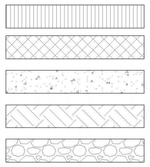
ABBREVIATIONS:

ABV	ABOVE
ACT	ACOUSTICAL CEILING PANEL / TILE
ADJ	ADJUSTABLE), ADJACENT
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AP	ACOUSTICAL PANEL
ALT	ALTERNATE
ARCH	ARCHITECTURAL
AV, A/V	AUDIO VISUAL
BLDG	BUILDING
BO	BOTTOM OF
BOT, BOTT	BOTTOM
BTWN	BETWEEN
CAB(S)	CABINET(S)
CL	CENTER LINE
CLG, CEIL	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONT	CONTINUOUS, CONTINUE
DEMO	DEMOLITION, DEMOLISH
DIA	DIAMETER
DIM, DIMS	DIMENSION(S)
DN	DOWN
DR	DOOR
DTL, DET	DETAIL
DWG	DRAWING
EA	EACH
ELEC, ELECT	ELECTRIC(AL)
ELEV	ELEVATION
EQ	EQUAL
EXIST,(E)	EXISTING
EXT	EXTERIOR
FA	FIRE ALARM
FEC	FIRE EXTINGUISHER CABINET
FF	FINISHED FLOOR,
FLR	FLOOR
FDN	FOUNDATION
FM	FIRE MARSHAL
FO	FACE OF
FOF	FACE OF FINISH
FT	FOOT (FEET)
FWTP	FABRIC-WRAPPED TACK PANEL
GALV	GALVANIZED
HC	HANDICAP
HDWR	HARDWARE
HOR, HORIZ	HORIZONTAL
HVAC	HEATING, VENTILATING & AIR CONDITION
MAX	MAXIMUM
MB	MARKER BOARD
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MANF, MFG	MANUFACTURER(R)(ING)
MIN	MINIMUM, MINUTE(S)
MISC	MISCELLANEOUS
N	NORTH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED - CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED - OWNER INSTALLED
OPP	OPPOSITE
PL	PLASTIC LAMINATE
SIM	SIMILAR
SPECS	SPECIFICATIONS
STRUCT	STRUCTURAL
SQ	SQUARE
TB	TACKBOARD / TOWEL BAR
TO	TOP OF
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE
TOF	TOP OF FLOOR
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES INC
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
VIF	VERIFY IN FIELD
WDO, WIN	WINDOW
WM	WALK-OFF MAT

MATERIAL GRAPHICS:

MATERIAL HATCHES

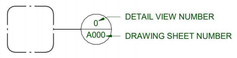


SYMBOLS

ELEVATION SYMBOLS AND HATCHES

TARGETS:

ENLARGED DETAIL TARGET



SPOT ELEVATION TARGET

INTERIOR ELEVATION TARGET

DIMENSION POINT TARGETS

INTERIOR ELEVATION NOTES

1. VERIFY DIMENSIONS IN AREAS TO RECEIVE CASEWORK, ARCHITECTURAL WOODWORK OR WALL MOUNTED PANELS. COORDINATE WITH ELECTRICAL, FIRE PROTECTION AND OTHER DEVICES. NOTIFY ARCHITECT OF ANY UNRESOLVED CONFLICTS.

2. DIMENSIONS ARE SHOWN TO DIMENSION POINT (DIM. PT.) OF REFERENCED DETAIL, WHERE APPLICABLE.

3. COORDINATE AND PROVIDE NECESSARY BACKING FOR ALL AV DEVICES, MARKERBOARD, TACKBOARD AND CASEWORK.

DEMOLITION NOTES

1. THE PURPOSE OF THE DEMOLITION DRAWINGS IS TO OUTLINE A GENERAL DIRECTION OF WHAT NEEDS TO BE REMOVED TO ACCOMPLISH THE WORK. WORK SHOWN IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO BE ALL INCLUSIVE. VERIFY EXISTING CONDITIONS BEFORE BIDDING AND INCLUDE ALL WORK EVIDENT BY SITE INSPECTION, WHETHER OR NOT SHOWN ON DRAWINGS, TO ACHIEVE DESIRED RESULTS INDICATED ON DOCUMENTS FOR COMPLETED WORK.

2. COORDINATE PHASING OF DEMOLITION WORK WITH OWNER PRIOR TO COMMENCING.

3. REFER TO CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND OTHER CONSULTANTS' DOCUMENTS FOR ADDITIONAL DEMOLITION INFORMATION.

4. USE DUE CARE TO MINIMIZE DAMAGE TO EXISTING WORK WHICH IS TO REMAIN. REPLACE, REPAIR, PATCH, AND REPAINT AS REQUIRED WORK DAMAGED, MODIFIED OR AFFECTED BY DEMOLITION WORK.

5. PROTECT EXISTING LANDSCAPING TO REMAIN.

6. COORDINATE WITH OWNER AND SCHEDULE IN ADVANCE INTERRUPTIONS OF ELECTRICAL, MECHANICAL, FIRE PROTECTION, PLUMBING, COMMUNICATION AND OTHER SERVICES, WHICH MAY AFFECT FACILITY OPERATIONS OR OTHER BUILDINGS NEARBY.

7. REMOVE OR CAP CONDUIT AND PIPING FROM ABANDONED UTILITIES.

8. IF ASBESTOS OR OTHER HAZARDOUS MATERIALS ARE OBSERVED OR SUSPECTED IN THE BUILDING, IMMEDIATELY STOP WORK IN THAT AREA AND PROMPTLY NOTIFY THE OWNER / ARCHITECT. THE OWNER WILL ARRANGE REMOVAL OR ENCAPSULATION OF HAZARDOUS MATERIALS UNDER A SEPARATE CONTRACT.

SITE PLAN NOTES

1. REFER TO CIVIL DRAWINGS FOR BUILDING ELEVATIONS

2. MODULAR PROVIDER TO COORDINATE ALL ELECTRICAL AND LOW VOLTAGE SCOPE WITH DRAWINGS INCLUDED HERE.

3. GENERAL CONTRACTOR TO VERIFY LOCATION OF ALL IRRIGATION LINES AND ASSOCIATED EQUIPMENT/VAULTS WITHIN THE SCOPE BOUNDARY AND ALONG NEW UTILITY ROUTES. LOCATIONS AS SHOWN IN DRAWINGS ARE APPROXIMATE. DISCONNECT EXISTING IRRIGATION LINES AND RELOCATE EQUIPMENT/VAULTS THAT FALL WITHIN FOOTPRINT OF MODULAR CLASSROOMS, ASSOCIATED DECKING OR ADJUSTED GRADING/PAVING SO THAT EXISTING SYSTEM FUNCTIONS AFTER MODIFICATIONS EQUALLY TO PERFORMANCE BEFORE THE WORK. IN THE EVENT OF DAMAGE, GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL REPAIR TO THE IRRIGATION SYSTEM, INCLUDING REPLACEMENT OF WIRE FROM POINT SOURCE TO POINT SOURCE.

4. GENERAL CONTRACTOR TO VERIFY LOCATION AND COMPLETE ANY NECESSARY MODIFICATIONS OR REPAIRS REQUIRED TO UNDERGROUND UTILITIES DUE TO WORK SHOWN HEREIN.

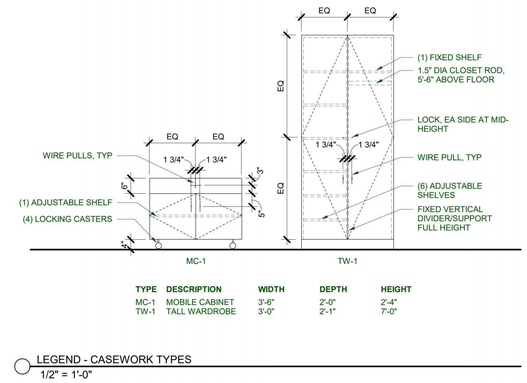
FLOOR PLAN NOTES

1. SEE ELECTRICAL, TECHNOLOGY AND CIVIL DRAWINGS FOR UTILITIES AND INFRASTRUCTURE REQUIRED TO SERVE MODULAR CLASSROOMS.

2. ALL INTERIOR FINISHES, WALL ACCESSORIES AND CASEWORK TO BE PROVIDED BY MODULAR MANUFACTURER.

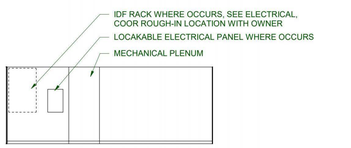
3. DOOR SWINGS AND LAYOUT VARY, SEE SITE PLAN TO DETERMINE DOOR LAYOUT AND SWING DIRECTION FOR EACH UNIQUE LOCATION.

4. ALL DOOR HARDWARE TO BE PROVIDED BY MODULAR MANUFACTURER AND IN ACCORDANCE WITH NCSD DOOR HARDWARE SPECIFICATION 087100.

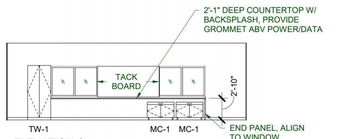


TYPE	DESCRIPTION	WIDTH	DEPTH	HEIGHT
MC-1	MOBILE CABINET	3'-6"	2'-0"	2'-4"
TW-1	TALL WARDROBE	3'-0"	2'-1"	7'-0"

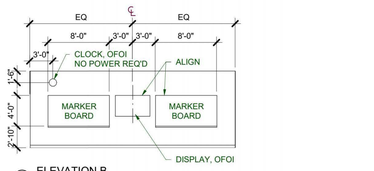
LEGEND - CASEWORK TYPES
1/2" = 1'-0"



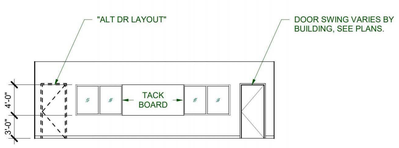
54 ELEVATION D
1/8" = 1'-0"



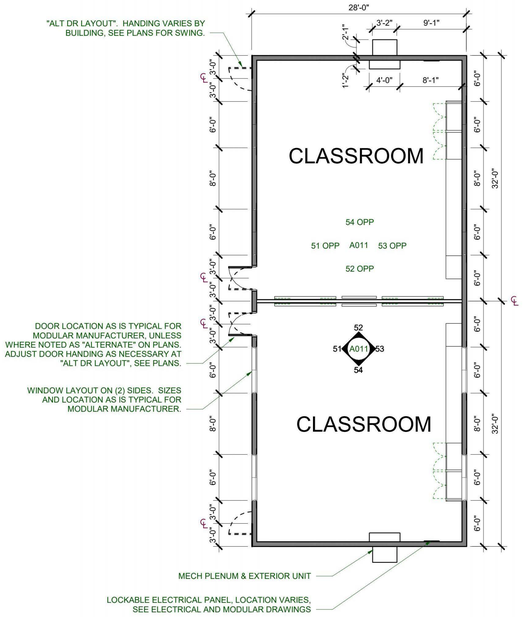
53 ELEVATION C
1/8" = 1'-0"



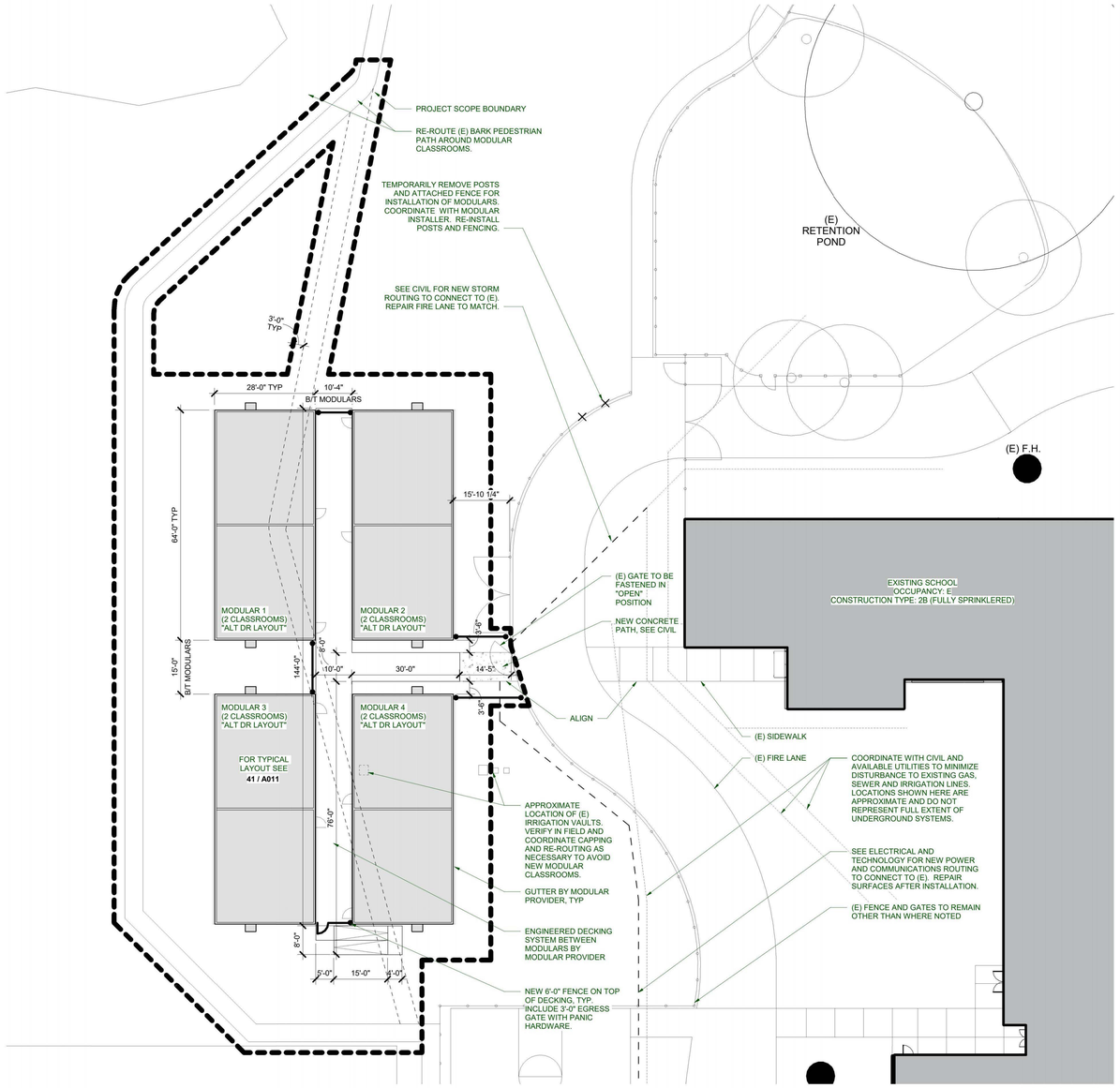
52 ELEVATION B
1/8" = 1'-0"



51 ELEVATION A
1/8" = 1'-0"



41 TYPICAL MODULAR PLAN
1/8" = 1'-0"



31 HVMS SITE PLAN
1/16" = 1'-0"

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REGISTERED ARCHITECT
CHRISTOPHER J. IVAY
OREGON
5145
STATE OF OREGON

HAPPY VALLEY MIDDLE SCHOOL
TEMPORARY MODULAR CLASSROOMS
13865 SE King Rd B, Happy Valley, OR 97086

MARK	DATE	DESCRIPTION
Issued:		02/20/2020
Scale:		As indicated

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NOTES, SITE PLAN, MODULAR LAYOUT

