

PUYALLUP, WA STORE NO.: 2403-278

DRAWING INDEX

GENERA	L				
C1	COVER SHEET	PLUMBIN	NG	ELECTRIC	CAL
C2	RESPONSIBILITY MATRIX	MP1	MECHANICAL AND PLUMBING PLAN	BAS1	BUILDING AUTOMATION SYSTEM PLAN
N1	GENERAL INFORMATION	P1	ENLARGED PLUMBING PLAN, DETAILS AND SCHEDULE	E1	ELECTRICAL PLANS, DETAILS AND SCHEDULES
N2	ENVELOPE COMPLIANCE			E1.1	ELECTRICAL COMPLIANCE REPORT
		MECHAN	NICAL	E1.1A	ELECTRICAL COMPLIANCE REPORT
ARCHITE	ECTURAL	M1	ENLARGED MECHANICAL PLAN	E1.2	SITE LIGHTING PLAN AND DETAILS
D1	DEMOLITION PLAN AND DETAILS	M2	MECHANICAL DETAILS AND SCHEDULES	E2	PICKUP STORAGE POWER PLAN, NOTES AND DETAILS
A1	FLOOR PLAN	BAS2	BUILDING AUTOMATION SYSTEM	E3	ELECTRICAL ONE-LINE, DETAILS AND SCHEDULES
A4	ROOF PLAN AND DETAILS				
A4.1	EXPANSION WALL SECTION & ROOF DETAILS	REFRIGE	ERATION	RACKING	
A6.1	PARTITION TYPES AND WALL DETAILS	BAS3	BUILDING AUTOMATION SYSTEM REFRIGERATION PLANS	FXS1	FIXTURE ANCHORAGE PLAN, NOTES AND DETAILS
A8	DOOR SCHEDULE, FINISHES AND DETAILS	BAS4	BUILDING AUTOMATION SYSTEM REFRIGERATION SCHEDULES		
OP1.0	EXTERIOR EXPANSION FLOOR PLANS AND DETAILS	BAS5	BUILDING AUTOMATION SYSTEM REFRIGERATION DETAILS	SPECIAL I	ELEMENTS
OP1.1	ENLARGED WALK-IN PLANS AND DETAILS	BAS6	BUILDING AUTOMATION SYSTEM REFRIG LEAK DETECTION	OS1	OWNER SUPPLIED ITEMS
OP1.2	EXPANSION WALL SECTIONS AND DETAILS		PLAN		
OP1.3	EXPANSION ELEVATIONS	RD1	REFRIGERATION DEMO PLAN		
OP1.4	EDGE PROTECTION	R1	PICKUP REFRIGERATION PLAN		COVER SHEET
OP2.0	RESPONSIBILITY SCHEDULE	R2	REFRIGERATION SCHEDULES	CS1	PICKUP DEMOLITION PLAN & SITE PLAN
		R3	REFRIGERATION DETAILS	CS1A	HORIZONTAL CONTROL PLAN
STRUCT	URAL	R4	REFRIGERATION SUBMITTALS	CS2	SITE SIGNAGE PLAN
S0	GENERAL STRUCTURAL INFORMATION AND DETAILS			CS3	SITE DETAILS
S1	FOUNDATION PLAN AND DETAILS			CS4	GRADING PLAN
S2	ROOF FRAMING PLAN AND DETAILS			CS5	EROSION & SEDIMENT CONTROL PLAN (INITIAL)
S3	STRUCTURAL DETAILS			CS6	EROSION & SEDIMENT CONTROL PLAN (INTERIM/FINAL)
				L1.0	LANDSCAPE PLAN
FIRE PR	OTECTION			L1.1	LANDSCAPE NOTES AND DETAILS
FP1	FIRE SPRINKLER SITE PLAN			IR1.0	IRRIGATION PLAN

FP2 FIRE SPRINKLER REMODEL PIPING PLAN

BUILDING CODE SU	MMARY				
	NAME OF PROJECT STREET ADDRESS PROPOSED USE			PUYALLUP, W 310 31ST AVE RETAIL	A NUE SE, PUYALLUP, WA 98374
CODES	BUILDING CODE MECHANICAL CODE PLUMBING CODE ELECTRICAL CODE ENERGY CODE FIRE CODE ACCESSIBILITY CODE			2018 WASHIN 2018 WASHIN 2018 WASHIN 2018 WASHIN 2018 WASHIN 2018 WASHIN ICC A117.1+IB	GTON STATE BUILDING CODE GTON STATE MECHANICAL CODE GTON STATE PLUMBING CODE GTON STATE ELECTRICAL CODE GTON STATE ENERGY CODE GTON STATE FIRE CODE C CHAPTER 11
OCCUPANCY	M - MERCANTILE; WHOLESALE S1 - STORAGE AREA; MOTOR \ STOCKROOMS (MIXED USE)	E OR RETAIL STORE (MA VEHICLE STATION AND	AIN USE) RECEIVING AND	SECTION 309. SECTION 311.	1 2
	A2 - ASSEMBLY USE; BREAKROUSE)	OOM AND FOOD TENAN		SECTION 303.	1
TYPE OF CONSTRUCTION	II-B UNPROTECTED (SPRINKLE	ERED)		PER SECTION	602.2 AND TABLES 601 AND 602
FIRE PROTECTION	BUILDING IS EQUIPPED THROI SYSTEM AND IS SURROUNDEI PERMANENT OPEN SPACE. UN	UGHOUT WITH AN AUTO O ON ALL SIDES BY 60 F NLIMITED AREA CRITER	DMATIC SPRINKLER EET MINIMUM OF IA IS APPLICABLE.		
OCCUPANT LOAD:			BUILDING AREAS	<u>:-</u>	
RETAIL: OFFICES: STORAGE: GARDEN CENTER: TOTAL OCCUPANT LC	157,384 4.346 38,642 19,489 PAD:	7/30 = 5,246 7/100 = 44 7/300 = 129 9/30 = 650 6,069	EXISTING AR PROPOSED E TOTAL PROP	EA: XPANSION: OSED AREA:	197,132 SF 3,232 SF 200,364 SF
EGRESS WIDTHS REQUIR	RED:				
RETAIL: OFFICES: STORAGE: GARDEN CENTER: TOTAL WIDTH REQUIF	5,246 x .2 44 x .2 129 x .2 650 x .2 RED:	= 1,050 INCHES = 9 INCHES = 26 INCHES = 130 INCHES 1,215 INCHES			
EGRESS WIDTHS PROVID	DED:				
RETAIL/GARDEN CEN OFFICES: STORAGE: TOTAL WIDTH PROVIE	TER: DED:	1,384 INCHES 68 INCHES 101 INCHES 1,553 INCHES			
RCHITECTURAL/STRUCTURAL	<u>.</u>	ELECTRICAL/MECHA	NICAL/PLUMBING ENGINE	ER:]
D PARTNERS RCHITECT OF RECORD 107 DISCOVERY BLVD JBLIN, OHIO 43017 HONE: (614) 634-7000		WD PARTNERS ENGINEER OF RECO 7007 DISCOVERY BLV DUBLIN, OHIO 43017 PHONE: (614) 634-700	RD /D 10		
RE PROTECTION ENGINEER:		STRUCTURAL ENGIN	EER (RACKING):		BUILDING REVIEW:
ELGIAN 0 CIRCLE 75 PARKWAY, SUIT TLANTA, GEORGIA 30339 HONE: (770) 432-3882	E 680	JOHNSTON BURKHO 930 CENTRAL STREE KANSAS CITY, MISSC PHONE: (816) 412-420	LDER ASSOCIATES, LLC T DURI 64105 10		CITY OF PUYALLUP PERMIT CENTER 333 S MERIDIAN 2ND FLOOR PUYALLUP, WA 98371 253-841-5481

Wa mart > Remodeled sqft: EXPANSION SQFT: TOTAL SQFT:

PLANNING AND ZONING REVIEW:	MECHANICAL/ELECTRICAL/PLUMBING REVIEW:	FIRE SPRINKLER & ALARM REVIEW:
CITY OF PUYALLUP PLANNING SERVICES 333 S MERIDIAN 2ND FLOOR PUYALLUP, WA 98371 253-864-4165	CITY OF PUYALLUP PERMIT CENTER 333 S MERIDIAN 2ND FLOOR PUYALLUP, WA 98371 253-841-5481	CITY OF PUYALLUP FIRE PREVENTION DIVISION 333 S MERIDIAN 2ND FLOOR PUYALLUP, WA 98371 253-864-4171





	VICINITY MAP	GENERAL NOTES
310 31ST AVENUE SE, PUYALLUP, WA 98374	WFG National Title 7-11 fuel Island Sportsman's Warehouse Subscore some Subscore some Subsc	 BUILDING IS FULLY SPRINKLERED AS REQUIRED BY CONTRACT DOCUMENTS. SUBMIT FIRE SPRINKLER SYSTEM DRAWINGS AND CALCULATIONS TO AUTHORITIES HAVING JURISDICTION (FIRE DEPARTMENT, FIRE MARSHAL, ETC). OBTAIN ALL APPROVALS PRIOR TO FABRICATION OR INSTALLATION. OWNER WILL PROVIDE, OR HAS ALREADY PROVIDED FIRE EXTINGUISHERS IN ACCORDANCE WITH NFPA 10. AUTHORITY HAVING JURISDICTION WILL APPROVE FINAL FIRE EXTINGUISHER LOCATIONS. WALMART'S ALARM CENTRALS ENGINEERING TEAM HAS CONTACTED THE AUTHORITY HAVING JURISDICTION FOR PRE-PLAN DATA ABOUT STATE AND LOCAL REQUIREMENTS THAT DIFFER FROM TH NATIONALLY PUBLISHED CODES AND STANDARDS. / COMPLETE SITE SPECIFIC SUBMITTAL IS BEING MADE DIRECTLY TO THE AUTHORITY HAVING JURISDICTION. QUESTIONS SHOULD BE DIRECTED TO 1-800-530-9924, OPTION 3. THE MAXIMUM STORAGE HEIGHT IS TWELVE FEET EXCEPT IN THE GENERAL MERCHANDISE RECEIVINC
	GENERAL	AREA IMMEDIATELY ADJACENT TO THE DOCK DOORS. THE STOCKROOM WILL HAVE A STACKING
	SCOPE OF WORK	HEIGHT OF 15 FEET OF CLASS I-IV COMMODITIES IN FIXED, SINGLE AND DOUBLE ROW RACKS. THE
	 DOORS: REPAIR/REPLACE AS NOTED. PICKUP STORAGE (RIGHT SIDE): REMODEL/INSTALL NEW EQUIPMENT AND WALK-IN AS NOTED ONLINE PICKUP: IMPLEMENT PICKUP 2.0 AND REMODEL EXISTING PICKUP AREA IF EXISTING ROOF: INSTALL EQUIPMENT AS SHOWN FLOORING: REPAIR / REPLACE AS NOTED PICKUP EXTERIOR: REPAINT PARKING AND ACCESS STRIPING AS NOTED. INSTALL NEW SITE DIRECTIONAL SIGNAGE AS NOTED. 	 STACKING HEIGHT OF THE ROLLING RACK AREA WIL NOT EXCEED 12 FEET. REINSTALL ALL FIRE EXTINGUISHERS IMMEDIATELY FOLLOWING COMPLETION OF FINAL FINISH TO MOUNTING SURFACE. REFER TO GENERAL CONTRACTOR PERMIT, REGISTRATION, NOTIFICATION INSPECTION & INSTALLER CERTIFICATION (GCPRN) REPORT LOCATED IN GC PERMIT INFORMATION FOLDER ON OWNER'S DOCUMENT DELIVERY WEBSITE.

HEALTH REVIEW:	STORE MANAGER:
TACOMA-PIERCE COUNTY HEALTH DEPARTMENT 3629 SOUTH D ST TACOMA, WA 98418 253-649-1706	JASON VAN NESS WALMART STORE NO. 2403-278 310 31ST AVENUE SE, PUYALLUP, WA 98374 PHONE: (253) 770-4399





7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM





	ISSUE BLO	CK
1	PR#1	01/25/22
2	PR#2	03/18/22
3	ADD#2	05/11/22
CHE	CKED BY:	SME
DRA	WN BY:	MA/AK/SH
PRC	TO CYCLE:	07/30/21
DOC		: 09/08/21



DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION



C1

SHEET:

		RESPONSIBILITY MATRIX			
THE PURPOSE OF THIS DOCUMENT IS	TO PROVIDE AN	EASY ACCESS TO SOME OF THE IMPORTANT INFORMATION NEEDED FOR THIS PROJECT. THIS MATRIX IS NOT AN INCLUSIVE SCOPE OF WC	RK AND DOES NOT REPLA	ACE THE REQUIREMENTS IDENTIFIED IN THE REST OF THE CONTRAC	T DOCUMENTS.
ITEM DESCRIPTION	FURNISHED BY	INSTALLED BY COORDINATION TASK	CONTACT	PHONE & EMAIL	LOCATION IN DOCUMENTS
NEW AUTO SLIDING DOOR PACKAGES, INCLUDING NEW PICKUP OR EXPANSION DOORS.	OWNER	OWNER GC TO CONFIRM DOOR MANUFACTURER'S ROUGH OPENING AND DRAWINGS DIMENSIONS BEFORE DOORS CAN BE BUILT AND SHIPPED. DOOR PRODUCTION DOES NOT BEGIN UNTIL ROUGH OPENINGS ARE CONFIRMED.	STANLEY ACCESS TECHNOLOGIES RECORD-USA	STANLEY ACCESS TECHNOLOGIES, FARMINGTON, CT CONTACT: CARLA MESSINA, NATIONAL ACCOUNTS PROJECT MANAGER, (860) 801-0267 RECORD-USA MONROE, NC CONTACT: DAVID PICKERS, VP OF DIRECT SALES, (704) 315-7392	REF SPECIFICATION 01600 FOR LONG LE
REPLACEMENT OF EXISTING AUTO SLIDING DOOR INCLUDING PICK-UP & OTHER LOCATIONS	OWNER	OWNER STANLEY DISPATCHES TECHNICIAN TO CONFIRM EXISTING CONDITIONS AND ROUGH OPENINGS	STANLEY ACCESS TECHNOLOGIES RECORD-USA	STANLEY ACCESS TECHNOLOGIES, FARMINGTON, CT CONTACT: CARLA MESSINA, NATIONAL ACCOUNTS PROJECT MANAGER, (860) 801-0267 RECORD-USA MONROE, NC CONTACT: DAVID PICKERS, VP OF DIRECT SALES, (704) 315-7392	
SALVAGE PICKUP REFRIDGERATION EQUIPMENT	N/A	 PROPAK: ACC TO REMOVE REFRIDGERATED EQUIPMENT. PROPAK TO DECOMMISSION EQUIPMENT AND REMOVE REFRIDGERANT. CC TO PALLETIZE EQUIPMENT AND CONTACT PROPAK FOR REMOVAL. N/A HUSSMANN HUSSMANN TO DECOMMISSION AND SALVAGE REFRIDGERATED CASES TO BE RE-USED FOR NEW OGP ACTIVATIONS. CC RESPONSIBLE FOR ALL OTHER SCOPE DUE TO OGP CASE REMOVAL, INCLUDING REMOVAL OF DOOR FRAMES AS NEEDED. 	PROPAK HUSSMANN	PROPAK CONTACT: DONALD PARTAIN - walmart@propak.com HUSSMANN CONTACT: RANDY BADSKY - Randy.Badsky@Hussmann.com	SPEC SECT 02023

LEAD TIMES







	AS REQUIRED FOR THE INS
3.	WHEN UTILITIES ARE REMO
4.	WHEN REMOVING EXISTING
	SYSTEMS TO KEEP THE EXIS
5.	THE CONTRACTOR MAY NO
	WATERTIGHT. COORDINATE
	OPENINGS.
6.	THE CONTRACTOR SHALL R
	NEW SIGNAGE AT COMPLET
7.	NOTES INDICATING DEMOLI

THE ARCHITECT HAS MADE A SCOPE VISIT WITH MEASUREMENTS AND PHOTOGRAPHS OF EXISTING CONDITIONS AND THE ARCHITECTURAL DRAWINGS INDICATE EXISTING CONDITIONS VERIFIED IN THE FIELD. IT, HOWEVER, REMAINS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS PRIOR TO THE SUBMISSION OF A BID AND TO THE COMMENCEMENT OF ANY WORK. NO ADDITIONAL COMPENSATION WILL BE PAID DUE TO THE CONTRACTOR'S FAILURE TO VERIFY EXISTING SITE CONDITIONS WHICH INCLUDE, BUT ARE NOT LIMITED TO, GRADES, EXTENT OF PAVING, OR UTILITIES. ANY DISCREPANCY WITH THE EXISTING SITE CONDITIONS AND/OR THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION AND INSTRUCTION. THESE CONSTRUCTION DOCUMENTS HAVE BEEN DESIGNED AND DRAWN ASSUMING EXISTING BUILDING CONDITIONS MATCH THE ORIGINAL DRAWINGS. THE GENERAL CONTRACTOR, IMMEDIATELY UPON ARRIVAL AT THE SITE, SHALL VERIFY ALL EXISTING STRUCTURAL COLUMN DIMENSIONS, STRUCTURAL BEARING HEIGHTS, EXISTING DIMENSIONS, TOP OF MASONRY ELEVATIONS, ROOFING CONDITIONS (INCLUDING PARAPETS, SCUPPERS AND ROOF DRAINS), AND JOIST BEARING ELEVATIONS PRIOR TO THE FABRICATION OF ANY STRUCTURAL ITEMS, IF DISCREPANCIES ARE FOUND BETWEEN WHAT IS SHOWN ON THE DRAWINGS AND EXISTING FIELD CONDITIONS, CONTACT THE WALMART CONSTRUCTION MANAGER AND THE ARCHITECT IMMEDIATELY TO DETERMINE WHAT ACTION SHOULD BE TAKEN TO MATCH EXISTING CONDITIONS. THE BEGINNING OF STRUCTURAL STEEL FABRICATION BY THE GENERAL CONTRACTOR. STEEL FABRICATOR. OR JOIST MANUFACTURER MEANS ACCEPTANCE OF THE EXISTING CONDITIONS. ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES (WHETHER SHOWN OR NOT) PRIOR TO THE SUBMISSION OF A BID OR THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE WALMART CONSTRUCTION MANAGER OF THE DISCOVERY OF EXISTING UTILITIES NOT SHOWN OR NOTED ON DRAWINGS. . THE CONTRACTOR SHALL VERIFY AND MAINTAIN (REPAIR IF DAMAGED) EXISTING IRRIGATION SYSTEMS AFFECTED BY THE CONSTRUCTION OF THIS

. THE CONTRACTOR SHALL FIELD LOCATE AND VERIFY ALL PROPERTY LINES, EASEMENTS, SETBACKS AND RESTRICTIONS. A REGISTERED SURVEYOR SHALL ESTABLISH ALL PROPERTY LINES AND SETBACKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND CLEARLY FLAG PROPERTY LINES AND SETBACKS. IT REMAINS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO DETERMINE EXACT LOCATION OF ALL SAID BOUNDARIES. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND DEPTHS OF UNDERGROUND UTILITY SERVICES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY ALL GRADES AND PROPOSED FINAL GRADES. IF RAMPS, STOOPS, STAIRS, SIDEWALKS, FLATWORK OR PAVING ARE INSTALLED, VERIFY FINAL GRADES SURROUNDING THE NEW CONSTRUCTION AND ADJUST STAIR RISERS, RAMP LENGTHS, LIMITS OF PAVING, ETC., TO ACCOMMODATE THE REQUIRED RAMP SLOPE, RISER HEIGHTS OR PAVING AREAS. ALL RAMPS AND STAIRS SHALL MEET ADA-ADAAGS (OR ADOPTED HANDICAP ACCESSIBILITY REQUIREMENTS). IF THERE IS A CONFLICT IN FIELD CONDITIONS, NOTIFY WALMART CONSTRUCTION MANAGER AND THE ARCHITECT PRIOR TO THE CONSTRUCTION OR ORDERING OF MATERIALS. THE CONTRACTOR SHALL VERIFY THE EXISTING FINISH FLOOR ELEVATION AT ALL NEW OPENINGS OF THE EXISTING BUILDING PRIOR TO ESTABLISHING THE

FINISH FLOOR ELEVATION. TO VERIFY FLOOR ELEVATION, THE CONTRACTOR SHALL REMOVE A SMALL PORTION OF THE BLOCK WALL AT THE PROPOSED THE CONTRACTOR SHALL VERIFY EXISTING FOOTING DEPTHS AND MATCH AT NEW ADDITION TO INSURE PROPER BLOCK COURSING. ANY DISCREPANCY SHALL BE REPORTED TO THE WALMART CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. 10. THE CONTRACTOR SHALL CORE THE ROOF INSULATION TO DETERMINE ITS THICKNESS AFTER CONTRACT AWARD. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MATCH EXISTING ROOF INSULATION THICKNESS ON THE ADDITION UNLESS DIRECTED OTHERWISE TO INSTALL 3-INCH INSULATION IN SEPARATED AND ISOLATED ROOF CONDITIONS. REFER TO ROOFING SPECIFICATION SECTION. 1. REPORT ANY DISCREPANCIES FOUND IN THE FIELD IMMEDIATELY TO WALMART AND THE ARCHITECT PRIOR TO MAKING ANY STRUCTURAL MODIFICATIONS

ALL WORK SHALL BE DONE IN A SAFE AND WORKMANLIKE MANNER AND IN STRICT ACCORDANCE WITH THE LOCAL AND/OR STATE (IF APPLICABLE) BUILDING CODES, NATIONAL ELECTRIC CODE, ADA-ADAAG AND OTHER ADOPTED ACCESSIBILITY STANDARDS, OSHA, AND ALL APPLICABLE CODES, REGULATIONS, PROVISIONS REGARDING THE USE OF GAS AND DIESEL EQUIPMENT WITHIN AN ENCLOSED BUILDING, FORMERLY INCLUDED IN THIS PARAGRAPH, ARE NOW PROVISIONS REGARDING CORDS FOR ELECTRICAL EQUIPMENT AND ROUTING OF EQUIPMENT CORDS AND HOSES, FORMERLY INCLUDED IN THIS PARAGRAPH, ARE NOW INCLUDED IN SECTION 01351 - REGULATORY COMPLIANCE EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO REVIEW THESE DOCUMENTS DOES NOT RELIEVE THE SUBCONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMING WORK PROPERLY. NO

THE EXISTING BUILDING SHALL BE PROTECTED FROM MOISTURE, DUST AND DEBRIS. INSTALL DUST PARTITIONS OR DRAPES AS REQUIRED AND/OR AS DIRECTED BY WALMART CONSTRUCTION MANAGER TO KEEP DUST AND MOISTURE FROM THE OPERATING AREAS OF THE STORE. ANY DAMAGE TO WALMART'S PROPERTY, WHICH OCCURS DURING THE PROCESS OF CONSTRUCTION SHALL BE REPAIRED/REPLACED AT NO ADDITIONAL COST TO WALMART; THIS INCLUDES ALL MERCHANDISE. CONTRACTOR SHALL PAY THE COST FOR ALL DAMAGED MERCHANDISE THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF THE EXISTING BUILDING SECURITY AT ALL TIMES. THIS INCLUDES KEEPING THE BUILDING SECURE FROM PERSONS, ENVIRONMENTAL ELEMENTS OR HAZARDS. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE INTEGRITY OF ALL EXISTING SECURITY SYSTEMS. THE CONTRACTOR SHALL OBTAIN PERMISSION FROM THE STORE MANAGER PRIOR TO THE MODIFICATION OF ANY EXISTING SECURITY SYSTEM FOR THE OPENING (DEMOLITION) OF ANY EXTERIOR WALL. THE CONTRACTOR SHALL KEEP THE WORK AREA CLEAN AND FREE OF DEBRIS AND REMOVE ALL TRASH AND DEBRIS FROM THE CONSTRUCTION AREA DAILY. NO FLAMMABLE MATERIALS OR LIQUIDS MAY BE STORED IN THE EXISTING BUILDING OR IN ANY NEW ADDITION. REMOVE ANY EXISTING EQUIPMENT, FIXTURES, FURNISHINGS, ACCESSORIES, SERVICES, FINISHES OR SURFACES AS REQUIRED SHOWN OR NOT SHOWN, FOR THE INSTALLATION OF NEW CONSTRUCTION. PROVIDE FURRING FOR CONDUITS AND PIPING, SHOWN OR NOT, AND FINISH OUT FURRING TO MATCH

10. REPAIR, RE-ROUTE, AND EXTEND ALL SERVICES, PIPING, CONDUIT OF EXISTING ITEMS AND EQUIPMENT AS REQUIRED DURING THE CONSTRUCTION PROCESS TO MAINTAIN NORMAL STORE OPERATIONS AND AS REQUIRED FOR THE INSTALLATION OF NEW CONSTRUCTION. THIS INCLUDES ALL ITEMS SHOWN OR NOT SHOWN ON THE DRAWINGS. RESET EXISTING EQUIPMENT, FIXTURES, FURNISHINGS, ACCESSORIES OR RELATED ITEMS AS REQUIRED FOR 11. WHEN EQUIPMENT, FIXTURES, FURNISHINGS, ACCESSORIES, SERVICES, FINISHES OR SURFACES ARE TEMPORARILY REMOVED OR RELOCATED IN ORDER TO PERFORM WORK, THE CONTRACTOR IS RESPONSIBLE FOR RETURNING THEM TO THEIR ORIGINAL POSITION, RECONNECTION OF SERVICES AND APPROPRIATE MEANS OF ATTACHMENT UNLESS SPECIFICALLY DIRECTED TO DO OTHERWISE.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY ORDERING OF MATERIALS TO PROHIBIT DELAYS OF THE CONSTRUCTION SCHEDULE OF THIS PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE DELIVERY OF MATERIALS IN A TIMELY MANNER. 14. IT IS IMPERATIVE THAT THE ROOF FRAMING, DECKING AND ROOFING SYSTEM BE COMPLETED IMMEDIATELY UPON THE DEMOLITION OF THE EXTERIOR WALL TO ELIMINATE POTENTIAL WATER DAMAGE OR MOISTURE INFILTRATION. THE CONTRACTOR SHALL KEEP THE BUILDING WATERTIGHT AT ALL TIMES. 15. THE GENERAL CONTRACTOR SHALL RESPOND TO ALL REQUIREMENTS OF THE STRUCTURAL ENGINEER/ARCHITECT FOR VERIFICATIONS, RESPONSES, AND 16. IF MODIFICATION TO SPRINKLER SYSTEM IS REQUIRED THE GENERAL CONTRACTOR SHALL HIRE A LICENSED SPRINKLER CONTRACTOR. CONTRACTOR TO SUBMIT SIGNED AND SEALED SPRINKLER DRAWINGS FOR APPROVAL PRIOR TO ANY ALTERATION OF THE AUTOMATIC SPRINKLER SYSTEM. WORK TO BE

18. MUD AND DEBRIS TRACKED ONTO OWNER PAVING OR CITY STREETS TO BE CLEANED IMMEDIATELY. 19. BUILDING COMPONENTS AFFECTED BY THE SCOPE OF WORK AND ALLOWED TO REMAIN SHALL BE SECURED TO PREVENT FALLING, LOOSENING, OR

1. ALL DEMOLITION SHALL BE CARRIED OUT IN A SAFE MANNER AND IN STRICT ACCORDANCE WITH OSHA REGULATIONS. . THE CONTRACTOR SHALL FIELD VERIFY THE EXTENT OF DEMOLITION. THE WORK INCLUDES, BUT IS NOT LIMITED TO, THE DEMOLITION AND REMOVAL OF WALLS, DOORS, FIXTURES, PLUMBING, PAVING, MECHANICAL AND ELECTRICAL ITEMS INCLUDING CONDUITS AND DUCTWORK AS SHOWN ON DRAWING OR STALLATION OF THE NEW WORK FOR A COMPLETE JOB. OVED, CAP AND SEAL A MINIMUM OF 8" BELOW FINISH FLOOR OR A MINIMUM OF 6" ABOVE FINISH CEILING. G STRUCTURAL ITEMS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING, BRACING AND SUPPORT ISTING STRUCTURE INTACT AND IN A SAFE CONDITION. REFER TO SECTIONS 02023 AND 02251.

OT REMOVE THE BLOCK WALL IN A PROPOSED OPENING PRIOR TO THE ROOFING SYSTEM OVER THE NEW ADDITION BEING MADE WITH THE WALMART CONSTRUCTION MANAGER AND THE STORE MANAGER TO SCHEDULE FOR DEMOLITION FOR NEW REMOVE ANY BUILDING SIGNAGE THAT INTERFERES WITH THE BUILDING ADDITION. WALMART WILL REINSTALL SIGNAGE OR ADD TION OF ADDITION. LITION WORK ARE NOT CONFINED SOLELY TO THE DEMOLITION PLANS. THE GENERAL CONTRACTOR SHALL REVIEW ALL

CONSTRUCTION DOCUMENTS, INCLUSIVE OF SCHEDULES AND SPECIFICATIONS, TO DETERMINE FULL EXTENT OF DEMOLITION WORK. REFER TO DETAILS 4,5, AND 6-D1 WHEN DEMOLITION REQUIRES THE USE OF A DUSTWALL.

GENE	
ABBR AB	DEFINITION ANCHOR BOLT
ACI ACRYL	AMERICAN CONCRETE INSTITUT ACRYLIC
ADA ADJ AFF	AMERICANS WITH DISABILITIES ADJACENT ABOVE FINISHED FLOOR
AFG AISC	ABOVE FINISHED GRADE AMERICAN INSTITUTE OF STEFL
ARCH ASTM	ARCHITECTURAL AMERICAN SOCIETY OF TESTING
AWS BFF	AMERICAN WELDING SOCIETY BELOW FINISHED FLOOR
BL BO	BLOCK LINTEL BOTTOM OF
BOS BRG	BOTTOM OF STEEL BEARING
	CONTROL JOINT
CLR CMU	CLEAR CONCRETE MASONRY UNIT
COL CONC	COLUMN CONCRETE
CONST CONT	CONSTRUCTION CONTINUOUS
	CONDENSING UNIT DIAMETER
DSD FAS	
EIFS	EXTERIOR INSULATION AND FINI
 EJ =1	EXPANSION JOINT
	EQUAL EXISTING TO REMAIN
	ELECTRIC WATER COOLER
FF	FOUNDATION FINISHED FLOOR
-RP FS	FIBER REINFORCED PLASTIC
FIG FV	FOOTING FIELD VERIFY
GA GC	GAUGE GENERAL CONTRACTOR
GM GR	GROCERY
<u>HC</u>	HANDICAP
HORIZ	HIGH DEFINITION TELEVISION HORIZONTAL
HSA HSS	HEADED STOD ANCHOR HOLLOW STRUCTURAL SECTION
NFO	
JBE	JOIST BEARING ELEVATION
JST JT	
<u></u>	LENGTH
<u></u>	LONG LEG HORIZONTAL
MAU	
	MECHANICAL ELECTRICAL PLUM MANUFACTURER
	MINIMUM MISCELLANEOUS
	METAL
NO NO	
NTS	NOT TO SCALE
	POWDER ACTUATED FASTENER
PFC	PAINT, FIX, CLEAN
PLAM	PLASTIC LAMINATE
PLF PMF.I	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
RC	REFRIGERATION CONTRACTOR
	REINFORCING
REV	
RTU RXPFC	ROOF TOP UNIT PHARMACY PAINT FIX CLEAN
SCB SCHED	SANITARY COVE BASE SCHEDULE
SDI SIM	STEEL DECK INSTITUTE SIMILAR
SJI SPECS	STEEL JOIST INSTITUTE SPECIFICATIONS
SS STD	STAINLESS STEEL STANDARD
STRUC T&B	STRUCTURAL TOP AND BOTTOM
<u>TEMP</u> THK	TEMPERED THICKNESS
<u>TO</u> TOC/TC	TOP OF TOP OF CONCRETE
TOF TOGB	TOP OF FOOTING TOP OF GRADE BEAM
TOM TOP/TP	TOP OF MASONRY TOP OF PAVING
TOS TRANS	TOP OF STEEL TRANSVERSE
TYP UNO	TYPICAL UNLESS NOTED OTHERWISE
VCPFC VERT	VISION CENTER PAINT FIX CLEA
W WM	WIDTH WALMART
	DEFINITION LE
FINAL MEF	
ALSO REF	ERRED TO AS THE DEAL BOX COPY

WORKERS WITH THIS KNOWLEDGE

WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

ABBREVIATION

LEGEND	
TE	
ACT	
C AND MATERIALS	
	Щ
	REU:
	N FOF
	LATIO
	STIPU
LANCE	
NTER IISH SYSTEM	
	ANTS
	ISULT
	CON
N	
MBING	
	3
2	
	С⊦
	DF
	PR
	DC
	(Co
	\
AN	
RCHANDISE PRINT FROM WM	
·	
	DC
	HA EN
FOR HAVING A THOROUGH KNOWLEDGE OF HEIR RELATED FIELD. THE FAILURE TO SE DOES NOT RELIEVE THE RESPONSIBILITY IO ADDITIONAL COMPENSATION SHALL PE	Sł



7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM





	ISSUE BL	ЭСК
3	ADD#2	05/11/22
CHE	CKED BY:	SME
DRA	WN BY:	MA/AK/SH
PRC	TO CYCLE:	07/30/21
DOC		: 09/08/21



CUMENTS THAT DO NOT VE THE ARCHITECT OR GINEER OF RECORD SEAL ND SIGNATURE SHALL BE ONSIDERED NOT FOR ONSTRUCTION



ς	
ح	ENVELOPE CO
2	
ξ	2018 WSEC Compliance For
{	
2	Project & Applicant Information
ξ	
5	9 9
2	Canaral Occupancy
Ę	General Occupancy
Ş	Project Scope
2	Envelope Project Descriptio
Ę	Envelope
{	Compliance Sc Scope and
Z	Method Building
Ś	Air Barrier Testing
5	Project Title W
Ę	Saana & Snaaa Canditi
Ę	Window-to-wall Ratio
2	Window-to-wall Italio
ξ	Opaque Envelope Assemblie
{	Roof/Ceiling
ξ	Insulation entir
ξ	
5	Walls
ξ	Mass (concrete masonry)
ξ	
5	
ξ	Marchan
Ę	wass (concrete masonry)
Ş	
ξ	
2	Mass (concrete masonry)
}	
ξ	
5	Mass (concrete masonry)
ξ	
5	
2	
Ę	Slab-on-grade Floors
Z	
E E	Fenestration & Opaque Doo
Z	
}	Glazed Doors
2	Sh
2	
Z	
	Project Title
	Project Title N
	Project Title
	Project Title N
	Project Title N
	Project Title N
	Project Title 1
	Project Title N
	Project Title

\sim	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\sim		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\sim	\sim	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\sim	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
MPLIAN	CE SUMMARY									
orms for Comme	reial Buildings including Group	R2, R3 & R4	4 over 3 stories and all R1					Administered by	: ©2022 NEE	
	Project Title	WAI	LGP0402_2403-278_WA_P	uyallup - 2018 WSE	C - 2018 WSEC	For Building Department Use: Data:				
	Project Address		310 31	st AVE SE					Date.	
	Applicant Name		Puyallup	o, WA 98374						
	Applicant Phone		614-0	534-7481						
	Applicant Email		chris.lapointe	@wdpartners.com						
	For questions about this rep	port, contact V	WSEC Commercial Technica	l Support at 360-539	-5300 or via ema	ail at com.techsuppo	ort@waenergycodes.	com		
	All Commercial	General B	uilding Use Type	Retail	General Sales	Building Cond	Floor Area	1	200 36	
	rii commerciai	other an D	and ose type	Tettal	ocherar sares	Project Cond.	Floor Area	1	3,232	
	Building Addition	Space Con	aditioning Categories	Fully	Conditioned	Floors Above	Grade		0	
		24				Compliance M	ethod	Con	npliance Meth	
on		202			240		- 28		2-0	
				WWR/SRR			-	a <mark>Al</mark> eri ai		
cope	Space Conditioning Catego	ory	Compliance Method	per Category	UA Calcul	lation Adjustment	Fenestrati	on Alternates	Complia	
g Addition	Fully Conditioned		Component performance	0.97% / 0%	No	ne selected	No altern	ates selected	C	
	Air banner	r testing not u	ncluded Air	Barrier Comments			Building	consists of painted	d fully grouted	
VAL CP0402	2403 278 WA Puvallun	2018 W	SEC 2018 WSEC					Day	Tun 24	
ALGIO402	_2405-276_WA_1 uyanup	- 2010 11.	SEC - 2018 WSEC			Ť.		Da	te Jul 14	
ioning	BUILDING ADDIT	ION - FUI	LLY CONDITIONED				Compliance	Verification	COMPLIE	
	0.97% Sky	vlight-to-root	f-ratio		0%	Vertical Fenestr	ation Alternate		No alter	
						ann ann	anterel 1999 -		8 ²⁰ 111	
ies						-				
	1		1:				Insulation R-Value	es .		
	Location in Docum	ents	Assembly ID	Assembly	Location	Cavity	(% penetration)	2nd Layer (MB Roof)	U-Factor	
irely above deck	OP1 Detail 2		946	Exte	nor		R-38 (< 0.04%)		U-0.026	
	U-Factor Source: Computed			ter stordari	(1887) - (1887)	U-Factor Source	Description: Comel	neck		
	Is this assembly exterior or inte	erior?: Exteri	or				terre and a		1	
	Location in Docum	ents	Assembly ID	Assembly	Location	Cavity	(% penetration)	Insulated Wall Furring	U-Factor	
y) - Commercial	OP1 Detail 2		South Wall	Ye	s		R-9.8 (< 0.04%)	No	U-0.085	
	Is CMU wall eligible for wall i	insulation exc	eption?: No	•		Percentage of Cl	MU cores filled with	insulation: (Selec	rt One)	
	Space type enclosed by CMU	walls: (Select	One)			Does assembly i	nclude wall furring?	: No		
	Framing Spacing:		III Ann MCMA ala	1.1.1.		U-Factor Source	: Computed			
v) - Commercial	OPI Detail 2	inverse of CA	North Wall	Ve Ve	s	1 1	$R_{-9.8} < 0.04\%$	No	U-0.085	
y) - commercial	Is CMU wall eligible for wall i	insulation exc	eption?: No	10	-	Percentage of C	MU cores filled with	insulation: (Selec	et One)	
	Space type enclosed by CMU	walls: (Select	One)			Does assembly include wall furring?: No				
	Framing Spacing:					U-Factor Source	: Computed			
	U-Factor Source Description: I	Inverse of CN	IU r-value from NCMA plus	insulation vendor r-	value	-				
y) - Commercial	OP1 Detail 2	1.41.000	East Wall	Ye	s	Provention of C	R-9.8 (< 0.04%)	No	U-0.085	
	Space true enclosed by CMU	maile: (Select	(One)			Percentage of C	nclude wall furring?	· No	et One)	
	Framing Spacing:	wans. (select	Olle)			U-Factor Source	: Computed			
	U-Factor Source Description: 1	Inverse of CN	IU r-value from NCMA plus	insulation vendor r-	value		•		10	
y) - Commercial	OP1 Detail 2		West Wall	Ye	s		R-9.8 (< 0.04%)	No	U-0.085	
	Is CMU wall eligible for wall i	insulation exc	eption?: No	1		Percentage of C	MU cores filled with	insulation: (Selec	t One)	
	Space type enclosed by CMU	walls: (Select	One)			Does assembly i	nclude wall furring?	No		
	Framing Spacing:					U-Factor Source	: Computed			
	U-Factor Source Description: 1	Inverse of CN	IU r-value from NCMA plus	s insulation vendor r-	value	8 			1	
	Location in Docum	ents	Assembly ID	Assembly	Location	Slab Edge	Under Slab		F-Factor	
Unheated slab	Sheet S1		946	At grad	e level	R-10	R-10		F-0.54	
	Slab Insulation Method: 2 ft ve	ertical (from t	op of slab downward)			F-Factor Source	WSEC Appendix A	1		
	F-Factor Source Description:									
or Assemblies	×2									
	ř		P	r			Insulation R-Value	es .	-	
	Location in Docum	ents	Assembly ID	Assembly	Location	Orientation	Shading (PF)	Fenestration SHGC	L'Enestration	
iding glass door	Sheet OP1 Detail	2	946A	Exte	nor	North Facing	PF < 0.2	SHGC-0.230	U-0.400	
	U-Factor & SHGC Source: NF	RC Rating	.a			U-Factor Source	Description:			
	Is this assembly exterior or inte	erior?: Exteri	or			4.5				

WALGP0402_2403	WALGP0402_2403-278_WA_Puyallup - 2018 WSEC - 2018 WSEC							
U x A Calculation BUILDING ADDITION - FULLY CONDITIONED						COMPLI		
	Opaque Envelope Assemblies			PROPOSED		1	TARGET	
Roof/Ceil	ling	Assembly ID	Roof/Ceiling Assembly U- Factor	Net Area (SF)	UxA	Roof/Ceiling Assembly U- Factor	Net Area (S	
	Insulation entirely above deck	946	0.026	3,169.0	82.4	0.027	3,169.0 (1)	
Walls		Assembly ID	Wall Assembly U- factor	Net Area (SF)	UxA	Wall Assembly U- factor	Net Area (S	
	Mass (concrete masonry) - Commercial	South Wall	0.085	1,128.0	95.9	0.104	1,128.0 (1)	
	Mass (concrete masonry) - Commercial	North Wall	0.085	776.0	66.0	0.104	776.0 (1)	
	Mass (concrete masonry) - Commercial	East Wall	0.085	1,743.0	148.2	0.104	1,743.0 (1)	
	Mass (concrete masonry) - Commercial	West Wall	0.085	543.0	46.2	0.104	543.0 (1)	
	Slab on Grade Floors		PROPOSED			TARGET		
Slab-on-grad	e Floors	Assembly ID	F-Factor	Perimeter Length (LF)	UxA	F-Factor	Perimeter Ler (LF)	
	Unheated slab	946	0.54	0.54 184.0 99.4		0.54	184.0 (1)	
Fenes	tration and Opaque Door Assemblies			PROPOSED			TARGE	
Glazed De	oors	Assembly ID	Door Assembly U- Factor	Rough Opening (SF)	UxA	Door Assembly U- Factor	Rough Open (SF)	
	Sliding glass door	946A	0.400	41.0	16.4	0.40	41.0 (1)	
	Proposed Area	Pror	oosed UxA		Target Area		Tare	
Totals 7.584		554			7,584			

WALGP04	VALGP0402_2403-278_WA_Puyallup - 2018 WSEC - 2018 WSEC								Jun 24
x A Calcul	lation	B	UILDING ADDIT	TION - FULLY	CONDITIONED	COMPLIES			
Fene	estration and Opaque Door A	Assemblies			PROPOSED			TAR	GET
Doors - North Facing Assembly		Assembly ID	PF	Glazed Door SHGC (SF)		SHGC x A	Glazed Door SHGC	Rough Opening (SF)	ing
Sliding glass door		946A	PF < 0.2	0.230	41.0	9.4	0.51	41.0 (1)	
Proposed Area		Proposed SHGC x A			Target Area		Targ	et SHGC	
ls	41			9				21	





innovation at scale











(13)

(16)

(15)

(14)

(12)

(11)

(10)

(1) FLOOR PLAN 1" = 30'-0"

			4	KEYNOTES		SHEET NOT
			10.44 PROVIDE FACTILE EXT	SIGN. REF INT.		 NOT USED. NOT USED. RELOCATION AND SETUP OF GOND RACKING AS INDICATED ON FXS SH
						PERFORMED BY OTHERS. ANCHOR BE PERFOMED BY GENERAL CONTR
\frown		\frown	\frown			
9				(3)		
				0 0	*	
			i i Mereziere Mereziere			
a	α	8 0				
D	a	E o				
			p - o			
D	a	E o				
			D D	a		
D	a	E o				
o	D	i o				PRODUCE PREF
		ii o		-		

1 - OP1.3

2 0P1.0

NOTES

DF GONDOLAS AND/OR N FXS SHEETS WILL BE ANCHORING OF UPRIGHTS TO AL CONTRACTOR.









GENERAL CONTRACTOR NON-STRUCTURAL CURB GENERAL CONTRACTOR <u>STRÙCTURAL CURB (AHU)</u>









2 CONTROL JOINT AT DOOR JAMB



	SECTION-A	SECTION
1 HEADEF	R CONNECT	ION DETAIL

OVER 18'-0" & UP TO 20'-0" OVER 20'-0" & UP TO 24'-0"	(2) C10x1 5/8"x16 (2) C12x1 5/8"x16
	()
NOTES:	
1. MAX WALL HEIGHT ABOV 2. SPLICING OF HEADER AN 3. MAX SPAN FOR OPENING 4. JAMBS NOT TO DECK ARI DETAILS. 3 5/8" JAMBS BEY THAT THE MAXIMUM UNBR/ 5. FRAMING MEMBERS ARE OF WALL ABOVE THE OPEN	E HEADER ASSEMI ID JAMB MEMBERS SS TO RECEIVE INF E TO BE BRACED IN OND 13'-4" ARE TO ACED LENGTH IS N INOT SIZED FOR V IING.
METAL STUD REF PLANS AND SECTIONS —	
(1) #10 TEK SCREW AT EACH VERTICAL STUD	
20 GA BOTTOM TRACK — TOP TRACK REF SCHEDUL	E
STUD HEADERS REF SCHE	DULE
FINISH AS INDICATED	
BOTTOM TRACK REF SCHEDULE	ا ا
FASTEN HEADER ASSEMBL WITH (1) #10 TEK SCREW A EACH FLANGE AND 12" OC FOR THE LENGTH OF THE HEADER	Y T

HEADER

LENGTH

UP TO 4'-0"

UP TO 10'-0"

INTERIOR NON-LOAD BEARING PARTITION HEADER SCHEDULE

HEADER

MEMBERS

PARTITION NOTES

PARTITION TYPES







EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL

DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. CONTACTOR SHALL FIELD VERIFY ALL EXISTING

STUDS CONTINUE TO DECK UNO. REF CAPTURE TRACK DETAILS. 2. USE 1/2" GYPSUM BOARD ON NON-RATED PARTITIONS UNO.

X-XX

- NUMBER INDICATES STUD NO NUMBER INDICATES STUD HEIGHT TO BOTTOM OF ROOF DECK TYP - NUMBER INDICATES

6 - 6" METAL 8 - 8" CMU 12 - 12" CMU

EXISTING PARTITION OR WALL TO REMAIN

_ _ _ _ _ _ _ _ _ _

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILI CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CONTRACTOR SHALL CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS. OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.



