CITY and BOROUGH of JUNEAU
RECYCLING BALER & TIER INSTALLATION
5600 Tonsgard Ct, (Capitol Disposal)
CBJ Contract No. E15-147
Juneau, Alaska
NOVEMBER 24, 2014

ARCHITECT
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EQUIPMENT
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800 EAST CENTER STREET
BELLVEVUE, OHIO 44811
(419)-217-8999

SHEET INDEX

SHEET INDEX

(FOR REFERENCE ONLY – DIMENSION ARE NOT CERTIFIED)

SK-JUNEAU W721R-75S W/STAMPER & SIDEFEED HOPPER – LAYOUT DRAWING
H-36904-2 ANCHOR CLIP LOCATIONS W721R

CODE DATA

ARCHITECTURAL:

*INTERNATIONAL BUILDING CODE – IBC (2009)
LIFE SAFETY CODE – NFPA-101 (2009)

ACCESSIBILITY:

ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG) – 2012

STRUCTURAL:

*INTERNATIONAL BUILDING CODE – IBC (2009)
SEISMIC: SITE CLASS D, Ss = 0.55, S1 = 0.28, I = 1.5, R = 6
WIND: V3s = 110 MPH, EXPOSURE CATEGORY C, I = 1.5

ELECTRICAL:

*NFPA 70 – NATIONAL ELECTRIC CODE
*INTERNATIONAL BUILDING CODE (2009)

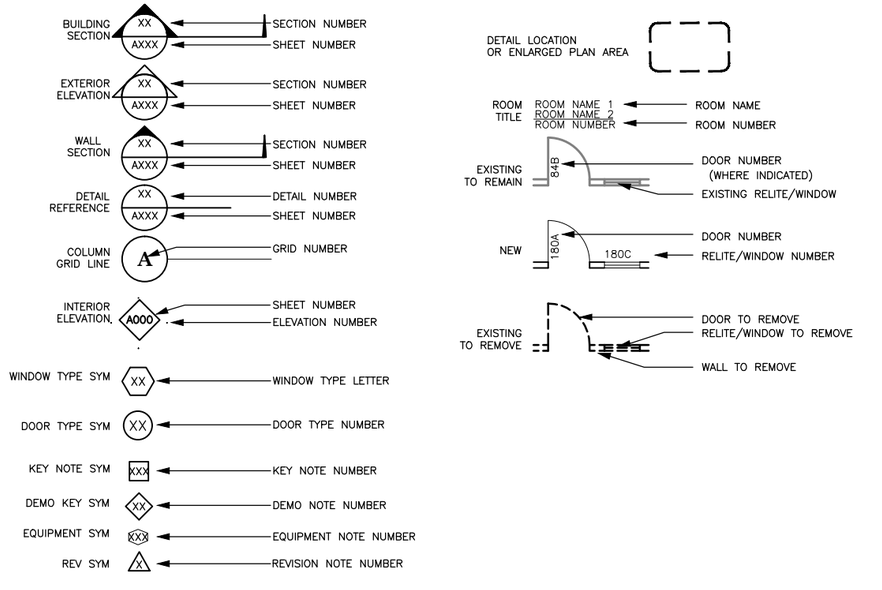
*AS ADOPTED AND AMENDED BY THE LOCAL JURISDICTION W/ MODIFICATIONS TITLE 19

ABBREVIATIONS

∠	ANGLE	ELEV	ELEVATOR	JAN	JANITOR	PR	PAIR
AC	ASPHALT CONCRETE	EMER	EMERGENCY	JT	JOINT	PWD	PLYWOOD
ACP	ACOUSTICAL CEILING PANEL	ENCL	ENCLOSURE				
ADJ	ADJUSTABLE	EPDM	ETHYLENE PROPYLENE DIANE MONOMER	LAM	LAMINATE	R	RISER
AFF	ABOVE FINISH FLOOR			LAV	LAVATORY	RAD	RADIUS
AFG	ABOVE FINISH GRADE	EPS	EXPANDED POLYSTYRENE	LB	POUND	RD	ROOF DRAIN
AIB	AIR INFILTRATION BARRIER	EQ	EQUAL	LT	LIGHT		
AL	ALUMINUM	EQP	EQUIPMENT	LLH	LONG LEG HORIZONTAL	REF	REFERENCE
APPROX	APPROXIMATE	EX-EXIST	EXISTING	LLV	LONG LEG VERTICAL	REFR	REFRIGERATOR
ARCH	ARCHITECTURAL	EXT	EXTERIOR			REINF	REINFORCED
ASB	ASBESTOS			MIR	MIRROR	REQ	REQUIRED
		FA	FIRE ALARM	MAX	MAXIMUM	RESIL	RESILIENT
BD	BOARD	FD	FLOOR DRAIN	MDO	MEDIUM DENSITY OVERLAID	RH	ROBE HOOK
BLDG	BUILDING	FDN	FOUNDATION	MECH	MECHANICAL	RL	RAIN LEADER
BLKG	BLOCKING	FF	FINISH FLOOR	MEMB	MEMBRANE	RM	ROOM
BM	BEAM	FIN	FINISH	MFR	MANUFACTURER	RO	ROUGH OPENING
BOT	BOTTOM	FLASH	FLASHING	MH	MANHOLE	RUB	RUBBER
		FLR	FLOOR	MIN	MINIMUM		
CAB	CABINET	FOC	FACE OF CONCRETE/CURB	MISC	MISCELLANEOUS	SASU	SELF ADHERING SHEET UNDERLAYMENT
CB	CATCH BASIN	FOF	FACE OF FINISH	MTD	MOUNTED	SCHED	SCHEDULE
CEM	CEMENT	FOS	FACE OF STUD	MTL	METAL	SF	SQUARE FOOT
CI	CAST IRON	FM	FACTORY MUTUAL	MUL	MULLION	SFRM	SPRAYED FIRE-RESISTIVE MATERIAL
CLG	CEILING	FRP	(GLASS) FIBER REINFORCED PLASTIC	NLR	NAILER	SHR	SHOWER
COL	COLUMN			NIC	NOT IN CONTRACT	SHTH	SHEATHING
CONC	CONCRETE	FR	FIRE RETARDANT	NO OR #	NUMBER	SIM	SIMILAR
CONT	CONTINUOUS	FT	FOOT OR FEET	NOM	NOMINAL	SPEC	SPECIFICATIONS
CJ	CONTROL JOINT	FTG	FOOTING	NTS	NOT TO SCALE	SQ	SQUARE
CTR	CENTER	FURR	FURRING			STC	SOUND TRANSMISSION CLASS
CTSK	COUNTERSUNK			OA	OVERALL	STD	STANDARD
		GA	GAUGE	OC	ON CENTER	STL	STEEL
DBL	DOUBLE	GALV	GALVANIZED	OD	OUTSIDE DIAMETER	STOR	STORAGE
DET	DETAIL	GB	GRAB BAR	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	STRUCT	STRUCTURAL
DIA	DIAMETER	GLS	GLASS			SS	STAINLESS STEEL
DIM	DIMENSION	GWB	GYPSUM WALL BOARD	OFOI	OWNER FURNISHED OWNER INSTALLED	SUSP	SUSPENDED
DISP	DISPENSER	GYP	GYPSUM			SY	SQUARE YARD
DN	DOWN			OFD	OVERFLOW DRAIN		
DR	DOOR	HB	HOSE BIBB	OPNG	OPENING	TC	TOP OF CURB
DS	DOWNSPOUT	HDWD	HARDWOOD	OPP	OPPOSITE	TEL	TELEPHONE
DWG	DRAWING	HM	HOLLOW METAL	OSB	ORIENTED STRAND BOARD	TEMP	TEMPORARY
DWR	DRAWER	HORIZ	HORIZONTAL			T&G	TONGUE & GROOVE
		HR	HOUR	PL	PLATE	TLT	TOILET
EA	EACH	HT	HEIGHT	PLAM	PLASTIC LAMINATE	TOC	TOP OF CONCRETE
EF	EXHAUST FAN	HVAC	HEATING, VENTING & AIR CONDITIONING	PLAS	PLASTER	TOD	TOP OF DECK
EFIS	EXTERIOR INSULATION & FINISH SYSTEM	HW	HOT WATER	PLUMB	PLUMBING	TPD	TOILET PAPER DISPENSER
EJ	EXPANSION JOINT			PC	PRE-CAST	TRD	TREAD
EL	ELEVATION	ID	INSIDE DIAMETER	PF	PRE-FINISHED	TRTD	PRESSURE TREATED
ES	EACH SIDE	INSUL	INSULATION	PSIG	POUNDS PER SQUARE INCH GAUGE	TOW	TOP OF WALL
ELEC	ELECTRICAL	INT	INTERIOR				

TOS	TOP OF STRUCTURE / TOP OF STEEL
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UNF	UNFINISHED
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VERT	VERTICAL
VEST	VESTIBULE
VB	VAPOR BARRIER
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOF
WB	WEATHER BARRIER
WD	WOOD
WP	WATERPROOF
WR	WASTE RECEPTACLE
WSCT	WAINSCOT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

SYMBOLS



STATE OF ALASKA
49 TH
PAUL B GLOE II
Dec. 1, 14
No. A 12249
REGISTERED PROFESSIONAL ENGINEER

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ISSUED FOR:
BID / PERMIT

SHEET NO:
FILE: 2014-05
A001

ARCHITECTURAL EQUIPMENT NOTES: BALER & WIRE TIER

PART 1: GENERAL

SUMMARY: THE INTENT OF THIS BID IS TO RESULT IN AN IMMEDIATE PURCHASE AND INSTALLATION OF ONE (1) NEW INDUSTRIAL TWO RAM WIDE BODY BALER WITH DOUBLE TWIST WIRE TIER AND ACCESSORIES. AT PROJECT COMPLETION, THE RESULT MUST BE A TURNKEY BALER WITH WIRE TIER SYSTEM FOR THE CBJ PUBLIC WORKS RECYCLING PROGRAM.

- THIS BALER IS FOR DENSIFICATION OF COMMINGLED AND SOURCE SEPARATED RECYCLING MATERIAL INCLUDING BUT NOT LIMITED TO USED BEVERAGE CANS (UBC) ALUMINUM, FERROUS (STEEL) CANS, MIXED PLASTICS, BULK OFFICE CORRUGATE CARDBOARD (OCC), OFFICE NEWS PAPER (ONP), HI-GRADE PAPERS, MIXED PAPER, WHITE GOODS EXCLUDING HOT WATER HEATERS, MUNICIPAL SOLID WASTE (MSW) AND SELECT NON-FERROUS (NF) METALS. THE BALER SHOULD BE CAPABLE OF CONTINUOUS AUTOMATIC OPERATION WITHOUT PLUGGING OR JAMMING AND MAINTAIN A CONSTANT FEED RATE. THE BALER SHOULD HAVE THE ABILITY TO RUN IN SEMI-AUTOMATIC AND MANUAL OPERATION.

ACCEPTANCE: UPON RECEIPT OF THE BALER, THE CITY AND BOROUGH OF JUNEAU WILL PERFORM SUCH INSPECTIONS AND TESTS AS DEEMED BY SOLID WASTE PERSONNEL NECESSARY TO DETERMINE IF BALER IS IN CONFORMANCE WITH CONTRACT REQUIREMENTS BOTH AS TO CONFIGURATION AND PERFORMANCE PARAMETERS. REPRESENTATIVES OF THE CONTRACTOR MAY WITNESS ACCEPTANCE INSPECTIONS AND TESTING.

FAILURE OF THE BALER TO MEET THE REQUIRED SPECIFICATIONS OR TO OPERATE PROPERLY IN ANY WAY WILL REQUIRE REPLACEMENT OR REPAIR BY CONTRACTOR AT NO EXPENSE TO THE CITY.

NEW EQUIPMENT: BIDDER REPRESENTS THAT ALL EQUIPMENT OFFERED SHALL BE NEW. USED, SHOPWORN, DEMONSTRATOR, PROTOTYPE OR DISCONTINUED MODELS ARE NOT ACCEPTABLE.

GUARANTEE: THE BIDDER GUARANTEES THAT THE EQUIPMENT OFFERED IS STANDARD EQUIPMENT, THE LATEST MODEL OF A REGULAR STOCK PRODUCT WITH ALL PARTS REGULARLY USED WITH THE TYPE OF EQUIPMENT OFFERED.

WHERE ACCESSORIES ARE TO BE SUPPLIED, THEY MUST BE COMPATIBLE WITH THE REST OF THE EQUIPMENT.

INSTRUCTION PLATES: WHERE SIGNIFICANT PROCEDURES ARE REQUIRED, INSTRUCTION PLATES MUST BE PROVIDED AT LOCATIONS READILY VISIBLE AND AS NEAR AS POSSIBLE TO THE AFFECTED AREA.

SUBMITTALS

PRODUCT DATA: FOR EQUIPMENT INDICATED. INCLUDE INSTALLATION , MATERIAL DESCRIPTIONS, DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES, AND FINISHES FOR BALER AND ACCESSORIES.

SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION DETAILS FOR EQUIPMENT AND ACCESSORIES.

- INCLUDE FABRICATION AND INSTALLATION PLANS, ELEVATIONS, SECTIONS, AND DETAILS OF EQUIPMENT AND THEIR CONNECTIONS. INDICATE ANCHORAGE FOR BALER COMPONENTS AND ACCESSORY ITEMS.
- COMPLETE BALER SPECIFICATION SHEET MUST BE PROVIDED.
- DRAWING OF THE OVERALL BALER AND ACCESSORIES, AND DIMENSIONS AND LAYOUT OF ANCHOR CLIPS.
- VENDOR MUST PROVIDE A SHIPMENT BREAKDOWN FOR SUBCONTRACTOR FOR INSTALLATION.

PART 1: GENERAL (CONTINUED)

DELEGATED-DESIGN SUBMITTAL: FOR EQUIPMENT AND ACCESSORIES INDICATED TO COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDE ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

SAMPLES FOR INITIAL SELECTION OF COATINGS (PAINT) : FOR BALER AND ACCESSORIES INDICATED WITH FACTORY-APPLIED FINISHES.

- INCLUDE SAMPLES ON MATERIALS USED FOR BALER AND ACCESSORIES INVOLVING COLOR SELECTION.