A011

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GENERAL NOTES

1. ALL WORK AND MATERIAL SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CITY'S ENGINEERING DESIGN AND STANDARD DETAILS MANUAL (DESIGN MANUAL), LATEST EDITION, APWA/ODOT OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
2. THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.
3. AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS:
   a. COPY OF THE CONTRACTOR'S CERTIFICATE OF INSURANCE
   b. EMERGENCY CONTACT NAME AND PHONE NUMBER
   c. TRAFFIC CONTROL PLAN
   d. LIST OF SUBCONTRACTORS
4. A COPY OF THE PERMIT WITH ALL ATTACHMENTS, A COPY OF THE APPROVED CONSTRUCTION PLANS, AND ALL AMENDMENTS SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. ALL WORK SHALL CONFORM TO THE PERMIT TERMS, CONDITIONS/PROVISIONS, APPROVED CONSTRUCTION PLANS, APPROVED PLAN AMENDMENTS, AND THESE GENERAL CONDITIONS. CHANGES TO ANY OF THE AFORESAID MUST BE APPROVED BY THE PROJECT ENGINEER AND CITY, IN ADVANCE OF WORK PERFORMANCE.
5. THE CONTRACTOR SHALL HAVE A CURRENT HAPPY VALLEY BUSINESS LICENSE BEFORE STARTING CONSTRUCTION.
6. A SIGN SHALL BE POSTED CONSPICUOUSLY AT THE JOB SITE ENTRANCE PRIOR TO SITE CONSTRUCTION, AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. USE 2-INCH HIGH BLACK LETTERS ON AN ORANGE BACKGROUND. THIS SIGN SHALL READ AS FOLLOWS: "CONSTRUCTION SHALL BE LIMITED TO 7:00 AM TO 6:00 PM ON WEEKDAYS, AND 8:00AM TO 5:00PM ON SATURDAYS AND SUNDAYS. HOWEVER, SITE CLEARING, EARTH MOVING, INSTALLATION OR CONSTRUCTION OF UNDERGROUND UTILITIES, PAVING OF STREETS AND SIDEWALKS, FOUNDATION FRAMINING AND POURING, AND STRUCTURAL FRAMING SHALL BE ENTIRELY PROHIBITED ON SUNDAYS. TO REPORT VIOLATIONS CALL 503-783-3800."
7. ALL FENCING, ESC MEASURES, AND CONSTRUCTION ENTRANCES SHALL BE INSTALLED AND MAINTAINED BY THE DEVELOPER AND INSPECTED BY THE CITY OF HAPPY VALLEY PRIOR TO BEGINNING WORK ON THE STIE. CALL FOR INSPECTION 24 HOURS IN ADVANCE, 503-783-3800.
8. MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN AND SANITARY CONDITION, FREE FROM OBSTRUCTIONS, HAZARDS, DEBRIS, AND TRASH AT ALL TIMES. A COPY OF THE CONTRACTOR CERTIFICATE OF INSURANCE SHALL BE AVAILABLE AT THE WORK AREA.
9. THE SPREADING OF MUD OR DEBRIS OR STORAGE OF MATERIAL OR EQUIPMENT OF ANY KIND UPON ANY PUBLIC ROADWAY IS STRICTLY PROHIBITED AND VIOLATION SHALL BE CAUSE FOR IMMEDIATE SUSPENSION OF THE PERMIT. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER IMMEDIATE CLEAN UP AND STOPPAGE OF WORK TO ACCOMPLISH CLEAN-UP.
10. DUST SHALL BE CONTROLLED WITHIN THE DEVELOPMENT DURING CONSTRUCTION AND SHALL NOT BE PERMITTED TO DRIFT ONTO ADJACENT PROPERTIES.
11. CONTRACTOR SHALL MONITOR THE HAULING OF DEBRIS TO ENSURE THAT ALL SPILLAGE FROM TRUCKS IS PROMPTLY AND COMPLETELY REMOVED AND CLEANED UP.
12. THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), "OREGON SUPPLEMENTS", AND CITY REQUIREMENTS. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR OWNERS NEAR THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE A PROJECT-SPECIFIC TRAFFIC CONTROL PLAN, APPROVED BY THE CITY, AND AVAILABLE ON THE PROJECT SITE.
13. THE CONTRACTOR IS RESPONSIBLE FOR PROVISION OF TIMELY NOTIFICATION OF TRAFFIC FLOW DISRUPTIONS TO AREA-WIDE EMERGENCY SERVICES AND THE SCHOOL DISTRICT. THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
14. TRAFFIC CONTROL DEVICES, FLAG PERSONS, ETC., SHALL BE IN PLACE PRIOR TO INITIATION OF CONSTRUCTION WORK AND SHALL BE EFFECTIVELY MAINTAINED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO ANY WORK WITHIN EXISTING RIGHT-OF-WAY.
15. PUBLIC ROADWAYS SHALL NOT BE CLOSED TO TRAFFIC, AT ANY TIME, WITHOUT HAVING FIRST OBTAINED A STREET CLOSURE PERMIT FROM THE CITY.
16. COMPACTION TESTING IS THE RESPONSIBILITY OF THE DEVELOPER. PROVIDE THE CITY WITH COPIES OF THE TEST RESULTS ON BASE ROCK AND ASPHALT. SCHEDULE PROOF ROLLS WITH THE CITY AT LEAST 48 HOURS IN ADVANCE.
17. CONTRACTOR MUST VERIFY ALL EXISTING UTILITIES FOR BOTH VERTICAL ELEVATION AND HORIZONTAL LOCATION PRIOR TO START OF WORK (POTHOLE BEFORE DIGGING IF NECESSARY). CONTRACTOR SHALL COORDINATE THE WORK WITH APPLICABLE AGENCIES.
18. TRENCHES WITHIN RIGHTS-OF-WAY, PAVEMENT, OR CONCRETE AREAS SHALL BE BACKFILLED WITH APPROVED CRUSHED ROCK (DRAWING NO. 205) OR CDF (DRAWING NO. 210), AND AS SPECIFIED ON THESE PLANS. TRENCHES OUTSIDE OF THE PAVED OR CONCRETE AREAS MAY BE BACKFILLED WITH NATIVE CLASS A MATERIAL PER DRAWING NO. 205.
19. THE CONTRACTOR SHALL MAINTAIN BENCHMARKS, PROPERTY CORNERS, AND MONUMENTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THEY SHALL BE REPLACED IN ACCORDANCE WITH ORS 209 BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.
20. THE CONTRACTOR SHALL NOTIFY THE CITY FORTY-EIGHT (48) HOURS PRIOR TO ANY PROOF ROLL, CONCRETE FORM INSPECTION, AND PAVING.
21. PROPERTY DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED. GRASS, SHRUBS, FLOWERS, BARK DUST, EXISTING SIGNS, PAVEMENT MARKINGS, MAILBOXES, ETC. DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RE-ESTABLISHED, REINSTALLED OR REPLACED, WITH LIKE KIND AND MATERIAL.
22. EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
23. TRENCHES WILL NOT BE ALLOWED TO REMAIN OPEN OVERNIGHT. A TEMPORARY HARD-SURFACE PATCH (HOT MIX BASE PAVING) OR STEEL PLATES SECURED WITH PINS AND COLD MIX RAMPS SHALL BE PLACED ON TRENCHES WITHIN EXISTING ROADWAYS AT THE END OF EACH DAY'S WORK. NO TRENCH, ON-SITE OR OFF-SITE, SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. THE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR HAZARDS OR DAMAGE RESULTING FROM THE PROSECUTION OF THE WORK.
24. WORK PROVIDED FOR UNDER THE PERMIT SHALL INCLUDE REPAIR OF EXISTING FACILITIES (ROADS, DITCHES, ETC.) AS MAY BE NECESSARY, IN THE CITY'S OPINION, TO OVERCOME DETERIORATION OR DAMAGE WHICH OCCURRED IN CONJUNCTION WITH THE WORK AUTHORIZED BY THE PERMIT. CORRECTIVE WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
25. POWER, TELEPHONE, GAS, AND CABLE TELEVISION TRENCHING AND CONDUITS ARE TO BE INSTALLED PER UTILITY COMPANY REQUIREMENTS. VERIFY WITH UTILITY COMPANY FOR SIZE AND TYPE OF CONDUIT PRIOR TO CONSTRUCTION.
26. UNIDENTIFIED UTILITIES SHALL NOT BE DISRUPTED OR CUT UNTIL UTILITY COMPANY HAS APPROVED THE CUT OR DISRUPTION.
27. ALL FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER-THAN-ORIGINAL CONDITION.
28. NOTIFY THE UTILITY COMPANY IMMEDIATELY OF ALL UTILITIES EXPOSED. UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK.
29. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL, AND OTHER MATERIAL IN THE NEW PUBLIC RIGHT-OF-WAY, UNDER THE NEW ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET ALL APPLICABLE REGULATIONS.
30. IF GROUND WATER SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THAT THE WATER IS NOT CONVEYED THROUGH UTILITY TRENCHES, AND THE NATURAL FLOW PATH OF THE SPRING IS ALTERED AS LITTLE AS PRACTICABLE.
31. SAWCUT STRAIGHT MATCH LINES WHERE EXISTING PAVEMENT MEETS NEW PAVEMENT. SAND AND SEAL JOINT (TYPICAL).
32. CONTRACTOR SHALL FOLLOW OSHA REQUIREMENTS.
33. ALL TRENCHES SHALL BE PROPERLY SHORED AND BRACED TO PREVENT CAVING.
34. WHERE TRENCH EXCAVATION REQUIRES REMOVAL OF PCC CURBS AND/OR SIDEWALKS, THE CURBS AND/OR SIDEWALKS SHALL BE SAWCUT AND REMOVED AT A TOOLED JOINT UNLESS OTHERWISE AUTHORIZED BY THE OWNER'S REPRESENTATIVE. THE SAWCUT LINES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE EXACT ALIGNMENT OF SUCH CUTS.
35. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE APPROVED DRAWINGS AND DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. REPAIRS SHALL RESTORE THE DAMAGED ITEM TO THE PRE-EXISTING CONDITION OR BETTER. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.
36. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT BE LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
37. SETTLEMENT OR CRACKING OF FINISHED SURFACES WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE, AND REPAIRED IN A MANNER ACCEPTABLE TO AND AT NO COST TO THE CITY OR DEVELOPER.
38. PRIOR TO FINAL PROJECT ACCEPTANCE, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ASPHALTIC CONCRETE MATERIAL, OR OTHER ITEMS DEPOSITED BY THE CONTRACTOR'S PERSONNEL DURING THE PERFORMANCE OF THIS CONTRACT.

GRADING AND COMPACTION NOTES

ALL STRUCTURAL FILLS SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 90% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 OR EQUIVALENT STANDARD (AASHTO T-180). SUBGRADE SHALL BE COMPACTED TO 92% RELATIVE DENSITY. ASPHALT CONCRETE SHALL BE COMPACTED TO 92% RELATIVE DENSITY. CRUSHED ROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY.

ALL FILL ON LOTS SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE COMPACTED TO REQUIREMENTS OF GEOTECHNICAL REPORT.

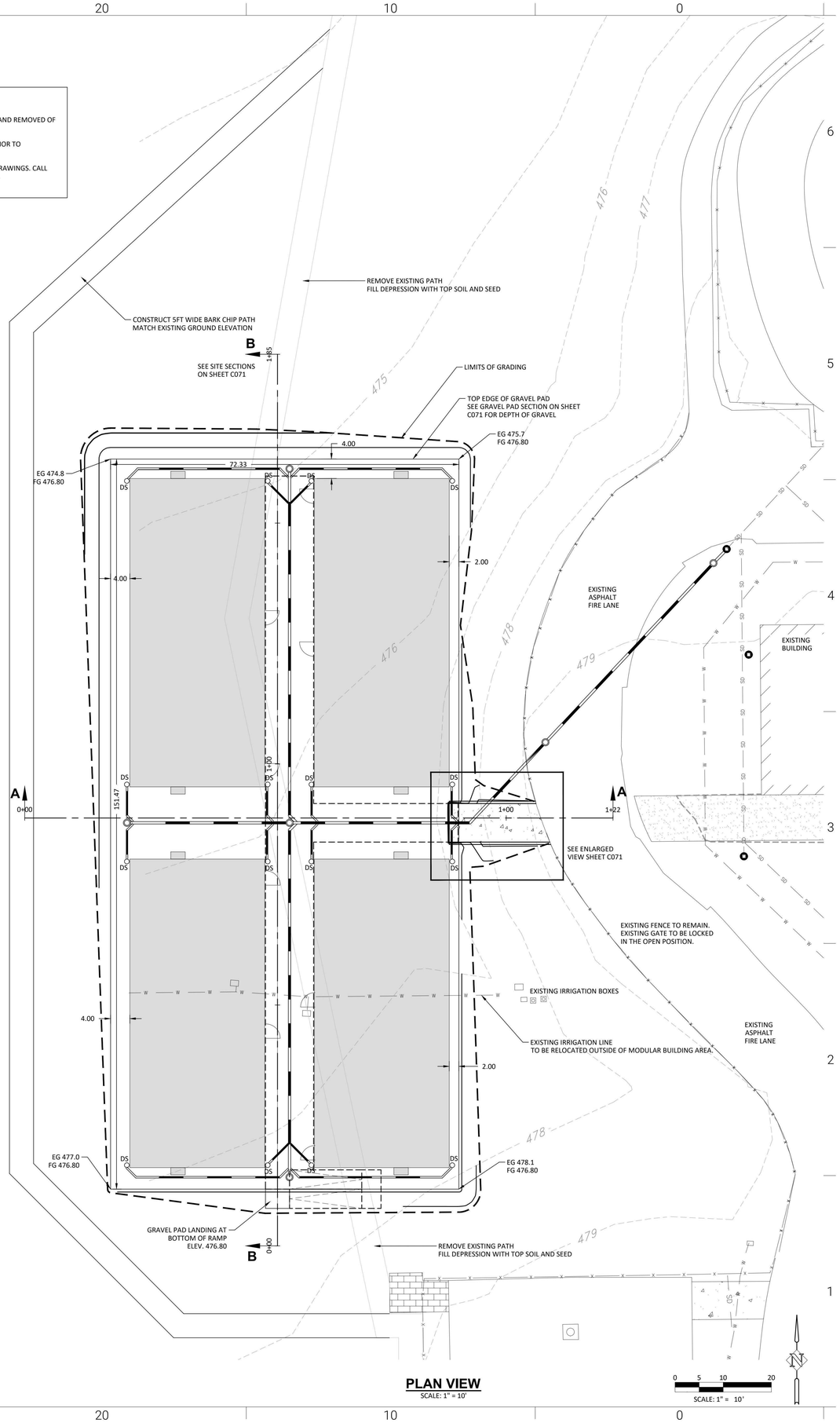
CONTRACTOR TO PROOF ROLL SUBGRADE, WITH ENGINEER AND CITY REPRESENTATIVE PRESENT, PRIOR TO PAVING AND CURB INSTALLATION.

GENERAL NOTES

EXISTING GROUND SHALL BE STRIPPED 4" DEPTH AND REMOVED OF ROOTS AND VEGETATION.

CONFIRM LOCATION OF MODULAR BUILDINGS PRIOR TO CONSTRUCTION OF GRAVEL PAD.

UTILITIES SHOW ARE COMPILED FROM RECORD DRAWINGS. CALL FOR PRIVATE LOCATES PRIOR TO CONSTRUCTION.



PLAN VIEW
SCALE: 1" = 10'

SCALE: 1" = 10'

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REGISTERED PROFESSIONAL ENGINEER
89,555
OREGON
JULY 11, 2014
ROBERT D. JACOBSON
EXPIRES: 06/30/2021

HAPPY VALLEY MIDDLE SCHOOL
TEMPORARY MODULAR CLASSROOMS
13865 SE King Rd B, Happy Valley, OR 97086

MARK	DATE	DESCRIPTION
Issued:		02/20/2020
Scale:		

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SITE PLAN

C011

EROSION AND SEDIMENT CONTROL NOTES:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH LOC CHAPTER 52, STATE, AND FEDERAL REGULATIONS. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, INSPECTED, AND MAINTAINED PER THE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, DECEMBER 2000.

THE IMPLEMENTATION OF THESE ESC PLANS AND CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE LOCAL JURISDICTION, AND VEGETATION/LANDSCAPING IS ESTABLISHED. THE OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AFTER THE PROJECT IS APPROVED UNTIL VEGETATION/LANDSCAPING IS ESTABLISHED.

THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

THE ESC FACILITIES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DOES NOT LEAVE THE SITE.

AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE MORE THAN 1/3 THE HEIGHT OF SEDIMENT FENCES.

STORM DRAIN INLETS, BASINS, AND AREA DRAINS SHALL BE PROTECTED UNTIL PAVEMENT SURFACES ARE COMPLETED AND/OR VEGETATION IS RE-ESTABLISHED. INLET PROTECTION MEASURES SHALL BE IN PLACE DURING SAW CUTTING ACTIVITIES.

ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATIONS SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE STORM WATER MANAGEMENT SYSTEM.

PAVEMENT SURFACES AND VEGETATION ARE TO BE PLACED AS RAPIDLY AS POSSIBLE.

PUBLIC STREETS WILL BE SWEPT DAILY, IF NECESSARY, TO ALLEVIATE SEDIMENT DISCHARGE TO THE STORM WATER MANAGEMENT SYSTEM. UNFILTERED WASH WATER CANNOT BE DISCHARGED TO STORM DRAINS.

TEMPORARY GRASS COVER MEASURES MUST BE FULLY ESTABLISHED BY OCTOBER 1ST. FROM OCTOBER 1ST THROUGH APRIL 30TH, THE WET WEATHER EROSION PREVENTION MEASURES WILL BE IN EFFECT FOR ANY EXPOSED SOIL OR SOILS NOT FULLY ESTABLISHED. SEE THE EROSION AND SEDIMENT CONTROL MANUAL (CHAPTER 4) FOR REQUIREMENTS. ALL STOCKPILED SEDIMENT WILL BE COVERED WITH PLASTIC SHEETING AND ISOLATED WITH SILT FENCING OR CHECK DAM AT THE TOE OF SLOPE WHEN NOT IN USE. ALL NEWLY EXPOSED SOILS WILL BE PROTECTED WITH AN ADEQUATE GROUND COVER AT THE END OF CONSTRUCTION EACH DAY. (STRAW, MULCH, COMPOST, WOOD CHIPS, PLASTIC SHEETING, ETC.).

IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST, WHERE ON-SITE OR OFF-SITE DAMAGE IS LIKELY TO OCCUR, ONE OR MORE OF THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL:

A. MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.

B. THE SITE IS SPRINKLED WITH WATER UNTIL SURFACE IS WET. REPEAT AS NEEDED TO PREVENT THE CARRY OUT OF MUD ONTO STREET, REFER TO STABILIZED CONSTRUCTION ENTRANCE DETAILS.

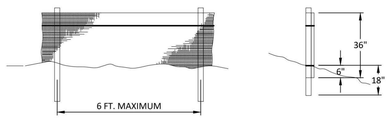
C. SPRAY EXPOSED SOILS WITH A DUST PALLIATIVE. NOTE, USED OIL IS PROHIBITED AS A PALLIATIVE.

STOCKPILES THAT WILL BE EXPOSED FOR MORE THAN 14 DAYS SHALL BE PROTECTED WITH PLASTIC SHEETING OR WITH A TEMPORARY GROUND COVER USED IN CONJUNCTION WITH TEMPORARY/PERMANENT SEEDING. STOCKPILES THAT CONTAIN ONLY STRIPPINGS SHALL BE IMMEDIATELY COVERED WITH PLASTIC SHEETING. SEDIMENT FENCES SHALL BE PLACED AT THE TOE OF SLOPE OF ALL STOCKPILES.

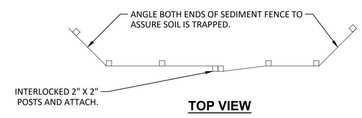
WIRE DIRECTLY OVER THE PIPE CENTERLINE AND ON TOP OF THE PIPE ZONE MATERIAL, PARALLEL TO, AND ALONG THE ENTIRE LENGTH OF ALL NONMETALLIC

LEGEND

- TREE PROTECTION FENCE
- SEDIMENT FENCE
- FLOW DIRECTION
- 100 EXISTING CONTOUR
- 101 PROPOSED CONTOUR



SIDE VIEW



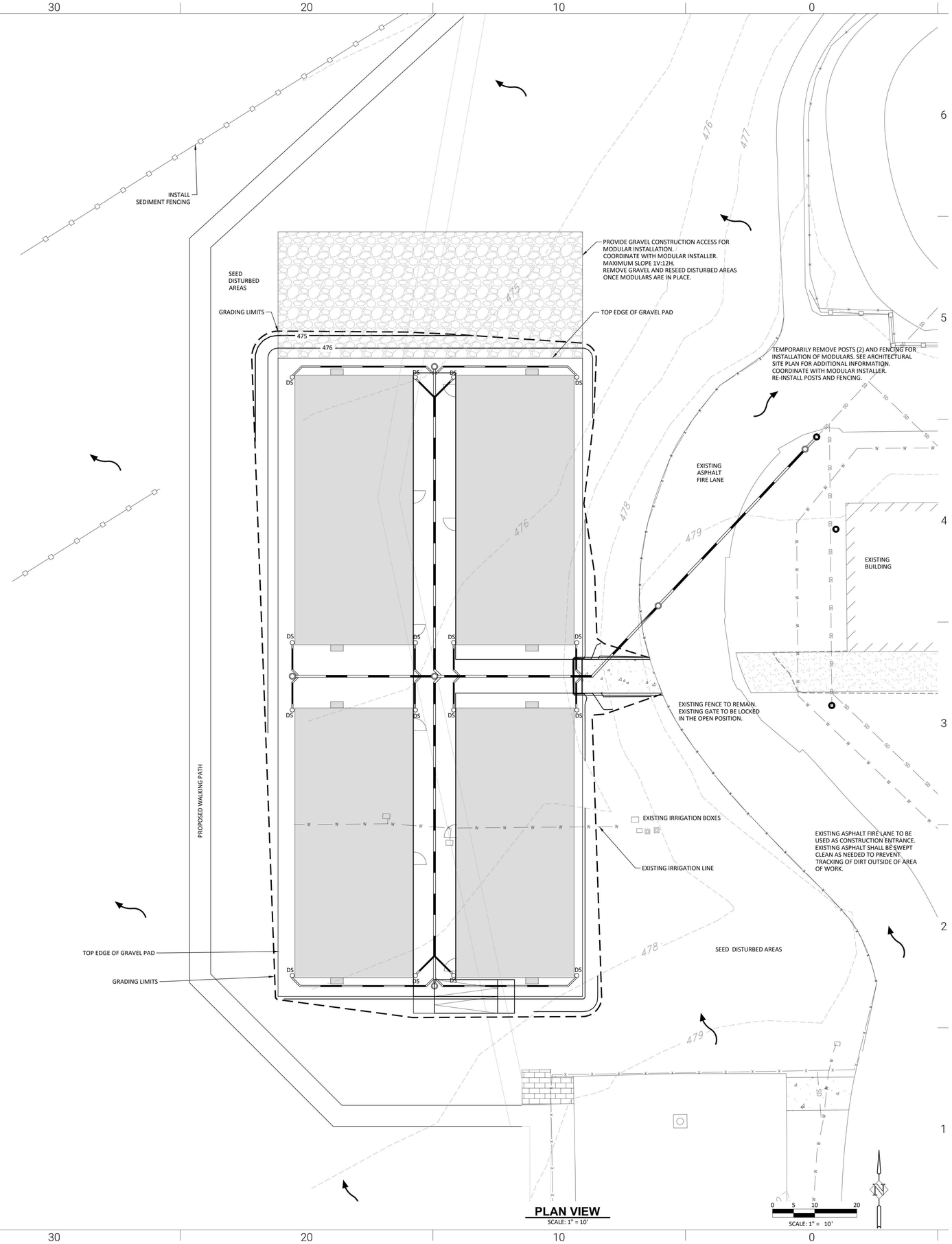
TOP VIEW

NOTES:

1. BURY BOTTOM OF FILTER FABRIC 6" MIN. VERTICALLY BELOW GRADE.
2. 2" x 2" FIR, PINE, OR STEEL FENCE POSTS.
3. STITCHED LOOPS TO BE INSTALLED UPHILL SIDE OF SLOPE.
4. COMPACT NATIVE FILL IN ALL AREAS OF FILTER FABRIC TRENCH.

SEDIMENT FENCE

NTS



PLAN VIEW

SCALE: 1" = 10'

SCALE: 1" = 10'

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JULY 11, 2014
ROBERT D. JACOBSON
EXPIRES: 06/30/2021

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EROSION AND SEDIMENT CONTROL PLAN

C021

CONSTRUCTION NOTES:

1. CONNECT TO EXISTING STORM PIPE. REMOVE AND REPLACE CLEANOUT IF NEEDED. IE 475.28.
2. INSTALL 6" PVC STORM PIPE, S=0.0030
3. INSTALL 4" PVC STORM PIPE, S=0.0050
4. INSTALL CLEANOUT.
5. DOWNSPOUT CONNECTION. LOCATE CLEANOUT ON VERTICAL PIPE.
6. INSTALL AN ACCESSIBLE BACKWATER VALVE

STORM DRAINAGE NOTES:

PRIVATE STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF HAPPY VALLEY AND 2017 OREGON PLUMBING SPECIALTY CODE.

STORM DRAIN PIPE SHALL BE AS SHOWN ON PLAN OR AS ACCEPTABLE PER THE OREGON PLUMBING SPECIALTY CODE.

THE CONTRACTOR SHALL TEST ALL PVC AND HDPE STORM PIPE FOR DEFLECTION AS PER CITY OF HAPPY VALLEY AND CCSD NO. 1 STANDARD SURFACE WATER SPECIFICATIONS. A COPY OF THE TEST RESULTS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.

THE CONTRACTOR SHALL FLUSH THE ENTIRE STORM SYSTEM AND VIDEO INSPECT ALL STORM SEWER CONVEYANCE PIPES. A COPY OF THE REPORT AND VIDEO TAPE SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.

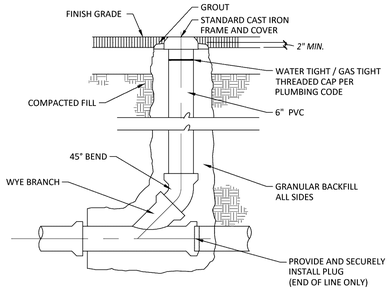
ALL STORM SEWER PIPES SHALL HAVE A RUBBER GASKET. ALL STORM PIPE AND RELATED CONNECTIONS TO CATCH BASINS, MANHOLES, AND OTHER RELATED STRUCTURES SHALL BE WATER TIGHT AS PER CITY OF HAPPY VALLEY AND CCSD NO. 1.

TRACER WIRE - 12-GAUGE STRANDED OR SOLID COPPER INSULATED HIGH MOLECULAR WEIGHT POLYETHYLENE (HMW-PE) TRACER WIRE. THE HMW-PE INSULATED COVER SHALL BE GREEN AND A MINIMUM 45 MIL THICK. THE WIRE SHALL BE RATED FOR 140 DEGREES FAHRENHEIT. INSTALL TRACER WIRE IN ALL TRENCHES FOR STORM SEWERS. PLACE THE TRACER WIRE DIRECTLY OVER THE PIPE CENTERLINE AND ON TOP OF THE PIPE ZONE MATERIAL, PARALLEL TO, AND ALONG THE ENTIRE LENGTH OF ALL NONMETALLIC PIPE.

EXISTING UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM RECORD DRAWINGS. CONTRACTOR SHALL CALL FOR LOCATES AND POTHOLE AS NEEDED TO CONFIRM EXISTING UTILITIES.

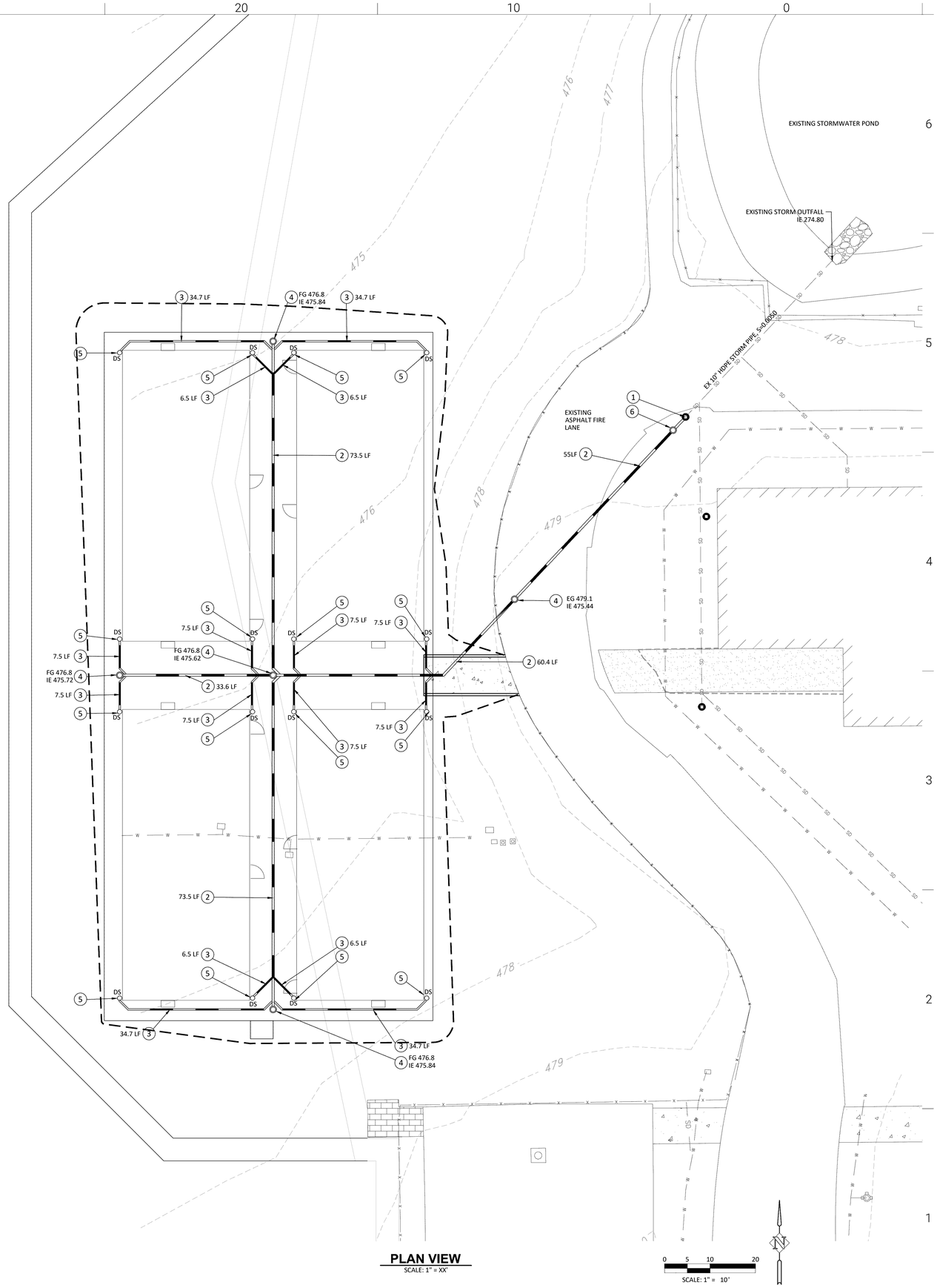
LEGEND

- STORMWATER CLEANOUT
- EXISTING STORM LINE
- STORM LINE
- EXISTING WATER LINE



NOTE: CAST IRON FRAME AND COVER SHALL BE VALLEY IRON & STEEL CO. NO.'S 202 (6") OR APPROVED EQUAL.

STANDARD CLEANOUT
NTS



PLAN VIEW
SCALE: 1" = XX'

0 5 10 20
SCALE: 1" = 10'

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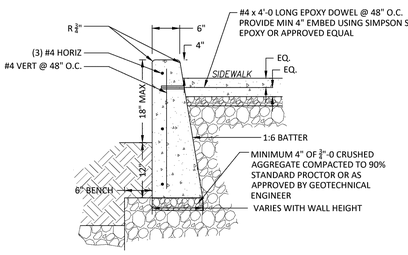
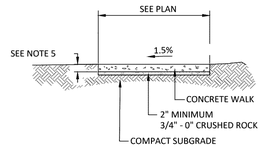
DRAINAGE PLAN

C031



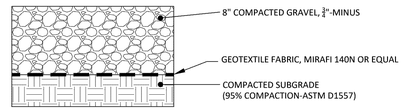
WALL DETAIL
N.T.S.



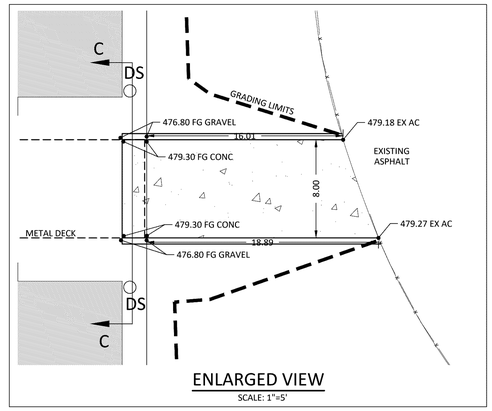
NOTES:

1. CONCRETE SHALL BE COMMERCIAL MIX, MIN. COMPRESSIVE STRENGTH OF 3300 psi AT 28 DAYS.
2. PANELS TO BE 5 FEET LONG.
3. EXPANSION JOINTS TO BE PLACED AT SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, WHEELCHAIR RAMPS, AND AT SPACING NOT EXCEED 45 FEET.
4. FOR SIDEWALKS ADJACENT TO THE CURB AND POURED AT SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2" RADIUS.
5. SIDEWALK SHALL HAVE MINIMUM THICKNESS OF 4 INCHES.

