SITE AND BUILDING IMPROVEMENTS FOR:

CLYDE TWP. MUNICIPAL CENTER

3350 VINCENT ROAD, NORTH STREET, MICHIGAN 48049

OWNER

CLYDE CHARTER TOWNSHIP 3350 VINCENT ROAD NORTH STREET, MICHIGAN 48049

CIVIL ENGINEER

HURON CONSULTANTS 3811 24TH AVE. SUITE A FORT GRATIOT, MI 48059 (810)-966-0680 (810)-966-0681 (FAX)

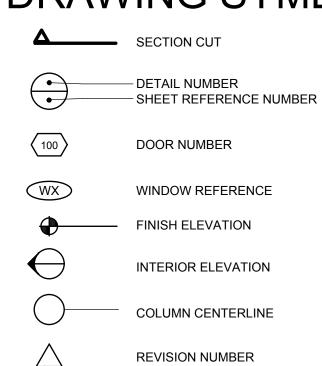
ARCHITECT

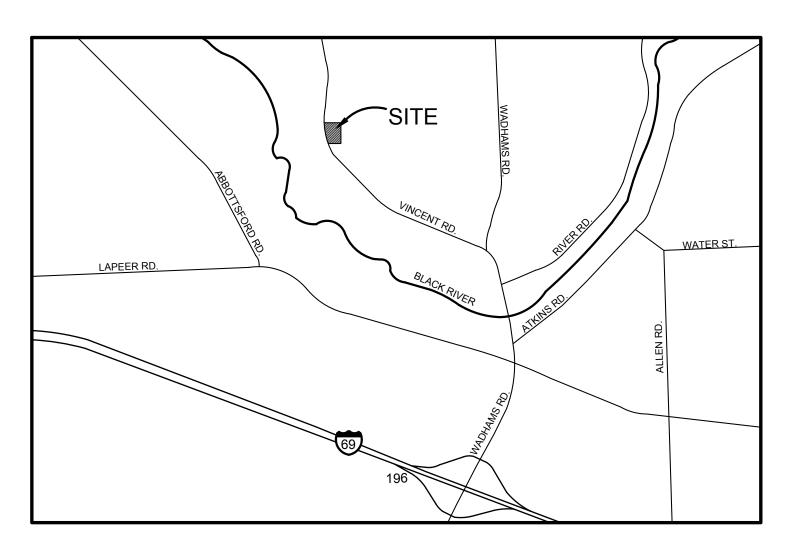
CHMP, INC 5198 TERRITORIAL ROAD GRAND BLANC, MICHIGAN 48439 (810) 695-5910 (810) 695-0680 (FAX)

MECHANICAL/ELECTRICAL ENGINEER

DICLEMENTE SIEGEL DESIGN INC. 1075 E. BRISTOL ROAD BURTON, MICHIGAN 48529 (810) 238-1024

DRAWING SYMBOLS





SHEET INDEX

SHEET No./ TITLE
T-1 TITLE SHEET

CIVIL

AS-1 ARCHITECTURAL SURVEY
SD-1 SITE DEMOLITION PLAN
SP-1 SITE PLAN
GP-1 GRADING PLAN
EC-1 EROSION CONTROL PLAN
DT-1 NOTES AND DETAILS
LP-1 LANDSCAPE PLAN

STRUCTURAL

S-1 FOUNDATION PLAN AND DETAILSS-2 ROOF FRAMING PLANS-3 STRUCTURAL NOTES AND DETAILS

ARCHITECTURAL

A-1 FLOOR PLAN
A-2 REFLECTED CEILING PLAN
A-3 ROOF PLAN
A-4 EXTERIOR BUILDING ELEVATIONS
A-5 ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS
A-6 ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS
A-7 ROOM FINISH AND DOOR/WINDOW SCHEDULE
A-8 BUILDING SECTIONS
A-9 BUILDING WALL SECTIONS
A-10 BUILDING WALL SECTIONS
A-11 MILLWORK DETAILS
A-12 BUILDING DETAILS

DEMOLITION PLAN

MECHANICAL

M-1 MECHANICAL TITLE SHEET
M-2 MECHANICAL DEMOLITION FLOOR PLAN
M-3 LINDERCROUND BLUMBING AND BIRING

M-3 UNDERGROUND PLUMBING AND PIPING FLOOR PLAN
M-4 PLUMBING AND PIPING FLOOR PLAN

M-5 HVAC FLOOR PLAN

M-6 MECHANICAL DETAILS AND SCHEDULES

ELECTRICAL

E-1 ELECTRICAL TITLE SHEET
E-2 ELECTRICAL SITE PLAN
E-3 ELECTRICAL DEMOLITION FLOOR PLAN
E-4 POWER FLOOR PLAN
E-5 LIGHTING FLOOR PLAN
E-6 PANEL SCHEDULES
E-7 SCHEDULES
E-8 WIRING DIAGRAMS

RISER DIAGRAM AND SCHEDULES

BUILDING CODE INFORMATION

APPLICABLE CODES:				
ALL WORK UNDER THE CONTRACT SHALL PROVISIONS OF THE SPECIFICATIONS AND APPLICABLE CODES, ORDINANCES, AND RAGENCIES INVOLVED. ALL PERMITS AND LEXECUTION OF THE WORK SHALL BE SECUTION OF THE WORK SHALL BE SECUTION.	D DRAWINGS, AND SHALL SA EGULATIONS OF ALL GOVER ICENSES NECESSARY FOR T JRED AND PAID FOR BY THE	RNING THE PROPER CONTRACTOR		
 BUILDING & STRUCTURAL PLUMBING MECHANICAL ELECTRICAL 	MICHIGAN BUILDING CODE MICHIGAN PLUMBING CODE MICHIGAN MECHANICAL CO NATIONAL ELECTRICAL COD	DE	(2012) (2012) (2012) (2012)	
CODE REVIEW:				
		ISTING DITION TAL	2,603 G.S 3,021 G.S 5,624 G.S	<u>S.F.</u>
	BUILDING HEIGHT:		19 FEET	
BUILDING USE GROUP (SECTION 302)	B-BUSINESS (ADMINISTRATION)		3,789 G.	S.F.
	A-3-ASSEMBLY (MEETING HALL)		1,344 N.S	S.F.
TYPE OF CONSTRUCTION (TABLE 503 & SECTION 506)	VB ALLOWABLE AREA: 2 STORIES/9,000 S.F. ACTUAL AREA: 1 STORY/5,624 S.F.			
	NON-SPRINKLED			
OCCUPANT LOAD (TABLE 1004.1.2)	B-BUSINESS			
	-ADMINISTRATION A-3-ASSEMBLY	FIRST FL		3,789 G.S.F./100= 38 OCCUPANTS
	-MEETING HALL	FIRST FL	-OOR:	1,344 N.S.F./7= 192 OCCUPANTS TWP. BOARD DESK: 8 OCCUPANTS TOTAL: 238 OCCUPANTS
REQUIRED EXITS (SECTION 1021.2)	FIRST FLOOR 2 EXITS REQUIRED 3 EXITS PROVIDED			
CORRIDORS				

1 HOUR FIRE RATING WHERE CORRIDORS OVER 30 OCCUPANTS (LOBBY CORRIDOR ONLY)

ABBREVIATIONS

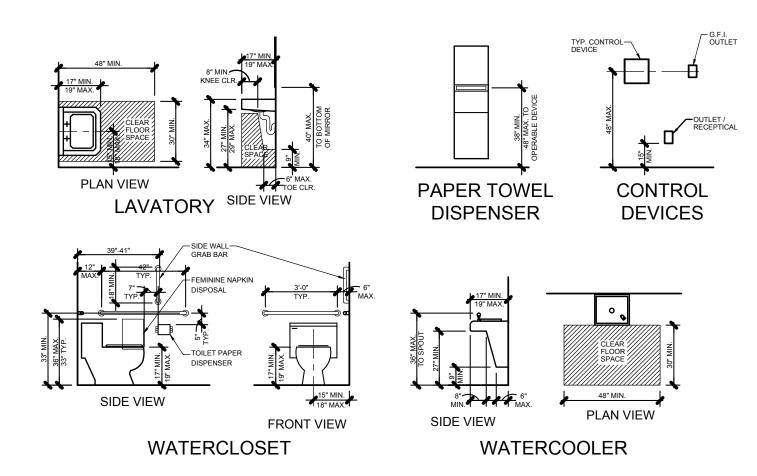
INSULATION

)	AT	INT.	INTERIOR
_	ANGLE	JAN.	JANITOR
.B.	ANCHOR BOLT	J.B./J. BOX	JUNCTION BOX
.C.	AIR CONDITIONING	LAM.	LAMINATE
COUST.	ACOUSTICAL	LAV.	LAVATORY
DJ.	ADJUSTABLE	L.L.	LANDLORD
.F.F.	ABOVE FINISH FLOOR	MAS.	MASONRY
LT.	ALTERNATE	MATL.	MATERIAL
LUM.	ALUMINUM	MAX.	MAXIMUM
RCH.	ARCHITECTURAL	MECH.	MECHANICAL
LKG.	BLOCKING	MET.	METAL
.M.	BENCH MARK	MISC.	MISCELLANEOUS
OT.	BOTTOM	MIN.	MINIMUM
RG.	BEARING	M.O.	MASONRY OPENING
.U.R.	BUILT UP ROOF	N.I.C.	
.U.K.	BUILT UP ROOF	N.I.C.	NOT IN CONTRACT
LINII	CHANNEL	NTC	NOT TO SCALE
HNL.	CHANNEL	N.T.S.	NOT TO SCALE
.T.	CERAMIC TILE	O.C.	ON CENTER
.J.	CONTROL JOINT	O.D.	OUTSIDE DIAMETER
.L./ <u>E</u>	CENTER LINE	OPNG.	OPENING
LG.	CEILING	OPP.	OPPOSITE
.0.	CLEAN OUT	PL.LAM.	PLASTIC LAMINATE
OL.	COLUMN	PL./ PL	PLATE
ONC.	CONCRETE	PLYWD.	PLYWOOD
ONST. JT.	CONSTRUCTION JOINT	PR.	PAIR
ONT.	CONTINUOUS	R.A.	RETURN AIR
• • • • • • • • • • • • • • • • • • • •		1 (1)	TETOTAL TAIL
BL.	DOUBLE	R.	RADIUS
ET.	DETAIL	R.D.	ROOF DRAIN
IA./Ø	DIAMETER	REF.	REFRIGERATOR
IV.			
	DIVISION	REINF.	REINFORCING
N.	DOWN	REQ.	REQUIRED
14.	DIOLIMAGUED	0.4	OLIDDI V AID
W.	DISHWASHER	S.A.	SUPPLY AIR
.S.	DOWN SPOUT	SFS	SURFACE FOUR SIDES
WG.	DRAWING	S.C.	SOLID CORE
A.	EACH	SHT.	SHEET
.J.	EXPANSION JOINT	SPEC.	SPECIFICATION
LEC.	ELECTRICAL	S.S.	SERVICE SINK
LEV.	ELEVATION	ST.STL.	STAINLESS STEEL
Q.	EQUAL	STL.	STEEL
ST.	ESTIMATE	STOR.	STORAGE
.W.	EACH WAY	STR.	STRUCTURAL
	2,10,1,1,1,1	0114.	0111001011112
.W.C.	ELECTRICAL WATER COOLER	T.	THERMOSTAT
XP.	EXPANSION	T.C.	TOP OF CURB
XT.	EXTERIOR	TEN.	TENANT
IN. FLR./F.F.	FINISH FLOOR	T.G.C.	TENANT'S GENERAL CONTRACTOR
IN.	FINISH	T.P.	TOP OF PAVING
. 5	EL O O D	T) (D	TVDIO AL
LR.	FLOOR	TYP.	TYPICAL
.S.	FLOOR SINK	U.N.O.	UNLESS NOTED OTHERWISE
.B.O.	FURNISHED BY OWNER	V.I.F.	VERIFY IN FIELD
.D.	FLOOR DRAIN	V.T.R.	VENT THROUGH ROOF
DN.	FOUNDATION	W.H.	WATER HEATER
A.	GAUGE	W.I.	WROUGHT IRON
ALV.	GALVANIZED	W.P.	WATER PROOF
.C.	GENERAL CONTRACTOR	W.R.	WATER RESISTANT
.U.	GALVANIZED IRON	WT.	WEIGHT
.n. .B.	HOSE BIBB	W/	WIGH
.D.	HOOL DIDD	V V /	VVIIII
.C.	HOLLOW CORE	W/O	WITHOUT
		VV/O	VVIIIOOI
DWE.	HARDWARE		
.M.	HOLLOW METAL		
D.	INSIDE DIAMETER		

INTERIOR

BARRIER FREE REQUIREMENTS

(TABLE 1018.1)





ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING

TITLE SHEET
PROJECT No. 16000800
APRIL 11, 2017
ISSUED FOR: BIDDING



CLYDE TOWNSHIP MUNICIPAL CENTER IMPROVEMENTS PROJECT

T.7N. - R.16.E. - SECTION 35 CLYDE TOWNSHIP, ST. CLAIR COUNTY, MICHIGAN



LOCATION MAP
1" = 1/2 MILE



3811 24th Ave, Suite A Fort Gratiot, MI 48059 TEL: (810) 966-0680 FAX: (810) 966-0681

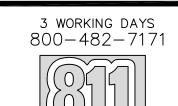
www.huronconsultants.com

CLIENT NAME:

CLYDE TOWNSHIP

3350 VINCENT ROAD NORTH STREET, MI 48049

TEL: (810) 985-7258 FAX: (810) 985-3065



Know what's below. Call before you dig.

PRIOR TO CONSTRUCTION, ALL EXISTING UTILITIES LOCATION AND DEPTH WITHIN THE PROJECT AREA SHALL BE FIELD VERIFIED. CALL MISS DIG SYSTEM 3 WORKING DAYS PRIOR TO CONSTRUCTION.

UTILITY INFORMATION SHOWN ON THIS DRAWING ARE APPROXIMATE AND MAY BE ACCORDING TO AVAILABLE RECORD OR DISCLOSED INFORMATION BY VARIOUS UTILITY COMPANIES, PUBLIC AGENCIES, OR OTHER SOURCES AND THUS MAY NOT NECESSARILY REFLECT ACTUAL FIELD LOCATIONS AND NO GUARANTEE IS GIVEN TO COMPLETENESS OR ACCURACY.

COPYRIGHT (C) 2017 HURON

COPYRIGHT (C) 2017 HURON
CONSULTANTS. ALL RIGHTS RESERVED.
THIS DRAWING AND ALL INFORMATION
CONTAINED HEREIN ARE NOT TO BE
USED OR REPRODUCED WITHOUT
WRITTEN PERMISSION BY HURON
CONSULTANTS.

PROJECT NAME:

CLYDE TOWNSHIP

MUNICIPAL CENTER

COVER SHEET

PROJECT LOCATION:

SECTION 35 T7N, R16E

CLYDE TOWNSHIP

SAINT CLAIR COUNTY

Drawn By: EJO Checked By: TDP Approved By: EJO

REVISIONS: 2017-03-13 2017-03-21

2017-03-27 PLAN REVIEW 2017-04-11 BIDDING

SCALE VERIFICATION:

0 0.5 1

BAR IS ONE-INCH
ADJUST SCALES ACCORDINGLY IF NOT

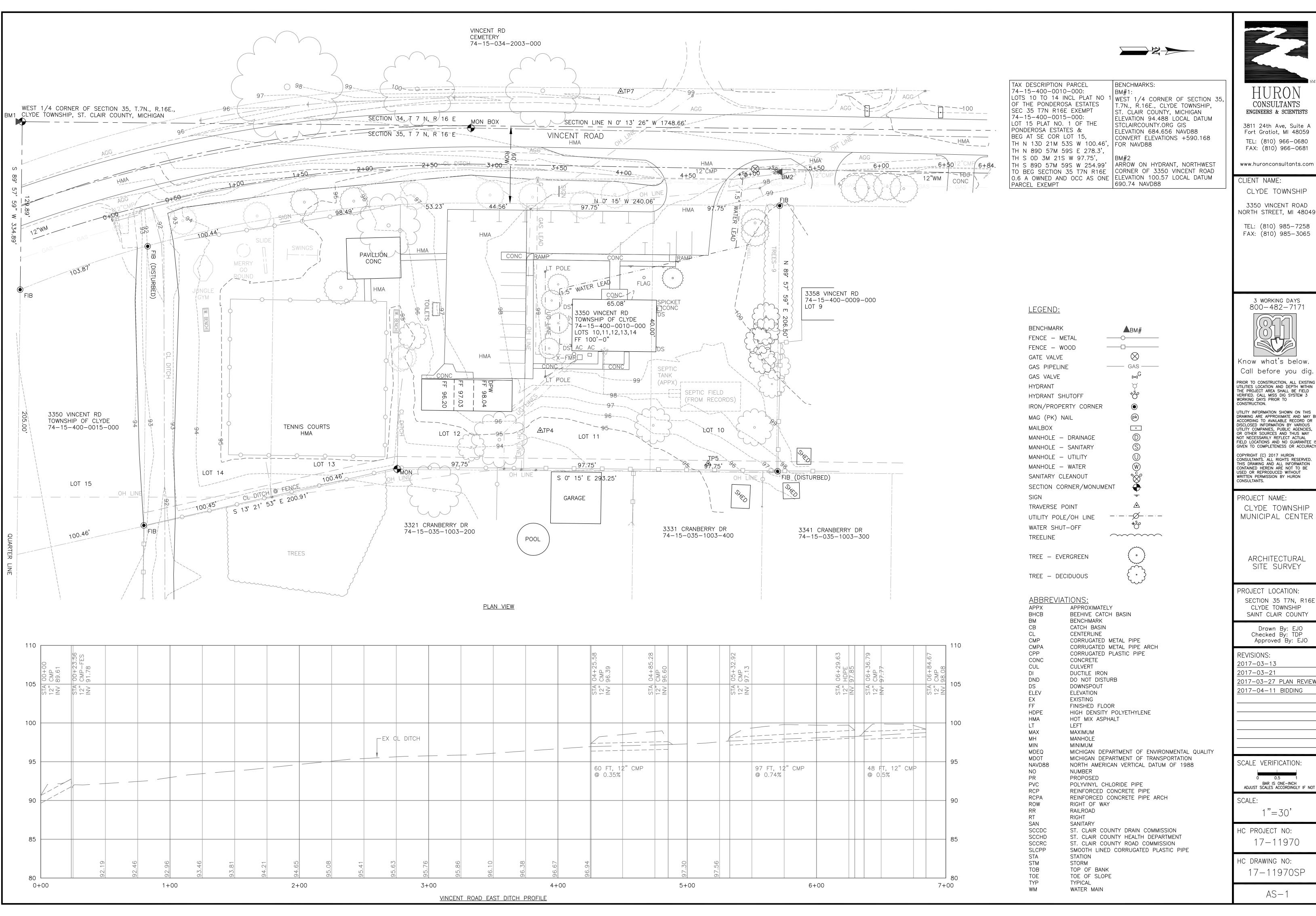
scale: AS NOTED

HC PROJECT NO: 17-11970

HC DRAWING NO:

16-11970CV

CV-1





NORTH STREET, MI 48049

800-482-7171

Call before you dig.

DRAWING ARE APPROXIMATE AND MAY E UTILITY COMPANIES, PUBLIC AGENCIES,

GIVEN TO COMPLETENESS OR ACCURAC COPYRIGHT (C) 2017 HURON CONSULTANTS. ALL RIGHTS RESERVED. THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN ARE NOT TO BE

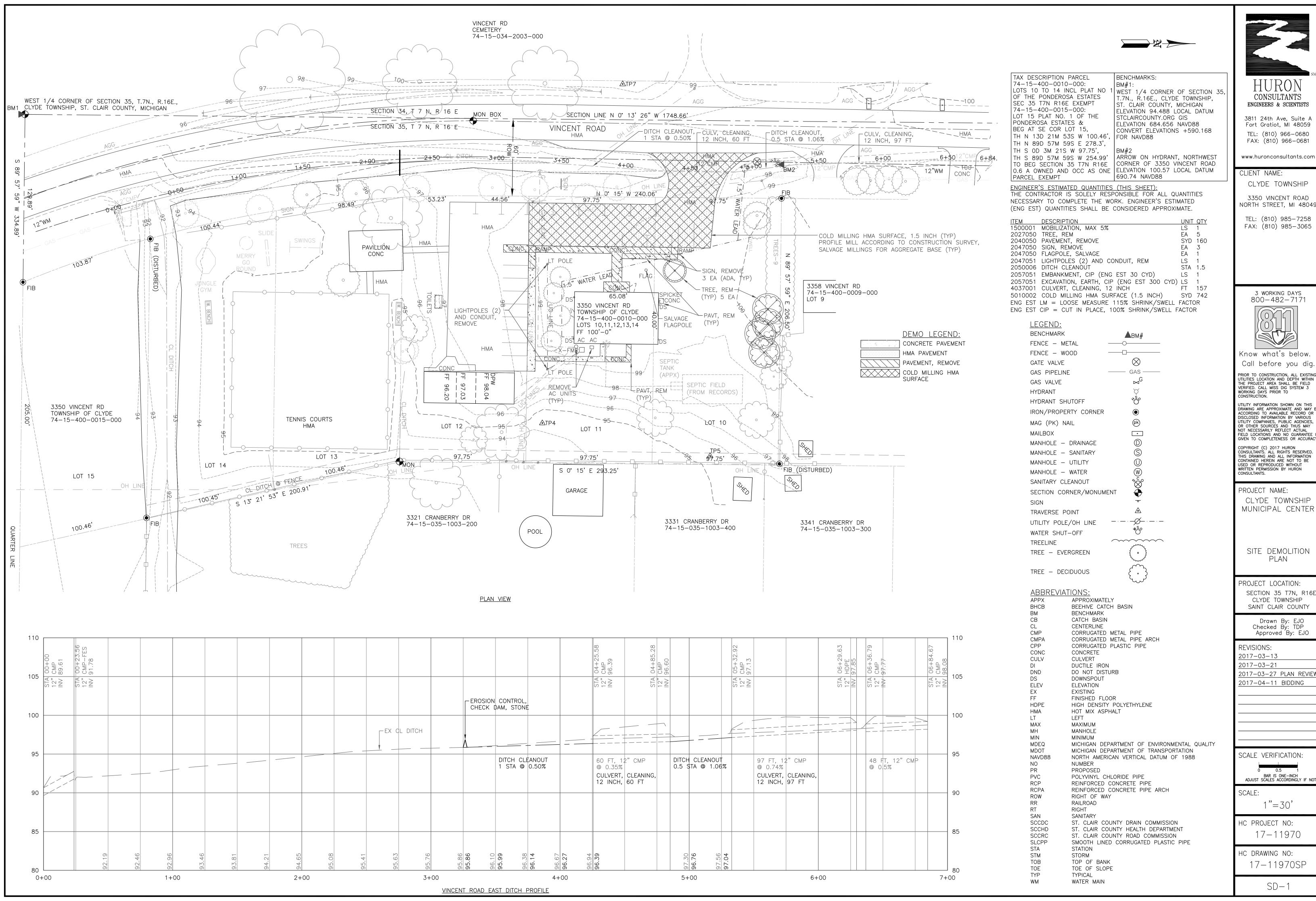
SECTION 35 T7N, R16E CLYDE TOWNSHIP SAINT CLAIR COUNTY

Drawn By: EJO Checked By: TDP

2017-03-27 PLAN REVIEW

BAR IS ONE-INCH ADJUST SCALES ACCORDINGLY IF NO

17-11970SP





Call before you dig.

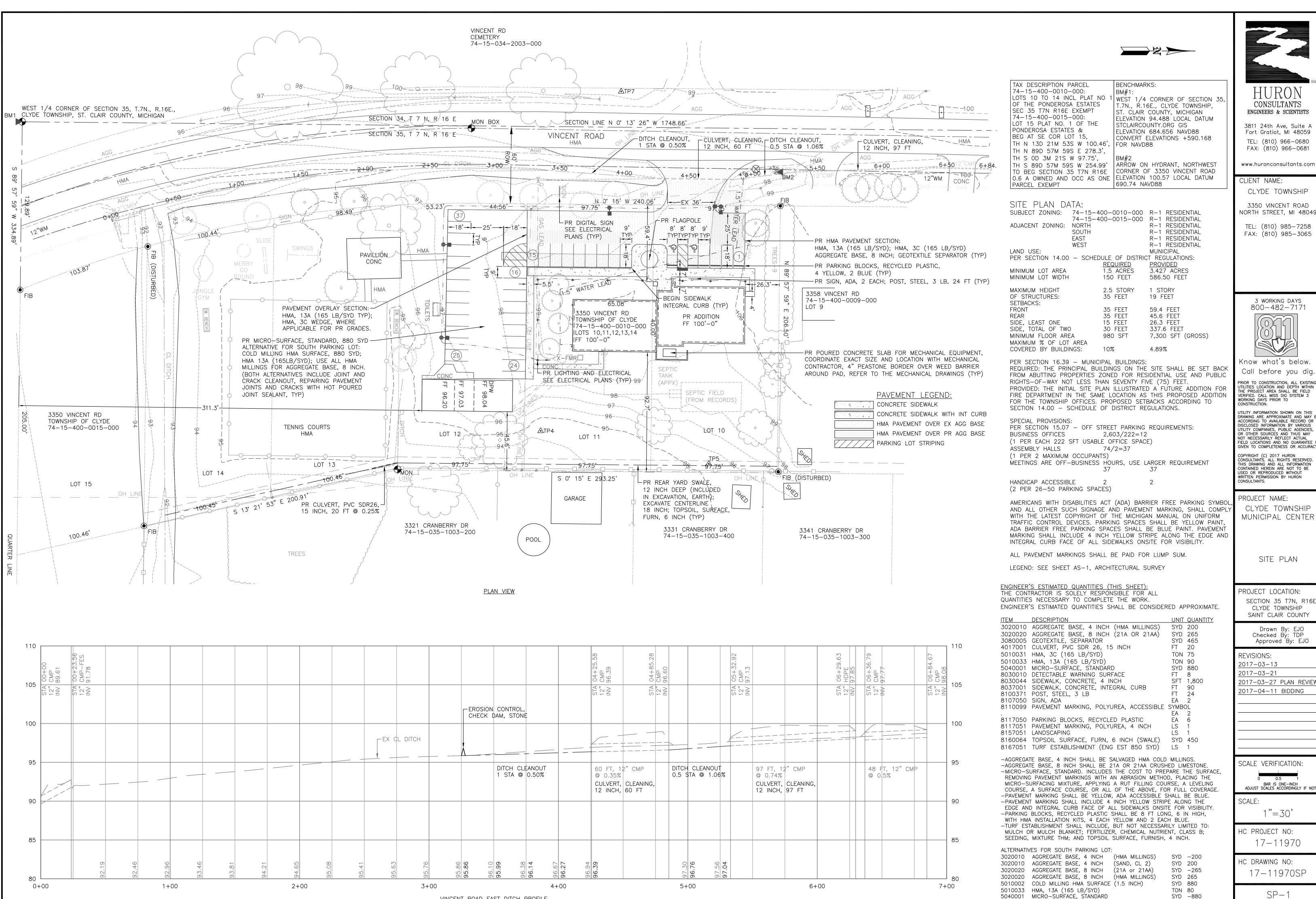
GIVEN TO COMPLETENESS OR ACCURAC CONSULTANTS. ALL RIGHTS RESERVED. THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN ARE NOT TO BE

SECTION 35 T7N, R16E

2017-03-27 PLAN REVIEW

BAR IS ONE-INCH ADJUST SCALES ACCORDINGLY IF NO

17-11970SP



VINCENT ROAD EAST DITCH PROFILE



CONSULTANTS ENGINEERS & SCIENTISTS

Fort Gratiot, MI 48059 TEL: (810) 966-0680 FAX: (810) 966-0681

www.huronconsultants.com

CLYDE TOWNSHIP

TEL: (810) 985-7258 FAX: (810) 985-3065

3 WORKING DAYS 800 - 482 - 7171

Know what's below.

Call before you dig.

UTILITY INFORMATION SHOWN ON THIS DRAWING ARE APPROXIMATE AND MAY I ACCORDING TO AVAILABLE RECORD OF DISCLOSED INFORMATION BY VARIOUS JTILITY COMPANIES, PUBLIC AGENCIES,

CONSULTANTS, ALL RIGHTS RESERVED. THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN ARE NOT TO BE TEN PERMISSION BY HURON

SECTION 35 T7N, R16E CLYDE TOWNSHIP

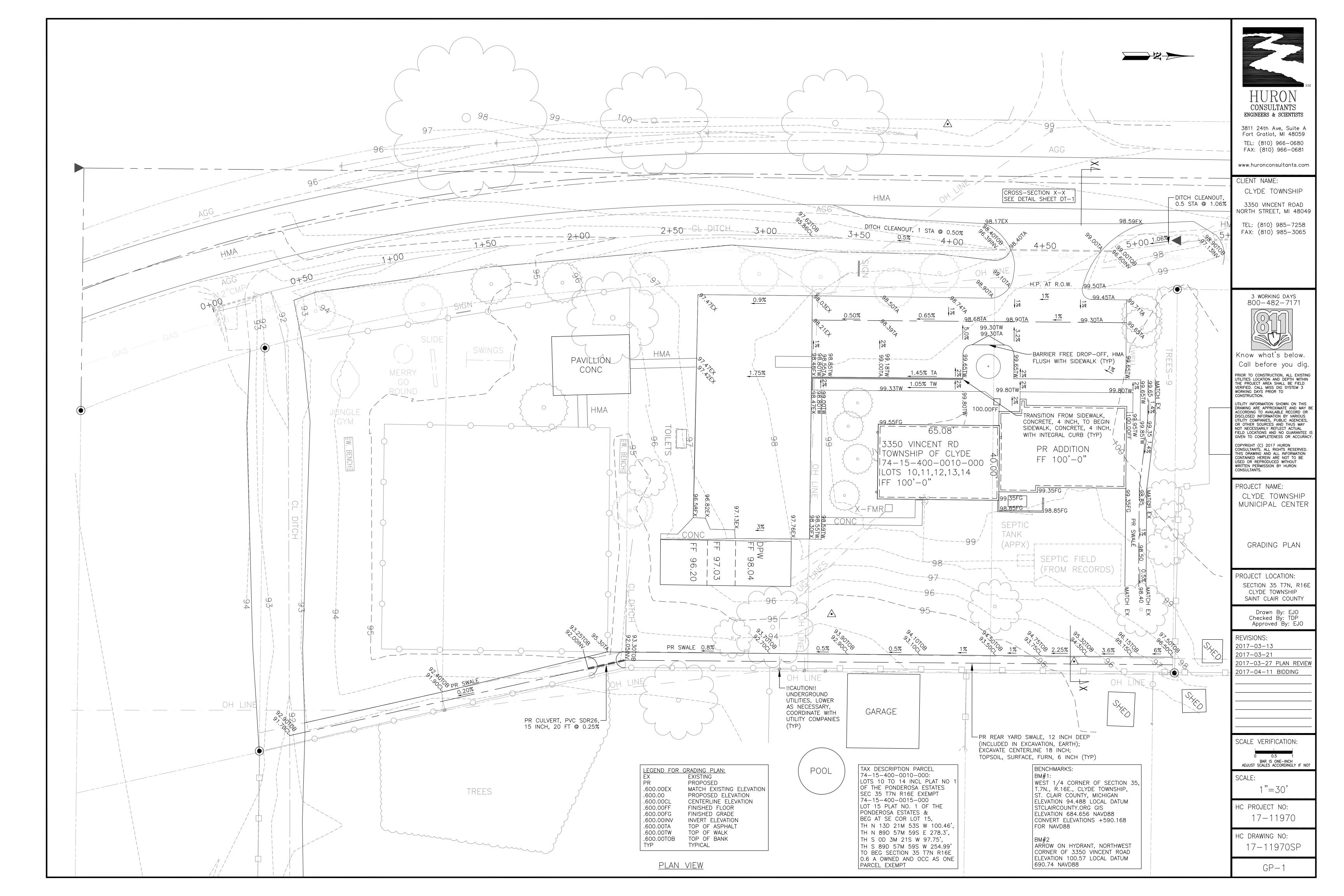
> Drawn By: EJO Checked By: TDP

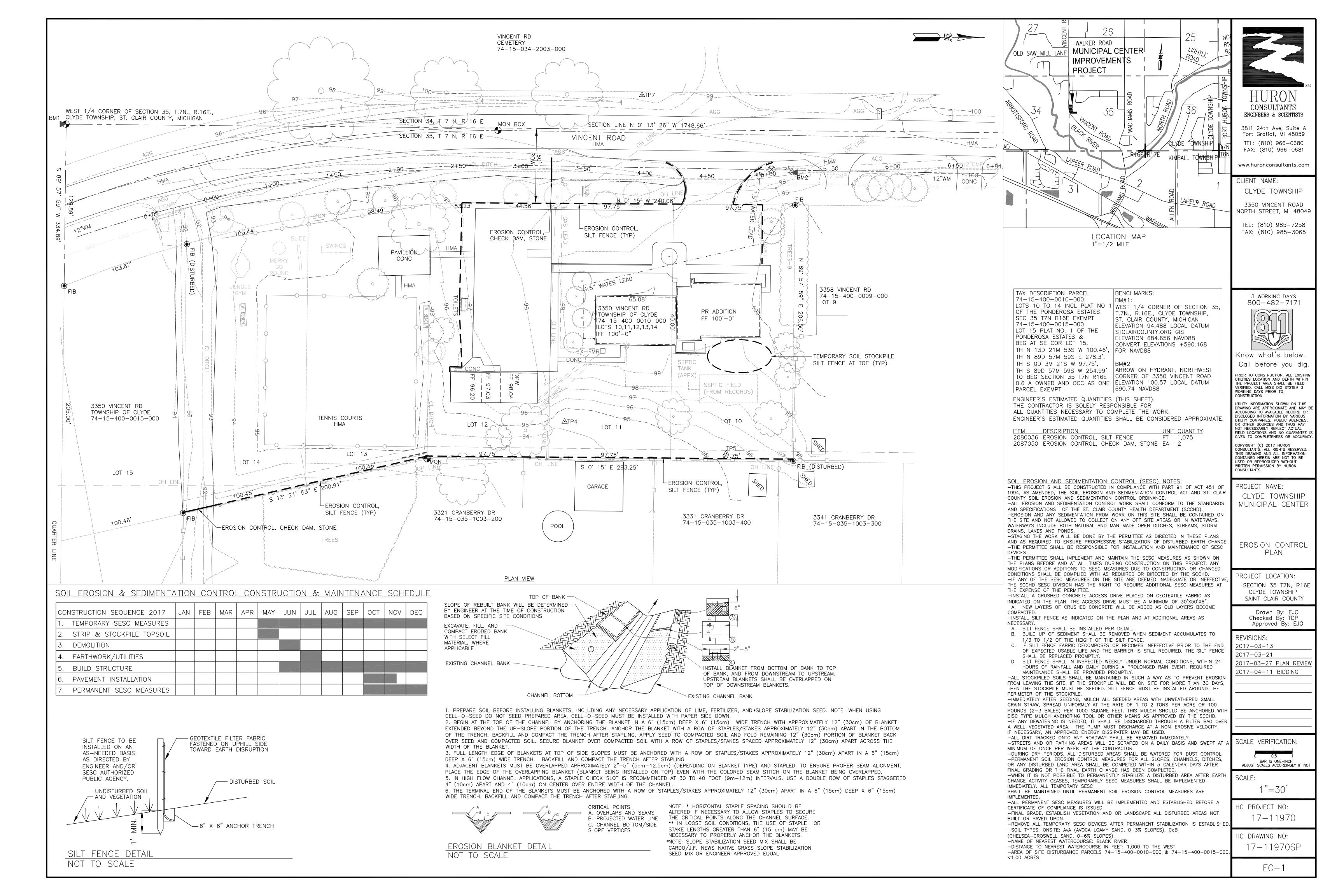
2017-03-27 PLAN REVIEW

BAR IS ONE-INCH ADJUST SCALES ACCORDINGLY IF NO

17-11970

SP-1





GENERAL NOTES

ALL WORK SHALL COMPLY WITH THE STANDARDS AND SPECIFICATIONS OF ALL LOCAL, COUNTY, STATE OR FEDERAL REGULATORY AGENCIES HAVING JURISDICTION OVER THE WORK, WHETHER OR NOT SPECIFIED HEREIN, INCLUDING BUT NECESSARILY LIMITED TO THE FORT GRATIOT CHARTER TOWNSHIP, ST. CLAIR COUNTY DRAIN COMMISSIONER, ST. CLAIR COUNTY HEALTH DEPARTMENT, ST. CLAIR COUNTY ROAD COMMISSION, MICHIGAN DEPARTMENT OF TRANSPORTATION, MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, OR ANY OTHERS AS APPLICABLE.

INDEMNIFICATION:

THE CONTRACTOR SHALL HOLD HARMLESS AND INDEMNIFY AND KEEP INDEMNIFIED EACH INDIVIDUAL PARTY OR AGENCY: FORT GRATIOT CHARTER TOWNSHIP, CHMP, INC., HURON CONSULTANTS, ST. CLAIR COUNTY DRAIN COMMISSIONER, ST. CLAIR COUNTY HEALTH DEPARTMENT, ST. CLAIR COUNTY ROAD COMMISSION, MICHIGAN DEPARTMENT OF TRANSPORTATION, MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, AND ANY OTHER LOCAL, COUNTY, STATE OR FEDERAL REGULATORY AGENCIES HAVING JURISDICTION OVER THE WORK, THEIR EMPLOYEES, CONSULTANTS, ENGINEERS, ARCHITECTS, INSPECTORS, LEGAL COUNSEL, OR ANY OTHER ASSIGNS OR REPRESENTATIVES, FROM ALL CLAIMS, SUITS OR DAMAGE TO THE PROPERTY, INCLUDING PROPERTY OF SAID AGENCY OR ITS SAID REPRESENTATIVES, WHETHER DUE TO THE NEGLIGENCE OF THE CONTRACTOR, OR THE JOINT NEGLIGENCE OF THE CONTRACTOR AND THEIR SUBCONTRACTORS AND ANY SAID AGENCY OR ITS SAID REPRESENTATIVES, ARISING OUT OF THE WORK UNDER THIS CONTRACT, OR IN CONNECTION WITH WORK NOT AUTHORIZED BY THE ISSUED CONTRACT, OR RESULTING FROM FAILURE TO COMPLY WITH THE TERMS OF THE CONTRACT, OR ARISING OUT OF THE CONTINUED EXISTENCE OF THE WORK PRODUCT WHICH IS THE SUBJECT OF THE CONTRACT.

