CITY OF MARSHALLTOWN

ANSON PARK SHELTER RENOVATION

#PRK20001

MARSHALLTOWN, IOWA

REBID DOCUMENTS
04/20/2021

ARCHITECT
I hereby certify that the portion of the technical submission described below has been prepared by me or under my direct supervision and responsible charge. I am duly licensed under the laws of the state of Iowa.

JUSTIN W SORENSEN — 06395
Printed or Typed Name — Iowa License No.

Signature — Date

My license renewal date is: 06/30/2021

Pages or sheets covered by this seal:
All: G & A sheets

MECHANICAL ENGINEER
I hereby certify that the portion of the technical submission described below has been prepared by me or under my direct supervision and responsible charge. I am duly licensed under the laws of the state of Iowa.

ROGER NIKOLAS — 18811
Printed or Typed Name — Iowa License No.

Signature — Date

My license renewal date is: 12/31/2021

Pages or sheets covered by this seal:
All: M sheets

ELECTRICAL ENGINEER
I hereby certify that the portion of the technical submission described below has been prepared by me or under my direct supervision and responsible charge. I am duly licensed under the laws of the state of Iowa.

DARRELL BREN — 15317
Printed or Typed Name — Iowa License No.

Signature — Date

My license renewal date is: 12/31/2021

Pages or sheets covered by this seal:
All: E sheets

INDEX TO DRAWINGS

SHEET INDEX - GENERAL

G-001 COVER SHEET

SHEET INDEX - ARCHITECTURAL

A-101 DEMOLITION PLAN & FLOOR PLAN
A-102 REFLECTED CEILING PLAN & ROOF PLAN
A-201 EXTERIOR ELEVATIONS
A-501 WALL SECTIONS, ENLARGED PLANS, INTERIOR ELEVATIONS, DETAILS, SCHEDULES
A-502 DETAILS

SHEET INDEX - MECHANICAL

M-001 MECHANICAL TITLE SHEET
M-101 PLUMBING & MECHANICAL PLAN
M-501 MECHANICAL DETAILS
ME601 MECHANICAL SCHEDULES

SHEET INDEX - ELECTRICAL

E-001 ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES
E-101 ELECTRICAL DEMOLITION PLAN
E-102 LIGHTING PLAN AND POWER AND TECHNOLOGY PLAN
E-501 ELECTRICAL DETAILS, RISERS, AND SCHEDULES

MOST COMMONLY USED ABBREVIATIONS

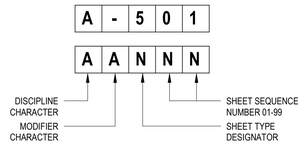
ABBREVIATIONS:

AB	ANCHOR BOLT/ROD
ABV	ABOVE
AC	ASPHALTIC CONCRETE/AIR CONDITIONER
ACC	ACCESSIBLE
ACM	ALUMINUM COMPOSITE MATERIAL
ACOUS	ACOUSTICAL
ADD	ADDENDUM
ADH	ADHESIVE
ADJ	ADJUSTABLE, ADJACENT, ADJOINING
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
ALT	ALTERNATE
ALUM	ALUMINUM
APC	ACOUSTICAL PANEL CEILING
ARCH	ARCHITECT (URAL)
ASI	ARCHITECTURAL SUPPLEMENTAL INFORMATION
AWP	ACOUSTICAL WALL PANEL
BD	BOARD
BEV	BEVELED
BFF	BELOW FINISH FLOOR
BL	BRICK LEDGE
BLDG	BUILDING
BLKG	BLOCK (ING)
BM	BEAM
BOT	BOTTOM
BO	BOTTOM OF
BOC	BOTTOM OF CONCRETE
BRG	BEARING
BRK	BRICK
BSMT	BASEMENT
BTWN	BETWEEN
C	CHANNEL/CELSIUS
CAB	CABINET
CB	CERAMIC BASE
CD	CONSTRUCTION DOCUMENTS
CEM	CEMENT
CF	CUBIC FEET OR FOOT
CG	CORNER GUARD
CIPC	CAST-IN-PLACE CONCRETE
CJ	CONTROL/CONSTRUCTION JOINT
CL	CENTER LINE
CLG	CEILING
CLKG	CAULKING
CLR	CLEAR, CLEARANCE
CMU	CONCRETE MASONRY UNIT
CO	CHANGE ORDER/CLEAN OUT
COL	COLUMN
COMB	COMBIMATION
COMP	COMPOSITE/COMPOSITION
CONC	CONCRETE
CONN	CONNECT (ION)
CONST	CONSTRUCTION
CONT	CONTINUOUS, CONTINUE
CONTR	CONTRACT (OR)
COORD	COORDINATE
CORR	CORRUGATED/CORRIDOR
CPT	CARPET
CSMT	CASEMENT
CT	CERAMIC TILE
CTB	CARPET TILE BASE
CTR	CENTER
D	DEPTH
DBL	DOUBLE
DEMO	DEMOLITION, DEMOLISH
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIV	DIVIDE, DIVISION
DISP	DISPENSER
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING (S)
DWR	DRAWER
DWTR	DUMBWAITER
(E)	EXISTING
E	EAST
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENL	ENLARGED
EMER	EMERGENCY
ENGR	ENGINEER
EOP	EDGE OF PAVEMENT
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EPS	EXPANDED POLYSTYRENE BOARD
EPT	EPOXY PAINT
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EST	ESTIMATE
ETC	ETCETERA
ETR	EXISTING TO REMAIN
EW	EACH WAY
EXIST	EXISTING
EXC	EXCAVATE/EXCAVATION
EXH	EXHAUST
EXP	EXPANSION/EXPOSED
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
EWS	EYE WASH AND SHOWER
FA	FIRE ALARM
FAB	FABRICATE/FABRICATION
FD	FLOOR DRAIN
FDC	FIRE DEPRATMENT CONNECTION
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISHED FLOOR
FFE	FINISH FLOOR ELEVATION
FIN	FINISH (ED)
FLOUR	FLOURESCENT
FLR	FLOOR (ING)
FO	FACE OF
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FOF	FACE OF FINISH
FR	FIRE RESISTANT/FRAME
FRP	FIBERGLASS REINFORCED PANEL
FS	FLOOR SINK
FT	FOOT, FEET/FIRE TREATED
FTG	FOOTING
FURR	FURRING
FUT	FUTURE
GA	GAGE, GAUGE
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GALV	GALVANIZED
GL	GLASS
GLU LAM	GLUE LAMINATED (BEAM)
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HB	HOSE BIB
HC	HANDICAP / HOLLOW CORE
HD	HEAVY DUTY
HDBD	HARDBOARD
HDR	HEADER
HDWD	HARDWOOD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HSS	HOLLOW STRUCTURAL STEEL
HVAC	HEATING, VENTILATION, AIR-CONDITIONING
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER/DIMENISON
IN	INCH(ES)
INCL	INCLUDE (D), INCLUDING
INFO	INFORMATION
INSP	INSPECTION
INSTR	INSTRUCTION(S)
INSUL	INSULATE (D), INSULATION
INT	INTERIOR
JAN	JANITOR
JST	JOIST
JT	JOINT
KCJ	KEYED CONSTRUCTION JOINT
KO	KNOCK OUT
L	LENGTH / ANGLE
LAB	LABORATORY
LAM	LAMINATE (ED)
LAV	LAVATORY
LB	POUND
LF	LINEAR FEET
LH	LEFT HAND
LKR	LOCKER
LOC	LOCATION
LONG	LONGITUDINAL
LT	LIGHT
LVR	LOUVER
LVT	LUXURY VINYL TILE
MBC	MINNESOTA BUILDING CODE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MC	MEDICINE CABINET
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURE (R)
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MR	MIRROR
MTL	METAL
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED / CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED / OWNER INSTALLED
OH	OVERHEAD
OPP	OPPOSITE
OPG	OPENING
ORIG	ORIGINAL
ORD	OVERFLOW ROOF DRAIN
OZ	OUNCE
PAR	PARALLEL
PCF	POUNDS PER CUBIC FOOT
PED	PEDESTAL
PERF	PERFORATED
PERP	PERPENDICULAR
PL	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PNL	PANEL
PR	PAIR/PROPOSAL REQUEST
PRCST	PRECAST CONCRETE
PREFAB	PREFABRICATE
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PT	PAINT / PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PTR	PAPER TOWEL RECEPTACLE
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
R	RADIUS/RISER
RB	RUBBER BASE
RBR	RUBBER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REBAR	REINFORCING BAR
REC	RECESSED
REF	REFERENCE/REFRIGERATOR
REINF	REINFORCE (D), (ING), (MENT)
REQ	REQUIRE
REQD	REQUIRED
RES	RESILIANT FLOORING
RET	RETURN
REV	REVISION (S), REVISED
RFI	REQUEST FOR INFORMATION
RFP	REQUEST FOR PROPOSAL
RH	RIGHT HAND
RL	RIDGE LINE
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RWL	RAIN WATER LEADER
S	SOUTH
SB	SPLASH BLOCK
SC	SOLID CORE
SCHED	SCHEDULE
SCR	SHOWER CURTAIN ROD
SCT	SECTION
SD	SOAP DISPENSER
SF	SQUARE FOOT
SHT	SHEET
SHTHG	SHEATHING
SIM	SIMILAR
SLDG	SLIDING
SLNT	SEALANT
SND	SANITARY NAPKIN DISPENSER
SNDU	SANITARY NAPKIN DISPOSAL UNIT
SOG	SLAB ON GRADE
SPEC	SPECIFICATION (S)
SQ	SQUARE
SSM	SOLID SURFACE MATERIAL
SST	STAINLESS STEEL
ST	STREET
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SHEET VINYL
SW	SHEARWALL
SYM	SYMMETRICAL
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TOWEL BAR
TBD	TO BE DETERMINED
TEMP	TEMPORARY/TEMPERED
TER	TERRAZZO
THD	THREAD (ED) (S)
THK	THICKNESS
THRU	THROUGH
TKBD	TACKBOARD
TL	TILE
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE/CURB
TOD	TOP OF DECK
TOF	TOP OF FOOTING (FOUNDATION)
TOP	TOP OF PIER
TOJ	TOP OF JOIST
TOS	TOP OF SLAB/STEEL
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TPO	THERMOPLATIC POLYOLEFIN
TPTN	TOILET PARTITION
TRANS	TRANSVERSE
TS	TUBE STEEL
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UTIL	UTILITY
V	SHEAR
VAR	VARIES
VB	VAPOR BARRIER / VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VARIFY IN FIELD
VR	VAPOR RETARDER
VWB	VINYL WALL BASE
VWC	VINYL WALL COVERING
W	WEST/WIDTH
W/	WITH
W/O	WITHOUT
WA	WEDGE ANCHOR
WB	WOOD BASE
WC	WATER CLOSET
WD	WOOD/WOODWORK
WDW	WINDOW
WF (W)	WIDE FLANGE
WG	WALL GUARD
WH	WATER HEATER
WI	WROUGHT IRON
WL	WIND LOAD
WP	WATERPROOF (ING)
WR	WATER RESISTANT
WSCT	WAINSCOT
WT	WEIGHT/WINDOW TREATMENT
WWF	WELDED WIRE FABRIC

SYMBOLS USED AS ABBREVIATIONS:

&	AND
L	ANGLE
LL	DOUBLE ANGLE
@	AT
d	PENNEY
#	POUND OR NUMBER
Ø	ROUND OR DIAMETER

SHEET IDENTIFICATION



DISCIPLINE CHARACTERS

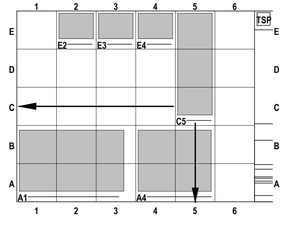
G	GENERAL
H	HAZARDOUS
C	CIVIL
L	LANDSCAPE
S	STRUCTURAL
A	ARCHITECTURAL
I	INTERIOR
P	PLUMBING
M	MECHANICAL
E	ELECTRICAL
T	TELECOMMUNICATIONS
R	RESOURCE

TYPICAL MODIFIER CHARACTERS

B	SUBSTRUCTURES
C	CEILING/CHEMICALS
D	DEMOLITION
E	ELEMENTS
F	FRAMING/FURNISHINGS
G	GRAPHICS/GRADING
H	HVAC
I	INFORMATION/IMPROVEMENTS
L	LIGHTING
N	FINISHES
P	PLAN/PIPING/POWER/PAVING/PLANTING
Q	EQUIPMENT
S	SITE
T	TECHNOLOGY/TRANSPORTATION
U	UTILITIES

SHEET TYPE DESIGNATORS

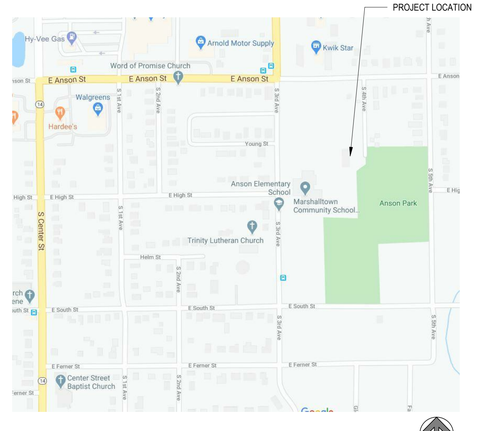
0	GENERAL (SYMBOLS LEGEND, NOTES, ETC)
1	PLANS (HORIZONTAL VIEWS)
2	ELEVATIONS (VERTICAL VIEWS)
3	SECTIONS (SECTIONAL VIEWS)
4	LARGE SCALE VIEWS
5	DETAILS
6	SCHEDULES AND DIAGRAMS
7	USER DEFINED
8	USER DEFINED
9	3D REPRESENTATIONS (ISO, PERSP, PHOTOS)



DESIGN TEAM

TITLE/DISCIPLINE	NAME/CONTACT	COMPANY	PHONE	E-MAIL
PROJECT MANAGER / ARCHITECT	JUSTIN SORENSEN	TSP, Inc.	507.208.8155	sorensenjw@teamtsp.com
MECHANICAL ENGINEER	ROGER NIKOLAS	TSP, Inc.	605.336.1160	nikolasrc@teamtsp.com
ELECTRICAL ENGINEER	DARRELL BREN	TSP, Inc.	605.336.1160	brendl@teamtsp.com

VICINITY MAP



TSP
TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901
(507) 288-8155
www.teamtsp.com
Architecture
Engineering
Planning
CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE: 04/20/2021 — DRAWN BY: ---
PROJECT #: 01190805 — CHECKED BY: ---

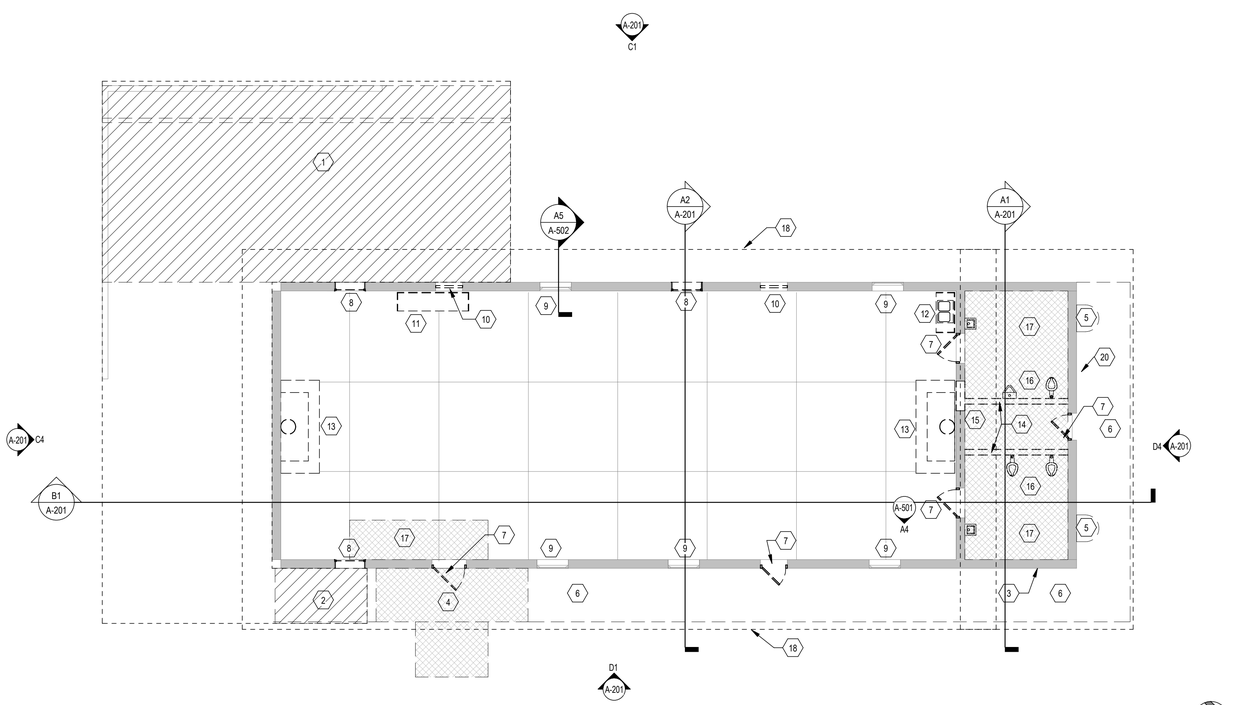
SHEET TITLE

COVER SHEET

SHEET NUMBER

G-001

REBID DOCUMENTS



C1 FIRST LEVEL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

SHEET GENERAL NOTES: DEMOLITION PLAN

A. DEMOLITION PORTIONS OF THE PLANS ARE PROVIDED FOR THE CONVENIENCE OF THE BIDDING PROCESS AND ARE NOT MEANT TO BE ALL-INCLUSIVE OF THE FULL SCOPE OF THE DEMOLITION EFFORT. OTHER ELEMENTS WITHIN THE DOCUMENTS THAT REQUIRE THE REMOVAL OF EXISTING CONSTRUCTION IN ORDER TO INSTALL THE NEW SCHEDULED MATERIAL SHALL BE CONSIDERED A PART OF THE SCOPE OF THE WORK UNDER THIS CONTRACT.
B. UNLESS NOTED OTHERWISE, EXISTING WALLS ARE MASONRY.
C. G.C. SHALL COORDINATE DEMOLITION OPERATIONS WITH OTHER TRADES.
D. AT THE TIME THEY PRESENT THEIR PROPOSAL TO THE PRIME BIDDER (GENERAL CONTRACTOR), EACH SUB-BIDDER (TRADE) SHALL PROVIDE A LIST OF EXISTING CONSTRUCTION ASSEMBLIES, INCLUDING SIZES AND LOCATIONS, THAT MUST BE CUT AND PATCHED TO FACILITATE THEIR WORK. THE GENERAL CONTRACTOR SHALL PROVIDE CUTTING AND PATCHING AS PER THE LISTS AND AS OTHERWISE DIRECTED ON THE DRAWINGS AND SPECIFICATIONS. OTHERWISE THE SUB-BIDDER ACCEPTS RESPONSIBILITY OF PATCHING.
E. DEMOLITION OF PLUMBING FIXTURES AND MECHANICAL EQUIPMENT AND ASSOCIATED PIPING SHALL BE BY M.C. G.C. SHALL PROVIDE PATCH TO MATCH AS REQUIRED DUE TO MECHANICAL DEMOLITION OPERATIONS. PATCHING SHALL INCLUDE FINISH TO MATCH EXISTING WHERE NEW FINISH IS NOT OTHERWISE SCHEDULED. REFERENCE MECHANICAL DEMOLITION SHEETS.
F. DEMOLITION OF ELECTRICAL FIXTURES AND EQUIPMENT AND ASSOCIATED CIRCUITING SHALL BE BY E.C. G.C. SHALL PROVIDE PATCH TO MATCH AS REQUIRED DUE TO ELECTRICAL DEMOLITION OPERATIONS. PATCHING SHALL INCLUDE FINISH TO MATCH EXISTING WHERE NEW FINISH IS NOT OTHERWISE SCHEDULED. REFERENCE ELECTRICAL DEMOLITION SHEETS.
G. FOLLOWING SELECTIVE DEMOLITION, THE G.C. SHALL PREPARE ADJACENT SURFACES THAT REMAIN FOR INTEGRATION INTO THE NEW WORK AND PATCH BACK ADJACENT SURFACES WHERE IT APPLIES.