7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM





ISSUE BLOCK				
CHE	CKED BY:	SME		
DRA	WN BY:	KR/AK/SH		
PRC	TO CYCLE:	07/30/21		
DOC	CUMENT DATE:	09/08/21		



DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION



SHEET: A6.1



		FINISH KE	Y		
MU WALLS)	GENERAL DOOR NOTES		REF SP	ECIFICATIONS FOR EXACT COLORS REQUIRED	
		MARK	FINISH	COLOR	
IDICATED:		ACT1			24"x48"
	1. ALL DOORS SCHEDULED AS NEW ARE TO RECEIVE	ACT3	ACOUSTICAL CEILING TILE	WHITE	24"x48"
EALED BY	SPECIFICATIONS.	ACT4	ACOUSTICAL CEILING TILE	WHITE	24"x48"
HOUT PEG-	2. REFERENCE ELEVATIONS ON A2 FOR EXTERIOR	ACTG	ACOUSTICAL CEILING GRID	WHITE	011-14/41
	3. SCHEDULED WIDTH AND HEIGHT INDICATE FINISHED	B6 B9	PLASTIC BASE	BLACK	6"X1/4" 4"x1/4"
MATCH	OPENING SIZE AT ALL OVERHEAD AND COILING DOOI	R B10	PLASTIC BASE OUTSIDE CORNER	BLACK	
RIM	4. SCHEDULED WIDTH AND HEIGHT INDICATE ROUGH	C1	CUSHION BACK TILE CARPET		
	OPENING SIZE AT ALL AUTOMATIC SLIDING DOOR	C3		CHARCOAL	
VE LATION OF	5. INSTALL DRIP CAP AT ALL NEW EXTERIOR DOORS.	co			
		CT2	ENTRY TILE	RED	12" x 24" x
		CT43	PORCELAIN WALL TILE	BEIGE	12" x 12" x
	DOOR SCHEDULE NOTES	CT44			12" x 12" x 1 12 x 24
		CT53A	TILE BASE	DARK GRAY	6 x 12
	1. NOT USED. 2. NOT USED.	CT53B	COVE BASE	DARK GRAY	6 x 6
	3. NOT USED.	CT54	WALL TILE	WHITE	4 x 12 LINE
	4. NOTUSED. 5. NOTUSED.	DB5 DB6			5" 6"
	6. NOT USED.	DB10	DURO BASE	BLACK	10"
	8. NOT USED.	EC	EXPOSED CONCRETE	CLEAR SEALER	
	9. NOT USED.		EXISTING TO REMAIN		
	11. NOT USED.	FRP2	FIBERGLASS REINFORCED PLASTIC	BEIGE	FRP WALL
	12. NOT USED.	FRP5	FIBERGLASS REINFORCED PLASTIC	ALMOND	FRP WALL
	14. NOT USED.	FT1	FAUX SUBWAY TILE	WHITE	
	15. NOT USED.	G1 G2	GROUT	DARK GRAY	
	17. NOT USED.	G3	GROUT	LIGHT TAN	
	18. NOT USED.	G4	GROUT	GRAY	
	20. NOT USED.	G7	GROUT	BROWN	
	21. NOT USED.	G15 G16	GROUT	BLACK GRAY	
	23. NOT USED.	HRC1	HEAT RESISTANT COATING	TO MATCH COPPER BROWN BY BERRIDGE	
	24. NOT USED.	HRC4	HEAT RESISTANT COATING	MATCH DARK GRAY	
	26. NOT USED	ICC	INTEGRAL COLORED CONCRETE	BROWN	
	27. NOMINAL SIZE FOR HEIGHTS AND WIDTHS ARE	P3 P5		"SAFETY YELLOW" OSHA STANDARD	
	FROM DOOR VENDOR.	P5E	PAINT	SAFETY YELLOW	
	28. PREFINISHED DOOR AND HARDWARE FURNISHED	P8	PAINT	"PURE WHITE" # 7005	
	29. AUTOMATIC OPENER INSTALLED BY VENDOR, REF	P14	PAINT	"GOLDENROD" # 6677	
(30 CARDREADER AND STAND ALONE ALARM INSTALLED		PAINT	SAFETY RED	
	BY VENDOR, REF SPEC.	P33E	PAINT	CREAM	
	31. NOT USED 2	P36	PAINT	"DOMINO" #6989	
	33. NOT USED.	P36E		BLACK "GARDENIA" #6665	
	34. NOT USED.	P49E	PAINT	DARK GRAY	
	36. NOT USED.	P76	PAINT	"WALMART BLUE" #076	
	37. NOT USED.	P76U	PAINT	WALMART BLUE (URETHANE-LIKE)	
	39. NOT USED.	P81E P83			
	40. NOT USED.	P93	PAINT	"TAMARIND" #7538	
	42. NOT USED.	P100	PAINT	"NOTABLE HUE" #6521	
	43. NOT USED.	P102	PAINT	"BEACH HOUSE" #7518	
	45. NOT USED.	P107 P112	PAINT	"BUTTERFIELD" #6676	
		P131	PAINT	"WHITE FLOUR" #7102	
		P134E	PAINT	LIGHT GRAY	
		P135E	PAINT		
:		P140E P159	PAINT		
HM, Single, w/ E	xit Device)	P162	PAINT	"PEPPERCORN" #7674	
		P162E	PAINT	BLACK GRAY	
e		P163		"TURQUISH" #6939	
eatherstrip	5	P 104 P204	PAINT	"FESTOON AQUA" #0019	
eatherstrip	3	P208	PAINT	"CANDID BLUE" #6953	
g aluminum.		P209	PAINT	"PASSIVE GRAY" #7064	
Autom, Auto), Auto		PF4 PL3		ORGANIC COTTON" WILSONART 4045 39	
Appendix A (Sec	ction 08462).	PL4	PLASTIC LAMINATE	MAPLE	
		PL6	PLASTIC LAMINATE	LIGHT TAN	
	<	PL11		NORTH SEA GRAY	
mm	······································	PL15 PL20			
		PL30	PLASTIC LAMINATE	"STEEL MESH" WILSONART 4879	
		PL31	PLASTIC LAMINATE	"GREY" WILSONART 1500-60	
		PS1	PROTECTIVE SURFACE		
		PS5	PROTECTIVE SURFACE	"FRESH LINEN" IMPACT SPEICALTIES	
		PS6	PROTECTIVE SURFACE	YELLOW	
		PS7		"GRAY PATTERN"	
		rov PS9	PROTECTIVE SURFACE		
		PS10	PROTECTIVE SURFACE	"BLACK"	
		PVC1	PVC PLANK FLOORING	WOODGRAIN	
		QT3		GRAY	6"x6" ABRA
		RRF3			
		SCB1	SANITARY COVE BASE	RED	8" H ANTIM
		SCB2	SANITARY COVE BASE	GRAY	8" H ANTIM
		SCB4	SANITARY COVE BASE	RED	8" H ANTIN
		SS	STAINLESS STEFI		
		SST1	SOLID SURFACE		
		TC	TEXTURED CONCRETE		
				WHILE BEIGE	12"x12"x1/8
		VCT20	VINTE COMPOSITION TILE	GRAY	12"x12"x1/8
		WB	2x8 WOOD BASE		
		WB10	2x10 WOOD BASE		

DESCRIPTION	innevation at scale
NYL FACED NON-PERFORATED	at scale
	7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T
< 3/8" < 3/8" < 2/0"	WDPARTNERS.COM
\$ 3/8	ULE ULSE OR RELY TO Y TO
EAR	REUSE ARED FOR TITH ITS ISS ITH ITS ISS ITH ITS ISS ITH ITS ISS ITH ITS ISS ITH ITS ISS IFFERENT TER TIME. U FERENT OF PROPEI OF PROPEI OF PROPEI DECTIS NO CONTRARY
	ON FOR WAS PREP WAS PREP IFIC SITE A REOUSLY W REOUSLY W LEOUSLY W LEOUSLY W LEOUSLY AND IT SERVICES SERVICES SERVICES SERVICES SERVICES SERVICES SERVICES SURVICES S
L PANEL	PULATI DRAWING DRAWING ON A SPEC ON A SPEC ALLUP, WA ABLUP, WA ABLUP, WA ABLUP, WA ABLUP, WA ABLUP, WA ABLUP, WA ABLUP, WA HIS DRAWI HIS DRAWI UIRES THE NSED ARCI SE ON ANO SE
L PANEL L PANEL	STI I HEIS PROCON PROCO
	S
	SULTAN
	CONS
	d X
	8374 83774
	310 3.
	ISSUE BLOCK 2 PR#2 03/18/22
ASIVE ASIVE	
MICROBIAL PLASTIC FOR QT MICROBIAL PLASTIC FOR QT	CHECKED BY: SME
MICROBIAL PLASTIC	DRAWN BY: MA/AK/SH PROTO CYCLE: 07/30/21
/8"	DOCUMENT DATE: 09/08/21
/8" /8"	
	Δ
	Mitt
	6729 REGISTERED ARCHITECT
	CHRISTOPHER K. DOERSCHLAG
	03/21/2022
	DOCUMENTS THAT DO NOT
	HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE
	CONSIDERED NOT FOR CONSTRUCTION
F FLUSH	DOOR SCHEDULE,
THEIR RELATED FIELD. THE FAILURE TO IGE DOES NOT RELIEVE THE RESPONSIBILITY NO ADDITIONAL COMPENSATION SHALL BE IT OCCUR DUE TO FAILURE TO FAMILIARIZE	A8



DECK PAINT NEW CONDUIT, DUCTWORK AND FIRE SPRINKLER PIPING (FIRE SPRINKLER HEADS TO REMAIN UNPAINTED) TO MATCH ADJACENT STRUCTURE OR DECK
SLOPE ALL EXTERIOR SLABS AWAY FROM BUILDING SLOPE. ALL SLOPES SHALL BE A MIN 1:100 (1%) AND SHALL NOT EXCEED 1:48 (2%). ALL SLABS SHALL MEET BUILDING AT ELEVATIONS 100.00 (UNO) WHERE SLAB EDGE MEETS PAVING. COORDINATE TOP OF SLAB WITH CIVIL DRAWINGS.
NOTE: ELECTRICAL, FIRE PROTECTION PIPING & PLUMBING WILL GO THRU EXISTING OPENING, IF AN OPENING EXISTS. REF MEP. IF ONE DOES NOT EXIST, REF STRUCTURAL.
NOTE: ALL PIPING PENETRATIONS THRU WALL ONLY. COORDINATE WITH VENDOR IF ANY PENETRATIONS ARE REQUIRED THRU THE ROOF. REF MEP
REF TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SITE-RELATED SCOPE OF WORK
NOTE: ARCHITECTURAL FINISH FLOOR=100.00' CIVIL FINISH FLOOR =REF CIVIL ALL EXTERIOR DOORS =100.00' UNO
NOTE: PROVIDE CONT. BACKER ROD AND SEALANT FROM SIDES OF CMU AT JUNCTURE OF NEW AND EXISTING CMU WALLS
NEW LOCATION OF RACK BEAMS AND UPRIGHT FRAMES PER FXS SHEETS. REF SHEET NOTES
FOR ENLARGED WALK IN PLAN, REF 2-OP1.1
NOTE : FOR REFRIGERATION LINE DETAIL, REF 4-OP1.0
NOTE : NEW LINERS ONLY INSTALLED ON WALK-IN WALLS. NEW LINERS WILL NOT BE INSTALLED ON WALK-IN CEILING. ALL CEILING JOINTS TO BE SEALED BY THE PANEL VENDOR
NEW EVAPORATORS TO BE FURNISHED BY RACK MANUFACTURER AND INSTALLED BY CONTRACTOR
NEW EVAPORATORS TO BE FURNISHED BY RACK MANUFACTURER AND INSTALLED BY CONTRACTOR REF 4-A8 , FOR NEW SLIDER DOOR

ANGLE DETAILS

AT EXPOSED PAINTED STRUCTURE OR



1/8" = 1'-0"



STOCKROOM - GR ENLARGED PLAN

WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBIL WORKERS WITH THIS KNOWLEDGE

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE C







	ISSUE BLOCK				
1	PR#1	01/25/22			
CHE	SME				
DRA	WN BY:	KR/AK/SH			
PRC	TO CYCLE:	07/30/21			
DOC		: 09/08/21			

SHEFT

OP1.0



	$\sim \sim \sim$	$\sim\sim\sim\sim$		<u> </u>	
Ş			COLOR LEGEND	 \sum	SHEET NOTES
3	P46		SAND	\langle	SHEET NOTES
	P47		BROWN	く	FOR FINISH SCHEDULE REFER A8 SHEET.
\sim			A . A . A . A . A . A . A . A . A	Z	

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF

ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBIL

7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

ABE

	STEEL REINF LAP SCHEDULE										
	CONCRETE LAP SPLICE (CLASS B) (IN)										СМИ
BAR SIZE	f'c = 3,000psi		f'c = 3,	500psi	f'c = 4,000psi		f'c = 4,500psi		f'c = 5,000psi		LAP SPLICE
0.22	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	(IN)
3	17	16	16	16	16	16	16	16	16	16	20
4	23	18	21	16	20	16	19	16	18	16	26
5	28	22	26	20	25	19	23	18	22	17	32
6	34	26	31	24	29	23	28	21	26	20	39
7	49	38	45	35	43	33	40	31	38	29	45
8	56	43	52	40	49	37	46	35	44	34	52

5E - NO JOINT INTERSECTION

	ABBREVIATIONS		ABBREVIATIONS	DESIGN LOADS	
AB	ANCHOR BOI T	V	LONG LEG VERTICAL	1. BUILDING CODE	
ACI	AMERICAN CONCRETE INSTITUTE	LONG	LONGITUDINAL	A. BUILDING CODE 20	018 \
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM	BI	JUILD
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	MECH	MECHANICAL		
AISI	AMERICAN IRON AND STEEL INSTITUTE	MFR	MANUFACTURER	2. GRAVITY LOADS	
ARCH	ARCHITECTURAL	MIN	MINIMUM	A. ROOF DEAD LOAD 17	7.8 P
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MISC	MISCELLANOUS	Df	RAW
AWS	AMERICAN WELDING SOCIETY	MO	MASONRY OPENING		
BFF	BELOW FINISHED FLOOR	MTL	METAL	B. ROOF LIVE LOADS	
BL	BLOCK LINTEL	NIC	NOT IN CONTRACT	1. ROOF 20	0 PSI
BM	BEAM	NO	NUMBER		
BO	BOTTOM OF	NS	NEAR SIDE	$1 (ROUND SNOW LOAD (P_{a})) \qquad $	
BOM	BOTTOM OF MASONRY	NTS	NOT TO SCALE	2 IMPORTANCE FACTOR (I) 1	010
BOS	BOTTOM OF STEEL	OC	ON CENTER	3 SNOW EXPOSURE FACTOR (Ce)	0
BRG	BEARING	OD		4 ROOF THERMAL FACTOR (Ct)	.0
CJ		OH	OPPOSITE HAND	5. ELAT ROOF SNOW LOAD (Pf) (PER CODE) 14	.0 4 0
CL	CENTER LINE	PAF	POWER ACTUATED FASTENER		4 .0
CLR		PCF	POUNDS PER CUBIC FOOT	3 LATERALLOADS	
CMU				A. WIND LOADS	
COL			POUNDS PER LINEAR FOOT	1. BASIC WIND SPEED (3-SECOND GUST)	
CONC				- ULTIMATE DESIGN WIND SPEED 97	7 MP
COND		PMEJ		- BASIC DESIGN WIND SPEED (SERVICE) 75	5.14
CONST		POF		2. WIND EXPOSURE CATEGORY C	5
				3. RISK CATEGORY II	ł
EE	EXHALIST FAN				\sim
EIES	EXTROOT FAN	REF	REFER TO	6 B. SEISMIC LOADS (SERVICE)	÷
E.I			REINFORCING	1. 5% DAMPED MAPPED ACCELERATION PARAMETER (Ss) 1.	.261
FI	ELEVATION	REOD	REQUIRED	2. 1-SEC PERIOD MAPPED ACCELERATION PARAMETER (S1) 0.	.435
FLEC	ELECTRICAL	REV	REVERSE	3. 5% DAMPED SPECTRAL RESPONSE COEFF. (Sds) 0.4	.841
EQ	EQUAL	RO	ROUGH OPENING	4. 1-SEC PERIOD SPECTRAL RESPONSE COEFF. (Sd1) 0.	.541
ETR	EXISTING TO REMAIN	RTU	ROOF TOP UNIT		
EW	EACH WAY	SCHED	SCHEDULE		OR N
FDN	FOUNDATION	SDI	STEEL DECK INSTITUTE	SI	ECT
FF	FINISHED FLOOR	SIM	SIMILAR	5. SITE CLASS D) (SO
FS	FAR SIDE	SJI	STEEL JOIST INSTITUTE	M6. RISK GATEGORY	i
FTG	FOOTING	SPCS	SPACES	7. IMPORTANCE FACTOR (le) 1.	.0
FV	FIELD VERIFY	SPECS	SPECIFICATIONS	8. SEISMIC DESIGN CATEGORY D)
GA	GAUGE	STRUC	STRUCTURAL	9. SEISMIC RESISTING SYSTEM SF	PEC
GC	GENERAL CONTRACTOR	T&B	TOP AND BOTTOM	M	IASO
Н	HEIGHT	THK	THICKNESS		
HORIZ	HORIZONTAL	то	TOP OF		
HSA	HEADED STUD ANCHOR	TOC	TOP OF CONCRETE		
HSS	HOLLOW STRUCTURAL SHAPE	TOF	TOP OF FOOTING		
INFO	INFORMATION	TOM			
ISO		TOS			
JBE	JOIST BEARING ELEVATION	TOW			
JST					
JI					
KSI	NIFS PER SQUARE INCH				
LD					
		VVP			

NOTE: WATERPROOF BASE PL, ANCHOR BOLTS AND COLUMN WITH ASPHALTIC MASTIC BELOW FF.

(2) #4x2'-0" BARS PLACED 1 1/2" BELOW TOP OF SLAB AT EACH CORNER OF COLUMN (DO NOT ALLOW REINF TO CROSS JOINT), TYP

GENERAL 1. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHOWN OR IMPLIED BY THESE DRAWINGS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WORK. 2. EXISTING CONDITIONS SHOWN MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. BIDDERS SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BID. WITHIN ONE WEEK FROM THE START OF CONSTRUCTION DATE GENERAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING MATERIAL, MEASUREMENTS, AND ELEVATIONS AND SHALL
2. EXISTING CONDITIONS SHOWN MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. BIDDERS SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BID. WITHIN ONE WEEK FROM THE START OF CONSTRUCTION DATE GENERAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING MATERIAL, MEASUREMENTS, AND ELEVATIONS AND SHALL
NOTIFY THE ARCHITECT, STRUCTURAL ENGINEER OF RECORD AND THE OWNER'S CONSTRUCTION MANAGER OF ANY DISCREPANCIES OR FORESEEN PROBLEMS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FIELD MEASUREMENTS, EXISTING CONDITIONS, AND KNOWN COMPLICATIONS WITH THE MATERIAL SUPPLIERS.
 GENERAL CONTRACTOR SHALL CAREFULLY COORDINATE DEMOLITION AND NEW CONSTRUCTION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS. GENERAL CONTRACTOR SHALL PROTECT EXISTING STRUCTURES, UTILITIES, PROPERTY, ETC DURING CONSTRUCTION. RESTORE ALL ITEMS DAMAGED, AS REQUIRED BY OWNER'S REPRESENTATIVE, TO THE OWNER'S SATISFACTION AT NO COST TO OWNER OR WITHOUT EXTENSION OF CONTRACT TIME.
 5. BUILDING COMPONENTS ABANDONED BY THE SCOPE OF WORK SHALL BE SECURED TO PREVENT FALLING, LOOSENING OR CREATING DAMAGE OF ANY KIND IN THE FUTURE. 6. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORT AND MAINTAINING STABLITY OF EXISTING STRUCTURE DURING ALL PHASES OF CONSTRUCTION 7. BEFORE OR CONCURRENT WITH ANY EXCAVATIONS ADJACENT TO THE EXISTING BUILDING FOUNDATION OR SLAB, GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORT SUPPORT FOR THE BASE AND SUBGRADE OF THE EXISTING SLAB AND FOUNDATIONS TO PREVENT UNDERMINING. 8. GENERAL CONTRACTOR SHALL PROVIDE FIRE PROTECTION FOR THE EXISTING STRUCTURE AND BUILDING CONTENTS DURING WELDING OR ANY OTHER CONSTRUCTION ACTIVITY THAT GENERATES SPARKS OR INTENSE HEAT.
 9. GENERAL CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE FOR MECHANICAL, ELECTRICAL AND PLUMBING WORK. 10. STEEL FRAMING IS NON-SELF SUPPORTING AND REQUIRES INTERACTION WITH OTHER ELEMENTS NOT CLASSIFIED AS STRUCTURAL STEEL TO PROVIDE THE REQUIRED STABILITY
 AND RESISTANCE TO LATERAL FORCES. 11. THE STEEL FRAMING AND ALL CONCRETE AND CMU WALLS SHALL BE TEMPORARILY BRACED UNTIL ALL STEEL BRACING, FLOOR AND DECKS, AND CONCRETE AND CMU WALLS HAVE BEEN INSTALLED AND ALL CONNECTIONS BETWEEN THESE ELEMENTS HAVE BEEN MADE. 12. THE STRUCTURAL ENGINEER OF RECORD, ITS EMPLOYEES, AND REPRESENTATIVES SHALL NOT BE RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK; NOR WILL THEY BE RESPONSIBLE FOR ANY FAILURE BY THE CONTRACTOR TO PERFORM OR COMPLETE CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
1. FOOTING DESIGNS ARE BASED ON A NET ALLOWABLE SOIL BEARING PRESSURE OF 3,000 PSF. IF SUITABLE BEARING MATERIAL IS NOT ENCOUNTERED AT THE ELEVATION INDICATED ON THE DRAWINGS AS INDICATED BY A LICENSED GEOTECHNICAL ENGINEER, THE CONTRACTOR SHALL OVEREXCAVATE UNTIL SUITABLE BEARING MATERIAL IS ENCOUNTERED.
 2. EXTERIOR FOOTINGS SHALL BEAR AT OR BELOW MINIMUM BEARING DEPTH. MINIMUM BEARING DEPTH IS 18 INCHES BELOW ADJACENT FINISHED GRADE. THICKENED SLAB EDGES FOR STOOPS, CANOPIES, ETC, SHALL BE 18 INCHES (UNO). 3. STANDARD PROCEDURES OF FROST PROTECTION FOR FOUNDATIONS AND EXCAVATIONS SHALL BE EMPLOYED FOR WINTER CONSTRUCTION. BACKFILLING OF EXCAVATIONS SHALL BE DONE AS SOON AS POSSIBLE TO PROTECT FOUNDATIONS FROM FROST. 4. HORIZ BARS IN FOOTINGS AND CONCRETE STEM WALLS, WHEN APPLICABLE, SHALL BE CONTINUOUS. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS UNO. 5. FOUNDATION WALLS SHALL HAVE TEMPORARY BRACING BEFORE BACKFILL IS PLACED AGAINST THEM. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED. 6. FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER. PENETRATIONS SHALL BE THROUGH FOUNDATION STEMWALL OR 6" CLEAR BELOW FOOTING.
CONCRETE SLABS-ON-GRADE 1. SLABS-ON-GRADE ARE UNREINFORCED CONCRETE UNLESS NOTED OTHERWISE. 2. PROVIDE SAW CUT JOINTS AT 12'-0" OC MAXIMUM SPACING UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS.
 PROVIDE (2) #4x2'-0" BARS PLACED 1 1/2" BELOW TOP OF SLAB AND LOCATED DIAGONALLY AT REENTRANT CORNERS. "CJ" INDICATES SAW CUT CONTRACTION JOINT IN SLAB-ON-GRADE, "CONST JT" INDICATES DOWELED CONSTRUCTION JOINT IN SLAB-ON-GRADE. CONCRETE AND REINFORCING STEEL
1. MINIMUM COMPRESSIVE STRENGTH (fc) AT THE END OF 28 DAYS SHALL BE AS FOLLOWS: A. INTERIOR CAST-IN-PLACE CONCRETE SLABS 4000 PSI SPECIFICATION SECTION 03314 B. EXTERIOR CAST-IN-PLACE CONCRETE SLABS REF SPECS SPECIFICATION SECTION 03310 C. STRUCTURAL CAST-IN-PLACE CONCRETE FOOTINGS 3000 PSI SPECIFICATION SECTION 03310 D. STRUCTURAL FORMED CONCRETE WALLS REF SPECS SPECIFICATION SECTION 03310
 FOR ALL OTHER CONCRETE PROPERTIES REFER TO SPECIFICATIONS. 2. CONCRETE FREEZING AND THAWING EXPOSURE CLASS SHALL BE F0 AND SULFATE EXPOSURE CLASS SHALL BE S0. 2. REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A 615, DEFORMED BAR, GRADE 60 OR ASTM SPECIFICATION A 706, DEFORMED BAR, GRADE 60. REF STEEL REINF LAP SCHEDULE FOR LAP LENGTHS, UNO ON DETAILS. 3. REFER TO ACI 315 FOR DETAILING PRACTICES AND FABRICATION, AND ACI 301 FOR STANDARD PRACTICE FOR MIXING AND PLACING CONCRETE AND CONCRETE COVER.
 4. LEAN CONCRETE - MIN 2 1/2 SACKS PORTLAND CEMENT PER CUBIC YARD. STRUCTURAL STEEL 1. STRUCTURAL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRENGTH AND SPECIFICATIONS. FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST
EDITION OF THE "AISC CODE OF STANDARD PRACTICE". STRUCTURAL STEEL YIELD ASTM SPECIFICATION A. PLATES, CHANNELS, ANGLES, & ANCHOR BOLTS: 36 KSI A 36, UNO B. ROUND BARS FOR JOIST REINFORCEMENT: 50 KSI A 529
C. WIDE FLANGE STEEL SHAPES: 50 KSI A 992 D. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SHAPES: 50 KSI A 500 GRADE C E. ROUND HOLLOW STRUCTURAL SHAPES: 46 KSI A 500 GRADE C
 F. HEADED STUD ANCHORS: 50 KSI A 108 (GRADE DESIGNATIONS 1010 TO 1020, INCLUSIVE) 2. ALL STRUCTURAL STEEL SHALL HAVE ONE SHOP COAT OF RUST INHIBITOR PRIMER PAINT CONFORMING TO THE SPECIFICATIONS. REF SPECS FOR PROTECTIVE FINISH FOR EXTERIOR STEEL. FIELD TOUCH UP ALL UNPAINTED, NICKED AND WELDED AREAS. PAINT ALL STEEL EXPOSED TO VIEW TO MATCH EXISTING.
 WELDING SHALL MEET ANSI/AWS D1.1 STRUCTURAL WELDING CODE. ELECTRODES SHALL BE 70 KSI LOW HYDROGEN. PROVIDE 1 1/2 INCH NON-SHRINK GROUT UNDER BASE PLATE AFTER ERECTION. NON-SHRINK GROUT, WHERE INDICATED ON PLANS, SHALL BE NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS. PROVIDE DOUBLE NUTS AND DOUBLE WASHERS FOR STEEL COLUMN ANCHOR BOLTS TO ALLOW FOR ADJUSTMENT IN BASE PLATE ELEVATION. PROVIDE L3x3x3/16 FIELD-FABRICATED FRAME BETWEEN JOISTS AT OPENINGS IN ROOF GREATER THAN 10"x10", UNO, (INCLUDING ROOF DRAIN AND EXHAUST FAN OPENINGS REGARDLESS OF OPENING SIZE).
 BOLTS FOR STEEL BEAM AND COLUMN CONNECTIONS SHALL BE 3/4" DIAMETER ASTM A 325-N HIGH-STRENGTH BOLTS, UNO. ALL BOLTED CONNECTIONS ARE BEARING TYPE. ALL BOLTS SHALL BE TIGHTENED SNUG TIGHT, UNO. THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ADEQUACY OF CONNECTIONS THAT ARE NOT DESIGNED OR FULLY DETAILED ON THE CONTRACT DOCUMENTS.
1. COLD FORM STRUCTURAL CURB BY SUPPLIER SHALL BE CAPABLE OF SPANNING BETWEEN BAR JOISTS AND CANTILEVERING TO PICK UP EDGE OF RTU AND ROOF DECK. ASSUME ROOF LOADS OF 16 PSF DEAD LOAD AND 20 PSF LIVE/SNOW LOAD. STEEL JOISTS AND JOIST GIRDERS
 EXISTING STEEL JOIST SAND JOIST GIRDERS ARE ASSUMED TO BE IN GOOD CONDITION AND IN COMPLIANCE WITH THE STEEL JOIST INSTITUTE SPECIFICATIONS. ANY DAMAGE TO EXISTING JOISTS OR GIRDERS SHALL BE REPORTED PRIOR TO ADDING LOAD TO FRAMING. ALL WELDING SHALL CONFORM TO THE CURRENT AMERICAN WELDING SOCIETY SPECIFICATIONS AND BE PERFORMED BY CERTIFIED WELDERS. DO NOT OVER WELD OR BURN THRU JOIST MATERIAL. ANY DAMAGE TO EXISTING JOIST SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. HANGERS SUPPORTING MECHANICAL EQUIPMENT FROM JOIST CHORDS SHALL BE LOCATED WITHIN 3 INCHES OF JOIST PANEL POINTS OR JOIST SHALL BE REINFORCED PER JOIST REINFORCING DETAIL. HANGER LOADS GREATER THAN 100 POUNDS SHALL NOT BE ATTACHED TO THE EDGE OF CHORD ANGLES AND SHALL BE CENTERED ON JOIST
 CHORD. 4. SPECIAL JOISTS AND JOIST GIRDERS THAT REQUIRE SPECIFIC ORIENTATION SHALL BE TAGGED AT ONE END. DEFINE LOCATION OF TAGGED END ON ERECTION DRAWINGS. 5. ALL LOADS SHOWN ON THE DRAWINGS ARE DESIGN WORKING LOADS FOR WORKING STRESS DESIGN WITH APPROPRIATE BUILDING CODE LOAD FACTOR ALREADY APPLIED. NO INCREASE IN STRESS OR LOAD REDUCTION IS ALLOWED FOR WIND OR SEISMIC LOAD COMBINATIONS. ALL ADDITIONAL SPECIFIED AXIAL LOADS ARE TO BE ADDITIVE TO FULL GRAVITY AND FULL UPLIFT LOADS TO PRODUCE THE WORST CASE CONDITION. JOISTS AND JOIST GIRDERS SHALL RESIST THE NET UPLIFT PRESSURE ON ROOF SHOWN IN THE DESIGN LOADS.
6. THE LIVE LOAD DEFLECTION LIMIT FOR JOIST AND JOIST GIRDERS IS L/240, UNLESS NOTED OTHERWISE. PROVIDE 2 1/2" BEARING SEATS FOR ALL JOISTS AND 7 1/2" BEARING SEATS FOR ALL JOIST GIRDERS. LIMIT JOIST GIRDER SEAT WIDTH TO A MAXIMUM OF 11". ALL JOISTS AND JOIST GIRDERS SHALL RESIST THE MOST CRITICAL EFFECTS FROM THE LOAD COMBINATIONS LISTED IN THE APPLICABLE BUILDING CODE.
 ALL JOISTS AND JOIST GIRDERS AT PERIMETER WALLS SHALL BE LIMITED TO A LIVE LOAD DEFLECTION OF L/360. LIMIT TOP CHORD WIDTH TO A MAXIMUM OF 11". WHERE JOISTS ARE PARALLEL TO AND NEAR WALLS, 50 FEET OR LESS IN LENGTH, PROVIDE A MAXIMUM 1/2" CAMBER AND FOR JOISTS GREATER THAN 50 FEET, PROVIDE A MAXIMUM 3/4" CAMBER. JOIST MANUEACTURER SHALL DESIGN THE COMPRESSION CHORD OF ALL JOISTS SUPPORTING ROOF TOP LINITS. SKY LIGHTS, AND OTHER STRUCTURES FOR AN UNBRACED.
 SOIST MANOLACTORER STALL DESIGN THE COMPLEX STORE THE UNBRACED LENGTH IS GREATER THAN THE SJI MAXIMUM. JOISTS SUPPORTING ROOF TOP EQUIPMENT SHALL HAVE A MINIMUM TOP CHORD WIDTH OF 6" TO ALLOW FOR PROPER INSTALLATION OF HEADERS WHERE REQUIRED. IF TOP CHORD WIDTH IS GREATER THAN 9" COORDINATE HEADER OFFSET WITH STEEL SUPPLIER. STEEL JOISTS AND JOIST GIRDERS SHALL HAVE BRIDGING AND BOTTOM CHORD BRACING DESIGNED AND PROVIDED PER THE CURRENT STEEL JOIST INSTITUTE SPECIFICATIONS DIAGONAL BRIDGING SHALL BE PROVIDED BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING IS DISCONTINUOUS.
STEEL ROOF DECK 1. ROOF DECK SHALL BE PAINTED TYPE "B" (WIDE RIB) AS SHOWN ON THE STRUCTURAL PLAN OR DETAILS, UNLESS NOTED OTHERWISE. REFER TO STRUCTURAL PLANS AND DETAILS FOR ROOF DECK ATTACHMENT. 2. WHEN THE ROOF DECK IS WELDED. WELDING RODS SHALL BE E 6022.
LIGHT GAUGE STEEL FRAMING 1. FOR 18 GAUGE AND LIGHTER FRAMING, CONNECTIONS SHALL BE MADE USING SELF-DRILLING, SELF-TAPPING SCREWS OR POWDER ACTUATED FASTENERS. 2. FOR 16 GAUGE AND HEAVIER FRAMING, CONNECTIONS SHALL BE MADE BY SELF-DRILLING SELF-TAPPING SCREWS, POWDER ACTUATED FASTENERS, OR BY WELDING AS
INDICATED ON THE DRAWINGS. 3. SELF-DRILLING SELF-TAPPING SCREW OR POWDER ACTUATED FASTENER CONNECTIONS ARE NOT PERMITTED TO BE USED WHERE WELDED STUD CONNECTIONS ARE SHOWN ON THE DRAWINGS.
 ALL 18 GAUGE AND LIGHTER FRAMING SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI. ALL 16 GAUGE AND HEAVIER FRAMING SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI. WHERE DETAILED CONNECTIONS OCCUR AT BRIDGING HOLES, INSTALL 16 GA x 1'-0" TRACK OVER STUD WITH (4) #10 SELF DRILLING SCREWS EACH LEG. CENTER TRACK ON CONNECTION.
MASONRY 1. CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C 90. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (fm) SHALL BE 2000 PSI. THE NET AREA COMPRESSIVE STRENGTH OF THE CONCRETE MASONRY UNITS SHALL BE 2800 PSI.
 MORTAR SHALL BE A PREBLENDED DRY MIX CONFORMING TO ASTM C 1714 AND MEETING THE PROPERY SPECIFICATIONS OF ASTM C 270 TYPE "S" MORTAR. REF SPECIFICATION 04200 FOR ADDITIONAL REQUIREMENTS. GROUT SHALL MEET ASTM SPECIFICATION C 476 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI. REF SPECIFICATION SECTION 04200 FOR ADDITIONAL REQUIREMENTS.
 4. GROUT SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4" DIAMETER HEAD. REF SPECIFICATION SECTION 04200. 5. WHERE NEW GROUT IS REQUIRED FOR CAST-IN-PLACE OR POST INSTALLED ANCHORS, PROVIDE 12" GROUT COVER ON ALL SIDES OF THE ANCHORS. CREATE A HOLE IN CMU ON INTERIOR SIDE OF WALL FOR GROUT INSERTION. PROVIDE PLUG AT BOTTOM. REPAIR HOLE AS REQUIRED.
 6. HORIZONTAL JOINT REINFORCEMENT SHALL BE LADDER TYPE SPACED AT 16" OC VERTICALLY FOR THE ENTIRE HEIGHT OF THE WALL. 7. CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND. 8. CONCRETE MASONRY BELOW FINISHED FLOOR SHALL BE NORMAL WEIGHT UNITS AND SHALL HAVE ALL CELLS FULLY GROUTED. CONCRETE MASONRY ABOVE FINISHED FLOOR
SHALL BE LIGHT WEIGHT OR NORMAL WEIGHT AND SHALL BE GROUTED ONLY AT REINFORCED CELLS AND BOND BEAMS, UNO. 9. REFER TO CMU WALL REINFORCING DIAGRAM AND DETAILS FOR PRIMARY WALL REINFORCEMENT. 10. REFER TO CMU WALL REINFORCING DIAGRAM AND MASONRY WALL OPENING DETAILS FOR ADDITIONAL REINFORCING AT OPENINGS, CONTROL JOINTS, CORNERS AND ENDS OF WALL PANELS
 11. REFER TO WALL FOUNDATION AND FRAMING DETAILS FOR ADDITIONAL BOND BEAM LOCATIONS AND EMBEDDED ITEMS. 12. USE OPEN KNOCK OUT BOND BEAM BLOCK WHERE HORIZONTAL BOND BEAM REINFORCEMENT IS REQUIRED. DO NOT USE TROUGH TYPE BLOCKS FOR BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS, UNO.
13. INSTALL EMBEDDED STEEL ITEMS FOR OVERHEAD DOORS IN GROUTED CELLS. COORDINATE LOCATIONS OF EMBEDDED ITEMS WITH OVERHEAD DOOR MANUFACTURER. POST-INSTALLED ANCHORS 1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. CONTRACTOR SHALL OBTAIN APPROVAL FROM ENGINEER OF RECORD PRIOR TO USING
POST-INSTALLED ANCHORS FOR MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. REFER TO SPECIFICATION 05090 FOR ADDITIONAL INFORMATION. 2. WHERE THE DRAWINGS INDICATE GROUT TO BE ADDED TO MASONRY WALLS, 7 DAY CURED GROUT MUST BE PRESENT WHEN INSTALLING POST-INSTALLED ANCHORS. SUBGRADE AND BASE
 PRIOR TO PLACEMENT OF SLABS IN SLAB REMOVAL AREAS, EXPOSED SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). WHERE SOILS ARE DISTURBED TO A DEPTH GREATER THAN 1'-0", COMPACTION SHALL BE PERFORMED IN A MAXIMUM 8 INCH LOOSE LIFTS. IN SLAB REMOVAL AREAS WHERE SUBGRADE IS NEEDED TO RAISE PAD TO PROPER ELEVATION, PROVIDE BASE AND/OR CHOKER MATERIAL AS INDICATED IN SPECS. NOTIFY IMMEDIATELY THE OWNER'S REPRESENTATIVE AND ENGINEER IF UNUSUAL SOIL CONDITIONS ARE FOUND. DO NOT ALLOW STORED EXCAVATION MATERIAL TO DISRUPT PROPER DRAINAGE OF AREA.
 DISPOSE OF EXCAVATED MATERIAL AS REQUIRED BY OWNER'S REPRESENTATIVE. THE TESTING AGENCY SHALL VERIFY THE SUBGRADE IS COMPACTED TO THE OPTIMUM MAXIMUM DRY DENSITY AS SPECIFIED IN THE PAD PREPARATION. A QUALIFIED REPRESENTATIVE OF THE TESTING AGENCY SHALL WITNESS PROOF ROLLING OF THE SUBGRADE TO IDENTIFY UNACCEPTABLE AREAS OF THE BUILDING PAD. THE CONTRACTOR SHALL RECOMPACT OR REMOVE AND REPLACE SOFT AREAS AS DETERMINED TO BE UNACCEPTABLE BY THE TESTING AGENCY. THE TESTING AGENCY SHALL PROVIDE A REPORT TO THE OWNER.
7. THE TESTING AGENCY SHALL VERIFY THE AGGREGATE BASE IS COMPACTED TO THE OPTIMUM MAXIMUM DRY DENSITY AS SPECIFIED IN THE PAD PREPARATION JUST PRIOR TO PLACING THE SLAB. A QUALIFIED REPRESENTATIVE OF THE TESTING AGENCY SHALL WITNESS PROOF ROLLING OF THE BASE TO IDENTIFY UNACCEPTABLE AREAS OF THE BUILDING PAD. THE CONTRACTOR SHALL REPAIR SOFT AREAS AS DIRECTED BY THE TESTING AGENCY. RUTTING DUE TO PROOF ROLLING DEEPER THAN 1/2 INCH IN THE BASE SHALL BE UNACCEPTABLE.THE TESTING AGENCY SHALL PROVIDE A REPORT TO THE OWNER AND THE ENGINEER STATING THE SUBGRADE AND BASE IS ACCEPTABLE.

WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

WORKERS WITH THIS KNOWLEDGE

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBIL

 \mathbb{Q}

 $\bigcirc \bigcirc$

Imart

Mal

 \mathbb{S}

 \bigcirc

 \bigcirc

₹₹

>⁴ %

PUYAL 2403-

∠≝ÿ

ΣΞ AVE S

2

ς α

∽ ⊢ ¬

DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION

S0

SHEET:

7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

S1

/2022 10:41:56 AM

!/9/2022 10:41

F	URNI A	ISHE CCES	D S SSO	PRIN RIES	KLEI	RS A	ND	
MFR	MAKE	S.I.N.	TEMP	STYLE	QTY SF	ARE ESCH	H ESCH E FINISH	ESCH QTY
TYCO	K17-23	1 TY7158	155	UPRIGHT	36	6		
BE PI	ERMITTEI	D. REFER	RENCE	SPECIFICA	TIONS A	PPENDIX	B FOR	
URE	SPRINKL	ERS TO	BE FU	RNISHED	BY OWN	ER FOR	INSTALLA	ATION
NKLE	RS TO	BE FURN	IISHED	BY OWNE	RFORI	NSTALLA	TION AR	DUND
RES	PONSIBI	F FOR A	NY DA	MAGE TO	OWNFR	FURNISH	FD	
LLAT	ION. TO 7099.	REPLACI	E DAMA	AGED SPR	RINKLERS	CONTAC	T HAINE	S,
	ITIONAL	(OWNER-		SHED) SF		S FOR T	HE SPAF	RES
ULTA	ANT SITE	OBSER	VATION.		CONTRA	51 00001		INOIN
ESP(JTLE FRS	DNSIBILIT TS WITH	THE PR	RIFY A OPOSEE RINKI	ND COMF) NEW SF FRS AND	ARE TH	E QUANT RS PRIOR	TY AND TO ORD	SIZE ERING RED
0 TH	HE OWNE	ER.		LING AND				
FIF	RE S	SPRIN	NKL	ER LI	EGEN	١D		
PRIN	KLERS A	RE TO E	BE USE	ON THI	S PROJE			
.N.	STYLE	FINISH	ESC	TEMP	K-FAC			
	J LL							
255	DRY	CHROME	FLUSH	1 200°	11.2	10		
			I	1	l		J	

SYMBOL LEGEND

SYMBOL	DESCRIPTION
XX	DEMO PIPING
	EXISTING BRANCH LINE TO REMAI
	EXISTING MAIN LINE TO REMAIN
	BRANCH LINE TO BE INSTALLED
Ø	DEMO SPRINKLERS
۲	EXISTING ROOF LEVEL SPRINKLER
0	EXISTING PENDENT SPRINKLERS
	EXISTING DRY PENDENT SPRINKLE
<u>○</u>	1" OUTLET WITH ARM-OVER TO N
	NEW DRILLED 1" MECHANICAL TER PENDENT SPRINKLER
Ъ	PLUG EXISTING OUTLET
	SHEET INC
SHEET NUMBER	SHEET NAME
FP1	FIRE SPRINKLER SITE PLAN
FP2	FIRE SPRINKLER REMODEL PIPING

OPTION "B" INSTALLATION PROCEDURE OPTION "A" INSTALLATION PROCEDURE CORE DRILL 2 1/2" DIAMETER HOLE IN THE FREEZER/COOLER INSULATED CORE DRILL 2 1/2" DIAMETER HOLE IN THE FREEZER/COOLER INSULATED CEILING PANEL. LOCATE HOLE AND REQUIRED SPRINKLER PROTECTION IN CEILING PANEL LOCATE HOLE AND REQUIRED SPRINKLER PROTECTION IN ACCORDANCE WITH NFPA 13 OBSTRUCTION CRITERIA (SSP TYPE SPRINKLERS). ACCORDANCE WITH NFPA 13 OBSTRUCTION CRITERIA (SSP TYPE SPRINKLE MAINTAIN 6" CLEARANCE FROM COOLER SEAMS. MAINTAIN 6" CLEARANCE FROM COOLER SEAMS. INSTALL TYCO DRY PENDENT SPRINKLER PER MANUFACTURERS INSTALLATION INSTALL TYCO DRY PENDENT SPRINKLER PER MANUFACTURERS INSTALLAT REQUIREMENTS. REQUIREMENTS. INSERT BOOT PRIOR TO MAKE-UP WITH PIPING. COMPLETELY FILL ANNULAR CEILING OPENING BETWEEN THE ESCUTCHEON AND COMPLETELY SEAL INTERFACE BETWEEN BOOT FLANGE AND TOP OF TOP OF CEILING PANEL WITH OPEN-CELL POLYETHYLENE FOAM BACKER ROD. FREEZER/COOLER PANEL WITH ADHESIVE PROVIDED WITH BOOT IN EXPANDED FOAM IS NOT PERMITTED. ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. INJECT DOW CORNING 739 PLASTIC ADHESIVE SEALANT INTO AND AROUND APPLY STRAP TIES ON BOOT AROUND DRY SPRINKLER BARREL PER THE TOP OF THE FREEZER/COOLER CEILING CORE OPENING IN ACCORDANCE MANUFACTURERS INSTRUCTIONS. WITH SEALANT MANUFACTURERS INSTRUCTIONS - SUPPLY FROM WET SUPPLY FROM WET PIPE SPRINKLER SYSTEM PIPE SPRINKLER SYSTEM - TEE WITH PLUG - TEE WITH PLUG DRY 1"DRY - 2 NYLON STRAP TIES SPRINKLER DROP SPRINKLER DROP (INSTALL OPPOSITE DIRECTIONS) OPEN-CELL - DOW CORNING 739 - TYCO RUBBER SEAL POLYETHYLENE PLASTIC ADHESIVE BOOT MODEL DSB-FOAM BACKER ROD--SEALANT PER BOOT FREEZER/COOLER FREEZER/COOLER CEILING CEILING -----MANUFACTURER SPRINKLER CUP TYCO MODEL TY5255 SPRINKLER CUP -TYCO MODEL TY5255 FLUSH 200°F DRY FLUSH 200°F DRY PENDENT SPRINKLER <---> PENDENT SPRINKLER (NO SUBSTITUTIONS) (NO SUBSTITUTIONS) OPTION OPTION NOTE: CONTRACTOR TO SEAL DRY PENDENT SPRINKLERS AT FREEZER/COOLER USING ONE OF THE OPTIONS ABOVE. NO OTHER SEALANTS ARE PERMITTED. FREEZER/COOLER DRY PENDENT SPRINKLER – FLOW HYDRANT 8"FEBCO 806YD DCDA EXISTING 12" MAIN - EXISTING 8" TEST LEAD-IN 47 180–0 la si a REMOTE FDC -----S/R HYDRANT -

JEND	
	1.
	2.
IN	
	3.
S	
	4.
ERS	
NEW PENDENT SPRINKLER	-
	э.
	6.
DEX	
PLAN	7.
	8.
	9.
	10
-	
<u> </u>	11.
-PS)	
	12
ION	
	13

SCOPE OF WORK

CONTRACTOR TO FIELD VERIFY EXTENT OF WORK

THE EXISTING FIRE SPRINKLER SYSTEMS WILL BE MODIFIED AS INDICATED ON THE PROJECT CONTRACT DOCUMENTS. THE SCOPE OF WORK MAY INCLUDE THE MODIFICATION OF EXISTING BRANCHLINES, INSTALLATION OF NEW BRANCHLINES, MODIFICATION OF EXISTING RISER(S). THE REMOVAL AND INSTALLATION OF NEW SPRINKLERS, MODIFICATION OF EXISTING MAINS, INSTALLATION OF NEW MAINS, REPLACEMENT OF THE EXISTING BACKFLOW PREVENTOR.

ALL NEW PIPING SHALL HAVE HANGERS INSTALLED IN ACCORDANCE TO THE DETAILS LOCATED ON THE FIRE PROTECTION DETAILS

ALL 1-INCH ARMOVERS (IF APPLICABLE) SHALL HAVE A HANGER SECURED TO THE STRUCTURAL STEEL ONLY, NOT TO THE DECK WHEN THE LENGTH EXCEEDS 2'-0" WHERE STATIC PRESSURES ARE UP TO 100 PSI AND 1'-0" WHERE STATIC PRESSURES EXCEEDS 100 PSI.

WHEN REQUIRED, EARTHQUAKE BRACING SHALL BE INSTALLED. REFERENCE EARTHQUAKE BRACING NOTES AND DETAILS LOCATED ON THE FIRE PROTECTION DETAILS SHEET. CEILING GRID SHALL BE PERMITTED TO BE REMOVED IN AREAS WHERE REQUIRED IN ORDER TO COMPLETE THE WORK NEEDED SUCH AS DEMO AND INSTALLATION OF NEW MAINS OR LONG DROPS. IN THIS CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING DAMAGED CEILING TILE OR GRID DURING THE INSTALLATION. ALL REMOVED CEILING TILES MUST BE REPLACED AT THE END OF BUSINESS DAY. AREAS LEFT EXPOSED

SUCH AS BUT NOT LIMITED TO REMOVED CEILING GRID AND CEILING TILES SHALL NOT BE PERMITTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PURCHASING AND INSTALLING MATCHING CEILING TILES TO REPLACE ANY CEILING TILES THAT HAVE EMPTY HOLES DUE TO SPRINKLER

- REPLACEMENT. USE EACH EXISTING OUTLETS FOR ONE NEW ARM OVER TO NEW SPRINKLER LOCATION UNLESS HYDRAULICALLY CALCULATED. CONTRACTOR SHALL INSTALL 1" INCH MECHANICAL TEES IF ADDITIONAL OUTLETS ARE REQUIRED. AFTER THE DEMOLITION IS COMPLETE, THE NEW SPRINKLER SYSTEM SHALL MEET ALL REQUIREMENTS OF NFPA 13. CONTRACTOR SHALL PROVIDE NEW SPRINKLERS
- AS NECESSARY DUE TO PAINT, DAMAGE, ETC.. CONTRACTOR SHALL COORDINATE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE FIRE LANES DURING THE SPRINKLER SYSTEM UPGRADE PROCESS. THE
- CONTRACTOR SHALL COORDINATE WITH THE STORE MANAGER A STAGING AREA FOR MATERIALS AND TOOLS TO BE USED FOR PROJECT PRIOR TO START OF WORK. THE SPRINKLER CONTRACTOR SHALL BE
- RESPONSIBLE FOR PREPARING THE SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND APPROVAL (BY THE ENGINEER OF RECORD AND AHJ) AS WELL AS INSTALLATION. THE SPRINKLER CONTRACTOR MUST FIRST SUBMIT DOCUMENTS. AS OUTLINED IN THE
- PROJECT SPECIFICATIONS, TO THE FIRE PROTECTION ENGINEER OF RECORD FOR APPROVAL. AFTER THE APPROVAL IS GIVEN, THE ENGINEER OF RECORD WILL SUBMIT FOR FIRE SPRINKLER PERMIT. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PAY AND PICK UP THE FIRE SPRINKLER PERMIT ONCE APPROVED.
- THE CONTRACTOR SHALL COORDINATE WITH THE STORE MANAGER ON THE AREA TO BE WORKED ON AT LEAST 24 HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY CONTENT OR BUILDING COMPONENTS DUE TO CONTRACTOR
- NEGLIGENCE IN EXECUTION OF THE SCOPE OF WORK SHOWN IN CONTRACT DOCUMENTS. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO REDUCE POTENTIAL DAMAGE T CONTENTS AND BUILDING DURING EXECUTION OF SCOPE OF WORK. WHERE POTENTIAL FOR DAMAGE TO CONTENTS OR BUILDING
- COMPONENTS IS CONSIDERED LIKELY DUE TO EXISTING SYSTEM CONDITION OR CONFIGURATIONS. CONTRACTOR SHALL DOCUMENT AND REVIEW CONCERNS WITH WALMART CONSTRUCTION MANAGER PRIOR TO
- INITIATING AFFECTED WORK. THE CONTRACTOR SHALL REPAIR ANY LEAKS OR REPLACE ANY LEAKING COMPONENTS AFFECTED BY THIS SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.

GENERAL UNDERGROUND NOTES

- . ALL UNDERGROUND IS SHOWN FOR HYDRAULIC REFERENCE ONLY. 2. SEE CIVIL DRAWINGS FOR EXACT LOCATIONS
- IF AVAILABLE. 3. NO NEW WORK UNLESS OTHERWISE NOTED.

DOCUMENTS IS TO PROVIDE GUIDANCE FOR BIDDING AND TO OBTAIN APPROVAL OF THE AUTHORITY HAVING JURISDICTION. SUBMIT COMPLETE FIRE SPRINKLER SHOP DRAWINGS AS REQUIRED BY CONTRACT DOCUMENTS TO THE OWNERS DESIGNATED REVIEWER. BASE DESIGN UPON THESE DRAWINGS AND AS REQUIRED BY THE SPECIFICATIONS. SHOP DRAWINGS SHALL INCLUDE ELEVATIONS, HANGER LOCATIONS, PIPE LENGTHS, DIMENSIONS. FABRICATIONS METHODS, MATERIAL DATA, AND ADDITIONAL INFORMATION NECESSARY TO CLARIFY THE INTENT OF INSTALLATION. CONTRACTOR SHALL PROVIDE PIPE SIZE, SPRINKLER SPACING, AND SYSTEM CONFIGURATION AS SHOWN. ALTERNATES MUST BE APPROVED IN WRITING BY FIRE PROTECTION ENGINEER OF RECORD DOCUMENTS PRIOR TO BID. COORDINATE LOCATIONS OF FIRE PROTECTION COMPONENTS, INCLUDING PIPING, ALARMS, DRAINS, TEST POINTS, ETC. WITH

GENERAL NOTES

THE DESIGN SHOWN ON THESE CONTRACT

AND ELECTRICAL COMPONENTS. OBSTRUCTION TO SPRINKLER DISCHARGE MUST BE CONSIDERED DURING SHOP DRAWING PRODUCTION AND INSTALLATION; ADDITIONAL SPRINKLERS MAY BE REQUIRED AT NO ADDITIONAL COST TO OWNER. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. CONTRACTOR MUST VISIT THE BUILDING SITE TO DETERMINE THE FULL EXTENT OF THE

ARCHITECTURAL, STRUCTURAL, MECHANICAL,

- EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS, BECOME TOTALLY FAMILIAR WITH THE DISCONNECTIONS, REMOVALS. RELOCATIONS AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT. NO EXTRA COMPENSATION WILL BE PAID FOR LACK OF SUCH DETERMINATION,
- FAMILIARIZATION, AND/OR ALLOWANCE. SUBMIT A REQUEST FOR INFORMATION FOR QUESTIONS REGARDING THE FIRE PROTECTION DOCUMENTS
- NEUTRALIZATION WALLS, IF PROVIDED, ARE SHOWN ON THE ARCHITECTURAL DRAWINGS. REFER TO MECHANICAL DRAWINGS FOR NEUTRALIZATION WALL PENETRATION DETAIL.
- PENETRATIONS OF "RATED ASSEMBLIES" SHALL BE FIRE STOPPED WITH AN APPROVED MATERIAL PER METHODS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

FIRE SPRINKLER PIPING DEMOLITION NOTES

- CONTRACTOR MUST VISIT THE BUILDING SITE TO DETERMINE THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS, BECOME TOTALLY FAMILIAR WITH THE DISCONNECTIONS, REMOVALS, RELOCATIONS AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT. NO EXTRA COMPENSATION WILL BE PAID FOR LACK OF SUCH DETERMINATION,
- FAMILIARIZATION, AND/OR ALLOWANCE UNLESS INDICATED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING FIRE PROTECTION COMPONENTS NOT INTENDED TO BE REUSED. DISCONNECT, RELOCATE, AND RECONNECT
- EXISTING FIRE PROTECTION SYSTEMS AND EQUIPMENT WHERE REQUIRED. NOTE CAREFULLY THAT THE FIRE PROTECTION DRAWINGS ARE INTENDED TO INDICATE, ONLY
- DIAGRAMMATICALLY, THE EXTENT AND THE GENERAL CHARACTER AND LOCATIONS OF THE WORK INCLUDED. PROVIDE ALL WORK OBVIOUSLY INTENDED, BUT HAVING MINOR DETAILS OMITTED OR NOT SHOWN. COMPLETE AS REQUIRED TO PERFORM THE FUNCTIONS INTENDED. FOLLOW THE CONTRACT DOCUMENTS FOR BUILDING DETAILS AND FIT THE WORK OF THE FIRE PROTECTION DRAWINGS AND SPECIFICATIONS THERETO.
- REMOVE ALL DEMOLITION MATERIALS AND DEBRIS TO AN APPROVED DUMPING SITE AND CLEAN ALL FIRE PROTECTION WORK PRIOR THE PROJECT COMPLETION. PERFORM ALL WORK ACCORDING TO THE
- PROJECT PHASING SCHEDULE INFORMATION FOR THIS PROJECT. PROVIDE ALL NECESSARY FIRE PROTECTION WORK, TEMPORARY AND/OR OTHERWISE, AND USE WHATEVER MEANS NECESSARY, TO CONFORM TO THE REQUIRED CONSTRUCTION PHASING OF THE PROJECT.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING ITEMS DAMAGED DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR SHALL PATCH ALL HOLES TO
- MATCH ADJACENT SURFACES LEFT UNUSED AFTER EXISTING SPRINKLER PIPING OR EQUIPMENT IS REMOVED AND VACATED FROM THESE HOLES. CONTRACTOR IS RESPONSIBLE FOR PROVIDING
- AND MAINTAINING FIRE DEPARTMENT ACCESS ROADS THROUGHOUT THE PROJECT. . SPRINKLER SYSTEMS NOT ASSOCIATED WITH THE DEMOLITION SHALL BE LEFT IN SERVICE. ALL WORK SHALL BE PERFORMED DURING OFF HOURS SO AS TO NOT INTERRUPT SERVICE.
- THE CONTRACTOR SHALL PROPERLY NOTIFY THE LANDLORD. THE LESSOR AND THE ADJACENT TENANTS A MINIMUM OF 48 HOURS IN ADVANCE BEFORE PROCEEDING WITH THIS WORK. ALL WORK SHALL BE SCHEDULED IN ADVANCE.

EXISTING FIRE PUMP	FITTING(S) WHEN
DIESEL FIRE PUMP RATED 80 PSI @ 1500 GPM	CURRENTLY INSTA
WATER SUPPLY	
INFORMATION	
STATIC: 38 PSI RESIDUAL: 33 PSI AT 1838 GPM	<u>NFPA STANDARD:</u> NFPA 13 NFPA 20
SUPPLIED BY: TELGIAN ENGINEERING & CONSULTING 8/26/21	<u>UL GUIDELINE:</u> UL LLC TECHNICAL RE
IS: 8" FIRE SERVICE LEAD-IN	<u>FIRE CODE:</u> 2018 INTERNATIONAL F
DATE OF TEST: 8/26/21 @ 9:30 AM FLOW TEST ELEVATION: 442' AMSL	BUILDING CODE; 2018 INTERNATIONAL E
WATER SUPPLY INFORMATION IS FURTHER REDUCED PER THE FOLLOWING:	SEISMIC R
* 5.0 PSI SAFETY FACTOR FOR WAL-MART STANDARDS	THE SPRINKLER CON ALL REQUIREMENTS F OF PIPING AGAINST I EARTHQUAKES". THE MUST ALSO TAKE IN OF THE STRUCTURAL FASTENING AND/OR ASSEMBLIES, RESTRA STRUCTURAL REQUIR

WATER SUPPLY TO BE USED FOR FIRE SPRINKLER DESIGN AT EFFECTIVE POINT: STATIC: 33 PSI **RESIDUAL:** 28 PSI AT 1838 GPM

WA

GENERAL NO

- SHALL NOT BE RESPONSIBLE FOR THE THE CONTRACT DOCUMENTS, NOR SHALL THEY BE REQUIRED TO SUPERVISE THE SUBCONTRACTORS, THEIR RESPECTIVE JOB SITE OTHER THAN THAT OF THE ENGINEERING FIRM'S EMPLOYEES. 3. CONTRACTOR MUST REVIEW ALL BECOME NECESSARY TO PROPERLY TRADES, IT WILL BE THE CONTRACTOR'S REVIEW CONSULTANT IN ADDITION TO OR COORDINATION CHANGES ON THE PROVIDE A SET OF AS-BUILT DRAWINGS ONCE COMPLETE. INSIDE THE BAR JOIST. PROTECTION UNDER OBSTRUCTIONS, AS OF THE FIELD COORDINATION AT NO ADDITIONAL COST TO OWNER. 2. ALL SPRINKLER DEFLECTOR DISTANCE THE STANDARDS OUTLINED IN NFPA 13. 13. ALL PIPING PASSING THROUGH CMU WALLS SHALL BE INSTALLED WITH ONE INCH CLEARANCE ON ALL SIDES. (CORE DIAMETER
- METHODS DESCRIBED BY THE UL FIRE RESISTANCE DIRECTORY. PROVIDE FLUSHING CONNECTIONS IN ACCORDANCE WITH THE STANDARDS OUTLINED IN NEPA 1.3. REQUIRED BY BUILDING CONDITIONS. CLEARANCES, ETC.
- THE CONTRACT DOCUMENTS FOR LOCATIONS, SIZES AND QUANTITIES OF OTHER TRADE WORK 9. SPRINKLER SPACING TO BE PER NFPA 13. 20. INTERFACE SPRINKLER SYSTEM WITH FIRE PROTECTION SUPERVISORY SYSTEM. APPROVED. SPRINKLERS SHALL BE TYCO
- HEADS. SPRINKLER PIPE SHALL BE LESS THAN 1.0 SHALL BE USED ONLY WITH ROLL GROOVE FITTINGS.
- MISSOURI, LOCATE AS REQUIRED BY NEW DOUBLE POLE VANE TYPE FLOW ELECTRIC SIGNAL OF ST. LOUIS, MISSOURI.
- NO HIGHER THAN 6 FEET ABOVE FINISH FI OOR 23. ALL SPRINKLER SYSTEMS TO BE MODIFIED SHALL BE HYDROSTATICALLY TESTED PER NFPA 13 PRIOR TO SPRINKLER SYSTEM MODIFICATION AND SHALL BE
- COMPLETION OF WORK. 24. DO NOT HANG OR SUPPORT ANY LOADS OR ROOF DECK OR JOIST BRIDGING. 25. SAMMY SCREWS ARE NOT PERMITTED.
- 27. PROVIDE RETAINING STRAPS ON HANGERS WHERE REQUIRED. 28. CONTRACTOR IS TO COORDINATE FINAL SPRINKLER HEAD LOCATIONS AND PIPE ROUTING SUCH THAT THEY DO NOT
- 29. WHERE THE DESIGN IS SHOWN TO REPLACE SPRINKLERS, IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE SIZE OF THE EXISTING SPRINKLER FITTING PRIOR TO BID. IT IS THE RESPONSIBILITY OF THE

- TRACTOR SHALL COMPLY WITH
- MAY BE MORE STRINGENT THAN NFPA.