....

TOPOGRAPHIC AND UTILITY INFORMATION SHOULD BE CONSIDERED APPROXIMATE, AND NOT NECESSARILY INDICATIVE OF REAL—WORLD CONDITIONS. APPROXIMATED UTILITIES AND FACILITIES SHOWN WITHIN THESE PLANS HAVE BEEN MAPPED THROUGH TOPOGRAPHIC SURVEY OF SURFACE CONDITIONS, AND COMPILATION OF RECORD DOCUMENTS. ACCURACY OR COMPLETENESS IS NEITHER GUARANTEED NOR IMPLIED. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND DEPTHS OF ALL FACILITIES PRIOR TO EXCAVATION AND CONSTRUCTION. ANY CONFLICTS MUST BE REPORTED TO THE ENGINEER IMMEDIATELY FOR DIRECTION.

ISS DIG:

THE PERMIT HOLDER MUST COMPLY WITH THE REQUIREMENTS OF ACT 53 OF PUBLIC ACTS OF 1974, AS AMENDED. CALL MISS DIG AT (800) 482-7171 AT LEAST THREE (3) FULL WORKING DAYS (EXCLUDING SATURDAYS AND SUNDAYS), BUT NOT MORE THAN TWENTY-ONE (21) CALENDAR DAYS, BEFORE YOU START WORK. PERMIT HOLDER ASSUMES ALL RESPONSIBILITY FOR DAMAGE TO OR INTERRUPTION OF UNDERGROUND UTILITIES.

THE CONTRACTOR IS RESPONSIBLE TO ASSURE ALL PERMIT ACQUISITIONS AND FEES ARE IN COMPLIANCE FOR ALL PERTINENT JURISDICTIONAL AGENCIES.

BACKFILL:

SUITABLE FILL MATERIAL SHALL BE PLACED IN 12-INCH MAXIMUM LIFTS COMPACTED TO 95% MAXIMUM UNIT DENSITY BY MODIFIED PROCTOR ANALYSIS. UTILITY TRENCHES WITHIN 3 FEET AND A 1 ON 1 ZONE OF INFLUENCE OF ALL PAVEMENT, AS REFERENCED FROM BACK OF CURB OR EDGE OF PAVEMENT, SHALL BE BACKFILLED WITH MDOT CL II GRANULAR MATERIAL (OR EQUAL AS APPROVED BY THE MUNICIPAL AGENCY HAVING JURISDICTION OVER THE SUBJECT UTILITY) IN 12-INCH MAXIMUM LIFTS COMPACTED TO 95% MAXIMUM DENSITY BY MODIFIED PROCTOR ANALYSIS.

NOTIFICATION OF START AND COMPLETION OF WORK. PERMIT HOLDER MUST NOTIFY ALL SAID AGENCIES AT LEAST FIVE (5) DAYS, EXCLUDING WEEKENDS AND HOLIDAYS, BEFORE STARTING WORK AND MUST NOTIFY THE SAID AGENCIES WHEN WORK IS COMPLETED.

TIME RESTRICTIONS:

THE CONTRACTOR SHALL COMPLETE THE WORK WITHIN THE ALLOTTED CONTRACT TIME LIMIT, REGARDLESS OF OVERTIME, WEEKENDS AND/OR HOLIDAYS TO ACCOMMODATE THE SCHEDULE, WITHOUT ADDITIONAL COMPENSATION. ALL WORK SHALL BE PERFORMED WEEKDAYS, WEEKENDS AND HOLIDAYS AS APPROVED BY THE AGENCIES HAVING JURISDICTION, INCLUDING BUT NOT NECESSARILY LIMITED TO FORT GRATIOT CHARTER TOWNSHIP.

SAFETY

CONTRACTOR AGREES TO WORK UNDER THE CONTRACT IN A SAFE MANNER AND TO KEEP THE AREA AFFECTED BY THE CONTRACT IN A SAFE CONDITION UNTIL THE WORK IS COMPLETED. ALL WORK SITE CONDITIONS SHALL COMPLY WITH THE 2005 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS AMENDED. THE CONTRACTOR SHALL USE ORANGE CONSTRUCTION FENCE AS REQUIRED TO ADEQUATELY PROTECT EXISTING AREAS AND SAFELY SEPARATE THE GENERAL PUBLIC FROM CONSTRUCTION ACTIVITIES. SAID CONSTRUCTION FENCE SHALL BE DAILY MONITORED AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

SIGNAGE

ALL TEMPORARY AND PERMANENT SIGNAGE SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND AS FURTHER FIELD DIRECTED.

SEQUENCE OF CONSTRUCTION:

THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONSTRUCTION ACTIVITIES, AND ALLOT FOR MULTIPLE MOBILIZATIONS AND DEMOBILIZATIONS FOR EACH STAGE OF CONSTRUCTION, INCLUDING BUT NOT NECESSARILY LIMITED TO DEMOLITION, CONCRETE WORK, PAVING, AND/OR RESTORATION, WITHOUT ADDITIONAL COMPENSATION.

CONCRETE SIDEWALK RAMP:

SIDEWALK RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, OR CURRENT EDITION, AND THE CURRENT EDITION OF MDOT STANDARD PLANS R-28-H SIDEWALK RAMP AND DETECTABLE WARNING DETAILS, AND CONCRETE SIDEWALKS PER STANDARD PLANS R-29-H DRIVEWAY PLANS AND DETAILS. SIDEWALKS IN RIGHT-OF-WAYS ARE SUBJECT TO ST. CLAIR COUNTY ROAD COMMISSION STANDARDS.

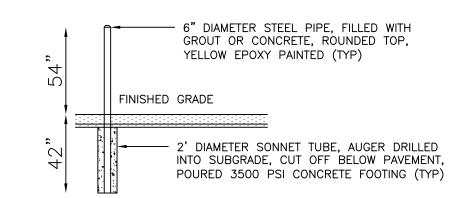
CONCRETE CURB & GUTTER:

CONCRETE CURB & GUTTER:

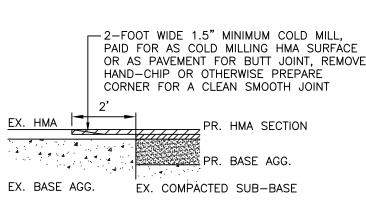
CONCRETE CURB & GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, OR CURRENT EDITION, AND THE CURRENT EDITION OF MDOT STANDARD PLANS R-30-F CONCRETE CURB AND CONCRETE CURB & GUTTER, AND APPROACHES PER STANDARD PLANS R-29-H DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK, MODIFIED TO THE SITE CONDITIONS AS ILLUSTRATED IN THESE PLANS AND DETAILS.

AMEDICANS WITH DISABILITIES ACT (ADA) COMDI

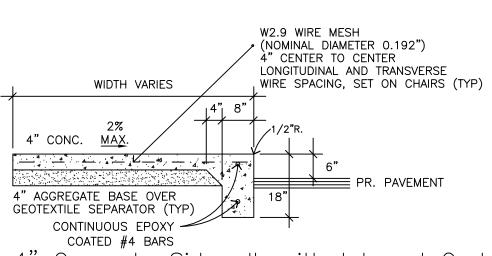
AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE:
CONTRACTOR SHALL SOLELY BE RESPONSIBLE TO PROVIDE WORK FOR THIS CONTRACT, INCLUDING BUT NECESSARILY LIMITED TO BARRIER FREE AND ALL OTHER APPLICABLE ACCESSIBILITY IN CONFORMANCE WITH 28 CFR PART 36, AMERICANS WITH DISABILITIES ACT, OR ANY OTHER CURRENT PERTINENT STANDARDS AND SPECIFICATIONS.



BOLLARD DETAIL (NO SCALE)



Butt Joint Detail (NO SCALE)



COATED #4 BARS

4" Concrete Sidewalk with Integral Curb Detail
(No Scale)

SIGN, ADA, 2 EA

ALL SIGNS AND PAVEMENT MARKING SHALL CONFORM WITH

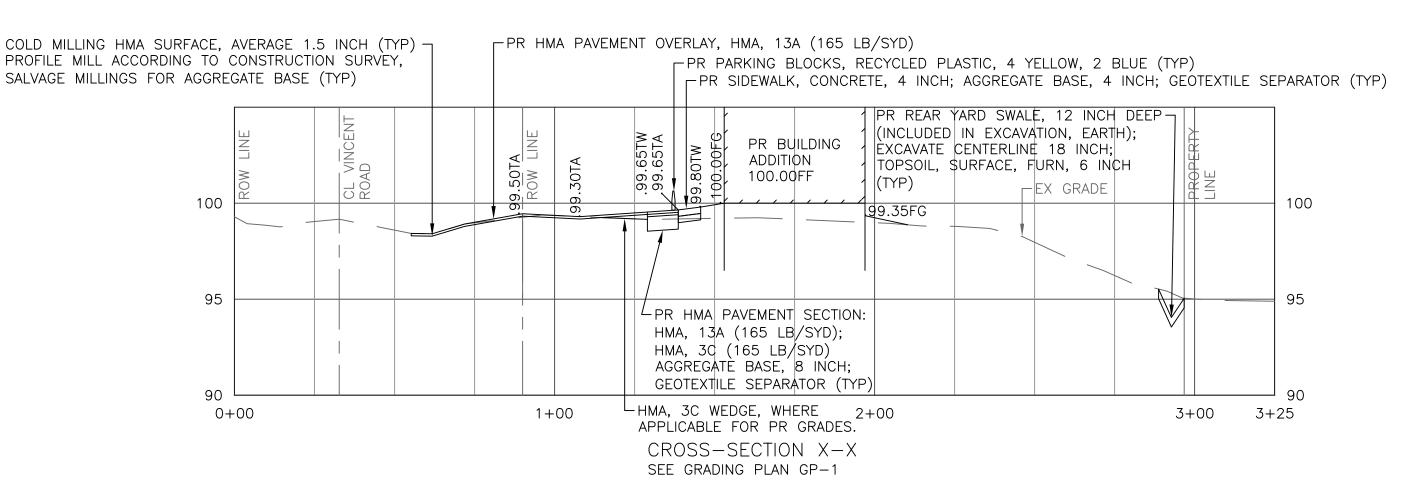
2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND

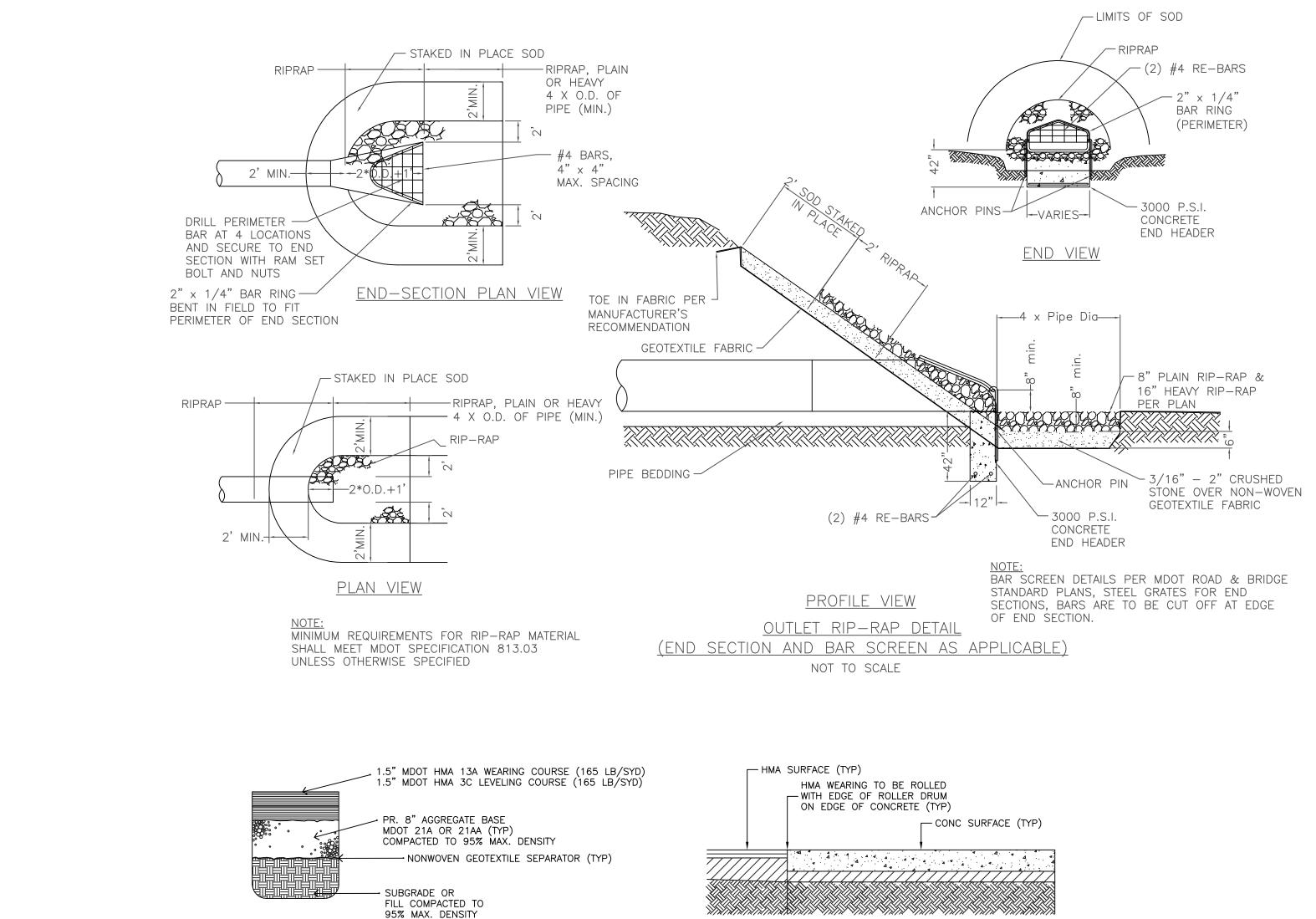
2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)

THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

SIGN DETAILS

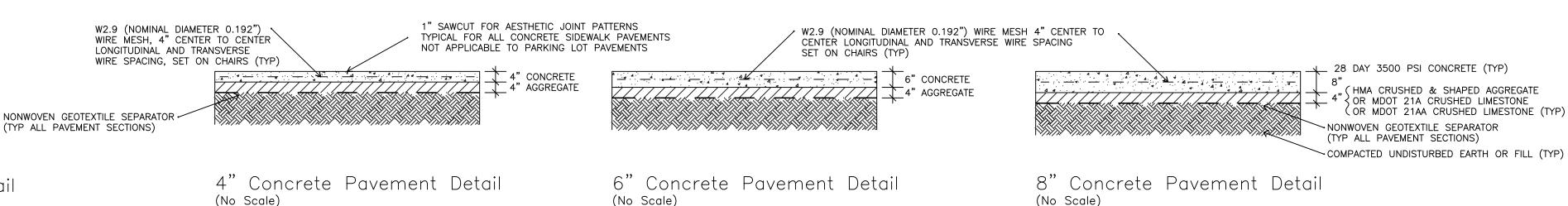
NOT TO SCALE





Concrete-HMA Joint Detail

(No Scale)



3" Hot Mix Asphalt (HMA) Detail

(No Scale)



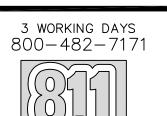
3811 24th Ave, Suite A Fort Gratiot, MI 48059 TEL: (810) 966-0680 FAX: (810) 966-0681

www.huronconsultants.com

CLIENT NAME: CLYDE TOWNSHIP

3350 VINCENT ROAD NORTH STREET, MI 48049

> TEL: (810) 985-7258 FAX: (810) 985-3065



Know what's below.

Call before you dig.

PRIOR TO CONSTRUCTION, ALL EXISTING UTILITIES LOCATION AND DEPTH WITHIN THE PROJECT AREA SHALL BE FIELD VERIFIED. CALL MISS DIG SYSTEM 3 WORKING DAYS PRIOR TO CONSTRUCTION.

UTILITY INFORMATION SHOWN ON THIS DRAWING ARE APPROXIMATE AND MAY BE ACCORDING TO AVAILABLE RECORD OR DISCLOSED INFORMATION BY VARIOUS UTILITY COMPANIES, PUBLIC AGENCIES, OR OTHER SOURCES AND THUS MAY NOT NECESSARILY REFLECT ACTUAL FIELD LOCATIONS AND NO GUARANTEE IS GIVEN TO COMPLETENESS OR ACCURACY

COPYRIGHT (C) 2017 HORON
CONSULTANTS. ALL RIGHTS RESERVED.
THIS DRAWING AND ALL INFORMATION
CONTAINED HEREIN ARE NOT TO BE
USED OR REPRODUCED WITHOUT
WRITTEN PERMISSION BY HURON
CONSULTANTS.

PROJECT NAME:

CLYDE TOWNSHIP

MUNICIPAL CENTER

NOTES AND DETAILS

PROJECT LOCATION:

SECTION 35 T7N, R16E

CLYDE TOWNSHIP

SAINT CLAIR COUNTY

Drawn By: EJO Checked By: TDP Approved By: EJO

REVISIONS: 2017-03-13 2017-03-21 2017-03-27 PLAN REVIEW 2017-04-11 BIDDING

SCALE VERIFICATION:

0 0.5 1

BAR IS ONE-INCH

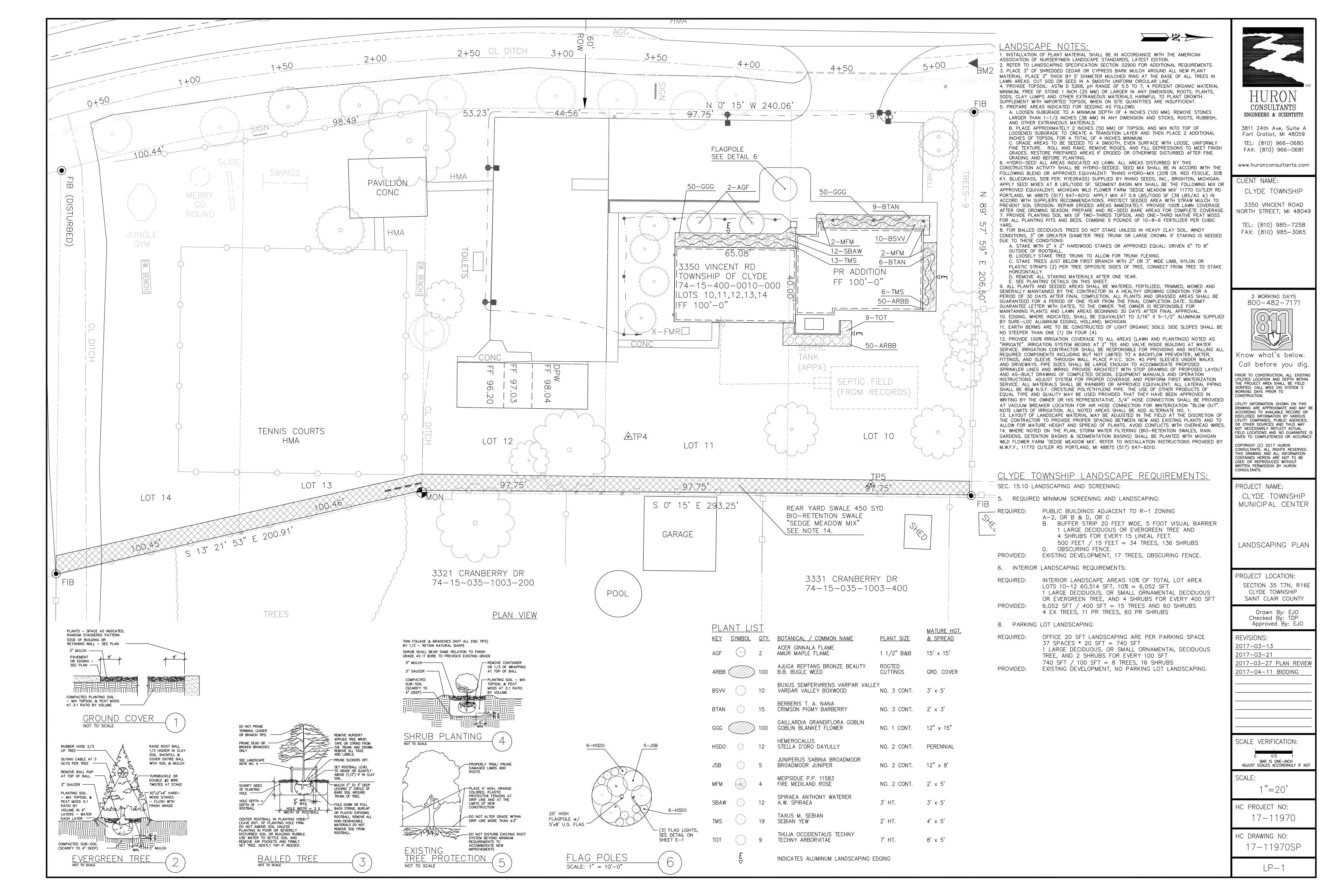
ADJUST SCALES ACCORDINGLY IF NO

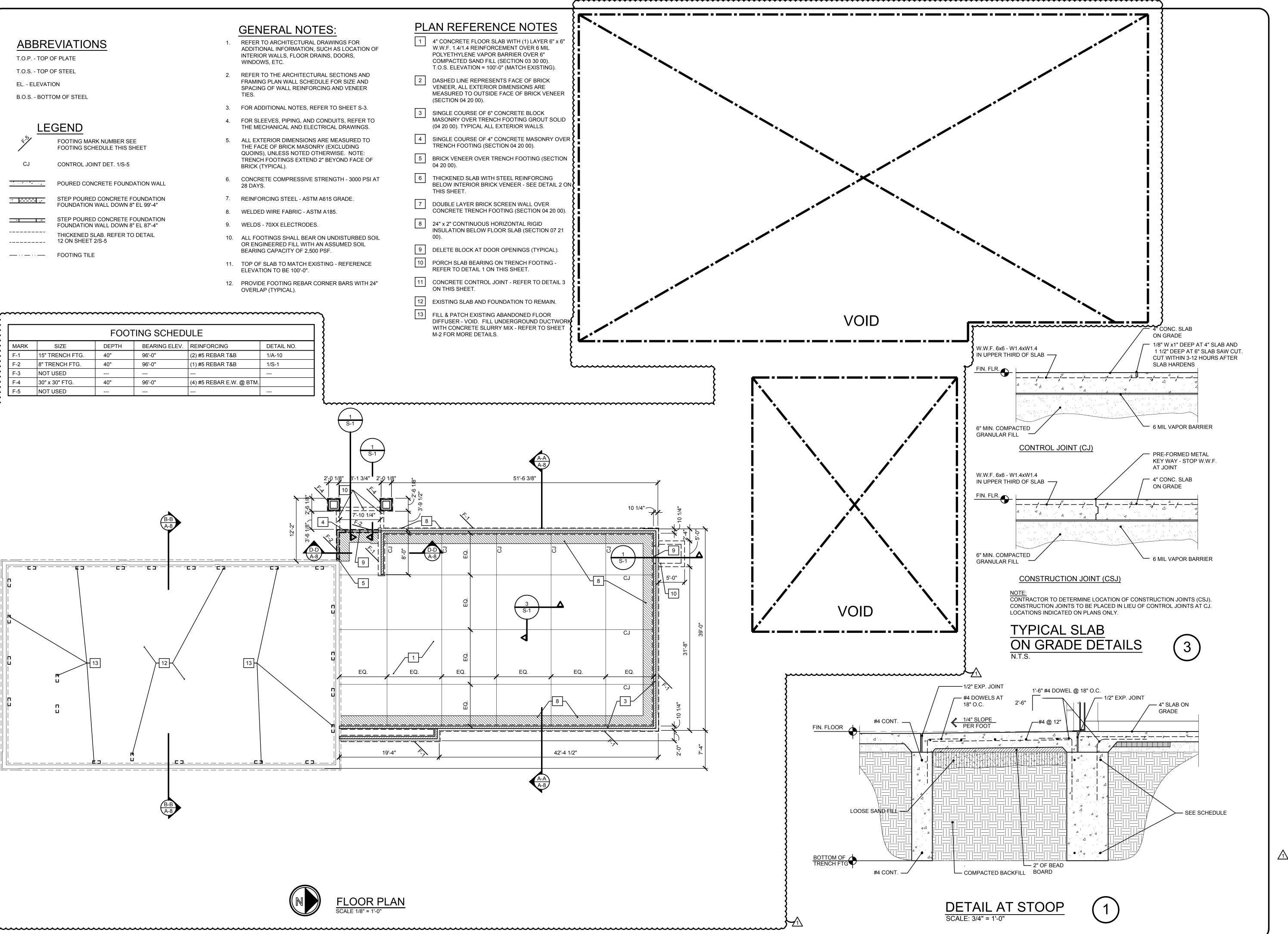
SCALE:

HC PROJECT NO: 17-11970

HC DRAWING NO: 17-11970SP

DT—

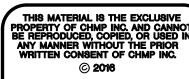




CHMPINC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



CLYDE TOWNSHIP MUNCIPAL CENTER SITE & BUIDLING IMPROVEMENTS

PROJECT NO. 1600080

DATE FEB. 15, 201

AS BUILT DATE

DRAWN BY AS, GNI

CHECKED BY GNI

SCALE AS NOTE:

ISSUED FOR: DATE

OWNER REVIEW 3-20-17

PLAN REVIEW 3-27-17

BIDDING 4-11-17

BULLETIN #1 3-29-18

SHEET NO.

S-1

	С	OLUMN S	CHEDULE
MARK	MATERIAL TYPE	SIZE	REMARKS
C-1	1.8E PARALLAM PSL	3-1/2" x 5-1/4" x 12'	PROVIDE SIMPSON POST BASE CONNECTOR LCB46 (DIRECT MOUNT TO FOUNDATION)
C-2	1.8E PARALLAM PSL	5-1/4" x 5-1/4" x 12'	PROVIDE SIMPSON POST BASE CONNECTOR LCB66 (DIRECT MOUNT TO FOUNDATION)

	Bl	EAM SCH	EDULE
MARK	SIZE AND TYPE	COLUMN/ SUPPORTS	REMARKS
BM-1	(3) 2"x12" (1) 3-1/2"x4"x1/4" <u>ズ</u>	(2) 2x6'S TRIMMERS	GALV. STL. 'LAG BOLT TO BM. @ 36" O.C. OR 1/2" DIA. BOLTS. 4" BRG. TOP OF BM. ELEV. = 112'-0"
	3-1/2"x11-1/4" 2.0E MICROLAMINATED LVL BEAM (1) 3-1/2"x4"x1/4"∡		PROVIDE SIMPSON STEEL POST CAP/BEAM CONNECTOR EQ. TO # BC4 TOP OF BM. ELEV. = 112'-0"

	HEADI	ER SCHEDULE	
MARK	SIZE AND TYPE	TRIMMERS	COMMENTS
H-1	(3) 2 x 12'S (1) 3-1/2 x 3-1/2 x 1/4 STL. &	(2) 2x6'S	GALV. ANGLE REQUIRES 4" MIN. BRG.
H-2	(2) 2 x 10'S (1) 3-1/2 x 3-1/2 x 1/4 STL. 🔏	(1) 2x4	MIN. 4" STEEL ANGLE BRG.
H-3	(2) 2 x 10'S (1) 3-1/2 x 3-1/2 x 1/4 STL. Z	(1) 2x4	MIN. 4" STEEL ANGLE BRG.

FRAMING NOTES:

WOOD FRAMING

DIMENSIONAL FRAMING MATERIAL SHALL BEAR THE GRADE MARK OF AN ALSC APPROVED AGENCY; KILN DRIED, AND HAS THE FOLLOWING MINIMUM STRESS GRADE:

2X4 STUD WALLS; HEM-FIR, CONSTRUCTION GRADE

2X6 AND LARGER; SOUTHERN PINE NO. 2

ANCHOR TRUSS TO CONTINUOUS PLATES WITH ONE TRUSS ANCHOR 300 POUND MINIMUM UPLIFT. EQUAL TO SIMPSON STRONG - TIE #H3.

REFERENCES TO "SIMPSON" ARE "SIMPSON STRONG-TIE" CONNECTORS OR EQUAL.

INSTALL CONNECTORS, HANGERS, STRAP TIES PER MANUFACTURER'S RECOMMENDATIONS.

ENGINEERED WOOD MICROLAMINATED BEAMS AND PARALLAM COLUMNS ARE AS MANUFACTURED BY WEYERHAEUSER COMPANY OR ARCHITECT APPROVED

ALL BEAMS SHALL BEAR ON BEARING WALLS OR SUPPORTED DIRECTLY ON POSTS.

ROOF SHEATHING

ROOF DECK SHEATHING: 1/2 INCH THICK APA RATED 24/16. FASTENED WITH 8D COMMON NAILS AT 6 INCHES O.C., AT PANEL EDGES AND INTERMEDIATE SUPPORTS. PROVIDE CONTINUOUS EDGE SUPPORTS.

WALL SHEATHING

WALL SHEATHING: 7/16" INCH THICK OSB SHEATHING STRUCTURAL NUMBER 1, EXTERIOR EXPOSURE. FASTENED WITH 8D COMMON NAILS AT 6 INCHES O.C., AT PANEL EDGES.

WOOD TRUSSES

WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED PER TRUSS PLATE INSTITUTE, INC. SPECIFICATIONS.

DESIGN LOADS FOR TRUSSES ARE SHOWN ON THE TRUSS LOADING

SHOP DRAWINGS FOR TRUSSES SHALL BE PREPARED BY THE SUPPLIER AND SUBMITTED TO THE ARCHITECT FOR APPROVAL. SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION AND SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN. SHOP DRAWINGS SHALL SHOW BRIDGING FOR CHORD MEMBERS IF REQUIRED BY DESIGN.

VALLEY JACK TRUSSES SHALL BEAR ON TOP CHORD OF ROOF TRUSSES AND FASTENED TO EACH TRUSS PER DETAIL.

THE EXTENT OF ROOF TRUSSES SHOWN ON THE PLAN IS FOR REFERENCE AND THE CONTRACTOR SHALL DETERMINE LOCATION AND NUMBER AS REQUIRED TO PROVIDE A COMPLETE ROOF STRUCTURE.

GENERAL NOTES:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL MISCELLANEOUS SUPPORT FRAMING FOR TOILET PARTITION OVERHEAD SUPPORTS.
- 2. REFER TO THE ARCH. PLANS, ELEVATIONS, AND DETAILS FOR SECTION REFERENCE
- 3. EXTERIOR LOAD BEARING WOOD STUD WALLS: 2x6 WOOD STUDS @ 16" O.C. (INTERIOR STUDS ONLY WITH GYPSUM BOARD) PROVIDE LATERAL BRIDGING AT 4'-0" O.C. MAX. REFER TO SECTION 06100-"ROUGH FRAMING" FOR ADDITONAL INFORMATION

TRUSS BEARING ELEVATION = 112'-0" (TYPICAL U.N.O.)

ABBREVIATIONS

- T.O.P. TOP OF PLATE
- T.O.S. TOP OF STEEL
- EL. ELEVATION
- B.O.S. BOTTOM OF STEEL

PLAN REFERENCED NOTES:

- SHADED WALLS REPRESENT LOAD BEARING WALL PARTITIONS - 2x6 WOOD STUDS SPACED 16" O.C.
- PRE-ENGINEERED WOOD TRUSSES SPACED 24" O.C. PRE-ENGINEERED VALLEY TRUSSES OVER EXISTING ROOF
- GIRDER TRUSS WITH STEEL TRUSS HANGERS.
- BOTTOM CHORD OF TRUSS ABOVE WITH REMOVABLE ACCESS PANEL
- 5/8" GYPSUM BOARD ATTIC DRAFT STOPPING OVER CUSTOM ROOF TRUSS WITH SUPPORT FRAMING AT 24" O.C. DRAFT STOPPING TO BE CONTINUOUS FROM UNDERSIDE OF TRUSS CHORD TO UNDERSIDE OF ROOF SHEATHING ABOVE.
- CONVENTIONAL FRAMING OPENING ENCLOSURE FOLLOWING REMOVAL OF CUPOLA FOR FLUSH CONDITION WITH EXISTING ROOF WITH 1/2" CDX PLYWOOD OVER 2 x WOOD FRAMING.

22 1/2" x 30" FRAMED ATTIC ACCESS OPENING BETWEEN

- EXISTING HEADER TO REMAIN.
- EXISTING ROOF FRAMING TO REMAIN.
- EXTEND TOP CHORD OF TRUSS OVER MECHANICAL CHASE.
- PROVIDE 2x6 TRUSS TAIL EXTENSIONS AND FRAMING AS REQUIRED FOR INSTALLATION OF NEW FASCIA/FREEZE/SOFFIT FOLLOWING REMOVAL OF PORCH CONSTRUCTION.

ROOF DESIGN LOADING

ROOF	<u>P.S</u>
LIVE (SNOW) LOAD	30.
ROOF SHINGLES	3.0
SHEATHING	1.5
INSULATION	1.0
GYPSUM BOARD	3.0
TRUSS	5.0
MISCELLANEOUS	6.5
TOTAL LOAD	50

WIND DESIGN LOADING

BASIC WIND SPEED 90 MPH EXPOSURE 'C'

2'-0 1/8" 8'-1 3/4" 2'-0 1/8" 63'-1 1/8" 51'-6 3/8" <u>5 1/2"</u> 3'-0 3/4" 13'-1 3/4" 19'-4"

FRAMING PLAN

CHMP INC 5198 TERRITORIAL ROAD

GRAND BLANC, MI 48439 TELEPHONE 810/695-5910

ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING

OWNER REVIEW 3-20-17

PLAN REVIEW 1 BULLETIN #1 3-29-18

GENERAL NOTES

- 1. THIS BUILDING HAS BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE, 2012 EDITION
- A. DESIGN LOADS:
- A. ROOF LIVE LOAD REDUCTION= 21 PSF
- B. SNOW LOADS
- a. GROUND SNOW LOAD, Pg = 25 PSF b. SNOW EXPOSURE FACTOR, Ce = 1.0
- c. THERMAL FACTOR, Ct = 1.1 d. BUILDING CATEGORY IV
- e. IMPORTANCE FACTOR, Is = 1.2 f. FLAT ROOF SNOW LOAD, Pf = 23.1 PSF + DRIFTING
- g. DRIFTING CALCULATED PER ASCE 7-02
- h. UNBALANCED SNOW LOADS: LEEWARD = 6.9 PSF, WINDWARD = 39.8 PSF
- C. WIND LOADS
- a. BASIC WIND SPEED V = 90 MPH (3-SECOND GUST)
- b. BUILDING CATEGORY IV
- c. IMPORTANCE FACTOR, Iw = 1.15
- d. EXPOSURE CATEGORY B
- e. INTERNAL PRESSURE COEFFICIENT ±0.18
- D. EARTHQUAKE LOADS
- a. SEISMIC USE GROUP III b. SEISMIC IMPORTANCE FACTOR, le = 1.5
- c. Ss = 0.11 (MBC FIG. 1615(1)); S1 = 0.04 d. SITE CLASS = D
- e. Fa = 1.6; Fv = 2.4 f. Sms = Fa*Ss = 0.18; Sm1 = FvS1 = 0.10
- g. Sds = (2/3)*Sms = 0.12; Sd1 = (2/3)*Sm1 = 0.64
- h. SEISMIC DESIGN CATEGORY = A
- i. SEISMIC RESISTING SYSTEM: ORDINARY MASONRY SHEAR WALLS
- j. DESIGN BASE SHEAR = 0.047W

 k. RESPONSE MODIFICATION FACTOR

FOR SEISMIC DESIGN OF BUILDINGS."

- k. RESPONSE MODIFICATION FACTOR, R = 3.0I. EARTHQUAKE LOADS CALCULATED PER SECTION 1617.5 "SIMPLIFIED ANALYSIS PROCEDURE
- 2. THE ARCHITECTURAL DRAWINGS SHALL BE WORKED WITH THE STRUCTURAL DRAWINGS. SOME
- STRUCTURAL INFORMATION HAS BEEN INCORPORATED IN THE ARCHITECTURAL DRAWINGS.

 3. THE STRUCTURE SHALL BE CONSIDERED TO BE IN AN UNSTABLE CONDITION UNTIL ALL WALL AND ROOF STRUCTURES ARE COMPLETED. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR STABILITY AND TO RESIST LATERAL LOADS DURING ERECTION.
- 4. ALL NON LOAD BEARING WALLS SHALL BE CONSTRUCTED TO ALLOW FOR THE VERTICAL DEFLECTION OF THE STRUCTURE ABOVE.

