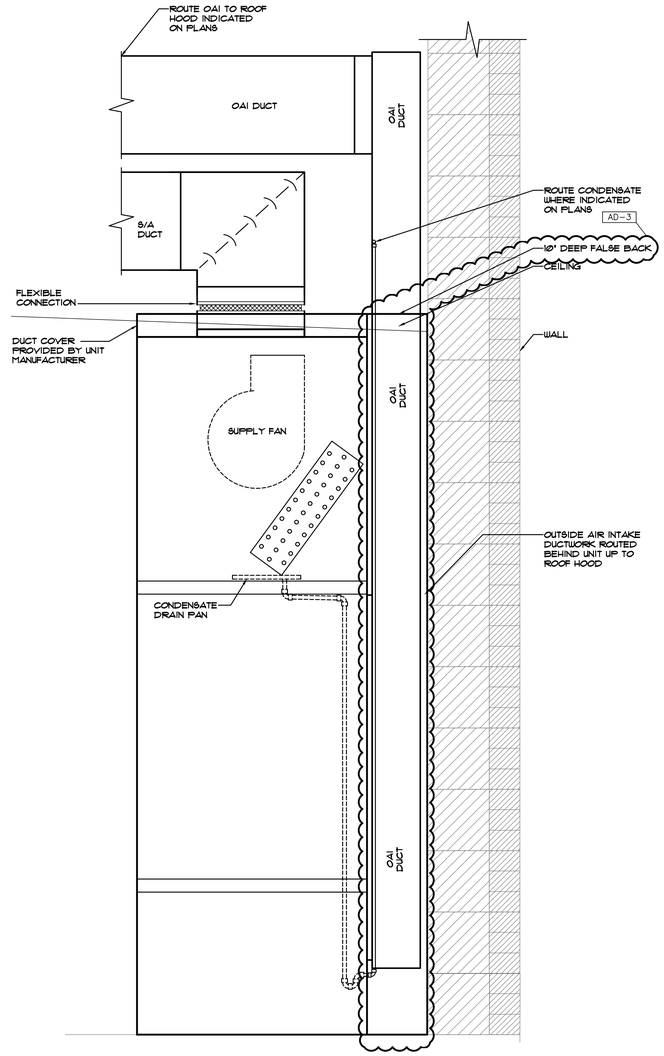
MARK	DATE	ISSUED FOR
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
MECHANICAL SCHEDULES

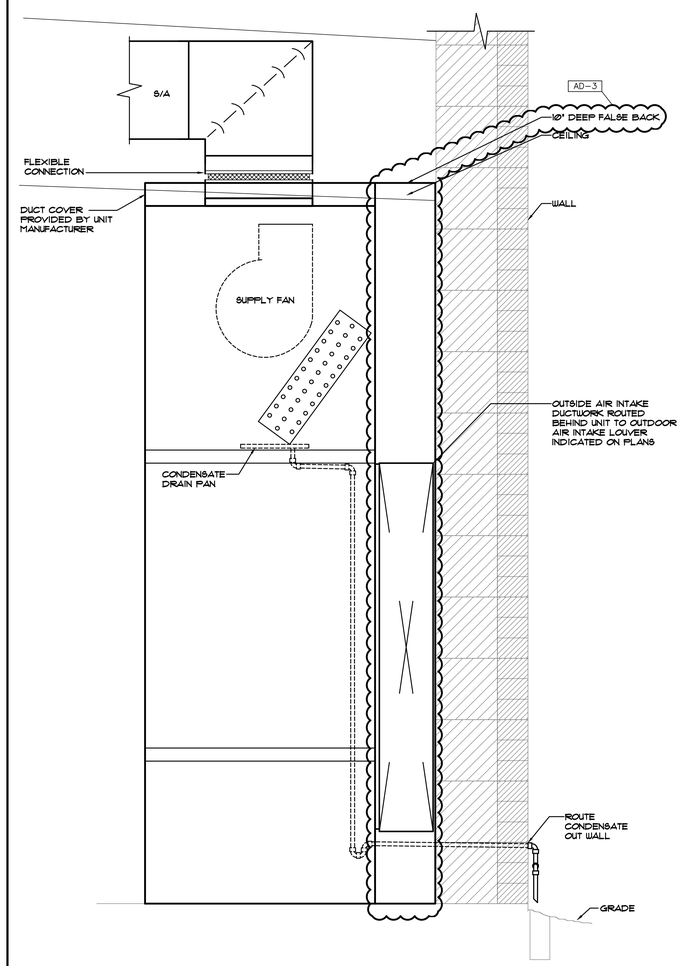
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
M-501

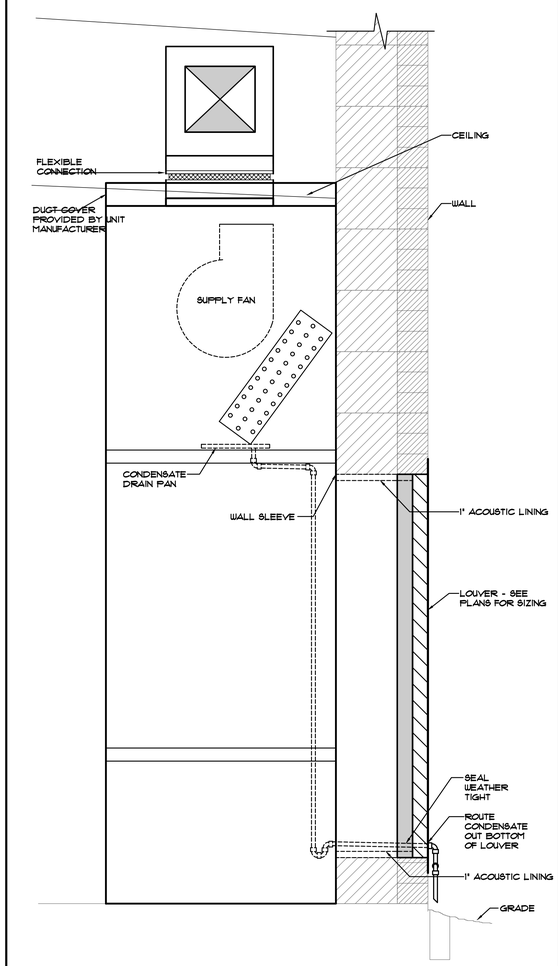
TYPICAL UNIT VENTILATOR TO ROOF HOOD DETAIL N.T.S.



TYPICAL UNIT VENTILATOR OFFSET LOUVER DETAIL N.T.S.

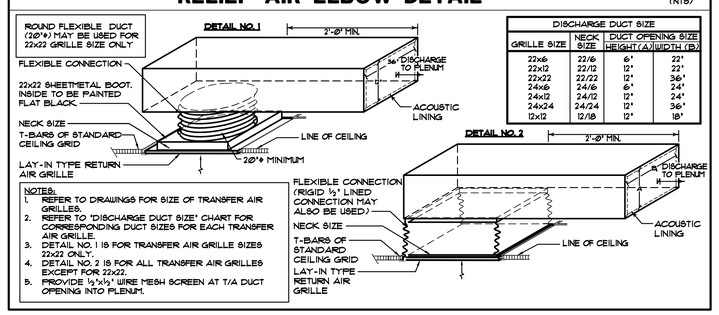


TYPICAL UNIT VENTILATOR DETAIL N.T.S.



RELIEF AIR ELBOW DETAIL (NTS)

ROUND FLEXIBLE DUCT (20"ø) MAY BE USED FOR 22x22 GRILLE SIZE ONLY



NOTES:
1. REFER TO DRAWINGS FOR SIZE OF TRANSFER AIR GRILLES.
2. REFER TO "DISCHARGE DUCT SIZE" CHART FOR CORRESPONDING DUCT SIZES FOR EACH TRANSFER AIR GRILLE.
3. DETAIL NO. 1 IS FOR TRANSFER AIR GRILLE SIZES 22x22 ONLY.
4. DETAIL NO. 2 IS FOR ALL TRANSFER AIR GRILLES EXCEPT FOR 22x22.
5. PROVIDE ½"x½" WIRE MESH SCREEN AT T/A DUCT OPENING INTO PLENUM.

DISCHARGE DUCT SIZE

GRILLE SIZE	NECK SIZE	DUCT OPENING SIZE HEIGHT (A)	WIDTH (B)
22x6	22/6	6"	22"
22x12	22/12	12"	22"
22x22	22/22	12"	36"
24x6	24/6	6"	24"
24x12	24/12	12"	24"
24x24	24/24	12"	36"
12x12	12/18	12"	18"

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GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY GL
CHECKED BY DJ

DAVID G. JANNEY REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
MECHANICAL DETAILS & DIAGRAMS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
M-603

PLUMBING EQUIPMENT AND FIXTURE SCHEDULE

TAG NO.	FIXTURE/EQUIPMENT TYPE	FIXTURE/EQUIPMENT DESCRIPTION	FIXTURE/EQUIPMENT MANUFACTURER AND MODEL NO.	ACCEPTABLE MANUF.	FIXTURE VALVE/FAUCET TYPE	FIXTURE VALVE/FAUCET TYPE	ACCEPTABLE MANUF.	ACCESSORIES/REMARKS (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION)	ELECTRICAL DATA							
									HP	KW	FLA	AMPS	MOCP	VOLT	PH	HZ
WC-1	WATER CLOSET	VITREOUS CHINA, WALL MOUNTED	AMERICAN STANDARD #2257.103	NOTE #1	BATTERY SENSOR FLUSH VALVE	SLOAN 'G2 OPTIMA' #8116-1.6	NOTE #8	BEMIS #1955-C SEAT	-	-	-	-	-	-	-	-
WC-2	WATER CLOSET	VITREOUS CHINA, WALL MOUNTED, ADA	AMERICAN STANDARD #2257.103	NOTE #1	BATTERY SENSOR FLUSH VALVE	SLOAN 'G2 OPTIMA' #8111-1.6	NOTE #8	BEMIS #1955-C SEAT	-	-	-	-	-	-	-	-
UR-1	URINAL	BATTERY SENSOR FLUSH VALVE	SLOAN 'G2 OPTIMA' #8111-1.6	NOTE #1	BATTERY SENSOR FLUSH VALVE	SLOAN 'G2 OPTIMA' #8111-1.6	NOTE #8	-	-	-	-	-	-	-	-	-
L-1	LAVATORY	VITREOUS CHINA, WALL MOUNTED, 20"x18", ADA	AMERICAN STANDARD #0355.012	NOTE #1	ELECTRONIC BATTERY SENSOR, 4" CENTERS	SLOAN #EBF-187	NOTE #3	MCGUIRE #PW-2150-WC 1-1/2" PROWRAP, MCGUIRE #4216TCCLK SUPPLIES	-	-	-	-	-	-	-	-
EWC-1	ELECTRIC BOTTLE FILLER	ELECTRIC WALL MOUNTED	ELKAY #EZS8S68MC	NOTE #2	-	-	-	-	-	-	-	-	-	-	-	-
S-1	SINK	TWO COMPARTMENT STAINLESS STEEL SINK, 33"x19"x6"	ELKAY #LRADQ-3319	NOTE #3	2 HANDLE, HIGH GOOSENECK	ELKAY #LKD2448BH	NOTE #3	MCGUIRE #B-8912-C8DF P-TRAP, MCGUIRE #4216TCCLK SUPPLIES	-	-	-	-	-	-	-	-
S-2	SINK	1-COMPARTMENT STAINLESS STEEL SINK, 22"x19-1/2"x6-1/2"	ELKAY #LRADQ-2219	NOTE #3	2 HANDLE, HIGH GOOSENECK	CHICAGO FAUCET CO. #350-317XKABCP	NOTE #3	MCGUIRE #B-8912-C8DF P-TRAP, MCGUIRE #4216TCCLK SUPPLIES	-	-	-	-	-	-	-	-
S-3	SINK	2-COMPARTMENT S. S. SINK W/ BUBBLER, 37-1/4" x 17" x 6-1/2"	ELKAY #DRKAD3717165LC	NOTE #1	2 HANDLE, HIGH GOOSENECK W/ BUBBLER	ELKAY #LKD2439C W/ LK1141A	NOTE #3	MCGUIRE #PW-2150-WC 1-1/2" PROWRAP, MCGUIRE #4216TCCLK SUPPLIES	-	-	-	-	-	-	-	-
S-4	SINK	1-COMPARTMENT STAINLESS STEEL SINK, 22"x19-1/2"x6-1/2"	ELKAY #LRADQ-2219	NOTE #3	2 HANDLE, HIGH GOOSENECK	ELKAY #LKD2448BH	NOTE #3	MCGUIRE #B-8912-C8DF P-TRAP, MCGUIRE #4216TCCLK SUPPLIES, JOSAM #61030 SOLIDS INTERCEPTOR	-	-	-	-	-	-	-	-
MB-1	MOP BASIN	MOLDED STONE, 36"x36"x6"H	FIAT #SB-3636	NOTE #4	WALL MOUNTED SERVICE FAUCET	CHICAGO FAUCET CO. #897	NOTE #3	W/ 3/4" HOSE THREAD, VACUUM BREAKER, WALL BRACE	-	-	-	-	-	-	-	-
SS-1	SERVICE SINK	VITREOUS CHINA WALL MOUNTED, 22"x20"x13-1/2"D	AMERICAN STANDARD #7695.008	NOTE #1	WALL MOUNTED SERVICE FAUCET	CHICAGO FAUCET CO. #897-CP	NOTE #3	W/ 3/4" HOSE THREAD, VACUUM BREAKER, WALL BRACE	-	-	-	-	-	-	-	-
PB-1	PLUMBERS BOX	FOR CLOTHES WASHER	GUY GRAY #B300BTB	NOTE #14	-	-	-	-	-	-	-	-	-	-	-	-
FD-1	FLOOR DRAIN	CAST IRON BODY, ADJUSTABLE 6"x6" NICKEL BRONZE TOP	WADE #100-G6	NOTE #5	-	-	-	VANDALPROOF SCREWS, PLUGGED TRAP PRIMER	-	-	-	-	-	-	-	-
FS-1	FLOOR SINK	CAST IRON, 8-1/8" DEEP, ACID RESISTING, 12"x12" TOP	WADE #3140	NOTE #5	-	-	-	ALUMINUM DOME STRAINER, SECURED HINGED GRATE, SLOPED RIM	-	-	-	-	-	-	-	-
SC-1	SILLCOCK	NON-FREEZE, VACUUM BREAKER, REMOVABLE KEY	WADE #8600	NOTE #6	-	-	-	-	-	-	-	-	-	-	-	-
HB-1	HOSEBIBB	VACUUM BREAKER, 3/4" HOSE THREAD	CHICAGO FAUCET CO. #952	NOTE #6	-	-	-	-	-	-	-	-	-	-	-	-
RD-1	ROOF DRAIN	CAST IRON BODY, GRAVEL STOP, LARGE SUMP	MIFAB #R1200-EU	NOTE #5	-	-	-	-	-	-	-	-	-	-	-	-
RD-2	ROOF DRAIN W/ OVERFLOW	CAST IRON BODY, GRAVEL STOP, LARGE SUMP	WADE #3043	NOTE #5	-	-	-	-	-	-	-	-	-	-	-	-
OFRD-1	OVERFLOW ROOF DRAIN	CAST IRON BODY, GRAVEL STOP, LARGE SUMP	MIFAB #R1200-W	NOTE #5	-	-	-	-	-	-	-	-	-	-	-	-
TW-1	TEMPERED WATER VALVE	TEMPERED WATER VALVE	BRADLEY #959-4000A TMV	NOTE #7	-	-	-	-	-	-	-	-	-	-	-	-
TWH-1	TANKLESS WATER HEATER	199 MBH, 4.1 GPM @ 90 DEGREE RISE (GAS FIRED)	NORITZ #NCC199CDV	NOTE #12	-	-	-	ISOLATION KIT, TEMP. RELIEF VALVE, DRAIN VALVE AND CONDENSATE PIPED TO FLOOR DRAIN	-	-	-	-	-	120	1	60
TWH-2	TANKLESS WATER HEATER	199 MBH, 4.1 GPM @ 90 DEGREE RISE (GAS FIRED)	NORITZ #NCC199CDV	NOTE #12	-	-	-	ISOLATION KIT, TEMP. RELIEF VALVE, DRAIN VALVE AND CONDENSATE PIPED TO FLOOR DRAIN	-	-	-	-	-	120	1	60
TWH-3	TANKLESS WATER HEATER	199 MBH, 4.1 GPM @ 90 DEGREE RISE (GAS FIRED)	NORITZ #NCC199CDV	NOTE #12	-	-	-	ISOLATION KIT, TEMP. RELIEF VALVE, DRAIN VALVE AND CONDENSATE PIPED TO FLOOR DRAIN	-	-	-	-	-	120	1	60
RCP-1	RECIRCULATION PUMP	17 GPM @ 7.25' HEAD, ALL BRONZE CONSTRUCTION	B&G #PL-100	NOTE #13	-	-	-	W/ STRAP ON AQUASTAT	2/5	-	-	4.8	-	120	1	60
DBP-1	DOMESTIC BOOSTER PUMP	160 GPM @ 60 PSI DISCHARGE W/ SUCTION @ 25 PSI	METROPOLITAN #48-MTIII-5D-PHI-60	NOTE #11	-	-	-	W/ 105 GAL. HYDROPNEUMATIC TANK, 4" SUCTION/ 4" DISCHARGE, (100 GPM @ 80' TDH EA. PUMP) 138' MIN. SHUT-OFF HEAD	(2) 5	-	-	-	-	208	3	60
WS-1	WATER SOFTENER	PEAK- 95 GPM each, PROGRESSIVE PARALLEL- 190 GPM	CULLIGAN #CTM-3000-FF Duplex Softener	NOTE #15	-	-	-	FRP VESSEL 24" Dia. x 95", 30" x 50" BRINE TANK	-	-	-	-	-	120	1	60

AD-3

NOTE #1: GERBER, CRANE, KOHLER, ZURN
NOTE # 2: OASIS, HAWS, SUNROC
NOTE #3: JUST
NOTE #4: MUSTEE, SWAN
NOTE #5: ZURN, JOSAM, J.R. SMITH, MIFAB
NOTE #6: JOSAM, ZURN, J.R. SMITH, WOODFORD
NOTE #7: LEONARD, POWERS, LAWLER
NOTE #8: ZURN, TOTO
NOTE #9: ZURN, TOTO
NOTE #10: ZURN, DELTA, T&S BRASS, CHICAGO FAUCET CO.
NOTE #11: AMT, B&G
NOTE #12: INTELLIHOT, RINNAI, NAVIEN
NOTE #13: ARMSTRONG, GRUNDFOS, TACO
NOTE #14: OATY, SIOUX CHIEF
NOTE #15: CULLIGAN, ECO WATER, PELICAN

GENERAL NOTES

A. WORK SHALL COMPLY WITH LOCAL, MUNICIPAL, AND STATE PLUMBING CODES.

B. THE SCOPE OF WORK SPECIFIED HEREIN AND IN THE SPECIFICATIONS SHALL BE COORDINATED WITH THE CONSTRUCTION MANAGER - REFER TO THE SCOPE OF WORK FOR EACH TRADE. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND CONSTRUCTION MANAGERS SCOPE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR CLARIFICATION. THE ARCHITECT/ENGINEER'S DECISION SHALL BE FINAL.

C. LAYOUT IS DIAGRAMMATIC. INSTALL PIPING AND EQUIPMENT TO MEET ACTUAL FIELD CONDITIONS. REVIEW PROJECT SPECIFICATIONS BEFORE STARTING ANY WORK. SUBMIT SHOP DRAWINGS OF WORK AS PER SPECIFICATIONS.

D. COORDINATE PHASING OF WORK AND PROVIDE TEMPORARY PIPING AND SERVICES AS REQUIRED FOR THE IMPLEMENTATION OF WORK.

E. LAYOUT WORK TO AVOID CONFLICTS BETWEEN DUCTWORK, LIGHTING, CEILINGS, PIPING AND BUILDING STRUCTURE.

F. SCHEDULE WORK TO AVOID DOWNTIME AND INCONVENIENCE TO OWNER.

G. TRADE COORDINATION

H. COORDINATE EQUIPMENT ELECTRICAL REQUIREMENTS (VOLTAGES, PHASE, LOAD, ETC.) BEFORE ORDERING ANY EQUIPMENT.

I. COORDINATE VENT THROUGH ROOF LOCATIONS WITH OUTDOOR AIR INTAKE LOCATIONS TO MAINTAIN A MINIMUM SEPARATION OF TEN FEET.

⬡ PLUMBING KITCHEN EQUIPMENT SCHEDULE

CONN. NO.	CONNECT TO	COLD WATER	HOT WATER	WASTE	FLOOR DRAINS	REMARKS
2	COOLER COIL	-	-	-	FD-1	-
7	FREEZER COIL	-	-	-	FD-1	-
14	ISLAND WORK TABLE	-	-	-	FS-1	-
15	HAND SINK	-	-	-	1½"	-
16	HAND SINK FAUCET	½"	½"	-	1½"	-
18	PREP SINK	½"	½"	-	FS-1	-
19	GARBAGE DISPOSAL	½"	-	-	2"	-
24	ICE MAKER	½"	-	-	FD-1	WATTS #LF3D
35	COMBI OVEN/STEAMER	(2)½"	½"	-	FS-1	WATTS #3D-BBFP
37	TILT SKILLET	½"	½"	-	FT	WATTS #3D-BBFP
38	FLOOR TROUGH	-	-	-	4"	-
45	THREE COMPARTMENT SINK	-	-	-	FS-1	-
47	SPLASH MOUNT FAUCET	¾"	¾"	-	-	-
48	SPLASH MOUNT PRE-RINSE FAUCET	½"	½"	-	-	-
49	GARBAGE DISPOSAL	½"	-	-	2"	-
51	DISH MACHINE	½"	½"	-	FS-1	-
52	DISH MACHINE BLOW DRYER	-	-	-	FS-1	-
63	MOP SINK	¾"	¾"	-	4"	-
70	DROP-IN HOT/COLD UNIT	-	-	-	FD-1	-
73	DROP-IN COLD WELL	-	-	-	FD-1	-
80	DROP-IN HOT/COLD UNIT	-	-	-	FD-1	-
83	DROP-IN COLD WELL	-	-	-	FD-1	-
90	DROP-IN HOT/COLD UNIT	-	-	-	FD-1	-
92	DROP-IN COLD WELL	-	-	-	FD-1	-

THIS CONTRACTOR SHALL PROVIDE ALL ROUGH-IN AND FINAL SERVICES AND CONNECT ALL WATER LINES, WASTE LINES, INDIRECT PIPING, ETC. FOR FIXTURES AND KITCHEN EQUIPMENT ITEMS. PROVIDE AND INSTALL ALL VALVES, STOPS, TRAPS, AND PRESSURE REGULATORS NECESSARY TO CONNECT LINES. FOR FURTHER INFORMATION AND DESCRIPTION OF KITCHEN EQUIPMENT BEING SUPPLIED REFER TO ARCHITECTURAL DRAWINGS, KITCHEN EQUIPMENT DRAWINGS, AND ENLARGED KITCHEN AREA DRAWINGS.

SYMBOLS/ABBREVIATIONS

	EXISTING UNDERGROUND SANITARY PIPING
ST	EXISTING UNDERGROUND STORM SEWER
	EXISTING COLD WATER PIPING
	EXISTING HOT WATER PIPING
	EXISTING HOT WATER RECIRCULATION PIPING
G	EXISTING GAS PIPING
FP	EXISTING FIRE PROTECTION PIPING
	EXISTING PIPING
	EXISTING PIPING TO BE REMOVED OR ABANDONED
	NEW UNDERGROUND SANITARY SEWER
ST	NEW UNDERGROUND STORM SEWER
	NEW COLD WATER PIPING
	NEW HOT WATER PIPING
	NEW HOT WATER RECIRCULATION PIPING
	NEW VENT PIPING
ST	NEW OVERHEAD STORM PIPING
	NEW OVERHEAD SANITARY PIPING
CA	COMPRESSED AIR PIPING
	PIPE DOWN
	PIPE UP
	SHUT-OFF VALVE
	CHECK VALVE
	HOSE BIBB/SILL COCK
	RELIEF VALVE
	SHOWER HEAD
	BALANCING COCK/MANUAL FLOW CONTROL VALVE
	THERMOMETER
	PRESSURE GAUGE
	SHEET NOTE TAG
	KITCHEN EQUIPMENT TAG

CO	CLEANOUT
CW	COLD WATER
DBP	DOMESTIC BOOSTER PUMP
DN	DOWN
EWC	ELECTRIC WATER COOLER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
GT	GREASE TRAP
HB	HOSE BIBB
HW	HOT WATER
HWR	HOT WATER RECIRCULATION
IM	ICEMAKER VALVE BOX
INV. EL.	INVERT ELEVATION
L	LAVATORY
LT	LAUNDRY TUB
MB	MOP BASIN
MH	MANHOLE
OFRD	OVERFLOW ROOF DRAIN
OSD	OPEN SITE DRAIN
PB	PLUMBERS BOX
RCP	HOT WATER RECIRCULATION PUMP
RD	ROOF DRAIN
S	SINK
SC	SILL COCK
SS	SERVICE SINK
TW	TEMPERED WATER
UR	URINAL
V	VENT
VTR	VENT THROUGH ROOF
WC	WATER CLOSET
WCO	WALL CLEANOUT
YCO	YARD CLEANOUT

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
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Email info@GibraltarDesign.com
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DATE 01/31/22
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DRAWN BY JM
CHECKED BY DJ

REGISTERED DAVID G. JANNEY NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

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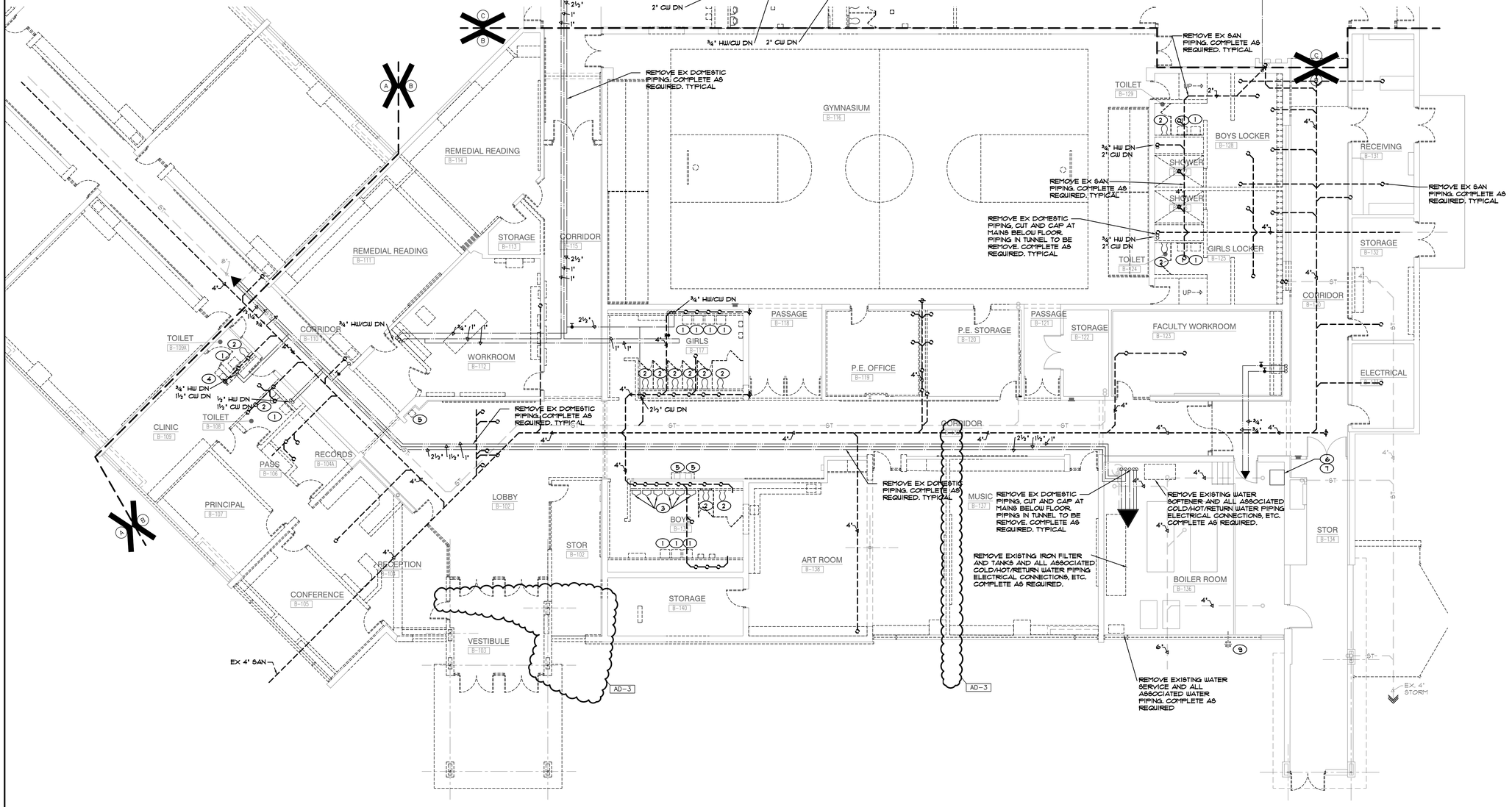
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
PLUMBING SCHEDULE, NOTES, SYMBOLS & ABBREVIATIONS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
P-001



SHEET NOTES

1. REMOVE EXISTING LAVATORY AND FAUCET AND ALL ASSOCIATED HOT/COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
2. REMOVE EXISTING WATER CLOSET AND FLUSH VALVE AND ALL ASSOCIATED COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
3. REMOVE EXISTING URINAL AND FLUSH VALVE AND ALL ASSOCIATED COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
4. REMOVE EXISTING SINK AND FAUCET AND ALL ASSOCIATED HOT/COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
5. REMOVE, PROTECT AND RELOCATE EXISTING ELECTRIC WATER COOLER. REMOVE ALL ASSOCIATED COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
6. REMOVE EXISTING GAS WATER HEATER AND ALL ASSOCIATED COLD/HOT/RETURN WATER PIPING, FLUES, GAS PIPING, ELECTRICAL CONNECTIONS, ETC. COMPLETE AS REQUIRED.
7. REMOVE EXISTING ELECTRIC HOT WATER RETURN PUMP AND ALL ASSOCIATED ELECTRICAL CONNECTIONS, VALVES, ETC. COMPLETE AS REQUIRED.
8. REMOVE EXISTING SHOWER AND FAUCET AND ALL ASSOCIATED HOT/COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
9. REMOVE EXISTING SILLCOCK AND ALL ASSOCIATED COLD WATER PIPING COMPLETE AS REQUIRED.

UNIT "B" PLUMBING FIRST FLOOR DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

NORTH

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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DAVID G. JANNEY REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

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DRAWING
UNIT "B" PLUMBING FIRST FLOOR DEMOLITION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
B PD102

SHEET NOTES

1. REMOVE EXISTING LAVATORY AND FAUCET AND ALL ASSOCIATED HOT/COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
2. REMOVE EXISTING WATER CLOSET AND FLUSH VALVE AND ALL ASSOCIATED COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
3. REMOVE EXISTING URINAL AND FLUSH VALVE AND ALL ASSOCIATED COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
4. REMOVE EXISTING SINK AND FAUCET AND ALL ASSOCIATED HOT/COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
5. REMOVE EXISTING SILLCOCK AND ALL ASSOCIATED COLD WATER PIPING COMPLETE AS REQUIRED.
6. REMOVE, PROTECT AND RELOCATE EXISTING ELECTRIC WATER COOLER, REMOVE ALL ASSOCIATED COLD WATER, SANITARY AND VENT PIPING COMPLETE AS REQUIRED.
7. REMOVE EXISTING FLOOR DRAIN AND ALL ASSOCIATED VENT PIPING AND CAP EXISTING SANITARY BELOW FLOOR AIR/WATERTIGHT COMPLETE AS REQUIRED.
8. REMOVE EXISTING SILLCOCK AND ALL ASSOCIATED COLD WATER PIPING COMPLETE AS REQUIRED.