CONCRETE SIDEWALK DETAIL
NTS

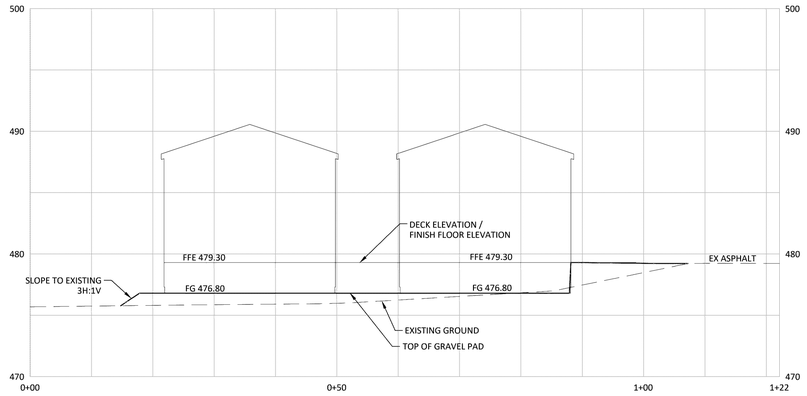


GRAVEL PAD SECTION
NTS

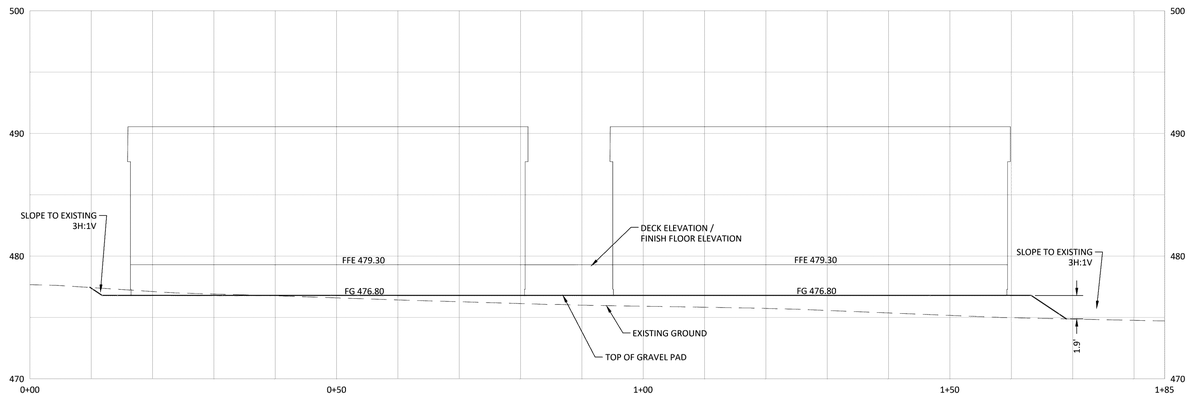


ENLARGED VIEW
SCALE: 1"=5'

SECTION C-C
SCALE: NTS



SECTION A-A
SCALE: 1" = 10' (HORIZ.)
1" = 5' (VERT.)



SECTION B-B
SCALE: 1" = 10' (HORIZ.)
1" = 5' (VERT.)

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SITE DETAILS AND SECTIONS

C071

ELECTRICAL SYMBOL LIST

NOTE: This is a standard symbol list and not all items listed may be used.

Abbreviations

AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AWG	AMERICAN WIRE GAUGE
A	AMPERES, AMBER
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AVAILABLE INTERRUPTING CAPACITY
BAS	BUILDING AUTOMATION SYSTEM
CA	CABLE
CAT	CATEGORY
CLG	CEILING
C	CONDUIT, CLOSE, CONTROL
COORD	COORDINATE
CU	COPPER
dB	DECIBEL
(X)	DEMOLISH
DTL	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DN	DOWN
DWG	DRAWING
EA	EACH
EMT	ELECTRICAL METALLIC TUBING
EL	ELEVATION
E	EMERGENCY
EF	EXHAUST FAN
(E)	EXISTING
FA	FIRE ALARM
FMC	FLEXIBLE METAL CONDUIT
FT	FOOT, FEET
FBO	FURNISHED BY OTHERS
G, GND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION
HT	HEIGHT
ID	IDENTIFICATION
IN	INCH, INCHES
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IG	ISOLATED GROUND
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATT
LED	LIGHT EMITTING DIODE
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
LV	LOW VOLTAGE
MOCP	MAXIMUM OVERCURRENT PROTECTION
MIN	MINIMUM
MCA	MINIMUM CIRCUIT AMPS
MISC	MISCELLANEOUS
MCC	MOTOR CONTROL CENTER
MT, MTD	MOUNT, MOUNTED
NEC	NATIONAL ELECTRIC CODE
NESC	NATIONAL ELECTRIC SAFETY CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
N	NEUTRAL
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
PNL	PANEL
PH	PHASE
PVC	POLY-VINYL-CHLORIDE
PWR	POWER
QTY	QUANTITY
(R)	RELOCATE
RFI	REQUEST FOR INFORMATION
REQD	REQUIRED
RMC	RIGID METAL CONDUIT
RM	ROOM
SHT	SHEET
STD	STANDARD
SPD	SURGE PROTECTION DEVICE
SWBD	SWITCHBOARD
TBD	TO BE DETERMINED
XFMR	TRANSFORMER
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UPS	UNINTERRUPTIBLE POWER SUPPLY
UON	UNLESS OTHERWISE NOTED
V	VOLTS, VOLTAGE
WP	WEATHERPROOF
W/	WITH
W/O	WITHOUT

Connections / Equipment

- VFD — COMBINATION ADJUSTABLE FREQUENCY DRIVE WITH SAFETY DISCONNECT SWITCH
- COMBINATION MOTOR STARTER/FUSED DISCONNECT SWITCH
- HEAVY DUTY FUSED DISCONNECT SWITCH
- MOTOR CONNECTION
- NON-FUSED DISCONNECT SWITCH
- T — TRANSFORMER
- FSD — FIRE SMOKE DAMPER
- SD — SMOKE DAMPER
- CEILING MOUNTED JUNCTION BOX
- FLOOR MOUNTED JUNCTION BOX
- WALL-MOUNTED JUNCTION BOX

Fire Alarm

- PULL STATION
- HORN

General

- X / X — DETAIL NUMBER AND SHEET LOCATION
- XX-X / LOCATION — EQUIPMENT IDENTIFICATION
- 1 — KEYED NOTE
- DEMOLISH
- EXISTING WORK
- NEW WORK

Miscellaneous

- #10 / B-27,29,31. — BRANCH CIRCUIT WIRING. ARROW INDICATES HOME RUN TO PANEL WITH CIRCUITS AS NOTED. WIRE SIZE IS #12 AWG MINIMUM UNLESS NOTED OTHERWISE. SHORT TICK MARKS INDICATE PHASE CONDUCTORS. LONG TICK MARKS INDICATE NEUTRAL CONDUCTORS. A SINGLE CURVED TICK MARK INDICATES INSULATED GREEN GROUND CONDUCTOR. SECOND CURVED TICK MARK INDICATES "ISOLATED GROUND" (GREEN INSULATION WITH YELLOW STRIPE) CONDUCTOR.
- BRANCH PANEL
- CIRCUIT BREAKER
- DRY TYPE TRANSFORMER
- FLUSH WALL MOUNTED BRANCH PANEL
- GB — GROUND BAR
- MAIN DISTRIBUTION PANEL / SUB DISTRIBUTION PANEL

Raceways

- CONDUIT CONCEALED IN WALL OR CEILING SPACE
- CONDUIT ROUTED BELOW FLOOR / GRADE
- CONDUIT ELLED DOWN
- CONDUIT ELLED UP
- CONDUIT/WIRING CONTINUATION
- CONDUIT/WIRING STUBBED OUT WITH END CAP OR INSULATED PLASTIC BUSHING
- FLEXIBLE CONDUIT

Switches and Receptacles

- DUPLEX RECEPTACLE (MULTIPLE LETTERS INDICATE MULTIPLE OPTIONS)
  A = ABOVE COUNTER
  B = CLOCK HANGER
  C = FLUSH CEILING MOUNTED
  E = EMERGENCY
  F = ARC FAULT PROTECTED BY BREAKER IN PANEL
  G = GROUND FAULT CIRCUIT INTERRUPTER
  H = HOSPITAL GRADE
  K = CHILD RESISTANT COVER
  L = ISOLATED GROUND
  P = PENDANT MOUNTED WITH CORD GRIPS. VERIFY PENDANT LENGTH
  R1 = HALF SWITCHED BY OCCUPANCY SENSOR RELAY
  R2 = FULLY SWITCHED BY OCCUPANCY SENSOR RELAY
  S = SPLIT WIRED
  T = TAMPER RESISTANT SHUTTERED RECEPTACLE
  U = USB PORT(S)
  W = WEATHERPROOF CONTINUOUS USE COVER, GFCI PROTECTED, WITH WEATHER-RESISTANT RECEPTACLE
- DUPLEX RECEPTACLE, FLUSH FLOOR
- DOUBLE DUPLEX RECEPTACLE, FLUSH FLOOR
- DOUBLE DUPLEX RECEPTACLE. SEE LETTER CODE LIST AT DUPLEX RECEPTACLE FOR OPTIONS
- EQUIPMENT ELECTRICAL CONNECTION
- SPECIAL PURPOSE RECEPTACLE. LETTER CODE DENOTES RECEPTACLE CONFIGURATION
  LX-XXR = NEMA CONFIGURATION TWIST-LOCK RECEPTACLE
  X-XXR = NEMA CONFIGURATION STRAIGHT BLADE RECEPTACLE
  P = PENDANT MOUNT WITH CORD GRIPS. VERIFY PENDANT LENGTH
  X = COORDINATE RECEPTACLE CONFIGURATION WITH EQUIPMENT BEING SUPPLIED
- OS — CEILING MOUNTED OCCUPANCY SENSOR
  P = PASSIVE INFRARED
  D = DUAL TECHNOLOGY
  U = ULTRASONIC, 360 DEG RANGE
  H = ULTRASONIC, HALLWAY PATTERN
  v (LOWERCASE) = VACANCY CONTROL DESIGNATION
- WALL MOUNTED OCCUPANCY SENSOR
  P = PASSIVE INFRARED
  D = DUAL TECHNOLOGY
  v (LOWERCASE) = VACANCY CONTROL DESIGNATION
- WALL MOUNTED OCCUPANCY SENSOR/SWITCH
  S = PASSIVE INFRARED WITH INTEGRAL "OFF" SWITCH
  T = DUAL RELAY PASSIVE INFRARED WITH TWO INTEGRAL "OFF" SWITCHES
  D = PASSIVE INFRARED WITH INTEGRAL DIMMER TO OFF.
  v (LOWERCASE) = VACANCY CONTROL DESIGNATION
- MULTIPLE CHANNEL SURFACE METAL RECEPTACLE RACEWAY WITH LOW VOLTAGE DIVIDERS, LENGTH AND RECEPTACLES AS INDICATED
- PHOTO ELECTRIC SWITCH
  D = CONTINUOUS DIMMING PHOTOCELL
  S = SWITCHED PHOTOCELL
- $ — SINGLE POLE SWITCH
  2 = DOUBLE POLE SWITCH
  3 = THREE-WAY SWITCH
  4 = FOUR-WAY SWITCH
  a THRU z (LOWERCASE) = LUMINAIRE CONTROL DESIGNATION
  D = DIMMER
  F = FAN SPEED CONTROL
  K = KEY OPERATED SWITCH
  L = LIGHTED HANDLE
  M = MANUAL MOTOR STARTER WITH THERMAL OVERLOAD
  P = SWITCH WITH PILOT LIGHT
  S = SENTRY SWITCH
  T = INTERVAL TIMER
  W = WEATHERPROOF SWITCH
  V = LOW VOLTAGE SWITCH

Telecommunications

- DATA OUTLET. PROVIDE DOUBLE GANG BACK BOX AND SINGLE GANG ADAPTER PLATE WITH 1" C. AND (2) CATEGORY 6A CABLES TO WALL MOUNTED DATA RACK.
  (MULTIPLE LETTERS INDICATE MULTIPLE OPTIONS)
  A = ABOVE COUNTER
  C = CEILING MOUNTED ABOVE ACCESSIBLE CEILING
  F = FLUSH CEILING MOUNTED
  R = SURFACE MOUNTED ON RACEWAY

GENERAL ELECTRICAL NOTES

A. ALL ELECTRICAL MATERIAL AND INSTALLATIONS SHOWN AND/OR SPECIFIED TO BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC 2017.

B. REFER TO ARCHITECTURAL DRAWINGS TO COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES.

C. MAXIMUM VOLTAGE DROP OF BRANCH CIRCUITS TO BE 3%. ELECTRICAL CONTRACTOR TO SIZE WIRING TO SUIT.

D. NO WIRE SMALLER THAN #12 AWG SHALL BE USED FOR BRANCH CIRCUIT WIRING.

E. IN FINISHED INTERIOR AREAS RUN ALL CONDUITS CONCEALED UNLESS OTHERWISE NOTED. PAINT ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTURAL PAINTING SPECIFICATIONS FOR REQUIREMENTS.

F. ALL EXPOSED CONDUIT TO BE RUN PARALLEL TO BUILDING LINES.

G. PROVIDE DEDICATED NEUTRALS FOR ALL BRANCH CIRCUITS UNLESS OTHERWISE NOTED.

H. ALL IN-SLAB OR BURIED CONDUIT TO BE COMPLETE WITH EQUIPMENT GROUNDING CONDUCTOR.

I. ALL EMPTY CONDUITS TO BE COMPLETE WITH PULL WIRE.

J. MC CABLE SHALL NOT BE USED WITHOUT PERMISSION FROM THE ENGINEER.

K. ALL CONDUIT ROUTED IN AREAS SUBJECT TO MECHANICAL DAMAGE TO BE RIGID.

SHEET INDEX

E001	SYMBOL LIST AND GENERAL NOTES - ELECTRICAL
E011	SITE PLAN - ELECTRICAL
E021	FIRST FLOOR PLAN - ELECTRICAL
E051	SINGLE LINE DIAGRAMS - ELECTRICAL
E081	SPECIFICATIONS - ELECTRICAL

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SYMBOL LIST AND GENERAL NOTES - ELECTRICAL

E001

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GENERAL SHEET NOTES

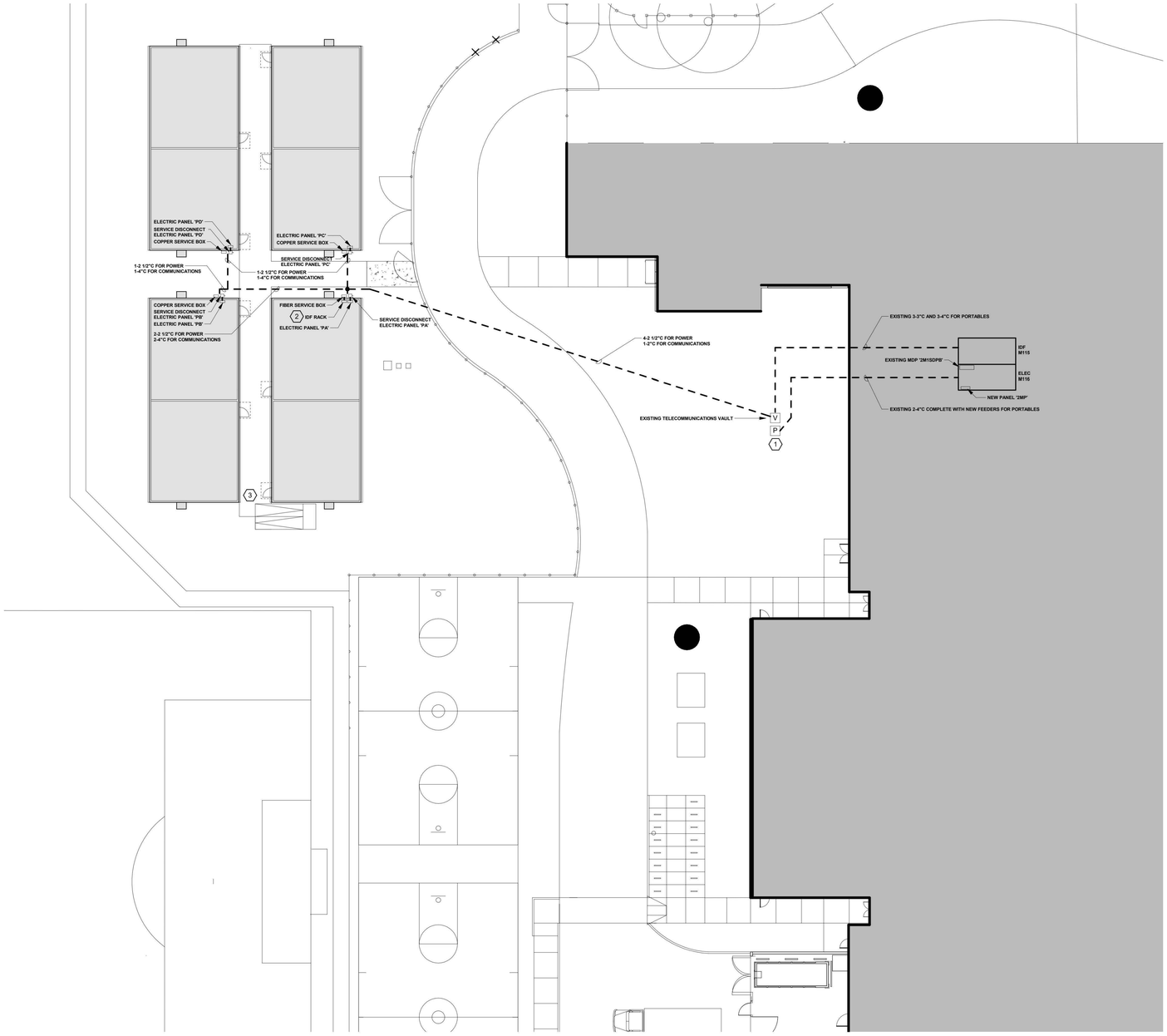
A. COORDINATE INSTALLATION OF ALL UNDERGROUND FEEDERS TO MAINTAIN MINIMUM CLEARANCES OF 6' FROM GAS LINES THAT RUN BESIDE FEEDERS AND 1' FROM GAS LINES THAT CROSS UNDERGROUND FEEDERS. ALSO MAINTAIN 10' FROM SANITARY, STORM AND WATER LINES THAT RUN PARALLEL TO UNDERGROUND FEEDERS.

