

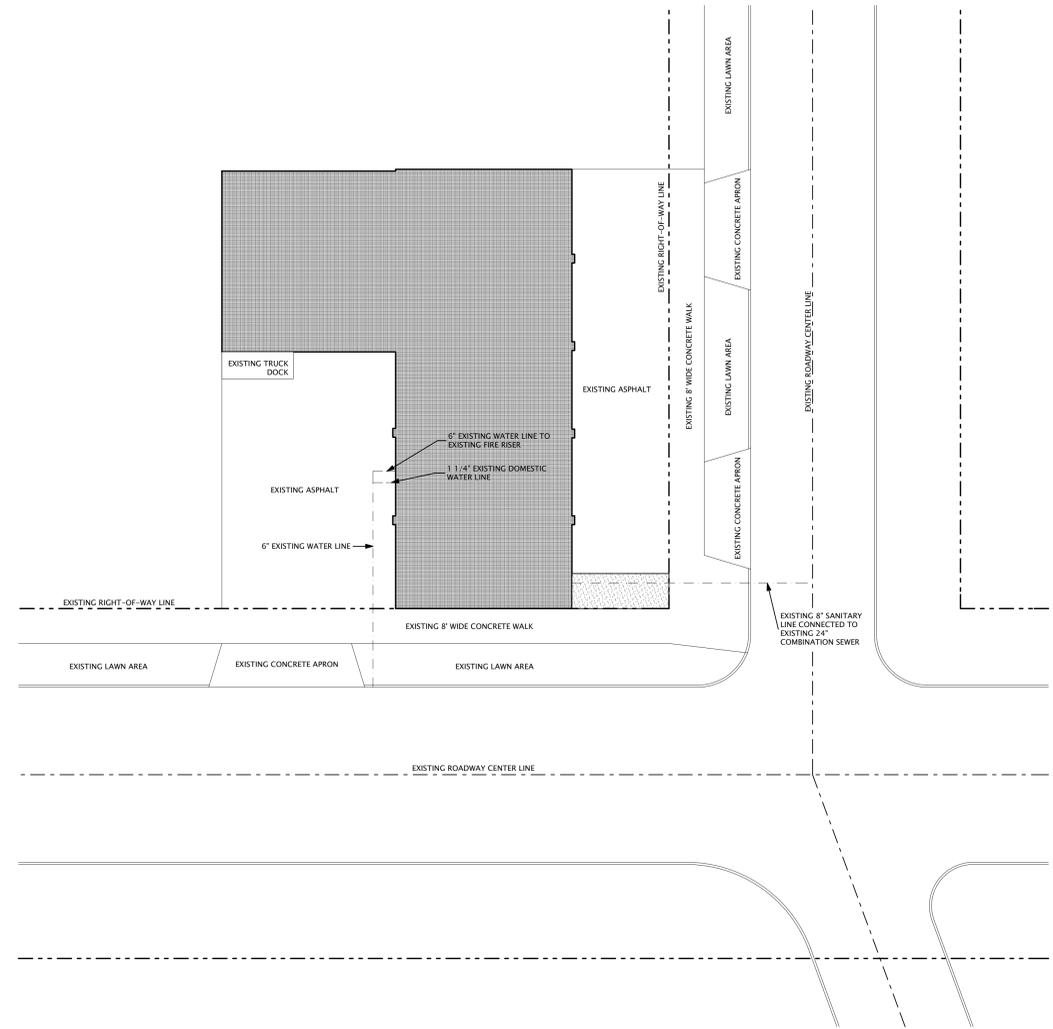
02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
01.15.2013	BIDDING
10.10.2012	DD BUDGET

CHECKED ARB
 APPROVED ARB

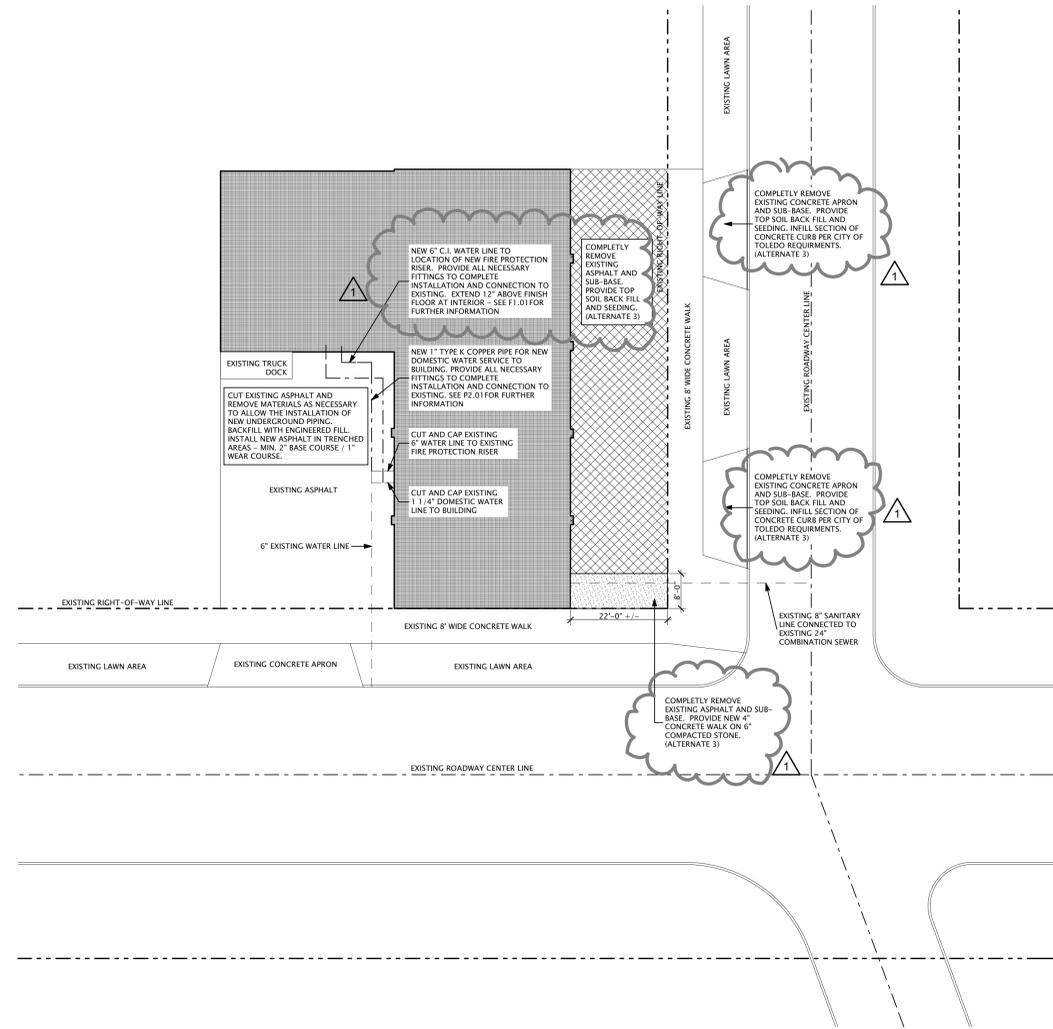
TCI JOB NO. 106086

SHEET TITLE
**SITE PLANS -
 EXISTING
 CONDITIONS AND
 NEW WORK**

SHEET NO.
SD1.01



SITE PLAN - EXISTING CONDITIONS
 SCALE: 1/16" = 1'-0"



SITE PLAN - NEW WORK
 SCALE: 1/16" = 1'-0"

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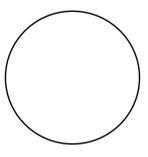
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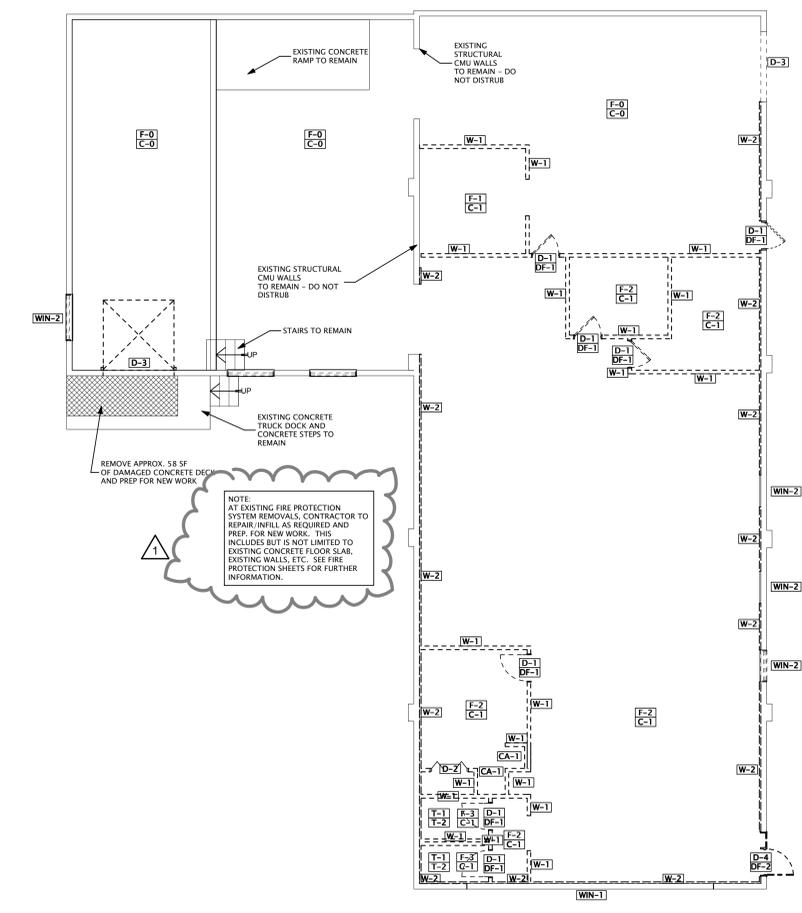
02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
01.15.2013	BIDDING
10.10.2012	DD BUDGET

CHECKED	ARB
APPROVED	ARB

TCI JOB NO. 106086

SHEET TITLE
DEMOLITION PLAN

SHEET NO.
A0.11



B3
A0.11 **DEMOLITION PLAN**
 SCALE: 1/8" = 1'-0"

DEMOLITION DESIGNATIONS:

CEILING:
 C-0: NO CEILING IN THIS AREA - EXISTING STRUCTURAL SYSTEM EXPOSED ABOVE. COMPLETELY REMOVE ALL EXISTING ROOF INSULATION.
 C-1: REMOVE ACOUSTICAL TILE CEILING SYSTEM INCLUDING METAL SUSPENSION SYSTEM - 0' X 9', 1'-0" X 1'-0", 2'-0" X 2'-0" AND/OR 2'-0" X 4'-0" AND COMPLETELY REMOVE ALL EXISTING INSULATION.

ADDITIONAL NOTES FOR CEILING:
 1. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR REMOVALS ASSOCIATED WITH THOSE TRADES LOCATED ON THE SURFACE, WITHIN AND/OR ABOVE CEILING SYSTEMS.

CASEWORK:
 CA-1: REMOVE BUILT-IN CASEWORK INCLUDING BASE CABINETS, COUNTERTOPS, WALL CABINETS, DESKS AND/OR SHELVING

ADDITIONAL NOTES FOR CASEWORK:
 1. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR REMOVALS ASSOCIATED WITH THOSE TRADES LOCATED ON THE SURFACE AND/OR WITHIN CASEWORK.
 2. REMOVE GLUE, ANCHORS, SHIMS, SUPPORT BRACKETS, ETC. ASSOCIATED WITH CASEWORK TO PROVIDE A SMOOTH SURFACE FOR NEW CONSTRUCTION.
 3. IF WALL IS TO REMAIN, PATCH ANY HOLES TO MATCH SURROUNDING AREA TO CREATE SMOOTH SURFACE.

DOORS:
 D-1: REMOVE SINGLE DOOR
 D-2: REMOVE BI-FOLD DOOR, TRACK, ETC.
 D-3: REMOVE OVERHEAD DOOR, INCLUDING DOOR AND TRACK
 D-4: REMOVE ALUMINUM ENTRANCE DOOR OR DOORS AND ADJACENT STOREFRONT SYSTEM.

ADDITIONAL NOTES FOR DOORS:
 1. CONTRACTOR SHALL INCLUDE REMOVAL AND SALVAGE OF EXISTING DOOR HARDWARE AS FOLLOWS FROM ALL DOORS TO BE REMOVED:
 A. LOCKSETS
 B. FRINGE HARDWARE
 - ALL ABOVE HARDWARE ARE ITEMS TO BE DELIVERED TO OWNER. ANY OTHER HARDWARE ITEMS TO BE DISPOSED OF OFF-SITE BY THE CONTRACTOR.

DOOR FRAMES:
 DF-1: REMOVE HOLLOW METAL OR STEEL DOOR FRAME
 DF-2: REMOVE ALUMINUM DOOR FRAME

ADDITIONAL NOTES FOR DOOR FRAMES:
 1. CONTRACTOR SHALL INCLUDE REMOVAL OR CUTTING OF EXISTING DOOR FRAME ANCHORS, SHIMS AND THRESHOLDS TO PROVIDE A CLEAN, CLEAR OPENING FOR NEW CONSTRUCTION.

EQUIPMENT:
 EQUIP-1: REMOVE EXISTING LOCKERS AND ALL ASSOCIATED WALL AND FLOOR ANCHORS

FLOORING:
 F-0: NO FLOORING DEMOLITION IN THIS AREA - EXISTING EXPOSED STRUCTURAL CONCRETE FLOOR WITH PAINTED FINISH
 F-1: REMOVE EXISTING RESILIENT FLOORING - ASPHALT, VINYL COMPOSITION, RUBBER TILE AND/OR SHEET GOODS.
 F-2: REMOVE EXISTING CARPET FLOORING - CARPET, PAD, AND/OR TACK STRIPS
 F-3: REMOVE EXISTING CERAMIC OR QUARRY TILE FLOORING - THIN SET

ADDITIONAL FLOORING NOTES:
 1. CONTRACTOR TO SCRAPE AND REPAIR EXISTING CONCRETE FLOOR SYSTEM AS REQUIRED IN ALL AREAS TO PROVIDE A SMOOTH SURFACE FOR NEW CONSTRUCTION.

STAIRS:
 ST-1: REMOVE EXISTING EXTERIOR CONCRETE STAIR, HANDRAIL, AND ALL ASSOCIATED FOUNDATIONS AND FOOTINGS.

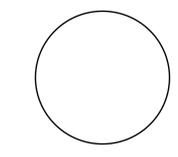
TOILET FIXTURES:
 T-1: REMOVE WALL MOUNTED SINK AND ASSOCIATED PLUMBING LINES
 T-2: REMOVE TOILET AND ASSOCIATED PLUMBING LINES

WALLS AND PARTITIONS:
 W-1: REMOVE METAL OR WOOD STUD AND GYPSUM BOARD PARTITION
 W-2: REMOVE WALL FIRING FROM EXISTING CMU EXTERIOR WALL.

ADDITIONAL NOTES FOR WALLS AND PARTITIONS:
 1. SEE ARCHITECTURAL FLOOR PLANS FOR THICKNESS OF WALL WHERE APPLICABLE

WINDOWS AND CURTAIN WALL:
 WIN-1: REMOVE EXISTING ALUMINUM WINDOW/OPENING INCLUDING FRAME, GLASS, ALL ASSOCIATED INTERIOR AND EXTERIOR ALUMINUM TRIM, WOOD INFILL MATERIALS, AND SEALANTS.
 WIN-2: REMOVE EXISTING WINDOW/OPENING INCLUDING FRAME, GLASS, ALL ASSOCIATED INTERIOR AND EXTERIOR TRIM, WOOD INFILL MATERIALS, AND SEALANTS.

ADDITIONAL NOTES FOR WINDOWS AND CURTAIN WALL:
 1. TAKE CAUTION WHEN REMOVING EXISTING EXTERIOR WINDOWS TO PROTECT FROM DAMAGE EXISTING SLATE WINDOW STOOLS FOR REMOVAL, CLEANING AND REINSTALLATION.
 2. REMOVE OR CUT EXISTING WINDOW AND CURTAIN WALL ANCHORS AND SHIMS TO PROVIDE A CLEAN, CLEAR OPENING FOR NEW CONSTRUCTION.



C-002 Dated 2/6/2013

KEY PLAN
N.T.S.

PROJECT TITLE
**Lucas County
Commissioners
Central
Drug
Testing
Relocation**
1302 Washington St
Toledo, Ohio

02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
01.15.2013	BIDDING
10.10.2012	DD BUDGET

CHECKED ARB
APPROVED ARB

TCI JOB NO. 106086

SHEET TITLE
**1ST FLOOR LIFE
SAFETY, CODE, &
WALL TYPES**

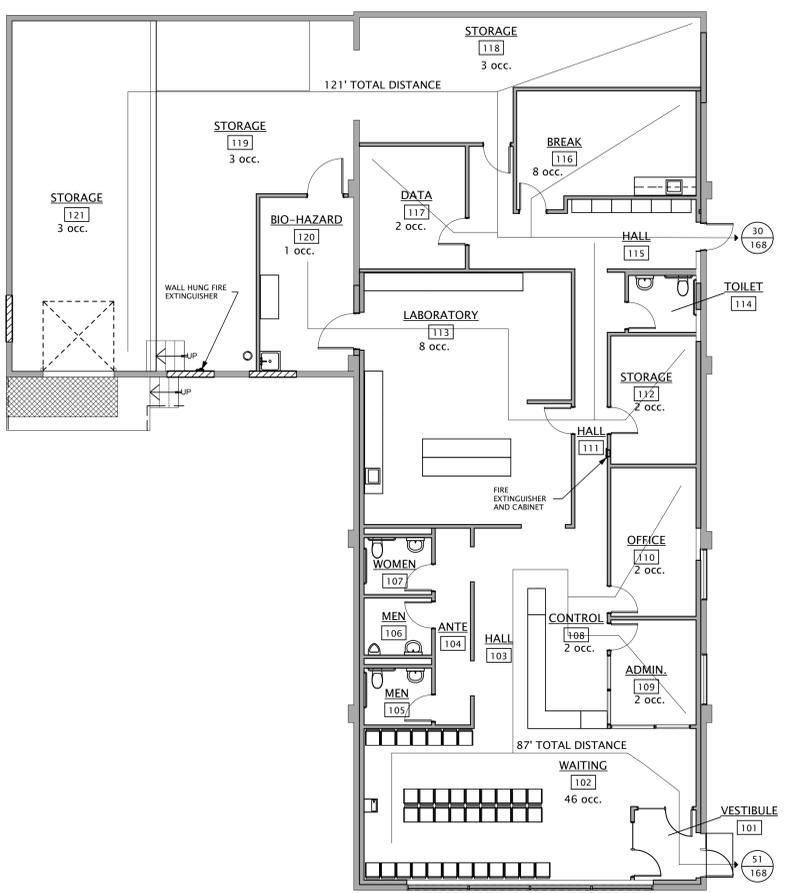
SHEET NO.