MANUALS AND CERTIFICATIONS: AWARDED CONTRACTOR IS REQUIRED TO SUBMIT FOUR HARD COPIES AND A SCANNED ELECTRONIC VERSION (PDF) FOR ALL OPERATION, MAINTENANCE AND PARTS MANUALS, INCLUDING ELECTRICAL AND HYDRAULIC SCHEMATICS, AT THE TIME OF BALER DELIVERY. THE FOLLOWING DOCUMENTATION WILL ADDITIONALLY BE PROVIDED AT THE TIME OF BALER DELIVERY: CONTRACTOR'S WARRANTY CERTIFICATION, AND MANUFACTURER'S WARRANTY CERTIFICATION.

APPLICABLE FEDERAL AND STATE LAWS: BALER AND WIRE TIER AND ALL ITS EQUIPMENT AND COMPONENTS SHALL BE DESIGNED, FABRICATED AND TESTED IN ACCORDANCE WITH THE LATEST EDITIONS OF CODES AND REGULATIONS AND SAFETY DEVICES THAT APPLY TO THIS TYPE OF EQUIPMENT. BALER AND WIRE TIER MUST MEET ALL CURRENT ANSI 245.51 SAFETY STANDARDS AND ALL FEDERAL REGULATIONS.

PROJECT CONDITIONS: FIELD MEASUREMENTS: SUPPLIER TO VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH BALER BY FIELD MEASUREMENTS BEFORE FABRICATION.

COORDINATION: PRE CONSTRUCTION COORDINATION MEETING AS REQUIRED IN DIVISION 1, INCLUDING BUT NOT LIMITED TO INSTALLATION OF ANGLE CLIPS, ANCHORAGE, AND BARRIER ANCHORAGE INTO CONCRETE AND/OR STEEL PLATE. FURNISH DRAWINGS AND DIRECTIONS FOR INSTALLING BALER. PROVIDE DELIVERY SCHEDULE OF SUCH ITEMS TO PROJECT SITE FOR TIMELY INSTALLATION.

WARRANTY: THE BIDDER WARRANTS THE BALER AND WIRE TIER FURNISHED AS PART OF THIS BID TO BE FREE FROM DEFECTS IN DESIGN, MATERIAL AND WORKMANSHIP AS FOLLOWS:

FOR A MINIMUM OF ONE YEAR WITH UNLIMITED HOURS FROM THE DATE OF OWNER ACCEPTANCE, ALL PARTS AND MATERIALS, EQUIPMENT AND WORKMANSHIP WILL BE WARRANTED. THIS WILL INCLUDE, BUT IS NOT LIMITED TO MISCELLANEOUS COSTS, LABOR, AIRFARE, LODGING, MEALS, ETC: BALER MANUFACTURER TO PROVIDE AT A MINIMUM FIVE YEAR WARRANTY ON MAJOR STRUCTURAL COMPONENTS. THE STANDARD MANUFACTURE'S WARRANTY WILL ALSO APPLY, AND COORDINATED WITH SECTION 01010.

AUTOMATED WIRE TIER MANUFACTURE SHALL WARRANT WIRE TIER ASSEMBLY FOR ONE YEAR WITH UNLIMITED HOURS FROM OWNER ACCEPTANCE.

WARRANTY WORK: ALL WARRANTY WORK MUST BE PERFORMED BY THE CONTRACTOR OR A RESPONSIVE, REPRESENTATIVE OF ITS CHOICE. THE BIDDER WILL IDENTIFY A REPRESENTATIVE, TO HANDLE ALL WARRANTY WORK ON ITS BEHALF IF THE CONTRACTOR CHOOSES NOT TO. THE CITY WILL NOT BE RESPONSIBLE TO PERFORM OR CONTRACT WITH ANOTHER SOURCE TO PERFORM ANY REQUIRED WARRANTY WORK. ALL COSTS INCURRED ON WARRANTY WORK PERFORMED WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

PARTS AVAILABILITY: THE MANUFACTURER MUST GUARANTEE PARTS AVAILABILITY FOR A MINIMUM OF FIVE (5) YEARS OR THE REASONABLE LIFE OF THE UNIT, WHICHEVER IS GREATER.

PART 2 - PRODUCT

BRAND/MODEL: THE BASIS OF DESIGN PRODUCT IS, AMERICAN BALER TWO RAM WB (WIDE BODY) WITH STAMPER, MODEL# 721 WITH ACCENT MODEL 470 12 GAUGE WIRE TIER, AMERICAN BALER COMPANY, 800 EAST ENTER STREET, BELVIEW, OHIO 44811; PHONE: 419-217-8999; WEB: WWW.AMERICANBALER.COM; OR APPROVED EQUAL.

BALER REQUIREMENTS:

1. FABRICATED FROM HEAVY STRUCTURAL STEEL MEMBERS, GUSSETED AND BRACED AS REQUIRED, AND FITTED IN JIGS AND FIXTURES FOR PROPER ALIGNMENT. SOLID SINGLE SIDE SHEETS USED ON EACH SIDE OF THE BALER FRAME WITH "WINDOW" CUTOUTS AS REQUIRED.
2. MUST HAVE REPLACEABLE HARDOX 500 LINERS, FOR THE CHARGE BOX FLOOR AND A MINIMUM OF REPLACEABLE HARDOX 450 LINERS FOR THE SIDES - THE CHARGE BOX FLOOR LINER STRIPS WILL ALTERNATE IN THICKNESS FROM ½" TO 1" ACROSS THE WIDTH OF THE CHARGE BOX. THE MAIN RAM BOTTOM LINER STRIPS WILL ALTERNATE IN THICKNESS TO CORRESPOND WITH BALER FLOOR. THERE MUST BE REPLACEABLE WELD-ON HIGH ABRASIVE RESISTANT STEEL ¼" THICK CHARGE BOX SIDE LINERS, PRESS BOX TOP AND SIDE LINERS, AND VERSA-DOOR LINERS.
3. MAIN AND EJECT PLATENS MUST BE HEAVY STEEL WELDMENTS WITH REPLACEABLE LINERS.
4. BALER MUST HAVE ADJUSTABLE BOLT-ON MAIN RAM HOLD DOWN BARS.
5. BALER MUST HAVE BOLT-ON MAIN RAM TOP COVER PLATES.
6. BALER MUST HAVE BOLT-ON EJECT RAM TOP COVER PLATES.
7. BALER MUST HAVE HINGED MAIN RAM WIPER.
8. THE BALER FEED HOPPER DESIGN WILL BE FLARED ON LONG SIDE FOR LOADING WITH 6' BUCKET.
9. BALER MUST BE OF A CONFIGURATION THAT WILL PRODUCE FOLLOWING LEVELS:

   PRODUCTION SUBJECT TO MATERIAL INPUT DENSITY, MOISTURE CONTENT AND FEED RATES. BALED PRODUCTS SHALL BE OF HIGHEST DENSITY POSSIBLE TO MAXIMIZE LOADING CAPACITY FOR TRANSPORT AND TO REDUCE WIRE COST/TON.

• BULK OCC	1250-1500 LBS	5.0 TO 8.0 TPH
• MSW	1900-2400 LBS	10.5 TO 17.5 TPH
• ONP	1300-1600 LBS	8.0 TO 12.0 TPH
• UBC	1000-1200 LBS	2.4 TO 3.0 TPH
• STEEL CANS	1500-2400 LBS	8.0 TO 13.0 TPH
• PLASTICS	1100-1450 LBS	2.0 TO 5.0 TPH
• NF METALS	1000-2700 LBS	4.5 TO 9.0 TPH

10. BALER FEED OPENING SHALL BE 87" LONG (LONG SIDE) X 58" WIDE , 86 CUBIC FOOT CHARGE BOX AND 9 DEGREE RAKED SHEAR BEAM.
11. BALER SHALL HAVE A HOPPER WHICH HAS TOP LOAD SYSTEM TO ALLOW FOR MANUAL FEEDING OR THE BALER MUST BE CAPABLE OF BEING RETROFITTED FOR A FEED CONVEYOR SYSTEM WITH MATERIAL UNIFORMLY SPREAD OUT ON THE BELT.
12. LAYOUT DRAWING SHOWING BALER LOADS AND ANGLE CLIPS AND ANCHORAGE LOCATIONS. EXISTING FLOOR, 3000 PSI, 6" REINFORCED CONCRETE SLAB ON GRADE.
13. BALER SHALL BE EQUIPPED WITH ALL ASSOCIATED DRIVES, PUMPS, MOTORS, PIPING, HYDRAULIC MECHANISMS, AND ELECTRICAL CONTROLS.
14. BALER SHALL HAVE HOPPER EXTENSION WITH ACCESS DOOR SAFETY INTERLOCKS.
15. BALE SEPARATION AND OVERSIZE RELEASE IS REQUIRED WITH MINIMUM SEVEN INCHES OF OVERSIZE RELEASE TRAVEL
16. MAIN ELECTRICAL PANEL SHALL INCLUDE MAIN CIRCUIT BREAKER, INSTRUMENTATION PACKAGE, INDIVIDUAL MOTOR STARTERS AND BRANCH BREAKERS, PUSHBUTTON PILOT LIGHTS TERMINAL STRIPS, SPEED POT(S)
17. BALER SHOULD HAVE SELF-STANDING OPERATOR CONTROL PANEL POSITIONED ON THE FLOOR NEAR THE BALER.
18. UNIT TO INCLUDE A CONTINUOUS GROUND BUS
19. PANEL SHALL HAVE HINGED DOOR. DOOR TO BE LOCKED CLOSED WITH MAIN DISCONNECTING HANDLE IN THE "ON" POSITION, EXCEPT THAT A "DEFEATER" MECHANISM SHALL PROVIDE ACCESS TO AUTHORIZED PERSONNEL
20. MUST MEET ELECTRICAL POWER REQUIREMENT OF EXISTING 3 PHASE / 60 HERTZ / 480 VOLT POWER SUPPLY. THE EXISTING POWER SUPPLY IS SUFFICIENT FOR THE OPERATION OF A BALER MEETING THESE SPECIFICATIONS.

PART 2: PRODUCTS (CONTINUED)

21. ALL WIRING MUST BE COLOR CODED AND/OR NUMBERED FOR EASY IDENTIFICATION.
22. MOTORS MUST BE TEFC.
23. MAIN HYDRAULIC PUMP(S) MOTOR MUST BE MINIMUM 75 HP WITH WYE DELTA STARTER OR OTHER REDUCED VOLTAGE STARTER. HYDRAULIC TANK WILL BE OUTFITTED TO OPERATE IN COLD WEATHER CLIMATE WITH THE POSSIBILITY OF REACHING TEMPERATURES AS LOW AS -20 DEGREES FAHRENHEIT.
24. 75HP 460/3/60 MAIN MOTOR
25. BALER ELECTRICAL PANELS TO BE NEMA 12 RATED.
26. BOTH MCC AND CONTROL PANEL MUST BE HEATED WITH THERMOSTATICALLY CONTROLLED PANEL HEATERS.
27. BALER MUST HAVE CBJ APPROVED MANUAL PUSHBUTTON SWITCHES.
28. BALER MOTOR CONTROL CENTER MUST BE MOUNTED ON POWER UNIT.
29. BALER MUST HAVE THE FOLLOWING: EMERGENCY STOP SWITCH ON MCC, EMERGENCY STOP SWITCH ON CONTROL CONSOLE, EMERGENCY STOP SWITCH ON TIER CONTROL PANEL, ONE EMERGENCY STOP SWITCH THAT MAY BE LOCATED IN THE CENTER OF THE MAIN FRAME NEAR REAR END OF MAIN CYLINDER, ONE EMERGENCY STOP SWITCH THAT MAY BE LOCATED IN THE CENTER OF THE EJECT FRAME NEAR REAR END OF EJECT CYLINDER, AND LOW OIL AND HOT OIL SHUTDOWN AND ALARM.
30. VENDOR TO INCLUDE ALL MANUFACTURER COLD WEATHER OPTIONS.
31. RESERVOIR MUST BE FITTED WITH TWO THERMOSTATICALLY CONTROLLED 4.5KW SUBMERSIBLE TANK HEATERS
32. THE HORSEPOWER FOR THE HIGH EFFICIENCY COOLING FAN MUST BE SUFFICIENT FOR CONTINUOUS OPERATION OF THE EQUIPMENT
33. AT TIME OF INSTALLATION, VENDOR MUST INCLUDE RECOMMENDED SPARE PARTS KIT FOR BALER AND WIRE TIER.
34. PROVIDE A BALER PARTS LIST MANUAL INCLUDING ELECTRICAL AND HYDRAULIC SCHEMATICS.
35. INCLUDE THREE SIDED SLOPING HOPPER EXTENSION ON LOADING SIDE. (HOPPER TO ALLOW FOR INSTALLATION OF FUTURE CONVEYOR)
36. PROVIDE VERSA-DOOR (OR APPROVED EQUIVALENT) COMBINATION HYDRAULIC BALE SEPARATION DOOR AND OVERSIZED BALE RELEASE
37. BALE DISCHARGE TABLE IS REQUIRED OF HEAVY PLATE STEEL, MIN 1/2" THICKNESS.
38. BALER SHALL PRODUCE STANDARD BALE SIZE TYPICALLY 30" X 45" X 60".