KEY NOTES: DEMOLITION PLAN

1. PROVIDE TEMPORARY SHORING AND DEMO CANOPY AS HATCHED AND ALL ASSOCIATED COLUMNS. SALVAGE EXISTING BEAM TO BE REINSTALLED AT NEW CANOPY EDGE.
2. DEMO HATCHED PORTION OF EXISTING CANOPY.
3. DEMO EXISTING SIDEWALK AS NEED TO INSTALL NEW ELECTRICAL SERVICE/METER AND GROUNDING.
4. DEMO EXISTING SIDEWALKS AS NEED TO INSTALL NEW STOOP. DEMO BACK TO NEAREST CONTROL JOINT.
5. DEMO EXISTING CONCRETE TOPPING RAMPS AND FORMER DOOR LOCATIONS. EXISTING SIDEWALK TO REMAIN.
6. UNDER ALTERNATE #2 DEMO EXISTING SIDEWALKS ON THE NORTH AND EAST SIDES OF THE BUILDING.
7. DEMO EXISTING DOOR AND FRAME.
8. DEMO EXISTING WINDOW AND ALL ASSOCIATED TRIM.
9. UNDER ALTERNATE #1 DEMO EXISTING WINDOW AND ALL ASSOCIATED TRIM.
10. DEMO EXISTING EXHAUST FAN AND LOUVER.
11. DEMO EXISTING WALL HUNG COUNTERTOP.
12. DEMO EXISTING BASE CABINET, SINK, & WATER HEATER. REF MECHANICAL.
13. DEMO EXISTING MASONRY FIREPLACE AND CHIMNEY UP THROUGH THE ROOF IN ENTIRETY. PREP FOR NEW CONCRETE SLAB ON GRADE.
14. DEMO EXISTING CMU WALL.
15. CUT NEW DOOR OPENING IN EXISTING CMU WALL, OVERCUT 8" EACH SIDE.
16. DEMO EXISTING PLUMBING FIXTURES, PARTITIONS, AND ACCESSORIES.
17. DEMO EXISTING SLAB ON GRADE AS NEEDED FOR NEW SUB SLAB PLUMBING ROUGH IN. REF MECHANICAL.
18. AFTER DEMO OF EXISTING METAL FASCIA INSPECT WOOD FASCIA FOR ROT. INLCUDE 75 LF OF DEMO AND REPLACEMENT IN BASE BID. EXISTING CANOPY JOIST MAY BE SALVAGED FOR USE AS REPLACEMENT FASCIA BEAMS.

PROJECT ADDRESS:

917 S 4th AVE.
MARSHALLTOWN, IA 50158

GOVERNING CODES:

BUILDING
INTERNATIONAL BUILDING CODE 2015 (IOWA)
ACCESSIBILITY
IAC - 661-302 / 2010 ADA STANDARDS (IOWA)
FIRE /LIFE SAFETY
INTERNATIONAL FIRE CODE 2015 (IOWA)
NFPA LIFE SAFETY CODE 2012
MECHANICAL
INTERNATIONAL MECHANICAL CODE 2018 (IOWA)
PLUMBING
UNIFORM PLUMBING CODE 2018 & IAC 641-25 (IOWA)
ENERGY
INTERNATIONAL ENERGY CODE 2012 (IOWA)
ELECTRICAL
NATIONAL ELECTRICAL CODE 2020 (IOWA)

PROJECT SUMMARY

RENOVATION OF THE EXISTING SHELTER AT ANSON PARK. INCLUDING BUT NOT LIMITED TO ROOF REPLACEMENT, NEW FACADE, NEW ELECTRICAL & LIGHTING SYSTEMS, NEW MECHANICAL AND PLUMBING, AND NEW INTERIOR FINISHES.

CODE SUMMARY

CHAPTER 3

Occupancy Classification: A-3 ASSEMBLY (COMMUNITY HALL)

CHAPTER 5

Allowable Height: IBC Table 504.3 - 40 ft
IBC Table 504.4 - 1 stories
Actual Height: Total Building Height = 13'-0"
= 1 Stories

Allowable Area *(per level)*: Table 506.2 = 6,000 sf
Frontage Increase (506.3): *not needed*
Actual Areas: 2,640 sf

Occupancy Seperation (table 508.4): none

CHAPTER 6

Type of Construction: Type V-B

Fire resistive Rating Requirements (Table 601):

Building Element	Rating (in hours)
Structural Frame	0
Exterior Bearing Walls (per table 602)	0
Interior Bearing Walls	0
Exterior Non Bearing Walls (per table 602)	0
Interior Non Bearing Walls	0
Floor Construction	0
Roof Construction	0

CHAPTER 9

Non Sprinklered

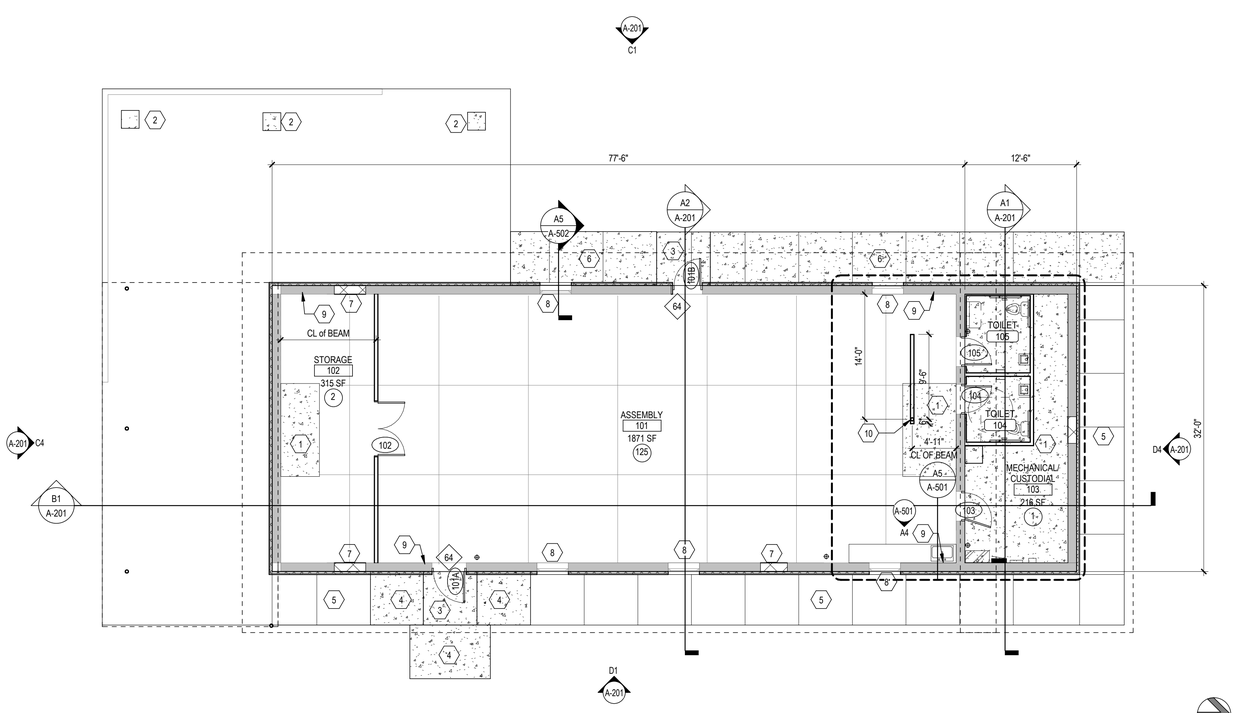
Fire Areas (Section 903.2.3): Fire areas less than 12,000 sf

CHAPTER 10

Egress Width (Section 1005): Stairs = Occupancy x 0.3
Other = Occupancy x 0.2

Travel Distance (Table 1017.2): A-3 250 Feet
Common Path Travel Distance (Table 1006.3): 75' - 0"

Corridors (Table 1020.1): A-3 occupancy without sprinker system require 1 hr corridors



A1 FIRST LEVEL FLOOR PLAN
SCALE: 1/8" = 1'-0"

SHEET GENERAL NOTES: FLOOR PLAN

A. THE SET OF DOCUMENTS FOR THIS PROJECT INCLUDES DRAWINGS AS REPRESENTED HEREIN AND A PROJECT MANUAL EACH WITH EQUAL WEIGHT OF IMPORTANCE.
B. PROVIDE BLOCKING AS REQUIRED FOR MOUNTING ALL ACCESSORIES, CASEWORK, HARDWARE, ETC.
C. THE G.C. SHALL PROVIDE ALL CHASES, SLOTS, OPENINGS, ETC. AS REQUIRED FOR THE WORK OF ALL TRADES, AND SHALL PROVIDE PATCHING TO MATCH EXISTING ADJACENT CONSTRUCTION INCLUDING FINISHES. COORDINATE WITH ALL OTHER TRADES. NOTE THAT THIS SHALL INCLUDE EXISTING CONSTRUCTION WHERE ACCESS IS REQUIRED TO ACCOMPLISH THE WORK. NOTE THAT EACH TRADE SHALL PROVIDE THEIR OWN CORE DRILLING AS REQUIRED TO ACCOMPLISH THEIR WORK. CONTACT THE ARCHITECT FOR APPROVAL OF THE LOCATION OF HOLES CORED THROUGH STRUCTURAL ELEMENTS. DUCTS, PIPING, CABLING, ETC. SHALL BE APPROPRIATELY SEALED WITH REGARD TO FIRE/SMOKE RATED ASSEMBLIES AND/OR ACOUSTICS BY THE TRADE PROVIDING THEM. REFERENCE SPECIFICATION SECTION 017329 CUTTING AND PATCHING.
D. SEAL VAPOR BARRIER AND/OR INFILTRATION BARRIER AT LAPS, PENETRATIONS, AND PERIMETER TO MAINTAIN THEIR FUNCTIONS AS BARRIERS.
E. DIMENSIONS ARE TO FACE OF MASONRY, EDGE OF MASONRY OPENING, CENTERLINE OF METAL STUD WALL, CENTERLINE OF STUD WALL OPENING, OR FACE OF OTHER FINISHED SURFACES.
F. ALL DIMENSIONS SHOULD BE VERIFIED WITHIN THE CONFINES OF EXTERIOR WALLS TO ENSURE ALIGNMENT AS INDICATED WITHIN THE PLAN. NOTIFY ARCHITECT IF ANY DISCREPANCIES OCCUR FROM THE ANTICIPATED WALL LAYOUT.
G. PROVIDE APPROPRIATE METAL DRYWALL ACCESSORIES SUCH AS METAL CORNER BEAD AND "J" MOLD AT ALL GYPSUM BOARD EDGES & CORNERS AND WHERE GYPSUM BOARD ABUTS DISSIMILAR MATERIALS. PROVIDE SEALANT AS APPROPRIATE.
H. DRYWALL CONTROL JOINTS SHALL BE INSTALLED AT BOTH SIDES OF ALL GYPSUM BOARD OPENINGS ON EACH SIDE OF THE WALL.
I. ALL FLOORS SHALL BE TAPERED TO FLOOR DRAINS IN THE IMMEDIATE AREA ONLY EXCEPT WHEN SCREED LINES ARE INDICATED ON THE PLAN. TAPERED SLABS ON GRADE SHALL MAINTAIN THEIR FULL THICKNESS AT ALL POINTS.
J. THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES TO ACCOMMODATE INSTALLATION OF EQUIPMENT AND DEVICES.
K. ALL H.M. AND ALUMINUM FRAMES SHALL HAVE RUBBER ROD AND FULL PERIMETER CAULK EACH SIDE. ALL HOLLOW METAL FRAMES SHALL HAVE BITUMINOUS COATING ON THE INSIDE. ALL HOLLOW METAL FRAMES SHALL BE GROUTED FULL AT MASONRY WALLS.
L. NEW SIDEWALKS SHALL BE 4" THICK WITH 6x6 W1.4xW1.4 W.W.F. AND BROOM FINISH OVER 4" MIN GRANULAR FILL. LOCATE CONTROL JOINTS AT 6'-0" OC MAX. SIDEWALKS SHALL PITCH LONGITUDINALLY NO GREATER THAN 1 IN 20 NOR CROSS PITCH GREATER THAN 1 IN 50.

KEY NOTES: FLOOR PLAN

1. NEW CONCRETE SLAB ON GRADE.
2. PATCH 4" CONCRETE SLAB ON GRADE AT REMOVED COLUMN LOCATIONS.
3. NEW 6'-0" x 6'-0" CONCRETE STOOP. REFERENCE DETAILS
4. PATCH EXISTING SIDEWALKS BACK TO NEW STOOP
5. UNDER ALTERNATE #2 PROVIDE NEW 6'-0" WIDE SIDEWALKS ON NORTH AND EAST SIDES OF BUILDING
6. NEW 6'-0" WIDE SIDEWALKS ON WEST SIDE OF BUILDING CONNECTING EXISTING PATIO TO NORTH SIDEWALK
7. FILL ALL ABANDONDED DOOR, WINDOW, EXHAUST FAN AND OTHER MISCELANIOUSE OPENINGS WITH 12" CMU TO MATCH EXISTING CONSTRUCTION.
8. UNDER ALTERNATE #1 PROVIDE NEW DOUBLE HUNG FIBERGLASS WINDOW AND METAL SCREEN
9. CUT AND REPOINT EXISTING MORTAR JOINTS IN EXISTING 12" CMU, INTERIOR AND EXTERIOR.
A. PROVIDE 75'-0" OF TUCKPOINTING IN BASE BID.
10. NEW 3" STEEL PIPE COLUMN. REF FOOTING DETAIL ##/A-502

PLUMBING FIXTURE REQUIREMENTS

CHAPTER 29

IBC Table 2902.1 - A-3 - W.C.= M-1/125, W-1/65; LAV=1/200

	W.C.		LAV	
MEN = 64occ.	W.C.(1/125)	= 0.51	LAV(1/200)	= 0.32
WOMEN= 64occ.	W.C.(1/65)	= 0.98	LAV(1/200)	= 0.32
TOTALS:	W.C.= 1.49		LAV = 0.64	

W.C. Actual	LAV	
Gender Neutrarl - 2	Gender Neutrarl - 2	Service Sink - 1

TSP

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/20/2021** DRAWN BY **JWS**
PROJECT # **01190805** CHECKED BY **JWS**

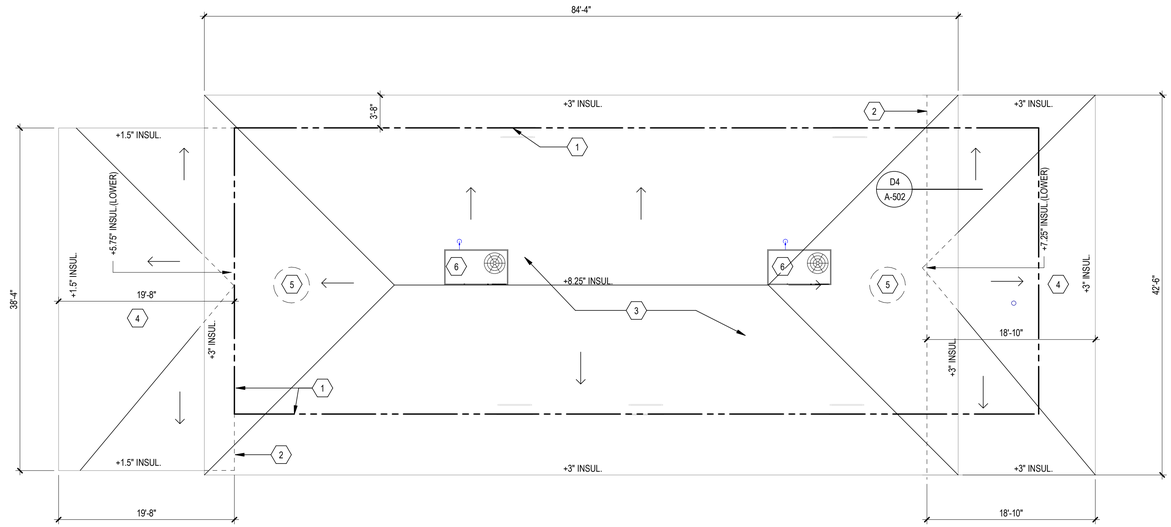
SHEET TITLE

DEMOLITION PLAN & FLOOR PLAN

SHEET NUMBER

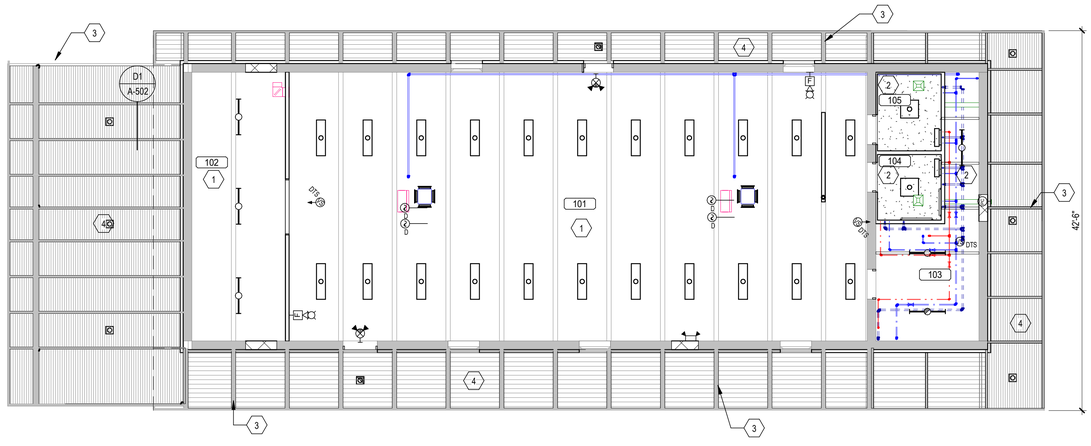
A-101

REBID DOCUMENTS



PLAN NORTH

C1 ROOF PLAN
SCALE: 1/8" = 1'-0"



PLAN NORTH

A1 FIRST LEVEL CEILING PLAN
SCALE: 1/8" = 1'-0"

SHEET GENERAL NOTES: ROOF PLAN

A. THE SET OF DOCUMENTS FOR THIS PROJECT INCLUDES DRAWINGS AS REPRESENTED HEREIN AND A PROJECT MANUAL EACH WITH EQUAL WEIGHT OF IMPORTANCE.
B. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
C. THE CONTRACTOR SHALL FIELD VERIFY ALL CURB AND ROOF PENETRATION LOCATIONS AND QUANTITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FLASHING SAME AT NO ADDITIONAL COST TO THE OWNER. UNLESS NOTE OR DETAILED OTHERWISE, FLASH ACCORDING TO MANUFACTURER'S STANDARD DETAILS.
D. WHERE INSULATION THICKNESS NECESSITATES IT, EXTEND EXISTING ROOF CURBS WITH TREATED WOOD BLOCKING. WHERE APPLICABLE, ALSO PROVIDE MECHANICAL AND ELECTRICAL EXTENSIONS.
E. THE CONTRACTOR SHALL TAKE CARE NOT TO OVERLOAD THE ROOF DECK WITH STOCKPILED MATERIALS.
F. ALL WOOD CURBS AND BLOCKING SHALL BE PRESSURE TREATED AS SPECIFIED. UNLESS NOTED OTHERWISE, ANCHOR ALL WOOD BLOCKING WITH 1/4" TAPCON SCREWS 12" O.C. STAGGERED.
G. THE CONTRACTOR IS RESPONSIBLE FOR DAILY WATER CUT-OFF AND TEMPORARY BALLAST TO SEAL UNFINISHED WORK IN THE EVENT OF INCLEMENT WEATHER.
H. THE CONTRACTOR SHALL COMPLETELY SEAL THE VAPOR BARRIER AT SIDE AND END LAPS, ROOF PERIMETERS, AND ROOF PENETRATIONS.
I. SEPARATE LAYERS OF INSULATION SHALL BE LAID WITH JOINTS STAGGERED.
J. SEALANTS AT CLAMPING BARS AND OTHER FLASHINGS RELATED TO THE ROOF SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR INSTALLING THE ROOF SYSTEM. SEALANTS AND FLASHINGS SHALL BE APPROVED BY THE ROOF MEMBRANE MANUFACTURER.
K. CONDENSING UNITS (CU) BY M.C. SHALL BE SET ON 6x6 REDWOOD SKIDS BY M.C. G.C. SHALL PROVIDE STRIPS OF WALKWAY PAD ADHERED TO BOTTOM OF SKIDS.
L. M.C. SHALL PROVIDE PREFABRICATED ROOF CURBS FOR MECHANICAL ROOF PENETRATIONS. G.C. SHALL INSTALL AND FLASH.

KEY NOTES: ROOF PLAN

1. PERIMETER OF BUILDING BELOW.
2. EDGE OF CANOPY BELOW.
3. UPPER ROOF: REMOVE EXISTING ROCK BALLAST, EPDM, INSULATION, ALL METAL ROOF EDGE AND FASCIA. IF ORIGINAL 'BUR' REMAINS, REMOVE LOOSE GRAVEL
4. LOWER ROOF: REMOVE ALL ROOF EDGE AND FASCIA. REMOVE ALL LOOSE GRAVEL FROM EXISTING 'BUR'.
5. DEMO EXISTING BRICK CHIMNEY AND PATCH HOLE WITH NEW WOOD DECKING.
6. ALTERNATE #3, NEW ROOFTOP MECHANICAL UNIT.