UNIT "C" PLUMBING FIRST FLOOR DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

NORTH

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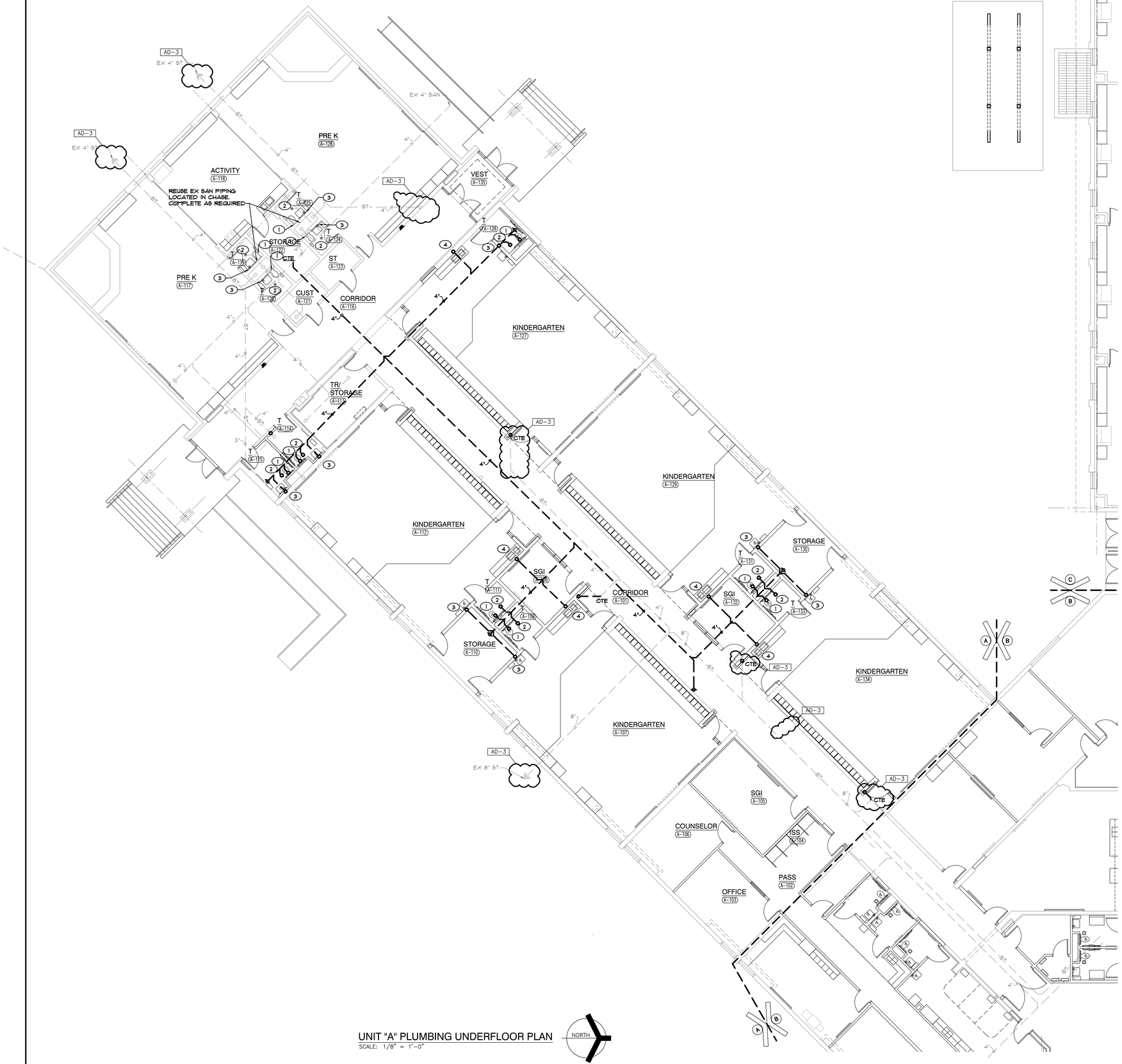
DRAWING
UNIT "C" PLUMBING FIRST FLOOR DEMOLITION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C PD103

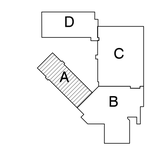
SHEET NOTES

1. 4" SANITARY UP TO WATER CLOSET.
2. 4" SANITARY UP TO FLOOR DRAIN.
3. 1½" SANITARY UP TO LAVATORY.
4. 2" SANITARY UP TO SINK.



UNIT "A" PLUMBING UNDERFLOOR PLAN
SCALE: 1/8" = 1'-0"

NORTH



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UNIT "A" PLUMBING UNDERFLOOR PLAN

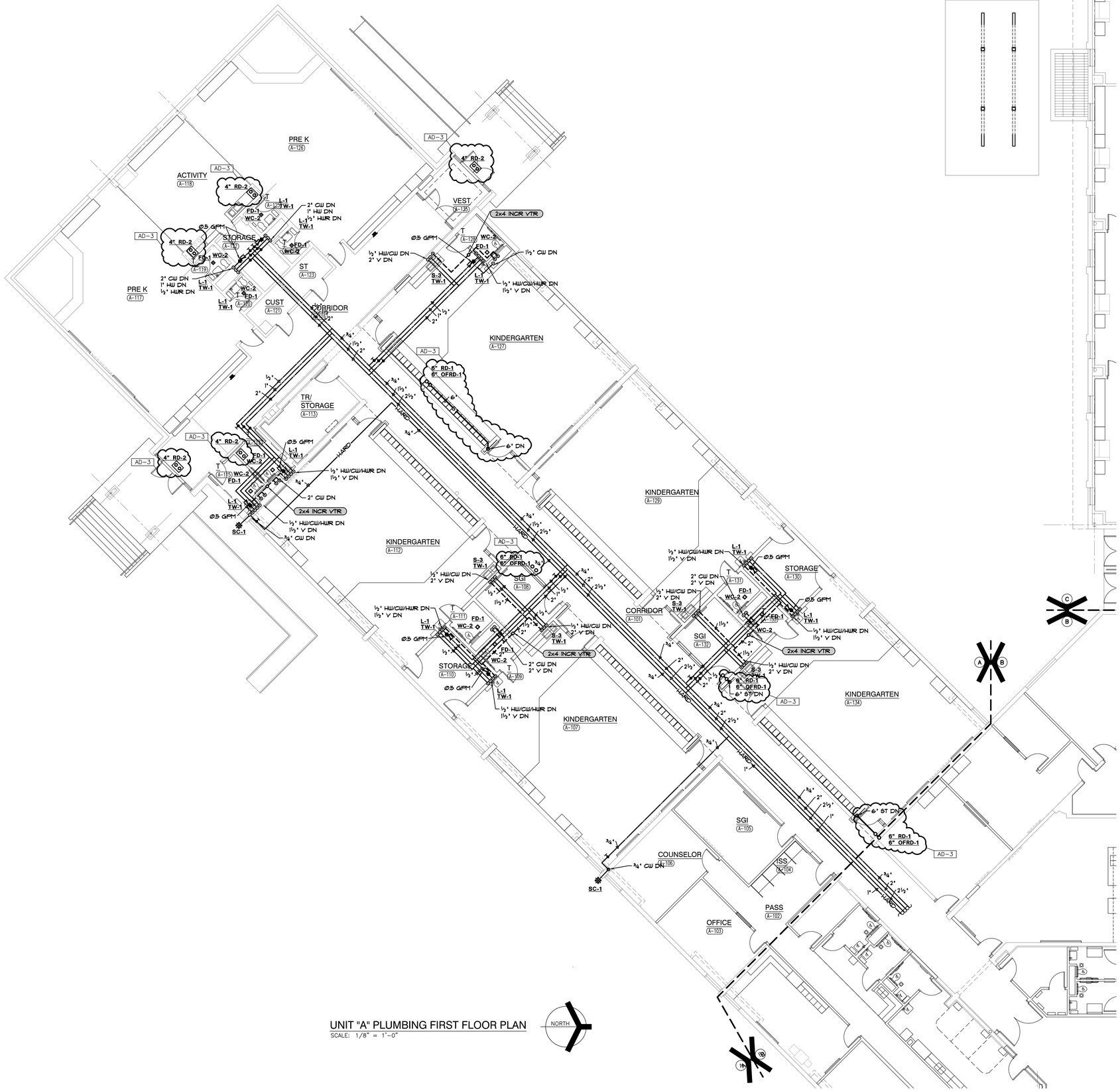
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A P-101

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

SHEET NOTES



UNIT "A" PLUMBING FIRST FLOOR PLAN

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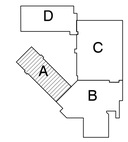
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER DAVID G. JANNEY

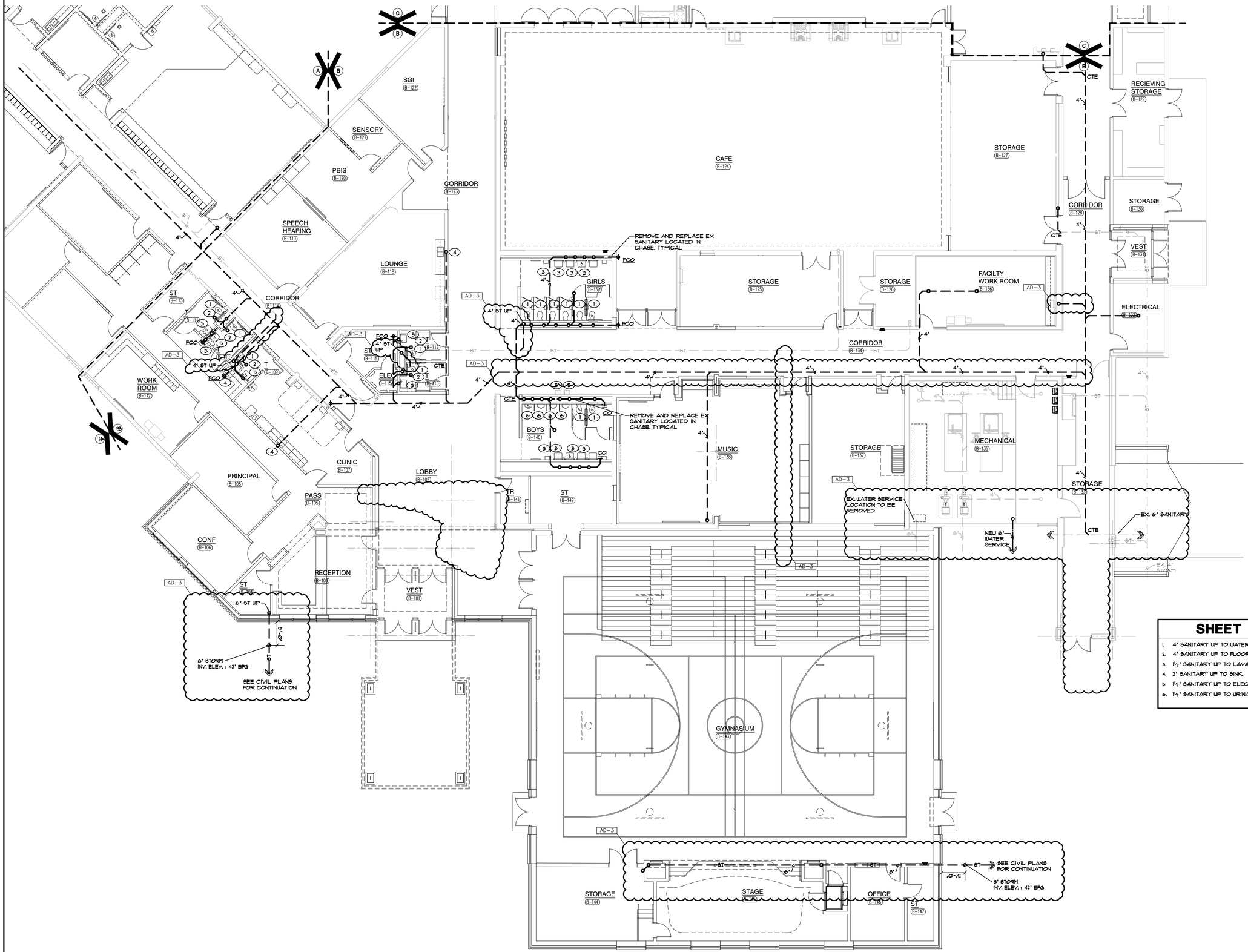
REVISIONS

MARK	DATE	ISSUED FOR
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "A" PLUMBING FIRST FLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
A P-102



SHEET NOTES

1. 4" SANITARY UP TO WATER CLOSET.
2. 4" SANITARY UP TO FLOOR DRAIN.
3. 1½" SANITARY UP TO LAVATORY.
4. 2" SANITARY UP TO SINK.
5. 1½" SANITARY UP TO ELECTRIC WATER COOLER.
6. 1½" SANITARY UP TO URINAL.

UNIT "B" PLUMBING UNDERFLOOR PLAN
SCALE: 1/8" = 1'-0"

NORTH

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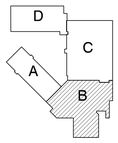
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY JM
CHECKED BY DJ

DAVID G. JANNEY
REGISTERED
NO. 10302590
STATE OF INDIANA
PROFESSIONAL ENGINEER

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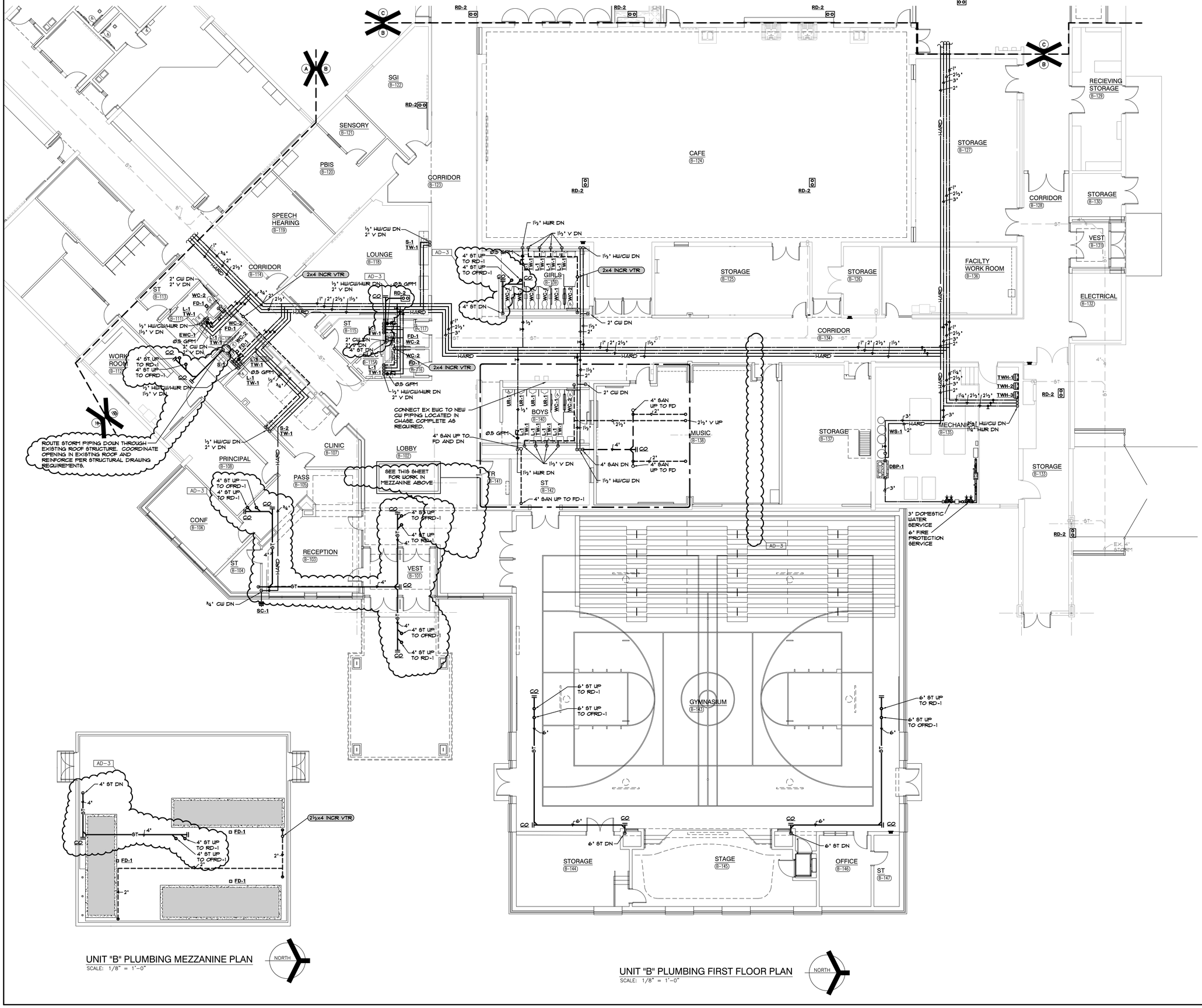
DRAWING
UNIT "B" PLUMBING UNDERFLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
B
P-103



UNIT "B" PLUMBING MEZZANINE PLAN

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

NORTH

UNIT "B" PLUMBING FIRST FLOOR PLAN

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

NORTH

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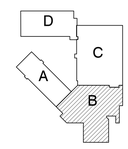
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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DRAWING

UNIT "B" PLUMBING FIRST FLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET B P-104

SHEET NOTES

1. 4" SANITARY UP TO WATER CLOSET.
2. 4" SANITARY UP TO FLOOR DRAIN.
3. 1½" SANITARY UP TO LAVATORY.
4. 4" SANITARY UP TO MOP BASIN.
5. 1½" SANITARY UP TO ELECTRIC WATER COOLER.
6. 1½" SANITARY UP TO URINAL.
7. 2" SANITARY UP TO SINK.
8. 4" GREASY WASTE UP TO FLOOR DRAIN.
9. 4" GREASY WASTE UP TO FLOOR SINK.
10. 4" GREASY WASTE UP TO KITCHEN EQUIPMENT
11. 3" GREASY WASTE UP TO KITCHEN EQUIPMENT
12. 2" GREASY WASTE UP TO KITCHEN EQUIPMENT

UNIT "C" PLUMBING UNDERFLOOR PLAN
SCALE: 1/8" = 1'-0"

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DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
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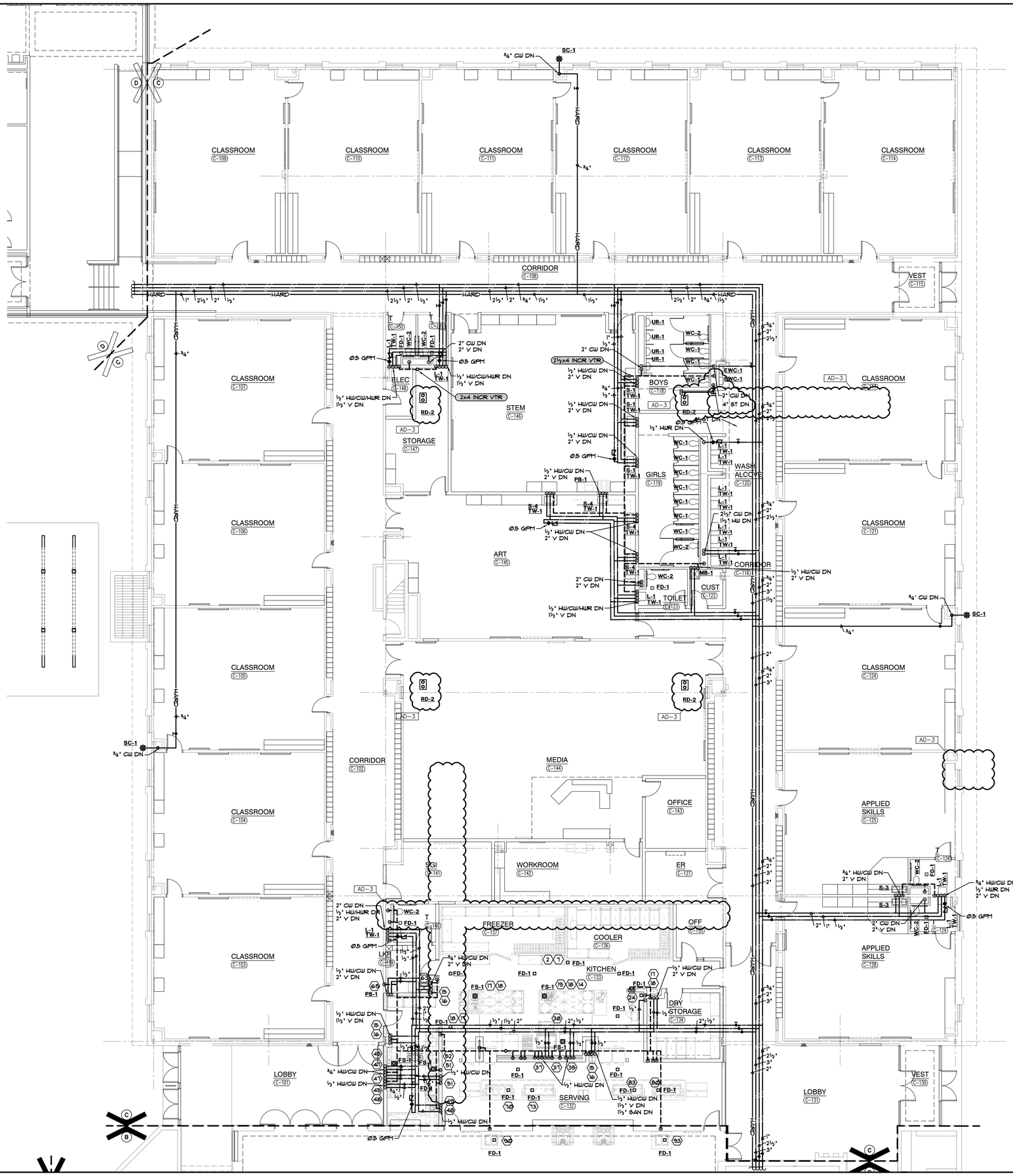
UNIT "C" PLUMBING UNDERFLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C P-105



UNIT "C" PLUMBING FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

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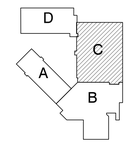
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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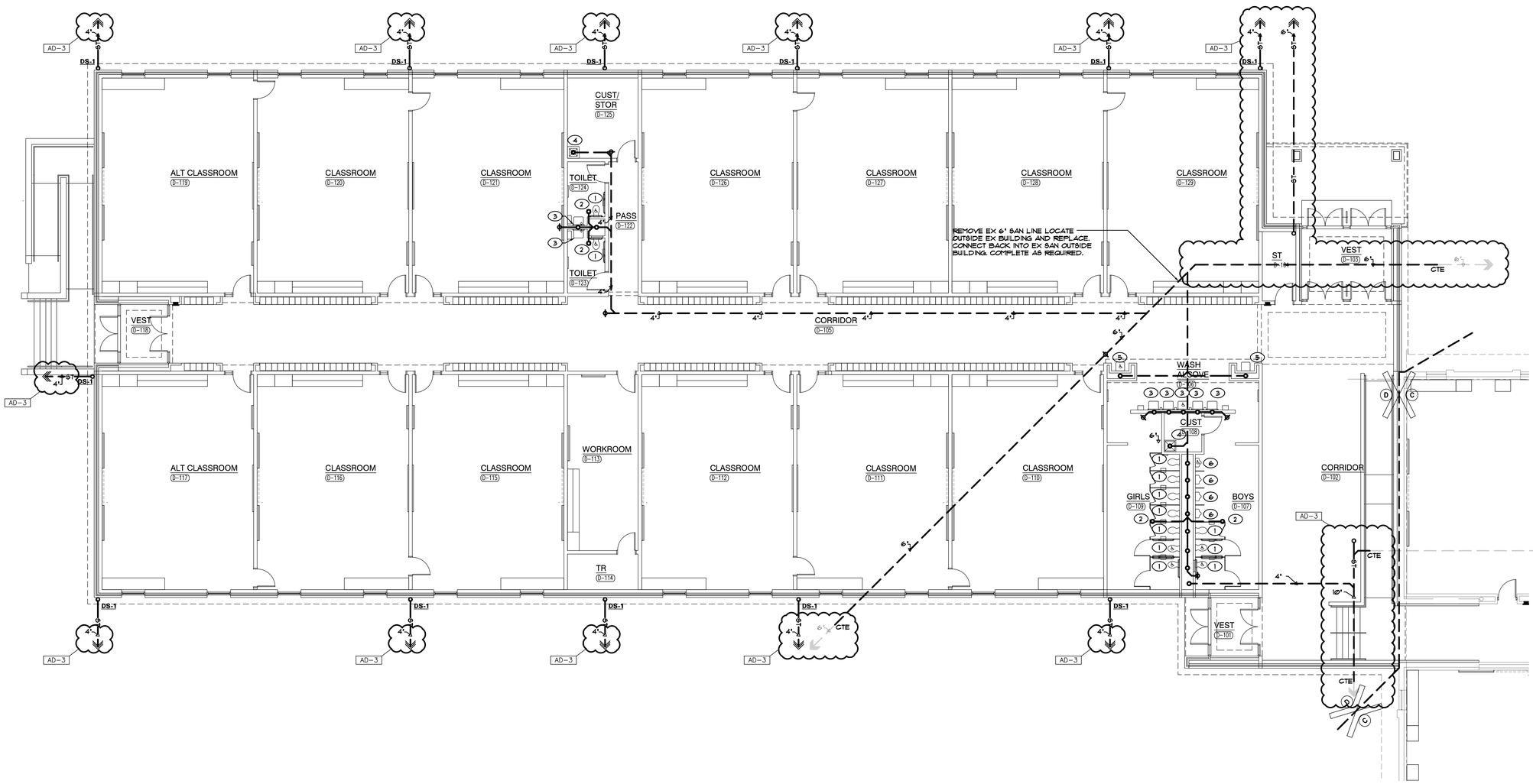
DRAWING
UNIT "C" PLUMBING FIRST FLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C P-106

SHEET NOTES

1. 4" SANITARY UP TO WATER CLOSET.
2. 4" SANITARY UP TO FLOOR DRAIN.
3. 1½" SANITARY UP TO LAVATORY.
4. 4" SANITARY UP TO MOP BASIN.
5. 1½" SANITARY UP TO ELECTRIC WATER COOLER.
6. 1½" SANITARY UP TO URINAL.



UNIT "D" PLUMBING UNDERFLOOR PLAN

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

NORTH

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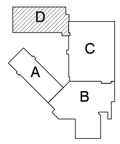
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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Email info@GibraltarDesign.com
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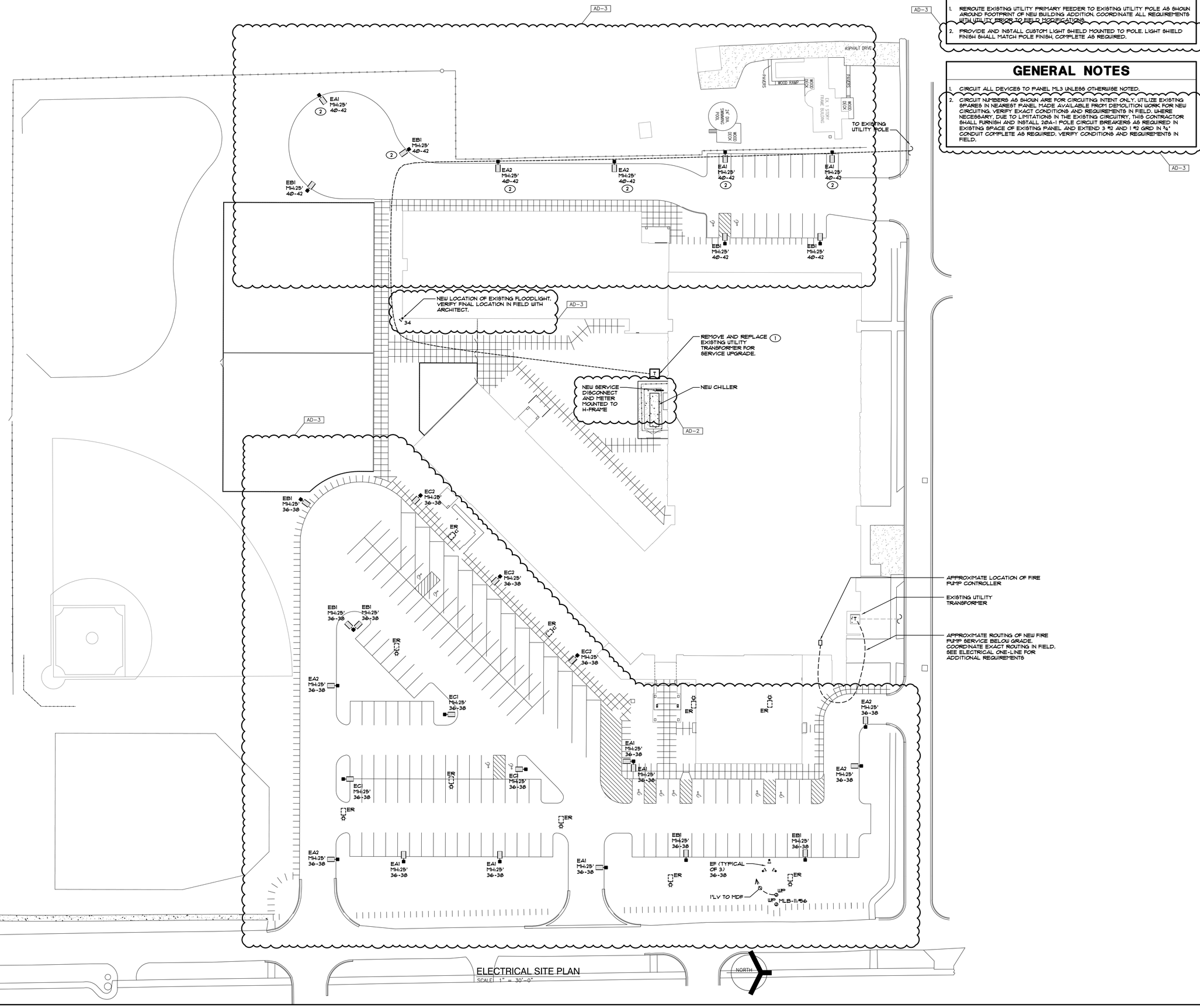
DRAWING
UNIT "D" PLUMBING UNDERFLOOR PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET D P-107



ELECTRICAL SITE PLAN

SCALE: 1" = 30'-0"

SHEET NOTES

1. REROUTE EXISTING UTILITY PRIMARY FEEDER TO EXISTING UTILITY POLE AS SHOWN AROUND FOOTPRINT OF NEW BUILDING ADDITION. COORDINATE ALL REQUIREMENTS WITH UTILITY PRIOR TO FIELD MODIFICATIONS.
2. PROVIDE AND INSTALL CUSTOM LIGHT SHIELD MOUNTED TO POLE. LIGHT SHIELD FINISH SHALL MATCH POLE FINISH, COMPLETE AS REQUIRED.

GENERAL NOTES

1. CIRCUIT ALL DEVICES TO PANEL ML3 UNLESS OTHERWISE NOTED.
2. CIRCUIT NUMBERS AS SHOWN ARE FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES IN NEAREST PANEL MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 3 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.