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STATE OF ALASKA 49TH PAUL B GLOBE II Dec. 3, 14 No. A 12249 REGISTERED PROFESSIONAL ENGINEER

PROJECT: A–2014–05

CITY and BOROUGH of JUNEAU
RECYCLING BALER & TIER INSTALLATION
5600 Tonsgard Ct, (Capitol Disposal)
CBJ Contract No. E15-147
Juneau, Alaska

DATE ISSUED: 2014 / 11 / 24

ISSUED FOR:
- PROGRESS ☐
- REVIEW & COMMENT ☐
- BID / PERMIT ■
- CONSTRUCTION ☐

FILE NAME: TH ARCH AK \2014–05

REVISIONS:
- 1 .
- 2 .
- 3 .
- 4

SHEET TITLE: ARCHITECTURAL EQUIPMENT NOTES: BALER & WIRE TIER

SHEET NO. A101

PART 2 - PRODUCT (CONTINUED)

39. 135 GPM HYDRAULIC PUMP CAPACITY.
40. REPLACEABLE OIL FILTRATION FILTERS OF 10-MICRON MINIMUM ALLOWED WITH REPLACEABLE RESERVOIR BREATHER FILTERS.
41. THE HORSEPOWER OF THE OIL CIRCULATION PUMP MUST BE SUFFICIENT FOR CONTINUOUS OPERATION OF THE EQUIPMENT.
42. 12" BORE X 8.5" ROD X 126" STROKE MAIN CYLINDER.
43. 8" BORE X 5.5" ROD X 77" STROKE EJECT CYLINDER.
44. MAIN COMPRESSION CYLINDER SHALL PROVIDE MINIMUM FORCE OF 169 TONS AND 209 PSI RAM FACE PRESSURE.
45. MAIN RAM PENETRATION TO WITHIN 8" OF END WALL.
46. EJECT COMPRESSION CYLINDER SHALL PROVIDE. MINIMUM FORCE OF 75 TONS AND 138 PSI RAM FACE PRESSURE.
47. EJECT PLATEN SHOULD EJECT THE BALE A MINIMUM OF 8" PAST EJECT NOZZLE.
48. BALER SYSTEM OPERATING PRESSURE MUST BE A MINIMUM OF 3000 PSIG.
49. HYDRAULIC RESERVOIR SHOULD HAVE CAPACITY OF APPROXIMATELY 500 GALLONS.
50. RAMS MUST BE POSITIONED BY LASER CONTROL. THE MAIN AND EJECT CYLINDERS WILL BE POSITIONED BY LASER CONTROL. ALL OTHER CYLINDERS MAY BE CONTROLLED BY TRANDUCER WITH MAGNET OR APPROVED EQUIVALENT.
51. BALER TO HAVE THE ABILITY FOR INTERNET ACCESS. AS AN ETHERNET CONNECTION WOULD BE ACCEPTABLE.
52. REPLACEABLE STANDARD TOOL STEEL RAM KNIFE.
53. TOOL STEEL BEAM BLADE.
54. 18.8 TON HYDRAULIC STAMPER MOUNTED ABOVE THE SHEAR BLADE TO CLEAR SHEAR JAMS.
55. BALER MAIN EJECT AND DOOR CYLINDER TO BE TRUNNION MOUNT OR APPROVED EQUIVALENT.
56. MAIN COMPRESSION, HIGH CYCLE, CYLINDER TO BE HYDRONAMICS 3000 PSI (OR APPROVED EQUIVALENT).
57. BALER TO BE FULLY TESTED TO FULL OPERATING PRESSURES AT FACTORY BEFORE SHIPMENT.
58. BALER TO BE PROPERLY PREPARED FOR A LONG DISTANCE SHIPMENT FOR ROAD AND BARGE OVER SALT WATER TO ALASKA.
    - STRETCH (SHRINK) WRAPPED SEALED FOR PROTECTION FROM SALT WATER SPRAY.

AUTOMATIC WIRE TIER REQUIREMENTS:
ACCENT MODEL 470 12 GAUGE. THE WIRE TIER SHALL BE INSTALLED ON THE BALER WITH SEPARATE TIER CONTROL PANEL COMPLETELY WIRED AND INCORPORATED INTO BALER CONTROLS.

- MUST USE 12 GAUGE WIRE.
- MUST HAVE THERMOSTATICALLY CONTROLLED CONTROL PANEL WITH MODEM DIAGNOSTICS.
- WIRE TYING EQUIPMENT IS REQUIRED TO HAVE THE MAXIMUM SAFETY DEVICES AND GUARDS.
- WIRE TYING EQUIPMENT WILL BE SHOP ASSEMBLED WITH BALER AND COATED (PAINTED) AS SPECIFIED.
- INCLUDE ANY AND ALL MOUNTING HARDWARE.
- MUST MEET ELECTRICAL POWER REQUIREMENT INCLUDING CONNECTIONS AND DISCONNECTS- WITH POWER SUPPLY FROM BALER PANEL.

FABRICATION: MATERIALS USED IN THE FABRICATION OF THIS EQUIPMENT MUST BE FREE OF DAMAGING KINKS AND SHARP BENDS. FORMING OF MATERIALS IS TO BE ACCOMPLISHED BY METHODS THAT WILL NOT CAUSE INJURY TO THE MATERIAL. SHEARING, CHIPPING AND CUTTING IS TO BE NEAT AND ACCURATE. ALL MAJOR BENDS AND CORNERS MUST BE MADE PROFICIENTLY, ENSURING UNIFORMITY OF SIZE AND SHAPE.

PART 2 - PRODUCT (CONTINUED)

FABRICATION, GENERAL SHOP ASSEMBLY: PREASSEMBLE ITEMS IN THE SHOP TO GREATEST EXTENT POSSIBLE. DISASSEMBLE UNITS ONLY AS NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES. CLEARLY MARK UNITS FOR REASSEMBLY AND COORDINATED INSTALLATION

BALER AND WIRE TIER COATING (PAINT):

- INDUSTRIAL & MARINE COATING MANUFACTURES:
  SHERWIN WILLIAMS
  TNEMEC
- PRIMER AND TOP COATING SYSTEM FROM SINGLE SOURCE: COATING SYSTEM RATED FOR A SEVERE SALT WATER MARINE ENVIRONMENT.
- BALER SURFACES SHALL BE PREPARED FOR COATING SYSTEM BY SHOT BLASTING OR SAND BLASTING ON ALL FOUR EXTERIOR SIDES, PER MANUFACTURE REQUIREMENTS.
- ALL METAL SURFACES MUST BE CLEANED, SCRAPED, PRIMED AND GROUND TO REMOVE SHARP EDGES.
- BALER SHALL HAVE ALL EXTERIOR AND INTERIOR SURFACES (EXCEPT UNDERSIDE OF FLOOR) PRIMED WITH ONE COAT OF HIGH SOLIDS, LOW VOC, AND RUST-INHIBITIVE PRIMER. UNDERSIDE OF FLOOR SHALL RECEIVE AN ASPHALT-BASED UNDERCOATING. EXTERIOR SIDES SHALL HAVE ONE COAT OF HIGH SOLIDS, LOW VOC, POLYURETHANE TOP COAT, OR EQUAL.
- ACCEPTABLE COLORS: RAL5010 GENTIAN BLUE FOR BAILER; RAL1023 TRAFFIC SAFETY YELLOW FOR WIRE TIER

BOLTED CONNECTIONS: BOLT HOLES ARE TO BE ACCURATELY PUNCHED OR DRILLED AND MUST HAVE BURRS REMOVED. WASHERS AND LOCK WASHERS ARE TO BE USED IN ACCORDANCE WITH APPROPRIATE COMMERCIAL PRACTICE. ALL NUTS, BOLTS, SCREWS AND OTHER HARDWARE ARE TO BE TIGHTENED TO WITHIN MANUFACTURER'S SPECIFICATIONS AND GOOD PRACTICE.

RIVETED CONNECTIONS: RIVET HOLES MUST BE ACCURATELY PUNCHED OR DRILLED, WITH BURRS REMOVED. RIVETS ARE TO BE DRIVEN WITH THE APPROPRIATE TOOLS AND WILL COMPLETELY FILL THE HOLES. HEADS, WHEN NOT COUNTERSUNK OR FLATTENED, MUST BE OF APPROVED SHAPE AND UNIFORM SIZE FOR THE DIAMETER OF THE RIVET.

WELDING AND SOLDERING: THE PROCEDURES AND STANDARDS USED MUST CONFORM TO NATIONALLY RECOGNIZED CODES AND STANDARDS. THE SURFACES TO BE WELDED ARE TO BE FREE OF RUST SCALE, PAINT, GREASE OR OTHER FOREIGN MATTER.

CASTINGS: ALL CASTINGS TO BE SOUND AND FREE FROM PATCHING, WARPING, OR ANY DEFECT, WHICH MIGHT REDUCE RELIABILITY OR PERFORMANCE.

MISCELLANEOUS ITEMS:

1. 10' LONG CONCRETE MEDIAN BARRIER, ALASKA DOT & PF PRECAST CONCRETE "F" SHAPE BARRIER G-46.10 WITH PIN SLEEVES EACH END.

2. 1/2" DIA EMT, (SEE ELECTRICAL SPECIFICATIONS)

PART 3 - INSTALLATION

PROJECT SITE CONDITIONS: THE INSTALL LOCATION IS IN A NON-HEATED AREA CURRENTLY USED FOR RECYCLING OPERATIONS. COORDINATE W/ PROPERTY OWNER AS REQUIRED FOR WORK TO TAKE PLACE DURING BOTH BUSINESS AND NON-BUSINESS HOURS.

EXAMINATION: EXAMINE SUBSTRATES, AREAS, AND CONDITIONS, WITH MANUFACTURE'S REPRESENTATIVE PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.

PART 3 - INSTALLATION (CONTINUED)

BALER INSTALLATION:
THE BASIS OF DESIGN BALER AND WIRE TIER IS COMPATIBLE WITH THE EXISTING FOUNDATION. ALL COSTS ASSOCIATED WITH THE BALER AND WIRE TIER'S INSTALLATION INCLUDING ANY OFF-LOADING, ELECTRICAL SERVICES, ELECTRICAL CONNECTIONS, ATTACHMENT OF BALER TO CONCRETE FLOOR, AND ANY OTHER INSTALLATION REQUIREMENTS WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE INCLUDED IN THE TOTAL BID.

A. THE CONTRACTOR WILL PROVIDE ALL OF THE FOLLOWING:
   - LABOR
   - EQUIPMENT
   - MATERIALS
   - SHIPPING
   - ANY INCIDENTALS
   - DELIVERY
   - OFFLOADING
   - AND ALL SPECIFICS REQUIRED FOR INSTALLATION OF A COMPLETE BALER AND WIRE TIER SYSTEM.

THE COMPLETE BALER INSTALLATION WILL REQUIRE SECURING THE BALER AND WIRE TIER STAND TO THE EXISTING CONCRETE FLOOR AND EXISTING STEEL PLATE .

HYDRAULIC AND ELECTRICAL CONNECTIONS MUST BE CONSIDERED AND ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. INSTALLATION INCLUDES THE BALER UNIT MAIN FRAME, BALER POWER UNIT, BALER UNIT CONTROL PANEL, BALER HOPPER EXTENSION, BALE UNIT EJECTION ASSEMBLY WITH WIRE TIER, WIRE TIER CONTROL PANEL AND WIRE TIER STAND.

B. THE CONTRACTOR WILL PROVIDE FOUNDATION DRAWING SHOWING BALER LOADS, FOR ANCHOR SIZING.

C. ANCHORS, BRACING, SUPPORTS AND OTHER MISCELLANEOUS HARDWARE ASSOCIATED WITH THE INSTALLATION ARE THE RESPONSIBILITY OF THE CONTRACTOR. SHIMS FOR LEVELING BALER ON EXISTING CONCRETE SLAB ARE THE RESPONSIBILITY OF THE CONTRACTOR. INSTALLATION CONTRACTOR TO SECURE THE BALER TO THE EXISTING CONCRETE SLAB ON GRADE.

D. THE BALER SHALL BE DESIGNED, ENGINEERED AND BUILT TO WITHSTAND THE ENVIRONMENT SUCH AS TYPICALLY FOUND IN THE RECYCLING INDUSTRY AND ALASKA.

E. CBJ RESERVES THE RIGHT TO INSPECT THE BALER AND ALL EQUIPMENT BEFORE SHIPMENT FROM THE MANUFACTURING FACILITY.

F. THE CONTRACTOR SHALL REMOVE THE EXISTING BALER AND STORE IT ON FLAT BED AT THE EXISTING FACILITY AS INDICATED ON DRAWING SHEET A201. PROTECT BALER WITH STRETCH (SHRINK) WRAP COVER.

PART 3 - INSTALLATION (CONTINUED)

G. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL INSTALLATION ACTIVITY WITH REPRESENTATIVES FROM CBJ AND THE CAPITOL LANDFILL MANAGER OR DESIGNEE. THE CONTRACTOR IS RESPONSIBLE FOR PROPER REMOVAL AND DISPOSAL OF ALL WASTE, DEBRIS AND EXCESS MATERIALS. RECYCLABLE DEBRIS MAY BE LEFT ON SITE IF COORDINATED THROUGH THE RECYCLING CENTER.

H. CONTRACTOR IS RESPONSIBLE FOR TRAINING CBJ AND CAPITOL LANDFILL PERSONNEL ON MAINTENANCE AND OPERATION OF THE BALER. TRAINING MUST COMMENCE UPON COMPLETION OF INSTALLATION.

I. STORAGE AND SECURITY OF ALL MATERIALS AND EQUIPMENT ARE THE RESPONSIBILITY OF THE CONTRACTOR.

J. NOTIFY CBJ SOLID WASTE COORDINATOR IMMEDIATELY OF ANY MATERIAL SHORTAGES OR PROBLEMS THAT WOULD CAUSE DELAYS.

K. AT TIME OF INSTALLATION COMPLETION, AN INSPECTION WILL BE CONDUCTED WITH CBJ SOLID WASTE COORDINATOR, MANUFACTURE REPRESENTATIVE, AND RECYCLING CENTER PERSONNEL. ALL PUNCH LIST ITEMS WILL BE CORRECTED WITHIN 5 BUSINESS DAYS.

START-UP AND TRAINING - BALER: THE CONTRACTOR'S REPRESENTATIVE WILL PROVIDE A FACTORY TECHNICIAN FOR A MINIMUM OF THREE CONTINUOUS DAYS OF ONSITE TRAINING FOR THE CBJ AND CAPITOL LANDFILL PERSONNEL IN THE OPERATION AND MAINTENANCE OF THE BALER.

START-UP AND TRAINING - WIRE TIER:
THE AUTOMATIC BALE WIRE TIER MANUFACTURER WILL PROVIDE A FACTORY TECHNICIAN FOR TWO CONTINUOUS DAYS FOR ONSITE TRAINING FOR THE CBJ AND CAPITOL LANDFILL PERSONNEL IN THE OPERATION AND MAINTENANCE OF THE WIRE TIER SYSTEM.

NOTE: IT IS EXPECTED THAT THE VENDOR PROVIDE FIVE CONTINUOUS DAYS OF TRAINING FOR THIS PROJECT AS SPECIFIED ABOVE.