SHEET GENERAL NOTES: CEILING PLAN

A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WHICH ARE TO MATCH EXISTING CONSTRUCTION. CONTACT A/E WITH DISCREPANCIES.
B. UNLESS NOTED OR DETAILED OTHERWISE, SUSPENDED DRYWALL SYSTEM SHALL INCORPORATE CEILING SUSPENSION SYSTEM (DRYWALL) AND 5/8" GYPSUM BOARD FINISHED AND PAINTED AS SPECIFIED, INCLUDING ALL APPROPRIATE ACCESSORIES, CONTROL JOINTS, CORNER BEADS, & MOLDINGS.
C. SEE ALSO MECHANICAL & ELECTRICAL DRAWINGS FOR OTHER CEILING PENETRATIONS. FINAL LOCATIONS OF ALL CEILING PENETRATIONS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR IN THE FIELD.
D. ALL SUSPENDED CEILING SYSTEMS SHALL BE ATTACHED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS TO STRUCTURAL FRAMING AND IN ABSENCE OF SAME TO SUB-FRAMING PROVIDED BY THE CONTRACTOR AND ATTACHED TO THE STRUCTURAL FRAME.
E. COORDINATE AND SCHEDULE ABOVE CEILING WORK BY OWNER OR BY OTHERS WITH CEILING INSTALLATION.
F. LOCATIONS OF OCCUPANCY SENSORS ARE NOT SHOWN. CONTRACTOR SHALL COORDINATE THEIR LOCATIONS IN COMPLIANCE WITH ELECTRICAL SPECIFICATIONS AND DRAWINGS.
G. ALL CEILING MOUNTED ITEMS SUCH AS LIGHT FIXTURES, GRILLES, DIFFUSERS, SPEAKERS, EXIT LIGHTS ETC, SHALL BE LOCATED IN THE CENTER OF ACT/ACB PANELS, GYP BD SOFFITS AND/OR PLASTER SOFFIT BAYS, UNLESS NOTED OTHERWISE. COORDINATE WITH MECHANICAL AND ELECTRICAL DRAWINGS.

KEY NOTES: CEILING PLAN

1. INTERIOR PREP AND PAINTING BY OWNER.
2. NEW GYPSUM BOARD CEILING -PAINTED BY OWNER.
3. PREP AND REPAINT ALL EXISTING EXTERIOR WOOD BEAMS AND STEEL COLUMNS. COLORS TO BE SELECTED POST BID.
4. NEW VENTED METAL SOFFIT PANELS, REFERENCE SPECIFICATION & DETAILS.

TSP

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/20/2021**	DRAWN BY **JWS**
PROJECT # **01190805**	CHECKED BY **JWS**

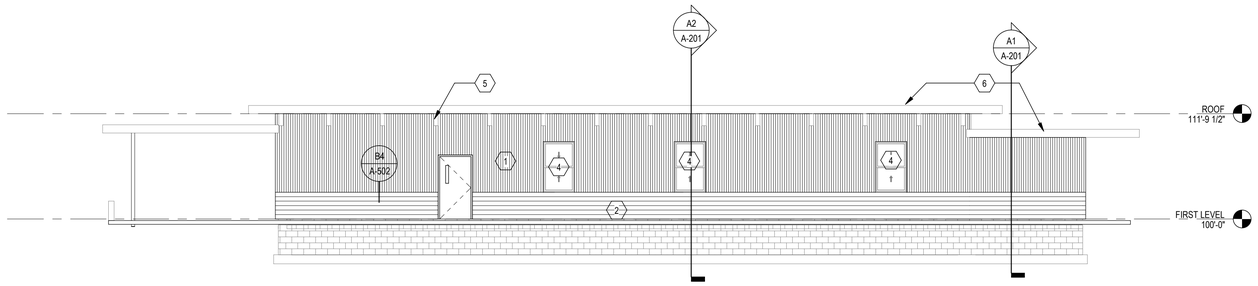
SHEET TITLE

REFLECTED CEILING PLAN & ROOF PLAN

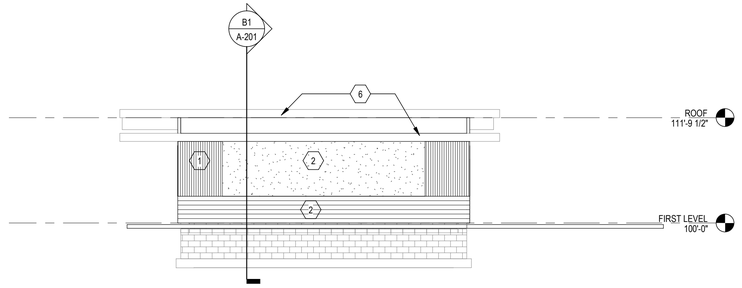
SHEET NUMBER

A-102

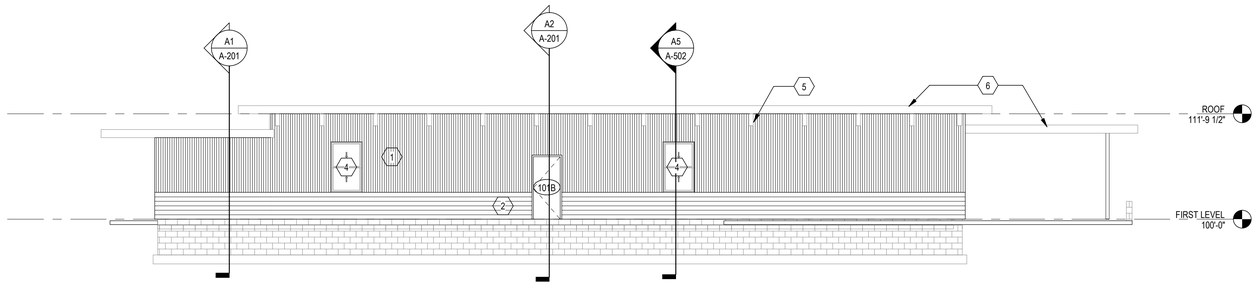
REBID DOCUMENTS



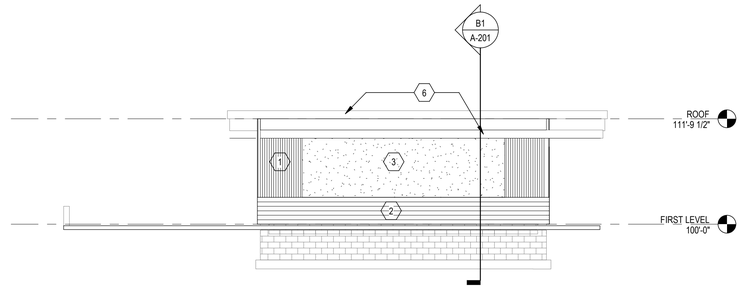
D1 EAST ELEVATION
SCALE: 1/8" = 1'-0"



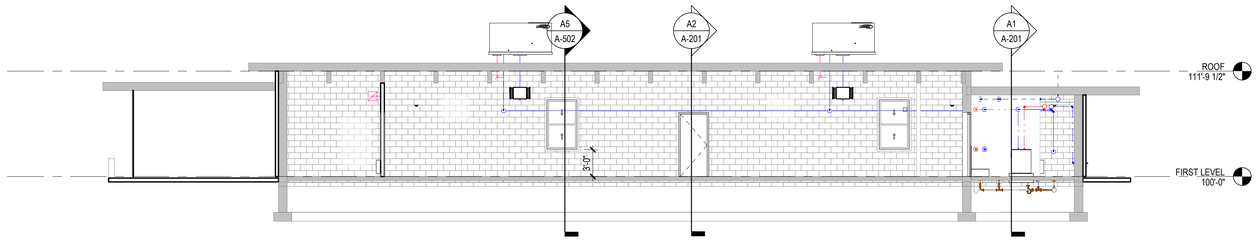
D4 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



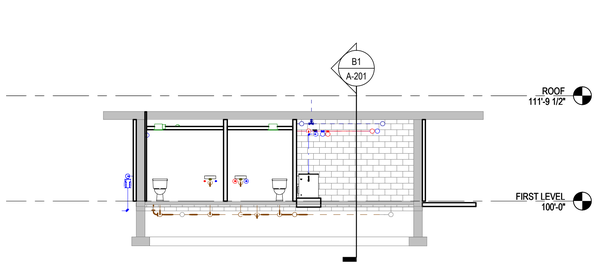
C1 WEST ELEVATION
SCALE: 1/8" = 1'-0"



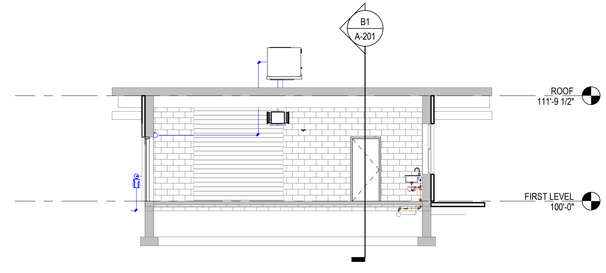
C4 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



B1 BUILDING SECTION - N/S
SCALE: 1/8" = 1'-0"



A1 BUILDING SECTION - E/W @ RESTROOMS
SCALE: 1/8" = 1'-0"



A2 BUILDING SECTION - E/W @ COMMUNITY HALL
SCALE: 1/8" = 1'-0"

SHEET GENERAL NOTES: EXTERIOR ELEVATIONS

A. APPLY SEALANT AND BACKER ROD TO ALL JOINTS BETWEEN DISSIMILAR MATERIALS.

B. ALL SURFACES DAMAGED DURING DEMOLITION SHALL BE REPAIRED FOR APPLICATION OF NEW FINISHES OR PATCHED TO MATCH EXISTING.

C. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WHICH ARE TO MATCH EXISTING CONSTRUCTION. CONTACT A/E WITH DISCREPANCIES.

KEY NOTES: EXTERIOR ELEVATIONS

1. VERTICAL RIB EXPOSED FASTENER METAL WALL PANELS. (E2)
2. REAR-VENTED WOOD FACADE SYESTE. (E1)
   A. UNDER ALTERNATE #4 PROVIDE STAINED CEDAR DECKING IN LIEU OF COMPOSIT DECKING SYSTEM.
3. DIRECT APPLIED FINISH SYSTEM (STUCCO) (E3)
4. UNDER ALTERNATE #1 PROVIDE NEW FIBERGLASS WINDOWS WITH STEEL SECURITY SCREENS.
5. REPAINT ALL EXPOSED WOOD BEAMS & BACKSIDE OF WOOD FASCIA
6. NEW PREFINISHED METAL ROOF EDGE AND FASCIA

NOTE: NOT ALL KEYNOTES MAY BE USED ON EACH PLAN

TSP

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/20/2021**	DRAWN BY **JWS**
PROJECT # **01190805**	CHECKED BY **JWS**

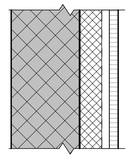
SHEET TITLE

EXTERIOR ELEVATIONS

SHEET NUMBER

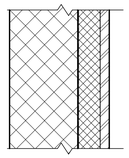
A-201

REBID DOCUMENTS



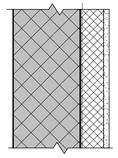
E1 EXTERIOR WALL CMU WITH WOOD SIDING

WALL ASSEMBLY
- EXISTING CMU
- NEW FLUID AIR/VAPOR BARRIER
- 2 1/2" RIGID INSULATION
  - Z FURRING -HORIZONTAL @24" OC
- 7/8" HAT CHANNELS
- WOOD SIDING



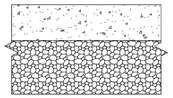
E2 EXTERIOR WALL CMU WITH METAL PANELS

WALL ASSEMBLY
- EXISTING CMU
- NEW FLUID AIR/VAPOR BARRIER
- 2 1/2" RIGID INSULATION
  - Z FURRING -HORIZONTAL @24" OC
- MTL WALL PANELS



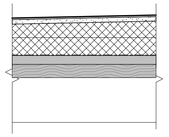
E3 EXTERIOR WALL CMU WITH EIFS

WALL ASSEMBLY
- EXISTING CMU
- NEW FLUID AIR/VAPOR BARRIER
- 2 1/2" RIGID INSULATION
  - Z FURRING -HORIZONTAL @24" OC
- 5/8" GYPSYUM SHEATHING
- STUCCO FINISH -SMOOTH



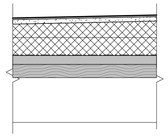
F1 FLOOR CONSTRUCTION

FLOOR ASSEMBLY:
- 4" REINFORCED CONCRETE SLAB
- CLASS 1 VAPOR BARRIER
- DRAINAGE FILL



R1 ROOF CONSTRUCTION

ROOF (FUTURE FLOOR) ASSEMBLY:
- ADHERED TPO ROOFING MEMBRANE
- 1/2" COVER BOARD
- TAPERED POLYISO ROOF INSULATION (MIN R-30)
- 1" INSUL. BUR (EXISTING)
- WOOD DECK (EXISTING)
- WOOD BEAMS (EXISTING)



R2 ROOF CONSTRUCTION

ROOF (FUTURE FLOOR) ASSEMBLY:
- ADHERED TPO ROOFING MEMBRANE
- 1/2" COVER BOARD
- TAPERED POLYISO ROOF INSULATION (MIN 1 1/2" @ PARIMETER)
- 1" INSUL. BUR (EXISTING)
- WOOD DECK (EXISTING)
- WOOD BEAMS (EXISTING)

LEGEND - CONSTRUCTION TYPES1

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

ROOM FINISH SCHEDULE - BASIC

ROOM #	ROOM NAME	FLOOR	BASE	CEILING	WALL	REMARKS
101	ASSEMBLY	SCONC	VB	PT	PT	1, 2
102	STORAGE	SCONC	VB	PT	PT	1, 2
103	MECHANICAL/ CUSTODIAL	SCONC	-	PT	PT	1
104	TOILET	SCONC	-	FRP	FRP	
105	TOILET	SCONC	-	FRP	FRP	

ROOM FINISH SCHEDULE REMARKS
1. INTERIOR PAINTING BY OWNER
2. SEAL NEW CONCRERE ONLY

TYPE A - PARTITION SCHEDULE

TYPE	STUD SIZE	Comments
A10	1 1/2"	2x4 WD STUD SLEEPERS W/ FRP ONE SIDE
A30	3 5/8"	2x4 WD STUD W/ 5/8" GYP BOTH SIDES
A31	3 5/8"	2x4 WD STUD W/ FRP BOTH SIDES, BATT INSULATION
A32	3 5/8"	2x4 WD STUD W/ 1x6" WD SIDING ALL SIDES

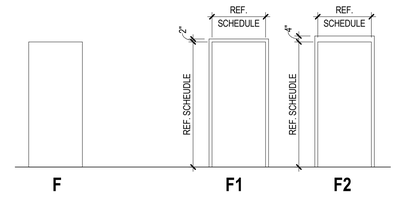
DOOR SCHEDULE

MARK	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR TYPE	DOOR MATERIAL	FRAME TYPE	FRAME MATERIAL	RATING	HDWR	REMARKS
101A	3'-6"	7'-0"	F	IHM	F2	HM		1	1,2
101B	3'-0"	7'-0"	F	IHM	F2	HM		1	1,2
102	6'-0"	7'-0"	F	HM	F1	HM		3	
103	3'-0"	7'-0"	F	HM	F2	HM		4	1
104	3'-0"	7'-0"	F	HM	F2	HM		4	1
105	3'-0"	7'-0"	F	HM	F2	HM		2	1

DOOR SCHEDULE REMARKS
1. NEW HOLLOW METAL FRAME IN EXISITNG CMU, MATCH HEAD TO COURSING.
2. THERMALLY BROKEN HOLLOW METAL FRAME.

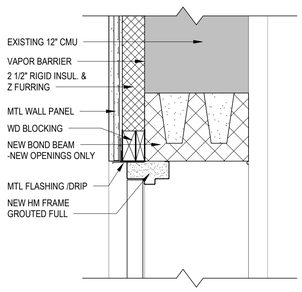
DOOR SCHEDULE ABBREVIATIONS

HM HOLLOW METAL
IHM INSULATED HOLLOW METAL



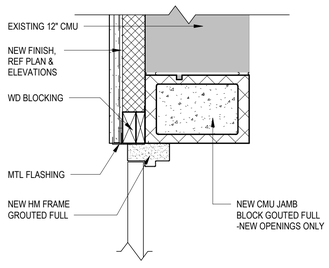
DOOR & FRAME TYPES

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



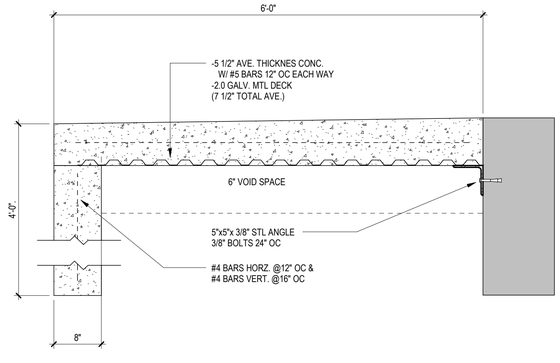
B1 DOOR HEAD @ NEW OPENING

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



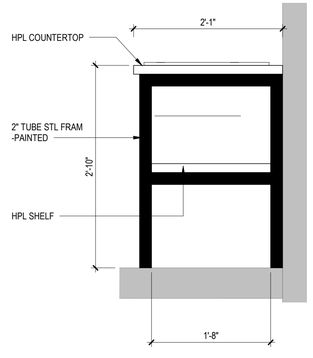
B2 DOOR JAMB @ NEW OPENING

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



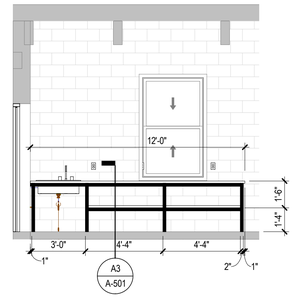
A1 STOOP DETAIL

SCALE: 1" = 1'-0"



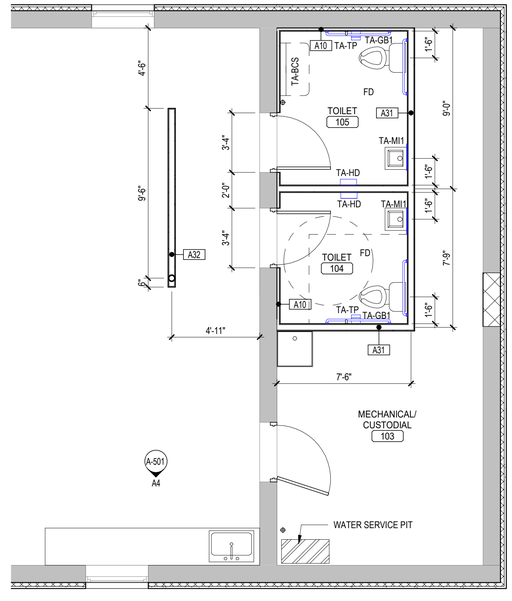
A3 COUNTER SECTION

SCALE: 1" = 1'-0"



A4 CASEWORK ELEVATION

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



A5 FIRST LEVEL FLOOR PLAN - Callout 1

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

TSP

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/20/2021**	DRAWN BY **JWS**
PROJECT # **01190805**	CHECKED BY **JWS**

