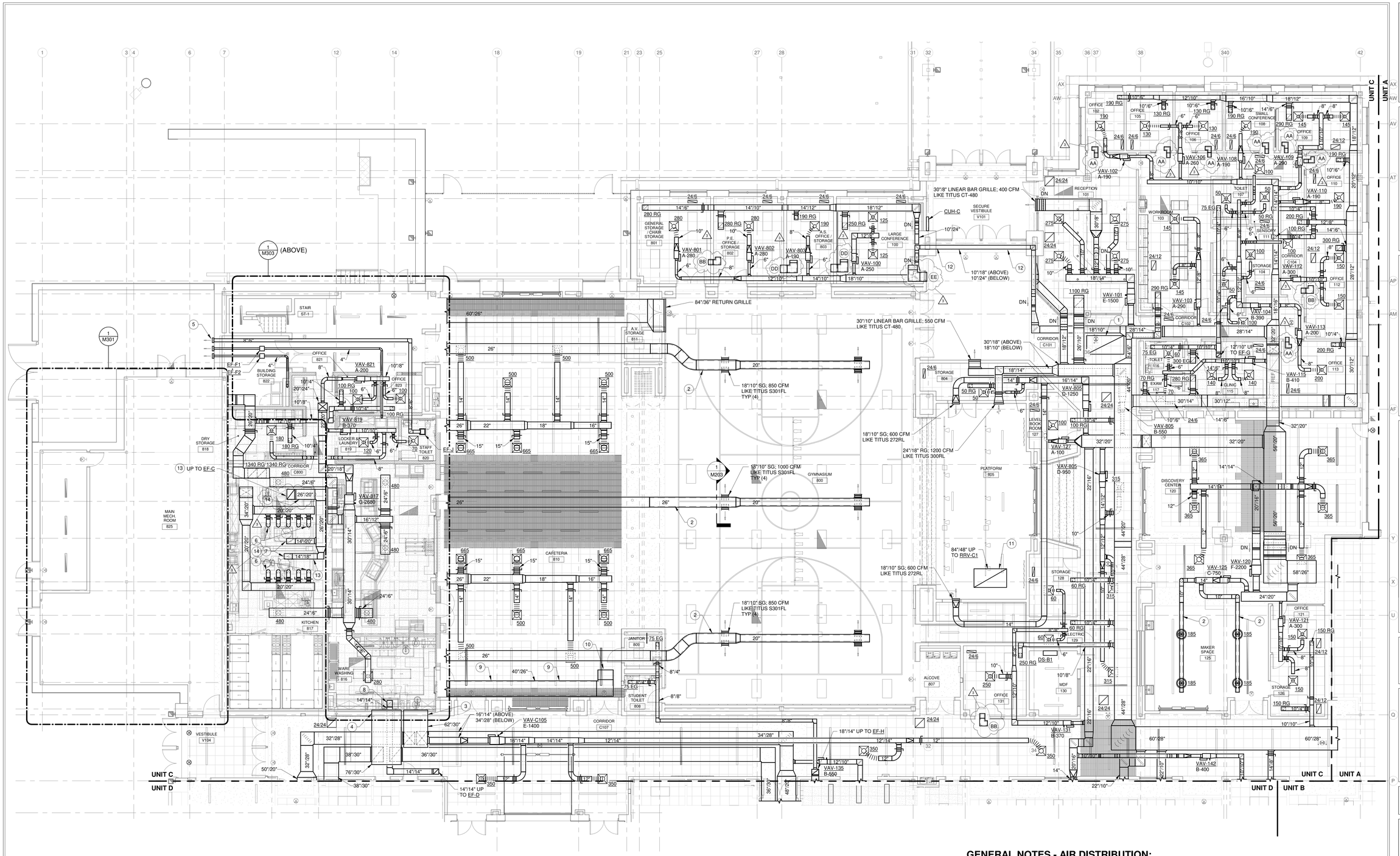
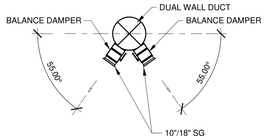


GROUND FLOOR PLAN - UNIT C - AIR DISTRIBUTION

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

NORTH



1 SECTION

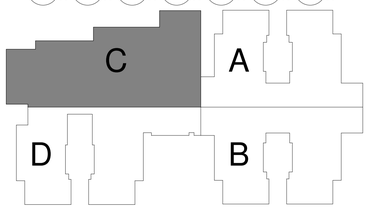
SCALE: 1/4" = 1'-0"