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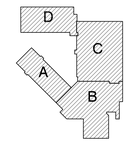
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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REVISIONS

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AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
ELECTRICAL SITE PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
E-002

SHEET NOTES

1. REMOVE, RELOCATE, & REPLACE EX WESTINGHOUSE PANEL 'ML9', 120/208V, 3Φ, 4W, 225A
2. REMOVE, RELOCATE, & REPLACE EX WESTINGHOUSE PANEL 'ML10', 120/208V, 3Φ, 4W, 225A
3. REMOVE, RELOCATE, & REPLACE EX GE PANEL 'HP-3', 120/208V, 3Φ, 4W, 225A
4. REMOVE, RELOCATE, & REPLACE EX GE PANEL 'CCP2', 120/208V, 3Φ, 4W, 225A
5. REMOVE & RELOCATE EX WESTINGHOUSE PANEL 'ML8', 120/208V, 3Φ, 4W, 225A
6. REMOVE & RELOCATE EX GE PANEL 'CCP1', 120/208V, 3Φ, 4W, 225A
7. REMOVE, EX WESTINGHOUSE PANEL 'ML6', 120/208V, 3Φ, 4W, 225A
8. REMOVE, EX WESTINGHOUSE PANEL 'ML7', 120/208V, 3Φ, 4W, 225A
9. REMOVE, EX WESTINGHOUSE PANEL 'ML4', 120/208V, 3Φ, 4W, 225A
10. REMOVE, EX WESTINGHOUSE PANEL 'ML14', 120/208V, 3Φ, 4W, 225A
11. REMOVE, EX WESTINGHOUSE PANEL 'ML5', 120/208V, 3Φ, 4W, 600A
12. EXISTING MECHANICAL EQUIPMENT TO BE REMOVED. DISCONNECT AND REMOVE EXISTING ELECTRICAL CONNECTION, COMPLETE AS REQUIRED.

UNIT "C" ELECTRICAL FIRST FLOOR DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

NORTH

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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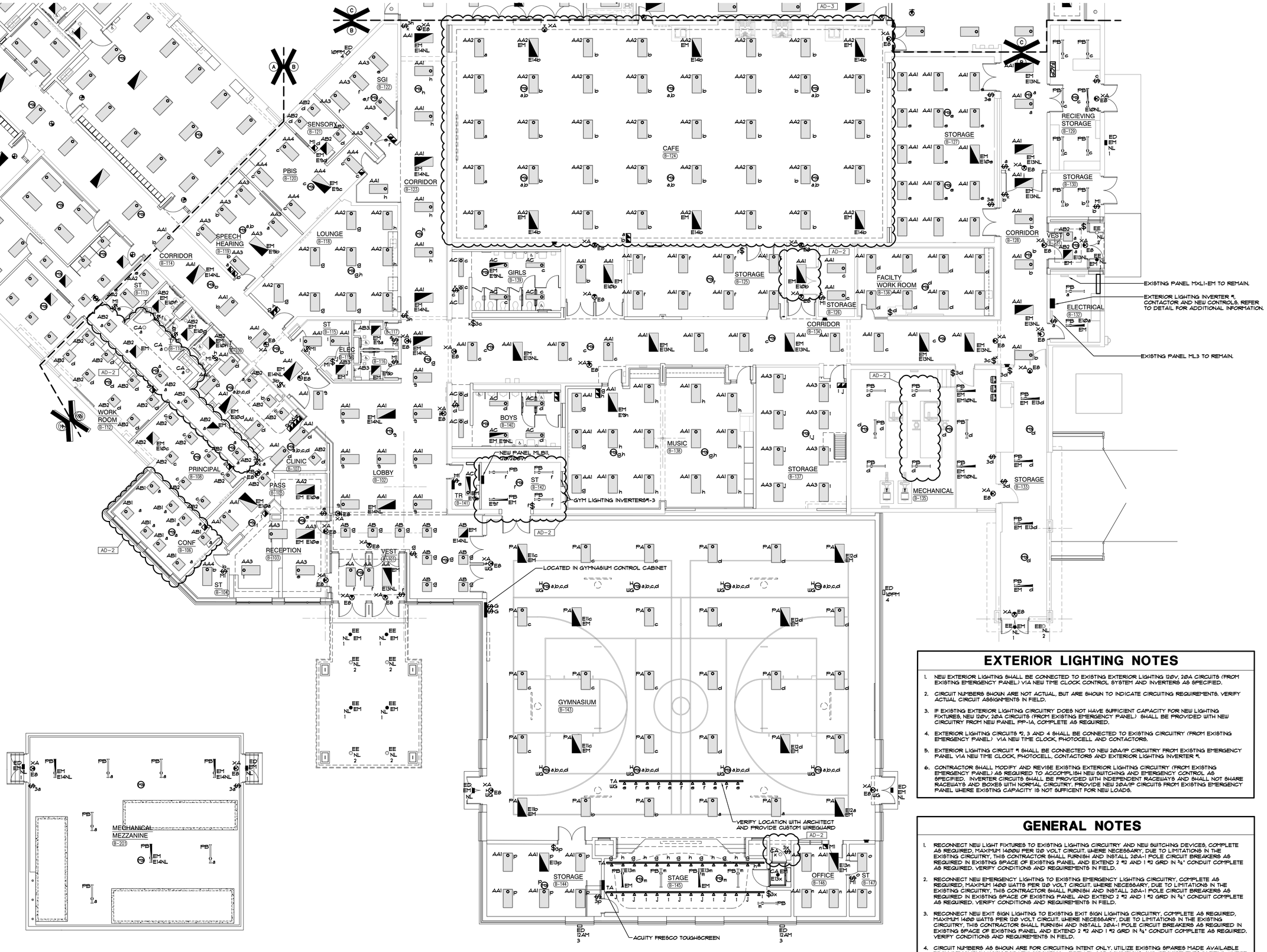
DRAWING
UNIT "C" ELECTRICAL FIRST FLOOR DEMOLITION PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C ED103



UNIT "B" ELECTRICAL LIGHTING MEZZANINE PLAN
SCALE: 1/8" = 1'-0"

NORTH

UNIT "B" ELECTRICAL FIRST FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

NORTH

EXTERIOR LIGHTING NOTES

1. NEW EXTERIOR LIGHTING SHALL BE CONNECTED TO EXISTING EXTERIOR LIGHTING 120V, 20A CIRCUITS (FROM EXISTING EMERGENSY PANEL) VIA NEW TIME CLOCK CONTROL SYSTEM AND INVERTERS AS SPECIFIED.
2. CIRCUIT NUMBERS SHOWN ARE NOT ACTUAL, BUT ARE SHOWN TO INDICATE CIRCUITING REQUIREMENTS. VERIFY ACTUAL CIRCUIT ASSIGNMENTS IN FIELD.
3. IF EXISTING EXTERIOR LIGHTING CIRCUITRY DOES NOT HAVE SUFFICIENT CAPACITY FOR NEW LIGHTING FIXTURES, NEW 120V, 20A CIRCUITS (FROM EXISTING EMERGENCY PANEL) SHALL BE PROVIDED WITH NEW CIRCUITRY FROM NEW PANEL EPP-1A, COMPLETE AS REQUIRED.
4. EXTERIOR LIGHTING CIRCUITS #2, 3 AND 4 SHALL BE CONNECTED TO EXISTING CIRCUITRY (FROM EXISTING EMERGENCY PANEL) VIA NEW TIME CLOCK, PHOTOCELL AND CONTACTORS.
5. EXTERIOR LIGHTING CIRCUIT #1 SHALL BE CONNECTED TO NEW 20A/1P CIRCUITRY FROM EXISTING EMERGENCY PANEL VIA NEW TIME CLOCK, PHOTOCELL, CONTACTORS AND EXTERIOR LIGHTING INVERTER #1.
6. CONTRACTOR SHALL MODIFY AND REVISE EXISTING EXTERIOR LIGHTING CIRCUITRY (FROM EXISTING EMERGENCY PANEL) AS REQUIRED TO ACCOMPLISH NEW SWITCHING AND EMERGENCY CONTROL AS SPECIFIED. INVERTER CIRCUITS SHALL BE PROVIDED WITH INDEPENDENT RACEWAYS AND SHALL NOT SHARE RACEWAYS AND BOXES WITH NORMAL CIRCUITRY. PROVIDE NEW 20A/1P CIRCUITS FROM EXISTING EMERGENCY PANEL WHERE EXISTING CAPACITY IS NOT SUFFICENT FOR NEW LOADS.

GENERAL NOTES

1. RECONNECT NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUITRY AND NEW SWITCHING DEVICES, COMPLETE AS REQUIRED, MAXIMUM 1400W PER 120 VOLT CIRCUIT. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
2. RECONNECT NEW EMERGENCY LIGHTING TO EXISTING EMERGENCY LIGHTING CIRCUITRY, COMPLETE AS REQUIRED, MAXIMUM 1400 WATTS PER 120 VOLT CIRCUIT. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
3. RECONNECT NEW EXIT SIGN LIGHTING TO EXISTING EXIT SIGN LIGHTING CIRCUITRY, COMPLETE AS REQUIRED, MAXIMUM 1400 WATTS PER 120 VOLT CIRCUIT. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
4. CIRCUIT NUMBERS AS SHOWN ARE FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
5. TYPE PA EMERGENCY FIXTURES IN GYM TO BE PROVIDED WITH EMERGENCY POWER BY THREE(3) MYERS LV-5-X 1800VA LIGHTING INVERTERS AND VL924 BY PASSES.

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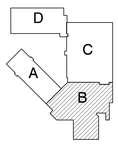
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



KEY PLAN

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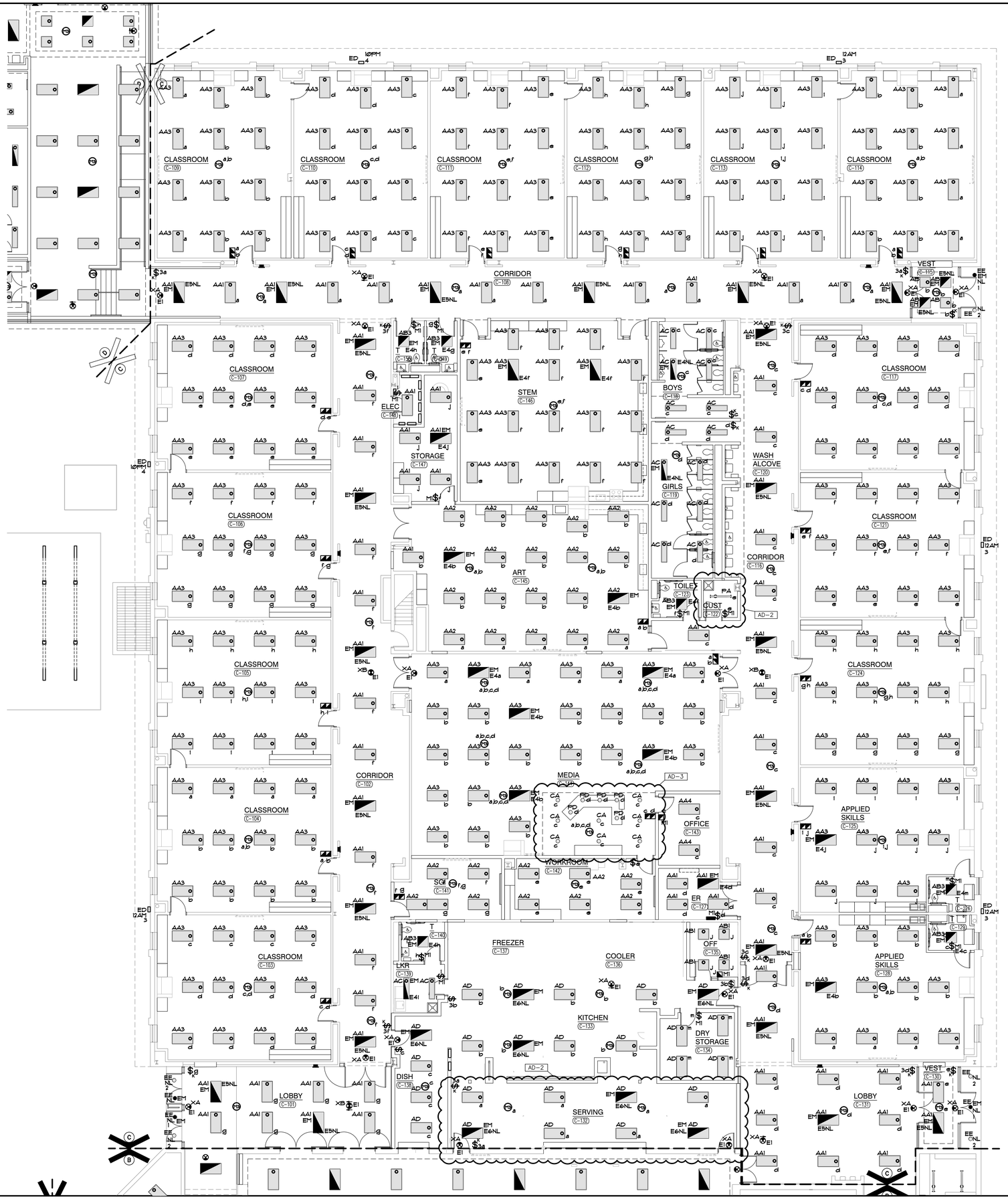
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "B" ELECTRICAL FIRST FLOOR LIGHTING PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET B EL102



GENERAL NOTES

1. RECONNECT NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUITRY AND NEW SWITCHING DEVICES, COMPLETE AS REQUIRED, MAXIMUM 1400W PER 120 VOLT CIRCUIT. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
2. RECONNECT NEW EMERGENCY LIGHTING TO EXISTING EMERGENCY LIGHTING CIRCUITRY, COMPLETE AS REQUIRED, MAXIMUM 1400 WATTS PER 120 VOLT CIRCUIT. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
3. RECONNECT NEW EXIT SIGN LIGHTING TO EXISTING EXIT SIGN LIGHTING CIRCUITRY, COMPLETE AS REQUIRED, MAXIMUM 1400 WATTS PER 120 VOLT CIRCUIT. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
4. CIRCUIT NUMBERS AS SHOWN ARE FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.

EXTERIOR LIGHTING NOTES

1. NEW EXTERIOR LIGHTING SHALL BE CONNECTED TO EXISTING EXTERIOR LIGHTING 120V, 20A CIRCUITS (FROM EXISTING EMERGENCY PANEL) VIA NEW TIME CLOCK CONTROL SYSTEM AND INVERTERS AS SPECIFIED.
2. CIRCUIT NUMBERS SHOWN ARE NOT ACTUAL, BUT ARE SHOWN TO INDICATE CIRCUITING REQUIREMENTS. VERIFY ACTUAL CIRCUIT ASSIGNMENTS IN FIELD.
3. IF EXISTING EXTERIOR LIGHTING CIRCUITRY DOES NOT HAVE SUFFICIENT CAPACITY FOR NEW LIGHTING FIXTURES, NEW 120V, 20A CIRCUITS (FROM EXISTING EMERGENCY PANEL) SHALL BE PROVIDED WITH NEW CIRCUITRY FROM NEW PANEL PP-1A, COMPLETE AS REQUIRED.
4. EXTERIOR LIGHTING CIRCUITS #2, 3 AND 4 SHALL BE CONNECTED TO EXISTING CIRCUITRY (FROM EXISTING EMERGENCY PANEL) VIA NEW TIME CLOCK, PHOTOCELL AND CONTACTORS.
5. EXTERIOR LIGHTING CIRCUIT #1 SHALL BE CONNECTED TO NEW 20A/1P CIRCUITRY FROM EXISTING EMERGENCY PANEL VIA NEW TIME CLOCK, PHOTOCELL, CONTACTORS AND EXTERIOR LIGHTING INVERTER #1.
6. CONTRACTOR SHALL MODIFY AND REVISE EXISTING EXTERIOR LIGHTING CIRCUITRY (FROM EXISTING EMERGENCY PANEL) AS REQUIRED TO ACCOMPLISH NEW SWITCHING AND EMERGENCY CONTROL AS SPECIFIED. INVERTER CIRCUITS SHALL BE PROVIDED WITH INDEPENDENT RACEWAYS AND SHALL NOT SHARE RACEWAYS AND BOXES WITH NORMAL CIRCUITRY. PROVIDE NEW 20A/1P CIRCUITS FROM EXISTING EMERGENCY PANEL WHERE EXISTING CAPACITY IS NOT SUFFICENT FOR NEW LOADS.

UNIT "C" ELECTRICAL FIRST FLOOR LIGHTING PLAN

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

NORTH

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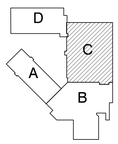
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY AG
CHECKED BY DJ

DAVID G. JANNEY REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "C" ELECTRICAL FIRST FLOOR LIGHTING PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
C EL103

UNIT "A" ELECTRICAL FIRST FLOOR POWER PLAN

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

SHEET NOTES

1. EX WESTINGHOUSE PANEL 'ACP1', 120/208V, 3Φ, 4W, 225A TO REMAIN
2. EX WESTINGHOUSE PANEL 'ML1', 120/208V, 3Φ, 4W, 225A TO REMAIN
3. NEW LOCATION OF EX GE PANEL 'A', 120/208V, 3Φ, 4W.
4. CIRCUIT DEVICES IN ROOM TO PANEL EM-TECH1.

GENERAL NOTES

1. CIRCUIT NUMBERS AS SHOWN FOR NEW POWER DEVICES ARE FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES IN NEAREST PANEL MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
2. NEW DEVICES SHOWN ON EXISTING WALLS SHALL BE INSTALLED RECESSED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS AS REQUIRED FOR INSTALLATION OF RECESSED DEVICES AND RACEWAYS. ONLY WHERE EXISTING WALLS ARE MASONRY AND NOT SUITABLE FOR CUTTING, DEVICES SHALL BE INSTALLED IN SURFACE RACEWAY PER SPECIFICATION REQUIREMENTS. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD.

AD-3

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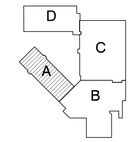
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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REGISTERED DAVID G. JANNEY NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

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AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "A" ELECTRICAL FIRST FLOOR POWER PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

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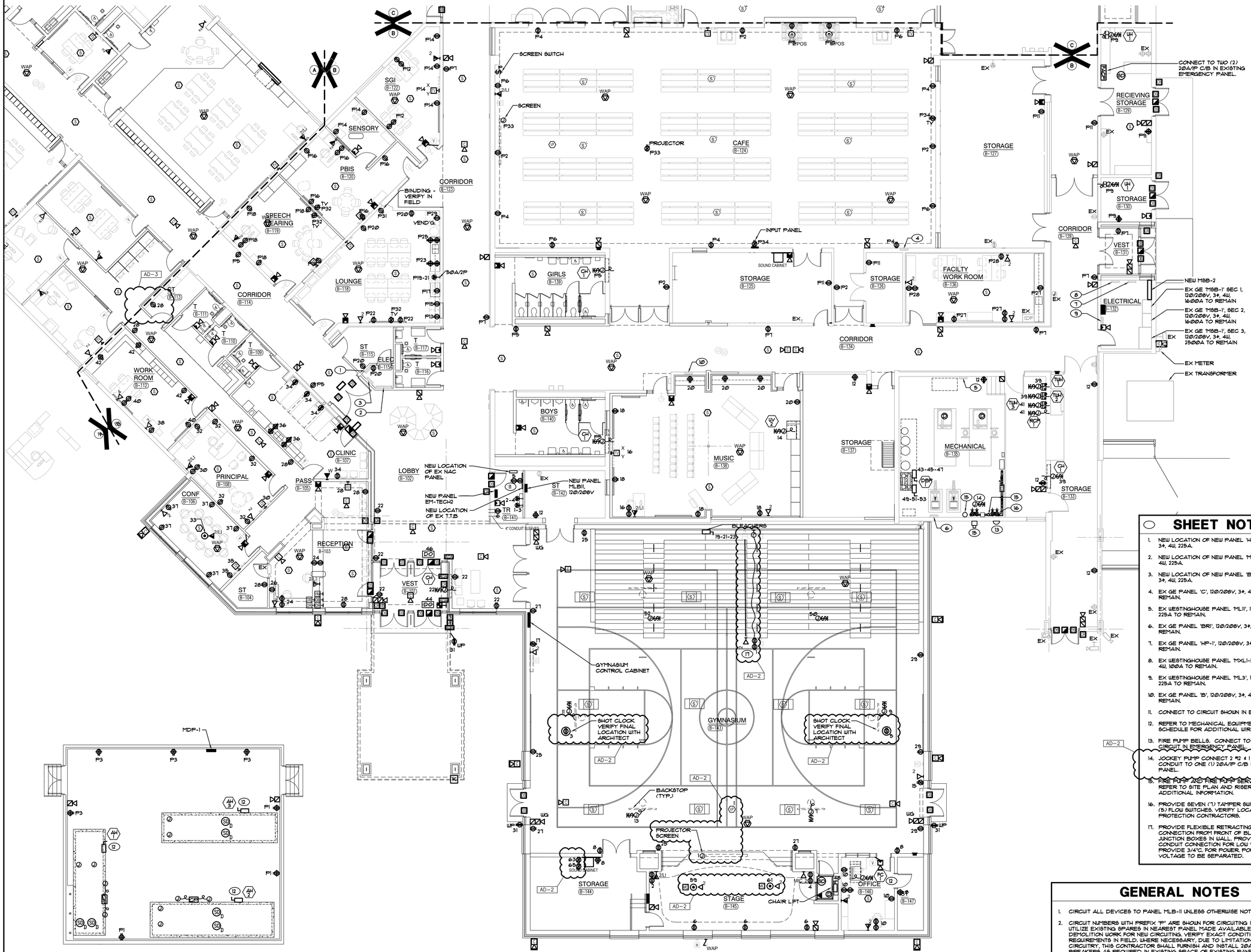
SHEET
A EP101



SHEET NOTES

1. NEW LOCATION OF NEW PANEL 'HP-2', 120/208V, 3Φ, 4W, 225A.
2. NEW LOCATION OF NEW PANEL 'ML2', 120/208V, 3Φ, 4W, 225A.
3. NEW LOCATION OF NEW PANEL 'ECP1', 120/208V, 3Φ, 4W, 225A.
4. EX GE PANEL 'C', 120/208V, 3Φ, 4W, XA TO REMAIN.
5. EX WESTINGHOUSE PANEL 'ML1', 120/208V, 3Φ, 4W, 225A TO REMAIN.
6. EX GE PANEL 'BR1', 120/208V, 3Φ, 4W, 225A TO REMAIN.
7. EX GE PANEL 'HP-1', 120/208V, 3Φ, 4W, 225A TO REMAIN.
8. EX WESTINGHOUSE PANEL 'MXL1-EM1', 120/208V, 3Φ, 4W, 1600A TO REMAIN.
9. EX WESTINGHOUSE PANEL 'ML3', 120/208V, 3Φ, 4W, 225A TO REMAIN.
10. EX GE PANEL 'B', 120/208V, 3Φ, 4W, XA TO REMAIN.
11. CONNECT TO CIRCUIT SHOWN IN EM - TECH2.
12. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL WIRING DETAILS.
13. FIRE PUMP BELLS. CONNECT TO ONE (1) 20A/1P CIRCUIT IN EMERGENCY PANEL.
14. JOCKEY PUMP CONNECT 2 #12 & 1 #12 GRD. - ¾" CONDUIT TO ONE (1) 20A/1P C/B IN EMERGENCY PANEL.
15. FIRE PUMP AND FIRE PUMP SERVICE METER. REFER TO SITE PLAN AND RISER FOR ADDITIONAL INFORMATION.
16. PROVIDE SEVEN ('7') TAMPER SWITCHES AND FIVE (5) FLOW SWITCHES. VERIFY LOCATION WITH FIRE PROTECTION CONTRACTORS.
17. PROVIDE FLEXIBLE RETRACTING CABLE CONNECTION FROM FRONT OF BLEACHER TO JUNCTION BOXES IN WALL. PROVIDE MINIMUM 2" CONDUIT CONNECTION FOR LOW VOLTAGE BOXES. PROVIDE 3/4"C. FOR POWER, POWER AND LOW VOLTAGE TO BE SEPARATED.

GENERAL NOTES

1. CIRCUIT ALL DEVICES TO PANEL MLB-11 UNLESS OTHERWISE NOTED.
2. CIRCUIT NUMBERS WITH PREFIX 'P' ARE SHOWN FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES IN NEAREST PANEL MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD. IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
3. NEW DEVICES SHOWN ON EXISTING WALLS SHALL BE INSTALLED RECESSED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS AS REQUIRED FOR INSTALLATION OF RECESSED DEVICES AND RACEWAYS. ONLY WHERE EXISTING WALLS ARE MASONRY AND NOT SUITABLE FOR CUTTING, DEVICES SHALL BE INSTALLED IN SURFACE RACEWAY PER SPECIFICATION REQUIREMENTS. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD.

UNIT "B" ELECTRICAL POWER MEZZANINE PLAN
SCALE: 1/8" = 1'-0"

UNIT "B" ELECTRICAL FIRST FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

NORTH

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY AC
CHECKED BY DJ

REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER DAVID G. JANNEY

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "B" ELECTRICAL FIRST FLOOR POWER PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

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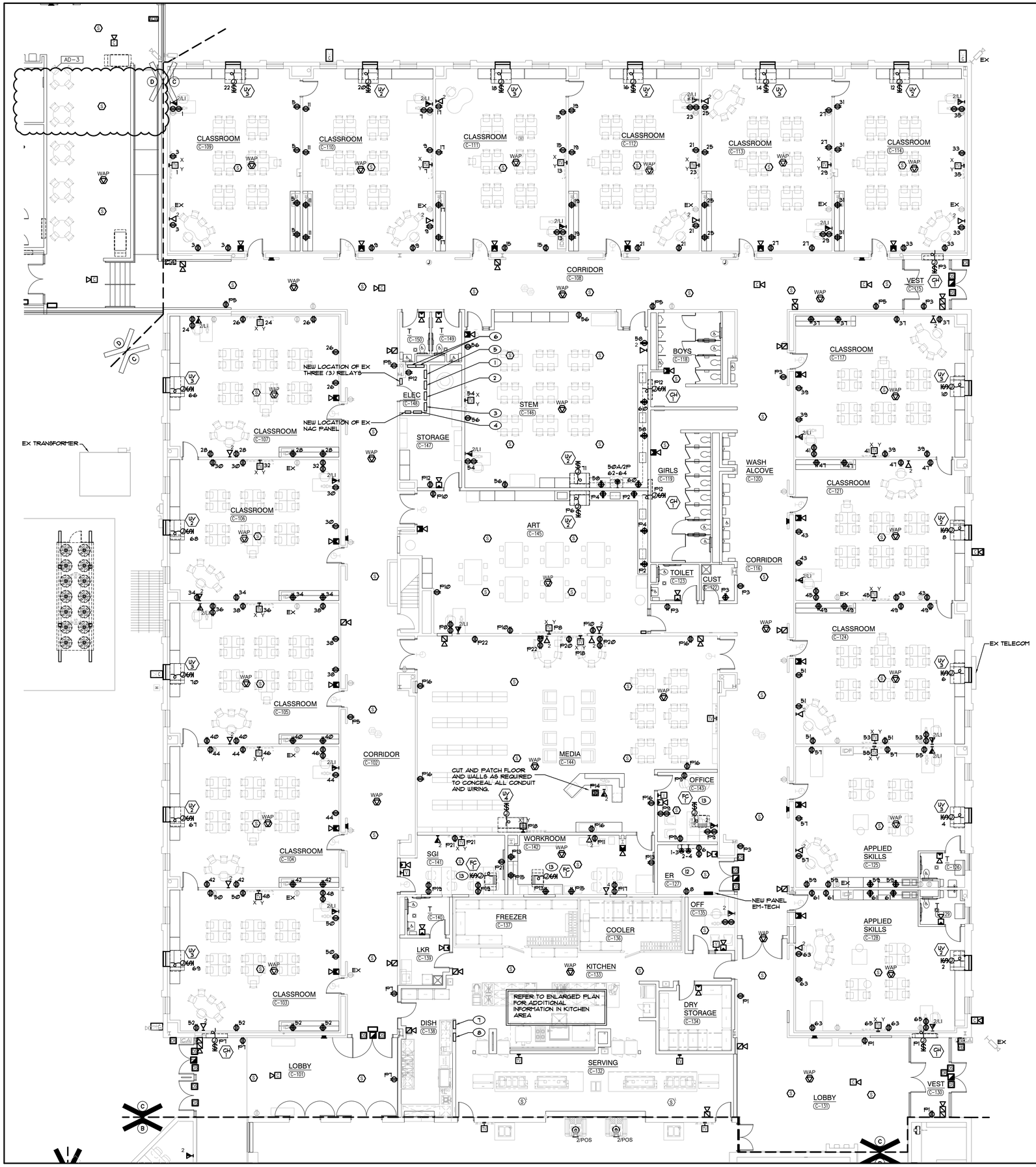
SHEET
B
EP102



SHEET NOTES

1. NEW LOCATION OF NEW PANEL 'ML9', 120/208V, 3Φ, 4W, 225A.
2. NEW LOCATION OF NEW PANEL 'ML10', 120/208V, 3Φ, 4W, 225A.
3. NEW LOCATION OF NEW PANEL 'HP-3', 120/208V, 3Φ, 4W, 225A.
4. NEW LOCATION OF NEW PANEL 'CCP2', 120/208V, 3Φ, 4W, 225A.
5. NEW LOCATION OF EX WESTINGHOUSE 'ML8', 120/208V, 3Φ, 4W, 225A.
6. NEW LOCATION OF EX GE PANEL 'CCP1', 120/208V, 3Φ, 4W, 225A.
7. NEW PANEL KP-1.
8. NEW PANEL KP-2.
9. NOT USED.
10. NOT USED.
11. NOT USED.
12. CONNECT TO PANEL EM-TECH.
13. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL WIRING DETAILS.

GENERAL NOTES

1. CIRCUIT NUMBERS WITHOUT A PREFIX ARE SHOWN FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES IN NEAREST PANEL MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
2. CIRCUIT NUMBERS WITH PREFIX 'P' ARE SHOWN FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES IN NEAREST PANEL MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
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AD-3

UNIT "C" ELECTRICAL FIRST FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

NORTH

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PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY AG
CHECKED BY DJ

REGISTERED DAVID G. JANNEY NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

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AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "C" ELECTRICAL FIRST FLOOR POWER PLAN

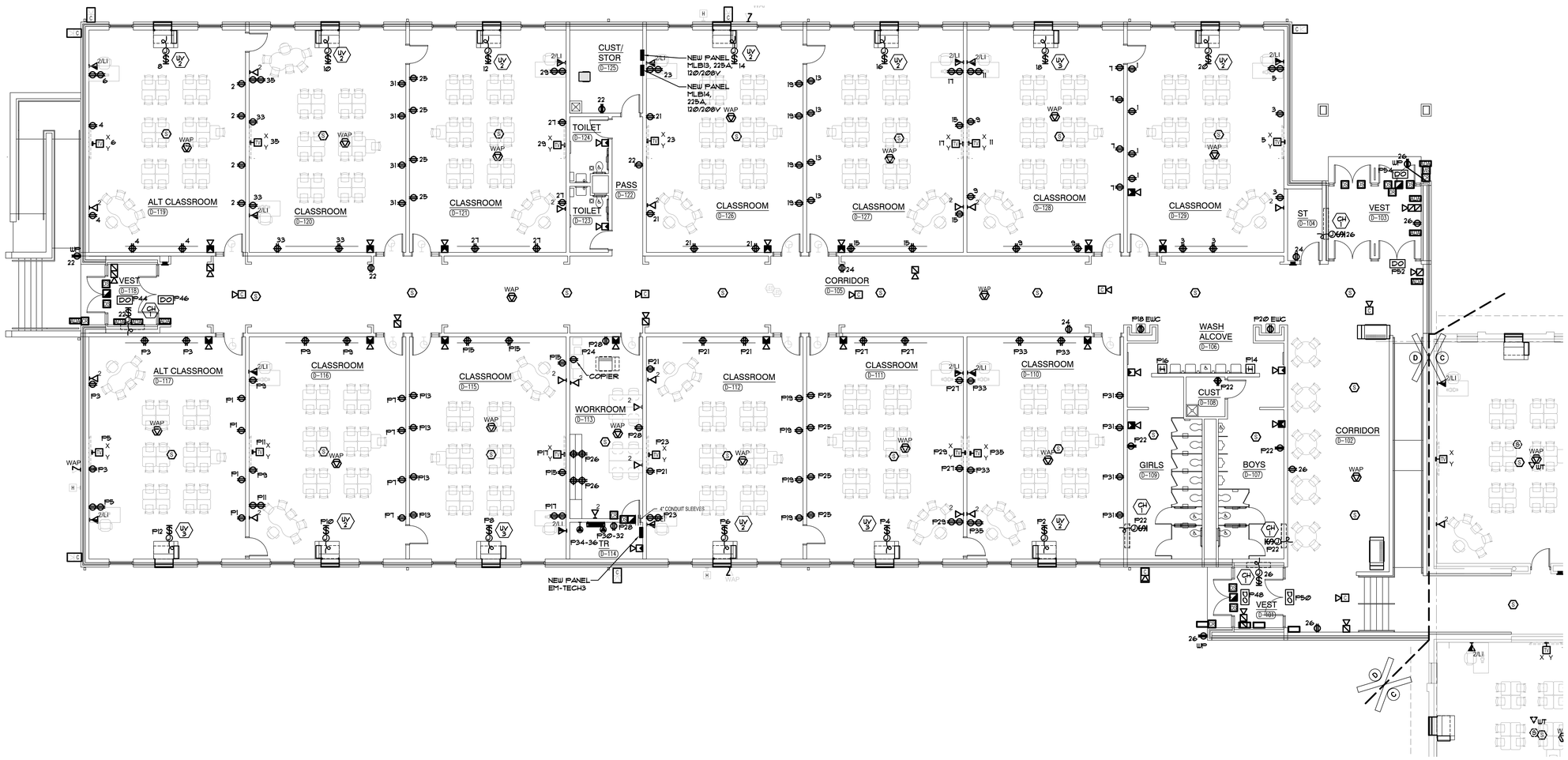
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET C EP103

GENERAL NOTES

1. CIRCUIT ALL DEVICES TO PANEL MLB-14 UNLESS OTHERWISE NOTED.
2. CIRCUIT ALL DEVICES WITH CIRCUIT PREFIX 'P' TO PANEL MLB-13 UNLESS OTHERWISE NOTED.
3. NEW DEVICES SHOWN ON EXISTING WALLS SHALL BE INSTALLED RECESSED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS AS REQUIRED FOR INSTALLATION OF RECESSED DEVICES AND RACEWAYS. ONLY WHERE EXISTING WALLS ARE MASONRY AND NOT SUITABLE FOR CUTTING, DEVICES SHALL BE INSTALLED IN SURFACE RACEWAY PER SPECIFICATION REQUIREMENTS. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD.