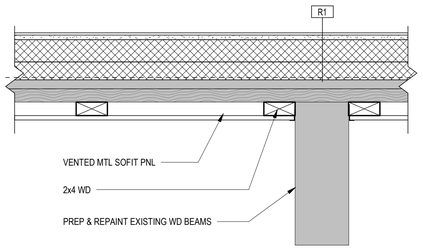
SHEET TITLE

WALL SECTIONS, ENLARGED PLANS, INTERIOR ELEVATIONS, DETAILS, SCHEDULES

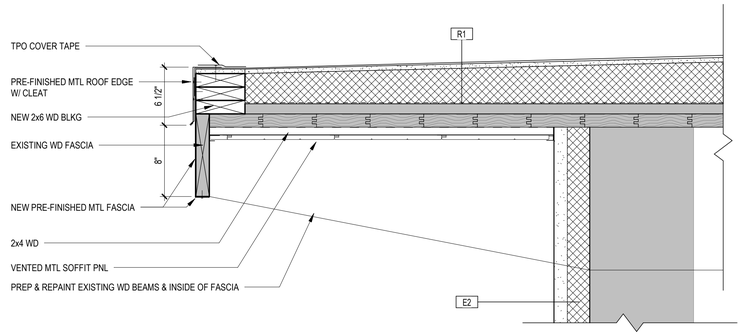
SHEET NUMBER

A-501

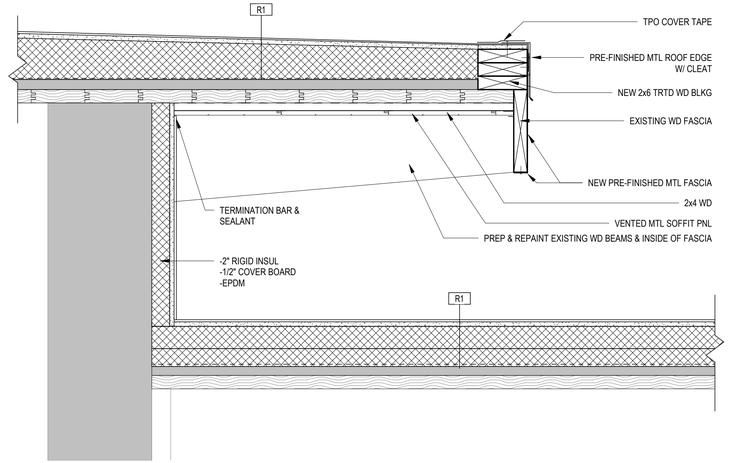
REBID DOCUMENTS



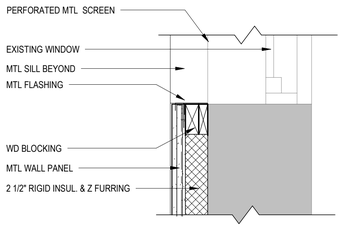
D1 CAONOPY CROSS SETION DETAIL
SCALE: 1 1/2" = 1'-0"



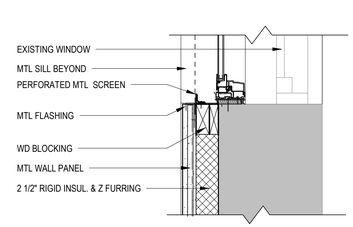
D2 CANOPY DETAIL
SCALE: 1 1/2" = 1'-0"



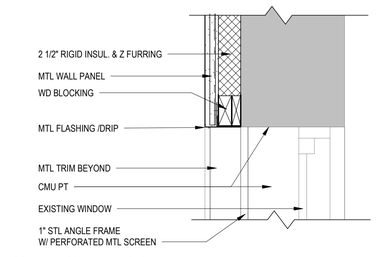
D4 CANOPY DETAIL OVER LOWER ROOF
SCALE: 1 1/2" = 1'-0"



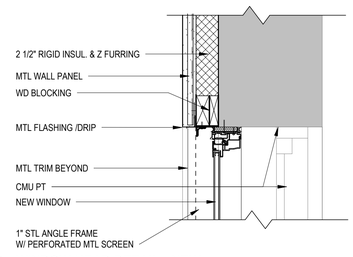
C1 WINDOW JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



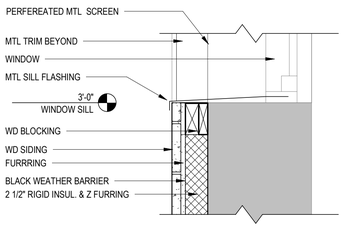
C2 WINDOW JAMB DETAIL - NEW
SCALE: 1 1/2" = 1'-0"



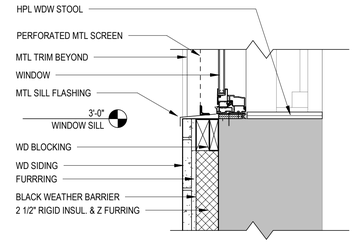
B1 WINDOW HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



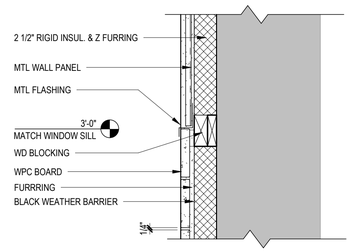
B2 WINDOW HEAD DETAIL - NEW
SCALE: 1 1/2" = 1'-0"



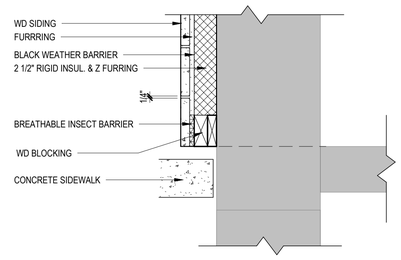
A1 WINDOW SILL DETAIL
SCALE: 1 1/2" = 1'-0"



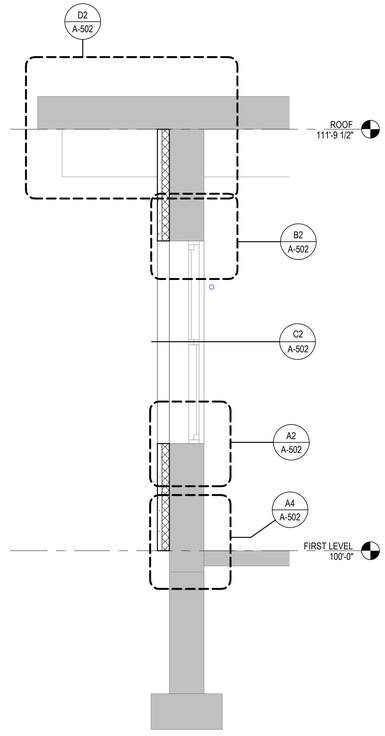
A2 WINDOW SILL DETAIL - NEW
SCALE: 1 1/2" = 1'-0"



B4 FINISH TRANSITIN DETAIL
SCALE: 1 1/2" = 1'-0"



A4 WALL BASE DETAIL
SCALE: 1 1/2" = 1'-0"



A5 Section 4
SCALE: 1/2" = 1'-0"

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE	DRAWN BY
04/20/2021	**JWS**
PROJECT #	CHECKED BY
01190805	**JWS**

SHEET TITLE

DETAILS

SHEET NUMBER

A-502

REBID DOCUMENTS

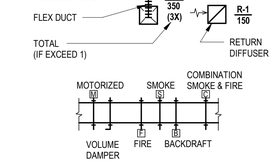
LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 24 x 36 FORMAT

GENERAL MECHANICAL SYMBOLS

- PONT WHERE NEW CONNECTS TO EXISTING
- NUMBER OF DETAIL ON SHEET / NUMBER OF SHEET WHERE DETAIL APPEARS (X / X-XXX)
- KEYNOTE (1)
- CONTINUATION SYMBOL
- ROOM NAME AND NUMBER (Room 1)
- EQUIPMENT TAG (X-XXX)

HVAC SYMBOLS

- 16"x8" — SQUARE DUCT SIZE TAG (WIDTH X HEIGHT)
- 16"/8" — OVAL DUCT SIZE TAG (WIDTH / HEIGHT)
- 16"Ø — ROUND DUCT SIZE TAGE (DIAMETER)
- DROP SA — RECTANGULAR SUPPLY/OUTSIDE AIR DUCT RISE
- DROP SA — ROUND SUPPLY/OUTSIDE AIR DUCT RISE
- DROP RA — RECTANGULAR RETURN/TRANSFER AIR DUCT RISE
- DROP RA — ROUND RETURN/TRANSFER AIR DUCT RISE
- DROP EA — RECTANGULAR EXHAUST/RELIEF AIR DUCT RISE
- DROP EA — ROUND EXHAUST/RELIEF AIR DUCT RISE
- ELBOW WITH TURNING VANES
- COUPLING
- SOUND ATTENUATOR
- VAV BOXES
- POWER ROOF VENTILATOR
- UNIT HEATERS
- LINEAR DIFFUSER



- CARBON DIOXIDE SENSOR CO2 — TH — TEMERATURE & HUMIDITY SENSOR
- CARBON MONOXIDE SENSOR CO — TS — TEMPERATURE SENSOR
- NITROGEN DIOXIDE SENSOR NO2 — T — THERMOSTAT
- HUMIDITY SENSOR HS — SVV — MANUAL SWITCH
- HUMIDISTAT H — S — SENSOR

LAB AND MEDICAL SYMBOLS

- LA — LAB AIR
- LDE — LAB DEIONIZED WATER
- LDI — LAB DISTILLED WATER
- LG — LAB GAS
- LV — LAB VACUUM
- MA — MEDICAL AIR
- CO2 — MEDICAL CO2
- MGAS — MEDICAL GAS
- H — MEDICAL HYDROGEN
- NI — MEDICAL NITROGEN
- NO — MEDICAL NITROUS OXIDE
- O — MEDICAL OXYGEN
- MV — MEDICAL VACUUM

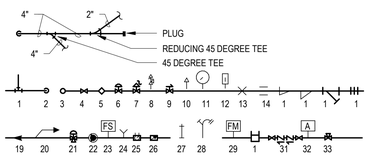
FIRE PROTECTION SYMBOLS

- DF — DRY FIRE SPRINKLER
- FP-O — FIRE PROTECTION OTHER
- FP-PA — FIRE PROTECTION PRE-ACTION
- FP — FIRE PROTECTION WET
- FP-DOM-W — COMBINATION FIRE & DOMESTIC

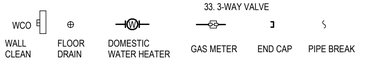
- UPRIGHT SPRINKLER HEAD
- PENDANT SPRINKER HEAD
- RECESSED SPRINKLER HEAD
- CONCEALED SPRINKLER HEAD
- 'D' REPRESENTS DRY SPRINKLER HEAD
- SIDEWALL SPRINKLER HEAD
- EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
- 48"x18" S/A — OBSTRUCTION FROM DUCTWORK 48" AND GREATER

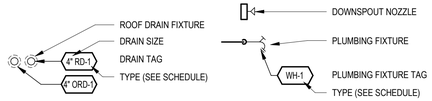
PLUMBING AND PIPING SYMBOLS

- 2" — PIPE SIZE TAG (DIAMETER)
- 1/8" / 12" SLOPE — PIPE SLOPE TAG
- (E) — EXISTING PIPE TAG
- PIPE BEING DEMOLISHED
- AV — ACID VENT PIPING
- AW — ACID WASTE ABOVE GRADE
- AWB — ACID WASTE BELOW GRADE
- CWR — CHILLED WATER RETURN
- CWS — CHILLED WATER SUPPLY
- CWV — COMBINATION WASTE AND VENT
- CD — COMPRESSED AIR
- CD — CONDENSATE DRAIN
- CDR — CONDENSATE RETURN
- CR — CONDENSER WATER RETURN
- CS — CONDENSER WATER SUPPLY
- DI — DEINOIZED WATER
- CW — DOMESTIC COLD WALTER
- F-CW — DOMESTIC COLD WALTER - FILTERED
- HCW — DOMESTIC COLD WATER HARD
- SCW — DOMESTIC COLD WATER SOFT
- HW — DOMESTIC HOT WATER
- HW 140 — DOMESTIC HOT WATER - 140 DEGRESS
- RHW — DOMESTIC HOT WATER RECIRCULATING
- RHW 140 — DOMESTIC HOT WATER RECIRCULATING 140 DEGREES
- DTWR — DUAL TEMP WATER RETURN
- DTWS — DUAL TEMP WATER SUPPLY
- GTR — GEOTHERMAL RETURN
- GTS — GEOTHERMAL SUPPLY
- GHR — GLYCOL HOT WATER RETURN
- GHS — GLYCOL HOT WATER SUPPLY
- HWR — GREASE VENT
- HWS — GREASE WASTE
- HWR — HEATING WATER RETURN
- HWS — HEATING WATER SUPPLY
- MIT — MITIGATION VENT
- G — NATURAL GAS
- G-2LB — NATURAL GAS - 2LB
- OV — OIL VENT
- OW — OIL WASTE
- PRO — PROCESS
- PD — PUMP DISCHARGE
- REF — REFRIGERANT
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- RHG — REFRIGERANT HOT GAS
- RO — REVERSE OSMOSIS WATER
- HPS — STEAM - HP
- HPR — STEAM - HP CONDENSATE
- MPS — STEAM - MP
- MPR — STEAM - MP CONDENSATE
- LPS — STEAM - LP
- LPR — STEAM - LP CONDENSATE
- V — SANITARY VENT
- W — SANITARY WASTE
- WB — SANITARTY WASTE - BELOW GROUND
- RD — STORM DRAINAGE
- RDB — STORM DRAINAGE - BELOW GRADE
- ORD — STORM DRAINAGE OVERFLOW
- ORDB — STORM DRAINAGE OVERFLOW BELOW GRADE



1. SIDE CONNECTION
2. ELBOW DOWN
3. ELBOW UP
4. SHUT OFF VALVE
5. BALANCING VALVE
6. CONTROL VALVE
7. PRESSURE REDUCING VALVE
8. PRESSURE RELIEF VALVE
9. CHECK VALVE
10. AIR VENT
11. PRESSURE GAUGE
12. THERMOMETER
13. PIPE ANCHOR
14. PIPE GUIDE
15. CONCENTRIC REDUCER
16. ECCENTRIC REDUCER
17. STRAINER
18. UNION
19. DIRECTION OF FLOW
20. PITCH PIPE DOWN
21. 3-WAY CONTROL VALVE
22. PUMP
23. FLOW SWITCH
24. PRESSURE TEMPERATURE TAP
25. MANUAL CALIBRATED BALANCING VALVE
26. AUTOMATIC FLOW CONTROL VALVE
27. MEDICAL GAS OUTLET
28. HOSE BIBB OR WALL HYDRANT
29. INSERTION FLOW METER
30. FLOW METER
31. REDUCED PRESSURE BACKFLOW PREVENTER
32. AQUASTAT
33. 3-WAY VALVE





ABBREVIATIONS

&	AND	ID	INDIRECT
Ø	ROUND	IN	INCH
A	AIR	INL	INLET
AC	AIR CONDITIONING	INSUL	INSULATION
ACOUS	ACOUSTICAL	INT	INTERIOR
AD	AREA DRAIN	INV	INVERT
ADD	ADDENDUM	INWG	INCHES WATER GAUGE
ADDL	ADDITIONAL	JT	JOINT
AFF	ABOVE FINISHED FLOOR	LAB	LABORATORY
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	LB	POUND
AG	ABOVE GROUND	LB/HR	POUNDS PER HOUR
ALT	ALTERNATE	LAT	LEAVING AIR TEMPERATURE
ALUM	ALUMINUM	LF	LINEAL FOOT
AP	ACCESS PANEL	LP	LOW PRESSURE
APPROX	APPROXIMATE	LPG	LIQUEFIED PETROLEUM GAS
ARCH	ARCHITECT/ARCHITECTURAL	LR	LIQUID REFRIGERANT
AV	ACID RESISTANT VENT	LS	LAWN SPRINKLER
AW	ACID RESISTANT WASTE	LVR	LOUVER
AUTO	AUTOMATIC	LWT	LEAVING WATER TEMPERATURE
BFF	BELOW FINISHED FLOOR	M/A	MIXED AIR
BLDG	BUILDING	MAN	MANUAL
BLW	BELOW	MATL	MATERIAL
BM	BEAM	MAV	MANUAL AIR VENT
BO	BY OTHER	MAX	MAXIMUM
BOT	BOTTOM	MBD	MOTORIZED BYPASS DAMPER
BSMT	BASEMENT	MBH	ONE THOUSAND BTU PER HOUR
BTU	BRITISH THERMAL UNITS	MCF	ONE THOUSAND CUBIC FEET
BTUH	BRITISH THERMAL UNITS PER HOUR	MCW	MAKE-UP COLD WATER
BTWN	BETWEEN	MD	MOTORIZED DAMPER
CAP	CAPACITY	MECH	MECHANICAL
CB	CATCH BASIN	MFR	MANUFACTURER
CCW	COUNTER CLOCKWISE	MH	MANHOLE
CFCV	CONSTANT FLOW CONTROL VALVE	MIN	MINIMUM
CFM	CUBIC FEET PER MINUTE	MISC	MISCELLANEOUS
CHW	CIRCULATING HOT WATER	MTR	MOTOR
CI	CAST IRON	MU/A	MAKE-UP/AIR
CLG	CEILING	N	NECK / NORTH
CLG	COOLING	NC	NOISE CRITERIA
CO	CLEAN OUT	NC	NORMALLY CLOSED
COL	COLUMN	NIC	NOT IN CONTRACT
COMB	COMBINATION	NO	NUMBER / NORMALLY OPEN
CONC	CONCRETE	NOM	NOMINAL
COND	CONDENSATE	NTS	NOT TO SCALE
CONF	CONFERENCE	O	OXYGEN
CONN	CONNECT	O/A	OUTSIDE AIR
CONST	CONSTRUCTION	OC	ON CENTER
CONT	CONTINUE/CONTINUATION	OF	OVERFLOW
CONTR	CONTRACT/CONTRACTOR	OPNG	OPENING
COORD	COORDINATE	ORD	OVERFLOW ROOF DRAIN
CTR	CENTER	PD	PRESSURE DROP
CUFT	CUBIC FEET	PIV	POST INDICATOR VALVE
CV	CHECK VALVE	PLBG	PLUMBING
CW	COLD WATER	PR	PAIR
CW	CLOCKWISE	PRESS	PRESSURE
D	DEGREE	PRIM	PRIMARY
DB	DRY BULB	PRV	PRESSURE REDUCING VALVE
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	PSIG	POUNDS PER SQUARE INCH GAUGE
DIAG	DIAGONAL	PW	POTABLE WATER
DIV	DIVISION	PWR	POWER
DI	DEIONIZED WATER	R	DUCT RISER
DMPR	DAMPER	R/A	RETURN AIR
DN	DOWN	RCP	RADIANT CEILING PANEL
DWG	DRAWING	RD	ROOF DRAIN
DW	DISTILLED WATER	REC	RECESSED
EA	EACH	RED	REDUCER
EAT	ENTERING AIR TEMPERATURE	REFR	REFRIGERATION
EL	ELBOW	RH	RELATIVE HUMIDITY
ELEC	ELECTRICAL	REQD	REQUIRED
ELEV	ELEVATION	REV	REVERSE
EP	EXPLOSION PROOF	RL/A	RELIEF AIR
EQ	EQUAL	RM	ROOM
EQUIP	EQUIPMENT	RPM	REVOLUTIONS PER MINUTE
EWC	ELECTRIC WATER COOLER	RW	RAIN WATER
EWT	ENTERING WATER TEMPERATURE	SF	SQUARE FOOT
E/A	EXHAUST AIR	S/A	SUPPLY AIR
EAH	EXHAUST HOOD	SAN	SANITARY
EXIST	EXISTING	SCHED	SCHEDULE
EXP	EXPANSION	SECT	SECTION
EXT	EXTERIOR	SD	SMOKE DAMPER
F	DEGREES FAHRENHEIT	SHT	SHEET
FCO	FLOOR CLEAN OUT	SIM	SIMILAR
FD	FLOOR DRAIN	SLV	SLEEVE
FD	FIRE DAMPER	SM	SURFACE MOUNT
FDV	FIRE DEPARTMENT VALVE	SP	STANDPIPE / STATIC PRESSURE
FHC	FIRE HOSE CABINET	SPEC	SPECIFICATION
FL	FLOOR	SPS	STATIC PRESSURE STATION
FLEX	FLEXIBLE	SQ	SQUARE
FLG	FLANGE	SR	SUCTION REFRIGERANT
FO	FUEL OIL	SSD	SOIL SUBDRAIN
FOV	FUEL OIL VENT	SS	STAINLESS STEEL
FOR	FUEL OIL RETURN	STD	STANDARD
FOS	FUEL OIL SUPPLY	STM	STEAM
FPM	FEET PER MINUTE	STRUCT	STRUCTURAL
FRP	FIBERGLASS REINFORCED PIPE	SUCT	SUCTION
FS	FULL SIZE	SUSP	SUSPENDED
FS	FLOOR SINK	T	THERMOSTAT
FT	FOOT/FEET	TCP	TEMPERATURE CONTROL PANEL
FTG	FOOTING	TD	TEMPERATURE DROP
FTR	FIN TUBE RADIATION	TDR	TRENCH DRAIN
GA	GAGE/GAUGE	TEMP	TEMPERATURE
GAL	GALLON	TYP	TYPICAL
GALV	GALVANIZED	UFD	UNDER FLOOR DUCT
GC	GENERAL CONTRACTOR	UG	UNDERGROUND
GEN	GENERATOR/GENERAL	VAC	VACUUM
GPH	GALLONS PER MINUTE	V	VENT
GR	GRADE	VAV	VARIABLE AIR VOLUME
GW	GREASE WASTE	VEL	VELOCITY
HB	HOSE BIB	VENT	VENTILATION
HORZ	HORIZONTAL	VERT	VERTICAL
HP	HORSE POWER	VOL	VOLUME
HP	HIGH PRESSURE	VTR	VENT THROUGH ROOF
HTG	HEATING	W	WASTE
HTR	HEATER	WB	WET BULB
HW	HOT WATER	WCO	WALL CLEAN OUT
HYD	HYDRANT	WH	WALL HYDRANT