GENERAL NOTES - AIR DISTRIBUTION:

1. SEE M201 FOR ADDITIONAL GENERAL NOTES.

PLAN NOTES:

1. 96" x 48" UP TO RRV-C2.
2. PROVIDE DUAL WALL DUCT AS INDICATED.
3. 62" x 30" TO AHU-3. SEE M303.
4. 72" x 30" TO AHU-3. SEE M303.
5. PROVIDE EXHAUST WALL VENT CAP.
6. 10"Ø MAKE-UP AIR DUCT CONNECTION TO KITCHEN HOOD. SEE 'FS' SERIES DRAINGS.
7. EXHAUST CONNECTION TO KITCHEN HOOD. SEE 'FS' SERIES DRAWINGS.
8. EXHAUST CONNECTION TO DISHWASH HOOD. SEE 'FS' SERIES DRAWINGS. DISHWASH HOOD DUCTWORK TO BE ALUMINUM CONSTRUCTION.
9. INTERNALLY LINED RETURN AIR DUCT.
10. PROVIDE 1/2" x 1/2" HARDWARE CLOTH OVER RETURN DUCT OPENING.
11. PAINT RELIEF DUCT AND ASSOCIATED DRAIN PAN AND PIPING FLAT BLACK.
12. CONCEAL SUPPLY AND RETURN DUCT WITHIN BULKHEAD. SEE 'A' SERIES DRAWINGS.
13. KITCHEN EXHAUST HOOD DUCTWORK TO BE WELDED CARBON STEEL FABRICATED AND INSTALLED IN ACCORDANCE WITH INDIANA MECHANICAL CODE 506. SLOPE TOWARD HOOD. INSULATED WITH 2" FIREWRAP.
14. PROVIDE FIRE RATED ACCESS DOOR IN DUCT.



CARMEL CLAY SCHOOLS
CARMEL, INDIANA

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Indianapolis, IN 46014
Phone: (317) 634-4672 Fax: (317) 638-8725
Email: info@redimond.com

PROJECT:

NEW ELEMENTARY SCHOOL FOR CARMEL CLAY SCHOOLS

CARMEL, IN

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

The drawings do not necessarily indicate or describe all work required for the performance and completion of the requirements of the Contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM #2	11-13-19
3	ADDENDUM #3	11-15-19

ISSUE DATE	DRAWN BY	CHECKED BY
10/28/19	W.C.E.	DED

DRAWING TITLE:

GROUND FLOOR PLAN - UNIT C - AIR DISTRIBUTION

CERTIFIED BY:

DANIEL E. DIMOND REGISTERED No. PE60910351 STATE OF INDIANA PROFESSIONAL ENGINEER

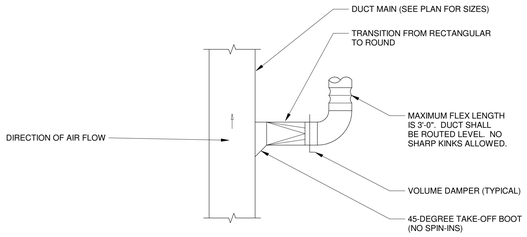
10/28/2019

DRAWING NUMBER

M203

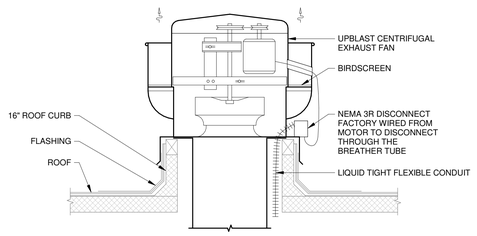
PROJECT NUMBER

18095



A BRANCH DUCT TAKE-OFF FROM MAIN DUCT

SCALE: NONE

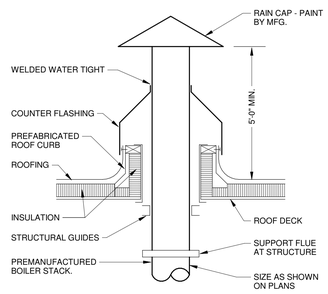


NOTES:

1. SEE FLOOR OR ROOF PLAN FOR ROOF OPENING SIZE.
2. CONTRACTOR TO COORDINATE ROOF OPENING SIZES AND LOCATIONS WITH GENERAL CONTRACTOR.
3. ANCHOR ROOF CURB TO ROOF STRUCTURE.