A0.03

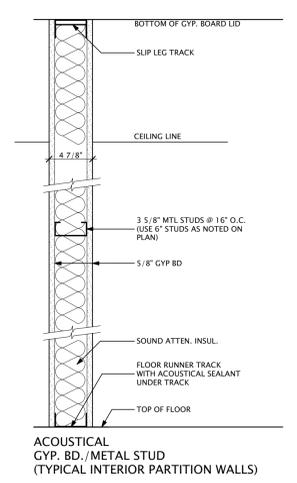
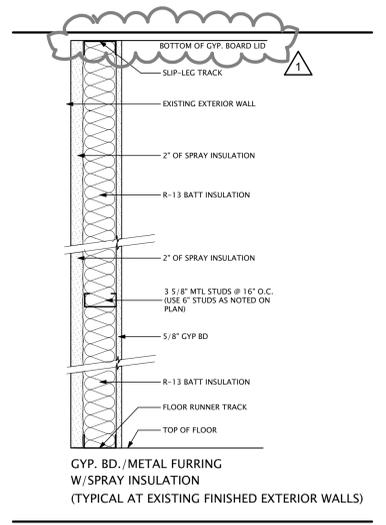
BUILDING CODE:	2011 OHIO BUILDING CODE
TYPE OF PROJECT:	INTERIOR ALTERATIONS
EXISTING USE GROUP:	8
PROPOSED USE GROUP:	8
MIXED USE GROUPS:	N/A
EXISTING CONSTRUCTION CLASSIFICATION:	5B
PROPOSED CONSTRUCTION CLASSIFICATION:	5B
EXISTING BUILDING AREA:	5,400
PROPOSED BUILDING AREA:	5,400
ALLOWABLE AREA:	9,000 SF
PERIMETER INCREASE:	NOT TAKEN
SPRINKLER INCREASE:	27,000 SF
TOTAL ALLOWABLE AREA:	36,000 SF
EXISTING BUILDING HEIGHT:	16'-8" FT. - 1 STORY
PROPOSED BUILDING HEIGHT:	16'-8" FT. - 1 STORY
ALLOWABLE HEIGHT:	40 FT. - 2 STORY
SPRINKLER INCREASE:	NOT TAKEN
TOTAL ALLOWABLE HEIGHT:	40 FT. - 2 STORIES
FIRE RESISTANCE RATINGS:	REQUIRED PROPOSED
STRUCTURAL FRAME - INCLUDING COLUMNS, BEAMS, TRUSSES	0 HOUR 0 HOUR
BEARING WALLS - EXTERIOR	0 HOUR 0 HOUR
BEARING WALLS - INTERIOR	0 HOUR 0 HOUR
NON BEARING WALLS & PARTITIONS - EXTERIOR	0 HOUR 0 HOUR
NON BEARING WALLS & PARTITIONS - INTERIOR	0 HOUR 0 HOUR
FLOOR CONSTRUCTION - INCLUDING SUPPORTING BEAMS & JOISTS	0 HOUR 0 HOUR
ROOF CONSTRUCTION - INCLUDING SUPPORTING BEAMS & JOISTS	0 HOUR 0 HOUR
FIRE WALLS (TO SEPARATE BUILDINGS AREAS W/ STRUCTURAL STABILITY)	NOT REQUIRED NOT REQUIRED
FIRE BARRIERS	NOT REQUIRED NOT REQUIRED
SEPARATION OF INCIDENTAL USES	NOT REQUIRED NOT REQUIRED
SEPARATION OF OCCUPANCIES	NOT REQUIRED NOT REQUIRED
EXIT STAIRS (1005.3.2)	NOT REQUIRED NOT REQUIRED
EXIT PASSAGEWAYS	NOT REQUIRED NOT REQUIRED
HORIZONTAL EXITS	NOT REQUIRED NOT REQUIRED
SHAFTS (707.2)	NOT REQUIRED NOT REQUIRED
SMOKE BARRIERS	NOT REQUIRED NOT REQUIRED
FIRE PARTITIONS	0 HOUR 0 HOUR
EXIT ACCESS CORRIDORS	0 HOUR 0 HOUR

OCCUPANT LOAD:	
FIRST FLOOR	81 OCCUPANTS
TOTAL	81 OCCUPANTS
NUMBER OF EXITS REQUIRED:	2
NUMBER OF EXITS PROVIDED:	2
MAXIMUM TRAVEL DISTANCE:	300' W/SPRINKLERS
EGRESS WIDTHS:	
DOORS, RAMPS, CORRIDORS (INCHES PER OCCUPANT)	7.4" (MIN, 32" CLEAR) 64" CLEAR
BEST ROOM FACILITIES:	
WOMEN'S WATER CLOSETS	1 2
WOMEN'S LAVATORIES	1 2
MEN'S WATER CLOSETS	1 2
MEN'S URINALS	1 1
MEN'S LAVATORIES	1 1
DRINKING FOUNTAINS	1 1
SERVICE SINKS	1 1
FIRE SPRINKLER SYSTEM:	PROVIDED: SYSTEM COMPLIANT WITH CHAPTER 9, SECTION 903.3.1.1
FIRE ALARM SYSTEM:	REQUIRED BY USER GROUP

LEGEND	
	REQUIRED OCCUPANT LOAD FOR THIS EXIT PROVIDED OCCUPANT LOAD FOR THIS EXIT
	BRACKET MOUNTED FIRE EXTINGUISHER
	FIRE EXTINGUISHER AND CABINET



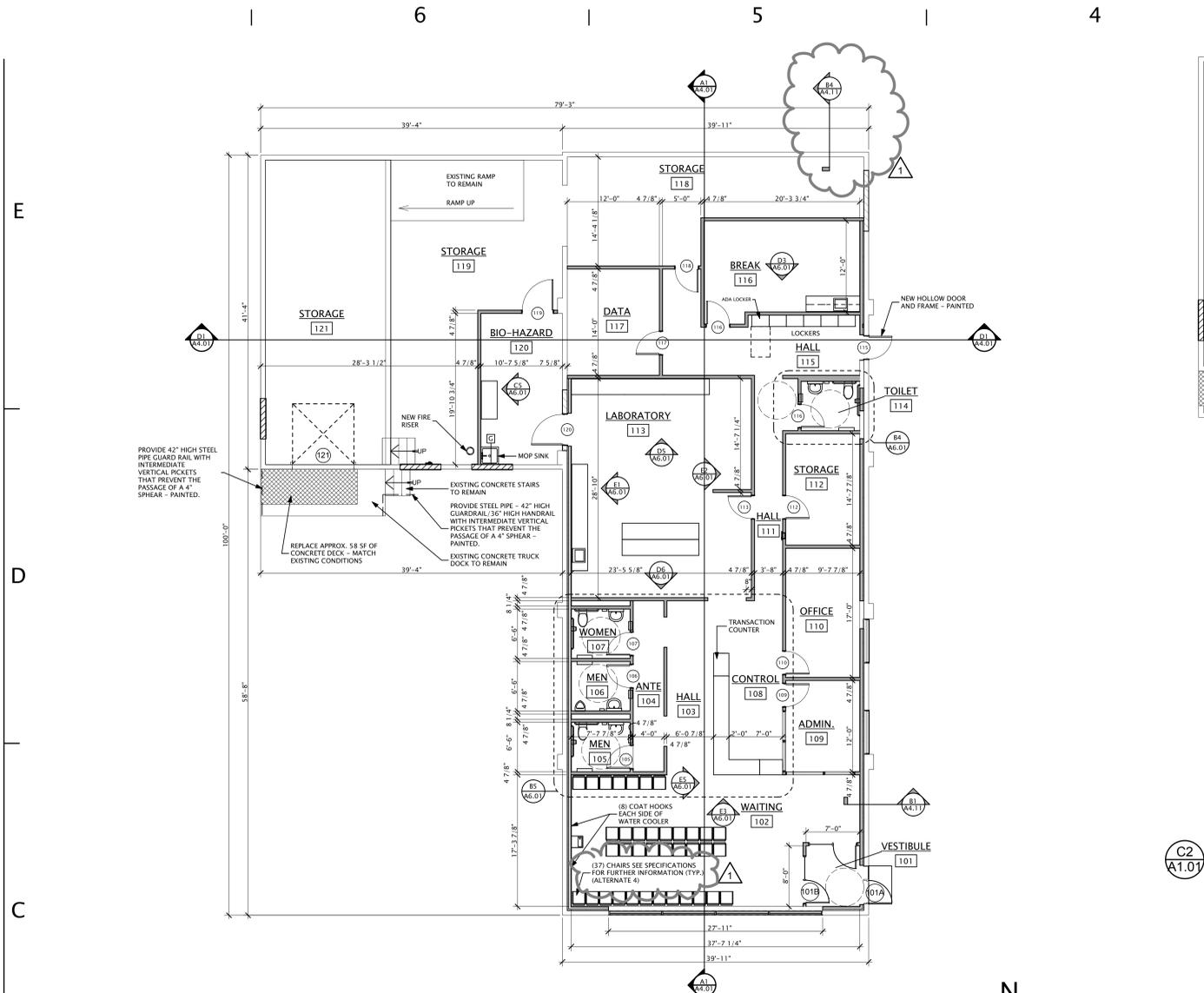
C2 1st FLOOR LIFE SAFETY
SCALE: 1/8" = 1'-0"



GYP. BD. /METAL FURRING
W/SPRAY INSULATION
(TYPICAL AT EXISTING FINISHED EXTERIOR WALLS)

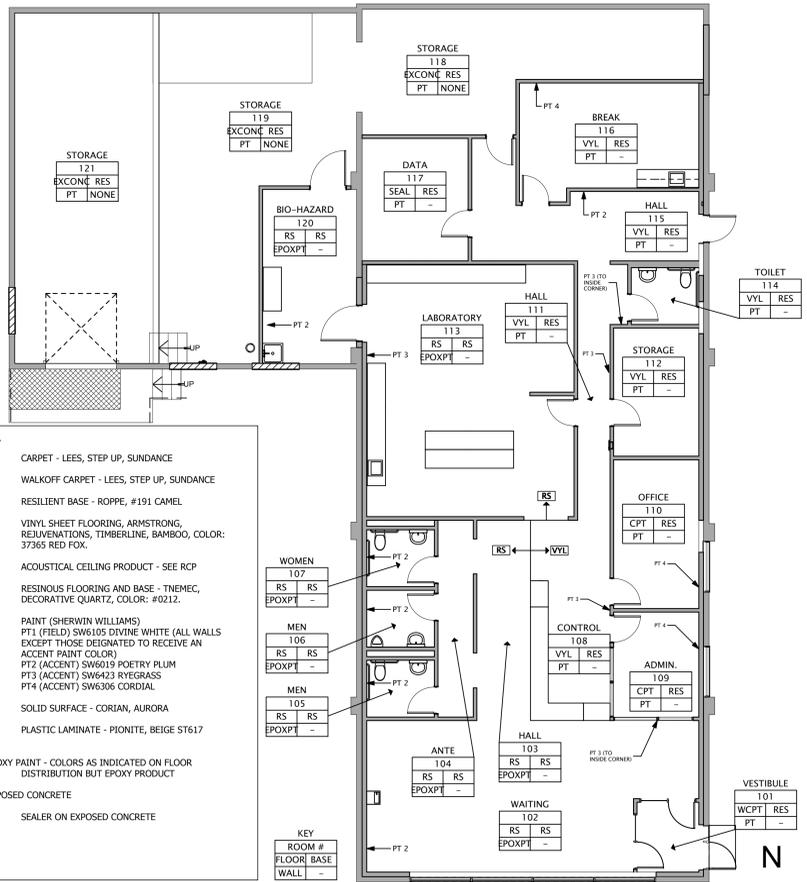
ACOUSTICAL
GYP. BD. /METAL STUD
(TYPICAL INTERIOR PARTITION WALLS)

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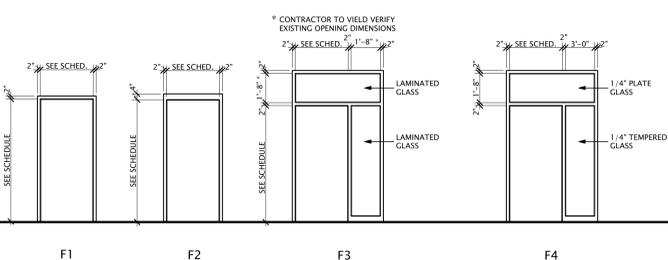
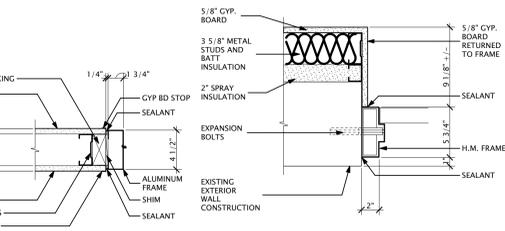
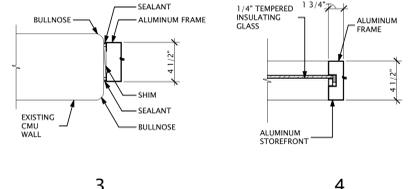
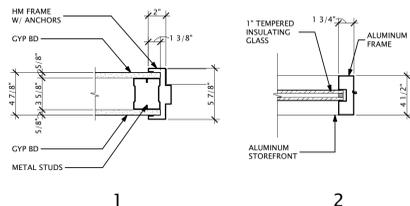
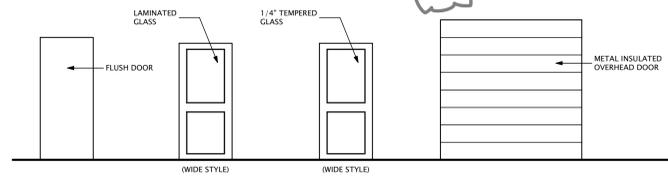
C4
A1.01 1st FLOOR PLAN
SCALE: 1/8" = 1'-0"

C2
A1.01 1st FLOOR RCP
SCALE: 1/8" = 1'-0"



A2
A1.01 1st FLOOR FINISH PLAN
SCALE: 1/8" = 1'-0"

No.	SIZE		DOOR		DOOR SCHEDULE				FIRE RATING	REMARKS	
	W	HT	EL	MATL	FN	EL	H	J			MATL
101A	3'-0"	8'-8"	D2	ALUM.	F3	2	2	ALUM.	001		
101B	6'-4"	8'-10"	D3	ALUM.	F4	2	2	ALUM.	002		
105	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	006
106	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	006
107	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	006
109	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	003
110	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	003
112	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	003
113	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	003
115	3'-0"	7'-0"	D1	HM	PT	F2	1	1	HM	PT	004
116	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	007
117	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	005
118	3'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	005
119	4'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	005
120	4'-0"	7'-0"	D1	HM	PT	F1	1	1	HM	PT	005
121	8'-0"	8'-0"	D4			3	3				INSULATED OVERHEAD DOOR



FIXTURE LEGEND

- RECESSED FLUORESCENT TROFFER (2'x4' 1'x4')
- FLUORESCENT COVE LIGHTING
- FLUORESCENT INDUSTRIAL FIXTURE (SEE ELECTRICAL FOR TYPE)
- SURFACE MOUNTED FLUORESCENT FIXTURE
- PENDANT MOUNTED FLUORESCENT LIGHT FIXTURE
- PENDANT MOUNTED FIXTURE
- RECESSED DOWNLIGHT
- EXIT SIGN / LIGHT
- SMOKE DETECTOR
- CEILING MOUNTED CABINET UNIT HEATER
- EXHAUST/RETURN GRILLE
- SUPPLY DIFFUSER
- RETURN-AIR GRILLE
- SPEAKER BY ELECTRICAL CONTRACTOR. SEE 'TS' SHEETS
- PENDANT SPRINKLER HEAD (SEE FIRE PROTECTION FOR TYPE)
- SIDEWALL SPRINKLER HEAD
- WINDOW SHADE TO BE PROVIDED AT THIS OPENING
- NOT ALL SYMBOLS SHOWN ARE USED ON DRAWINGS

CEILING LEGEND

- 24" x 24" SUSPENDED LAY-IN ACOUSTICAL CEILING
- EXPOSED OR EXISTING CONSTRUCTION TO REMAIN

CEILING TYPES

ACP-1 - ARMSTRONG CLEAN ROOM VL (NONPERFORATED) 24" X 24" X 5/8" SQUARE LAY-IN, COLOR: WHITE PROVIDE PRELUDE 15/16" EXPOSED TEE GRID SYSTEM (WHITE)

ACP-2 - ARMSTRONG DUNE ITEM 1774 24" X 24" X 5/8" SQUARE LAY-IN, COLOR: WHITE PROVIDE PRELUDE 15/16" EXPOSED TEE GRID SYSTEM (WHITE)

CEILING FINISH KEY
ROOM NAME AND NUMBER PLUS GENERAL CEILING FINISH AND HEIGHT UNLESS NOTED OTHERWISE BY FINISH KEY

CLASSROOM - ROOM NAME
101 - ROOM NUMBER
9'-0" - CEILING HEIGHT (A.F.F.)
ACP - CEILING FINISH ABBREVIATION (SEE BELOW)

CEILING FINISH ABBREVIATIONS

ACP ACOUSTICAL LAY-IN CEILING PANELS
ALUM ALUMINUM PANEL
AWP ACOUSTICAL WALL PANEL
AB ACOUSTICAL BAFFLE
EX EXISTING
EX-P TO BE PAINTED
EXC-P EXPOSED CONSTRUCTION - TO BE PAINTED
FB FABRIC BANNER
CVP-P CYPSPUM BOARD - PAINTED
CVP-EP CYPSPUM BOARD - EPOXY PAINTED
PT PAINT
SVP SYNTHETIC VENEER PLASTER (UNFINISHED)
LIF

NOTES

- REFER TO FINISH PLANS FOR INFORMATION ON ROOM FINISHES.
- REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON MATERIALS AND CONSTRUCTION.