PROVIDE THE FOLLOWING SUPPLIES:

- HYDRAULIC OIL APPROX. 475 GALLONS
- START-UP BALING WIRE: ONE STEM OF 12 GAUGE HI-TENSILE WIRE FOR AUTOMATIC TIER.
- ALL HARDWARE NECESSARY FOR BALER ASSEMBLY AND OPERATION INCLUDING, BUT NOT LIMITED TO, NUTS, BOLTS, WASHERS AND O, RINGS FOR THE BALER SUPPLIED BY THE BALER MANUFACTURER.

MISCELLANEOUS ITEMS:

1. INSTALL CONCRETE MEDIAN BARRIERS AS INDICATED ON DRAWINGS, WITH 1" DIA PINS IN PREDRILLED HOLES IN EXISTING CONCRETE FLOOR SLAB. FIELD LOCATE BARRIERS.
2. INSTALL 1/2" EMT TO RUN WIRE FEEDER FROM WIRE TIER STAND TO AUTOMATIC WIRE TIER AT BALE DISCHARGE.

CLEAN-UP AND INSPECTION: AT THE COMPLETION OF THE INSTALLATION, THE PROJECT WORK AREA MUST BE FREE OF ALL EQUIPMENT, DEBRIS, CONTAINERS, PACKAGING, ETC.

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STATE OF ALASKA 49TH
PAUL B GLOE II
Dec. 3, 14
No. A 12249
REGISTERED PROFESSIONAL ENGINEER

PROJECT: A-2014-05

CITY and BOROUGH of JUNEAU
RECYCLING BALER & TIER INSTALLATION
5600 Tonsgard Ct, (Capitol Disposal)
CBJ Contract No. E15-147
Juneau, Alaska

DATE ISSUED: 2014 / 11 / 24

ISSUED FOR:
PROGRESS ☐
REVIEW & COMMENT ☐
BID / PERMIT ■
CONSTRUCTION ☐

FILE NAME: TH ARCH AK \2014-05

REVISIONS:
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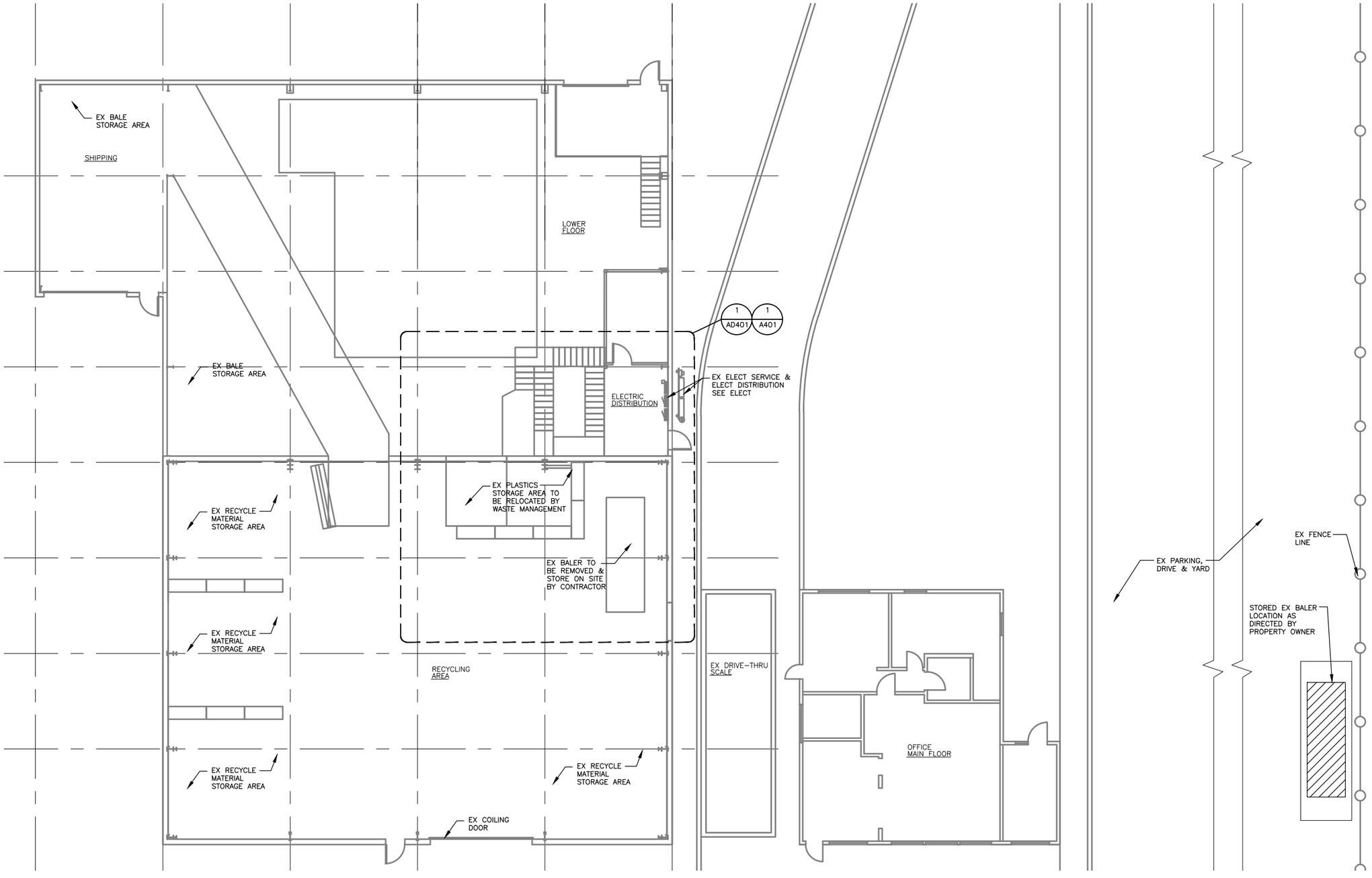
SHEET TITLE: ARCHITECTURAL EQUIPMENT NOTES: BALER & WIRE TIER - CONT.

SHEET NO. A102



1 OVERALL FLOOR PLAN

SCALE: 0 4' 8' 16'

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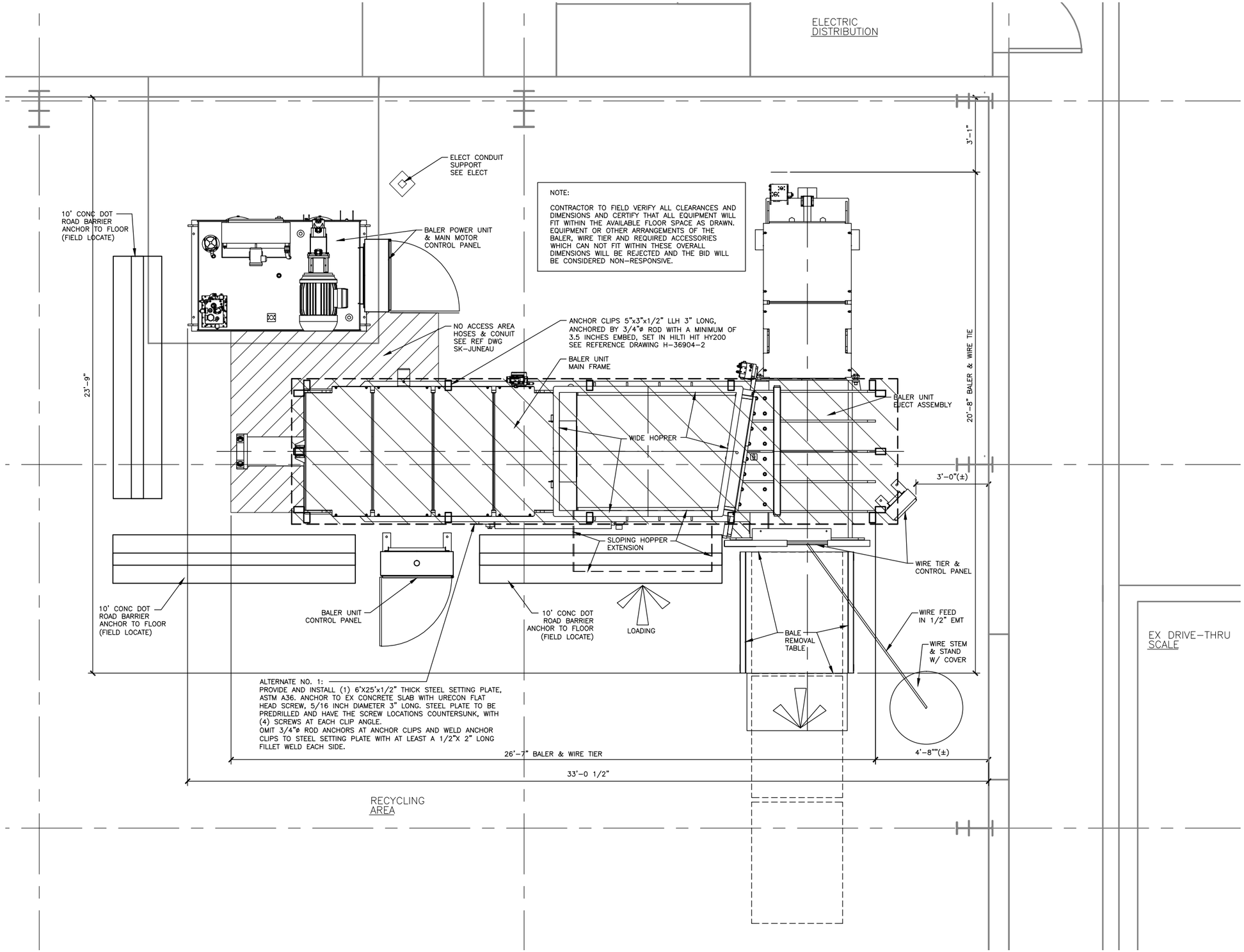
SHEET TITLE: OVERALL FLOOR PLAN

SHEET NO. A201



1 **ENLARGED FLOOR PLAN - EQUIPMENT LAYOUT & ALTERNATE NO. 1**

SCALE: 0 1' 2' 4'

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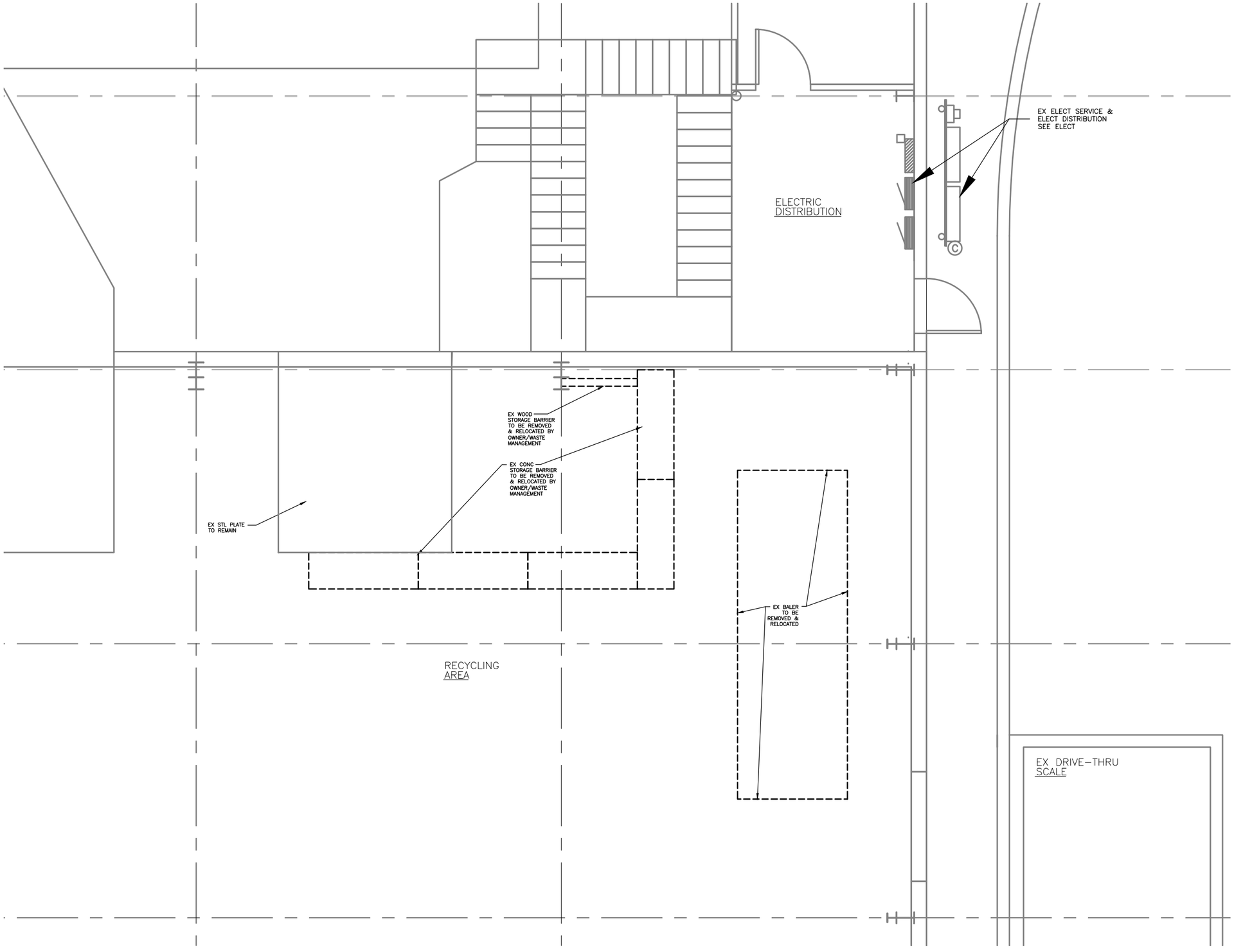
SHEET TITLE:
ENLARGED FLOOR PLAN - EQUIP LAYOUT & ALT NO. 1

SHEET NO.
A401



1 **ENLARGED FLOOR PLAN - DEMOLITION PLAN**

SCALE: 0 2' 4' 8'

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Juneau, Alaska

DATE ISSUED: 2014 / 11 / 24

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- CONSTRUCTION ☐

FILE NAME: TH ARCH AK \2014-05

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SHEET TITLE: **ENLARGED FLOOR PLAN - DEMOLITION PLAN**

SHEET NO. **AD401**

LEGEND

ABBREVIATIONS:

UON	UNLESS OTHERWISE NOTED
XFMR	TRANSFORMER
RSC	RIGID STEEL CONDUIT
C.B.	CIRCUIT BREAKER

SHEET NOTE SYMBOLS:

(N) NEW

POWER:

- DUPLEX RECEPTACLE
- CONDULET
- DISCONNECT

SERVICE EQUIPMENT:

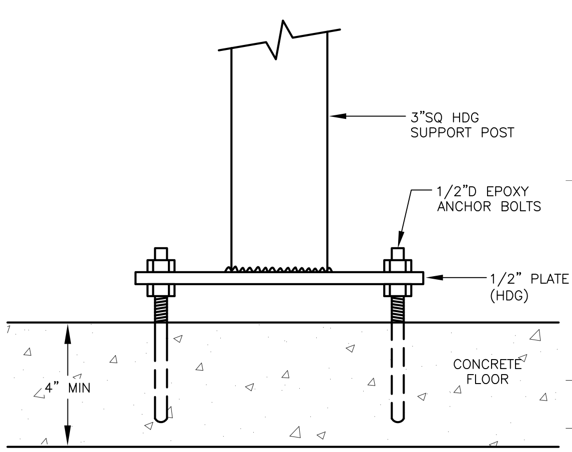
- TRANSFORMER
- PANELBOARD
- MAIN DISTRIBUTION PANEL

DIAGRAM SYMBOLS:

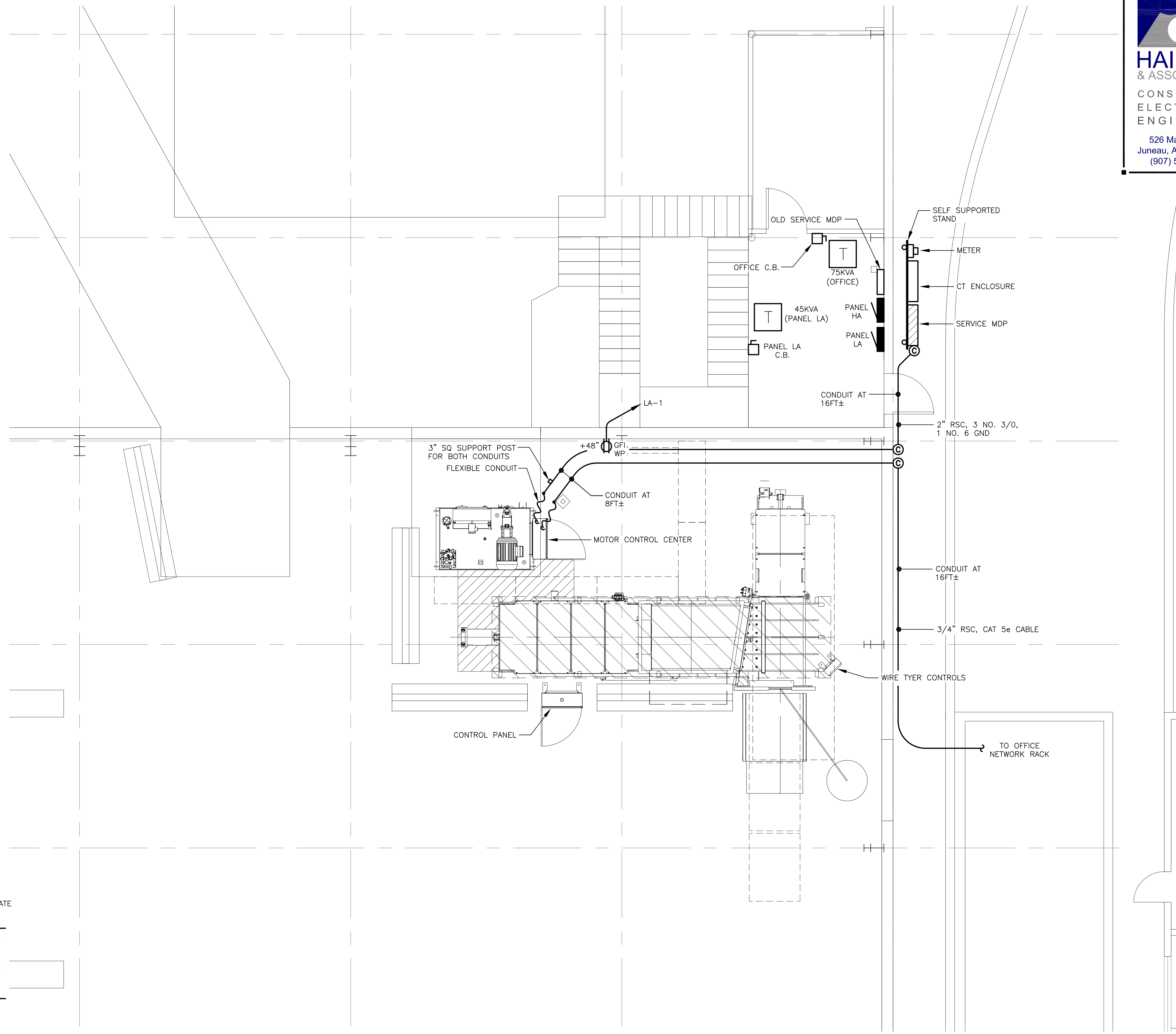
- CIRCUIT BREAKER
- CONTACT
- GROUND BUS
- GROUND ROD
- METER
- CURRENT TRANSFORMER
- TRANSFORMER

CONDUIT & CONDUCTORS:

- HOME RUN
- CONDUIT: 1/2" UON.
- UNGROUNDED CONDUCTORS (#12 AWG)
- NEUTRAL: #10 WITH DOT #12 OTHERWISE
- GROUND CONDUCTOR
- CONDUCTORS NOT SHOWN WHERE ONLY #12 NEUTRAL AND UNGROUNDED CONDUCTOR ARE REQUIRED
- FLEXIBLE CONDUIT



2 DETAIL - SUPPORT POST



1 ENLARGED FLOOR PLAN - EQUIPMENT LAYOUT

SCALE: 0 2' 4' 8'

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286-01
24 Nov. 2014

PROJECT: A-2014-05

CITY and BOROUGH of JUNEAU
RECYCLING BALER & TIER INSTALLATION
5600 Tonsgard Ct, (Capitol Disposal)
CBJ Contract No. E15-147
Juneau, Alaska

DATE ISSUED: 2014 / 11 / 24

ISSUED FOR:
- PROGRESS ☐
- 95% REVIEW & COMMENT ☐
- BID / PERMIT ■
- CONSTRUCTION ☐

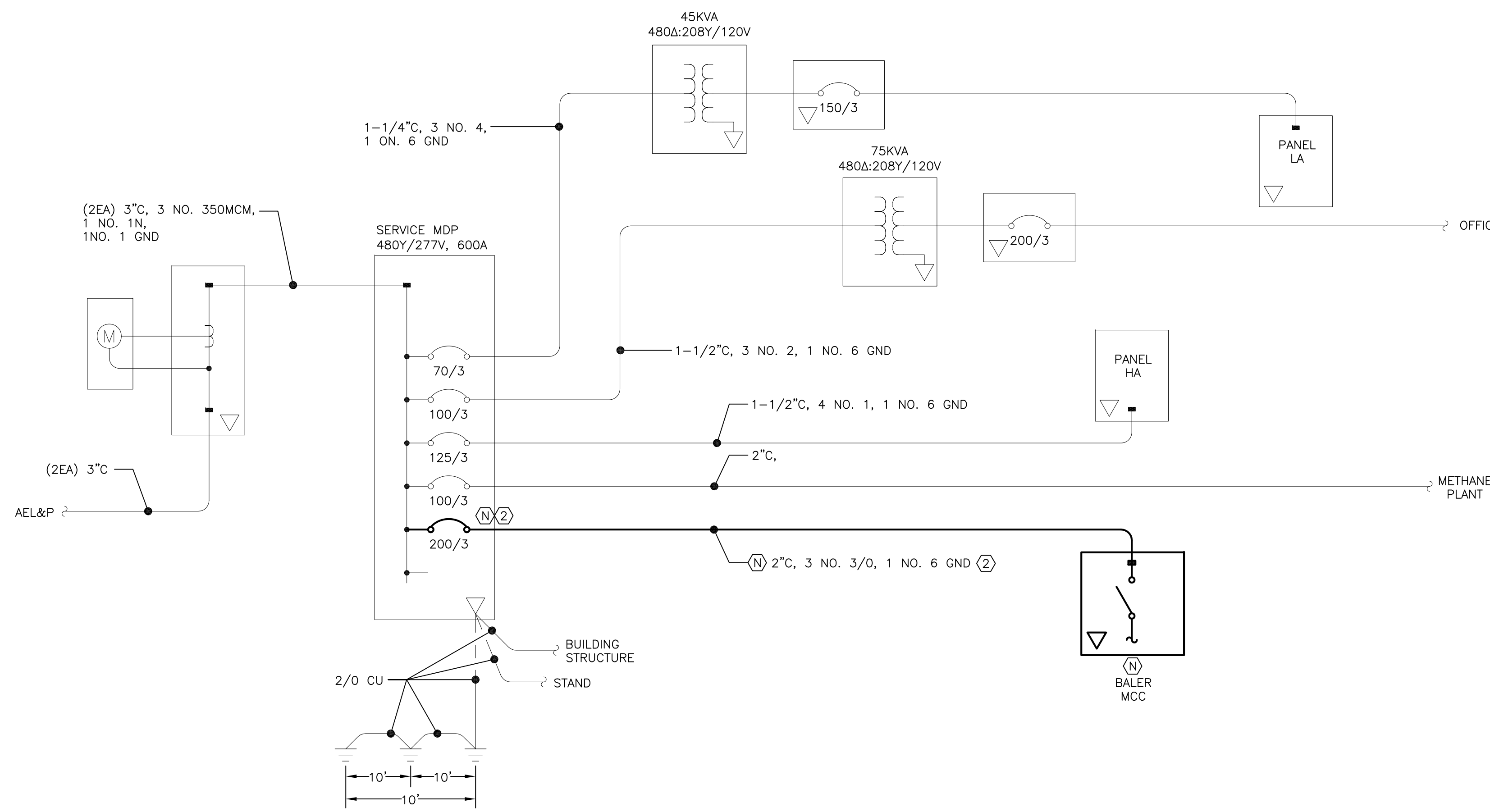
FILE NAME: TH ARCH AK \2014-05

REVISIONS:

SHEET TITLE: ENLARGED FLOOR PLAN - EQUIPMENT LAYOUT

SHEET NO. E101

Plotted 9/30/2014 10:45 AM by Robbie Jensen F:\Projects\286 TH Architecture\01 CBJ Recycle Baler\Drawings\Working\E101.dwg



NOTES:

1. THIS DIAGRAM ILLUSTRATES THE EXISTING SYSTEM CONFIGURATION WITH NEW ELEMENTS IDENTIFIED.
2. COORDINATE CIRCUIT BREAKER AND FEEDER RATING WITH THE BALER EQUIPMENT PROVIDED.

1 SINGLE LINE DIAGRAM - POWER DISTRIBUTION SYSTEM

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PROJECT: A-2014-05

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CBJ Contract No. E15-147
Juneau, Alaska

DATE ISSUED: 2014 / 11 / 24

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FILE NAME: TH ARCH AK \2014-05

REVISIONS:

SHEET TITLE: SINGLE LINE DIAGRAM

SHEET NO. E102

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Plotted 10/29/2014 8:33 AM by Robbie Jensen

SPECIFICATION

GENERAL

1.1 DEFINITIONS

A. IMC: INTERMEDIATE METAL CONDUIT.

B. LFMC: LIQUIDTIGHT FLEXIBLE METAL CONDUIT.

C. RSC: RIGID STEEL CONDUIT.

1.2 SUBMITTALS

A. PRODUCT DATA:

1. CONDUCTORS AND CABLES.

2. CONDUITS, RACEWAYS, AND BOXES.

3. OVERCURRENT PROTECTIVE DEVICES.

1.3 QUALITY ASSURANCE

A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.

B. COMPLY WITH NFPA 70.

1.4 COORDINATION

A. COORDINATE CHASES, SLOTS, INSERTS, SLEEVES, AND OPENINGS WITH GENERAL CONSTRUCTION WORK AND ARRANGE IN BUILDING STRUCTURE DURING PROGRESS OF CONSTRUCTION TO FACILITATE THE ELECTRICAL INSTALLATIONS THAT FOLLOW.

B. SEQUENCE, COORDINATE, AND INTEGRATE INSTALLING ELECTRICAL MATERIALS AND EQUIPMENT FOR EFFICIENT FLOW OF THE WORK. COORDINATE INSTALLING LARGE EQUIPMENT REQUIRING POSITIONING BEFORE CLOSING IN THE BUILDING.

C. COORDINATE LAYOUT AND INSTALLATION OF RACEWAYS, BOXES, ENCLOSURES, CABINETS, AND SUSPENSION SYSTEM WITH OTHER CONSTRUCTION.

1.5 FIELD QUALITY CONTROL

A. INSPECT INSTALLED COMPONENTS FOR DAMAGE AND FAULTY WORK, INCLUDING THE FOLLOWING:

1. SUPPORTING DEVICES FOR ELECTRICAL COMPONENTS.

2. ELECTRICAL IDENTIFICATION.

3. ELECTRICAL DEMOLITION.

4. CUTTING AND PATCHING FOR ELECTRICAL CONSTRUCTION.

5. TOUCHUP PAINTING.

B. CONDUCTOR AND CABLE TESTS:

1. AFTER INSTALLING CONDUCTORS AND CABLES AND BEFORE ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, TEST FEEDER CONDUCTOR INSULATION FOR COMPLIANCE WITH REQUIREMENTS.

C. WIRING DEVICES:

1. AFTER INSTALLING WIRING DEVICES AND AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, TEST FOR PROPER POLARITY, GROUND CONTINUITY, AND COMPLIANCE WITH REQUIREMENTS.

2. TEST GFCI OPERATION WITH BOTH LOCAL AND REMOTE FAULT SIMULATIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

1.6 REFININSHING AND TOUCHUP PAINTING

A. REFINISH AND TOUCHUP PAINT.

1. CLEAN DAMAGED AND DISTURBED AREAS AND APPLY PRIMER, INTERMEDIATE, AND FINISH COATS TO SUIT THE DEGREE OF DAMAGE AT EACH LOCATION.