FOUNDATIONS

- SOIL INVESTIGATION DATA WAS NOT MADE AVAILABLE. FOUNDATIONS ARE DESIGNED FOR A
 MAXIMUM ALLOWABLE BEARING CAPACITY OF 2,500 PSF. CONTRACTOR SHALL BE RESPONSIBLE
 FOR VERIFYING SOIL BEARING CAPACITY.
- 2. THE CONTRACTOR WILL RETAIN THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO MONITOR THE FOUNDATION WORK & DETERMINE THE QUALITY OF THE SOIL AT ALL FOOTING LOCATIONS. EXCAVATIONS ARE TO BE INSPECTED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER. THE UNSUITABLE MATERIALS SHALL BE REMOVED AND FOOTINGS SHALL BE LOWERED (THICKENED).
- 3. CONTRACTORS SHALL BE AWARE OF AND VERIFY LOCATION OF ALL UNDERGROUND UTILITIES, TANKS, ETC. A HIGH PRESSURE GAS MAIN RUNS DIRECTLY ACROSS THE PROJECTED SITE. DUE CARE SHALL BE EXERCISED DURING EXCAVATION SO THAT EXISTING UTILITIES ARE NOT DAMAGED
- 4. ALL TOPSOIL AND LOOSE FILL MATERIALS BE STRIPPED FROM THE CONSTRUCTION AREA AND WASTED OR STOCKPILED FOR LATER USE. A GEOTECHNICAL ENGINEERS REPRESENTATIVE OF OF THE SOILS ENGINEER IN THE FIELD SHOULD DETERMINE THE EXACT DEPTH OF STRIPPING AT THE TIME OF THE STRIPPING OPERATIONS. THE EXPOSED SUBGRADE SHOULD BE PROOFROLLED WITH APPROVED EQUIPMENT. THIS PROOFROLLING WILL DETERMINE WHERE SOFT UNSUITABLE MATERIALS ARE ENCOUNTERED, THESE SOILS SHOULD BE REMOVED AND REPLACED WITH WELL-COMPACTE MATERIAL. A REPRESENTATIVE OF THE SOILS ENGINEER BE PRESENT FOR THIS PHASE OF THE PROJECT.
- 5. AFTER THE EXISTING SUBGRADE SOILS ARE STRIPPED AND PROOFROLLED, THE PLACEMENT AND COMPACTION OF FILL FOR STRUCTURAL APPLICATIONS SHALL BE MONITORED AND TESTED BY A QUALIFIED REPRESENTATIVE OF THE GEOTECHINCAL ENGINEER. ALL FILL SHALL BE FORMED FROM MATERIAL FREE OF VEGETABLE MATTER, RUBBISH, LARGE ROCK AND OTHER DELETERIOUS MATERIAL. WITH THE EXCEPTION OF SOILS WITH HIGH AMOUNTS OF CLAY AND SILT, MOST OF THE ONSITE SOILS APPEAR TO BE ADEQUATE FOR STRUCTURAL FILL. THE FILL MATERIAL SHOULD BE PLACED IN LAYERS NOT TO EXCEED 8 INCHES IN LOOSE THICKNESS AND SHOULD BE WATERED AS REQUIRED TO SECURE SPECIFIED COMPACTION. EACH LAYER SHOULD BE UNIFORMLY COMPACTED BY MEANS OF SUITABLE EQUIPMENT OF THE TYPE REQUIRED BY THE MATERIALS COMPOSING THE FILL. THE FILL SHOULD BE COMPACTED TO THE SPECIFIED PERCENT OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM DENSITY TEST D-1557 (95% BELOW ALL STRUCTURAL AREAS OR STRUCTURAL INFLUENCED AREAS AND 90% BELOW FLOOR SLAB AREAS). SHOULD THE RESULTS OF THE INPLACE DENSITY TEST INDICATE THAT THE SPECIFIED COMPACTION LIMITS ARE NOT OBTAINED, THE AREAS REPRESENTED BY SUCH TESTS SHOULD BE REWORKED AND RETESTED AS REQUIRED UNTIL THE SPECIFIED DIFFERENTIAL SETTLEMENTS WHICH ARE DETRIMENTAL TO THE BEHAVIOR OF SHALLOW FOUNDATIONS, FLOOR SLABS, AND PAVEMENT SECTIONS.

CONCRETE

- 1. THE FOLLOWING CODES GOVERN THE DESIGN, DETAILING, FABRICATION AND CONSTRUCTION OF ALL REINFORCED CONCRETE:
- A. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-02)
- 2. ALL CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE AS FOLLOWS: FOOTINGS, PIERS, AND WALLS 3000 PSI
- SLAB ON GRADE 3500 PSI ALL EXTERIOR EXPOSED CONCRETE SHALL BE ENTRAINED.
- 3. BEFORE PLACING CONCRETE REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS OF PIPE SLEEVES, EMBEDDED ITEMS, OPENINGS, EQUIPMENT PADS, ELECTRICAL CONDUITS, RECESSES, DRAINS, ETC. ALL OPENINGS FOR PIPE, CONDUITS, ETC. SHALL BE SLEEVED. MINIMUM SLEEVE SPACING SHALL BE 3 SLEEVE DIAMETERS.
- 4. ALL DEFORMED BAR REINFORCEMENT SHALL BE ASTM A615, GRADE 60.
- 5. ALL DEFORMED BAR REINFORCING SHALL BE SPLICED A MINIMUM OF 32 BAR DIAMETERS.
- 6. ALL WELDED WIRE FABRIC SHALL BE ASTM A-185. SHEETS SHALL BE LAPPED A MINIMUM OF WIRE SPACING + 2".

CONCRETE MASONRY

- THE FOLLOWING CODES GOVERN THE DESIGN, DETAILING AND CONSTRUCTION OF ALL MASONRY:
 A. BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-02)
 B. SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-02)
- 2. ALL MASONRY SHALL HAVE A COMPRESSIVE STRENGTH, f'm = 1500 PSI.
- 3. ALL MORTAR FOR LOAD BEARING AND EXTERIOR CONCRETE MASONRY SHALL BE TYPE S, ABOVE GRADE AND TYPE M BELOW GRADE PROPORTIONED BY VOLUME ACCORDING TO ASTM C-270.
- 4. ALL GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI, AND SHALL BE PROPORTIONED BY VOLUME ACCORDING TO ASTM C-476.
- 5. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C-90 GRADE N,TYPE I UNITS MEDIUM WEIGHT UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL DRAWINGS FOR FURTHER DETAILS WITH REGARD TO FACE FINISH.
- 6. ALL MASONRY WALLS SHALL HAVE HORIZONTAL LADDER TYPE JOINT REINFORCEMENT AT 16" O.C. PROVIDE PREFABRICATED CORNER PIECES AT ALL CORNERS AND INTERSECTIONS OF WALLS.
- 7. ALL DEFORMED BAR REINFORCING SHALL BE ASTM A-615 GRADE 60. LAP SPLICES IN WALLS SHALL BE A MINIMUM OF 48 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
- 8. REINFORCE ALL MASONRY WALLS AS SHOWN ON SCHEDULE AND DETAILS. PLACE BAR ON CENTERLINE OF WALL IN FULLY GROUTED CELL FULL HEIGHT OF THE WALL. LAP REINFORCEMENT WITH TYPICAL FOOTING DOWEL REFER TO WALL SECTIONS FOR DOWELS REQUIREMENTS.

STRUCTURAL STEEL

THE FOLLOWING CODE SHALL GOVERN THE DETAILING, FABRICATION & ERECTION OF ALL STEEL:
 A. MANUAL OF STEEL CONSTRUCTION, 9TH EDITION (AMERICAN INSTITUTE OF STEEL CONSTRUCTION)

WIDE FLANGE SHAPES — ASTM A-992, Fy = 50 KSI
STEEL PLATE, CHANNELS & ANGLES — ASTM A-36
STRUCTURAL STEEL TUBES — ASTM A-500 GRADE B, Fy = 46KSI

- ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS)
 D1.1-2000 STRUCTURAL WELDING CODE. E70XX ELECTRODES SHALL BE USED FOR WELDED SHOP &
 FIELD CONNECTIONS.
- 3. ALL BOLTED CONNECTIONS SHALL BE MADE WITH 3/4"Ø ASTM A-325 BOLTS. ALL BOLTED CONNECTIONS SHALL BE CONSIDERED AS BEARING UNLESS NOTED OTHERWISE.
- 4. ALL FRAMED BEAM CONNECTIONS ARE TO CONFORM TO AISC STANDARD TWO ANGLE WEB CONNECTIONS EXCEPT AS DETAILED ON DRAWINGS CAPABLE OF SUPPORTING 50% OF THE TOTAL UNIFORM LOAD CAPACITY OF THE BEAM OR FOR LOADS INDICATED ON DRAWING. NO CONNECTION SHALL CONSIST OF LESS THAN TWO 3/4"Ø BOLTS OR A WELD DEVELOPING LESS THAN 10 KIPS.
- 5. ALL FIELD CONNECTIONS SHALL BE BOLTED UNLESS NOTED OTHERWISE. FIELD WELDING IS NOT ALLOWED EXCEPT WHERE SPECIFICALLY INDICATED OR APPROVED.
- 6. ALL GROUT PADS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 7 DAYS.
- 7. ALL ANCHOR BOLTS SHALL BE ASTM A-36.
- 8. PROVIDE AND HAVE IN PLACE ADEQUATE LATERAL BRACING AND VERTICAL SUPPORTS FOR THE SAFE ERECTION AND TRUE ALIGNMENT OF THE STRUCTURAL STEEL. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE SAFE ERECTION & TEMPORARY BRACING OF STRUCTURAL STEEL.
- 9. VERIFY NUMBER AND SIZE OF OPENINGS IN ROOF, WALLS, AND FLOOR WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. SEE STRUCTURAL DRAWINGS AND SPECIFICATIONS, FOR STRUCTURAL REQUIREMENTS. VERIFY ALL DETAILS & INFORMATION WITH THE APPROPRIATE CONTRACTOR
- 10. ALL DIMENSIONS RELATED TO STRUCTURAL STEEL USED TO SUPPORT EQUIPMENT OR FRAME OPENINGS SHALL BE VERIFIED WITH CERTIFIED AND APPROVED SHOP DRAWINGS OF PURCHASED EQUIPMENT PRIOR TO DETAILING AND FABRICATION.
- 11. ALL EDGES OF METAL DECK SHALL BE SUPPORTED AT A CHANGE IN DECK SPAN WHETHER SHOWN ON DRAWINGS OR NOT. PROVIDE TUBE STEEL OR A DOUBLE ANGLE BETWEEN JOIST AND METAL DECK.
- 12. FIELD WELD ALL LINTELS AND BEAMS TO BEARING PLATE WITH A 5/16" x 4" LG. FILLET WELD TO EACH SIDE U.N.O.

WOOD FRAMING

- 1. DIMENSIONAL FRAMING MATERIAL SHALL BEAR THE GRADE MARK OF AN ALSC APPROVED AGENCY AND SHALL HAVE MET THE FOLLOWING REQUIREMENTS:
 - A. 2X4 STUD WALLS; HEM-FIR, CONSTRUCTION GRADE
- B. 2X6 AND LARGER; HEM FIR #2 GRADE
- 2. INSTALL CONNECTORS, HANGERS, STRAP TIES PER MANUFACTURER'S RECOMMENDATIONS.
- 3. ALL ROOF, WALL SHEATHING SHALL BE APA RATED WITH THICKNESS AND LOAD RATINGS INDICATED ON PLANS OR SPECS. ALL SHEATHING SHALL BE FIRE TREATED REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 4. NOT USED
- 5. ALL FRAMING SHALL BE ERECTED, TRUE LEVEL, AND/OR PLUMB. MEMBERS SHALL BE SECURELY NAILED OR BOLTED IN PLACE AS DETAILED AT THE PROPER LOCATIONS OR SPACING INDICATED. ALL FRAMING MEMBERS SHALL BE OF FULL LENGTH WITHOUT PIECES ADDED OR SPLICED. FURRING, BLOCKING, NAILERS, ETC.. SHALL BE SECURELY ANCHORED IN PLACE.
- 6. COMPLY WITH THE RECOMMENDATIONS AND PRACTICES OF THE AITC, NFPA AND TIP FOR THE INSTALLATION OF ALL WOOD FRAMING.
- 7. ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE SHALL BE TREATED.

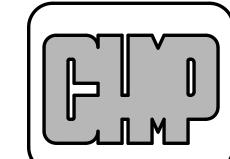
WOOD TRUSSES

- 1. WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED PER TRUSS PLATE INSTITUTE, INC. SPECIFICATIONS.
- 2. SHOP DRAWINGS FOR TRUSSES SHALL BE PREPARED BY THE SUPPLIER AND SUBMITTED TO THE ARCHITECT FOR APPROVAL. SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF AND AND SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN. SHOP DRAWINGS SHALL SHOW BRIDGING FOR CHORD MEMBERS IF REQUIRED BY DESIGN.
- 3. VALLEY TRUSSES SHALL BEAR ON TOP CHORD OF ROOF TRUSSES AND FASTENED TO EACH TRUSS PER DETAIL 6/S-4.
- 4. THE EXTENT OF ROOF TRUSSES SHOWN ON THE PLAN IS FOR REFERENCE AND THE TRUSS SUPPLIER SHALL DETERMINE LOCATION AND NUMBER AS REQUIRED TO PROVIDE A COMPLETE ROOF STRUCTURE.
- 5. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND INSTALLED PER TRUSS PLATE INSTITUTE, INC. SPECIFICATION AND NFPA NATIONAL, INC. SPECIFICATIONS AND NFPA NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.
- 6. DEFLECTION OF TRUSSES SHALL BE LIMITED TO MAXIMUM LIVE LOAD DEFLECTION OF SPAN/360.
- 7. DESIGN AND SPECIFICATION OF TEMPORARY AND PERMENANT WOOD TRUSS BRACING BY TRUSS MANUFACTURER AND SHOWN ON SHOP DRAWINGS. TRUSS INSTALLER SHALL PROVIDE AND INSTALL BRACING PER SHOP DRAWINGS.
- 8. ANCHOR TRUSS TO CONTINUOUS PLATES WITH ONE TRUSS ANCHOR 480 POUND MINIMUM UPLIFT. EQUAL TO SIMPSON STRONG TIE #H2.5A
- 8. REFERENCES TO "SIMPSON" ARE "SIMPSON STRONG-TIE" CONNECTORS OR EQUAL.

SHEATHING

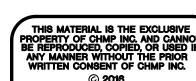
- 1. ROOF DECK SHEATHING: 1/2 INCH THICK APA RATED 24/16. FASTENED WITH 8D COMMON NAILS AT 6 INCHES O.C., AT PANEL EDGES AND 12" @ INTERMEDIATE SUPPORTS.
- 2. WALL SHEATHING: 7/16" OSB EXTERIOR RATED. FASTENED WITH 8D COMMON NAILS @ 6 INCHES O.C., AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. PROVIDE SOLID BLOCKING AT ALL PANEL

5198 TERRITORIAL ROAD Grand Blanc, mi 48439 Telephone 810/695-5910



CHMP INC

ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING



YDE TOWNSHIP MUNCIPAL CENTER SITE & BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

CHECKED BY GNM

SCALE AS NOTED

ISSUED FOR: DATE

OWNER REVIEW 3-20-17

PLAN REVIEW 3-27-17

BIDDING 4-11-17

SHEET NO.

S-

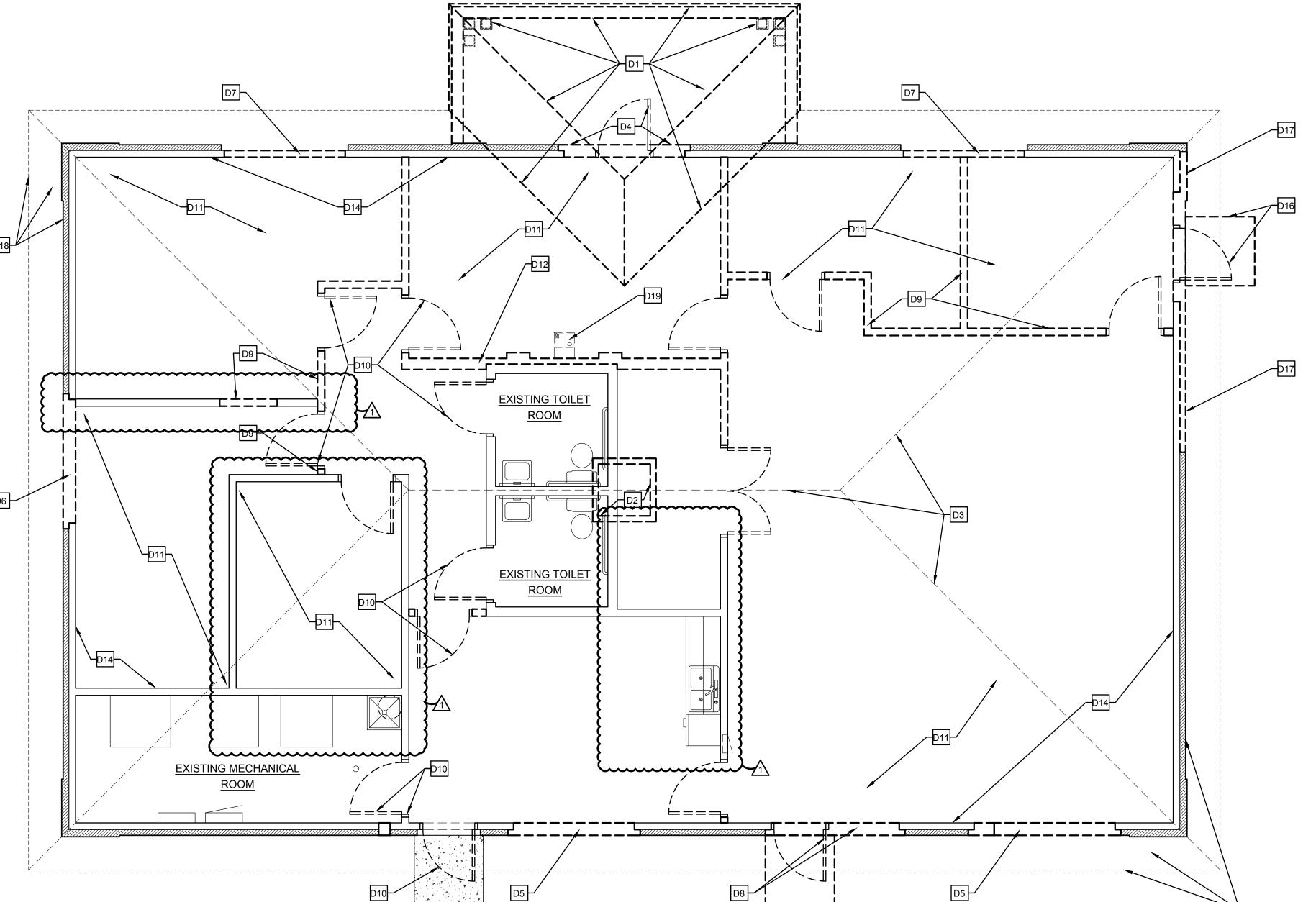
OF

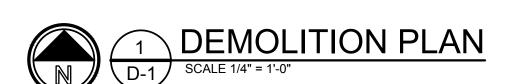
STRUCTURAL NOTES

DEMOLITION PLAN REFERENCED NOTES:

- D1 REMOVE PORCH CONSTRUCTION IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO: ROOF STRUCTURE, COLUMNS, SOFFIT/CEILING, PORCH SLAB, AND FOUNDATION/FOOTINGS. REFER TO ROOF FRAMING PLAN FOR NEW WORK IN THIS AREA.
- D2 REMOVE EXISTING CUPOLA ON ROOF ABOVE. ENCLOSE OPENING WITH PLYWOOD & FRAMING FLUSH WITH EXISTING
- D3 REMOVE EXISTING SHINGLES AND UNDERLAYMENT DOWN TO EXISTING WOOD DECK. (TYPICAL)
- D4 REMOVE EXISTING ENTRY DOOR AND TRANSOM PREPARE OPENING FOR NEW WINDOW UNIT AND PANEL. CAREFULLY REMOVE & SALVAGE BRICK AT NEW JAMB LOCATIONS FOR NEW MASONRY TOOTH-IN.
- REMOVE EXISTING EXTERIOR WALL CONSTRUCTION AND PREPARE OPENING FOR NEW WINDOW/WALL PANEL INSTALLATION, AND FOR TOOTHING IN NEW MASONRY AT JAMBS. PROVIDE TEMP. SHORING OF STRUCTURE FOR INSTALLATION OF NEW LINTEL/HEADER.
- D6 REMOVE EXISTING WINDOW UNIT & EXTERIOR WALL, AND PREPARE OPENING FOR NEW WINDOW/WALL PANEL INSTALLATION AND FOR TOOTHING IN NEW BRICK MASONRY AT JAMBS. PROVIDE TEMP. SHORING OF STRUCTURE FOR INSTALLATION OF NEW LINTEL/HEADER.
- D7 REMOVE EXISTING WINDOW UNIT & WALL PANEL FOR INSTALLATION OF NEW WINDOW UNIT/WALL PANEL.
- D8 REMOVE EXISTING DOOR, FRAME, PORCH SLAB, FOOTING, AND EXTERIOR WALL. PREPARE OPENING FOR NEW WINDOW/WALL PANEL INSTALLATION AND FOR TOOTHING IN NEW BRICK MASONRY AT JAMBS. PROVIDE TEMP. SHORING OF STRUCTURE FOR INSTALLATION OF NEW LINTEL/HEADER.
- D9 REMOVE EXISTING INTERIOR WALL PARTITIONS (TYPICAL).
- D10 REMOVE EXISTING DOOR & FRAME (TYPICAL).
- D11 REMOVE EXISTING FLOOR FINISH & SUSPENDED CEILING SYSTEM TYPICAL THROUGHOUT ALL SPACES.
- D12 REMOVE EXISTING BRICK VENEER FINISH
- D13 NOT USED
- P14 REMOVE EXISTING DRYWALL FINISH TO EXISTING WOOD STUDS. TYPICAL AT THE FOLLOWING CONDITIONS: ALL EXTERIOR WALLS, EXTERIOR FACE OF MECHANICAL ROOM WALLS, BOTH SIDES OF EXISTING TOILET ROOM PARTITIONS (NOTE: BATT INSULATION IN WALL CAVITIES TO REMAIN).
- D15 NOT USED
- REMOVE EXISTING DOOR, FRAME, PORCH SLAB, FOOTING, AND EXTERIOR WALL CONSTRUCTION FOR INSTALLATION OF NEW DOOR AND FRAME.
- PEPARE FOR INSTALLATION OF NEW BRICK VENEER AND WALL SHEATHING, AND SHEATHING PER SCHEDULE.
- D18 REMOVE EXISTING SOFFIT, GUTTERS, DOWNSPOUTS, AND METAL FASCIA/FRIEZE WRAP FOR INSTALLATION OF NEW SOFFITS, GUTTERS, DOWNSPOUTS, AND METAL FASCIA/FRIEZE WRAP (TYPICAL).
- D19 REMOVE PLUMBING FIXTURE SEE PLUMBING DRAWINGS.

C. D. E.





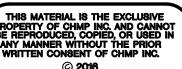
DEMOLITION GENERAL NOTES

- A. ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.
- B. REFER TO "SELECTIVE DEMOLITION" SECTION 02 41 19 AND "CUTTING AND PATCH" SECTION 01 73 29 FOR ADDITIONAL REQUIREMENTS.
- C. COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.
- D. REFER TO MECHANICAL AND ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION.
- E. CONTRACTOR TO COORDINATE WITH OWNER IF ANY ITEMS ARE TO BE SALVAGED OR STORED PRIOR TO CONSTRUCTION.
- F. THE INTENT OF THE DEMOLITION WORK IS TO REMOVE ALL INTERIOR FLOOR FINISHES, FINISH CEILINGS, INTERIOR WALL PARTITIONS (NOTED), DOORS, ETC. TO LOAD BEARING STUD WALLS UNLESS NOTED OTHERWISE.
- G. ALL DEMOLISHED MATERIALS THAT ARE NOT SALVAGED SHALL BE LEGALLY REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SHORING OF EXISTING STRUCTURE AS REQUIRED FOR INSTALLATION OF NEW LINTELS AT NEW OPENINGS. REFER TO ROOF FRAMING PLAN SHEET S-2.
- I. REFER TO ARCHITECTURAL FLOOR PLAN FOR DIMENSIONS ON NEW FINISHED OPENINGS.

CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



YDE TOWNSHIP MUNCIPAL CENTER SITE & BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

CHECKED BY GNM

SCALE AS NOTED

ISSUED FOR: DATE

OWNER REVIEW 3-20-17

PLAN REVIEW 3-27-17

BIDDING 4-11-17

BULLETIN #1 3-29-18

SHEET NO.

NEW WORK LEGEND

WALL TYPE (SCHEDULE THIS SHEET)

ROOM DESIGNATION - REFER

TO ROOM FINISH SCHEDULE SHEET A4.2.1

PORTABLE FIRE EXTINGUISHER

- REFER TO SECTION 10 44 16

TO SHEET A-7 FOR TYPES &

F.E. OF THE SPECIFICATION WINDOW DESIGNATION - REFER

DETAILS

DOOR DESIGNATION SEE DOOR SCHEDULE A4.3.1

WALL TYPES:

EXTERIOR WALL: BRICK VENEER (MATCH EXISTING) OVER BUILDING WRAP OVER 7/16" OSB SHEATHING OVER 2 x 6 WOOD STUDS @ 16" O.C. (T.O.P.= 12'-0" A.F.F.) WITH 5/8" INTERIOR GYPSUM BOARD FINISH. FILL STUD CAVITY WITH CELLULOSE INSULATION (R-21).

EXTERIOR WALL: EXISTING COMPOSITE BRICK OVER OSB OVER 2 x 4 WOOD STUD WALL TO REMAIN. REPLACE EXISTING INTERIOR FACE GYPSUM BOARD. EXISTING FIBERGLASS INSULATION TO REMAIN.

> INTERIOR WALL: (OFFICE AREA)- 5/8" GYPSUM BOARD (PAINT) OVER 1/2" RESILIENT SOUND CHANNELS OVER EXISTING 2 x 4 WOOD STUDS. 5/8" GYPSUM BOARD FINISH OPPOSITE SIDE. FILL CAVITIES WITH 3" SOUND ATTENUATION INSULATION. EXTEND GYPSUM BOARD 3" ABOVE FINISH CEILING.

INTERIOR WALL: 5/8" TYPE X FIRECODE GYPSUM BOARD EACH SIDE OF 2 x 4 WOOD STUDS SPACED 24" O.C. EXTEND GYPSUM BOARD AND STUDS TIGHT TO UNDERSIDE OF ROOF TRUSSES. 1 HOUR FIRE RATED WALL PARTITION -U.L. DESIGN U314.

INTERIOR WALL: (OFFICE AREA)- 5/8" GYPSUM BOARD (PAINT) OVER 1/2" RESILIENT SOUND CHANNELS OVER 2 x 4 WOOD STUDS SPACED AT 24" O.C. WITH 5/8" GYPSUM BOARD FINISH OPPOSITE SIDE. FILL CAVITIES WITH 3" SOUND ATTENUATION INSULATION. EXTEND WALL UP 3" ABOVE FINISH CEILING.

INTERIOR WALL: 5/8" GYPSUM BOARD FINISH EACH SIDE OF 2 x 4 WOOD STUDS. EXTEND

WALL UP 3" ABOVE FINISH CEILING.

NTERIOR WALL: EXISTING 2 x 4 WOOD STUD WALL, SHEATHING AND INSULATION TO REMAIN. ADD 2 x 4 WOOD STUDS @ 24" O.C.TO UNDERSIDE OF TRUSSES TO REPLACE BRICK VENEER. INSTALL 5/8" TYPE X GYPSUM BOARD TO EACH FACE OF WALL TO ACHIVE 1 HOUR FIRE RATED ASSEMBLY - U.L. DESIGN U314.

INTERIOR WALL: EXISTING BRICK VENEER & 2 x 4 WOOD STUD WALL TO REMAIN. PATCH, REPAIR, AND FINISH EXISTING INTERIOR FACE PER ROOM FINISH SCHEDULE. 5/8" GYPSUM BOARD OVER 2 x 2 WOOD FURRING TO BE INSTALLED OVER BRICK FACE.

NTERIOR WALL: EXISTING WALL FINISH TO REMAIN IN RESTROOMS (PAINT).NEW GYPSUM BOARD FINISH OVER EXISTING STAGGERED 2 x 4 WOOD STUD FRAMING WITH 3-1/2" EXISTING FIBERGLASS INSULATION TO REMAIN.

GENERAL NOTES

- 1. EXTERIOR BUILDING DIMENSIONS ARE MEASURED FROM OUTSIDE FACE OF BRICK (EXCLUDING 1" QUOINS) UNLESS NOTED OTHERWISE.
- 2. ALL INTERIOR DOORS NOT DIMENSIONED SHALL BE SET 4" AWAY FROM ADJACENT WALL.
- 3. REFER TO ROOM FINISH SCHEDULE SECTION ON SHEET A-7 FOR ALL INTERIOR FINISH REQUIREMENTS.
- 4. REFER TO DOOR SCHEDULE ON SHEET A-7 FOR ALL DOOR AND FRAME REQUIREMENTS.
- 5. ALL INTERIOR DIMENSIONS ARE INSIDE CLEAR. REFER TO THE WALL TYPE SCHEDULE ON THIS SHEET.
- 6. F.E. = SURFACE MOUNTED FIRE EXTINGUISHER, R.F.E. = RECESSES FIRE EXTINGUISHER.
- 7. REFER TO SHEET A-7 FOR WINDOW SCHEDULE.

RAMP - UP 6 1/2"

STEP - UP 6 1/2"

MECHANICAL EQUIPMENT. REFER TO THE MECHANICAL DRAWINGS.

ELECTRICAL EQUIPMENT. REFER TO THE ELECTRICAL DRAWINGS. POURED CONCRETE SLAB FOR MECHANICAL EQUIPMENT. COORDINATE EXACT SIZE & LOCATION WITH MECH. CONTRACTOR.

4" PEASTONE BORDER OVER WEED BARRIER AROUND PAD.

72" x 74" RECESSED FLOOR MAT. (SECTION 124813)

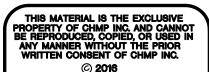
RECESSED NIGHT DEPOSIT BOX

WOOD HANDRAIL - STAIN AND VARNISH

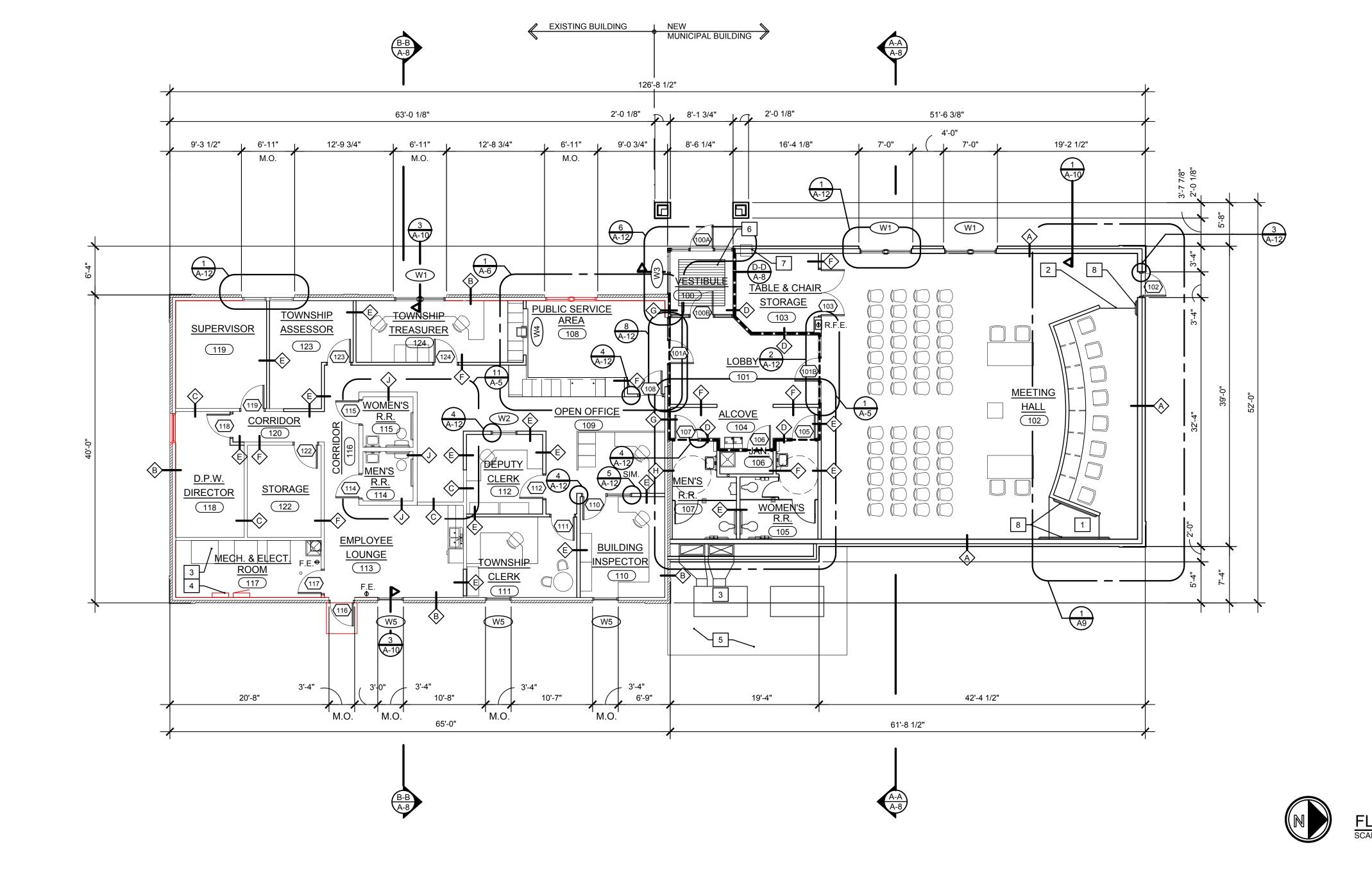
PLAN REFERENCED NOTES:

CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48439 TELEPHONE 810/695-5910

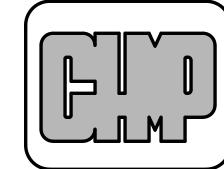
ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING



PLAN REVIEW 1 BULLETIN #1 3-29-18 A-1



CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48439 TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING

PLAN REFERENCE NOTES:

5/8" SUSPENDED GYPSUM BOARD SOFFIT/ BULKHEAD - REFER TO 09 25 55 "GYPSUM BOARD ASSEMBLIES" OF THE SPECIFICATIONS - REFER TO ROOM FINISH SCHEDULE FOR HEIGHTS.

2 EXISTING DRYWALL CEILING - PATCH AND PAINT. (MECHANICAL AND ELECTRICAL ROOMS)

3 SHADED CEILING AREA REPRESENTS FIRE RATED ASSEMBLY AT UNDERSIDE OF ROOF TRUSSES AS FOLLOWS: (1) LAYER 5/8' TYPE "X" GYPSUM BOARD OVER 1/2" RESILIENT SOUND CHANNEL (RC-1) @ 12" O.C. ATTACH TO UNDERSIDE OF TRUSS ABOVE - ONE HOUR FIRE RATED (U.L.PS22)

CEILING LEGEND

2' x 4' LAY-IN LIGHT FIXTURE

1' X 4' SURFACE MOUNTED LIGHT FIXTURE

PENDANT MOUNTED LIGHTING FIXTURE

RECESSED DOWN FLUORESCENT LIGHT FIXTURE

WALL MOUNTED EXIT LIGHT FIXTURE

2' x 2' ACOUSTICAL CEILING GRID WITH 6" SONOBATT INSULATION ABOVE ALL EXCEPT MEETING HALL 102 AND TABLE & CHAIR STORAGE 103

PREFINISHED VENTED METAL SOFFIT

GYPSUM CEILING WITH 6" SONOBATT INSULATION ABOVE IN ALL EXCEPT ROOMS 106 AND 118

SUPPLY DIFFUSER

12" x 12" EXHAUST AIR LOUVER

RETURN GRILLE

REFLECTED CEILING PLAN GENERAL NOTES

- A. REFER TO ROOM FINISH SCHEDULE SHEET A-7 FOR ALL CEILING HEIGHTS AND FINISHES.
- B. ANY ACOUSTICAL CEILINGS NOT DIMENSIONED ARE TO BE EVENLY SPACED FROM PERIMETER WALLS IN ROOM.
- C. PAINT ALL EXPOSED MECHANICAL/ELECTRICAL EQUIPMENT, I.E. DUCTWORK, CONDUIT, ETC.



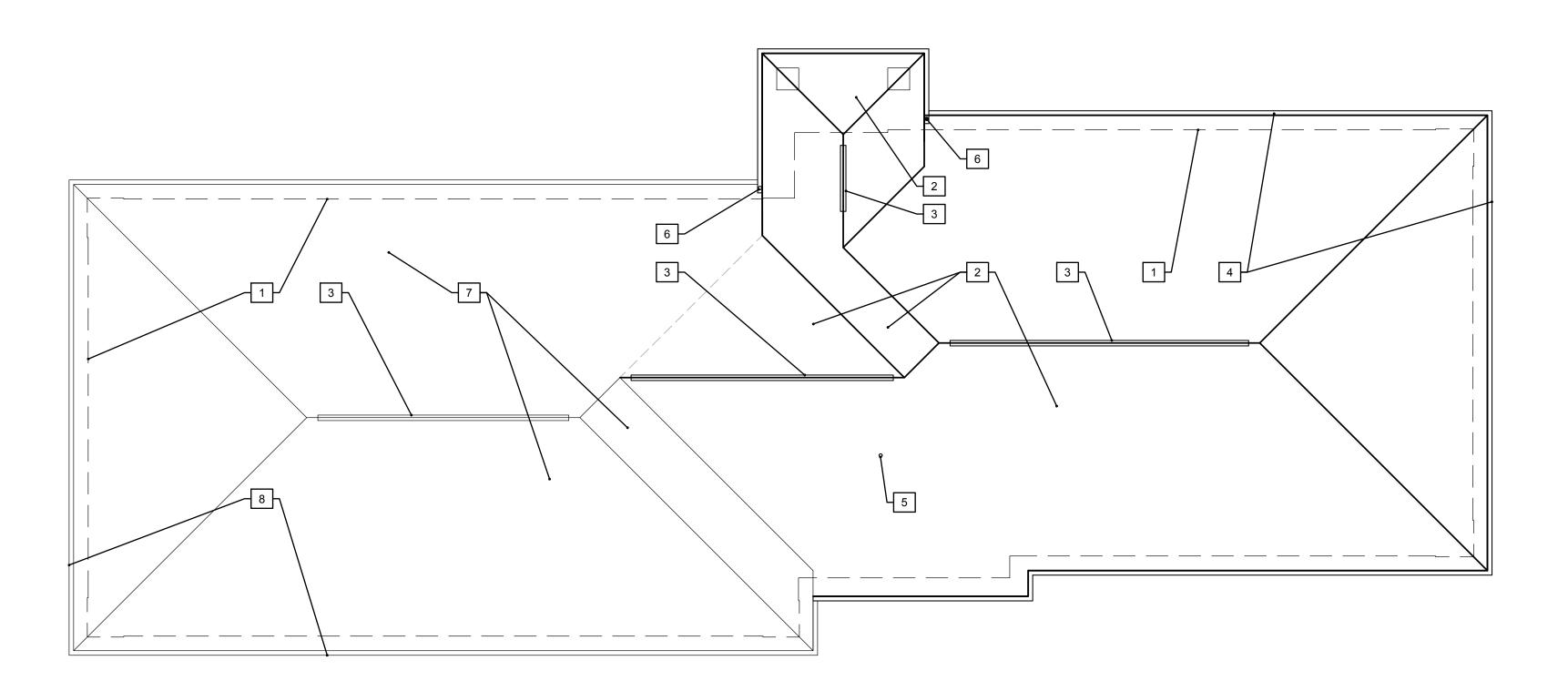
PROJECT NO. FEB. 15, 2016 AS BUILT DATE DRAWN BY AS, GNM CHECKED BY

AS NOTED

ISSUED FOR: DATE OWNER REVIEW 3-20-17 PLAN REVIEW 3-27-17 4-11-17

BIDDING 1 BULLETIN #1 3-29-18

A-2



GENERAL NOTES

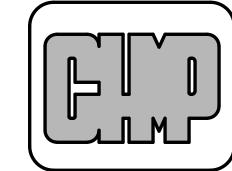
- PAINT ALL EXPOSED VENTS, EXHAUST FANS, WALL GRILLES AND ROOF PENETRATIONS TO MATCH ADJACENT FINISH MATERIALS TYPICAL.
- 2. CONTINUOUS RIDGE VENT SHALL BE CONCEALED TYPE.
- 3. PROVIDE CONCEALED STEP FLASHING AT ALL ROOF / WALL INTERSECTIONS.
- 4. PROVIDE "ICE & WATER SHIELD" UP 36" MINIMUM FROM FACE OF BUILDING (B.L. - TYPICAL) BELOW PERIMETER OF ASPHALT SHINGLE ROOFING AREAS) AND 36" WIDE CENTERED AND BELOW ALL ROOF VALLEYS.