AD-3



UNIT "D" ELECTRICAL FIRST FLOOR POWER PLAN

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

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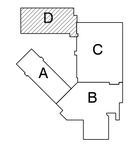
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

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REVISIONS

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AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
UNIT "D" ELECTRICAL FIRST FLOOR POWER PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

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SHEET
D
EP104

SHEET NOTES

1. REFER TO MECHANICAL EQUIPMENT CONNECTION FOR ADDITIONAL CIRCUITING AND WIRING INFORMATION.

GENERAL NOTES

1. CIRCUIT NUMBERS WITHOUT A PREFIX ARE SHOWN FOR CIRCUITING INTENT ONLY. UTILIZE EXISTING SPARES IN NEAREST PANEL MADE AVAILABLE FROM DEMOLITION WORK FOR NEW CIRCUITING. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE NECESSARY, DUE TO LIMITATIONS IN THE EXISTING CIRCUITRY, THIS CONTRACTOR SHALL FURNISH AND INSTALL 20A-1 POLE CIRCUIT BREAKERS AS REQUIRED IN EXISTING SPACE OF EXISTING PANEL AND EXTEND 2 #12 AND 1 #12 GRD IN ¾" CONDUIT COMPLETE AS REQUIRED. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD.
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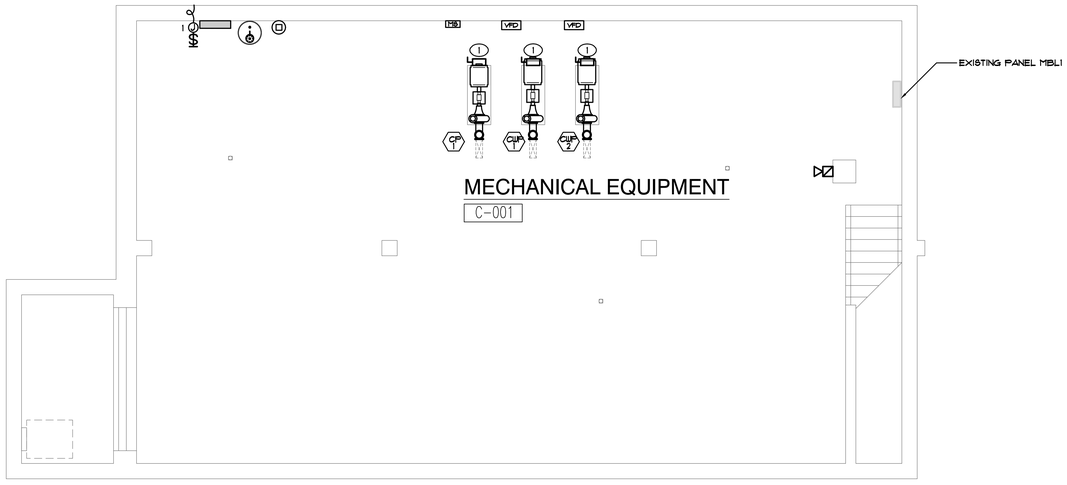
AD-3



BASEMENT CHILLER ROOM
ELECTRICAL LOWER LEVEL POWER PLAN
SCALE: 1/4" = 1'-0"

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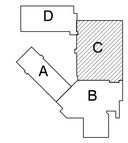
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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Indianapolis, IN 46260
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Email info@GibraltarDesign.com
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PROFESSIONAL ENGINEER

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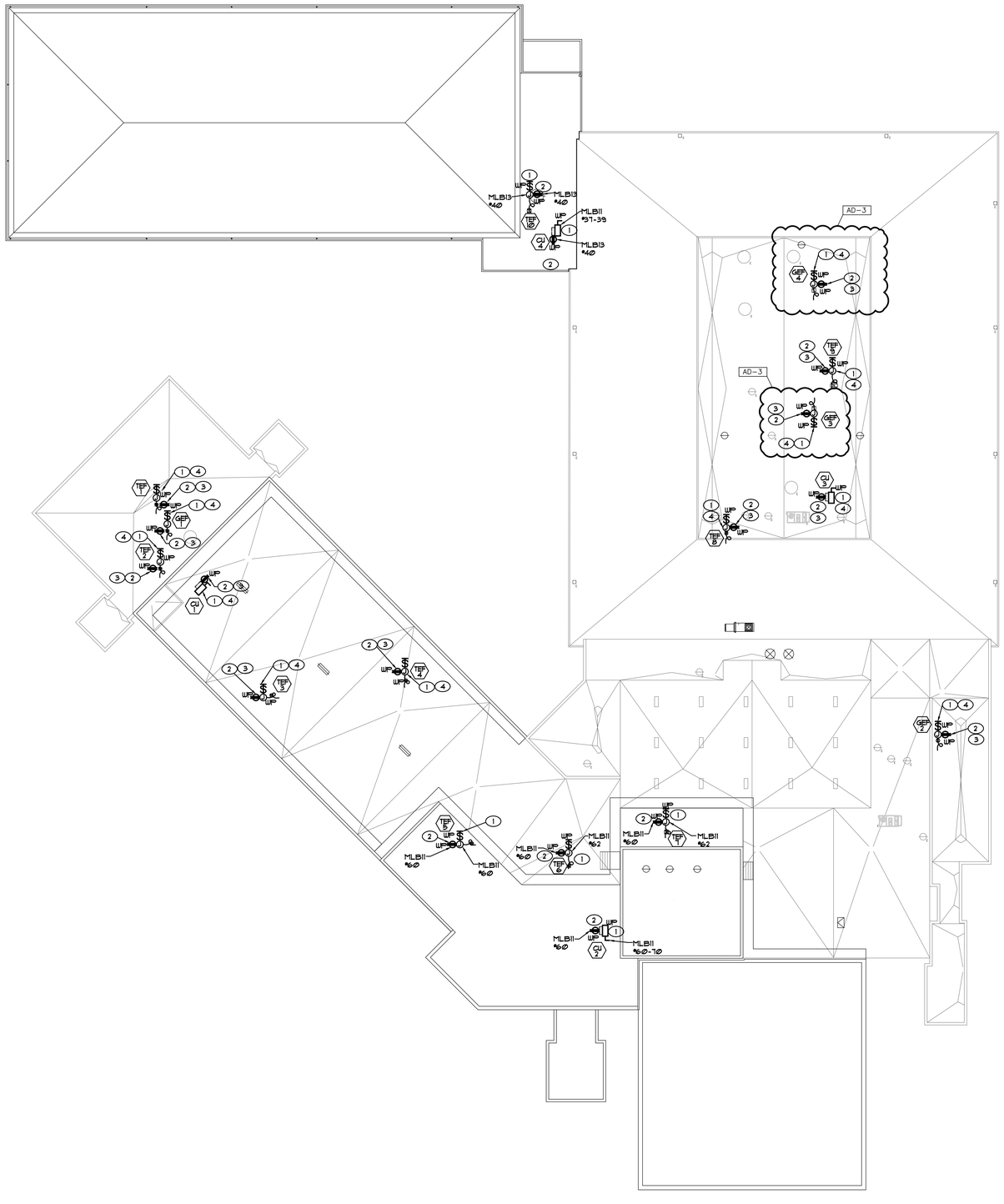
DRAWING
BASEMENT CHILLER ROOM ELECTRICAL LOWER LEVEL POWER PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
EP105

SHEET NOTES

1. REFER TO MECHANICAL EQUIPMENT CONNECTION FOR ADDITIONAL CIRCUITING AND WIRING INFORMATION.
2. LOCATE WEATHERPROOF GFI TYPE RECEPTACLE ON UNIT IN AN APPROVED MANNER.
3. CONNECT RECEPTACLE TO NEAREST 120V GENERAL RECEPTACLE CIRCUIT WITH AVAILABLE CAPACITY (MAXIMUM 1400U PER 120V CIRCUIT). UTILIZE EXISTING CAPACITY MADE AVAILABLE BY DEMOLITION. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD, COMPLETE AS REQUIRED.
4. CONNECT EQUIPMENT TO NEAREST EXISTING 120/208V PANELS WITH AVAILABLE SPACE AND CAPACITY. UTILIZE EXISTING CAPACITY MADE AVAILABLE BY DEMOLITION. VERIFY CONDITIONS AND REQUIREMENTS IN FIELD, COMPLETE AS REQUIRED.



ELECTRICAL POWER ROOF PLAN
SCALE: 1" = 20'-0"

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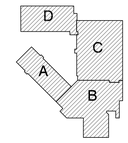
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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Homepage www.GibraltarDesign.com
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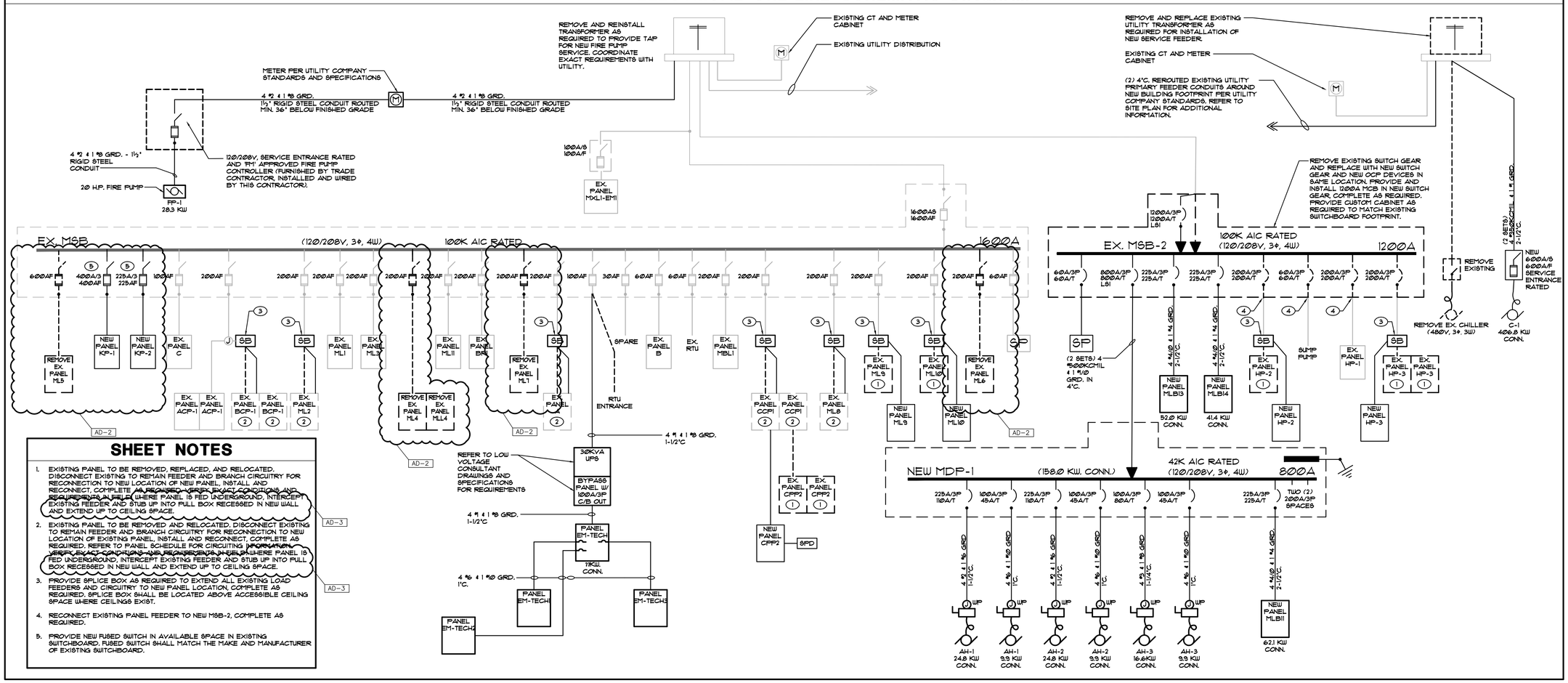
DRAWING
ELECTRICAL POWER ROOF PLAN

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
EP201

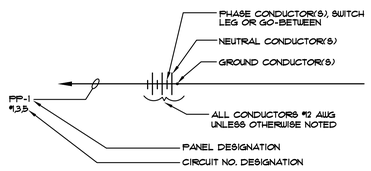
ELECTRICAL ONE-LINE SCHEMATIC DIAGRAM



SHEET NOTES

1. EXISTING PANEL TO BE REMOVED, REPLACED, AND RELOCATED. DISCONNECT EXISTING TO REMAIN FEEDER AND BRANCH CIRCUITRY FOR RECONNECTION TO NEW LOCATION OF NEW PANEL. INSTALL AND RECONNECT, COMPLETE AS REQUIRED. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE PANEL IS FED UNDERGROUND, INTERCEPT EXISTING FEEDER AND STUB UP INTO FULL BOX RECESSED IN NEW WALL AND EXTEND UP TO CEILING SPACE. AD-3
2. EXISTING PANEL TO BE REMOVED AND RELOCATED. DISCONNECT EXISTING TO REMAIN FEEDER AND BRANCH CIRCUITRY FOR RECONNECTION TO NEW LOCATION OF EXISTING PANEL. INSTALL AND RECONNECT, COMPLETE AS REQUIRED. REFER TO PANEL SCHEDULE FOR CIRCUITING INFORMATION. VERIFY EXACT CONDITIONS AND REQUIREMENTS IN FIELD. WHERE PANEL IS FED UNDERGROUND, INTERCEPT EXISTING FEEDER AND STUB UP INTO FULL BOX RECESSED IN NEW WALL AND EXTEND UP TO CEILING SPACE. AD-3
3. PROVIDE SPLICE BOX AS REQUIRED TO EXTEND ALL EXISTING LOAD FEEDERS AND CIRCUITRY TO NEW PANEL LOCATION. COMPLETE AS REQUIRED. SPLICE BOX SHALL BE LOCATED ABOVE ACCESSIBLE CEILING SPACE WHERE CEILINGS EXIST.
4. RECONNECT EXISTING PANEL FEEDER TO NEW MSB-2, COMPLETE AS REQUIRED.
5. PROVIDE NEW FUSED SWITCH IN AVAILABLE SPACE IN EXISTING SWITCHBOARD. FUSED SWITCH SHALL MATCH THE MAKE AND MANUFACTURER OF EXISTING SWITCHBOARD.

KEY TO ELECTRICAL CIRCUIT WIRING



NOTES:
1. ALL WIRING SHALL BE #12 AWG, UNLESS OTHERWISE NOTED.
2. MINIMUM CONDUIT SIZE SHALL BE ¾" EXCEPT FOR THREE (3) WIRES OR LESS, OR CONTROL WIRING WITHIN BUILDINGS,
3. WHICH MAY BE ½" CONDUIT.

½" FLEXSTEEL, GREENFIELD OR SEALITE SHALL BE THE MINIMUM SIZE INSTALLED.

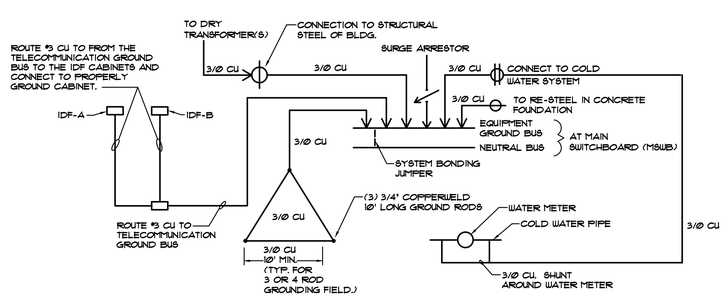
ELECTRICAL ABBREVIATIONS

NOTE:
ABBREVIATIONS USED ON DRAWINGS IN GENERAL ARE LISTED BELOW. REFER TO CSI SECTION 01420 FOR ANY ABBREVIATIONS LISTED ON THE DRAWINGS BUT ARE NOT LISTED BELOW.

A	AMPS	KVA	KILOVOLT AMPERE
AC	AIR CONDITIONING	KW	KILOWATTS
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AFG	ABOVE FINISHED GRADE	MTD	MOUNTED
BRKR	BREAKER	NE	NEW LOCATION OF EXISTING RELOCATED DEVICE
C	CONDUIT	NIC	NOT IN CONTRACT
CH	CABINET HEATER	NL	NIGHTLIGHT
CKT	CIRCUIT	NTS	NOT TO SCALE
DISTR	DISTRIBUTION	O/C	ON CENTER
EF	EXHAUST FAN	P	POLE
ELEC	ELECTRICAL	PNL	PANEL
EM	EMERGENCY	PH	PHASE
EMT	ELECTRICAL METALLIC TUBING	RR	REMOVE AND RELOCATE EXISTING DEVICE
ER	EXISTING DEVICE TO BE REMOVED	SW	SWITCH
EX	EXISTING DEVICE TO REMAIN	TYP	TYPICAL
F	FUSE	UON	UNLESS OTHERWISE NOTED
FS	FUSIBLE SWITCH	V	VOLTS
G	GROUND	VIF	VERIFY IN FIELD
GFI	GROUND FAULT INTERRUPTING PROTECTION	W	WATTS
GRC	GALVANIZED RIGID CONDUIT	WP	WEATHERPROOF TYPE DEVICE
HP	HORSEPOWER	WG	WIRE GUARD
J	JUNCTION BOX	F&I	FURNISH AND INSTALL

GROUNDING DETAIL

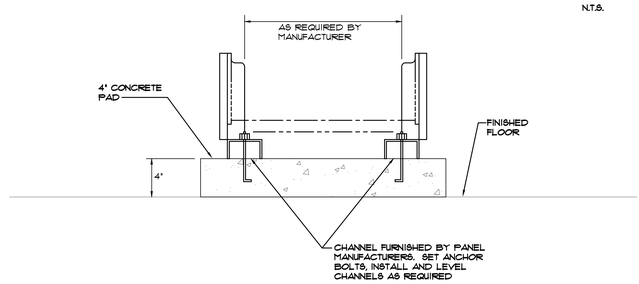
(N.T.S.)



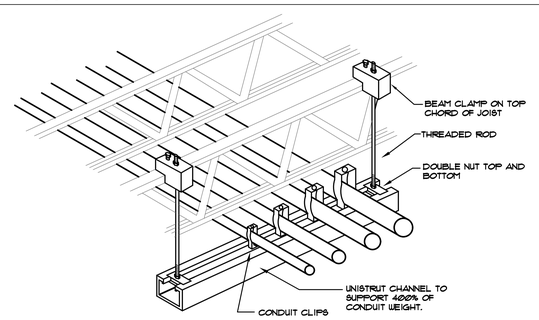
NOTES:
1. CONTRACTOR SHALL FOLLOW THIS DETAIL FOR PROPER GROUNDING CONNECTIONS, INCLUDING FURNISH AND INSTALL ALL CONDUCTORS AND EQUIPMENT SUCH AS GROUND RODS, SURGE ARRESTOR, GROUND BUS, ETC. TO PROPERLY GROUND/BOND ALL EQUIPMENT.
2. SYSTEM GROUNDING FOR INTERIOR DISTRIBUTION TRANSFORMERS SHALL BE MADE TO A GROUNDING ELECTRODE AS NEAR AS PRACTICAL TO, AND PREFERABLY IN THE SAME AREA AS, THE TRANSFORMER. THE ELECTRODE SHALL BE THE NEAREST OF A METAL WATER PIPE GROUNDING ELECTRODE OR STRUCTURAL METAL GROUNDING ELECTRODE.
3. GROUNDING ELECTRODE RESISTANCE SHALL BE 25 OHMS OR LESS. SHOULD THE MEASURED RESISTANCE BE HIGHER THAN 25 OHMS, ADDITIONAL SUPPLEMENTAL ELECTRODES SHALL BE PROVIDED AS REQUIRED TO REACH A RESISTANCE TO EARTH OF 25 OHMS OR LESS.
4. IN ADDITION TO THE ABOVE DEPICTED CONNECTIONS, CONTRACTOR SHALL PROVIDE ALL GROUND RODS, GROUND GRIDS, AND OTHER GROUNDING ELECTRODES AS REQUIRED BY THE UTILITY COMPANY AND MAKE CONNECTIONS TO UTILITY EQUIPMENT PER UTILITY COMPANY STANDARDS.

TYPICAL FLOOR MOUNTED PANEL & EQUIPMENT PAD INSTALLATION

N.T.S.



2 1/2" AND LARGER CONDUIT SUPPORT DETAIL



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ARCHITECTURE • ENGINEERING • INTERIOR DESIGN
MILLIES ENGINEERING GROUP (219) 924-8400 www.milliesengineeringgroup.com

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY AG
CHECKED BY DJ

REGISTERED PROFESSIONAL ENGINEER DAVID G. JANNEY NO. 10302590 STATE OF INDIANA

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
ELECTRICAL DETAILS & DIAGRAMS

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

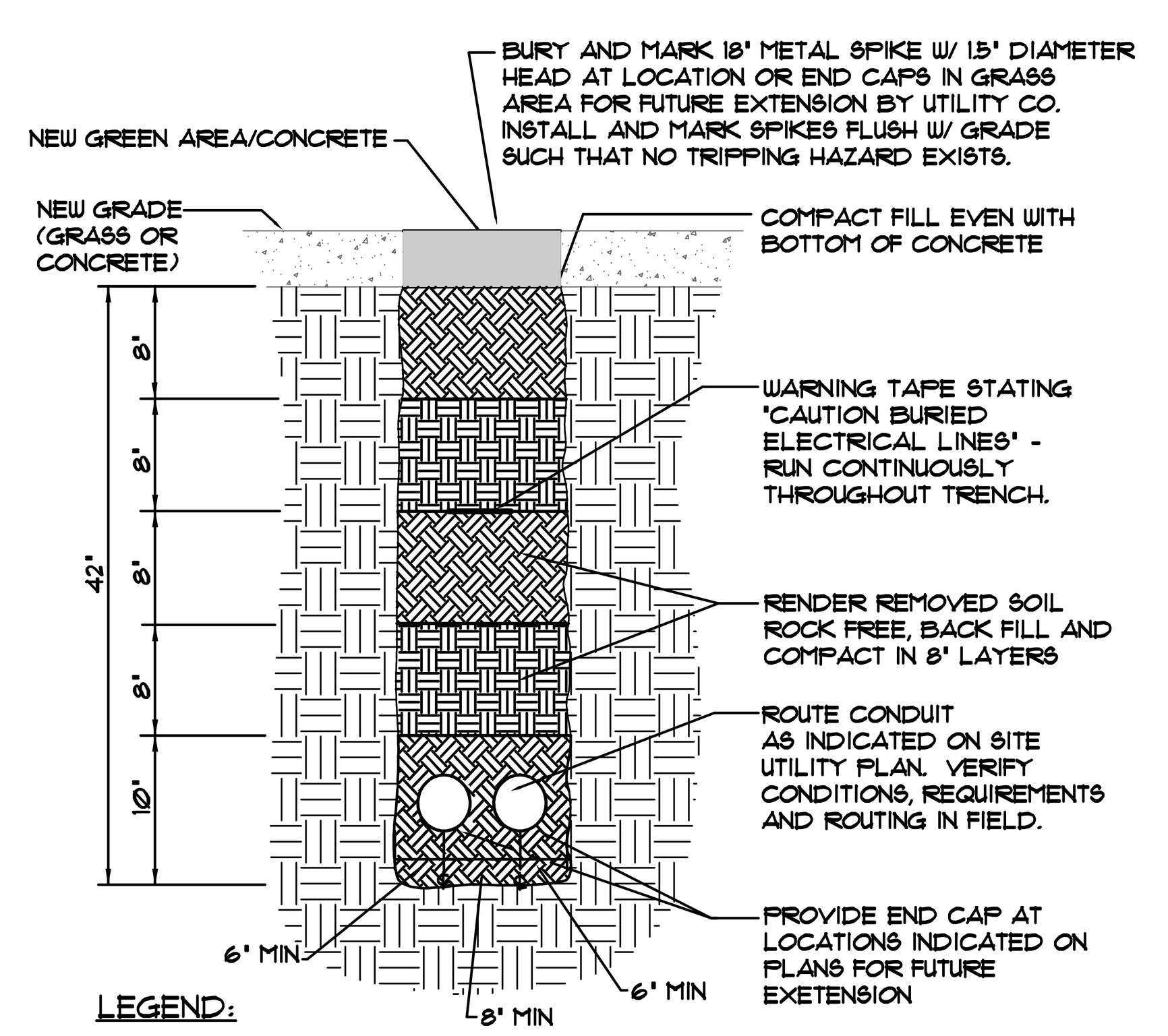
SHEET
E-501

FIXTURE GENERAL NOTES

1. INTERIOR FIXTURES, EXTERIOR FIXTURES AND POLE FINISHES AND COLORS TO BE SELECTED BY ARCHITECT. THE ARCHITECT MAY, AT THEIR DISCRETION, CHOOSE A CUSTOM COLOR AT NO ADDITIONAL CHARGE.
2. PENDANT FIXTURES SPECIFIED ON THIS PROJECT SHALL BE CAREFULLY COORDINATED WITH CONTRACT DOCUMENTS AND FIXTURE MANUFACTURER AS EACH PENDANT FIXTURE IS A CUSTOM MANUFACTURED FIXTURE. PROVIDE PENDANT EMERGENCY SECTIONS AND EMERGENCY CIRCUITS AS SHOWN. COORDINATE WITH FIXTURE MANUFACTURER AND PROVIDE ADDITIONAL ACCESSORIES FOR A COMPLETE AND PROPER INSTALLATION. PROVIDE PROPER FIXTURE LENGTH, FEEDS, SINGLE AND DUAL CIRCUITING AND SUSPENSION LENGTH AS SHOWN ON DRAWINGS. PROVIDE FABRICATION DRAWINGS FOR REVIEW AS PART OF THE SHOP DRAWING SUBMITTAL PROCESS.
3. LED FIXTURES (LESS THAN 10000 LUMENS) SHALL BE PROVIDED WITH FACTORY INSTALLED INTEGRAL EMERGENCY BATTERY UNITS BATTERY UNITS SHALL PROVIDE A MINIMUM OF 1400 LUMENS.
4. FIXTURES THAT CANNOT BE PROVIDED WITH EMERGENCY BALLASTS OR FIXTURES WITH GREATER THAN 10000 LUMENS SHALL BE PROVIDED WITH EMERGENCY INVERTER (MYERS #LV SERIES OR APPROVED EQUAL) WITH SUITABLE CAPACITY TO POWER FIXTURE FOR A MINIMUM OF 90 MINUTES PER CODE. VERIFY SIZING AND REQUIREMENTS WITH CONTRACT DOCUMENTS PRIOR TO ORDERING.
5. SHADED FIXTURES SHALL HAVE AN EMERGENCY SOURCE OF POWER AS SPECIFIED.
6. EXTERIOR LIGHTING POLES SHALL BE PROVIDED WITH STRAIGHT SQUARE ALUMINUM POLES WITH CAST BASE COVERS AND VIBRATION DAMPENERS. THE POLES SHALL BE SIZED PROPERLY TO SUPPORT FIXTURE WEIGHT AT 100 MPH WIND WITH A 1.3 GUST FACTOR. MINIMUM POLE SIZE TO BE 5" SQUARE. PROVIDE ADDITIONAL MOUNTING ACCESSORIES AS REQUIRED FOR A COMPLETE AND PROPER INSTALLATION. (AD-2)
7. FOR EXTERIOR POLE MOUNTED LIGHTING, PROVIDE FACTORY MOUNTED HOUSE SIDE SHIELDS INTEGRAL TO THE FIXTURE AS SPECIFIED. ADDITIONALLY, PROVIDE CUSTOM FABRICATED POLE MOUNTED HOUSE SIDE SHIELDING AS REQUIRED TO CONTROL LIGHT TRESPASS AND COMPLY WITH LOCAL REQUIREMENTS.
8. FIXTURES WITH EMERGENCY BATTERIES SHALL BE PROVIDED WITH CONSTANT HOT SENSING WIRE SO THAT FIXTURE CAN BE SWITCHED ON AND OFF WITHOUT ACTIVATING EMERGENCY BALLAST. UPON LOSS OF POWER, THE FIXTURE SHALL BE ILLUMINATED FOR A MINIMUM OF 90 MINUTES REGARDLESS OF THE LIGHT SWITCH POSITION. PROVIDE TEST SWITCH AND CHARGING INDICATOR FOR EMERGENCY BATTERY AS SPECIFIED.
9. CAREFULLY COORDINATE MOUNTING REQUIREMENTS FOR FIXTURES WITH CONTRACT DOCUMENTS AND FIXTURE MANUFACTURER. PROVIDE APPROPRIATE MOUNTING FRAMES FOR LAY-IN OR GYPSUM CEILINGS. VERIFY CEILING REQUIREMENTS WITH FINAL ARCHITECTURAL REFLECTED CEILING PLAN.
10. VERIFY FIXTURE MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO ROUGH-IN.
11. VERIFY VOLTAGES OF EXISTING LIGHTING CIRCUITRY PRIOR TO ORDERING FIXTURES.
12. PROVIDE CUSTOM ANTI-SWAY BRACING FOR PENDANT TO ELIMINATE PENDANT MOVEMENT DUE TO AIR MOVEMENT OR ENVIRONMENTAL CAUSES.
13. COORDINATE LOCATIONS OF INTERIOR AND EXTERIOR LIGHTING FIXTURES WITH FINAL ARCHITECTURAL DRAWINGS. FIXTURES THAT ARE NOT INSTALLED IN THE CORRECT LOCATION SHALL BE RELOCATED AND REINSTALLED IN THE CORRECT LOCATION AT NO ADDITIONAL CHARGE.
14. FIXTURES SHALL BE PROVIDED WITH ESCUTCHEON PLATES AS REQUIRED TO COVER EXISTING HOLES FROM REMOVED FIXTURES. CANOPY CEILING AROUND NEW FIXTURES SHALL BE REFINISHED TO MATCH EXISTING SURROUNDING CANOPY CEILING SURFACES.
15. PROVIDE 5000K COLOR TEMPERATURE IN SPECIAL EDUCATION SPACES AS SPECIFIED.
16. FIXTURES SHALL BE CAREFULLY COORDINATED WITH MANUFACTURER TO DELIVER THE SPECIFIED PRODUCT IN SUFFICIENT TIME TO MEET PROJECT DEADLINES. EQUIPMENT DELIVERY LEAD TIME SHALL NOT BE HELD AS A VALID REASON FOR REQUESTING LUMINAIRE SUBSTITUTION UNLESS LUMINAIRE LEAD TIME FROM SPECIFIED MANUFACTURER IS IN EXCESS OF 14 WEEKS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE NECESSARY EQUIPMENT LEAD TIMES, DELIVER SUBMITTALS FOR REVIEW IN A TIMELY FASHION, AND PLACE ORDERS ACCORDINGLY TO ENSURE TIMELY DELIVERY.
17. EVALUATION OF APPROVED EQUALS SHALL BE AT THE SOLE DISCRETION OF THE ARCHITECT AND ENGINEER. IF THE PRODUCT SUBMITTED DURING THE REVIEW PROCESS IS NOT JUDGED AS AN EQUAL BY THE REVIEWING ENGINEER, THE CONTRACTOR SHALL PROVIDE THE PRODUCT SPECIFIED.
18. CAREFULLY COORDINATE VOLTAGES OF FIXTURES PRIOR TO ORDERING FIXTURES.
19. APPROVED EQUALS WILL BE CONSIDERED FROM THE FOLLOWING VENDORS: KSA LIGHTING (630.307.6955), FORCE CHICAGO (312.986.1515) OR PG ENLIGHTEN (847.228.1199).
20. CAREFULLY VERIFY COLOR TEMPERATURE OF FIXTURES WITH ARCHITECT PRIOR TO ORDERING.