THE FIRE PROTECTION ENGINEER OF RECORD CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH CONDUCT OF THE WORK, THE CONSTRUCTION PROCEDURES FOLLOWED BY THE CONTRACTOR, EMPLOYEES OR ANY OTHER PERSON AT THE

CONSTRUCTION DOCUMENTS PRIOR TO BID. SHOULD MODIFICATIONS TO THESE PLANS

COORDINATE THE SYSTEM WITH ALL OTHER RESPONSIBILITY TO OBTAIN APPROVAL OF THE CHANGES FROM BOTH THE AUTHORITY HAVING JURISDICTION AND THE OWNER'S DESIGNATED OBTAINING THE NECESSARY APPROVALS, THE CONTRACTOR MUST MAKE NOTE OF ANY FIELD INSTALLATION DRAWINGS, AND THEN MUST

ON CONTRACTOR MUST VERIFY ALL DROP DOWN LOCATIONS AT EXTERIOR WALLS WITH THE PROJECT MANAGER PRIOR TO INSTALLATION.). ALL PIPING MUST BE COORDINATED AROUND FRAMING MEMBERS AND PROPERLY INSTALLED

1. CONTRACTOR SHALL ROUTE PIPING AROUND ALL OBSTRUCTIONS AND PROVIDE SPRINKLER DETAILED IN NFPA 13 STANDARDS AS PART

REQUIREMENTS SHALL BE IN ACCORDANCE TO

EQUAL TO PIPE +2"). ALL CORES SHALL BE COORDINATED WITH STRUCTURAL REINFORCING CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CORING WITH PROPER CLEARANCE AT ALL CMU WALLS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TWO INCH CLEARANCE AROUND ALL PIPING PASSING THROUGH CONCRETE SLABS. THE SPRINKLER CONTRACTOR SHALL FILL ALL CLEARANCES WITH APPROVED MASTIC.

PENETRATIONS OF ASSEMBLIES SHALL BE FIRE STOPPED WITH APPROVED MATERIALS PER

16. PROVIDE ALL NECESSARY OFFSETS, RISES OR DROPS IN PIPING AND AUXILIARY DRAINS 7. EXAMINE THE JOB CONDITIONS AND VERIFY ALL MEASUREMENTS, DISTANCES, ELEVATIONS,

18. ARCHITECTURAL AND ELECTRICAL BACKGROUND INFORMATION IS SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO

1. ALL MATERIALS SHALL BE UL LISTED AND FM

MANUFACTURED TO STANDARDS RECOGNIZED BY NFPA 13., THREADED PIPE SHALL HAVE A CORROSION RESISTANCE RATING OF 1.0 OR GREATER. CRIMP-TYPE COUPLINGS SHALL NOT BE USED. THREADABLE THINWALL PIPE WITH CORROSION RESISTANCE RATING OF

22. IF REQUIRED, PROVIDE 24 VOLT AC, ELECTRIC BELL, MODEL NO. PBA248, ELECTRIC BELL BY POTTER ELECTRIC SIGNAL OF ST. LOUIS, AUTHORITIES HAVING JURISDICTION. PROVIDE DETECTOR, MODEL NO. VSR-F, BY POTTER

SET ADJUSTABLE DELAYED SIGNAL AT 30 SECONDS. MOUNT WATER FLOW INDICATORS

RE-HYDROSTATICALLY TESTED AFTER

MAKE ANY ATTACHMENTS TO THE METAL 26. CEILING FLANGES ARE NOT PERMITTED.

INTERFERE WITH NOR RECEIVE DAMAGE FROM THE NORMAL OPERATIONS OF THE AREA.

CONTRACTOR TO PROVIDE THE NECESSARY THE NEW SPRINKLER HE EXISTING SPRINKLER

ABLE CODES

EDITION:

PORT PROJECT 4789705078

FIRE CODE

BUILDING CODE

REQUIREMENTS

PER NFPA 13 "PROTECTION DAMAGE WHERE SUBJECT TO SPRINKLER CONTRACTOR TO ACCOUNT THE LIMITATIONS ELEMENTS PRIOR TO SIZING, LOCATING SEISMIC AINTS, ETC. ON THEIR PLANS. REMENTS AND LIMITATIONS

> STORE LOCATION: 310 31ST AVE SE PUYALLUP, WA 98374

7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000

WDPARTNERS.COM

	ISSUE	BL(OC K
CHEC	KED B`	Y:	DW
DRAW	/NBY:		ΒY
PROT		F٠	06/25/21

DOCUMENT DATE:09/03/

FP1

7007 DISCOVERY BLVD DUBLIN OH 43017

Ē	VDPARTNERS.COM
STIPULATION FOR REUSE	THIS DRAMING WAS PREPARED FOR USE ON A SPECIFIC SITE AT: PUYALUP, WA CONTEMPORANEOUSLY MTH ITS ISSUE DATE ON 09/03/21 AND IT IS NOT DATE ON 09/03/21 AND IT IS NOT DATE ON 09/03/21 AND IT IS NOT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAMING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQURES ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAMING FOR REUSE ON ANOTHER PROJECT IS NOT AUTORIZED AND MAY BE CONTRARY TO THE LAW
CONSULTANTS	
	TO SIST AVENUE SE, PUYALLUP, WA STORE NO: 2403 - 278 JOB NUMBER: WALGPO402 PROTO: 192
	ISSUE BLOCK
	ECKED BY: DW
DRA PRC DOC	WN BY: BY DTO CYCLE: 06/25/21 DUMENT DATE:09/03/21
	AWING REVIEWED BY enjamin R. Young, CET
WAT WATEF SPECIAL C	NICET ER-BASED SYSTEMS LAYOUT - LEVEL IV R-BASED INSPECTION & TESTING - LEVEL II HAZARDS SUPPRESSION SYSTEMS - LEVEL I ERTIFICATION NUMBER: 104269
A	
HAV ENG AND CON	E THE ARCHITECT OR INEER OF RECORD SEAL SIGNATURE SHALL BE ISIDERED NOT FOR ISTRUCTION

FP2

GENERAL NOTES

- GENERAL NOTES ARE APPLICABLE TO ALL MECHANICAL AND PLUMBING DRAWINGS.
- PROVIDE ALL MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS AND READY FOR INTENDED USE AND IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURERS RECOMMENDATIONS.
- STORE MUST BE KEPT IN OPERATION.ARRANGE ALL WORK TO KEEP DISRUPTIONS TO STORE OPERATIONS TO A MINIMUM. COORDINATE WITH EXISTING AND NEW CONSTRUCTION. PAY ALL NECESSARY FEES AND PERMITS.
- IF NEW CONSTRUCTION DISRUPTS EXISTING UNDERGROUND SERVICES (GAS, SEWER, DOMESTIC WATER, FIRE SPRINKLER, ETC.), PROVIDE ALL MATERIALS AND LABOR AS REQUIRED TO MAINTAIN THEIR PROPER OPERATION.
- CONTRACTOR IS RESPONSIBLE FOR UTILIZING OWNER APPROVED ROOFING CONTRACTORS FOR CUTTING AND PATCHING ROOF.
- 6. NOT USED.
- CONTRACTOR SHALL INSTALL OWNER FURNISHED RTU CURB AND TEMPORARY COVER CURB PER ARCH DETAIL (IF USED). RTU'S SHALL BE FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR. CURB ADAPTOR (IF USED) SHALL BE FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR. RTU SHALL BE SET ON ROOF CURB. DO NOT SET RTU DIRECTLY ON 27. NOT USED. ROOF. COORDINATE RTU INSTALLATION WITH WALMART CONSTRUCTION MANAGER AND AES AS REQUIRED FOR RTU/AHU CURB ADAPTERS.
- REPLACE FILTERS ON NEW RTU NO MORE THAN ONE DAY PRIOR TO STARTING TEST & BALANCE PROCEDURES. FILTERS SHALL BE 2" THICK EQUAL TO FARR 30/30.
- LABEL RTU WITH 6" BLACK PERMANENT PAINT STENCIL AND LABEL SENSOR WITH 2" HIGH BLACK PERMANENT PAINT STENCIL. NUMBER THE SENSOR TO CORRESPOND WITH RTU IT CONTROLS. LOCATE LABEL FOR UNIT NEAR ITS DISCONNECT SO IT IS READABLE FROM ROOF HATCH.
- 10. IF RTUS ARE INSTALLED BEFORE ROOFING IS COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE WHICH OCCURS DURING THE ROOFING PROCESS, INCLUDING TAR ON 32. CAP ALL PIPING OPENINGS DURING CONSTRUCTION COILS.
- 1. ROOFTOP UNIT CONDENSATE SHALL BE ROUTED TO DRAIN WITH THE SLOPE OF THE ROOF.
- 12. MECHANICAL FAILURE OF NEW ROOFTOP UNITS PRIOR TO ACCEPTANCE BY OWNER, SHALL BE REPAIRED OR REPLACED BY CONTRACTOR THROUGH WARRANTY AGREEMENT WITH MANUFACTURER.
- 13. IF APPLICABLE, COORDINATE ALL NEW GAS PIPING AND ROOF EQUIPMENT WITH EXISTING GAS PIPING, SKYLIGHTS, AND ROOF EQUIPMENT. FIELD VERIFY EXISTING CONDITIONS.
- 14. ROOFTOP UNITS BEING ADDED TO EXISTING ROOF STRUCTURE SHALL BE INSTALLED WHEN THE UNITS ARRIVE AT THE JOB SITE. REFERENCE ARCHITECTURAL/STRUCTURAL SHEETS FOR DETAILS.
- 5. INSTALL VTR'S A MINIMUM OF 24" AND FLUES A MINIMUM OF 36" FROM ROOF EDGE AND/OR PARAPET WALLS. INSTALL VTR'S, FLUES AND EXHAUST FANS A MINIMUM OF 10 FT FROM OUTSIDE AIR INTAKE OF ROOF TOP UNITS. INSTALL EXHAUST FANS AND ROOF TOP UNITS A MINIMUM OF 10 FT FROM ROOF EDGE OR A MINIMUM OF 60" FROM PARAPET WALLS THAT ARE AT LEAST 42" HIGH.
- 16. COORDINATE LOCATION OF DUCTWORK AND DIFFUSERS WITH LIGHT FIXTURES TO PREVENT EXCESSIVE SHADOWING OF THE SALES OR STOCK FLOORS. LIGHT FIXTURE LOCATIONS TAKE PRECEDENCE. FIELD VERIFY STRUCTURAL CONDITIONS BEFORE FABRICATION OF DUCTWORK.
- 7. FLEXIBLE DUCT CONNECTIONS TO NEW OR RELOCATED DIFFUSERS AND GRILLES ARE PROHIBITED. INSPECT CONDITION OF EXISTING DUCT AND REPLACE DAMAGED DUCT WITH EQUIVALENT TYPE OF DUCT AS REQUIRED.
- 18. DUCT SIZES SHOWN ON DRAWINGS ARE NET FREE AREA. CONTRACTOR'S OPTION, ROUND DUCTWORK OF EQUIVALENT FREE AREA MAY BE USED IN LIEU OF RECTANGULAR. INCREASE RECTANGULAR SHEET METAL SIZE AS REQUIRED FOR LINER. REFER TO SPECIFICATIONS FOR THE INSULATION THICKNESS.
- 9. DUCT SUPPORT AND GRILLE DETAIL IS APPLICABLE THROUGHOUT THE STORE. DO NOT USE FASTENERS THAT PENETRATE ROOF DECK. 20. TYPICAL BRANCH DUCT FITTING DETAIL IS
- APPLICABLE THROUGHOUT THE STORE.

- BEEN FIELD VERIFIED, CONTRACTOR IS TO OR MODIFIED, AND TO VERIFY THAT PROPER THAN 4". REF ARCH. FOR TRENCHING REQUIREMENTS.
- 22. NOT USED.
- SEWER AND VENT PIPE SIZE AND ELEVATION AND BEFORE CUTTING FLOOR SLAB FOR NEW SEWER PIPING
- 24. NOT USED. 25. PLUMBING CONTRACTOR SHALL PROVIDE ONE YEAR WARRANTY FOR PROPER SEWER SYSTEM
- OPERATION. 26. SANITARY DRAINAGE LINES AND FITTINGS (DRAIN, WASTE AND VENT) SHALL BE CAST IRON, COATED CODES, PVC-DWV PLASTIC SCHEDULE 40 MAY BE USED IN LIEU OF CAST IRON. ALL PHOTOLAB PLUMBING SHALL BE PVC.
- 29. ALL FLOOR CLEANOUTS SHALL BE INSTALLED FLUSH WITH FLOOR FINISH MATERIAL OR FLUSH WITH CONCRETE SLAB IF NO FLOOR FINISH MATERIAL IS CALLED OUT FOR ON ARCHITECTURAL DRAWINGS.
- 30. LOCATE ALL FLOOR CLEAN-OUTS OUT OF TRAFFIC WAYS, WHILE MAINTAINING ACCESSIBILITY, LOCATE PER DIMENSIONS IF SHOWN ON PLANS.
- 31. FLOOR CUTS SHALL BE STRAIGHT AND CLEAN, AND SMOOTH WITH ADJACENT FLOOR SLAB. WITH GENERAL CONTRACTOR.
- UNTIL FINAL CONNECTIONS TO EQUIPMENT AND ACCESSORIES ARE MADE.
- 33. CUT AND PATCH EXISTING CONCRETE FLOOR SLAB FOR INSTALLATION OF NEW UNDERGROUND
- 34. DO NOT INSTALL PIPING WITHIN COOLER PANELS. CORROSIVE MATERIALS FOR SPACERS AND ANCHORS.
- 35. PROVIDE ESCUTCHEON PLATES FOR PLUMBING WALLS.
- 36. PROVIDE AIR TIGHT SEAL AROUND PIPING AND CEILINGS. FINISH WITH ESCUTCHEON PLATE.
- AND DRAIN PIPING EXPOSED TO FREEZING.
- 38. INSTALL CONTINUOUS SEALANT JOINT AT ALL EXTERIOR WALL PENETRATIONS.
- 39. AT CONTRACTOR'S OPTION (U.N.O), IN LIEU OF SIZES SCHEDULE AND SPECIFICATIONS.
- SEISMIC ZONE REQUIREMENTS PER SMACNA STRUCTURAL ENGINEER'S CERTIFICATION ON DETAILS SUBMITTED FOR PERMITTING.
- 41. BUILDING COMPONENTS ABANDONED BY THE SCOPE LOOSENING, OR CREATING DAMAGE OF ANY KIND IN THE FUTURE.

WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

WORKERS WITH THIS KNOWLEDGE.

21. EXISTING PIPE SIZES AND LOCATIONS HAVE NOT RESPONSIBLE TO FIELD VERIFY LOCATION AND SIZES OF ALL EXISTING PIPING THAT IS BEING CONNECTED SLOPES AND ELEVATIONS ARE AVAILABLE. MAINTAIN MINIMUM SLOPE OF 1/8" PER FOOT FOR SAN SEWER PIPING 4" OR LARGER. MAINTAIN MINIMUM SLOPE OF 1/4" PER FOOT FOR SAN SEWER PIPING SMALLER

23. PLUMBING CONTRACTOR SHALL VERIFY EXISTING SHALL VERIFY THAT PROPER SLOPES ARE AVAILABLE

INSIDE AND OUTSIDE. WHERE PERMITTED BY LOCAL

28. PROVIDE AUTOMATIC TRAP PRIMERS ON FLOOR DRAINS IF REQUIRED BY LOCAL PLUMBING CODES.

REPLACE REMOVED SLAB WITH CONCRETE FLUSH REFERENCE ARCHITECTURAL SHEETS. COORDINATE

PLUMBING PIPE. MATCH EXISTING CONSTRUCTION.

INSTALL EXPOSED PIPING IN PREP AREAS A MINIMUM OF 1" FROM PANEL WALL AND 6" ABOVE FINISHED FLOOR TO ALLOW FOR CLEANING. USE ONLY NON-

PENETRATIONS THROUGH GROCERY CEILINGS AND

PENETRATIONS THROUGH COOLER/FREEZER WALLS 37. PROVIDE HEAT TAPE AND INSULATION ON ALL WATER

COPPER WATER PIPING, PEX OR AQUATHERM PIPING MAY BE USED. REFER TO EQUIVALENT NOMINAL PIPE

40. PROVIDE SEISMIC BRACING BASED ON APPROPRIATE PUBLISHED SEISMIC DETAILS, LOCAL AND NATIONAL CODES. CONTRACTOR'S RESPONSIBILITY INCLUDES

OF WORK SHALL BE SECURED TO PREVENT FALLING,

7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

ISSUE BL	OCK
CHECKED BY:	RRN
DRAWN BY:	VM
PROTO CYCLE:	07/30/21
DOCUMENT DATE	: 09/08/21

DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION

MP1

SHEET

		FLOOR	DRAIN SCHEDULE		
MARK	MANUFACTURER	MODEL	DESCRIPTION		
FD2			HUB DRAIN SAME AS SANITARY WASTE PIPING MATERIAL UNLESS NOTED OTHERW ON PLANS		
		CLEA	NOUT SCHEDULE		
MARK	MANUFACTURER	MODEL	DESCRIPTION		
FCO1	ZURN SIOUX CHIEF MIFAB JAY R. SMITH JOSAM WATTS OATEY	Z1400 852 C1100 4231 55000 CO-200-RX-4 74000	CAST IRON OR PVC BODY, ROUND EXTRA HEAVY-DUTY CAST OR DUCTILE IRON POLYPROPYLENE OR ABS PLUG, ADJUSTABLE TO FINISH SURFACE.		

LOCATE HUB DRAIN WHERE SHOWN ON DIMENSIONED PLUMBING FLOOR PLAN.

ROOF DRAIN CALCULATIONS Roof area: 3230 Sqft Rain fall rate: 1.5" GPM= 3230 sqft x 1.5"/ 12 (in/ft) x 1/60 (min/hr) x 7.48 gal/sqft = 50.3 gal Per 2018 Uniform plumbing code table 1103.3 (for 1/4" slope) required gutter size is 6", 8" provided size (Equivalent Diameter) is : 8.56 inches Per 2018 Uniform plumbing code table 1103.1; size of downspout required is 3", 10" provided size (Equivalent Diameter) is : 10.70 inches

4" SS ETR (15.422

5.403	CONNECT TO EXIS EQUAL OR LARGE LOCATION, ELEVA SITE.
5.404	CONNECT TO EXIS LARGER SIZE. VEI SITE.
5.422	EXISTING PIPING IN FIELD).
5.429	CUT AND PATCH E SLAB FOR INSTAL UNDERGROUND F EXISTING CONSTE
5.442	REMOVE FIXTURE ABANDONED UND MINIMUM OF 8" BE

KEYNOTES

XISTING SANITARY PIPE OF GER SIZE. VERIFY SIZE, ATION, AND FLOW DIRECTION AT KISTING VENT PIPE OF EQUAL OR ERIFY SIZE AND LOCATION AT

G TO REMAIN (VERIFY LOCATION EXISTING CONCRETE FLOOR

LLATION OF NEW PLUMBING PIPE. MATCH TRUCTION AND FINISHES.

RE INCLUDING P-TRAP AND CAP ABANDONED UNDER SLAB WASTE PIPING A MINIMUM OF 8" BELOW FINISHED FLOOR. IT IS NOT REQUIRED TO DEMO UNDER SLAB WASTE PIPING BACK TO ACTIVE MAIN.

7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.

KEYNOTES

RETRO CURB NOTE
OWNER SHALL FURNISH AND THE CONTRACTOR SHALL INSTALL "RETRO CURB" (AS MANUFACTURED BY AES INDUSTRIES INC., CONTACT CHAD BURT 1-800-786-0402) FOR NEW ROOF TOP UNITS. CONTRACTOR SHALL COORDINATE WITH AES EXACT CURB SIZE NEEDED.
RETRO CURB SELECTION AND INSTALLATION SHALL BE ADJUSTED FOR ROOF SLOPE TO MAINTAIN LEVEL RTU INSTALLATION AND ADEQUATE CONDENSATE DRAINAGE. ROUTE NEW CONDENSATE TO DRAIN AWAY FROM UNIT DOWN SIDE SLOPE OF ROOF.
SEE SPECIFICATION FOR ADDITIONAL INFORMATION.

CURB VENDOR TO PROVIDE SIGNED AND SEALED SEISMIC CALCULATIONS FOR CURB CONSTRUCTION AND FOR THE UNIT ATTACHMENT TO CURB.

15.711 REFER TO ARCHITECTURAL ROOF PLAN AND STRUCTURAL PLANS FOR DETAILS OF ROOF CURB INSTALLATION.

7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.

L PP		ON THIC CO		<u>SNIGHED</u>				CONTRACTO				ΔΤΙΟ
1	AREA		NOMINAL CAPACITY		SUPF			EFFI		HEATING GAS	G TYPE	S DE
K 5	SERVEL PICKUP STORAGE	SGH060H4	EL (TONS) IEX1G 5.0	CFM HP 2000 1.50	(IN.) KIT 0 0.50 ECM	AIR CFN 225		RATION SEEI	R EER	(MBH) 150	(KW)	LO
	AL INFORMATIC	N (ALL UNITS): HERTZ. UNITS MU		S AGA APPRO		30%. OUGH THE BOOM						2010
	ED WITH FAC ANT R-410A. D WITH FAC OINT POWER	TORY INSTALLED S	MOKE DETECTORS.	REAKER.							ov 02.1-	_010.
SU SHI T(SHI SHI	RB AND ANCH ED WITH FAC [®] O SCHEDULE ED WITH FAC [®] ED WITH FAC [®]	IOR BRACKETS FU FORY INSTALLED R NOTES FOR UNIT-S FORY INSTALLED H FORY INSTALLED C	RNISHED BY OWNER, INSTAL TU CONTROLLER. REFER TO SPECIFIC TEMPERATURE SEN IIGH PERFORMANCE, FULLY I ONVENIENCE RECEPTACLE.	LED BY CONT SCHEDULE N ISORS. MODULATING	RACTOR. REFER TO SP OTES FOR EMS VENDO ECONOMIZER.	ECIFICATIONS AI R SPECIFIC REQI	ID HVAC SEI JIREMENTS.	ISMIC/WIND RESTRAIN	T BRACKET	DETAIL.		
STA SHE	GE COOLING D WITH 2 INC	G UNITS ARE PROV CH, MERV8 (MINIMU	IDED WITH MULTI-STAGE SUI IM EFFICIENCY REPORTING V	PPLY AIR VOLU (ALUE) AIR FIL	JME (MSAV) TECHNOLC TER.	GY FOR PART-LC	AD OPERAT	ION ENERGY SAVINGS	S.			
R AI NAL SHE SHE SHE	LY LABEL UN D WITH TEM D WITH OVE D WITH AVEI	NIT FORNISH NIT "IAQ" IN 3" RED I PERATURE SENSO RRIDE TEMPERATU RAGING TEMPERAT	IED WITH CO2 SENSOR (87N3 LETTERS, REFER TO SPECIFI R (94L60). INSTALLED BY BAS JRE SENSOR (56L80). INSTALL FURE KIT (23M20). INSTALLED	3). CO2 SENS CATIONS. S CONTRACTC LED BY BAS CO D BY BAS CON	DR INSTALLED BY BAS (DR. DNTRACTOR. TRACTOR.	CONTRACTOR. R	FER IO EM	SHEETS.				
SHI SHI A(SH SH	ED WITH HUM ED WITH INSU CTOR TO FOLI ED WITH VER ED WITH KEY	IDITY SENSOR (17N LATED PANEL BAS OW MANUFACTUR FICAL VENT EXTEN ACTIVATED BEMOT	M50) AND FACTORY INSTALLE IE AND ALIGHNMENT BRACKE RER'S INSTALLATION INSTRUC SION KIT WITH VENT CAP LO IE SMOKE DETECTOR TEST S	ED HUMIDITRO ETS FOR MOUI CTIONS. CATED JUST A STATION INST	L REHEAT COIL. HUMID NTING TO EXISTING LEN NBOVE TOP SURFACE O ALLED BY MECHANICAL	TY SENSOR INST NOX "L" SERIES (F UNIT. CONTRACTOR	ALLED BY B. CURB WITHC	AS CONTRACTOR. DUT A CURB ADAPTER				
	SHED WITH FAC SHED WITH BAC NSTALLED CON SHED WITH FAC	FORY INSTALLED B NET CARD FOR USI TROLS BY CONTRA FORY APPLIED COF	AROMETRIC RELIEF DAMPER E WITH BACNET CAPABLE EN CTOR. REFER TO EM SHEET RROSION INHIBITING TREATM	A. AS SYSTEM. S FOR ADDITIC IENT #1 REQU	DNAL INFORMATION. IRED (WITHIN 1 MILE).							
	SHED WITH FAC SHED WITH FAC SHED WITH FAC	FORY INSTALLED COP FORY INSTALLED C FORY INSTALLED P	CONDENSATE DRAIN PAN FLC ROPANE KIT.	AT SWITCH KI	T.							
		AREA			R CURTAI	N SCHE WEIGHT		E N MOTORS	ELEC		DATA	
_	MARK AC 12	PICKUP STORAGE	MANUFACTUREF BERNER POWERED AIRE	R	MODEL CHD10-2072A ETA 2-72	(LBS) 169	HP 0.75	VOLTS PH 120 1	FLA 16.0	MCA 20.0	MOCP 25	NC A, I
	GENERAL INFOI AIR CURTAINS F INSTALL BOTTO	RMATION (ALL DEVI URNISHED AND IN M OF WALL MOUNT	ICES): STALLED BY CONTRACTOR. TED AIR CURTAIN AT ELEVAT		D ON DRAWINGS UNLES		WISE.			. <u> </u>		
F	IOTES:			ISCONNECT S		P OF AIR CURTA	A SING		A 1-			
F C L E	URNISHED WIT URTAINS AT E JNIT SHALL BE BELOW DOOR T	H MANUFACTURE ACH DOOR ON HIG TOP MOUNTED. FO RACK AND SPANN	H'S 120V PHOTOELECTRIC SE GH SPEED WHEN DOOR OPEN OR CURTAIN INSTALLATIONS I NING ENTIRE DOOR OPENING TH TWO AIR CURTAINS TO DO	NSOR SWITCH NS AND DE-EN NOT DETAILED AS REQUIRED	H, SENSOR REFLECTOF ERGIZE AIR CURTAINS O ON ARCHITECTURAL D SUPPORT UNISTRUT	R, AND REQUIRED WHEN DOOR CLO RAWINGS, SUSP FROM STRUCTU	ACCESSOR SES. END CURTA RE.	RIES TO ENERGIZE ALL	AIR NSTALLED	=		
	TWO AIR CURTA BERNER SHALL BERNER UNIT S BERNER UNIT S	AINS. BE FURNISHED WI HALL BE FURNISHE HALL BE FURNISHE	TH FACTORY INSTALLED SIN ED WITH TANDEM PERFORMA ED WITH FACTORY INSTALLE	GLE PHASE CO ANCE KITS. D INTELLISWIT	CH DIGITAL CONTROL	ND. ER.	I U ALLU			-		
	UNIT SHALL BE OPENS AND CO UNIT SHALL BE INSTALL BOTTO AIR CURTAIN ST	HURNISHED WITH A NTINUE OPERATIO TOP MOUNTED ANI M OF AIR CURTAIN JALL BE TESTED IN	A FIELD MOUNTED AND WIRE N FOR 60 SECONDS AFTER D D SUPPORTED FROM STRUC NO HIGHER THAN 8'-0" AFF. ACCORDANCE WITH ANOLAN	D 24V MAGNE OOR CLOSES TURE. REFER INSTALL PER M MCA 220	I IC LIMIT DOOR SWITCH ENCE MECHANICAL ANI MANUFACTURER'S INST	1 AND TIME DELA D ARCHITECTURA RUCTIONS.	Y TO ENERG	ai∠e air curtain whe S.	N DOOR			
ь. U B	ERNER FURNIS	E BLACK IN COLOR.	RY INSTALLED FAN SPEED C	ONTROL WITH	TAMPER PROOF COVE	R.						
-												
-	MADY	0ED)#4				SCHED						 TE0
-	DB5-4	SUPPLY A (4 WAY DROF	AIR AES INDUS BOX)		A IVIODEL ADB-1-10-4	DROF	BOX JSER				. NŬ A, (I ЕО G, H F
	GAVV	SUPPLY A	UTILE (E.H.P CAR		520DS RTDBV	LOUVER REGI	STER	SURFACE MOUNT		DRAWINGS	В, Е	, r, H
	ROUND				MANUFACTURER AES / WMVC	/ MODEL						
	RECTANGULAR				RUSKIN / WMR AES / AMD4 RUSKIN / WME	25						
	GENERAL INFO INSTALL BOTTO BALANCE DAMI	RMATION (ALL DEV OM OF WALL MOUN PER CONTACTS:	VICES): TED AIR DEVICES AT ELEVAT	ION INDICATE	D ON DRAWINGS UNLE	SS NOTED OTHE	RWISE.					
		AES - (800) 786-040 RUSKIN - (816) 761-	2 -7476									
	NOTES: 6-WAY (DB1-DB ALL STEEL CON ALL ALUMINUM	3) OR 4-WAY (DB4-I ISTRUCTION. CONSTRUCTION.	DB8) THROW UNLESS SHOW	N OTHERWISE	WITH FLOW ARROWS	ON PLAN.						
i.	BRANCH DUCT STANDARD WH PROVIDE NECK DROP BOX DIFF	SIZE SHALL BE SAN ITE FINISH. FOR DUCT CONNE SUSERS FURNISHE	ME AS NOTED DIFFUSER NEC ECTION. D BY OWNER INSTALLED BY		R. REFERENCE SPECIFIC		SK V⊥↓v ∽					
	PROVIDE MANU PROVIDE WITH TWO 2" SLOTS REFER TO PLAN	JFACTURER'S OPPO FASTENERS FOR (WITH MANUFACTUR NS FOR DIRECTION	COMPLETE (NON-HINGED) RE RER'S INSULATED PLENUM (IAL ARROWS INDICATING CFI	NEW CONTRACTOR NOT SSIBLE THROU MOVABILITY (TUTTLE & BAIL M THROWS FC	JGH FACE UNLESS NOT DF GRILLE. DO NOT PRO EY LP, PRICE JSPI, CAR DR PROPER GRILLE SFI	ED OTHERWISE. VIDE FILTER UNI NES CXPC.) ECTION.	_ESS NOTED) OTHERWISE.				
	PROVIDE ROUN PROVIDE CEILII	ID NECK ADAPTER	GISTER BOX WITH 16" OR 24	" PLATE FOR F	OUGH-IN.							
-												
												/
		,	L = W/4, 4"	MIN						\sim		
		ARTICON		_/	ART-ON			AMPLO AMPLO			7	J
												J
				W	-							-
		T						4	V	-		
		11/2		N 1. 2. 3.	OTES: SPIN-IN FITTINGS W/ S REF PLANS FOR RUNG 45°LEAD IN	COOPS ARE NOT OUT SIZES	- ACCEPTAB	LE				
			וכם בבוטיי			דייוח	ᄃӏŦŦ					
				ινιγ			1111	DVII				
		• NTS				DOOT	<u> </u>					
		NTS				0001						

1) BUILDING AUTOMATION PLAN

	BAS EQUIPMENT SALVAGE REQUIREMENTS	GENERAL
	ALL DEMOLISHED NOVAR BAS EQUIPMENT SHALL BE RETURNED TO WALMART MECHANICAL SERVICES CONSTRUCTION MANAGER. EQUIPMENT TO BE RETURNED INCLUDES: EXECUTIVE CONTROLLER(S), IOM(S), CIM(S), CCM(S), ETC. PROVIDE DOCUMENTATION FOR ALL EQUIPMENT REMOVED IN ACCORDANCE WITH SPECIFICATIONS AND REQUIRED CLOSE-OUT DOCUMENTS.	1. TEMPERATURE AND C PROVIDE 1/2" CONDUI FROM SENSOR TO CO SENSOR ON BOX. ALL +84" UNLESS NOTED C SALES FLOOR SHALL E SIDE OF COLUMN. DO SUPPLY AIR PATH OR
	WIRE LEGEND	MECHANICAL DRAWIN
	WIR-1010 (TAN CABLE 18-2, 20-2 TWISTED PAIR)	RECESSED BOX W RING FLUSH MOU
	WIR-2020 (BLUE CABLE 22-2 TWISTED PAIR) BELDEN 8719 (16-2 TWISTED PAIR)	B. BLOCK WALLS AN BOX SURFACE MO
	BELDEN 8761 (22-2 TWISTED PAIR)	C. INSULATE BEHIND EXTERIOR WALLS
	BELDEN 8771 (22-3 TWISTED PAIR)	D. MOUNT CO2 SENS
	BELDEN 1120A (18-3 TWISTED PAIR)	2. TERMINATIONS SHALL
	NOTES: 1. ALL CABLE WIR-2020 UNLESS NOTED OTHERWISE	NO FOIL OR UNUSED V AFTER APPLICATION C
ETMS FOR HVAC UNITS SHALL BE FIELD SERIES WIRED TO THE NEAREST RTU	 ALL CABLE FURNISHED AND INSTALLED BY BAS CONTRACTOR. 	3. CABLE: PROVIDE CABL NO DEVIATION FROM I CABLES SHALL HAVE I WHERE THE OPPOSITI SHALL BE INSTALLED I FINISHED AREAS OF B
		IN SALES FLOOR AREA 4. MINOR CHANGES IN M
		5. ROUTE BAS CONDUITS
TS R TS R TS ROOF CURB ROOF		WALLS, PIPE RACKS A TRANSITION FROM TH CONDUIT TO EMT OR RUN IN CONDUIT FULL REFRIGERATED CASES LEVEL IN OPEN SALES CAN BE EXPOSED.
6'-0" WIR-2020 CABLE TO NEXT RTU		6. <u>DEMOLITION:</u> COORDIN DEMOLITION PLANS TH DEMOLITION. REMOVE WAY BACK TO ORIGINA DEVICES. DEMOLITION
OOFTOP UNIT DETAIL		7. BAS CONTRACTOR SH THE BAS SUPPLIER ON TESTS ON POWER SW NECESSARY.
		8. DIMMING CONTROL W HOME RUN FIXTURES PLANS, PER THE MANU INSTRUCTIONS. DO NO FIXTURE'S WIRING HAI CONTROL WIRING IN T
(2) (1)		9. DO NOT INSTALL EQUI DIRECTLY UNDER SKY INDICATED OTHERWIS
		10. WHERE GROUPED CO THE JOIST SPACE, CO CONTRACTOR PRIOR MAINTAIN REQUIRED C SPRINKLERS.
		11. 24 HOURS PRIOR TO S SYSTEMS OR ENERGY SYSTEMS, SEND EMAI
		THE E-MAIL SHALL STA IS BEING SHUT DOWN ANTICIPATED TO BE SI
		THE WORK IS COMPLE UP AND RUNNING.
		BAS S
		AHUS# AHU TEM/F
		ALS ANALOG LI
		IDS INDOOR DE
		OTS OUTDOOR
		S-X WALL TEM
DISCONNECT AND REMOVE		RTUC ROOFTOP
COM LOOP SECTION AND PROVIDE COM WIRING TO AN EXISTING AD LACENT BTILLAS		EICB EQUIPMEN
EMS EMS		BAP BUILDING A
		FDI FLUORESC
		IAO INTERFACE
		IOM INPUT/OUT
		IR INTERFACE
		PLM PHASE LOS
/ARRTU-45		PSOP POWER SV
		PSP POWER SV ROP REMOTE OF
		ELDP ECLIPSE LI
		UCM UNITARY C
		ES1 BAS CONTI
		LINGO XE BAS CONT
		LCD NOVAR LCI
		NOS NIGHTTIME
		MOMENTAI
		EXISTING E
	IS TO BE COMPLETED BY A WALMART APPROVED CONTRACTOR	— — — FACTORY
	·]	

BAS NOTES
2 SENSOR MOUNTING: ND INSTALL BAS CABLE ROL MODULE. MOUNT INSORS TO BE MOUNTED AT HERWISE. SENSORS ON INSTALLED ON THE BACK OT INSTALL SENSORS IN HVAC DIRECT SUNLIGHT. REF 5 FOR EXACT LOCATIONS.
LLS: PROVIDE A 4" SQUARE H A SINGLE GANG PLASTER ED VERTICALLY.
COLUMNS: PROVIDE A 2"X4" ITED VERTICALLY. ENSORS MOUNTED ON
TH 1/2" POLYSTYRENE RS 6" ABOVE TEMPERATURE
E MADE IN ACCORDANCE TALLATION INSTRUCTIONS. RE(S) SHALL BE EXPOSED HEAT SHRINK
ACCORDING TO DRAWINGS. AWINGS WILL BE ACCEPTED. CH END LABELED INDICATING END TERMINATES. CABLE CONDUIT OR CABLE TRAY IN DING. EXCEPT HVAC CABLE T BAR JOISTS.
ERIALS OR TERMINATION EASE CONTRACT COST.
VOR CHASES). PROVIDE A PVC UNDERSLAB BAS EX. BAS CABLES SHALL BE ENGTH, BENEATH BAS CABLES AT BAR JOIST REA AND THE STOCKROOM
TE WITH ARCHITECTURAL EXTENT OF BAS ONDUIT AND WIRES ALL THE ING JUNCTION BOXES OR HALL NOT AFFECT ACTIVE
L PROVIDE ASSISTANCE TO ERFORMING EQUIPMENT CHING PANELS AS
NG MUST TERMINATE IN ILY, AS SHOWN ON EMS ACTURER'S INSTALLATION MODIFY THE LISTED IESS OR TERMINATE
E ADJACENT FIXTURES. IENT OR CONDUITS GHT WELLS UNLESS
ON PLANS. OUITS ARE INSTALLED WITHIN RDINATE WITH SPRINKLER INSTALLATION IN ORDER TO EARANCES FROM
JTTING DOWN HVAC ANAGEMENT CONTROLS O NSRM@WALMART.COM. E WHAT, WHY, AND WHEN IT ND HOW LONG IT IS IT DOWN. THEN SEND A SRM@WALMART.COM AFTER E AND THE SYSTEM IS BACK
MBOLS
DLLER SENSOR
IT SENSOR THERMOSTAT MODULE
POINT SENSOR
PERATURE SENSOR
EWPOINT SENSOR
RATURE SENSOR
ITY SENSOR
NTERFACE COMM BOARD
NALOG OUTPUT
JT MODULE RELAY
CE AND/OR I/O MODULE
CHING OVERRIDE PANEL
ERRIDE PANEL