B UPBLAST EXHAUST FAN

SCALE: NONE

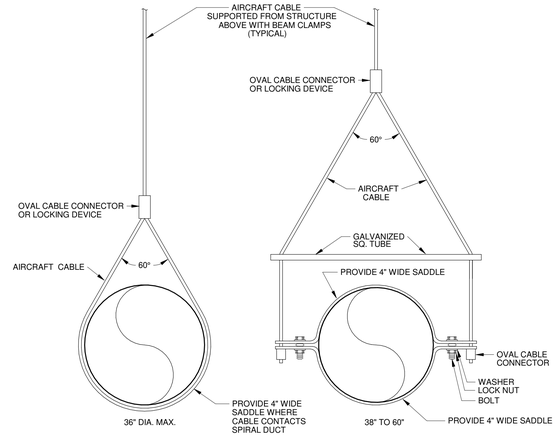


NOTES:

1. ROOF CURB TO BE ANCHORED TO ROOF STRUCTURE.

E BOILER VENT CAP DETAIL

SCALE: NONE

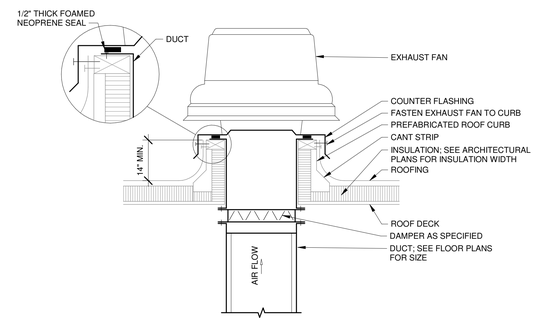


NOTES:

1. HANGERS MUST NOT DEFORM SHAPE OF DUCT.
2. SPACING OF HANGERS PER SMACNA STANDARDS.
3. ALL HANGERS MUST BE INSTALLED PLUMB FOR AESTHETIC APPEARANCE.
4. USE ALL LOAD RATED FASTENERS.

C TYPICAL SPIRAL DUCT SUPPORT LOWER ELEVATION

SCALE: NONE

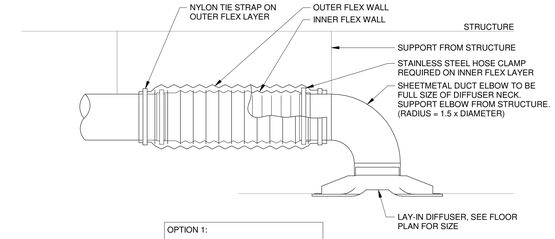


NOTES:

1. ROOF CURB TO BE ANCHORED TO ROOF STRUCTURE.
2. USE CANT STRIP FOR BUILT UP ROOF.
3. CURB TO ACCOMMODATE SLOPED ROOF.
4. INSTALL INTERNALLY LINED DUCTWORK TO A POINT 10-FOOT FROM FAN INLET.

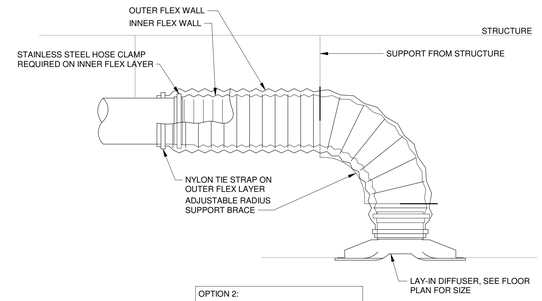
F CENTRIFUGAL ROOF EXHAUST FAN

SCALE: NONE



OPTION 1:

PROVIDE 90-DEGREE METAL ELBOW FOR FINAL CONNECTION TO DIFFUSER. PROVIDE STAINLESS STEEL HOSE CLAMP FOR CONNECTION TO ALL DIFFUSERS.

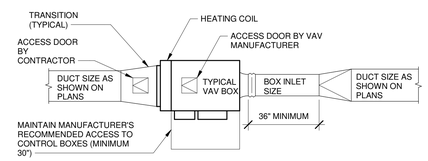


OPTION 2:

PROVIDE ONE PIECE, FULLY ADJUSTABLE BRACE; LIKE TITUS FLEXRIGHT OR THERMAFLEX FLEX FLOW ELBOW FOR CONNECTION TO ALL DIFFUSERS.