TRENCH DETAIL

N.T.S.



LEGEND:

— — — INDICATES CONDUIT ROUTED MINIMUM 36" BELOW GRADE AND LISTED FOR DIRECT BURIAL WITH NYLON PULL WIRE. COORDINATE CONDUIT TYPE WITH SPECIFICATIONS. REGARDLESS OF THE SPECIFIED CONDUIT, ALL CONDUIT BENDS SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH NO LESS THAN 36" BENDING RADIUS.

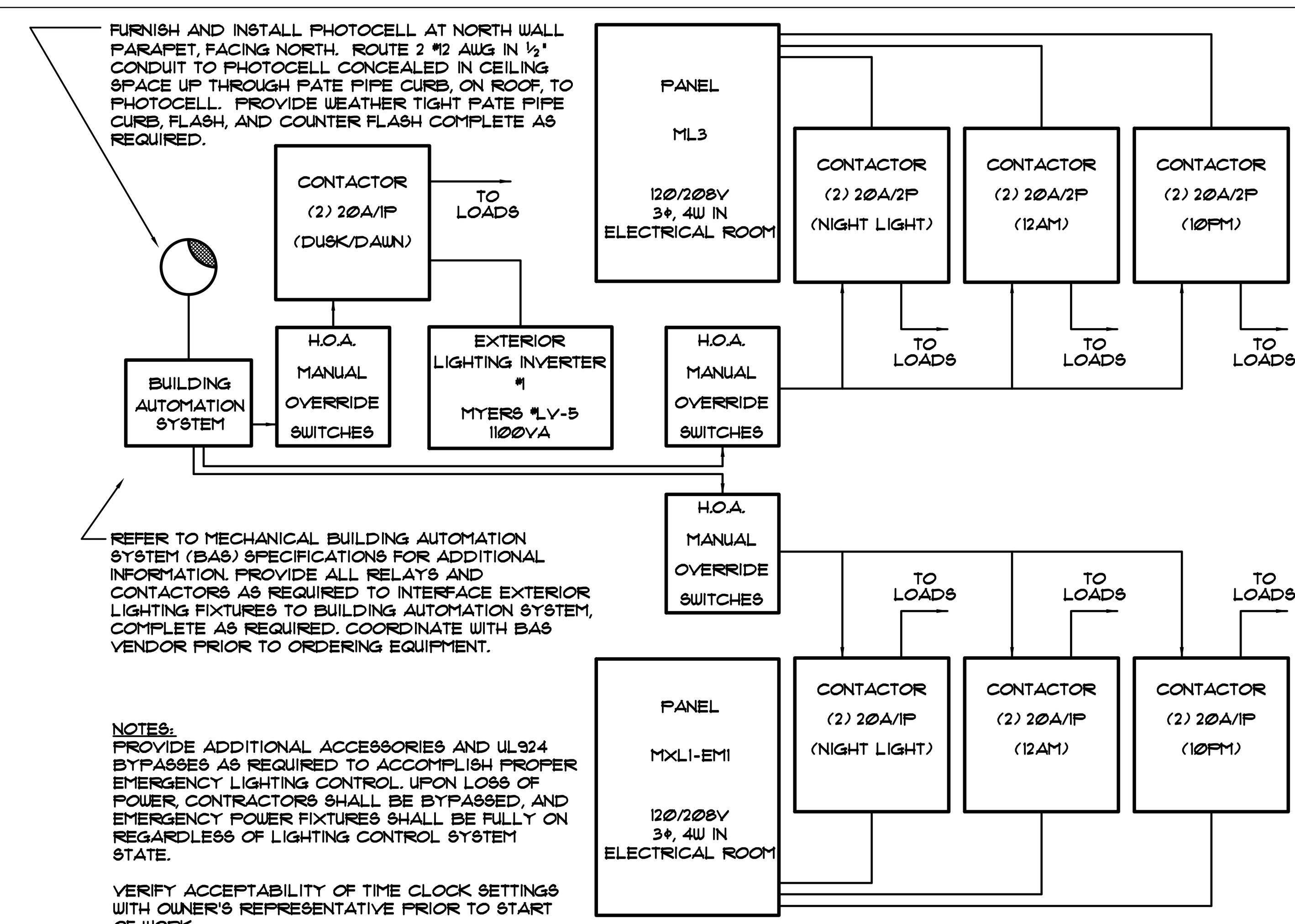
[PROPERLY TERMINATE, CAP AND SPIKE WITH 18" METAL SPIKE W/ 1.5" DIAMETER FOR FUTURE EXTENSION.

EXTERIOR LIGHTING LUMINAIRE SCHEDULE

AD-3

TAG	SYMBOL	DESCRIPTION	MANUFACTURER SERIES OR CATALOG NUMBER	VOLTAGE/ BALLAST	LAMPS/CROSS SECTION	MOUNTING	REMARKS
EA1		EXTERIOR LED FIXTURE MOUNTED ON A STRAIGHT, SQUARE ALUMINUM POLE	LITHONIA #DSX1 LED-P1-50K-T4M-208-SPA-HS NO SUBSTITUTIONS	208 VOLT	LED 5000K MIN 7000LM MAX 54W	POLE MTD 25'-0" AFG	
EA2		EXTERIOR LED FIXTURE MOUNTED ON A STRAIGHT, SQUARE ALUMINUM POLE	LITHONIA #DSX1 LED-P1-50K-T1S-208-SPA-HS NO SUBSTITUTIONS	208 VOLT	LED 5000K MIN 7000LM MAX 54W	POLE MTD 25'-0" AFG	
EB1		EXTERIOR LED FIXTURE MOUNTED ON A STRAIGHT, SQUARE ALUMINUM POLE	LITHONIA #DSX1 LED-P4-50K-T4M-208-SPA-HS NO SUBSTITUTIONS	208 VOLT	LED 5000K MIN 11000LM MAX 125W	POLE MTD 25'-0" AFG	
EB2		EXTERIOR LED FIXTURE MOUNTED ON A STRAIGHT, SQUARE ALUMINUM POLE	LITHONIA #DSX1 LED-P4-50K-T5W-208-SPA NO SUBSTITUTIONS	208 VOLT	LED 5000K MIN 11000LM MAX 125W	POLE MTD 25'-0" AFG	
EC1		EXTERIOR LED FIXTURE MOUNTED ON A STRAIGHT, SQUARE ALUMINUM POLE	LITHONIA #DSX1 LED-P7-50K-T5W-208-SPA-HS NO SUBSTITUTIONS	208 VOLT	LED 5000K MIN 15000LM MAX 183W	POLE MTD 25'-0" AFG	
EC2		EXTERIOR LED FIXTURE MOUNTED ON A STRAIGHT, SQUARE ALUMINUM POLE	LITHONIA #DSX1 LED-P7-50K-T4M-208-SPA NO SUBSTITUTIONS	208 VOLT	LED 5000K MIN 15000LM MAX 183W	POLE MTD 25'-0" AFG	
ED		EXTERIOR LED WALL MOUNTED LIGHT FIXTURE	LITHONIA #WST-P3-40K-VF-120-XX OR APPROVED EQUAL NO SUBSTITUTIONS	120 VOLT	LED 4000K MIN 6000LM MAX 56W	WALL MTD 12'-0" AFG OR AS NOTED	-VERIFY FINISH WITH ARCHITECT.
EE		LED 6" DOWNLIGHT WITH TRIM FINISH TO BE SELECTED BY ARCHITECT	LITEISTRY#LTR-6RD-H-SL15L-DM1-IC-LTR-6RD-T-SL-40K8-MD-S HALO #HC615D010 / HM612840 / 61MDHWF SPECTRUM #SGICE6LED0S SERIES	120 VOLT	LED 4000K MAX 18W MIN 1500LM	RECESSED CANOPY MOUNTED -	-VERIFY TRIM FINISH WITH ARCHITECT -PROVIDE TRIM ACCESSORIES AS REQUIRED FOR MINIMUM 2-5/8" TOTAL CEILING THICKNESS -IC RATED
EF		~~LED IN-GRADE SITE FIXTURE~~ FOR FLAGPOLE WITH FINISH TO BE SELECTED BY ARCHITECT	~~HYDREL #[illegible]-X-LED-P4-40K-MVOLT-~~ NSP-X-X-X-X-X-LDIM-X	208 VOLT	LED 4000K MIN 7000LM MAX 53W	RECESSED IN-GRADE - -	-VERIFY TRIM FINISH WITH ARCHITECT

EXTERIOR LIGHTING CONTROL SEQUENCE DIAGRAM



REFER TO MECHANICAL BUILDING AUTOMATION SYSTEM (BAS) SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE ALL RELAYS AND CONTACTORS AS REQUIRED TO INTERFACE EXTERIOR LIGHTING FIXTURES TO BUILDING AUTOMATION SYSTEM, COMPLETE AS REQUIRED. COORDINATE WITH BAS VENDOR PRIOR TO ORDERING EQUIPMENT.

NOTES:
PROVIDE ADDITIONAL ACCESSORIES AND UL924 BYPASSES AS REQUIRED TO ACCOMPLISH PROPER EMERGENCY LIGHTING CONTROL. UPON LOSS OF POWER, CONTRACTORS SHALL BE BYPASSED, AND EMERGENCY POWER FIXTURES SHALL BE FULLY ON REGARDLESS OF LIGHTING CONTROL SYSTEM STATE.

VERIFY ACCEPTABILITY OF TIME CLOCK SETTINGS WITH OWNER'S REPRESENTATIVE PRIOR TO START OF WORK.

INTERIOR LIGHTING LUMINAIRE SCHEDULE

TAG	SYMBOL	DESCRIPTION	MANUFACTURER SERIES OR CATALOG NUMBER	VOLTAGE/ BALLAST	LAMPS/CROSS SECTION	MOUNTING	REMARKS
AA		2' X 4' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT4-30L-ADP-EZ1-LP840 COLUMBIA #LCAT24 SERIES METALUX #24CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 24W MIN 3000LM	RECESSED LAY-IN	- - - -
AA1		2' X 4' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT4-40L-ADP-EZ1-LP840 COLUMBIA #LCAT24 SERIES METALUX #24CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 32W MIN 4000LM	RECESSED LAY-IN	- - - -
AA2		2' X 4' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT4-48L-ADP-EZ1-LP840 COLUMBIA #LCAT24 SERIES METALUX #24CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 38W MIN 4800LM	RECESSED LAY-IN	- - - -
AA3		2' X 4' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT4-60L-ADP-EZ1-LP840 COLUMBIA #LCAT24 SERIES METALUX #24CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 48W MIN 6000LM	RECESSED LAY-IN	- - - -
AA4		2' X 4' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT4-72L-ADP-EZ1-LP840 COLUMBIA #LCAT24 SERIES METALUX #24CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 61W MIN 7200LM	RECESSED LAY-IN	- - - -
AB		2' X 2' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT2-20L-ADP-EZ1-LP840 COLUMBIA #LCAT22 SERIES METALUX #22CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 17W MIN 2000LM	RECESSED LAY-IN	- - - -
AB1		2' X 2' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT2-33L-ADP-EZ1-LP840 COLUMBIA #LCAT22 SERIES METALUX #22CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 27W MIN 3300LM	RECESSED LAY-IN	- - - -
AB2		2' X 2' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT2-40L-ADP-EZ1-LP840 COLUMBIA #LCAT22 SERIES METALUX #22CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 32W MIN 4000LM	RECESSED LAY-IN	- - - -
AB3		2' X 2' LED DIRECT/INDIRECT FIXTURE	LITHONIA #2BLT2-60L-ADP-EZ1-LP840 COLUMBIA #LCAT22 SERIES METALUX #22CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 48W MIN 6000LM	RECESSED LAY-IN	- - - -
AC		1' X 4' LED DIRECT/INDIRECT FIXTURE	LITHONIA #BLT4-40L-ADP-EZ1-LP840 COLUMBIA #LCAT14 SERIES METALUX #14CZ2 SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 32W MIN 4000LM	RECESSED LAY-IN	- - - -
AD		2' X 4' LED LENSED KITCHEN TROFFER FIXTURE WITH INVERTED LENS AND TRIPLE GASKETING	LITHONIA #2GTL4-100L-RW-A19INV-MVOLT-EZ1-LP840-ABC COLUMBIA #LJT24 SERIES METALUX #GR LED SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 83W MIN 10000LM	RECESSED LAY-IN	-INVERTED LENS AND TRIPLE GASKETING - -
CA		6" DIAMETER LED DOWNLIGHT WITH SEMI-SPECULAR ALZAK REFLECTOR, IRIDESCENT FREE FINISH, & WHITE FLANGE	LITHONIA #LDN6-40-15-LO6-AR-LSS-MVOLT -EZ10-XX PRESCOLITE #LTR SERIES PORTFOLIO #LD6B SERIES	120/277 VOLT 0-10V DIM - -	LED 4000K MAX 18 W MIN 1500 LM	RECESSED LAY-IN/ DRYWALL	-VERIFY TRIM FINISH WITH ARCHITECT
PA		LED HIGH BAY FIXTURE WITH WIREGUARD AND SAFETY CABLE	LITHONIA #IBG-30L-SEF-AFL-GND-MVOLT-GZ10-40K-80CRI-WGX-XX-XX COLUMBIA #PEL4 SERIES METALUX #OHB SERIES	120/277 VOLT 0-10V DIM -	LED 4000K MAX 178 W 30000 LM	CABLE MTD 6" ABOVE BOTTOM OF STRUCTURE	-PROVIDE WIREGUARD AND SAFETY CABLE - -
PB		4', LED INDUSTRIAL FIXTURE WITH WIREGUARD AND SAFETY CHAINS	LITHONIA #CLX-L48-7000LM-SEF-FDL-MVOLT -GZ10-40K-80CRI-XX-XX METALUX #SNLED SERIES ~~COLUMBIA #MPS SERIES~~	120/277 VOLT 0-10V DIM -	LED 4000K CRI +85 ~~MIN 7000 LM~~	'Y' CHAIN SUSPEND -	-COORD LOCATIONS WITH DUCTWORK & PIPING
PD		LIBRARY PENDANT	VISA #CP1542-L40-H-MVOLT-XX-XX OR APPROVED EQUAL	120/277 VOLT 0-10V DIM -	LED 4000K MAX 16W MIN 1700 LM	SUSPENDED - -	-VERIFY HEIGHT WITH ARCHITECT -VERIFY FINISH WITH ARCHITECT
TA		TRACK LIGHT FIXTURE WITH LED PAR30 DIMMABLE HEAD, TWO CIRCUIT TWO NEUTRAL TRACK WITH BARN DOORS	CON-TECH #CTL5030-B-FA-30-BD30 PROVIDE WITH NTEK-X-B TRACK JUNO #TEK SERIES OR APPROVED EQUAL	120 VOLT - - -	ONE (1) LED 75W EQUIV PAR 30 PER HEAD	36" STEM MOUNTED TO UNISTRUT	-PROVIDE ALL MOUNTING ACCESSORIES - -
XA		SINGLE FACE EXIT WITH 90 MINUTE BATTERY BACKUP	DUAL-LITE #SE-S-R-X-E-1 LITHONIA #LE-S-X-1-R-ELN-X SURE-LITES #CX SERIES	120 VOLT - - -	LED MAX 3W - -	CEILING/ WALL - -	-VERIFY FINISH WITH ARCHITECT -PROVIDE WITH ARROWS AS REQUIRED
XB		DUAL FACE EXIT WITH 90 MINUTE BATTERY BACKUP	DUAL-LITE #SE-D-R-X-E-1 LITHONIA #LE-S-X-2-R-ELN-X SURE-LITES #CX SERIES	120 VOLT - - -	LED MAX 3W - -	CEILING/ WALL - -	-VERIFY FINISH WITH ARCHITECT -PROVIDE WITH ARROWS AS REQUIRED
EM		FIXTURE ON EMERGENCY CIRCUIT WITH 90 MINUTE, 1400 LUMEN OUTPUT BATTERY UNIT OR INVERTER	BODINE FACTORY INSTALLED DRIVER OR MYERS LV SERIES INVERTER	120/277 VOLT	-	IN FIXTURE/ REMOTE	-PROVIDE TEST SWITCH AND CHARGING INDICATOR
NL		CONSTANT HOT, UNSWITCHED NIGHT LIGHT FIXTURE					

AD-3

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MILLIES ENGINEERING GROUP

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY AG
CHECKED BY DJ

DAVID G. JANNEY REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
ELECTRICAL SCHEDULES, NOTES, DETAILS & DIAGRAMS

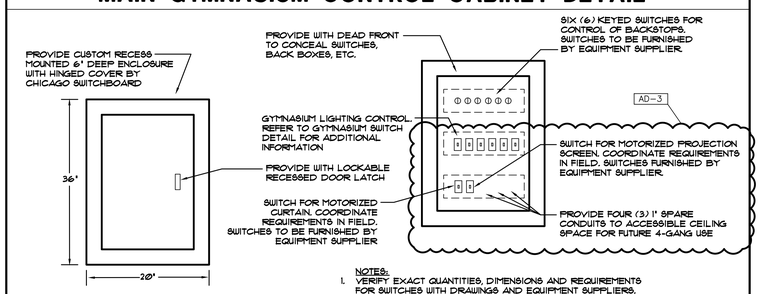
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
E-502

KITCHEN EQUIPMENT / ELECTRICAL

ITEM NUMBER	QUANTITY	DESCRIPTION SU=STUB UP NIKEC= NOT IN KITCHEN EQUIPMENT CONTRACT	SOURCE	VOLTAGE	KW	AMPS	HP	PHASE	CONN.	AFF	REMARKS
1	1	WALK-IN COOLER/FREEZER	KOLPAK CUSTOM	120		16.0		1	D	DFA	CIRCUIT REQUIRED AT EACH DOOR
2	1	WALK-IN COOLER COIL	PART OF ITEM 1	120		5.0		1	D	DFA	
3	1	WALK-IN COOLER COMPRESSOR	PART OF ITEM 1	208		10.9	1.50	3	D	ROOF	
7	1	WALK-IN FREEZER COIL	PART OF ITEM 1	208 120		9.0 15.0		1 1	D P	DFA 96	REFER TO COOLER/FREEZER DWG. K400 FOR DRAIN LINE HEAT TAPE. NEMA 5-15P
8	1	WALK-IN FREEZER COMPRESSOR	PART OF ITEM 1	208		19.5	3.50	1	D	ROOF	REFER TO COOLER/FREEZER DWG. K400
14	1	ISLAND WORKTABLE W/ 2 COMP PREP SINK	CUSTOM ST.STL.	120		16.0		1	P	SU	FIXTURE MOUNTED DCO - 4 LOCATIONS
16	4	HAND SINK FAUCET	T45 BRASS 5EF-1D-WG	120		6.00		1	P	16	
17	1	ISLAND WORKTABLE W/ PREP SINKS	CUSTOM ST.STL.	120		16.0		1	P	SU	FIXTURE MOUNTED DCO - 4 LOCATIONS
19	1	GARBAGE DISPOSAL SYSTEM	IN-SINK-ERATOR SS-200-7/A8-101	208		3.20		3	D	SU	EXTEND SERVICE TO K.E.C. FURNISHED CONTROL PANEL.
21	1	COUNTERTOP MIXER W/ STAND	HOBART HL200-1STD	120		8.00		1	P	*	*PLUG INTO ISLAND WORKTABLE
22	1	SLICER	HOBART HS8-1	120		5.40		1	P	*	*PLUG INTO ISLAND WORKTABLE
24	1	ICE MAKER W/ BIN	MANITOWOC IYT0420A	120		11.5		1	D	66	
26	1	MICROWAVE	PANASONIC NE-1064F	120		13.4		1	P	24	NEMA 5-15P
28	2	SINGLE DOOR REACH-IN HEATED CABINET	TRAULSEN AHT132U-FHS	208		7.80		1	P	78	NEMA L14-20P MOUNTED IN SOFFIT ABOVE
29	2	SINGLE DOOR REACH-IN REFRIGERATOR	TRAULSEN AHT132UT-FHS	120		7.00		1	P	78	NEMA 5-15P MOUNTED IN SOFFIT ABOVE
35	1	COMBI OVEN/STEAMER DBL STACK	RATIONAL ICC 6-FULL/ICC 6-FULL	208 208		15.0 15.0		1 1	D D	48 24	
37	1	40 GALLON TILT SKILLET	CLEVELAND SGL40T1	120		10.0		1	P	16	NEMA 5-15P
40	1	DOUBLE STACKED CONVECTION OVEN	SOUTHBEND SLGB/22SC	120		7.90		1	P	16	NEMA 5-15P (1) REQUIRED PER OVEN
49	1	GARBAGE DISPOSAL SYSTEM	IN-SINK-ERATOR SS-200-7/A8-101	208		3.20		3	D	16	EXTEND SERVICE TO K.E.C. FURNISHED CONTROL PANEL.
51	1	DISH MACHINE W/BOOSTER HEATER	HOBART CL44EN-BAS	208		133		3	D	60	150 AMP BREAKER REQUIRED
52	1	DISH MACHINE BLOWER DRYER	HOBART BDELRAB-HTSDOM	208		34.2		3	D	60	45 AMP BREAKER REQUIRED
68	1	MILK COOLER	TRUE TMC-49-HC	120		2.70		1	P	SU	NEMA 5-15P PROVIDE FLUSH MOUNTED RECEPTACLE IN FLOOR
69	1	MOBILE HOT SERVING COUNTER	CUSTOM ST. STL/ MILLWORK	120		16.0		1	P	SU	DCO
70	1	DROP-IN HOT/COLD UNIT	LTI DI-QSCHP-4	120/ 280		14.4		1	P	SU	NEMA 14-20P
71	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VGT	120		6.00		1	D	SU	
72	1	MOBILE COLD SERVING COUNTER	CUSTOM ST. STL/ MILLWORK	120		16.0		1	P	SU	DCO
73	1	DROP-IN COLD WELL UNIT	LTI DI-2063TA	120		8.50		1	P	SU	NEMA 5-15P
74	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VGT	120		6.00		1	D	SU	DCO
75	1	DRY GOODS SERVING COUNTER	CUSTOM ST. STL/ MILLWORK	120		16.0		1	P	SU	
76	1	ICE CREAM FREEZER	BEVERAGE AIR NC28HC-1-W	120		2.00		1	P	SU	NEMA 5-15P PROVIDE FLUSH MOUNTED RECEPTACLE IN FLOOR
78	1	MILK COOLER	TRUE TMC-49-HC	120		2.70		1	P	SU	NEMA 5-15P
79	1	MOBILE HOT SERVING COUNTER	CUSTOM ST. STL/ MILLWORK	120		16.0		1	P	SU	DCO
80	1	DROP-IN HOT/COLD UNIT	LTI DI-QSCHP-4	120/ 280		14.4		1	P	SU	NEMA 14-20P
81	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VGT	120		6.00		1	D	SU	
82	1	MOBILE COLD SERVING COUNTER	CUSTOM ST. STL/ MILLWORK	120		16.0		1	P	SU	DCO
83	1	DROP-IN COLD WELL UNIT	LTI DI-2063TA	120		8.50		1	P	SU	NEMA 5-15P
84	1	SELF-SERVE BREATH GUARD W/LIGHTS	VERSA-GARD VGT	120		6.00		1	D	SU	
85	1	DRY GOODS SERVING COUNTER	CUSTOM ST. STL/ MILLWORK	120		16.0		1	P	SU	DCO
87	2	POINT OF SALE SYSTEM	BY OWNER NIKEC	120		16.0		1	P	SU	DCO. DATA LINE REQUIRED.
DR1		DUPLEX CONVENIENCE RECEPTACLE		120		16.0		1		16	
DR2		DUPLEX CONVENIENCE RECEPTACLE		120		16.0		1		48	FURNISH HORIZONTAL RECEPTACLE WHEN MOUNTED ABOVE COUNTERTOP

MAIN GYMNASIUM CONTROL CABINET DETAIL



NOTES:
1. VERIFY EXACT QUANTITIES, DIMENSIONS AND REQUIREMENTS FOR SWITCHES WITH DRAWINGS AND EQUIPMENT SUPPLIERS.
2. PROVIDE PERMANENT ENGRAVED LABELS FOR SWITCHES.
3. ROUTE CONTROL CABLING FROM EACH SWITCH TO THE DEVICE CONTROLLED. COORDINATE REQUIREMENTS IN FIELD WITH THE EQUIPMENT SUPPLIER.

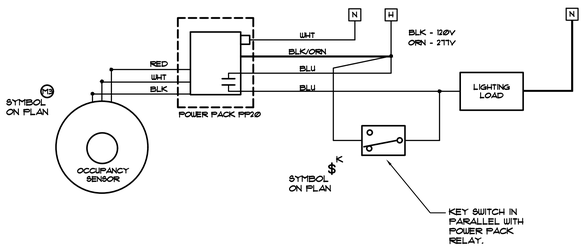
LIGHTING CONTROL SYSTEM NOTES

AD-3

1. UNLESS NOTED OTHERWISE, THE LIGHTING CONTROL SYSTEM SHALL BE A STAND ALONE SENSORSWITCH WIRED SYSTEM COMPLETE WITH OCCUPANCY SENSORS, POWER PACKS, EMERGENCY ACCESSORIES, ETC. SYSTEM TO BE PROVIDED WITH COMPONENTS AND ACCESSORIES AS REQUIRED TO PROVIDE FUNCTIONALITY PER THE CONTRACT DOCUMENTS.
2. LIGHTING CONTROL EQUIPMENT WILL BE CONSIDERED FROM THE FOLLOWING MANUFACTURERS: EATON CONTROLS, LEVITON OR HUBBELL CONTROLS. THE SUBMITTED LIGHTING CONTROL SYSTEM SHALL PROVIDE FULL LIGHTING CONTROL FUNCTIONALITY AS SPECIFIED.
3. BECAUSE OF DIFFERENCES BETWEEN MANUFACTURERS, DIAGRAMS SHOWN ARE DIAGRAMMATIC AND MAY NOT SHOW ALL PARTS AND ACCESSORIES REQUIRED. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS WITH LIGHTING CONTROL MANUFACTURER AND CONTRACT DOCUMENTS. CONTRACTOR SHALL PROVIDE ALL PARTS AND ACCESSORIES REQUIRED FOR A COMPLETE AND PROPERLY OPERATING SYSTEM AS SHOWN ON CONTRACT DOCUMENTS. VERIFY ALL CONDITIONS AND REQUIREMENTS, COMPLETE AS REQUIRED.
4. NO EXTRAS SHALL BE ALLOWED AFTER BIDDING FOR NOT FULLY UNDERSTANDING THE SCOPE OF WORK INVOLVED OR TO FULLY ACCOMPLISH THE SWITCHING SCHEME SHOWN ON THE CONTRACT DOCUMENTS.
5. PROVIDE 12 HOURS OF FACTORY COMMISSIONING AND 6 HOURS FACTORY TRAINING FOR THE OWNER'S BUILDING STAFF.
6. UL924 BYPASS DEVICES SHALL BE PROVIDED FOR ALL FIXTURES WITH AN EMERGENCY SOURCE OF POWER THAT IS SWITCHED. THE UL924 BYPASS SHALL PROVIDE BYPASS FOR BOTH THE POWER AND CONTROL SIGNAL, COMPLETE AS REQUIRED.
7. ALL LOW VOLTAGE CABLING SHALL BE PLENUM RATED. CABLING ROUTED IN CONCEALED AREAS SHALL BE ROUTED NEATLY EXPOSED WITHIN J-HOOKS. CABLING LOCATED IN EXPOSED CEILINGS SHALL BE CONCEALED IN NEATLY ROUTED CONDUIT. LOW VOLTAGE CABLING INSTALLATION SHALL FULLY MEET LOCAL CODE REQUIREMENTS.

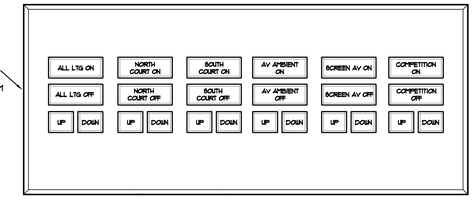
AD-2

CORRIDOR LIGHTING CONTROLS



NOTES:
1. LAYOUT SHOWN IS DIAGRAMMATIC ONLY. CONSULT MANUFACTURER FOR SPECIFIC WIRING REQUIREMENTS.
2. POWER PACK LOW VOLTAGE OUTPUTS SHALL BE TIED TOGETHER TO ADEQUATELY POWER SENSORS. CONNECT DEVICES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, COMPLETE AS REQUIRED.
3. DIAGRAM SHOWS ONE SENSOR AND SWITCH ONLY. CONTRACTOR SHALL PROVIDE QUANTITIES OF DEVICES AS SHOWN ON DRAWINGS, WIRED PER MANUFACTURER'S REQUIREMENTS TO ACCOMPLISH REQUIRED CONTROL SEQUENCE.
4. SEQUENCE:
   KEY SWITCH ON: LIGHTS ALWAYS ON
   KEY SWITCH OFF: LIGHTS CONTROLLED BY POWER PACK (SENSOR)

MAIN GYMNASIUM SWITCH DETAIL AND SEQUENCE OF OPERATIONS



A. ALL LTG ON: TURNS ALL LIGHTING (SWITCH LEGS 'a', 'b', 'c' AND 'd') TO FULL 50 FC AVERAGE LEVEL. ALLOWS DIMMABLE LIGHTING TO BE SELECTED SO THAT LEVEL MAY BE ADJUSTED MANUALLY BY RAISE/LOWER BUTTON.

B. ALL LTG OFF: TURNS ALL LIGHTING IN GYM OFF.

C. NORTH COURT ON: TURNS NORTH COURT LIGHTING (SWITCH LEG 'a' AND 'd') TO FULL 50 FC LEVEL. ALLOWS DIMMABLE NORTH COURT LIGHTING TO BE SELECTED SO THAT LEVEL MAY BE ADJUSTED MANUALLY BY RAISE/LOWER BUTTON.

D. NORTH COURT OFF: TURNS NORTH COURT LIGHTING (SWITCH LEG 'a' AND 'd') LIGHTING OFF.

E. SOUTH COURT ON: TURNS SOUTH COURT LIGHTING (SWITCH LEG 'b' AND 'c') TO FULL 50 FC LEVEL. ALLOWS DIMMABLE SOUTH COURT LIGHTING TO BE SELECTED SO THAT LEVEL MAY BE ADJUSTED MANUALLY BY RAISE/LOWER BUTTON.