2. FOLLOW PAINT MANUFACTURER'S WRITTEN INSTRUCTIONS FOR SURFACE PREPARATION AND FOR TIMING AND APPLICATION OF SUCCESSIVE COATS.

3. REPAIR DAMAGE TO GALVANIZED FINISHES WITH ZINC-RICH PAINT RECOMMENDED BY MANUFACTURER.

4. REPAIR DAMAGE TO PAINT FINISHES WITH MATCHING TOUCHUP COATING RECOMMENDED BY MANUFACTURER.

1.7 CLEANING AND PROTECTION

A. ON COMPLETION OF INSTALLATION, INCLUDING OUTLETS, FITTINGS, AND DEVICES, INSPECT EXPOSED FINISH. REMOVE BURRS, DIRT, PAINT SPOTS, AND CONSTRUCTION DEBRIS.

B. PROTECT EQUIPMENT AND INSTALLATIONS AND MAINTAIN CONDITIONS TO ENSURE THAT COATINGS, FINISHES, AND CABINETS ARE WITHOUT DAMAGE OR DETERIORATION AT TIME OF SUBSTANTIAL COMPLETION.

BASIC MATERIALS AND METHODS

1.1 SUPPORTING DEVICES

A. MATERIAL: COLD-FORMED STEEL, WITH CORROSION-RESISTANT COATING.

B. METAL ITEMS FOR USE OUTDOORS, IN DAMP LOCATIONS, OR IN CORROSIVE ENVIRONMENTS: HOT-DIP GALVANIZED STEEL, OR STAINLESS STEEL.

C. SLOTTED-STEEL CHANNEL SUPPORTS: FLANGE EDGES TURNED TOWARD WEB, AND 9/16-INCH-DIAMETER SLOTTED HOLES AT A MAXIMUM OF 2 INCHES O.C., IN WEBS.

1. CHANNEL THICKNESS: SELECTED TO SUIT STRUCTURAL LOADING.

2. FITTINGS AND ACCESSORIES: PRODUCTS OF THE SAME MANUFACTURER AS CHANNEL SUPPORTS.

D. RACEWAY AND CABLE SUPPORTS: MANUFACTURED CLEVIS HANGERS, RISER CLAMPS, STRAPS, THREADED C-CLAMPS WITH RETAINERS, AND WALL BRACKETS.

E. EXPANSION ANCHORS: CARBON-STEEL WEDGE OR SLEEVE TYPE.

F. POWDER-DRIVEN THREADED STUDS: HEAT-TREATED STEEL.

G. ELECTRICAL EQUIPMENT INSTALLATION:

1. HEADROOM MAINTENANCE: IF MOUNTING HEIGHTS OR OTHER LOCATION CRITERIA ARE NOT INDICATED, ARRANGE AND INSTALL COMPONENTS AND EQUIPMENT TO PROVIDE THE MAXIMUM POSSIBLE HEADROOM.

2. MATERIALS AND COMPONENTS: INSTALL LEVEL, PLUMB, AND PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, UNLESS OTHERWISE INDICATED.

3. EQUIPMENT: INSTALL TO FACILITATE SERVICE, MAINTENANCE, AND REPAIR OR REPLACEMENT OF COMPONENTS. CONNECT FOR EASE OF DISCONNECTING, WITH MINIMUM INTERFERENCE WITH OTHER INSTALLATIONS.

4. RIGHT OF WAY: GIVE TO RACEWAYS AND PIPING SYSTEMS INSTALLED AT A REQUIRED SLOPE.

H. ELECTRICAL SUPPORTING DEVICE APPLICATION:

1. ALL LOCATIONS: HOT-DIP GALVANIZED MATERIALS OR STAINLESS STEEL MATERIALS, U-CHANNEL SYSTEM COMPONENTS.

2. SELECTION OF SUPPORTS: COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

3. STRENGTH OF SUPPORTS: ADEQUATE TO CARRY PRESENT AND FUTURE LOADS, TIME A SAFETY FACTOR OF AT LEAST FOUR; MINIMUM OF 200-LB DESIGN LOAD.

I. SUPPORT INSTALLATION:

1. INSTALL SUPPORT DEVICES TO SECURELY AND PERMANENTLY FASTEN AND SUPPORT ELECTRICAL COMPONENTS.

2. INSTALL INDIVIDUAL AND MULTIPLE RACEWAY HANGERS AND RISER CLAMPS TO SUPPORT RACEWAYS. PROVIDE U-BOLTS, CLAMPS, ATTACHMENTS, AND OTHER HARDWARE NECESSARY FOR HANGER ASSEMBLIES AND FOR SECURING HANGER RODS AND CONDUITS.

3. SUPPORT INDIVIDUAL HORIZONTAL RACEWAYS SEPARATE, MALLEABLE-IRON PIPE HANGERS OR CLAMPS.

4. INSTALL ¼-INCH DIAMETER OR LARGER THREADED STEEL HANGER RODS, UNLESS OTHERWISE INDICATED.

5. SEPARATELY SUPPORT CAST BOXES THAT ARE THREADED TO RACEWAYS AND USED FOR FIXTURE SUPPORT. SUPPORT SHEET-METAL BOXES DIRECTLY FROM THE BUILDING STRUCTURE OR BY BAR HANGERS. IF BAR HANGERS ARE USED, ATTACH BAR TO RACEWAYS ON OPPOSITE SIDES OF THE BOX AND SUPPORT THE RACEWAY WITH AN APPROVED FASTENER NOT MORE THAN 24 INCHES FROM THE BOX.

6. INSTALL METAL CHANNEL RACKS FOR MOUNTING CABINETS, PANELBOARDS, DISCONNECT SWITCHES, CONTROL ENCLOSURES, PULL AND JUNCTION BOXES, TRANSFORMERS, AND OTHER DEVICES, UNLESS COMPONENTS ARE MOUNTED DIRECTLY TO STRUCTURAL ELEMENTS OF ADEQUATE STRENGTH.

7. SECURELY FASTEN ELECTRICAL ITEMS AND THEIR SUPPORTS TO THE BUILDING STRUCTURE, UNLESS OTHERWISE INDICATED. PERFORM FASTENING ACCORDING TO THE FOLLOWING UNLESS OTHER FASTENING METHODS ARE INDICATED:

a. WOOD: FASTEN WITH WOOD SCREWS OR SCREW-TYPE NAILS.

b. NEW CONCRETE: CONCRETE INSERTS WITH MACHINE SCREWS AND BOLTS.

c. EXISTING CONCRETE: EXPANSION BOLTS.

d. INSTEAD OF EXPANSION BOLTS, THREADED STUDS DRIVEN BY A POWDER CHARGE OR EPOXY SET ANCHORS, PROVIDED WITH LOCK WASHERS MAY BE USED IN EXISTING CONCRETE.

e. STEEL: WELDED THREADED STUDS OR SPRING-TENSION CLAMPS ON STEEL. FIELD WELDING: COMPLY WITH AWS D1.1. WELDING TO STEEL STRUCTURE MAY BE USED ONLY FOR THREADED STUDS, NOT FOR CONDUITS, PIPE STRAPS, OR OTHER ITEMS. LIGHT STEEL: SHEET-METAL SCREWS. FASTENERS: SELECT SO THE LOAD APPLIED TO EACH FASTENER DOES NOT EXCEED 25 PERCENT OF ITS PROOF-TEST LOAD.

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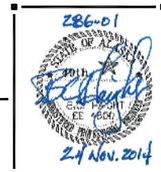

PROJECT: A-2014-05

CITY and BOROUGH of JUNEAU
RECYCLING BALER & TIER INSTALLATION
5600 Tonsgard Ct, (Capitol Disposal)
CBJ Contract No. E15-147
Juneau, Alaska

DATE ISSUED: 2014 / 11 / 24

ISSUED FOR:
PROGRESS ☐
95% REVIEW & COMMENT ☐
BID / PERMIT ■
CONSTRUCTION ☐

FILE NAME: TH ARCH AK \2014-05

REVISIONS:
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SHEET TITLE: SPECIFICATION

SHEET NO. E103

Plotted 10/30/2014 11:14 AM by Robbie Jensen
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1.2 IDENTIFICATION

A. IDENTIFICATION DEVICES: A SINGLE TYPE OF IDENTIFICATION PRODUCT FOR EACH APPLICATION CATEGORY. USE COLORS PRESCRIBED BY ANSI A13.1, NFPA 70, AND THESE SPECIFICATIONS.

B. TAPE MARKERS FOR WIRE: VINYL OR VINYL–CLOTH, SELF–ADHESIVE, WRAPAROUND TYPE WITH PREPRINTED NUMBERS AND LETTERS.

C. COLOR–CODING CABLE TIES: TYPE 6/6 NYLON, SELF–LOCKING TYPE. COLORS TO SUIT CODING SCHEME.

D. ENGRAVED–PLASTIC LABELS, SIGNS, AND INSTRUCTION PLATES: ENGRAVING STOCK, MELAMINE PLASTIC LAMINATE PUNCHED OR DRILLED FOR MECHANICAL FASTENERS 1/16–INCH MINIMUM THICKNESS FOR SIGNS UP TO 20 SQ.IN. AND 1/8–INCH MINIMUM THICKNESS FOR LARGER SIZES. ENGRAVED LEGEND IN WHITE LETTERS ON BLACK BACKGROUND.

E. FASTENERS FOR NAMEPLATES AND SIGNS: SELF–TAPPING, STAINLESS–STEEL SCREWS OR NO. 10/32 STAINLESS–STEEL MACHINE SCREWS WITH NUTS AND FLAT AND LOCK WASHERS.

F. FLOOR MARKING TAPE: 2–INCH WIDE, 5 MIL PRESSURE SENSITIVE VINYL TAPE WITH YELLOW AND BLACK STRIPES AND CLEAR VINYL OVERLAY.

G. INSTALLATION:

1. INSTALL AT LOCATIONS FOR MOST CONVENIENT VIEWING WITHOUT INTERFERENCE WITH OPERATION AND MAINTENANCE OF EQUIPMENT.
2. COORDINATE NAMES, ABBREVIATIONS, COLORS, AND OTHER DESIGNATIONS USED FOR ELECTRICAL IDENTIFICATION WITH CORRESPONDING DESIGNATIONS INDICATED IN THE CONTRACT DOCUMENTS OR REQUIRED BY CODES AND STANDARDS. USE CONSISTENT DESIGNATIONS THROUGHOUT PROJECT.
3. COLOR–CODE 208/120–V SYSTEM SECONDARY SERVICE, FEEDER, AND BRANCH–CIRCUIT CONDUCTORS THROUGHOUT THE SECONDARY ELECTRICAL SYSTEM AS FOLLOWS:
   a. PHASE A: BLACK
   b. PHASE B: RED
   c. PHASE C: BLUE
4. COLOR–CODE 480/277–V SYSTEM SECONDARY SERVICE, FEEDER, AND BRANCH–CIRCUIT CONDUCTORS THROUGHOUT THE SECONDARY ELECTRICAL SYSTEM AS FOLLOWS:
   a. PHASE A: BROWN
   b. PHASE B: ORANGE
   c. PHASE C: YELLOW
5. WORKSPACE INDICATION: INSTALL FLOOR MARKING TAPE TO SHOW WORKING CLEARANCES IN THE DIRECTION OF ACCESS TO LIVE PARTS. WORKSPACE SHALL BE AS REQUIRED BY NFPA 70 AND 29 CFR 1926.403 UNLESS OTHERWISE INDICATED. DO NOT INSTALL AT FLUSH–MOUNTED PANELBOARDS AND SIMILAR EQUIPMENT IN FINISHED SPACES.

1.3 DEMOLITION

A. PROTECT EXISTING ELECTRICAL EQUIPMENT AND INSTALLATIONS INDICATED TO REMAIN. IF DAMAGED OR DISTURBED IN THE COURSE OF THE WORK, REMOVE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL CAPACITY, QUALITY, AND FUNCTIONALITY.

B. ACCESSIBLE WORK: REMOVE EXPOSED ELECTRICAL EQUIPMENT AND INSTALLATIONS, INDICATED TO BE DEMOLISHED, IN THEIR ENTIRETY.

C. ABANDONED WORK: CUT AND REMOVE BURIED RACEWAY AND WIRING, INDICATED TO BE ABANDONED IN PLACE, 2 INCHES BELOW THE SURFACE OF ADJACENT CONSTRUCTION. CAP RACEWAYS AND PATCH SURFACE TO MATCH EXITING FINISH.

D. REMOVE DEMOLISHED MATERIAL FROM PROJECT SITE.

E. REMOVE, STORE, CLEAN, REINSTALL, RECONNECT, AND MAKE OPERATIONAL COMPONENTS INDICTED FOR RELOCATION.

1.4 CUTTING AND PATCHING

A. CUT, CHANNEL, CHASE, AND DRILL FLOORS, WALLS, PARTITIONS, CEILINGS, AND OTHER SURFACES REQUIRED TO PERMIT ELECTRICAL INSTALLATIONS. PERFORM CUTTING BY SKILLED MECHANICS OF TRADES INVOLVED.

B. REPAIR AND REFINISH DISTURBED FINISH MATERIALS AND OTHER SURFACES TO MATCH ADJACENT UNDISTURBED SURFACES. INSTALL NEW FIREPROOFING WHERE EXISTING FIRESTOPPING HAS BEEN DISTURBED. REPAIR AND REFINISH MATERIALS AND OTHER SURFACES BY SKILLED MECHANICS OF TRADES INVOLVED.