TROLLER

ITROLLER CD DISPLAY

OVERRIDE SWITCH

ARY PUSH BUTTON SWITCH JIPMENT

EQUIPMENT

Y INSTALLED EQUIPMENT NT TO BE DEMOLISHED

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY

7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

	ISSUE BL	OCK
4	ADD#6	07/07/22
CHE	ECKED BY:	SG
DR/	WN BY:	NS
PRC	OTO CYCLE:	07/30/21

DOCUMENT DATE: 09/08/21

DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION

BAS1

SHEET

Location									ONE SET	POINTS		ח ח		
HAND YOU DEVICE TO BUILD AND ALL ORDER DEVICE THE STORE BUILD AND ALL OPERATIONAL DEVICES AND ALL OF LOCATIONAL OF THE STORE BUILD AND ALL OPERATIONAL DEVICES AND ALL OPE	<text></text>	<text></text>	<text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text>	//ARK RTU 45	AREA S PICKUP S	ERVED	(2) SCHEDULE	COOLING SETPOINT (°F +/-0.5°F) 76	HEATING SETPOINT (°F +/-0.5°F) 67	(2) SCHEDULE	COOLING SETPOINT (°F +/-0.5°F) 78	HEATING SETPOINT (°F +/-0.5°F) 63	HUMIDITY SETPOINT	NOTE
AND/NO OPERATION FOR UNITE WITH HUMONTY SETTORINT IN ATU ZONE SETTORINTS SCHEDULET BACCE MUNITY SECOND IN THE MERCHANCE AND AND ALL THE CARA COMMON IN SMALL PRACTICE DIRAMADIPLICATION BARCE MUNITY SECOND INCOMES Y BERGETORY BARCE MUNITY SCHEDURES COMMON IN THE CARA OPERATION WIRE MODICAL POINT TO ENHANCE DEVELOPMENT ENHANCE STREED FAIL DEVELOPMENT TO ENHANCE DEVELOPMENT TO ENHANCE DEVELOPMENT ENHANCE STREED FAIL DEVELOPMENT TO ENHANCE DEVELOPMENT ENHANCE DEVELOPMENT TO THE ENHANCE DEVELOPMENT TO ENHANCE DEVELOPMENT ENHANCE DEVELOPMENT TO THE ENHANCE DEVELOPMENT DEVELOPMENT ENHANCE DEVELOPMENT ENHANCE DEVELOPMENT TO ENHANCE DEVELOPMENT DEVELOPMENT ENHANCE DEVELOPMENT ENHANCE DEVELOPMENT TO ENHANCE DEVELOPMENT ENHANCE DEVELOPMENT ENHANCE DEVELOPMENT TO THE DEVELOPMENT DEVELOPMENT EN	Control and management of the	<text></text>	<text></text>	1) SET PH 2) ADJUS 3) VESTIB	ARMACY RTU TMENTS TO SC ULE RTU OPEF	SENSOR TO HEDULE WIL	ALLOW +/- 3 DEG F L L NEED TO BE MADE L BE LOCKED OUT B	JSER SPACE SET E IF THE STORE IS BETWEEN 40°F AN	POINT ADJUSTME S NOT OPEN 24/7. ID 85°F AMBIENT.	NT				
Description Control of the second of the	<text></text>	<text></text>	<text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
In the structure Hundler's doing below between the series with an above Hundler's below below below the series of the series of the structure of the series of the seri	The state of a state	Control <	Control The statute and control of	<u>DEHUMID</u> WHEN TH	IFICATION OPE E SPACE HUM	RATION (FOI	R UNITS WITH HUMIE DS SCHEDULED RH	DITY SETPOINT IN SETPOINT, THE O	RTU ZONE SETP EM CONTROLLER	OINTS SCHEDUL	<u>=)</u> Ze dehumidific.	ATION		
ENTIFIE NOTING AND CONTROLLE TO BE CONTINUE TO BE CONTINUE THE DAS SHALL EXERCISE THE DAY TO AN CALL POINT DAY TO COLUMN. NE SHALL ENHANCES YEND CONTROLLET DAY TO AN CALL POINT DATING OR COOLING. METHING THE MERCINAL CASCENDARY OF THE OWN DAY CALL POINT DATING OR COOLING. METHING THE MERCINAL CASCENDARY OF THE OWN DAY CALL POINT DATING OR COOLING. METHING THE MERCINAL CASCENDARY OF THE OWN DAY THE OWN DOWN DATING OR COOLING. METHING THE MERCINAL CASCENDARY OF THE OWN DAY THE OWN DOWN DATING OR COOLING. METHING THE MERCINAL CASCENDARY OF THE OWN DATING OR COOLING. METHING THE OWN DOWN DATING OWN DOWN THE OWN DATING OWN DOWN DERING COMMUNICAR SHALL BE CONTROLLER AND THE OWN DATING OWN DOWN DERING COMMUNICAR SHALL BE CONTROLLER AND THE OWN DOWN THE OWN DATING OWN DOWN DERING COMMUNICAR SHALL BE CONTROLLER AND THE OWN DATING OWN	TO A THUS DETINED IN THE RECENT ON A SUPERVISE OF BEYOND TO BE CONT TAKE CONTROL. THE BAS PHALE LENERGE THE SUPERVISE DESIGNATION OF THE SUPERVISE OF A THE SUPERVISE OF A THE CONTROL THE EAST CONTROL BY ALL DETINESS TO A THE SUPERVISE OF A THE SUPERVISE OF A THE SUPERVISE OF THE CONTROL THE SUPERVISE OF A THE SUPERVISE DETINESS TO A SUPERVISE OF A THE SUPERVISE OF A THE SUPERVISE OF THE CONTROL THE SUPERVISE OF A THE SUPERVISE DETINESS TO A SUPERVISE OF A THE SUPERVISE OF A THE SUPERVISE OF THE SUPERVISE OF A THE SUPERVISE DETINESS TO A SUPERVISE OF A THE SUPERVISE OF A THE SUPERVISE OF A THE SUPERVISE OF A THE SUPERVISE DETINESS TO A SUPERVISE OF A THE SUPERVISE OF A	THE AT UN REPORTED IN THE MONINAL SHEEPLET OR & CONT FAN CONTROL THE AS A FAUL REPORT THE CONTROL OF SUBJIC PREVENTION OF UNITED AT AN OF DIRECT OF THE CONTROL THE CAN FAULT OF THE CONTROL OF SUBJIC PREVENTION OF CONTROL HERE ALL BENNINEED IN THE MONINAL SCHEDULE TO BE AUTOF YAU CONTROL THE CAN FAULT OF THE CONTROL HERE ALL BENNINEED IN THE MONINAL SCHEDULE TO BE AUTOF YAU CONTROL THE CAN FAULT OF THE CONTROL HERE ALL BENNINEED IN THE MONINAL SCHEDULE TO BE AUTOF YAU CONTROL THE CONTROLLED OF THE CONTROL BIALL DAVIEL IN CONTROL TO CONTROL AND AUTOEND OF THE CONTROL HERE CONTROL HERE ALL BEAVER TO THE CONTROL THE AT THE DIRECT OF THE CONTROL HERE AND CONTROL THE AUTOEND OF DIRECT ON AUTOEND OF THE THE AUTOEND OF THE THE DIRECT AND AUTOEND OF THE DIRECT AUTOEND OF THE AUTOEND OF THE THE AUTOEND OF THE AUTOEND OF THE AUTOEND OF THE AUTOEND OF THE AUTOEND AUTOEND OF THE AUTOEND OF THE THE AUTOEND OF THE AUTOEND OF THE AUTOEND OF THE AUTOEND OF THE AUTOEND OF DIRECT AUTOEND OF THE THE AUTOEND OF THE THE AUTOEND OF T	Bit This Important to the elements of the elements of the control fragments of the control fragments of the elements of the control fragments of the elements of the control fragments of the control fragments of the elements of the elements of the control fragments of the elements of the control fragments of the elements of the elem	MODE. W CONTROI SUPPLY F	HEN THE SPA LER SHALL DE	CE HUMIDITY E-ENERGIZE I N	DROPS BELOW SCH DEHUMIDIFICATION.	HEDULED RH SET	POINT MINUS INE	oor humidity [DEADBAND, THE	OEM		
ENDINE IN THE RECOMPLET QUELY ON A CALL FOR THEATING OR COOLING. IN VARIAGE SPEED FAN OPENATION. THE FAN SPEED SHALL BE CONTROLLED BY THE CEN IN VARIAGE SPEED FAN OPENATION. THE FAN SPEED SHALL BE CONTROLLED BY THE CEN IN VARIAGE SPEED FAN OPENATION. THE FAN SPEED SHALL BE CONTROLLED BY THE CEN IN VARIAGE SPEED FAN OPENATION. THE FAN SPEED SHALL BE A DESIGN ARPLOW FROM IS ON FINADARD CONSTRUCTION. THE FAN SPEED SHALL BE A DESIGN ARPLOW FROM SHALL BE CONTROLLED BY THE CEN CONTROLLER AND SHALL BE AT DESIGN ARPLOW FROM IS ON FINADARD CONSTRUCTION. RATING IN ECONOMIZER MOCE, WHEN THE SUPPLY FAN IS DO THE DOILING. MUNT YANIS OFFICATION. RATING IN ECONOMIZER MOCE, WHEN THE SUPPLY FAN IS DO THE DOILING. RATING IN ECONOMIZER MOCE, WHEN THE SUPPLY FAN IS DO THE DOILING. RATING IN ECONOMIZER MOCE, WHEN THE SUPPLY FAN IS DO THE DOILING. RATING IN ECONOMIZER MOCE, WHEN THE SUPPLY FAN IS DO THE DOILING. RATING IN ECONOMIZER MOLTON THE FAN IS DOILING AND ADDIARY FOR MOLECULAR. RATING THE ECONOMIZER MOLTON THE MESSION DOILING AND ADDIARY FOR MOLECULAR. RATING THE ECONOMIZER MOLTON THE MESSION IN LISES THAN AS DO REDUCTION ECONOMIZER MOLTON THE MESSION IN LISES THAN AS DO REDUCTION ECONOMIZER MOLTON THE CONTROLLER AND UNON A CALL FOR MILL OF THE ECONOMIZER MOLTON THE MESSION IN LISES THAN AS DO REDUCTION ECONOMIZER MOLTON THE MESSION	CONTRICT DETIFIED AN THE REQUIREMENTACIONED TO DETIFICATION FOR CONTROL. THE CAN CONTROLLES MUNICIPATION CONTROL CONTROL DE CONTROLLES DE LA CONTROL CONTROLLES MUNICIPATION CONTROL CONTROL DE CONTROLLES DE LA CONTROL SHALT BARRY CONTROLLES DE LA CONTROL DE CONTROLLES DE LA CONTROL SHALT BARRY CONTROLLES DE LA CONTROL DE CONTROLLES AND CONTROLLES DE LA CONTROL SHALT BARRY CONTROLLES DE LA CONTROLLES AND SHALT DE LA CONTROL AND CONTROL DECEMPENDI SANLE CONTROLLES DE LA CONTROL D	CONTRUE DUTTIEED IN THE MEDIANEL SCHEDULET DE TAUTOTAL CHARAN DE CONTRUELTE DUTIE CEN CONTRUELTE AUGUSTALISTICANA DUTIES DUTIES CANADALISTICANA DE CONTRUELTE DUTIES CONTRUELTES CONTRUE CO	PAR HIGH BERNTIELD IN THE ACCOUNTED. ACCOUNTED. THE ACCOUNTED. LET AN THE CONTROLLED IN THE CONTROL AND THE CONTROL	FOR RTU SUPPLY F CONTROI	S IDENTIFIED II AN TO OPERA LER SHALL EN	N THE MECH/ TE CONTINU IERGIZE THE	ANICAL SCHEDULE T OUSLY IN OCCUPIED SUPPLY FAN TO OP	O BE "CONT" FAN MODE ONLY. IN ERATE ONLY ON	I CONTROL, THE UNOCCUPIED MC A CALL FOR HEA	BAS SHALL ENER DE, THE OEM TING OR COOLIN	GIZE THE			
TH WARABLE SPEED FAN OPERATION THE FAR SPEED SHALL BE CONTROLLED BY THE OIM R ASEE 0.4 MOUNT OF OPERATION CONFRESSOR CARCENT VISAINUS SPEED FAIN CONTROL TH WARABLE SPEED FAIN SPEED STARES FROM MINUMUS SETTING UP TO DESIGN ARE CONTROL TH WARABLE SPEED FAIN SPEED STARES FROM MINUMUS SETTING UP TO DESIGN ARE CONTROL TH WARABLE SPEED THE CONTROLLER AND SHALL ECT DESIGN ARE CONTROL TH WARABLE SPEED THE CONTROLLER AND SHALL ECT THE OW OPEN POSITION. TH WARABLE SPEED THE CONTROLLER AND SHALL ECT THE OW OPEN POSITION. TH WARABLE SPEED THE THE SPEED THE WARABLE SPEED THE OUTSIDE ARE DAMERED SHALL GO MUM POSITION SET TO THE OWN CONTROLLER AND A CALL FOR COOLING MUM POSITION SET TO THE WARABLE SPEED THE OUTSIDE ARE DAMERED SHALL GO MUM POSITION SET TO THE THE WAS TO THE OWN CONTROLLER AND A CALL FOR COOLING BHALL BE MUM POSITION SET TO THE THE WAS TO THE OWN CONTROLLER AND A CALL FOR COOLING BHALL BE MUM POSITION SET TO THE THE WAS TO THE OWN CONTROLLER AND A CALL FOR COOLING BHALL BE MUM POSITION SET TO THE AND MOUNT OF THE MED TO SERVICE THE THE OUTSIDE ARE DESTIGNT THE THE ECONOMIZER COOLING BHALL BE MUM POSITION THE SPEED TO TO THE OWN CONTROLLER AND A CALL FOR COOLING BHALL BE MUM POSITION THE SPEED TO TO THE OWN CONTROLLER AND A CALL FOR COOLING BHALL BE MUM POSITION THE ANST TO THE OWN CONTROLLER AND WOUNT OF AFTER THE ECONOMIZER MUM POSITION THE AND THE MANT THE MENT TO THE OWN CONTROLLER AND MOUNT OF AFTER THE ECONO	POR HTD WITH WARAPE SPEED FAIL OFFENTION CONFERENCE CONFERENCE ALL PERSONALES SPEED FAIL OFFENTION CONFIGURATION C	CONTRACT CONTRACT CONTRACT CONTRACT SHALL THAN GOAL CONTRACT SHALL TH	CORRENT ON ADDRESS CONTROLLED OF THE COMPAREMENT ON THE END OPERATION THE END OPERATION ADDRESS CORRENT ON ADDRESS CONTROLLED OF THE CONTROL ON ADDRESS CORRENT ON ADDRESS CONTROL ON ADDRESS CONTROL ON ADDRESS	FOR RTU	S IDENTIFIED II E THE SUPPLY	N THE MECH FAN TO OPE	ANICAL SCHEDULE T RATE ONLY ON A CA	O BE "AUTO" FAN ALL FOR HEATING	I CONTROL, THE OR COOLING.	DEM CONTROLLE	ER SHALL			
Dev OED BASED ON COMPRESSOR CAPACITY CONTROL SUPPLY PAY END MONOTONICED BY THE GEN CONTROLLER AND SHALL BE AT DESIGN AIRFLOW FROM IS BUILL BE CONTROLLED BY THE GEN CONTROLLER AND SHALL BE AT DESIGN AIRFLOW FROM IS BUILL BE CONTROLLED BY THE GEN CONTROLLER AND SHALL BE AT DESIGN AIRFLOW FROM IS BUILT BE CONTROLLED BY THE GEN CONTROLLER AND SHALL BE AT DESIGN AIRFLOW FROM IS BUILT BEAR THE THE THE THE GEN CONTROLLER AND A DEAL FOR OPEN FORMONIC IS ADJUSTABLE FROM TO TO'S THE AND ALAACE PIET THE CUTSIDE AIR QUANTITY ON THE MECHANICAL IS ADJUSTABLE FROM TO TO'S THE AND THE THE CUTSIDE AIR QUANTITY ON THE MECHANICAL IS ADJUSTABLE FROM TO TO'S THE ADD THE THE CUTSIDE AIR QUANTITY ON THE MECHANICAL IS ADJUSTABLE FROM TO TO'S THE ADD THE THE CUTSIDE AIR QUANTITY ON THE MECHANICAL IS ADJUSTABLE FROM TO'S THE ADD TO THE ONE CONTROLLER AND A DALL FOR COOLING SHALL BE IS ADJUSTABLE FROM TO'S ADDITIONAL STARE COOLING SHALL BE AT THE CONTROLLER AND A DALL FOR TO THE ONE AND A DALL FOR TO THE ONE CONTROLLER AND A DALL FOR THE ADDITIONAL STARE COOLING SHALL BE AND A DALL FOR THE ADDITIONAL STARES OF MECHANICAL COOLING FOR POSITION IF THERPRATURE CONTRUER TO MOREARE ATTER MECHANICAL COOLING IS INTERGED FOR ADDITIONAL STARES OF THE OLITICAL FOR THE ADDITIONAL STARES OF MECHANICAL COOLING IS INTERGED FOR ADDITIONAL STARES OF MECHANICAL COOLING IS INTERGED FOR ADDITIONAL STARES ATTER MECHANICAL COOLING OF AND ADDITIONAL STARES OF MECHANICAL COOLING IS INTERGED FOR ADDITIONAL STARES ATTER MECHANICAL COOLING AND ADDITIONAL STARES ATTER MECHANICAL	Definition by the based of commerces on the adverted that the open formation of	Definition of the Masken of COLOMPERSION CARACTER 1997 FAM SHREET INTRODUCE COMPARED Definition of CONTROLLED THE CONTROLLED AND SHALL BO TO THE CY OPEN ADDITION Definition of CONTROLLED THE CONTROLLED AND SHALL BO TO THE CY OPEN ADDITION Definition of CONTROLLED THE CONTROLLED AND SHALL BO TO THE CY OPEN ADDITION Definition of CONTROLLED THE CONTROLLED AND SHALL BO TO THE CY OPEN ADDITION Definition of CONTROLLED THE CONTROLLED AND SHALL BO TO THE CY OPEN ADDITION Definition of CONTROLLED AND DEALANCE PERTURE UDDITED AT A DIAL TYPE THE CONTROLLED AND A CALL CONTROLLED	Element of the set of the s	FOR RTU	S WITH VARIAE LER BASED O	BLE SPEED FA	AN OPERATION, THE OF OPERATING COMP RETE STAGES FROM	EFAN SPEED SHA PRESSOR CAPAC	LL BE CONTROLL ITY. VARIABLE SI	ED BY THE OEM PEED FAN CONTF	ROL			
THE PROJECT OF THE OUTSIDE AR DAMPER SHALL GO TO THE OK OPEN POSITION UPAN YAN IS OFF, THE OUTSIDE AR DAMPER SHALL GO TO THE OK OPEN POSITION ATTES IN ECONOMER MODE WHEN THE SUPPLY PAN IS ON THE OUTSIDE AR DAMPER SHALL GO VID IS ADJUSTABLE FROM TO 100K. COOLING OPENTION (ECONOMERE MADE) DAMPENTION (ECONOMERE PLANLED) OPENTION (ECONOMERE PLANLED) DAMPENTION (ECON	THE SALE ADJACES DEPENDENT WIND THE SIRE YALL GOT THE UNTITE AR DAMPER SIALL GO TO THE UNIT OR PERIODAL DO UNESS OFENTING NE EVOLUTIES AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE MINUT AND SIRE YALL SISTEN AND BALANCE PERIOD DAMAR YALL SISTEN AND SIRE YALL SISTEN AND BALANCE PERIOD DI HE SIRE YALL SISTEN AND SIRE YALL SISTEN AND SIRE SIRE SIRE YALL SISTEN AND SIRE SIRE SIRE SIRE SIRE SIRE SIRE SIRE	Contract and purposed determined Contract and purposed	 Durando La puncto dispersively Durando La puncto dispersively Durando La puncto dispersive dis	DETERMI OPERATION MECHANI	NED BY OEM B ON SHALL BE C CAL SCHEDUL	ASED ON CO CONTROLLED	MPRESSOR CAPACI BY THE OEM CONT	TY CONTROL. SU ROLLER AND SHA	JPPLY FAN SPEEI ALL BE AT DESIGN	D DURING ECONO I AIRFLOW FROM	DMIZER			
RATING IN CONSINTER NODE, WHEN THE SUPPLY FAN IS ON THE OUTSIDE AR DAMERE SHALL DO MIN POSITION SET YTEST AND BANANCE PER THE OUTSIDE AR QUANTY ON THE MECHANICAL DOUBLE FROM TO 1005. ROOMS OF THE YTEST AND BANANCE PER THE OUTSIDE AR QUANTY ON THE MECHANICAL DATE THE REFORMER SHORE, HAVE TO THE CEM CONTROLLER AND A CALL FOR COOLING FARCE TEMPERATURE SHORE, HAVE THE OUTSIDE AR AND REFURM AR DAMERS TO AND THE CEM CONTROLLER SHALL MOULTATE THE OUTSIDE AR AND REFURM AR DAMERS TO AND THE CEM CONTROLLER SHALL MOULTATE THE OUTSIDE AR AND REFURM AR DAMERS TO AND THE CEM CONTROLLER SHALL MOULTATE THE OUTSIDE AR AND REFURM AR DAMERS TO AND THE CEM CONTROLLER SHALL MOULTATE THE OUTSIDE AR AND REFURM AR DAMERS TO AND THE CEM CONTROLLER SHALL MOULTATE THE OUTSIDE AR AND REFURM AR DAMERS TO AND THE REFERENCE ON THE COM CONTROLLER SHALL DISABLE MECHANICAL HER DISTIDE AR THERPERTURE FROM THE COM CONTROLLER SHALL DISABLE MECHANICAL END UTSIDE AR THERPERTURE FROM THE COM CONTROLLER SHALL DISABLE MECHANICAL END UTSIDE AR DAMENTAN THE OUTSIDE AR DAMERS AT THE 100% OPEN POSITION ET EMPERATURE FOR A MINAUN OF 10 MINUTES THE COM CONTROLLER SHALL DISABLE FROM HAUD COULT AND MANTAIN THE OUTSIDE AR DAMERS AT THE 100% OPEN POSITION. ET EMPERATURE FOR AN MINAUN OF 10 MINUTES THE COM CONTROLLER SHALL DISABLE? ET EMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS EVERGIZED. THE COM AND SHALL DE EXERCISED TO SATISFY THE OUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REFLORM CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS SUBGETS AND SHALL DE EXERCISED TO SATISFY THE OUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REFLORM CONTINUES TO INCREASE AFTER MECHANICAL COOLING IN SCIEDE S AND SHALL DE EXERCISED TO SATISFY THE OUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REFLORM CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM SO FORCE TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT OUTING SHALL DERENGED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REFLORM CONTINUES TO INCREASE AFTER M	UNL RES OPERATING IN RECOMMUTER MUNICIPAL THE SUPPLY FAILS ON THE OUTSIDE AR DAMARER SHALL OG TO HE MINILMON ROBERTATING LECONOMERE FLAG TO AN OLAR CHER THE OUTSIDE AR DAMARER SHALL OG COMMUTE COMMUTER PAULE FERRING THE DATE TO THE CONTOL FOR ANY ACTUAL TO PERCENT LECONOMERE COMMUTER PAULE FERRING THE DATE TO THE CONTOL FER AND A CALL FOR COMING SHALL BE DEFOUND A SUPPLY AND TEMPERATURE OF & DT AT LEAST TO THE CONTOL FER AND A CALL FOR COMING DEFOUND A SUPPLY AND TEMPERATURE OF & DT AT LEAST TO THE CONTON AND RETURNING BOMERES TO MATTAN A SUPPLY AND TEMPERATURE OF & DT AT LEAST THE VALUE AND RECONOMERES TO COMPARE THE CONTON MATTAN A SUPPLY AND TEMPERATURE OF & DT AT LEAST THE VALUE AND RECONOMERES TO COMING DEFOUND THE TO ACCOUNT AND THE DATE OF DEFOUND AND TEMPERATURE STRUCTURE THE CONTON DEFOUND THE TO ACCOUNT AND THE DATE OF DEFOUND THE DATE OF AND A CALL FOR A MINILMA OF DATE THE THE TO ACCOUNT AND THE OTHER DATE OF DATE OF THE TO ATTACH AND THE DATE OF DATE OF DATE THE THE TO ACCOUNT AND THE OTHER DATE OF DATE OF THE TO ATTACH AND THE DATE OF DATE THE THE TO ACCOUNT AND THE OTHER DATE OF DATE OF THE TO ATTACH AND THE OTHER DATE THE STARE TO COUNT AND THE OTHER DATE OF DATE OF THE DATE OF THE DATE OF THE DATE OF DATE THE THE TO ACCOUNT AND THE OTHER DATE OF DATE OF THE DATE OF THE DATE OF DATE THE TO THE OTHER THE OTHER DATE OF THE DATE OF THE DATE OF THE DATE OF THE DATE OF THE THE THE THE DATE OF THE DATE OF THE DATE OF THE DATE OF THE DATE THE STARE TO COUNT AND THE DATE OF THE DATE OF THE DATE OF THE DATE OF THE DATE THE DATE OF THE TO THE DATE OF THE DATE THE DATE OF THE THE DATE OF THE DATE THE DATE OF THE THE TO THE DATE OF THE DATE OF THE DATE OF THE DATE OF THE DATE THE DATE OF THE DATE THE DATE OF THE THE DATE OF THE DATE OF THE DATE OF THE DATE OF THE DATE THE DATE OF THE THE DATE OF	UNLERS OPERATING IN COORMATER MODE, WIEN THE SUPPLY FAILS ON THE OUTGINE AND AND AND FAILS ON THE OUTGINE AND AND AND FAILS OF THE OUTGINE AND	UNLESS OPERATING IN ECONOMIZER MODE, WIENT THE SUPPLY FINES ON THE OUTSIDE AR BANGER SHALL GO TO HE MINIMUM OTTO SHE THE TEST AND BANGE THE THE OUTSIDE AND AND THE THE OUTSIDE AND	<u>OUTSIDE</u> WHEN TH	AIR DAMPER (E SUPPLY FAN	D <u>PERATION</u> I IS OFF, THE	OUTSIDE AIR DAMP	ER SHALL GO TO	THE 0% OPEN PO	DSITION.				
The PRODUCT PROVINCE TO BE THE PROVINCE PROVINCE PROVINCE THE PROVINCE THE CONTROLLER AND A CALL FOR COOLING SHALL BE CONTROLLED TO THE CONTROLLER SHALL PROVINCE AND A CALL FOR COOLING SHALL BE CONTROLLED TO THE CONTROLLER SHALL DOTATE THE PROVINCE TO A MINIMUM OF AFTER THE CONTROLLER SHALL MOULTET THE CONTROLLER SHALL DOTATE THE REPORT THE PROVINCE TO THE CONTROLLER SHALL DOTATE THE PROVINCE TO THE CONTROL THE PROVINCE TO THE CONTROL THE SHALL DO TOTA ON THE PROVINCE THE PROVINCE THE PROVINCE TO THE CONTROL THE THE PROVINCE THE PROVINCE THE PROVINCE TO THE CONTROL THE THE PROVINCE THE PROVI	The source transmission of the source of	Decide and the set of th	Description Description Description	UNLESS (TO THE M	DPERATING IN IINIMUM POSIT	ECONOMIZEI ION SET BY 1 ISTABLE ERC	R MODE, WHEN THE FEST AND BALANCE	SUPPLY FAN IS C PER THE OUTSID	ON THE OUTSIDE E AIR QUANTITY	AIR DAMPER SHA ON THE MECHAN	ALL GO ICAL			
PAGE TRUMERATURE SENSOR INPUT TO THE OWN CONTROLLER AND MUPER COLLONG SHALL BE MAD THE OWN CONTROLLER SHALL MODULATE THE OUTSIDE AR AND RETURN AR DAMPERS TO AFTER THE ECONOMICER DAMPER INS MODULATED TO THE TORY OPEN HOSTFON BEFORE THE FIRST STACE MECHANICAL COOLING. THE OPEN CONTROLLER SHALL DISABLE MECHANICAL HEN OUTSIDE ARE TEMPERATURE FROM THE OBM OUTDOOR ARE SENSOR IS LESS THAN 45 DF. E TEMPERATURE INCREASES TO ~= 0.5 DEG ABOVE SPACE COOLING SETPONT AND THE GOODNOWLER SEENI ONK OPEN FOR A MINIMAN OF 10 MINITES, THE OBM CONTROLLER SHALL INSERGED. THE OCH ANICAL COOLING AND MAINTAIN THE OUTSIDE AR DAMPER AT THE 10% OPEN POSITION ANICAL COOLING AND MAINTAIN THE OUTSIDE ARE DAMPER AT THE 10% OPEN POSITION. THE THEREFORTURE FOR AN INMUM OF 10 MINITES, THE OBM COOLING IS NOT REAGGED. THE OCH ANICAL COOLING AND MAINTAIN THE OUTSIDE ARE DAMPER AT THE 10% OPEN POSITION. B SHALL CONTINUE TO DERROLE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG F S SHALL CONTINUE TO DERROLE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG F S SHALL DECEMERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REMEMINTS.	DAGE DO MARCH THEREFAULTE SINGO REUT TO THE OPEN CONTROLLER. ECONOMIZER COOLING SHALL, RE MINITADIA DURING VIET THEREFORME (C. 45 BF). THE UNIT TO THE OPEN CONTROL TO A MINITADIA UNITADIA DURING VIET THEREFORMENCIAL COOLING. THE TABLE TIRKIN THE ROOMANDER MOTOR AN ANNUM OR UNITADIA DURING THE THE ECONOMIZER DAMPERT HAS MODULATED TO THE ION OPEN POSITION BEFORE EXECUTION THE THE STACE THEREFORM CL, COOLING, THE COM CONTROL EN SHALL DISABLE MECHANICAL COOLING WHEN OUTSOF ART TRAFFERITURE FROM THE COM OUTCOME STEPTION THE DECONOMIZER MAREE LIVAR EFFL 100% OPEN FOR A MINITADIA OF INMAITTS THE CHI CONTROL IER SHALL DISABLE MECHANICAL DAMPER LIVAR EFFL 100% OPEN FOR A MINITADIA OF INMAITTS THE CHI CONTROL IER SHALL DISABLE DE MINITADIA THE STACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS EXERCIZED. THE COM OUTCOME THE ASSALL TEMPERATURE FRANKLING STACES AND MECHANICAL COOLING IS EXERCIZED. THE OSH DAMPER LIVAR COOLING AND MANY THE OUTSON STACES OF MECHANICAL COOLING IS EXERCIZED. THE OSH DAMPER LIVAR AND THE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS EXERCIZED. THE OSH DAMPER LIVAR AND THE DESIDE TO SATISY THE CUTOUT TEMPERATURES. DOULNG STACES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES. THE SALL TEMPERATURE FRANKLING STACE AND THE DEM ONTOLICES MOD UPONA CALL FOR DECORE INCREMENTS. DOULNG STACES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECORE INCREMENTS. THE SANGE TEMPERATURE STACE THE DEM ONTOLICES MOD UPONA CALL FOR DECORE INCREMENTS. DOULNG STACES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES. THE CONTON TEMPERATURE STACE MECHANICAL COOLING IS EXERCIZED THE OSM CONTROLLER SANL DE ENERGIZE SINCH FOM THE DIS NOT MECHANICAL COOLING IS EXERCIZED THE OSM CONTROLLER SANL DE ENERGIZE AND THE DEMONSTROLLER AND MODULATE THE OUTSIDE AND MODEL THE CONTON TEMPERATURE	NAME DO BERGET ENVIRENTING FOR MOUTO THE DEAL CONTROLLER AND MOUNTER DOT PRESENTING BEDGES MARTINA AGENERAL AND TEMPERATURE OF 60 OF THE OTH MOUNTER DOT PRESENTION BEDGES MARTINA AGENERAL AND TEMPERATURE OF 60 OF THE OTH MOUNTER DOT PRESENTION BEDGES MARTINA AGENERAL AND TEMPERATURE OF 60 OF THE OTH MOUNTER DOT PRESENTION BEDGES MARTINA AGENERAL AND TEMPERATURE OF 60 OF THE OTH MOUNTER DOT PRESENTION BEDGES MARTINA AGENERAL AND TEMPERATURE CONTINUES TO AND BEAG AGONG SPACE COOL NOW AND DERRODES TO HAR DERIVATION MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER AGE DARGES AFTER MARCHARA. MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER AGE DARGES AT THE YORK OPEN POSITION BERGET BENERALTURE CONTINUES TO INCREASE AFTER MECHANCAL COOLING IN BERGOZED. THE OBM MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER AGE DARGES ON MOUNDAL COOLING DERRODESCI. MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER AGE DARGES ON MOUNDAL COOLING DERRODESCI. MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER CONTROLLER AND INFORMATION DERRODESCI. MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER CONTROLLER AND INFORMATION DECKNOLOGING MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER CONTROLLER AND INFORMATION DECKNOLOGING MARTINA AGENERAL COOLING, AND MARTINA THE OUTOPER CONTROLLER AND INFORMATION D. MARTINA AGENERAL DE DERRODER THE AGENE ON THE ORD MOUNT CLEAR AND INFORMATION D. MARTINA AGENERAL DE DERRODER THE AGENERAL THE CONTROLLER AND INFORMATION D. <td>NAME ON BRACE TRAFFORMULE SINGLE AND TO THE ORAL CONTROLLER AND MORE AND TO THE ORAL CONTROLLER SAME AND MORE AND AND MORE AND MORE AND MORE AND AND AND AND</td> <td>ECONOM UPON AN</td> <td>IZER COOLING ECONOMIZER</td> <td>OPERATION ENABLE SIG</td> <td>(ECONOMIZER ENA) NAL FROM THE BAS</td> <td><u>BLED)</u> TO THE OEM COI</td> <td>NTROLLER AND A</td> <td>CALL FOR COOL</td> <td>ING</td> <td></td> <td></td> <td></td>	NAME ON BRACE TRAFFORMULE SINGLE AND TO THE ORAL CONTROLLER AND MORE AND TO THE ORAL CONTROLLER SAME AND MORE AND AND MORE AND MORE AND MORE AND AND AND AND	ECONOM UPON AN	IZER COOLING ECONOMIZER	OPERATION ENABLE SIG	(ECONOMIZER ENA) NAL FROM THE BAS	<u>BLED)</u> TO THE OEM COI	NTROLLER AND A	CALL FOR COOL	ING			
AFTER THE ECONOMIZER DAMPER HAS MODULATED TO THE 100% OPEN POSITION BEFORE HER OUTSIDE AR TERMETATURE FROM THE GEM OUTDOOR AR SENSOR & LESS THAN 4 DF. E TEMPERATURE INCREASES TO ~0 = 0 SEG ADAVES PARCE GOOLING SETTOOM TAND THE ECONOMIZER S BEEN 100% OPEN FOR A MINIMUM OF 10 MINUTES, THE COEM CONTROLLER SHALL ENERGIZED, THE OEM ANICAL COOLING AND MAINTAIN THE OUTSIDE AR DAMPER AT THE 100% OPEN POSITION. E TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM R SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS ENERGIZED, THE OEM R SHALL DE ENERGIZE AND TONAL STAGES OF MECHANICAL COOLING IS ENERGIZED, THE OEM R SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 S OF SPACE TEMPERATURE, IF AVAILABLE. NUT TEMPERATURE FOR LAWY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OCING SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 RECENTION ETEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OCING STAGES S OF THE STAGE MERCHANICAL COOLING AND MODULATE THE OUTSIDE AR DAMPER MIT EMPERATURE, REACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OUTSIDE AR DAMPER MIM POSITION. ETEMPERATURE, TO ANY STAGE OF COOLING AND MODULATE THE OUTSIDE AR DAMPER MIM POSITION. DECONMUZER DISABLEDI </td <td>10 MAUTES AFTER THE ECONOMIZER DAMPER HAS MOULATED TO THE 100% OPEN PORTION BEFORE BERNJANG IMP NOT TO BE AND THE STACE MECHANICAL COLUMN THE DE DIS ON THE DESIGN TO BE SOT HAN 40 DF. 11 HIS SYACE TEMPERATURE (TAM HANDLA LOCUME) THE COM OUTDOOR AR GENOR (LES THAN LOCUME) 20 MARTING THAN THE THAN THE PORTION THE COM OUTDOOR AR GENOR (LES THAN LOCUME) 21 HIS SYACE TEMPERATURE (COMTINUES TO MORPHASE TO A MURITES, THE COM COMTROLLER ANALL ENTERDET FROM 21 HIS SYACE TEMPERATURE (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF AND A MURINUM (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE TEMPERATURE (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE TEMPERATURE (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE TEMPERATURE (COM THAN THE COM COM TRACLER ON WITHIN 15 MUNITES, THE MEXT 31 ACC OF COOLING SHALL BE EMERGIZED TO SATISH'T HE CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE TEMPERATURE OR THE COM PRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED TO SATISH'T HE CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING AS AND AS AND AS AND AS AND AS AND AND ADDULATE THE OUTSIDE ARI DAMARTING AND AND 21 HE STACE TEMPERATURE OF MERGYZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN US 20 MARTING AS AND AND AND AND AND AND AND AND AND AND</td> <td>IS UNLINES ATTER THE ECONOMIZER NAMERAL IA& MODILIATED TO THE 100% OPEN PORTION REPORE DERIVERS IN THE REPORT TRANSMITTER TRANSMITTER OF AND THE OWN OPEN PORTION REPORT. THE BRACE TEMPERATURE INCRASES TO # 00 DE ADD BADY SPACE CONCIS STETIONT AND THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OUT OWN OF TO MINUTES. THE OWN OPEN PORTION THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER RECHANGES ADD INTO THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OWN OPEN PORTION IS STETION TAME THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OWN OPEN PORTION IS STETION TAME THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OWNER AT THE OWN OPEN PORTION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER RECHANGES ADD INTO THE OWN OPEN PORTION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER RECHANGES ADD INTO INTO IS STEREOF ADD WITHOULD STAND AND Y STARE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STARE OF COOLINGS SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES. THE CUTOUT TEMPERATURE CONTINUES FOR INCREASE AFTER MECHANICAL COOLING IN SUBJECT FOR THE DIA DIA DECORDER THE OWNER THE PORT TEMPERATURE. TO ADD OWNER THE ADD OWNER ADD OWNER ADD INTO THE OWNER OWNER AND UPON A CALL FOR COOLING SFALL BE ENERGIZER ADD THEM THE BAS TO THE OWN CONTROLLER AND UPON A CALL FOR CONTROLLER SHALL DEVENTORES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. TO THE MINUTE FOR THE REARDER STAND. IF THE SHARE TEMPERATURE CONTRULES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. TO THE MINUTE FOR THE SHARE TEMPERATURES AND THE BAS TO THE OWN CONTROLLER, THE OWNER OWNER DEFENT THE OWNER TO INCREASE ADTIONNOL STARES OF MECHANICAL COOLING IS STREAGED TO MAPPER TO THE MINUTE SHALL DEVENTIONES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. TO THE MINUTE ADD ADDITIONES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. THE DEVOLUTE THE REPART THERE ATTERES AND THE DIA DIA DEPENDENT ON SED OF THE MINUTE ADDITIONES TO INCREASE AFTER MECHANICAL CO</td> <td>IN ANALTER, AFTER THE ECONOMOZER INAMERIA IN A MORILINATE TO THE INSU OPEN PORTION REPORT. OCONING OWEND CART EXPERIENT UNE FROM THE COM OUTDOOR AR SENSOR IS LESS THAN A G.DF. THE SHACE TUMERATURE INCREMENTING EFROM THE COM OUTDOOR AR SENSOR IS LESS THAN A G.DF. THE SHACE TUMERATURE INCREMENTS TO SHACE AND AND AND AND AND AND AND A COMPARE THE SHACE TUMERATURE INCREMENTS TO A COMPARE AND INFO THE INFORMATION THE COM OUTDOOR AND SENSOR IS LESS THAN A HA G.DF. THE SHACE TUMERATURE INCREMENT IN OUTSIDE AND ANDRER AT THE INFORMATION OF PROPERTION. THE SHACE TUMERATURE INCREMENTS TO INCREMENT A TETA MACINAL COM IN IS INFORMED. THE OWN DEVICE THE SHALL CONTINUE TO DEPENDE AND ANDRER AT THE INFORMATION OF STORED THE SHACE TUMERATURE INCREMENTS TO INCREMENT A TETA MACINAL COM IN ONE IN STORE THE COULD TERMENT INCREMENT IN OUTSIDE AND ANDRER AT THE INFORMATION OF STORED THE SHACE TUMERATURE ON ANY STARE OF DOULNNE IN OTHER ANDRED WITHIN IS INNUTES, THE NEXT STARE OF COULING STARES THE COULD TERMENT INCREMENTS AND AND AND AND AND AND AND AND AND AND</td> <td>BASED O ENERGIZI MAINTAIN</td> <td>N SPACE TEMF ED AND THE O A SUPPLY AIR</td> <td>PERATURE SE EM CONTROI TEMPERATU</td> <td>ENSOR INPUT TO TH LLER SHALL MODUL/ JRE OF 45 DF. THE U</td> <td>E OEM CONTROL ATE THE OUTSIDE JNIT SHALL RUN I</td> <td>LER, ECONOMIZE E AIR AND RETUR IN ECONOMIZER I</td> <td>er cooling sha n air dampers Mode for a min</td> <td>ll be To Imum of</td> <td></td> <td></td> <td></td>	10 MAUTES AFTER THE ECONOMIZER DAMPER HAS MOULATED TO THE 100% OPEN PORTION BEFORE BERNJANG IMP NOT TO BE AND THE STACE MECHANICAL COLUMN THE DE DIS ON THE DESIGN TO BE SOT HAN 40 DF. 11 HIS SYACE TEMPERATURE (TAM HANDLA LOCUME) THE COM OUTDOOR AR GENOR (LES THAN LOCUME) 20 MARTING THAN THE THAN THE PORTION THE COM OUTDOOR AR GENOR (LES THAN LOCUME) 21 HIS SYACE TEMPERATURE (COMTINUES TO MORPHASE TO A MURITES, THE COM COMTROLLER ANALL ENTERDET FROM 21 HIS SYACE TEMPERATURE (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF AND A MURINUM (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE TEMPERATURE (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE TEMPERATURE (COMTINUES TO MORPHASE ATTER HECHANICAL COLUNG IS EMERGYZED THE COM 20 MARTING OF ANALE TEMPERATURE (COM THAN THE COM COM TRACLER ON WITHIN 15 MUNITES, THE MEXT 31 ACC OF COOLING SHALL BE EMERGIZED TO SATISH'T HE CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE TEMPERATURE OR THE COM PRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED TO SATISH'T HE CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING OF ANALE DEVERSIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISHED IN US 20 MARTING AS AND AS AND AS AND AS AND AS AND AND ADDULATE THE OUTSIDE ARI DAMARTING AND AND 21 HE STACE TEMPERATURE OF MERGYZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN US 20 MARTING AS AND	IS UNLINES ATTER THE ECONOMIZER NAMERAL IA& MODILIATED TO THE 100% OPEN PORTION REPORE DERIVERS IN THE REPORT TRANSMITTER TRANSMITTER OF AND THE OWN OPEN PORTION REPORT. THE BRACE TEMPERATURE INCRASES TO # 00 DE ADD BADY SPACE CONCIS STETIONT AND THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OUT OWN OF TO MINUTES. THE OWN OPEN PORTION THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER RECHANGES ADD INTO THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OWN OPEN PORTION IS STETION TAME THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OWN OPEN PORTION IS STETION TAME THE ECONOMIZER DAMARENA SEEN 100% OPEN FOR A WITH MUM THE DIA OWNER AT THE OWN OPEN PORTION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER RECHANGES ADD INTO THE OWN OPEN PORTION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER RECHANGES ADD INTO INTO IS STEREOF ADD WITHOULD STAND AND Y STARE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STARE OF COOLINGS SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES. THE CUTOUT TEMPERATURE CONTINUES FOR INCREASE AFTER MECHANICAL COOLING IN SUBJECT FOR THE DIA DIA DECORDER THE OWNER THE PORT TEMPERATURE. TO ADD OWNER THE ADD OWNER ADD OWNER ADD INTO THE OWNER OWNER AND UPON A CALL FOR COOLING SFALL BE ENERGIZER ADD THEM THE BAS TO THE OWN CONTROLLER AND UPON A CALL FOR CONTROLLER SHALL DEVENTORES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. TO THE MINUTE FOR THE REARDER STAND. IF THE SHARE TEMPERATURE CONTRULES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. TO THE MINUTE FOR THE SHARE TEMPERATURES AND THE BAS TO THE OWN CONTROLLER, THE OWNER OWNER DEFENT THE OWNER TO INCREASE ADTIONNOL STARES OF MECHANICAL COOLING IS STREAGED TO MAPPER TO THE MINUTE SHALL DEVENTIONES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. TO THE MINUTE ADD ADDITIONES TO INCREASE AFTER MECHANICAL COOLING IS THE REST. THE DEVOLUTE THE REPART THERE ATTERES AND THE DIA DIA DEPENDENT ON SED OF THE MINUTE ADDITIONES TO INCREASE AFTER MECHANICAL CO	IN ANALTER, AFTER THE ECONOMOZER INAMERIA IN A MORILINATE TO THE INSU OPEN PORTION REPORT. OCONING OWEND CART EXPERIENT UNE FROM THE COM OUTDOOR AR SENSOR IS LESS THAN A G.DF. THE SHACE TUMERATURE INCREMENTING EFROM THE COM OUTDOOR AR SENSOR IS LESS THAN A G.DF. THE SHACE TUMERATURE INCREMENTS TO SHACE AND AND AND AND AND AND AND A COMPARE THE SHACE TUMERATURE INCREMENTS TO A COMPARE AND INFO THE INFORMATION THE COM OUTDOOR AND SENSOR IS LESS THAN A HA G.DF. THE SHACE TUMERATURE INCREMENT IN OUTSIDE AND ANDRER AT THE INFORMATION OF PROPERTION. THE SHACE TUMERATURE INCREMENTS TO INCREMENT A TETA MACINAL COM IN IS INFORMED. THE OWN DEVICE THE SHALL CONTINUE TO DEPENDE AND ANDRER AT THE INFORMATION OF STORED THE SHACE TUMERATURE INCREMENTS TO INCREMENT A TETA MACINAL COM IN ONE IN STORE THE COULD TERMENT INCREMENT IN OUTSIDE AND ANDRER AT THE INFORMATION OF STORED THE SHACE TUMERATURE ON ANY STARE OF DOULNNE IN OTHER ANDRED WITHIN IS INNUTES, THE NEXT STARE OF COULING STARES THE COULD TERMENT INCREMENTS AND	BASED O ENERGIZI MAINTAIN	N SPACE TEMF ED AND THE O A SUPPLY AIR	PERATURE SE EM CONTROI TEMPERATU	ENSOR INPUT TO TH LLER SHALL MODUL/ JRE OF 45 DF. THE U	E OEM CONTROL ATE THE OUTSIDE JNIT SHALL RUN I	LER, ECONOMIZE E AIR AND RETUR IN ECONOMIZER I	er cooling sha n air dampers Mode for a min	ll be To Imum of			
E TEMPERATURE INCREASES TO >= 0.5 DEG ABOVE SPACE COOLING SETPOINT AND THE ECONOMIZER SHEEN 10% OFEN FOR A MINIMUM OF 10 NIMUTES, THE OEM CONTROLLER SHALL ENERGIZE FIRST HANCAL COOLING AND MANTANT THE OUTSIDE ARE DAMPERA THE 100% OFEN POSITION. ETEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM S OF SPACE TEMPERATURE, IF AVAILABLE. UT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING SHALL BE ENRERGIZED TO SATISTY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REMENTS.	IF THE SPACE TEMPERATURE ENCREASES TO -> 0.5 DEC ABOVE SPACE COULING SET POINT AND THE ECONOMIZER BUMBER HAS BERNET TORS OPEN FORM AND AND TAIL TO TISTER AR DAMPER AT THE 100% OPEN POSITION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COULING IS ENERGIZED. THE CEM COUNTIONLES HAVE DEVERTISED AND AND AND TAIL OUTSIDE ARE DAMPER AT THE 100% OPEN POSITION. IF THE SPACE TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE MICHAENDRATURE TO ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISTY THE CUTOUT TEMPERATURE. COOLING SHALE BE ENERGIZED TO SATISTY THE CUTOUT TEMPERATURES ARE SATISFED IN 0.5 DEGREE INCREMENTS.	IF THE STACE TIMEPERATURE HUREINEEST TO - A DEPENDENCE ON UNK BETTOWN TWO THE ECONAMPER THE STACE THE UNK OWN OPEN FOR A MINIMUM OF 19 MINIMUM OF 19 MINIMUM OF 19 MINIMUM OF 10 MINIMU	IF THE STAGE TEMPERATURE INVERSE TO - 0.0 DEG AGOVE STAGE COOLING IS TOMIT AND THE ECONOMIZER DEMPER HAS BEECHANGEL COOLING AND MANTAIN THE OUTSIDE AR DAMPER AT THE 10% OPEN POSITION. THE SEARCE THEOREMENT HE CONTINUES TO INSTRAGE AFTER HERITMAN COOLING IS HERITREPE THE FEM DOTITION LES SHALL CONTINUE TO DEBOORE ADDITIONAL STAGES OF MECHANICAL COOLING IS INTERREPT. THE FEM DOTITION LES SHALL CONTINUE TO DEBOORE ADDITIONAL STAGES OF MECHANICAL COOLING IS INTERREPT. THE PEXT DOTITION LES SHALL DESENTED IN THE ACT ALSO INTERREPTS OF STAGE TEMPERATURE, THE AVAILABLE IF THE OUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN IN MINUTES. THE NEXT STAGE OF COOLING STAGES THE COMPRESSOR OUTOUT TEMPERATURES ARE SATISFED IN 0.5 DEGREE WITHIN THE ADDITION OF THE ASS TO THE DAS TO THE DAS TO THE OWN CONTROLLER. THE OWN DEGREE WITHIN THE SAGE TEMPERATURE SIGNAL TRANSPORT DEGREE WITHIN THE SAGE TEMPERATURE SIGNAL THE DAS TO THE OWN CONTROLLER. THE COM DEGREE WITHIN THE CONTINUES TO INCREMENT. THE SHALL CONTINUE TO INCREMENT. THE SHALL CONTINUE TO THE DAS TO THE DAS TO THE OWN CONTROLLER. THE COM DEGREE WITHIN THE CONTRUCT DESINGENT. THE SHALL EVENTLY AND AND AND AND AND ADDIT THE DEGREE CONTROLLER. THE COM DEGREE WITHIN TECONOMICS THE SHALL SHOW THE DAS TO THE OWN CONTROLLER. THE COM DEGREE WITHIN TECONOMICS THE SHALL SHOW THE DAS TO THE OWN CONTROLLER. THE COM CONTROLLER SHALL EVENTLY AND AND ADDIT TO THE OWN CONTROLLER. THE COM DEGREE TO THE SHALL EVENTLY AND AND ADDIT TO THE OWN CONTROLLER. THE COM THE MANUNA POSITION. THE DEGREE TO THE SHALL EVENTLY AND TAGE OF COOLING IS NOT REACHED WITHIN TO THE OWN CONTROLLER. THE DEM TO THE MINUTE AND AND STAGE OF THE THE THE MECHANICAL COOLING IS SHALL BENERICZED. THE SHALL THE DEGREE TO THE SHALL EVENTLY AND TAGE OF COOLING IS NOT REACHED WITHIN TO MINUTES. THE NEXT STAGE OF COOLING STALL BE EVENTRED TO INCREASE ATTER MECHANICAL COOLING IS ENERGIZED. THE DEM TO THE MINUTE AND THE SHALL EVENTLY AND TAGE OF COOLING IS NOT REACHED WITHIN TO MINU	10 MINUT ENERGIZI COOLING	ES AFTER THE NG THE FIRST WHEN OUTSIE	ECONOMIZE STAGE MEC DE AIR TEMPI	ER DAMPER HAS MO HANICAL COOLING. ERATURE FROM THE	DULATED TO THE THE OEM CONTR OEM OUTDOOR	E 100% OPEN POS ROLLER SHALL DI AIR SENSOR IS L	ITION BEFORE SABLE MECHANIC ESS THAN 45 DF.	CAL			
HANICAL COOLING AND MAINTAIN THE OUTSIDE AR DAMPER AT THE 100% OPEN POSITION. E TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM R SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG F SOF SPACE TEMPERATURE, IF AVAILABLE. UNIT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING SHALL DE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 INT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING STAGES INT ENDERSTATE FOR ANY STAGE OF COLLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING STAGES INT ENDERSTATE FOR ANY STAGE OF COLLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING STAGES INT ENDERSTATE FOR THE SPACE TEMPERATURES ARE STO THE OEM CONTROLLER, AND UPON A CALL FOR SED ON THE SPACE TEMPERATURE SUBSOR INPUT TO THE OEM CONTROLLER, THE OEM SED ON THE SPACE TEMPERATURE COOLING AND MODULATE THE OUTSIDE AIR DAMPER MUM POSITION. E TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM S OF SPACE TEMPERATURE, FAULURAL STAGES OF MECHANICAL COOLING IN B. JEGG S OF SPACE TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING STAGES INT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING STAGES OFF STAGE TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING STAGES OFF STAGE TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING STAGES OFF STAGE TEMPERATURE, FOR STAFE STAGE HEATING AND MODULATE THE OUTSIDUE IN 0.5 REMENTS. ECONTINUES TO INCREASE AFTER ENERGIZING THE ATURE SARE SATISF	STACE MECHANICAL COOLING AND MAINTAIN THE OUTSIDE AIR DAINER AT THE 100% OPEN POSITION. THE STACE TEMPERATURE CONTINUES TO INCERSE A FETER MECHANICAL COOLING IN 0.5 DEG F NICKEMENTS OF STACE TEMPERATURE FOR ANY STACE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STACE OF COOLING STALE E ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. THE ORDINATES SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. COOLING STACES THE ORDINERT SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. COOLING OFFACES THE RE INNO COMMUZE REMAIN ENDINE THERE INNO COMMUZE REMAIN ENDINE THE SATISFY THE CUTOUT TEMPERATURES CONTROLLER. THE OUTSIDE AND ADAMPER COMMUNA POSITION. THE SATISFY THE SATISFY THE CUTOUT TEMPERATURES AND ADAMPER CONTROLLER SHALL CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE CEM COULING STACES THE SATISFY TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE COM COULING STACES THE MUTULE TO INFREMENT THE CUTOUT TEMPERATURES AND ADAMPER THE MUTUL	STACE MICHANICAL COOLING AND MAINTAIN THE OUTSIDE AND AWAPER AT THE 100% OPEN POSITION. IF THE STACE TURPERATURE CONTINUES TO INCREASE ATTER MECHANICAL COOLING IN 0.5 DEG F INCREMENTS OF STACE TEMPERATURE. F AVAILABLE. IF THE OUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING STACES IF THE OUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING STACES IF THE OUTOUT TEMPERATURE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE MOREMENTS. IF THE OUTOUT STACES IF THE OUTOUR STACES IF THE STACE THE OWAPERATURE STACES OF MOLTON IF THE SPACE TEMPERATURE STACES OF MOLTON TO THE OEM CONTROLLER AND UPON A CALL FOR CONTROLLER SHALL ENERGIZE FIRST STACE BECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER IF THE SPACE TEMPERATURE STACES OF MOLTON AND THE THE OUTON TO THE OEM CONTROLLER THE OUTSIDE AIR DAMPER IF THE SPACE TEMPERATURE ON THINKS TO INCREASE AFTER HECHANICAL COOLING IS DEGREGORED. THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE BECHANICAL STACES OF MECHANICAL COOLING IN 0.5 DEG INTROLLER SHALL ENERGIZE FIRST STAGE TEMPERATURES STACE OF MECHANICAL COOLING IS DEGREGORED. THE OPEN IF THE SPACE TEMPERATURE ON THIS STACE TEMPERATURES STACE OF MECHANICAL COOLING IS AND THE STACE TEMPERATURES OF SPACE IF THE OUTON TEMPERATURE FOR ANY STACE OF OOOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT IF THE COULD STACES SHALL DE ENERGIZE AS THE ENERGIZE ON ADDILATE THE OUTSIDE AIR DAMPER TO 15 IF THE OUTON TEMPERATURE FOR ANY STACE OF OOOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT IF THE COULONS STALES SHALL DE ENERGIZE AS THE CUTOUT TEMPERAT	TAGE MICHANICAL COOLING AND ANIMITAIN THE OUTSIDE AR DAVIERA IT THE 100% OPEN POSITION. THE SPACE TEMPERATURE CONTINUE TO INFERGE ADDITIONAL STAGES OF MECHANICAL COOLING SINDS DEEP F INFERDENTISE OF TABLE TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STAGE OF COOLING SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEFINE WORKMITS. 2001ING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEFINE WORKMITS. 2001ING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 2011ING DEFINITION OF THE SALE THE COMPRESSOR CUTOUR TEMPERATURES ARE SATISFIED IN 0.5 2011ING DEFINITION OF THE SALE THE TABLE TO THE OFMIC CONTROLLER AND UPON A CALL FOR 2011ING DEFINITION OF THE SALE THE TABLE SIGNAL FROM THE BAS TO THE OFMIC CONTROLLER AND UPON A CALL FOR 2011ING DEFINITION OF THE SALE THERETURE BAREAR AND THE TO THE OFMIC CONTROLLER AND UPON A CALL FOR 2011ING DEFINITION OF THE SALE THERETURE BAREAR AND THE TO THE OFMIC CONTROLLER AND UPON A CALL FOR 2011ING DEFINITION OF THE SALE THERETURE BAREAR AND THE TO THE OFMIC CONTROLLER THE OFMIC 2011ING DEFINITION OF THE SALE THERETURE BAREAR AND THE TO THE OFMIC CONTROLLER THE OFMIC 2011ING DEFINITION OF THE SALE THERETURE BAREAR AND THE TO THE OFMIC CONTROLLER THE OFMIC 2011ING THE SALE TEMPERATURE TO ANIMAL STAGES OF MECHANICAL COOLING IS EMERGIZED. THE OFMIC 2011ING THE SALE SALE TEMPERATURE TO ANIS TAGE OF CONTROLLER AND WOULD IS EMERGIZED THE OFMIC 2011ING THE SALE SALE AND ANY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 2011ING THE SALE SALE AND ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT 2011ING THE SALE SALE AND AND ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT 2011ING THE SALE DEFINITION OF SALE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT 2011ING THE SALE AND AND ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT 2010IN ON THE SALE DEFINITION OF SALE OF COOLING IS NOT	IF THE SF DAMPER	ACE TEMPERA HAS BEEN 100	TURE INCRE % OPEN FOR	ASES TO >= 0.5 DEG A MINIMUM OF 10 M	ABOVE SPACE C	COOLING SETPOI	NT AND THE ECO SHALL ENERGIZE	NOMIZER FIRST			
R SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG F SOF SPACE TEMPERATURE, IF AVALABLE. UNI TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING SHALL BE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURE. AGES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REMENTS.	CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG F MICREMENTS OF SARCE TEMMERATURE, FLANALABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE WORKMATTS. COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE WORKMATTS. COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE WORKMATTS. COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE WORKMATTS. COOLING OFFICIENT SPI-5 COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE WORKMATS. COOLING DESCRIPTIONS DESCRIPTIONS FINER IS AN ECONOMICATE PURALE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR CONTROLLER SHALL ENERGIZE RIST STAGE MECHANICAL COULING AND MODULATE THE OUTSIDE AIR DAMPER TO THE WINNUM POSITION. IF THE SPACE TEMPERATURE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR CONTROLLER SHALL CONTINUE TO INCERSE MECHANICAL COULING AND MODULATE THE OUTSIDE AIR DAMPER TO THE WINNUM POSITION. IF THE SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE SIGNAL STAGES OF MECHANICAL COULING IS EVERCIZED. THE GEM CONTROLLER SHALL CONTINUE TO INCERSE AT THE AUXINITY TO THE OEM CONTROLLER. THE INCERSE STAGE OF COULING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 ENTROLER SHALL DECENTROLE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 ENTROLER SHALL DECENTROLES TO STAGES OF THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 ENTROLER SHALL DECENTROLES TO DECREASE AFTER ENERGIZING HEATING, THE OUTSIDE AIR DAMPER TO THE MINIMA POSITION. IF THE STAGE TEMPERATURE FOR ANY STAGE OF HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMA POSITION. IF THE STAGE TEMPERATURE FOR ANY STAGE OF THE THE OU	CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG F MERCHANDS SHALL BE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES TARGE OF COOLING SHALL BE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE IN/CREMENTS. STAGE # OOLING STAGES STAGE # SPI-10 SPI-15 SOLING BERCHAUPERCONTINUES TO MERCHAURE STAGE STAGE STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AR DAMPER STAGE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS MOTOTISIDE AR DAMPER STAGE TEMPERATURE (REAL WALL SHEROLONDE STAGES OF MECHANICAL COOLING IS ADDEGE STAGE TEMPERATURE (REAL SHEROLINES TO MERCASE OF MECHANICAL COOLING IS NOT DEGREASE STAGE TEMPERATURE (REAL SHEROLINES TO MERCASE OF MECHANICAL COOLING IS NOT THE OBMODILATE THE OUTSIDE	CONTROLIER SHALL CONTINUE TO ENFRINCE ADDITIONAL STACES OF MECHANICAL COOL ING IN 6 DREP ENDER IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 05 DEGREE INOREMENTS.	STAGE M IF THE SF	ECHANICAL CO	OLING AND	MAINTAIN THE OUTS	DIDE AIR DAMPER	AT THE 100% OP	EN POSITION. ENERGIZED, THE	OEM			
UUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OGUING SHALL BE ENERGIZEAS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5	IF THE CUTCUIT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLINGS SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS.	THE CUTUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 16 MINUTES. THE NEXT STAGE OF COOLING STAGES SHALL DE CENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECRETE INCREMENTS. $VOOLING STAGES SHALL DE CENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECRETE INCREMENTS. \frac{VOOLING STAGES SHALL DE CENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECRETE INCREMENTS. \frac{VOOLING STAGES SHALL DE CENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECRETE IN 0.5 DECRETION (CONTROLLER AND UPON A CALL FOR CONTROLLER AND CONTROLLER AND CONTROLLER AND CONTROLLER AND UPON A CALL FOR CONTROLLER AND CONTROLLER AND CONTROLLER AND CONTROLLER AND CONTROLLER AND UPON A CALL FOR CONTROLLER AND THE PRACE TEMPERATURE SENSOR INPUT TO THE OWN CONTROLLER. THE CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL$	IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO STAFF. THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECRETE INCREMENTS. TRANSPORT OF COOLING STAGES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECRETE INCREMENTS. TRANSPORT OF COOLING STAGES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DECRETE INCREMENTS. TRANSPORT OF COOLING STAGES SHALL DE ENERGIZE DISTINGTING THE DAS TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING SHALL BEREADED FIRST STAGE MECHANICAL COOLING AND AND MOULATE THE OUTSIDE AR DAMFER TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING SHALL BEREADED FIRST STAGE MECHANICAL COOLING AND MOULATE THE OUTSIDE AR DAMFER TO THE OEM CONTROLLER AND UPON A CALL FOR CONTROLLER AND ANY TAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STAGE FOR CONTROLLER AND UPON A CALL FOR CONTROLLER AND UPON A CALL FOR CONTROLLER AND UPON A CALL FOR CONTROLLER AND AND MOULATE THE CUTOUT TEMPERATURES AND AND MOUTAR AND AND UPON A CALL FOR CONTROLLER. THE	CONTROI	LER SHALL CO NTS OF SPACE	E TEMPERATI	ENERGIZE ADDITION URE, IF AVAILABLE.	IAL STAGES OF M	IECHANICAL COO	LING IN 0.5 DEG I	-			
AGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 COOLING STAGES #EXEMENTS. COOLING STAGES #SP+1.0 SP SP+1.5 SP+3 SP+1.5 SP+4.0 #ERATION (ECONOMIZER DISABLED) NO ECONOMIZER ENABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR SED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM R SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER UT MOMERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM R SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG S OF SPACE TEMPERATURE, IF AVAILABLE. UT TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT OOLING SHALL BE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 TOOLING STAGES TO OFF SP+1.0 SP+5.5 SP+2.0 SP+1.0 SP+1.15 SP+5.5 SP+2.0 SP+1.0 SP+1.0 SP SP+1.0 SP SP+2.0 SP+1.0 SP+2.0 SP+1.0 SP+2.0 SP+1.0 SP+2.0 SP+1.0 SP+2.0 SP+1.0 SP+2.0 SP+1.0 <	COOLING STAGES SHALL DE-INERCIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 STAGE ************************************	COULINE STACES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 ECREEN ENCERMENTS: TAGE # OPENATION COULING STACES SP+10 SP10 SP+20 38.4 SP+20 SP10 SP+10 SP10 SP+20 38.4 SP+20 SP10 SP+10 SP10 SP10 SP11 SP10 SP11 SP10 SP11 SP10 SP11 SP11	COULDING STACES SHALL DE-REPREZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 EXTRACE # 000-ING STACES ECONOMZER 1 SP+10 2 SP+10 3.8.4 SP+20 2.3.5 SP+10 2.3.6 SP+10 2.3.6 SP+10 2.3.6 SP+10 2.3.6 SP+20 2.3.6 SP+20 2.3.6 SP+10 2.3.6 SP+20 2.3.6 SP+20 2.3.6 SP+20 2.3.7 SP+10 2.3.8 SP+20 2.3.8 SP+10 2.3.8 SP+	IF THE CU STAGE O	F COOLING SH	RATURE FOR ALL BE ENER	ANY STAGE OF COC GIZED TO SATISFY	DLING IS NOT REATHE CUTOUT TEM	ACHED WITHIN 15 IPERATURE.	MINUTES, THE N	EXT			
COOLING STAGES $\frac{1}{2ER}$ SP+5 SP-5 SP+10 SP SP+10 SP-5 SP+10 SP-5 SP+20 SP+10 SP SP+20 SP+20 SP+10 SP+20 SP+10 SP-20 SP+10 SP SP+20 SP-20 SP+10 SP SP+20 SP-20 SP+10 SP SP+20 SP-20 SP+10 SP SP+20 SP SP+20 SP SP+20 SP SP SO SPACE TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING SHALL BE ENERGIZED AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 SP SP+5 SP+10 SP SP+10 SP SP+10 SP <t< td=""><td>COOLING STAGES ECONOMIZER SP+5 1 SP+16 2 SP+16 38.4 SP+20 2 SP+16 38.4 SP+20 SP10 SP+16 38.4 SP+20 SP10 SP+16 SP10 SP+16 SP10 SP+16 SP10 SP+16 SP20 SP+16 SP20 SP+16 SP20 SP116 SP10 SP120 SP10 SP220 SP10 SP220 SP20 SP116 SP216 SP15 SP216 SP15</td><td>COOLING STAGESSTAGE #ONOFF1SP+10SP+203.8.4SP+20SP+103.8.4SP+20SP+103.8.4SP+20SP+103.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SPA20SP+105.8.4SPA20SP+105.8.6SPA20SPA205.8.7SPA20SPA205.9.7SPA20SPA205.9</td><td>COOLING STAGES STAGE # ON - OFF 1 SP-1.5 2 SP-1.5 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 SP-2.0 SP-1.5 3.8.4 SP-2.0 COOLING OPERATION LECONOMIZEE REALEDIDIE FINEE SIN GEONOMIZEE AND THE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING BASED ON THE SPACE TEMPERATURE SIGNAL FROM THE BAS TO THE OCH CONTROLLER AND MORE AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE # AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE OF LOCOLING IS ADD BAD MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE OF COOLING IS ADD BAD MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STAGE # ON ON OFF 1 STAGE # AND ON OFF 2 SP+1.0 SP-2.0 SP+1.0 SP-2.0 SP+1.0 SP-2.0 SP+1.0 HEATMO OPERATION. SPACE TEMPERATURE SCANT</td><td></td><td>STAGES SHAL INCREMENTS.</td><td>L DE-ENERG</td><td>IZE AS THE COMPRE</td><td>SSOR CUTOUT I</td><td>EMPERATURES</td><td>ARE SATISFIED IN</td><td>0.5</td><td></td><td></td><td></td></t<>	COOLING STAGES ECONOMIZER SP+5 1 SP+16 2 SP+16 38.4 SP+20 2 SP+16 38.4 SP+20 SP10 SP+16 38.4 SP+20 SP10 SP+16 SP10 SP+16 SP10 SP+16 SP10 SP+16 SP20 SP+16 SP20 SP+16 SP20 SP116 SP10 SP120 SP10 SP220 SP10 SP220 SP20 SP116 SP216 SP15 SP216 SP15	COOLING STAGESSTAGE #ONOFF1SP+10SP+203.8.4SP+20SP+103.8.4SP+20SP+103.8.4SP+20SP+103.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SP+20SP+105.8.4SPA20SP+105.8.4SPA20SP+105.8.6SPA20SPA205.8.7SPA20SPA205.9.7SPA20SPA205.9	COOLING STAGES STAGE # ON - OFF 1 SP-1.5 2 SP-1.5 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 3.8.4 SP-2.0 SP-2.0 SP-1.5 3.8.4 SP-2.0 COOLING OPERATION LECONOMIZEE REALEDIDIE FINEE SIN GEONOMIZEE AND THE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING BASED ON THE SPACE TEMPERATURE SIGNAL FROM THE BAS TO THE OCH CONTROLLER AND MORE AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE # AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE OF LOCOLING IS ADD BAD MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE OF COOLING IS ADD BAD MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STAGE # ON ON OFF 1 STAGE # AND ON OFF 2 SP+1.0 SP-2.0 SP+1.0 SP-2.0 SP+1.0 SP-2.0 SP+1.0 HEATMO OPERATION. SPACE TEMPERATURE SCANT		STAGES SHAL INCREMENTS.	L DE-ENERG	IZE AS THE COMPRE	SSOR CUTOUT I	EMPERATURES	ARE SATISFIED IN	0.5			
Image: Spring Spring Spring Image: Spring Spring Spring Spring Image: Spring S	I SP1:0 SP 2 SP1:10 SP1:0 COOLING OPERATION IECONOMIZER DISABLED! FINAL FINAL SP1:0 COOLING OPERATION IECONOMIZER DISABLES IGNUM FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR CONTROLLER, THE OEM CONTROLLER, STAGE OF MEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER, STAGE OF ON THE SPACE TEMPERATURE, SPE:5 STAGE OF MONTON SPE:5 SPE:6 3 SPE:10 SPE:5 UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, SPE:5 STAGE	T SPF 10 SP 2 SP +10 SP +20 SP +10 COOLING OPERATION_ECONOMIZER DISABLEDIO IF THERE IS NO ECONOMIZER ENABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER. THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS DEG MCREMENTS OF SPACE TEMPERATURE, FAVALIALE. IF THE SPACE TEMPERATURE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS DEG MCREMENTS OF SPACE TEMPERATURE, FAVALIALE. IF THE CUTOUT TEMPERATURE TO SATISFY THE CUTOUT TEMPERATURES. THE NEXT STAGE OF COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. STAGE # ON IN OUR STAGES 3 1 SP+1.5 2 SP+1.0 4 SP+2.0 4 SP+2.0 MINIMON POSITION. SP ASE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER. THE OWING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS.	IIsoIso22SP+102000LING OPERATION LECONOMIZER DISAULEDIFITHERE IN OCONOMIZER PARABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER AND UPON A CALL FOR CONTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE OUTSDEAL RIPARABLE DOTITION.FITHE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO INCREASE OF COOLING STAGES OF MECHANICAL COOLING IN 0.5 DEGNOREMENTS OF SPACE TEMPERATURE, FAVAILABLE.IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURE.COOLING STAGESSTAGE #OOLING STAGES1STAGE ##11SPACE TEMPERATURESTAGE ##01SPACE ##011111111223342343434344444545454545 </td <td>STAC ECONO</td> <td>COOLI GE # MIZER</td> <td>NG STAGES ON SP+.5</td> <td>OFF SP5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	STAC ECONO	COOLI GE # MIZER	NG STAGES ON SP+.5	OFF SP5							
SP+2.0 SP+1.0 2ERATION (ECONOMIZER DISABLED) NO ECONOMIZER ENABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR SED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM R SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER MUM POSITION. E TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM R SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG S OF SPACE TEMPERATURE, IF AVAILABLE. UIT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. AGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REMENTS. TO TO N	3.4SP+2.0SP+1.0COOLING OPERATION (ECONOMIZER DISABLED)FTHERE IN OCCONOMIZER DISABLES BIONAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR SOUTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION.F THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IN BAMPER TO THE MINIMUM POSITION.F THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IN 0.5 DEG NOTRELIER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG NOTREMENTS OF SPACE TEMPERATURE, IF ANALABLE.F THE SPACE TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT STAGE OF COOLING SHALL BE ENERGIZED OF SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5DEGREE INCREMENTSSTAGE #COOLING STAGESSTAGE #OCOLING STAGESSTAGE #OPAL STAGESSTAGE #STAGE #OPAL STAGESSTAGE #OPAL STAGESSTAGE # <t< td=""><td>3.8.4 SP+20 SP+10 COOLING OPERATION LEGCONDMIZER DISABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR SOOLING BASED ON THE SPACE TEMPERATURE SENSOR NPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COLUNG AND MODULATE THE OUTBODE AND DAMFER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE, FIRST STAGE MECHANICAL COLUNG IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS A DEG NORCEMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE NOREMENTS. Import A CALL FOR THE TO BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE OPEN CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING. THE OEM CONTROLLER. THE OPEN CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING. THE OEM CONTROLLER. THE OPEN CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, FILE CUTOUT TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING. THE OEM CONTROLLER. SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS.</br></br></br></br></td><td>3.4 9F-12 220UNG DPERATION JECONOMZER JUBABLEDI 220UNG DPERATION JECONOMZER TRABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR THERE IS NO CONNUMMER TRABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER THE DEM 200 TROLLER SHALL ENERGIES TARGE MECHANICAL COOLING ND MODULATE THE OUTSDEAR AND MERE TO THE MINIMUM POSITION. 17 THE STACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL DE ONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL DE ONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL DE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT 500 TROLLER SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. 17 HE CUTOUT STAGES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. 19 FOR ACALL FOR HATING STAGES 10 A SP1.5 SP1.5 3 A S</td><td>1</td><td>5</td><td>SP+1.0 SP+1.5</td><td>SP SP+.5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	3.8.4 SP+20 SP+10 COOLING OPERATION LEGCONDMIZER DISABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR SOOLING BASED ON THE SPACE TEMPERATURE SENSOR NPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COLUNG AND MODULATE THE OUTBODE AND DAMFER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE, FIRST STAGE MECHANICAL COLUNG IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IS A DEG NORCEMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE NOREMENTS. Import A CALL FOR THE TO BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE OPEN CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING. THE OEM CONTROLLER. THE OPEN CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE 	3.4 9F-12 220UNG DPERATION JECONOMZER JUBABLEDI 220UNG DPERATION JECONOMZER TRABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR THERE IS NO CONNUMMER TRABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER THE DEM 200 TROLLER SHALL ENERGIES TARGE MECHANICAL COOLING ND MODULATE THE OUTSDEAR AND MERE TO THE MINIMUM POSITION. 17 THE STACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL DE ONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL DE ONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM 200 TROLLER SHALL DE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS NOT REACHED WITHIN 15 MINUTES. THE NEXT 500 TROLLER SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. 17 HE CUTOUT STAGES SHALL DE ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. 19 FOR ACALL FOR HATING STAGES 10 A SP1.5 SP1.5 3 A S	1	5	SP+1.0 SP+1.5	SP SP+.5							
YERATION (ECONOMIZER DISABLED) NO ECONOMIZER ENABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER, THE OEM SED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OUTSIDE AIR DAMPER MUM POSITION. E TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM R SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG S OF SPACE TEMPERATURE, IF AVAILABLE. JUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT OOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. AGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 REMENTS. TEMPERATURE SP+1.0 SP+1.5 SP+2.0 SP+2.1 SP+2.1 SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OLLING STAGES F SP+1.0 SP SP+2.0 SP+1.0 SP SP+2.0 SP+1.0 SP SP+2.0 SP+1.0 SP SP+2.0 SP+1.0 SP SP+2.0 </th <th>COOLING OPERATION (ECONOMIZER DISABILED) IF THERE IS NO ECONOMIZER ENABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER, THE OEM CONTROLLER FAILL ENERGIZE FINST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER FAILL ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE OUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS.</th> <th>COOLING OPERATION (ECONOMIZER DISABLED) IF THERE IS NO ECONOMIZER DISABLED SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OUM CONTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES. ARE SATISFIED IN 0.5 DEGREE INCREMENTS. COOLING STAGES OFF STAGE OF ONO STAGES OFF 1 SP+1.5 SP+5.5 2 SP+1.0 SP 3 SP+1.5 SP+5.5 4 SP+2.0 SP+1.0 UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OPIC ACALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OPIC ALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OPIC ALL FOR HEATING STAGES IF THE OUTROLL FOR SHALL BE ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMFER TO THE MINIMUM POSITION. IF THE OUTROLL FOR SHALL BE ENERGIZE FOR ENERGIZING HEATING, THE OEM CONTROLLER, THE OPIC ALL FOR HEATING STAGES HEATING IN STAGES HEATING IN STAGES HEAT</th> <th>COOLING OPERATION LECONOMIZEE DISABLES) IF THERE IS NO ECONOMIZEE NEARLE SENSOR INPUT TO THE OEM CONTROLLER. THE OEM CONTROLLER STALL ENERGIZE INERST STAGE MECHANICAL COLING AND MOULTE THE OLING AND MOMER IF THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER. THE OEM CONTROLLER SHALL ENERGIZE INERS STAGE MECHANICAL COLING AND MOULTE THE OLINGE AND ADMPER IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 EVENTS EVENTS EVENTS SPACE TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 EVENTS EVENTS EVENTS SPACE TEMPERATURE SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE DEGREE INFORMATION HEATING OPERATION SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE DEM CONTROLLER SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE DEM CONTROLLER SPALE HEATING OPERATION SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE DEM CONTROLLER. THE DEM CONTROLLER SPALE ADDITIONAL STAGES HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE WINNIMM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE DEM CONTROLLER SHALL ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG I</th> <th>3&</th> <th>4 8</th> <th>SP+2.0</th> <th>SP+1.0</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	COOLING OPERATION (ECONOMIZER DISABILED) IF THERE IS NO ECONOMIZER ENABLE SIGNAL FROM THE BAS TO THE OEM CONTROLLER, THE OEM CONTROLLER FAILL ENERGIZE FINST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER FAILL ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE OUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS.	COOLING OPERATION (ECONOMIZER DISABLED) IF THERE IS NO ECONOMIZER DISABLED SIGNAL FROM THE BAS TO THE OEM CONTROLLER AND UPON A CALL FOR COOLING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OUM CONTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES. ARE SATISFIED IN 0.5 DEGREE INCREMENTS. COOLING STAGES OFF STAGE OF ONO STAGES OFF 1 SP+1.5 SP+5.5 2 SP+1.0 SP 3 SP+1.5 SP+5.5 4 SP+2.0 SP+1.0 UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OPIC ACALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OPIC ALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OPIC ALL FOR HEATING STAGES IF THE OUTROLL FOR SHALL BE ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMFER TO THE MINIMUM POSITION. IF THE OUTROLL FOR SHALL BE ENERGIZE FOR ENERGIZING HEATING, THE OEM CONTROLLER, THE OPIC ALL FOR HEATING STAGES HEATING IN STAGES HEATING IN STAGES HEAT	COOLING OPERATION LECONOMIZEE DISABLES) IF THERE IS NO ECONOMIZEE NEARLE SENSOR INPUT TO THE OEM CONTROLLER. THE OEM CONTROLLER STALL ENERGIZE INERST STAGE MECHANICAL COLING AND MOULTE THE OLING AND MOMER IF THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER. THE OEM CONTROLLER SHALL ENERGIZE INERS STAGE MECHANICAL COLING AND MOULTE THE OLINGE AND ADMPER IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED. THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 EVENTS EVENTS EVENTS SPACE TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 EVENTS EVENTS EVENTS SPACE TEMPERATURE SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE DEGREE INFORMATION HEATING OPERATION SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE DEM CONTROLLER SPACE TEMPERATURE SENSOR INPUT TO THE DEM CONTROLLER. THE DEM CONTROLLER SPALE HEATING OPERATION SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE DEM CONTROLLER. THE DEM CONTROLLER SPALE ADDITIONAL STAGES HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE WINNIMM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE DEM CONTROLLER SHALL ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG I	3&	4 8	SP+2.0	SP+1.0							
COOLING STAGES # ON SP+.5 SP5 SP+1.0 SP SP+1.5 SP+.5 SP+2.0 SP+1.0 ERATION L FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE SITION. E TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER ING. E TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER ING. INUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE,	DEGREE INCREMENTS. STAGE # ON OFF 1 SP+5 2 SP+10 3 SP+1.5 4 SP+2.0 SP+1.0 SP+1.0 HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. THEATING STAGES STAGE # ON OFF 1 SP-5 2 SP-1.0	DEGREE INCREMENTS. Image: Cooling Stages STAGE # ON 1 SP+10 2 SP+10 3 SP+15 4 SP+20 SP+10 SP+10 4 SP+20 4 SP+20 SP+15 SP+5 4 SP+20 SP+10 SP+10 HEATING OPERATION Upon a CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IPON A CALL FOR HEATING ECONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE SPACE TEMPERATURE FOR ANY STAGE OF HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE NCREMENTS. SP-10 SP-5 SP+5 3 SP-15 SP-5 SP-5 SP-10 3 SP-10 SP-10	DEGREE INCREMENTS. STAGE # ON OFF 1 SP+.5 SP5 2 SP+1.0 SP 3 SP+1.5 SP+.5 4 SP+2.0 SP+1.0 SP+1.0 SP+1.0 SP SP SP SP	IF THE SF CONTROL INCREME IF THE CL STAGE OF	LER SHALL CO NTS OF SPACE JTOUT TEMPER F COOLING SH STAGES SHAL	ATURE CONT E TEMPERATI RATURE FOR ALL BE ENER	ENERGIZE ADDITION URE, IF AVAILABLE. ANY STAGE OF COO GIZED TO SATISFY	DLING IS NOT REA THE CUTOUT TEM	ACHED WITHIN 15 IPERATURE.	MINUTES, THE N	EXT			
OCOMMON OFF SP+.5 SP5 SP+1.0 SP SP+1.5 SP+.5 SP+2.0 SP+1.0 ERATION LFOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE SITION. E TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER INUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER TO THE SITURE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER TO THE SITURE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER TO THE OUTSIDE AIR DAMPER TO THE SITURE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER TO THE SITURE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER TO THE OUTSIDE AIR DAMPER TO THE SITURE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER TO THE SITURE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER TO THE SITURE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, THE OUTSIDE ADDITIONAL STAGES HEATING AND THE OUTSIDE AIR DAMPER TO THE OUTSIDE AIR DAMPER	STAGE # ON OFF 1 SP+5 SP-5 2 SP+10 SP 3 SP+15 SP+5 4 SP+2.0 SP+1.0 HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES STAGE # ON OFF 1 SP-5 SP-5 SP-10	STAGE # ON OFF 1 SP+5 SP+5 2 SP+10 SP 3 SP+20 SP+10 HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, FOR ANY STAGE OF HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING STAGES AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. IF A ON OFF 1 SP-5 2 SP-10 SP-10	STAGE # OON OFF 1 SP+.5 SP.5 2 SP+10 SP 3 SP+15 SP.5 4 SP+20 SP+10 HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES STAGE # ON OFF 1 SP-10 SP-10	DEGREE		NG STAGES								
SF11.0 SF SP+1.5 SP+.5 SP+2.0 SP+1.0 ERATION L FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE ISITION. E TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER INUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE,	2 SP+1.5 SP+.5 3 SP+1.5 SP+2.0 SP+1.0 HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. Image: The Cutous temperatures are satisfied in 0.5 DEGREE INCREMENTS. Image: The SP1.5 1 SP+.5 2 SP+.5 2 SP+.5 2 SP+.5 2 SP+.5 2	2 SP1.5 SP1.5 3 SP1.5 SP1.5 4 SP2.0 SP1.0 HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. MEATING STAGES STAGE # ON OFF 1 SP5 2 SP1.0 SP5 3 SP5 3 SP5 3 SP5 SP5 SP5 SP5 SP5 SP5 SP5 SP5	2 JF110 JF 3 SP+1.5 SP+5.5 4 SP+2.0 SP+1.0 HEATING DECOMPTING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING STAGE OF AS THE HEATER CUTOUT TEMPERATURE. HEATING STAGES IF THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. IF HEATING STAGES IF ATING STAGES IF AGE # ON OFF 1 SP-1.0 SP-1.0	STAC 1	SE #	ON SP+.5	OFF SP5							
ERATION L FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE SITION. E TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER INUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE,	HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. Image: the temperature of the stages of the stage of stage of the stage of stage of the stage of	HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS.	HEATING OPERATION UPON A CALL FOR HEATING BASED ON THE SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE HEATING AND MODULATE THE OUTSIDE AIR DAMPER TO THE MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. Important Stages of the stages of the stages are staged by 0.5 DEGREE Important Stages Stages of the stages of the stages of the stages are stages of the stages of th	3		SP+1.5 SP+2.0	SP+.5 SP+1.0							
E TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER INUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE,	MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP	MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS.	MINIMUM POSITION. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE AFTER ENERGIZING HEATING, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. <u>HEATING STAGES</u> <u>STAGE # ON OFF</u> <u>1 SP-5 SP+5</u> <u>2 SP-1.0 SP</u> <u>3 SP-1.5 SP-5</u> <u>4 SP-2.0 SP-1.0</u>	<u>HEATING</u> UPON A C OEM CON	OPERATION CALL FOR HEAT	TING BASED (LL ENERGIZE	ON THE SPACE TEMI E FIRST STAGE HEAT	PERATURE SENS	OR INPUT TO THE ATE THE OUTSIE	E OEM CONTROLI JE AIR DAMPER T	LER, THE O THE			
- INDE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE,	SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES STAGE # ON OFF 1 SP5 2 SP-1.0	SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES HEATING STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES HEATING IN 0.5 DEG INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE. IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES TAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	IF THE SP	POSITION.		INUES TO DECREAS		ZING HEATING, TI					
	IP THE COTOOT TEMPERATORE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN IS MINUTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES STAGE # ON OFF 1 SP5 2 SP-1.0	IP THE COTOOT TEMPERATORE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN IS MINUTES, THE NEXT STAGE OF HEATING STAGE TO SATISFY THE CUTOUT TEMPERATURE. HEATING STAGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. INCREMENTS. HEATING STAGES STAGE # ON OFF 1 SP5 2 SP-1.0 3 SP-1.5 4 SP-2.0	IP THE COTOUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN IS MINOTES, THE NEXT STAGE OF HEATING SHALL BE ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS. HEATING STAGES STAGE # ON OF 1 SP5 2 SP-1.0 3 SP-1.5 3 SP-1.5 4 SP-2.0	IF AVAILA	BLE.					MINUTES THE N	TURE,			
EATING SHALL BE ENERGIZED TO SATISEV THE CUTOUT TEMPERATURE	HEATING STAGES INCREMENTS. HEATING STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP	HEATING STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-2.0 SP-1.0	Interfield of Addition Control From Encretic on the interfere of Addition Cost decrete HEATING STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	STAGE O	F HEATING SHA		GIZED TO SATISFY T	THE CUTOUT TEM	PERATURE.					
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE	HEATING STAGESSTAGE #ONOFF1SP5SP+.52SP-1.0SP	BEATING STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	Bit Mide STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	INCREME	NTS.									
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S.	2 SP-1.0 SP	2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	STAC 1	E #	ON SP5	OFF SP+.5							
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES <u>+ ON OFF</u> SP5 SP+.5	3 SP-1.5 SP5	4 36-2.0 36-1.0	4 07-2.0 07-1.0	2		SP-1.0 SP-1.5	SP SP5							
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES <u>+ ON OFF</u> <u>SP5 SP+.5</u> <u>SP-1.0 SP</u> <u>SP-1.5 SP5</u> <u>SP-2.0 SP-1.0</u>														
 OUT TEMPERATURE FOR ANY STAGE OF HEATING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT FATING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE	STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP	STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	STAGE OI COOLING DEGREE STAG 1 2 3 4 HEATING UPON A C OEM CON MINIMUM IF THE SP SHALL CO IF AVAILA IF THE CL STAGE OI HEATING INCREME	F COOLING SH STAGES SHAL INCREMENTS. COOLII SE # COOLII SE # SE SE SE SE SE SE SE SE SE SE SE SE SE	ALL BE ENER L DE-ENERG NG STAGES ON SP+.5 SP+1.0 SP+1.0 SP+1.5 SP+2.0 TING BASED O LL ENERGIZE ATURE CONT VERGIZE ADD RATURE FOR ALL BE ENER L DE-ENERG	COFF SP5 SP SP+.5 SP+.5 SP+1.0 ON THE SPACE TEMI FIRST STAGE HEAT INUES TO DECREAS DITIONAL STAGES HE ANY STAGE OF HEA GIZED TO SATISFY T IZE AS THE HEATER	THE CUTOUT TEM ESSOR CUTOUT T PERATURE SENS TING AND MODUL E AFTER ENERGIZ EATING IN 0.5 DEG TING IS NOT REA THE CUTOUT TEM CUTOUT TEMPER	IPERATURE. EMPERATURES / OR INPUT TO THE ATE THE OUTSIE ZING HEATING, TI S INCREMENTS O CHED WITHIN 15 IPERATURE. RATURES ARE SA	ARE SATISFIED IN OEM CONTROLI DE AIR DAMPER T HE OEM CONTRO F SPACE TEMPER MINUTES, THE NI TISFIED IN 0.5 DE	LER, THE O THE LLER RATURE, EXT			
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE	HEATING STAGESSTAGE #ONOFF1SP5SP+.52SP-1.0SP	BEATING STAGES STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	STAGE # ON OFF 1 SP5 SP+.5 2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	NCREME	NTS.									
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES	2 SP-1.0 SP	2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	2 SP-1.0 SP 3 SP-1.5 SP5 4 SP-2.0 SP-1.0	STAC)E #	ON SP5	OFF SP+.5							
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES <u>+ ON OFF</u> <u>SP-5 SP+5</u>	3 SP-1.5 SP5 4 SP-2.0 SP-1.0			3		SP-1.0 SP-1.5 SP-2.0	SP SP5 SP-1.0							
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE HEATING STAGES ¥ ON SP5 SP+.5 SP-1.0 SP SP-2.0 SP-1.0														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES HEATING STAGES SP-1.0 SP-1.0 SP-2.0 SP-1.0														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES ¥ ON OFF SP5 SP+.5 SP-1.0 SP SP-1.5 SP5 SP-2.0 SP-1.0														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. <u>HEATING STAGES <u>4 ON OFF</u> <u>SP-5 SP+5</u> <u>SP-1.0 SP</u> <u>SP-1.5 SP-5</u> <u>SP-2.0 SP-1.0</u></u>														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. <u>HEATING STAGES</u> <u>Y ON OFF</u> SP-5 SP+5 SP-10 SP SP-1.0 SP SP-2.0 SP-1.0														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES + ON OFF SP-1.5 SP-5.5 SP-1.0 SP SP-1.5 SP-5.5 SP-2.0 SP-1.0														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. HEATING STAGES + ON OFF SP-10 SP-5 SP-10 SP-15 SP-20 SP-10														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. <u>HEATING STAGES</u> <u>7 ON OFF</u> <u>5P-10 SP-5</u> <u>5P-10 SP-10</u> <u>5P-20 SP-10</u>														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S.														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE S. <u>HEATING STAGES 4 ON OFF 3 SP-10 SP 3 SP-10 SP 3 SP-20 SP-10</u>														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE THEATING STAGES THEATING STAGES SP-10 SP SP-10 SP SP-10 SP-10 SP-10 SP-10 SP-20 SP-10														
AGES SHALL DE-ENERGIZE AS THE HEATER CUTOUT TEMPERATURES ARE SATISFIED N 0.5 DEGREE <u>HEATING STAGES</u> <u>HEATING STAGES</u> <u>SP-10</u> SP-5 <u>SP-20</u> SP-10 <u>SP-20</u> SP-10														
AGES SHALL DE-ENERGIZE AS THE HEATER OUTOUT TEMPERATURES ARE SATISFIED N 0.5 DEGREE HEATING STAGES HEATING STAGES SP-10 SP-10 SP-10 SP-20 SP-10 SP-10 SP-20 SP-10 SP														