F. SOUTH COURT OFF: TURNS SOUTH COURT LIGHTING (SWITCH LEG 'b' AND 'c') LIGHTING OFF.

G. AV AMBIENT ON: TURNS AV AMBIENT LIGHTING (SWITCH LEG 'c' AND 'd') TO FULL 50 FC LEVEL. ALLOWS DIMMABLE AV AMBIENT LIGHTING TO BE SELECTED SO THAT LEVEL MAY BE ADJUSTED MANUALLY BY RAISE/LOWER BUTTON.

H. AV AMBIENT OFF: TURNS AV AMBIENT LIGHTING (SWITCH LEG 'c' AND 'd') LIGHTING OFF.

I. SCREEN AV ON: TURNS SCREEN AV LIGHTING (SWITCH LEG 'a' AND 'b') TO FULL 50 FC LEVEL. ALLOWS DIMMABLE SCREEN AV LIGHTING TO BE SELECTED SO THAT LEVEL MAY BE ADJUSTED MANUALLY BY RAISE/LOWER BUTTON.

J. SCREEN AV OFF: TURNS SCREEN AV LIGHTING (SWITCH LEG 'a' AND 'b') LIGHTING OFF.

K. COMPETITION ON: TURNS ALL LIGHTING (SWITCH LEGS 'a', 'b', 'c' AND 'd') TO FULL 100 FC AVERAGE LEVEL. ALLOWS DIMMABLE LIGHTING TO BE SELECTED SO THAT LEVEL MAY BE ADJUSTED MANUALLY BY RAISE/LOWER BUTTON.

L. COMPETITION OFF: TURNS ALL LIGHTING OFF.

NOTES:
1. PRESSING 'ON' WILL TURN ON ALL LIGHTING REGARDLESS OF OCCUPANCY. IF NO OCCUPANCY IS DETECTED WITHIN 15 MINUTES, THE LIGHTING IN THE UNOCCUPIED AREA SHALL SHUT OFF. IF OCCUPANCY IS DETECTED AND THE SWITCH IS IN THE 'ON' STATE, THE LIGHTING SHALL IMMEDIATELY TURN ON ('AUTOMATIC ON OPERATION').
2. PROVIDE ACCESSORIES, INTERFACES AND PROGRAMMING TO ACCOMPLISH THE ABOVE SEQUENCE OF OPERATIONS.
3. NO FIXTURES ARE CONTROLLED BY THE OCCUPANCY SENSORS ONLY. FIXTURES IN SPACE SHALL BE CONTROLLED WITH BOTH A LIGHT SWITCH AND OCCUPANCY SENSORS.
4. SWITCHING ALL LIGHTING OFF WILL CAUSE FIXTURES TO TURN TO 10% DIMMING LEVEL FOR THREE MINUTES BEFORE TURNING COMPLETELY OFF.

STAGE AND GYMNASIUM LIGHTING CONTROL SYSTEM

1. THE LIGHTING CONTROL SYSTEM SHALL BE A STANDALONE ACUITY nFRESCO SYSTEM (ACUITY FRESCO nFCS-7TEN-X) COMPLETE WITH KEYPADS, SENSORS, ACCESSORIES, PROGRAMMING SOFTWARE, ETC. THE SYSTEM SHALL PROVIDE DIMMING CONTROL OF ALL GYMNASIUM, STAGE THEATRICAL LIGHTING AND STAGE AREA HOUSE LIGHTING USING THE FRESCO SYSTEM WITH N-LIGHT COMPONENTS.
2. LIGHTING CONTROL EQUIPMENT WILL BE CONSIDERED FROM THE FOLLOWING MANUFACTURERS: HUBBELL CONTROLS, LEVITON OR CRESTRON. THE JUDGMENT OF WHAT IS ACCEPTED AS AN EQUAL SHALL BE AT THE SOLE DISCRETION OF THE REVIEWING ENGINEER. IF THE ENGINEER DEEMS THE PRODUCT SUBMITTED DURING THE SHOP DRAWING REVIEW AS NOT EQUAL TO THE SPECIFIED PRODUCT, THE SPECIFIED PRODUCT SHALL BE PROVIDED AT NO ADDITIONAL COST.
3. BECAUSE OF DIFFERENCES BETWEEN MANUFACTURERS, CONTRACT DOCUMENTS MAY NOT SHOW ALL PARTS AND ACCESSORIES REQUIRED. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS WITH LIGHTING CONTROL MANUFACTURER AND CONTRACT DOCUMENTS. CONTRACTOR SHALL PROVIDE ALL PARTS AND ACCESSORIES REQUIRED FOR A COMPLETE AND PROPERLY OPERATING SYSTEM AS SHOWN ON CONTRACT DOCUMENTS. VERIFY ALL CONDITIONS AND REQUIREMENTS, COMPLETE AS REQUIRED.
4. NO EXTRAS SHALL BE ALLOWED AFTER BIDDING FOR NOT FULLY UNDERSTANDING THE SCOPE OF WORK INVOLVED OR TO FULLY ACCOMPLISH THE SWITCHING SCHEME SHOWN ON THE CONTRACT DOCUMENTS.
5. THE SYSTEM SHALL BE PROVIDED WITH 6 HOURS OF COMMISSIONING AND 2 HOURS TRAINING BY A FACTORY REPRESENTATIVE. THE USE OF AN AUTHORIZED SALES REPRESENTATIVE FOR THIS WORK IS ACCEPTABLE.
6. ALL LOW VOLTAGE CABLING SHALL BE PLENUM RATED. CABLING ROUTED IN CONCEALED AREAS SHALL BE ROUTED NEATLY EXPOSED WITHIN J-HOOKS. CABLING LOCATED IN EXPOSED CEILINGS SHALL BE CONCEALED IN NEATLY ROUTED CONDUIT. LOW VOLTAGE CABLING INSTALLATION SHALL FULLY MEET LOCAL CODE REQUIREMENTS.
7. ACUITY SOFTWARE SHALL BE PROVIDED FOR THE OWNER'S COMPUTER TO ALLOW FOR REMOTE ADJUSTMENTS TO BE MADE TO THE LIGHTING CONTROL SYSTEM.
8. THE DIGITAL SWITCH ARRANGEMENT AND LABELING SHALL BE VERIFIED WITH OWNER PRIOR TO PROGRAMMING. ALL THEATRICAL TRACK FIXTURE SWITCH LEGS AS WELL AS THE DIMMING BACK OF HOUSE STAGE LIGHTING SHALL BE PROVIDED WITH DIMMING CONTROL AND INDIVIDUAL VIRTUAL BUTTONS ON THE FRESCO TOUCHSCREEN.
9. THE CONTROL SYSTEM SHALL BE PROVIDED WITH TWO (2) FUTURE FACTORY AUTHORIZED REP SITE VISITS TO CALIBRATE AND PROVIDE ADJUSTMENTS TO THE LIGHTING CONTROL FOLLOWING SUBSTANTIAL COMPLETION OF THE BUILDING.
10. THE SYSTEM SHALL PROVIDE FOR THREE WAY CONTROL OF THE GYMNASIUM LIGHTING FROM THE FRESCO POSITION OR THE GYMNASIUM CABINET. PROVIDE DIGITAL BUTTONS AT THE FRESCO LOCATION TO MATCH THE LAYOUT OF THE PHYSICAL GYMNASIUM LIGHTING CONTROL BUTTONS.

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN
MILLIES ENGINEERING GROUP
(219) 924-8400
www.milliesengineeringgroup.com

PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY SM
DRAWN BY AG
CHECKED BY DJ

DAVID G. JANNEY REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	02/17/22	ADDENDUM NO. 2
AD-3	02/23/22	ADDENDUM NO. 3

DRAWING
ELECTRICAL DETAILS & NOTES

PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
E-504

GENERAL ROUGH-IN NOTES:

1) CONTRACTOR SHALL USE THESE DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS TO DETERMINE THE FULL SCOPE, INTENT AND REQUIREMENTS OF THE PROJECT. SPECIFICATIONS AND DRAWINGS ARE INTENDED TO BE COMPLEMENTARY, NOT MUTUALLY EXCLUSIVE. WORK SHOWN ON THE DRAWINGS BUT NOT LISTED IN THE SPECIFICATIONS, AND WORK DESCRIBED IN THE SPECIFICATIONS BUT NOT SHOWN ON THE DRAWINGS SHALL BE INTERPRETED AS THOUGH WORK WERE FULLY DESCRIBED IN BOTH PLACES. THE HIGHER QUANTITY, HIGHER QUALITY, MORE LABOR INTENSIVE AND OVERALL MORE STRINGENT AND MORE COSTLY REQUIREMENT SHALL APPLY.

2) COLORS OF CABLING USED FOR ALL COMMUNICATIONS TECHNOLOGY WORK SHALL BE REVIEWED AND APPROVED PRIOR TO PROCUREMENT AND INSTALLATION.

3) ALL LADDER RACK AND OTHER COMMUNICATION TECHNOLOGY CABLING PATHWAYS DEPICTED ON THE ENLARGED FLOOR PLANS AND OTHERWISE NECESSARY FOR PROFESSIONAL WIRE MANAGEMENT WITHIN THE MAIN EQUIPMENT ROOM (ER) AND ALL TELECOMMUNICATION ROOMS (TR) SHALL BE PROVIDED BY THE COMMUNICATIONS TECHNOLOGY CONTRACTOR. SEE DIVISION 27 SPECIFICATIONS AND DRAWINGS FOR REQUIREMENTS.

4) THE DIVISION 27 CONTRACTOR SHALL THOROUGHLY REVIEW THE SPECIFIED ROUGH-IN TO ENSURE THAT SUPPLIED ROUGH-IN WILL SUPPORT THE CABLING AND DEVICES BEING SUPPLIED. DIVISION 27 CONTRACTOR SHALL THOROUGHLY COORDINATE WITH THE DIVISION 26 ROUGH-IN PROVIDER PRIOR TO ROUGH-IN MATERIAL ACQUISITION AND INSTALLATION.

GENERAL PATHWAYS NOTES:

1) ROUGH-IN/PATHWAYS SHALL BE CLOSELY REVIEWED AND COORDINATED PRIOR TO INSTALLATION. IT IS THE RESPONSIBILITY OF THE ROUGH-IN PROVIDER TO THROUGHLY REVIEW AND UNDERSTAND THE REQUIREMENTS OF THE SYSTEMS THAT WILL USE THE PATHWAYS. THIS INCLUDES, BUT IS NOT LIMITED TO, PROPER SIZING OF BOXES, AND PROVIDING THE CORRECT QUANTITY AND SIZES OF CONVEYANCES. THE COST FOR REMOVING AN INSUFFICIENT PATHWAY SYSTEM AND INSTALLING AN APPROPRIATELY SIZED AND TYPED PATHWAY SYSTEM IS THE RESPONSIBILIITY OF THE CONTRACTOR.

PATHWAYS SHALL BE COMPLIANT WITH THE CONTRACT DOCUMENTS.

2) WHERE CONDUIT IS SHOWN AND/OR SPECIFIED, PROVIDE PULL BOXES SHOWN ON THE DRAWINGS PLUS ADDITIONAL PULL BOXES AS FOLLOWS:

A) EVERY 180 DEGREES OF CONDUIT BEND;
B) EVERY 100 FEET OF CONDUIT PATH.

3) INSTALLED PULL BOXES AND JUNCTION BOXES BE IN ACCESSIBLE LOCATIONS.

4) ROUGH-IN REQUIREMENTS INDICATED ON PLANS, ELEVATIONS AND DETAILS TAKE PRECEDENCE OVER VALUES GIVEN ON THE LEGEND, BUT ONLY TO THE EXTENT THAT THOSE SPECIFIC ITEMS ARE MODIFIED.

5) PROVIDE PATHWAYS FOR COMMUNICATIONS AND SECURITY SYTEMS CABLING. REFER TO SECTIONS “PATHWAYS FOR COMMUNICATIONS” AND “PATHWAYS FOR SAFETY AND SECURITY”.

6) PROVIDE COVER PLATES FOR DEVICE, JUNCTION AND PULL BOXES. COORDINATE MATERIAL AND FINISH OF BLANK PLATES TO MATCH SURROUNDING PLATES.

7) WHERE CONDUITS ARE SPECIFIED “TAAC” (TO ABOVE ACCESSIBLE CEILING) THIS SHALL MEAN THAT CONDUITS SHALL BE STUBBED INTO AN ACCESSIBLE CEILING CAVITY WITHIN THE SAME ROOM AS THE DEVICE THE CONDUIT SERVES. SEE ALSO “DEFINITIONS.”

8) WHERE DEVICE CONDUITS ARE SPECIFIED “TAHC” (TO ABOVE ACCESSIBLE HALLWAY/CORRIDOR CEILING) THIS SHALL MEAN THAT CONDUITS SHALL BE RUN CONTINUOUS AND STUBBED OUT INTO AN ACCESSIBLE CEILING CAVITY WITHIN THE NEAREST CORRIDOR FEATURING AN ACCESSIBLE CEILING CAVITY. SEE ALSO “DEFINITIONS.”

9) CONDUIT INSTALLER SHALL INSTALL PULL STRINGS IN CONDUITS IMMEDIATELY AFTER INSTALLATION. THIS INCLUDES CONDUITS TARGETED FOR IMMEDIATE AND FUTURE USE.

10) WHERE A MOUNTING HEIGHT MEASUREMENT IS APPLIED TO A ROUGH-IN, THE MEASUREMENT SHALL BE REFERENCED TO THE CENTER OF THE ROUGH-IN DEVICE, EXCEPT WHERE OTHERWISE DETAILED,

11) ROUGH-IN BOXES SHALL BE INSTALLED FLUSH IN WALLS AND CEILINGS.

12) PATHWAYS SHALL BE INSTALLED CONCEALED MANNER. EXPOSED CONDUIT SHALL NOT BE PERMITTED IN FINISHED AREAS.

13) SURFACE MOUNT BACK BOXES AND MATCHING RACEWAY SHALL BE USED FOR COMMUNICATION TECHNOLOGY DEVICES THAT ARE NOT INSTALLED WITHIN A WALL OR CEILING

13) PROVIDE CODE-COMPLIANT FIRE-STOPPING FOR PATHWAYS THROUGH FIRE-RATED WALLS, FLOORS AND CEILINGS.

14) ALL CONDUIT PROVIDED FOR COMMUNICATION TECHNOLOGY USE SHALL BE PROVIDED WITH NYLON END-BUSHINGS. BUSHINGS SHALL BE INSTALLED AT EACH END OF THE CONDUIT; AT EACH PULL/ JUNCTION/DEVICE BOX; ON CONDUIT STUBS; AT EACH LOCATION WHERE PULLING CABLE THROUGH THE CONDUIT MAY CAUSE THE CABLE TO RUB AGAINST THE END OF A CONDUIT OR ITS END FITTING.

15) DEVICES DESIGNATED WITH THE “CH” SUBSCRIPT (COUNTER HEIGHT) SHALL BE CLOSELY COORDINATED IN THE FIELD WITH ARCHITECT, CASEWORK AND FURNITURE VENDORS PRIOR TO ROUGH-IN.

16) DEVICES TO BE INSTALLED AT CASEWORK LOCATIONS SHALL BE CLOSELY COORDINATED WITH THE CASEWORK TO ENSURE FUNCTIONAL CONNECTIVITY. COORDINATE WITH THE ARCHITECT AND THE EQUIPMENT AND CASEWORK DRAWINGS.

17) ROUGH-IN SHALL BE CLOSELY COORDINATED TO COMPLEMENT THE INTENDED FURNITURE PLAN AND TO ENSURE THE SAFE AND EFFICIENT CONNECTIVITY OF EQUIPMENT.

18) MANY COMMUNICATIONS DEVICES ARE INTENDED TO HAVE ADJACENT POWER OR INTEGRAL RECEPTACLES (MULTI-SERVICE) TO SERVE THE SAME EQUIPMENT. CLOSE PROXIMITY OF SEPARTE DEVICES IS CRITICAL FOR USABILITY AND AESTHETICS. COORDINATE THE LOCATION OF SEPARATE DEVICES SO THAT THEY ARE LOCATED ADJACENT AND AT THE SAME ELEVATION.

19) TELECOMMUNICATION DEVICE MOUNTING HEIGHT SHALL BE CONSISTENT WITH THE ELECTRICAL OUTLET MOUNTING HEIGHTS FOR THE FACILITY (NEW OR EXISTING) UNLESS OTHERWISE INDICATED ON DRAWINGS. CONTRACTOR SHALL SEEK THE DIRECTION OF THE DESIGNER/ARCHITECT/ENGINEER/ CONSULTANT SHOULD DISCREPANCIES BE FOUND WITHIN THE DRAWINGS, SPECIFICATIONS AND ACTUAL FIELD CONDITIONS.

20) CONDUITS STUBBED INTO THE CEILING CAVITY SHALL BE MARKED WITH AN INDELIBLE MARKER INDICATING THE CONDUIT’S INTENDED USE. MARK CONDUIT SO AS TO BE READABLE FROM BELOW. LABEL WITHIN 6 INCHES OF THE CONDUIT BUSHING. BELOW OF EXAMPLES OF LABELS TO BE USED. “CAMERA,” “ICOM,” “DOOR,” “SPKR,” “MIC,” “CLOCK,” “VOL,” “PANEL,” “WAP,” “DATA,” “PHONE,” “COM,” “RF,” “VP,” “INPUT,” ETC.

21) WHERE SPECIFICATIONS AND/OR DRAWINGS INDICATE THE USE OF SURFACE RACEWAY AND BOXES IN LIEU OF RECESSED ROUGH-IN, THE BOX SIZE AND USABLE RACEWAY CABLE AREA SHALL SUBSTANTIALLY MATCH THAT OF THE DEFAULT STANDARD ROUGH-IN. IN SOME CIRCUMSTANCES THIS MAY REQUIRE THE CONTRACTOR TO PROCURE MATERIALS ONLY AVAILABLE BY SPECIAL ORDER FROM THE MANUFACTURERS.

22) LADDER RACK AND OTHER COMMUNICATION TECHNOLOGY CABLING PATHWAYS DEPICTED ON THE ENLARGED FLOOR PLANS SHALL BE PROVIDED AS INDICATED. ADDITIONAL PRODUCTS NECESSARY FOR PROFESSIONAL WIRE MANAGEMENT WITHIN THE MAIN EQUIPMENT ROOM <ER> AND ALL TELECOMMUNICATION ROOMS <TR> SHALL BE ALSO BE PROVIDED AS NECESSARY.

23) ELEVATOR TELEPHONE CONNECTIONS, SHALL BE CLOSELY COORDINATED WITH THE ELEVATOR PROVIDER. PROVIDE CONDUIT FROM THE ELEVATOR CONTROL PANEL TO THE CORRIDOR CEILING SPACE, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

24) COORDINATE THE TELEPHONE CONNECTION REQUIREMENTS FOR THE FIRE ALARM CONTROL PANEL (FACP) WITH THE FIRE ALARM INSTALLER. PROVIDE CONDUIT FROM THE FACP TO ACCESSIBLE CORRIDOR CEILING SPACE, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

25) COORDINATE DATA CABLING AND TERMINATION REQUIREMENTS FOR HVAC BUILDING AUTOMATION SYSTEM (BAS), WITH THE BAS PROVIDER.

26) PROVIDE A MINIMUM OF TWO (2) 2-INCH DIAMETER THROUGH-THE-WALL CONDUIT SLEEVES FOR USE AS COMMUNICATION AND SECURITY CABLE PATHWAYS INTO EACH SPACE CONTAINING COMMUNICATION AND SECURITY DEVICES. ROUTE CONDUITS FROM ABOVE ACCESSIBLE CEILING TO THE NEAREST HALLWAY/CORRIDOR FEATURING AND ACCESSIBLE CEILING CAVITY.

GENERAL NOTES:

1) NOTHING SET FORTH IN THESE DRAWINGS SHALL RELEASE ANY CONTRACTOR FROM HIS RESPONSIBILITY TO PROVIDE APPROPRIATE QUANTITIES, FIELD MEASUREMENTS, DIMENSIONAL STABILITY, INSTALLATION, ANCHORAGE, AND COORDINATION WITH OTHER TRADES; OR RELEASE HIM FROM HIS RESPONSIBILITY TO IDENTIFY AND RESOLVE DEVIATIONS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, OR FREE HIM OF HIS RESPONSIBILITY TO ALERT DESIGNER TO ERRORS OR OMISSIONS.

2) CONTRACTOR SHALL UTILIZE THESE DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS TO DETERMINE THE FULL SCOPE, INTENT AND REQUIREMENTS OF THE PROJECT. SPECIFICATIONS AND DRAWINGS ARE INTENDED TO BE COMPLEMENTARY, NOT MUTUALLY EXCLUSIVE. WORK SHOWN ON THE DRAWINGS BUT NOT LISTED IN THE SPECIFICATIONS, AND WORK DESCRIBED IN THE SPECIFICATIONS BUT NOT SHOWN ON THE DRAWINGS SHALL BE INTERPRETED AS THOUGH WORK WERE FULLY DESCRIBED IN BOTH PLACES. THE HIGHER QUANTITY, HIGHER QUALITY, MORE LABOR INTENSIVE AND OVERALL MORE STRINGENT AND MORE COSTLY REQUIREMENT SHALL APPLY UNLESS OTHERWISE CLARIFIED IN WRITING PRIOR TO BID.

3) EACH CONTRACTOR SHALL VERIFY IN THE FIELD ALL EXISTING APPLICABLE CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS AND AS PERTINENT TO THE INTENT OF THESE DRAWINGS. ANY DISCREPANCY DISCOVERED SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER PRIOR TO THE COMMENCEMENT OF ANY WORK AFFECTED BY, OR RELATED TO, SUCH DISCREPANCY. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH, OR CAUSED BY HIS FAILURE TO COMPLY WITH THIS REQUIREMENT.

4) EACH CONTRACTOR SHALL REVIEW ALL PORTIONS OF HIS WORK, BEFORE STARTING THE WORK, TO VERIFY THAT THE WORK WILL NOT PROHIBIT COMPLETION OF THE PROJECT AS INTENDED IN THESE CONSTRUCTION DOCUMENTS. ALL QUESTIONS SHALL BE REFERRED TO THE DESIGNER FOR RESOLUTION.

5) EACH CONTRACTOR SHALL BE RESPONSIBLE FOR JOB CLEANLINESS. PROJECT AREAS SHALL BE THOROUGHLY CLEANED AND TRASH DISPOSED OF AT THE END OF EACH WORK DAY. OWNER'S FACILITIES SHALL NOT BE USED FOR WASTE DISPOSAL.

6) PROVIDE DUST PROTECTION WHEN WORKING IN EXISTING FACILITIES. SEAL OFF ALL WORK AREAS FROM REMAINDER OF THE EXISTING FACILITY TO RETAIN ALL CONSTRUCTION DIRT AND DUST. SEAL EXISTING DOORS WITH TAPE AND PROVIDE DUST-PROOF BARRIERS AS REQUIRED.

7) ALL WORK SHALL BE SEQUENCED TO PROVIDE FOR THE OWNER'S CONTINUED USE OF THE EXISTING FACILITY WHEN REQUIRED. OWNER'S ACCESS, EGRESS AND SAFETY SHALL BE MAINTAINED BY EACH CONTRACTOR. THE SEQUENCE OF WORK SHALL BE AS DETERMINED BY THE CONSTRUCTION MANAGER. REFER TO THE PROJECT MANUAL FOR FURTHER REQUIREMENTS.

8) EACH CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL SURFACES AND FINISHES IN THE INTERIOR OR EXTERIOR OF THE FACILITY. DAMAGED SURFACES OR FINISHES RESULTING FROM THE PERFORMANCE OF THE WORK OR NEGLIGENCE SHALL BE REPAIRED AT NO COST TO THE OWNER BY THE RESPONSIBLE CONTRACTOR. FINISHES AND SURFACES SHALL BE MADE TO MATCH THE EXISTING FINISHES OR SURFACES TO THE SATISFACTION OF THE OWNER AND ARCHITECT/ CONSTRUCTION MANAGER.

9) “TECHNOLOGY” CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TELEPHONE, DATA, CENTRAL SOUND, SECURITY CCTV AND ALARM SYSTEM SERVICES IN ALL EXISTING AREAS FOR DURATION OF PROJECT FOR MULTI-PHASED PROJECTS. CONTRACTOR SHALL COLLABORATE WITH OWNER’S TECHNOLOGY PERSONNEL AS NECESSARY AND PROVIDE TEMPORARY WIRING, CROSS-CONNECTS, TERMINATION DEVICES, AND LABOR TO MAINTAIN OPERATION ACCEPTABLE TO THE OWNER. CONTRACTOR SHALL REFER TO THE FRONT END DOCUMENTS OF THE SPECIFICATIONS FOR ADDITIONAL INFORMATION RELATED TO PHASING. ALL PHASING QUESTIONS SHALL BE ADDRESSED PRIOR TO THE CONTRACTOR’S BID SUBMISSION.

10) EACH CONTRACTOR SHALL FIELD VERIFY ALL EXISTING APPLICABLE CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS. AS PERTAINS TO THE INTENT OF THESE DRAWINGS, CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ARCHITECT AND DESIGNER ANY DISCREPANCIES DISCOVERED PRIOR TO THE COMMENCEMENT OF ANY WORK AFFECTED BY OR RELATED TO SUCH DISCREPANCY. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH OR CAUSED BY THAT CONTRACTOR’S FAILURE TO COMPLY WITH THIS REQUIREMENT.

GENERAL CABLING NOTES:

1) ALL PROVIDED CABLE SHALL BE RATED FOR THE ENVIRONMENT INSTALLED.

2) ALL INSTALLED CABLING SHALL BE CONTINUOUS AND WITHOUT SPLICES, EXCEPT WHERE OTHERWISE NOTED.

3) “ABOVE ACCESSIBLE CEILING” SHALL BE INTERPRETED TO GENERALLY MEAN THE ACCESSIBLE CAVITY ABOVE SUSPENDED CEILING AND BENEATH THE DECK/FLOOR ABOVE. CONDUITS STUBBED ABOVE ACCESSIBLE CEILING SHALL TERMINATE IN A LOCATION IN WHICH A NORMAL HEIGHT PERSON CAN VIEW AND ACCESS WITHOUT STRAIN WHILE STANDING UPRIGHT ON A LADDER OR OTHER VERTICAL LIFT DEVICE,

4) COLOR CODING OF CABLING SHALL BE COORDINATED AND APPROVED PRIOR TO PROCUREMENT AND INSTALLATION.

5) ALL CABLE IN EXPOSED CEILINGS SHALL BE IN CONDUIT.

SLEEVE AND FIRE-STOPPING NOTES:

1) ALL PENETRATIONS THROUGH BUILDING STRUCTURE (WALL AND/OR FLOORS) FOR COMMUNICATIONS CABLING SHALL BE SLEEVED.

2) ALL SLEEVES THROUGH WALLS OR FLOORS HOLDING A FIRE RATING SHALL BE INSTALLED UTILIZING ONE OF THE APPROVED METHODS FOR A UL LISTED ASSEMBLY.

3) APPROVED MANUFACTURERS FOR UL LISTED SLEEVES SHALL BE SPECIFIED TECHNOLOGY SYSTEMS, UNIQUE FIRESTOP PRODUCTS, AND WIREMOLD.

4) ALL SLEEVES THROUGH FLOORS SHALL BE FIRESTOPPED TO A RATING EQUAL TO OR HIGHER THAN THE FLOOR RATING.

5) ALL UN-USED SLEEVES THROUGH WALLS OR FLOORS HOLDING A FIRE RATING SHALL BE FIRESTOPPED TO A RATING EQUAL TO OR HIGHER THAN THE WALL OR FLOOR RATING.

6) ALL SLEEVES THROUGH WALLS HOLDING A FIRE RATING SHALL BE FIRESTOPPED TO A RATING EQUAL TO OR HIGHER THAN THE WALL RATING.

7) ALL PENETRATIONS SHALL BE PART OF THE RE-USABLE PATHWAY SYSTEM; FIRESTOPPED PENETRATIONS SHALL EITHER BE AN ASSEMBLY WITH FIRESTOP MATERIALS BUILT INTO THE ASSEMBLY OR FIRESTOPPED WITH REMOVABLE PUTTY OR FIRESTOP BAGS.