REFERENCE NOTES

- 1 DASHED LINE INDICATES OUTSIDE FACE OF BUILDING BELOW
- 2 ARCHITECTURAL GRADE DIMENSIONAL ROOF SHINGLES OVER SYNTHETIC BUILDING FELT REFER TO SECTION 07 31 16 OF THE SPECIFICATIONS. PROVIDE ICE & WATER SHIELD PROTECTION UP 36" FROM EAVE AND 36" WIDE AT ALL ROOF VALLEYS.
- 3 CONTINUOUS (CONCEALED TYPE) RIDGE VENT
- 4 NEW PREFINISHED METAL GUTTER WITH LEAFGUARD AND DOWNSPOUTS DISCHARGE ONTO PRECAST CONCRETE SPLASH BLOCKS. REFER TO SECTION 07 71 23 OF THE SPECIFICATIONS.
- 5 KEEP ALL MECHANICAL VENT PENETRATIONS ON EAST SIDE OF ROOF RIDGE
- 6 DISCHARGE DOWNSPOUT ON ROOF BELOW
- 7 EXISTING ROOF SHINGLES TO REMAIN
- 8 EXISTING GUTTER AND DOWNSPOUTS TO REMAIN



CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF CHMP INC. AND CANIBE REPRODUCED, COPIED, OR USET ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF CHMP INC.

E TOWNSHIP MUNCIPAL CENTER E & BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

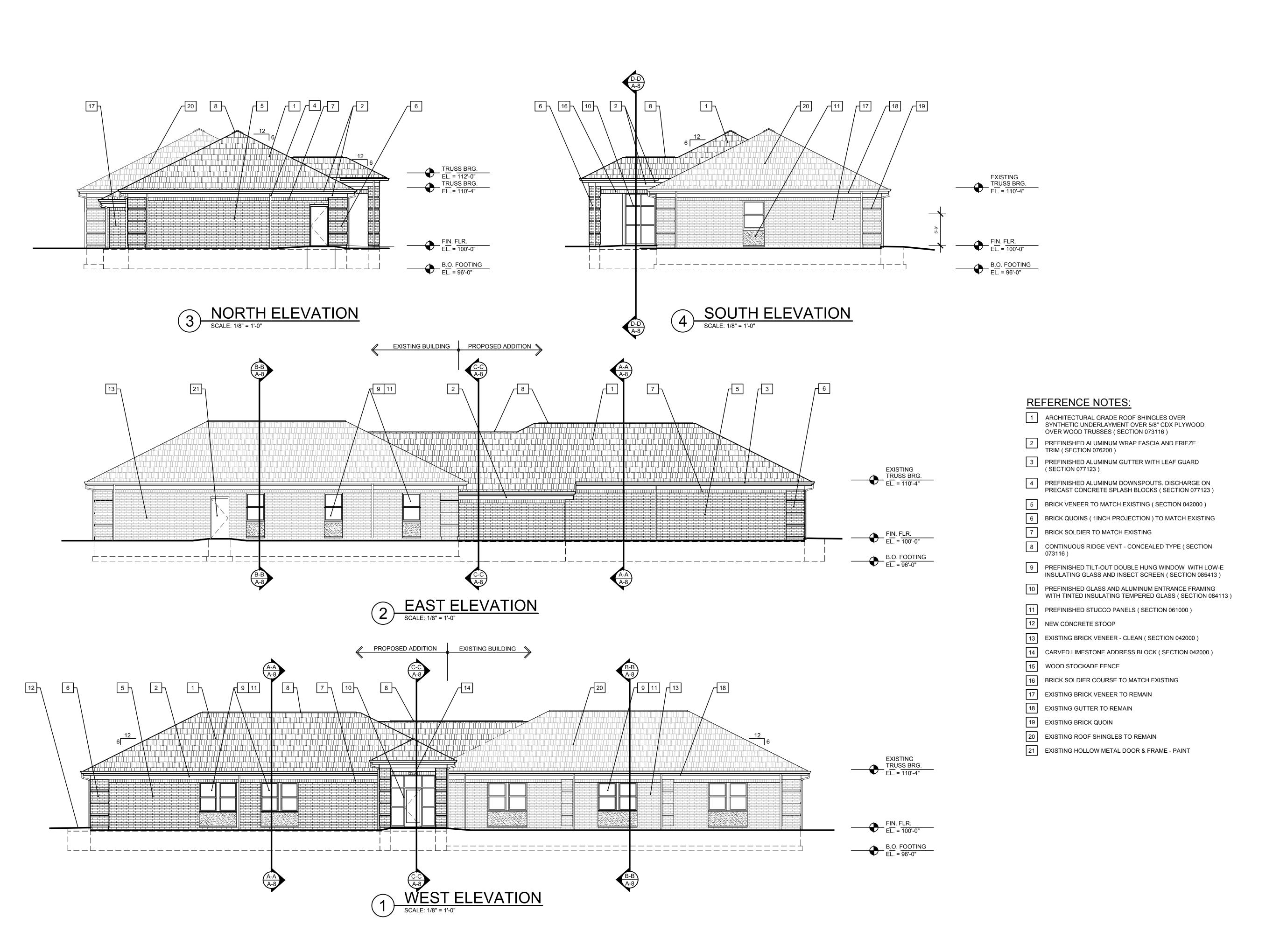
DRAWN BY AS, GNM
CHECKED BY GNM
SCALE AS NOTED
ISSUED FOR: DATE

ISSUED FOR: DATE
OWNER REVIEW 3-20-17
PLAN REVIEW 3-27-17
BIDDING 4-11-17

BIDDING 4-11-17
BULLETIN #1 3-29-18

SHEET NO

A-3



CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF CHMP INC. AND CANNO BE REPRODUCED, COPIED, OR USED I ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF CHMP INC.

ITEN CONSENT OF CHMP INC. © 2018

OWNSHIP MUNCIPAL CENTER BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

CHECKED BY GNM

SCALE AS NOTED

ISSUED FOR: DATE

OWNER REVIEW 3-20-17

PLAN REVIEW 3-27-17

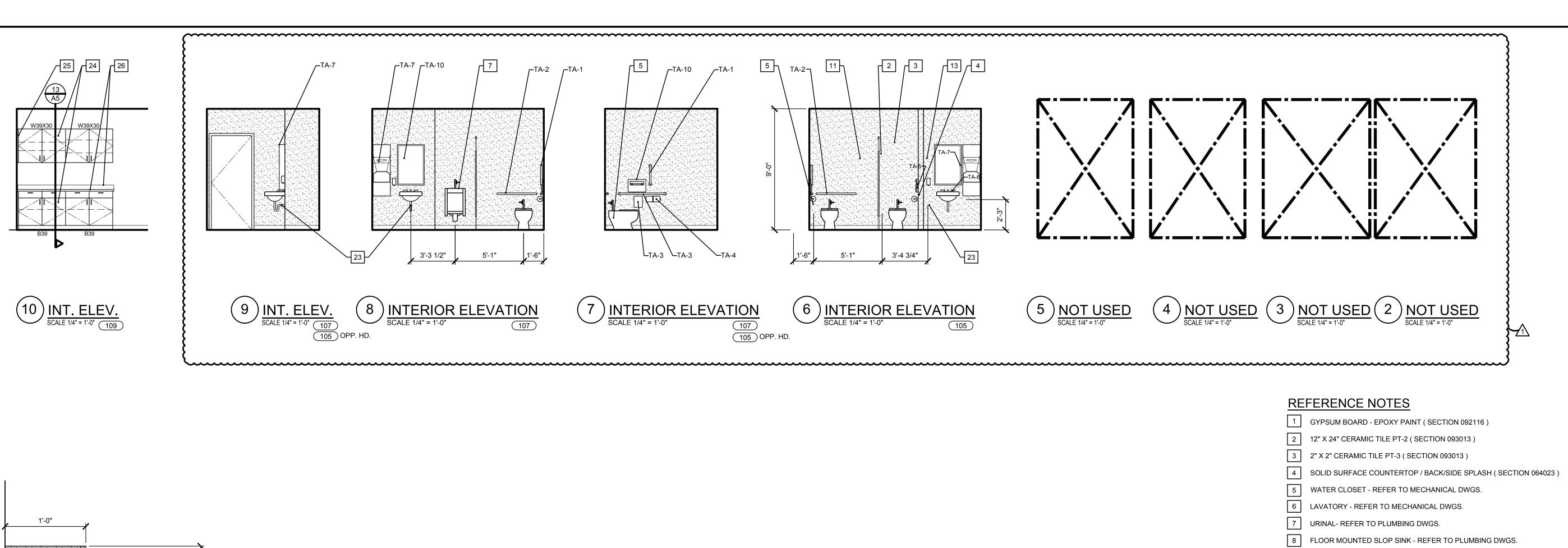
BIDDING 4-11-17

BULLETIN #1 3-29-18

SHEET NO.

A-4

BUILDING ELEVATIONS
SCALE 1/8" = 1'-0"



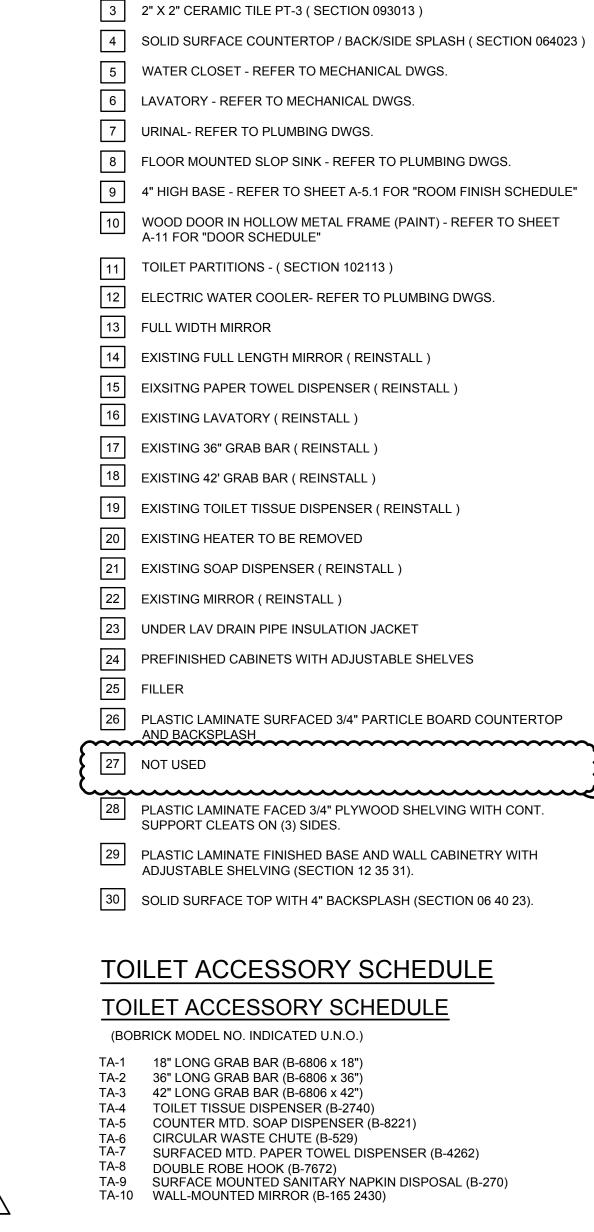
WOMEN'S

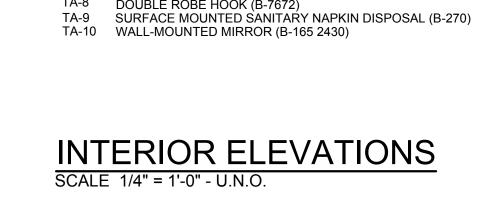
ENLARGED PARTIAL

CABINETS SECTION
SCALE 1 1/2" = 1'-0"

OPEN OFFICE

ENLARGED PARTIAL





CLYDE TOWNSHIP MUNCIPAL CENTE SITE & BUIDI ING IMPROVEMENTS

CHMP INC.

5198 TERRITORIAL ROAD GRAND BLANC, MI 48439 TELEPHONE 810/695-5910

ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

CHECKED BY GNM

SCALE AS NOTED

ISSUED FOR: DATE

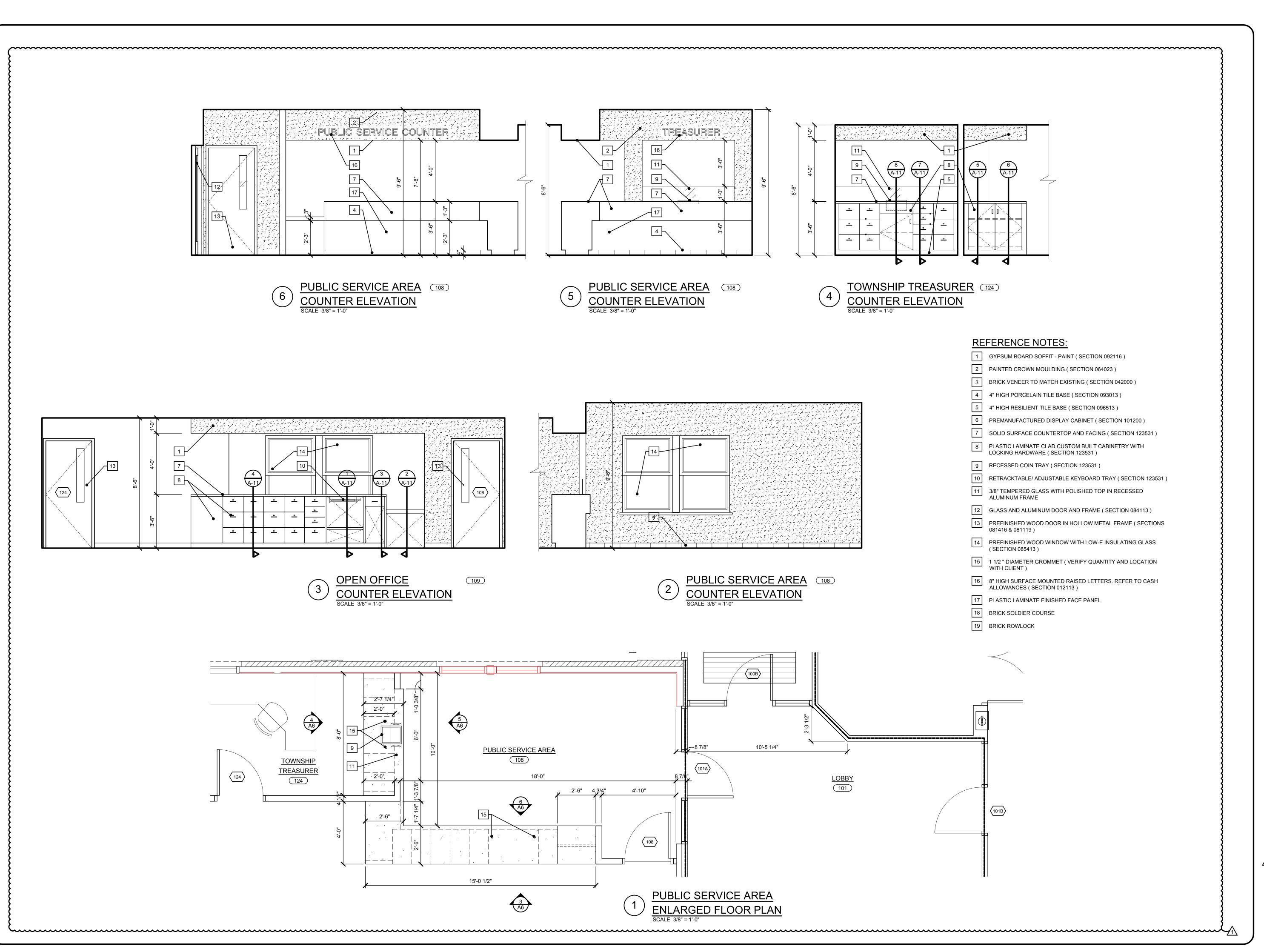
OWNER REVIEW 3-20-17

PLAN REVIEW 3-27-17

BIDDING 4-11-17

BULLETIN #1 3-29-18

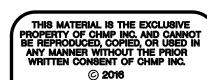
SHEET NO.



CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING



E TOWNSHIP MUNCIPAL CENTER BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

CHECKED BY GNM

SCALE AS NOTED

ISSUED FOR DATE

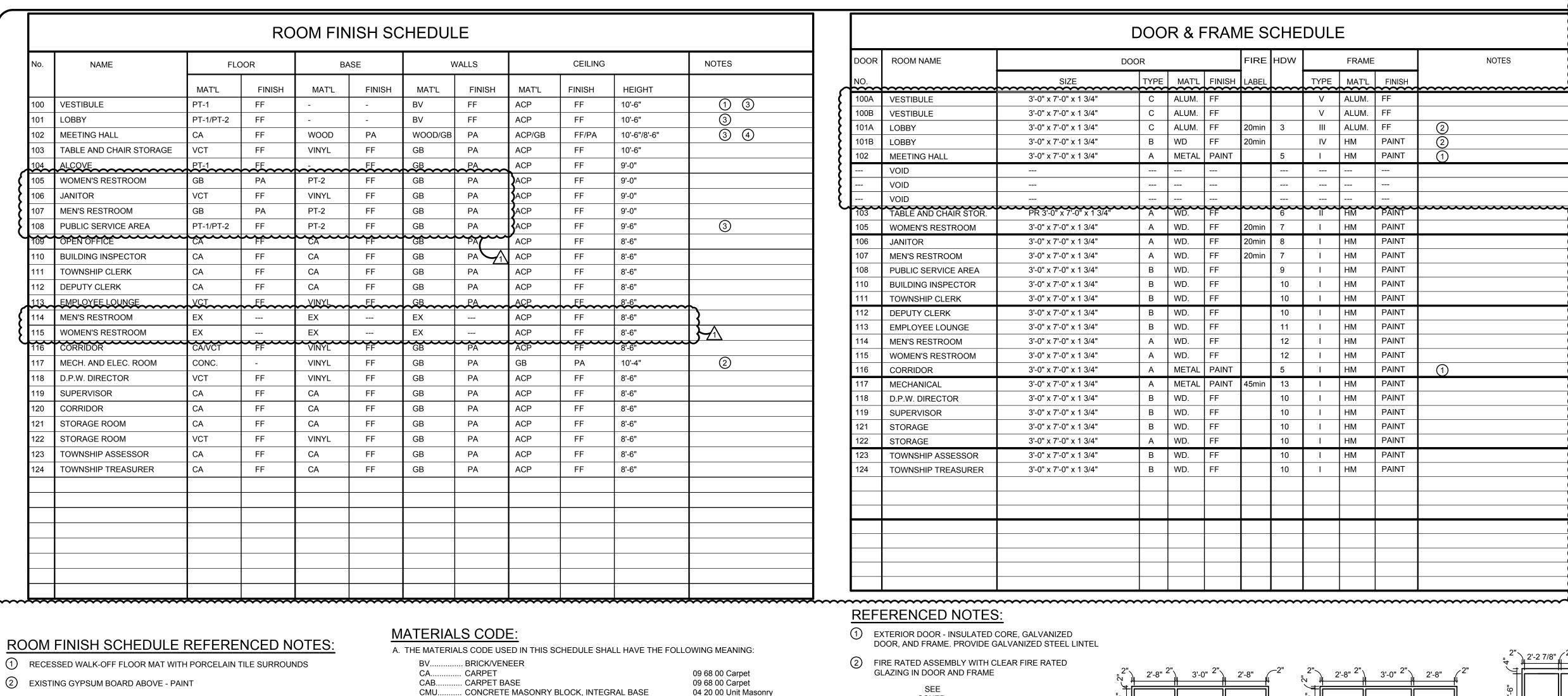
OWNER REVIEW 3-20-17

PLAN REVIEW 3-27-17

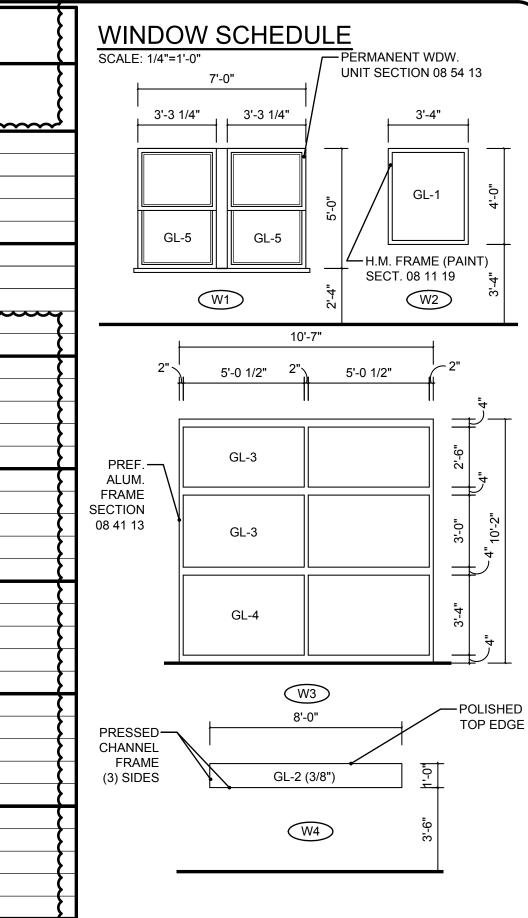
BIDDING 4-11-17

BULLETIN #1 3-29-18

SHEET NO.



				R & F		I		T				SCALE: 1/4"=1'-0" PERMANENT WDV UNIT SECTION 08
OOR	ROOM NAME	DO	OR	ı	1	FIRE	HDW		FRAME	<u> </u>	NOTES	7'-0"
10.		SIZE	TYPE	MAT'L	FINISH	LABEL		TYPE	MAT'L	FINISH		3'-3 1/4" 3'-3 1/4" 3'-4"
100A	VESTIBULE	3'-0" x 7'-0" x 1 3/4"	С	ALUM.	FF			V	ALUM.	FF		
100B	VESTIBULE	3'-0" x 7'-0" x 1 3/4"	С	ALUM.	FF			V	ALUM.	FF		
101A	LOBBY	3'-0" x 7'-0" x 1 3/4"	С	ALUM.	FF	20min	3	III	ALUM.	FF	2	
101B	LOBBY	3'-0" x 7'-0" x 1 3/4"	В	WD	FF	20min		IV	НМ	PAINT	2	
102	MEETING HALL	3'-0" x 7'-0" x 1 3/4"	А	METAL	PAINT		5	I	НМ	PAINT	1	GL-5 GL-5 /
	VOID											H.M. FRAME (I
	VOID											SECT. 08 11 1
	VOID											$ \begin{array}{c cccc} \hline & & & & \\ \hline & $
103	TABLE AND CHAIR STOR.	PR 3'-0" x 7'-0" x 1 3/4"	A	WD.	FF		6		HM	PAINT		
105	WOMEN'S RESTROOM	3'-0" x 7'-0" x 1 3/4"	Α	WD.	FF	20min	7	I	НМ	PAINT		10'-7"
106	JANITOR	3'-0" x 7'-0" x 1 3/4"	Α	WD.	FF	20min	8	I	НМ	PAINT		2" 5'-0 1/2" 2" 5'-0 1/2"
107	MEN'S RESTROOM	3'-0" x 7'-0" x 1 3/4"	Α	WD.	FF	20min	7	I	НМ	PAINT		
108	PUBLIC SERVICE AREA	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		9	I	HM	PAINT		
110	BUILDING INSPECTOR	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10	I	HM	PAINT		
111	TOWNSHIP CLERK	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10	ı	НМ	PAINT		PREF. — GL-3
112	DEPUTY CLERK	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10	I	HM	PAINT		ALUM. \ L
113	EMPLOYEE LOUNGE	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		11	ı	НМ	PAINT		FRAME SECTION
114	MEN'S RESTROOM	3'-0" x 7'-0" x 1 3/4"	A	WD.	FF		12	1	HM	PAINT		08 41 13 GL-3
115	WOMEN'S RESTROOM	3'-0" x 7'-0" x 1 3/4"	Α	WD.	FF		12	I	HM	PAINT		<u> </u>
116	CORRIDOR	3'-0" x 7'-0" x 1 3/4"	Α		PAINT		5	I	HM	PAINT	1	
117	MECHANICAL	3'-0" x 7'-0" x 1 3/4"	Α		PAINT	45min	13	I	HM	PAINT		
118	D.P.W. DIRECTOR	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10	I	HM	PAINT		GL-4
119	SUPERVISOR	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10		HM	PAINT		
121	STORAGE	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10	1	HM	PAINT		
122	STORAGE	3'-0" x 7'-0" x 1 3/4"	А	WD.	FF	<u> </u>	10	'	HM	PAINT		\(\text{W3}\)
123	TOWNSHIP ASSESSOR	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10	1	HM	PAINT		8'-0"
124	TOWNSHIP TREASURER	3'-0" x 7'-0" x 1 3/4"	В	WD.	FF		10	1	HM	PAINT		PRESSED
												CHANNEL FRAME
												(3) SIDES GL-2 (3/8")
												}
						<u> </u>						₩4
									1			· · · · · · · · · · · · · · · · · · ·



GRAND BLANC, MI 48439 TELEPHONE 810/695-5910

5198 TERRITORIAL ROAD





ROOM FINISH SCHEDULE REFERENCED NOTES

- 2 EXISTING GYPSUM BOARD ABOVE PAINT
- 3 PROVIDE 6" CROWN MOLDING AT ROOM PERIMETER REFER TO
- 4 PROVIDE CHAIR RAIL AND WOOD WAINSCOT AROUND PERIMETER OF ROOM AS DETAILED ON DET. 7 OF SHEET A-9
- (5) PROVIDE APPROPRIATE SILL TRANSITION STRIPS AT ALL FLOOR FINISH MATERIAL CHANGES PER DETAILS THIS SHEET.

GENERAL FINISH NOTES

- A. PAINTER TO APPLY ONE COAT PRIMER AND TWO COATS FINISH COLOR TO ALL PAINTED WALLS AND NOTED SURFACES.
- B. CONTRACTOR SHALL PROPERLY CLEAN AND FILL ALL SURFACES TO BE COVERED LEAVING INSTALLATION AREA SMOOTH AND FREE OF FOREIGN MATERIAL AND INSTALL APPROPRIATE UNDERLAYMENT OR PREPARATION PER MANUFACTURER'S RECOMMENDATIONS FOR ALL FLOORING SURFACES.
- PRIOR TO CARPET INSTALLATION, CONTRACTOR TO INSPECT ALL SUB-FLOORING TO INSURE A CLEAN, DRY AND SECURE SURFACE BEFORE INSTALLATION. IF FILLING COMPOUND IS NEEDED FOR FLOOR LEVELING, LATEX BASED SUB-FLOOR FILLER WILL BE USED.

REFERENCE NOTES

- 1 SHEET CARPET, VINYL, AND RESILIENT BASE IN THIS ROOM
- 2 PORCELAIN FLOOR TILE WITH ACCENT AND BASE IN THIS ROOM
- 3 VCT IN THIS ROOM
- PORCELAIN TILE ON FLOOR, BASE, AND WALLS
- RECESSED VINYL LINK WALK-OFF FLOOR MAT REFER TO SPECIFICATION SECTION 12 48 13 WITH PORCELAIN TILE SURROUNDS
- 6 WOOD CHAIR RAIL & WAINSCOT SEE DETAIL 7 ON SHEET A-9
- 7 PORCELAIN TILE AND BASE
- 8 EXISTING CONCRETE
- 9 EXISTING 6" TILE FLOORING
- GL-1: 1/4" CLEAR TRANSPARENT FLOAT PLATE GLASS
- GL-2: CLEAR TRANSPARENT TEMPERED GLASS GL-3: 1" SOLAR BRONZE ANNEALED LOW-E (1/4" SOLAR BRONZE FLOAT x 1/2" AIR SPACE x 1/4" CLEAR TEMPERED)
- GL-4: 1" SOLAR BRONZE TEMPERED LOW-E (1/4" SOLAR BRONZE
- TEMPERED x 1/2" AIR SPACE x 1/4" CLEAR TEMPERED) GL-5: INSULATED GLASS PROVIDED BY PRE-MANUFACTURED WINDOW SUPPLIER. INSULATED LOW-E GLAZING. REFER TO SECTION 08 54 13 OF THE SPECIFICATIONS.

.. CONCRETE MASONRY BLOCK, INTEGRAL BASE CONC...... CONCRETE (WITH SEALER)

... CERAMIC TILE ... EPOXY FLOOR TREATMENT .. GYPSUM BOARD . PORCELAIN TILE

09 61 37 Epoxy Floor Treatment 09 21 16 Gypsum Board Assemblies 09 30 13 Ceramic Tiling .. VINYL COMPOSITION TILE 09 65 19 Resilient Tile Flooring VINYL..... VINYL BASE 09 65 13 Resilient Wall Base & Accessories

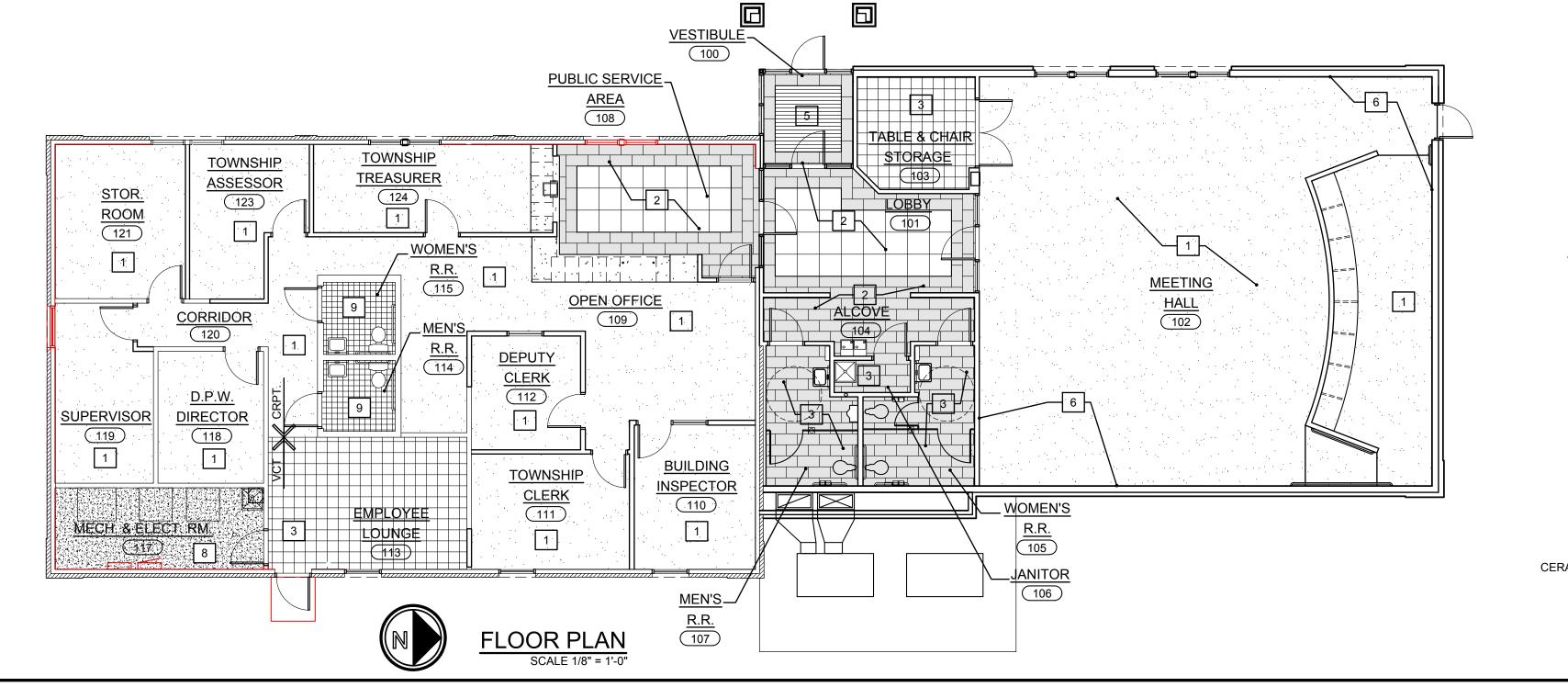
03 30 00 Cast-In-Place Concrete

.. EXISTING FINISH B. THE FINISH CODE USED IN THIS SCHEDULE SHALL HAVE THE FOLLOWING MEANING: (SEE ALSO DOOR SCHEDULE SECTION 00861 FOR FINISHED SCHEDULED THEREIN).