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	FP	FIRE PUMP
ACC	AIR COOLED CONDENSER	GI	GREASE INTERCEPTOR
ACCU	AIR COOLING CONDENSING UNIT	GRV	GRAVITY ROOF VENTILATOR
AFMS	AIR FLOW MEASURING STATION	H	HUMIDIFIER
AHU	AIR HANDLING UNIT	HWP	HEATING WATER PUMP
AS	AIR SEPARATOR	HX	HEAT EXCHANGER
B	BOILER	HPU	HEAT PUMP UNIT
CF	CABINET FAN	HRU	HEAT RECOVERY UNIT
CF	CHEMICAL FEEDER	ILC	INLINE CENTRIFUGAL
CFP	CHEMICAL FEEDER PUMP	PF	PROPELLER FAN
CH	CHILLER	PRV	POWER ROOF VENTILATOR
CRU	CONDENSATE RETURN UNIT	PWF	POWER WALL FAN
CT	COOLING TOWER	RE	RETURN/EXHAUST FAN
CUH	CABINET UNIT HEATER	RTU	ROOFTOP UNIT
CWP	CONDENSER WATER PUMP	SA	SHOCK ABSORBER
CHWP	CHILLED WATER PUMP	SAT	SOUND ATTENUATOR
DBP	DOMESTIC WATER BOOSTER PUMP	SEP	SEWAGE EJECTOR PUMP
DC	DUCT MOUNTED COIL	SF	SUPPLY FAN
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	US	UTILITY SET
ET	EXPANSION TANK	UV	UNIT VENTILATOR
EWH	ELECTRIC WATER HEATER	WFMS	WATER FLOW MEASURING STATION
FCU	FAN COIL UNIT	WH	WATER HEATER

PROJECT GENERAL NOTES

*	DEMO 1	WHERE EQUIPMENT AND/OR FIXTURES ARE INDICATED TO BE REMOVED, THE EXISTING SERVICES SHALL BE CAPPED AND CONCEALED BEHIND FINISHED SURFACES. ABANDONED BRANCH SERVICES SHALL BE REMOVED BACK TO THE MAINS AND CAPPED, UNLESS OTHERWISE INDICATED.
*	DEMO 2	CAP ANY ABANDONED OR UNUSED PIPE AND/OR DUCT OPENINGS.
*	DEMO 3	THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND PAINTING TO MATCH EXISTING WALLS, FLOORS, AND CEILINGS.
*	DEMO 4	HYDRONIC AND DOMESTIC PIPING SHALL BE THOROUGHLY CLEANED BEFORE PUTTING INTO PERMANENT SERVICE.
*	DEMO 5	WHERE MATERIAL IS INDICATED TO BE REMOVED, IT SHALL REMAIN THE PROPERTY OF THE OWNER. THIS CONTRACTOR SHALL DISPOSE OF MATERIAL AS DIRECTED BY THE OWNER.
*	EXST 1	REMOVE ALL UNUSED PIPING, DUCTWORK AND ACCESSORIES.
*	EXST 2	THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING, PRIOR TO FINAL BID, ALL EXISTING CONDITIONS FOR PLUMBING AND MECHANICAL SYSTEMS.
*	EXST 3	WHERE FLOOR DRAINS OCCUR WITHIN THE LIMITS OF CONSTRUCTION, PREVENT CONSTRUCTION DEBRIS FROM ENTERING DRAIN BODY BY SEALING DRAIN OPENING PRIOR TO START OF WORK.
*	NEW 1	COORDINATE AND COOPERATE WITH THE OTHER TRADES ON THE INSTALLATION OF PIPING, DUCTWORK, CONDUIT, LIGHTS, CABLE TRAY, STRUCTURE, AND EQUIPMENT TO PREVENT CONFLICTS.
*	NEW 2	THE CONTRACTOR SHALL BE FAMILIAR WITH ALL THE CONDITIONS BOTH EXISTING AND THOSE ILLUSTRATED BY THESE DOCUMENTS AS WELL AS THOSE WHICH CAN BE REASONABLY ANTICIPATED INCLUDING, BUT NOT LIMITED TO ARCHITECTURAL, ELECTRICAL, VENTILATION, PLUMBING, AND OTHER SYSTEMS INVOLVED ON THIS PROJECT.
*	NEW 3	FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATIONAL BUILDING CODE AND INTERNATIONAL MECHANICAL CODE.
*	NEW 4	LOCATE EQUIPMENT REQUIRING ACCESS 2'-0" MAXIMUM ABOVE CEILING.
*	NEW 5	ALL ROOF MOUNTED EQUIPMENT SHALL BE A MINIMUM 10'-0" FROM EDGE OF ROOF.
*	NEW 6	LOCATE DUCTWORK, PIPING AND MECHANICAL EQUIPMENT AWAY FROM THE SPACE ABOVE ELECTRICAL PANELS. TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT.
*	NEW 7	ADJUST PIPING AND DUCTWORK SIZES TO PROPERLY CONNECT TO MECHANICAL EQUIPMENT.
*	NEW 8	REFER TO PLUMBING SERIES DRAWINGS FOR GAS AND A.C. CONDENSATE DRAIN PIPING.
*	NEW 9	PIPE SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN.
*	NEW 10	FOR DETAILS, EQUIPMENT CONNECTIONS, AND PIPE SIZES NOT SHOWN ON THE SEGMENTS, REFER TO DETAILS, SCHEDULES, AND SPECIFICATIONS.
*	NEW 11	INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
*	NEW 12	LOCATIONS OF PIPING, DUCTWORK AND EQUIPMENT AS INDICATED ON THE DRAWING, ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID INTERFERENCE IN THE FIELD.
*	NEW 13	INSTALL EXPOSED PIPING AND DUCTWORK AS HIGH AS PRACTICAL IN ROOMS WITHOUT CEILINGS.
*	NEW 14	MATERIALS AND EQUIPMENT SHOWN ON PLANS SHALL BE NEW AND FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE INDICATED.
*	NEW 15	THIS CONTRACTOR IS RESPONSIBLE FOR ALL SLEEVES AND/OR OPENINGS WHERE REQUIRED TO RUN PIPES AND DUCTS THROUGH FOUNDATIONS,FLOOR SLABS, WALLS, BRIDGING AND BEAMS EXCEPT WHERE OTHERWISE INDICATED.
*	NEW 16	CEILING ACCESS IS REQUIRED AT ALL REHEAT COILS, VALVES, FIRE DAMPERS, MANUAL AND MOTORIZED DAMPERS LOCATED ABOVE CEILING. CEILING ACCESS PANELS WILL BE PROVIDED UNDER THE GENERAL SECTION OF CONSTRUCTION AND SHALL BE MINIMUM OF 24" X 24" UNLESS OTHERWISE INDICATED. COORDINATE WITH GENERAL CONTRACTOR.
*	NEW 17	THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
*	NEW 18	WHERE NEW SERVICES ARE SHOWN CONNECTING TO EXISTING, VERIFY EXACT LOCATION AND SIZE OF EXISTING.
*	NEW 19	EXISTING SERVICES SHALL BE MAINTAINED UNLESS OTHERWISE INDICATED.
*	NEW 20	ALL DUCTS, PIPING, FIXTURES, ETC., WHICH ARE DASHED AND/OR INDICATED BY NOTE ON DEMOLITION PLANS SHALL BE REMOVED.
*	NEW 21	ALL PLUMBING SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH NATIONAL, STATE, AND LOCAL CODES.
*	NEW 22	SEAL ALL SHEET METAL DUCTWORK JOINTS.
*	NEW 24	BALANCING OF AIR AND HYDRONIC SYSTEMS SHALL BE PERFORMED BY AN NEBB OR AABC CERTIFIED TEST AND BALANCE AGENCY.
*	NEW 25	PIPE PENETRATIONS OF RATED WALLS AND FLOORS SHALL BE SLEEVED AND PROPERLY FIRE SEALED.
*	NEW 26	ALL PIPE AND DUCT PENETRATIONS OF SMOKE PARTITION WALLS SHALL BE PROPERLY SEALED TO RESIST THE PASSAGE OF SMOKE AS REQUIRED BY THE LOCAL AUTHORITY.

PLUMBING GENERAL NOTES

*	EXST 1	FIELD VERIFY ALL NEW WATER, WASTE, AND VENT PIPING CONNECTIONS AND PROVIDE NEW CONNECTIONS AS REQUIRED FOR PROPERLY OPERATING SYSTEMS.
*	NEW 1	PITCH UNDERFLOOR SANITARY WASTE AND STORM PIPING 3" AND GREATER AT 1/8" PER FOOT, UNLESS NOTED OTHERWISE. PITCH ALL OTHER WASTE PIPING AT 1/4" PER FOOT UNLESS OTHERWISE NOTED.
*	NEW 2	FIELD VERIFY LOCATION AND INVERTS OF SITE UTILITIES PRIOR TO INSTALLATION.
*	NEW 3	ROUTE DOMESTIC WATER, FIRE PROTECTION, SANITARY SEWER, AND STORM SEWER SERVICES TO SITE UTILITIES 5'-0" FROM BUILDING UNLESS NOTED OTHERWISE. REFER TO CIVIL PLANS.
*	NEW 4	WASTE AND VENT PIPING BELOW FLOOR AND THROUGH FLOOR SHALL BE 2" MINIMUM.
*	NEW 5	PROVIDE CLEANOUT IN ACCESSIBLE LOCATION AT THE BASE OF ALL PLUMBING RISERS.

* NOTE *

ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

HVAC GENERAL NOTES

*	NEW 1	SUPPLY AND RETURN PIPING TO COILS ARE THE SAME SIZE.
*	NEW 2	CONTRACTOR SHALL LOCATE THERMOSTATS, CO2, AND TEMPERATURE SENSORS AT 4'-0" AFF. A MINIMUM OF 8" FROM LIGHT SWITCH.
*	NEW 3	REFER TO PIPING DRAWINGS FOR THERMOSTAT, CO2, AND TEMPERATURE SENSOR LOCATIONS.
*	NEW 4	CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR SHALL ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES. CONDENSATE PIPING SHALL BE TYPE "L" COPPER.
*	NEW 5	PROVIDE A 4" HOUSEKEEPING PAD FOR EACH PIECE OF MECHANICAL EQUIPMENT. COORDINATE SIZES WITH MECHANICAL EQUIPMENT SELECTED.
*	NEW 6	THIS CONTRACTOR SHALL BE REQUIRED TO REPLACE FILTERS ON HVAC EQUIPMENT AFTER ALL DUST PRODUCING CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO THE FINAL PUNCH.

SHEET INDEX - MECHANICAL

DD Issue	CD Issue	SHEET #	SHEET NAME
		M-001	MECHANICAL TITLE SHEET
		M-101	PLUMBING & MECHANICAL PLAN
		M-501	MECHANICAL DETAILS
		ME601	MECHANICAL SCHEDULES

TSP

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE	DRAWN BY
04/16/2021	**JLP**
PROJECT #	CHECKED BY
01190805	**RCN**

SHEET TITLE

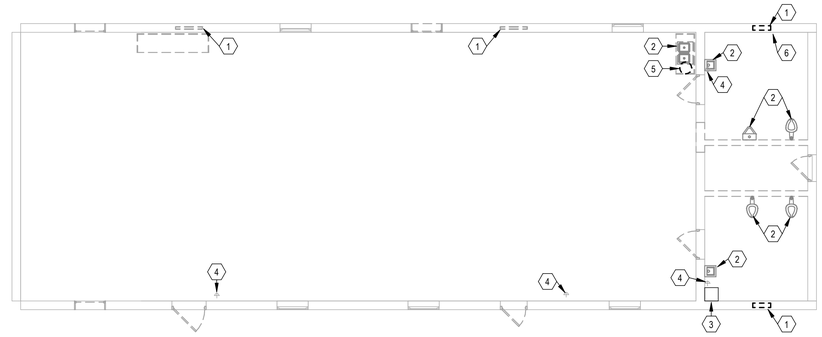
MECHANICAL TITLE SHEET

SHEET NUMBER

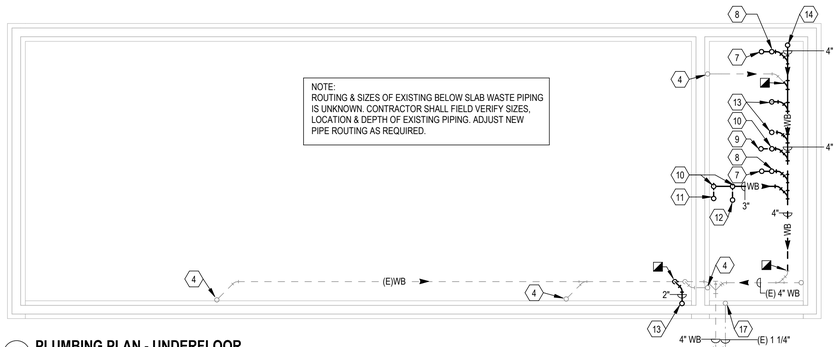
M-001

REBID DOCUMENTS

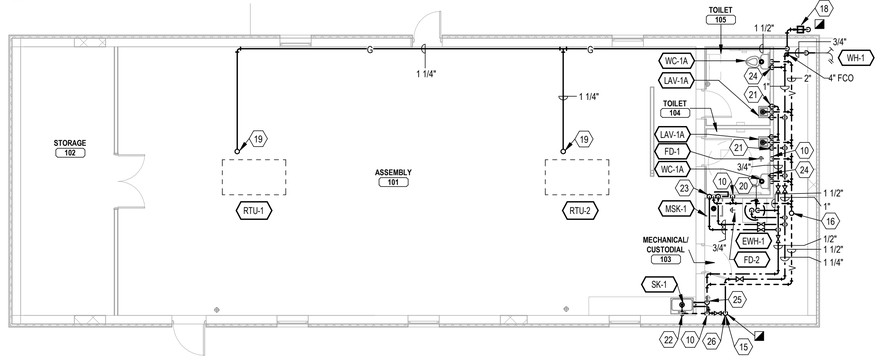
L:_TSP Revit Local\01190805_Anson Park_M19_sorensenjw@teamtsp.com.rvt
4/16/2021 5:03:46 PM



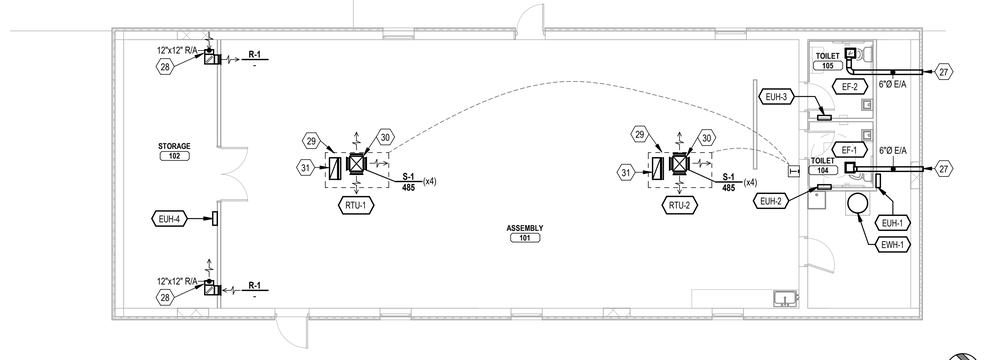
D3 MECHANICAL DEMOLITION PLAN - FIRST LEVEL
SCALE: 1/8" = 1'-0"



C3 PLUMBING PLAN - UNDERFLOOR
SCALE: 1/8" = 1'-0"



B3 PLUMBING PLAN - FIRST LEVEL
SCALE: 1/8" = 1'-0"



A3 MECHANICAL HVAC PLAN - FIRST LEVEL
SCALE: 1/8" = 1'-0"

PLAN NORTH

KEYNOTES

1	REMOVE WALL MOUNTED EXHAUST FAN & ALL CONTROLS.
2	REMOVE PLUMBING FIXTURE AND ALL PIPING.
3	WATER SERVICE & METER IN PIT TO REMAIN.
4	FLOOR DRAIN TO REMAIN. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING DRAIN AND VENT.
5	REMOVE UNDER CABINET MOUNTED ELECTRIC WATER HEATER & ALL PIPING.
6	REMOVE ALL ABANDONED GAS PIPING BACK TO EXTERIOR WALL. PREPARE EXISTING OPENING THRU WALL FOR NEW GAS PIPING. COORDINATE WITH G.C. FOR CUTTING AND PATCHING WALL.
7	4" WB UP TO WATER CLOSET.
8	2" V UP.
9	2" WB UP TO FLOOR DRAIN.
10	1 1/2" V UP.
11	3" WB UP TO MOP SINK.
12	3" WB UP TO FLOOR DRAIN.
13	2" WB UP TO LAV OR SINK.
14	4" WB UP TO FCO.
15	1 1/4" CW DN. CONNECT TO EXISTING WATER METER & SERVICE.
16	2" V UP TO 4" VTR.
17	EXISTING 1 1/4" CW UP.
18	GAS METER, SERVICE AND REGULATOR. TOTAL CONNECTED LOAD = 300 CFH. COORDINATE WITH UTILITY COMPANY.
19	CONNECT 1 1/4" GAS TO RTU ON ROOF WITH SHUT-OFF VALVE, 6" DIRT LEG & UNION.
20	3/4" HW & CW DN TO WATER HEATER.
21	1/2" HW & CW DN TO LAV. 1 1/2" V UP.
22	1 1/2" V UP AS HIGH AS POSSIBLE BENEATH COUNTERTOP.
23	3/4" HW & CW DN TO MOP SINK. 1 1/2" V UP.
24	1/2" CW DN TO WATER CLOSET. 2" V UP.
25	1/2" HW DN TO SINK.
26	CONNECT 1/2" CW TO 1 1/4" CW RISER. ROUTE PIPING THRU WALL TO SINK.
27	PROVIDE WALL CAP.
28	OPEN ENDED TRANSFER AIR DUCT WITH EXPANDED METAL SCREEN.
29	INSTALL RTU SO BOTH REST ON TWO ROOF BEAMS.
30	20"X18" SUPPLY AIR UP THRU ROOF TO RTU. INSTALL SUPPLY REGISTERS AT 9'-4" AFF TO BOTTOM FLANGE.
31	30"X12" RETURN AIR DUCT UP THRU ROOF TO RTU. PROVIDE 90 DEG ELBOW AND MESH SCREEN AT OPEN ENDED DUCT. INSTALL BOTTOM OF DUCT EVEN WITH BOTTOM OF ROOF BEAMS.

PROVIDE NEW NATURAL GAS SERVICE, METER AND GAS PIPING TO ROOFTOP UNITS RTU-1 AND RTU-2 UNDER ALTNERATE NO. 3

INSTALL WATER PIPING TO ALLOW SEASONAL DRAINAGE OF SYSTEM.

PROVIDE ROOFTOP UNITS RTU-1 AND RTU-2 AND ELECTRIC UNIT HEATER EUH-4 UNDER ALTNERATE NO. 3

MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOW VOLTAGE WIRING OF ALL TEMPERATURE CONTROL DEVICES

TSP

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/16/2021**	DRAWN BY **JLP**
PROJECT # **01190805**	CHECKED BY **RCN**

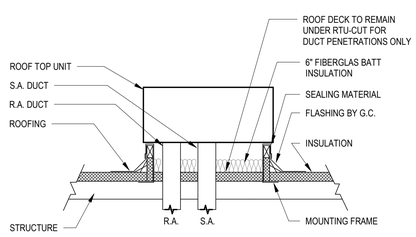
SHEET TITLE

PLUMBING & MECHANICAL PLAN

SHEET NUMBER

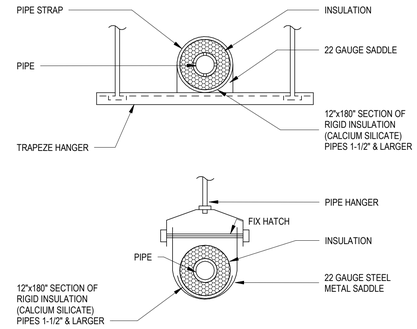
M-101

REBID DOCUMENTS

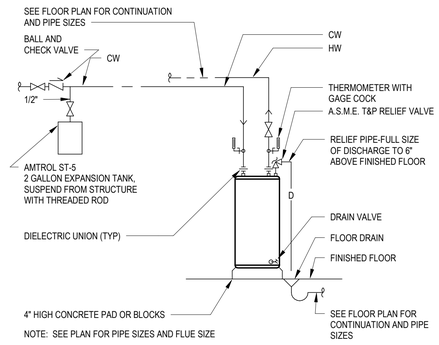


NOTE:
ROOF CURB BY M.C. COORDINATE INSTALLATION WITH G.C.