D CONNECTION TO DIFFUSER

SCALE: NONE

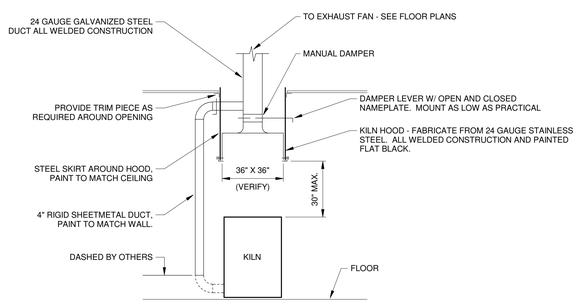


NOTES:

1. SUPPORT UNIT AT ALL FOUR CORNERS FROM STRUCTURE ABOVE.
2. SUPPORT UNIT SO THAT BOTTOM ACCESS PANEL CAN BE REMOVED WITHOUT REMOVING SUPPORTS.
3. SIZE OF ACCESS DOOR IN OUTLET DUCT SHALL BE APPROXIMATELY 2/3'S THE WIDTH OF THE DUCT. (MINIMUM SIZE SHALL BE 6"/6")

G VAV BOX INSTALLATION

SCALE: NONE

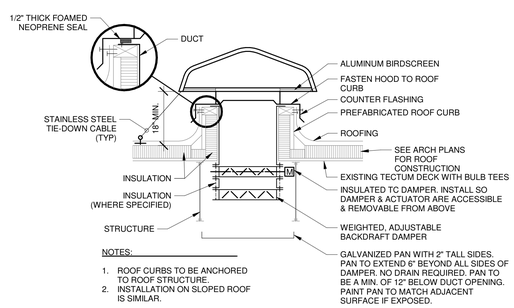


NOTES:

1. KILN HOOD SHALL HAVE FACE OPENING AREA 6" WIDER THAN TOP OF KILN ON ALL SIDES.
2. AUTO DAMPER AND EXHAUST FAN TO TIE-IN WITH POWER TO KILN WITH DELAYED TIMED SHUT-OFF.

H KILN HOOD DETAIL

SCALE: NONE

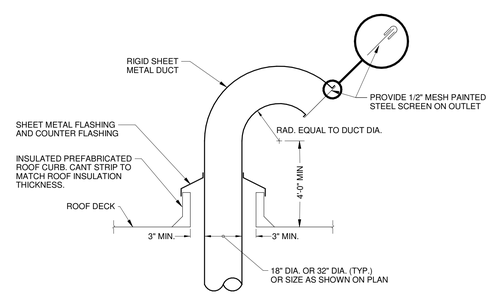


NOTES:

1. ROOF CURBS TO BE ANCHORED TO ROOF STRUCTURE.
2. INSTALLATION ON SLOPED ROOF IS SIMILAR.

J NON-DUCTED ROOF RELIEF VENTILATOR

SCALE: NONE

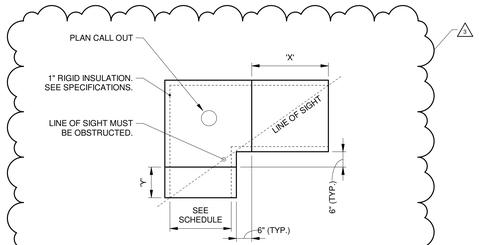


NOTE:

1. PAINT ALL EXPOSED SHEET METAL.

K BOILER INTAKE GOOSENECK DETAIL

SCALE: NONE



PLAN VIEW

TRANSFER DUCT SCHEDULE				
PLAN CALL OUT	TRANSFER DUCT SIZE	CFM RANGE	"X" DIMENSION	"Y" DIMENSION
AA	10"/10"	0 - 200	12"	0"
BB	14"/12"	205 - 325	12"	0"
CC	16"/16"	330 - 500	18"	0"
DD	20"/20"	505 - 800	18"	6"
EE	24"/22"	805 - 1000	18"	12"
FF	26"/24"	1005 - 1250	24"	12"

REMARKS:

1. 'X' AND 'Y' DIMENSIONS SHOWN ARE MINIMUMS TO NULLIFY ANY 'LINE OF SIGHT' THROUGH THE TRANSFER DUCT. ACTUAL FIELD DIMENSIONS MAY VARY BASED ON APPLICATION, WALL THICKNESS, ORIENTATION, ETC. FIELD VERIFY CONDITIONS PRIOR TO FABRICATION.
2. 'TRANSFER DUCT SIZE' LISTED IN THE SCHEDULE ARE THE INTERNAL DIMENSIONS.