FF - FACTORY FINISH PA - PAINT

S - CONCRETE SEALER

(2) FIRE RATED ASSEMBLY WITH CLEAR FIRE RATED GLAZING IN DOOR AND FRAME 2" SCHED. SEE SCHEDULE V (IV) FRAME TYPES

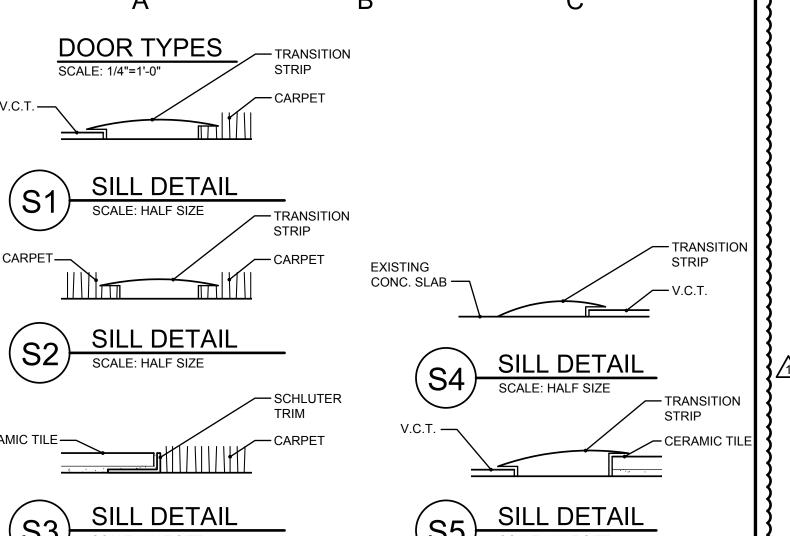


REFERENCED NOTES:

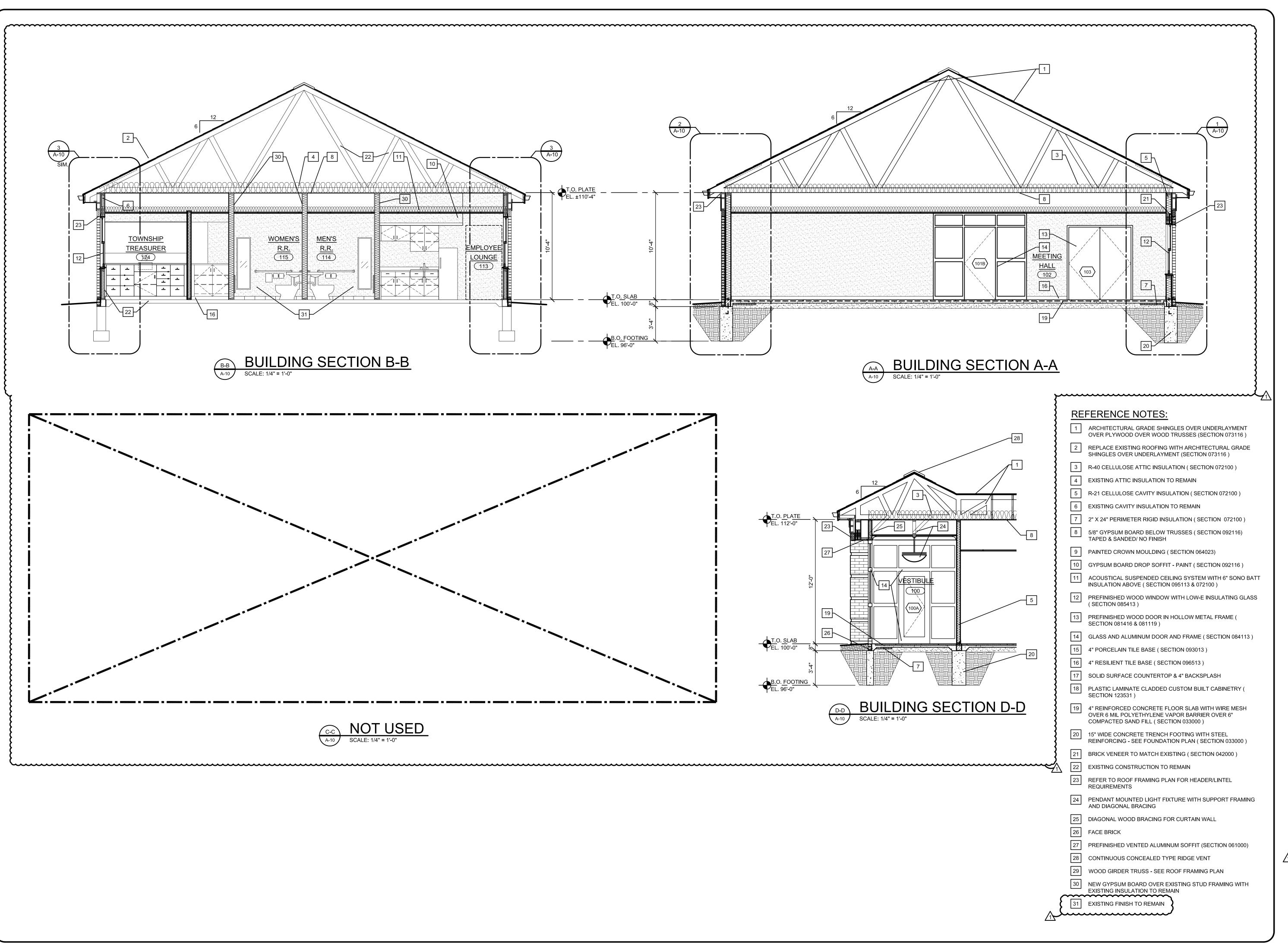
(1) EXTERIOR DOOR - INSULATED CORE, GALVANIZED

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

DOOR, AND FRAME, PROVIDE GALVANIZED STEEL LINTEL



PROJECT NO. FEB. 15, 2016 **AS BUILT DATE** DRAWN BY **CHECKED BY** SCALE AS NOTED **ISSUED FOR:** DATE OWNER REVIEW 3-20-17 PLAN REVIEW 3-27-17 BIDDING 4-11-17 BULLETIN #1 3-29-18



CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING



CLYDE TOWNSHIP MUNCIPAL CENTE SITE & BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

CHECKED BY GNM

SCALE AS NOTED

ISSUED FOR: DATE

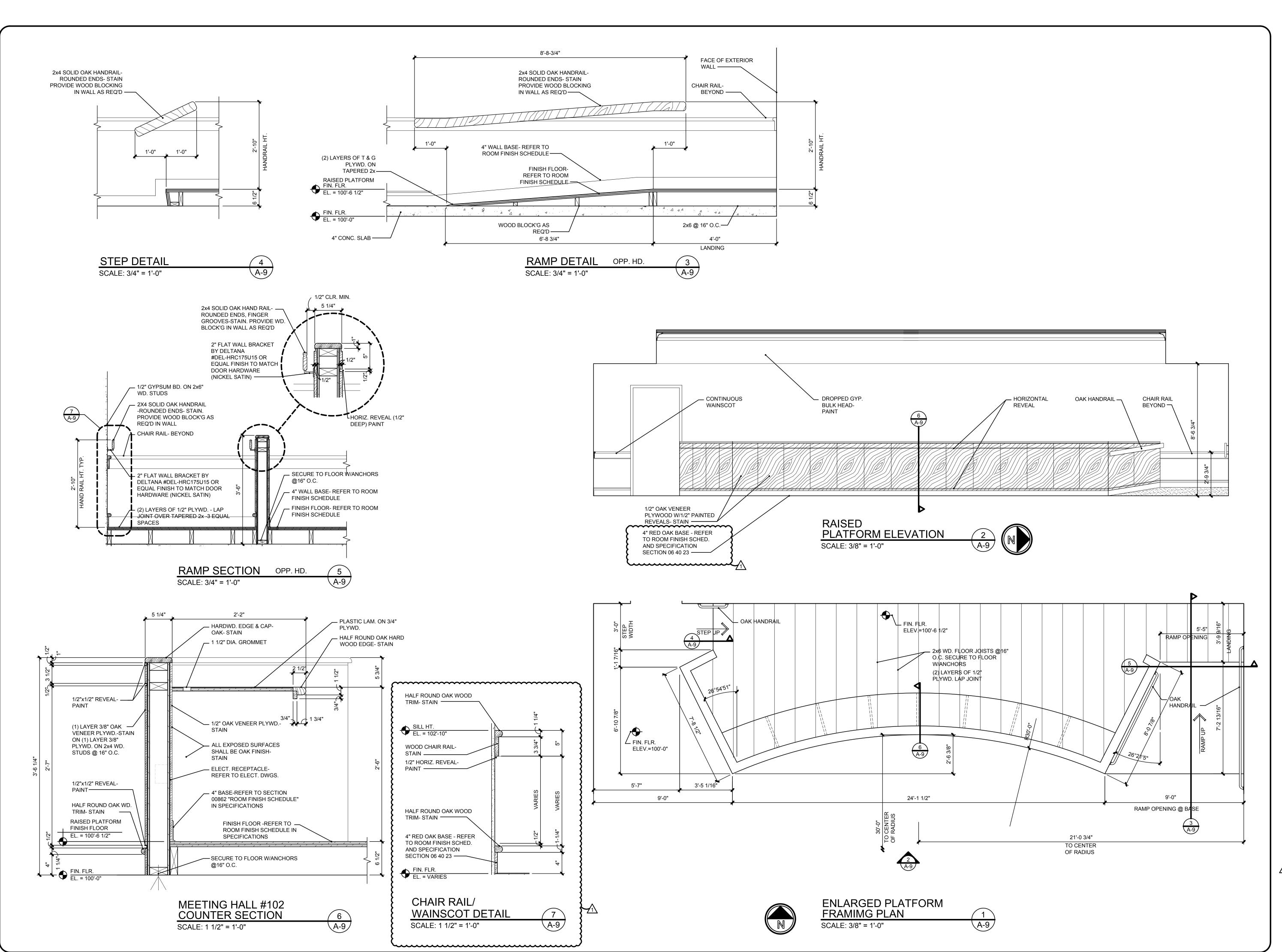
OWNER REVIEW 3-20-17

PLAN REVIEW 3-27-17

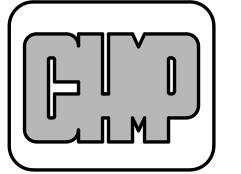
BIDDING 4-11-17

BULLETIN #1 3-29-18

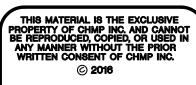
A-8



CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



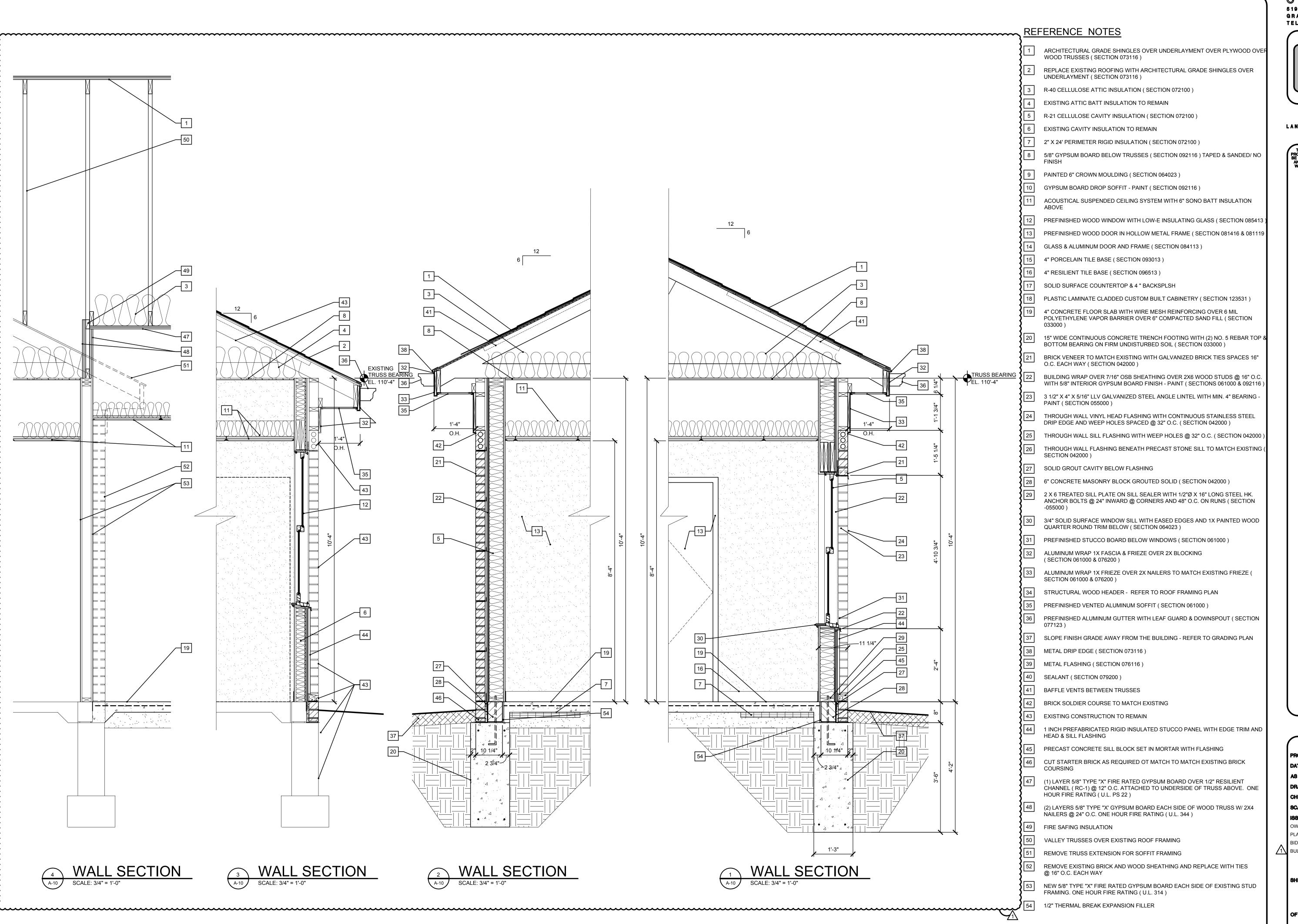
ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



RITTEN CONSENT OF CHMP INC. © 2016

CLYDE TOWNSHIP MUNCIPAL CENTE SITE & BUIDLING IMPROVEMENTS

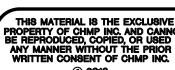
PROJECT NO. 16000800 DATE FEB. 15, 2016 AS BUILT DATE **DRAWN BY** AS, GNM **CHECKED BY** AS NOTED SCALE **ISSUED FOR:** OWNER REVIEW 3-20-17 PLAN REVIEW BIDDING 4-11-17 1\ BULLETIN #1 3-29-18 SHEET NO. A-9



5198 TERRITORIAL ROAD GRAND BLANC, MI 48439 TELEPHONE 810/695-5910



ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING

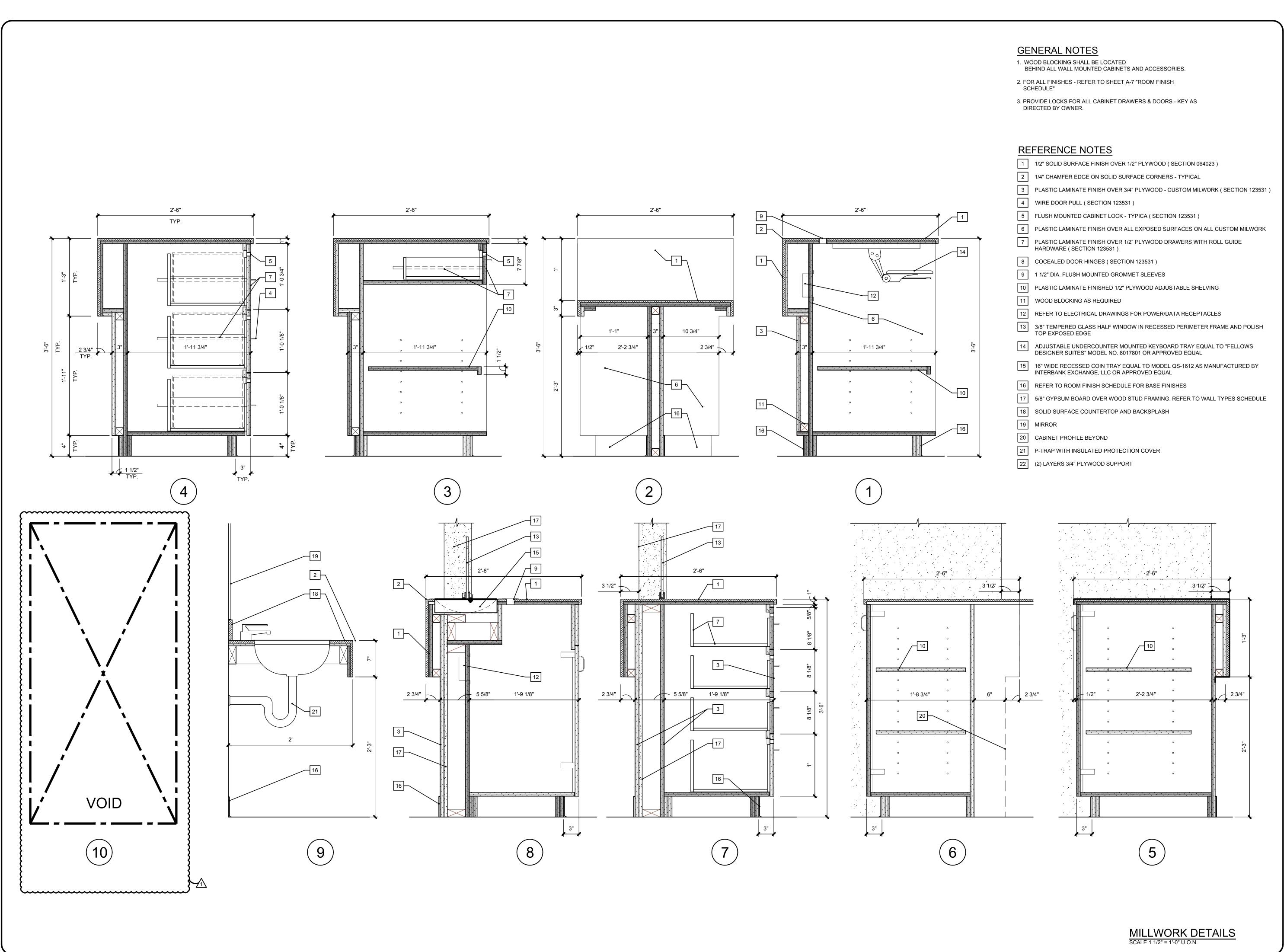


PROJECT NO. FEB. 15, 2016 **AS BUILT DATE CHECKED BY** AS NOTED 88UED FOR: OWNER REVIEW

PLAN REVIEW BIDDING

1\ BULLETIN #1

3-29-18



5198 TERRITORIAL ROAD GRAND BLANC, MI 48439 Telephone 810/695-5910



ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING

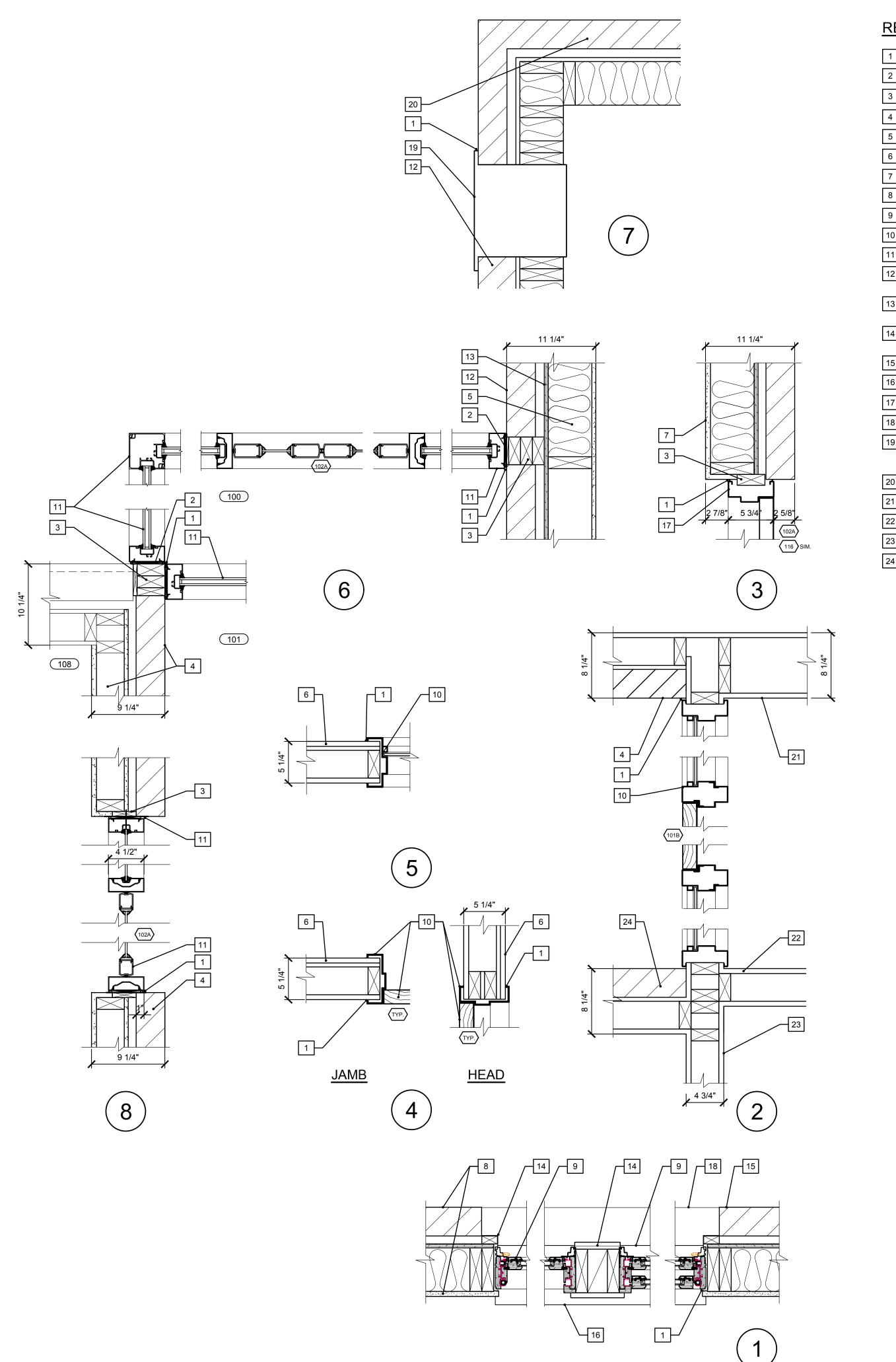
THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF CHMP INC. AND CANNOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF CHMP INC.

PROJECT NO. 16000800 FEB. 15, 2016 AS BUILT DATE DRAWN BY AS, GNM CHECKED BY SCALE AS NOTED

ISSUED FOR: DATE OWNER REVIEW 3-20-17

PLAN REVIEW BIDDING 1\ BULLETIN #1 3-29-18

SHEET NO.



REFERENCE NOTES

- 1 CONTINUOUS SELANT WITH BACKER ROD (SECTION 079200)
- WOOD SHIM AS REQUIRED (SECTION 061000)
- WOOD BOCKING AS REQUIRED (SECTION 061000)
- TYPE "D" WALL (SHEET A-1) REMOVE & REPLACE EXISTING BRICK & SHEATHING
- 5 R-21 CELLULOSE CAVITY INSULATION (SECTION 072100)
- TYPE "E" WALL (SHEET A-1)
- 7 TYPE "A" WALL (SHEET A-1)
- 8 TYPE "A" OR "B" WALL (SHEET A-1)
- 9 PREFINISHED WOOD WINDOW WITH LOW-E INSULATING GLASS (SECTION 085413)
- PREFINISHED WOOD DOOR IN HOLLOW METAL FRAME (SECTION 081416 & 081119)
- GLASS & ALUMINUM DOOR AND FRAME (SECTION 084113)
- BRICK VENEER TO MATCH EXISTING WITH GALVANIZED BRICK TIES SPACES 16"
 O.C. EACH WAY (SECTION 042000)
- BUILDING WRAP OVER 7/16" OSB SHEATHING OVER 2X6 WOOD STUDS @ 16" O.C. WITH 5/8" INTERIOR GYPSUM BOARD FINISH PAINT (SECTIONS 061000 & 092116)
- PREFINISHED ALUMINUM WRAP OVER 1X WOOD TRIM (SECTION 061000) & 076200)
 OVER BUILDING WRAP AND SHEATHING
- 15 TOOTH IN BRICK TO MATCH EXISTING COURSING
- 16 SOLID SURFACE WINDOW SILL (SECTION 068023)
- 17 INSULATED METAL EXTERIOR DOOR IN METAL FRAME (SECTION 081119)
- 18 STONE SILL BELOW
- PREFABRICATED NIGHT DEPOSIT BOX BUILT INTO WALL EQUAL TO MODEL M500-1W AS MANUFACTURED BY INTERBANK-EQUIPMENT WITH DEPOSIT SIDE LOCKABLE ACCESS DOOR. UNIT SHALL BE EXTERIOR GRADE.
 - TYPE A WALL (SHEET A-1) WITHOUT INSULATION AND EXTERIOR GYPSUM BOARD
 - PAINTED GYPSUM BOARD FINISH

 TYPE F WALL (SHEET A-1)
 - 23 TYPE G WALL (SHEET A-1)
 - 24 TYPE C WALL (SHEET A-1)

CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING



E & BUIDLING IMPROVEMENTS

PROJECT NO.

DATE FE

AS BUILT DATE

DRAWN BY

CHECKED BY

SCALE

ISSUED FOR: DATE
OWNER REVIEW 3-20-1
PLAN REVIEW 3-27-1

OWNER REVIEW 3-20-17
PLAN REVIEW 3-27-17
BIDDING 4-11-17

SHEET NO.

A-12

ENLARGED PLAN DETAILS

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

WORK INCLUDED

THE CONTRACTOR SHALL PROVIDE ALL ITEMS, ARTICLES, MATERIALS, OPERATIONS, OR METHODS MENTIONED, LISTED, OR SCHEDULED ON THE DRAWINGS AND IN THESE SPECIFICATIONS, INCLUDING ALL LABOR, MATERIALS, EQUIPMENT AND ALL INCIDENTALS NECESSARY REQUIRED FOR THE COMPLETION AND OPERATION OF ALL SYSTEMS. CONTRACTOR SHALL REFERENCE THE EXISTING ARCHITECTURAL AND ELECTRICAL PLANS AND SPEC'S FOR PROJECT COORDINATION. ALL FEES REQUIRED FOR LOCAL OR STATE INSPECTIONS SHALL BE PAID BY THE CONTRACTOR AS PART OF HIS CONTRACT.

LOCAL CONDITIONS

THE CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH CONDITIONS WHICH WILL AFFECT THE WORK HE IS TO PERFORM.

PERMITS AND INSPECTIONS

THE CONTRACTOR SHALL TAKE OUT ALL PERMITS REQUIRED AND ARRANGE FOR ALL NECESSARY INSPECTIONS AND SHALL PAY ALL FEES AND EXPENSES IN CONNECTION THEREWITH AS A PART OF THEIR WORK UNDER THEIR CONTRACT.

UPON COMPLETION OF THE WORK, THEY SHALL FURNISH TO THE OWNER ALL CERTIFICATES OF INSPECTION AND APPROVAL WHICH ARE CUSTOMARY FOR THE CLASSES OF WORK INVOLVED.

RULES, CODES AND STANDARDS

ALL WORK SHALL BE PERFORMED OR INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND CODES OF LOCAL, STATE AND FEDERAL GOVERNMENTS, OR OTHER AUTHORITIES HAVING LAWFUL JURISDICTION AND EACH CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR SUCH COMPLIANCE.

ALL MECHANICAL WORK AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL AUTHORITIES, NFPA, NEC, UL, MBC, MPC, MMC, ASHRAE, STATE FIRE SAFETY CODES, OSHA, AND SHALL BEAR THE LABEL OF INSPECTION AND APPROVAL OF THE UNDERWRITERS LABORATORIES.

EXTRA WORK

FOR ANY EXTRA MECHANICAL WORK WHICH MAY BE PROPOSED, THIS CONTRACTOR SHALL FURNISH TO THE GENERAL CONTRACTOR AN ITEMIZED BREAKDOWN OF THE ESTIMATED COST OF MATERIALS AND LABOR REQUIRED TO COMPLETE THIS WORK. TO THIS COST SHALL BE ADDED A PERCENTAGE TO COVER ALL ITEMS OF INSURANCE, OVERHEAD AND PROFIT AS LISTED IN CONTRACTOR'S PROPOSAL. THE MECHANICAL CONTRACTOR SHALL PROCEED ONLY AFTER RECEIVING A WRITTEN ORDER FROM THE GENERAL CONTRACTOR ESTABLISHING THE AGREED PRICE AND DESCRIBING THE WORK TO BE DONE.

SCHEDULE OF WORK

THE CONTRACTOR SHALL EXPEDITE HIS WORK IN ORDER TO CONFORM TO THE DATES OUTLINED IN THE GENERAL CONTRACTOR'S PROGRESS SCHEDULE AND WHERE NECESSARY SHALL WORK OVERTIME AT HIS OWN EXPENSE SO THAT ALL WORK MAY BE COMPLETED WITHIN THE TIME OUTLINED.

CUTTING AND PATCHING

THE MECHANICAL CONTRACTOR SHALL "BUILD IN" HIS WORK AND SHALL BE RESPONSIBLE FOR HOLDING HIS WORK IN PLACE WHILE CONCRETE IS BEING POURED AND WHILE WALLS ARE BEING LAID.

ALL MEASUREMENTS NECESSARY FOR THE PROPER INSTALLATION OF MATERIALS OR APPARATUS SHALL BE TAKEN IN THE FIELD. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR CORRECT FIT OF WORK INSTALLED.

CUTTING AND PATCHING OF EXISTING WALLS, FLOOR, CEILING, ETC. TO INSTALL NEW MECHANICAL SYSTEM IS BY THE M.C.

AS-BUILT DRAWINGS

FURNISH ONE SET OF DRAWINGS AT THE COMPLETION OF THE WORK REFLECTING ALL CHANGES AND ADDITIONS FROM THE BID SET DOCUMENTS FOR PERMANENT RECORDS.

GUARANTEE AND WARRANTY

CONTRACTOR SHALL GUARANTEE ALL WORK INSTALLED BY HIM OR HIS SUBCONTRACTORS TO BE FREE FROM DEFECT IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF THE WORK, UNLESS A LONGER PERIOD IS STIPULATED UNDER SPECIFIC HEADINGS, AND HE SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THIS OWNER, ANY MATERIAL OR EQUIPMENT DEVELOPING DEFECTS AND SHALL ALSO MAKE GOOD ANY DAMAGE CAUSED BY SUCH DEFECTS OR THE CORRECTION OF DEFECTS. REPAIRS OR REPLACEMENTS SHALL BEAR ADDITIONAL TWELVE (12) MONTHS GUARANTEE, AS ORIGINALLY CALLED FOR, DATED FROM THE FINAL ACCEPTANCE OF THE REPAIR OR REPLACEMENT. THIS REQUIREMENT SHALL BE BINDING EVEN THOUGH IT WILL EXCEED PRODUCTS GUARANTEES FURNISHED BY SOME MANUFACTURERS.

CONTRACTOR SHALL SUBMIT HIS OWN AND EACH EQUIPMENT MANUFACTURER'S WRITTEN CERTIFICATES, WARRANTING THAT EACH ITEM OF EQUIPMENT FURNISHED COMPLIES WITH ALL REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS.

NOTE THAT GUARANTEE SHALL RUN FROM DATE OF FINAL ACCEPTANCE OF THE WORK, NOT FROM DATE OF INSTALLATION OF A DEVICE OR PIECE OF EQUIPMENT.

SUBMITTALS - SUBMIT SHOP DRAWINGS ON PDF'S FOR ALL EQUIPMENT. DO NOT ORDER EQUIPMENT UNTIL SHOP DRAWINGS ARE APPROVED. SUBMIT SHOP DRAWINGS ON

MAINTENANCE MANUALS - SUBMIT (2) TWO MAINTENANCE MANUALS FOR ALL EQUIPMENT. MAINTENANCE MANUALS TO INCLUDE COPY OF APPROVED SHOP DRAWINGS AND MANUFACTURER RECOMMENDED SCHEDULE OF MAINTENANCE OF EQUIPMENT.

ALL ITEMS ON THE DRAWINGS ARE DESIGNED AROUND BASE BID ITEMS. IF CONTRACTOR USES EQUIPMENT OTHER THAN BASE BID, HE SHALL COORDINATE WITH OTHER TRADES.

FIRE RATING

EQUIPMENT SCHEDULES

MAINTAIN ALL CEILING/FLOOR/WALL FIRE RATINGS WITH UL RATED FIRE ASSEMBLIES AS MANUFACTURED BY THE 3-M COMPANY . FIRE DAMPERS SHALL MEET UL 555 WITH GALV SLEEVES AND DUCT ACCESS DOORS. INSTALL PER SMACNA-STATE FIRE MARSHALL REQUIREMENTS. FIRE DAMPER GREENHECK DFD-150. LABEL ALL ACCESS DOORS PER CODE.

<u>DUCTWORK</u>

ALL SUPPLY. RETURN AND EXHAUST DUCTWORK SHALL BE HEAVY GALVANIZED SHEET METAL WITH NEXUS FITTINGS CONFORMING TO SMACNA STANDARDS. ALL DUCTWORK SHALL HAVE ALL JOINTS SEALED WITH MASTIC.

ALL DUCTS SHALL BE OF THE BEST GRADE GALVANIZED STEEL, EXCEPT WHERE OTHERWISE SPECIFIED, MADE UP WITH PITTSBURGH LOCK SEAMS MADE AIR TIGHT, AND JOINTED TOGETHER WITH LOCKING STRIPS IN SUCH A MANNER THAT THERE ARE NO OPENINGS FOR LEAKAGE OF AIR. EACH FLAT SURFACE OF EVERY SECTION OF DUCTWORK SHALL BE PANELED, EXCEPT DUCTS 8" X 6" AND SMALLER. THE GAUGES, BRACING, REINFORCING AND DETAILS OF ALL DUCTWORK SHALL CONFORM TO THE SHEET METAL AND AIR-CONDITIONING CONTRACTORS NATIONAL ASSOCIATION STANDARDS LOW VELOCITY DUCT CONSTRUCTION.

THE CONTRACTOR SHALL CHANGE THE SHAPE OF ANY DUCT, PRESERVING THE FULL EFFECTIVE AREA AS CALLED FOR ON PLANS, WHERE REQUESTED BY THE ENGINEERS TO SUIT CONSTRUC-TION OF BUILDING OR EQUIPMENT INSTALLED, BUT SHALL NOT EXCEED A WIDTH TO HEIGHT RATIO OF 3 TO 1. DUCTWORK SHALL NOT BE FABRICATED UNTIL VERIFICATION OF JOB FIELD CONDITIONS AN BE MADE SO THAT CHANGES IN SHAPE OF DUCTS WILL NOT BE REQUIRED AFTER FABRICATION.

VANES AND DEFLECTORS: ALL ELBOWS AND TURNS SHALL BE MADE WITH A CENTERLINE RADIUS OF NOT LESS THAN 1-1/2 THE DIAMETER OR WIDTH. WHERE THE BUILDING CONSTRUC-TION DOES NOT PERMIT A LONG RADIUS ELBOW OR TURN, OR IF SHOWN ON THE DRAWINGS. THE ELBOWS SHALL BE CONSTRUCTED WITH DEFLECTORS THAT SHALL BE CONSTRUCTED OF GALVANIZED RESPONDING SIZE. ALL SUCH VANES SHALL BE SECURELY ANCHORED TO DUCTS AND SHALL HAVE FREESTANDING EDGES WITH BRACING. MITERED ELBOWS SHALL CONTAIN DOUBLE THICKNESS TURNING VANES WITH SIDE RAILS AND FASTENERS AS SPECIFIED

ALL DUCTWORK SHALL BE SUPPORTED PER SMACNA STANDARDS. CABLE HANGING SUPPORT SYSTEMS AS MANUFACTURE BY DYNA-TITE IS ACCEPTABLE.

THE CONTRACTOR SHALL FURNISH AND INSTALL MANUAL VOLUME REGULATORS WITH LOCKS. VOLUME REGULATORS SHALL BE SURFACE QUADRANT TYPE WITH PERMANENT KEY OPERATOR, VENTFABRICS, INC. #641, OR APPROVED EQUAL, WITH ROD SIZES AS RECOMMENDED BY MANUFACTURER.

THE CONTRACTOR SHALL SEAL ALL SUPPLY, RETURN AND EXHAUST DUCTWORK JOINTS PER CLASS 'A' REQUIREMENTS WITH 3M OR UNITED DUCT SEALER AND PRESSURE SENSITIVE TAPE.

<u>AIR BALANCING</u>

PROVIDE AIR BALANCE FOR REPORT FOR ROOFTOP UNIT, FURNACES, GRILLES, ETC. PROVIDE THREE (3) COPIES.

CLEANING AND FINISHING

DURING THE CONSTRUCTION PROCESS, CONTRACTOR SHALL REMOVE ALL DEBRIS, RUBBISH, ETC. TO

MAINTAIN A SAFE WORKING ENVIRONMENT.

ACCESS DOORS

ACCESS DOORS FOR ALL EQUIPMENT LOCATED ABOVE DRYWALL CEILINGS. **ROOF PENETRATIONS**

FURNISH AND INSTALL FLASHING FOR ALL ROOF PENETRATIONS. MATERIALS TO BE COMPATIBLE WITH ROOFING CONSTRUCTION.

HVAC SYSTEMS

apeer Rd

HVAC SYSTEM DESIGN AND CONSTRUCTION SHALL MEET NFPA-90A AND 90B AND HAVE A FLAME SPREAD RATING OF NOT OVER 25 AND SMOKE DEVELOPE RATING OF NOT OVER 50.

OVERVIEW OF MECHANICAL SCOPE

THIS OVERVIEW OF SCOPE IS INCLUDED TO GIVE THE CONTRACTOR A GENERAL OVERVIEW OF THE PROJECT REQUIREMENTS. THE OVERVIEW IS NOT ALL INCLUSIVE AND IS NOT INTENDED TO, AND SHOULD NOT BE USED TO, ESTABLISH CONTRACT LIMITS OR PRICING INCLUSIONS. THE CONTRACT DOCUMENTS SHALL BE USED TO ESTABLISH CONSTRUCTION CONTRACT SCOPE.

THIS OVERVIEW OF SCOPE INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING: MECHANICAL:

REMOVE EXISTING FURNACES, DUCTWORK, PIPING, CONDENSING UNIT, REFRIGERANT AND REFRIGERANT PIPING, CONTROLS, ETC.

- 2. PROVIDE NEW FURNACES, CONDENSING UNITS, DUCTWORK, GRILLES, GAS PIPING, FLUES AND VENTS, ETC.
- 3. PROVIDE ROOFTOP UNIT, DUCTWORK, GRILLES, GAS PIPING, ETC.
- 4. PROVIDE PLUMBING FIXTURES, SANITARY WASTE/VENT PIPING, HOT & COLD WATER PIPING, WATER HEATER, INSULATION, PIPE LABELS, ETC.
- 5. PROVIDE AIR BALANCE.
- 6. PROVIDE CHECK TEST AND START UP.
- PROVIDE AS—BUILT DRAWINGS.

PROJECT REQUIREMENTS

PROVIDE AND PAY FOR ALL NECESSARY PERMITS. ALL WORK SHALL BE INSTALLED TO COMPLY WITH THE OWNER'S STANDARDS, STATE AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING CODES AND THEIR RELATED REFERENCES.

- 2012 MICHIGAN BUILDING CODE
- 2012 MICHIGAN MECHANICAL CODE
- 2012 MICHIGAN PLUMBING CODE
- 2012 INTERNATIONAL FIRE CODE (AS REFERENCED)
- MICHIGAN UNIFORM ENERGY CODE-ASHRAE 90.1-2007

2014 N.E.C. AS AMENDED BY 2014 MICHIGAN ELECTRICAL CODE RULES PART "8"

MANUFACTURER AND MODEL NUMBER LISTED REPRESENTS THE BASIS OF DESIGN FOR THIS PROJECT. THE MECHANICAL CONTRACTOR SHALL BEAR ALL ADDITIONAL COST ASSOCIATED WITH USING EQUIPMENT BY OTHER APPROVED MANUFACTURERS INCLUDING ADDITIONAL COSTS BY OTHER TRADES.

ALL EQUIPMENT INSTALLED SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE FIELD OR PROJECT CONDITIONS DO NOT ALLOW ALL MANUFACTURER'S RECOMMENDATIONS TO BE MET, THE INSTALLING CONTRACTOR SHALL SUBMIT IN WRITING TO THE ENGINEER THE PROPOSED DEVIATION, IN A SKETCH FORM, ACCOMPANIED BY THE MANUFACTURER'S CONCURRENCE.