DTES

<u>SMOKE DETECTORS</u> FOR UNITS EQUIPPED WITH SMOKE DETECTORS (DUCT MOUNTED OR SPACE MOUNTED) THE SMOKE DETECTOR SHALL SHUT-DOWN THE UNIT UPON SMOKE DETECTOR ACTIVATION. IF REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION, UPON SMOKE DETECTOR ACTIVATION ADDITIONAL UNITS SHALL SHUT-DOWN UPON A SIGNAL FROM EITHER THE OWNER ALARM SYSTEM OR BAS TO THE OEM CONTROLLER. THE OEM CONTROLLER SHALL CLOSE THE OUTSIDE AIR DAMPER TO THE 0% OPEN POSITION, SHUT-DOWN ALL STAGES OF COOLING OR HEATING AND TURN OFF THE SUPPLY FAN. OEM CONTROLLER SHALL OVERRIDE ALL OTHER SPACE CONDITION DEMANDS WHEN UNIT HAS RECEIVED A SMOKE DETECTOR ACTIVATION ALARM.

RTU PROTECTION ALL EQUIPMENT SAFETY SEQUENCES, I.E. COMPRESSOR RESET, GAS BURNER RESET, ETC SHALL BE CONTROLLED BY THE OEM CONTROLLER.

<u>ALARMS</u> THE RTU CONTROLLER SHALL COMMUNICATE ALL RTU ERROR CODES TO THE BAS.

	RTU LOAD ALARM LIST
ERROR	
CODE	FROM OEM CONTROLLER TO BAS
4	SMOKE ALARM
5	AIR FLOW SWITCH
20	INPUT ERROR, PHASE LOSS OR VFD FAIL
74	ZONE SENSOR PROBLEM

COMMUNICATION DATA POINT LIST THE RTU CONTROLLER AND BAS SHALL TRANSFER THE COMMUNICATION DATA POINTS BASED ON THE FOLLOWING SCHEDULE.

		2Т
h	-ROM BAS TO RTU CONTROLLER - ANALOG OUTPL	
OBJECT ID	OBJECT NAME	UNITS
101	APPLICATION MODE CONTROL	NONE
102	OUTDOOR AIR MIN POS CONTROL	PERCENT
104	OCCUPANCY SCHEDULER CONTROL	NONE
108	SPACE DEHUMIDIFICATION SETPT	PERCENT
114	EMERGENCY OVERRIDE CONTROL	NONE
129	SET ECONOMIZER OUTDOOR AIR SUITABLE	NONE
130	HEATING OCCUPIED SETPOINT	DEG F
131	COOLING OCCUPIED SETPOINT	DEG F
132	HEATING UNOCCUPIED SETPOINT	DEG F
133	COOLING UNOCCUPIED SETPOINT	DEG F
	FROM RTU CONTROLLER TO BAS - ANALOG INPUT	ſS
OBJECT ID	OBJECT NAME	UNITS
232	UNIT STATUS	NONE
239	SPACE TEMPERATURE	DEG F
240	DISCHARGE AIR TEMPERATURE	DEG F
241	EFFECTIVE OCCUPANCY	NONE
243	LOCAL SPACE TEMPERATURE	DEG F
244	OUTSIDE AIR DAMPER	PERCENT
245	HEAT PRIMARY	PERCENT
247	COOL PRIMARY	PERCENT
248	ECONOMIZER ENABLED	PERCENT
250	SUPPLY FAN STATUS	PERCENT
252	SPACE TEMPERATURE SETPT (EFF)	DEG F
255	MOST RECENT ERROR 1	NONE
256	MOST RECENT ERROR 2	NONE
257	MOST RECENT ERROR 3	NONE
258	MOST RECENT ERROR 4	NONE
259	MOST RECENT ERROR 5	NONE
274	SPACE CO2 SENSOR (EFF)	PPM
276	SPACE HUMIDITY (EFF)	PERCENT
278	DEHUMIDIFICATION SETPT (EFF)	PERCENT
279	DEHUMIDIFICATION STATUS	NONE
281	RETURN AIR TEMPERATURE	DEG F

ECONOMIZER OPERATION (BACNET CONTROLLER WITH MUNTERS AHUS COMMUNICATING TO CONTROLLER) THE BAS SHALL SEND AN ECONOMIZER ENABLE SIGNAL TO THE OEM CONTROLLER WHEN BOTH OF FOLLOWING OUTSIDE AIR CONDITIONS ARE MET:

OUTSIDE DRY BULB TEMPERATURE > 5 DEG F AND < 68 DEG F OUTSIDE DEWPOINT TEMPERATURE > 5 DEG DP AND < 48 DEG DP

ECONOMIZER OPERATION (ES1 WITHOUT MUNTERS AHUS AND ENTHALPY WIRE FROM EXISTING CONTROLLER) THE ES1 SHALL SEND AN ECONOMIZER ENABLE SIGNAL TO THE RTU OEM CONTROLLER WHEN AN ECONOMIZER ENABLE SIGNAL IS RECEIVED FROM THE LINGO XE/EP2 CONTROLLER THRU XIO-44-B ON BACNET.

THE LINGO XE/EP2 CONTROLLER SHALL SEND AN ECONOMIZER ENABLE SIGNAL WHEN BOTH THE FOLLOWING OUTSIDE AIR CONDITIONS ARE MET:

OUTSIDE DRY BULB TEMPERATURE > 5 DEG F AND < 68 DEG F OUTSIDE DEWPOINT TEMPERATURE > 5 DEG DP AND < 48 DEG DP

ECONOMIZER OPERATION (XCM20R WITHOUT MUNTERS AHUS AND ENTHALPY WIRE FROM EXISTING CONTROLLER) THE XCM20R SHALL SEND AN ECONOMIZER ENABLE SIGNAL TO THE RTU OEM CONTROLLER WHEN AN ECONOMIZER ENABLE SIGNAL IS RECEIVED FROM THE LINGO XE/EP2 CONTROLLER ON INPUT TERMINAL D11.

THE LINGO XE/EP2 CONTROLLER SHALL SEND AN ECONOMIZER ENABLE SIGNAL WHEN BOTH THE FOLLOWING OUTSIDE AIR CONDITIONS ARE MET:

OUTSIDE DRY BULB TEMPERATURE > 5 DEG F AND < 68 DEG F OUTSIDE DEWPOINT TEMPERATURE > 5 DEG DP AND < 48 DEG DP

ECONOMIZER OPERATION (WITHOUT MUNTERS AHUS OR OUTDOOR DEWPOINT SENSOR COMMUNICATING TO CONTROLLER)(LIQUOR BOX) UPON AN ECONOMIZER ENABLE SIGNAL FROM THE OEM CONTROLLER BASED ON THE OUTDOOR SINGLE ENTHALPY SENSOR 18mA SETTING AND A CALL FOR COOLING BASED ON

SPACE TEMPERATURE SENSOR INPUT TO THE OEM CONTROLLER, ECONOMIZER COOLING SHALL BE ENERGIZED AND THE OEM CONTROLLER SHALL MODULATE THE OUTSIDE AIR AND RETURN AIR DAMPERS TO MAINTAIN A SUPPLY AIR TEMPERATURE OF 45 DF. THE UNIT SHALL RUN IN ECONOMIZER MODE FOR A MINIMUM OF 10 MINUTES AFTER THE FIRST ECONOMIZER DAMPER HAS MODULATED TO THE 100% OPEN POSITION BEFORE ENERGIZING THE FIRST STAGE MECHANICAL COOLING. THE OEM CONTROLLER SHALL DISABLE MECHANICAL

COOLING WHEN OUTSIDE AIR TEMPERATURE FROM THE OEM OUTDOOR AIR SENSOR IS LESS THAN 45 DF. IF THE SPACE TEMPERATURE INCREASES TO >= 0.5 DEG ABOVE SPACE COOLING SETPOINT, THE OEM CONTROLLER SHALL ENERGIZE FIRST STAGE MECHANICAL COOLING AND MODULATE THE DAMPERS TO MAINTAIN 55 F SUPPLY AIR TEMPERATURE.

IF THE SPACE TEMPERATURE CONTINUES TO INCREASE AFTER MECHANICAL COOLING IS ENERGIZED, THE OEM CONTROLLER SHALL CONTINUE TO ENERGIZE ADDITIONAL STAGES OF MECHANICAL COOLING IN 0.5 DEG F INCREMENTS OF SPACE TEMPERATURE, IF AVAILABLE.

IF THE CUTOUT TEMPERATURE FOR ANY STAGE OF COOLING IS NOT REACHED WITHIN 15 MINUTES, THE NEXT STAGE OF COOLING SHALL BE ENERGIZED TO SATISFY THE CUTOUT TEMPERATURE.

COOLING STAGES SHALL DE-ENERGIZE AS THE COMPRESSOR CUTOUT TEMPERATURES ARE SATISFIED IN 0.5 DEGREE INCREMENTS.

> EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. CONTACTOR SHALL FIELD VERIFY ALL EXISTING

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY CONDITIONS PRIOR TO SUBMITTING FINAL BIELS. CONTRACTOR SHALL CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

IF WIRING LENGTH BETWEEN DEVICES EXCEEDS 328', OBTAIN SPORLAN-APPROVED NETWORK SWITCH TO INCREASE MAXIMUM WIRING LENGTH TO 650'. INSTALL ONE ADDITIONAL SWITCH FOR EACH SUBSEQUENT

(NOVAR) FOR THE REPROGRAMMING OF THEIR RACK CONTROLLER WITH THE REMOVAL OF CIRCUITS FROM THEIR CONTROL. VERIFY DEFROST SCHEDULES ARE COORDINATED BETWEEN THE EXISTING RACK CONTROLLER AND THE NEW CASE CONTROLS.

INCREMENT OF 325' OF RUN BETWEEN DEVICES.

COORDINATE WITH LEGACY BAS VENDOR

NOTES: 1. ALL CABLE WIR-2020 UNLESS NOTED OTHERWISE. 2. ALL WIR-1010 AND WIR-2020 CABLE FURNISHED BY OWNER FOR INSTALLATION BY CONTRACTOR. ALL OTHER CABLE FURNISHED AND INSTALLED BY

CONTRACTOR.

WIRE LEGEND WIR-1010 (TAN CABLE 18-2, 20-2 TWISTED PAIR) WIR-2020 (BLUE CABLE 22-2 TWISTED PAIR)

ALL KE2 CONTROLLERS TO BE PLACED IN BONDING GROUPS TO COORDINATE DEFROST. ONLY ONE BONDING GROUP SHALL BE ABLE TO DEFROST AT ANY GIVEN TIME. ALL COILS WITHIN A GIVEN BONDING GROUP SHALL BE PROGRAMMED FOR SYNCHONIZED DEFROST. INPUT3 RCU3 INPUT4 RCU4 INPUT5 SPARE INPUT6 SPARE INPUT7 SPARE INPUT8 SPARE

KE2 NETWORK SWITCH REQUIRES 120V

POWER. PROVIDE DUPLEX RECEPTACLE FOR

EACH SWITCH SHOWN.

KE2 NETWORK SWITCH #1 (PART # 21001)

INPUT1 SPARE

INPUT2 RCU2

— XCM CONTROLLER FACTORY INSTALLED IN EMERSON X-LINE CONDENSING UNITS, TYP.

	XIO-80 (XIO-02)
UNIVEF	RSAL INPUTS/ANALOG OUTPUTS
U1/A1	LDP PICKUP COOLER (AI)
U2/A2	LDP PICKUP COOLER (DI)
U3/A3	LDP PICKUP FREEZER (AI)
U4/A4	LDP PICKUP FREEZER (DI)
U5/A5	SPARE
U6/A6	SPARE
U7/A7	SPARE
U8/A8	SPARE

NEW BAS BACKBOARD

BAS EQUIPMENT SALVAGE REQUIREMENTS

1.02.15 ALL DEMOLISHED NOVAR BAS EQUIPMENT SHALL BE RETURNED TO WALMART MECHANICAL SERVICES CONSTRUCTION MANAGER. EQUIPMENT TO BE RETURNED INCLUDES: EXECUTIVE CONTROLLER(S), IOM(S), CIM(S), CCM(S), ETC. PROVIDE DOCUMENTATION FOR ALL EQUIPMENT REMOVED IN ACCORDANCE WITH SPECIFICATIONS AND REQUIRED CLOSE-OUT DOCUMENTS.

	GENE	RAL REFRIGERATION BAS NOTES			-+ ⁰⁰ (1)
0	3.12.18 1. BAS CONT SUPPLIER CONFIGUE SENSOR L FOR THE C PRIOR TO TERMINAT THE BAS S 2. BAS CONT REFRIGER	RACTOR SHALL CONTACT THE BAS (S) TO OBTAIN A CURRENT MODULE RATION PRINTOUT BEFORE TERMINATING EADS AT INPUT MODULES. THE REQUEST CONFIGURATION PRINTOUT SHALL BE MADE THE INSTALLATION OF BAS CABLES. WIRING IONS SHALL BE LANDED ACCORDING TO SUPPLIER CONFIGURATION SHEETS. RACTOR SHALL PROVIDE COMPLETED ATION SENSOR INPUT VERIFICATION		William R. Kraner teamofchoice.com	TE 5516 479-636-500 ⁴ 5 N 2ND ST JOB NO.: 2758 3ERS, AR 72756 DESIGNED BY: JVV
	FORMS TO OF THE RE INSTALLEF SUPPLIER ACCURAC) THE BAS SUPPLIER(S) AT THE BEGINNING EFRIGERATION EQUIPMENT STARTUP. BAS & SHALL PROVIDE ASSISTANCE TO THE BAS (S) FOR SPOT CHECKING OF SENSORS FOR Y.			SUI 1800 ROG
	3. ALL BAS C ROUTED II AND ROUT AS MUCH	ABLE ON THE SALES FLOOR SHALL BE N CONDUIT AND CONCEALED FROM VIEW TED ALONGSIDE OTHER PIPING OR CONDUIT AS POSSIBLE.	EUSE) FOR USE IS ISSUE OT OT TIME. USE NOF OR	COPERLY COPERLY GINGERS. ING FOR IS NOT IRARY TO
	4. BAS CONT AVAILABLE REFRIGER RELEASEE MECHANIC	RACTOR SHALL BE PRESENT AND TO RESOLVE ISSUES AND PROVIDE ATION STARTUP ASSISTANCE UNTIL BY THE BAS SUPPLIER AND WALMART CAL CONSTRUCTION MANAGER.	ULATION FOR RE	AWING WAS PREPARED PECIFIC SITE AT: UP, WA MPORANEOUSLY WITH IT N 09/08/21, AND IT IS N LE FOR USE ON A DIFFEI CI SITE OR AT A LATER 1 S DRANIG FOR RFFFFA	LE ON ANOTHER PROJEC RES THE SERVICES OF PI RED ARCHITECTS AND EN DUCTION OF THIS DRAW ON ANOTHER PROJECT RIZED AND MAY BE CON W.
	5. DURING TH CONTRAC REFRIGER OTHER BA	TOR SHALL COMPLETE ALL UNRESOLVED ATION WORK PRIOR TO WORKING ON S INSTALLATION ITEMS.	STIP	THIS DF ON A SI PUYALL PUYALL CONTEI CONTEI CONTEI PROJEC	EXAMP REQUIR LICENS REPRO REUSE AUTHOI THE LA
	6. WHEN THE PERFORM THE BUILD RESPONS TEST TO E REFRIGER BAS SUPP FORMS AN COMPLET RETURNEI CONSTRU	E BAS SUPPLIER IS NOT SCHEDULED TO THE ON SITE REFRIGERATION STARTUP, DING AUTOMATION CONTRACTOR IS IBLE FOR PERFORMING ALL CHECKS AND INSURE A FULLY FUNCTIONAL ATION CONTROL SYSTEM. CONTACT THE LIER FOR THE BLANK TEST VERIFICATION ID INSTRUCTIONS FOR COMPLETING. ALL ED TEST VERIFICATION FORMS SHALL BE D TO THE WALMART MECHANICAL CTION MANAGER.	CONSULTANTS		
	7. REFER TO INSTALLAT DEVICES S NOT INSTA	ARCHITECTURAL DRAWINGS FOR PIPING FION AND SEALING REQUIREMENTS FOR SHOWN ON COOLER/FREEZER PANELS. DO ALL PIPING WITHIN COOLER/FREEZER			d X
	PANELS. 8. ROUTE AL CONDUIT) ON COOLE WHERE U TO HAVE 1	L UTILITY SERVICE LINES (PIPES AND WITHIN STUD WALLS WHEREVER POSSIBLE. ER/FREEZER PANELS IN FOOD PREP AREAS FILITIES MUST BE EXPOSED, CONTRACTOR THE OPTION OF THE FOLLOWING:			WA 98374 192 GROCERY E)
	A. SURFA CORRI PIPE/C SEALA	ACE MOUNT UTILITIES WITH NON- OSIVE ANCHORS; SEAL BOTH SIDES OF CONDUIT TO PANEL CONTINUOUSLY WITH NT.	C		Р VYALLUP, PUYALLUP, 2403-278 РRОТО:
	C. COVER	V FOR CLEANING; USE ONLY NON- OSIVE MATERIALS FOR SPACERS AND ORS.	Г		ENUE SE, TORE NO WALGP0402
	STEEL NON-C SEALA	BENT PLATES MOUNTED TO WALL WITH CORROSIVE ANCHORS; APPLY CONTINUOUS NT ALONG EDGES AND JOINTS.			1ST AVE S
	9. REFERENCE FOR FULL	EXTENT OF DEMOLITION WORK REQUIRED.		\rightarrow	310 3 OB NUMBER:
_	E2E	REFRIGERATION NETWORK GATEWAY		ISSUE BL	.OCK
-	ES1 BAS	REFRIGERATION EXECUTIVE CONTROLLER BUILDING AUTOMATION SYSTEM	4	ADD#6	07/07/22
	TEMP VFD	TEMPERATURE VARIABLE FREQUENCY DRIVE			
_		BACKBOARD REFRIGERATION CIRCUIT			
-		PRESSURE TRANSDUCER			
		DUAL TEMP SWITCH			
_	C-##	CONTACTOR			
	RIB/C-##	RELAY IN BOX & CONTACTOR PANEL	CHE	CKED BY:	ROP
	DXL	CPC DXL CASE/CIRCUIT CONTROLLER	DRA PRC	WN BY: TO CYCLE:	JVG 07/30/21
	CLCD	CPC CONTROL LINK CASE DISPLAY	DOC	UMENT DATE	: 09/08/21
	MF ESR	CPC MULTIFLEX ELECTRONIC STEPPER REGULATOR	Ð	LAM R. KA	LAN.
	Al8 XM-101	DANFOSS INPUT MODULE DANFOSS CASE MANAGEMENT SYSTEM		ALL CAS	CIER
	AK2-CM	MODULE/ENCLOSURE DANFOSS COMMUNICATIONS MODULE	PE	254716 R 54716	Jak -
5	KE2	KE2 RE2 COIL CONTROLLER	Č.	CSSIONAL ET	GING
} {		EMERSON X-LINE RCU CONTROLLER	}	Jul 07, 2022	
		NOVAR CASE INPUT MODULE			
	RCC	NOVAR REFRIGERATION CASE/CIRCUIT CONTROLLER			
	MinIO XIO	NOVAR INPUT/OUTPUT MODULE SPORLAN REFRIGERATION CASE/CIRCUIT			
	SGR	SPORLAN GATEWAY ROUTER			
_	SNS	SPORLAN NETWORK SWITCH			
		EXISTING EQUIPMENT			
L					
NY EM:S	OR BUIL DING				
ND E All 'N A	EMAIL TO STATE WHAT, ND HOW LONG	3			
HEN T.CC S B	N SEND A DM AFTER THE ACK UP AND				
				SYSTE	EM
	[RE	FRIGEF PI AN	RATION IS
	EACH SUB A THOROU SPECIFICA	CONTRACTOR IS RESPONSIBLE FOR HAVING GH KNOWLEDGE OF ALL DRAWINGS AND TIONS IN THEIR RELATED FIFL D THE			
AL LT"	FAILURE T	O ACQUAINT THEMSELVES WITH THIS GE DOES NOT RELIEVE THE RESPONSIBILITY			€⊔ات
\LT					

PICKUP REFRIGERATION BAS PLAN

24 HOURS PRIOR TO SHUTTING DOWN A **REFRIGERATION SYSTEMS, HVAC SYSTE** AUTOMATION CONTROLS SYSTEMS, SEN NSRM@WALMART.COM. THE E-MAIL SHA WHY, AND WHEN IT IS BEING SHUT DOW IT IS ANTICIPATED TO BE SHUT DOWN. T FOLLOW UP EMAIL TO NSRM@WALMAR WORK IS COMPLETE AND THE SYSTEM I RUNNING.

EXISTING CONDITIONS WERE TAKEN FROM ORIGINA DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUIL CONDITIONS. CONTRACTOR SHALL FIELD VERIFY A **EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL** BIDS. CONTRACTOR SHALL CAREFULLY COORDINA NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

8 %

CIRCUIT #	APPLICATION	MODEL NUMBER	
PCU2			
CIRCUIT #	APPLICATION	MODEL NUMBER	
RCU3	Pickup Cooler W.I.		
·	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····
CIRCUIT #	APPLICATION	MODEL NUMBER	
	1/2 Pickup Freezer W/ I		
RCU4			
RCU4		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	uuu
RCU4 NOTES: 1) Case T 2) Walk-I	TXV Target Superheat shall be set per RC	CM Cutsheets. TYP of all cases. t per RSM recommendations. TYP of all Walk	-In Coils.

- TEMPERATURE AND DEFROST CONTROLLED VIA KE2

					ОР		SU				F
	Krack			34	34		6-10	EL	##	45	50
F	RCU4 DISCHARGE	AIR TEMPERATURE AND DEF	ROST PARAMETERS	~~~~~	~~~~	·····	~~~~	·····	~~~~	~~~~	<u> </u>
				DISCHA FOR C SETTI	ARGE AIR ASES/ RE NG FOR ¹	TEMP SI TURN AI WALK IN	ETTINGS R TEMP BOXES			DEFROST	Г
MODEL NUMBER	MFR	EQUIPMENT TAG NUMBER	EQUIPMENT CUTSHEET DATE	MANUFACTURER TARGET (°F)	OPERATING SETPOINT (°F)	DUAL TEMP TARGET (°F)	SUPERHEAT SETPOINT (°F)	DEFROST TYPE	FREQUENCY PER DAY	MAX DURATION (MIN)	TERMINATION TEMP (°F)
	Krack			-8	-8		6-10	EL	##	45	55

				Ŵ	OPERA	DUAL	SUPER		FRE	MAX	TERM
	Krack			-10	-10		6-10	EL	##	45	55
RCU	3 DISCHARGE A	IR TEMPERATURE AND DEFF	ROST PARAMETERS								
				DISCHA FOR CA SETTI	RGE AIR ASES/ RE NG FOR V	TEMP SE TURN AIF VALK IN F	ETTINGS R TEMP BOXES		I	DEFROST	
MODEL NUMBER	MFR	EQUIPMENT TAG NUMBER	EQUIPMENT CUTSHEET DATE	MANUFACTURER TARGET (°F)	PERATING SETPOINT (°F)	0UAL TEMP TARGET (°F)	JPERHEAT SETPOINT (°F)	DEFROST TYPE	FREQUENCY PER DAY	MAX DURATION (MIN)	ERMINATION TEMP (°F)

RCU2	2 DISCHARGE AIR	TEMPERATURE AND DEF	ROST PARAMETERS								
				DISCHA FOR CA SETTIN	RGE AIR ASES/ RE NG FOR V	TEMP SE TURN AIF VALK IN E	ETTINGS R TEMP BOXES]	DEFROST	Г
MODEL NUMBER	MANUFACTURER	EQUIPMENT TAG NUMBER	EQUIPMENT CUTSHEET DATE	MANUFACTURER TARGET (°F)	OPERATING SETPOINT (°F)	DUAL TEMP TARGET (°F)	SUPERHEAT SETPOINT (°F)	DEFROST TYPE	FREQUENCY PER DAY	MAX DURATION (MIN)	TERMINATION TEMP (°F)
	Kna ala			10	40		0.40		- цц	45	-

SAME SYSTEM WHEN MULTIPLE COILS ARE IN SAME COOLER/FREEZER BOX. POWER CONDUIT AND WIRING SAME SIZE AND QUANTITY AS WIRING TO PANEL. COIL CONTROL CONDUIT SHALL BE 1". -----

SEALED WITH SILICONE SEALANT, TYP ------

CONDULET AT CEILING PENETRATION FILLED WITH SILICONE SEALANT, TYP -**1" EMT CONDUIT PENETRATION**

EMT CONDUIT AND WIRING TO NEXT COIL CONTROL & POWER JUNCTION BOXES ON

COIL CONTROLLER FOR COIL CONTROL WIRING - COOLER/FREEZER BOX CEILING

COIL BY RC, TYP.

AUX

PARTICULAR SITE. UNLESS NOTED OTHERWISE.

COMPONENT INFORMATION.

(4) KE2 CONTROLLER WIRING (WALK-IN, ON RCU)

2.28.12	
\square	AUDIO/VISUAL ALA
HS	HORN AND STROE
LDP	LEAK DETECTION
L	LEAK DETECTION
ZA	ZONE ALARM SILE

RECOVER ALL REFRIGERANT FROM THE EXISTING REFRIGERATION EQUIPMENT TO BE REMOVED. RECOVERED REFRIGERATION EQUIPMENT SHALL BE OR SHALL BE STORED IN REFRIGERANT CYLINDERS. RECOVERED REFRIGERANT SHALL BE PLACED IN

CAREFULLY DOCUMENT THE AMOUNTS OF REFRIGERANT REMOVED FROM DEMOLISHED EQUIPMENT IN ACCORDANCE WITH WALMART'S POLICIES AND APPLICABLE LAWS, CODES, AND REGULATIONS FOR REFRIGERANT RECOVERY AND HANDLING.

PROJECT SPECIFICATIONS.

KNOWLEDGE.