SHEET KEYNOTES

1 AT EXISTING POWER CONDUIT STUB-UP LOCATION ADJACENT TO COMMUNICATIONS PULL BOX. SUPPLY AND INSTALL NEW VAULT TO TRANSITION NEW FEEDERS FROM THE 2-4" EXISTING CONDUITS TO 4-2 1/2" NEW CONDUITS FEEDING THE NEW PORTABLES.

2 FROM IDF RACK PROVIDE DEDICATED 4" CONDUIT TO REMAINING (3) MODULARS FOR CATEGORY 6A CABLE.

3 WIRE AND CONNECT GATE PANIC HARDWARE POWER SUPPLY TO NEW 15A-1P BREAKER ON PANEL 'PB' USING 2#12 AND 1#12 GND IN 3/4"C



1 SITE PLAN - ELECTRICAL

0' 8' 16' 32'
1/16" = 1'-0"

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JANUARY 13, 2015
BRENT ROSS BARGHOLZ

EXPIRES: 12/31/21

HAPPY VALLEY MIDDLE SCHOOL
TEMPORARY MODULAR CLASSROOMS
13865 SE King Rd B, Happy Valley, OR 97086

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SITE PLAN - ELECTRICAL

E011

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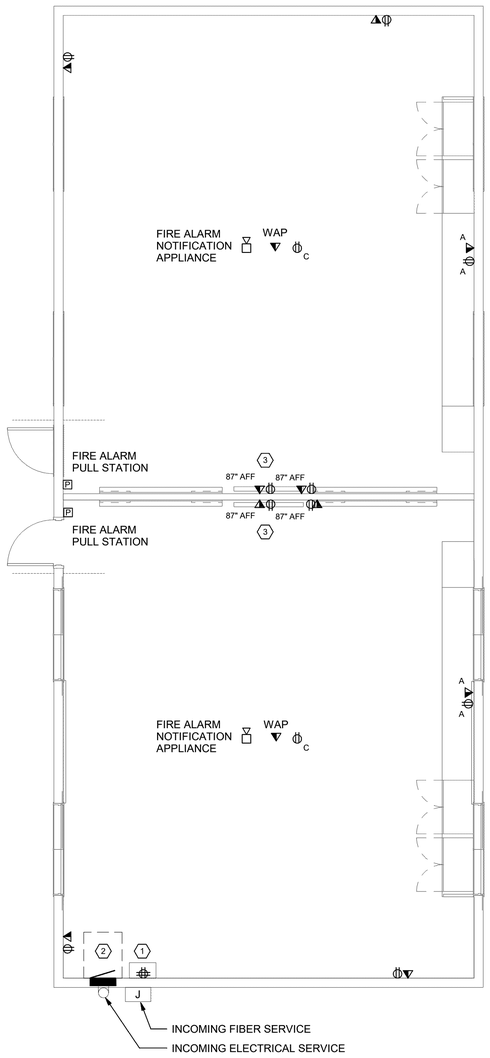


2 TYPICAL MODULAR POWER PLAN

0' 2' 4' 8'

1/4" = 1'-0"

SHEET KEYNOTES

1 NEW WALL MOUNTED DATA CABINET TO BE CHATSWORTH CUBE-IT WALL MOUNT CABINET 11996-724. FROM DATA RACK RUN CORNING ALTOS LITE 12 STRAND OS2 FIBER OPTIC CABLE IN COMMUNICATION CONDUIT TO IDF ROOM. TERMINATE FIBER ONTO LC TYPE CONNECTORS AT EACH END.

2 REFER TO SITE PLAN FOR ELECTRICAL PANEL LOCATION. DATA RACK TO BE MOUNTED ADJACENT TO ELECTRICAL PANEL.

3 INSTALLATION OF DISPLAY MONITORS BY OWNER

ELECTRICAL SCOPE OF WORK

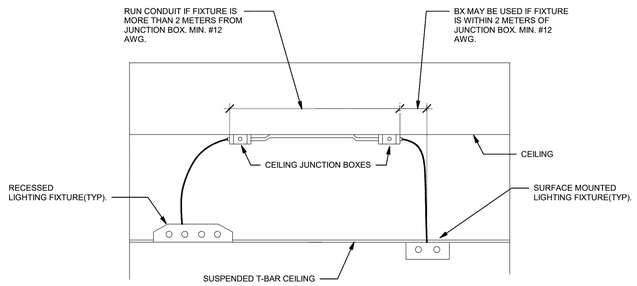
A. INTERNAL MODULAR PANEL, RECEPTACLE AND 120V WIRING IS BY MODULAR BUILDING SYSTEMS.

B. DATA OUTLET ROUGH-IN IS BY MODULAR BUILDING SYSTEMS.

C. INCOMING ELECTRICAL AND FIBER SERVICES IS BY THE ELECTRICAL CONTRACTOR.

D. DATA RACK, PATCH PANELS, CATEGORY 6 CABLES, CONNECTORS, AND FACEPLATES ARE BY THE ELECTRICAL CONTRACTOR.

E. ALL FIRE ALARM DEVICES, WIRING, AND INTERCONNECTION TO THE SCHOOL FIRE ALARM SYSTEM IS BY ELECTRICAL CONTRACTOR.

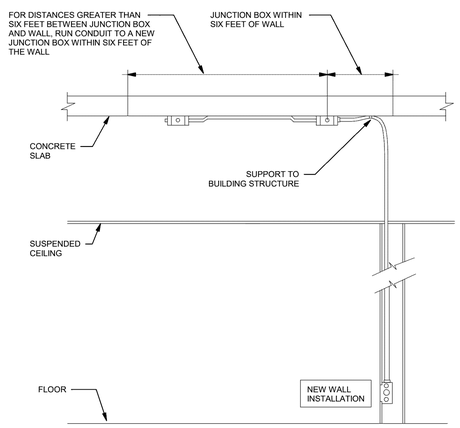


DETAIL NOTES:

(1) BX IS ONLY PERMITTED FOR FIXTURE DROPS. DO NOT LOOP B/X FROM ONE FIXTURE TO ANOTHER.

1 LIGHTING DROP - DETAIL

NO SCALE



GENERAL DETAIL NOTES:

1. NEW WALL INSTALLATION RUN CONDUIT FROM JUNCTION BOX DOWN TO FIRST DEVICE.
2. EXISTING WALL INSTALLATION RUN FLEX OR BX FROM JUNCTION BOX DOWN TO DEVICE.
3. ALL CONDUITS ARE TO BE DIRECTLY SUPPORTED FROM SLAB.
4. COORDINATE ROUTE WITH OTHER TRADES TO AVOID CONFLICTS WITH ACCESS.

3 POWER DROP DETAIL

NO SCALE

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FIRST FLOOR PLAN - ELECTRICAL

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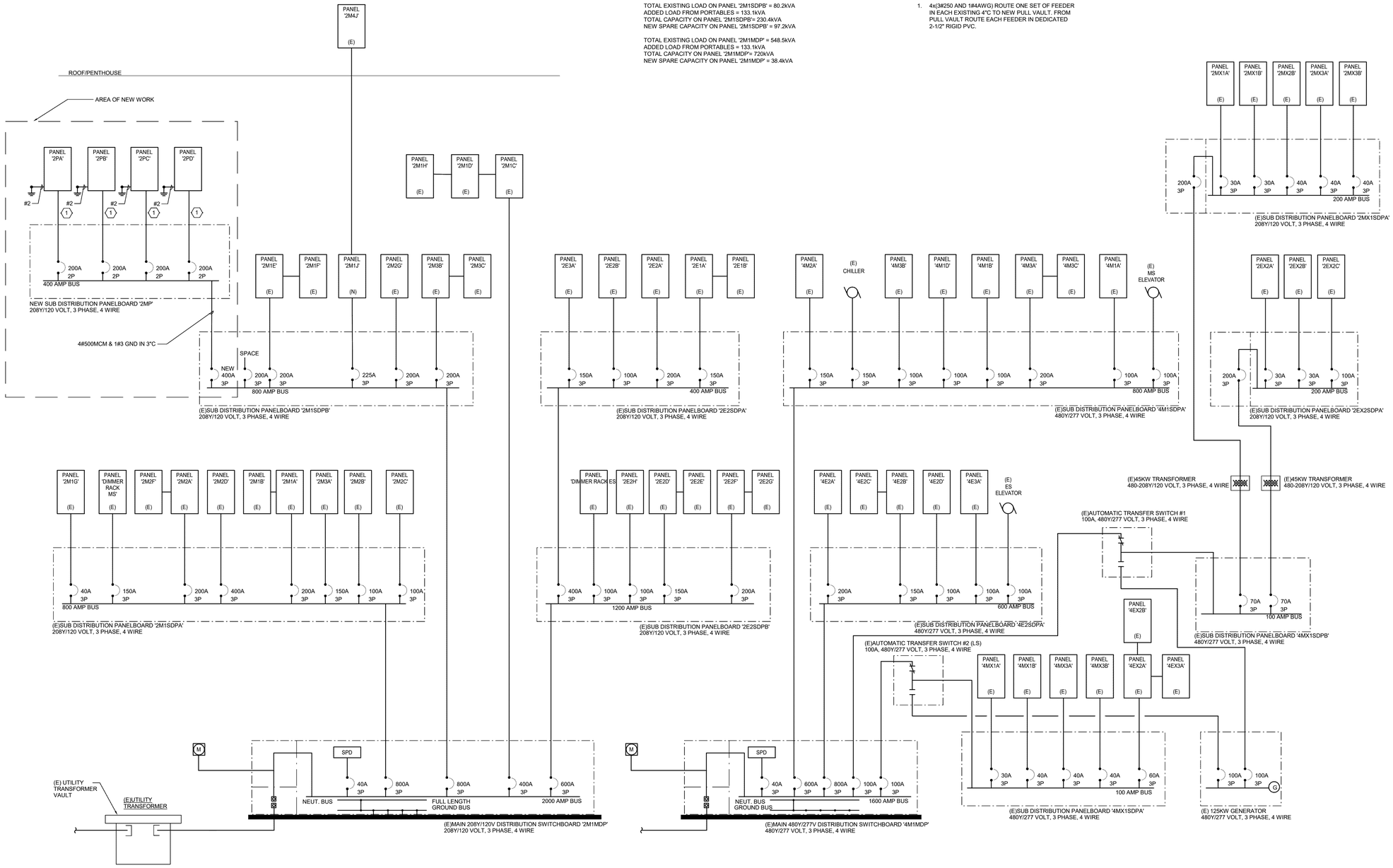
LOAD SUMMARY

TOTAL EXISTING LOAD ON PANEL '2M1SDPB' = 80.2kVA
ADDED LOAD FROM PORTABLES = 133.1kVA
TOTAL CAPACITY ON PANEL '2M1SDPB'= 230.4kVA
NEW SPARE CAPACITY ON PANEL '2M1SDPB' = 97.2kVA

TOTAL EXISTING LOAD ON PANEL '2M1MDP' = 548.5kVA
ADDED LOAD FROM PORTABLES = 133.1kVA
TOTAL CAPACITY ON PANEL '2M1MDP'= 720kVA
NEW SPARE CAPACITY ON PANEL '2M1MDP' = 38.4kVA

SHEET KEYNOTES

1. 4x(3#250 AND 1#4AWG) ROUTE ONE SET OF FEEDER IN EACH EXISTING 4"C TO NEW PULL VAULT. FROM PULL VAULT ROUTE EACH FEEDER IN DEDICATED 2-1/2" RIGID PVC.



1 ONE-LINE POWER DISTRIBUTION DIAGRAM

NO SCALE

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SINGLE LINE DIAGRAMS - ELECTRICAL

E051

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MATERIALS, MEANS AND METHODS FOR ELECTRICAL

A. SUBMITTALS: PROVIDE ELECTRONIC FORMAT VIA ZIP FILE VIA E-MAIL. NO MORE THAN ONE PDF PER SPECIFICATION SECTION. HIGHLIGHT PRODUCTS BEING SUBMITTED; UNMARKED CUTSHEETS WILL BE RETURNED AS REJECTED.

B. CONTINUITY OF SERVICE: MAINTAIN SERVICE TO EXISTING FACILITIES, INCLUDING TENANTS OUTSIDE OF AREA OF WORK, DURING CONSTRUCTION. WHERE INTERRUPTION IS NECESSARY FOR ADDITION OF NEW ELECTRICAL, SCHEDULE WITH BUILDING OWNER AND AFFECTED TENANTS OUTAGE TIME/DATA AT LEAST ONE WEEK AHEAD OF THE INTERRUPTION. OBTAIN WRITTEN PERMISSION FROM OWNER FOR ANY INTERRUPTION OF POWER, LIGHTING OR SIGNAL CIRCUITS AND SYSTEMS. PROVIDE OVERTIME AS PART OF CONTRACTED WORK TO AVOID INTERRUPTIONS DURING REGULAR BUSINESS HOURS FOR AFFECTED TENANTS.

C. WIRES: COPPER, 600 VOLT THROUGHOUT. 12 AND 10 AWG SOLID OR STRANDED. MINIMUM 90C INSULATION RATING: THWN-2, XHHW-2 OR THHN-2. COLOR CONDUCTORS (208Y/120-VOLT): BLACK FOR PHASE A, RED FOR PHASE B, BLUE FOR PHASE C, WHITE FOR NEUTRAL, GREEN FOR GROUND.

D. CONDUIT USE: EMT, MINIMUM 0.75-INCH FOR POWER AND 1-INCH FOR TELECOM, UNLESS OTHERWISE NOTED. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) FOR MOTORS, LUMINAIRES AND OTHER VIBRATING EQUIPMENT. KEEP RACEWAY AT LEAST 12-INCHES AWAY FROM HOT WATER LINES AND OTHER SURFACES >104F.

E. CONNECTORS: WIRE NUTS FOR 12AWG TO 8AWG CONDUCTORS.

F. CONNECTOR USE: USE COMPRESSION FITTINGS IN ALL LOCATIONS. USE INSULATED, GROUNDING TYPE BUSHINGS FOR 60 AMP AND LARGER FEEDERS.

G. BOXES: 4-INCH OCTANGONAL BOX, 1.5-INCH DEEP FOR LUMINAIRES, 4-INCH SQUARE AND 1.5-INCHES DEEP FOR POWER.

H. CLEAN INTERIOR OF BOXES AND LUMINAIRES AS WELL AS FRONT OF FACEPLATES TO REMOVE DUST, DEBRIS AND OTHER MATERIAL. CLEAN EXPOSED SURFACES AND RESTORE FINISH.

I. GROUNDING: EQUIPMENT GROUNDING CONDUCTOR, CODE SIZE MINIMUM IN NONMETALLIC AND METALLIC RACEWAY SYSTEMS.

J. MC CABLE TO BE USED ONLY FOR LIGHTING WHIPS AND AS A SINGLE DROP TO A DEVICE. DAISY CHAINING BETWEEN DEVICES IS NOT ACCEPTABLE.

K. SUPPORT: DO NOT USE OTHER TRADE'S FASTENING DEVICES AS SUPPORTING MEANS FOR LUMINAIRES, EQUIPMENT OR MATERIALS. DO NOT FASTEN SUPPORTS TO PIPES, DUCTS, CONDUIT AND MECHANICAL EQUIPMENT. PROVIDE CHANNEL SUPPORT SYSTEMS FOR SUPPORTING MULTIPLE CONDUITS. SAFETY FACTOR OF 4 REQUIRED FOR EVERY FASTENING DEVICE OR SUPPORT FOR ELECTRICAL EQUIPMENT AND LUMINAIRES INSTALLED.

L. ON BACK OF FACEPLATE AND SWITCH PLATES, LEGIBLY WRITE CIRCUIT NUMBERS ROUTED TO OUTLET BOX IN PERMANENT INK. EXCEPTION: WITH 1/8-INCH HIGH COMPUTER SAN SERIF TEXT ON WHITE BACKGROUND ON ADHESIVE BACKING, PROVIDE LABEL ON FRONT OF FACEPLATE IN TELECOM/SERVER ROOMS AND WHERE DIRECTED BY OWNER.