AD-3

AUDIO-VISUAL SYSTEMS

X LI ▼ X LI ▼	**VOICE AND DATA OUTLET WITH LOCAL INPUT** X = QUANTITY OF (4) PAIR VOICE/DATA CABLES (MIN. 1 VOICE AND 1 DATA CABLE WITHOUT SUBSCRIPT) LI = FUTURE LOCAL INPUT CABLING TO A VIDEO PROJECTOR, TELEVISION, ETC.
LI X ▽ LI ▽ X	**DATA OUTLET WITH LOCAL INPUT** X = QUANTITY OF (4) PAIR DATA CABLES (MIN. 2 DATA CABLE WITHOUT SUBSCRIPT) LI = FUTURE LOCAL INPUT CABLING TO A VIDEO PROJECTOR, TELEVISION, ETC.
VP Y	**VIDEO PROJECTOR CEILING MOUNTED - NETWORK** QUANTITY OF TWO - (4) PAIR DATA CABLES - THIS OUTLET WILL ALSO ACCEPT CABLING FROM LOCAL INPUT LOCATIONS Y = MODEL
VP Y VP Y	**VIDEO PROJECTOR WALL MOUNTED** QUANTITY OF TWO - (4) PAIR DATA CABLES - THIS OUTLET WILL ALSO ACCEPT LOCAL INPUT CABLES Y = MODEL
Y FP	**FLAT PANEL DISPLAY CEILING MOUNTED - NETWORK** QUANTITY OF TWO - (4) PAIR DATA CABLES - THIS OUTLET WILL ALSO ACCEPT LOCAL INPUT CABLES Y = MODEL
FP Y FP Y	**FLAT PANEL DISPLAY WALL MOUNTED - NETWORK** QUANTITY OF TWO - (4) PAIR DATA CABLES - THIS OUTLET WILL ALSO ACCEPT LOCAL INPUT CABLES Y= MODEL / HEIGHT = 60" (UNLESS OTHERWISE NOTES)
AV X Y AV	**AUDIO VIDEO (A/V) OUTLET** X = SYSTEM Y = MODEL SEE SYTEM DETAILS FOR CONNECTIVITY REQUIREMENTS
MC MC	**MICROPHONE INPUT – WALL MOUNT** X = SYSTEM SEE SYTEM DETAILS FOR CONNECTIVITY REQUIREMENTS
MC X	**MICROPHONE INPUT – CEILING MOUNT** X = SYSTEM SEE SYTEM DETAILS FOR CONNECTIVITY REQUIREMENTS
S X Y	**SYSEM SPEAKER – RECCESSED CEILING MOUNTED** X = SYSTEM Y= MODEL
S X Y	**SYSTEM SPEAKER – WALL MOUNTED** X = SYSTEM Y = MODEL
S X Y	**SYSTEM SPEAKER – PENDANT MOUNTED** X = SYSTEM Y = MODEL
S X Y	**SYSTEM SPEAKER – CEILING MOUNTED** X = SYSTEM Y = MODEL
CP X Y CP	**A/V CONTROL PANEL** X = SYSTEM Y = TYPE SEE SYTEM DETAILS FOR CONNECTIVITY REQUIREMENTS
IWB X Y IWB X Y	**INTERACTIVE WHITE BOARD** A/V SYSTEM CONTROL PANEL

SECURITY/LIFE SAFETY

CAM	**VIDEO SURVEILLANCE CAMERA OUTLET WALL MOUNTED** QUAINTY OF ONE - (4) PAIR DATA CABLE (UNLESS OTHERWISE NOTED) Y = CAMERA TYPE
CAM Y	**VIDEO SURVEILLANCE CAMERA OUTLET CEILING MOUNTED** QUAINTY OF ONE - (4) PAIR DATA CABLE (UNLESS OTHERWISE NOTED) Y = CAMERA TYPE
CAM Y	**VIDEO SURVEILLANCE CAMERA OUTLET EXTERIOR WALL** QUAINTY OF ONE - (4) PAIR DATA CABLE (UNLESS OTHERWISE NOTED) Y = CAMERA TYPE
SD X	**SECURE DOOR** DENOTES A DOOR WITH CONNECTIVITY FOR STATUS SENSOR(S) AND LOCKING AND UN-LOCKING CAPABILITIES. X – WHERE UTILIZED WILL BE DEFINED ON SYSTEM DIAGRAM
DS	**DOOR STATUS SENSOR** DOOR STATUS SENSOR ALLOWS DOOR MONITORING WITH OR WITHOUT LOCKING PROVISIONS CABLE AS REQUIRED BY SYSTEM
DR	**DOOR RELEASE** DOOR RELEASE SWITCH ALLOWS MANUAL ACTUATION OF AN ELEC. DOOR LOCK. CABLE AS REQUIRED BY SYSTEM
KP	**KEYPAD** KEYPAD UTILIZED TO ACTUATE ACCESS TO A SECURE DOOR. CABLE AS REQUIRED BY SYSTEM
CR	**PROXIMITY CARD READER** QUANTITY ONE – (4) PAIR DATA CABLE Y = MODEL MAY BE A COMBINATION KEYPAD AND READER; SEE SPECIFICATION.
PS	**PANIC (DURESS) SWITCH** SWITCH UTILIZED TO MANUALLY ACTUATE ALARM AND/OR ACCESS CONTROL SYSTEM.
EHO	**ELECTRONIC HOLD OPEN** CABLE AS REQUIRED BY SYSTEM
◩	**ELECTRIC DOOR LOCK/STRIKE** REQUIRES 120V POWER
SM X	**SECURITY MONITOR** ONE DATA CABLE, PLUS OTHER SPECIAL A/V CABLES AS REQUIRED BY SYSTEM X = TYPE

DISTRIBUTED SYSTEMS

S V Y	**SPEAKER – SUSPENDED CEILING MOUNTED** CABLE AS REQUIRED BY SYSTEM V = INTREGAL VOLUME CONTROL Y = MODEL
S V Y	**SPEAKER – SOLID CEILING MOUNTED** CABLE AS REQUIRED BY SYSTEM V = INTREGAL VOLUME CONTROL Y = MODEL
S Y	**SPEAKER, WALL TYPE** CABLE AS REQUIRED BY SYSTEM Y = MODEL
S P Y	**SPEAKER, PENDANT** CABLE AS REQUIRED BY SYSTEM Y = MODEL
V P	**SPEAKER, VOLUME CONTROL** CABLE AS REQUIRED BY SYSTEM P = PRIORITY OVERRIDE OPTION
H Y	**SPEAKER, HORN TYPE** CABLE AS REQUIRED BY SYSTEM Y = MODEL
VIS	**VIDEO INTERCOM CALL STATION** QUANTITY ONE - (4) PAIR DATA CABLE ACCESS CONTROL SYSTEMS CABLE TO DOOR CONTROLER
VIM	**VIDEO INTERCOM MASTER STATION** QUANTITY ONE - (4) PAIR DATA CABLE ACCESS CONTROL SYSTEMS CABLE TO DOOR CONTROLER
◔	**CLOCK – BATTERY TYPE** WALL CLOCK; 12" DIAMETER, UNLESS OTHERWISE NOTED WG = PROVIDE WITH ACCESSORY WIRE GUARD
◔◔	**CLOCK – BATTERY TYPE** WALL CLOCK; 12" DIAMETER, UNLESS OTHERWISE NOTED WG = PROVIDE WITH ACCESSORY WIRE GUARD DOUBLE SIDED
LED Y	**LED CLOCK – CEILING MOUNTED** QUANTITY OF ONE - (4) PAIR DATA CABLE PER CLOCK Y = MODEL
LED LED Y	**LED CLOCK** QUANTITY OF ONE - (4) PAIR DATA CABLE PER CLOCK Y = MODEL DOUBLE SIDED
LED Y	**LED CLOCK – WALL MOUNTED** QUANTITY OF ONE - (4) PAIR DATA CABLE PER CLOCK Y = MODEL

TELECOMMUNICATIONS

▼ X ▼ X	**VOICE OUTLET; STANDARD** X = QUANTITY OF - (4) PAIR VOICE CABLES CABLE WITHOUT SUBSCRIPT) B = BLANK COVER, NO CONNECTORS OR CABLE
W ▼ W ▼	**VOICE OUTLET; WALL MOUNTED TELEPHONE** QUANTITY OF ONE - (4) PAIR VOICE CABLES CABLE WITHOUT SUBSCRIPT)
X ▽ X ▼	**VOICE AND DATA OUTLET; STANDARD** X = QUANTITY OF (4) PAIR VOICE/DATA CABLES (MIN. 1 VOICE AND 1 DATA CABLE WITHOUT SUBSCRIPT) B = BLANK COVER, NO CONNECTORS OR CABLE
X ▼ F X ▽ F X ▼ F	**VOICE AND DATA OUTLET IN OFFICE FURNITURE** X = QUANTITY OF (4) PAIR VOICE/DATA CABLES (MIN. 1 VOICE AND 1 DATA CABLE WITHOUT SUBSCRIPT) F = FURNITURE MOUNTED
X ▽ Y X ▽ Y	**DATA OUTLET; STANDARD** X = QUANTITY OF (4) PAIR DATA CABLES (MIN. 1 DATA CABLE WITHOUT SUBSCRIPT) Y = (B) BLANK COVER: (CH) COUNTER HEIGHT
WAP ▽	**WIRELESS LAN ACCESS POINT OUTLET WALL MOUNTED** QUANTITY OF TWO - (4) PAIR DATA CAT6A CABLES
WAP	**WIRELESS LAN ACCESS POINT OUTLET CEILING MOUNTED** QUANTITY OF TWO - (4) PAIR DATA CAT6A CABLES
X POS ▽ X POS ▽	**POINT OF SALE DATA OUTLET** X = QUANTITY OF (4) PAIR VOICE/DATA CABLES (MIN. 1 DATA CABLE WITHOUT SUBSCRIPT) SEE SYSTEM DIAGRAM FOR ADDITIONAL CABLING REQUIREMENTS
X	**ABOVE CEILING OUTLET** X = QUANTITY OF (4) PAIR DATA CABLES (MIN. 1 DATA CABLE WITHOUT SUBSCRIPT)
BAS ▽ BAS ▽	**BUILDING AUTOMATION SYSTEMS OUTLET** QUANTITY OF TWO - (4) PAIR DATA CABLES COORDIATE OUTLET LOCATION WITH BUIDLING CONTROLS CONTRACTOR
FACP ▼ FACP ▼	**FIRE ALARM CONTROL PANEL** QUANTITY OF TWO - (4) PAIR DATA CABLES COORDINATE OUTLET LOCATION WITH FIRE ALARM CONTRACTOR
ELEV ▼ ELEV ▼	**ELEVATOR CONTROL OUTLET** QUANTITY OF TWO - (4) PAIR DATA CABLES COORDINATE OUTLET LOCATION WITH ELEVATOR CONTRACTOR
EMER ▼ EMER ▼	**EMERGENCY TELEPHONE OUTLET** QUANTITY OF ONE - (4) PAIR VOICE CABLES (UNLESS OTHERWISE NOTED) COORDINATE OUTLET LOCATION WITH SECURITY SYSTEM CONTRACTOR
2 SP ▼ 2 SP ▼	**SECURITY ALARM PANEL OUTLET** QUANTITY OF TWO - (4) PAIR DATA CABLES COORDINATE OUTLET LOCATION WITH SECURITY SYSTEMS CONTRACTOR

SCOPE OF WORK

(1) "T" SERIES DRAWINGS BEING ISSUED FOR SCOPE AND COORDINATION. THE SOUND AND SECURITY SYSTEMS TO PART OF A LATER BID PACKAGE.

(2) THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL OUTLET / JUNCTION BOXES, CONDUITS AND RACEWAY FOR ALL LOW VOLTAGE SYSTEMS. THIS WORK IS DEPICTED ON THE "E" AND "T" SERIES DRAWINGS.

(3) FOR COORDINATION PURPOSES, OCCASSIONALLY AN ITEM OF WORK MAY BE SHOWN ON THE E SERIES DRAWINGS AND THE T SERIES DRAWINGS. IN ADDITION, THE SAME WORK MAY BE INCLUDED ON MULTIPLE T SERIES DETAIL SHEETS FOR SIMILAR REASONS. REQUEST A CLARIFICATION FOR ANY ITEMS THAT APPEAR UNCLEAR AS TO QUANTITY OR CONTRACT RESPONSIBILITY. EXAMPLE: ELECRICAL DEVICES ARE SHOWN ON T SERIES DETAIL SHEETS FOR COORDINATION AND SPACING PURPOSES; THE ELECTRICAL OUTLETS AND POWER EQUIPMENT IS THE RESPONSIBILITY OF DIVISION 26. LIKEWISE, SOME TELECOMMUNICATIONS CONDUITS APPEAR ON E SERIES SHEETS FOR SPACE COORDINATION; TELECOMMUNICATIONS PATHWAY AND SPACES ARE COVERED UNDER DIVISION 27.

(4) REFER TO DIVISION 26 AND DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(3) NO LOW VOLTAGE CABLING SHALL RUN EXPOSED IN AREAS OF THE BUILDING THAT DO NOT HAVE CEILINGS (I.E. GYMNASIUMS, LOCKER ROOMS, ETC.)- ALL CONDUITS RUN TO NEAREST ACCESSIBLE CEILING SPACE.

LEGEND NOTES

(1) BASE SYMBOLS ARE UTILIZED TO REFERENCE THE FLOORPLAN LOCATION AND PROPER ROUGH-IN REQUIREMENTS. WHERE SUBSCRIPTS ARE USED WITH THESE SYMBOLS, THEY MODIFY THE REQUIREMENTS.
(2) ROUGH-IN REQUIREMENTS CAN BE FOUND ON THE “T-7XX” SERIES DRAWINGS. PRIOR TO INSTALLATION OF ROUGH-IN, VERIFY ROUGH-IN SIZE REQUIREMENTS WITH DEVICE SUPPLIER;
(3) INCREASE SIZE OF BOX, AS REQUIRED TO ACCOMMODATE THE QUANTITY AND SIZE OF CONDUITS ENTERING BOX.
(4) ALL 1-GANG AND 2-GANG ROUGH-IN BOXES, RECESS/FLUSH MOUNTED, SHALL BE ASSEMBLED FROM 4" SQUARE BOXES AND SEPARATE TRIM RINGS. DEPTH OF COMPOSITE ASSEMBLY SHALL AS INDICATED, MINIMUM.
(5) IN APPLICATIONS WHERE THE DRAWINGS AND/OR SPECIFICATIONS REQUIRE THE USE OF SURFACE RACEWAY AND BOXES IN LIEU OF CONCEALED ROUGH-IN, CONTRACTOR SHALL MATCH THE SIZE OF THE BOX LISTED ON THE LEGEND; SHALL MATCH THE QUANTITY OF USABLE RACEWAYS; AND SHALL MATCH THE USABLE RACEWAY CABLE AREA SUBSTANTIALLY, TO QUANTITY AND SIZES OF RACEWAYS LISTED ON THE LEGEND. CONTRACTOR IS ADVISED THAT THIS MAY REQUIRE PROCUREMENT OF MATERIALS ONLY AVAILABLE BY SPECIAL ORDER FROM THE MANUFACTURERS.
(6) WHERE FIELD CONDITIONS INVOLVE INACCESSIBLE AREAS THE ROUGH-IN SHALL BE MODIFIED TO ALLOW THE PATHWAY TO BE ACCESSIBLE AND REUSABLE.
(7) COLOR CODING OF CABLING SHALL BE COORDINATED AND APPROVED PRIOR TO PROCUREMENT AND INSTALLATION.
(8) SYMBOLS AND SUBSCRIPTS MAY DISTINGUISH BETWEEN VOICE (V) AND DATA (D) INTENDED USES. MATERIALS AND INSTALLATION FOR VOICE AND DATA USES SHALL BE IDENTICAL UNLESS SPECIFICALLY NOTED. (1D, 1V IS THE SAME AS 2 CABLES).
(9) SYMBOLS PLACED ON EXTERIOR WALLS WITH A “WP” SUBSCRIPT SHALL BE INSTALLED WITH WEATHERPROOF HOUSINGS AND THE ROUGH-IN SEALED FROM MOISTURE INGRESS.
(10) WHERE A TELECOMMUNICATIONS OUTLET LOCATION IS ADJACENT TO AN ELECTRICAL OUTLET, THE MOUNTING HEIGHT WILL BE THE SAME FOR EACH. WHERE MULTIPLE TELECOMMUNICATIONS ARE ADJACENT (SUCH AS TELECOMMUNICATIONS AND SOUND DEVICES, FACEPLATES SHALL BE COORDINATED TO THE SAME TYPE AND COLOR AND MOUNTED AT THE SAME HEIGHT.

PATHWAY AND SPACES DEVICES

▨	**TELECOMMUNICATION WALL LINING (BACKBOARD)** 8' TALL, 4' WIDTH ¾” AC PLYWOOD; CUT TO FIT SPACE AS SHOWN PAINTED WITH FIRE RETARDANT WHITE PAINT
☷	**LADDER RACK** SIZE AS INDICATED 8' MOUNTING HEIGHT WHEN HORIZONTAL, UON
4"	**FIRE RATED SLEEVE THROUGH WALL** 4" DIAMETER UNLESS OTHERWISE NOTED; PROVIDE FIRE STOPPING; ROUTE FROM ROOM TO ACCESSIBLE CEILING NOTE: PROVIDE WATERFALL DEVICE WHEN CABLE DROP IS GREATER THAN 6"
⊢⊣	**SLEEVE THROUGH WALL** 2" DIAMETER UNLESS OTHERWISE NOTED; PROVIDE FIRE STOPPING; ROUTE FROM ACCESSIBLE CEILING TO ACCESSIBLE CEILING NOTE; NOT ALL SLEEVES WILL BE SHOWN, ONLY ADDITIVE INSTANCES REQUIRED TO ACHIEVE DESIGN GOALS
○	**FIRE RATED SLEEVE THROUGH FLOOR** 4" DIAMETER UNLESS OTHERWISE NOTED; PROVIDE FIRE STOPPING; ROUTE FROM ROOM TO ACCESSIBLE CEILING NOTE: PROVIDE WATERFALL DEVICE WHEN CABLE DROP IS GREATER THAN 6"
⊙	**POKE-THRU – FIRE RATED DEVICE** SEE ELECTRICAL DRAWINGS FOR POKE-THRU SIZE AND TYPE ADJACENT SYMBOL DENOTES CABLING REQUIREMENTS MODIFIED TO FIT BOX
⊙	**FLOOR BOX – FLUSH TO FINISHED FLOOR** SEE ELECTRICAL DRAWINGS FOR FLOORBOX SIZE AND TYPE ADJACENT SYMBOL DENOTES CABLING REQUIREMENTS MODIFIED TO FIT BOX
▣	**FURNITURE WHIP - WALL**
⊙ W	**FURNITURE WHIP FROM FIRE RATED POKE THROUGH DEVICE** X = [WHERE X REPRESENTS A-C] POKE-THRU SIZE AND TYPE 1 1/4" WHIP FITTING MINIMUM
PP	**TELEPOWER POLE** ADJACENT SYMBOL DENOTES CABLING REQUIREMENTS MODIFIED TO FIT BOX
J P	**JUNCTION/PULL BOX – WALL MOUNTED** SIZE AS NOTED OR CALCULATED BY QUANTITY AND SIZE OF CONDUITS NOTE; ALL BOXES SHALL BE MOUNTED SO AS TO ALLOW RE-ENTRY IN A SAFE MANNER
Ⓙ Ⓟ	**JUNCTION/PULL BOX – FLOOR MOUNTED** SIZE AS NOTED OR CALCULATED BY QUANTITY AND SIZE OF CONDUITS NOTE; ALL BOXES SHALL BE MOUNTED SO AS TO ALLOW RE-ENTRY IN A SAFE MANNER
J P	**JUNCTION/PULL BOX – CEILING MOUNTED** SIZE AS NOTED OR CALCULATED BY QUANTITY AND SIZE OF CONDUITS NOTE; ALL BOXES SHALL BE MOUNTED SO AS TO ALLOW RE-ENTRY IN A SAFE MANNER

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PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY
SCHOOL CORPORATION
CROWN POINT, INDIANA

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
21-113
DATE
1/31/22
COORDINATED BY
BKS
DRAWN BY
TKP
CHECKED BY
BKS

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian K Scott
BICSI ID # 114038
EXPIRES 12-31-24
RCDD

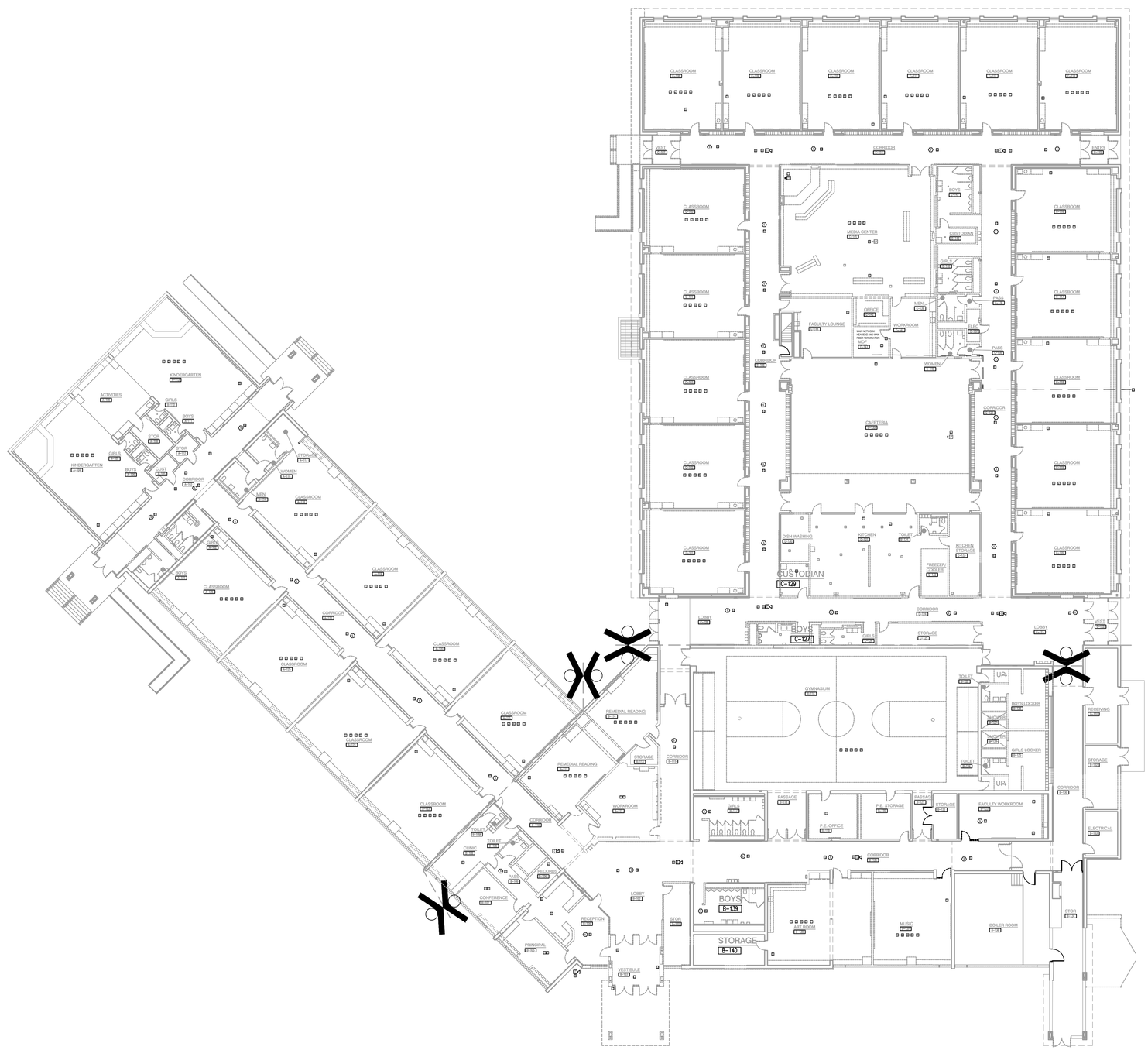
REVISIONS

MARK	DATE	ISSUED FOR
AD-3	2/23/2022	Addendum 3

DRAWING
TELECOMMUNICATIONS LEGEND

PROJECT
CROWN POINT MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
T001



D:\DROPBOX\CROWN_POINT_ COMMUNITY_SCHOOLS\T-BALL – MAC ELEMENTRY SCHOOLS\MACARTHUR ELEMENTARY\DRAWINGS\T-DRAWINGS\MAC TD100 – ADD-3-OVERALL TELECOMMUNICATIONS FIRST FLOOR DEMO PLAN.DWG

1 OVERALL TELECOMMUNICATIONS FIRST FLOOR DEMO PLAN

SCALE: 1/16 = 1'-0"

GENERAL DEMOLITION NOTES:

1 THE CONTRACT DOCUMENTS DO NOT PROPOSE TO SHOW ALL SYSTEMS, MATERIALS, OR EQUIPMENT EXISTING ON THE PROJECT THAT WILL REQUIRE DEMOLITION. DEMOLITION DRAWINGS ARE BASED ON PARTIAL FIELD OBSERVATION. REPORT DISCREPANCIES TO THE CONSULTANT BEFORE DISTURBING EXISTING INSTALLATION.

2 REMOVE ALL ABANDONED CABLING AS DEFINED BY THE NEC.

3 ALL REMOVED TECHNOLOGY AND / OR SECURITY DEVICE TO BE INVENTORIED AND TURNED OVER TO THE OWNER. PROTECT AND STORE AS DIRECTED BY THE OWNER.

4 IDENTIFY ITEMS TO BE SALVAGED WITH THE OWNER. PROVIDE NON-DESTRUCTIVE REMOVAL OF SYSTEMS, MATERIALS, AND EQUIPMENT FOR REUSE OR SALVAGE AS INDICATED.

5 REMOVE ALL COMMUNICATIONS DEBRIS FROM SITE AND LEGALLY DISPOSE OF IT.

6 COORDINATE ALL LOW VOLTAGE DEMO ACTIVITY WITH CONSTRUCTION MANAGER, REVIEW DEMO PHASING PLANS.

7 CONTRACTOR UNDERSTANDS THAT ADJACENT AREAS NEED TO REMAIN IN OPERATION AND THAT SERVICES TO THESE AREAS NEED TO BE MAINTAINED.

8 CONTRACTOR SHALL NOTIFY THE OWNER AND CONSULTANT NO LESS THAN THREE DAYS IN ADVANCE BEFORE COMMENCING ANY DEMOLITION TO INSURE THAT NO ADJACENT OCCUPIED AREAS WILL BE DISRUPTED.

9 FIRE STOP ANY SLEEVES WHERE CABLES HAVE BEEN REMOVED.

10 CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TELEPHONE, DATA, CENTRAL SOUND, SECURITY CCTV AND ALARM SYSTEM SERVICES IN ALL EXISTING AREAS FOR DURATION OF PROJECT FOR MULTI-PHASED PROJECTS. CONTRACTOR SHALL COLLABORATE WITH OWNER'S TECHNOLOGY PERSONNEL AS NECESSARY AND PROVIDE TEMPORARY WIRING, CROSS-CONNECTS, TERMINATION DEVICES, AND LABOR TO MAINTAIN OPERATION ACCEPTABLE TO THE OWNER. CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION RELATED TO PHASING.

☐ DEMOLITION NOTES:

(ALL DEMOLITION NOTES MAY NOT BE USED ON THIS SHEET.)

1 EXISTING TELECOMMUNICATION OUTLET(S) TO BE REMOVED. REMOVE CABLE BACK TO THE SOURCE. IF OUTLET(S) ARE IN SURFACE RACEWAY REMOVE SURFACE RACEWAY.

2 EXISTING WIRELESS ACCESS POINT(S) TO BE REMOVED. REMOVE CABLE BACK TO THE SOURCE. SECURELY STORE IN A LOCATION DESIGNATED BY OWNER.

3 EXISTING DATA CABINET TO BE REMOVED. REMOVE FIBER CABLING ASSOCIATED WITH DATA CABINET BACK TO THE SOURCE.

4 EXISTING CLOCK TO BE REMOVED. SECURELY STORE IN A LOCATION DESIGNATED BY OWNER.

5 EXISTING INTERCOM SPEAKER TO BE REMOVED.

6 EXISTING MAIN INTERCOM CABINET, TO REMAIN IN SERVICE UNTIL AREA IS DEMO'D. WHEN AREA IS READY TO BE DEMO'D REMOVE INTERCOM CABINET AND FOR ANY INTERCOM SPEAKERS THAT NEED TO REMAIN IN SERVICE IN OTHER AREAS WAITING FOR DEMO PULL THE EXISTING SPEAKERS BACK TO THE NEAREST NEW TELECOM ROOM.

AD-3

7 EXISTING AUDIO/VIDEO SYSTEMS AND DEVICES (PROJECTOR,TELEVISION,INTERACTIVE BOARD), AND RELATED MOUNTS AND CABLING, ETC. TO BE REMOVED. SECURELY STORE IN A LOCATION DESIGNATED BY OWNER. NOTE - MOST OF THE CLASSROOM PROJECTORS ARE SITTING ON PORTABLE CARTS.

8 EXISTING SECURITY DEVICES (CAMERAS, CARD READER, CONTROLLER, DOOR INTERCOM ETC.) AND RELATED MOUNTS TO BE REMOVED. REMOVE CABLE BACK TO THE SOURCE.

9 EXISTING SECURITY CAMERA(S) TO REMAIN. CEILING MOUNTED UNITS SHALL BE DISCONNECTED FROM CEILING TILE AND TEMPORARILY SUPPORTED TO STRUCTURE ABOVE CEILING.

10 EXISTING INTERCOM SPEAKER(S) TO REMAIN. DISCONNECT FROM CEILING TILE AND PROVIDE TEMPORARY ABOVE CEILING SUPPORT. (TYPICAL)

11 EXISTING WIRELESS ACCESS POINT TO REMAIN. DISCONNECT FROM CEILING TILE AND PROVIDE TEMPORARY ABOVE CEILING SUPPORT. REMOVE THE ABANDONED CABLE TO CABINETS AFTER CUT-OVER TO NEW CABLING.

12 EXISTING SECURITY DEVICES (CARD READER,CONTROLLER, DOOR INTERCOM ETC.) TO REMAIN IN SERVICE AND/OR BE RELOCATED INTO NEW DOOR FRAMES.

13 EXISTING INCOMING WAN FIBER SERVICE TO REMAIN UNTIL NEW MDF IS BUILT. OWNER IS RESPONSIBLE TO ARRANGE WITH SERVICE PROVIDER TO HAVE THE FIBER RELOCATED.

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CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

FIRST FLOOR KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
21–113
DATE
01/31/22
COORDINATED BY
BKS
DRAWN BY
TKP
CHECKED BY
BKS

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian K Scott
BICSI ID # 114038
EXPIRES 12-31-24
RCDD

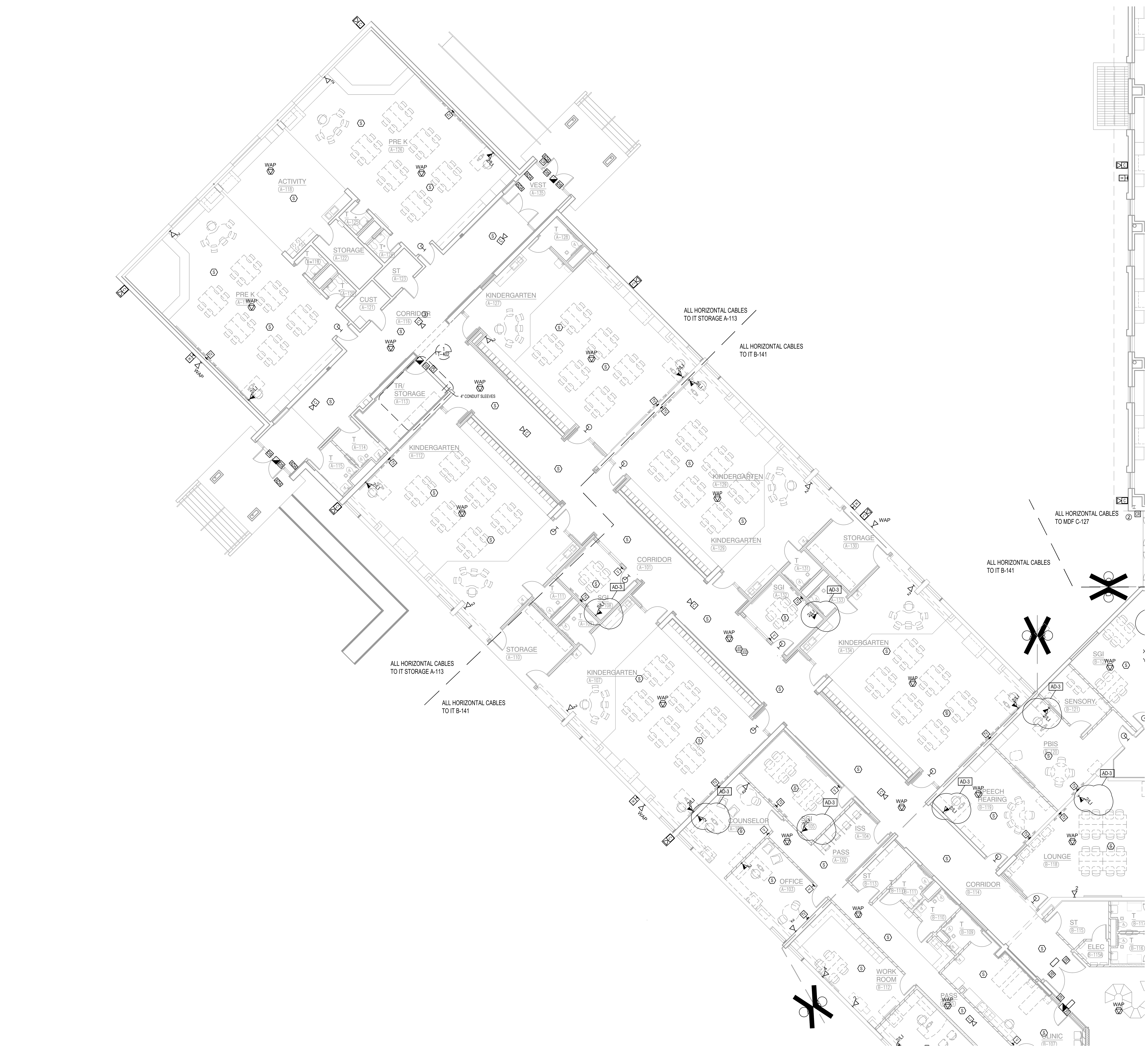
REVISIONS

MARK	DATE	ISSUED FOR
AD 2	2/17/22	ADDENDUM 2
AD 3	2/23/22	ADDENDUM 3

DRAWING
OVERALL TELECOMMUNICATIONS FIRST FLOOR DEMO PLAN

PROJECT
CROWN POINT MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
TD100



1 UNIT "A" TELECOMMUNICATIONS FIRST FLOOR PLAN

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

PLAN NOTES:

(ALL NOTES MAY NOT BE USED ON THIS SHEET.)

1. NEW TELECOMMUNICATION OUTLET(S) TO BE INSTALLED IN SURFACE RACEWAY WHERE REQUIRED.
2. EXISTING CARD READER, TO BE RE-INSTALLED IN NEW DOOR FRAME.
3. EXISTING SECURITY CAMERA(S), TO BE RE-INSTALLED IN NEW CEILING.
4. AUDIO AND DATA CABLE TO TRAVEL WITH BLEACHERS.
5. PROVIDE CONDUIT FOR SPEAKER CABLE. ROUTE FROM SPEAKER TO SOUND CABINET.
6. EXISTING INCOMING WAN FIBER.
7. DATA OUTLET MOUNTS IN THE BACK PAN OF THE SOUND CABINET. (AD-2)
8. COORDINATE DATA OUT LOCATION WITH SCOREBOARD SUPPLIER.