<u>VENTILATION</u>

BASED 2012 MMC SECTION 403

MEETING ROOM: $1936 \div 1000 \times 50 \times 5 + 1936 \times 0.06 \div 0.8 = 750$ CFM $156 \times 0.12 \div 0.8 = 24$

TOTAL O.A. = 774 CFM

F-1 (WEST):

Ponderosa Dr

LOBBY: $210 \div 1000 \times 10 \times 5 + 210 \times 0.06 \div 0.8 = 30$ CFM ALCOVE: $105 \times 0.06 \div 0.8 = 8 \text{ CFM}$ PUBLIC SERVICE: $180 \div 1000 \times 10 \times 5 + 180 \times 0.06 \div 0.8 = 48 \text{ CFM}$ $386 \div 1000 \times 5 + 386 \times 0.06 \div 0.8 = 41 \text{ CFM}$ OFFICES: STORAGE: $217 \times 0.12 \div 0.8 = 33 \text{ CFM}$

TOTAL O.A. = 160 CFM

F-2 (EAST):

OFFICES: $1000 \div 1000 \times 5 + 1000 \times 0.06 \div 0.8 = 110 \text{ CFM}$ CORRIDOR: $158 \times 0.06 \div 0.8 = 20 \text{ CFM}$ $156 \div 1000 \times 25 \times 5 + 156 \times 0.06 \div 0.8 = 37 \text{ CFM}$ LOUNGE:

TOTAL O.A. = 167 CFM

	ARCHITECTURAL	- MI	ECHA	NICA	.L – E	LECTR	RICAL	COORI	DINATIO	ON SC	HEDULE
					ELEC	TRICAL	DISCO	NNECT	STAF	RTER	
DESIGNATION	LOCATION	HP	KW	MCA	VOLTAGE	PHASE	FURN.	INST.	FURN.	INST.	REMARKS
RTU-1	GRADE			49.6	208	3	S	S	S	S	THERMOSTAT, 10 TON, CO₂ SENSOR
F-1 & F-2	MECHANICAL ROOM			14.1	120	1	E	E	S	S	THERMOSTAT
CU-1 & CU-2	GRADE			21	208	3	E	E	S	S	INTERLOCK W/FURNACE
EWC	ALCOVE	1/6			120	1	E	E	S	S	
EWH-1	VESTIBULE		4		208	1	E	E	S	S	
WH-1	JANITOR CLOSET		4.5		208	3	E	E	S	S	
EF-1 & 2	TOILETS		0.13		120	1	S	S	E	E	
EF-3	JANITOR CLOSET		0.08		120	1	S	S	E	E	
EF-4 & 5	TOILETS		0.08		120	1	S	S	E	E	
		•			•				•	•	•

<u>LEGEND</u>

=	SUPPLIER (MANUFACTURER)*	EF		EXHAUST FAN
=	MECHANICAL	RTU		ROOFTOP UNIT
=		WH		WATER HEATER
=	ELECTRICAL	EWC	=	ELECTRIC WATER COOL
=	WATTS	EWH	=	ELECTRIC WALL HEATE

* - ITEMS INDICATED AS SUPPLIER SHALL BE PROVIDED WITH THE ITEM/ EQUIPMENT OR BY THE CONTRACTOR PURCHASING THE ITEM/EQUIPMENT

LEGEND

MECHANICAL CONTRACTOR

PLUMBING CONTRACTOR

ELECTRICAL CONTRACTOR

GENERAL CONTRACTOR

VERTICAL FIRE DAMPER

VOLUME BOX

OPEN END DUCT

HEATING SUPPLY

HEATING RETURN

UNIT VENTILATOR

PRESSURE GUAGE

HEATING WATER COIL

ACCESS DOOR

BALL VALVE

STRAINER

MOTORIZED DAMPER

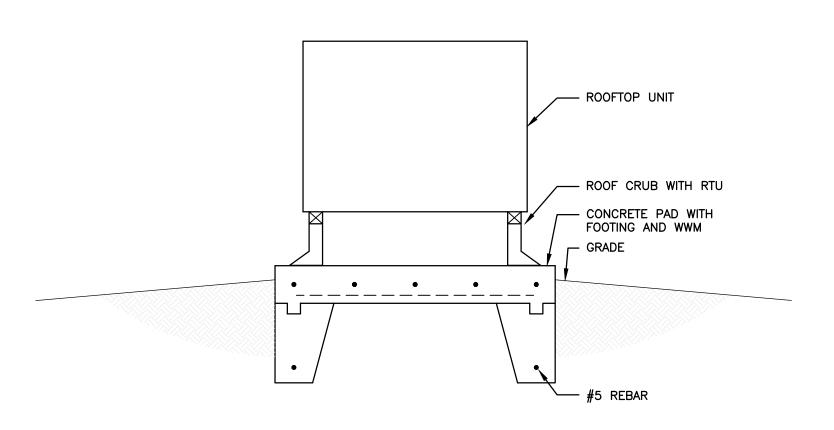
BACK DRAFT DAMPER

HORIZONTAL FIRE DAMPER

EVICTIO	GAS L	OADS
— EXISTING NEW CHERTY AIR	ITEM	CFH
SUPPLY AIR RETURN AIR EXHAUST	F-1	110
EXHAUST FAN	F-2	110
ELECTRIC WALL HEATER RETURN AIR GRILLE	EX. F-3*	110
Transfer air grille Supply air diffuser	RTU-1	250
CABINET UNIT HEATER		
UNIT HEATER ROOFTOP UNIT	TOTAL	580
- NEW CONNECTION POINT	TEL: 100	

TEL: 100 *LOCATED IN GARAGE	
LOGITIED III OF III TOL	

	MECHANICAL SHEET INDEX
SHEET	DESCRIPTION
M-1	MECHANICAL TITLE SHEET
M-2	FLOOR PLAN: DEMOLITION
M-3	FLOOR PLAN: UNDERGROUND PLUMBING & PIPING
M-4	FLOOR PLAN: PLUMBING & PIPING
M-5	FLOOR PLAN: HVAC
M-6	SCHEDULES



ROOFTOP UNIT PAD DETAIL

1		



Engineering and Architecture | 17-6903 M1

© 2017 DiClemente Siegel Design Ir Project No. DiClemente Siegel Design Inc. 17-6903 1075 E. Bristol Road, Burton, Michigan 48529

These documents are instruments of service for use solely with respect to this project. DSD and DSD's consultants shall be deemed the authors and owners of their respective instruments of service and shall retain all common law, statutory and other reserved rights intended to be used by the contractor as shop drawings. Final dimensions, equipment access, including copyrights. DSD grants to the owner a nonexclusive license to reproduce DSD's instruments of service solely for the

LOCATION MAP NO SCALE

Robinwood Dr

These documents are two dimensional, traditional plan and specification documents that are not routing, miscellaneous fittings, final installation and coordination is the contractor's responsibility. purposes of constructing, using and maintaining this project. SHEET NO.

ACADFile

PROJECT NO.

AS BUILT DATE

ISSUED FOR:

OWNER REVIEW

ISSUED FOR BIDDING

DRAWN BY CHECKED BY

SCALE

DATE

16000800

FEB. 15, 2016

AS NOTE

DATE

ISSUED FOR PLAN REVIEW 3-27-

CHMP INC. 5198 TERRITORIAL ROAD

GRAND BLANC, MI 48439 TELEPHONE 810/695-5910

ARCHITECTURE

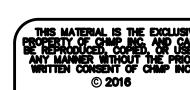
ENGINEERIN

SURVEYING

LANDSCAPE ARCHITECTURE

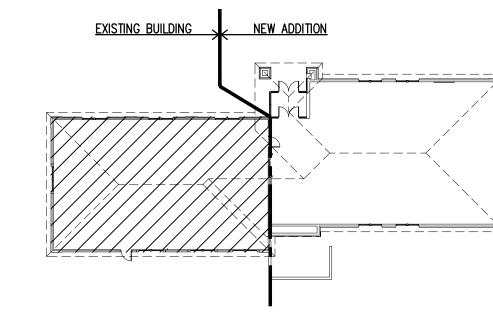


ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING



<u>DEMOLITION NOTES</u>

- 1) REMOVE EX. HIGH EFFICIENCY GAS FURNACE, DUCTWORK, GAS PIPING, PVC VENTS, ETC.
- (2) REMOVE EX. GAS FIRED FURNACE, FLUE, DUCTWORK, GAS PIPING, ETC.
- REMOVE EX. CONDENSING UNIT, REFRIGERANT AND PIPING.
- REMOVE EX. CONDENSING UNIT, REFRIGERANT AND PIPING.
- REMOVE HIGH AND LOW COMBUSTION AIR LOUVERS.
- EX. SERVICE SINK TO REMAIN.
- EX. WATER HEATER TO REMAIN.
- REMOVE HOSE BIBB AND CAP PIPING.
- REMOVE EXHAUST FAN, DUCTWORK, ETC.
- REMOVE FLOOR GRILLE (TYPICAL).
- REMOVE ELECTRIC HEATER
- REMOVE EXISTING EXHAUST FAN, DUCTWORK, SOFFIT VENTS, ETC.
- REMOVE THERMOSTATS.
- REMOVE RETURN AIR GRILLES, DUCTWORK, ETC.
- REMOVE EWC, W/V, CW PIPING AND CAP.
- REMOVE WATER METER.
- EX. SUPPLY AIR DUCTWORK BELOW FLOOR TO BE ABANDONED AND FILLED WITH FLOWABLE CONCRETE FILL BY M.C.
- REMOVE SINK, W/V, H/CW PIPING.
- REMOVE LAVATORIES; REINSTALL AFTER WALLS ARE RE-FINISHED.
- REMOVE WATER CLOSETS; REINSTALL AFTER WALLS ARE RE-FINISHED.
- (21) EX. GAS METER.





Engineering and Architecture ACADFile 17–6903 M2

	KEY PLAN NO SCALE	© 2017 DiCle	emente Siegel Design Inc.
1075	emente Siegel Design Inc. E. Bristol Road, Burton, Michigan 48529 38.1024		Project No. 17-6903
010.20	50.1021		ACADEile .

These documents are two dimensional, traditional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents that are not intended to be used by the contractor as about dimensional plan and specification documents are instruments of service for use solely with respect to this project. DSD and DSD's consultants shall be deemed to be used by the contractor as about dimensional plan and specification documents are instruments of service for use solely with respect to this project. DSD and DSD's consultants shall be deemed to be used by the contractor as a plan dimensional plan and specification documents are instruments of service for use solely with respect to this project. DSD and DSD's consultants shall be deemed to be used by the contractor as a plan dimensional plan and specification documents are instruments of service for use solely with respect to this project. intended to be used by the contractor as shop drawings. Final dimensions, equipment access, routing, miscellaneous fittings, final installation and coordination is the contractor's responsibility.

_____|____||_____||

BUILDING &

CLERK- TREASURER

<u>DPW</u> WATER

OFFICE MANAGER (109)

FURNACE ROOM -

---NG---

— EXISTING 1¾" GAS TO GARAGE TO REMAIN 110 CFH

SHELVING UNIT

REMOVE -EXISTING DUCTS

FLOOR PLAN: DEMOLITION

<u>TREASURER</u>

<u>SUPERVISOR</u>

MEETING ROOM
102

— EXISTING 1½" CW SERVICE VERIFY LOCATION AND DEPTH IN FIELD.

SHEET NO. M-2

PROJECT NO.

AS BUILT DATE

OWNER REVIEW

ISSUED FOR: DATE

ISSUED FOR BIDDING

ISSUED FOR PLAN REVIEW 3-27-1

DRAWN BY CHECKED BY

SCALE

FEB. 15, 2016

AS NOTED





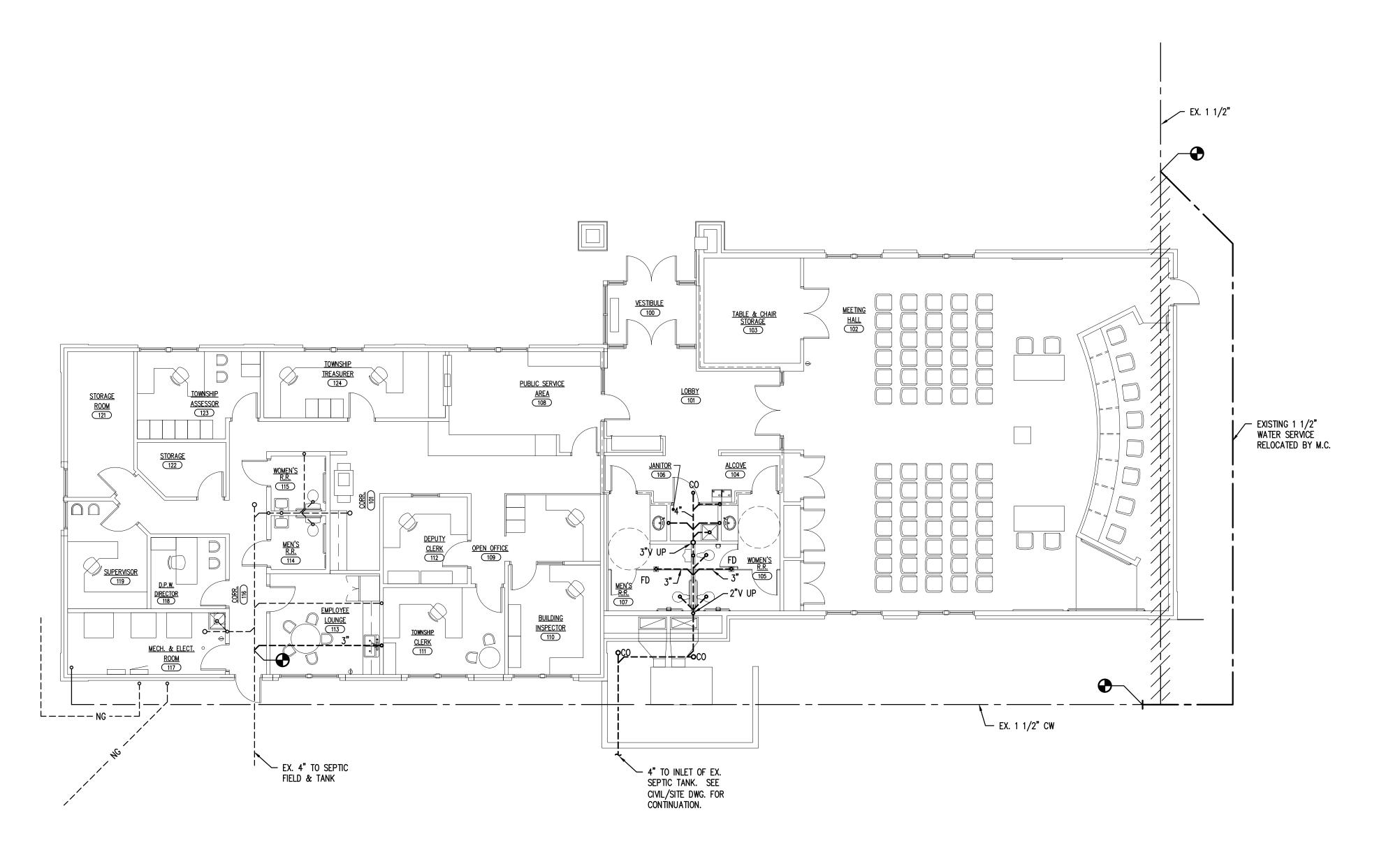


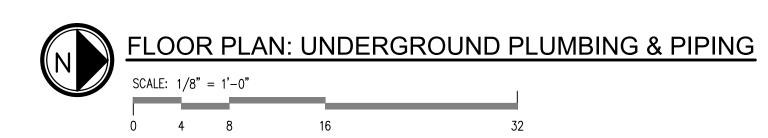
PROJECT NO. 16000800 DATE FEB. 15, 2016 AS BUILT DATE DRAWN BY CHECKED BY SCALE AS NOTED ISSUED FOR: DATE OWNER REVIEW ISSUED FOR PLAN REVIEW 3-27-1 ISSUED FOR BIDDING

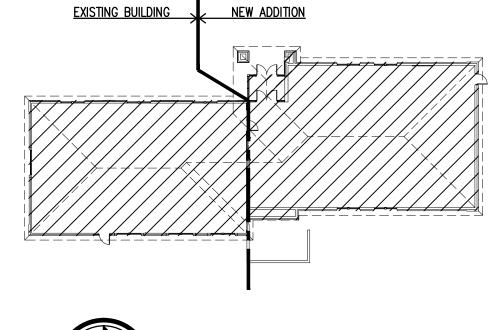
SHEET NO.

ACADFile

M-3



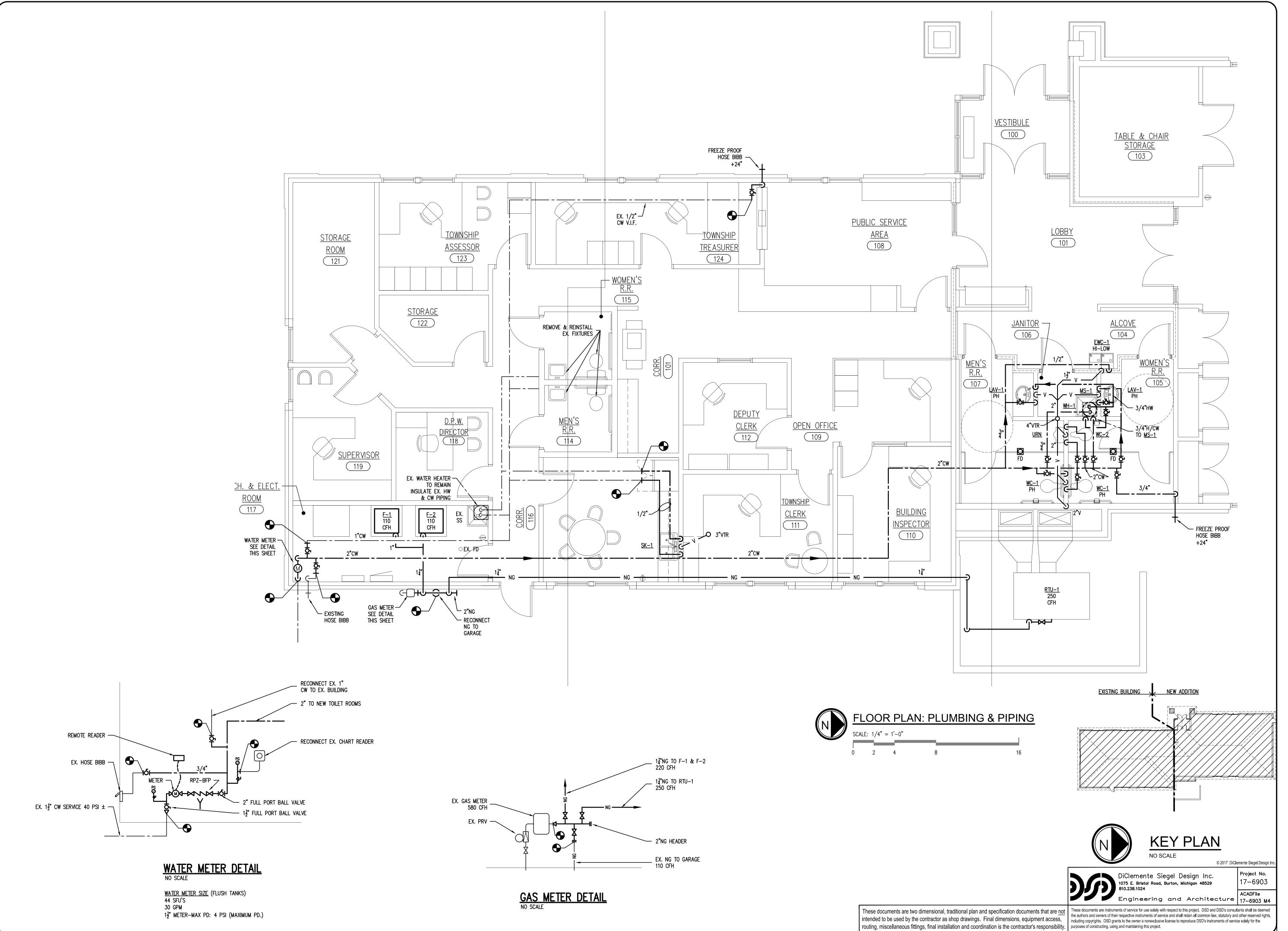






© 2017 DiClemente Siegel Design Inc Project No. 17-6903

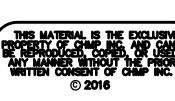
DiClemente Siegel Design Inc. 1075 E. Bristol Road, Burton, Michigan 48529



CHMP INC.
5198 TERRITORIAL ROAD
GRAND BLANC, MI 48439
TELEPHONE 810/695-5910



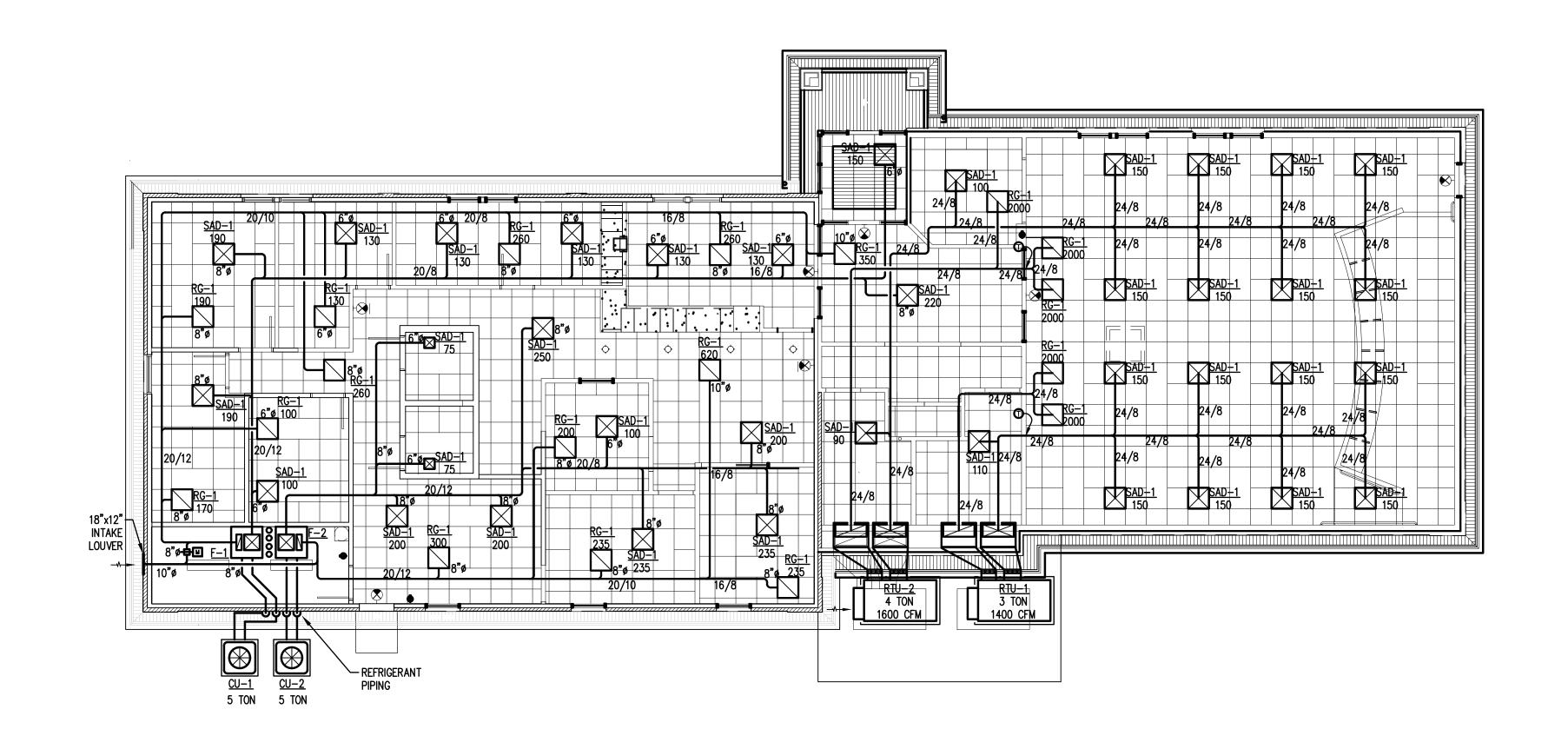
ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING

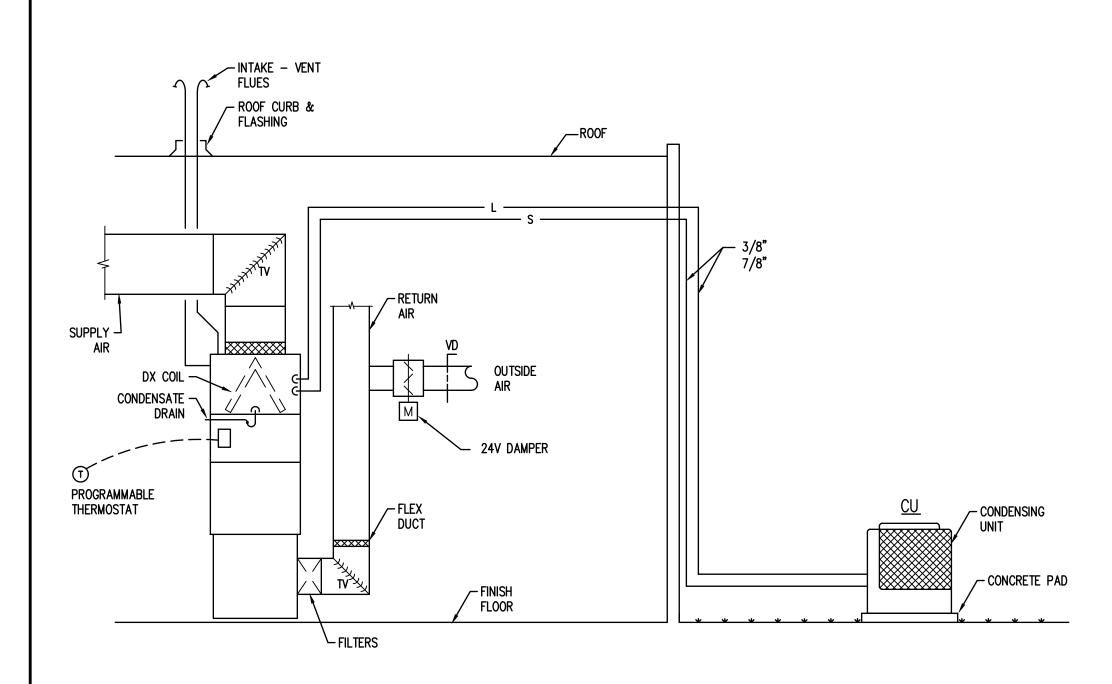


CLYDE TOWNSHIP MUNCIPAL CENTE SITE & BUIDLING IMPROVEMENTS 3350 VINCENT ROAD CLYDE TOWNSHIP, MICHIGAN

PROJECT NO. 16000800
DATE FEB. 15, 2016
AS BUILT DATE
DRAWN BY EKS
CHECKED BY RJS
SCALE AS NOTED
ISSUED FOR: DATE
OWNER REVIEW 3-3-17
ISSUED FOR PLAN REVIEW 3-27-17
ISSUED FOR BIDDING 4-11-17

M-4

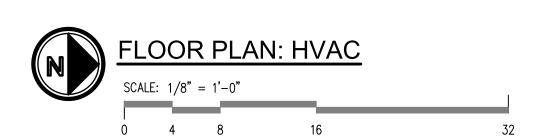


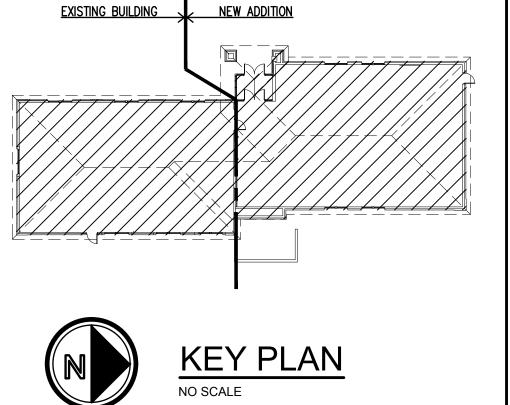


TYIPICAL FURNACE/CU DETAIL NO SCALE

NOTES

- DRAIN PAN TO HAVE WATER SENSOR WIRE TO HEAT PUMP. UPON SENSING WATER HP SYSTEM TO SHUT DOWN. GOLIATH DRAIN PANS SERIES 962 WITH VIBRATION ISOLATORS AND RECTORSEAL AG-4200 SENSOR.
- 2. INSULATE ALL REFRIGERANT PIPING WITH 1" FIBERGLASS ASJ.







CHMP INC.

6198 TERRITORIAL ROAD Grand Blang, MI 48489 Telephone 810/696-5910

ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING

	_
PROJECT NO.	6000800
DATE FEB.	15, 2016
AS BUILT DATE	
DRAWN BY	EKS
CHECKED BY	RJS
SCALE AS	NOTED
ISSUED FOR: DATE	
OWNER REVIEW	3-3-17
ISSUED FOR PLAN REVIEW	3-27-17
ISSUED FOR BIDDING	4-11-17
BULLETIN #1	3-29-18
SHEET NO.	
M-5	
OF 6	

1. R410 REFRIGERANT, RTU TO HAVE FROSTAT AND CRANKCASE HEATER.

2. TRANE, CARRIER, DAIKIN, AAON OR JOHNSON/YORK.

	FURNACES & CONDENSING UNITS
MARK	REMARKS
F-1 & F-2	TRANE UNITARY SPLIT SYSTEM MODEL TUH1D120A9H51B VERTICAL UP BLAST AGA CERTIFIED FURNACE WITH DX COIL, MERV 8 FILTERS, 1 HP DIRECT DRIVE MOTOR, GAS FIRED, PROGRAMMABLE THERMOSTAT, 95% EFFICIENCY, 40°F - 70°F, 14.0 AMPS. CONCENTRIC FLUE/INTAKE ASSEMBLY.
	AIR FLOW: 1810 CFM @ 0.75" ESP.
	HEATING INPUT/OUTPUT: 110,00 BTUH/104,500 BTUH
	COOLING: 60,500 BTUH TOTAL, 45,618 SENSIBLE, 13 SEER/11.0 EER
	CU-1 & CU-2: TRANE NOMINAL 5 TON CONDENSING UNIT MODEL 4TTA3060D3, 208V-3¢, 21 MCA, R-410 REFRIGERANT

						WATE	R HEATER SCHE	DULE	
MARK	LOCATION	KW	VOLTAGE	RECOVERY	WATER		STORAGE CAPACITY	MANUFACTURER &	REMARKS
MATRIX	EGOMMON	IXW	VOETAGE	100° TR	IN °F	OUT °F	(GALLONS)	MODEL No.	TALIFF WAY
WH-1	JANITOR CLOSET	4.5	208V-3¢	19 GPH	45 °	145*	30	LOCHINVAR EST-030-K	PROVIDE T & P VALVE, DRAIN PAN, GLASS LINED, FOAM INSULATION, 22"Ø X 32"HI, 110 LBS (EMPTY), WALL BRACKET

						ELECT	TRIC HEA	ATER S	CHEDU	ILE		
UNIT ID	MBH	KW	CFM		LECTRICAL			ICAL SIZE		MOUNTING	MANUF/ MODEL NO.	REMARKS
				VOLTS	PHASE	AMPS	LENGTH	HEIGHT	DEPTH			
EWH-1	13.6	4	250	208/230	1	19.2	15"	20"	4"	SURFACE MOUNTED	Q-MARK AWH4408	UNIT MOUNTED DISCONNECT & THERMOSTAT

				FLOOR	DRAIN SCHEDULE
MARK	SIZE	CONSTRUCTION	MANUFACTURER	MODEL	REMARKS
FD-1	3"	CAST IRON	ZURN	Z415B-NH-ZN-P	ADJUSTABLE 6"Ø STRAINER, TRAP PRIMER

1. TRAP PRIMER: SURE SEAL INLINE ASSE 1072 CHECK VALVE, WADE, ZURN, JR SMITH OR EQUAL.

AND REFRIGERANT LINE KIT, PRE-FABRICATED PAD

2. ZURN, WADE, JOSAM, MIFAB OR JR SMITH.

		PLUI	MBING	FIXT	URE S	SCHEDULE
MARK	DESCRIPTION	w	٧	HW	CW	REMARKS
WC-1 (BF)	WATER CLOSET	4"	2"		3/4"	AMERICAN STANDARD "CADET FLOW WISE" 16 1/2" MODEL AS 2467.100 1.1 GPF, ELONGATED, TANK TYPE, PRESSURE ASSISTED, SIPHON JET, BEMIS 1055 SSC SEAT, FLOOR MOUNTED (ADA-PH)
WC-2	WATER CLOSET	4"	2"		3/4"	AMERICAN STANDARD "CADET FLOW WISE" 15" MODEL AS 2462.100 1.1 GPF, ELONGATED, TANK TYPE, PRESSURE ASSISTED, SIPHON JET, BEMIS 1055 SSC SEAT, FLOOR MOUNTED
LAV-1 (PH)	LAVATORY (COUNTER TOP)	1 1/2"	1 1/2"	1/2"	1/2"	AMERICAN STANDARD BF "AQUALYN" #0476.028 VIT. CHINA, INNSBROOK #6055 BATTERY SELECTRONIC FAUCET, GRID STRAINER, ASSE 1070 MIXING VALVE (ADA-PH).
EWC-1 (PH)	ELECTRIC WATER COOLER (HI-LOW)	1 1/2"	1 1/2"		1/2"	ELKAY EZSTL8WS-VR, WALL MOUNT, CARRIER, 120V-1φ, "NO LEAD" HIGH LOW, 8 GPH, 5.0 FLA
URN	URINAL	2"	2"		3/4"	AMERICAN STANDARD WASHBROOK #6590.001, SLOAN BATTERY OPERATED FLUSH VALVE (ADA-PH), 1 GPF
MS-1	SERVICE SINK	3"	1 1/2"	3/4"	3/4"	FIAT, 24" x 24" x 10", MSB10-2424, MOLDED STONE, MODEL CHICAGO 897-RCF FAUCET WITH VACUUM BREAKER, SS GRID-STRAINER DRAIN, HOSE, HOSE BRACKET, MOP HANGER BRACKET
SK-1	2-COMPARTMENT SINK	1 1/2"	1 1/2"	1/2"	1/2"	ELKAY LR-250, 33" x 22" x 7 7/8" DEEP, LK-35 BASKET STRAINER, DELTA 400 SINGLE LEVER FAUCET WITH HOSE, 304SS, SELF-RIM

- NOTES: 1. INSULATE HW, CW, W, V, TRAP, MIXING VALVE, ETC. BELOW PH FIXTURES WITH PRE-FORMED INSULATION WITH PVC COVERS.
 - 2. INSTALL H & CW MIXING VALVES BELOW ALL HAND WASHING FIXTURES WATTS LFUSG-B-3/8". (105° HW MAX.) ASSE1070
 - 3. KOHLER, AMERICAN STANDARD, CRANE, MANSFIELD, KOHLER OR PRO-FLO.
 - 4. WALL HOSE BIBB: WOODFORD MODEL 30 FREEZELESS, KEY, ASSE 1011, VACUUM BREAKER.
 - 5. BATTERY OPERATED FLUSH VALVES TO OPERATE AT 15 20 PSI WATER PRESSURE.

			DIFFUS	ER, GRILLE AI	ND REGISTER SCHED	OULE
MARK	CFM RANGE	NECK SIZE	FACE SIZE	FINISH	MANUFACTURER & MODEL No.	REMARKS
SAD-1	0-80 81-280 281-400 401-550	6"ø 8"ø 10"ø 12"ø	24" X 24"	OFF-WHITE	PRICE SCDA	STEEL
RG-1	0-500 501-2000 2001-4000	10" x 10" 22" x 22" 22" x 46"	12" x 12" 24" x 24" 24" x 48"	OFF-WHITE	PRICE 80	EGGCRATE, FRAME
RG-2	SEE PLAN	SEE PLAN	SEE PLAN	OFF-WHITE	PRICE 510Z	0° DEFLECTION, STEEL, 3/4' SPACING
SAG-1	SEE PLAN	SEE PLAN	SEE PLAN	OFF-WHITE	PRICE 920D	DOUBLE DEFLECTION, OBVD, STEEL

COORDINATE LOCATION AND TYPE OF DIFFUSER FRAME WITH ARCHITECTURAL REFLECTED CEILING PLAN

							EXHA	UST FA	N SCH	EDULE			
MARK	SERVICE	TYPE	DRIVE	CFM	DAMPER	E.S.P.	FAN	WATTS		ELECTRICAL		MANUFACTURER &	REMARKS
	32,,,,,,	=	DINIVE	J	SIZE	IN. W.G.	RPM		VOLTS	HERTZ	PHASE	MODEL NUMBER	NEW THE
EF-1	TOILET	CENTRIFUGAL	DIRECT	150	6 " ø	0.25"	769	130	120V	60	1ф	GREENHECK SP-B150	DISC, BDD, WALL CAP
EF-2	TOILET	CENTRIFUGAL	DIRECT	150	6 " ø	0.25"	769	130	120V	60	1ф	GREENHECK SP-B150	DISC, BDD, WALL CAP
EF-3	JANITOR CLOSET	CENTRIFUGAL	DIRECT	75	6 " ø	0.25"	950	80	120V	60	1ф	GREENHECK SP-B110	DISC, BDD, WALL CAP
EF-4	TOILET	CENTRIFUGAL	DIRECT	75	6 " ø	0.25"	950	80	120V	60	1ф	GREENHECK SP-B110	DISC, BDD, SOFFIT GRILLE
EF-5	TOILET	CENTRIFUGAL	DIRECT	75	6 " ø	0.25"	950	80	120V	60	1ф	GREENHECK SP-B110	DISC, BDD, SOFFIT GRILLE

1. GREENHECK, COOK, ACME OR PENN-BARRY.

© 2017 DiClemente Siegel Design Inc

DiClemente Siegel Design Inc. 1075 E. Bristol Road, Burton, Michigan 48529

Engineering and Architecture 17-6903 M6

These documents are two dimensional, traditional plan and specification documents that are not interest and the beautiful to be a controlled to be

17-6903

SHEET NO.

intended to be used by the contractor as shop drawings. Final dimensions, equipment access, routing, miscellaneous fittings, final installation and coordination is the contractor's responsibility.

PROJECT NO.