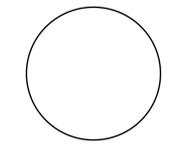
REFLECTED CEILING PLAN GENERAL NOTES

- REFER TO ELECTRICAL DRAWINGS FOR FIXTURE TYPES, AND ELECTRICAL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION PERTAINING TO ELECTRICAL AND MECHANICAL WORK.
- COORDINATE SIZE AND LOCATION OF ALL ACCESS PANELS WITH TRADE. REQUIRING THE SAME. ACCESS PANELS ARE SPECIFIED ARCHITECTURALLY BUT ARE REQUIRED TO BE PROVIDED BY TRADE. SPOT ALL LOCATIONS WITHIN FIXED CYPSPUM BOARD CEILING AND RECEIVE APPROVAL FROM THE ARCHITECT'S FIELD REPRESENTATIVE BEFORE PLACEMENT.
- COORDINATE CEILING SUSPENSION SYSTEMS WITH OTHER CEILING SPACE EQUIPMENT SUPPORTS.
- ALL SMOKE BARRIER PARTITIONS, HORIZONTAL EXIT ENCLOSURES AND FIRE RATED PARTITIONS WHICH EXTEND TO THE DECK ABOVE SHALL BE MARKED EVERY 20'-0" HORIZONTALLY WITHIN THE CEILING SPACE: "FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS"
- ALL CYP BOARD FASCIAS @ SOFFITS, ADJACENT TO LAY-IN CEILING, SHALL EXTEND 6" MINIMUM ABOVE LAY-IN CEILING.
- PROVIDE WOOD BLOCKING, ABOVE CYPSPUM BOARD CEILING, AS REQUIRED FOR MISCELLANEOUS SUSPENDED ITEMS (i.e. CURTAIN TRACKS, WINDOW SHADES, ACOUSTICAL BAFFLES, ETC.) TREATED WHERE REQUIRED.
- CENTER ALL SPRINKLER HEADS IN THE CENTER OF CEILING TILE UNLESS SHOWN OTHERWISE.

500 Madison Ave
Toledo, OH 43604
419.242.7405 tel
419.242.7400 fax
www.thecollaborativeinc.com
tc@thecollaborativeinc.com



ARCHITECTS
LANDSCAPE ARCHITECTS
INTERIOR DESIGNERS
PLANNERS



C-002 Dated 2/6/2013

KEY PLAN
N.T.S.

PROJECT TITLE
Lucas County Commissioners Central Drug Testing Relocation
1302 Washington St
Toledo, Ohio

DATE	REVISIONS
02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
01.15.2013	BIDDING
10.10.2012	DD BUDGET

CHECKED ARB
APPROVED ARB

TCI JOB NO. 106086

SHEET TITLE
1ST FLOOR, RCP, & FINISH PLANS AND DOOR SCHEDULE

SHEET NO.
A1.01

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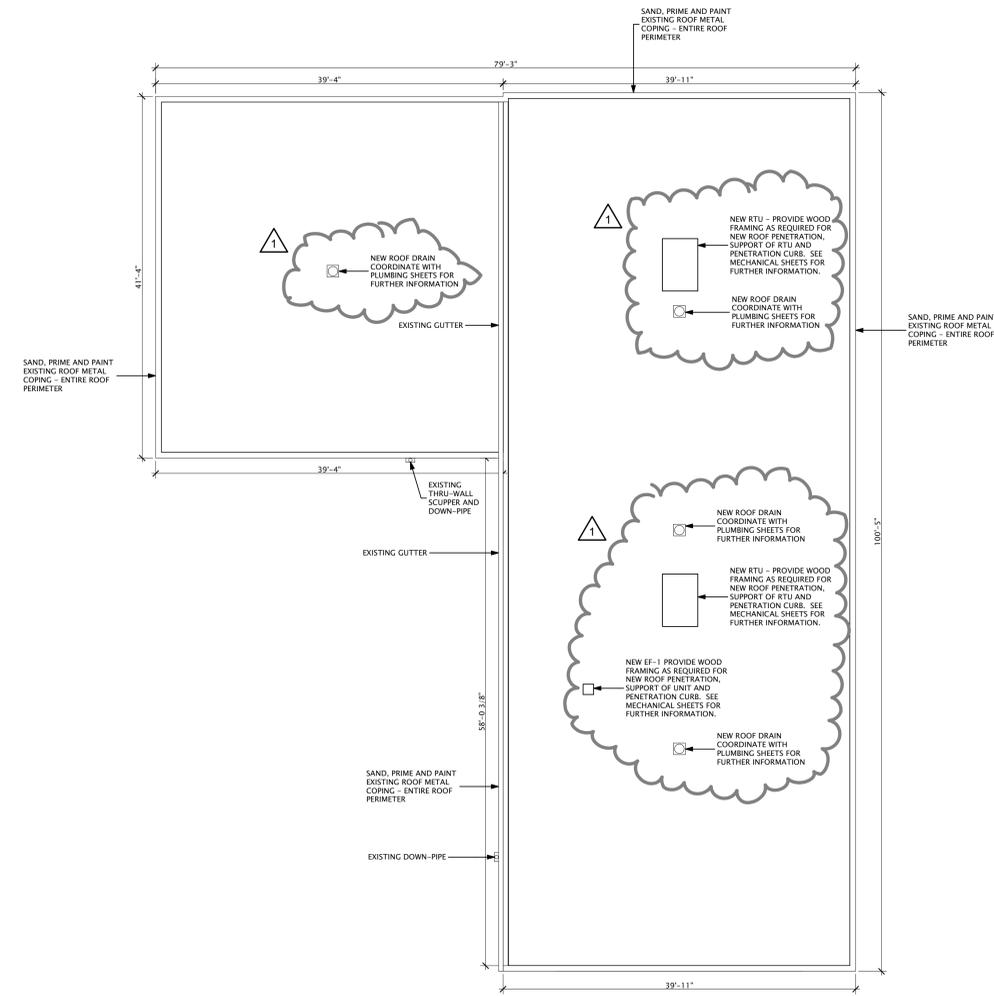
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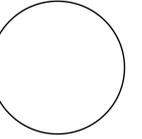
B2
A1.04
ROOF PLAN
SCALE: 1/8" = 1'-0"

500 Madison Ave
Toledo, OH 43604
419.242.7405 tel
419.242.7400 fax
www.thecollaborativeinc.com
tci@thecollaborativeinc.com



the COLLABORATIVE inc

ARCHITECTS
LANDSCAPE ARCHITECTS
INTERIOR DESIGNERS
PLANNERS



C-002 Dated 2/6/2013

KEY PLAN
N.T.S.



PROJECT TITLE

**Lucas County
Commissioners
Central
Drug
Testing
Relocation**
1302 Washington St
Toledo, Ohio

02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
01.15.2013	BIDDING
10.10.2012	DD BUDGET

CHECKED ARB
APPROVED ARB

TCI JOB NO. 106086

SHEET TITLE
ROOF PLAN

SHEET NO.

A1.04

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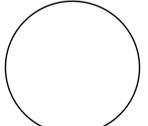
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C-002 Dated 2/6/2013

KEY PLAN
N.T.S.

PROJECT TITLE
**Lucas County
Commissioners
Central
Drug
Testing
Relocation**
1302 Washington St
Toledo, Ohio

02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
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CHECKED ARB
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TCI JOB NO. 106086

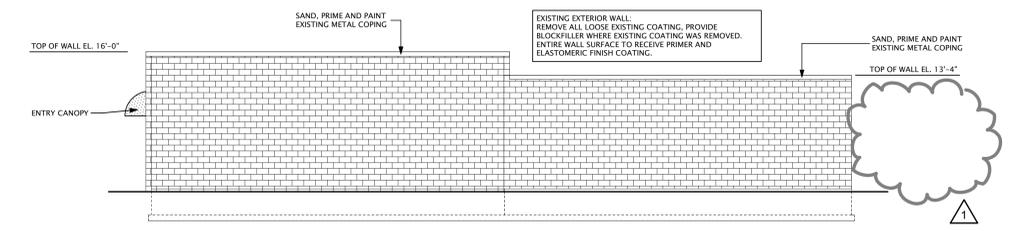
SHEET TITLE
**EXTERIOR
ELEVATIONS**

SHEET NO.

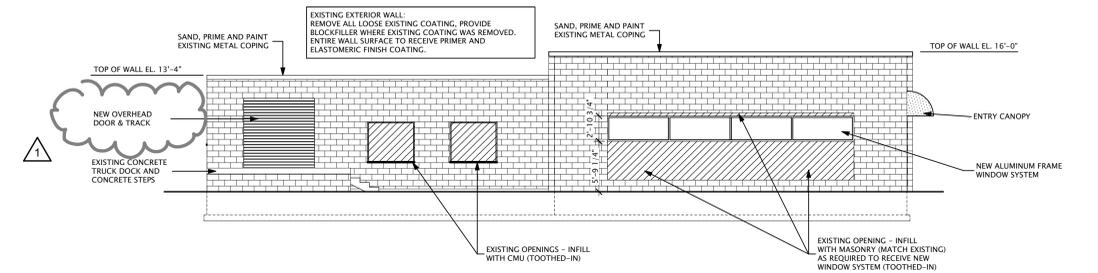
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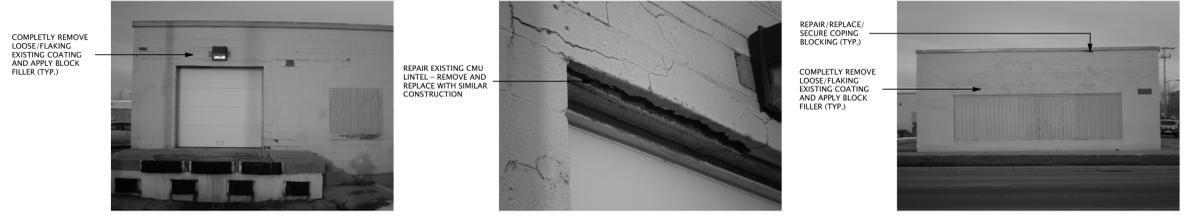


D4 North Elevation
SCALE: 1/8" = 1'-0"

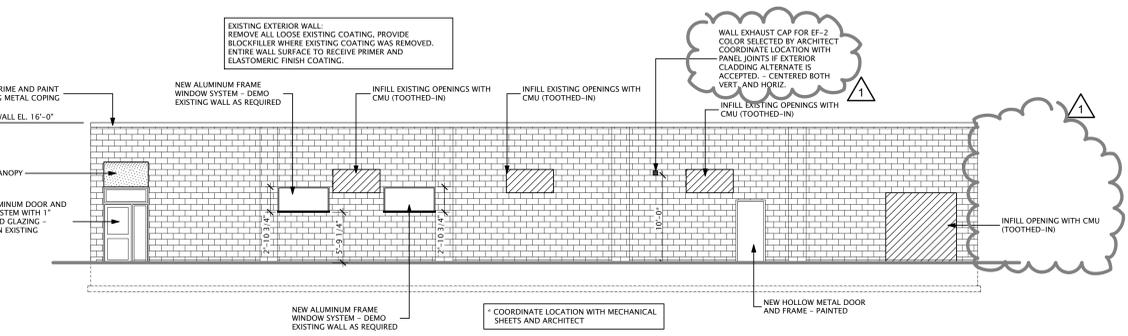


D1 South Elevation
SCALE: 1/8" = 1'-0"

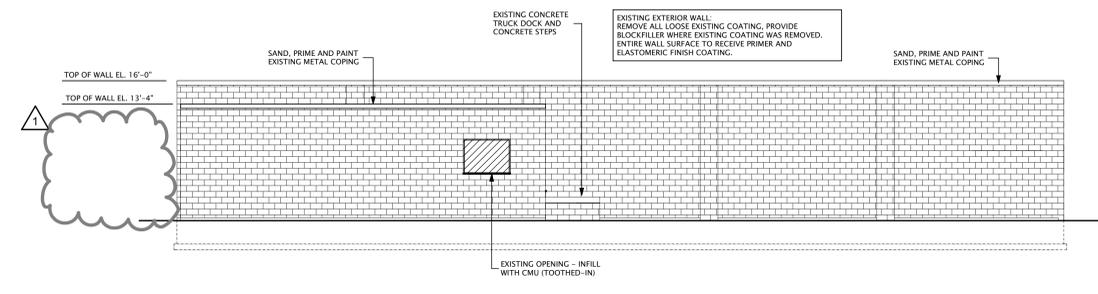
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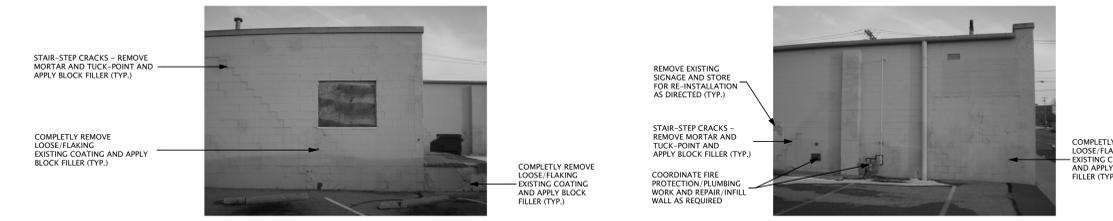
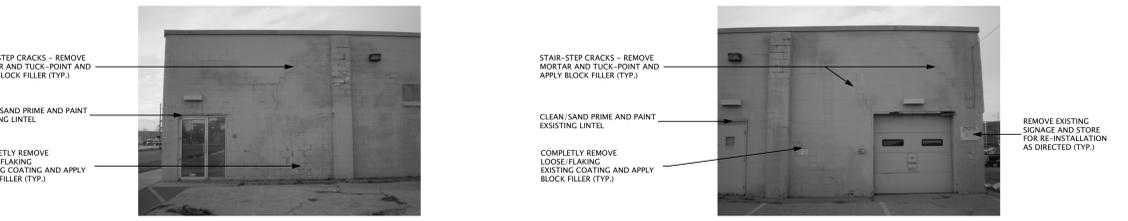


B4 East Elevation
SCALE: 1/8" = 1'-0"



B1 West Elevation
SCALE: 1/8" = 1'-0"

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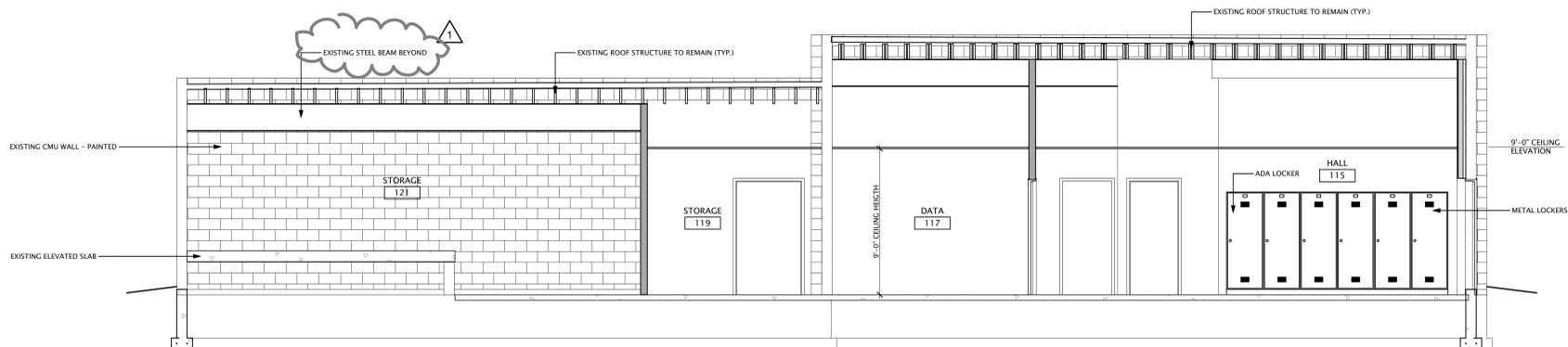
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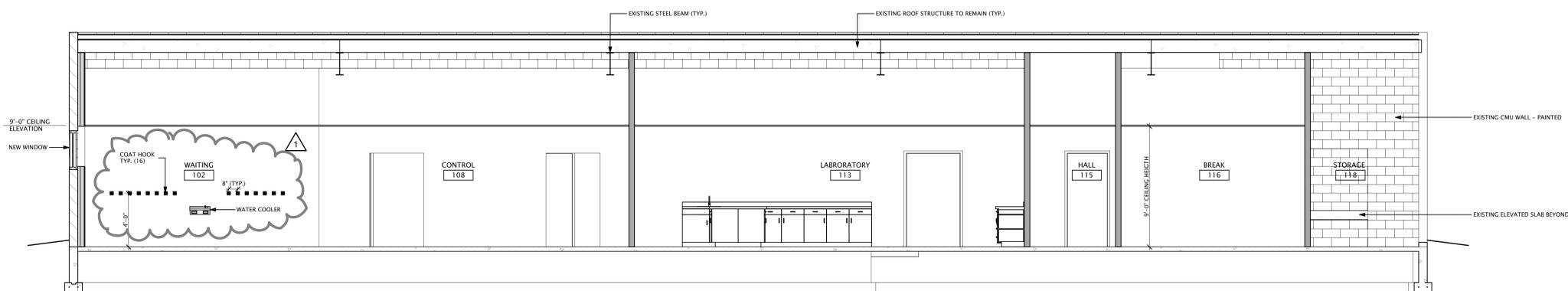
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A



D1
A4.01 BUILDING SECTION
 SCALE: 1/4" = 1'-0"

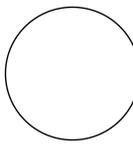


A1
A4.01 BUILDING SECTION
 SCALE: 1/4" = 1'-0"

500 Madison Ave
 Toledo, OH 43604
 419.242.7405 tel
 419.242.7400 fax
 www.thecollaborativeinc.com
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C-002 Dated 2/6/2013

KEY PLAN
 N.T.S.