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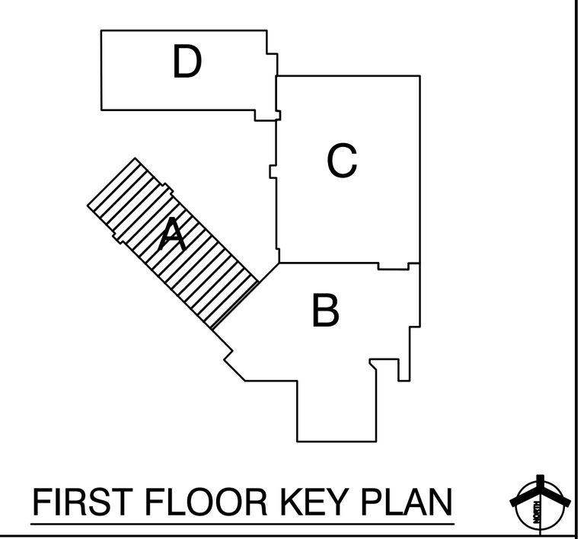
PROJECT

DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



FIRST FLOOR KEY PLAN

GIBRALTAR DESIGN
9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT 21-113
DATE 01/31/22
COORDINATED BY BKS
DRAWN BY TKP
CHECKED BY BKS

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER — Bicsi — Brian K Scott — BICSI ID # 114038 — Expires 12-31-24 — RCDD

REVISIONS

MARK	DATE	ISSUED FOR
AD 2	2/17/22	ADDENDUM 2
AD 3	2/23/22	ADDENDUM 3

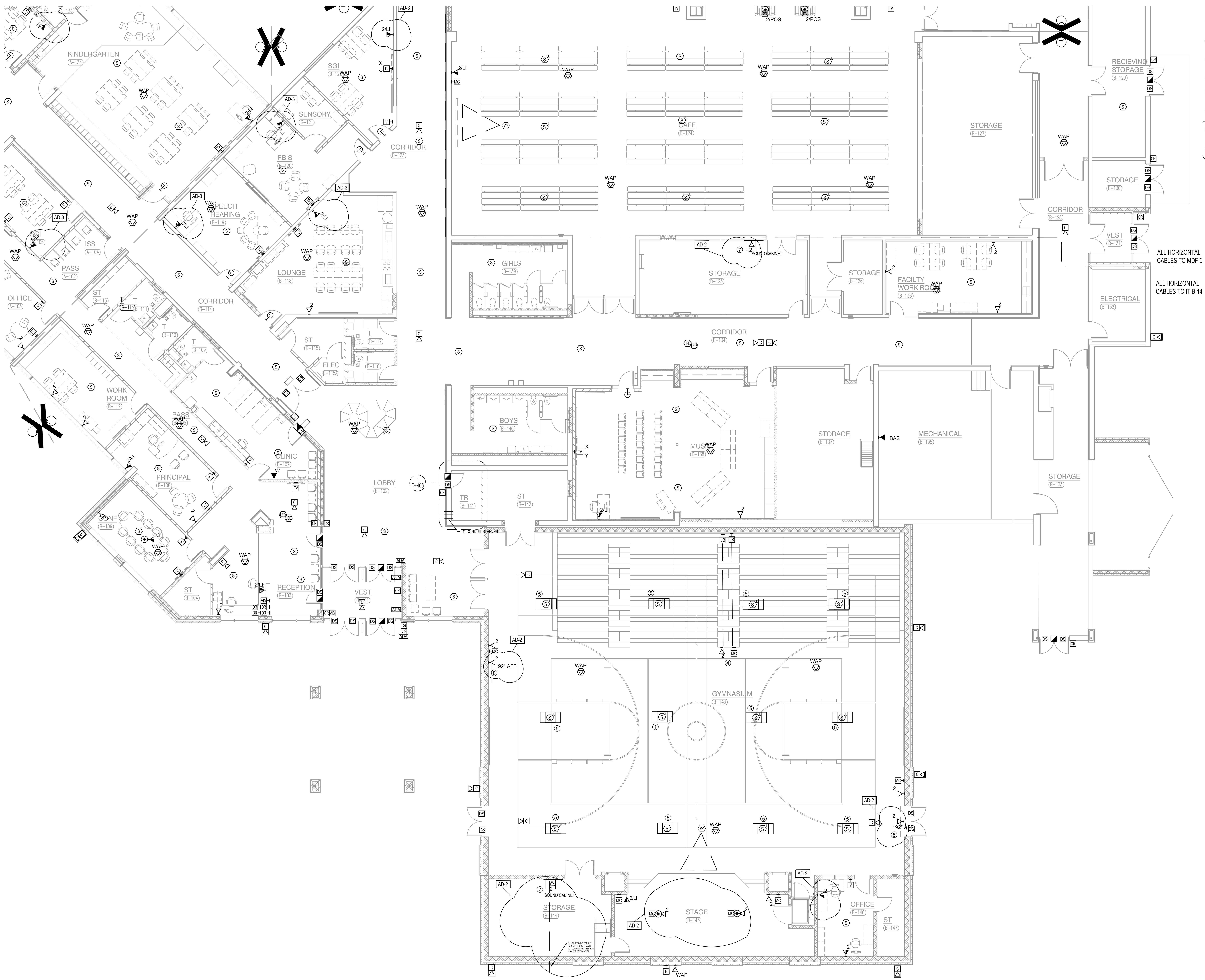
DRAWING
UNIT "A" TELECOMMUNICATIONS FIRST FLOOR PLAN

PROJECT
CROWN POINT MACARTHUR ES ADDITIONS AND RENOVATIONS

A

SHEET T-101

D:\DROPBOX\CROWN_POINT_COMMUNITY_SCHOOLS\T-BALL - MAC ELEMENTRY SCHOOLS\MACARTHUR ELEMENTARY\DRAWINGS\T-DRAWINGS\MAC T101 ADD 3 UNIT A TELECOMMUNICATIONS FIRST FLOOR PLAN.DWG



PLAN NOTES:

(ALL NOTES MAY NOT BE USED ON THIS SHEET.)

1. NEW TELECOMMUNICATION OUTLET(S) TO BE INSTALLED IN SURFACE RACEWAY WHERE REQUIRED.
2. EXISTING CARD READER, TO BE RE-INSTALLED IN NEW DOOR FRAME.
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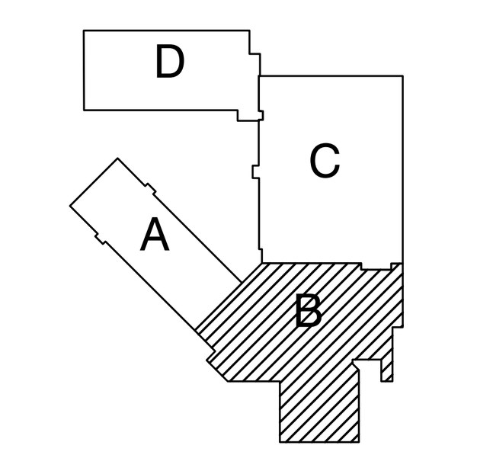
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



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Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
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AD 3	2/23/22	ADDENDUM 3

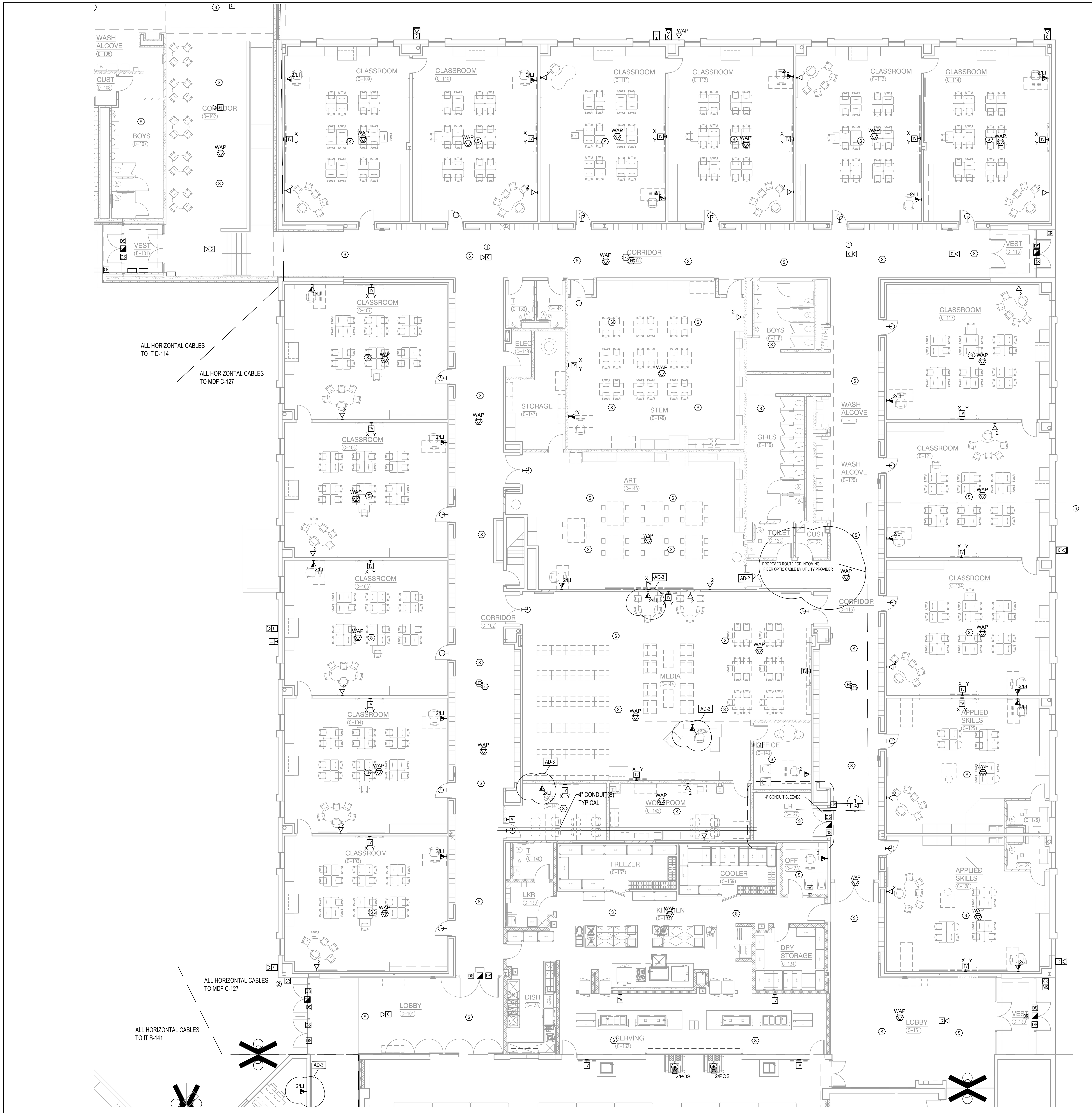
DRAWING
UNIT "B" TELECOMMUNICATIONS FIRST FLOOR PLAN

PROJECT
CROWN POINT MACARTHUR ES ADDITIONS AND RENOVATIONS

B
SHEET T-102

1 UNIT "B" TELECOMMUNICATIONS FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

D:\DROPBOX\CROWN_POINT_COMMUNITY_SCHOOLS\T-BALL - MAC ELEMENTRY SCHOOLS\MACARTHUR ELEMENTARY\DRAWINGS\T-DRAWINGS\MAC T102 ADD 3 UNIT B TELECOMMUNICATIONS FIRST FLOOR PLAN.DWG



PLAN NOTES:

(ALL NOTES MAY NOT BE USED ON THIS SHEET.)

1. NEW TELECOMMUNICATION OUTLET(S) TO BE INSTALLED IN SURFACE RACEWAY WHERE REQUIRED.
2. EXISTING CARD READER, TO BE RE-INSTALLED IN NEW DOOR FRAME.
3. EXISTING SECURITY CAMERA(S), TO BE RE-INSTALLED IN NEW CEILING.
4. AUDIO AND DATA CABLE TO TRAVEL WITH BLEACHERS.
5. PROVIDE CONDUIT FOR SPEAKER CABLE. ROUTE FROM SPEAKER TO SOUND CABINET.
6. EXISTING INCOMING WAN FIBER.
7. DATA OUTLET MOUNTS IN THE BACK PAN OF THE SOUND CABINET. (AD-2)
8. COORDINATE DATA OUT LOCATION WITH SCOREBOARD SUPPLIER.

1 — UNIT "C" TELECOMMUNICATIONS FIRST FLOOR PLAN

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

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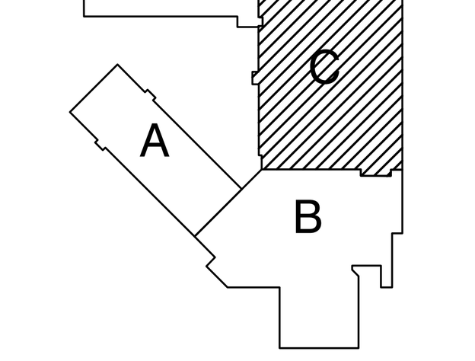
PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS
CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA



FIRST FLOOR KEY PLAN

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9102 N. Meridian St., Ste. 300
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
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REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Brian K Scott
BICSI ID # 114038
EXPIRES 12-31-24
RCDD

REVISIONS

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AD 3	2/23/22	ADDENDUM 3

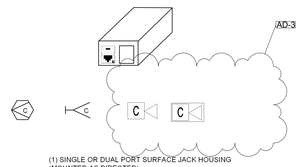
DRAWING
UNIT "C" TELECOMMUNICATIONS FIRST FLOOR PLAN

PROJECT
CROWN POINT MACARTHUR ES ADDITIONS AND RENOVATIONS

C — SHEET T-103

ER/TR TERMINATION SHALL BE ON SECURITY/SPECIAL USE PANEL WHERE EQUIPPED. SEE RACK LAYOUT FOR DETAILS

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS



(1) SINGLE OR DUAL PORT SURFACE JACK HOUSING (MOUNTED AS DIRECTED)
(1) RJ45 8P 8C MOD JACK; (1) 4 PAIR CABLE TO ER/TR

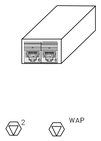
COORDINATE FINAL TERMINATION WITH EQUIPMENT VENDOR

271513

10 ABOVE CEILING OUTLET 1 - CAM
NTS

(NOTE: WAP SUBSCRIPT SHALL HAVE CABLE TERMINATED ON "WAP" SPECIAL USE PANEL IN ER/TR) – CAT 6A UNLESS SPECIFICALLY OTHERWISE NOTED

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS



(1) TWO PORT JACK HOUSING
(2) RJ45 JACK INSERT; (2) 4 PR CABLE TO ER/TR
(1) PLENUM RATED RJ45 TO RJ45 5' PATCH CABLE

NOTE: PLENUM AIR RETURN AREAS; HOUSING SHALL BE PLENUM RATED OR COMPLETELY WRAP JACK ASSEMBLY WITH UNIFRAX FYREWRAP 0.5 PLENUM INSULATION

271513

9 ABOVE CEILING OUTLET 2 - WAP
NTS

WORKSTION OUTLET (FACEPLATE) NOTES: (THIS DETAIL)

A. OUTLET REQUIREMENTS WHERE POWER/COMMUNICATIONS MULTI-COMPARTMENT SURFACE RACEWAY IS REQUIRED SHALL SUBSTITUTE TWO (2) 4-PORT JACK FRAMES AND FACEPLATE(S) IN PLACE OF THE DOUBLE GANG FACEPLATES SHOWN ON THIS DRAWING. ADDITIONAL FACEPLATES SHALL BE CUT-IN ADJACENT TO FULFILL THE OUTLET PORT REQUIREMENT. OUTLET LOCATIONS REQUIRING FOUR (4) OR FEWER PORTS SHALL UTILIZE A SINGLE 4 PORT JACK FRAME AND FACEPLATE.

B. ALL CABLES USED FOR DATA SHALL BE TERMINATED ON "HORIZONTAL DATA" PATCH PANELS IN THE ER/TR. ALL CABLES USED FOR VOICE SHALL BE TERMINATED ON "HORIZONTAL VOICE" PATCH PANELS IN THE ER/TR. ALL WIRELESS ACCESS POINT CABLES WILL BE TERMINATED ON A "SPECIAL USE" PATCH PANELS IN THE ER/TR. ALL CABLES USED FOR CONTROL SHALL BE TERMINATED ON "SPECIAL USE" PATCH PANELS IN THE ER/TR.

C. SOLID TRIANGLES DENOTE VOICE (TELEPHONE) REQUIREMENTS. HOLLOW TRIANGLES DENOTE DATA REQUIREMENTS. HALF SOLID TRIANGLES DENOTE VOICE AND DATA REQUIREMENTS; UNLESS NOTED OTHERWISE*. EACH HALF SOLID TRIANGLE WILL RECEIVE ONE VOICE JACK AND THE REMAINDER WILL BE DATA.

*NOTATIONS WILL BE SUBSCRIPTS TO THE SYMBOL: xV WHERE x IS THE QUANTITY OF VOICE CABLES AND xD WHERE x IS THE QUANTITY OF DATA CABLES.

D. ALL DECORA STYLE JACK FRAMES SHALL MATCH ELECTRICAL DEVICE COLOR.

E. JACK COLOR-CODING WILL BE AS LISTED IN CABLE AND TERMINATION CHART ON LABELING AND TERMINATION DETAIL SHEET.

F. CABLE COLOR-CODING WILL BE AS LISTED IN CABLE AND TERMINATION CHART ON LABELING AND TERMINATION DETAIL SHEET.

G. COORDINATE PROPER MOUNTING DEVICE FOR USE WITH FLOORBOX/POKE THROUGH DEVICES PROVIDED BY OTHERS.

271513

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS

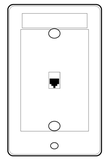
(1) DUAL PORT SURFACE JACK (MOUNTED AS DIRECTED)
(1) RJ45 8P 8C MOD JACK; (1) 4 PAIR CABLE TO ER/TR

COORDINATE FINAL TERMINATION WITH EQUIPMENT VENDOR

271513

8 PANEL SERVICE OUTLET
NTS

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS

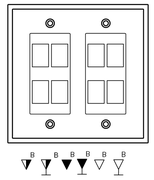


(1) SINGLE GANG SS FACEPLATE W/ MTG STUDS
(1) 8P 8C MOD JACK; 4 PAIR CABLE TO ER/TR

271513

7 SINGLE GANG FP WALL PHONE
NTS

WHERE DEVICE IS LOCATED IN A SPECIAL MOUNTING ARRANGEMENT SUCH A A FLOORBOX OR TELEPOWER POLE. UTILIZE INTEGRAL FACEPLATE IN LIEU OF STANDARD SINGLE GANG FACEPLATE.



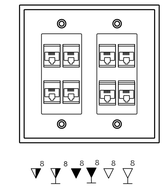
(1) DOUBLE GANG SS FACEPLATE (DECORA STYLE)
(2) 4 PORT DECORA STYLE MODULE FRAMES
(8) 1 PORT BLANKS

271513

6 DOUBLE GANG FP BLANK
NTS

WHERE DEVICE IS LOCATED IN A SPECIAL MOUNTING ARRANGEMENT SUCH A A FLOORBOX OR TELEPOWER POLE. UTILIZE INTEGRAL FACEPLATE IN LIEU OF STANDARD SINGLE GANG FACEPLATE.

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS



(1) DOUBLE GANG SS FACEPLATE (DECORA STYLE)
(2) 4 PORT DECORA STYLE MODULE FRAME
(2) 1 PORT BLANKS
(8) RJ45 UTP JACK INSERTS; 4 PR UTP CABLES TO ER/TR

SYMBOL SUBSCRIPTS MAY INDICATE A QUANTITY/AS SHOWN OR A #D INDICATING DATA AND #V INDICATING VOICE. THE ADDITION OF THE D AND V CABLES WOULD INDICATE THE TOTAL 4 PAIR CABLES TO THE OUTLET.

271513

5 DOUBLE GANG FP 8
NTS

WHERE DEVICE IS LOCATED IN A SPECIAL MOUNTING ARRANGEMENT SUCH A A FLOORBOX OR TELEPOWER POLE. UTILIZE INTEGRAL FACEPLATE IN LIEU OF STANDARD SINGLE GANG FACEPLATE.

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS

(1) DOUBLE GANG SS FACEPLATE (DECORA STYLE)
(2) 4 PORT DECORA STYLE MODULE FRAME
(2) 1 PORT BLANKS
(6) RJ45 UTP JACK INSERTS; 4 PR UTP CABLES TO ER/TR

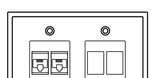
SYMBOL SUBSCRIPTS MAY INDICATE A QUANTITY/AS SHOWN OR A #D INDICATING DATA AND #V INDICATING VOICE. THE ADDITION OF THE D AND V CABLES WOULD INDICATE THE TOTAL 4 PAIR CABLES TO THE OUTLET.

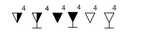
271513

4 DOUBLE GANG FP 6
NTS

WHERE DEVICE IS LOCATED IN A SPECIAL MOUNTING ARRANGEMENT SUCH A A FLOORBOX OR TELEPOWER POLE. UTILIZE INTEGRAL FACEPLATE IN LIEU OF STANDARD SINGLE GANG FACEPLATE.

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS





(1) DOUBLE GANG SS FACEPLATE (DECORA STYLE)
(2) 4 PORT DECORA STYLE MODULE FRAME
(4) 1 PORT BLANKS
(4) RJ45 UTP JACK INSERTS; 4 PR UTP CABLES TO ER/TR

SYMBOL SUBSCRIPTS MAY INDICATE A QUANTITY/AS SHOWN OR A #D INDICATING DATA AND #V INDICATING VOICE. THE ADDITION OF THE D AND V CABLES WOULD INDICATE THE TOTAL 4 PAIR CABLES TO THE OUTLET.

271513

3 DOUBLE GANG FP 4
NTS

WHERE DEVICE IS LOCATED IN A SPECIAL MOUNTING ARRANGEMENT SUCH A A FLOORBOX OR TELEPOWER POLE. UTILIZE INTEGRAL FACEPLATE IN LIEU OF STANDARD SINGLE GANG FACEPLATE.

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS

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(6) 1 PORT BLANKS
(2) RJ45 UTP JACK INSERTS; 4 PR UTP CABLES TO ER/TR

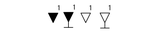
SYMBOL SUBSCRIPTS MAY INDICATE A QUANTITY/AS SHOWN OR A #D INDICATING DATA AND #V INDICATING VOICE. THE ADDITION OF THE D AND V CABLES WOULD INDICATE THE TOTAL 4 PAIR CABLES TO THE OUTLET.

271513

2 DOUBLE GANG FP 2
NTS

WHERE DEVICE IS LOCATED IN A SPECIAL MOUNTING ARRANGEMENT SUCH A A FLOORBOX OR TELEPOWER POLE. UTILIZE INTEGRAL FACEPLATE IN LIEU OF STANDARD SINGLE GANG FACEPLATE.

REFERENCE TERMINATION AND COLOR CODING CHART FOR CABLE AND JACK COLORS



(1) DOUBLE GANG SS FACEPLATE (DECORA STYLE)
(2) 4 PORT DECORA STYLE MODULE FRAMES
(7) 1 PORT BLANKS
(1) RJ45 UTP JACK INSERT; 4 PR UTP CABLE TO ER/TR

SYMBOL SUBSCRIPTS MAY INDICATE A QUANTITY/AS SHOWN OR A #D INDICATING DATA AND #V INDICATING VOICE. THE ADDITION OF THE D AND V CABLES WOULD INDICATE THE TOTAL 4 PAIR CABLES TO THE OUTLET.

271513

1 DOUBLE GANG FP 1
NTS

D:\DROPBOX\CROWN_POINT_ES_ADDITIONS_AND_RENOVATIONS_-_MAC ELEMENTRY SCHOOL\SMACARTHUR ELEMENTARY\DRAWINGS\TB30X42 - CONSULTANT-REVIT.DWG

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PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

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BICSI
Brian K Scott
BICSI ID # 114038
EXPIRES 12-31-24
RCDD

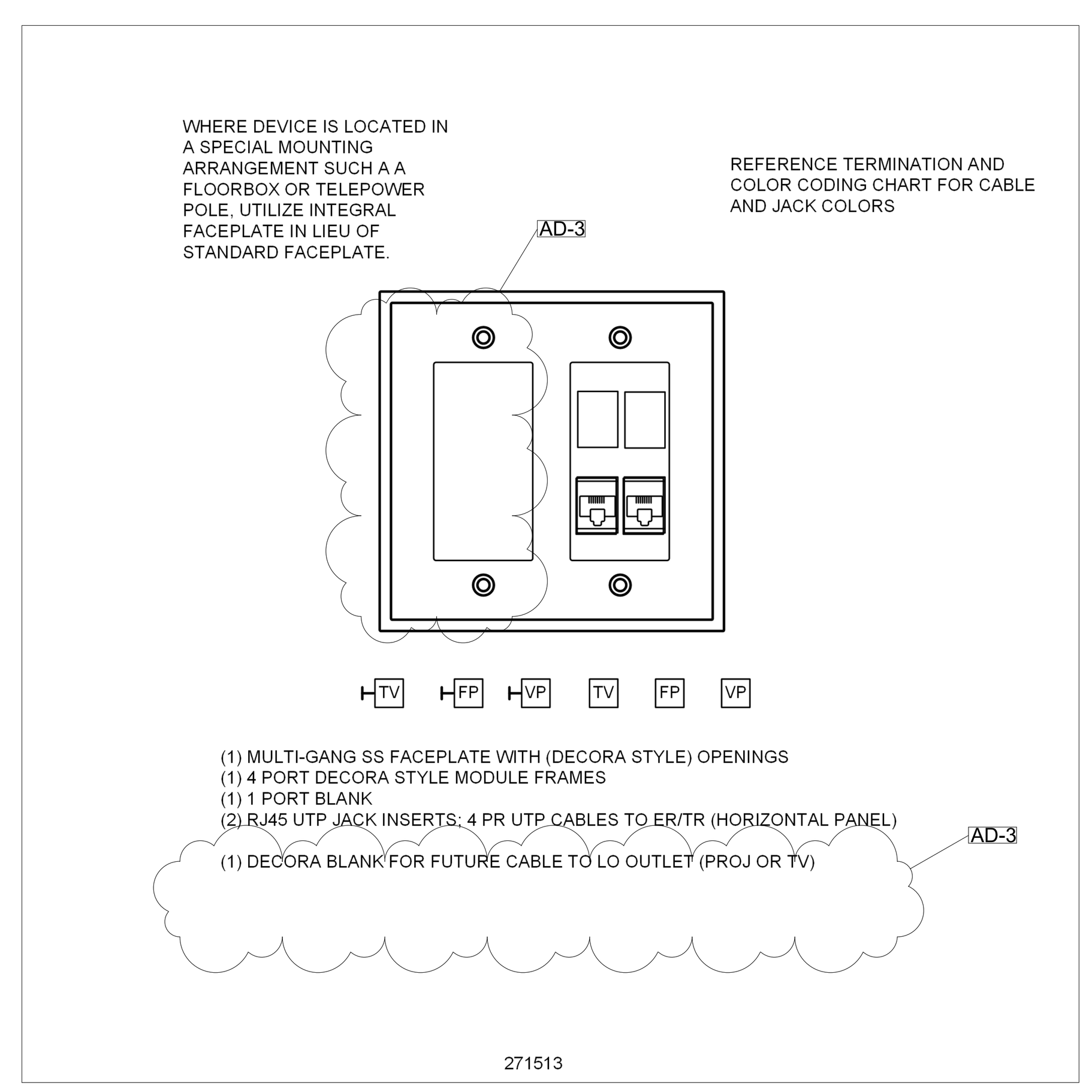
REVISIONS

MARK	DATE	ISSUED FOR
AD-3	2/23/2022	Addendum 3

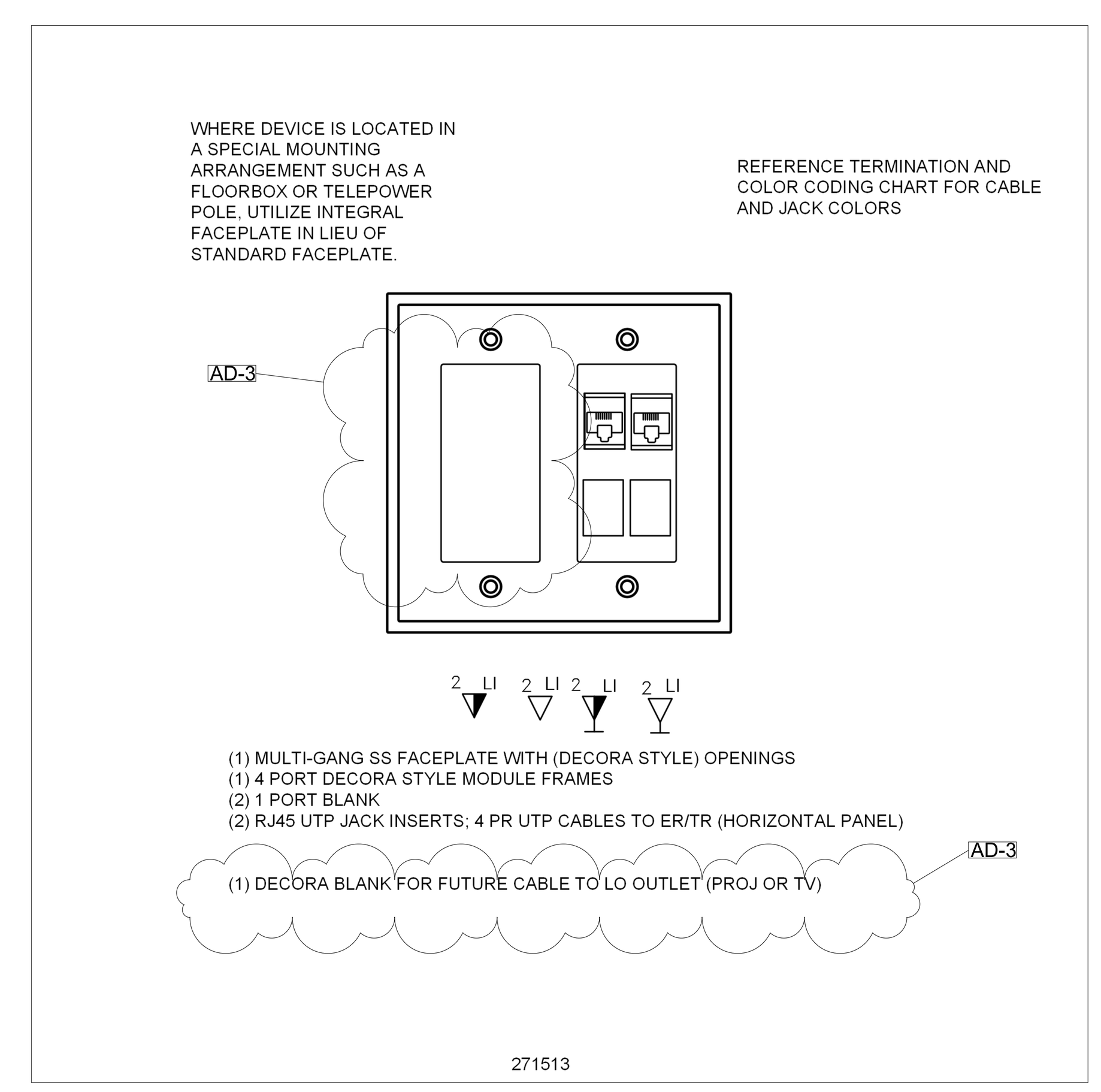
DRAWING
OUTLET DETAILS

PROJECT
CROWN POINT MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
T501



2 TV OR PROJECTOR LOCAL OUTPUT
NTS



1 TV OR PROJECTOR LOCAL INPUT
NTS

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PROJECT
DOUGLAS MACARTHUR ES ADDITIONS AND RENOVATIONS

CROWN POINT COMMUNITY SCHOOL CORPORATION
CROWN POINT, INDIANA

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AD-3	2/23/2022	Addendum 3

DRAWING
OUTLET DETAILS

PROJECT
CROWN POINT MACARTHUR ES ADDITIONS AND RENOVATIONS

SHEET
T502

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