L RETURN AIR TRANSFER DUCT DETAIL

SCALE: NONE

CARMEL CLAY SCHOOLS
CARMEL, INDIANA

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Email: info@redimond.com

PROJECT:
NEW ELEMENTARY SCHOOL FOR CARMEL CLAY SCHOOLS
CARMEL, IN

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of mechanical, electrical, structural, architectural of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

The Contract Documents contain provisions that describe all work required for full performance and completion of the requirements of the Contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

3	ADDENDUM #3	11-15-19

ISSUE DATE	DRAWN BY	CHECKED BY
10/28/19	NFS	DED

DRAWING TITLE:
DETAILS - AIR DISTRIBUTION

CERTIFIED BY:
DANIEL E. DIMOND
REGISTERED
No. PE60910351
STATE OF INDIANA
PROFESSIONAL ENGINEER
10/28/2019

DRAWING NUMBER
M401

PROJECT NUMBER
18095

MINI-SPLIT AIR CONDITIONING UNIT

MARK NO.	DRAWING NAME &/OR PURPOSE	SPECIFICATION			MANUFACTURER AND MODEL NO.	AIR VOLUME (CFM)	COOLING COIL						SUPPLY FAN		ELECTRICAL			WEIGHT	REMARKS
		SECTION	NAME	EQUIPMENT TYPE			TOTAL MBH	SEN. MBH	EAT		LAT		ESP (IN. WG)	HP	VOLTS	PHASE	MOCP		
									DB	WB	DB	WB							
DS-A / ACCU-A	TELECOMMUNICATION ROOM COOLING	23 81 34	MINI-SPLIT AIR CONDITIONING	WALL MOUNTED DUCTLESS SPLIT AIR CONDITIONER	DAIKIN ID: FTK18NMVJU OD: RK18NMVJU	713	18.0	-	80	67	55	54	N/A	-	208	1	20	-	PROVIDE WALL MOUNT BRACKET, CONDENSATE PUMP, WIRED REMOTE CONTROL, COOLING OPERATION DOWN TO -5°F. AMBIENT.
DS-B / ACCU-B	TELECOMMUNICATION ROOM COOLING	23 81 34	MINI-SPLIT AIR CONDITIONING	WALL MOUNTED DUCTLESS SPLIT AIR CONDITIONER	DAIKIN ID: FTK12NMVJU OD: RK12NMVJU	434	10.9	-	80	67	55	54	N/A	-	208	1	15	-	PROVIDE WALL MOUNT BRACKET, CONDENSATE PUMP, WIRED REMOTE CONTROL, COOLING OPERATION DOWN TO -5°F. AMBIENT.
DS-C / ACCU-C	CONCESSION BUILDING HEATING & COOLING	23 81 34	MINI-SPLIT AIR CONDITIONING	WALL MOUNTED DUCTLESS SPLIT AIR CONDITIONER & HEAT PUMP	DAIKIN ID: FTX09NNVJU OD: RX09NMVJU	417	9.0	-	80	67	55	54	N/A	-	208	1	15	-	PROVIDE WALL MOUNT BRACKET, CONDENSATE PUMP. WIRED REMOTE CONTROL, COOLING OPERATION DOWN TO -5°F. AMBIENT. HEAT PUMP UNIT, CAPABLE OF 6,000 BTU/HR @ 17°F OUTDOOR TEMPERATURE, 4.06 COP