AS BUILT DATE

OWNER REVIEW

ISSUED FOR: DATE

ISSUED FOR PLAN REVIEW 3-27-17 ISSUED FOR BIDDING 4-11-1

DRAWN BY CHECKED BY

SCALE

FEB. 15, 2016

AS NOTED

CHMP INC. 5198 TERRITORIAL ROAD

GRAND BLANC, MI 48439 TELEPHONE 810/695-5910

ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING

	SYMBOL SCHEDULE
SYMBOL	DESCRIPTION
	EXISTING TO REMAIN.
<u></u>	NEW CLASH MARKS INDICATE DEMOLITION ITEM
- Es	SLASH MARKS INDICATE DEMOLITION ITEM UNDERGROUND ELECTRIC SERVICE — SECONDARY
_	UNDERGROUND TELEPHONE SERVICE
CTV	UNDERGROUND CTV SERVICE
—-Е _Р -—	UNDERGROUND ELECTRIC SERVICE — PRIMARY
	RECESSED 2' x 4' LED FIXTURE.
	RECESSED 2' x 4' LED FIXTURE ON NIGHT LIGHT CIRCUIT, TYPE AS NOTED
<u> </u>	PENDANT MOUNTED LED FIXTURE
×	PENDANT MOUNTED LED FIXTURE ON NIGHT LIGHT CIRCUIT
	SUSPENDED OR SURFACE MOUNTED LED FIXTURE
0	RECESSED LED FIXTURE
	RECESSED LED FIXTURE ON NIGHT LIGHT CIRCUIT
lacksquare	STRIP LED FIXTURE EXIT LIGHT, CEILING MOUNTED — ARROWS AS INDICATED — SHADED AREA INDICATES SIDE
	FACE IS ON
H S	EXIT LIGHT, WALL MOUNTED — ARROWS AS INDICATED — SHADED AREA INDICATES SIDE FACE IS ON
S S ₃	SINGLE POLE TOGGLE SWITCH THREE WAY SWITCH
S _D	DIMMER SWITCH
S _{3D}	THREE WAY DIMMER SWITCH
S _T	MANUAL MOTOR STARTER WITH THERMAL PROTECTION.
□ N.F.	DISCONNECT SWITCH, NON-FUSED
40	DISCONNECT SWITCH FUSED
<u>®</u>	CEILING MOUNTED OCCUPANCY SENSOR
<u></u>	FLUSH WALL MOUNTED OCCUPANCY SENSOR
PP	POWER PACK FOR OCCUPANCY SENSORS DUPLEX RECEPTACLE OUTLET
<u>⊕</u>	FLUSH FLOOR MOUNTED COMBINATION TELE/DATA/RECEPTACLE OUTLET
	TELEPHONE/DATA OUTLET - WALL MOUNTED WITH TWO PORTS
▼ _C	TELEPHONE/DATA OUTLET — CEILING MOUNTED WITH TWO PORTS JUNCTION BOX
JO	LIGHTING/RECEPTACLE/EQUIPMENT PANEL
(B)	PUSH PAD DOOR OPERATOR PROVIDED AND INSTALLED BY OTHERS.BACK BOX, 1/2" CONDUIT
	STUBBED — OFF ABOVE NEAREST ACCESSIBLE CEILING AND WIRING AS RECOMMENDED BY MANUFACTURER, PROVIDED AND INSTALLED BY CONTRACTOR.
ES	ELECTRIC DOOR STRIKE PROVIDED AND INSTALLED BY OTHERS. BACK BOX, 1/2" CONDUIT STUBBED — OFF ABOVE NEAREST ACCESSIBLE CEILING AND WIRING AS RECOMMENDED BY
	MANUFACTURER, PROVIDED AND INSTALLED BY CONTRACTOR.
T • • • • • • • • • • • • • • • • • • •	TRANSFORMER SINGLE PHASE MOTOR
	TELEVISION OUTLET FOR CTV CABLES IN 3/4" CONDUIT STUBBED OFF ABOVE NEAREST
₩	ACCESSIBLE CEILING SPACE. ALSO PROVIDE A DUPLEX RECEPTACLE AT THIS LOCATION AT THE SAME MOUNTING HEIGHT FOR TV. ALL PROVIDED AND INSTALLED BY CONTRACTOR EXCEPT FOR CABLES WHICH ARE PROVIDED AND INSTALLED BY COMCAST CTV CO.
(F) <u></u>	DUCT DETECTOR — PROVIDE INTERLOCKING CONTROL WIRING TO RESPECTIVE RTU FOR SHUTDOWN. MOUNT INSIDE BUILDING IN RETURN DUCT. PROVIDED, INSTALLED AND WIRED BY CONTRACTOR, INCLUDING BACK BOX.
₩	MICROPHONE OUTLET - WALL MOUNTED
∭ _F	MICROPHONE OUTLET - FLOOR OUTLET
(S)	SPEAKER — CEILING MOUNTED
<u> </u>	VOLUME CONTROL — WALL MOUNTED
A SS	FLUSH CEILING MOUNTED S/G ELECTRICAL BOX FOR AV SYSTEM WIRELESS MICROPHONE ANTENNA. SURFACE WALL MOUNTED, SOUND AND AV SYSTEMS EQUIPMENT CABINET.
СТ	CURRENT TRANSFORMER CABINET AND METER.
	ELECTRIC SERVICE METER
T	TIMER
P	PHOTOCELL
LC	LIGHTING CONTACTOR
E	EXISTING EQUIPMENT/DEVICE INDICATES RELOCATED POSITION OF EXISTING ITEM
R AV	AUDIO VISUAL
WP	WEATHERPROOF
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
CTV ERR	CABLE TELEVISION EXISTING TO BE REMOVED AND RELOCATED WHERE INDICATED. EXTEND AND/OR REPLACE EXISTING
	CONDUIT AND WIRING AS REQUIRED TO MAINTAIN EXISTING OPERATION.
GFI C - ⊕-	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE OUTLET — CEILING MOUNTED
F ⊕	DUPLEX RECEPTACLE OUTLET - CEILING MOUNTED DUPLEX RECEPTACLE OUTLET - FLUSH FLOOR MOUNTED
F 🖤	TELEPHONE/DATA OUTLET - FLUSH FLOOR MOUNTED
	EMERGENCY EGRESS LIGHTING FIXTURE — WALL MOUNTED WITH BATTERY PACK AND DUAL ADJUSTABLE HEADS

					ELEC	ELECTRICAL DIS			STARTER		
DESIGNATION	LOCATION	HP	KW	MCA	VOLTAGE	PHASE	FURN.	INST.	FURN.	INST.	REMARKS
RTU-1	GRADE			25	240	1	S	S	S	S	THERMOSTAT, 10 TON, CO₂ SENSOR
F-1 & F-2	MECHANICAL ROOM			12	120	1	E	E	S	S	THERMOSTAT
CU-1 & CU-2	GRADE			34.6	240	1	E	E	S	S	INTERLOCK W/FURNACE
EWC	ALCOVE	1/6			120	1	E	E	S	S	
EWH-1	VESTIBULE		4		208	1	E	E	S	S	
WH-1	JANITOR CLOSET		4.5		208	3	E	E	S	S	
EF-1 & EF-2	TOILETS		0.13		120	1	S	S	E	E	
EF-3	JANITOR CLOSET		0.08		120	1	S	S	E	E	
EF-4 & 5	TOILETS		0.08		120	1	S	S	E	E	

RTU = ROOFTOP UNIT

= WATER HEATER

= ELECTRIC WATER COOLER

= ELECTRIC WALL HEATER

MECHANICAL

E = ELECTRICAL

W = WATTS

	ELECTRICAL SHEET INDEX
SHEET	DESCRIPTION
E-1	OVERVIEW OF SCOPE, PROJECT REQUIREMENTS, LOCATION MAP, A/M/E COORDINATION AND SYMBOL SCHEDULES, AND SHEET INDEX
E-2	ELECTRICAL SITE PLAN
E-3	EXISTING ELECTRICAL DEMOLITION FLOOR PLAN
E-4	POWER FLOOR PLAN
E-5	LIGHTING FLOOR PLAN
E-6	PANEL SCHEDULES
E-7	LIGHTING FIXTURE SCHEDULE
E-8	WIRING DIAGRAMS
E-9	RISER DIAGRAM AND SCHEDULES

SHALL BE PROVIDED WITH THE ITEM/

EQUIPMENT OR BY THE CONTRACTOR

PURCHASING THE ITEM/EQUIPMENT

THIS OVERVIEW OF SCOPE IS INCLUDED TO GIVE THE CONTRACTOR A GENERAL OVERVIEW OF THE PROJECT REQUIREMENTS. THE OVERVIEW IS NOT ALL INCLUSIVE AND IS NOT INTENDED TO, AND SHOULD NOT BE USED TO, ESTABLISH CONTRACT LIMITS OR PRICING INCLUSIONS. THE CONTRACT DOCUMENTS SHALL BE USED TO ESTABLISH CONSTRUCTION CONTRACT SCOPE.

THIS OVERVIEW OF SCOPE INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

ELECTRICAL:

- 1. PROVIDE ELECTRICAL DISTRIBUTION EQUIPMENT INCLUDING ASSOCIATED PANEL, CONDUIT, WIRING, ETC. WHERE INDICATED.
- 2. PROVIDE POWER FEEDERS AND/OR BRANCH CIRCUITS TO ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL SERVICÉ, INCLUDING ASSOCIATED CONDUIT, STARTERS, DISCONNECT SWITCHES, CIRCUIT BREAKERS, WIRING, ETC. WHERE INDICATED.
- 3. PROVIDE BACK BOXES, CONDUIT, WIRING, OUTLETS, PLYWOOD BACKBOARDS, ETC. FOR TELEPHONE/DATA/FIBER SYSTEMS. SYSTEMS EQUIPMENT PROVIDED BY OTHERS, INSTALLED AND WIRED BY CONTRATOR.
- 4. PROVIDE ALL REQUIRED LIGHTING FIXTURES, INCLUDING ASSOCIATED CONDUIT, WIRING, BREAKERS, ACCESSORIES, LAMPS, SWITCHES, ETC. AS INDICATED ON THE DRAWINGS.
- 5. PROVIDE LIGHTING CONTROL SYSTEM, INCLUDING ASSOCIATED OCCUPANCY SENSORS, CONDUIT, WIRING, POWER PACKS, CONTROLS, ADJUSTMENTS/SETTINGS, ETC. WHERE
- 6. PROVIDE ALL REQUIRED ELECTRICAL DEVICES, OUTLETS, SWITCHES, CONDUIT, WIRING, BREAKERS, BACK BOXES, ETC. AS INDICATED ON THE DRAWINGS.
- 7. PROVIDE BACK BOXES, CONDUIT, OUTLETS, ETC. FOR CABLE TV SYSTEM. SYSTEM AND DEVICES PROVIDED, INSTALLED AND WIRED BY OTHERS.
- 8. PROVIDE AUDIO VISUAL SYSTEM INCLUDING ASSOCIATED AMPLIFIER, MICROPHONES, TELEVISIONS, SPEAKERS, OUTLETS, CONDUIT, WIRING, ETC. WHERE INDICATED IN MEETING HALL. EXACT ITEMS T.B.D. PER BUDGET.
- 9. DEMOLISH ALL ELECTRICAL ITEMS IN REMODELED AREA, UNLESS OTHERWISE NOTED TO

GENERAL NOTES: (FOR ALL ELECTRICAL SHEETS)

- 1. ALL CONDUIT SIZES ARE BASED ON THW WIRES, U.O.N.
- 2. ALL ELECTRICAL ITEMS SHOWN ON THE DRAWINGS ARE NEW, UNLESS OTHERWISE NOTED.
- 3. ALL ELECTRICAL ITEMS SHOWN, SHALL BE PROVIDED, INSTALLED, REMOVED, RELOCATED ETC. (AS INDICATED), BY THE CONTRACTOR, U.O.N.
- 4. ALL NEW BRANCH CIRCUITS SHALL BE 20A-1P, WIRED WITH 1/2"C.-2#12 AND 1#12 GROUND, UNLESS OTHERWISE NOTED. PROVIDE #10 WIRE FOR CIRCUITS OVER 100'-0" FROM RESPECTIVE PANEL. PROVIDE THE NEXT SIZE LARGER WIRE SIZE FOR CIRCUITS OVER 100'-0" FROM RESPECTIVE PANEL AND WHICH ALREADY HAVE A WIRE SIZE LARGER THAN #12.
- 5. INSTALL ALL NEW CONDUITS WITHIN FINISHED AREAS OF THE BUILDING "CONCEALED", UNLESS SPECIFIC APPROVAL IS RECEIVED FROM THE OWNER OR ARCHITECT TO INSTALL CONDUITS EXPOSED. ALL CUTTING, CORING, PAINTING AND PATCHING OF BUILDING CONSTRUCTION (TO ACCOMMODATE INSTALLATION OF NEW ELECTRICAL ITEMS) SHALL BE DONE BY THE CONTRACTOR, PATCHING SHALL MATCH BUILDING CONSTRUCTION.
- 6. ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS, CEILINGS, ROOF, ETC. TO BE SEALED WITH APPROPRIATE MATERIALS TO MAINTAIN FIRE RATING.
- 7. REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE FOR ALL ELECTRICAL RELOCATED AND DEMOLITION ITEMS U.O.N. TO BE EXTENDED.
- 8. THE OWNER SHALL BE GIVEN THE OPTION OF KEEPING ANY OR ALL ELECTRICAL ITEMS WHICH ARE TO BE REMOVED. ALL ITEMS THAT THE OWNER REFUSES TO ACCEPT SHALL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE THE EQUIPMENT (TO BE KEPT BY THE OWNER) WHERE DIRECTED BY THE OWNER IN THE FIELD.
- 9. ALL NEW PENETRATIONS THROUGH FIRE PARTITIONS TO BE SEALED WITH APPROPRIATE MATERIALS TO MAINTAIN FIRE RATING. ALL PENETRATIONS REMAINING FROM REMOVAL OF EXISTING CONDUITS TO BE PATCHED TO RETAIN FIRE RATING. REFER TO ARCHITECTURAL PLANS FOR WALLS, CEILINGS, FLOORS, ETC. THAT REQUIRE COORDINATION.
- 10. ALL EQUIPMENT AND DEVICES SHOWN TO BE REMOVED ARE TO BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
- 11. ALL EXISTING ELECTRICAL ITEMS WITHIN THE REMODELED AREA OR OUTSIDE THE BUILDING SHALL BE REMOVED. UNLESS OTHERWISE NOTED TO REMAIN. IF CONNECTION TO THESE ITEMS TO REMAIN IS INTERRUPTED, RECONNECTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 12. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE HIS WORK IN ACCORDANCE WITH ARCHITECTURAL PHASING PLAN AND OWNER'S SCHEDULE. CONTRACTOR SHALL MINIMIZE POWER SHUTDOWNS AND SHALL PROVIDE TEMPORARY WIRING AS REQUIRED TO MAINTAIN ESSENTIAL

PROJECT REQUIREMENTS

PROVIDE AND PAY FOR ALL NECESSARY PERMITS. ALL WORK SHALL BE INSTALLED TO COMPLY WITH THE OWNER'S STANDARDS, STATE AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING CODES AND THEIR RELATED REFERENCES.

2012 MICHIGAN BUILDING CODE

2012 MICHIGAN MECHANICAL CODE

2012 MICHIGAN PLUMBING CODE

2012 INTERNATIONAL FIRE CODE (AS REFERENCED) MICHIGAN ENERGY CODE-ASHRAE 90.1-2007

2014 NATIONAL ELECTRICAL CODE AS AMENDED BY THE 2014 MICHIGAN ELECTRICAL CODE RULES PART B.

2012 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS

MANUFACTURER AND MODEL NUMBER LISTED REPRESENTS THE BASIS OF DESIGN FOR THIS PROJECT. THE ELECTRICAL CONTRACTOR SHALL BEAR ALL ADDITIONAL COST ASSOCIATED WITH USING EQUIPMENT BY OTHER APPROVED MANUFACTURERS INCLUDING ADDITIONAL COSTS BY

ALL EQUIPMENT INSTALLED SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE FIELD OR PROJECT CONDITIONS DO NOT ALLOW ALL MANUFACTURER'S RECOMMENDATIONS TO BE MET, THE INSTALLING CONTRACTOR SHALL SUBMIT IN WRITING TO THE ENGINEER THE PROPOSED DEVIATION, IN A SKETCH FORM, ACCOMPANIED BY THE MANUFACTURER'S CONCURRENCE.

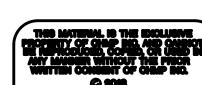
OVERVIEW OF ELECTRICAL SCOPE

GRAND BLANC, MI 48489 TELEPHONE 810/695-5910

CHMP INC.

5198 TERRITORIAL ROAD

ARCHITECTURE ENGINEERING LANDSCAPE ARCHITECTURE SURVEYING



FEB. 15, 2016

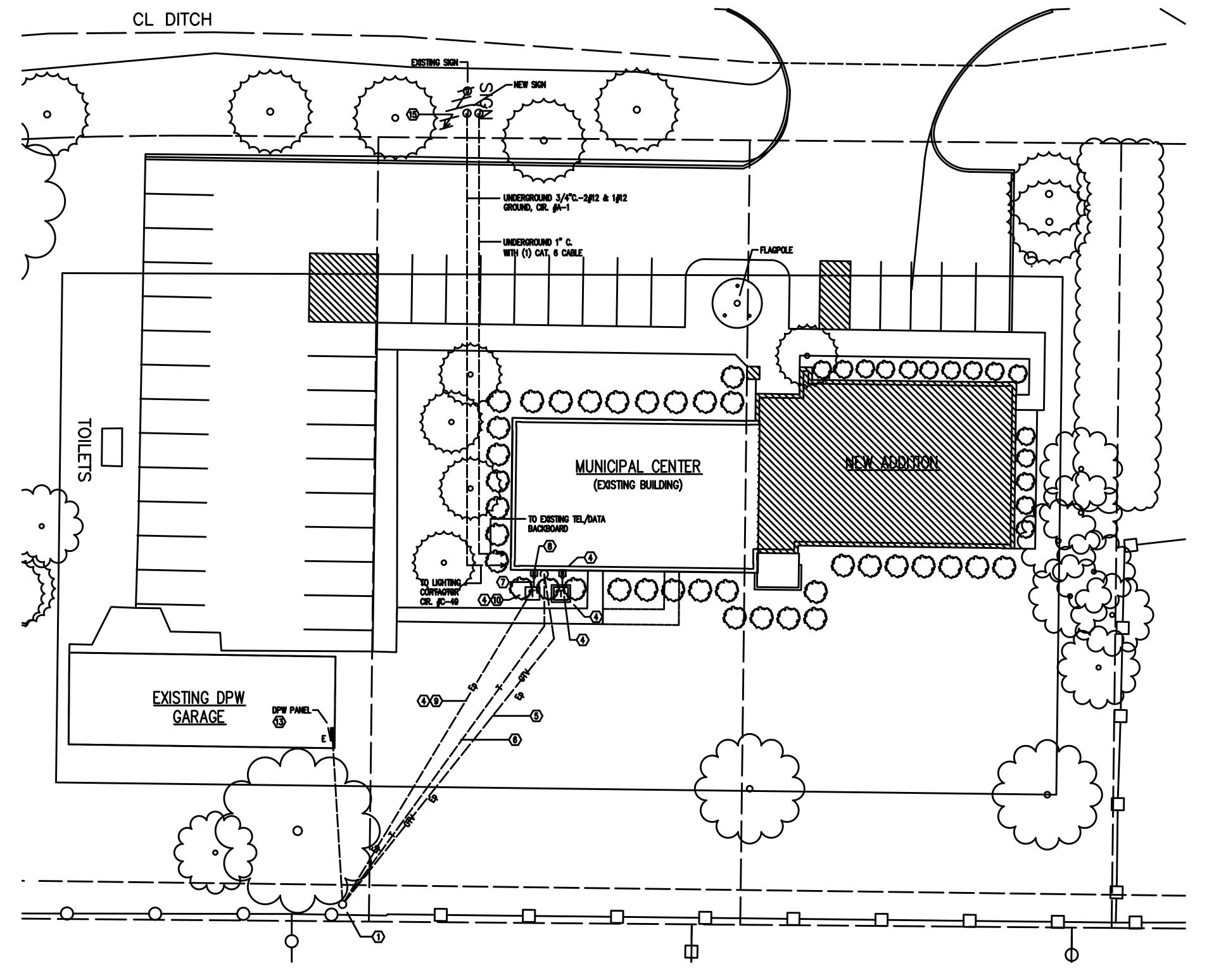
AS, GNM CHECKED BY

AS NOTED OWNER REVIEW 3-20-17 PLAN REVIEW 3-27-17

BIDDING 4-11-17 BULLETIN #1 3-29-18

LOCATION MAP

- (1) EXISTING DTE CO. (DETROIT EDISON COMPANY) POWER POLE, TO REMAIN.
- 5 EXISTING COMCAST CABLE TV AND INTERNET CO. UNDERGROUND CABLES AND CONDUIT, TO REMAIN.
- (6) EXISTING AT&T CO. UNDERGROUND MAIN TELEPHONE SERVICE ENTRANCE CABLES AND CONDUIT, TO REMAIN.
- EXISTING UNDERGROUND SECONDARY 120/240V-16-3W ELECTRIC SERVICE CONDUIT AND WIRING, TO
- (8) EXISTING DTE CO. SECONDARY 120/240V-16-3W ELECTRIC SERVICE METER, AND CONDUIT TO REMAIN.
- (9) EXISTING DTE CO. UNDERGROUND PRIMARY ELECTRICAL SERVICE WIRING, TO REMAIN.
- DESTING DTE CO. 120/240V-16-3W SECONDARY PAD MOUNTED TRANSFORMER, TO REMAIN.
- (13) EXISTING SQUARE D TYPE QO LOAD CENTER, 120/240V-16-3W, MLO, 8 CIRCUIT PANEL "DPW", TO REMAIN.
- EXISTING UNDERGROUND CONDUIT & WIRING FOR EXISTING SIGN, CIRCUIT #DPW-7, TO DPW PANEL, TO BE REMOVED.





ELECTRICAL SITE PLAN





4 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

NOTE:
UTILITY INFORMATION ON THIS DRAWING MAY BE FROM
INFORMATION DISCLOSED TO THIS FIRM BY THE VARIOUS
UTILITY COMPANIES. NO GUARANTEE IS GIVEN AS TO THE
COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES (IN CONFLICT WITH PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. CALL M-I-S-S-D-I-G.

ANY INFORMATION OR DATA ON THIS DRAWING IS NOT INTENDED TO BE SUITABLE FOR REUSE BY ANY PERSON, FIRM, OR CORPORATION OR ANY OTHERS ON EXTENSIONS OF THIS PROJECT OR FOR USE ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION AND ADAPTATION BY THE SURVEYOR OR ENGINEER FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OF LEGAL EXPOSURE TO THE SURVEYOR OR ENGINEER.

CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48489 TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



YDE TOWNSHIP MUNCIPAL CENTER SITE & BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

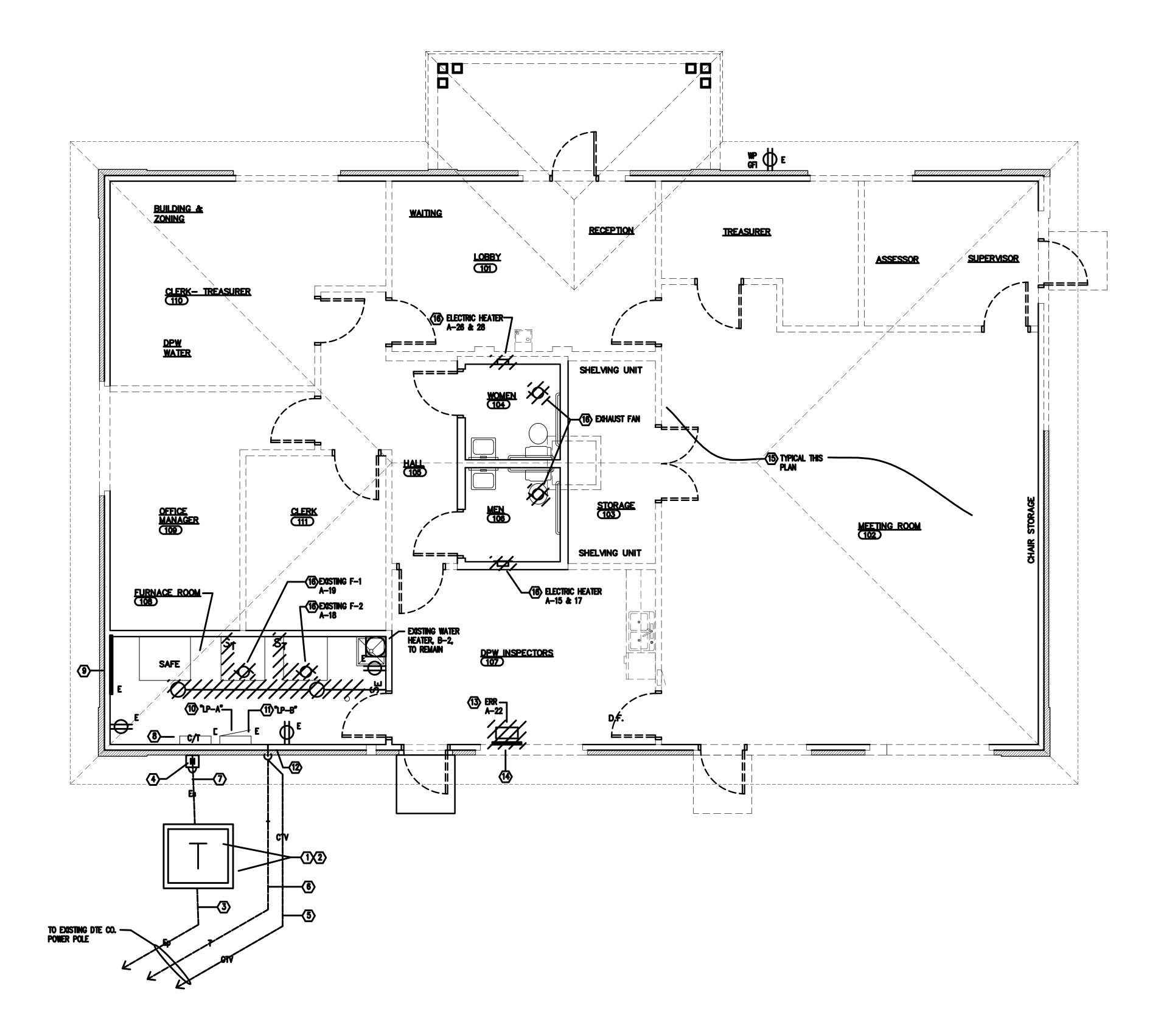
DRAWN BY AS, GNM

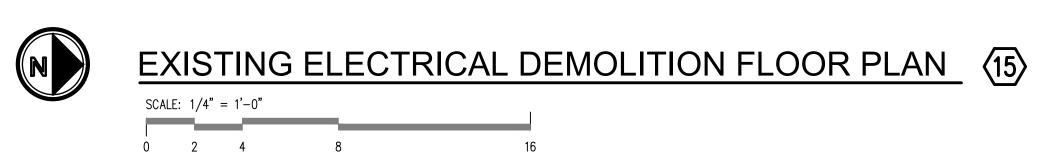
DRAWN BY AS, GNM
CHECKED BY GNM
SCALE AS NOTED
ISSUED FOR: DATE

OWNER REVIEW 3-20-17
PLAN REVIEW 3-27-17
BIDDING 4-11-17
BULLETIN #1 3-29-18

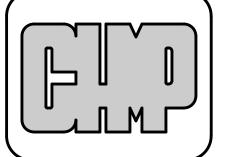
HEET NO.

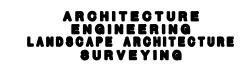
- 2 EXISTING DTE CO. (DETROIT EDISON COMPANY) 120/240V-16-3W SECONDARY PAD MOUNTED TRANSFORMER, TO REMAIN.
- (3) EXISTING DTE CO. UNDERGROUND PRIMARY ELECTRICAL SERVICE WIRING, AND CONDUIT TO REMAIN.
- EXISTING DTE CO. SECONDARY 120/240V-16-3W ELECTRIC SERVICE METER, TO REMAIN.
- (5) EXISTING COMCAST CABLE TV AND INTERNET CO. UNDERGROUND CABLES AND CONDUIT, TO REMAIN.
- (6) EXISTING AT&T CO. UNDERGROUND MAIN TELEPHONE SERVICE ENTRANCE CABLES AND CONDUIT, TO REMAIN.
- (7) EXISTING UNDERGROUND SECONDARY ELECTRIC SERVICE CONDUIT AND WIRING, TO REMAIN.
- 8 EXISTING DTE CO. CURRENT TRANSFORMER CABINET, TO REMAIN.
- Existing at at telephone co. 4' \times 8' \times 3/4" d. Main telephone service plywood backboard and associated equipment, to remain.
- EXISTING SQUARE D TYPE NQOB PANELBOARD, 225A-120/240V-1#-3W, 42 CIRCUIT, PANEL "LP-A" WITH 225A-2P MAIN BREAKER, TO REMAIN.
- (11) EXISTING SQUARE D TYPE QO LOAD CENTER, 120/240V-16-3W, 2 CIRCUIT, MLO, PANLE "LP-B", TO REMAIN.
- (12) EXISTING COMCAST CTV AND INTERNET CO. FIBER OPTIC MAIN SERVICE ENTRANCE EQUIPMENT, TO REMAIN.
- EXISTING FIBER OPTIC SERVER/COMPUTER EQUIPMENT, TO BE REMOVED AND RELOCATED TO NEW DATA CLOSET IN MEETING HALL #102.
- EXISTING 2' W x 4' H. FIBER OPTIC PLYWOOD BACKBOARD, TO BE REMOVED.
- ALL EXISTING ELECTRICAL ITEMS WITHIN THE REMODELED AREA OR OUTSIDE THE BUILDING SHALL BE REMOVED, UNLESS OTHERWISE NOTED TO REMAIN. IF CONNECTION TO THESE ITEMS TO REMAIN IS INTERRUPTED, RECONNECTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 16 TO BE REMOVED BY OTHERS, ASSOCIATED ELECTRICAL TO BE REMOVED BY CONTRACTOR.





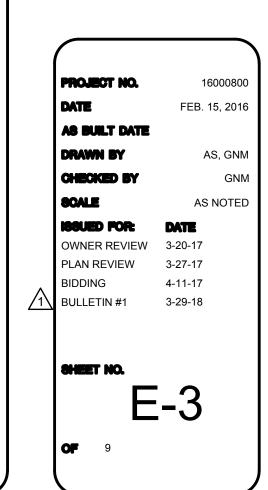




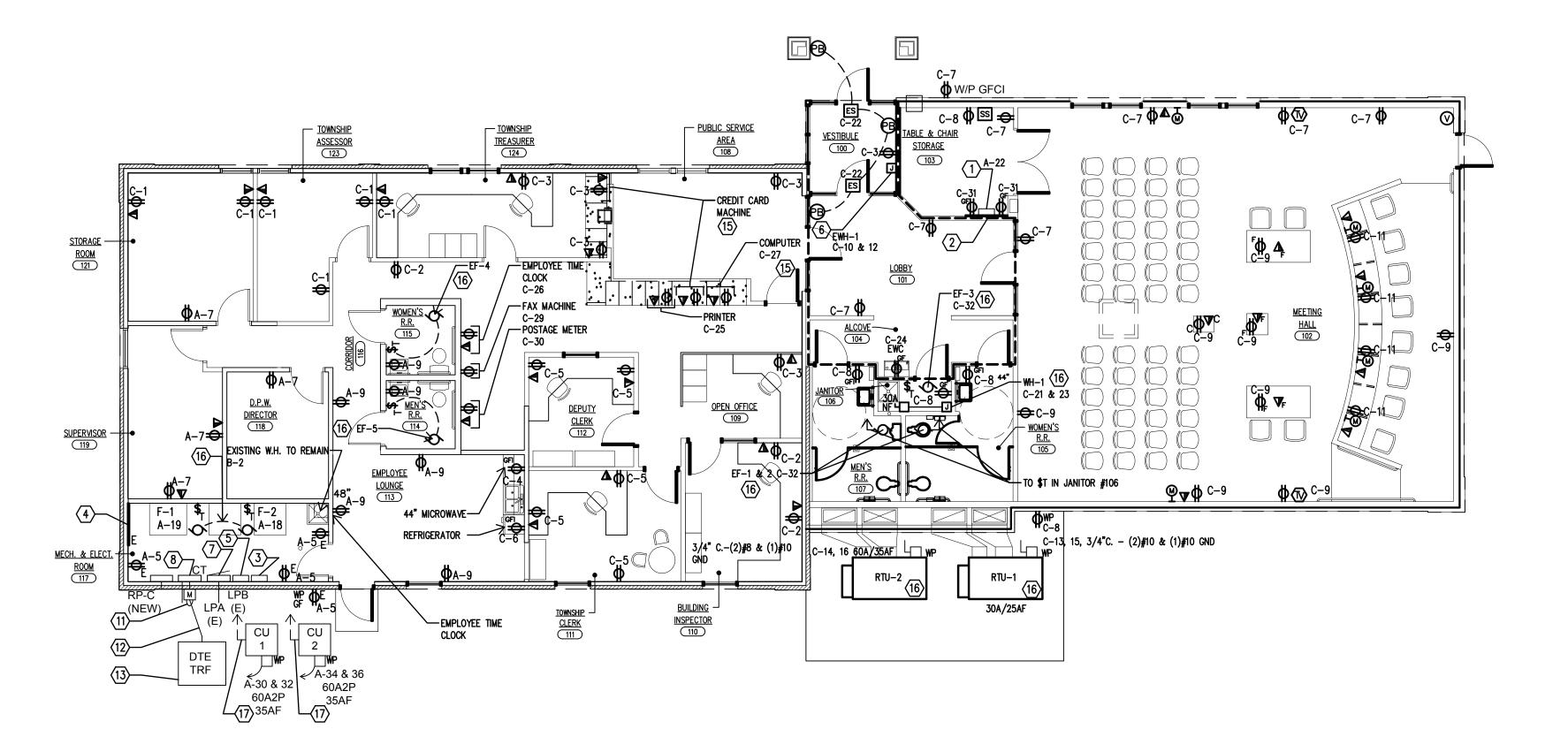


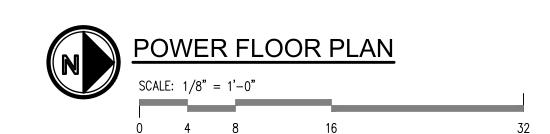


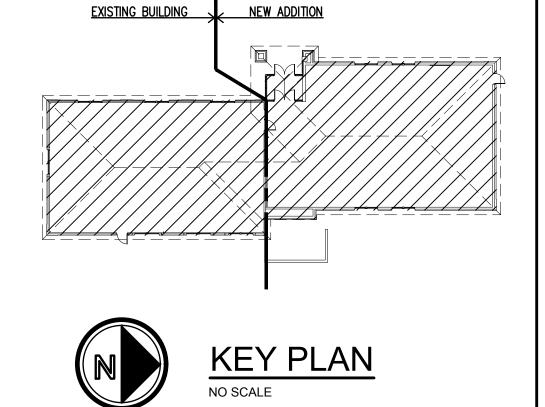
LYDE TOWNSHIP MUNCIPAL CENTER SITE & BUIDLING IMPROVEMENTS



- LOCATION OF RELOCATED FIBER OPTIC SERVER/COMPUTER EQUIPMENT FROM EXISTING BUILDING, TO BE INSTALLED AND WIRED BY CONTRACTOR.
- 4' W. X 4' H. X 3/4" D. CLASS A FIRE RATED PLYWOOD BACKBOARD BY CONTRACTOR FOR COMCAST CTV/INTERNET CO. FIBER OPTIC SERVICE CABLES AND EQUIPMENT.
- EXISTING COMCAST CABLE TELEVISION AND INTERNET COMPANY FIBER OPTIC MAIN SERVICE ENTRANCE EQUIPMENT, TO REMAIN.
- EXISTING AT&T TELEPHONE COMPANY 4' W. \times 8' H. \times 3/4" D. MAIN TELEPHONE SERVICE PLYWOOD BACKBOARD AND ASSOCIATED EQUIPMENT, TO REMAIN.
- (5) EXISTING SQUARE D TYPE QO LOAD CENTER, 120/240V-16-3W, 2 CIRCUIT, MLO, PANEL "LP-B", TO REMAIN.
- 6 PROVIDED AND INSTALLED BY OTHERS WIRED BY CONTRACTOR.
- (7) EXISTING SQUARE D TYPE NQOB PANELBOARD, 225A-120/240V-16-3W, 42 CIRCUIT, PANEL "LP-A" WITH 225A-2P MAIN BREAKER, TO REMAIN.
- (8) EXISTING DTE CO. CURRENT TRANSFORMER CABINET, TO REMAIN.
- (11) EXISTING DTE CO. SECONDARY 120/240V-16-3W ELECTRIC SERVICE METER INCLUDING BASE, TO REMAIN.
- (12) EXISTING UNDERGROUND SECONDARY 120/240V-10-3W ELECTRICAL SERVICE CONDUIT AND WIRING, TO REMAIN.
- (13) EXISTING DTE 120/240V-16-3W SECONDARY PAD MOUNTED TRANSFORMER, TO REMAIN.
- 15) MOUNTED BELOW COUNTER AT KEYBOARD TYP.
- PROVIDED AND INSTALLED BY OTHERS, ASSOCIATED ELECTRICAL PROVIDED, INSTALLED AND WIRED BY CONTRACTOR.
- UNDERGROUND 3/4° C. 2/14 & 1/14 GROUND INTERLOCKING CONTROL WIRING TO RESPECTIVE FURNACE.







CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48439 Telephone 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF CHMP INC. AND CANNOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF CHMP INC.

© 2016

PROJECT NO. FEB. 15, 2016 AS BUILT DATE DRAWN BY CHECKED BY SCALE ISSUED FOR: OWNER REVIEW ISSUED FOR BIDDING SHEET NO. E-4

- WIRE ALL EXIT LIGHTS TO THE SAME CIRCUIT AS NORMAL LIGHTING IN THEIR RESPECTIVE AREA (AS INDICATED), CONNECTED AHEAD OF ANY LOCAL SWITCHES, WITH 1/2"C.-2#12 AND 1#12 GROUND.
- WIRE ALL EMERGENCY LIGHTS TO THE SAME CIRCUIT AS NORMAL LIGHTING IN THEIR RESPECTIVE AREA (AS INDICATED), CONNECTED AHEAD OF ANY LOCAL SWITCHES, WITH 1/2"C.-2#12 AND 1#12 GROUND.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES SHOWN ON THIS SHEET.

LEGEND FOR LIGHTING CONTROL SYSTEM

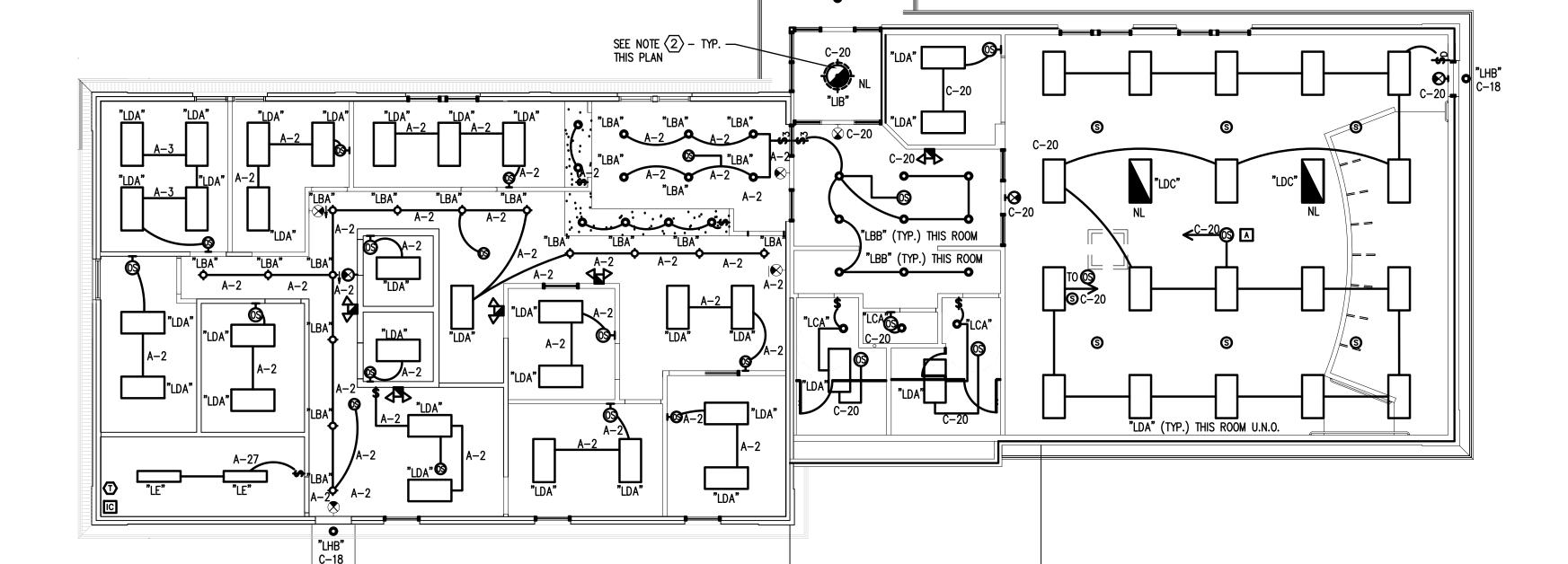
- © CEILING MOUNTED PASSIVE INFRARED (PIR): RELAY STANDARD RANGE 360° OCCUPANCY SENSOR, EQUAL TO SENSORSWITCH #CM-9-R.
- © CEILING MOUNTED DUAL TECHNOLOGY (PDT): RELAY STANDARD RANGE 360° OCCUPANCY SENSOR, EQUAL TO SENSORSWITCH #CM-P-DT-9-R.
- FLUSH WALL MOUNTED SWITCH DECORATOR OCCUPANCY SENSOR PASSIVE INFRARED (PIR), EQUAL TO SENSORSWITCH #WSX-WHITE.
- FLUSH WALL MOUNTED SWITCH DECORATOR OCCUPANCY SENSOR DUAL TECHNOLOGY TYPE (PDT), EQUAL TO SENSORSWITCH #WSX—PDT—WHITE.
- PP MINI POWER PACK: 120/277 VAC, MOUNTED ABOVE CEILING, EQUAL TO SENSORSWITCH #MP20.