PROJECT TITLE
**Lucas County
 Commissioners
 Central
 Drug
 Testing
 Relocation**
 1302 Washington St
 Toledo, Ohio

02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
01.15.2013	BIDDING
10.10.2012	DD BUDGET

CHECKED ARB
 APPROVED ARB

TCI JOB NO. 106086

SHEET TITLE
**BUILDING
 SECTIONS**

SHEET NO.

A4.01

6

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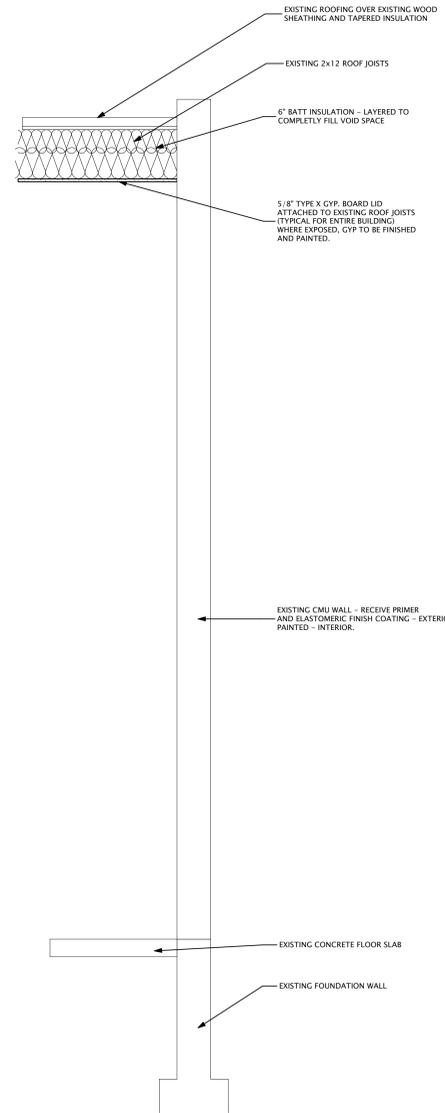
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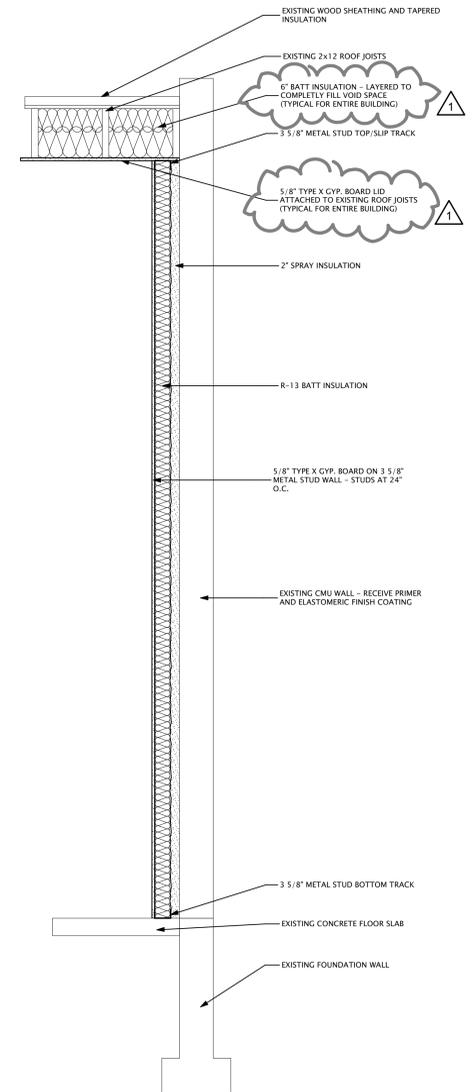
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B

A



B4
A4.11 WALL SECTION
SCALE: 3/4" = 1'-0"

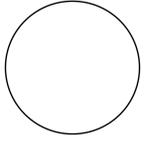


B1
A4.11 WALL SECTION
SCALE: 3/4" = 1'-0"

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SHEET TITLE
WALL SECTIONS

SHEET NO.
A4.11

6

5

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3

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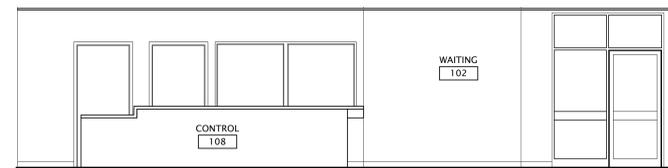
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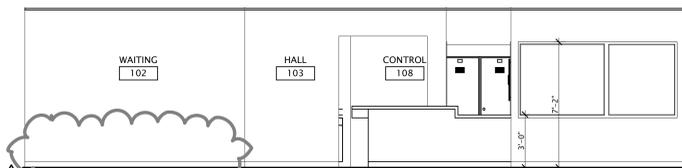
Revised 2/10/2013

6 | 5 | 4 | 3 | 2 | 1

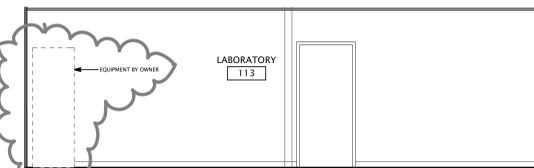
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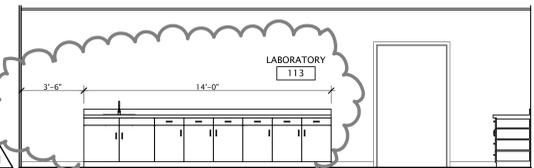
E5 Elevation
SCALE: 1/4" = 1'-0"



E3 Elevation
SCALE: 1/4" = 1'-0"

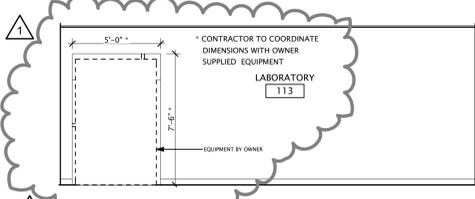


E2 Elevation
SCALE: 1/4" = 1'-0"

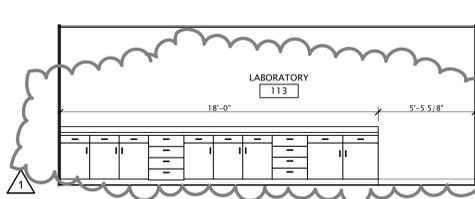


E1 Elevation
SCALE: 1/4" = 1'-0"

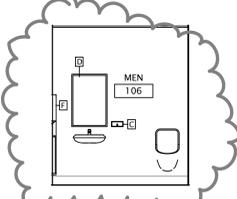
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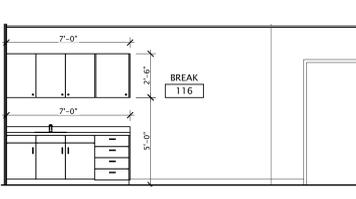
D6 Elevation
SCALE: 1/4" = 1'-0"



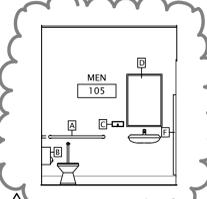
D5 Elevation
SCALE: 1/4" = 1'-0"



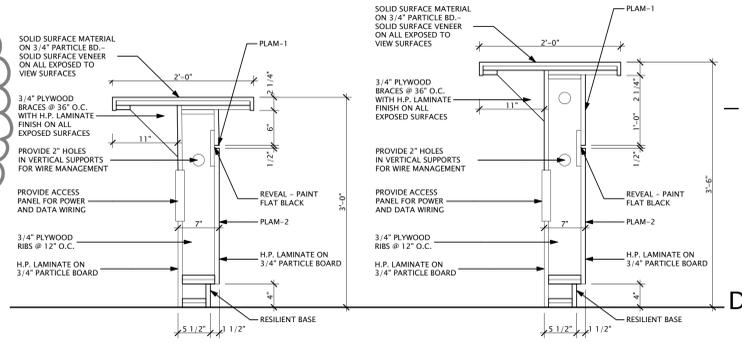
D4 Elevation
SCALE: 1/4" = 1'-0"



D3 Elevation
SCALE: 1/4" = 1'-0"

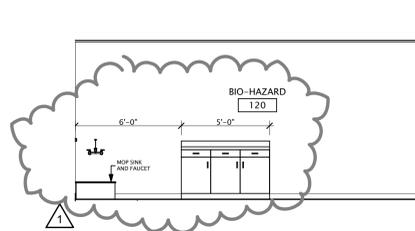


D2 Elevation
SCALE: 1/4" = 1'-0"

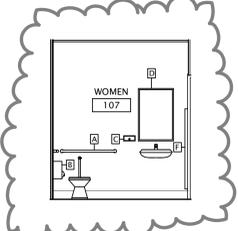


SECTION THRU TRANSACTION COUNTER
SCALE: 1" = 1'-0"

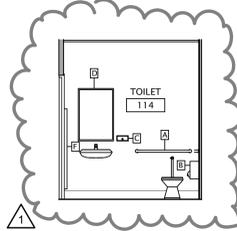
C



C5 Elevation
SCALE: 1/4" = 1'-0"

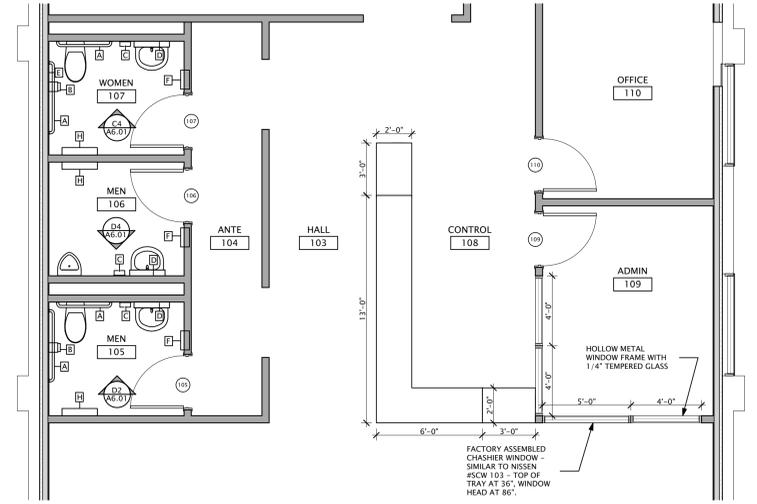


C4 Elevation
SCALE: 1/4" = 1'-0"

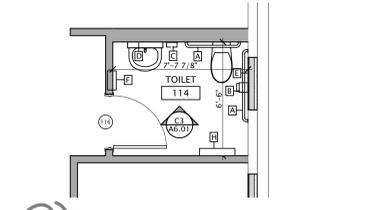


C3 Elevation
SCALE: 1/4" = 1'-0"

B



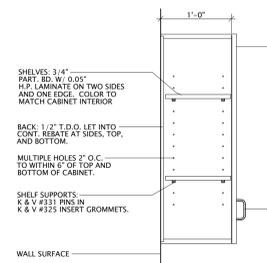
B5 ENLARGED FLOOR PLAN
SCALE: 1/4" = 1'-0"



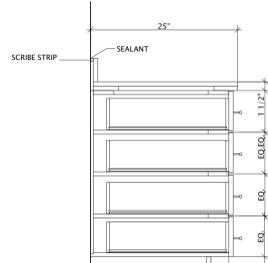
B4 ENLARGED FLOOR PLAN
SCALE: 1/4" = 1'-0"

TOILET ROOM ACCESSORIES SCHEDULE				
ITEM	MANUFACTURER	MODEL #	MOUNTING HGT	
A) GRAB BARS (42", 36", 18" VERTICAL BAR)	BRADLEY	#5120	CENTERLINE 34" TO FINISH FLOOR	
B) TOILET TISSUE DISPENSER	BRADLEY	#5402	TOP OF UNIT @ 30" A.F.F.	
C) SOAP DISPENSER	BRADLEY	#6542	38" AFF TO BOTTOM OF FIXTURE	
D) MIRROR - STAINLESS STEEL FRAME	BRADLEY	#5181.5	40" AFF TO REFLECTIVE PORTION OF MIRROR	
E) SANITARY NAPKIN DISPOSAL	BRADLEY	#411-11	30" AFF TO TOP OF UNIT	
F) PAPER TOWEL DISPENSER/DISPOSAL	BRADLEY	#5384	12" AFF TO BOTTOM OF UNIT	
G) MOP HOLDER	BRADLEY	#221		
H) STAINLESS STEEL SHELF	BRADLEY	#236 X 16	48" AFF TO TOP OF SHELF	

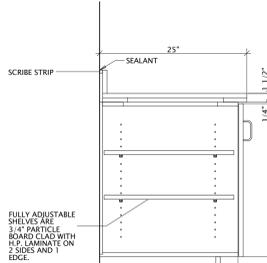
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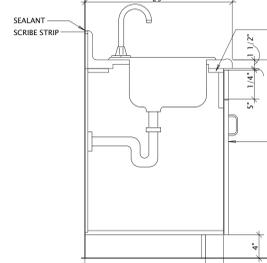
WALL CABINET
SCALE: 1" = 1'-0"



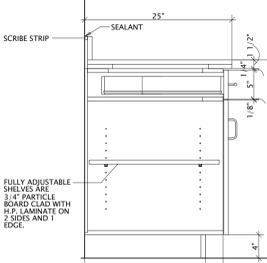
4 DRAWER BASE CABINET
SCALE: 1" = 1'-0"



FULL DOOR CABINET
SCALE: 1" = 1'-0"



BASE CABINET W/ SINK
SCALE: 1" = 1'-0"



DRAWER/DOOR BASE CABINET
SCALE: 1" = 1'-0"

6 | 5 | 4 | 3 | 2 | 1

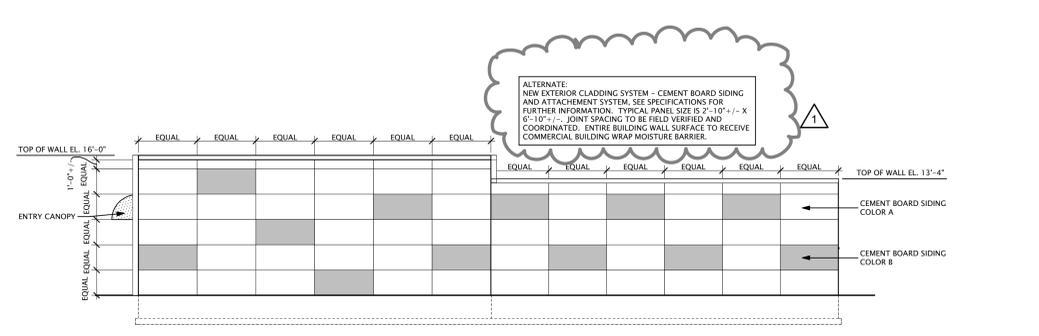
02.05.2013	PERMITS
02.05.2013	ADDENDUM #1
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CHECKED ARB
APPROVED ARB

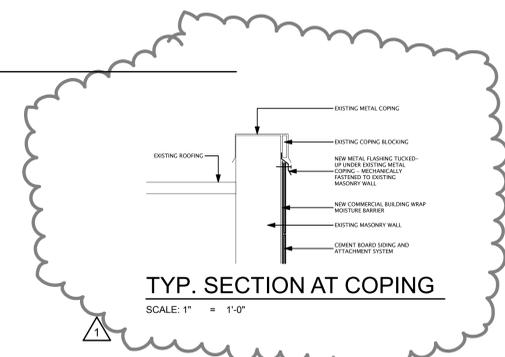
TCI JOB NO. 106086

SHEET TITLE
ALTERNATES

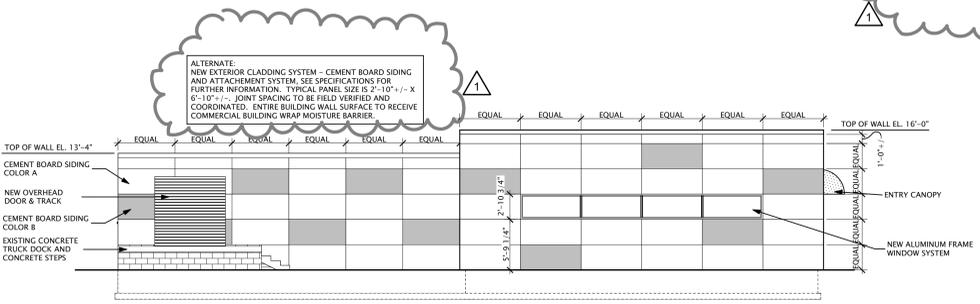
SHEET NO.
A8.01



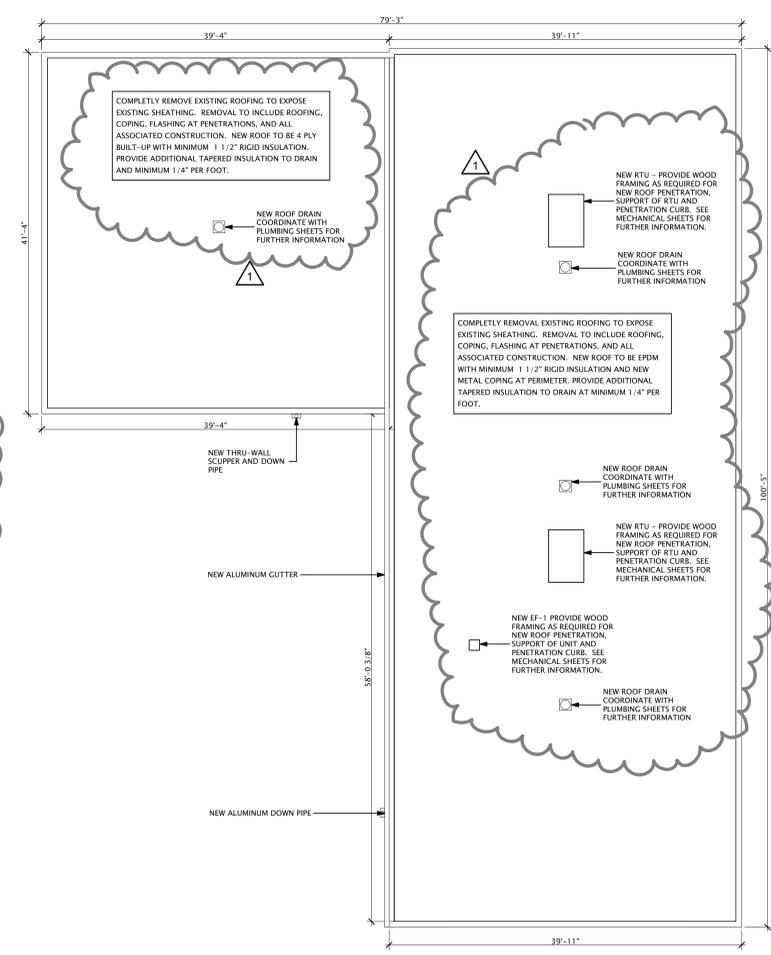
D4 NORTH ELEVATION ALTERNATE 2
SCALE: 1/8" = 1'-0"