CABINET UNIT HEATER SCHEDULE

MARK NO	DRAWING NAME &/OR PURPOSE	SPECIFICATION			MANUFACTURER & MODEL NO	HEATING DATA							WEIGHT (LBS)	FAN RPM	ELECTRICAL DATA			STYLE	REMARKS
		SECTION	NAME	EQUIPMENT TYPE		CFM	MBH	GPM	WPD (FT)	EAT	EWT	LWT			WATTS	VOLTS	PHASE		
CUH-A	MISCELLANEOUS HEAT	23 82 39	UNIT HEATERS - HYDRONIC	CABINET UNIT HEATERS	TRANE MODEL N-04	370	30	2.1	8	70	180	150	112	-	100	120	1	VERTICAL SEMI RECESSED COUNTER FLOW	51" WIDE x 30" TALL COVER, COUNTER FLOW, RECESSED AS FAR INTO WALL AS POSSIBLE, FIELD VERIFY ACTUAL CONDITIONS, PROVIDE DISCONNECT SWITCH
CUH-B	MISCELLANEOUS HEAT	23 82 39	UNIT HEATERS - HYDRONIC	CABINET UNIT HEATERS	TRANE MODEL E-06	600	49	3.3	8	70	180	150	140	-	125	120	1	HORIZONTAL FULLY RECESSED COUNTER FLOW	55" WIDE x 31" TALL COVER, COUNTER FLOW, RECESSED FULLY. FIELD VERIFY ACTUAL CONDITIONS, PROVIDE DISCONNECT SWITCH

HOT WATER PROPELLER UNIT HEATER SCHEDULE

MARK NO	DRAWING NAME &/OR PURPOSE	SPECIFICATION			MANUFACTURER & MODEL NO	HEATING DATA							WEIGHT (LBS)	FAN RPM	ELECTRICAL			REMARKS
		SECTION	NAME	EQUIPMENT TYPE		CFM	MBH	GPM	WPD (FT)	EAT	EWT	LWT			HP	VOLTS	PHASE	
PUH-A	MISCELLANEOUS HEAT	23 82 39	UNIT HEATERS - HYDRONIC	PROPELLER UNIT HEATERS	TRANE MODEL 1005	1535	30	1.61	5	60	180	140	85	1550	1/8	120	1	FAN GUARD, HORIZONTAL AND VERTICAL ADJUSTABLE LOUVERS, DISCONNECT SWITCH
PUH-B	MISCELLANEOUS HEAT	23 82 39	UNIT HEATERS - HYDRONIC	PROPELLER UNIT HEATERS	TRANE MODEL 2605	4099	100	5.4	5	60	180	140	195	1100	1/2	120	1	FAN GUARD, HORIZONTAL AND VERTICAL ADJUSTABLE LOUVERS, DISCONNECT SWITCH

ELECTRIC CABINET UNIT HEATER SCHEDULE

MARK NO	DRAWING NAME &/OR PURPOSE	SPECIFICATION			MANUFACTERER & MODEL NO	HEATING DATA					FAN DATA		ELECTRICAL DATA			WEIGHT (LBS)	REMARKS
		SECTION	NAME	EQUIPMENT TYPE		CFM	KW	STEPS	EAT	LAT	HP	RPM	AMPS	VOLTS	PHASE		
ECUH-A	MISCELLANEOUS HEAT	23 82 39	ELECTRIC CABINET UNIT HEATER	ELECTRIC CABINET HEATERS	MARKEL 6300 SERIES	250	2.0	2	60°F	97.8°F	-	0	10.6	208	1	99	PROVIDE INTEGRAL LINE VOLTAGE THERMOSTAT, DISCONNECT SWITCH, AND WALL MOUNTING BRACKET
ECUH-B	MISCELLANEOUS HEAT	23 82 39	ELECTRIC CABINET UNIT HEATER	ELECTRIC CABINET UNIT HEATERS	MARKEL 3420 SERIES	175	2.0	1	60°F	87°F	-	0	9.6	208	1	41	PROVIDE INTEGRAL LINE VOLTAGE THERMOSTAT, DISCONNECT SWITCH, SURFACE MOUNTED
EPUH-A	MISCELLANEOUS HEAT	23 82 39	ELECTRIC CABINET UNIT HEATER	ELECTRIC CABINET UNIT HEATERS	MARKEL 5100 SERIES	400	3.3	1	60°F	86°F	-	0	9.17	208	3	25	PROVIDE INTEGRAL LINE VOLTAGE THERMOSTAT, DISCONNECT SWITCH, SURFACE MOUNTED

HYDRONIC RADIANT CEILING PANEL SCHEDULE

MARK NO	DRAWING NAME &/OR PURPOSE	SPECIFICATION			MANUFACTURER & MODEL NO	CAPACITY		PANEL			TUBE		REMARKS
		SECTION	NAME	EQUIPMENT TYPE		BTU PER FT/PANEL	MEAN WATER SUPPLY	WIDTH	PASSES	MATERIAL	DIA	MATERIAL	
RCP-A	PERIMETER BUILDING HEAT	23 82 43	RADIANT CEILING PANELS - HYDRONIC	RADIANT CEILING PANELS - HYDRONIC	STERLING LINEAR RADIANT CEILING PANEL	276	170	16"	4	COPPER	5/8"	EXTRUDED ALUMINUM	SEE DRAWINGS FOR LENGTH REQUIRED. PANELS SHALL BE CUSTOM COLOR AS SELECTED BY ARCHITECT. PROVIDE INACTIVE PANEL FOR VALVE ACCESS AND HOOK-UP. PROVIDE 1 1/2" FOIL BACKED BATT INSULATION FOR EACH PANEL.