C4 ROOFTOP UNIT
SCALE: NOT TO SCALE

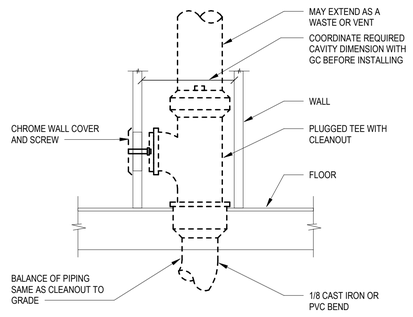


C5 HANGER AND INSULATION SADDLES
SCALE: NOT TO SCALE

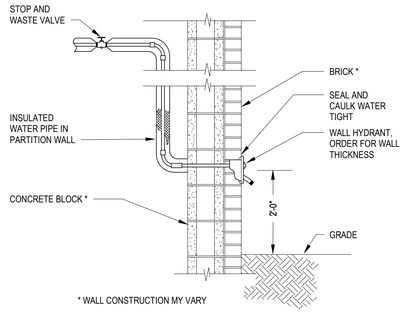


NOTE: SEE PLAN FOR PIPE SIZES AND FLUE SIZE

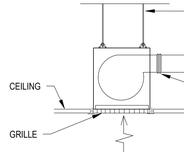
B3 ELECTRIC WATER HEATER
SCALE: NOT TO SCALE



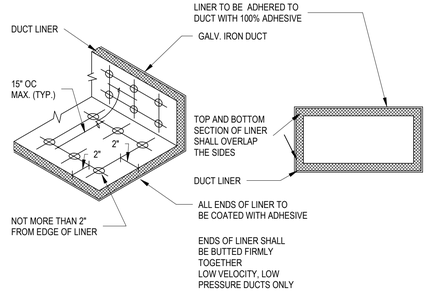
B4 WALL CLEANOUT
SCALE: NOT TO SCALE



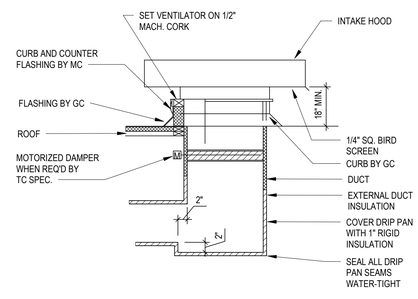
B5 WALL HYDRANT
SCALE: NOT TO SCALE



A3 CEILING FAN
SCALE: NOT TO SCALE



A4 DUCT LINER
SCALE: NOT TO SCALE



A5 INTAKE RELIEF VENTILATOR
SCALE: NOT TO SCALE

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE	DRAWN BY
04/16/2021	**JLP**
PROJECT #	CHECKED BY
01190805	**RCN**

SHEET TITLE

MECHANICAL DETAILS

SHEET NUMBER

M-501

REBID DOCUMENTS

ROOFTOP UNIT SCHEDULE

			EQUIPMENT REQUIREMENTS																								ELECTRICAL REQUIREMENTS									
					SUPPLY FAN					GAS FIRED HEAT EXCHANGER						EVAPORATOR COOLING COIL						COMPRESSOR										CONTROLLER							DISCONNECT		
										BURNER				AIRSIDE																						
UNIT NO.	MANUFACTURER	MODEL NO.	OUTDOOR AIRFLOW	FILTER	AIRFLOW	ESP	RPM	BHP	MOTOR POWER	INPUT MBH	OUTPUT MBH	STAGES	FUEL TYPE	EAT	LAT	NOM. TONS	CAPACITY MBH	EAT DB	EAT WB	LAT DB	LAT WB	NO.	REFRIGERANT	AMBIENT	EER	UNIT WEIGHT	EQUIPMENT NOTES	VOLT/PH	MIN A/C	MIN CKT AMP	MOCP	WIRE SIZE / CONDUIT	TYPE	SIZE	LOCATION	CTL DEVICE	AUX	BY	CONTROL BY	TYPE	BY	ELECTRICAL NOTES
RTU-1	LENNOX	LGH-060	500 CFM	2" MERV 7	1950 CFM	0.75 in-wg	1078	1.00 hp	1.0 hp	150	113	2	NG	50.0 °F	103.6 °F	5	62	79.4 °F	66.0 °F	54.7 °F	54.7 °F	1	R410A	95.0 °F	13.1	1050 lb	ALL	240 / 1	2,510	44	60	SEE CIRCUIT SCHEDULE	E1	-	-	-	-	DIV 22/23	DIV. 22/23	DISC SW	DIV. 22/23	
RTU-2	LENNOX	LGH-060	500 CFM	2" MERV 7	1950 CFM	0.75 in-wg	1078	1.00 hp	1.0 hp	150	113	2	NG	50.0 °F	103.6 °F	5	62	79.4 °F	66.0 °F	54.7 °F	54.7 °F	1	R410A	95.0 °F	13.1	1050 lb	ALL	240 / 1	3,400	44	60	SEE CIRCUIT SCHEDULE	E1	-	-	-	-	DIV 22/23	DIV. 22/23	DISC SW	DIV. 22/23	

REMARKS:
1. ECONOMIZER WITH BAROMETRIC RELIEF DAMPER.
2. FACTORY SINGLE ZONE VAV CONTROLS WITH 7-DAY PROGRAMMABLE THERMOSTAT, CO2 SENSOR AND HUMIDISTAT.
3. 14" HIGH ROOF CURB.
4. HUMIDITROL HOT GAS REHEAT DEHUMIDIFICATION SYSTEM.
5. 5 YEAR COMPRESSOR WARRANTY, 10 YEAR GAS HEAT EXCHANAGER WARRANTY.
6. TWO STAGE COOLING.
7. DIRECT DRIVE SUPPLY FAN WITH EC MOTOR.
8. PROVIDE WITH HINGED ACCESS DOORS, SERVICE DISCONNECT, HAIL GUARDS AND 120V CONVENIENCE OUTLET.
9. PROVIDE RTU-1 AND RTU-2 UNDER ALTERNATE NO. 3.

EXHAUST FAN & POWER ROOF VENT SCHEDULE

	EQUIPMENT REQUIREMENTS												ELECTRICAL REQUIREMENTS										
														CONTROLLER						CONTROL	DISCONNECT		ELECTRICAL
UNIT NO.	MANUFACTURER	MODEL NO.	TYPE	AIRFLOW	TSP	RPM	POWER (WATTS)	SONES	EQUIPMENT NOTES	VOLT/PH	MIN CKT AMP	MOCP	WIRE SIZE / CONDUIT	TYPE	SIZE	LOCATION	CTL DEVICE	AUX	BY	BY	TYPE	BY	NOTES
EF-1	GREENHECK	SP-110-VG	VARIABLE SPEED CEILING FAN	100 CFM	0.38 in-wg	940	8.4	2.3	ALL	120/1	0.25	15	SEE CIRCUIT SCHEDULE	-	-	-	-	-	-	E1	INTEGRAL	DIV. 22/23	
EF-2	GREENHECK	SP-110-VG	VARIABLE SPEED CEILING FAN	100 CFM	0.38 in-wg	940	8.4	2.3	ALL	120/1	0.25	15	SEE CIRCUIT SCHEDULE	-	-	-	-	-	-	E1	INTEGRAL	DIV. 22/23	

REMARKS:
1. VARI-GREEN EC MOTOR.
2. PROVIDE WITH WALL CAP AND BACKDRAFT DAMPER.
3. PROVIDE DISCONNECT.

ELEC. REMARKS:
E1. EXHAUST FAN IS CONTROLLED BY PILOT SWITCH IN RESTROOM.

WATER HEATER SCHEDULE

	EQUIPMENT REQUIREMENTS											ELECTRICAL REQUIREMENTS										
	LOCATION				ELEMENT HEATING	RECOVERY RATE	STORAGE						CONTROLLER						CONTROL	DISCONNECT		ELECTRICAL
UNIT NO.	ROOM	NUMBER	MANUFACTURER	MODEL NO.	CAP. (2 EACH)	@ 100 DEG DT	CAP.	EQUIPMENT NOTES	VOLT/PH	MIN CKT AMP	MOCP	WIRE SIZE / CONDUIT	TYPE	SIZE	LOCATION	CTL DEVICE	AUX	BY	BY	TYPE	BY	NOTES
EWH-1	MECHANICAL/ CUSTODIAL	103	A. O. Smith	DEL-30	4500 W	18.0 gal/h	30.0 gal	ALL	240 / 1	23.43	30	SEE CIRCUIT SCHEDULE	-	-	-	-	-	-	DIV. 22/23	E1	DIV. 26	

REMARKS:
1. DUAL NON-SIMULTANEOUS ELEMENTS.
2. ASME T&P VALVE.

ELEC. NOTES:
E1. PROVIDE A 30A, 3 POLE, NON-FUSED DISCONNECT IN A NEMA 3R ENCLISURE.

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE

TYPE	SYSTEM	MANUFACTURER	MODEL NO.	FACE SIZE	NECK SIZE	MOUNTING TYPE	SPECIFICATION	MAX NC (dB)	MAX PD ("WG)	INTEGRAL DAMPER	FINISH COLOR	MATERIAL	REMARKS
S-1	SUPPLY	KRUEGER	880H	18"x16"	16"x14"	SURFACE	DOUBLE DEFLECTION GRILLE WITH FRONT BLADES PARALLEL TO SHORT DIMENSION. 3/4" SPACING.	25	0.05	-	WHITE	STEEL	
R-1	RETURN	KRUEGER	S85	14 x 14"	12"x12"	SURFACE	SINGLE DEFLECTION GRILLE WITH FRONT BLADES PARALLELT TO SHORT DIMENSION. 1/2" SPACING. 35° DEFLECTION.	25	0.05	-	WHITE	STEEL	

ELECTRIC UNIT HEATER SCHEDULE

				EQUIPMENT REQUIREMENTS							ELECTRICAL REQUIREMENTS										
				ELEMENT	AIRSIDE									CONTROLLER							DISCONNECT		
UNIT NO.	MANUFACTURER	MODEL NO.	AIRFLOW	STAGES	HEATING CAP.	ENTERING AIR TEMP. DB	LEAVING AIR TEMP. DB	EQUIPMENT NOTES	VOLT/PH	MIN CKT AMP	MOCP	WIRE SIZE / CONDUIT	TYPE	SIZE	LOCATION	CTL DEVICE	AUX	BY	CONTROL BY	TYPE	BY	ELECTRICAL NOTES
EUH-1	TRANE	UHAA	230 CFM	1	3.0 kW	60 °F	101 °F	ALL	240 / 1	15.63	20	SEE CIRCUIT SCHEDULE	-	-	-	-	-	-	DIV. 22/23	INTEGRAL	DIV. 22/23	
EUH-2	TRANE	UHAA	230 CFM	1	1.5 kW	60 °F	81 °F	ALL	240 / 1	7.813	15	SEE CIRCUIT SCHEDULE	-	-	-	-	-	-	DIV. 22/23	INTEGRAL	DIV. 22/23	
EUH-3	TRANE	UHAA	230 CFM	1	1.5 kW	60 °F	81 °F	ALL	240 / 1	7.813	15	SEE CIRCUIT SCHEDULE	-	-	-	-	-	-	DIV. 22/23	INTEGRAL	DIV. 22/23	
EUH-4	TRANE	UHAA	230 CFM	1	3.0 kW	60 °F	101 °F	ALL	240 / 1	15.63	20	SEE CIRCUIT SCHEDULE	-	-	-	-	-	-	DIV. 22/23	INTEGRAL	DIV. 22/23	

REMARKS:
1. 18 GA LOUVERED FACE. SURFACE MOUNT INSTALLATION.
2. UNIT MOUNTED ADJUSTABLE THERMOSTAT.
3. UNIT MOUNTED CIRCUIT BREAKER.
4. EUH-2 AND EUH-3 TO BE RECESSED UNITS.
5. PROVIDE EUH-4 UNDER ALTERNATE NO. 3.

PLUMBING FIXTURE SCHEDULE

UNIT NO.	DESCRIPTIION	MANUFACTURER	MODEL	SPECIFICATIONS	FLUSH VALVE OR FAUCET	ACCESSORY	CONNECTIONS				MOUNTING HEIGHT
							CW	HW	WASTE	VENT	
FD-1	FLOOR DRAIN	SIOUX CHIEF	833	CAST IRON, NICKEL BRONZE ADJUSTABLE STRAINER, FLASHING COLLAR CLAMP AND P-TRAP			-	-	2"	1 1/2"	
FD-2	FLOOR DRAIN	SIOUX CHIEF	833	CAST IRON, NICKEL BRONZE ADJUSTABLE STRAINER, FLASHING COLLAR CLAMP AND P-TRAP.			-	-	3"	1 1/2"	
LAV-1A	LAVATORY - WALL HUNG - ADA	AMERICAN STANDARD	LUCERNE	20"x18", VITREOUS CHINA, BACK SPLASH, FRONT OVERFLOW, CONCEALED ARMS WITH CARRIER.	DELTA 501LF-HDF SINGLE LEVER LAVATORY FAUCET, SCALD GUARD, VANDAL RESISTANT, CERAMIC DESC VALVING. (1.5 GPM), GRID STRAINER	PROVIDE FLOOR MOUNTED LAV CARRIER WITH CONCEALED ARMS, ADA COMPLIANT OFFSET DRAIN, 1 1/4" P-TRAP, PERFORATED STRAINER, CHROME SUPPLIES & STOPS, PREMOLDED PIPE INSULATION KIT (WHITE).	1/2"	1/2"	2"	1 1/2"	34" TO RIM
MSK-1	MOP SINK	FIAT	MSB-2424	24"x24"x10" HIGH, MOLDED STONE	CHICAGO 897, VACUUM BREAKER, PAIL HOOK, HOSE END SPOUT, WALL BRACKET, DOME TYPE WITH LINT BASKET OF NO. 302 STAINLESS STEEL, COMPRESSION GASKET OR LEAD CAULK JOINT, 3-INCH DEEP SEAL CAST IRON TRAP	VINYL BUMPER GUARD ON EXPOSED SIDES, NO. 832-AA HOSE AND BRACKET, NO. 889-CC MOP HANGER	3/4"	3/4"	3"	1 1/2"	36" TO FAUCET
SK-1	SS. SINK, SINGLE COMPARTMENT	ELKAY	"LUSTERTONE" LR-2219	SINGLE COMPARTMENT SINK, 22" X 19" X 7.5" D. 18 GAUGE TYPE 302 S.S., 2 HOLE SELF-RIMMING, OFF-CENTERED REAR DRAIN OPENING, 8" CENTERS, FULLY UNDERCOATED.	AMERICAN STANDARD 6409.170 MONTERREY FAUCET, WING HANDLES, 13" HIGH X 8" REACH SWING GOOSENECK, CERAMIC DISC VALVING, SOLID BRASS CONSTRUCTION, CHROME PLATED, LESS SPRAY.	1 1/2" P-TRAP, CHROME ANGLE SUPPLIES AND STOPS, NEOPRENE CRUMB CUP STOPPER.	1/2"	1/2"	2"	1 1/2"	
WC-1A	WATER CLOSET - FLOOR MOUNT - ADA COMPLIANT	AMERICAN STANDARD	CADET 2467.016	VITREOUS CHINA, ELONGATED BOWL, ADA PRESSURE ASSIST FLUSH TANK, WHITE	3/8" ANGLE SUPPLY LOOSE KEY STOP	ENEKE 527 SS WHITE, OPEN FRONT SEAT, LESS COVER, WITH SELF-SUSTAINING CHECK HINGE, FLAT BOLT CAPS, INSULATED TANK, LOCKING TANK COVER.	1/2"	-	4"	2"	17" TO RIM
WH-1	WALL HYDRANT	WOODFORD	MODEL 67	FREEZELESS, VACUUM BREAKER, CHROME FINISH, BRASS CASTING, S.S. STEM, 3/8" ROD, BRASS VALVE WITH HEMISPHERICAL SEAT, LOOSE KEY, RECESSED WITH HINGED DOOR AND KEY			3/4"	-	-	-	24" ABOVE GRADE

TSP

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/16/2021**	DRAWN BY **JLP**
PROJECT # **01190805**	CHECKED BY **RCN**

SHEET TITLE

MECHANICAL SCHEDULES

SHEET NUMBER

ME601

REBID DOCUMENTS

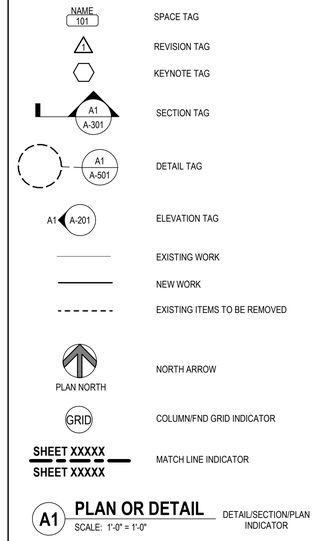
ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)	DCP	DOMESTIC WATER CIRCULATING PUMP	HT	HEIGHT	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
A	AMPERE	DEPT	DEPARTMENT	HTG	HEATING	SWBD	SWITCHBOARD
AC	AIR CONDITIONER	DIA	DIAMETER	HTR	HEATER	SYM	SYMMETRICAL
AFC	ABOVE FINISHED COUNTER	DISC	DISCONNECT	HV	HIGH VOLTAGE	SYS	SYSTEM
AFF	ABOVE FINISHED FLOOR	DIST	DISTRIBUTION	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	TEL	TELEPHONE
AFG	ABOVE FINISHED GRADE	DN	DOWN	HWP	HYDRONIC WATER PUMP	TERM	TERMINAL
AFI	ARC FAULT CIRCUIT INTERRUPTER	DT	DOUBLE THROW	IC	INTERRUPTING CAPACITY	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
AHU	AIR HANDLING UNIT	DTS	DUAL TECHNOLOGY SENSOR	IG	ISOLATED GROUND	NIC	NOT IN CONTRACT
AIC	AVAILABLE INTERRUPTING FAULT CURRENT	DWG	DRAWING	IMC	INTERMEDIATE METAL CONDUIT	NL	NIGHT LIGHT
AL	ALUMINUM	EC	ELECTRICAL CONTRACTOR	INCAND	INCANDESCENT	N.O.	NORMALLY OPEN
ALT	ALTERNATE	ELEC	ELECTRIC, ELECTRICAL	IR	INFRARED	NTS	NOT TO SCALE
AMP	AMPERE	ELEV	ELEVATOR	I/W	INTERLOCK WITH	OH	OVERHEAD
AMPL	AMPLIFIER	EM	EMERGENCY	J-BOX	JUNCTION BOX	OL	OVERLOADS
ANNUN	ANNUNCIATOR	EMS	ENERGY MANAGEMENT SYSTEM	KV	KILOVOLT	OS	OCCUPANCY SENSOR
APPROX	APPROXIMATELY	EMT	ELECTRICAL METALLIC TUBING	KVA	KILOVOLT-AMPERE	PA	PUBLIC ADDRESS
AQ-STAT	AQUASTAT	EQUIP	EQUIPMENT	KVAR	KILOVOLT-AMPERE REACTIVE	PB	PULL BOX
ARCH	ARCHITECT, ARCHITECTURAL	EWC	ELECTRIC WATER COOLER	KW	KILOWATT	PED	PEDESTAL
ATS	AUTOMATIC TRANSFER SWITCH	EXIST	EXISTING	KWH	KILOWATT HOUR	PF	POWER FACTOR
AUTO	AUTOMATIC	EXH	EXHAUST			PH	PHASE
AUX	AUXILIARY	EXP	EXPLOSION PROOF	LOC	LOCATE OR LOCATION	PIR	PASSIVE INFRARED
AV	AUDIO VISUAL	FA	FIRE ALARM	LT	LIGHT	PIV	POST INDICATING VALVE
AWG	AMERICAN WIRE GAUGE	FACP	FIRE ALARM CONTROL PANEL	LTG	LIGHTING	PNL	PANEL
BATT	BATTERY	FB-XX	FLOOR BOX (SEE SCHEDULE)	LTNG	LIGHTNING	PP	POWER POLE
BD	BOARD	FCU	FAN COIL UNIT	LV	LOW VOLTAGE	PR	PAIR
BLDG	BUILDING	FIXT	FIXTURE			PRI	PRIMARY
BMS	BUILDING MANAGEMENT SYSTEM	FLR	FLOOR	MAX	MAXIMUM	PROJ	PROJECTION
C	CONDUIT	FLUOR	FLUORESCENT	MAG.S	MAGNETIC STARTER	PRV	POWER ROOF VENTILATOR
CAB	CABINET	FU	FUSE	MC	MOMENTARY CONTACT	PT	POTENTIAL TRANSFORMER
CAT	CATALOG	FVNR	FULL VOLTAGE NON-REVERSING	MC	MECHANICAL CONTRACTOR	PVC	POLYVINYL CHLORIDE (CONDUIT)
CATV	CABLE TELEVISION	GA	GAUGE	MCB	MAIN CIRCUIT BREAKER	QUAN	QUANTITY
CB	CIRCUIT BREAKER	GAL	GALLON	MCC	MOTOR CONTROL CENTER	REC	RECEPTACLE
CB-XX	RECESSED CEILING BOX (SEE SCHEDULE)	GALV	GALVANIZED	MDC	MAIN DISTRIBUTION CENTER	REQD	REQUIRED
CCTV	CLOSED CIRCUIT TELEVISION	GC	GENERAL CONTRACTOR	MDP	MAIN DISTRIBUTION PANEL	RM	ROOM
CKT	CIRCUIT	GEN	GENERATOR	MFR	MANUFACTURER	RSC	RIGID STEEL CONDUIT
CLG	CEILING	GFI/GFCI	GROUND FAULT CIRCUIT INTERRUPTER	MFS	MAIN FUSED DISCONNECT SWITCH	RTU	ROOF TOP UNIT
CM	CORNER MOUNT	GFP	GROUND FAULT PROTECTOR	MH	MANHOLE	SC	SURFACE CONDUIT
CMPR	COMPRESSOR	GND	GROUND	MIC	MICROPHONE	SEC	SECONDARY
COMB	COMBINATION	GRS	GALVANIZED RIGID STEEL (CONDUIT)	MIN	MINIMUM	SHT	SHEET
CONN	CONNECTION	GYP BD	GYPSUM BOARD	MISC	MISCELLANEOUS	SIM	SIMILAR
CONST	CONSTRUCTION	HB	HIGH BAY	MLO	MAIN LUGS ONLY	S/N	SOLID NEUTRAL
CONT	CONTINUATION OR CONTINUOUS	HOA	HANDS-OFF-AUTOMATIC SWITCH	MMS	MANUAL MOTOR STARTER	SPEC	SPECIFICATION
CONTR	CONTRACTOR	HORIZ	HORIZONTAL	MOA	MULTIOUTLET ASSEMBLY	SPKR	SPEAKER
CP	CIRCULATING PUMP	HP	HORSEPOWER	MSP	MOTOR STARTER PANELBOARD	SP	SPARE
CRT	CATHODE-RAY TUBE			MSB	MAIN SWITCHBOARD	SR	SURFACE RACEWAY
CT	CURRENT TRANSFORMER			MT	MOUNT	SS	STAINLESS STEEL
CTR	CENTER			MT.C	EMPTY CONDUIT	SSW	SELECTOR SWITCH
CU	COPPER			MTS	MANUAL TRANSFER SWITCH	S/S	STOP/START PUSHBUTTONS
				MTR	MOTOR, MOTORIZED	STA	STATION
						STD	STANDARD
				N.C.	NORMALLY CLOSED	SURF	SURFACE MOUNTED
				NEC	NATIONAL ELECTRICAL CODE	SW	SWITCH