1.5 TOUCHUP PAINT

A. FOR EQUIPMENT: EQUIPMENT MANUFACTURER'S PAINT SELECTED TO MATCH INSTALLED EQUIPMENT FINISH.

B. GALVANIZED SURFACES: ZINC–RICH PAINT RECOMMENDED BY ITEM MANUFACTURER.

GROUNDING

1.1 GROUNDING CONDUCTORS

A. MATERIAL: COPPER, ONLY.

B. EQUIPMENT GROUNDING CONDUCTORS: INSULATED WITH GREEN–COLORED INSULATION.

C. BARE COPPER CONDUCTORS: COMPLY WITH THE FOLLOWING:

1. SOLID CONDUCTORS: ASTM B 3.
2. ASSEMBLY OF STRANDED CONDUCTORS: ASTM B 8.
3. TINNED CONDUCTORS: ASTM B 33.

D. COPPER BONDING CONDUCTORS: AS FOLLOWS:

1. BONDING CABLE: 28 KCMIL, 14 STRANDS OF NO. 17 AWG COPPER CONDUCTOR, ¼ INCH IN DIAMETER.
2. BONDING CONTUCTOR: NO.4 OR NO.6 AWG, STRANDED COPPER CONDUCTOR.
3. BONDING JUMPER: BARE COPPER TAPE, BRAIDED BARE COPPER CONDUCTORS, TERMINATED WITH COPPER FERRULES; 1–5/8 INCHES WIDE AND 1/16 INCH THICK.
4. TINNED BONDING JUMPER: TINNED–COPPER TAPE, BRAIDED COPPER CONDUCTORS, TERMINATED WITH COPPER FERRULES; 1–5/8 INCH WIDE AND 1/16 INCH THICK.

1.2 CONNECTOR PRODUCTS

A. COMPLY WITH IEEE 837 AND UL 467; LISTED FOR USE FOR SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND CONNECTED ITEMS.

B. BOLTED CONNECTORS: BOLTED–PRESSURE–TYPE CONNECTORS, OR COMPRESSION TYPE.

C. CRIMPED CONNECTORS: HIGH COMPRESSION TYPE, KIT FORM, AND SELECTED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

1.3 INSTALLATION

A. IN RACEWAYS, USE INSULATED EQUIPMENT GROUNDING CONDUCTORS.

B. CRIMP CONNECTIONS: USE FOR CONNECTIONS TO STRUCTURAL STEEL AND FOR UNDERGROUND CONNECTIONS, EXCEPT THOSE AT TEST WELLS.

C. EQUIPMENT GROUNDING CONDUCTOR TERMINATIONS: USE BOLTED PRESSURE CLAMPS.

CONDUCTORS AND CABLES

1.1 CONDUCTOR AND CABLE MATERIAL

A. COPPER COMPLYING WITH NEMA WC 5 OR 7; STRANDED FOR NO. 8 AWG AND LARGER.

B. INSULATION TYPES: TYPE THW, THHN–THWN, XHHW, USE, AND SO COMPLYING WITH NEMA WC 5 OR 7.

1.2 CONDUCTOR AND INSULATION APPLICATIONS

A. EXPOSED FEEDERS: TYPE THHN–THWN OR XHHW, SINGLE CONDUCTORS IN RACEWAY.

B. EXPOSED BRANCH CIRCUITS: TYPE THHN–THWN OR XHHW, SINGLE CONDUCTORS IN RACEWAY.

C. CORD DROPS AND PORTABLE APPLIANCE CONNECTIONS: TYPE SO, HARD SERVICE CORD.

D. CLASS 1 CONTROL CIRCUITS: TYPE THHE–THWN OR XHHW, SINGLE CONDUCTORS IN RACEWAY.

E. CLASS 2 CONTROL CIRCUITS: TYPE THHN–THWN OR XHHW, SINGLE CONDUCTORS IN RACEWAY.

F. COORDINATE CONDUCTOR INSULATION TEMPERATURE RATING AND AMPACITY RATING WITH THE TEMPERATURE AND AMPACITY RATING OF THEIR CIRCUIT PROTECTION DEVICES.

G. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS ACCORDING TO MANUFACTURER'S PUBLISHED TORQUE–TIGHTENING VALUES. IF MANUFACTURER'S TORQUE VALUES ARE NOT INDICATED, USE THOSE SPECIFIED IN UL 486A AND UL 486B.

H. MAKE SPLICES AND TAPS THAT ARE COMPATIBLE WITH CONDUCTOR MATERIAL AND THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATINGS THAN UNSPLICED CONDUCTORS.

1. USE OXIDE INHIBITOR IN EACH SPLICE AND TAP CONDUCTOR FOR ALL CONDUCTORS.

I. WIRING AT OUTLETS: INSTALL CONDUCTOR AT EACH OUTLET, WITH AT LEAST 6 INCHES OF SLACK.

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286-01
24 NOV. 2014

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FILE NAME: TH ARCH AK \2014-05

REVISIONS:

SHEET TITLE: SPECIFICATION

SHEET NO. E104

RACEWAYS

1.1 CONDUIT AND TUBING

A. RIGID STEEL CONDUIT: ANSI C80.1

B. IMC: ANSI C80.6

C. LFMC: FLEXIBLE STEEL CONDUIT WITH PVC JACKET, FEDERAL SPECIFICATION W–C–566C.

D. FITTINGS: NEMA FB 1; COMPATIBLE WITH CONDUIT AND TUBING MATERIALS.

1.2 WIREWAYS:

A. SHEET METAL SIZED AND SHAPED AS INDICATED, NEMA 1; SCREW–COVER TYPE. INCLUDE COUPLINGS, OFFSETS, ELBOWS, EXPANSION JOINTS, ADAPTERS, HOLD–DOWN STRAPS, END CAPS, AND OTHER FITTINGS TO MATCH AND MATE WITH WIREWAYS AS REQUIRED FOR COMPLETE SYSTEM.

1.3 INSTALLATION

A. OUTDOORS:

1. EXPOSED: RIGID STEEL OR IMC.
2. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR–DRIVEN EQUIPMENT): LFMC.
3. BOXES AND ENCLOSURES: NEMA 250, TYPE 3R OR 4.

B. INDOORS:

1. EXPOSED: RIGID STEEL OR IMC.
2. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR–DRIVEN EQUIPMENT): LFMC.
3. BOXES AND ENCLOSURES: NEMA 250, TYPE 1.

C. MINIMUM RACEWAY SIZE: ½–INCH TRADE SIZE.

D. RACEWAY FITTINGS: COMPATIBLE WITH RACEWAYS AND SUITABLE FOR USE AND LOCATION.

1. RIGID AND INTERMEDIATE STEEL CONDUIT: USE THREADED RIGID STEEL CONDUIT FITTINGS, UNLESS OTHERWISE INDICATED.

E. INSTALL EXPOSED RACEWAYS, AND RACEWAYS WITHIN ACCESSIBLE SPACES, PARALLEL OR AT RIGHT ANGLES TO NEARBY SURFACES OR STRUCTURAL MEMBERS AND FOLLOW SURFACE CONTOURS AS MUCH AS POSSIBLE.

1. RUN PARALLEL OR BANKED RACEWAYS TOGETHER ON COMMON SUPPORTS.
2. MAKE PARALLEL BENDS IN PARALLEL OR BANKED RUNS. USE FACTORY ELBOWS ONLY WHERE ELBOWS CAN BE INSTALLED PARALLEL; OTHERWISE, PROVIDE FIELD BENDS FOR PARALLEL RACEWAYS.

F. JOIN RACEWAYS WITH FITTINGS DESIGNED AND APPROVED FOR THAT PURPOSE AND MAKE JOINTS TIGHT.

1. USE INSULATING BUSHINGS TO PROTECT CONDUCTORS.

G. TIGHTEN SET SCREWS OF THREADLESS FITTINGS WITH SUITABLE TOOLS.

H. TERMINATIONS:

1. WHERE RACEWAYS ARE TERMINATED WITH LOCKNUTS AND BUSHINGS, ALIGN RACEWAYS TO ENTER SQUARELY AND INSTALL LOCKNUTS WITH DISHED PART AGAINST BOX. USE TWO LOCKNUTS, ONE INSIDE AND ONE OUTSIDE BOX.
2. WHERE RACEWAYS ARE TERMINATED WITH THREADED HUBS, SCREW RACEWAYS OR FITTINGS TIGHTLY INTO HUB SO END BEARS AGAINST WIRE PROTECTION SHOULDER. WHERE CHASE NIPPLES ARE USED, ALIGN RACEWAYS SO COUPLING IS SQUARE TO BOX; TIGHTEN CHASE NIPPLE SO NO THREADS ARE EXPOSED.

I. INSTALL PULL WIRES IN EMPTY RACEWAYS. USE POLYPROPYLENE OR MONOFILAMENT PLASTIC LINE WITH NOT LESS THAN 200–LB TENSILE STRENGTH. LEAVE AT LEAST 12 INCHES OF SLACK AT EACH END OF PULL WIRE.

J. LOW VOLTAGE SYSTEM RACEWAYS, 2–INCH TRADE SIDE AND SMALLER: IN ADDITION TO ABOVE REQUIREMENTS, INSTALL RACEWAYS IN MAXIMUM LENGTHS OF 150 FEET AND WITH A MAXIMUM OF TWO 90–DEGREE BENDS OR EQUIVALENT. SEPARATE LENGTHS WITH PULL OR JUNCTION BOXES WHERE NECESSARY TO COMPLY WITH THESE REQUIREMENTS.

K. FLEXIBLE CONNECTIONS: USE MAXIMUM OF 36 INCHES OF FLEXIBLE CONDUIT FOR EQUIPMENT SUBJECT TO VIBRATION, NOISE TRANSMISSION, OR MOVEMENT; AND FOR ALL MOTORS. INSTALL SEPARATE GROUND CONDUCTOR ACROSS FLEXIBLE CONNECTIONS.

BOXES, ENCLOSURES, AND CABINETS

1.1 SHEET METAL OUTLET AND DEVICE BOXES: NEMA OS 1.
1.2 CAST–METAL OUTLET AND DEVICE BOXES: NEMA FB 1, TYPE FD, WITH GASKETED COVER.
1.3 SMALL SHEET METAL PULL AND JUNCTION BOXES: NEMA OS 1.
1.4 CAST–METAL PULL AND JUNCTION BOXES: NEMA FB 1, CAST ALUMINUM WITH GASKETED COVER.
1.5 HINGED–COVER ENCLOSURES: NEMA 250, TYPE 1, WITH CONTINUOUS HINGE COVER AND FLUSH LATCH.

A. METAL ENCLOSURES: STEEL, FINISHED INSIDE AND OUT WITH MANUFACTURER'S STANDARD ENAMEL.

WIRING DEVICES

1.1 RECEPTACLES

A. STRAIGHT–BLADE–TYPE RECEPTACLES: COMPLY WITH NEMA WD1, NEMA WD 6, DSCC W–C–596G, AND UL 498, 20 AMPERE MINIMUM.

B. STRAIGHT–BLADE AND LOCKING RECEPTACLES: HEAVY–DUTY GRADE.

C. GFCI RECEPTACLES: STRAIGHT BLADE, FEED–THROUGH TYPE, HEAVY–DUTY GRADE, WITH INTEGRAL NEMA WD 6, CONFIGURATION 5–20R DUPLEX RECEPTACLE; COMPLYING WITH UL 498 AND UL 943. DESIGN UNITS FOR INSTALLATION IN A 2–3/4–INCH–DEEP OUTLET BOX WITHOUT AN ADAPTER.

1.2 WALL PLATES

A. SINGLE TYPES TO MATCH CORRESPONDING WIRING DEVICES.

1. PLATE–SECURING SCREWS: METAL WITH HEAD COLOR TO MATCH PLATE FINISH.
2. MATERIAL FOR WET LOCATIONS: CAST ALUMINUM WITH SPRING–LOADED LIFT COVER, AND LISTED AND LABELED FOR USE IN "WET LOCATIONS". COVERS HINGED TO OPERATE VERTICALLY.

1.3 INSTALLATION

A. INSTALL DEVICES AND ASSEMBLIES LEVEL, PLUMB, AND SQUARE WITH BUILDING LINES.

B. ARRANGEMENT OF DEVICES: UNLESS OTHERWISE INDICATED, MOUNT FLUSH, WITH LONG DIMENSION VERTICAL, AND WITH GROUNDING TERMINAL OF RECEPTACLES ON BOTTOM. GROUP ADJACENT SWITCHES UNDER SINGLE, MULTIGANG WALL PLATES.

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286-01
24 Nov. 2014

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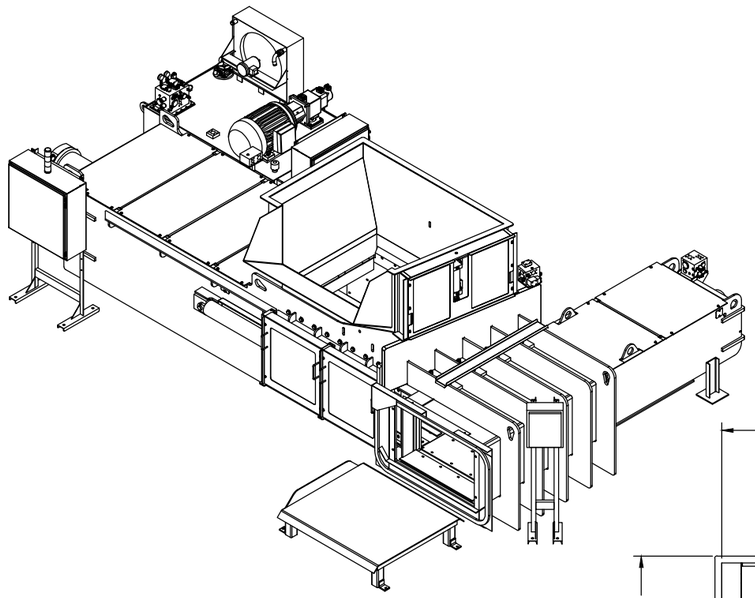
FILE NAME: TH ARCH AK \2014-05

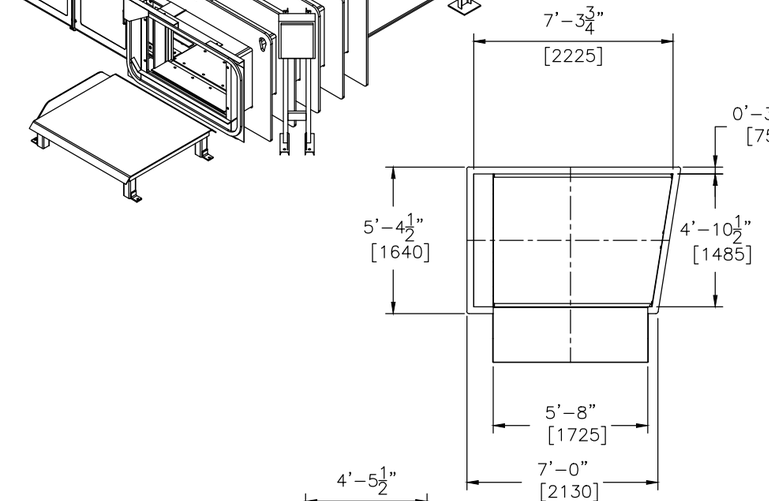
REVISIONS:

SHEET TITLE: SPECIFICATION

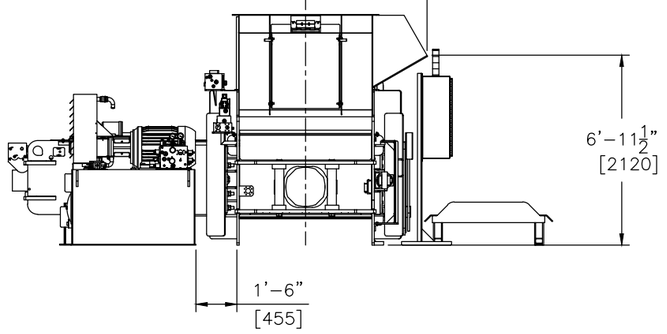
SHEET NO. E105

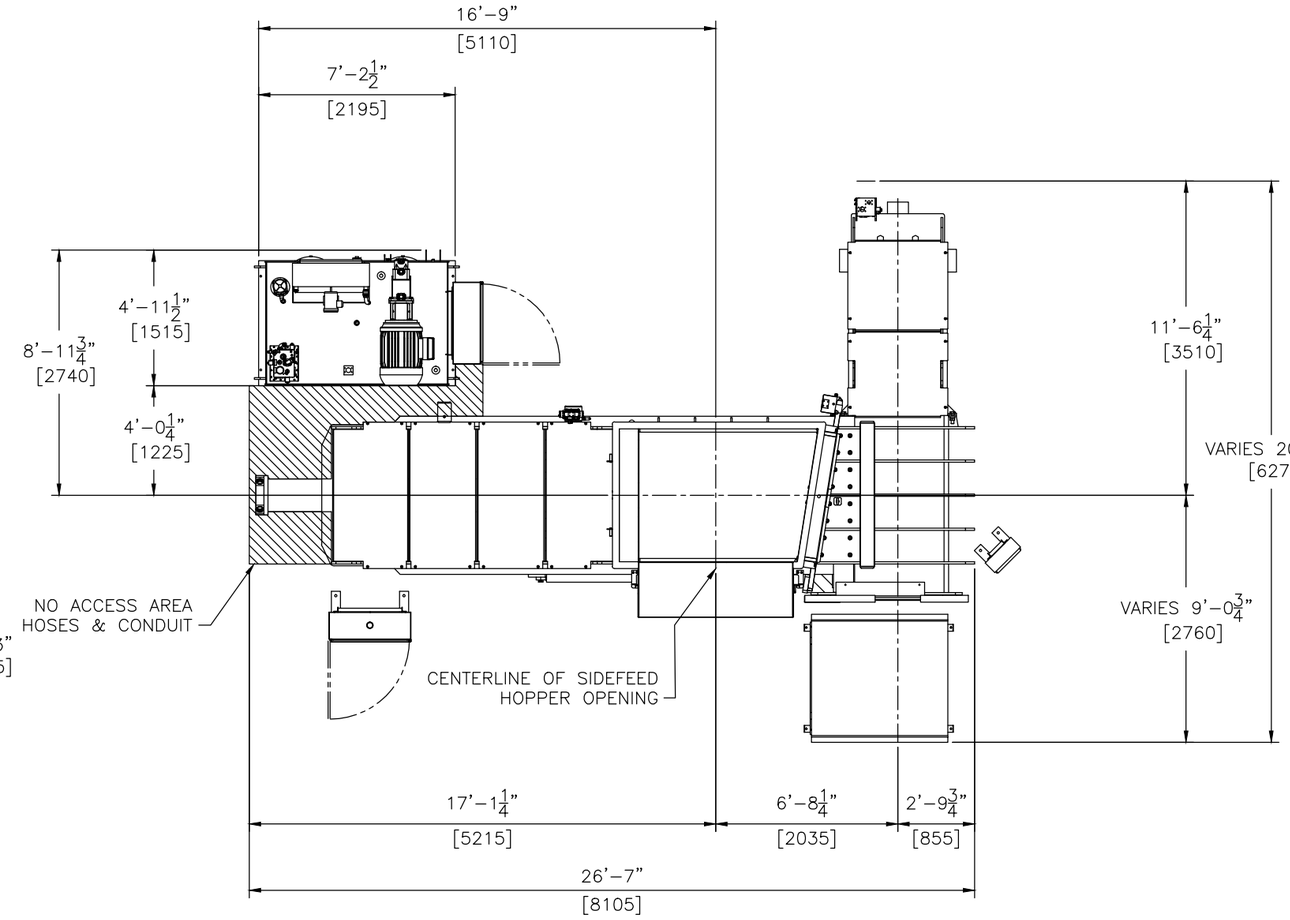
Plotted 11/4/2014 10:03 AM by Robbie Jensen F:\Projects\286 TH Architecture\01 CBJ Recycle Baler\Drawings\Working\E105.dwg

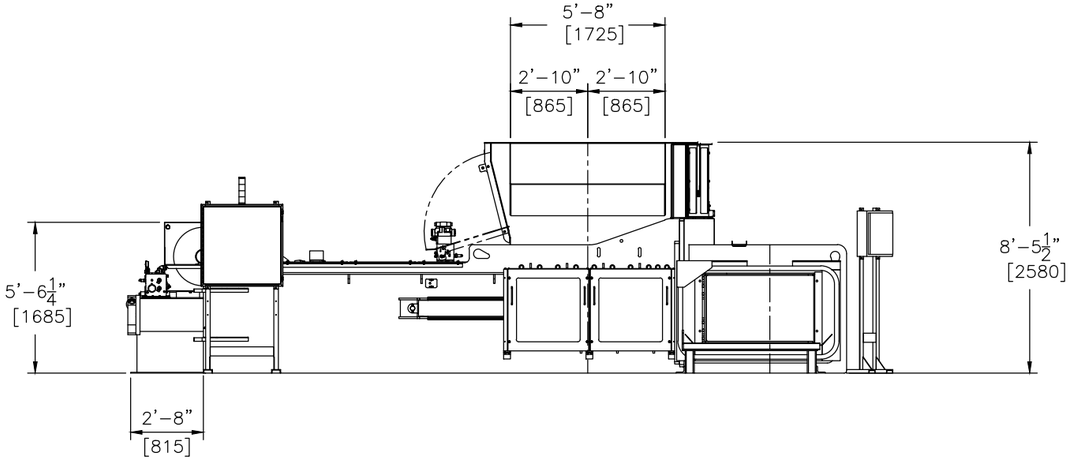




HOPPER FLANGE DETAIL







APPROVED BY _____

DATE: _____

DIMENSIONS ARE NOT CERTIFIED

AMERICAN BALER COMPANY
800 East Center Street
Bellevue, Ohio 44811

DRAWN BY: MAH | DATE: 10–30–14 | SHEET 1 OF 1

CUSTOMER

MODEL: W721R–75S W/STAMPER & SIDEFEED HOPPER LAYOUT DRAWING

DWG. NO.: SK–JUNEAU

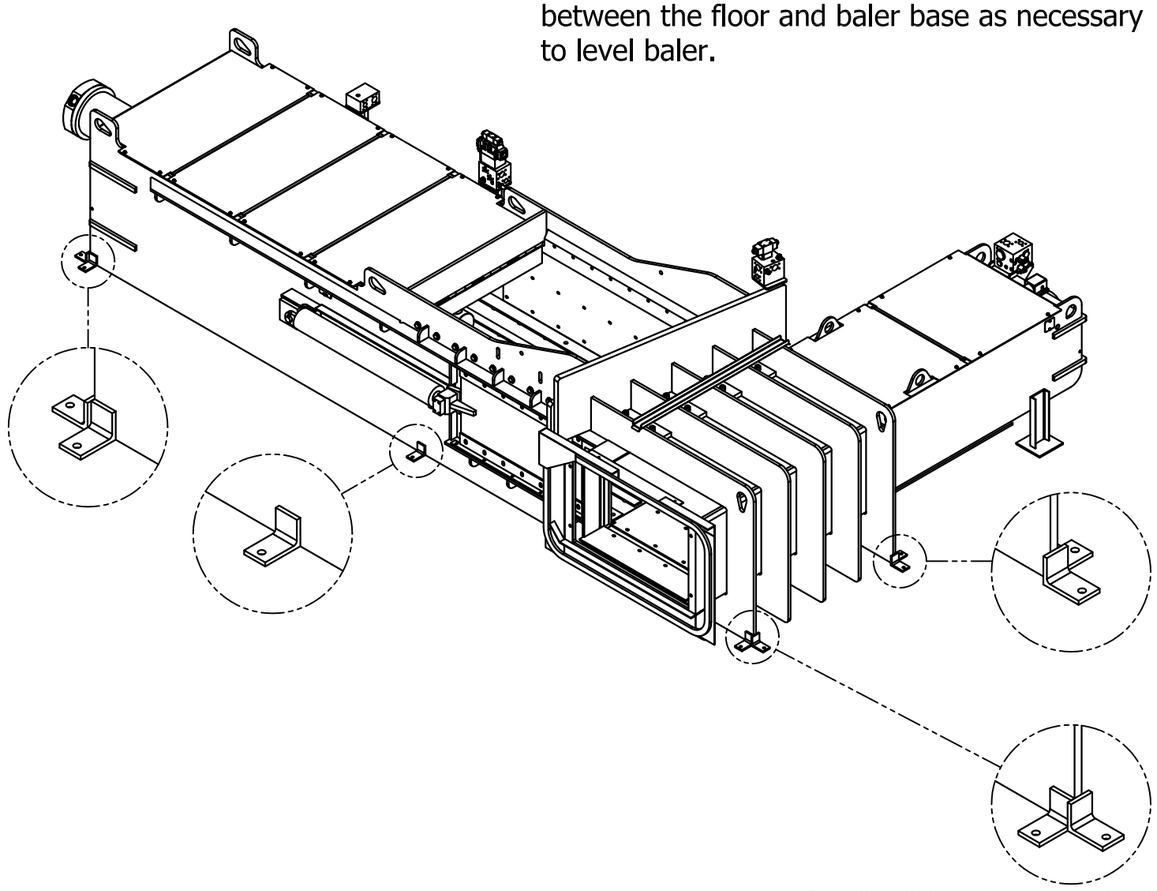
REV.

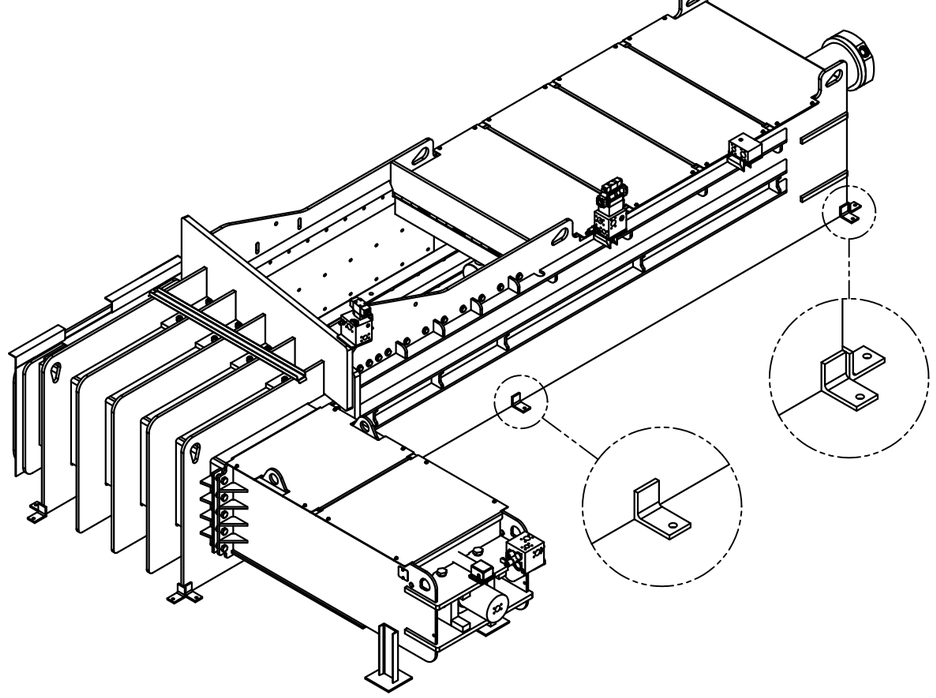
Parts List			
ITEM	QTY	NAME	DESCRIPTION
1	10	M10212-066	ANCHOR CLIP 5 X 3-1/2 X 1/2 X 3 LG

During normal baling operations, the baler may have a tendency to "walk" or move if it is not properly secured. This may lead to problems with alignment for hose and electrical connections as well as wire feed and floor loading. While the bale table, wire stand, and electrical consoles may all be lagged to the floor, it is not recommended to directly lag the baler itself to the floor. Doing so may lead to broken welds, or pulled lag bolts breaking concrete.

It is recommended to use angles (supplied) which are pressed tight against the baler frame (as shown) both sides and lagged with a (3/4 x 5 lag bolt) to the floor. This keeps the baler in place, but allows it to flex slightly as designed.

Level Baler before installing anchor clips.
Place a level on the floor at baler base, and shim between the floor and baler base as necessary to level baler.





Do Not Weld Anchor Clips To The Baler Frame

REV	ECN NO.	DATE	BY	DESCRIPTION

AMERICAN BALER COMPANY

AMERICAN BALER COMPANY
BELLEVUE, OHIO 44811

USED ON:	
SIMILAR TO:	
MATERIAL CODE:	
INITIAL ECN:	
DRAWN BY: MAH	
DATE: 11-15-12	
SCALE: ----	
SHEET 1 OF 1	

TOLERANCES UNLESS SPECIFIED
ANGLES ±1°
FRACTIONAL ±1/16
DECIMAL
X.X ±0.1 X.XXX ±0.001
X.XX ±0.01 X.XXXX ±0.0001

TITLE: ANCHOR CLIP LOCATIONS W721R

SIZE D | DWG. NO. H-36904-2 | REV.