3

CARMEL CLAY SCHOOLS
CARMEL, INDIANA

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PROJECT:
NEW ELEMENTARY SCHOOL
FOR
CARMEL CLAY SCHOOLS
CARMEL, IN

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REVISIONS:
3 ADDENDUM #3 11-15-19

ISSUE DATE	DRAWN BY	CHECKED BY
10/28/19	W.C.E.	DED

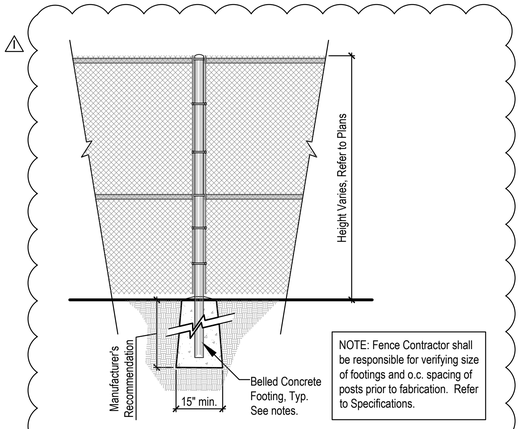
DRAWING TITLE:
SCHEDULES - LIQUID HEAT TRANSFER

CERTIFIED BY:
DANIEL E. DIMOND
REGISTERED
No. PE60910351
STATE OF INDIANA
PROFESSIONAL ENGINEER
10/28/2019

DRAWING NUMBER
M612

PROJECT NUMBER
18095

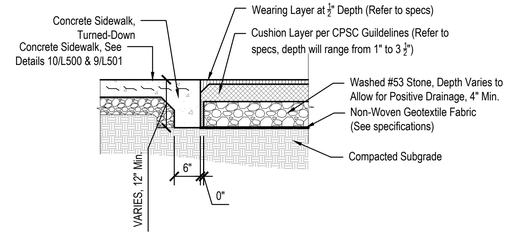
context DESIGN
12 S Main St, Ste 200 | Fortville, IN 46040
317-485-6900 | www.context-design.com



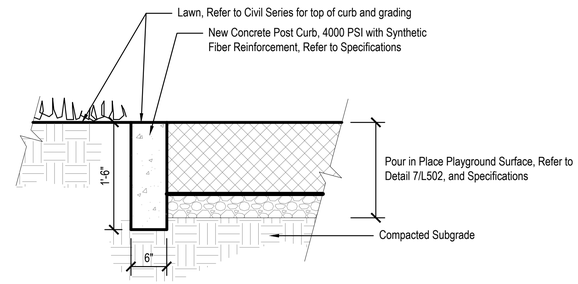
NOTE: Fence Contractor shall be responsible for verifying size of footings and o.c. spacing of posts prior to fabrication. Refer to Specifications.

10 FENCE FOOTING
SCALE: 1/2" = 1'-0"

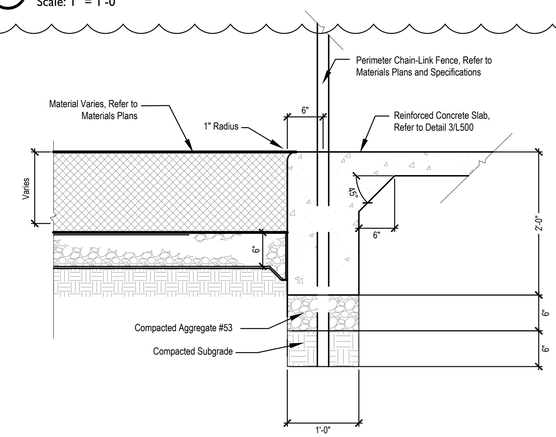
NOTE:
1. Fall zone depths vary, coordinate with playgound equipment manufacturer and playsurface manufacturer to meet or exceed CPSC Guidelines.
2. See Layout Plans for Colors and Locations.
3. See Playground Underdrain Section Detail7/L502 and Specifications.