ASHRAE 90.1-2007 ENERGY CALCULATIONS:

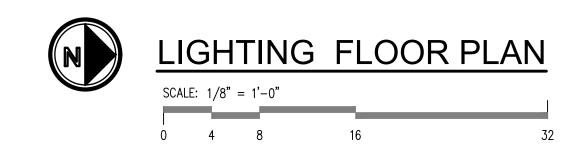
("BUILDING AREA METHOD")

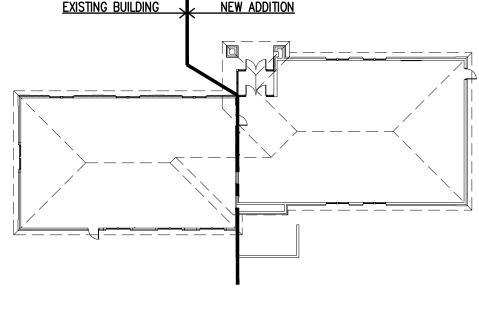
- A. BUILDING TYPE FROM TABLE 9.5.1 IS "TOWN HALL".
- B. THE ALLOWED "LIGHTING POWER DENSITY" IS 1.1 W/FT².
- C. THE GROSS LIGHTED FLOOR AREA OF THE BUILDING SPACE IS 5,683 SQUARE FEET.

 D. THE "INTERIOR LIGHTING POWER ALLOWANCE" IS 5,683 (LIGHTED FLOOR AREA) \times 1.1 W/FT²
- (LIGHTING POWER DENSITY) = 6,251 WATTS.
- E. OUR TOTAL "INTERIOR LIGHTING POWER" IS 3,955 WATTS, WHICH PUTS OUR BUILDING BELOW THE "INTERIOR LIGHTING POWER ALLOWANCE" OF 6,251 WATTS.



"LHB" C-18







CHMP INC. 6198 TERRITORIAL ROAD GRAND BLANG, MI 48489 TELEPHONE 810/895-6910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



E TOWNSHIP MUNCIPAL CENTER E & BUIDLING IMPROVEMENTS

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY DDA

CHECKED BY DL

SCALE AS NOTED

ISSUED FOR: DATE

OWNER REVIEW 3-3-17

ISSUED FOR PLAN REVIEW 3-27-17

ISSUED FOR BIDDING 4-11-17

BULLETIN #1 3-29-18

"EXISTING" 120/240VOLT-1PHASE-3WIRE+GRND PANELBOARD SCHEDULE PANELBOARD DESIGNATION EXISTING LP-"A" LOCATION MECH. & ELECT. ROOM #117 225 AMP BUS X M.C.B. __ M.L.O. MOUNTING: FLUSH ___ SURFACE _X SPECIAL REQUIREMENTS <u>225A-2P "MAIN SERVICE" RATED MB</u> LOAD TYPE LOAD TYPE 1000 (7) EXISTING LIGHTING MEETING ROM 14 (5) Existing Kitchen Lights 300 2 500 DEXISTING LIGHTINING PROTECTION SYSTEM 17) EXISTING LIGHTS 1300 4 900 (5) EXISTING RECEPTACLES 900 6 500 S EXISTING BATHROOM RECEPTACIES & TIME CLOCK 7 EXISTING OFFICE RECEPTACLES 540 (5) EXISTING OFFICE RECEPTACLES 1 DISTING RECEPTACLES 900 DUSTING RECEPTACLES DESTING TREASURER'S OFFICE RECEPTACLES 720 12 ② Edisting inspectors lighting 100 DESTING ENT LIGHTS 1680 7 EXISTING HEATER MEN'S - DUSTING LIGHTING BATHROOM 6 EXISTING FURNACE #2 1000 20 1680 6 EXISTING FURNACE #1 (3) EXISTING UNKNOWN LOAD 1000 22 21 1680 1 EXISTING WELL PUMP 20 EXISTING FAM, MEETING ROOM 1000 (3) EXISTING UNKNOWN LOAD DESTING HEATER, WOMEN'S BATHROOM 1680 28 1000 (3) Existing Unknown Load 5 EXISTING A/C UNIT 3840 30 1000 (3) EXISTING UNKNOWN LOAD 3840 32 31 1000 3 EXISTING UNKNOWN LOAD 2680 34 1000 3 EXISTING UNKNOWN LOAD ● EXISTING A/C UNIT 2680 36 3000 (4) EXISTING DPW BUILDING PANEL 2720 -- (1) Existing LP-"B" 2) SPACE ② SPACE LIGHTING 5,500 VA AT 100 % = 5,500 VA RECEPTACLE 6,260 VA AT 100 % = 6,260 VA (FIRST 10,000 VA AT 100%)

- 1 ALL BREAKERS ARE 20A-1P U.O.N.
- 2 Existing space section, to remain.
- 3 Existing unknown load and breaker, to remain.

RECEPTACLE 0 VA AT 50 % = 0 VA

39,840 VA AT 80 X = 31,872 VA

- EXISTING LOAD AND BREAKER, TO REMAIN.
- (5) EXISTING LOAD TO BE REMOVED AND BREAKER TO REMAIN AND BE USED TO FEED NEW LOAD INDICATED.

51,600 VA TOTAL DEMAND = 43,632 VA / 240 V = 181.8 A

- **(6)** Existing load and breaker, to be removed.
- ② EXISTING LOAD TO BE REMOVED AND BREAKER TO REMAIN AND BECOME A SPARE.

"REVISED"

SPECIAL REQUIREMENTS 225A-2P "MAIN SERVICE" RATED MB () STORY VA LOAD TYPE A B LOAD TYPE VA 182T								
XI_	VA	LOAD TYPE		Ņ.	B	LOAD TYPE S NEW LIGHTS 108, THRU 124	VA	4
<u>1</u>		(3) NEW SPARE	┢╲╴	Ħ	$\vdash \frown$		1300	1
3	500	PROTECTION SYSTEM	┝╲╴	+	$\vdash \smallfrown$	(1) NEW SPARE		,
5	720	(4) EXISTING RECEPTACLES, 117, OUTSIDE	┝╲╴	╂	$\vdash \smallfrown$	(E) NEW SPARE		,
7	900	(5) NEW RECEPTACLES, 119,	┝╲╴	╀	$\vdash \smallfrown$	(E) NEW SPARE		,
9	1080	(6) NEW RECEPTACLES, 113, 114, 115, 116	lacksquare	╀	$\vdash \smallfrown$	(E) NEW SPARE		
1		A NEW COACE	lacksquare	Ц	$ldsymbol{oxed}$	(6) NEW SPARE		
3		(3) NEW SPARE	ےا	$oldsymbol{ol{ol{ol}}}}}}}}}}}}}}}}$	$ldsymbol{oxed}$	6 NEW SPARE		-
5		(8) NEW SPARE	L20 L-∕\-		$oldsymbol{ol}oldsymbol{ol}oldsymbol{ol}}}}}}}}}}}}}}}}}$	6 NEW SPARE		_
기					15	(1) NEW FURNACE #2, 117	1440	-
+		A	15	П				
9		11) NEW FURNACE #1, 117	20	П		EXISTING UNKNOWN LOAD EXISTING UPS COMPUTER	1000	-
1		(B) NEW SPARE	丌	Ħ		SERVER	1000	-
3			一一	Ħ	20	(S) NEW SPARE		
5	1000	3 EXISTING UNKNOWN LOAD	一	╁	├─╨	(8) NEW SPARE		,
7	1000	3) Existing Unknown Load	┝╲╴	+		1		,
29	1000	3 Easting Unichown Load	┝╲╴	╀	┝╌╙	(3) CU-4, OUTSIDE	3240)
31	1000	3) EXISTING UNKNOWN LOAD	lacksquare	╀	├ -�	1	3240)
3	1000	3 Easting Unionoun Load	 	╀	┝╬	(1) CU-2, OUTSIDE	3240	-
5	2000	(4) EXISTING DPW BUILDING PANEL	1 11	Ļ	lacksquare		3240	-
7	2720		ᇇ	$oldsymbol{ol{ol{ol}}}}}}}}}}}}}}}}}$	L .	2) SPACE		-
		(4) EXISTING LP—"B"	30	L	L .	- O SPACE	<u> </u>	_
<u>- ا</u>	1680	(4) EVISIMO II- B	人		<u> </u>			-
_	HTING			_	1,800	2 SPACE		-

- 1 ALL BREAKERS ARE 20A-1P U.O.N.
- 2 EXISTING SPACE SECTION, TO REMAIN.
- 3 EXISTING UNKNOWN LOAD AND BREAKER, TO REMAIN.
- 4 EXISTING LOAD AND BREAKER, TO REMAIN.
- (5) Existing Breaker to remain and feed New Load Indicated.
- 6 NEW 20A-1P SPARE BREAKER.
- (7) CHANGE LABELS ON PANEL TO 208 VOLT INSTEAD OF 240 VOLT.
- (8) EXISTING BREAKER TO REMAIN AND BECOME A SPARE.
- PROVIDE A 208V-10 PRIMARY/240V-10 SECONDARY BUCK-BOOST TRANSFORMER IF REQUIRED TO MAINTAIN OPERATION OF THESE EXISTING LOADS, IF THEY ARE NOT DUAL RATED FOR BOTH 208 & 240 VOLT OPERATION.
- (1) NEW 40A-2P BREAKER TO FEED NEW LOAD INDICATED.
- 11) NEW 15A-1P BREAKER TO FEED NEW LOAD INDICATED.

"EXISTING"

S	100	D DESIGNATION <u>Existing "D</u> AMP BUS <u>M.C.B. X</u> M EQUIREMENTS		LOCATION <u>D</u>		IRFACE <u>x</u>	
X	VA	LOAD TYPE		B 15	LOAD TYPE	VA	QX.
1	-	2) EXISTING SPACE	} ₁5	 - ~	① EXISTING FURNACE #1	1680	2
3	1000	3 EXISTING UNKNOWN LOAD	┝╩┤	+-~	3 Easting Unknown Load	1000	4
5	540	EXISTING PAVILLION RECEPTACLES	$\vdash \sim \vdash$	 	4 EXISTING PAVILLION LIGHTS	500	6
7	1000	5) EXISTING TWP. SIGN	$\vdash \sim \vdash$	-	② EXISTING SPACE		8
R R M	IGHTING ECEPTACLI ECEPTACLI ISC. OTAL	E 540 VA AT 100 E 0 VA AT 50	_x -		. VA (FIRST 10,000 VA AT 100% . VA . VA) 	

- 1 ALL BREAKERS ARE 20A-1P U.O.N.
- 2 EXISTING SPACE SECTION, TO REMAIN.
- 3 EXISTING UNKNOWN LOAD AND BREAKER, TO REMAIN.
- (4) EXISTING LOAD AND BREAKER, TO REMAIN.
- (5) Existing load to be removed and breaker to remain and become a spare.

"REVISED"

	120/2	40VOLT—	1PHASE-3	SWIRE	Ξ+	-GRND	PANEL	BOARD SC	HEDUL	E.
F		D DESIGNATION	EXISTING "DI		LC	CATION D		ING: FLUSH	SURFACE	_
5		AMP BUS CQUIREMENTS	M.C.B. <u>X</u> M.				MOUNI		SUNPACE .	<u>~</u>
GI.	VA	LOAD	TYPE		ΑI	B 15	L	OAD TYPE	VA	9
1		2 EXISTING SP	ACE	- 15	╀	┝╌╩┤	(1) EXISTING	FURNACE #1	168	10
3	1000	3) EXISTING UN		┝╩╴	╀	_~	3 EXISTING	UNKNOWN LOAD	100	10
5	540	EXISTING PAN RECEPTACLES	ALLION	20	╁	_~	① EXISTING	PAVILLION LIGHTS	50	0
7	-	(5) NEW SPARE			Ł	<u> </u>	② EXISTING	SPACE	_	<u>-</u> [•
R	IGHTING IECEPTACLI IECEPTACLI IISC. IOTAL		AT	X X			, VA (FIRST , VA , VA	10,000 VA AT 10	00%) = <u>19.15</u>	ŽΑ

- 1 ALL BREAKERS ARE 20A-1P U.O.N.
- 2 EXISTING SPACE SECTION, TO REMAIN.
- 3 EXISTING UNKNOWN LOAD AND BREAKER, TO REMAIN.
- (4) EXISTING LOAD AND BREAKER, TO REMAIN.
- (3) EXISTING BREAKER TO REMAIN AND BECOME A SPARE.

(6) CHANGE LABELS ON PANEL TO 208 VOLT INSTEAD OF 240 VOLT.

" E	"EXISTING"								
	120/240VOLT-1PHASE-3WRE+GRND PANELBOARD SCHEDULE								
P	ANELBOAR	D DESIGNATION <u>EX</u>			LOCATION N				_
5									
9 1	VA	LOAD TYI	Æ	Ņ	B	LOAD '	TYPE	VA	<u>G1</u>
1		2 EXISTING SPACE			+	3 EXISTING WATE	R HEATER	1680	2
	LIGHTING 0 VA AT 100 x = 0 VA RECEPTACLE 0 VA AT 100 x = 0 VA (FIRST 10,000 VA AT 100%) RECEPTACLE 0 VA AT 50 x = 0 VA MISC 1680 VA AT 80 x = 1344 VA TOTAL 1680 VA TOTAL DEMAND = 1344 VA 240 V = 5.6 A								

- 1 ALL BREAKERS ARE 20A-1P U.O.N.
- 2 EXISTING SPACE SECTION, TO REMAIN.
- 3 EXISTING LOAD AND BREAKER, TO REMAIN.
- (4) CHANGE LABELS ON PANEL TO 208 VOLT INSTEAD OF 240 VOLT.

CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48489 TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



FEB. 15, 2016 AS BUILT DATE CHECKED BY AS NOTED

ISSUED FOR: DATE OWNER REVIEW 3-20-17 PLAN REVIEW 3-27-17 BIDDING BULLETIN #1 3-29-18

		Y EXACT COLOR SEL XTURES WITH ARCHI	
TYPE	DESCRIPTION	MOUNTING	WATTAGE
"LBA"	PRESCOLITE CAT. NO. LC6SLDM6LCSL10L35K8	RECESSED CAN	13.5
"LBB"	PRESCOLITE CAT. NO. LC6SLDM6LCSL10L35K8	RECESSED CAN	13.5
"LDA"	COLUMBIA CAT. NO. LCAT24-35MLG-EDU	2' x 4' LAY-IN	39
"LDC"	COLUMBIA CAT. NO. LCAT24-35LWG-EDU-ELL14	2' x 4' EMG	39
"LHB"	PRESCOLITE CAT. NO. LC65LDMEM6LCSL10L35K8WH WITH BATTERY PACK	EMG CON.	13.5
"LIB"	CAMMAN CAT. NO. P4200-30-LX35K-CLV-MV-WA-BA-ST-REM	PENDANT	80
"X"	COMPAS CAT. NO. CE12	UNIVERSAL	1.78
"LAA"	HUBBEL CAT. NO. ASL-A-24L4K-210-4-U-DB-SSAH25-5OB-1-S2	SITE POLE SINGLE	181
"LAB"	HUBBEL CAT. NO. ASL-A-24L4K-210-4-U-DB-SSAH25-5OB-2-S2	SITE POLE TWIN	362
"LE"	COLUMBIA CAT. NO. LCL4-35LW-EDU	SURFACE	19
"LK"	HUBBEL CAT. NO. MBUL	GROUND	58

CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48489 TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



YDE TOWNSHIP MUNCIPAL CENTER SITE & BUIDLING IMPROVEMENTS 3350 VINCENT ROAD CLYDE TOWNSHIP, MICHIGAN

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

N BY AS, GNM

GD BY GNM

AS NOTED

O FOR: DATE

 ISSUED FOR
 DATE

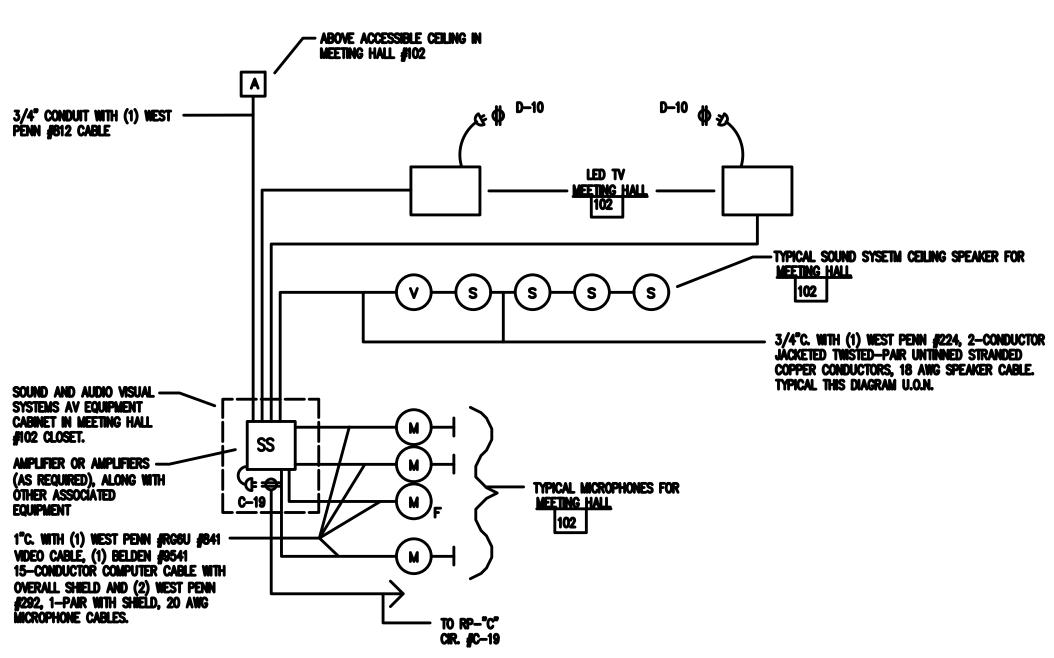
 OWNER REVIEW
 3-20-17

 PLAN REVIEW
 3-27-17

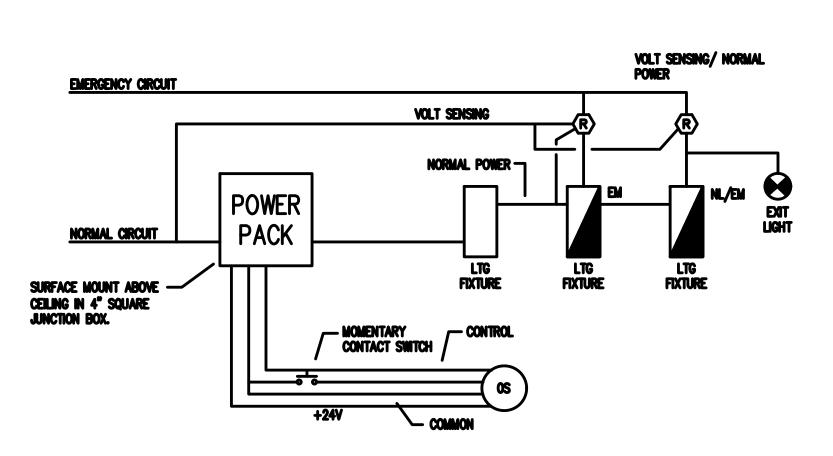
 BIDDING
 4-11-17

 BULLETIN #1
 3-29-18

ET NO.



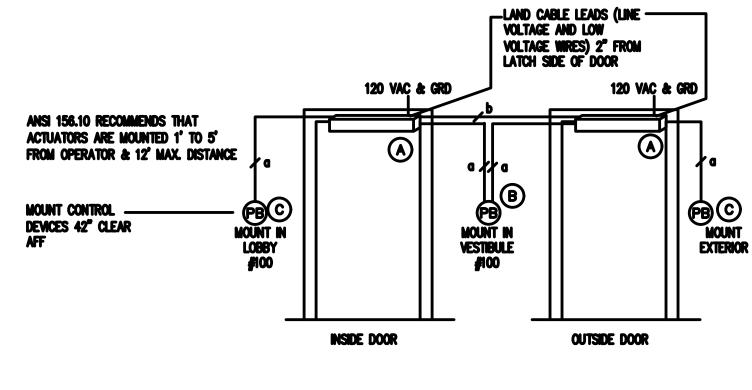
REFER TO SHEETS #E-4 & 5 FOR EXACT LOCATION AND QUANTITY OF EQUIPMENT SHOWN. NO SCALE



TYPICAL ROOM LIGHTING OCCUPANCY CONTROL WIRING DIAGRAM NO SCALE

NOTES: 1. THIS DETAIL APPLIES FOR INSTALLATIONS UTILIZING (66), (66), (66) AND (66) ONLY.

- 2. POWER PACK TO BE SENSORSWITCH #MP20.
- 3. RELAY TO BE MORLITE CAT. No. PCM-120V OR APPROVED EQUAL.
- 4. VERIFY WIRING REQUIREMENTS WITH MANUFACTURER.



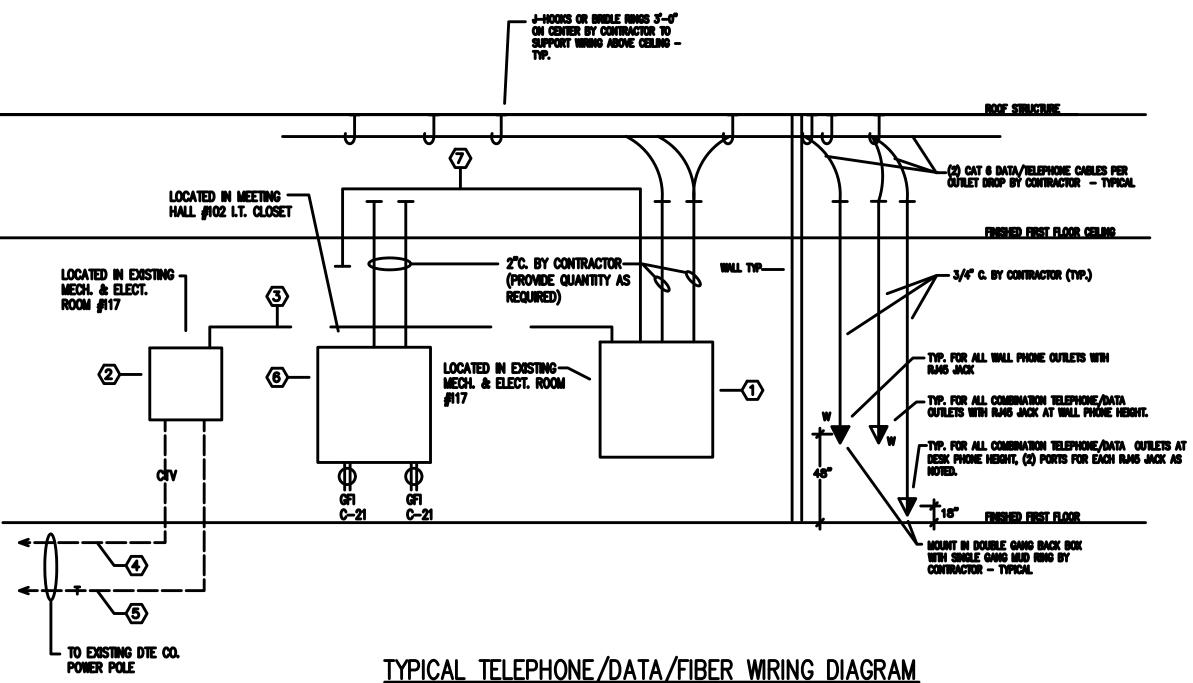
ACCESS CONTROL COMPONENT LEGEND:

WIRE SPECIFICATIONS:

- A POWER OPERATOR RECORD 8100 LE
 - a. 2, 18AWG STRANDED COPPER MAX RUN 200°
- B VESTIBULE ACTUATOR SDC AA-3ALxAA-3AR
 - b. 6, 18AWG STRANDED COPPER MAX RUN 200°
- © WALL ACTUATOR SDC 4824A4U
- c. Furnish Plenum rated wire as required.

ACTUATORS REQUIRE 2 GANG BOX.

TYPICAL AUTOMATIC DOOR ACTUATOR WIRING DIAGRAM NO SCALE



NO SCALE

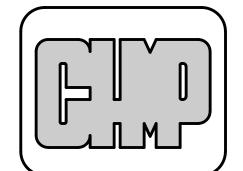
1. ALL WORK PROVIDED AND INSTALLED BY CONTRACTOR U.O.N.

- 2. FINAL CONNECTIONS BY OWNER'S IT COMPANY.
- 3. TELEPHONE/DATA JACKS WILL USE STANDARD 568B TERMINAL METHODOLOGY.
- 4. SERVERS, ROUTERS, RACKS, ETC. PROVIDED BY OTHERS, INSTALLED AND WIRED BY CONTRACTOR.

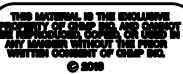
KEY NOTES

- EXISTING ATA:T TELEPHONE CO. 4" W. x 8" H. x 3/4" D. MAIN TELEPHONE SERVICE PLYWOOD BACKBOARD, AND ASSOCIATED EQUIPMENT, TO REMAIN.
- 2 EXISTING COMCAST CTV/INTERNET CO. FIBER OPTIC MAIN SERVICE ENTRANCE EQUIPMENT, TO REMAIN.
- (3) EXISTING CONDUIT AND WIRING TO REMAIN.
- 4) EXISTING COMCAST CABLE TV AND INTERNET CO. UNDERGROUND CONDUIT, TO REMAIN.
- (5) EXISTING AT&T CO. UNDERGROUND MAIN TELEPHONE SERVICE ENTRANCE CABLES AND CONDUIT, TO REMAIN.
- (6) NEW 4' W. x 4' H. x 3/4" D. CLASS A FIRE RATED PLYWOOD BACKBOARD, BY CONTRACTOR FOR COMCAST CTV/INTERNET CO. FIBER OPTIC SERVICE CABLES AND
- (2) 2" CONDUITS UP TO CEILING SPACE OF MEETING HALL ROOM #102 I.T. CLOSET AND STUBBED OFF INTO ROOM.

CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48489 TELEPHONE 810/695-5910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



FEB. 15, 2016 AS BUILT DATE AS, GNM CHECKED BY GNM AS NOTED ISSUED FOR: DATE OWNER REVIEW 3-20-17 PLAN REVIEW BIDDING 4-11-17 BULLETIN #1 3-29-18 E-8

20	1 - 119, 123, 124 - RECEPTACLES	1,620 WATTS	2 - 109, 110, RECEPTACLES	1,080 WATTS	20
20	3 - 124, 108, 109 100 - RECEPTACLES	1,800 WATTS	4 - 113 MICROWAVE	1,000 WATTS	20
20	5 - 112, 111 - RECEPTACLES	1,260 WATTS	6 - 113 REFRIGERATOR	1,000 WATTS	20
20	7 - 100, 101, 104, 103, 102 - RECEPTACLES	1,440 WATTS	8 - 103, 105, 106, 107 - OUTSIDE RECEPTACLES	1,260 WATTS	20
20	9 - 102 - RECEPTACLES	1,620 WATTS	10 _ר EWH-1 25A - 100	1,997 WATTS	20
20	11 - 102 - RECEPTACLES	900 WATTS	12	1,997 WATTS	
30	13 RTU-1 2P30A - OUTSIDE	2,537 WATTS	14 RTU-2 2P40A - OUTSIDE	3,116 WATTS	40
	15	2,537 WATTS	16	3,116 WATTS	
	17 - SITE POLE LIGHTS	690 WATTS	18 - FLAG/EXTERIOR CANS	230 WATTS	
	19 - SIGN FRONT	1,000 WATTS	20 - ADDITION LIGHTING - 100-107	1,361 WATTS	
	21 _] WATER HEATER 20 - 106	1,920 WATTS	22 - DOOR OPERATORS - 100, 101	250 WATTS	
	23	1,920 WATTS	24 - DRINKING FOUNTAIN - 104	600 WATTS	
	25 - PRINTER - 108	500 WATTS	26 - COPY MACHINE - 109	1,500 WATTS	
	27 - RECEPTACLE/COMPUTER - 108	500 WATTS	28 - SOUND - 103	500 WATTS	
	29 - FAX MACHINE - 109	500 WATTS	30 - POSTAGE METER - 109	200 WATTS	
	31 - (2) FIBER SYSTEM RECEPTACLES - 103	360 WATTS	32 - EF-1, 2, & 3 - 104, 105, 107	340 WATTS	
	33 - EF-4 & 5 - 114, 115	160 WATTS	34		
	35		36		
	37		38		
	39		40		

RECEPTACLES	11,340	
LIGHTING	2,210	
AIR UNITS/HEATING	11,306	
MISCELLANEOUS	15,955	
TOTAL @ 100%	40,811	
TOTAL AMP @ 100%	170.05	

MOTOR HP	SWITCH/FUSE	CIRCUIT BREAKER	STARTER SIZE
1/2	30/4A	15A	1
3/4	30/5A	15A	1
1	30/6A	15A	1
1 1/2	30/9A	20A	1
2	30/10A	20A	1
3	30/15A	25A	1
5	30/25A	45A	1
7 1/2	60/35A	70A	1
10	60/45A	80A	2
15	100/70A	125A	3
20	100/80A	175A	3
25	100/100A	200A	3
30	200/125A	250A	4
40	200/150A	300A	4
50	200/200A	400A	5
60	400/225A	450A	5
75	400/300A	600A	5
100	400/400A	800A	6

NOTES: REFER TO RISER DIAGRAM FOR SIZING AND FEEDERS FOR VARIABLE FREQUENCY DRIVES.

THE ABOVE SCHEDULES ARE BASED ON MOTOR FULL LOAD AMPERES PUBLISHED BY N.E.C. AND ON MOTOR RUNNING OVERLOAD PROTECTION PROVIDED BY THERMAL OVERLOAD RELAYS.

FUSE SIZES ARE BASED ON DUAL-ELEMENT CLASS RK5 FUSES.

CIRCUIT BREAKER SIZES ARE BASED ON THERMAL MAGNETIC TYPE

S	FEEDER AND BRANCH SIZING SCHEDULE — GENEI	
OVERCURRENT DEVICE RATING (AMPERES)	WIRE SIZE — 30, 3W SYSTEM (AWG OR Kcmil)	WIRE SIZE — 3ø, 4W SYSTEM (AWG OR Kcmil)
15-20	3#12+12GND, 3/4" C	4#12+12GND, 3/4" C
25-30	3#10+10GND, 3/4" C	4#10+10GND, 3/4" C
35-40-45	3#8+10GND, 3/4" C	4#8+10GND, 3/4" C
50-60	3#6+10GND, 3/4" C	4#6+10GND, 1" C
70-80	3#4+8GND, 1" C	4#4+8GND, 1 1/4" C
90	3#3+8GND, 1 1/4" C	4#3+8GND, 1 1/4" C
100	3#2+8GND, 1 1/4" C	4#2+8GND, 1 1/4" C
110	3#1+6GND, 1 1/4" C	4#1+6GND, 1 1/2" C
125	3#1/0+6GND, 1 1/2" C	4#1/0+6GND, 2" C
150	3#2/0+6GND, 2" C	4#2/0+6GND, 2" C
175	3#3/0+6GND, 2" C	4#3/0+4GND, 2" C
200-225	3#4/0+4GND, 2" C	4#4/0+4GND, 2 1/2" C
250	3-250Kcmil+4GND, 2 1/2" C	4-250Kcmil+4GND, 2 1/2" C
300	3-350Kcmil+4GND, 2 1/2" C	4-350Kcmil+4GND, 2 1/2" C
350	3-500Kcmil+3GND, 2 1/2" C	4-500Kcmil+3GND, 3" C
400	3-600Kcmil+3GND, 3" C	4-600Kcmil+3GND, 3 1/2" C

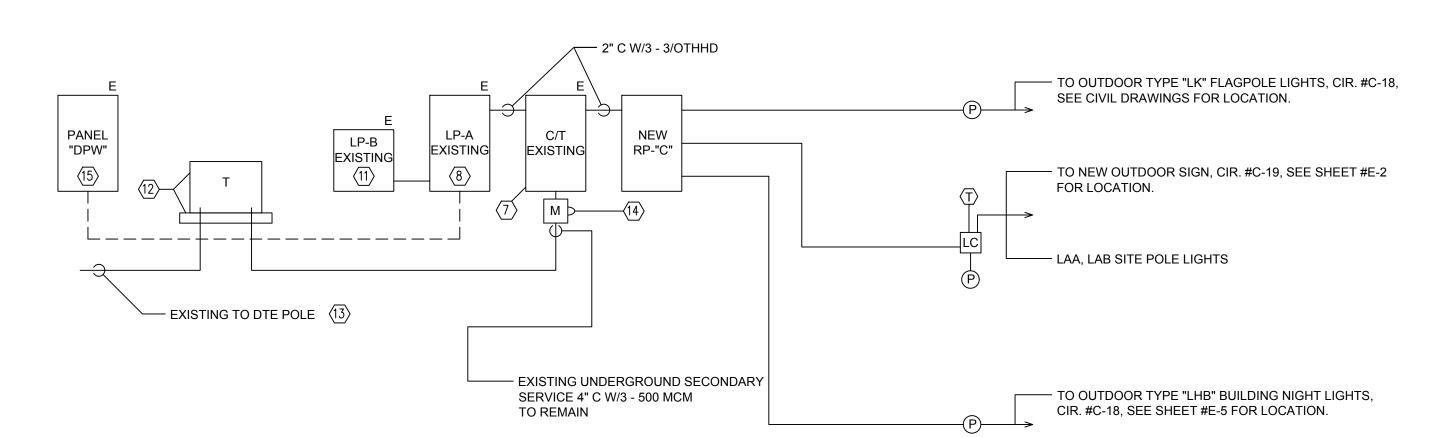
<u>Note</u>

CONTRACTOR TO SIZE FEEDERS AND BRANCH CIRCUITS BASED ON THIS SCHEDULE AND OVER CURRENT DEVICE SIZE, UNLESS NOTED OTHERWISE.

CONDUCTORS ARE BASED ON THHN/THWN UP TO AND INCLUDING #4/0. LARGER THAN #4/0 ARE BASED ON TYPE XHHW.

KEY NOTES (FOR RISER DIAGRAM)

- \bigcirc EXISTING DTE CO. CURRENT TRANSFORMER CABINET (W.P.) TO REMAIN.
- (8) EXISTING SQUARE D TYPE NQOB PANELBOARD, 225A-120/240V-1ø-3W, 42 CIRCUIT, PANEL "LP-A" WITH 225A-2P MAIN BREAKER, TO REMAIN.
- EXISTING SQUARE D TYPE QO LOAD CENTER, 120/240V-10-3W, 2 CIRCUIT, MLO, PANEL "LP-B", TO REMAIN.
- EXISTING DTE CO. (DETROIT EDISON COMPANY) 120/240V-10-3W SECONDARY PAD MOUNTED TRANSFORMER AND CONCRETE PAD, TO REMAIN.
- EXISTING DTE CO. UNDERGROUND PRIMARY ELECTRICAL SERVICE WIRING, AND CONDUIT TO REMAIN.
- EXISTING DTE CO. SECONDARY 120/240V-10-3W ELECTRIC SERVICE METER, TO REMAIN.
- EXISTING SQUARE D TYPE QO LOAD CENTER, 120/240V-1ø-3W, MLO 8 CIRCUIT PANEL "DPW", TO REMAIN.



ELECTRIC SERVICE RISER DIAGRAM

NO SCALE

ELECTRICAL SERVICE CALCULATIONS CONNECTED LOAD: DEMAND LOAD: 4,010 WATTS @ 100% . 4,010 W. RECEPTACLES 10,000 WATTS @ 100% . 10,000 W. 4,580 WATTS @ 50% .. 2,290 W. MISCELLANEOUS . 35,724 W. 44,655 WATTS @ 80% TOTAL 63,245 WATTS 52,024 W. 240V-1ø SERVICE 216.77 AMPS 400 AMP 240/120 VOLT-10 SERVICE IS REQUIRED. EXISTING 400 AMP SERVICE IS ADEQUATE TO ACCOMMODATE THE NEW DEMAND LOAD. CHMP INC. 5198 TERRITORIAL ROAD GRAND BLANG, MI 48439 TELEPHONE 810/695-6910



ARCHITECTURE
ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEYING



ENTER

CLYDE TOWNSHIP MUNCIPAL CENT SITE & BUIDLING IMPROVEMENT

PROJECT NO. 16000800

DATE FEB. 15, 2016

AS BUILT DATE

DRAWN BY AS, GNM

CHECKED BY GNM

SCALE AS NOTED

OWNER REVIEW 3-20-17
PLAN REVIEW 3-27-17
BIDDING 4-11-17
BULLETIN #1 3-29-18

HEET NO.