M. PROVIDE UPDATED TYPEWRITTEN SCHEDULE ON PANELBOARDS AFFECTED BY REMODEL WORK UNDER THIS CONTRACT.

N. TOGGLE TYPE SWITCHES: 120V, 20A, LEVITON 1221 SERIES, P&S, HUBBELL OR APPROVED. FINISH TO MATCH POWER OUTLETS.

O. WIRING DEVICES: PROVIDE COMMERCIAL GRADE RECEPTACLES, 125 VOLT, 20-AMP, COOPER 5362, HUBBELL, BRYANT, LEVITON, P&S OR APPROVED. FINISH TO MATCH EXISTING, ELSE GREY FINISH. TEST DEVICES FOR CONTINUITY AND GROUNDING PRIOR TO COMPLETION.

P. FACEPLATES: 302 STAINLESS STEEL FOR POWER OUTLETS AND WALL SWITCHES AND WALL SWITCH/SENSORS.

Q. OCCUPANCY SENSORS: DUAL-TECHNOLOGY, MINIMUM 1000 SF COVERAGE PER SENSOR FOR HALF-STEP MOTION FOR BOTH TECHNOLOGIES (PASSIVE INFRARED AND ULTRASONIC). LOCATED AS DIRECTED BY MANUFACTURER, NO CLOSER THAN 60-INCHES FROM SUPPLY OR RETURN AIR DIFFUSER. WATTSTOPPER DT-300 SERIES, LEVITON, HUBBELL, GREENGATE, SENSOR SWITCH OR APPROVED.

R. WALL SWITCH/SENSOR (IN STORAGE 306B): DUAL-TECH (PIR AND ULTRASONIC) TECHNOLOGY. 120/277VAC DUAL RATING. WATTSTOPPER DW-100 SERIES, OR APPROVED.

S. SHOULD ACTUAL FIELD CONDITIONS REQUIRE INDICATED CIRCUIT DESIGNATIONS TO VARY, INDICATE THE CIRCUIT NUMBER USED ON THE "AS-BUILT" DRAWINGS.

T. WALL DIMMER: 0-10 VOLT DIMMING WITH ON/OFF RELAY FUNCTION AND 3-WAY DIMMING CAPABILITY. PROGRAMMABLE LOW END TRIM, HIGH END TRIM, FADE-TO-DIM SETTINGS. POWER FAILURE MEMORY FOR SETTINGS. SUPPRESSION FOR INTERFERENCE WITH RADIO/TV. LED INDICATORS FOR PERCENT DIMMING ACTIVE. LUTRON MAESTRO SERIES OR APPROVED.

U. TELECOM OUTLETS: PROVIDE MINIMUM 2-1/8-INCH DEEP., 4-INCH SQUARE GALVANIZED STEEL BOXES WITH SINGLE-GANG PLASTER RINGS. PROVIDE KNOCKOUT CLOSURES FOR UNUSED OPENINGS. USE STAMPED STEEL STUD BRIDGES FOR FLUSH OUTLET BOXES IN HOLLOW STUD WALLS.

V. TELECOM RACEWAY: USE MINIMUM 1-INCH CONDUIT WITH MINIUM 11-INCH INSIDE BEND RADIUS. NO MORE THAN 180-DEGREE BENDS BETWEEN PULL POINTS AND/OR PULL BOXES. USE INSULATED THROAT BUSHINGS ON BOTH ENDS OF CONDUIT SLEEVES. WHERE NOT SHOWN ON DRAWINGS, PROVIDE CONTINUOUS CONDUIT SLEEVING THROUGH WALLS AND FLOORS TO PROVIDE CONTINUOUS PATHWAY TO NEAREST IT ROOM. MAINTAIN SMOKE AND FIRE RATINGS OF WALLS AND FLOORS.

W. TELECOM CABLE: 100-OHM, CATEGORY 6A, 4-PAIR UNSHIELDED TWISTED PAIR, CMP RATED JACKET, COLOR BLUE FOR WORKSTATIONS AND YELLOW FOR WAP'S.

X. TELECOM JACKS: CAT 6A MODULAR JACKS, IDC TERMINALS, T568A/B WIRING SCHEME. PROVIDE DUST COVER FOR MODULAR OPENINGS, COLOR TO MATCH FACEPLATE. JACKS TO BE ORTRONICS CAT. NO. OR-HDJ6A. COLOR'S TO BE AS FOLLOWS: WORKSTATION TO BE FOG WHITE; PATCH PANEL TO BE BLACK; WAP'S TO BE YELLOW; WAP PATCH PANEL TO BE YELLOW; CAMERAS TO BE GREEN; CAMERA PATCH PANEL TO BE GREEN.

Y. FACEPLATE: HIGH IMPACT THERMOPLASTIC, WITH RECESSED LABEL FIELDS, MOUNTS WITHIN SINGLE-GANG WALL BOX. 2 PORT. ORTRONICS CAT. NO. OR-403HDJ12.

Z. PATCH PANEL: 2U 48 PORT CATEGORY 6A RATED. ORTRONICS CAT. NO. OR-PSDHJU48.

AA. TELECOM CABLE INSTALL: BEFORE INSTALLING CABLE, ENSURE PATHWAYS ARE COMPLETE CLEANED. PROVIDE CABLE TIES AND CABLE MANAGEMENT CLAMPS BY HAND SO CABLE FITS SNUGLY. WHERE POSSIBLE, ROUTE THROUGH EXISTING WIRE BASKET TRAYS. CO-INSTALL A PULL CORD (NYLON, 1/8-INCH MINIMUM) WITH CABLE INSTALLED IN CONDUIT. WHERE J-HOOKS ARE USED TO SUPPORT CABLES, SUPPORT THEM AT MAXIMUM 48 TO 60-INCH INTERVALS. DO NOT REST CABLE ON ACOUSTIC TILE OR GYPBOARD CEILING, AND PROVIDE SUPPORTS FOR CABLES INDEPENDENT OF OTHER TRADES. DO NOT BEND TIGHTER THAN CABLE MINIMUM BEND RADIUS OR PULLING TENSION, OR EXCEED 25LBS PULL TENSION PER 4-PAIR UTP CABLE. DO NOT LOCATE CLOSER THAN 12-INCHES BY ANY LUMINAIRE OR 36-INCHES TO ANY ELECTRICAL EQUIPMENT, MOTOR OR TRANSFORMER.

BB. TELECOM OUTLET INSTALL: DRESS AND TERMINATE CABLES PER ANSI/TIA/EIA-568-C.1 DOCUMENT. TERMINATE USING T568B WIRING SCHEME. DO NOT EXCEED 0.5-INCH PAIR UNTWIST AT TERMINATION POINT. DO NOT EXCEED 4 TIMES OUTSIDE DIAMETER OF CABLE IN TERMINATION AREA FOR BEND RADIUS COMPLIANCE. TEST CABLES WITH LEVEL IV TEST UNIT FOR CAT 6 PERFORMANCE PER ANSI/TIA/EIA-568 C, INCLUDING CONTINUITY, LENGTH, WIRE MAP, ATTENUATION, NEXT, RETURN LOSS, ELFEXT, PROPAGATION DELAY, DELAY SKEW, PSNEXT, PSELFEXT. PROVIDE RESULTS TO OWNER IN ELECTRONIC FORMAT INCLUDING CIRCUIT ID, TEST RESULT (PASS/FAIL), DATE/TIME OF TEST, PROJECT NAME, NVP.

CC. TELECOM CABLE LABELING: LABEL HORIZONTAL CABLES WITH MACHINE PRINTED LABEL AT EACH END 12-INCHES AND 48-INCHES FROM TERMINATION POINT. LABEL PATCH PANEL PORTS AND TO PORTS WITH CABLE IDENTIFIER. PROVIDE FINAL CABLE ID MATRIX TO OWNER ONE WEEK PRIOR TO CABLE INSTALLATION. DENOTE THE TO ID, AS WELL AS UNIQUE CABLE NUMBER FOR TO, E.G. A-001-A FOR CABLE 1, A-001-B FOR CABLE 2, ETC.

DD. FIRE ALARM SYSTEM: MODULAR FIRE ALARM SYSTEMS INDICATED ON DRAWINGS ARE CONTRACTOR DESIGNED SYSTEMS. COST FOR CONTRACTOR DESIGNED SYSTEM IS TO BE CARRIED BY ELECTRICAL CONTRACTOR. FIRE ALARM CONTRACTOR TO CONFIRM SCHOOL FIRE ALARM PANEL LOCATION AND SYSTEM REQUIREMENTS ONSITE PRIOR TO BID. DESIGN SYSTEMS IN COMPLIANCE WITH CODE AS INTERPRETED BY THE AHJ.

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SPECIFICATIONS - ELECTRICAL

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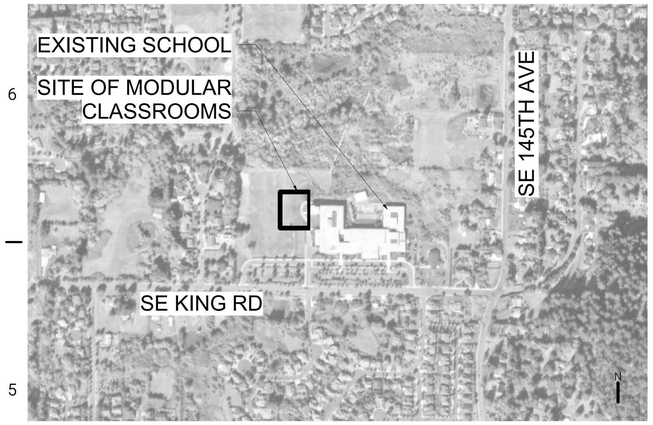
VICINITY MAP:



CODE INFORMATION

APPLICABLE CODES & STANDARDS

2019 OREGON STRUCTURAL SPECIALTY CODE
2019 OREGON MECHANICAL SPECIALTY CODE
2017 OREGON PLUMBING SPECIALTY CODE (2012 IPC WITH AMENDMENTS)
2017 OREGON ELECTRICAL SPECIALTY CODE (2017 NEC WITH AMENDMENTS)
US ADAAG ACCESSIBILITY GUIDELINE/ANSI A117.1

AREA CALCULATIONS FOR TEMPORARY MODULAR BUILDINGS

AREA NAME	AREA OCCUPANCY	AREA (GROSS SQUARE FEET)
MODULAR 1	E	1,792 SF
MODULAR 2	E	1,792 SF
MODULAR 3	E	1,792 SF
MODULAR 4	E	1,792 SF
TOTAL GROSS SF OF MODULAR BUILDINGS		7,168 SF

"BUILDING AREA, GROSS" IS DEFINED IN CHAPTER 2 OF 2014 OSSC AS:
THE FLOOR AREA WITHIN THE INSIDE PERIMETER OF THE EXTERIOR WALLS OF THE BUILDING UNDER CONSIDERATION, EXCLUSIVE OF VENT SHAFTS AND COURTS, WITHOUT DEDUCTION FOR CORRIDORS, STAIRWAYS, CLOSETS, THE THICKNESS OF INTERIOR WALLS, COLUMNS, OR OTHER FEATURES. THE FLOOR AREA OF A BUILDING, OR PORTION THEREOF, NOT PROVIDED WITH SURROUNDING EXTERIOR WALLS SHALL BE THE USABLE AREA UNDER THE HORIZONTAL PROJECTION OF THE ROOF OR FLOOR ABOVE."

OCCUPANCY (CHAPTER 3)

BUILDING CLASSIFICATION:
TEMPORARY MODULAR BUILDING SERVING PUBLIC MIDDLE SCHOOL

EDUCATION E

CONSTRUCTION TYPE, BUILDING HEIGHT AND ALLOWABLE FLOOR AREA

MODULAR STRUCTURES WILL BE BROUGHT TO SITE PRE-ASSEMBLED, HAVING BEEN INDEPENDENTLY DESIGNED AND PERMITTED.

FIRE RESISTIVE REQUIREMENTS

NO FIRE SEPARATIONS WILL BE REQUIRED DUE TO SIZE, SEPARATION FROM EXISTING BUILDING AND TEMPORARY NATURE OF MODULAR BUILDINGS

OCCUPANT LOAD (TABLE 1004.1.2)

OCCUPANCY/FUNCTION OF SPACE — LOAD FACTOR (SF/OCC.)

EDUCATIONAL
CLASSROOM AREA — 20 NET

EACH CLASSROOM CONTAINS 797 NSF RESULTING IN A LOAD OF 40 OCCUPANTS.

EXIT & EXIT ACCESS:

EGRESS WIDTH (§ 1005):
OTHER COMPONENTS: OCC. LOAD X 0.20 INCHES PER OCCUPANT

40 OCCUPANTS PER CLASSROOM = 8.0 INCHES REQUIRED
36" CLEAR DOORWAYS PROVIDED

ACCESSIBILITY (CHAPTER 11)

PRE-FABRICATED MODULAR CLASSROOMS AND RAMP/DECKING SYSTEM HAVE BEEN DESIGNED TO COMPLY WITH REQUIRED WALKWAY SLOPES AND CLEARANCES (DOORS, REACH RANGE).

PLUMBING FIXTURES (CHAPTER 29)

NO NEW PLUMBING IS PROVIDED WITHIN TEMPORARY MODULAR BUILDINGS. BUILDING OCCUPANCY OF SCHOOL WILL NOT INCREASE DUE TO TEMPORARY MODULAR BUILDINGS AND PLUMBING FIXTURES WITHIN HIGH SCHOOL WILL BE AVAILABLE FOR OCCUPANT USE AT ALL TIMES.

PROJECT TEAM:

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Project Manager: Ric Battaglia, battaglia@bora.co
Project Architect: Brian Squillace, squillace@bora.co

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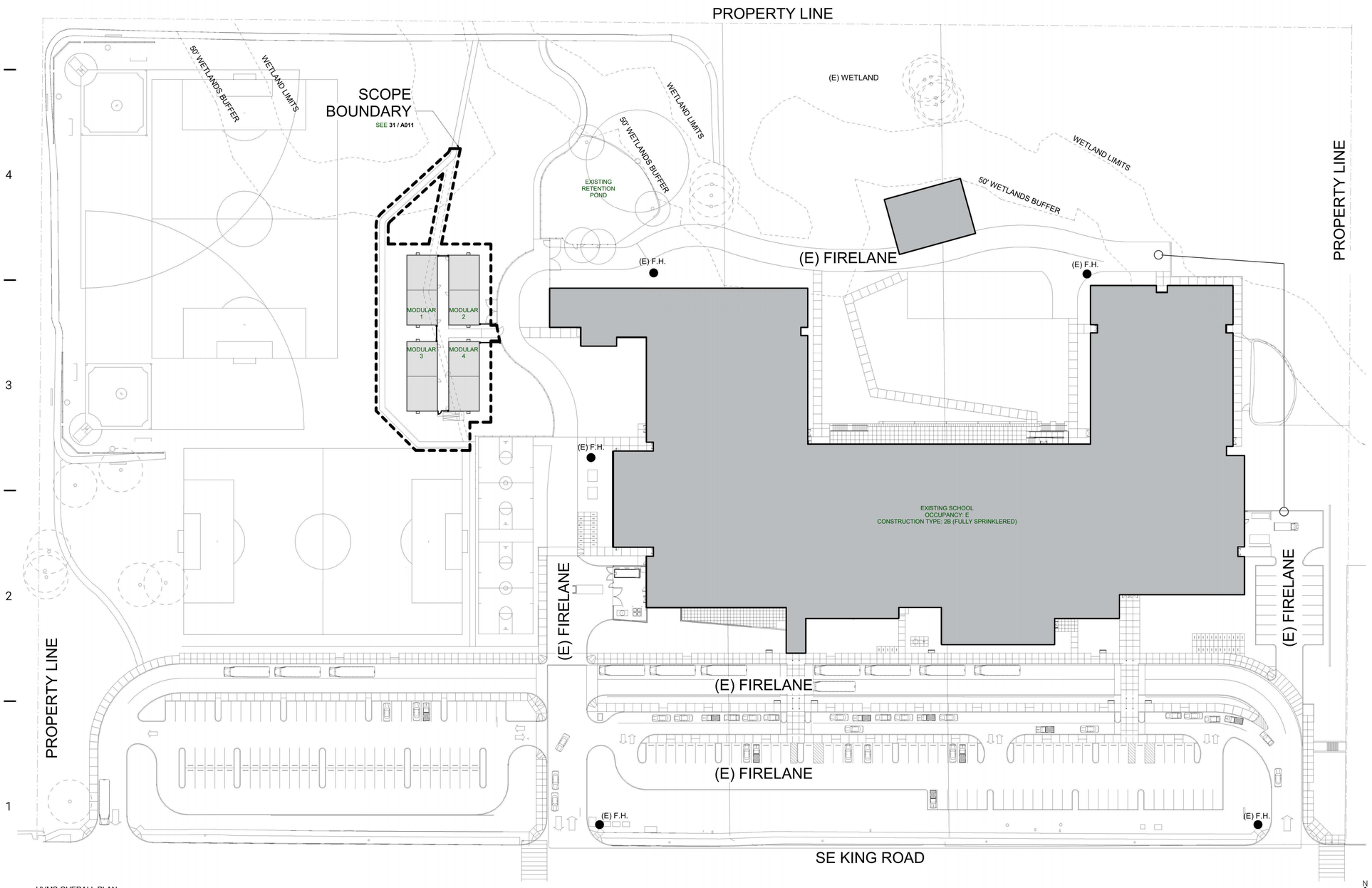
SHEET INDEX:

HVMS SHEET INDEX

Rev.	Number	Sheet Name
GENERAL		
	G001	SHEET INDEX, SITE PLAN AND SITE PHOTOS
CIVIL		
	C011	GENERAL CIVIL NOTES AND SITE PLAN
	C021	EROSION CONTROL AND SEDIMENT PLAN
	C031	DRAINAGE PLAN
	C071	SITE DETAILS AND SECTIONS
STRUCTURAL		
	S011	FOUNDATION PLAN & DETAILS
	S021	MODULAR PLAN & ELEVATIONS
	S031	RAMP & STAIR DRAWINGS
	S032	RAMP & STAIR DETAILS
	S033	RAMP & STAIR DETAILS
ARCHITECTURAL		
	A011	NOTES, SITE PLAN, MODULAR LAYOUT
ELECTRICAL		
	E001	GENERAL ELECTRICAL NOTES AND SYMBOLS
	E011	ELECTRICAL SITE PLAN
	E021	MODULAR LAYOUT & ELECTRICAL DETAILS
	E051	SINGLE LINE DIAGRAM
	E081	ELECTRICAL SPECIFICATIONS



1 HVMS OVERALL PLAN
1" = 40'-0"

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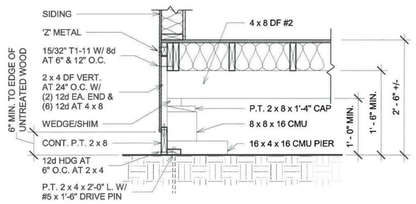
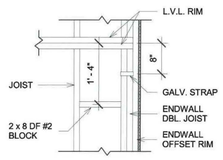
SHEET INDEX, SITE PLAN AND SITE PHOTOS

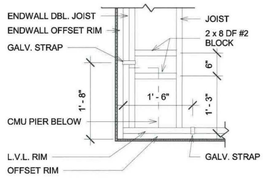
G001



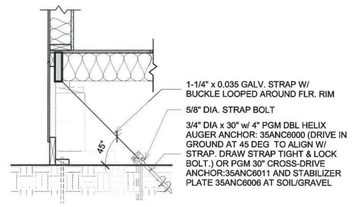
1 ENDWALL FOOTING AT BEAM
3/4" = 1'-0"



3 TIE-DOWN AT MARRIAGE
3/4" = 1'-0"



2 TIE-DOWN AT CORNER
3/4" = 1'-0"



4 TIE-DOWN STRAP
3/4" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER 77584 OREGON MAY 22, 2015 MICHAEL C. LEWIS
EXPIRES: 12/31/2020

REV.	DESCRIPTION	DATE	BY

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SHEET FOUNDATION DETAILS
JOB# 2020-KL-11-1
DMP: 2864 2020-12-1 BASE
PROJ. 28' x 64' MODULAR CLASSROOM
N. CLACK. (HV) XVIII
SHEET # S 4.2
ADDRESS 13865 SE KING RD, HAPPY VALLEY, OR 97086
DRW JS
DATE 3/10/20

FOUNDATION NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS. THIS STRUCTURE SHALL BE ADEQUATELY BRACED FOR WIND OR EARTHQUAKE FORCES AND TEMPORARY FORCES DURING SETTING AND ERECTION UNTIL ALL UNITS HAVE BEEN PERMANENTLY ATTACHED THERETO. REMOVE ORGANIC / SOD UNDER ALL BEARING PADS.

2. DESIGN LOADS:

ROOF DEAD LOAD	12 PSF
ROOF SNOW LOAD	25 PSF
FLOOR DEAD LOAD	10 PSF
FLOOR LIVE LOAD	50 PSF
WIND LOAD	Lambda = 1.0 Vult = 140 MPH (Vasd = 108 MPH) 3 SECOND GUST - EXP. B
SEISMIC	BEARING WALL SYSTEM: S_S = 1.500, F_a = 1.200 S_{DS} = 1.000 (PER ASCE 7-16 SEC. 12.8.1.3), RISK CATEGORY II I_e = 1.0, SEISMIC DESIGN CATEGORY D, SITE CLASS D
ALLOWABLE BEARING CAPACITY	1800 PSF AT GRAVEL

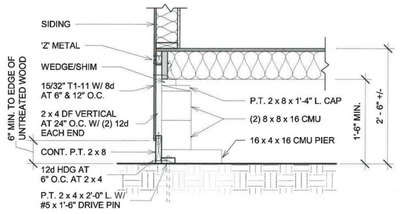
3. EXCEPT AS NOTED, DIMENSION LUMBER FOR FOUNDATION SHALL BE HEM-FIR, NO. 2 AND BETTER. TREATED LUMBER SHALL BE ACQ PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD U1, USE CATEGORY UC4A, TO A MINIMUM RETENTION OF 0.40 PCF. AT PIECES IN CONTACT WITH GROUND, SAWN END GRAIN SHALL BE FIELD TREATED WITH 2% MIN. CONCENTRATION COPPER NAPHTHENATE. TREATED PLATE STOCK SHALL BE GOOD QUALITY AND SHALL NOT CONTAIN EXCESSIVE SPLITS, CHECKS OR WANE. 2 x 4 FRAMING SHALL BE HEM-FIR, STANDARD OR BETTER, TREATED 2 x 4 FRAMING SHALL MEET THE REQUIREMENTS SPECIFIED ABOVE.

4. ALL FASTENERS TO BE HOT DIPPED GALVANIZED (HDG) OR EQUAL AT P.T. MEMBERS.

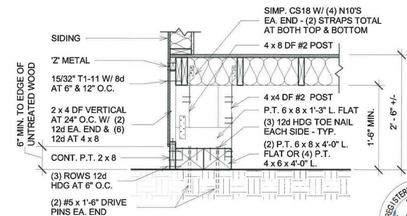
5. VENT CRAWL SPACE w/ (6) 15" SQ. METAL VENTS (MODERN STANDARD). INSTALL 6 MIL. VAPOR BARRIER ON GROUND IN ENTIRE CRAWL SPACE. LAP VAPOR BARRIER JOINTS MIN 12". (VAPOR BARRIER NOT REQUIRED AT ASPHALT OR CONCRETE IF OCCURS)

6. CONNECT STORM WATER FROM ROOF GUTTERS AND DOWNSPOUTS AND DIRECT AWAY FROM BUILDING PAD TO AN APPROVED DRAINAGE SYSTEM.

7. FOUNDATION PLANS AND DETAILS ARE NOT REVIEWED BY BCD OR L&I, EXCEPT FOR THE SUITABILITY OF THE DESIGN TO SUPPORT THE MODULAR BUILDING. APPROVAL AND INSPECTION OF THE FOUNDATION SYSTEM IS THE JURISDICTION OF THE LOCAL BUILDING OFFICIAL.



1 SIDEWALL FOOTING
3/4" = 1'-0"



2 ENDWALL COLUMN FOOTING
3/4" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER 77584 OREGON MAY 22, 2015 MICHAEL C. LEWIS
EXPIRES: 12/31/2020

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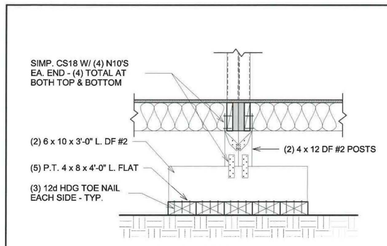
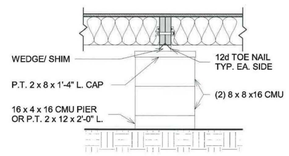
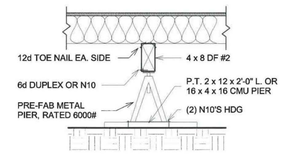
SHEET FOUNDATION NOTES & DETAILS
JOB# 2020-KL-11-1
DMP: 2864 2020-12-1 BASE
PROJ. 28' x 64' MODULAR CLASSROOM
N. CLACK. (HV) XVIII
SHEET # S 4.0
ADDRESS 13865 SE KING RD, HAPPY VALLEY, OR 97086
DRW JS
DATE 3/10/20



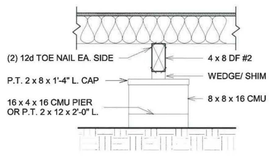
1 COLUMN FOOTING
3/4" = 1'-0"



3 MARRIAGE LINE FOOTING
3/4" = 1'-0"



2 MID-SPAN FOOTING
3/4" = 1'-0"



4 MID-SPAN FOOTING - ALT.
3/4" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER 77584 OREGON MAY 22, 2015 MICHAEL C. LEWIS
EXPIRES: 12/31/2020

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SHEET FOUNDATION DETAILS
JOB# 2020-KL-11-1
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DRW JS
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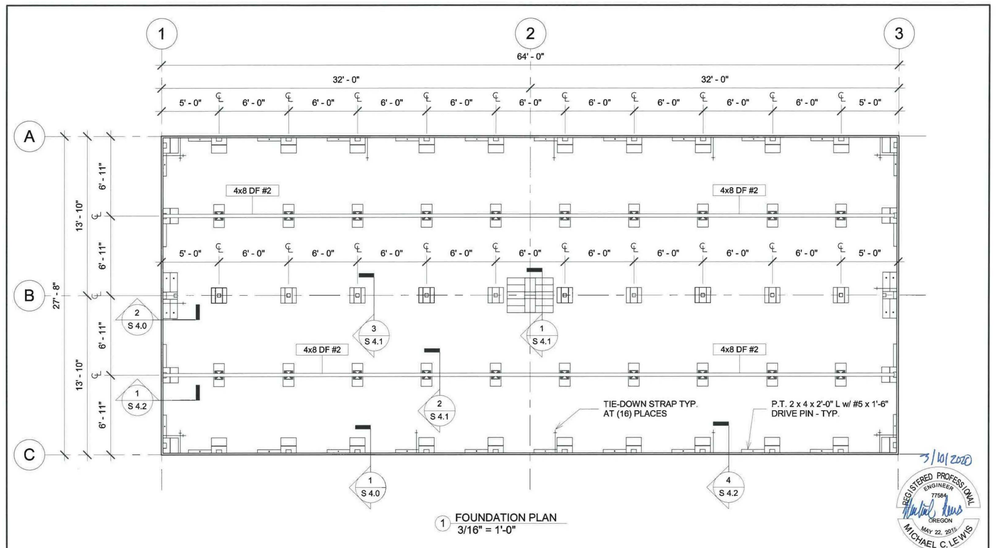

1 FOUNDATION PLAN
3/16" = 1'-0"

3/10/2020

REGISTERED PROFESSIONAL ENGINEER 77584 OREGON MAY 22, 2015 MICHAEL C. LEWIS
EXPIRES: 12/31/2020

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SHEET FOUNDATION PLAN
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FOUNDATION PLAN & DETAILS

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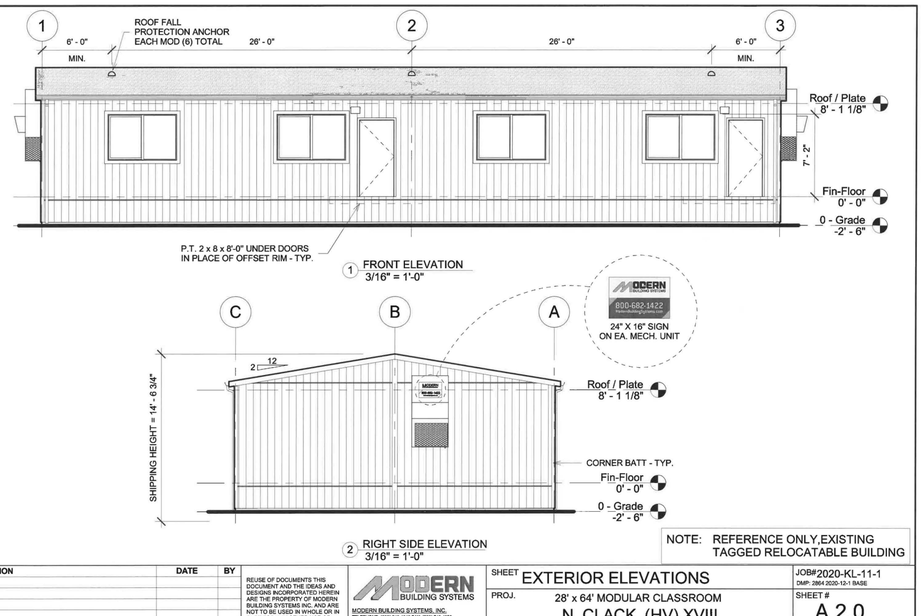

1 FRONT ELEVATION
3/16" = 1'-0"

2 RIGHT SIDE ELEVATION
3/16" = 1'-0"

NOTE: REFERENCE ONLY,EXISTING TAGGED RELOCATABLE BUILDING

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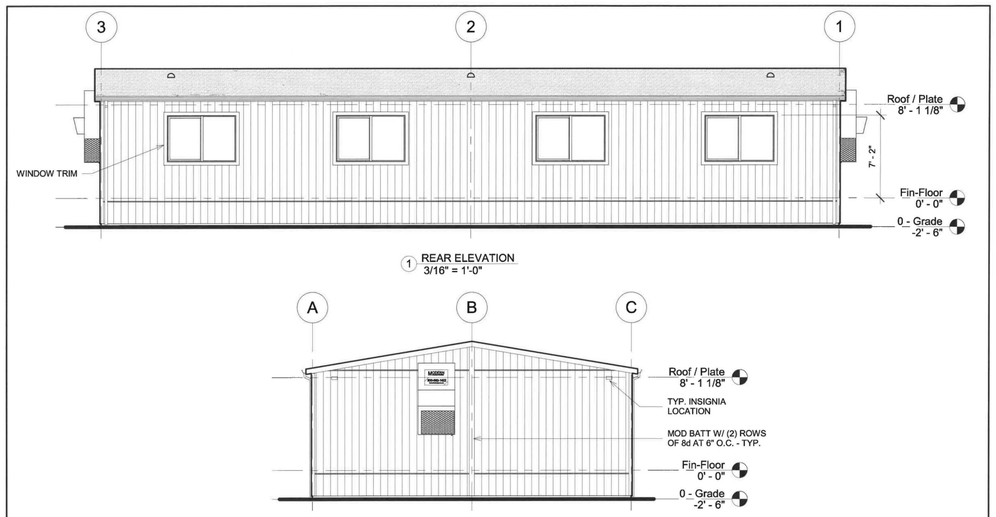
SHEET	EXTERIOR ELEVATIONS
PROJ.	28' x 64' MODULAR CLASSROOM N. CLACK. (HV) XVIII
ADDRESS	13865 SE KING RD, HAPPY VALLEY, OR 97086
JOB#	2020-KL-11-1 DMP: 2864 2020-12-1 BASE
SHEET #	A 2.0
DRW	JS
DATE	3/10/20



1 REAR ELEVATION
3/16" = 1'-0"

2 LEFT SIDE ELEVATION
3/16" = 1'-0"

NOTE: REFERENCE ONLY,EXISTING TAGGED RELOCATABLE BUILDING

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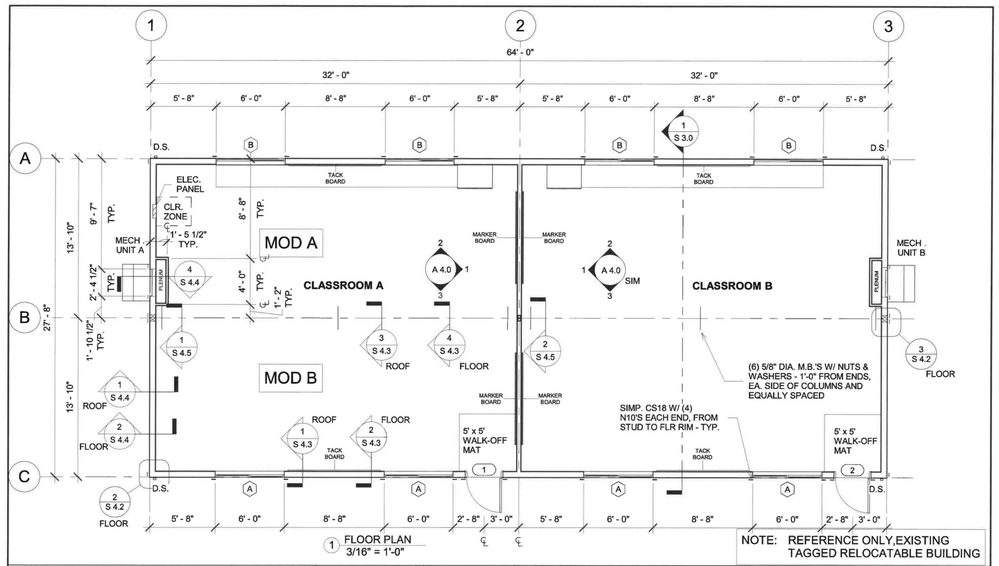