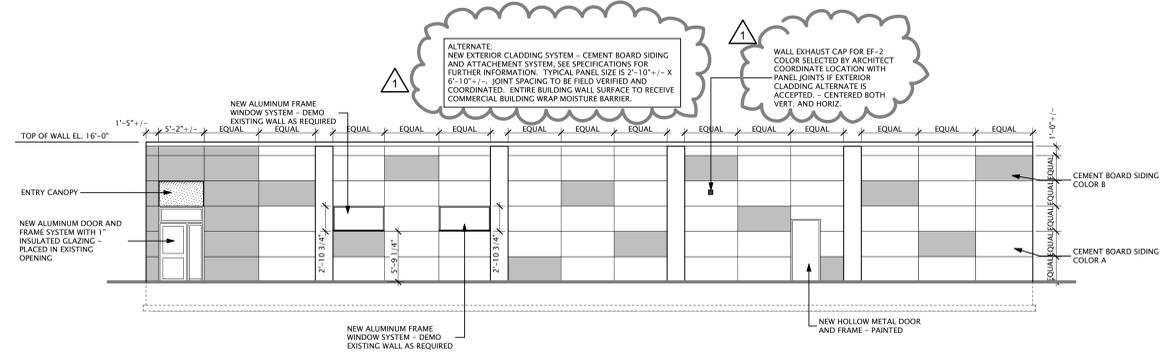
TYP. SECTION AT COPING
SCALE: 1" = 1'-0"



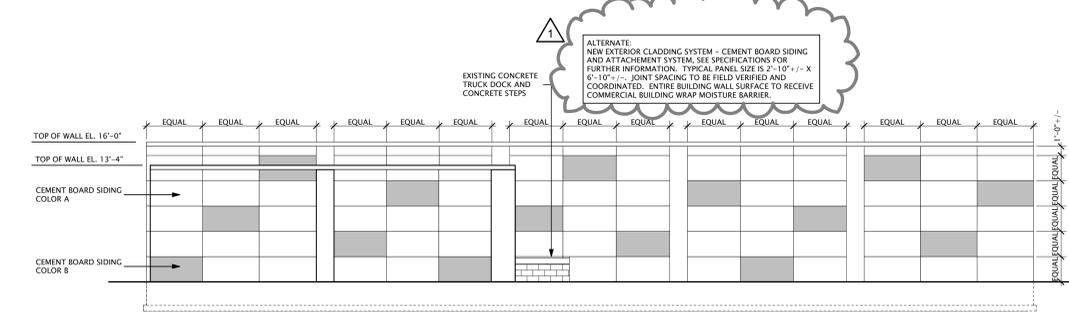
C4 SOUTH ELEVATION ALTERNATE 2
SCALE: 1/8" = 1'-0"



B1 ROOF PLAN ALTERNATE 1
SCALE: 1/8" = 1'-0"



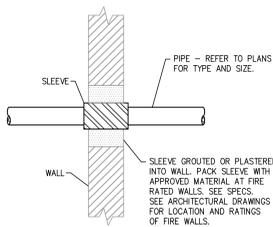
A4 EAST ELEVATION ALTERNATE 2
SCALE: 1/8" = 1'-0"



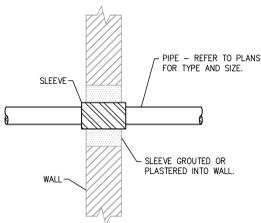
A1 WEST ELEVATION ALTERNATE 2
SCALE: 1/8" = 1'-0"

E
D
C
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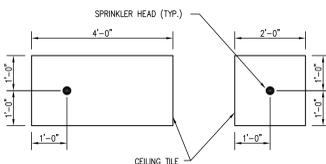
FIRE SEALANT SCHEDULE - NON-INSULATED PIPING				
PIPING TYPE	FIRE RATING	HLTI PRODUCT	UL SYSTEM NUMBER	SEALANT DEPTH
METAL PIPE THROUGH CONCRETE				
MAX. 10" STEEL, 4" COPPER, STEEL CONDUIT, EMT PIPE	2-HOUR	FS-ONE, CP 601S, OR CP 606	CAJ 1149	1/2"
MAX. 30" STEEL, CAST IRON, MAX. 6" COPPER CONDUIT OR MAX. 4" EMT PIPE	2-HOUR	FS-ONE	CAJ 1291	1/2"
MAX. 10" STEEL, CAST IRON, MAX. 4" COPPER, CONDUIT OR EMT PIPE	3-HOUR	FS-ONE	CAJ 1184	1"
MAX. 20" STEEL, CAST IRON, MAX. 6" COPPER, CONDUIT OR 4" EMT PIPE	3-HOUR	FS-ONE	CAJ 1155	1/2"
MAX. 6" STEEL, COPPER, STEEL CONDUIT, MAX. 4" EMT PIPE	4-HOUR	FS-ONE	WJ 1068	1 1/2"
METAL PIPE THROUGH GYPSUM				
MAX. 8" STEEL, CAST IRON, MAX. 6" CONDUIT MAX. 4" COPPER OR EMT	1 OR 2-HOUR	FS-ONE	WL 1205	1"



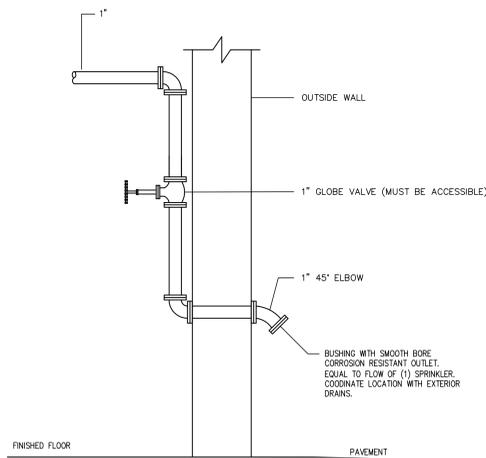
PIPE THRU FIRE WALL DETAIL
NO SCALE



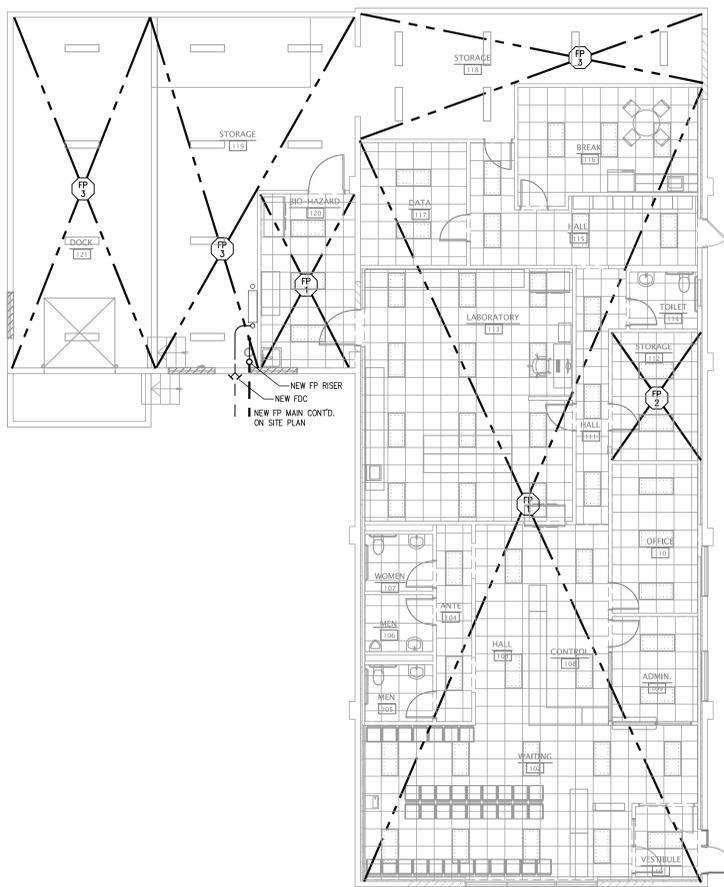
PIPE THRU WALL DETAIL
NO SCALE



SPRINKLER HEAD PLACEMENT DETAIL
NO SCALE

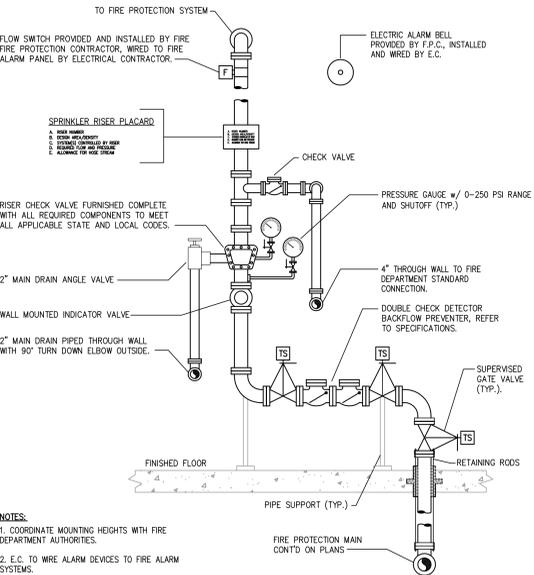


INSPECTOR'S TEST CONNECTION
NO SCALE



FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

SPRINKLER HEAD SCHEDULE										
TAG	DESCRIPTION	CEILING	HAZARD DESIGN	DESIGN DENSITY *		HOSE ALLOWANCE	HEAD TYPE	TEMPERATURE RATING	FINISH	REMARKS
				GPM	SQ. FT.					
FP1	OFFICES/COMMON SPACE	YES	LIGHT	.10	1500	250 gpm	RECESSED	ORDINARY (155F)	BRASS	
FP2	UTILITY/STORAGE RM.	NO/YES	ORDINARY 1	.15	1500	250 gpm	UPRIGHT/PENDENT	ORDINARY (155F)	BRASS	
FP3	EXISTING DOCK/STORAGE	NO	ORDINARY 1	.15	1500	250 gpm	UPRIGHT	ORDINARY (155F)	BRASS	EXISTING COVERAGE. REVISE SPRINKLER HEAD LAYOUT AND COVERAGE TO COORDINATE WITH NEW FLOOR PLAN RENOVATIONS



AUTOMATIC SPRINKLER RISER DETAIL - AREA A
NO SCALE

FIRE PROTECTION GENERAL NOTES:

- CONTRACTOR SHALL VISIT SITE TO VERIFY ALL EXISTING CONDITIONS THAT MAY AFFECT THE WORK.
- CONTRACT SHALL INCLUDE ALL MATERIALS, LABOR, TOOLS, ETC., FOR A COMPLETE AND OPERABLE INSTALLATION. ALL MATERIALS SHALL BE NEW, SPECIFICATION GRADE, AND U.L. LISTED PRODUCTS, UNLESS NOTED OTHERWISE.
- COORDINATE ALL WORK AND SCHEDULES WITH OWNER, CONSTRUCTION MANAGER, OTHER CONTRACTORS AND APPROPRIATE UTILITY COMPANIES.
- STORE MATERIALS WHERE DIRECTED. PROTECT STORED MATERIALS AND INSTALLED WORK FROM DAMAGE. REPAIR ALL DAMAGE.
- REMOVE DIRT, DEBRIS AND UNUSED MATERIALS FROM SITE REGULARLY, AND DISPOSE OF BY PROPER AND LEGAL METHODS.
- PATCH AND FINISH CONSTRUCTION DAMAGED DURING THE COURSE OF FIRE PROTECTION SYSTEM INSTALLATION, SEALS & FIRE STOPPING AT ALL WALL AND FLOOR PENETRATIONS.
- PERFORM TESTING AND MAKE FINAL ADJUSTMENTS TO VERIFY PROPER PERFORMANCE OF ALL SYSTEMS AND EQUIPMENT.
- MAINTAIN "AS BUILT" RECORDS OF ALL INSTALLED ITEMS AND PROVIDE TO CONSTRUCTION MANAGER AT PROJECT COMPLETION.

NOTE: THESE NOTES ARE GENERAL IN NATURE. SPECIFIC MEANS, METHODS AND MATERIALS ARE DETAILED IN THE SPECIFICATIONS AND CONTRACTOR IS DIRECTED TO THOROUGHLY REVIEW THE FULL SPECIFICATION. CONTRACT SPECIFICATIONS SHALL GOVERN IN CASE OF CONFLICT.

FIRE PROTECTION DESIGN NOTES:

- AREA(S) COVERED BY HYDRAULICALLY DESIGNED WET PIPE SPRINKLER SYSTEM:
 - ENTIRE EXISTING BUILDING (RENOVATIONS)
- REGULATORY REQUIREMENTS FOR FIRE PROTECTION SYSTEM DESIGN AND INSTALLATION:
 - DISVISION 13 SPECIFICATIONS
 - NFPA-13
 - STATE BUILDING CODE
 - LOCAL AUTHORITY HAVING JURISDICTION
 - OWNERS INSURANCE UNDERWRITER
- INITIATE SYSTEM INSTALLATION ONLY AFTER SUBMITTALS HAVE BEEN APPROVED BY:
 - ARCHITECT/ENGINEER
 - LOCAL FIRE DEPARTMENT AUTHORITY/ FIRE MARSHAL
 - OWNERS INSURANCE UNDERWRITER
- COORDINATE THE LAYOUT AND INSTALLATION OF SPRINKLER PIPING AND EQUIPMENT WITH STRUCTURAL, MECHANICAL, ELECTRICAL, AND ALL OTHER TRADES PRIOR TO FABRICATION AND/OR INSTALLATION OF WORK. INCLUDE:
 - INSPECTOR'S TEST CONNECTION
 - SYSTEM MAIN AND AUXILIARY DRAINS
 - COVERAGE OVER AND UNDER LARGE DUCTS/OBSTRUCTIONS/EQUIPMENT
 - FIRE ALARM SYSTEM
 - ROUTING OF MAINS THRU BUILDING
 - LOCATION OF SITE FIRE PROTECTION WATER MAINS
- ALL MECHANICAL EQUIPMENT & DUCTWORK SHOWN ON FLOOR PLANS IS FOR REFERENCE ONLY. FOR ACTUAL LOCATIONS AND SIZES SEE MECHANICAL/HVAC DRAWINGS.
- WATER FLOW INFORMATION: CITY WATER DEPT. RECORDS
 TEST LOCATION: CITY MAIN - WASHINGTON STREET & 12th STREET
 STATIC PRESSURE: 58 PSI
 RESIDUAL PRESSURE: 52 PSI
 FLOW (GPM): 1050 GPM
 DATA SOURCE: VOID 2003 CITY DATA

 EXISTING RISER TAG: DRY-SYSTEM
 STATIC PRESSURE: 55 PSI
 RESIDUAL PRESSURE: 50 PSI

 CONTRACTOR TO PROVIDE FLOW TEST AND DOCUMENT DATA ON FIRE PROTECTION SHOP DRAWINGS/CALCULATIONS.
- ALL SPRINKLER SYSTEM HYDRAULIC CALCULATIONS SHALL BE DESIGNED TO MAINTAIN A 5 PSI SAFETY FACTOR, INCLUDING HOSE DEMAND.
- IN DESIGNING THE SPRINKLER HYDRAULIC AREA, THE DIMENSION OF THE DESIGN AREA PARALLEL TO THE BRANCH LINES SHOULD BE EQUAL TO 1.4 TIMES THE SQUARE ROOT OF THE DESIGN AREA.
- AVOID RUNNING SPRINKLER PIPING OVER ELECTRICAL PANELS.