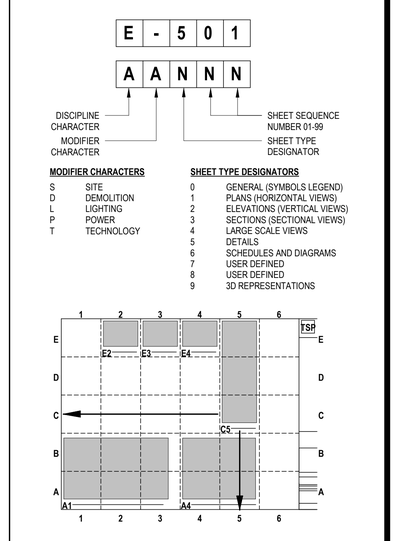
Y	WYE-CONNECTED
∠	ANGLE
@	AT
△	DELTA
'	FEET
"	INCHES
#	NUMBER
Ø	PHASE
℄	CENTER LINE
P	PLATE

V	VOLT
VA	VOLT-AMPERES
VDT	VIDEO DISPLAY TERMINAL
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
VS	VACANCY SENSOR
W	WATT
W/	WITH
WB-XX	RECESSED WALL BOX (SEE SCHEDULE)
WG	WIRE GUARD
WH	WATER HEATER
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER
XFR	TRANSFER

CONVENTIONS LEGEND



SHEET IDENTIFICATION



MODIFIER CHARACTERS

S	SITE
D	DEMOLITION
L	LIGHTING
P	POWER
T	TECHNOLOGY

SHEET TYPE DESIGNATORS

0	GENERAL (SYMBOLS LEGEND)
1	PLANS (HORIZONTAL VIEWS)
2	ELEVATIONS (VERTICAL VIEWS)
3	SECTIONS (SECTIONAL VIEWS)
4	LARGE SCALE VIEWS
5	DETAILS
6	SCHEDULES AND DIAGRAMS
7	USER DEFINED
8	USER DEFINED
9	3D REPRESENTATIONS

ELECTRICAL SYMBOL NOTES

THE LIGHTING FIXTURE TYPE IS INDICATED BY AN UPPER CASE LETTER.
THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER.
THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER.

EXAMPLE 1: LIGHTING FIXTURE TYPE "A2" IS CONNECTED TO CIRCUIT 12 AND CONTROLLED BY SWITCH "b".

EXIT LIGHTS. STEM INDICATES WALL MOUNTING. NO STEM INDICATES CEILING MOUNTING. SHADED AREA INDICATES ILLUMINATED FACE(S). ARROW INDICATES DIRECTIONAL ARROW ON ILLUMINATED FACE(S). THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. EXAMPLE: THE WALL MOUNTED EXIT LIGHT TYPE "E" WITH SINGLE FACE AND DIRECTIONAL ARROW IS CONNECTED TO CIRCUIT 14.

DEVICES. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: SPLIT DUPLEX RECEPTACLE IS CONNECTED TO CIRCUIT 16 AND ONE RECEPTACLE OUTLET IS CONTROLLED BY SWITCH "c".

THE CONTROL DEVICE DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: SINGLE POLE SWITCH "d" TO CONTROL LIGHTING FIXTURES INDICATED BY "d".

SPECIAL /RECEPT CONNECTIONS. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER(S) ADJACENT TO THE SYMBOL. SEE KEYNOTE FOR CONFIGURATION. EXAMPLE: 3 PHASE CONNECTION TO CIRCUITS 1, 3, 5.

MOTOR CONNECTIONS. THE MOTOR IS INDICATED BY A NUMBER WITHIN OR CHARACTERS ADJACENT TO THE MOTOR SYMBOL. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER(S) ADJACENT TO THE SYMBOL. EXAMPLE: MOTOR SF-1; 3 PHASE CONNECTION TO CIRCUITS 2, 4, 6.

TRANSFORMERS. THE TRANSFORMER TYPE IS INDICATED BY A NUMBER FOLLOWING THE UPPER CASE LETTER "T". SEE THE SINGLE LINE DIAGRAM OR RISER FOR THE TRANSFORMER DESCRIPTION AND REQUIREMENTS. EXAMPLE: TRANSFORMER TYPE "T1".

PANELBOARDS. PANELBOARD DOORS MAY BE SHOWN TO INDICATE OPENING SIDE OF RECESSED PANELBOARDS. SEE PANELBOARD IDENTIFICATION FOR DESIGNATION CODES.

CONDUIT RUN CONCEALED IN CEILING OR WALL CONSTRUCTION.

HOME RUN TO BRANCH CIRCUIT PANELBOARD. THE PANELBOARD DESIGNATION IS SHOWN ADJACENT TO THE HOME RUN ARROW AS A NUMERATOR AND THE CIRCUIT DESIGNATION IS SHOWN AS THE DENOMINATOR. CIRCUIT BREAKER SIZES (AMPS/NUMBER OF POLES) ARE SHOWN IN THE PANELBOARD SCHEDULE WITH THE CORRESPONDING PANELBOARD AND CIRCUIT DESIGNATION. EXAMPLE: HOME RUN TO PANELBOARD LN12; CIRCUITS 1, 3, 5.

SYMBOL NOTATIONS: UPPER CASE LETTERS ADJACENT TO SYMBOLS INDICATE A UNIT TYPE. SEE APPROPRIATE SCHEDULE OR SPECIFICATIONS.

ELECTRICAL SYMBOL LEGEND

HT AFF	SYMBOL	DESCRIPTION
AS NOTED		SURFACE MOUNTED LIGHT (TYPE DENOTED)
AS NOTED		FLOODLIGHT (TYPE DENOTED)
		RECESSED LIGHT (TYPE DENOTED)
PER SCHED		POLE MOUNTED LIGHT (TYPE DENOTED)
		SURFACE LIGHT (TYPE DENOTED)
		PENDANT OR HUNG LIGHT (TYPE DENOTED)
		RECESSED LIGHT (TYPE DENOTED)
		STRIP LIGHT (TYPE DENOTED)
AS NOTED		TRACK LIGHT/FLOOD LIGHT (TYPES DENOTED)
96"		EMERGENCY BATTERY LIGHT (TYPE DENOTED)
12"[a]		EXIT SIGN (TYPE DENOTED)
AS NOTED		LIGHT FIXTURE ON EM / LIFE SAFETY BRANCH
AS NOTED		LIGHT FIXTURE ON CRITICAL BRANCH
		LIGHT ON CORD REEL (TYPE DENOTED)
46"		SINGLE POLE SWITCH
46"		2 POLE SINGLE THROW SWITCH
46"		3-WAY SWITCH
46"		4-WAY SWITCH
46"		KEYED SWITCH
46"		PILOT SWITCH
46"		DIMMER SWITCH
46"		3-WAY DIMMER SWITCH
46"		OCCUPANCY SENSOR SWITCH
46"		MOMENTARY CONTACT SWITCH
46"		TIMER SWITCH
46"		TIME DELAY SWITCH
46"		FAN SPEED CONTROL
46"		MOTOR HORSEPOWER RATED SWITCH
46"		LOW-VOLTAGE SWITCH
46"		LOW-VOLTAGE DIMMING SWITCH
46"		MANUAL MTR. STR. (W/OVERLOADS)
18"		SINGLE RECEPT (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
18"		DUPLEX RECEPT (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
18"		USB RECEPTACLE
18"		GFI DUPLEX RECEPT. (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
18"		DEAD FRONT GFI (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
18"		DUPLEX SPLIT RECEPT
18"		DUPLEX ISOLATED GROUND RECEPT
18"		DUPLEX RECEPT ON EMERGENCY CIRCUIT
18"		FOURPLEX RECEPT. (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
18"		GFI FOURPLEX RECEPT. (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
18"		FOURPLEX RECEPT ON EMERGENCY CIRCUIT
		FLOOR RECEPT. (DUPLEX SHOWN)
AS NOTED		SPECIAL RECEPTACLE

HT AFF	SYMBOL	DESCRIPTION
AS NOTED		RECEPT ON DROP CORD (DUPLEX SHOWN)
		RECEPT ON CORD REEL (DUPLEX SHOWN)
AS NOTED		MULTIOUTLET ASSEMBLY
	E	EQUIPMENT CONNECTION
	P	POWER POLE (OPEN OFFICE STYLE)
18"		JUNCTION BOX (WALL/FLOOR/CEILING)
	PB	PULL BOX
72"[b]		CIRCUIT BREAKER PANEL
72"[b]		LIFE SAFETY CIRCUIT BREAKER PANEL
72"[b]		CRITICAL CIRCUIT BREAKER PANEL
72"[b]		EQUIPMENT CIRCUIT BREAKER PANEL
72"[b]		POWER OR DISTRIBUTION PANEL
		SWITCHBOARD
72"[b]		SPECIAL CABINET (TYPE DENOTED)
	T1	TRANSFORMER (TYPE DENOTED)
	25 KVA	GENERATOR (KVA DENOTED)
	SF-1	MOTOR
72"[b]		MAG. MOTOR STARTER
72"[b]		COMB. MOTOR STARTER (NON-FUSED)
72"[b]		COMB. MOTOR STARTER (FUSED)
72"[b]		SAFETY DISC. SW. (NON-FUSED)
72"[b]		SAFETY DISC. SW. (FUSED)
72"[b]		CONTACTOR
AS NOTED		BUS DUCT WITH PLUG-IN DISCONNECT (FUSED)
	VFD	VARIABLE FREQUENCY DRIVE
72"[b]	R	RELAY
72"[b]		ENCLOSED CIRCUIT BREAKER
		OCCUPANCY SENSOR
AS NOTED		PHOTOCELL/PHOTOSENSOR
46"		THERMOSTAT
		HAND OR HAIR DRYER (SEE ARCH SPEC)
		SOLENOID VALVE
46"		PUSH BUTTON
46"		POWER-OPERATED DOOR ACTUATOR
46"		EMERGENCY POWER OFF PUSH BUTTON

HT AFF	SYMBOL	DESCRIPTION
		CONDUIT CONCEALED IN WALL OR OVERHEAD
		CONDUIT CONCEALED BELOW FLOOR
		CONDUIT EXPOSED
		CONDUIT TRANSITION UP
		CONDUIT TRANSITION DOWN
		CONDUIT STUBBED OUT
	-LV-	LOW VOLTAGE POWER WIRING
	-EX-	EXISTING CONDUIT
	-UE-	UNDERGROUND ELECTRICAL
	-UHVE-	UNDERGROUND HIGH VOLTAGE ELECTRICAL
	-UT-	UNDERGROUND TELEPHONE
	-UCOM-	UNDERGROUND COMMUNICATIONS
	-UTV-	UNDERGROUND CABLE (CATV OR CCTV)
	-UFBR-	UNDERGROUND FIBER OPTIC
	-OHE-	OVERHEAD ELECTRIC
	-OHT-	OVERHEAD TELEPHONE
		BRANCH CIRCUIT HOME RUN
		CABLE TRAY (TYPE DENOTED)
		TELECOM. EQUIPMENT RACK (2-POST)
		TELECOM. EQUIPMENT RACK (4-POST)
		GROUNDING BUS BAR
		CONDUIT SLEEVE (SIZE DENOTED)
18"		TELEPHONE OUTLET (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
46"[c]		WALL TELEPHONE OUTLET
18"		DATA OUTLET, (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
18"		COMBINATION VOICE / DATA OUTLET, (SLASH INDICATES MOUNTING ABOVE FINISHED COUNTER)
		DATA OUTLET, FLOOR
AS NOTED		WIRELESS ACCESS POINT
46"		INTERCOM OUTLET LOCATION
18"		TELEVISION OUTLET
18"		AUDIO VISUAL OUTLET
		OUTLET IN FLOOR (MICROPHONE SHOWN)
		MULTI-SERVICE OUTLET
84"		SINGLE FACE CLOCK WALL MOUNTED
84"		DOUBLE FACE CLOCK WALL MOUNTED
18"		EQUIPOTENTIAL GROUND OUTLET
84"		BELL / CHIME / BUZZER
84"	S	SPEAKER
84"		HORN TYPE SPEAKER
46"		VOLUME CONTROL
		ANTENNA

HT AFF	SYMBOL	DESCRIPTION
90"[b]	H	FIRE ALARM HORN
90"[b]	H S	FIRE ALARM HORN / STROBE
90"[b]	H F	FIRE ALARM STROBE
90"[b]	H C	FIRE ALARM CHIME
90"[b]	H C S	FIRE ALARM CHIME / STROBE
90"[b]	SP	FIRE ALARM SPEAKER
90"[b]	H SP S	FIRE ALARM SPEAKER / STROBE
8"[d]		SMOKE DETECTOR
		HEAT DETECTOR
	D	DUCT SMOKE DETECTOR
AS NOTED		REMOTE TEST/STATUS STATION
46"[c]		F.A. PULLSTATION
	H	F.A. DOOR HOLDER
	FR	FIRE ALARM SHUT DOWN RELAY
	FS	SPRINKLER FLOW SWITCH
	TS	SPRINKLER VALVE TAMPER SWITCH
	FACP	FIRE ALARM CONTROL PANEL
	FA ANNUN	FIRE ALARM REMOTE ANNUNCIATOR
	ES	ELECTRIC STRIKE
	ML	MAGNETIC LOCK
	RX	REQUEST TO EXIT
	DC	DOOR CONTACTS / DOOR SWITCH
46"[c]	CR	CARD READER
46"[c]	K	KEYPAD
AS NOTED	MD	MOTION DETECTOR
AS NOTED		CCTV CAMERA
AS NOTED		PROJECTOR
46"		NURSE CALL EMERG. STATION
46"		NURSE CALL CODE BLUE EMRG. STATION
46"[c]		NURSE CALL DUTY STATION
46"[c]		NURSE CALL STAFF STATION
46"[c]		NURSE CALL STAFF ASSIST STATION
46"		NURSE CALL SINGLE PATIENT STATION
46"		NURSE CALL DUAL PATIENT STATION
12"[a]		NURSE CALL DOME LIGHT
12"[a]		NURSE CALL ZONE LIGHT
46"[c]	NCM	NURSE CALL MASTER STATION
46"[c]	NCC	NURSE CALL EQUIPMENT CABINET
72"[b]	NC ANNUN	NURSE CALL ANNUNCIATOR PANEL

ALL DISTANCES ARE TO CENTER OF DEVICE OR EQUIPMENT UNLESS OTHERWISE NOTED.
a. DISTANCE ABOVE TOP OF DOOR FRAME b. DISTANCE TO TOP OF EQUIPMENT OR DEVICE c. DISTANCE TO HIGHEST OPERABLE PART OF EQUIPMENT d. DISTANCE BELOW CEILING

SHEET INDEX - ELECTRICAL

SHEET #	SHEET NAME
E-001	ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES
E-101	ELECTRICAL DEMOLITION PLAN
E-102	LIGHTING PLAN AND POWER AND TECHNOLOGY PLAN
E-501	ELECTRICAL DETAILS, RISERS, AND SCHEDULES

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE	DRAWN BY
04/14/2021	**CRN**
PROJECT #	CHECKED BY
01190805	**DLB**

SHEET TITLE

ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

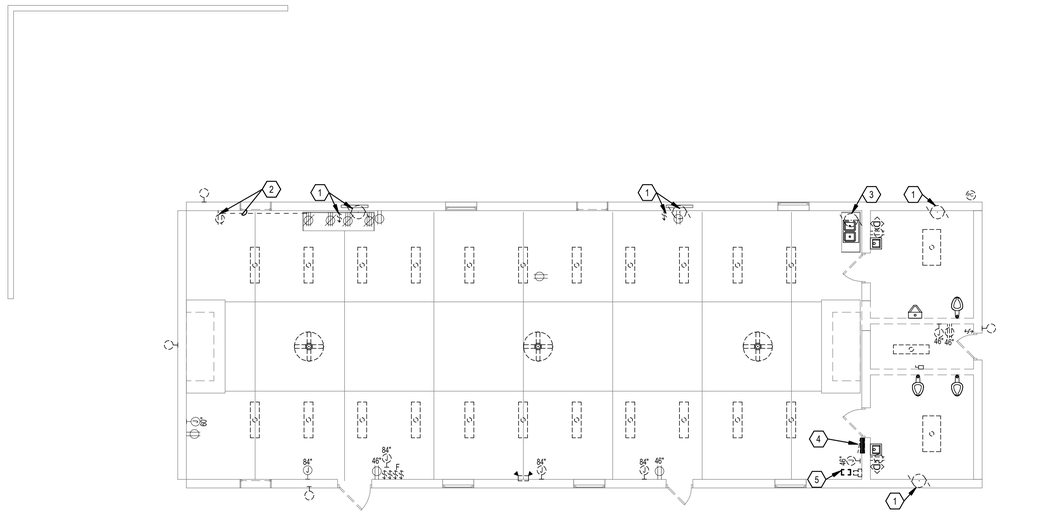
SHEET NUMBER

E-001

REBID DOCUMENTS

KEYNOTES

1	DISCONNECT POWER FROM EXHAUST FAN. REMOVE CONDUCTORS BACK TO NEAREST SPLICE.
2	REMOVE OUTLET AND SURFACE CONDUIT TO FOURPLEX OUTLET REMAINING.
3	DISCONNECT POWER FROM WATER HEATER. REMOVE CONDUCTORS BACK TO SOURCE.
4	DISCONNECT EXISTING SERVICE AND BRANCH CIRCUITS AND REMOVE PANEL AND METER. EXTEND 12 EXISTING BRANCH CIRCUITS TO NEW PANEL LN1 LOCATION.
5	REMOVE OBSOLETE TIMECLOCK AND ALL CABLING.