1 FLOOR PLAN
3/16" = 1'-0"

NOTE: REFERENCE ONLY,EXISTING TAGGED RELOCATABLE BUILDING

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SHEET #	A 1.0
DRW	JS
DATE	3/10/20

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MODULAR PLAN & ELEVATIONS

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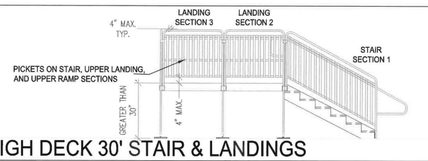
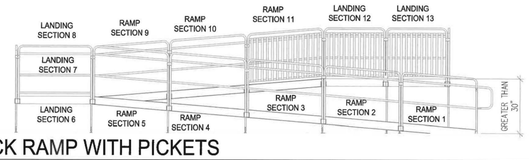


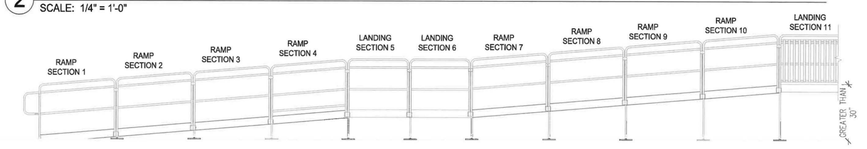
1 HIGH DECK 30' STAIR & LANDINGS

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



2 SWITCHBACK RAMP WITH PICKETS

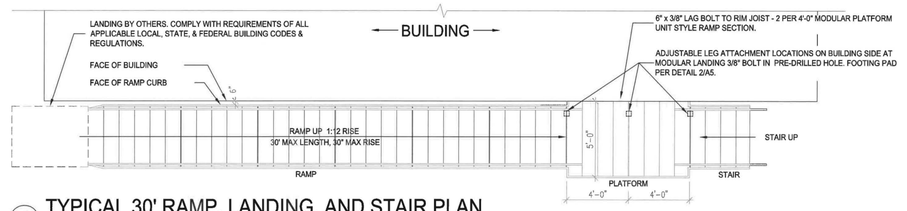
SCALE: 1/4" = 1'-0"



3 HIGH DECK 30' RAMPS & LANDINGS

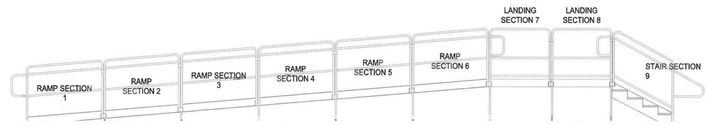
SCALE: 1/4" = 1'-0"

Northwest Access Products Phone: (360) 980-1288 www.northwestaccessproducts.com Manufactured by NW Access L.L.C.	THE DESIGN OF THE RAMP PRODUCT AND THE INFORMATION CONVEYED IN THIS DRAWING PERTAINING TO THAT DESIGN IS PROPERTY OF NW Access, DESCRIBED HEREIN AS "THE COMPANY". THIS DRAWING SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART FOR THE INTENDED PROJECT IN ANY WAY WITHOUT THE EXPRESS CONSENT OF THE COMPANY. THE DRAWING IS CREATED FOR THE SPECIFIC PROJECT NAMED ON THE DRAWING AND MUST BE RETURNED TO THE COMPANY ON COMPLETION OF THE PROJECT UNLESS WRITTEN PERMISSION IS OBTAINED FROM THE COMPANY FOR RETENTION OF THE DRAWING BY THE PROJECT OWNER.	Customer Name: Manufacture Date: Installation Date: Serial Number:	**NW Access L.L.C.** Elevations Sheet: A3 of A8 — **A3**



1 TYPICAL 30' RAMP, LANDING, AND STAIR PLAN

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



2 TYPICAL 30' RAMP, LANDING, AND STAIR ELEVATION

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

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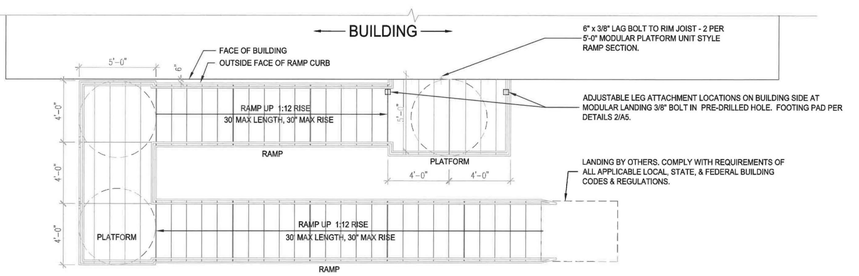
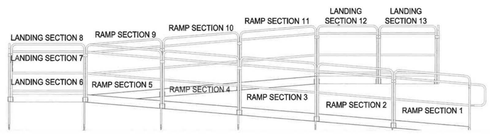


1 TYPICAL SWITCHBACK RAMP CONFIGURATION PLAN

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



2 TYPICAL SWITCHBACK RAMP CONFIGURATION ELEVATION

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

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Northwest Access Products
MODULAR ADA RAMPS AND ACCESSORIES

(360) 980-1288

www.northwestaccessproducts.com

Manufactured by NW Access L.L.C.

RAMP SYSTEM SPECIFICATIONS
EXTRUDED ALUMINUM PROPERTY LIMITS
MODULAR RAMP DESIGN & TYPICAL CONFIGURATION
ENGINEERING CALCULATIONS AND STRUCTURAL ANALYSIS
SUN WALK DECKING & TESTING INFORMATION

GENERAL NOTES

1. THESE PLANS AND SPECIFICATIONS ARE NOT VALID FOR ANY OTHER ACCESS SYSTEMS, ONLY THOSE ACCESS SYSTEMS PRODUCED BY NW Access L.L.C.
2. THE RAMP SYSTEM, STAIRS AND LANDINGS HAVE BEEN DESIGNED TO MEET IBC AND ICC A117.1 REQUIREMENTS FOR ACCESSIBLE FACILITIES. THE DESIGN LOADING CRITERIA IS 100 PSF LIVE LOAD.
3. THE MODULAR ALUMINUM RAMP SYSTEM SHALL BE A RIGID, FREE SPAN DESIGN, AND SHALL CONFORM TO THE CURRENT EDITION OF THE ALUMINUM ASSOCIATION SPECIFICATIONS AND GUIDELINES FOR ALUMINUM STRUCTURES.
4. ALL COMPONENTS TO BE MANUFACTURED USING 6061-T6 AND 6063-T6 ALUMINUM ALLOY, WITH A MILL FINISH. ALL SS BOLTS AND NUTS TO BE TYPE 304 AND ALL SS SCREWS TO BE 410 STAINLESS
5. INSTALLATION CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH ACI (OSHA AND STATE LABOR AND INDUSTRIES STANDARDS AND REQUIREMENTS). CONTRACTORS SHALL ASSUME FULL RESPONSIBILITY FOR THE CONDITION OF THE STRUCTURES TO BE ACCESSED USING THE RAMP AND RELATED SYSTEMS.
6. LANDING AT DOOR WILL BE INSTALLED ½" LOWER THAN THE FINISHED FLOOR OF BUILDING PER ICC A117.1, 303
7. WELDING SHALL BE IN ACCORDANCE WITH ANSI/AWS GAS METAL ARCH WELDING PROCESS BY EXPERIENCED OPERATORS.
8. LANDING, RAMP, AND STAIR WALKING SURFACES TO BE SUN WALK POLYPROPYLENE INTERLOCKING PANELS, AS PER MANUFACTURER'S SPECIFICATIONS. TESTING MEETS OR EXCEEDS STANDARDS FOR DISTRIBUTED /CONCENTRATED LOAD, IZOD IMPACT, COEFFICIENT OF FRICTION AND SLIP RESISTANCE. DRAINAGE OPENINGS TO COMPLY WITH ICC A117.1, 302.3 OPENING
9. ADJUSTABLE LEG AND LEVELING FEET ARE ASSUMED TO BE PLACED ON SUITABLE FIRM BEARING MATERIAL ATOP UNDISTURBED SOIL.
10. STANDARD RAMP AND LANDING GUARDRAILS TO BE 42 INCH MINIMUM HEIGHT CAPABLE OF SUPPORTING AND ATTACHING REMOVABLE PICKET, WHEN THRESHOLD HEIGHTS EXCEED 30" ABOVE GRADE.
11. GUARDRAILS SHALL BE DESIGNED AND CONSTRUCTED FOR A LOAD OF 50 PLF APPLIED VERTICALLY DOWNWARD AT THE TOP OF THE GUARDRAIL.
12. HANDRAILS SHALL BE DESIGNED AND CONSTRUCTED FOR A LOAD OF 50 PLF APPLIED IN ANY DIRECTION.
13. GUARDRAILS WITH ATTACHED PICKETS SHALL BE CONSTRUCTED SO THAT A 4 (FOUR) INCH SPHERE CAN NOT PASS THROUGH ANY OPENING IN THE RAIL.
14. ALL SURFACES AND WELDING JOINTS SHALL BE SMOOTH AND FREE FROM SHARP OR JAGGED EDGES.
15. ALL DESIGNS SHOWN HEREIN ARE SUBJECT TO CHANGE PENDING FIELD VERIFICATION OF EXISTING CONDITIONS.

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DATE: 1/13/16

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RAMP & STAIR DRAWINGS

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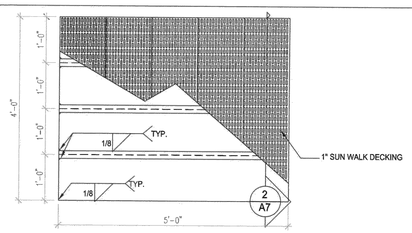

1 RAMP FLOOR SECTION
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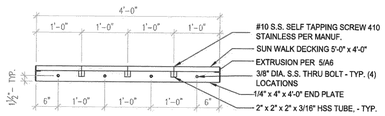

2 RAMP FLOOR SECTION
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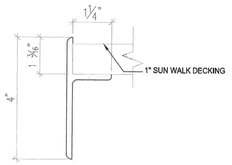

3 LANDING EXTRUSION
SCALE: 6" = 1'-0"

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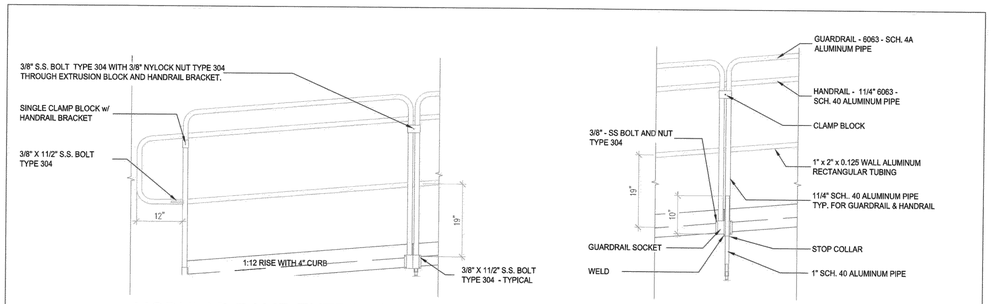
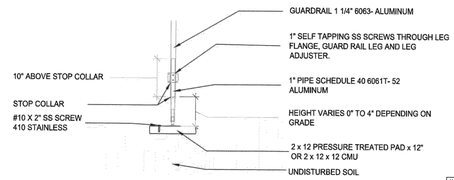


1 MODULAR RAMP ENTRANCE SECTION
SCALE: 3/4" = 1'-0"

3 MODULAR RAMP SECTION TYPICAL
SCALE: 3/4" = 1'-0"



2 ADJUSTABLE LEG SECTION
SCALE: 3/4" = 1'-0"

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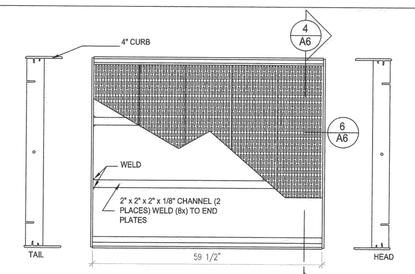

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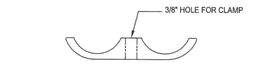

2 HANDRAIL BRACKET
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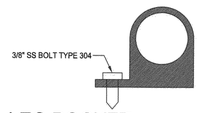

3 LEG POCKET
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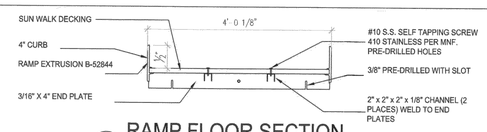

4 RAMP FLOOR SECTION
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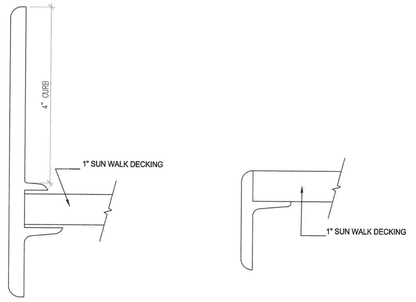

5 LANDING EXTRUSION
SCALE: 6" = 1'-0"

6 RAMP EXTRUSION
SCALE: 6" = 1'-0"

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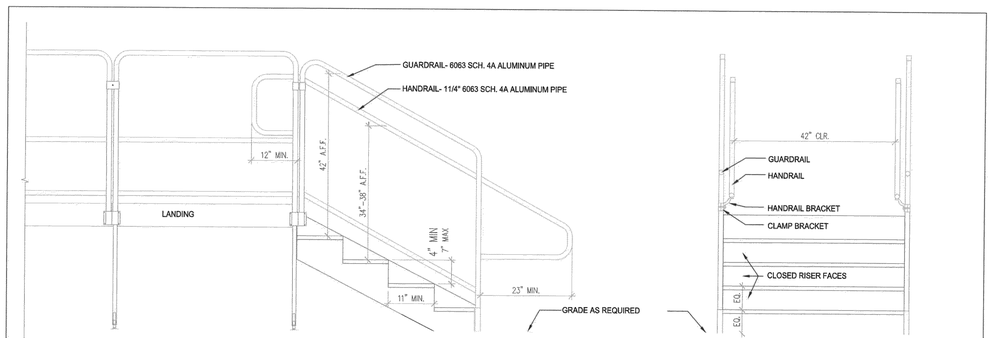
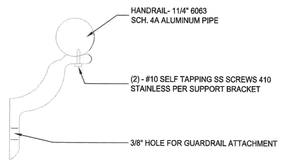


1 STAIR ELEVATION
SCALE: 3/4" = 1'-0"

3 STAIR ELEVATION
SCALE: 3/4" = 1'-0"



2 HANDRAIL BRACKET
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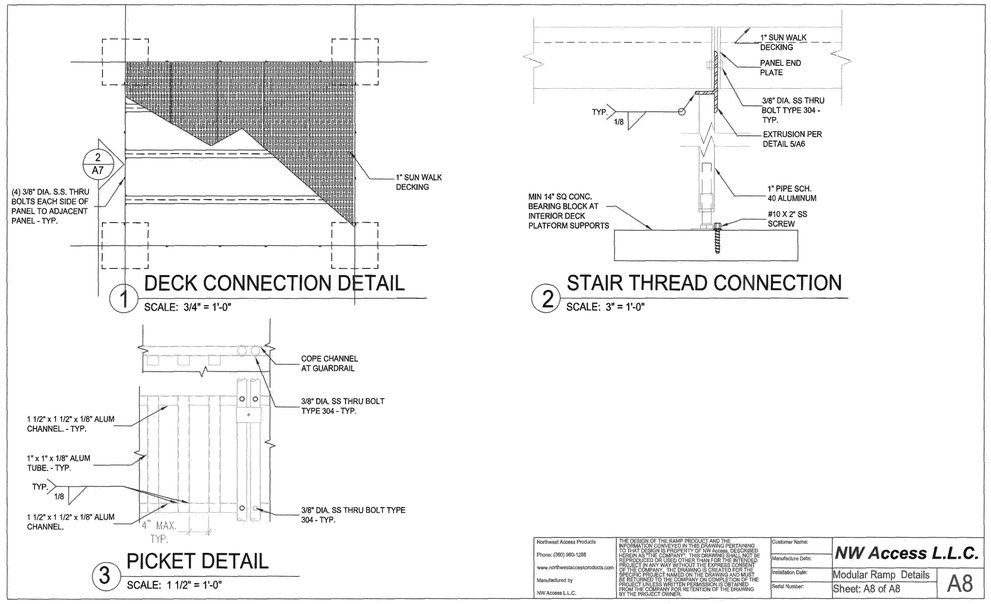

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Manufacture Date:
Installation Date:
Serial Number:

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