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C-002 Dated 2/6/2013

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Lucas County Commissioners Central Drug Testing Relocation Study

1302 Washington St.
Toledo, Ohio

02-05-13 ADDENDUM #1
01-15-13 BIDDING
10-05-12 DO SUBMITTAL

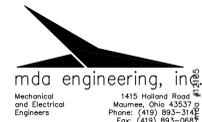
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APPROVED DRM

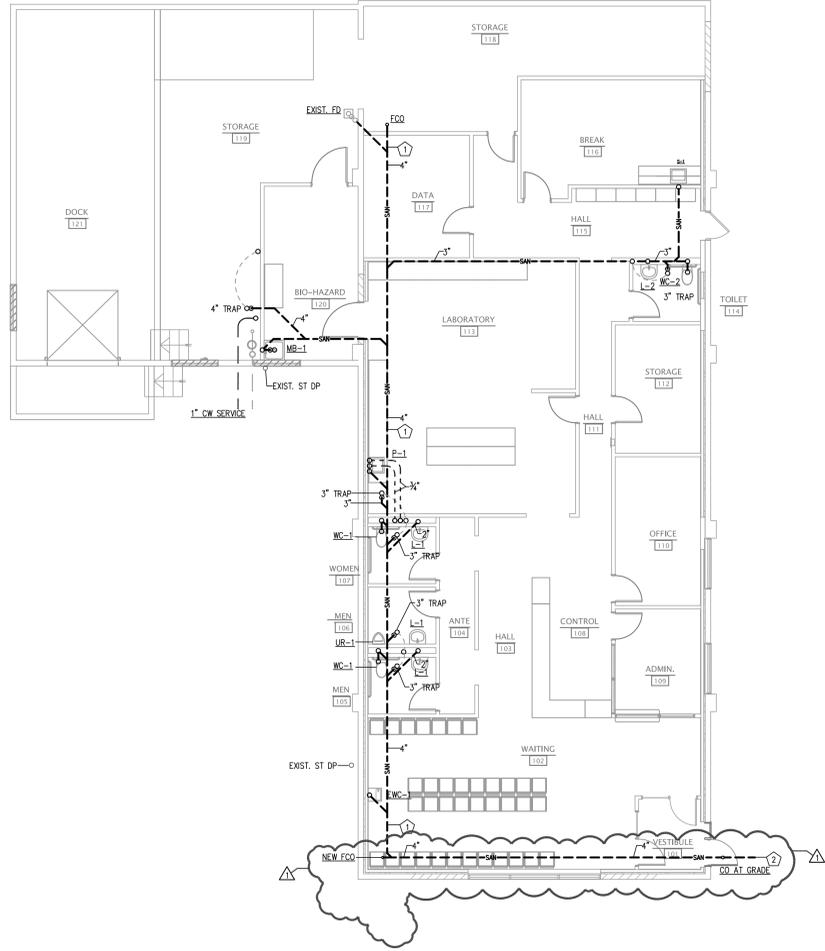
TCI JOB NO. 106086

SHEET TITLE
FLOOR PLAN - FIRE PROTECTION

SHEET NO.

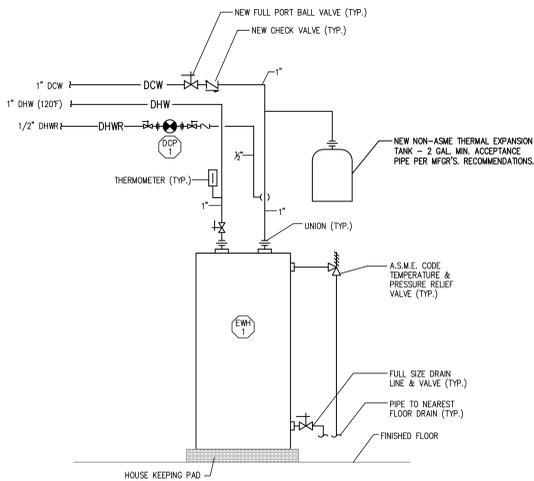
F1.01



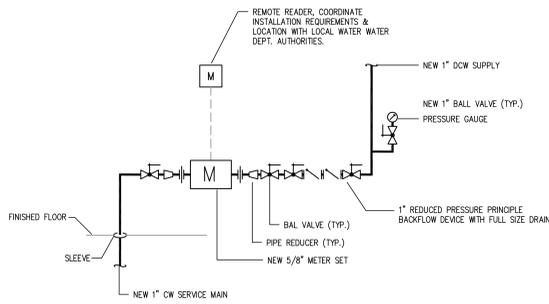


FLOOR PLAN - UNDERSLAB PLUMBING

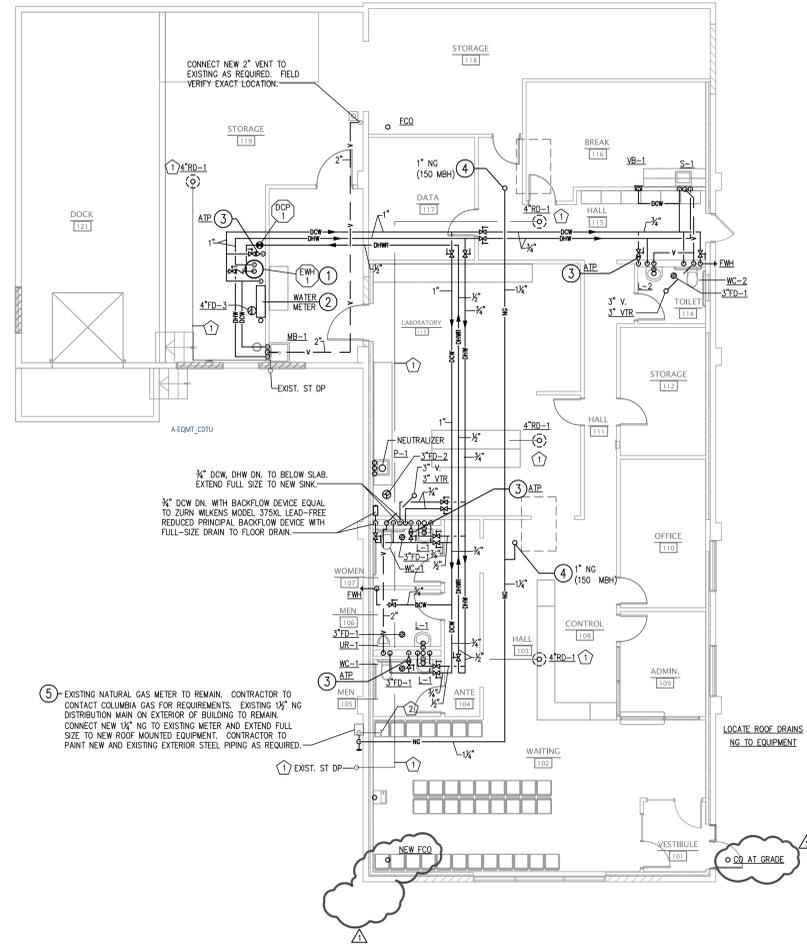
- 1 CONTRACTOR TO FIELD VERIFY EXISTING BELOW SLAB SANITARY PIPE ROUTING, LOCATION, AND ELEVATION. COORDINATE NEW SANITARY MAIN INSTALLATION WITH EXISTING SANITARY LOCATION.
- 2 CONNECT NEW SANITARY MAIN TO EXISTING SEWER MAIN AS REQUIRED. CONTRACTOR TO FIELD VERIFY EXACT LOCATION, AND ELEVATION PRIOR TO START OF CONSTRUCTION.



1 ELECTRIC WATER HEATER DETAIL

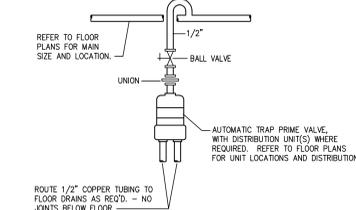


2 WATER SERVICE AND METER DETAIL

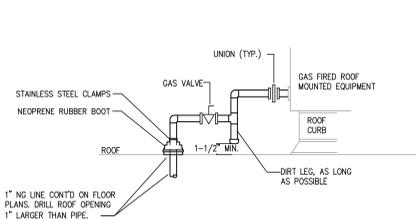


FLOOR PLAN - PLUMBING

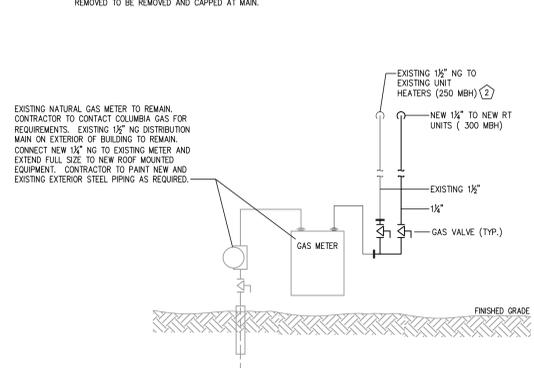
- 1 CONTRACTOR TO FIELD VERIFY EXISTING STORM PIPE ROUTING AND LOCATIONS. EXISTING PIPING TO REMAIN. CONNECT NEW ROOF DRAINS TO EXISTING PIPING AS REQUIRED. FIELD VERIFY EXACT LOCATIONS.
- 2 CONTRACTOR FIELD VERIFY EXISTING NG PIPE ROUTING AND LOCATION. EXISTING NG SUPPLIES TO EXISTING UNIT HEATERS TO REMAIN. EXISTING NG PIPING TO EXISTING RT-UNITS BEING REMOVED TO BE REMOVED AND CAPPED AT MAIN.



3 AUTOMATIC TRAP PRIMER DETAIL



4 NATURAL GAS CONNECTION DETAIL



5 NATURAL GAS SUPPLY DETAIL

150 Madison Ave
Toledo, OH 43604
419.242.7405 tel
419.242.7400 fax
www.thecollaborativeinc.com
tci@thecollaborativeinc.com



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CHECKED RFY
APPROVED DRM

TCI JOB NO. 106086

SHEET TITLE
**FLOOR PLAN -
PLUMBING**

SHEET NO.

P2.01

mda engineering, inc.
Mechanical
and Electrical
Engineers
4415 Holland Road
Mouseton, Ohio 43572
Phone: (419) 893-3142
Fax: (419) 893-0687

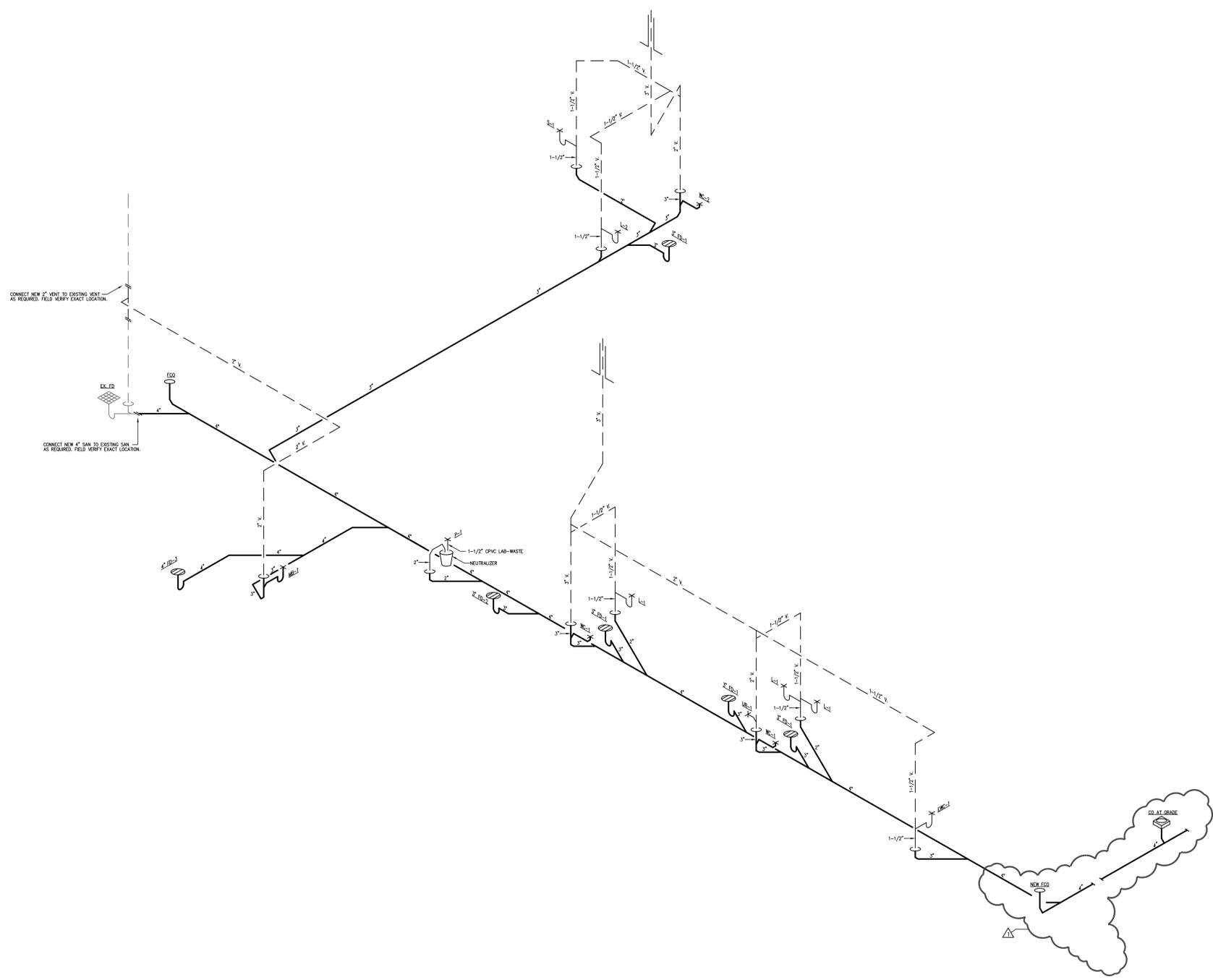
E

D

C

B

A



ROOFTOP UNIT SCHEDULE

TAG	NOMINAL TONS	FAN SECTION				COOLING COIL SECTION					HEATING SECTION										REMARKS						
		CFM	CFM OA	ESP (in.)	EER/SEER	TOT MBH	AMB	EAT ° DB/WB	TOT MBH	SENS MBH	GAS HEAT IN/OUT (MBH)	OUTDOOR AMBIENT	EVAP. FAN HP	CONDENSERS QTY	HP	COMPRESSORS QTY	TYPE	ELECTRICAL VOLTAGE	MCA	MOC		ACCESSORIES CURB	RELIEF	T-STAT	LxWxH (N.) W/CURB	OPER. WT. (lbs.)	MAKE
RTU-1	6	2,400	240	0.75"	11.0	95/78	79.7/62.0	75.2	58.1	150/120	-10	2.4	1	1/4	1	SCROLL	208/3/60	32.8	50	YES	BAROMETRIC	YES	74"x44"x51"	800	CARRIER	48TCEA0781	2 UNITS REQUIRED, SEE PLAN FOR LOCATIONS

- NOTES: 1. PROVIDE FACTORY MOUNTED SMOKE DETECTORS AT RETURN CONNECTIONS TO UNITS. ELECTRICAL CONTRACTOR SHALL WIRE DETECTORS TO FIRE ALARM INTERFACE.
 2. MECHANICAL CONTRACTOR TO BE RESPONSIBLE FOR STRUCTURAL MODIFICATIONS DUE TO USE OF ALTERNATE UNITS.
 3. PROVIDE 7-DAY PROGRAMMABLE THERMOSTATS.
 4. MECHANICAL CONTRACTOR TO INSTALL STRUCTURAL STEEL SUPPORTS BETWEEN JOISTS FOR PROPER WEIGHT DISTRIBUTION.
 5. UNIT TO HAVE R-410 TYPE REFRIGERANT.

MINI SPLIT SYSTEM SCHEDULE

TAG	LOCATION DWG ROOM	S.A. CFM	S.A. WATTS	COOLING SECTION		FILTERS		ELECTRICAL		ACCESSORIES				OPER. WT. (lbs.)	MAKE	MODEL	REMARKS
				TOT MBH	COND. UNIT	EFF.	VOLTAGE	MCA	MIXING BOX	SMOKE DET.	DISC.	VFD					
AC-1	M1.01 DATA	400	1,070	12	CU-1	STD	115/1/60	1.2	NO	NO	YES	NO	23	DAIKIN	MS-A12WA	---	

1. PROVIDE CONDENSATE PUMP 2. PROVIDE LOW AMBIENT KIT 3. MANUFACTURERS SHALL BE MITSUBISHI, LG, OR SAMSUNG.

AIR COOLED CONDENSING UNIT SCHEDULE

TAG	DWG.	SERVING TONS	SEER @ OP COND	REFRIG.	AMBIENT TEMP	COMPRESSOR		COND FAN MOTOR		ELECTRICAL DATA			LOW AMB.	MAKE	MODEL	REMARKS		
						TYPE	QTY	CONTROL	QTY	FLA	VOLTAGE	MCA					MOP	
CU-1	M1.01	AC-1	1	13.0	R410A	95/78F	ROTARY	1	REMOTE	1	0.93	115/1/60	16	20	0F	MITSUBISHI	MU-A12WA	---

1. PROVIDE WIND BAFFLE FOR LOW AMBIENT OPERATION.
 2. SIZE AND ROUTE REFRIGERATION PIPING PER MANUFACTURER'S RECOMMENDATIONS.
 3. HEAT PUMP OPERATION.