22 1 R1

	PIPING	SCHEDULE	RCU2			PIPING	SCHEDULE	RCU3			PIPING	SC
PIPE DESIGNATION	HORIZONTAL SUCTION	VERTICAL SUCTION RISER AS REQUIRED**	LIQUID	ESTIMATED TOTAL LENGTH***	PIPE DESIGNATION	HORIZONTAL SUCTION	VERTICAL SUCTION RISER AS REQUIRED**	LIQUID	ESTIMATED TOTAL LENGTH***	PIPE DESIGNATION	HORIZONTAL SUCTION	SU(AS
RCU2	1 3/8	5/8 & 7/8	1/2	64	RCU3	7/8	1/2 & 5/8	1/2	33	RCU4	1 3/8	
REFERENCE ONI CAUSES THE NEI FEET, IT MUST BE * TWO LISTED SI ** ESTIMATED TO SECTIONS. THIS	Y AND TO BE USED D FOR A RISER. IF APPROVED BY EN ZES INDICATES A V DTAL LENGTH INCLU IS ONLY AN ESTIM/ BIDDING PURPOSE	IN THE EVENT THAT UNEXPECTED RISE GINEER OF RECORE ERTICAL SUCTION D JDES HORIZONTAL A TE AND ACTUAL LEI	T A PIPING CONFL R LENGTH EXCEE). OUBLE RISER. AND VERTICAL PI NGTH WILL VARY	LICT EDS 4 PE 7. NOT	REFERENCE ONLY CAUSES THE NEE FEET, IT MUST BE *** TWO LISTED SIZ *** ESTIMATED TO SECTIONS. THIS I	Y AND TO BE USED D FOR A RISER. II APPROVED BY EN ZES INDICATES A N TAL LENGTH INCL S ONLY AN ESTIM BIDDING PURPOSI	D IN THE EVENT THAT UNEXPECTED RISER IGINEER OF RECORD VERTICAL SUCTION DO UDES HORIZONTAL A ATE AND ACTUAL LEN	A PIPING CONF R LENGTH EXCE DUBLE RISER. ND VERTICAL PI	LICT EDS 4 PE . NOT	REFERENCE ONLY CAUSES THE NEED FEET, IT MUST BE *** TWO LISTED SIZ *** ESTIMATED TOT SECTIONS. THIS IS TO BE USED FOR F	AND TO BE USED FOR A RISER. IF APPROVED BY EN ES INDICATES A V FAL LENGTH INCL S ONLY AN ESTIM) IN T [:] UNE IGINE /ERTI UDES ATE A FS

24 HOURS PRIOR TO SHUTTING DOWN ANY REFRIGERATION SYSTEMS, HVAC SYSTEMS OR BUILDING AUTOMATION CONTROLS SYSTEMS, SEND EMAIL TO NSRM@WALMART.COM, THE E-MAIL SHALL STATE WHAT.	REFRIC	GERATION SYMBOLS	EPA CLEAN AIR ACT	4 ° ()
WHY, AND WHEN IT IS BEING SHUT DOWN AND HOW LONG IT IS ANTICIPATED TO BE SHUT DOWN. THEN SEND A FOLLOW UP EMAIL TO NSRM@WALMART.COM AFTER THE WORK IS COMPLETE AND THE SYSTEM IS BACK UP AND RUNNING.	10.12.17 XXX ← XXX ← CO ⊢ 	CIRCUIT NUMBER MODEL NUMBER (CIRCUIT INFO) CLEANOUTS (CO) CONDENSATE DRAIN LINE (CD)	11.02.15 COMPLY WITH CLEAN AIR ACT, TITLE VI, SECTION 608 AND CODE OF FEDERAL REGULATION TITLE 40, PART 82 WHEN ADDING OR REMOVING REFRIGERATED EQUIPMENT. RECORD ALL EQUIPMENT IDENTIFICATION NUMBERS, MODEL AND SERIAL NUMBERS, THE AMOUNT OF REFRIGERANT RECOVERED FROM EACH UNIT, THE	R. Kraner "B.E. P.E. P.E. JOB NO.: 2758
		CONNECT TO EXISTING CONTINUATION DETAIL NUMBER	DATE OF DECOMMISSIONING, COMPANY NAME AND SIGNATURE OF ON-SITE SUPERVISOR.	William teamofchoice.co
		EVAPORATOR COIL	1. PLANS INDICATE GENERAL ROUTING OF	8 1806 700
	\$		REFRIGERANT LINES, WITH A SINGLE LINE SHOWN INDICATING BOTH SUCTION AND LIQUID LINE ROUTING FOR EACH SYSTEM.	E E SUE SUE SUE SUE SUE RALY VISE RELY VISE RELY VISE VISE VISE VISE VISE VISE VISE VISE
		ELBOW - TORNED DOWN ELBOW TURNED UP REFRIGERATION KEYNOTE REFERENCE	2. REFRIGERATION STSTEM INSTALLATION SHALL BE IN COMPLETE CONFORMANCE WITH SPECIFICATIONS, AND WITH ALL REQUIREMENTS OF REFRIGERATION EQUIPMENT MANUFACTURER.	-OR REUSI RREPARED FOR T: TY WITH ITS ISS ND IT IS NOT V A DIFFERENT A LATER TIME. R REJERERNCE R REJERENCE CES OF PROPE CES OF PROPE S AND ENGINE HISD DRAWING F PHICD DRAWING F PHICD DRAWING F PHICD DRAWING F
		REFRIGERATION PIPING (ABOVE) REFRIGERATION PIPING (BELOW) REFRIGERATION EQUIPMENT (DEMO)	3. REFRIGERATION DRAWINGS ARE PROVIDED AS AN AID TO BIDDERS AND TO INDICATE DESIRED ROUTING OF REFRIGERATION LINES; CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR CORRECT INSTALLATION OF DIDING AND	PULATION I RRAWING WAS I SPECIFIC SITE A SPECIFIC SITE A LUP, WA EMPORANEOUS ON 008/21, L 008/21, L 200 ANOTH F 200 ANOTH F 20
	ETR (TYP)	EXISTING TO REMAIN TYPICAL	ACCESSORIES TO PROVIDE A COMPLETE AND FULLY OPERATING SYSTEM. 4. REFER TO SPECIFICATION 15600 FOR INSULATION	
		KEYNOTES	THICKNESS. INSIDE DIAMETER OF INSULATION SHALL MATCH PIPE DIAMETER TO MINIMIZE AIR GAPS BETWEEN PIPING AND INSULATION. PROVIDE FACTORY PRE-MANUFACTURED FITTINGS AT ALL TRAPS AND FLBOWS. WHERE PRE-MANUFACTURED	
KEYNOTES REMOVED:	15.603 AT AL PROV THE F	L POINTS WHERE SUCTION LINES RISE, (IDE A SUCTION LINE TRAP AT THE BASE OF RISER. DENSATE DRAIN: PITCH DRAIN LINES DOWN	FITTINGS ARE UNAVAILABLE MITER CUT ALL FITTINGS TO ENSURE PROPER SEAL BETWEEN INSULATION SEGMENTS.	LTANTS
15.601 15.602	APPR PROV TAPE LINES	OXIMATELY 1" PER 10' TOWARD DRAIN. (IDE COPPER PIPING WITH ELECTRIC HEAT AND INSULATION ON ALL CONDENSATE EXPOSED TO FREEZING TEMPERATURES.	 5. PIPE INSULATION SHALL BE BLACK, UNLESS OTHERWISE STATED ON PLANS OR SPECIFICATIONS. 6. COORDINATE REEPICERATION DEMOLITION ISSUES 	CONSU
	15.607 SEE S SIZES ALL R 15.608 END (SCHEDULES FOR EVAPORATOR TYPES, 5, AND CAPACITIES; CONTROL METHOD; AND EFRIGERATION PIPING SIZES, ETC. CONDENSATE LINE OVER RECEPTOR W/AIR	WITH THE ARCHITECTURAL DRAWINGS. REFER TO ARCHITECTURAL PLANS FOR REFRIGERATION EQUIPMENT DEMOLITION AND COOLER REPAIR AND REMODELING.	RY EXP
	GAP. DRAII ARE F PROF AND/0	CONTRACTOR SHALL ENSURE FLOOR N(S) AND DRAIN LINE(S) SERVING WALK-IN FREE OF OBSTRUCTIONS AND FUNCTION PERLY. WHERE EXTENSIVE DAMAGE EXISTS OR PROPER DRAINAGE CANNOT BE	7. REFRIGERATION SYSTEM SHALL REMAIN OPERATIONAL DURING REMODELING. DURING THE PHASING OF OLD TO NEW SYSTEMS, BOTH NEW	A NA 9837
	OBTA MECH 15.610 PROV REFR	INED COORDINATE WITH WALMART IANICAL CONSTRUCTION MANAGER. /IDE 0.020" PVC JACKET ON ALL IGERATION LINES EXTERIOR TO BUILDING.	REQUIRED TO OPERATE AT THE SAME TIME FOR A SHORT PERIOD. 8. WHERE NEW REFRIGERATED EQUIPMENT IS	D , V , N
	15.612 PROV WALL SHOU SUCT	VIDE INTERMEDIATE SUCTION LINE TRAP IN OR VOID SPACE. INTERMEDIATE TRAP JLD BE PLACED AT THE MIDPOINT OF ANY ION LINE RISE WHICH EXCEEDS 16 FEET.	INDICATED ON THE DRAWINGS, PROVIDE DEMOLITION, REMOVAL, AND TEMPORARY STORAGE OF OLD EQUIPMENT PER WALMART MECHANICAL SERVICES CONSTRUCTION MANAGER'S INSTRUCTIONS, AND REEDICE PATION	LUF SE, PUY, NO: 240 PRC
······································	15.617 COOF PENE ROOF OPEN PENE	RDINATE REFRIGERATION LINE TRATIONS THROUGH ROOF. REINFORCE STRUCTURE AS NECESSARY. CUT ROOF IING FOR THE REFRIGERATION PIPE TRATION AND SUPPLY ROOF CURB WITH	 9. COORDINATE REMOVAL AND DISPOSAL OF EXISTING EVAPORATORS, REFRIGERATED CASES, AND 	
PIPING SCHEDULE RCU4	WEAT PROF REQU COOF BOOF	THERTIGHT SHEETMETAL COVER. PERLY FLASH, PATCH, AND REPAIR ROOF AS JIRED FOR NEW PENETRATION. RDINATE EXACT SIZE AND LOCATION OF EVENETRATIONS WITH STRUCTURAL	CONDENSING UNITS, WITH WALMART MECHANICAL SERVICES CONSTRUCTION MANAGER. 10. REMOVE COPPER LINES, EVAPORATORS, AND CONDENSATE LINES FROM COOLERS/ FREEZERS	
HORIZONTAL SUCTION RISER AS REQUIRED** LIQUID ESTIMATED TOTAL LENGTH***	15.620 INSTA THIS DOUE	ALL VERTICAL SUCTION DOUBLE RISER IN LOCATION. REFER TO VERTICAL SUCTION	BEING REMOVED FROM SITE. COORDINATE WITH WALK-IN PANEL VENDOR FOR TIME LINE OF REPLACEMENT. REFERENCE SPECIFICATION FOR CONTACT INFORMATION.	31 OB NUMBE
1 3/8 5/8 & 7/8 1/2 67 IOWN EVEN WHERE A RISER IS NOT EXPECTED. THIS IS FOR	15.637 REFR REFR LIQUI	SIZES. IGERATION CONTRACTOR SHALL INSTALL IGERATION MANUFACTURER-FURNISHED D LINE SOLENOID VALVE IN A SERVICE	11. WALK-IN PANEL VENDOR SHALL PROPERLY PREPARE ALL COOLER/FREEZER PANELS, GLASS DOORS, SLIDER OR SWING DOORS, PALLETIZE, AND PREPARE THE EQUIPMENT TO SHIP OFF SITE.	ISSUE BLOCK
AND TO BE USED IN THE EVENT THAT A PIPING CONFLICT D FOR A RISER. IF UNEXPECTED RISER LENGTH EXCEEDS 4 APPROVED BY ENGINEER OF RECORD.	ACCE INSTA VALV CONE SUBM	SSIBLE LOCATION AT CASE/EVAPORATOR. ALL CONTROL WIRING FROM SOLENOID E BACK TO CIRCUIT CONTROLLER OR DENSING UNIT. REFER TO REFRIGERATION MITTAL S/SCHEDULES AND BAS PLANS FOR	12. COORDINATE WITH FIRE PROTECTION CONTRACTOR FOR THE REMOVAL OF SPRINKLERS FOR ALL REMOVED COOLER/FREEZER BOXES.	3 ADD#2 05/11/22 4 ADD#6 07/07/22
TALLENGTH INCLUDES HORIZONTAL AND VERTICAL RIPE	EXAC SPEC REQU	T REQUIREMENTS. REFER TO IFICATIONS FOR ASSET TAGGING JIREMENTS.	13. COORDINATE WITH ELECTRICAL CONTRACTOR FOR THE REMOVAL OF ALL REMOVED COOLER/FREEZER BOXES ELECTRICAL WIRING DEVICES.	
S ONLY AN ESTIMATE AND ACTUAL LENGTH WILL VARY. NOT BIDDING PURPOSES.			 14. COORDINATE WITH BAS CONTRACTOR FOR THE REMOVAL OF ALL REMOVED COOLER/FREEZER BOXES EMS WIRING AND DEVICES. 15. EXISTING REEPIGERATION DIDING MAY BE BE USED 	
			 EXISTING REFRIGERATION PIPING MAY BE RE-USED UNLESS OTHERWISE NOTED ON PLANS. REFER TO SCHEDULES FOR PIPE SIZE REQUIREMENTS. BUILDING COMPONENTS ABANDONED BY THE 	
			SCOPE OF WORK SHALL BE SECURED TO PREVENT FALLING, LOOSENING, OR CREATING DAMAGE OF ANY KIND IN THE FUTURE.	
			REPLACE CASES, EVAPORATORS, ETC. THEN 24 TO 48 HOURS AFTER THE WORK IS COMPLETED AND ALL FINAL ADJUSTMENTS HAVE BEEN MADE, PROVIDE AND CHANGE LIQUID LINE FILTER CORES,	CHECKED BY: ROP
			OIL SYSTEM FILTER USING SPORLAN OF STYLE FILTER, AND REPLACE SUCTION FILTERS. FILTERS ARE TO BE RATED FOR WAX REMOVAL. CONTRACTOR TO PROPERLY DISPOSE OF OIL AND	PROTO CYCLE: 07/30/21 DOCUMENT DATE: 09/08/21
			 18. REFER TO GROCERY ARCHITECTURAL DRAWINGS FOR ADDITIONAL WORK BY REFRIGERATION 	STILLAM R. KR. A
4			CONTRACTOR. 19. COMPLETE ASSET TAGGING PROCESS FOR ALL NEW REFRIGERATED CASES. REFER TO SPECIFICATIONS	
ND RCU4 NT R448A			20. UPON START-UP OF ALL NEW REFRIGERATED EQUIPMENT. CONSTRUCTION MANAGER SHALL REQUEST THE BUILDING PERFORMANCE REPORT	PEGISTERED AND AND AND AND AND AND AND AND AND AN
CO CO CO CD CD CD CD CD KRD64E-220			FOR ALL RACKS AND SUCTION GROUPS WHERE WORK IS PERFORMED. ANY DEVIATIONS NOTED ON THE REPORT MUST BE CORRECTED PRIOR TO PROJECT CLOSE OUT. REQUEST VIA EMAIL AT B PTEAM1@WAI -MART COM	GUI 07, 2022
(NEW) RCU2 KRD64E-220 (NEW)				
PICKUP PREEZER PICKUP FREEZER C C C C C C				
15.637 (15.606) (15.606)				
P 4 8 R3 R3 R3 PICKUP COOLER				
15.620 TINUATION TYP.			PRIOR TO INSTALLING ANY EQUIPMENT OR ADJUSTING RACK PARAMETERS, REFRIGERATION CONTRACTOR SHALL REQUEST A SUCTION GROUP	
$\begin{array}{c} 15.637 \\ \hline \\ $			REPORT FOR ALL RACKS AND SUCTION GROUPS WHERE WORK IS PERFORMED. REQUEST VIA EMAIL AT B.PTEAM1@WAL-MART.COM	
- <u>(15.608</u>)			REFERENCE ARCHITECTURAL DRAWINGS FOR ALL NEW CASES BEING INSTALLED FOR CONNECTION LOCATION OF UTILITIES. (TOP FED VS BOTTOM FED)	
			ALL WORK ON THIS SHEET IS TO BE COMPLETED BY A WALMART APPROVED CONTRACTOR.	
			REFRIGERATION CONTRACTOR IS RESPONSIBLE FOR ALL FINAL REFRIGERATION ELECTRICAL TERMINATIONS TO REFRIGERATION EQUIPMENT.	PLAN
TION PLAN			EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR BELATED FIELD. THE	
	EXISTING DRAWING CONDITIC EXISTING	CONDITIONS WERE TAKEN FROM ORIGINAL SS AND MAY NOT REFLECT EXACT "AS-BUILT" ONS. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS PRIOR TO SUBMITTING FINAL	FAILURE TO ACQUAINT THEIR RELATED FIELD. THE FAILURE TO ACQUAINT THEMSELVES WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED	SHEET:
	BIDS. CO NEW WOI DISCIPLIN	NTRACTOR SHALL CAREFULLY COORDINATE RK AND DEMOLITION WITH ALL OTHER IES AND EXISTING CONDITIONS.	BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.	R1

	Form	at:		Supercente	er	Stor	·e#:		2403					Syst
	D	Nizo:		Demoli		Citule	State:		Puvallue	MΔ				
	Proto S	Size:		Remodel		City/S			Fuyallup, v	VA				0
	ProtoCycl	e Date:		7/30/2021	1	Date Pr	epared		9/8/2021	1				Pre
														Specific
	Equip Info	ormation		C	Case Fixture	Length / Qua	antity			Wal	lk-In B	ox Size	-	
CKT #	Number	Date	FT/# of Doors	1 Dr/2'	2 Dr/4'	3 Dr/6'	4 Dr/8'	5 Dr/10'	6 Dr/12'	L	w	н		Ca
RCU2										16	16	10		KF
General N	lotes:	ndensina Llnit c	coordinated with Hus	semann										
1.) 2.)	Temperature an	d defrost contro	olled via KE2.	Sinanii.										
						DEEL				20	П			רסעי
							TIGE	RAI	ION	30	יחנ			5131
	Form	at:		Supercente	er	Stor	re#:		2403					Sys
	Proto S	Size:		Remodel		City/S	State:		Puyallup, \	NA				Cc
	ProtoCvcl	e Date:		7/30/202	1	Date Pr	9/8/202	1						
				1100/202	<u> </u>				5/0/202	1				
														/ N
														Specific
	Equip Inf	ormation		C	Case Fixture	Length / Qu	antity			Wal	ılk-In B	lox Size		Specific
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number Iotes: New Remote Co Temperature an	ormation Cutsheet Date ondensing Unit of d defrost contro	FT/# of Doors	1 Dr/2'	Case Fixture	Length / Qu 3 Dr/6'	antity 4 Dr/8'	5 Dr/10'	6 Dr/12'	Wal	Ilk-In B W 16	H 10	-	Ca
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number lotes: New Remote Co Temperature an	ormation Cutsheet Date ondensing Unit of d defrost contro	FT/# of Doors	1 Dr/2'	Case Fixture 2 Dr/4'	Length / Qu 3 Dr/6'	antity 4 Dr/8'	5 Dr/10'	6 Dr/12'	Wal	IIk-In B W 16	Box Size		Ca GL
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number Iotes: New Remote Co Temperature an	ormation Cutsheet Date ondensing Unit c	FT/# of Doors	1 Dr/2'	Case Fixture	Length / Qu 3 Dr/6'	antity 4 Dr/8'	5 Dr/10'	6 Dr/12'	U L 18	IIK-In B W 16	H 10 EDU	LES	Ca GL
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number Notes: New Remote Co Temperature an Forma	ormation Cutsheet Date ondensing Unit of d defrost contro	FT/# of Doors	1 Dr/2'	Case Fixture 2 Dr/4'	Length / Qu 3 Dr/6'	antity 4 Dr/8' RIGE e#:	5 Dr/10'	6 Dr/12'	U L 18	IK-In B W 16	H 10 EDU	LES	Ca GL SYST Sys
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number Iotes: New Remote Co Temperature an Forma	ormation Cutsheet Date ondensing Unit of d defrost contro	FT/# of Doors	1 Dr/2' ssmann. Supercente Remodel	Case Fixture 2 Dr/4'	Length / Qu 3 Dr/6' REFF Store	antity 4 Dr/8' RIGE e#: :tate:	5 Dr/10'	6 Dr/12' ION 2403 Puyallup, V	Wal	IIK-In B W 16	EDU	LES	Specific Ca GL SYST Syst
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number Jotes: New Remote Co Temperature an Forma Proto S Proto Cycle	ormation Cutsheet Date ondensing Unit of d defrost contro at: iize:	FT/# of Doors	C 1 Dr/2' ssmann. Supercente Remodel 7/30/2021	Case Fixture	Length / Qu 3 Dr/6' REFF Store City/S Date Pre	antity 4 Dr/8' RIGE e#: :tate: epared	5 Dr/10'	6 Dr/12' 6 Dr/12' 2403 Puyallup, V 7/7/2022	Wal L 18 SC VA	IIK-In B W 16	EDU	LES	Ca GL SYST Syst Con Prep
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number lotes: New Remote Co Temperature an Form: Proto S Proto Cycle	ormation Cutsheet Date ondensing Unit of d defrost contro	FT/# of Doors	C 1 Dr/2' ssmann. Supercente Remodel 7/30/2021	Case Fixture 2 Dr/4'	Length / Qu 3 Dr/6' REFF Stor City/S Date Pro	antity 4 Dr/8' RIGE e#: :tate: epared	5 Dr/10'	6 Dr/12' ION 3 2403 Puyallup, V 7/7/2022	Val	IK-In B W 16	EDU	LES	Ca GL SYST Syst Co Pre Specifica
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number Iotes: New Remote Co Temperature an Form: Proto S ProtoCycle	ormation Cutsheet Date ondensing Unit of d defrost contro at: size: > Date:	FT/# of Doors	1 Dr/2' ssmann. Supercente Remodel 7/30/2021	Case Fixture	Length / Qu 3 Dr/6' REFF Store City/S Date Pre	antity 4 Dr/8' RIGE e#: tate: epared	5 Dr/10'	6 Dr/12' 6 Dr/12' 2403 Puyallup, V 7/7/2022	VA	IK-In B	EDU		Specifica GL SYST Syst Co Pre Specifica
CKT # RCU3 General N 1.) 2.)	Equip Inf Tag Number Jotes: New Remote Co Temperature an Forma Proto S ProtoCycle Equip Info Tag	ormation Cutsheet Date ondensing Unit of d defrost contro d defrost contro at: ize: e Date: ormation Cutsheet	FT/# of Doors	C 1 Dr/2' ssmann. Supercenter Remodel 7/30/2021	Case Fixture	Length / Qu 3 Dr/6' REFF Store City/S Date Pre	antity 4 Dr/8' RIGE e#: itate: epared antity	5 Dr/10'	6 Dr/12'	VA	Ik-In B ₩ 16	EDU		Specific GL SYST Syst Co Prej Specifica