A2 ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION
#PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/14/2021**	DRAWN BY **CRN**
PROJECT # **01190805**	CHECKED BY **DLB**

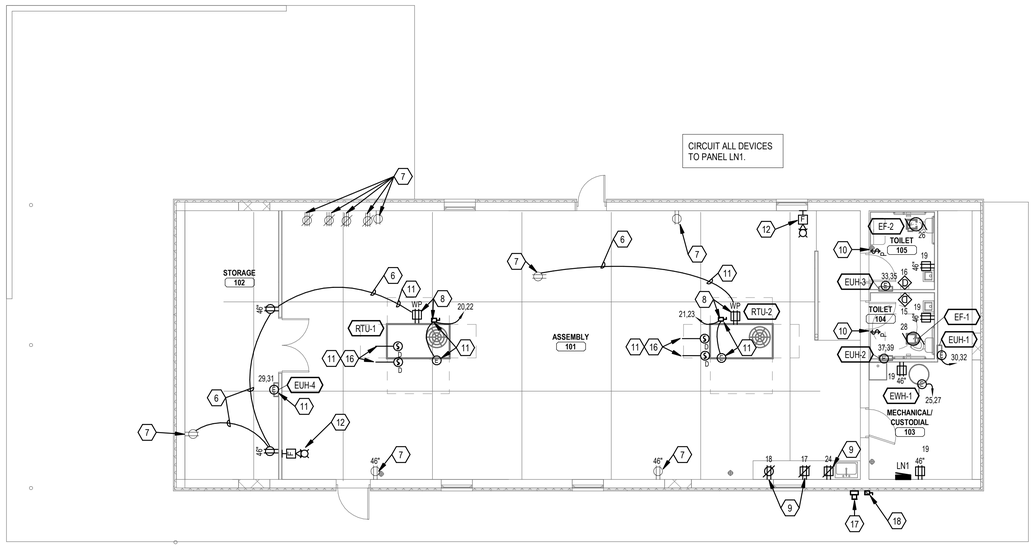
SHEET TITLE

ELECTRICAL DEMOLITION PLAN

SHEET NUMBER

E-101

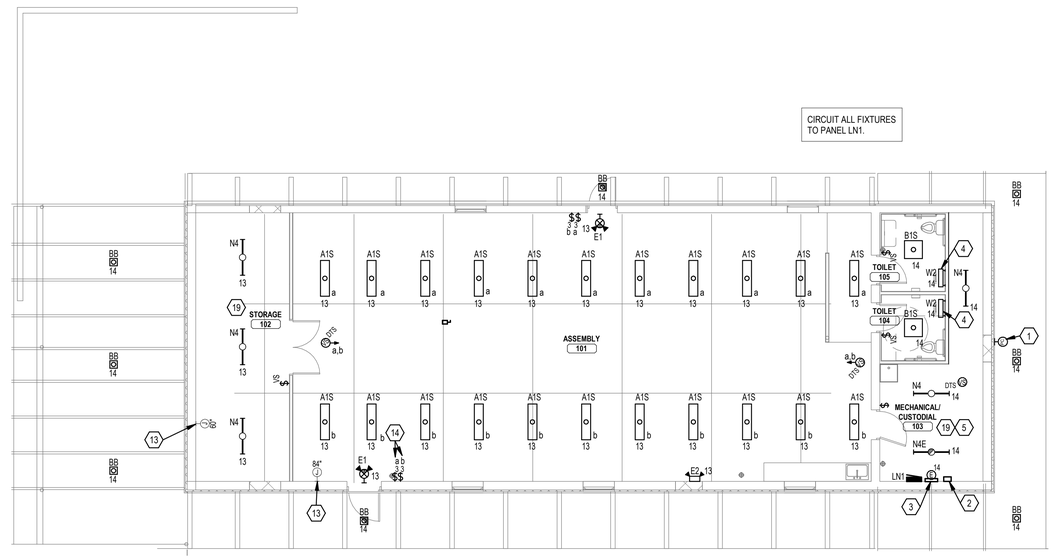
REBID DOCUMENTS



B2 **POWER AND TECHNOLOGY PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH

CONTACTOR SCHEDULE		
POLE	DESCRIPTION	CONTROL
1	NORMAL BB FIXTURES	PC
2	EMERGENCY BB	PC AND INVERTER
3	SPARE	
4	SPARE	



A2 **LIGHTING PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH

KEYNOTES

1	PROVIDE PHOTOCELL FOR CONTROL OF EXTERIOR LIGHTING AND EMERGENCY EXTERIOR LIGHTING.
2	PROVIDE A FOUR POLE CONTACTOR TO CONTROL EXTERIOR LIGHTING AND EMERGENCY EXTERIOR LIGHTING VIA BUILDING MOUNT PHOTOCELL OF KEYNOTE 1 THIS SHEET.
3	PROVIDE EMERGENCY LIGHTING INVERTER, BASIS OF DESIGN: DUAL-LITE LG-125-S-I. INVERTER SHALL PROVIDE EMERGENCY POWER TO EXTERIOR EMERGENCY FIXTURES.
4	MOUNT BOTTOM OF LIGHT FIXTURE 6" ABOVE TOP OF MIRROR. CENTER FIXTURE ABOVE MIRROR.
5	COORDINATE LIGHTING LAYOUT IN ROOM WITH MECHANICAL DUCTWORK, PIPING, EQUIPMENT, ETC.
6	EXTEND EXISTING CIRCUIT TO NEW RECEPTACLES.
7	REPLACE EXISTING DEVICES WITH GRAY DEVICE AND STAINLESS STEEL PLATE.
8	OUTLET AND DISCONNECT ARE PROVIDED INTEGRAL TO RTU UNIT.
9	PROVIDE NEW SURFACE MOUNTED BOX AND RACEWAY. BASIS OF DESIGN: LEGRAND V2400 SERIES STEEL RACEWAY.
10	PROVIDE PILOT LIGHT SWITCH TO CONTROL EXHAUST FAN. SWITCH LED SHALL BE ON WHEN EXHAUST FAN IS ON. PROVIDE LABEL.
11	BASE BID: EQUIPMENT NOT PROVIDED. DO NOT PROVIDE POWER AS SHOWN. ALTERNATE #3: EQUIPMENT PROVIDED AS SHOWN. PROVIDE POWER AS SHOWN.
12	FIRE ALARM STROBE TO ALARM WHEN DUCT SMOKE DETECTOR DETECTS SMOKE.
13	PROVIDE A NEW STAINLESS STEEL COVER PLATE FOR JUNCTION BOX.
14	RE-USE EXISTING BACK BOX FOR NEW SWITCHES.
16	INSTALL DUCT SMOKE DETECTORS IN RETURN DUCT AND SUPPLY DUCT OF RTU. DUCT DETECTORS SHALL SHUT DOWN RTU AND ANNUNCIATE HORN/STORBE.
17	UTILITY METER. SEE RISER DIAGRAM DETAIL A2 SHEET E-501 FOR MORE INFORMATION.
18	PROVIDE FUSED DISCONNECT. SEE RISER DIAGRAM FOR MORE INFORMATION.
19	CHAIN HANG LIGHTS SO BOTTOM OF FIXTURE IS 9'-0" AFF.

TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901

(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/14/2021**	DRAWN BY **CRN**
PROJECT # **01190805**	CHECKED BY **DLB**

SHEET TITLE

LIGHTING PLAN AND POWER AND TECHNOLOGY PLAN

SHEET NUMBER

E-102

REBID DOCUMENTS

PANELBOARD: LN1

LOCATION: MECHANICAL/ CUSTODIAL 103
MOUNTING: SURFACE TYPE 1
MAIN DEVICE: 200 A MCB
BUS AMPS: 200 AMPS
VOLTAGE: 120/240 V. 1 ø 3 W.
A.I.C. RATING: 10,000 AMPS SYMMETRICAL
SPECIAL: LOAD CENTER PANEL

N	LOAD DESCRIPTION	RATING	P	CKT	A		B		CKT	P	RATING	LOAD DESCRIPTION	N
	EXISTING LOAD	20 A	1	1	0.0	0.0			2	1	20 A	EXISTING LOAD	
	EXISTING LOAD	20 A	1	3			0.0	0.0	4	1	20 A	EXISTING LOAD	
	EXISTING LOAD	20 A	1	5	0.0	0.0			6	1	20 A	EXISTING LOAD	
	EXISTING LOAD	20 A	1	7			0.0	0.0	8	1	20 A	EXISTING LOAD	
	EXISTING LOAD	20 A	1	9	0.0	0.0			10	1	20 A	EXISTING LOAD	
	EXISTING LOAD	20 A	1	11			0.0	0.0	12	1	20 A	EXISTING LOAD	
	LTG - 101-103	20 A	1	13	1.1	0.4			14	1	20 A	LTG - 104-106	
1	HAND DRYER - 104	20 A	1	15			1.7	1.7	16	1	20 A	HAND DRYER - 105	1
	REC BANQUET HALL 101	20 A	1	17	0.2	0.2			18	1	20 A	REC BANQUET HALL 101	
	REC - 104 -106	20 A	1	19			0.7	5.3	20	2	60 A	RTU-1	
	RTU-2	60 A	2	21	5.3	5.3			22				
				23			5.3	0.2	24	1	20 A	REC BANQUET HALL 101	
	EWH-1	30 A	2	25	2.8	0.0			26	1	15 A	EF-1	
				27			2.8	0.0	28	1	15 A	EF-2	
	EUH-4	20 A	2	29	1.5	1.5			30	2	20 A	EUH-1	
				31			1.5	1.5	32				
	EUH-3	15 A	2	33	0.8	0.0			34	1	20 A	SPARE	
				35			0.8	0.0	36	1	20 A	SPARE	
	EUH-2	15 A	2	37	0.8	0.0			38	1	20 A	SPARE	
				39			0.8	0.0	40	--	--	SPACE	--
--	SPACE	--	--	41	0.0	0.0			42	--	--	SPACE	--
		TOTAL LOAD:			20 kVA		22 kVA						
		TOTAL AMPS:			163 A		181 A						

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Other	0 VA	0.00%	0 VA		
REC	1260 VA	100.00%	1260 VA	**CONNECTED LOAD:**	41252 VA
LTG	1514 VA	125.00%	1892 VA	**ESTIMATED DEMAND:**	41604 VA
SPEC	35760 VA	100.00%	35760 VA	**CONNECTED CURRENT:**	172 A
Appliance - Dwelling Unit	3450 VA	100.00%	3450 VA	**EST. DEMAND CURRENT:**	173 A
MTR	48 VA	112.50%	54 VA		

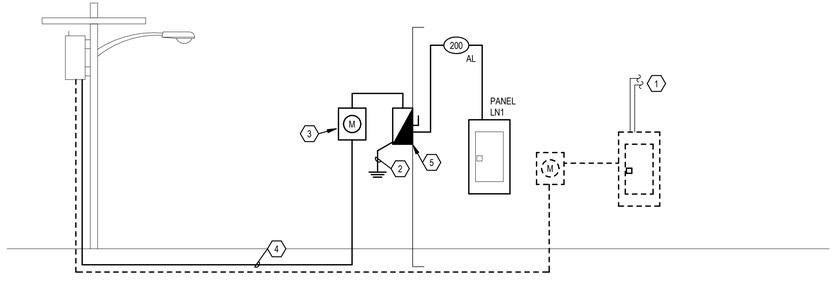
NOTES (N):
1. PROVIDE LOCKING DEVICE FOR CIRCUIT BREAKER.
2. GROUND FAULT CIRCUIT PROTECTION 4 - 6 mA.
3. SURGE PROTECTIVE DEVICE (SPD)

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG SERIES	DESCRIPTION	VOLTAGE	MOUNTING	BALLAST/DRIVER	LAMP	WATTAGE	EQUIVALENTS
A1S	SATCO	NUVO 62-1184	1'X4' SURFACE TROFFER; BRONZE FINISH; 3600 LUMENS	120 V	SURFACE/CEILING	LED STANDARD	LED	45 W	LUMAX
B1S	SATCO	NUVO 62-1183	2'X2' SURFACE TROFFER; BRONZE FINISH; 3500 LUMENS	120 V	SURFACE/CEILING	LED STANDARD	LED	45 W	LUMAX
E1	DUAL-LITE	LT U R B I - 03L	EXIT LIGHT WITH EMERGENCY HEADS	120 V	WALL	--	LED	5 W	EMERGI-LITE
E2	DUAL-LITE	EVHC6IB	EMERGENCY LED BUGEYE FIXTURE	120 V	WALL	LED STANDARD	LED	6 W	EMERGI-LITE
N4	COLUMBIA LIGHTING	LCL 4 30 ML E U	4' LED STRIP LIGHT	120 V	SURFACE/CEILING	LED STANDARD	LED	42 W	METALUX
N4E	COLUMBIA LIGHTING	LCL 4 30 ML E U ELL14	4' LED STRIP LIGHT; EMERGENCY BATTERY BACKUP	120 V	SURFACE/CEILING	LED STANDARD	LED	42 W	METALUX
W2	NUVO LIGHTING	62-914	2' VANITY FIXTURE	120 V	WALL	LED STANDARD	LED	26 W	INDESSA
BB	ASL LIGHTING	W12-ND-40K-S12	CANOPY FIXTURE; 1200 LUMENS	120 V	SURFACE/CEILING	LED STANDARD	LED	12 W	SUBMIT FOR PRIOR APPROVAL

KEYNOTES

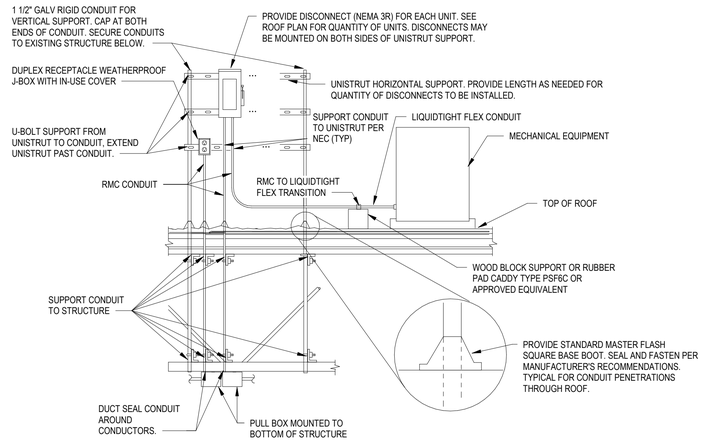
1	EXTEND 12 EXISTING 20A, 1 POLE CIRCUITS TO NEW PANEL LN1 LOCATION. EXTEND WIRING.
2	GROUND PER N.E.C. AND DETAIL A4 THIS SHEET.
3	ALLIANT ENERGY TO PROVIDE METER, DIVISION 26 TO PROVIDE METER SOCKET PER UTILITY'S REQUIREMENTS.
4	COORDINATE WITH POWER UTILITY COMPANY, ALLIANT ENERGY, FOR INCREASING SIZE OF SERVICE. ALLIANT ENERGY SHALL PROVIDE NEW CONDUIT AND CONDUCTORS FROM UTILITY OWNED TRANSFORMER TO METER SOCKET. COORDINATE WITH UTILITY IF EXISTING CONDUIT/WIRING CAN BE RE-USED. THE EXISTING ADDRESS IS 311 E ANSON ST. PARK, MARSHALLTOWN, IOWA.
5	PROVIDE 200A SERVICE RATED FUSED DISCONECT SWITCH IN A NEMA 3R ENCLOSURE. DISCONNECT'S EXPECTED AIC RATING SHALL BE GREATER THAN 6800 AMPS, COORDINATE AMOUNT WITH SHORT CIRCUIT STUDY AND MARK DISCONNECT ACCORDING TO SPECIFICATIONS.



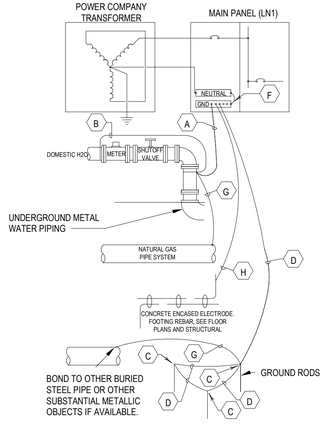
A2 RISER DIAGRAM - NEW AND DEMO
SCALE: NOT TO SCALE

CIRCUIT SCHEDULE				
MARK (AMPACITY)	SERVICE CONDUCTORS PH/N-C	4-WIRE (W/NEUTRAL) PH/N-GND-C	3-WIRE (NO NEUTRAL) PH-GND-C	ALUMINUM FEEDERS 4-WIRE (W/NEUTRAL) PH/N-GND-C
15	12-3/4"	12-12-3/4"	12-12-3/4"	NOT ALLOWED
20	12-3/4"	12-12-3/4"	12-12-3/4"	NOT ALLOWED
25	10-3/4"	10-10-3/4"	10-10-3/4"	NOT ALLOWED
30	10-3/4"	10-10-3/4"	10-10-3/4"	NOT ALLOWED
35	8-1"	8-10-1"	8-10-3/4"	NOT ALLOWED
40	8-1"	8-10-1"	8-10-3/4"	NOT ALLOWED
45	6-1 1/4"	6-10-1 1/4"	6-10-1"	NOT ALLOWED
50	6-1 1/4"	6-10-1 1/4"	6-10-1"	NOT ALLOWED
60	6-1 1/4"	6-10-1 1/4"	6-10-1"	NOT ALLOWED
70	4-1 1/2"	4-8-1 1/2"	4-8-1 1/4"	NOT ALLOWED
80	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"	NOT ALLOWED
90	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"	NOT ALLOWED
100	2-1 1/2"	2-8-1 1/2"	2-8-1 1/2"	1/0-6-2"
110	2-1 1/2"	2-6-1 1/2"	2-6-1 1/2"	1/0-4-2"
125	1-2"	1-6-2"	1-6-1 1/2"	2/0-4-2"
150	1/0-2"	1/0-6-2"	1/0-6-2"	3/0-4-2 1/2"
175	2/0-2"	2/0-6-2"	2/0-6-2"	4/0-4-2 1/2"
200	3/0-2 1/2"	3/0-6-2 1/2"	3/0-6-2"	250 KCMIL-4-3"

MISCELLANEOUS NOTES:
1. ALL CIRCUITS (BRANCH, FEEDER, AND SERVICE) SHALL BE SIZED PER THE OVERCURRENT DEVICE AND THIS CIRCUIT SCHEDULE UNLESS OTHERWISE NOTED. THE ABOVE CHART IS THE MINIMUM CONDUCTOR AND CONDUIT SIZE FOR THE OVERCURRENT DEVICE. CHART DOES NOT INCLUDE REQUIRED VOLTAGE DROP.
2. CIRCUITS SHALL BE 4 WIRE (4W) UNLESS DENOTED WITH "3W" (3 WIRE), OR IS THE SERVICE ENTRANCE FROM THE UTILITY.
3. ALL BRANCH CIRCUITS AND FEEDERS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR.
4. ALL CONDUCTORS SHALL BE COPPER UNLESS NOTED OTHERWISE.
5. THE NEUTRAL SHALL BE THE SAME SIZE AS THE PHASE CONDUCTORS UNLESS 3-WIRE, OR NOTED OTHERWISE.
6. SINGLE PHASE CIRCUITS SHALL BE SIZED PER THE OVERCURRENT DEVICE UNLESS OTHERWISE NOTED. SIZE THE CONDUCTORS AND CONDUIT PER THE 4-WIRE COLUMN OF THIS CHART BUT REDUCE THE AMOUNT OF PHASE CONDUCTORS AS REQUIRED.



B4 ROOF MOUNTED EQUIPMENT
SCALE: NOT TO SCALE



KEYNOTES

A. GROUNDING ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE, AS SHOWN. SIZE PER NEC TABLE 250.66.

B. BOND WATER SYSTEMS AROUND ALL VALVES AND METERS PER NEC.

C. CONNECT GROUNDING ELECTRODE CONDUCTOR TO GROUND ROD WITH GROUND CONNECTOR.

D. GROUNDING ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE, AS SHOWN. #6 AWG BARE COPPER CONDUCTOR.

E. NOT USED

F. NOT USED

G. BOND METAL WATER PIPING AND OTHER METAL PIPING SYSTEMS WITH BONDING JUMPER SIZED PER NEC.

H. GROUND ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE, AS SHOWN. #4 AWG COPPER CONDUCTOR.

A4 GROUNDING DETAIL
SCALE: NOT TO SCALE

TSP
TSP, Inc.
1500 Highway 52 North
Rochester, MN 55901
(507) 288-8155
www.teamtsp.com

Architecture
Engineering
Planning

CONSULTANTS

PROJECT

CITY OF MARSHALLTOWN ANSON PARK SHELTER RENOVATION #PRK20001

MARSHALLTOWN, IOWA

ISSUES

ISSUE	DATE	DESCRIPTION

ISSUE DATE **04/14/2021** DRAWN BY **CRN**
PROJECT # **01190805** CHECKED BY **DLB**

SHEET TITLE

ELECTRICAL DETAILS, RISERS, AND SCHEDULES

SHEET NUMBER

E-501

REBID DOCUMENTS