EXHAUST FAN SCHEDULE

TAG	LOCATION DWG	SERVICE	TYPE	CFM	SP (in.)	MOTOR		DRIVE	SONES	ACCESSORIES			OPER. WT. (lbs.)	MAKE	MODEL	REMARKS		
						HP	VOLTAGE			CURB	SCREEN	CONTROL					DISC	B/D DMPR
EF-1	M1.01	RESTROOM 105, 106, 107	CENTRIFUGAL ROOF	225	0.500	1/6	115/1#	DIRECT	7.5	YES	NO	INTERLOCK WITH LIGHT SWITCH	YES	YES	54	GREENHECK	G-080-VG	---
EF-2	M1.01	RESTROOM 114	CENTRIFUGAL INLINE	75	0.375	1/6	115/1#	DIRECT	5.3	NO	YES	INTERLOCK WITH LIGHT SWITCH	YES	YES	46	GREENHECK	SQ-60-VG	PROVIDE WITH MOTOR GUARD

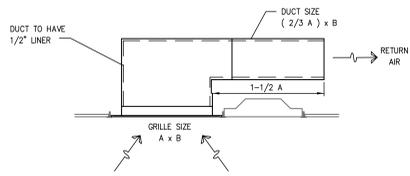
GRILLE, REGISTER AND DIFFUSER SCHEDULE

TAG	SERV	TYPE	NECK	MAX CFM	SP	PATTERN	MAX NC	DAMPER	NOM MODULE	MTG	FINISH	MAKE	MODEL	REMARKS
SA	SUPPLY	DIFFUSER	6"ø	120	0.031	4-WAY	<15	NO	24"x24"	LAY-IN	OFF WHITE	PRICE	ASDA	--
SB	SUPPLY	DIFFUSER	8"ø	250	0.040	4-WAY	<22	NO	24"x24"	LAY-IN	OFF WHITE	PRICE	ASDA	--
SC	SUPPLY	DIFFUSER	10"ø	460	0.050	4-WAY	<28	NO	24"x24"	LAY-IN	OFF WHITE	PRICE	ASDA	--
RA	RETURN	GRILLE	10"x22"	600	0.021	N.A.	<15	NO	N.A.	LAY-IN	OFF WHITE	PRICE	80	--
RB	RETURN	GRILLE	22"x22"	1,200	0.021	N.A.	<15	NO	N.A.	LAY-IN	OFF WHITE	PRICE	80	--
EA	EXHAUST	REGISTER	6"x6"	100	0.047	N.A.	<15	YES	N.A.	LAY-IN	OFF WHITE	PRICE	BODAL	--

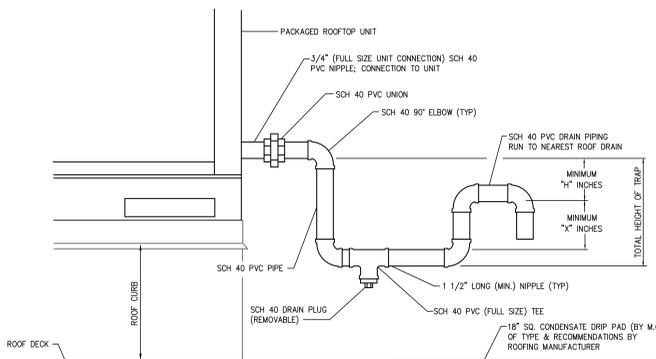
NOTE: ARCHITECT TO VERIFY FINISH OF ALL AIR INLETS & OUTLETS.

LEGEND AND SYMBOLS

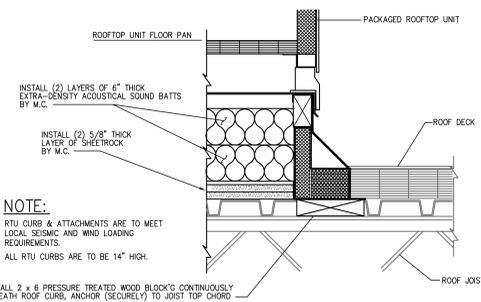
S.A.	SUPPLY AIR	—	BALANCING DAMPER
R.A.	RETURN AIR	◊	HORIZONTAL FIRE DAMPER
E.A.	EXHAUST AIR	▷	VERTICAL FIRE DAMPER
F.A.I.	FRESH AIR INTAKE	▷	COMBINATION SMOKE & FIRE DAMPER
A.F.F.	ABOVE FINISHED FLOOR	⊙	THERMOSTAT
G.C.	GENERAL CONTRACTOR	—	INDICATES DUCT LINER
E.C.	ELECTRICAL CONTRACTOR	—	SPIN-IN FITTING W/BALANCING DAMPER
P.C.	PLUMBING CONTRACTOR	—	
T.C.C.	TEMPERATURE CONTROL CONTRACTOR	—	



CEILING RETURN AIR GRILLE SOUND TRAP DETAIL
NO SCALE

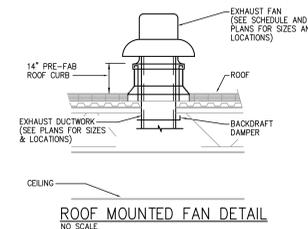


PACKAGED ROOFTOP UNIT CONDENSATE DRAIN TRAP & PIPING DETAIL
NO SCALE (TYPICAL FOR ALL UNITS)

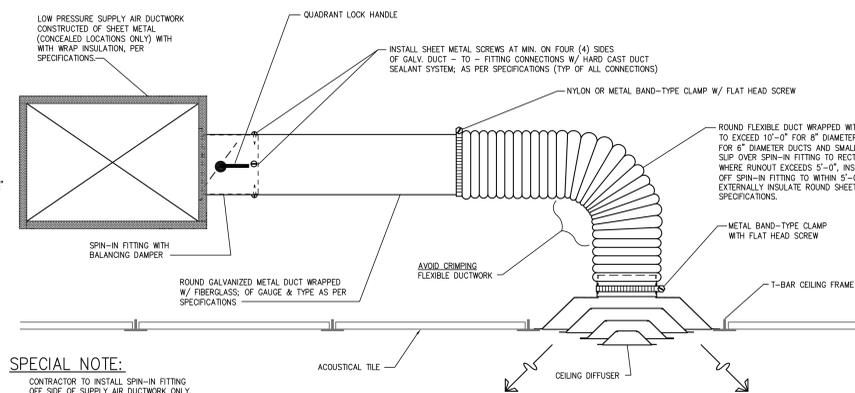


NOTE: RTU CURB & ATTACHMENTS ARE TO MEET LOCAL SEISMIC AND WIND LOADING REQUIREMENTS. ALL RTU CURBS ARE TO BE 14" HIGH.

DETAIL OF ROOFTOP UNIT ROOF CURB WITH SOUND BATT INSTALLATION
NO SCALE



ROOF MOUNTED FAN DETAIL
NO SCALE



SPECIAL NOTE:

CONTRACTOR TO INSTALL SPIN-IN FITTING OFF SIDE OF SUPPLY AIR DUCTWORK ONLY. DO NOT ATTACH SPIN-IN FITTING OFF BOTTOM OF DUCTWORK.

TYPICAL SQUARE LOUVERED FACE CEILING DIFFUSER INSTALLATION DETAIL
NO SCALE

530 Madison Ave
Toledo, OH 43604
419.242.7405 fax
419.242.7400 fax
www.thecollaborativeinc.com
tci@thecollaborativeinc.com



ARCHITECTS
LANDSCAPE ARCHITECTS
INTERIOR DESIGNERS
PLANNERS



C-002 Dated 2/6/2013

KEY PLAN
N.T.S.

PROJECT TITLE
Lucas County Commissioners Central Drug Testing Relocation Study

1302 Washington St.
Toledo, Ohio

02-05-13	ADDENDUM #1
01-15-13	BIDDING
10-05-12	DO SUBMITTAL

CHECKED: DRM
APPROVED: LJS

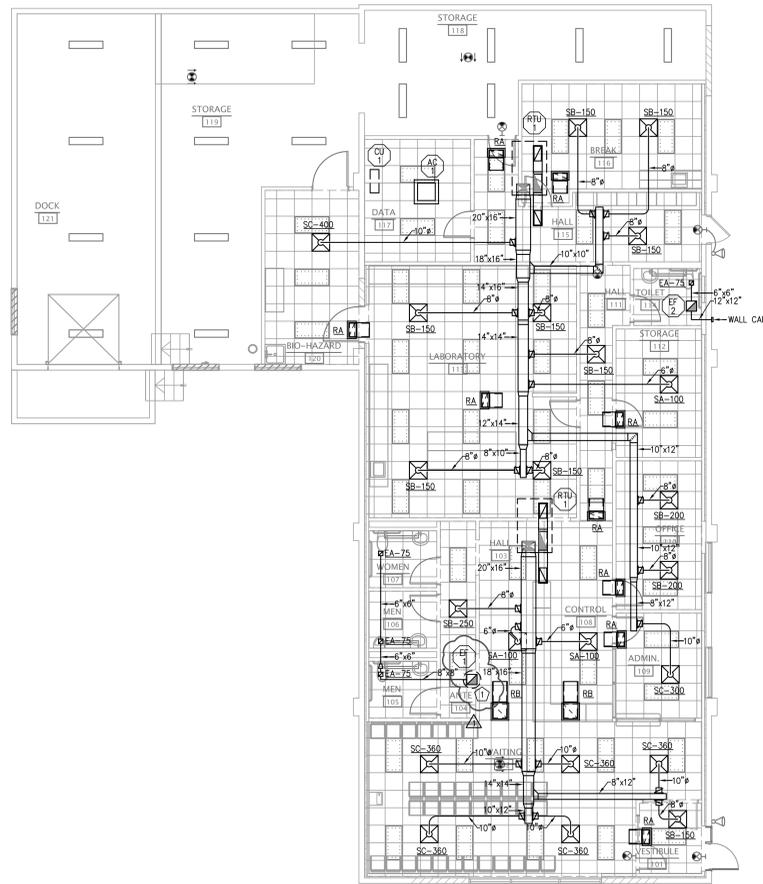
TCI JOB NO. 106086

SHEET TITLE
SCHEDULE AND DETAILS

SHEET NO.

M0.01

mda engineering, inc.
Mechanical and Electrical Engineers
1415 Holland Road
Maumee, Ohio 43537
Phone: (419) 893-3141
Fax: (419) 893-0687
mde #12705



FIRST FLOOR PLAN - MECHANICAL
 1/8" = 1'-0"
 0 1 2 3 4 5 6 8 feet



FLOOR PLAN MECHANICAL NOTES:

1. PROVIDE ROOF CURB FOR EXHAUST FAN (EF-1) ON ROOF.

MECHANICAL SPECIFICATION

1.00 GENERAL

1.01 GENERAL SCOPE

A. THE WORK REQUIRED UNDER THIS SPECIFICATION SHALL CONSIST OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, POWER, TRANSPORTATION, HOISTING IMPLEMENTS, ETC. OF EVERY DESCRIPTION NECESSARY FOR THE ENTIRE COMPLETION OF THE MECHANICAL WORK OF THE CONTRACT, ALL AS SPECIFIED HEREIN, SHOWN ON THE DRAWINGS OR REASONABLY IMPLIED BY EITHER, COMPLETE IN EVERY RESPECT UNLESS SPECIFICALLY EXCLUDED HEREIN. THE WORK INCLUDED IN THIS CONTRACT SHALL CONSIST OF THE INSTALLATION, TEST AND GUARANTEE OF ALL WORK HEREIN SPECIFIED.

1.02 INSPECTION OF EXISTING AND GENERAL CONDITIONS

A. THE CONTRACTOR WILL BE HELD TO HAVE PERSONALLY INSPECTED THE SITE OF THE PROPOSED WORK TO ARRIVE AT A CLEAR UNDERSTANDING OF THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, THE EXTENT OF OTHER CONTRACTORS' ACTIVITIES IN THE AREA, AND TO BECOME FULLY ACQUAINTED WITH THE RECEIVING AND STORAGE SPACES AVAILABLE. THE CONTRACTOR SHALL BE HELD TO HAVE COMPARED THE PREMISES AND SITE WITH THE DRAWINGS AND SPECIFICATIONS, AND SHALL BE SATISFIED AS TO THE CONDITIONS OF THE PREMISES, THE ACTUAL ELEVATIONS, AND ANY OTHER CONDITIONS AFFECTING THE CARRYING OUT OF THE WORK, BEFORE THE DELIVERY OF THIS PROPOSAL.

B. NO ALLOWANCES OR EXTRA CONSIDERATION ON BEHALF OF THE CONTRACTOR WILL SUBSEQUENTLY BE ALLOWED BY REASON OF THE CONTRACTOR'S FAILURE TO HAVE BECOME FAMILIAR WITH SITE CONDITIONS, ERROR OR OVSIGHT ON THE PART OF THE CONTRACTOR OR DUE TO INTERFERENCE BY THE OWNER'S OR OTHER CONTRACTORS' ACTIVITIES.

C. ITEMS SPECIFIED ON MECHANICAL EQUIPMENT SCHEDULES AND PLANS ARE THE BASIS OF DESIGN. EQUALITY OF OTHER EQUIPMENT SHALL BE DETERMINED BY THE OWNER AND ENGINEER. ANY MODIFICATION TO THESE DOCUMENTED METHODS THAT IS MADE NECESSARY BY ALTERNATE EQUIPMENT IS THE RESPONSIBILITY OF THE SUPPLIER OF THE ALTERNATE EQUIPMENT.

D. CONTRACTOR IS DIRECTED TO INCLUDE ALL NECESSARY OVERTIME AND PREMIUM TIME (SATURDAY, SUNDAY, HOLIDAYS) REQUIRED FOR THE COMPLETION OF THE INTENDED WORK TO MEET SPECIFIED SCHEDULES.

E. DO NOT SCALE MECHANICAL DRAWINGS. FOR EXACT DIMENSIONS USE DIMENSIONED DRAWINGS OR ACTUAL FIELD CONDITIONS.

1.03 CODES, PERMITS AND COMPLIANCE

A. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY LAWS OF GOVERNING BODIES. COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES AND ALL LEGAL REQUIREMENTS. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY CHANGES NECESSARY FOR CODE COMPLIANCE REGARDLESS OF THE METHOD OF INSTALLATION SHOWN ON THE DRAWINGS OR SPECIFIED.

B. ALL MECHANICAL WORK SHALL COMPLY WITH CURRENT EDITIONS OF ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.

C. ALL EQUIPMENT, DEVICES, AND MATERIALS SHALL BE THE LATEST PRODUCTS OF MANUFACTURER AND SHALL CONFORM TO THE REQUIREMENTS NOTED ON PLANS.

1.04 WORKMANSHIP

A. WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY CONFORMING TO THE BEST MECHANICAL INSTALLATION PRACTICE. ANY WORK OR MATERIAL WHICH IS REJECTED MUST BE REMOVED IMMEDIATELY AND REPLACED. NO SUB-STANDARD WORK WILL BE ACCEPTED.

B. THE BREVITY OF THIS SPECIFICATION SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM ALL WORK IN A FIRST CLASS WORKMAN LIKE MANNER.

1.05 SUBMITTALS AND RECORD DRAWINGS

A. SUBMIT SHOP DRAWINGS AND CATALOG DATA FOR APPROVAL FOR ALL EQUIPMENT AND MATERIALS SPECIFIED FOR THIS PROJECT PRIOR TO ORDERING OR MANUFACTURE OF SUCH. SHOP DRAWINGS NOT STAMPED WITH CONTRACTOR APPROVAL WILL BE REJECTED.

B. THE CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF ALL DEVIATIONS FROM THE APPROVED DESIGN DOCUMENTS AND SPECIFICATIONS WHICH MAY OCCUR IN THE WORK AS ACTUALLY CONSTRUCTED, AND SHALL SUBMIT SAME TO THE ENGINEER OR OWNER'S REPRESENTATIVE AT COMPLETION OF THE JOB.

C. SUBMITTALS SHALL BE COORDINATED THROUGH THE ENGINEER.

1.06 TESTS AND GUARANTEES

A. ALL TESTS FOR VARIOUS SYSTEMS SHALL BE PERFORMED AS REQUIRED, CONSISTENT WITH GOOD GENERAL PRACTICE, AND IN COMPLIANCE WITH CODES AND AUTHORITIES.

B. AS A CONDITION PRECEDENT TO THE FINAL PAYMENT, THE CONTRACTOR SHALL EXECUTE TO THE OWNER A GUARANTEE IN A FORM APPROVED BY THE OWNER. GUARANTEE SHALL WARRANT THAT ALL WORK INCLUDED IN THIS DIVISION OF THE SPECIFICATIONS WILL REMAIN IN SERVICEABLE AND PERFECT CONDITION (ORDINARY WEAR AND TEAR, ABUSE AND CAUSES BEYOND THE CONTROL OF THE CONTRACTOR EXCLUDED) FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL COMPLETION AND ACCEPTANCE OF WORK, AND THAT THE CONTRACTOR WILL MAKE GOOD AT HIS OWN EXPENSE, WITHOUT COST TO THE OWNER, ANY IMPERFECTIONS IN WHOLE OR IN PART WHICH MAY DEVELOP IN THIS WORK DURING THE PERIOD ABOVE SPECIFIED, INCLUDING ANY DAMAGE TO OTHER WORK CAUSED BY SUCH IMPERFECTIONS OR REPAIRING OF SAME.

C. ALL MECHANICAL SYSTEMS, DEVICES AND RELATED ITEMS SHALL BE TESTED, REPLACE ANY AND ALL DEFECTIVE DEVICE ITEMS OR SYSTEMS BEFORE COMPLETION OF THE PROJECT.

1.07 COORDINATION

A. FIELD VERIFY EXACT LOCATION OF ALL NEW EQUIPMENT WITH EXISTING CONDITIONS AND COORDINATE WITH THE GENERAL AND OTHER CONTRACTORS PRIOR TO ROUGH-IN AND/OR INSTALLING ANY OF THIS WORK.

B. FIELD VERIFY ALL CLEARANCES AND CONDITIONS PRIOR TO THE START OF ANY PIPING, DUCTWORK, ETC.; VERIFY LOCATIONS OF ALL PIPING, DUCTWORK, EQUIPMENT, DEVICES, ETC. WITH ARCHITECTURAL, CIVIL, PLUMBING, FIRE PROTECTION, STRUCTURAL AND ELECTRICAL DRAWINGS PRIOR TO ROUGH-IN. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING WITH WORK.

C. ALL INTERRUPTIONS OF SERVICES TO EXISTING OR OPERABLE FACILITIES SHALL BE SCHEDULED WITH THE OWNER A MINIMUM TWO (2) WEEKS IN ADVANCE. THE CONTRACTOR SHALL NOT INTERRUPT OR RESTORE SERVICES WITHOUT PRIOR CONSENT OF THE OWNER. THE INTERRUPTION SHALL BE ONLY FOR THE SPECIFIC SCHEDULED TIME. THE OWNER OR ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR SHUTDOWN AND START-UP OF ELECTRICAL OR PROCESS SYSTEMS.

D. COORDINATE ALL POWER WIRING, SAFETY DISCONNECT MEANS, MOTOR CONTROL AND CONTROL WIRING FOR MECHANICAL EQUIPMENT WITH THE ELECTRICAL CONTRACTOR.