	0100
	Ĺ
	CIF <
Σ	
:56 P	
2 1:08	
5	

0	W	'N	Ε	R	F	U	R	Ν

		~~~~~~	·····	·····	·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~~	~~~~~		~~~~~	·····	~~~~~~	·····	~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····
CU2				Refrig. BAS:	Novar	Condenser Type:	Air	н	I/R Media:	N/A	SG1 Liq Temp ºF:	103	SG2 Liq Temp ºF:		N/A	[	DESIGN DB °	F:	96	ASHRAE Weather Station Location:	MCCHORD AFB, W/
	Remote Condensing Unit	Refrigerant:	R448A	System Elec:	208V/220V 3ph 60Hz	Sat. Cond. Temp ºF:	111		H/R Use:	N/A	SG1 Comp RGT °F:	30	SG2 Comp RGT °F:		N/A	C	DESIGN WB	F :	68	EXTERIOR DRY BULB (DB) °F: (Based on 5 yr Extreme DB)	
	William R. Kraner, P.E.	Estimated Refrigerant C	harge	Defrost Elec:	208V 1Ph/3Ph 60Hz	Cond Design TD °F:	15	H/R	Water GPM:	N/A						DESIGN II	NTERIOR DR	Y BULB °F :	75	EXTERIOR WET BULB (WB) °F: (Based on 0.4% Monthly Max MCWB)	
	James Van Grouw	Rack and Condenser (lbs)		Sys.Pilot Elec:	N/A	Evap. Superheat °F:	10	Est. Sur	mmer THR MBH:	N/A						DESIG	ON INTERIOR	RH % :	55%	ASHRAE PUBLISHED YEAR:	
	15610 v4.0 - DX	Fixture and Field Piping (lbs)		Cond. Elec:	N/A			Est. W	inter THR MBH:	N/A										DESIGN ELEVATION (FT):	
	CIRCUIT INFORMATIO	N									·		F	IXTURE ELE	CTRICAL INF	ORMATION				MISC INFORMATION	
							Circuit		Case/								Lights	Anti-Sweat	Drain Pan		
	Case / Coil			LSHX	Evaporator Coil	Sub-Circuit Load	Load	Evap.	Walk-In	Circuit	t Control Valves	Defrost	Defrost Heaters		Fa	ans	Amps	Amps	Amps		
#	Manufacturer	Application		Model #	TXV / Distributor	(MBH)	(MBH)	SST	Air Temp	EEPR	LLSV	Туре	Amps	Voltage	Amps	Voltage	(120v)	(120v)	(120v)	Comments	
λK	Krack	1/2 Pickup Freezer W	V.I.	HX-6	٨٨		16.6	-18	-10	N/A	E6S140	EL	17.4	208/3	3.6	208/1				NEW EVAP	
	I				Suction G	Group #1 Required Capacity:	16.6	-21	(°F) Suction Tempe	erature							I				

	Refrig. BAS:	Novar	Condenser Type:	Air	H/R	Media:	N/A	SG1 Liq Temp ºF:	103	SG2 Liq Temp ºF:		N/A		DESIGN DB	₿ ºF :	96	ASHRAE Weather Station Location:	MCCHORD AFB, W
ng Unit Refrigerant: R448A	System Elec:	208V/220V 3ph 60Hz	Sat. Cond. Temp ºF:	111	H/	R Use:	N/A	SG1 Comp RGT °F:	50	SG2 Comp RGT °F:		N/A		DESIGN WE	3 ºF :	68	EXTERIOR DRY BULB (DB) °F: (Based on 5 yr Extreme DB)	
, P.E. Estimated Refrigerant Charge	Defrost Elec:	208V 1Ph/3Ph 60Hz	Cond Design TD °F:	15	H/R W	ater GPM:	N/A						DESIGN	INTERIOR D	ORY BULB °F :	75	EXTERIOR WET BULB (WB) ⁰F: (Based on 0.4% Monthly Max MCWB)	
ouw Rack and Condenser (lbs)	Sys.Pilot Elec:	N/A	Evap. Superheat °F:	10	Est. Sumn	ner THR MBH:	N/A						DESI	GN INTERIO	)R RH %:	55%	ASHRAE PUBLISHED YEAR:	
DX Fixture and Field Piping (lbs)	Cond. Elec:	N/A			Est. Wint	er THR MBH:	N/A										DESIGN ELEVATION (FT):	
RMATION	·							·			FIXTURE ELE	CTRICAL INF	ORMATION				MISC INFORMATION	
				Circuit		Case/								Lights	Anti-Sweat	Drain Pan		
	LSHX	Evaporator Coil	Sub-Circuit Load	Load	Evap.	Walk-In	Circui	t Control Valves	Defrost	Defrost Heaters		Fa	ans	Amps	Amps	Amps		
r Application	Model #	TXV / Distributor	(MBH)	(MBH)	SST	Air Temp	EEPR	LLSV	Туре	Amps	Voltage	Amps	Voltage	(120v)	(120v)	(120v)	Comments	
Pickup Cooler W.I.	HX-3	٨٨		15.0	28	34	N/A	E5S140	EL	20.9	208/1	3.0	208/1				NEW EVAP	
<u>ו </u>	g Unit     Refrigerant:     R448A       , P.E.     Estimated Refrigerant Charge       uw     Rack and Condenser (lbs)        )X     Fixture and Field Piping (lbs)        RMATION	g Unit     Refrigerant:     R448A     System Elec:       , P.E.     Estimated Refrigerant Charge     Defrost Elec:       uw     Rack and Condenser (lbs)      Sys.Pilot Elec:       )X     Fixture and Field Piping (lbs)      Cond. Elec:       RMATION	g Unit     Refrigerant:     R448A     System Elec:     208V/220V 3ph 60Hz       , P.E.     Estimated Refrigerant Charge     Defrost Elec:     208V 1Ph/3Ph 60Hz       uw     Rack and Condenser (lbs)      Sys.Pilot Elec:     N/A       )X     Fixture and Field Piping (lbs)      Cond. Elec:     N/A       RMATION	g Unit     Refrigerant:     R448A     System Elec:     208V/22UV 3ph 60Hz     Sat. Cond. Temp *F:       , P.E.     Estimated Refrigerant Charge     Defrost Elec:     208V 1Ph/3Ph 60Hz     Cond Design TD °F:       uw     Rack and Condenser (lbs)      Sys.Pilot Elec:     N/A     Evap. Superheat °F:       IX     Fixture and Field Piping (lbs)      Cond. Elec:     N/A     Evap. Superheat °F:       IX     Fixture and Field Piping (lbs)      Cond. Elec:     N/A     Evap. Cond Design TD °F:       IX     Fixture and Field Piping (lbs)      Cond. Elec:     N/A     Evap. Superheat °F:       IX     Fixture and Field Piping (lbs)      LSHX     Evaporator Coil     Sub-Circuit Load       r     Application     Model #     TXV / Distributor     (MBH)       Pickup Cooler W.I.     HX-3     ^^     Surction Group #1 Required Capacity:	g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp °+:       111         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD °F:       15         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat °F:       10         IX       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evap. Superheat °F:       10         IX       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evap. Superheat °F:       10         IX       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evap.oration       Circuit         RMATION       LSHX       Evaporator Coil       Sub-Circuit Load       Load         r       Application       Model #       TXV / Distributor       (MBH)       (MBH)         Pickup Cooler W.I.       HX-3       ^^       15.0       15.0	g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp °+:       111       H/I         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD °F:       15       H/R W         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat °F:       10       Est. Summ         IX       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evap. Superheat °F:       10       Est. Summ         RMATION       Examplication       Model #       TXV / Distributor       (MBH)       (MBH)       SST         Pickup Cooler W.I.       HX-3       A       15.0       28	g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp %:       111       H/R Use:         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD %:       15       H/R Water GPM:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat %:       10       Est. Summer THR MBH:         IX       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evap. Superheat %:       10       Est. Winter THR MBH:         IX       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evap. Superheat %:       10       Est. Winter THR MBH:         RMATION        Cond. Elec:       N/A       Evaporator Coil       Sub-Circuit Load       Load       Evap.       Walk-In         r       Application       Model #       TXV / Distributor       (MBH)       SST       Air Temp         Pickup Cooler W.I.       HX-3       M       15.0       28       34	g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. 1emp %-:       111       H/R Use:       N/A         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD %-:       15       H/R Water GPM:       N/A         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat %-:       10       Est. Summer THR MBH:       N/A         IX       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evap. Superheat %-:       10       Est. Winter THR MBH:       N/A         RMATION       Fixture and Field Piping (lbs)        Cond. Elec:       N/A       Evaporator Coil       Sub-Circuit Load       Evap.       Case/       Circuit       Circuit       Circuit       Circuit       Circuit       Circuit       Circuit       Pickup Cooler W.I.       HX-3       ^A       MA       MA       MA       MA       MA       MA       MA       Evap.       Mak-In       Circuit       Ci	g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp *F:       111       H/R Use:       N/A       SG1 Comp RG1 *F:         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD °F:       15       H/R Water GPM:       N/A       SG1 Comp RG1 *F:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat °F:       10       Est. Summer THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       10       Est. Winter THR MBH:       N/A       Image: Cond Design TD °F:       Image: Cond Design TD °F: <t< td=""><td>g Unit         Retrigerant:         R448A         System Elec:         208V/220V 3ph 60Hz         Sat. Cond. Temp *F:         111         H/R Use:         N/A         SG1 Comp RG1 *F:         50           , P.E.         Estimated Refrigerant Charge         Defrost Elec:         208V 1Ph/3Ph 60Hz         Cond Design TD °F:         15         H/R Water GPM:         N/A         SG1 Comp RG1 *F:         50           uw         Raok and Condenser (lbs)          Sys.Pilot Elec:         N/A         Evap. Superheat °F:         10         Est. Summer THR MBH:         N/A        </td><td>g Unit       Retrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp %:       111       H/R Use:       N/A       SG1 Comp RG1 %:       50       SG2 Comp RG1 %:         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD %:       15       H/R Water GPM:       N/A       SG1 Comp RG1 %:       50       SG2 Comp RG1 %:       SG1 Comp RG1 %:       SG1 Comp RG1 %:</td><td>g Unit         Retingerant:         R448A         System Elec:         208V/220V 3ph 60Hz         Sat. Cond. Temp 4::         111         H/R Use:         N/A         SG1 Comp RG1 4::         50         SG2 Comp RG1 4::           , P.E.         Estimated Refrigerant Charge         Defrost Elec:         208V 1Ph/3Ph 60Hz         Cond Design TD 9::         15         H/R Water GPM:         N/A         SG1 Comp RG1 4::         50         SG2 Comp RG1 4::                                                                                   </td></t<> <td>g Unit         Refrigerant:         R448A         System Elec:         208V/220V 3ph 60Hz         Sat. Cond. Temp *F:         111         H/R Use:         N/A         SG1 Comp RG1 *F:         50         SG2 Comp RG1 *F:         N/A           , P.E.         Estimated Refrigerant Charge         Defrost Elec:         208V 1Ph/3Ph 60Hz         Cond Design TD *F:         15         H/R Water GPM:         N/A         SG1 Comp RG1 *F:         50         SG2 Comp RG1 *F:         N/A           uw         Rack and Condenser (lbs)          Sys.Pilot Elec:         N/A         Evap. Superheat *F:         10         Est. Summer THR MBH:         N/A        </td> <td>g Unit       Retrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp $\Psi$:       111       H/R Use:       N/A       SG1 Comp RG1 T:       50       SG2 Comp RG1 T:       N/A         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD $\Phi$:       15       H/R Water GPM:       N/A       V/A       V/A</td> <td>g Unt       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp 4::       111       H/R Use:       N/A       SG1 Comp RG 1 *:       N/A       DESIGN WG         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD °F:       15       H/R Water GPM:       N/A       VIA       <td< td=""><td>g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp 9F:       111       H/R Use:       N/A       SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       N/A       DESIGN WB 9F:         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD 9F:       15       H/R Water GPM:       N/A       Image: SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       SG2 Comp RG1 7F:       DESIGN INTERIOR DRY BULB 9F:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat "F:       10       Est. Summer THR MBH:       N/A       Image: SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       DESIGN INTERIOR DRY BULB 9F:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat "F:       10       Est. Summer THR MBH:       N/A       Image: Sign MB 467       Image:</td><td>g Unit       Retrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp *F:       111       H/R Use:       N/A       SG1 Comp RG1 *F:       50       SG2 Comp RG1 *F:       N/A       DESIGN WB *F:       68         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD *F:       15       H/R Water GPM;       N/A       SG1 Comp RG1 *F:       50       SG2 Comp RG1 *F:       N/A       DESIGN INTERIOR DRY BULB *F:       75         uw       Rack and Condenser (lbs)       -       Sys.Pilot Elec:       N/A       Evap. Superheat *F:       10       Est. Summer THR MBH:       N/A       Cond. Elec:       N/A       DESIGN INTERIOR RH %:       55%       DESIGN INTERIOR RH %:</td><td>g Unt         Refigerant:         R448A         System Elec:         208//22/V 3ph 60Hz         Sal. Cond. Iemp *F:         111         H/R Use:         N/A         SG1 Comp RG1 *F:         N/A         DESIGN WB *F:         68         (Based on 5 yr Extremo DB)           i, P.E.         Estimated Refrigerant Charge         Defrost Elec:         208/ 1Ph/3Ph 60Hz         Cond Design TD *F:         15         H/R Water GPM:         N/A         Image: Second Comp RG1 *F:         N/A         &lt;</td></td<></td>	g Unit         Retrigerant:         R448A         System Elec:         208V/220V 3ph 60Hz         Sat. Cond. Temp *F:         111         H/R Use:         N/A         SG1 Comp RG1 *F:         50           , P.E.         Estimated Refrigerant Charge         Defrost Elec:         208V 1Ph/3Ph 60Hz         Cond Design TD °F:         15         H/R Water GPM:         N/A         SG1 Comp RG1 *F:         50           uw         Raok and Condenser (lbs)          Sys.Pilot Elec:         N/A         Evap. Superheat °F:         10         Est. Summer THR MBH:         N/A	g Unit       Retrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp %:       111       H/R Use:       N/A       SG1 Comp RG1 %:       50       SG2 Comp RG1 %:         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD %:       15       H/R Water GPM:       N/A       SG1 Comp RG1 %:       50       SG2 Comp RG1 %:       SG1 Comp RG1 %:       SG1 Comp RG1 %:	g Unit         Retingerant:         R448A         System Elec:         208V/220V 3ph 60Hz         Sat. Cond. Temp 4::         111         H/R Use:         N/A         SG1 Comp RG1 4::         50         SG2 Comp RG1 4::           , P.E.         Estimated Refrigerant Charge         Defrost Elec:         208V 1Ph/3Ph 60Hz         Cond Design TD 9::         15         H/R Water GPM:         N/A         SG1 Comp RG1 4::         50         SG2 Comp RG1 4::	g Unit         Refrigerant:         R448A         System Elec:         208V/220V 3ph 60Hz         Sat. Cond. Temp *F:         111         H/R Use:         N/A         SG1 Comp RG1 *F:         50         SG2 Comp RG1 *F:         N/A           , P.E.         Estimated Refrigerant Charge         Defrost Elec:         208V 1Ph/3Ph 60Hz         Cond Design TD *F:         15         H/R Water GPM:         N/A         SG1 Comp RG1 *F:         50         SG2 Comp RG1 *F:         N/A           uw         Rack and Condenser (lbs)          Sys.Pilot Elec:         N/A         Evap. Superheat *F:         10         Est. Summer THR MBH:         N/A	g Unit       Retrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp $\Psi$ :       111       H/R Use:       N/A       SG1 Comp RG1 T:       50       SG2 Comp RG1 T:       N/A         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD $\Phi$ :       15       H/R Water GPM:       N/A       V/A       V/A	g Unt       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp 4::       111       H/R Use:       N/A       SG1 Comp RG 1 *:       N/A       DESIGN WG         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD °F:       15       H/R Water GPM:       N/A       VIA       VIA <td< td=""><td>g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp 9F:       111       H/R Use:       N/A       SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       N/A       DESIGN WB 9F:         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD 9F:       15       H/R Water GPM:       N/A       Image: SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       SG2 Comp RG1 7F:       DESIGN INTERIOR DRY BULB 9F:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat "F:       10       Est. Summer THR MBH:       N/A       Image: SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       DESIGN INTERIOR DRY BULB 9F:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat "F:       10       Est. Summer THR MBH:       N/A       Image: Sign MB 467       Image:</td><td>g Unit       Retrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp *F:       111       H/R Use:       N/A       SG1 Comp RG1 *F:       50       SG2 Comp RG1 *F:       N/A       DESIGN WB *F:       68         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD *F:       15       H/R Water GPM;       N/A       SG1 Comp RG1 *F:       50       SG2 Comp RG1 *F:       N/A       DESIGN INTERIOR DRY BULB *F:       75         uw       Rack and Condenser (lbs)       -       Sys.Pilot Elec:       N/A       Evap. Superheat *F:       10       Est. Summer THR MBH:       N/A       Cond. Elec:       N/A       DESIGN INTERIOR RH %:       55%       DESIGN INTERIOR RH %:</td><td>g Unt         Refigerant:         R448A         System Elec:         208//22/V 3ph 60Hz         Sal. Cond. Iemp *F:         111         H/R Use:         N/A         SG1 Comp RG1 *F:         N/A         DESIGN WB *F:         68         (Based on 5 yr Extremo DB)           i, P.E.         Estimated Refrigerant Charge         Defrost Elec:         208/ 1Ph/3Ph 60Hz         Cond Design TD *F:         15         H/R Water GPM:         N/A         Image: Second Comp RG1 *F:         N/A         &lt;</td></td<>	g Unit       Refrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp 9F:       111       H/R Use:       N/A       SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       N/A       DESIGN WB 9F:         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD 9F:       15       H/R Water GPM:       N/A       Image: SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       SG2 Comp RG1 7F:       DESIGN INTERIOR DRY BULB 9F:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat "F:       10       Est. Summer THR MBH:       N/A       Image: SG1 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       SG2 Comp RG1 7F:       50       DESIGN INTERIOR DRY BULB 9F:         uw       Rack and Condenser (lbs)        Sys.Pilot Elec:       N/A       Evap. Superheat "F:       10       Est. Summer THR MBH:       N/A       Image: Sign MB 467       Image:	g Unit       Retrigerant:       R448A       System Elec:       208V/220V 3ph 60Hz       Sat. Cond. Temp *F:       111       H/R Use:       N/A       SG1 Comp RG1 *F:       50       SG2 Comp RG1 *F:       N/A       DESIGN WB *F:       68         , P.E.       Estimated Refrigerant Charge       Defrost Elec:       208V 1Ph/3Ph 60Hz       Cond Design TD *F:       15       H/R Water GPM;       N/A       SG1 Comp RG1 *F:       50       SG2 Comp RG1 *F:       N/A       DESIGN INTERIOR DRY BULB *F:       75         uw       Rack and Condenser (lbs)       -       Sys.Pilot Elec:       N/A       Evap. Superheat *F:       10       Est. Summer THR MBH:       N/A       Cond. Elec:       N/A       DESIGN INTERIOR RH %:       55%       DESIGN INTERIOR RH %:	g Unt         Refigerant:         R448A         System Elec:         208//22/V 3ph 60Hz         Sal. Cond. Iemp *F:         111         H/R Use:         N/A         SG1 Comp RG1 *F:         N/A         DESIGN WB *F:         68         (Based on 5 yr Extremo DB)           i, P.E.         Estimated Refrigerant Charge         Defrost Elec:         208/ 1Ph/3Ph 60Hz         Cond Design TD *F:         15         H/R Water GPM:         N/A         Image: Second Comp RG1 *F:         N/A         <

# \K	Krack	Application 1/2 Pickup Freezer W.I.	HX-6	TXV / Distributor	(MBH)	(MBH) 16.6	-16	-8	N/A	E6S140	EL	17.4	208/3 3.6	208/1 (120v) (120v)	(120v)	NEW EVAP	
щ	Case / Coll	Anniastica	LSHX Madal #			LUau	сот				Deirost				Amps	Commente	
				Evaporator Coil	Sub-Circuit Load	Circuit	Evan	Case/	Circuit (	Control Values	Defrect	Defrect Heaters		Lights Anti-Sweat	Drain Pan		
	CIRCUIT INFORMATIO	N	1										FIXTURE ELECTRICAL IN	IFORMATION		MISC INFORMATIO	N
	15610 v4.0 - DX	Fixture and Field Piping (Ibs)	Cond. Elec:	N/A			Est. Wir	nter THR MBH:	N/A							DESIGN ELEVATION (FT):	
	James Van Grouw	Rack and Condenser (lbs)	Sys.Pilot Elec:	N/A	Evap. Superheat °F:	10	Est. Sum	mer THR MBH:	N/A					DESIGN INTERIOR RH % :	55%	ASHRAE PUBLISHED YEAR:	
	William R. Kraner, P.E.	Estimated Refrigerant Charge	Defrost Elec:	208V 1Ph/3Ph 60Hz	Cond Design TD °F:	15	H/R V	Water GPM:	N/A					DESIGN INTERIOR DRY BULB °F :	75	EXTERIOR WET BULB (WB) °F: (Based on 0.4% Monthly Max MCWB)	
	Remote Condensing Unit	Refrigerant: R448A	System Elec:	208V/220V 3ph 60Hz	Sat. Cond. Temp ºF:	111	н	I/R Use:	N/A	SG1 Comp RGT °F:	30	SG2 Comp RGT °F:	N/A	DESIGN WB °F :	68	EXTERIOR DRY BULB (DB) °F: (Based on 5 yr Extreme DB)	
CU4			Refrig. BAS:	Novar	Condenser Type:	Air	H/	R Media:	N/A	SG1 Liq Temp ºF:	103	SG2 Liq Temp °F:	N/A	DESIGN DB °F :	96	ASHRAE Weather Station Location:	MCCHORD AFB, W

IISHED	WALK-IN EVAP	ORATOR COIL	<ul> <li>GENERAL INFORMATION (ALL COILS):</li> <li>1. COILS FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR</li> <li>2. INFORMATION CONTAINED WITHIN THIS SCHEDULE IS FOR OWN INFORMATION REGARDING EQUIPMENT.</li> <li>3. SUPPLIER SHALL VERIFY PRODUCT REQUIREMENTS INCLUDING REQUIREMENTS, ETC. WITH REFRIGERATION SCHEDULE(S).</li> </ul>		
	Туре	VOLTAGE	QTY	NOTES	NOTES
ATION	GL66D-268	208 V	1		NOTES:
ATION	KR64E-220	208 V	2		A. EVAPORATOR COIL SHALL BE FURNISHED WITH FACTORY INST
	turning 4				15690 EQUIPMENT SPECIFICATION, INCLUDING: ELECTRONIC EX UPSTREAM OF THE EEV), SUCTION PRESSURE TRANSDUCER, A SENSOR AND ALL OTHER COMPONENTS, REFER TO DETAILS FO

NER'S PURCHASING REPRESENTATIVE. REFER TO REFRIGERATION SCHEDULE(S) FOR SPECIFIC IG BUT NOT LIMITED TO LIQUID TO SUCTION HEAT EXCHANGER, EXPANSION DEVICE TYPE, ELECTRICAL

TALLED VALVES, SENSORS, TRANSDUCERS, AND ALL OTHER APPURTENANCES, AS OUTLINED IN THE EXPANSION VALVE (EEV), SCHRADER VALVES (TWO IN THE SUCTION LINE, ONE IN THE LIQUID LINE, AIR TEMPERATURE SENSOR, SUCTION TEMPERATURE SENSOR, DEFROST TERMINATION TEMPERATURE NEW WORK AND DEMOLITION WITH ALL OTHER SENSOR AND ALL OTHER COMPONENTS. REFER TO DETAILS FOR FIELD INSTALLED CONTROL WIRING BETWEEN EVAPORATOR COIL AND WALK-IN UNIT CONTROLLER.

![](_page_33_Picture_11.jpeg)

![](_page_33_Figure_12.jpeg)

![](_page_33_Figure_13.jpeg)

![](_page_34_Figure_0.jpeg)

![](_page_34_Picture_3.jpeg)

![](_page_34_Figure_4.jpeg)

![](_page_34_Figure_6.jpeg)

![](_page_34_Picture_7.jpeg)

EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CONTRACTOR SHALL CAREFULLY COORDINATE | BECAUSE OF CONDITIONS THAT OCCUR DUE TO NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

KNOWLEDGE.

![](_page_34_Figure_9.jpeg)

![](_page_35_Figure_0.jpeg)

![](_page_35_Figure_1.jpeg)

інпп											CUSTOMER			Wa	almart		
STORE:	[:] #2403										CONTACT						
LOCATION:	Puyallup, Washington, USA										SALESMAN			Keit	h Exler		
QUOTE / JOB #:	: CRM146377										ENGINEER			Jos	h Lurk		
REFRIGERATOR/UNIT CO	OLER	DIS	REQ'D				UNIT SIZES	DES	IGN CONDITIONS			CON	NDENS	SING UN IT I	DATA		
		AIR	CAP	EVP	DEF	DEF WEIGHT	SPEC	MID POINT	COND	REF	CONDENSING UNIT	CAP C	COMP	MID POINT	UNIT	UNIT	UNIT
MODEL	DESCRIPTION	TMP	(MBH)	TMP	TYPE	TER LBS	SHEET	SST	DEG F	TYPE	MODEL#	MBH	kW	COND T	VOLT	MCA	MOPD
 KRD64E-220TDAK	Pickup Freezer W.I.	-10	16.60	-18	EL	333	40.6Lx17.3Wx48.9H	-21	96 AMBIENT	R448A	XFAL-050Z-TFC-081	19.8		111	208-230V/3P/60Hz	28.8	45
	SHIP LOOSE INCLUDES:																
KE2	(1) E6 120V LLSV											CASE				ום חואא כ	
	(1) 7/8 SUCTION FILTER											DE	FROS	THEATER I	NOT POWERED FROM	THE UN	JMF, IT
																	T
GLD66D-268TDAA	Pickup Cooler W.I.	34	15.00	28	EL	226	40.6Lx17.3Wx33H	26	96 AMBIENT	R448A	XFAM-022Z-TFC-081	17.6		111	208-230V/3P/60Hz	14.3	20
	SHIP LOOSE INCLUDES:																
												CASE	FANS		ONDENSATE PAN HTI		IMP
 KE2	(1) E5 120V LLSV												/		NOT POWERED FROM	THE UN	ит., IT
 KE2	(1) E5 120V LLSV (1) 7/8 SUCTION FILTER											DE	FROS				
 KE2	(1) E5 120V LLSV (1) 7/8 SUCTION FILTER		40.00	10				10		<b>D</b> 4404			FROS			00.0	45
 KE2 KRD64E-220TDAK	(1) E5 120V LLSV (1) 7/8 SUCTION FILTER Pickup Freezer W.I.	8	16.60	-16	EL	333	40.6Lx17.3Wx48.9H	-19	96 AMBIENT	R448A	XFAL-050Z-TFC-081	20.8	EFROS	111	208-230V/3P/60Hz	28.8	45
KE2 KRD64E-220TDAK	(1) E5 120V LLSV (1) 7/8 SUCTION FILTER Pickup Freezer W.I.	8	16.60	-16	EL	333	40.6Lx17.3Wx48.9H	-19	96 AMBIENT	R448A	XFAL-050Z-TFC-081	20.8	FROS	111	208-230V/3P/60Hz	28.8	45
KE2 KRD64E-220TDAK	(1) E5 120V LLSV (1) 7/8 SUCTION FILTER Pickup Freezer W.I. SHIP LOOSE INCLUDES:	8	16.60	-16	EL	333	40.6Lx17.3Wx48.9H	-19	96 AMBIENT	R448A	XFAL-050Z-TFC-081	20.8	EROS	111	208-230V/3P/60Hz	28.8	45

![](_page_35_Figure_5.jpeg)

ELEC	TRICAL SYMBOLS LEGEND	GENERAL LIGHTIN	
04.24.20 (SYMBOLS APP	PLY ONLY WHEN USED ON DRAWINGS)	01.31.20 1. EXIT SIGN MOUNTING	
SYMBOL		A. WALL FIXTURE: CENTER 12" A OPENING. B. CEILING FIXTURE: ON CEILING	BOVE DOOR
Ю П/0 П	(WALL MOUNTED/CEILING MOUNTED)	SPECIFIED ON DRAWINGS. C. PENDANT FIXTURE: MATCH H	
0		NOT HAVE PENDANT MOUNTED EXIT SIG NOT HAVE PENDANT MOUNTE PENDANT MOUNT SIGN 24" BE	ED EXIT SIGNS, THE
		BAR JOIST. D. VERIFY MOUNTING HEIGHT W	ITH AHJ. EXIT SIGNS TO
		ENSURE STORE SIGNAGE DO THEIR VIEW.	ES NOT OBSTRUC
		F. THE USE OF TRITIUM BASED F SIGNAGE IS PROHIBITED.	RADIOACTIVE EXIT
		2. EMERGENCY LIGHT FIXTURE INST A. WALL FIXTURE: 12" BELOW FII +10'-0" IN AREAS OF EXPOSED	ALLATION
42 / 1891	EMERGENCY LIGHT REMOTE HEADS	UNLESS NOTED OTHERWISE. B. PENDANT FIXTURE: BOTTOM	CHORD OF BAR
\$	SINGLE POLE SWITCH	JOIST OR AT HEIGHT SPECIFII C. REMOTE HEAD FIXTURE: HEA ABOVE DOOR OPENING +9'-0"	ED ON DRAWINGS. DS CENTERED . UNLESS NOTED
\$3	3-WAY SWITCH	OTHERWISE AND BATTERY PA	ACK MOUNTED ON ELOW FINISHED
\$4 \$K	4-WAY SWITCH	STRUCTURE. D. REFER TO MANUFACTURER'S	WRITTEN
\$D	DIMMER SWITCH	CONTINUOUSLY FOR A MINIM BEFORE INITIAL TESTING.	UM OF 24 HOURS
\$VS	VARIABLE SPEED SWITCH	E. AFTER EMERGENCY LIGHT HA DO NOT TURN OFF FOR EXTE TIME	AS BEEN POWEREI NDED PERIODS OF
\$M	MANUAL MOTOR SWITCH SINGLE POLE OCCUPANCY	3. EXIT SIGNS, EMERGENCY LIGHTS	AND NIGHT LIGHT
\$0.52	SENSOR SWITCH DOUBLE POLE OCCUPANCY	4. IN AREAS OF OPEN STRUCTURE,	MOUNT STRIP
	SENSOR SWITCH CEILING MOUNTED OCCUPANCY	FIXTURE TO BOTTOM CHORD OF NOTED OTHERWISE.	BAR JOIST, UNLES
	SENSOR SWITCH, FOUR-DIRECTION SENSING	5. PROVIDE SEPARATE BOXES FOR ON SEPARATE BRANCH CIRCUITS	GANGED SWITCHE
ŌS	WALL MOUNTED OCCUPANCY SENSOR SWITCH, ONE-DIRECTION SENSING	6. FIXTURES DENOTED WITH "ABJ" A FASTENED ON UNISTRUT CHANN	RE TO BE
Φ	RECEPTACLE, DUPLEX	THE BOTTOM SIDE OF THE TOP C JOISTS. LOCATE THE FIXTURES R PERPENDICULAR TO BAR JOISTS	HORD OF BAR UNNING WITHIN BAR JOIST
<b>—</b>	RECEPTACLE, DUPLEX, MOUNTED HORIZONTALLY	WEBBING SPACES. DO NOT FAST UNISTRUT CHANNELS TO ROOF D	EN FIXTURE OR DECK.
$\bigcirc$	RECEPTACLE, GFI	OCCUPANCY S	ENSOR
	RECEPTACLE, DUPLEX FLUSH FLOOR	NOTES	
		1. OCCUPANCY SENSORS IN REST PROGRAMMED FOR AUTOMATIC	COMS SHALL BE
	RECEPTACLE, DUPLEX		S.
	ISOLATED GROUND RECEPTACLE, DOUBLE DUPLEX,	2. OCCUPANCY SENSORS IN DELI, F BAKERY PREP AREAS SHALL BE WITH MAXIMUM AVAILABLE TIME	PRODUCE, AND PROGRAMMED DELAY SETTINGS.
$\oplus$	RECEPTACLE, SIMPLEX TWIST LOCK,	3. OCCUPANCY SENSORS IN WALK- COOLERS/EREEZERS SHALL BE I	IN OW TEMPERATUR
•	RECEPTACLE, SIMPLEX TWIST LOCK, ISOLATED GROUND, L5-15R, UNO	RATED, WALL MOUNTED 6" ABOV AIMING FOR MAXIMUM COVERAG	E DOOR. ADJUST E, 10 MINUTE TIME
<b></b>	RECEPTACLE, DUPLEX TWIST LOCK, L5-15R, UNO	4. ALL OTHER OCCUPANCY SENSO	RS SHALL BE
•	RECEPTACLE, DUPLEX TWIST LOCK, ISOLATED GROUND, L5-15R, UNO	PROGRAMMED WITH THE MINIMU DELAY SETTING UNLESS NOTED	JM AVAILABLE TIME OTHERWISE.
•	RECEPTACLE, SPECIAL	5. ALL SINGLE-POLE OCCUPANCY S PROGRAMMED FOR MANUAL ON	ENSORS SHALL BE LIGHTING
Φ	RECEPTACLE, SIMPLEX	6. ALL BI-LEVEL OCCUPANCY SENS	ORS SHALL BE
		CONTROL FOR 50% OF FIXTURES MANUAL ON MODE FOR REMAINI	AND WITH NG FIXTURES.
	(WALL MOUNTED/CEILING MOUNTED) THERMOSTAT	7. WHERE TWO OCCUPANCY SENS THE SAME LOCATION WIRE FOR	ORS ARE SHOWN I PARALLEI
	(WALL MOUNTED/CEILING MOUNTED) ALARM JUNCTION BOX,	OPERATION.	
	(WALL MOUNTED/CEILING MOUNTED) ALARM JUNCTION BOX,		
(R)	FOR REMOTE TEST/RESET (WALL MOUNTED/CEILING MOUNTED)		
<u>(S)</u>	SMOKE DETECTOR		
	CIRCUIT, CONCEALED IN WALLS OR		
· · · · 、	CIRCUIT, CONCEALED IN SLAB FLOOR, E INDICATES EXISTING WIRING		
	CIRCUIT, EXPOSED, E INDICATES EXISTING WIRING		
◄	LOW VOLTAGE WIRING		
н	CONDUIT SLEEVE		
	FLUSH MOUNTED PANELBOARD		
-			
	I ELEPHONE / DATA BOX FOR ISD		
	MOTOR		
	TELEPOWER POLE		
	PUSH BUTTON		
В	BUZZER		
SS	SAIL SWITCH JUNCTION BOX		
	HORN / STROBE		
DH	DOOR HOLD OPEN		
ТС	TIME CLOCK		
ABBREVIATIONSa, b, cLOWER C	ASE LETTERS INDICATE		
AFF ABOVE FI	IG CONFIGURATION NISHED FLOOR NISHED GRADE		
C CONDUIT	ΆΝ		
CW CASH WR EC ELECTRIC	AP CAL CONTRACTOR		
ETR EXHAUST ETR EXISTING EWC ELECTRIC	FAN TO REMAIN WATER COOLER		
GC GENERAL			
GFI GROUND HD HAND DR'	FAULT CIRCUIT INTERRUPTER		
LCU LIGHTING	CONTROL UNIT		(2)
NTS NOT TO S REC REFRIGER	CALE RATION ELECTRICAL CONTRACTOR RATION CONTRACTOR		
RH RADIANT SC SECURITY	HEATER ( CAMERA	120/240V (UPS)	
TYP TYPICAL UH UNIT HEA		□ 120/240V ■ 208Y/120V	
UNO UNLESS N WH WATER H WP WEATHER	IOTED OTHERWISE EATER R PROOF	480Y/277V	
WR WEATHER	RESISTANT	48υΔ	

"OW" FIXTURES	S AND LAMPS AF	RE FURNISHED
1	OW	8' STRIP (WIRE
	$\gamma\gamma\gamma\gamma$	<u> </u>
		EXIT-SIGN (SI
18	OW	EMERGENCY
27	OW	EMERGENCY
50	OW	4' SEALED STR
LIGHT FIXTUR	<u>E NOTES (APPL</u> RT ALL RECESS	IES TO ALL LIG
ABOVE,	WITH A MINIMU	JM OF TWO 12-
ACTING	FURE TO SEAT	IN THE GRID G
		1
	D	
	<b>C</b>	
	B	

A

![](_page_36_Figure_2.jpeg)

PICKUP STORAGE LIGHTING DEMO PLAN 1/16" = 1'-0"

	LIG	HT FIXTURE SCHEDULE					
OBY THE OWNER FOR INS	TALLATION BY THE CONTRACTOR. "GC	" FIXTURES AND LAMPS ARE FURNISHED AND INSTA	LED BY THE CO	NTRACTO	٦.		
ESCRIPTION	VENDOR / MANUFACTURER	MODEL	VOLTAGE	INPUT VA	COLOR TEMP	LIGHT SOURCE	LAM QTY
	ACUITY BRANDS LIGHTING INC	CLX L96 10000LM HEF RDL MVOLT EOHN 40K 80CRI	120/277	67 VA	4000K		
NOLE FACE)	ACUTY BRANDS LIGHTING INC	RED: LQM SW +R +20/277 EL N SD90 M6 GREEN: LQM S W 1 G 120/277 EL N SD90 M6	120/277	AVAN	<u>min</u>	HNTEGRALLED	مير
LIGHT	REXEL USA INC	EVHC6IDP-WM	120/277	3 VA	-	INTEGRAL LED	-
LIGHT - REMOTE HEADS	REXEL USA INC	EVHC6IDP-0-WM W/ EVODW	120/277	3 VA	-	INTEGRAL LED	-
RIP	LSI INDUSTRIES INC	W/M EG3 4 LED 6L DA S UNV DIM 40 980 SL	120/277	50 VA	4000K	INTEGRAL LED	-

<u>HT FIXTURES):</u> -GAUGE STEEL WIRES LOCATED AT DIAGONALLY OPPOSITE CORNERS. FIXTURE SUPPORT WIRES MAY BE SLIGHTLY LOOSE TO ALLOW GRID SYSTEM. ATTACH LIGHT FIXTURES TO THE SUSPENDED CEILING SYSTEM TO RESIST 100 PERCENT OF THE FIXTURE WEIGHT TE IN ACCORDANCE WITH APPLICIABLE BUILDING CODE REQUIREMENTS.

CONTRACTOR IS RESPONSIBLE FOR COMPLETE INSTALLATION OF THE LIGHTING SYSTEM AS INDICATED ON PLANS AND/OR AS MODIFIED TO ACCOMMODATE EXISTING OBSTRUCTIONS. IDENTIFY CONFLICTS PRIOR TO ROUGH-IN. WHERE CONFLICTS WITH EXISTING UTILITIES OCCUR, ADJUST FIXTURE LOCATION AS REQUIRED. FIXTURES SHALL BE INSTALLED AS NEAR AS POSSIBLE TO LOCATIONS INDICATED ON PLANS WITH EVEN SPACING MAINTAINED.

![](_page_36_Figure_7.jpeg)

# 4 PICKUP STORAGE LIGHTING PLAN

_____

![](_page_36_Figure_9.jpeg)

WORKERS WITH THIS KNOWLEDGE.

WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

EQUIPMENT, AND LABOR, RESPECTS, READY FOR ANCE WITH NEC, NESC.	
ACTURER'S ARY FEES AND PERMITS.	
TO BE ROUTED ACROSS THE HE EXTERIOR WALLS. D WHERE APPLICABLE.	
ISRUPTIONS TO STORE RUPTIONS WITH WALMART DRE MANAGER.	
SH AND INSTALL EXTENDED REQUIRED.	
KER KNOCKOUTS TRIM IS IN GOOD TO LIVE PARTS.	
TIONS AS FOLLOWS: CIFICATIONS FOR FIRE	
MECHANICAL DETAIL. I'H EXPANDING FOAM	
RAL DOCUMENTS FOR TERIOR MOUNTED DEVICES, EWAY PENETRATIONS.	
UNDING CONDUCTOR (SIZE R AND LIGHTING CIRCUITS,	
WN ON PLANS. CONDUIT WN 600 VOLT COPPER PMENT GROUNDING	
EIGHTS ARE FROM FINISHED LESS NOTED OTHERWISE ON	
IOUNTING HEIGHTS WITH	
TION TO ALL EQUIPMENT IN	
PLIER WIRING DIAGRAMS.	
S PROJECT.	
DS SHALL MATCH THE TYPE RENT PROTECTIVE	
BE MINIMUM #12 AWG JLES. WHERE 20A BRANCH	
CTION (15-FT MAXIMUM).	
TORS PER NEC. L MULTIWIRE BRANCH	
ACHMENT OF ANY TYPE WEB MEMBERS. UTILIZE	
OR SUPPORTING THE	
HERWISE. SEAL DEVICES TO NE SEALANT.	
ER/FREEZER PANELS OR IN D WITH GALVANIZED 1/2" DW FOR CLEANING.	
ONE LINE DIAGRAM AND HALL BE INSTALLED UNDER	
R GREATER. REFER TO DER SLAB.	
E EXPANSION COUPLINGS IENT AS REQUIRED BY	
TRUCTION INTERRUPTS EDING EXISTING EQUIPMENT,	
BUT NOT SHOWN ON ATERIALS TO REWORK FAIN EXISTING OPERATION.	
S (ELECTRICAL, TELEPHONE, ETC.) PROVIDE ALL D TO REROUTE, SLEEVE,	
AND SECURITY CABLES	
JCTION. PROTECT ALARM DENTAL DAMAGE SO THAT ALL TIMES.	
ALS, UNLESS OTHERWISE	
EXISTING ELECTRICAL CTORS AS INDICATED ON RED BY DEMOLITION.	
EVICES, ETC., WHICH WILL	
ES SERVING SALES AREA REMOVED. EXISTING E REUSED FOR NEW POWER	
CONDITION MEET NS AND ALL U.L. RATINGS. O CONDUCTORS BACK TO	
R AND REPLACE WITH JTION AND POWER SWITCH F" PROVIDE HANDLE LOCK	
UIT BREAKER IN THE "OFF" IRCUIT IDENTIFICATION	
ONED IN CEILING SPACES ., THROUGH STOCKROOM MOVE FROM RACEWAY(S),	
NDUIT TO BE ABANDONED IN VED BACK TO FINISHED AIR SURFACE(S) TO MATCH	
RANCH CIRCUITS TO BE D. REMOVE CIRCUIT R PLATE. EXCEPTION:	
BREAKERS SHALL BE ETR ( OFF DEVICE TO LOCK OFF" POSITION. UPDATE ION SCHEDULE AS "SPACE"	
FIXTURES: REFER TO FICATION FOR DISPOSAL OF	
ED BY THE SCOPE OF WORK ALLING, LOOSENING, OR THE FUTURF.	
ON MILESTONE DATE: FOR DATA AND PHONE	
OXES AS SHOWN ON PLANS. / LOCAL CODES AND/OR	
NSTALL CABLE IN POWER	
TION MANAGER.	

![](_page_36_Picture_15.jpeg)

### 7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

![](_page_36_Figure_19.jpeg)

![](_page_36_Picture_21.jpeg)

	ISSUE BI	_OCK
4	ADD#6	07/07/22
CHE	ECKED BY:	SG
DRA	WN BY:	SI
PRO	TO CYCLE:	07/30/21

DOCUMENT DATE: 09/08/21

![](_page_36_Picture_24.jpeg)

DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION

![](_page_36_Picture_26.jpeg)

E1

SHEET:

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CONTRACTOR SHALL CAREFULLY COORDINATE NEW WORK AND DEMOLITION ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE

LIGHTING COM	PLIANCE	E SUN	AMARY										
2018 WSEC Compliance Form	s for Commercial	Building	gs including Group	R2, R3 & R4	over 3 stor	ies and all R1					Administered b	y: ©2022 N	EEA, All right
		Projec	t Title	WA	ALGP0402	_2403-278_WA_Puy	allup - 2018 WSEC	For	r Building Depa	rtment Use:	:	Date:	Mar 1
Duciost & Applicant		Projec	t Address		3181 AV	ENUE SE, PUYALL 310	UP, WA 98374					L	
Information		Applic	ant Nama			PUYALLUP, WA 9	8374						
		Applic	cant Phone			820-045-9794							
		Applic	cant Email		Sw	eta.kumari@wdparti	ners.com						
	Fo	or questio	ns about this report	, contact WSE	EC Comme	rcial Technical Supp	ort at 360-539-5300	or via email a	t com.techsuppc	ort@waener	rgycodes.com		
General Occupancy			All Commerc	ial	General	Building Use Type		Retail,	General Sales	Building	g Cond. Floor Area		202,630
General Project Types		Build	ing Addition Add	Building or ition iting Scope	I	nterior Lighting	Alteration Lighting Scope	Parking C Exteri	Garage Lighting ior Lighting	Project ( Floors A	Cond. Floor Area	Complia	5,498 1
Lighting Project Description										compna	ince method	Compilar	iee weende i
		1	Intonia	r / Extorior						T	PA Calculation		
Lighting Compliance Scope and Method	Project T	уре	(Interior includes	both interior &	parking)	Luminaire Rep	lacement Scope	Compliance	e Method	E	Adjustment	Co	mpliance Ver
Additional Efficiency	Building Ad	dition	Interi	or Lighting				Space by	space	No Calculat	tion Adjustments select	ted	COMPLI
Options Included													
Project Title WA	ALGP0402_24	03-278	_WA_Puyallup	- 2018 WS	EC						Da	ate Ma	r 16, 2022
Lighting Power Calculat	ion	BUIL	DING ADDIT	ION - INTI	ERIOR I	JGHTING				(	Compliance Verifi	cation C	OMPLIES
Compliance Method			Space	by space			LPA Calculation	Adjustment					none
					Interior	r Lighting Power Al	lowance - Space by	Space					
General Space Type	Specific Spa	асе Туре	Ceiling Height (Ff	t) Gr	oss Interio	or Area (SF)	LPA (Watts/SF)	Tota (S	ll Watts Allowe SF x LPA x 1)	d	Total Proposed Watt (LPD + Display LPD	ts D)	Compliance §
Storage room	Gener	al			23	8	0.38		90				
Storage room	Gener	al			2,3	5	0.38		101				
				I			Proposed Total L	.PD			820		
		Т	otals						1,169		820		COMPLI
						Proposed Lightin	g Power Density						
				uantity of		Watts or Wattage Limi	<b>t</b>	Total Linear		Watte	a nor Linoar		Total Watts Proposed
Fixture Type	Fix	ture ID	Fi	stures (#F)		per Fixture		Feet (LF)		Foo	t (WpLF)		(#F x WpF) or
Linear Fixtures						(wpr)							(LF X WPLF)
LEI	strip T	ype 50		3		50							150
LEI	strip T	Type 1		10		67					Davage of Takel I DD		670
											Proposed Total LPD	)	820
Project Title WA	ALGP0402_24	03-278 <u></u>	_WA_Puyallup	- 2018 WS	EC						Da	ate Ma	r 16, 2022
Proposed Fixtures Detail	s	BUIL	DING ADDIT	ION - INTI	ERIOR I	LIGHTING							
Fixture Type/Application	Fixt	ure ID			Location i	in Documents		Lar	тр Туре		Exi	New or isting-to-Re	emain
Linear Fixtures													
LED strip	How is linear fi	pe 50 xture que	antity defined?: Our	antity of fixtur	es with cur	E1 rent limiting device			LED	Leng	th of track (LT):	New	
	Fixture Descrip	tion: 4FT	SEALED STRIP							Are t	these fixtures located w	vithin a dayl	ight zone?: No
	Do these fixture	es require	e specific application	n lighting con	trols?: Pern	nanent lighting in dw	elling units, occupa	ncy controls				•	
		1				E1			LED		1	New	
LED strip	How is linear f	vture au	ntity defined?	ntity of fixtor	oc with are	EI Tent limiting device			LED	Loro	th of track (IT).	INCW	

018 WSEC Re The following in Vashington Sta For questions al	quirements for Com formation is necessa te Energy Code, Co bout this report, con	mercial Buildings includi ary to check a permit app ommercial Provisions. tact WSEC Commercial	ng Group R2, R3 & R4 over 3 stories & all R1 plication for compliance with the lighting systems, r Technical Support at 360-539-5300 or via email at	Administered by ©2 motors and electric t com.techsupport@	2022 NEEA, All rights reserved al system requirements in the @waenergycodes.com
Project: WALGP04 31ST AVE 310 PUYALLUI	02_2403-278_WA NUE SE, PUYALI P, WA 98374	4_Puyallup - 2018 WS LUP, WA 98374	BEC		Date: 2022-03-16
Applies	Code Section	Component	Compliance Information Required In Permit Documentation	Location in Documents	Building Department Notes
LIGHTING S	SCOPE				
	C103.1	Construction documents - General	For a shell & core or tenant space (first build- out) project, indicate if there is no lighting scope included in the project.		
	C103.1	Construction documents - General	For an alteration project, indicate if there is no lighting scope included in the project.		
LIGHTING C	CONTROLS				
YES	C405.2	Lighting controls, general	For all lighting fixtures, indicate lighting control method on plans for spaces and lighting zone(s) served, or exception taken	E1, E1.2	
	C405.2, Option 2	Luminaire level lighting controls (LLLC)	Indicate on plans all fixtures provided with LLLC in lieu of C405.2 lighting controls; provide description of control capabilities and performance parameters		
	C405.2.5, Item 3 C405.2.1.1 C405.2.3.1	Lighting in dwelling units (dormitory, hotel and all other than multifamily)	Indicate method of automatic control of all installed luminaires in dwelling units in buildings other than multifamily (occupancy or light reduction controls)		
	C405.2.5, Item 2	Lighting in sleeping units	Indicate method of automatic off control of all installed luminaires in sleeping units (vacancy or key card control); also refer to Receptacles		
NO	C405.2.3 C405.2.3.1 C405.2.5	Manual controls	Indicate on plans the method of manual lighting control, location of manual control device and the area or specific application it serves		
NO	C405.2.3.1 C405.2.1.1 C405.2.4	Manual interior light reduction controls	Indicate on plans which method of manual 50% lighting load reduction is provided, or indicate applicable exception		
YES	C405.2.1 C405.2.2.1 C405.2.1, Exception 3	Method of automatic shut-off control	Indicate on plans the method of automatic shut-off control during unoccupied periods (occupancy sensor, time switch or digital timer switch) for all lighting zones	E1, E1.2	
YES	C405.2.1	Occupant sensor controls	Indicate on plans all luminaires that are controlled by occupant sensor controls; indicate controls are configured to turn luminaires 100% off when the space is unoccupied	E1	
NO	C405.2.1 C405.2.1.1	Occupant sensor controls	Indicate if occupant sensor controls are configured to be manual on or automatic on to not more than 50% power; indicate spaces eligible for exception that allows automatic on to 100% power		

Page 1/10

The following Washington S For questions	information is necess State Energy Code, C s about this report, co	sary to check a permit app ommercial Provisions. ntact WSEC Commercial	lication for compliance with the lighting systems, i Technical Support at 360-539-5300 or via email at	ne ronowing information is necessary to check a permit application for compliance with the lighting systems, motors and electrical system requirements in the Vashington State Energy Code, Commercial Provisions.							
NA	C405.2.1.2	Occupant sensor controls - warehouses spaces	Indicate each aisleway and corridor within a warehouse space are designated as separate zones that are independently controlled								
NA			Indicate occupant sensors are configured to automatically reduce lighting power by 50% when the zone is unoccupied and 100% off after the zone is unoccupied for over 20 minutes; indicate controls are configured to automatically restore lighting to full power when the zone or space is occupied								
NA	C405.2.1.3	Occupant sensor controls - open plan office areas	For open plan office areas larger than 300 sf, indicate general lighting is provided with vacancy controls that reduce lighting power by not less than 80% and are configured to turn luminaires 100% off when the space is unoccupied; indicate that no individual control zone area exceeds 600 sf								
	C405.2.1.4	Occupant sensor controls - parking garages	Indicate parking garage general lighting is provided with vacancy controls that reduce lighting power by not less than 30% and are configured to turn luminaires 100% off when no vehicles or pedestrians are present, unless eligible for an exception; indicate that no individual control zone area exceeds 3,600 sf								
NA	C405.2.1.5	Occupant sensor controls - enclosed fire-rated stairwells	Indicate stairway lighting is provided with vacancy controls that reduce lighting power by not less than 50% when the stairway in unoccupied								
NA	C405.2.2.1	Automatic time switch controls	Indicate spaces on plans where time switch controls turn luminaires 100% off during unoccupied hours								
NA			Indicate spaces on plans where time switch controls are configured to turn on lighting to full power versus 50% power								
NA			Indicate locations of override switches on plans and the lighting zone(s) served; indicate that the area(s) served by each override switch does not exceeds 5,000 sf								
NA	C405.2.1, Exception 3	Digital timer switch	Indicate digital timer switch control includes: manual on/off, time delay, audible and visual indication of impending time-out								
NA	C405.2.4.2 C405.2.4.3	Daylight zones - Sidelit and toplit	Indicate primary and secondary sidelit daylight zone floor areas on plans								
NA			Indicate toplit daylight zone floor areas on plans								
NA			For small vertical fenestration assemblies (rough opening less than 10 percent of primary daylight zone floor area) where daylight responsive controls are not required, provide fenestration area to daylight zone floor area calculation(s)								

Lightin	ig, Motor ai	nd Electrical	Requirem
2018 WSEC I The following Washington S For questions	Requirements for Com information is necess State Energy Code, Co about this report, con	nmercial Buildings includ ary to check a permit ap ommercial Provisions. tact WSEC Commercial	ing Group R2, R3 & plication for complia Technical Support a
NA	C405.2.4	Daylight responsive controls	Indicate on plans daylight responsiv area served by ea exceeds 2,500 sf
NA			Identify sidelit an are not provided controls and the e
NA	C405.2.4.1.1	Daylight responsive controls	Indicate on plans method (continue dimming that pro between 0%-100
NA	C405.2.4.1	Daylight responsive controls	Indicate that dayl configured to con controlled lights
NA	C405.2.5	Additional controls - Specific application lighting controls	Identify spaces at that require speci- controls per this
NA	C405.2.5, Item 1	Display and accent lighting	Indicate on plans provided that cor and display case both general area applications with
NA			Indicate manual a sensor or time sw methods
	C405.2.5, Item 3	Hotel/motel guest rooms	Indicate method vacancy or captiv luminaires and sy room
NA	C405.2.5, Item 1	Supplemental task lighting	Indicate method automatic shut-o time switch) for including under-s lighting
NA	C405.2.5, Item 1	Lighting equipment for sale or demonstration	Indicate on plans sale or demonstra independently fre and other lighting same space
NA			Indicate manual a sensor or time sw methods
NA	C405.2.5, Item 4	Lighting for non- visual applications	Identify all eligib applications on p served by each co exceeds 4,000 sf
NA			Indicate on plans controlled indepe area lighting and within the same s

Page 2/10

Page 3/10

irements List, pg 3	of 10		
R2, R3 & R4 over 3 stories & all R1	Administered by ©2022 N	IEEA, All rights reserved	
r compliance with the lighting systems,	motors and electrical syst	tem requirements in the	
Support at 360-539-5300 or via email a	t com.techsupport@waer	nergycodes.com	
on plans lighting zone(s) served by responsive controls; indicate that the /ed by each control device does not 2,500 sf			
sidelit and toplit daylight zones that provided with daylight sensing and the exception(s) that apply			
on plans the lighting load reduction (continuous dimming, or stepped g that provides at least two even steps 0%-100% of rated power)			
that daylight sensing controls are ed to completely shut off all ed lights in the lighting zone			
spaces and lighting fixtures on plans ire specific application lighting per this section			
on plans that manual controls are I that control display, accent lighting lay case lighting independently from eral area lighting and other lighting ons within the same space			
manual and automatic (occupant r time switch) lighting control			
method of automatic control - or captive key control of all installed es and switched receptacles in guest			
method and location of manual and ic shut-off control (occupant sensor or tch) for supplemental task lighting, g under-shelf or under-cabinet			
on plans that lighting equipment for emonstration are controlled dently from both general area lighting r lighting applications within the ace			
manual and automatic (occupant r time switch) lighting control			
all eligible non-visual lighting ons on plans; indicate that the area y each control device does not 4,000 sf			
on plans that non-visual lighting are ed independently from both general ting and other lighting applications he same space			

018 WSEC F	Requirements for Co information is neces	sary to check a permit an	plication for compliance with the lighting systems	motors and electrical system rea
Vashington S	tate Energy Code, C	Commercial Provisions.	Technical Support at 360,539,5300 or via email a	t.com.techsupport@waeneravco
or questions	about this report, oc	Shace WSEC Commercial	Technical Support at 360-559-5500 of Ma email a	t com.techsupport@waenergyco
NA			Indicate method of manual lighting control and applicable automatic lighting control	
NA	C405.2.5, Item 5	Means of egress lighting	Identify on plans egress fixtures that function as both normal and emergency means of egress illumination	
NA			Provide calculation of lighting power density of total egress lighting	
NA			If total egress lighting power density is greater than 0.02 W/sq. ft., indicate on plans egress fixtures requiring automatic shut-off during unoccupied periods	
NA			Indicate method of automatic shut-off control	
YES	C405.4.1 C405.4.2	Lighting control of exempt interior lighting	Indicate that exempt interior lighting equipment and lighting located within spaces that are eligible for a lighting power exemption are controlled independently from non-exempt and general area lighting	E1
NA	C405.2.6	Exterior lighting controls	For decorative exterior lighting, indicate on plans automatic daylight shut-off controls, or exception taken	
YES			For exterior lighting that is not decorative, indicate on plans automatic daylight or time- switch shut-off controls and setback controls; or indicate exception taken	E1.2
NA			For lighting requiring setback controls, include control sequence that reduces lighting power by at least 30% between 12am-6am, or from 1 hour after closing to 1 hour before opening, or based upon motion sensor	
NA			For building facade and landscape lighting, indicate control sequence for shut-off control is based on dawn-to-dusk and business opening/closing schedule; indicate whether automatic or time switch controls will be provided for this function	
NA	C405.5.2	Lighting control of exempt exterior lighting	Indicate that exempt exterior lighting and lighting located within exterior areas/surfaces that eligible for a lighting power exemption are controlled independently from non- exempt exterior lighting	
NA	C405.5.4	Exterior gas-fired lighting appliances	Indicate ignition system is a method other then continuously burning pilot light	
NA	C405.2.7	Area controls - Master control switches and circuit power limit	Indicate location(s) of master control switch(es) intended to control multiple independent switches; circuit breaker may not be used as a master control switch	
NA			Verify that no 20 amp circuit controlled by a single switch or automatic control is loaded beyond 80%	

Page 4/10

![](_page_37_Picture_12.jpeg)

![](_page_37_Picture_13.jpeg)

# Lighting, Motor and Electrical Requirements List, pg 5 of 10 2018 WSEC Requirements for Commercial Buildings including Group R2, R3 & R4 over 3 stories & all R1 -- Administered by ©2022 NEEA, All rights reserved The following information is necessary to check a permit application for compliance with the lighting systems, motors and electrical system requirements in the Washington State Energy Code, Commercial Provisions.

	C406.4	Enhanced digital lighting controls	To comply with additional efficiency credit, indicate on plans that interior lighting fixtures are configured with all of the following control functions, as applicable: 1) Each fixture is individually addressed, or exception taken; 2) Fixtures are configured for continuous dimming; 3) No more than eight fixtures are controlled by a single daylight sensor; 4) In enclosed and open office areas, illumination levels of overhead general area lighting is configured to be individually adjusted by occupants	
			Include calculations that demonstrate the total lighting power of all interior lighting fixtures configured with enhanced lighting controls is no less than 90% of the total interior lighting power for the area the enhanced lighting controls credit is being applied to	
INTERIOR I	LIGHTING POW	ER & EFFICACY		
YES	C405.4.1 C405.4.2	Total connected interior lighting power	Include all luminaires in interior lighting fixture schedule; indicate fixture types, lamps, ballasts, and manufacturer's watts per fixture for the installed lamp	E1.1
NA			Identify spaces eligible for lighting power exemption on plans and in WSEC interior lighting compliance reports; indicate the exception applied	
YES			Identify lighting equipment eligible for lighting power exemption in fixture schedule and in WSEC interior lighting compliance reports; indicate the exception applied	E1.1
	C405.1 C405.1.1	Lighting in dwelling units (multifamily)	For all installed luminaires, include lamp type and number of lamps in lighting fixture schedule; for lamps that are not LED, T-8 or small diameter fluorescent, indicate efficacy of other lamp types is 65 lumens per watt or greater	
			For all installed luminaires, indicate in lighting fixture schedule whether complying via lighting power density or by qualifying lamp type; if by lamp type, include number of lamps	
			For all installed luminaires, indicate in lighting fixture schedule whether complying via lighting power density or by qualifying lamp type; if by lamp type, include number of lamps	
INTERIOR I	LIGHTING POW	ER CALCULATION -	INDICATE COMPLIANCE PATH TAKEN	
NA	C405.4.2.1	Building Area Method	Demonstrate that total proposed wattage per building area does not exceed maximum allowed wattage per building area; identify locations of building areas on plans; provide WSEC exterior lighting compliance reports	

Page 5/10

2018 WSEC   The following Washington S For questions	Requirements for Co information is neces State Energy Code, o about this report, c	ommercial Buildings includ ssary to check a permit ap Commercial Provisions. ontact WSEC Commercial	ling Group R2, R3 & R4 over 3 stories & all R1 plication for compliance with the lighting systems, I Technical Support at 360-539-5300 or via email a	Administered by ©2022 NEEA, All rights reserved motors and electrical system requirements in the t com.techsupport@waenergycodes.com				
YES	C405.6	Electrical transformers	Include electrical transformer schedule on electrical plans; indicate transformer type, size, efficiency, or exception taken	E3, Specification 16402				
YES	C405.11	Feeders and branch circuits	Provide documentation that demonstrates maximum voltage drop across feeders and branch circuits does not exceed 5%	E3				
	C405.7	Dwelling unit electrical energy consumption	Indicate on electrical plans that each dwelling unit in Group R-2 has a separate electrical energy meter					
	C405.8	Electric motor efficiency	Include all motors, including fractional hp motors, in electric motor schedule on electrical plans; indicate motor type, horsepower, rpm, rated efficiency, or exception applied					
	C405.9.1	Elevator cabs	For luminaires in each elevator cab, provide calculations that demonstrate average efficacy is not less than 35 lumens per watt					
			For elevators that do not have an integral air conditioning system, indicate rated watts per cfm for elevator cab ventilation fans do not exceed 0.33 watts per cfm					
			Indicate automatic controls that de-energize lighting and ventilation fans when elevator is stopped and unoccupied for a period of 15 minutes or more					
	C405.9.2	Escalators and moving walks	Indicate escalators comply with ASME A17.1/CSA B44; automatic controls are configured to reduce operational speed to the minimum permitted when not in use					
	C405.9.3	Regenerative drive	Indicate all one-way down or reversible escalators are provided with a variable frequency regenerative drive					
DOCUME	NTATION AND S	YSTEM REQUIREMEN	NTS TO SUPPORT COMMISSIONING (CX)					
NA	C408.4	Scope of electrical power and lighting systems commissioning	Indicate that all electrical systems (receptacles, transformers, motors, vertical and horizontal transportation) for which the WSEC requires control functions and / or configuration to perform specific functions are required to be commissioned					
NA			Where total building lighting load is > 20 kW, or where total lighting load of luminaires requiring daylight sensing and / or occupancy control > 10 kW, indicate that all automatic lighting control systems are required to be commissioned; or provide building lighting power calculation demonstrating eligibility for exception					
NA	C405.13 C408.1.1 C408.1.2 C408.1.4.2 C103.6.3	Commissioning requirements in construction documents	Indicate Cx requirements in plans and specifications for all applicable electrical and lighting control systems per C408					

Page 9/10

ravcodes.com	notors and electrical system	plication for compliance with the lighting systems, i	any to check a permit app	ate Energy Code, Co	Washington S
	com.techsupport@waenergy	Technical Support at 360-539-5300 or via email at	atact WSEC Commercial	bout this report, con	or questions
	E1.1	Demonstrate that total proposed wattage does not exceed maximum allowed wattage; identify locations of space types on plans, including retail display areas and areas with display, highlight and decorative lighting; provide WSEC exterior lighting compliance reports	Space-By-Space Method	C405.4.2.2	YES
		D INTERIOR LIGHTING POWER DENSITY	CREDITS - REDUCED	L EFFICIENCY	ADDITION
		To comply with additional efficiency credit, demonstrate that total connected interior lighting wattage is 10% or 20% less than the total maximum allowed lighting wattage for the area the reduced lighting power credit is being applied to; indicate whether lighting power allowance is based on the building area method or space-by-space method; provide WSEC exterior lighting compliance reports	Reduced interior lighting power density	C406.3.1 C406.3.2	NA