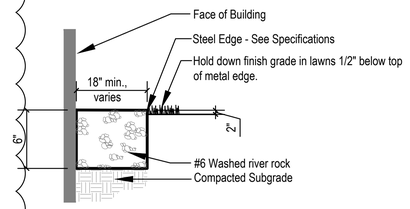
7 POURED IN PLACE - PLAYSURFACING WITH TURN DOWN EDGE
Scale: 3/4" = 1'-0"



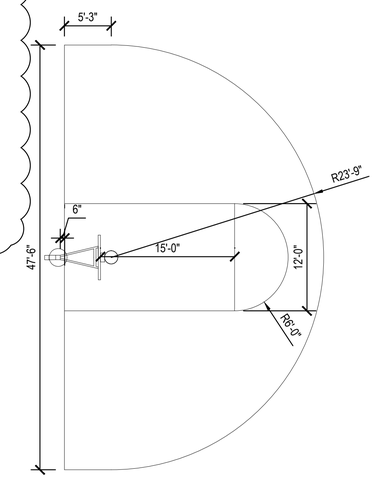
6 PLAYGROUND POST CURB
Scale: 1" = 1'-0"



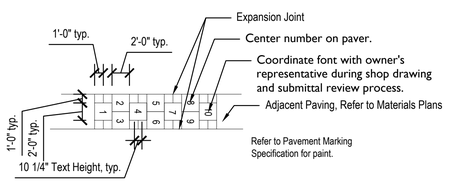
5 CONCRETE TURN DOWN EDGE WITH FENCING
NOT TO SCALE



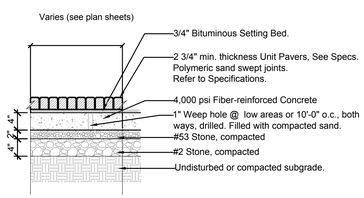
3 STONE MAINTENANCE EDGE (MOW STRIP)
Not to Scale



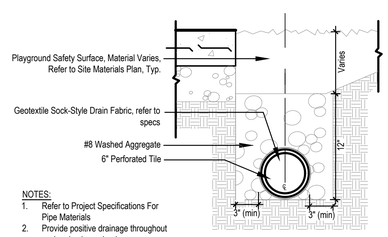
2 HALF COURT BASKETBALL
Scale: 1/8" = 1'-0"



9 PROTOTYPICAL HOPSCOTCH UNIT PAVING LAYOUT
Scale: 1/8" = 1'-0"

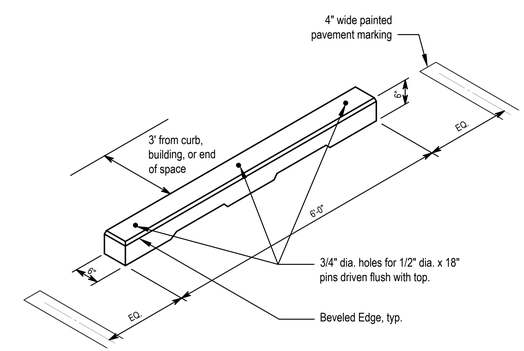


8 HOPSCOTCH UNIT PAVERS
Scale: 3/4" = 1'-0"



NOTES:
1. Refer to Project Specifications For Pipe Materials
2. Provide positive drainage throughout system to storm structure

4 PLAYGROUND UNDERDRAIN SECTION
Not to Scale



NOTE:
Dimensions indicated are minimums. Manufacturer's standards in excess are acceptable.
Precast concrete OR recycled HDPE may be provided at Contractor's option.

1 WHEEL STOP
Not to Scale

CSO
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7800 | csoinc.net

PROJECT:
NEW
CARMEL ELEMENTARY SCHOOLS
FOR
CARMEL CLAY SCHOOLS
12025 CLAY CENTER ROAD
CARMEL, INDIANA 46032

Scope Drawings:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Revisions:
1 Addendum 01
2 Addendum 03

Issue Date	Drawn By	Checked By
10-25-19	DLF	CCH

Drawing Title:
SITE DETAILS

Certified By:
FREDDIE J. PRAZEAU
REGISTERED
No. 2020-0052
STATE OF INDIANA
LANDSCAPE ARCHITECT
EXPIRES 12-31-2019

Drawing Number:
L502

Project Number:
18095