E. REFER TO ELECTRICAL DRAWINGS FOR WORK INVOLVING ELECTRICAL SUPPLY WIRING FROM POWER SOURCE TO UNIT CONNECTION POINTS.

F. LOCATE AND INSTALL ALL REQUIRED DEVICES IN ACCORDANCE WITH AMERICAN DISABILITY ACT GUIDELINES.

1.08 IDENTIFICATION

A. INSTALL ENGRAVED PLASTIC LAMINATE SIGN OR EQUIPMENT MARKER ON OR NEAR EACH MAJOR ITEM OF MECHANICAL EQUIPMENT.

1.09 DEMOLITION, REMOVALS, CLEAN-UP, PROTECTION AND TOUCH-UP

A. THIS CONTRACTOR SHALL DISPOSE OF ALL MATERIALS GENERATED FROM REMOVAL AND INSTALLATION OF THIS WORK. DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE WEEKLY.

B. UPON COMPLETION OF WORK THIS CONTRACTOR SHALL THOROUGHLY CLEAN ALL APPARATUS FURNISHED BY THIS CONTRACTOR.

C. ALL EQUIPMENT, ITEMS, DEVICES AND APPURTENANCES SHALL BE PROTECTED FROM BEERS AND DAMAGE WHILE STORED AT THE SITE AND DURING AND AFTER INSTALLATION.

D. PATCH FINISHED SURFACES AND BUILDING COMPONENTS USING NEW MATERIALS MATCHING EXISTING MATERIALS AND EXPERIENCED INSTALLERS.

E. ALL CUTTING AND PATCHING OF ROOF, WALLS, FLOORS, AND SLABS, ETC. IS THE RESPONSIBILITY OF THIS CONTRACTOR UNLESS SPECIFICALLY STATED OTHERWISE ON THE DRAWINGS.

1.10 MAINTENANCE MANUALS

A. PREPARE MAINTENANCE MANUALS. PROVIDE A MINIMUM OF FOUR COPIES WITH A SINGLE COPY SENT TO THE ENGINEER FOR APPROVAL. INCLUDE THE FOLLOWING INFORMATION FOR EQUIPMENT ITEMS:

1. COMPLETE INFORMATION ON PROJECT EQUIPMENT AND SERVICES AS WAS SUBMITTED DURING THE COURSE OF THE PROJECT. THIS INFORMATION IS SOLELY INTENDED TO PROVIDE THE OWNER WITH ACCURATE, USABLE INFORMATION ON HOW TO CARE FOR HIS FACILITY.
2. DESCRIPTION OF FUNCTION, NORMAL OPERATING CHARACTERISTICS AND LIMITATIONS, PERFORMANCE CURVES, ENGINEERING DATA AND TESTS, AND COMPLETE NOMENCLATURE AND COMMERCIAL NUMBERS OF REPLACEMENT PARTS.
3. MANUFACTURER'S PRINTED OPERATING PROCEDURES TO INCLUDE START-UP, BREAK-IN AND ROUTING AND NORMAL OPERATING INSTRUCTIONS; REGULATION, CONTROL, STOPPING, SHUTDOWN, AND EMERGENCY INSTRUCTIONS; AND SUMMER AND WINTER OPERATING INSTRUCTIONS.
4. MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING; DISASSEMBLY, REPAIR, AND REASSEMBLY; ALIGNING AND ADJUSTING INSTRUCTIONS.
5. SERVICING INSTRUCTIONS AND LUBRICATION CHARTS AND SCHEDULES.
6. MSDS FOR EACH CHEMICAL COMPOUND USED IN MECHANICAL SYSTEMS.

2.00 BASIC MATERIALS AND METHODS

2.01 DUCT INSULATION

A. INSULATION MATERIALS

1. MINERAL-FIBER BLANKET THERMAL INSULATION: GLASS FIBERS BONDED WITH A THERMOSETTING RESIN, COMPLY WITH ASTM C 553, TYPE I, WITHOUT FACING AND WITH ALL-SERVICE JACKET MANUFACTURED FROM KRAFT PAPER, REINFORCING SCRIM, ALUMINUM FOL, AND VINYL FLK.

B. FIELD-APPLIED JACKETS

1. SELF-ADHESIVE ALUMINUM JACKETING: SBS MODIFIED BITUMEN, SELF ADHERING SHEET MEMBRANE COMPLETE WITH A REFLECTIVE FOIL SURFACE, AND HAVING THE FOLLOWING PHYSICAL PROPERTIES:
 - A. THICKNESS: 1.5 MM (60 MILS).
 - B. VAPOR PERMEANCE: 2.8 NG/P.A.M.²S (0.05 PERMS) TO ASTM E 96.
 - C. LOW TEMPERATURE FLEXIBILITY: -30 DEG. C TO CDSB 37-0P-56M.
 - D. ELONGATION: 40X TO ASTM D412-MODIFIED.

C. APPLY INSULATION MATERIALS, ACCESSORIES, AND FINISHES ACCORDING TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS, WITH SMOOTH, STRAIGHT, AND EVEN SURFACES, AND FREE OF VOIDS THROUGHOUT THE LENGTH OF DUCTS AND FITTINGS.

D. INDOOR DUCT AND PLENUM APPLICATION SCHEDULE:

1. SERVICE: RECTANGULAR AND ROUND SUPPLY-AIR DUCTS, CONCEALED: INSTALL MINERAL-FIBER BLANKET INSULATION, 1 1/2 INCHES THICK, SINGLE LAYER WITH FOIL AND PAPER JACKET AND VAPOR RETARDER.
2. SERVICE: RECTANGULAR, RETURN-AIR DUCTS, CONCEALED: INSTALL 0.5 INCH LINER.

2.02 DUCTWORK AND DUCT ACCESSORIES

A. CONSTRUCT RECTANGULAR DUCTWORK TO MEET ALL FUNCTIONAL CRITERIA DEFINED IN SECTION VII OF THE SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" METAL AND FLEXIBLE" 1985 EDITION. ALL DUCTWORK MUST COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODE REQUIREMENTS.

B. EXCEPT AS OTHERWISE INDICATED, FABRICATE RECTANGULAR DUCTS WITH GALVANIZED SHEET STEEL, IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," TABLES 1-3 THROUGH 1-19, INCLUDING THEIR ASSOCIATED DETAILS, CONFORM TO THE REQUIREMENTS IN THE REFERENCED STANDARD FOR METAL THICKNESS, REINFORCING TYPES AND INTERVALS, THE ROD APPLICATIONS, AND JOINT TYPES AND INTERVALS.

C. STATIC PRESSURE CLASSIFICATIONS: UNLESS OTHERWISE INDICATED, CONSTRUCT DUCTS TO THE FOLLOWING:

1. LOW PRESSURE SUPPLY DUCTS INCLUDING DOWN STREAM OF AIR TERMINALS: 2-INCH WG (500 PA).
2. MEDIUM PRESSURE SUPPLY DUCTS BETWEEN AIR HANDLING UNIT AND AIR TERMINALS: 3-INCH WG (750 PA).
3. RETURN DUCTS: 2-INCH WG (500 PA), NEGATIVE PRESSURE.
4. EXHAUST DUCTS: 2-INCH WG (500 PA), NEGATIVE OR POSITIVE PRESSURE.

D. FABRICATE ROUND DUCTS WITH SPIRAL LOCKSEAM CONSTRUCTION, COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," TABLE 3-2 FOR GALVANIZED STEEL GAUGES.

E. SEAL DUCT JOINTS AND SEAMS WITH DUCT SEALANT, TAPE OR MASTICS.

1. PRESSURE CLASSIFICATION 2-INCH WG (500 PA): TRANSVERSE JOINTS.
2. PRESSURE CLASSIFICATION 3-INCH WG (750 PA): TRANSVERSE AND LONGITUDINAL JOINTS.

F. WHERE INDICATED, PROVIDE FACTORY-FABRICATED, INSULATED, ROUND FLEXIBLE DUCT, WITH AN OUTER JACKET ENCLOSING 1-1/2 INCH THICK, GLASS FIBER INSULATION AROUND A CONTINUOUS INNER LINER, STEEL-WIRE HELIX REINFORCEMENT ENCAPSULATED IN THE INNER LINER, AND POLYETHYLENE FILM INNER AND OUTER JACKET. MAXIMUM LENGTH: 5 FEET.

G. PROVIDE STANDARD GALVANIZED VOLUME CONTROL DAMPERS, SINGLE-BLADE (FOR DAMPERS UNDER 12 INCHES IN HEIGHT), OPPOSED BLADE DESIGN, STANDARD LEAKAGE RATING, WITH LINKAGE OUTSIDE OF AIR STREAM, AND SUITABLE FOR HORIZONTAL OR VERTICAL APPLICATIONS. FURNISH WITH LOOKING QUARTERS.

H. PROVIDE LOW-LEAKAGE STANDARD GALVANIZED VOLUME CONTROL DAMPERS, SINGLE-BLADE (FOR DAMPERS UNDER 12 INCHES IN HEIGHT), OPPOSED BLADE DESIGN, LOW-LEAKAGE RATING, WITH LINKAGE OUTSIDE OF AIR STREAM AND SUITABLE FOR HORIZONTAL OR VERTICAL APPLICATIONS. FURNISH WITH NEOPRENE BLADE SEALS AND ALUMINUM JAMB SEALS.

I. PROVIDE BALANCING DAMPERS AT ALL BRANCH TAKE-OFFS IN ALL SUPPLY AIR AND EXHAUST AIR SYSTEMS AND WHERE REQUIRED TO FACILITATE PROPER BALANCING OF AIR SYSTEMS.

J. CONSTRUCT ALL RECTANGULAR ELBOWS WITH TURNING VANES. COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS" - METAL AND FLEXIBLE" FOR VANES AND VANE RUNNERS. VANE RUNNERS SHALL AUTOMATICALLY ALIGN VANES.

3.00 PRODUCTS AND EXECUTION

3.01 ROOFTOP UNITS

A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: AAO, CARRIER, MCGRAW, TRANE, YORK.

B. DESCRIPTIONS: FACTORY ASSEMBLED AND TESTED, DESIGNED FOR ROOF INSTALLATION, AND CONSISTING OF COMPRESSORS, CONDENSERS, EVAPORATOR COILS, CONDENSER AND EVAPORATOR FANS, REFRIGERATION AND TEMPERATURE CONTROLS, FILTERS AND DAMPERS.

C. THERMOSTAT: 24 VAC, SOLID-STATE, PROGRAMMABLE, MICROPROCESSOR-BASED, WALL MOUNTING UNIT WITH AUTOMATIC SWITCHING FROM HEATING TO COOLING, PREFERENTIAL RATE CONTROL, MULTIPLE TEMPERATURE PRESETS SELECTABLE BY DAY AND TIME, AND BATTERY BACK-UP PROTECTION OF PROGRAM SETTINGS AGAINST POWER FAILURE.

D. ACCESSORIES:

1. FIVE YEAR COMPRESSOR WARRANTY.
2. 2 SETS OF 2 INCH THICK PLEATED FILTERS.

E. INSTALL UNITS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.02 AIR INLETS AND OUTLETS

A. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE AIR OUTLETS AND INLETS OF ONE OF THE FOLLOWING:

1. DIFFUSERS, REGISTERS AND GRILLES: ANEMOSTAT PRODUCTS, CARNES, KRUEGER, METAL AIRE, PRICE, TITUS PRODUCTS AND TUTTLE & BAILEY.

B. EXCEPT AS OTHERWISE INDICATED, PROVIDE MANUFACTURER'S STANDARD GRILLES, REGISTER AND DIFFUSERS WHERE SHOWN, OF SIZE, SHAPE, CAPACITY AND TYPE INDICATED; CONSTRUCTED OF MATERIALS AND COMPONENTS AS INDICATED, AND AS REQUIRED FOR COMPLETE INSTALLATION.

1. FINISHES:

- A. GRILLES, REGISTERS AND DIFFUSERS: OFF-WHITE, UNLESS OTHERWISE INDICATED.

A. INSTALL AIR OUTLETS AND INLETS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO INSURE THAT PRODUCTS SERVE INTENDED FUNCTION.

3.03 SEQUENCES OF OPERATION

A. ROOFTOP UNITS

1. PROVIDE SEVEN-DAY PROGRAMMABLE THERMOSTAT AS LOCATED ON THE DRAWINGS.
2. OCCUPIED COOLING CONTROL: UNIT SHALL OPERATE OFF ITS PACKAGED CONTROLS TO MAINTAIN A 75 DEG. F SET POINT WITH THE OUTSIDE AIR DAMPER AT ITS MINIMUM POSITION.
3. UNOCCUPIED COOLING CONTROL: UNIT SHALL OPERATE OFF ITS PACKAGED CONTROLS TO MAINTAIN A 85 DEG. F SET POINT WITH THE OUTSIDE AIR DAMPER CLOSED. FAN SHALL CYCLE ON/OFF ON A CALL FOR COOLING.
4. OCCUPIED HEATING CONTROL: UNIT SHALL OPERATE OFF ITS PACKAGED CONTROLS TO MAINTAIN A 72 DEG. F SET POINT WITH THE OUTSIDE AIR DAMPER AT ITS MINIMUM POSITION.
5. UNOCCUPIED HEATING CONTROL: UNIT SHALL OPERATE OFF ITS PACKAGED CONTROLS TO MAINTAIN A 68 DEG. F SET POINT WITH THE OUTSIDE AIR DAMPER CLOSED. FAN SHALL CYCLE ON/OFF ON CALL FOR HEAT.
6. PROVIDE 24 V A.C. SOLID-STATE, PROGRAMMABLE, MICROPROCESSOR-BASED WALL MOUNTING THERMOSTAT WITH AUTOMATIC SWITCHING FROM HEATING TO COOLING, PREFERENTIAL RATE CONTROL, MULTIPLE TEMPERATURE PRESETS SELECTABLE BY DAY AND TIME, AND BATTERY BACKUP PROTECTION OF PROGRAM SETTINGS AGAINST POWER FAILURE.
7. DUCT MOUNTED SMOKE DETECTORS (BY EC) WHERE REQUIRED SHALL DE-ENERGIZE UNIT FANS UPON DETECTION OF SMOKE IN THE UNIT.

3.04 TESTING, ADJUSTING AND BALANCING

A. EMPLOY THE SERVICES OF AN INDEPENDENT TESTING, ADJUSTING AND BALANCING AGENCY CERTIFIED BY THE ASSOCIATED AIR BALANCE COUNCIL TO TEST AND BALANCE THE INDICATED SYSTEMS. SUBMIT SIX (6) COPIES OF THE REPORT TO THE ENGINEER FOR REVIEW.

B. OBTAIN APPROVAL FROM ENGINEER FOR ADJUSTMENT OF FAN SPEED HIGHER OR LOWER THAN INDICATED SPEED. MAKE REQUIRED ADJUSTMENTS TO PULLEY SIZES, BELTS, ETC., TO ACCOMMODATE FAN SPEED CHANGES.

C. PROVIDE THE SERVICES OF ONE OF THE FOLLOWING TEST AND BALANCE CONTRACTORS:

1. AERODYNAMICS.
2. AIRONICS.
3. DUNBAR MECHANICAL, INC.
4. ENVIRO-AIRE, INC.
5. RIA COOLHAIR.
6. INTERNATIONAL TEST AND BALANCE.
7. FLUID DYNAMICS.
8. ENGINEER APPROVED EQUAL.

D. TEST, ADJUST, AND BALANCE THE FOLLOWING MECHANICAL SYSTEMS:

1. SUPPLY AIR SYSTEMS.
2. RETURN AIR SYSTEMS.
3. EXHAUST AIR SYSTEMS.
4. VERIFY TEMPERATURE CONTROL SYSTEM OPERATION.

3.04 POWER VENTILATORS

A. QUALITY ASSURANCE: PROVIDE FANS THAT ARE U.L. LISTED AND LABELED. MOTORS AND ELECTRICAL ACCESSORIES SHALL COMPLY WITH NEMA STANDARDS.

B. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: AOE, CARNES, COOK, GREENCOCK, JENI.

C. GENERAL: PROVIDE FANS THAT ARE FACTORY FABRICATED AND ASSEMBLED, FACTORY TESTED AND FACTORY FINISHED WITH INDICATED CAPACITIES AND CHARACTERISTICS.

D. CENTRIFUGAL ROOF VENTILATORS: BELT-DRIVEN OR DIRECT-DRIVE AS INDICATED, CENTRIFUGAL CONSISTING OF HOUSING, WHEEL, FAN SHAFT, BEARINGS, MOTOR, DRIVE ASSEMBLY AND THE FOLLOWING ACCESSORIES:

1. DISCONNECT SWITCH.
2. BIRD SCREEN.
3. BACKDRAFT DAMPER.
4. ROOF CURB.

E. CEILING MOUNTED VENTILATORS: CENTRIFUGAL FAN DESIGNED FOR INSTALLATION IN CEILING, WALL, OR CONCEALED INLINE APPLICATIONS, CONSISTING OF HOUSING, FAN WHEEL, CEILING GRILLE, ELECTRICAL JUNCTION BOX WITH RECEPTACLE FOR MOTOR AND THE FOLLOWING ACCESSORIES:

1. REMOTE SPEED CONTROL.
2. ALUMINUM WALL CAP.

590 Madison Ave
 Toledo, OH 43604
 419.242.7405 tel
 419.242.7400 fax
 www.thecollaborativeinc.com
 tsc@thecollaborativeinc.com



ARCHITECTS
 LANDSCAPE ARCHITECTS
 INTERIOR DESIGNERS
 PLANNERS



C-002 Dated 2/6/2013

KEY PLAN
 N.T.S.

PROJECT TITLE
**Lucas County
 Commissioners
 Central Drug
 Testing
 Relocation Study**

1302 Washington St.
 Toledo, Ohio

02-05-13	ADDENDUM #1
01-15-13	BIIDDING
10-05-12	DO SUBMITTAL

CHECKED JPK
 APPROVED DRM

TCI JOB NO. 106086

SHEET TITLE
**FIRST FLOOR PLAN
 MECHANICAL**

SHEET NO.
M1.01