		For project with dwelling units, to comply with additional efficiency credit indicate in lighting fixture schedule that lamps within installed interior luminaires have an efficacy rating of at least 65 lumens per watt; include number of lamps and provide calculations that demonstrate at least 95% of lamps have this efficacy rating	Reduced interior lighting power density - dwelling unit lamp efficacy	C406.3	
			ER & EFFICACY	LIGHTING POW	EXTERIOR
	E1.1	Include all luminaires in exterior lighting fixture schedule; indicate fixture types, lamps, ballasts, and manufacturer's watts per fixture for the installed lamp	Total connected exterior lighting power	C405.5.2	YES
		Identify exterior applications eligible for lighting power exemption on plans and in WSEC exterior lighting compliance reports; indicate exception applied			NA
	E1.1	Indicate building exterior lighting zone as specified by the AHJ	Exterior lighting zone	C405.5.3(1)	YES
		For building grounds fixtures rated at greater than 50 watts, indicate rated lamp efficacy (in lumens per watt) in fixture schedule	Exterior building grounds lighting	C405.5.1	NA
			ER CALCULATION	LIGHTING POW	EXTERIOR
		Demonstrate that total proposed tradable surface wattage does not exceed maximum allowed tradable surface wattage (including base site allowance); identify locations of tradable surfaces on plans; provide WSEC exterior lighting compliance reports	Tradable allowances	C405.5.3	NA
		lumens per watt) in fixture schedule Demonstrate that total proposed tradable surface wattage does not exceed maximum allowed tradable surface wattage (including base site allowance); identify locations of tradable surfaces on plans; provide WSEC exterior lighting compliance reports	ER CALCULATION Tradable allowances	LIGHTING POW	EXTERIOR NA

![](_page_38_Picture_6.jpeg)

Page 6/10

Lighting,	Motor a	nd Electrical	Requirements List, pg 10	0 of 10
2018 WSEC Reg	uirements for Cor	mmercial Buildings includi	ng Group R2, R3 & R4 over 3 stories & all R1	Administered by ©2022 NEEA, All rights reserved
The following info	rmation is neces	sary to check a permit app	plication for compliance with the lighting systems,	motors and electrical system requirements in the
Washington State	Energy Code, C	ommercial Provisions.		
For questions abo	out this report, co	ntact WSEC Commercial	Technical Support at 360-539-5300 or via email a	t com.techsupport@waenergycodes.com
NΔ	C408 1 2	Commissioning	Include general summary of Cy plan per	
IN/A	C408.1.2	raquiramanta in	C408.1.2 including 1) Norretive description	
	C408.1.2.1	requirements in	c408.1.2 including. 1) Natrative description	
	C408.1.4	construction	of activities; 2) Responsibilities of the Cx	
	C103.6.3	documents	team; 3) Schedule of activities including	
			verification of project close out	
			documentation per C103.6; 4) Conflict of	
			interest plan (if required)	
NΔ	C408 1 2	Commissioning	Include in general summary that a Cy project	
1 47 1	C408.1.2	requirements in	report and Compliance Checklist (Figure	
	C102.6.2	acquirements in	$C408 \pm 41$ shall be completed by the	
	C105.0.5	de estruction	C408.1.4.1) shall be completed by the	
		documents	Certified CX Professional and provided to the	
			owner prior to the final electrical inspection	
NΔ	C408 4 1	Functional	Identify in plans and specifications the	
1471	C+00.4.1	nerformance testing	intended operation of all equipment and	
		performance testing	acentrale during all modes of operation	
		cinteria	including interfacing between new and	
			including interfacing between new and	
			existing-to-remain systems	
PROJECT CL	OSE OUT DOC	CUMENTATION		
NA	C103.6.3	Project close out	Indicate in plans that project close out	
		documentation	documentation is required including WSEC	
		requirements	lighting compliance reports that document all	
		requirements	interior and exterior lighting area and / or	
			interior and exterior lighting area and 7 of	
			surface types, lighting power anowances and	
			instance densities	
If "no" is selecte	d for any questio	on, provide explanation.		

Page 10/10

ements List, pg 7	of 10
3 & R4 over 3 stories & all R1 7	Administered by ©2022 NEEA, All rights reserved
ppliance with the lighting systems, r	motors and electrical system requirements in the
oort at 360-539-5300 or via email at	t com.techsupport@waenergycodes.com
that proposed wattage per non- ace type does not exceed owed wattage per non-tradable (including base site allowance ter tradable allowance identify locations of non-tradable lans; provide WSEC exterior obliance reports	
% of existing luminaires in an e or parking garage are replaced; pliance path (building area or ce method); include all new and main luminaires in WSEC ng compliance reports; indicate nting wattage does not exceed owed per compliance path	
6 of existing luminaires in an e or parking garage are replaced; existing lighting wattage in each o alteration; include all new and omain luminaires in WSEC ng compliance reports; indicate al lighting wattage in alteration exceed total existing lighting to alteration	
6 of existing exterior lighting blaced; include all new and emain luminaires in WSEC ing compliance reports; indicate al exterior lighting wattage does aximum allowed	
6 of existing exterior lighting olaced; indicate total existing age prior to alteration; include all ting-to-remain luminaires in or exterior compliance reports; osed total exterior lighting not exceed total existing wattage tition	
viring is installed to serve new naires and /or luminaires are a new circuit; indicate manual c lighting controls are provided e) - manual (C405.2.3); nsor (C405.2.1); light reduction laylight responsive (C405.2.4); ication (C405.2.5)	
viring is installed to serve new naires and /or luminaires are a new circuit; indicate automatic rols are provided (C405.2.6)	

2018 WSEC Re The following in Washington Sta For questions a	equirements for Co formation is neces ate Energy Code, 0 bout this report, co	ommercial Buildings includii ssary to check a permit app Commercial Provisions. ontact WSEC Commercial	ng Group R2, R3 & R4 over 3 stories & all R1 / Ilication for compliance with the lighting systems, r Technical Support at 360-539-5300 or via email at	Administered by ©2022 NE notors and electrical system com.techsupport@waener
	C503.6.3	Lighting panel alterations	Where a new interior and/or exterior lighting panel is installed or an existing panel is moved (all new raceway and conductor wiring), indicate all applicable lighting controls requirements apply	
	C503.6.4	Newly-created rooms	Where interior space(s) is reconfigured (permanently installed walls or ceiling-height partitions) to create new enclosed spaces, indicate all applicable lighting controls requirements apply	
	C504.2	Lighting repairs	Identify existing luminaires being upgraded with bulb and / or ballast replacement; indicate fixture alteration does not increase existing fixture wattage	
	C505.1	Change of interior space use	Identify spaces on plans where the building area type or space use type is being changed from one type to another per Tables C405.4.2(1) or (2)	
			Indicate compliance method (building area or space-by-space); include all new and existing- to-remain luminaires in WSEC interior lighting compliance reports; indicate proposed lighting wattage does not exceed maximum allowed per compliance path	
RECEPTAC	LES			
NA	C405.10	Controlled receptacles	Identify all controlled and uncontrolled receptacles on electrical plans in each space in which they are required; include receptacle configuration such as spacing between controlled and uncontrolled, duplex devices, etc	
NA			Provide schedule that lists the number of controlled and uncontrolled receptacles in each space where controlled receptacles are required - classrooms, private offices, open office areas, conference rooms, copy rooms, break rooms and modular partitions/workstations	
NA			Indicate on plans the method of automatic control for each controlled receptacle zone (occupant sensor or programmable time-of- day control); indicate that each zone served by a single controller does not exceed 5,000 sf	
	C405.2.5, Item 2	Switched receptacles in sleeping units	Indicate method of automatic off control of all switched receptacles in sleeping units (vacancy or key card control)	
	C503.6.6	Electrical receptacle alerations	Where new receptacles are added or replaced within an alteration project that is 5,000 sf or larger, indicate receptacles are provided with automatic controls per C405.10, or exception taken	
MOTODS T	DANGEODMED	S ELECTRIC METERS	LINTEDIOD TO ANSDODTATION	

Lighting, Motor and Electrical Requirements List, pg 8 of 10

Page 7/10

Page 8/10

![](_page_38_Picture_15.jpeg)

### 7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

![](_page_38_Figure_19.jpeg)

![](_page_38_Figure_20.jpeg)

ISSUE BLOCK							
2	PR#2	03/18/22					
СНЕ	ECKED BY:	SG					
DRA	AWN BY:	SK					
PRC	DTO CYCLE:	07/30/21					

DOCUMENT DATE: 09/08/21

![](_page_38_Picture_22.jpeg)

![](_page_38_Figure_23.jpeg)

NEEA, All rights reserved ______ tem requirements in the ergycodes.com

![](_page_38_Figure_25.jpeg)

46	GENERAL REFRIGERATION ELECTRICAL NOTES	09.27.19 DROP	ROUGH-IN NOTES:	EDU
<u>2.21</u> 1.	COORDINATE ALL WORK WITH REFRIGERATION CONTRACTOR (R.C.) PRIOR TO INSTALLATION.	▼a	FLUSH MOUNT JUNCTION BOX AT +20" (UNO) WITH (1) 3/4" CONDUIT STUBBED 12" ABOVE	LAY-IN C
2.	REFRIGERATED CASES: E.C. SHALL PROVIDE CONDUIT AND WIRE FOR REFRIGERATED CASE FANS, LIGHTS AND ANTI-SWEAT HEATERS, AND (IF APPLICABLE) ELECTRICAL DEFROST. PROVIDE ADEQUATE CONDUCTOR LENGTH TO ALLOW TERMINATION. NEATLY BUNDLE CIRCUITS AND CLEARLY TAG AND LABEL EACH CIRCUIT WITH BRANCH CIRCUIT	▼b ▼c <u>SCHEI</u>	FLUSH MOUNT JUNCTION BOX AT +20" (UNO) WITH (1) 3/4" CONDUIT ROUTED TO NEARES         SURFACE MOUNT JUNCTION BOX AT +66" (UNO) WITH (1) 3/4" CONDUIT STUBBED TO ACC         DULE GENERAL NOTES:	FT ACCES
3.	DESIGNATION AND REFRIGERATION SYSTEM NOMBER FOR FINAL TERMINATION AT CASE BY R.C. REF CASE CONNECTION WIRING DETAIL. IF NEW CASES ARE PROVIDED WITH A FACTORY INSTALLED TERMINAL STRIP AND JUMPERS FOR CONNECTION TO A SINGLE CIRCUIT FOR 120V CASE LOADS. RC SHALL REMOVE FACTORY INSTALLED JUMPERS AS REQUIRED TO UTILIZE EXISTING SEPARATE 120V FAN/LIGHT/ANTI-SWEAT CIRCUITS AS INDICATED ON PLANS AND/OR PANELBOARD SCHEDULES. ANY EXISTING ANTI-SWEAT CONTROL (SWEATMISER) SHALL BE BY-PASSED. CASES UTILIZING ELECTRICAL DEFROST WILL BE PROVIDED WITH SEPARATE 208V TERMINATIONS AT THE TERMINAL STRIP FOR CONNECTION TO THE 208V ELECTRIC DEFROST CIRCUIT. RC SHALL MAKE FINAL TERMINATIONS OF 120V AND 208V POWER CIRCUIT(S) AT CASE TERMINAL STRIP. REFER TO CASE CONNECTION SCHEMATIC ON REFRIGERATION SHEETS.	1. AL 2. AL 3. AL 4. PR 5. CC 6. WH FR 7. FC 8. AC AR	L JUNCTION BOXES SHALL BE DOUBLE GANG WITH SINGLE GANG PLASTER RING UNLESS N L JUNCTION BOXES TO BE ROUGHED IN AT SCHEDULED HEIGHT UNLESS NOTED OTHERWIS L CONDUITS SHALL BE TERMINATED WITH BUSHINGS. ROVIDE PULL WIRE WITH EACH EMPTY RACEWAY (JUNCTION BOX/CONDUIT) INSTALLED. DNDUIT RUNS SHALL HAVE NO MORE THAN 90 DEGREES OF TRANSITION BETWEEN PULL BO HERE CONDUIT(S) TRAVERSE AREAS WITH CEILINGS OPEN TO STRUCTURE, CONDUIT(S) SH COM CUSTOMER AREA. DR CONDUIT RUNS SCHEDULED WITH 1-1/2" OR LARGER CONDUIT UTILIZE LARGE RADIUS SV CESSIBLE CEILING SPACE SHALL BE CONSIDERED 12 INCHES ABOVE A LAY-IN CEILING OR A EAS OPEN TO STRUCTURE.	VEEPS A ABOVE B
•-	WALK-IN UNITS: PROVIDE CONDUIT AND WIRE FOR EVAPORATOR COIL FANS (CF) AND (IF APPLICABLE) ELECTRIC DEFROST (ED). PROVIDE ADEQUATE CONDUCTOR LENGTH TO ALLOW TERMINATION. NEATLY BUNDLE CIRCUITS AND CLEARLY TAG AND LABEL EACH CIRCUIT WITH BRANCH CIRCUIT DESIGNATION AND REFRIGERATION SYSTEM NUMBER FOR FINAL TERMINATION AT COIL BY R.C. REF EVAPORATOR COIL WIRING DETAIL.		ALL EQUIPMENT IN EDC-4 IS EXISTING TO REMAIN EXCEPT AS NOTED.	Termina Threade
	ROUTE REFRIGERATED CASE AND WALK-IN UNIT COIL FAN, LIGHTS, ANTI-SWEAT AND DEFROST BRANCH CIRCUITS TO WIREWAYS PROVIDED AT REFRIGERATION EQUIPMENT AND/OR PANELBOARDS AS REQUIRED.		E EMS L4D1-8 L4D1-8 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D1-2 L4D	4" COND 'ITH PUR 3/4" CONI
	REFRIGERATED CASE WIRING COMPARTMENT REPRESENTED ON DRAWING BY JUNCTION BOX. KEEP PENETRATIONS THROUGH WALK-IN UNITS TO A MINIMUM. ROUTE ALL CONDUITS SERVING FREEZERS AND COOLERS ON INSIDE OF BOX.		BACKBOARD 16.145 H4B ELPD CONTACTOR L4D1 L4D2	JUNC
	ALL CONDUITS INSTALLED ON TOP OF WALK-IN UNITS SHALL BE A MINIMUM OF 6" FROM ANY EDGE TO ALLOW SPACE FOR EDGE PROTECTION NETTING. DO NOT ROUTE CONDUITS ABOVE THE CEILING GRID ACCESS UNLESS CONDUITS ARE INSTALLED IN JOIST SPACE, REF ARCH	/	225A ENCLOSED CIRCUIT BREAKER FOR PANEL L4D3	
	UNDERSLAB CIRCUITS SHALL NOT BE ROUTED UNDER WALK-IN FREEZERS AND SHALL BE ROUTED ABOVE		(5) EDC-4 1/8" = 1'-0"	
	REFRIGERANT LINES WHERE THEY CROSS. CIRCUITS FOR REFRIGERATED CASES SERVED BY UNDERSLAB REFRIGERATION PIPING ARE TO BE ROUTED UNDERSLAB AND EXTENDED TO THE FIRST CASE IN EACH SYSTEM. WIRING AND CONDUIT FOR SLAVE WIRING BETWEEN CASES SHALL BE PROVIDED BY R.C. REFER TO UNDERSLAB CASE CONNECTION WIRING DETAIL.			
-	ALL UNDERSLAB CONDUITS SHALL BE 3/4" MIN. CIRCUITS FOR REFRIGERATED CASES SERVED BY OVERHEAD REFRIGERATION PIPING ARE TO BE ROUTED DOWN FROM STRUCTURE AT THE SAME LOCATION AS THE REFRIGERATION PIPING AND EXTENDED TO THE FIRST CASE IN EACH SYSTEM. WIRE AND CONDUIT FOR SLAVE WIRING BETWEEN CASES SHALL BE PROVIDED BY THE R.C. REFER TO OVERHEAD CASE CONNECTION WIRING DETAIL.			
3.	ON GROUPS OF THREE OR MORE REFRIGERATED CASES WITH ELECTRIC DEFROST, R.C. SHALL CONNECT CASES TO CREATE A THREE-PHASE HEATER CIRCUIT. HEATER LOADS SHALL BE BALANCED BETWEEN PHASES AS EVENLY AS POSSIBLE. REF			
4.	PROVIDE A SEPARATE NEUTRAL FOR EACH NEW BRANCH CIRCUIT SERVING REFRIGERATED CASES OR WALK-IN UNITS AS INDICATED ON PLANS.			
5. 6.	PROVIDE CIRCUIT BREAKER LOCKING DEVICE (LOCK- OFF FOR MAINTENANCE) ON NEW AND/OR EXISTING CIRCUIT BREAKERS SERVING REFRIGERATED CASES. REFERENCE ARCHITECTURAL DEMOLITION PLANS FOR FULL EXTENT OF DEMOLITION WORK REQUIRED.			
			M RCU TO COILS SHALL BE	<b>۲۰۰</b>
				-
				- - - - - - - - - - - - - - - 
	PROVIDE 3/4 °C FROM LOW VOLTAGE WIRING COMPARTI TO ACCESSIBLE INTERIOR JO SPACE AND TERMINATE WITI BUSHING PROVIDE 3/4 °C FROM LOW		MOUNT TO FRAMING OR NON-REMOVABLE ACCESS PANEL WP/WR 53 LPU- 21,23,25 60A/3P/NF, NEMA 3R MOUNTED ON THE ROOF NEMA 3R	-
	VOLTAGE WIRING COMI TO ACCESSIBLE INTERI SPACE AND TERMINATE BUSHING	PARTMENT OR JOIST E WITH PROVID VOLTAG TO ACC SPACE / BUSHIN	E 3/4"C FROM LOW E WIRING COMPARTMENT ESSIBLE INTERIOR JOIST AND TERMINATE WITH G	-
			PICKUP STORAGE	

ROOF RCU POWER PLAN

3/16" = 1'-0"

![](_page_39_Figure_1.jpeg)

IOTES		
T(S) TO EXISTING BRANCH UM WIRE SIZE AND CUIT ARE NOTED. VERIFY SIZE, DITION OF EXISTING BRANCH AND WIRE PRIOR TO USE TO EY MEET REQUIRED SIZE, AND AND REPLACE AS REQUIRED. OPERATOR: VERIFY IANUFACTURER'S		
PROVIDED WITH A HACR REAKER AND GFI DUPLEX CIRCUITRY SHALL BE ROUTED IN UNIT TO THE TERMINATION		USE
AHU MAINTENANCE CUIT. TRY TO FACTORY PROVIDED TCH. E.C. SHALL INSTALL SWITCH PER S RECOMMENDATIONS. CTION BOX WITH COVERPLATE MOUNTING OF EXTERIOR E 3/4" CONDUIT THROUGH TO ABOVE BAR JOIST AND BUSHING.		STIPULATION FOR REI
TALL NEW CIRCUIT BREAKER NG PANELBOARD INDICATED. HANUFACTURER, TYPE AND XISTING CIRCUIT BREAKERS. DINATE WITH GENERAL DARCHITECTURAL IS THE EXTENT OF ELECTRICAL IOVE UNUSED DEVICES, S, AND WIRING BACK TO CTION BOXES OR EFERENCE POWER PLANS FOR REUSED. DEMOLITION SHALL VE CIRCUITS. IF CIRCUIT IS THE WAY TO PANELBOARD, BREAKER AND REPLACE WITH DATE TYPEWRITTEN CIRCUIT FIFYING CIRCUIT AS "SPACE".		CONSULTANTS
ICT REQUIREMENTS WITH IONS PRIOR TO BID. PROVIDE BROWN DEVICE AND PLATE ONTROL PANEL: PROVIDE CONNECT TO AIR DOOR PROVIDE AND INSTALL ALL /IRING BETWEEN THE AIR CURTAIN AND DOOR CH PER MANUFACTURER'S COOLER WALL, AND ROUTE AY UP EXTERIOR SIDE OF STRUCTURE. MINIMIZE IT ROUTED INSIDE COOLER ATE EXACT LOCATION WITH ALLER PRIOR TO ROUGH-IN. EEVE AND SLEEVE		
TH SILICONE SEALANT AFTER LLED. OVIDE 3/4" CONDUIT FROM O STRUCTURE. PROVIDE 1" ACK OF BOX EXTENDED 2" INTO N JUNCTION BOX SO THAT OVE DOOR ON NON ACTIVE R 12" ABOVE ROLL SEAL ON F CONTROLS. TERMINATE ND WITH THREADED BUSHINGS. EEVE AND SLEEVE TH SILICONE SEALANT AFTER LLED. WP JUNCTION BOX ON WALL ER/FREEZER BOX CEILING FOR ANN HEAT TRACE TAPE		2
IGHT FLEXIBLE METAL CTION TO HEAT TAPE. ROVIDED WITH R PANEL FOR CONNECTION TO ATERS AND/OR HEATED WEATHERPROOF EXTENSION FOR RECESSED JUNCTION RED. FINAL TERMINATIONS BY BUILDING AUTOMATION LLER AND/OR LEAK DETECTION D AND INSTALLED BY OTHERS. AS INDICATED INCLUDING /I OCK-OFF DEVICE AT		4
L TERMINATIONS AT BAS/LEAK LS BY R.C. (CF) AND/OR ELECTRIC CUITS FROM THE BAS IAL TERMINATIONS AT .C.		CH
		DC
	l	
		DC HA
FOR HAVING A THOROUGH KNOWLEDGE OF HEIR RELATED FIELD. THE FAILURE TO GE DOES NOT RELIEVE THE RESPONSIBILITY NO ADDITIONAL COMPENSATION SHALL BE F OCCUR DUE TO FAILURE TO FAMILIARIZE		<b> </b> <b> </b> SF
	L	

![](_page_39_Picture_3.jpeg)

### 7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

![](_page_39_Figure_7.jpeg)

![](_page_39_Picture_8.jpeg)

	ISSUE BL	OCK						
2	PR#2	03/18/22						
4	ADD#6	07/07/22						
CHE	ECKED BY:	SG						
DRAWN BY: S								
PRO	DTO CYCLE:	07/30/21						
DO	CUMENT DATE	: 09/08/21						

![](_page_39_Picture_10.jpeg)

CUMENTS THAT DO NOT AVE THE ARCHITECT OR GINEER OF RECORD SEAL ND SIGNATURE SHALL BE ONSIDERED NOT FOR ONSTRUCTION

![](_page_39_Picture_12.jpeg)

E2

HEET:

		Supply From:					Р	hases:	3						Mains Type: MLO
		Mounting: Surface						Wires:	4						Mains Rating: 600A
lotes:		Enclosure: NEMA 1													MCB Rating:
скт	Notes	Circuit Description	Р	СВ	AMP	k	4 /A	E k\	3 /A	( k)	C /A	AMP	СВ	Р	Circuit Descri
4						00.00	40.00								
3	13	TRANSFORMER T4D	3	175	133 1	30.88	10.28	36 88	10.28			37 1	50	3	B05 PAN WASHER
5		112.5 KVA 480/3	Ũ							36.88	10.28	••••	0.0	Ũ	37.1 A, 480/3
7		PANEL H4P				17.21	9.70								D56 FRYER W/BSKT LIFT
9	13	480/277/3	3	150	62.1			17.21	9.70	17.04	0.70	35.0	45	3	35.0 A, 480/3 Shunt-trip breaker
13						3 88	12 19			17.21	9.70			┢	D58 FRVFR
15	13	BALER	3	30	14.0	0.00	12.10	3.88	12.19			44.0	60	3	44.0 A, 480/3
17		10 HF, 400/5								3.88	12.19				SHUNT-TRIP BREAKER
19	10	COMPACTOR	0	20	110	3.88	12.19	2.00	10.40			44.0	~~~	0	D58 FRYER
23	13	10 HP, 480/3	3	30	14.0			3.00	12.19	3 88	12 19	44.0	60	3	SHUNT-TRIP BREAKER
25						3.88	11.90			0.00	12.10				
27	13	BALER 10 HP 480/3	3	30	14.0			3.88	9.60			36.4 <b>70</b>	70	3	TRANSFORMER TPU
29						0.00	0.00			3.88	8.73				
31 12	13	COMPACTOR	3	30	14.0	3.88	3.60	3 88	3.60			13.0	20	2	
35 35	10	10 HP, 480/3	5	50	14.0			5.00	5.00	3.88	3.60	15.0	20	ľ	
37						5.99	3.60								
39	2	RTU-45	3	30	21.6			5.99	3.60	5.00	0.00	13.0	20	3	HCR AIR DOOR -480V/3 PI
-1						Dha	ο Δ.	130.0	6 k\/A	5.99	3.60 5 A				
						Pha	se B:	136.7	6 kVA	494	.2 A				
						Pha	se C:	135.8	9 kVA	490	.6 A				
												·			
oad Cl	assifica	ation	C	onneo	cted Loa	ad	Dem	and Fa	ctor	Esti	mated	Demano	k		Panel
tchen	•			1796	640 VA		(	<u>35.00%</u>		116766 VA					Tatal Oam a
anting	-			274	40 VA		1	25.00%			3425	VA			Total Conn. Lo
Receptacle -			189	+02 VA		1	00.00%			1880	. VA VA		I Otal Est. Dem		
lecepta				100			-	00.0070			1000	VA			Total Est. Dema
										1					
										1					
										1					

Notes:		Location: PICKUP STORAGE Supply From: TPU Mounting: Surface Enclosure: NEMA 1	E 94	6			F	Volts: Phases: Wires:	208Y/1 3 4	20 V					A.I.C. Rating: 10kA Mains Type: MCB Mains Rating: MCB Rating: 150A			
скт	Notes	Circuit Description	Р	СВ	AMP		A		3	(	C	AMP	СВ	Р	Circuit Description	N	lotes	СК
$\sim$												$\sim$	$\sim$			$\sim$	$\sim$	$\sim$
1 3	2,26	FREEZER DEFROST,FAN CONTROLLER (RCU2)	3	30	3.6	0.43	0.31	0.43	0.31	0.42		3.0	30	2	COOLER DEFROST, FAN CONTR (RCU3)	OLLER	2,26	2
$\frac{2}{2}$					tra	0.36	0.72			0.43	0.18 (		$\frac{20}{90}$	╘╴	COMAINTENANCE RECEPTACI			<del>v</del> å
9		MANGERS STATION	1	20	6.0	0.00	0.72	0.72	0.80			6.7	20	$\frac{1}{1}$	PRINTER	HUIGE		10
11		INSECT CONTROL	1	20	1.5			-		0.18	0.60	5.0	20	1	AUTOMATIC DOOR			12
$\frac{13}{2}$		PICKUP STORAGE LIGHTING	12	29	6.8	0.82	1.92					160	25	$\uparrow$	AIRCURTAIN	$\sim$	$\sim$	-14
15 17	2,27	RCU2	3	45	23.0		1 37	2.77	1.37	2.77	1.37	11.4	20	3	RCU3	2	2,27	16 18 20
21 23	2,27	RCU4	3	45	23.0		0.42	2.77	0.43	2.77	0.43	3.6	30	3	FREEZER DEFROST,FAN CONTR (RCU4)	ROLLER	2,26	20 22 24
		CARCELLIN	L			)2.11	0.43	0.00	0.00		(	حيرا	ىپ		Contraction of the second seco	m	لميد	
29		SPACE						0.00	0.00	0.00	0.00				SPACE			30
31		SPACE				0.00	0.00								SPACE			32
33		SPACE						0.00	0.00				-		SPACE			34
35		SPACE								0.00	0.00				SPACE			36
37		SPACE				0.00	0.00								SPACE			38
39		SPACE				_		0.00	0.00						SPACE			40
41		SPACE					-			0.00	0.00				SPACE			42
						Pha	se A:	11.90	) KVA	100	.3 A	-						
						Pha	se B:	9.60	kVA	81.	1 A	-						
						Pha	se C:	8.73	kVA	72.	8 A							
	laccific	ation	<u> </u>		stad La	ad	Dom	and Ea	otor	Ecti	matod	Domand	1		Panal Totals	<u> </u>		
Lighting				27/		au	Den	125 00%		LSU	3425		<b>,</b>		Failer Iotais	•		
	-			214				100 00%	)		25610				Total Conn. Load: 3	0 239 k\/A		
Recent				189				100.00 /0	,		1880				Total Est Demand: 3	0.200 KVA		
i vecehr				100				100.00%	J		1000	۷Л			Total Conn · 2	Δ		
															Total Est Demand: 8	4 A 6 A		
										_								

![](_page_40_Figure_2.jpeg)

		Location: Supply From: Mounting: Surface Enclosure: NEMA 1					P	Volts: Phases: Wires:	208Y/1 3 4	20 V					A.I.C. Ra Mains Mains Ra MCB Ra
Notes: CKT	Notes	Circuit Description	Р	СВ	AMP	k	A VA	E k\	B /A	( k)	C /A	AMP	СВ	Р	
4	10		4	20	2.0	0.26	0.50					4.0	20	1	
3	13		1	20	3.0	0.30	0.50	0.36	0.00			4.2	20		
5	24	SPARE	1	20	5.0			0.50	0.00	0.00	0.00		20	1	SPARE
7	24	SPARE	1	20		0.00	0.72			0.00	0.00	6.0	20	1	GATEWAY R
9	13	M04 SCALE/M11 WRAPPER	1	20	11.0	0.00	0.12	1.32	0.36			3.0	20	1	R/O WATER
11	13	P04 SCALE/P05 WRAPPER	1	20	12.5					1.50	0.36	3.0	20	1	R/O WATER
13	13	SEAFOOD RECEPTACLES	1	20	6.1	0.73	0.00						20	1	SPARE
15	24	SPARE	1	20				0.00	0.00				20	1	SPARE
17	24	SPARE	1	20						0.00	0.00		20	1	SPARE
19						0.56	1.67								
21	13	COMPRESSOR HSE PANEL	3	20	4.7			0.56	1.67			13.9	20	3	UH-1
23										0.56	1.67				
25	1					0.56	0.00								SPACE
27	13	COMPRESSOR HSE PANEL	3	20	4.7			0.56	0.00						SPACE
29							_			0.56	0.00				SPACE
						Pha	se A:	5.10	kVA	42.	7 A				
						Pha	se B:	4.83	kVA	40.	5 A				
						Pha	se C:	4.65	kVA	38.	8 A				
Load C	lassifica	ation	Co	onnec	ted Lo	ad	Dem	and Fa	ctor	Esti	mated	Deman	d		
Kitchen	-			355	50 VA			90.00%			3195	VA			
MISC -				887	70 VA		1	00.00%	)		8870	VA			٦
Recepta	acle -			216	60 VA		1	00.00%	)		2160	VA			Т
															T(

LOAD TYPE	CONNECTED LOAD						
ADDED LIGHTING:	0.82KVA						
ADDED HVAC:	20.73KVA						
ADDED MISC LOADS:	59.30KVA						
ADDED RECEPTACLE LOADS:	3.20KVA						
ADDED KITCHEN LOADS:	0.00KVA						
ADDED MOTOR LOADS:	0.00KVA						
ADDED TOTAL:	84.05KVA						
REMOVED TOTAL LOADS:	10.81KVA						
TOTAL LOAD:	73.24KVA						
EXISTING PEAK DEMAND LOAD:	976.25KVA						
781 KVA(@125%)							
TOTALS:	1049.49KVA						
(KVA*1000)/(480V)(V3):	1262.38AMPS						
EXISTING SERVICE SIZE	3000AMPS						
NOTE: EXISTING SERVICE LOAD HAS BEEN CALCULATED PER NEC 220.87							

AND METERING WITH UTILITY COMPANY. STORE ADDRESS:

UTILITY COMPANY: CONTACT:

PHONE:

FAULT	FAULT		FEEDER	XFMR	С	CONDUCTOR	VOLTAGE	NUMBER	NUMBER	CALCULATED	CONDUIT &	CONN.	VOLTAGE
LABEL	LOCATION	A.F.C.	SIZE	KVA	VALUE	LENGTH	L-L	OF	OF SETS	FAULT VALUE	CONDUCTOR	LOAD	DROP*
		(A)			(OR %Z)	(FT)	(V)	PHASES		(A)		(AMPS)	(%)
1	MSB	26702	750		24137	40	480	3	7	26106	COPPER	1284	0.09%
2	H4B	26106	350		19704	690	480	3	2	9854	COPPER	422	2.77%
4	SWITCH	9854	3		4774	100	480	3	1	5647	COPPER	70	0.65%
5	TPU	5647	3	45	4774	15	480	3	1	4136	COPPER	70	0.10%
-ê-	P	4136	1/0		8925	15-	208	3	h	3910		<b>4</b> 3	415%
	RCU-2	3910	8	• •	1557	55	208	3		1818	COPPER	23	0.80%
8	RCU-3	3910	12		617	35	208	3	1	1373	COPPER	11	0.62%
ا ه	BCU-4	3910	س ہم		1557 J	سقة س	م ²⁰⁸ م	سهما	m ¹ m	بر 1 ⁸¹⁸ د در	COPPER .	بہ <del>23</del> م	0,80%
10	HCR DOOR-1	9854		$P \cup$	1557	115	480	$  {}_{3} {}_{3}$	$\downarrow \downarrow \downarrow$	2717	COPPER	13	0.41%
11	HCR DOOR-2	9854			1557	145	480	3	h	2286	COPPER	13	0.52%
12	KĚ2-40	3910	10		981	52	208		1	1306	COPPER	3	0.17%
¥ 13	KE2-49	3910	م 10 م		م ¹ 89 م	L 455 L	208	ستحسد	1 m	به م ¹³⁸ 4 م	COPPER	h .A	0,19%
14	RTU-45	9854			1557	140	480	$\sim$ $3$	$\gamma$	2348	COPPER	22	0.85%
* VOLTA	AGE DROP (%)	- POINT	TO POINT	CALCU	JLATION								
** VOLT	AGE DROP TO	TAL - TO	TAL VOLT	AGE DI	ROP BACK	TO SERVICE							

![](_page_40_Figure_8.jpeg)

#12

760 FT.

480 FT.

277 VOLT

1-5 AMPS

GFI BREAKER FOR EQUIPMENT PROTECTION (30MA).

BREAKER IS NOT SERVING AN EXISTING LOAD. IF NO PROVIDE FILLER PLATE, IF BREAKER IS SERVING A IDENTIFICATION SCHEDULE AS "SPACE" OR INDICATE

. DUAL TAP SOLENOID OPERATED BREAKER. CONNECT

CONDITION OF CIRCUIT BREAKER TO ENSURE THAT IT

UTILIZING EXISTING RELAY AND CONTROLS. UPDATE

SCHEDULE FOR LOAD SERVED. IF CIRCUIT IS NOT IN

SERVING A LOAD, IDENTIFY LOAD SERVED. UPDATE CIRCUIT IDENTIFICATION SCHEDULE AS "SPARE" OR

SCHEDULE FOR LOAD SERVED. IF CIRCUIT IS NOT IN

EXISTING PANELBOARDS OR DISTRIBUTION BOARDS

#10	#8	#6
825 FT.	490 FT.	770 FT.
60 FT.	245 FT.	385 FT.
10 FT.	165 FT.	255 FT.
#10	#8	#6
'60 FT.	1170 FT.	1865 FT.
80 FT.	585 FT.	930 FT.
250 FT.	390 FT.	620 FT.

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY

![](_page_40_Picture_43.jpeg)

### 7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

PUSE C CONT DATE SUITA SUITA SUITA SUITA REPR REDR REUS REUS

![](_page_40_Picture_49.jpeg)

	ISSUE BLOCK									
2	PR#2	03/18/22								
4	ADD#6	07/07/22								
CH	ECKED BY:	SG								
DR/	AWN BY:	SI								
PRO	OTO CYCLE:	07/30/21								

DOCUMENT DATE: 09/08/21

![](_page_40_Picture_52.jpeg)

DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION

![](_page_40_Picture_54.jpeg)

E3

SHEET:

Notes:		Location: Supply From: Mounting: Surface Enclosure: NEMA 1					Ρ	Volts: hases: Wires:	480Y/2 3 4	77 V					A.I.C. Rating: 18kA Mains Type: MLO Mains Rating: 600A MCB Rating:
СКТ	Notes	Circuit Description	Р	СВ	AMP	k)	A /A	l k\	B /A	( k)	C /A	AMP	СВ	Р	Circuit Descr
1 3 5	13	TRANSFORMER T4D 112.5 KVA 480/3	3	175	133.1	36.88	10.28	36.88	10.28	36.88	10.28	37.1	50	3	B05 PAN WASHER 37.1 A, 480/3
7 9 11	13	PANEL H4P 480/277/3	3	150	62.1	17.21	9.70	17.21	9.70	17.21	9.70	35.0	45	3	D56 FRYER W/BSKT LIFT 35.0 A, 480/3 SHUNT-TRIP BREAKER
13 15 17	13	BALER 10 HP, 480/3	3	30	14.0	3.88	12.19	3.88	12.19	3.88	12.19	44.0	60	3	D58 FRYER 44.0 A, 480/3 SHUNT-TRIP BREAKER
19 21 23	13	COMPACTOR 10 HP, 480/3	3	30	14.0	3.88	12.19	3.88	12.19	3.88	12.19	44.0	60	3	D58 FRYER 44.0 A, 480/3 SHUNT-TRIP BREAKER
25 27 29	13	BALER 10 HP, 480/3	3	30	14.0	3.88	12.68	3.88	10.38	3.88	9.64	39.3	70	3	TRANSFORMER TPU
31 33 35	13	COMPACTOR 10 HP, 480/3	3	30	14.0	3.88	3.60	3.88	3.60	3.88	3.60	13.0	20	3	HCR AIR DOOR -480V/3 F
37 39 41	2	RTU-45	3	30	21.6	5.99	3.60	5.99	3.60	5.99	3.60	13.0	20	3	HCR AIR DOOR -480V/3 F
						Phas Phas Phas	se A: se B: se C:	139.8 137.5 136.8	4 kVA 4 kVA 0 kVA	505 496 493	.3 A .9 A .9 A	-			
<b>Load C</b> Kitchen	assifica -	ation	Co	<b>onne</b> 1796	<b>cted Lo</b> 640 VA	ad	Dem	and Fa 65.00%	ctor	Esti	i <b>mated</b> 116766	<b>Demano</b> 3 VA	t		Pane
Lighting MISC - Recepta	- Icle -			274 2307 17(	40 VA 102 VA 00 VA		1 1 1	25.00% 00.00% 00.00%	) ) )		3425 230102 1700	VA 2 VA VA			Total Conn. L Total Est. Dem Total C Total Est. Dem
Notes:															

Location: PICKUP STORAGE 946 Supply From: TPU Mounting: Surface Enclosure: NEMA 1 Notes:							F	Volts: Phases: Wires:	208Y/1 3 4	20 V				A.I.C. Rating: 10kA Mains Type: MCB Mains Rating: MCB Rating: 150A						
скт	Notes	Circuit Description	Р	СВ			A		В		C		СВ	Р	Circuit Description	Notes	ск			
1 3 5	2,26	FREEZER DEFROST, FAN CONTROLLER	3	45	7.2	0.86	0.30	0.86	0.30	0.86	0.30	2.5	30	3	COOLER DEFROST, FAN CONTROLLER	2,26	2 4 6			
7		LEAK DETECTION PANEL	1	20	3.0	0.36	0.72					6.0	20	1	COOLER DOOR HEATER & HEAT TRACE	2	8			
9		MANGERS STATION	1	20	6.0	0.00	•…=	0.72	0.80			6.7	20	1	PRINTER	_	10			
11		INSECT CONTROL	1	20	1.5					0.18	0.60	5.0	20	1	AUTOMATIC DOOR		12			
13		PICKUP STORAGE LIGHTING	1	20	6.8	0.82	1.92					16.0	25	K	AIR CURTAIN	2	14			
15								5.96	1.74				$\sim$	12			16			
17	2,27	RCU-2	3	100	49.6					5.96	1.74	14.5	30	3	RCU-3	2,27	18			
19	1					5.96	1.74					Mr.					20			
21		SPACE						0.00	0.00			22			SPACE		22			
23		SPACE								0.00	0.00				SPACE		24			
25		SPACE				0.00	0.00								SPACE		26			
27		SPACE						0.00	0.00						SPACE		28			
29		SPACE								0.00	0.00				SPACE		30			
31		SPACE				0.00	0.00								SPACE		32			
33		SPACE						0.00	0.00						SPACE		34			
35		SPACE								0.00	0.00				SPACE		36			
37		SPACE				0.00	0.00								SPACE		38			
39								0.00	0.00	0.00	0.00				SPACE					
41		SPACE					-	10.0		0.00	0.00				SPACE		42			
						Pha	ase A:	12.68	3 KVA	106	.6 A	-								
						Pha	ase B:	10.38	8 kVA	87.	4 A									
						Pha	ase C:	9.64	· kVA	80.	3 A									
oad C	lassifica	tion	C	nne	rted I o	ad	Dem	and Fa	ctor	Fsti	imated	Demano	1		Panel Totals					
ighting	-			274		uu	2011	125 00%			3425		•							
				282	60 VA			100 00%	,		28260				Total Conn. Load: 32.7 kV/A					
lioo -				170					,		1700									
ecepia				170	70 VA			100.00%	J		1700	۷n								
															Total Est. Demand: 93 A					

![](_page_41_Figure_2.jpeg)

Notes:		Ex. Panel: L4D1 Location: Supply From: Mounting: Surface Enclosure: NEMA 1					F	Volts: Phases: Wires:	208Y/1 3 4	20 V					A.I.C. Ra Mains T Mains Ra MCB Ra
скт	Notes	Circuit Description	Р	СВ	AMP	k	A VA	l k\	3 /A	( k)	C /A	AMP	СВ	Р	c
1	13	LPTV	1	20	3.0	0.36	0.00						20	1	SPARE
3	13	LPTV	1	20	3.0			0.36	0.00				20	1	SPARE
5	24	SPARE	1	20						0.00	0.00		20	1	SPARE
7	24	SPARE	1	20		0.00	0.72					6.0	20	1	GATEWAY R
9	13	M04 SCALE/M11 WRAPPER	1	20	11.0			1.32	0.36	-		3.0	20	1	R/O WATER F
11	13	P04 SCALE/PO5 WRAPPER	1	20	12.5					1.50	0.36	3.0	20	1	R/O WATER F
13	13	SEAFOOD RECEPTACLES	1	20	6.1	0.73	0.00						20	1	SPARE
15	24	SPARE	1	20				0.00	0.00				20	1	SPARE
1/	24	SPARE	1	20		0.50	4.07			0.00	0.00		20	1	SPARE
19	12			20	47	0.56	1.67	0.56	1.67			12.0	200		
21	13	COMPRESSOR HSE PANEL	3	20	4.7			0.56	1.07	0.56	1.67	13.9	20	1°	
25						0.56	0.00			0.50	1.07				SDACE
23	13	COMPRESSOR HSE PANEL	3	20	47	0.50	0.00	0.56	0.00						SPACE
20	13	COMPRESSORTISE PANEL		20	4.7			0.50	0.00	0.56	0.00				SPACE
25						Pha	<u>ςο Δ΄</u>	4.60	k\/Δ	38	3 A				
						Dha	50 A.	4.00		40	2 1				
						Pha	se D. se C.	4.05		40.	3 A 8 A				
						1110	30 0.	4.00	NVA	50.	07				
Load C	lassifica	ation	Co	onneo	cted Lo	ad	Dem	nand Fa	ctor	Esti	mated	Demano	b		
Kitchen	-			355	50 VA			90.00%			3195	VA			
MISC -				837	70 VA		-	100.00%	)		8370	VA			Т
Recepta	acle -			216	60 VA		-	100.00%	)		2160	VA			Тс
															Тс
										+					
Notes										1					
10103.															

MSB LOAD SUMMARY						
LOAD TYPE	CONNECTED LOAD					
ADDED LIGHTING:	0.82KVA					
ADDED HVAC:	41.04KVA					
ADDED MISC LOADS:	57.30KVA					
ADDED RECEPTACLE LOADS:	3.02KVA					
ADDED KITCHEN LOADS:	0.00KVA					
ADDED MOTOR LOADS:	0.00KVA					
ADDED TOTAL:	102.18KVA					
REMOVED TOTAL LOADS:	10.81KVA					
TOTAL LOAD:	91.37KVA					
EXISTING PEAK DEMAND LOAD: 781 KVA(@125%)	976.25KVA					
TOTALS:	1067.62KVA					
(KVA*1000)/(480V)(√3):	1284.18AMPS					
EXISTING SERVICE SIZE	3000AMPS					
NOTE: EXISTING SERVICE LOAD HAS BEEN CAL	CULATED PER NEC 220.87					

AND METERING WITH UTILITY COMPANY.

UTILITY COMPANY

CONTACT:

PHONE:

STORE ADDRESS:

ᡊᢇᠬ᠇ᠬ᠇ᠬ᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇᠇ FAULTFAULTFEEDERXFMRCCONDUCTORVOLTAGENUMBERNUMBERCALCULATEDCONDUIT &<br/>CONDUCTORCONN.VOLTAGEVOLTAGELABELLOCATIONA.F.C.SIZEKVAVALUELENGTHL-LOFOF SETSFAULT VALUECONDUCTORLOADDROP*DROP*(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)</td 26106 COPPER 1284 0.09% MSB 26702 750 24137 40 480 0.09% 422 2.77% 2.86% H4B 26106 350 19704 690 480 9854 COPPER SWITCH 9854 4774 100 5647 COPPER 70 0.65% 3.51% 480 TPU 5647 4774 15 480 4136 COPPER 70 0.10% 3.60% 45 LPU | 4136 | 8925 208 3910 COPPER 93 0.15% 3.76% 15 1/0 - 3 3806 2913 RCU-2 3910 208 COPPER 50 0.52% 4.28% 40 1557 1911 RCU-3 3910 50 208 COPPER 15 0.48% 4.23% 1557 2717 115 COPPER 13 0.41% 3.27% 9 |CR DOOR- 9854 480 1557 145 2286 COPPER 13 0.52% 10 |CR DOOR- 9854 480 3.38% 1557 22 | 0.85% | 3.71% 140 2348 COPPER 11 | RTU-45 | 9854 | 8 480 * VOLTAGE DROP (%) - POINT TO POINT CALCULATION ** VOLTAGE DROP TOTAL - TOTAL VOLTAGE DROP BACK TO SERVICE

![](_page_41_Figure_8.jpeg)

WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

GFI BREAKER FOR EQUIPMENT PROTECTION (30MA).

BREAKER IS NOT SERVING AN EXISTING LOAD. IF NO PROVIDE FILLER PLATE, IF BREAKER IS SERVING A IDENTIFICATION SCHEDULE AS "SPACE" OR INDICATE

DUAL TAP SOLENOID OPERATED BREAKER. CONNECT

CONDITION OF CIRCUIT BREAKER TO ENSURE THAT IT

UTILIZING EXISTING RELAY AND CONTROLS. UPDATE

SCHEDULE FOR LOAD SERVED. IF CIRCUIT IS NOT IN

SCHEDULE FOR LOAD SERVED. IF CIRCUIT IS NOT IN

EXISTING PANELBOARDS OR DISTRIBUTION BOARDS

6-10 AMPS 240 FT. 380 FT.

11-15 AMPS | 160 FT. | 250 FT.

WORKERS WITH THIS KNOWLEDGE.

#8	#6
490 FT.	770 FT.
245 FT.	385 FT.
165 FT.	255 FT.
#8	#6
1170 FT.	1865 FT.
585 FT.	930 FT.
390 FT.	620 FT.

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY

![](_page_41_Picture_42.jpeg)

![](_page_41_Picture_43.jpeg)

### 7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

WDPARTNERS.COM

![](_page_41_Figure_46.jpeg)

![](_page_41_Figure_48.jpeg)

 $\mathcal{N}$ 

 $\square \cap$ 

>>

 $\bigcirc$ 

![](_page_41_Picture_49.jpeg)

	ISSUE BLOCK								
2	PR#2	03/18/22							
CHE	ECKED BY:	SG							
DRA	WN BY:	SI							
PRC	DTO CYCLE:	07/30/21							
DOC	: 09/08/21								

....... 03/21/2022

DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION

![](_page_41_Picture_53.jpeg)

E3

SHEET:

DESIGN LOADS		GENERAL NOTE
<ol> <li>BUILDING CODE         <ul> <li>A. BUILDING CODE</li> </ul> </li> <li>2. GRAVITY LOADS             <ul> <li>A. REFER TO MANUFACTURER'S RATED LOADS.</li> </ul> </li> </ol>	2018 WASHINGTON STATE BUILDING CODE (2018 WASBC)	<ul> <li>1.0 GENERAL</li> <li>1.1 ALL FIXTURES SHALL BE DESIGNED TO MEET ALL BUIL SECTION 2209.1 OF THE 2018 WASBC.</li> <li>1.2 JOHNSTON BURKHOLDER ASSOCIATES HAS DESIGNED FIXTURES SHOWN ON THIS INSTALLATION DRAWING TO FORCES FOR THE BUILDING CODES NOTED IN THE "DE INSTALLATION OF THE FIXTURES SHALL MEET THE LAY</li> </ul>
<ul> <li>3. LATERAL LOADS <ul> <li>A. SEISMIC LOADS</li> <li>1. 5% DAMPED SPECTRAL RESPONSE COEFF (Sds)</li> <li>2. 1-SEC PERIOD SPECTRAL RESPONSE COEFF (Sd1)</li> <li>3. SEISMIC DESIGN CATEGORY</li> <li>4. SEISMIC SITE CLASS</li> <li>5. NON-BUILDING STRUCTURAL SYSTEM AND SEISMIC RESISTING SYSTEM</li> <li>6. RESPONSE MODIFICATION FACTOR (R)</li> <li>7. OVERSTRENGTH FACTOR (Ω0)</li> <li>8. IMPORTANCE FACTOR (Ip)</li> <li>STORAGE AREA</li> <li>9. ANALYSIS PROCEDURE</li> <li>10. DESIGN BASE SHEAR (PER RMI 2.6.2)</li> <li>STORAGE AREA RACKS</li> </ul> </li> </ul>	1.009 g 0.541 g D D (DEFAULT) STEEL STORAGE RACKS 4.0 2.0 1.0 (NO PUBLIC ACCESS) EQUIVALENT LATERAL FORCE 0.252W (NO PUBLIC ACCESS)	<ul> <li>2.0 SLAB AND FOUNDATION</li> <li>2.1 SLAB ON GRADE IS ASSUMED TO HAVE A MINIMUM OF</li> <li>2.2 THE SLAB ON GRADE IS ASSUMED TO BE A MINIMUM O PLACED OVER A MINIMUM OF 4 INCHES OF DRAINAGE</li> <li>2.3 THE SLAB ON GRADE IS DESIGNED TO BEAR ON A NET MINIMUM.</li> <li>3.0 MATERIAL FOR RACKS AND ANCHORAGE</li> <li>3.1 ALL ANCHORS TO THE SLAB SHALL BE AS NOTED ON T</li> <li>3.2 OWNER IS TO PROVIDE MAINTAINENCE PER RMI 1.4.1.</li> <li>3.3 FIXTURE INSTALLER SHALL OBTAIN OUT-OF-PLUMB INS SUPPLIER PRIOR TO INSTALLATION PER RMI, SECTION</li> <li>3.4 NO FIELD WELDING IS PERMITTED. ALL WELDING SHAL WELDERS, IN AN APPROVED SHOP. USE E70xx WELD R OF BASE METAL OF WELDMENTS. PER AWS D1.1 OR D</li> <li>3.5 PROVIDE 6" AT 120" TALL RACKS AND 4 1/2" AT RACKS I THE UPRIGHT FRAME HEIGHT) MINIMUM CLEARANCE B ADJACENT BUILDING ELEMENTS PER ASCE 7-16, SECT</li> </ul>
SPECIAL INSPECTIONS REQUIR	ED	
SPECIAL INSPECTION AS REQUIRED BY S OF THE 2018 WASHINGTON STATE BUILDI BY THE ENGINEER OF RECOR	ECTION 1704 NG CODE OR D:	
PERIODIC SPECIAL INSPECTIONS:		

1. POST INSTALLED ANCHORS - MECHANICAL - USED FOR THE ANCHORAGE OF STORAGE RACK OR SALES FLOOR SHELVING FIXTURES, PER SECTION 1705.3, TABLE 1705.3(4.b.) AND 1705.3, TABLE 1705.3(4.b.) OF THE 2018 WASHINGTON STATE

1. SPECIAL INSPECTIONS NOTED ABOVE SHALL BE PROVIDED BY, BUT

REFERENCE SPECIFICATIONS FOR DETAILS.

SHEET FXS1.

NOTES:

BUILDING CODE FOR EACH ANCHOR LISTED IN THE "ANCHOR BOLT DETAIL" ON

NOT LIMITED TO, THE OWNER'S CONSTRUCTION TESTING LABORATORY (CTL).

![](_page_42_Figure_1.jpeg)

![](_page_42_Figure_2.jpeg)

S	CK FIXTURE SCH	EDULE		ANC			
		FIXTURE	TOP SHELF		MAX SHELF		
DING CODE REQUIREMENTS INCLUDING		STORAGE RACK	72"	FRAME : 24-72 075A	1200	ANCHOR	DEWALT SCRE
	0	STORAGE RACK	72"	FRAME : 44-72 075A	1200	NOTES.	
O RESIST DESIGN SEISMIC LATERAL	OGP2	STORAGE RACK	90"	FRAME : 46-90 OGP	600	1. ANCHOR E	BOLTS AS NOTED AF
ESIGN LOADS" TABLE ON THIS SHEET. YOUT SHOWN ON THE FIXTURE LAYOUT	OGP5	STORAGE RACK	90"	FRAME : 22-90 OGP	120	GENERAL	CONTRACTOR (GC).
F 4 INCHES THICK, UNREINFORCED AND FILL. SOIL BEARING CAPACITY OF 500 PSF		RACK FIXTURE N CONFIGURATION FRAME POST TY REF SCHEDULE FRAME POST W/ (INCHES, 075 = 0	MARK (SHELF N VARIES - BY OWNEI (PE, (A = UA) ALL THICKNESS 0.075")	R) B NEW RACK EXISTING F RELOCATE EXISTING F	K RACK ED EXISTING RACK RACK WITH NEW		
STALLATION TOLERANCE FROM FIXTURE		FRAME HEIGHT			NFIGURATION		
LL BE PERFORMED BY CERTIFIED RODS OR EQUAL TO TENSILE STRENGTH 01.3.	T	("24/44" = DESK) ("YP RACK FIXTURE	<u>SYMBOL</u>	RACK SYMBOL	FRAMES		
LESS THAN 120" (OR EQUAL TO 5% OF BETWEEN OTHER RACK FIXTURES OR TION 15.5.3.3.4.		RACK FRAM	ME & ANCHORA	GE SCHEDULE			
	FRA	ME MARK	ANCHOR DET	AIL FRAM	IE COUNT		
	22	2-90 OGP	3-FXS1 & 4B-FX	S1	2		
	24	-72 075A	3-FXS1 & 4A-FX	S1	8		

3-FXS1 & 4A-FXS1

3-FXS1 & 4B-FXS1

44-72 075A

46-90 OGP

![](_page_42_Figure_4.jpeg)

HORAGE BILL OF MATERIALS	
MATERIAL TYPE	COUNT
CREW BOLT+ - 1/2" DIAMETER x 3" (#PFM1411380)	38
REW BOLT+ - 3/8" DIAMETER x 2 1/2" (#PFM1411220)	40
RE FURNISHED BY AND INSTALLED BY THE ).	

![](_page_42_Figure_6.jpeg)

FIXTURE ANCHORAGE PARTIAL PLAN

![](_page_42_Picture_8.jpeg)

THE QUAN WORK INC AND ACCO	ITITIES (COUNT LUDED IN THE DUNTING OF TH	) OF ITEMS LISTED IN THIS SCHEDULE MAY NOT ACCU CONTRACT DOCUMENTS. ACTUAL QUANTITY (COUNT) E CONTRACT DRAWINGS.	IRATELY REPRESENT THE ACTUAL Q ) OF OWNER SUPPLIED ITEMS SHALL	UANTITY REQUIRED TO COMPLETE THE SCOPE OF BE DETERMINED THROUGH A THOROUGH REVIEW
		OWNER	SUPPLIED ITEMS	
	VENDOR			
WDS #		Family	ТҮРЕ	MODEL
EL0016	1000041247	26_Lighting_Exit_Wall_Acuity_LQM	Type16	RED: LQM S W 1 R 120/277 EL N SD90 M6 GREEN: LQM S W 1 G 120/277 EL N SD90 M6
EL0001	1000041247	26_Lighting_Surface_Strip_Acuity_CLX	Туре1	CLX L96 10000LM HEF RDL MVOLT EOHN 40K 80CRI PLR1G AE1CD WH
AES INDUS MD0011	TRIES INC 1000059359	23_HVAC_Supply_Drop_Box_2-4Way1	Drop_Box_DB5_4Way	ADB-1-10-4
ECOLAB IN FR2026	IC 1000057606	FURN - Insect Control Unit D	Default	STEALTH MAXIMA
EMERSON RB0006	CLIMATE TECH 1000214394	NOLOGIES RETAIL 23_Refrigeration_EMS_Horn_Strobe_Emerson	Horn Strobe	868STR
RB0009 RB0013 RB0016	1000214394 1000214394 1000214394	23_Refrigeration_EMS_Leak_Detection_Panel_Emerson 23_Refrigeration_EMS_Leak_Detection_Sensor_Emerson 23_Refrigeration_EMS_Leak_Detection_Zone_Alarm_Em	LDP MRLDS Zone Alarm	MRLDS
RDUUIO	1000214394	erson		
HAINES JC GR1000	NES & CADBUR 1000121534	Y LLC HJC GROCERY - Edge Protection	GROCERY - Edge Protection	[209-045-06][70-WS-EncNet5][W42]
HUSSMAN	N CORPORATIO	N 23_Refrigeration_Condensing_Unit_Hussmann 23. Refrigeration_Evaporator_Coil_Krack_GL_D_Hussma	Condensing Unit	GL 66D-268
RE0378	1000048208	23_Refrigeration_Evaporator_Coil_Krack_KR_E_Hussma	KR64E-220	KR64E-220
		nn		
R0620.001 R0700.000	1000713318           1000713318	DOOR - WalkIn Door Swing DOOR - WalkIn HCR	42x90 42x90	VARIES PCAV
	IDUSTRIES INC			
MR0476	1000185327	23_HVAC_RTU_Lennox_Strategos_SGH	5_TON_480V_150MBH	SGH060H4EX1G
ELO050	1000077474	26_Lighting_Sealed_Strip_LSI_EG3	Туре50	W/M EG3 4 LED 6L DA S UNV DIM 40 980 SL
NOVAR	1000211094	23_Refrigeration_EMS_ES1_LCD_XFMR_Refrigeration_G	Novar ES1 w/ XFMR	ES1
	1000211094	23_Refrigeration_EMS_ES1_LCD_XFMR_Refrigeration_G ateway_Novar	Novar xcm.LCD w/ XFMR	xcm.LCD
RB0031	1000211094 1000211094	23_Refrigeration_EMS_Evap_Controller_Enclosure_KE2 23_Refrigeration_EMS_XIO_Enclosure_Novar	KE2 Evap 40A (20178/20844) 1 XIO Enclosure	20178/20844
ORBIS			Default	
PU1075		PICKUP - Tote	Default	UR2416-10, 3H (NPL-678)
EL0027 EL0018	1000046047 1000046047	26_Lighting_Emergency_Battery_Rexel_EVHC 26_Lighting Emergency Ceiling Rexel EVHC	Type27 Type18	EVHC6IDP-0-WM W/ EVODW EVHC6IDP-WM
STANLEY	ACCESS TECHN		· ··	
PU1142	1000152469	PICKUP - Surface Mtd_Bi-Parting Door_Solid	144"	DURA-GLIDE 2000 SERIES
STAR GUA EX5005	RD LLC 1000144099	PROTECT - Bollard	INT-4" FLOOR MOUNTED GALV 32"H-OW	UNKNOWN
			ארייעע ארייעע ארייעע	

# SHEE

1. THE QUANTITIES (CC PURCHASED BY OWNER "OWNER SUPPLIED ITEM ACCURATELY REPRESE REQUIRED TO COMPLE INCLUDED IN THE CONT ACTUAL QUANTITY (CO ITEMS SHALL BE DETER THOROUGH REVIEW AN CONTRACT DRAWINGS. 2. REFERENCE APPENE SPECIFICATIONS TO DE RESPONSIBLE FOR THE FURNISHED PRODUCTS

> MATERIAL VENDOR EQUIPMEN

> > VENDOR

VENDOR ACUITY BRANDS LIGHTING II AES INDUSTRIES INC ECOLAB INC EMERSON CLIMATE TECHNO RETAIL HAINES JONES & CADBURY LI HUSSMANN CORPORATION KPS GLOBAL LLC LENNOX INDUSTRIES INC LSI INDUSTRIES INC

NOVAR NOVAR1000211001ORBISTBDREXEL USA INC1000046047STANLEY ACCESS TECHNOLOGIES LLC1000152469

STAR GUARD LLC

ET NOTES				
COUNT) OF ITEMS ER AS SCHEDULED ON THIS EMS" SHEET MAY NOT SENT THE ACTUAL QUANTITY LETE THE SCOPE OF WORK NTRACT DOCUMENTS. OUNT) OF OWNER SUPPLIED ERMINED THROUGH A AND ACCOUNTING OF THE IS.				
NDIX A IN THE DETERMINE WHO IS HE INSTALLATION OF OWNER TS.				
L VENDOR LIST				
	VENDOR SAP			
NT VENDOR LIST	г			
	VENDOR SAF #			
IG INC	1000041247			
	1000059359			
	1000057606			
HNOLOGIES	1000214394			
RY LLC HJC	1000121534			
NC	1000048208			
	1000713318			

1000185327 1000077474 1000211094

1000144099

![](_page_43_Picture_10.jpeg)

# 7007 DISCOVERY BLVD DUBLIN, OH 43017 614.634.7000 T

![](_page_43_Figure_13.jpeg)

![](_page_43_Picture_14.jpeg)

DOCUMENTS THAT DO NOT HAVE THE ARCHITECT OR ENGINEER OF RECORD SEAL AND SIGNATURE SHALL BE CONSIDERED NOT FOR CONSTRUCTION

![](_page_43_Picture_16.jpeg)

OS1

SHEET:

WALMART SUPERCENT	⊐ [
PICKUP EXPANSION	
02403-278, 310 31ST AVE SE	
CITY OF PUYALLUP, COUNTY OF PIERCE, STATE	
CONSTRUCTION DOCUMENTS	

CONTACTS

PROPERTY OWNER WAL-MART STORES INC. 702 S.W 8TH ST. BENTONVILLE, AR 72716 DUDALE: 1, 200, 025, 5278 PHONE: 1-800-925-6278 ENGINEER GALLOWAY & COMPANY, INC. 6162 S. WILLOW DRIVE, SUITE 320 GREENWOOD VILLAGE, COLORADO 80111 TEL: (303) 770–8884 FAX: (303) 770–3636 ATTN: BRANDON ALLEY, PE EMAIL: brandonalley@gallowayus.com PREPARER GALLOWAY & COMPANY, INC. 6162 S. WILLOW DRIVE, SUITE 320 GREENWOOD VILLAGE, COLORADO 80111 TEL: (303) 770–8884 FAX: (303) 770–3636 ATTN: MAGGIE CORDER EMAIL: maggiecorder@gallowayus.com

AGENCY CONTACTS DEVELOPMENT & PLANNING SERVICES development engineering 333 s. meridian puyallup, wa 98371 contact: josh kubitza, aicp tel: (253) 284-0270

BUILDING DIVISION city of puyallup 333 s. meridian puyallup, wa 98371 tel: (253) 864–4165

![](_page_44_Picture_5.jpeg)

Add Construction Sequence. See COP Standards Section 501.6 for guidance. [Civil Plans, CS0]

# OF WASHINGTON

![](_page_44_Picture_7.jpeg)

<u>VICINITY MAP</u> 1"=200'

SHEET LIST TABLE		
SHEET NUMBER	SHEET TITLE	
CSO	COVER SHEET	
CS1	PICKUP DEMOLITION & SITE PLAN	
CS1A	HORIZONTAL CONTROL PLAN	
CS2	SITE SIGNAGE PLAN	
CS3	SITE DETAILS	
CS4	GRADING PLAN	
CS5	SEDIMENT & EROSION CONTROL INITIAL PLAN	
CS6	SEDIMENT & EROSION CONTROL INTERIM & FINAL PLAN	
CS7	UTILITY PLAN	
L1.0	LANDSCAPE PLAN	
L1.1	LANDSCAPE NOTES & DETAILS	
IR1.0	IRRIGATION PLAN	

N

	NOTE: CONTRACTOR MUST COORDINATE WORK WITH UTILITY OF BEGINNING WORK AND IS RESPONSIBLE FOR ALL MATERIALS, COMPLETE WORK AND RESTORE AREA TO SAME STATE PRIOF	COMPANY AND CITY PRIOR TO LABOR, REPAIRS, ETC. TO R TO STARTING WORK	Vay
	CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMAT WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. TI IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPI	ION FOR FINAL ACCEPTANCE OF 7 DISTRICT OR ANY OTHER AGENCY HIS INFORMATION MAY INCLUDE, BUT ECTIONS AND REPORTS.	A. Suite 107 5, CO 80920
	CONTRACTOR RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTAN DISTRICTS OR ANY OTHER GOVERNING AGENCY.	, REPORTS AND/OR ANY OTHER NCE OF WORK FROM CITY, UTILITY	Colorado Spring Colorado Spring CallowayUS.cc
	UNLESS OTHERWISE NOTED, CONTRACTOR TO PROTECT LAND MATCH IF DISTURBED. CONTRACTOR TO CAP AND REINSTALL	ISCAPING IN PLACE AND REPLACE TO . IRRIGATION AS NECESSARY TO	
	NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY SHALL HAVE LICENSED SURVEYOR REPLACE ANY DAMAGED (	/ MONUMENTATION. CONTRACTOR OR DISTURBED MONUMENTATION AT	
	THEIR COST. SURVEYOR TO OBTAIN AUTOCAD FILE FROM ENGINEER AND A DIMENSIONING PRIOR TO CONSTRUCTION STAKING. SURVEYOI BASIS OF BEARING AND DATUM INFORMATION TO ENSURE IM HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DESI PRIOR TO CONSTRUCTION STAKING ANY DISCREPANCY MUST	VERIFY ALL HORIZONTAL CONTROL R MUST VERIFY ALL BENCHMARK, IPROVEMENTS WILL BE AT THE SAME IGN CONSTRUCTION DRAWINGS. BE REPORTED TO OWNER AND	A FOR REUSE AS PREPARED FOR AS PREPARED FOR FIC SITE AT: USLY WITH ITS ISSUE /2021, AND IT IS NOT SE ON A DIFFERENT ANOTHER PROJECT ANOTHER PROJECT ERVICES OF PROJECT ERVICES OF PROJECT FUIS INAMING FOR THIS INAMING FOR FUIS FOR DEGINERS.
	ENGINEER PRIOR TO CUNTINUATION OF ANT FURTHER STARTIN NOTE: LENGTHS OF STORM/SANITARY SEWER ARE THE HORI, OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWI SHOWN ARE APPROXIMATE AND COULD VARY DUE TO VERTIC WDTHS.	IG OR CONSTRUCTION WORK. ZONTAL DISTANCES FROM CENTER ISE NOTED. THEREFORE, LENGTHS CAL ALIGNMENT AND STRUCTURE	STIPULATION THIS DRAWING WI USE ON A SPECIL USE ON A SPECIL PUYALLUP, WA CONTEMPORANGO DATE ON 09/08, SUITABLE FOR U PROJECT SITE OF USE OF THIS DR OR EXAMPLE ON REQUIRES THE S LICENSED ARCH
	<ul> <li><u>CAUTION</u> — <u>NOTICE</u> <u>TO</u> <u>CONTRA</u></li> <li>ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PRC COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTO THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHE NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANY CONSTRUCTION.</li> <li>WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILIT RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VI UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE ME THE ENGINEER PRIOR TO CONSTRUCTION.</li> </ul>	ACTOR WIDED BY THE APPROPRIATE UTILITY SURVEY AND IS TO BE CONSIDERED W'S RESPONSIBILITY TO FIELD VERIFY ETHER SHOWN ON THE PLANS OR CIES TO THE ENGINEER PRIOR TO ITY, IT IS THE CONTRACTOR'S ERTICAL LOCATION OF SUCH EXISTING ETHOD. REPORT INFORMATION TO	ANDON ALL ANDON ALL ANDON ALL ANDON ALL ANDON ALL S56606 S56606 CISTENED ONAL ENGINE 09/01/2022
	PROPERTY DESCRIPTION LOCATED IN THE CITY OF PUYALLUP, PIERCE COUNTY, WASH OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER RANGE 4 EAST OF THE WILLAMETTE MERIDIAN.	HINGTON, IN THE NORTHEAST CORNER ? OF SECTION 3, TOWNSHIP 19 NORTH,	
	VERTICAL DATUM Vertical datum is based upon a gps observation usin the elevation of the project site and is based on th	VG AN OPUS SOLUTION TO DETERMINE HE NAVD88 DATUM.	لا م م م م ا م م م م
	BENCHMARK the project benchmark is a set rebar and cap on th in an island. project benchmark elevation = 445.61'	HE SOUTHWEST SIDE OF THE PROJECT	LUP, V
	<u>CITY OF PUYALLUP BUILDING F</u> B—21—0905	<u>PERMIT NUMBER:</u>	PUYAL 310 3
	CITY OF PUYALLUP GENERAL NO 1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMI WORK COMMENCING, THE GENERAL CONTRACTOR SHAL THE DEVELOPMENT SERVICES CENTER TO BE ATTENDE WORK SHOWN ON THE APPROVED ENGINEERING PLANS	)TES: IT FROM THE CITY OF PUYALLUP. PRIOR TO ANY L ARRANGE FOR A PRE-CONSTRUCTION MEETING AT D BY ALL CONTRACTORS THAT WILL PERFORM G, REPRESENTATIVES FROM ALL APPLICABLE UTILITY	
	COMPANIES, THE PROJECT OWNER AND APPROPRIATE (253-841-5568) TO SCHEDULE THE MEETING. THE CO SET OF APPROVED PLANS AT THE MEETING. 2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE I THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREF	CITY STAFF. CONTACT ENGINEERING SERVICES AT INTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN PLANS AND BEFORE ACCEPTANCE OF THE PROJECT PAPED BY THE CITY'S INSPECTOR DETAILING	ISSUE BLOCK
	REMAINING ITEMS OF WORK TO BE COMPLETED. ALL IT COMPLETED TO THE SATISFACTION OF THE CITY PRIOR PROVISION OF SANITARY SEWER SERVICE. 3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM	TO THE STANDARD SPECIFICATIONS FOR ROAD,	▲         ▲         ADD#2         05/12           ▲         CCD#1         09/01
	BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST E CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WOF	REFERRED TO AS THE "STANDARD F TRANSPORTATION AND AMERICAN PUBLIC WORKS EDITION, UNLESS SUPERSEDED OR AMENDED BY THE RKS FNGINEERING AND CONSTRUCTION (HEREINAFTER	
	REFERRED TO AS THE "CITY STANDARDS"). 4. A COPY OF THESE APPROVED PLANS AND APPLICABLE SHALL BE ON SITE DURING CONSTRUCTION. 5. ANY DEVISIONS MADE TO THESE PLANS MUST BE REV	E CITY DEVELOPER SPECIFICATIONS AND DETAILS	
	<ul> <li>ANT REFIGURE AND THE CITY PRIOR TO ANY IMPLEMENTATI RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS O</li> <li>THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ONLY (911) AT LEAST TWO WORKING DAYS IN ADVANC</li> </ul>	ION IN THE FIELD. THE CITY SHALL NOT BE ION IN THESE PLANS. I) ON THE GROUND PRIOR TO ANY CONSTRUCTION.	
	<ul> <li>CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.</li> <li>ANY STRUCTURE AND/OR OBSTRUCTION THAT REQUIRE PROJECT SHALL BE DONE SO AT THE DEVELOPER'S EX EXISTENCE OF EXISTENCE UTILITIES ARE APPROXIMATE.</li> </ul>	ES REMOVAL OR RELOCATION RELATING TO THIS XPENSE.	
	<ol> <li>LOCATIONS OF EXISTING UTILITIES ARE ALL NOMINAL.</li> <li>DETERMINE THE TRUE ELEVATIONS AND LOCATIONS OF ENGINEER'S RESPONSIBILITY.</li> <li>THE CONTRACTOR SHALL INSTALL, REPLACE, OR RELO</li> </ol>	IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY OF HIDDEN UTILITIES. ALL VISIBLE ITEMS SHALL BE THE	
	AFFECTED BY CONSTRUCTION, PER CITY STANDARDS. 10. POWER, STREET LIGHT, CABLE, AND TELEPHONE LINES 10-FOOT UTILITY EASEMENT ADJACENT TO PUBLIC RIG HAVE A MINIMUM HORIZONTAL SEPARATION FROM OTH	SHALL BE IN A TRENCH LOCATED WITHIN A SHT-OF-WAY. RIGHT-OF-WAY CROSSINGS SHALL	
	FEET. 11. ALL CONSTRUCTION SURVEYING FOR EXTENSIONS OF P DIRECTION OF A WASHINGTON STATE LICENSED LAND ( DROFFESSIONAL CIVIL ENGINEER. CITY OF PUYALLUP –	PUBLIC FACILITIES SHALL BE DONE UNDER THE SURVEYOR OR A WASHINGTON STATE LICENSED	CHECKED BY: DRAWN BY:
	2-6 12. DURING CONSTRUCTION, ALL PUBLIC STREETS ADJACEN MATERIAL DEPOSITS RESULTING FROM ON-SITE CONST	CITY STANDARDS SECTION 2 DEDICE, , NT TO THIS PROJECT SHALL BE KEPT CLEAN OF ALL RUCTION, AND EXISTING STRUCTURES SHALL BE	PROTO CYCLE: DOCUMENT DATE: 09/0
	PROTECTED AS DIRECTED BY THE GTT. 13. CERTIFIED RECORD DRAWINGS ARE REQUIRED PRIOR TO 14. A NPDES STORMWATER GENERAL PERMIT MAY BE REQ PROJECT. FOR INFORMATION CONTACT THE DEPARTMENT	O PROJECT ACCEPTANCE. JUIRED BY THE DEPARTMENT OF ECOLOGY FOR THIS NT OF ECOLOGY, SOUTHWEST REGION OFFICE AT	
	(360)407–6300. 15. ANY DISTURBANCE OR DAMAGE TO CRITICAL AREAS AND DESIGNATED FOR PRESERVATION AND PROTECTION SHA PLAN REVIEWED AND APPROVED BY THE CITY'S PLAN	ND ASSOCIATED BUFFERS, OR SIGNIFICANT TREES ALL BE MITIGATED IN ACCORDANCE WITH A MITIGATION MINIC DIVISION PREPARATION AND IMPLEMENTATION	
Remove other Limits of Disturba	OF THE MITIGATION PLAN SHALL BE AT THE DEVELOPE	ER'S EXPENSE.	
and keep this one. [Civil Plans, (	CS0]		
	LIMITS OF DISTURBANCE LABLE	PES .	
	TOTAL LOD = $34,640 \text{ SF} / 0.7953 \text{ ACR}$		
PERVIOUS AREA WITHIN LOD	TOTAL LOD = 34,640 SF/ 0.7953 ACR           EXISTING           1747 SF/ 0.0401 ACRES	PROPOSED 8,112 SF/ 0.1862 ACRES	
PERVIOUS AREA WITHIN LOD MPERVIOUS AREA WITHIN LOD 5	TOTAL LOD = 34,640 SF/ 0.7953 ACR         EXISTING         1747 SF/ 0.0401 ACRES         32879 SF/ 0.7548 ACRES         Existing = 34,626 when totaling area	PROPOSED 8,112 SF/ 0.1862 ACRES 26,534 SF / 0.6091 ACRES	

![](_page_45_Figure_0.jpeg)

С

_____

D

_____

APPROX. 1" = 20'

1	(		
(	$\geq$		
	$\rangle$	PARKING	CO
	$\left\langle \right\rangle$		
	(	BUILDING AREA (SF)	
	$\left( \right)$	STANDARD STALLS	
	$\geq$	COMPACT STALLS	
	$\mathbf{\mathbf{b}}$	ADA STALLS	
	(	PICKUP STALLS	
	>	TOTAL PARKING STALLS	
	$\rangle$	PARKING RATIO	
	(		

1

![](_page_45_Figure_3.jpeg)

![](_page_45_Figure_4.jpeg)

![](_page_45_Figure_5.jpeg)

Combine notes 21 and 41Civil Notes, CS1

### DEMOLITION NOTES

- 1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES. PADS. WALLS. FLUMES. FOUNDATIONS. PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE PROPOSED PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
- 3. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY THEMSELVES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
- 4. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR MARKING ONSITE LOCATIONS OF Existing utilities.
- 5. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.
- 6. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY CITY AND OWNER. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE EXISTING FACILITIES TO REMAIN, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
- 7. CONTRACTOR SHALL LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS, BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.
- 8. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 72 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
- 9. ALL EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME THE DRAWINGS WERE PREPARED AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGE DUE TO THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
- 10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, AND EROSION CONTROL PLANS AND INSPECTION REPORTS (SWPPP).
- 11. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
- 12. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS FOR EXCAVATION AND TRENCHING PROCEDURES. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, ETC. AS NECESSARY FOR THESE OPERATIONS, AND SHALL COMPLY WITH ALL OSHA PERFORMANCE CRITERIA.
- 13. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.
- 14. ANY RECYCLED MATERIAL TO BE STOCKPILED ON THE SITE SHALL BE STORED IN AS SMALL AN AREA AS PRACTICAL AND THE LOCATION OF ANY STOCKPILE SHALL BE WELL CLEAR OF THE BUILDING PAD AREA AND THE LOCATION MUST BE PRE-APPROVED BY THE ENGINEER AND OWNER PRIOR TO STOCKPILING.
- 15. QUANTITIES SHOWN HERE ARE APPROXIMATE AND ARE PROVIDED FOR CONVENIENCE ONLY AND NOT FOR
- 16. ASBESTOS OR HAZARDOUS MATERIAL, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIAL CONTRACTOR. REFERENCE ARCHITECTURAL PLANS FOR LIMITS OF BUILDING DEMOLITION.

(35) existing pickup directional signage to be removed (ref. site signage plan).

0 existing site light and post to be relocated, light and post to be salvaged, base to be removed.

_____

 $(\overline{36})$  proposed do not enter Sign (ref site details).

(39) PROPOSED LANDSCAPING (REF. LANDSCAPE PLANS L1.0 AND L1.1).

(41) EXISTING FIRE HYDRANT TO BE PROTECTED DURING CONSTRUCTION.

(43) PROPOSED SITE LIGHT WITH YELLOW BASE (REF. ELECTRICAL SHEET E1.2)

(38) EXISTING CURB AND GUTTER TO BE REMOVED.

 $(\overline{37})$  proposed curb and gutter.

(42) PROPOSED 2' CHASE.

![](_page_45_Figure_24.jpeg)

![](_page_45_Picture_25.jpeg)

## _egend

![](_page_45_Figure_28.jpeg)

- 2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND
- EXACT BUILDING UTILITY ENTRANCE LOCATIONS. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS
- NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS. TRAFFIC SIGNALS & POLES. ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND
- PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN 6. THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED "THE SITE SPECIFIC SPECIFICATIONS".

### CAUTION - NOTICE TO CONTRACTOR

- 1. ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FIELD LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO
- 2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT

![](_page_45_Picture_36.jpeg)

(IN FEET) 1 inch = 20 ft.

![](_page_45_Picture_40.jpeg)

![](_page_45_Picture_41.jpeg)

CS1

SHEET:

![](_page_46_Picture_0.jpeg)

F

![](_page_46_Picture_2.jpeg)

Callout easement with type and dimensions [Civil Plans, CS1A]

# 31ST AVE 35TH AVE SE KEY MAP Approx. 1" = 500'

### LEGEND ._____

· · · · · ·
ь
_0
۵

PROPERTY BOUNDARY LINE
PROPOSED SAWCUT LINE
Existing Building
EXISTING CURB AND GUTTER TO REMAIN
PROPOSED CURB AND GUTTER
EXISTING ASPHALT PAVEMENT TO REMAIN
EXISTING CONCRETE PAVEMENT TO REMAI
PROPOSED CONCRETE PAVEMENT
PROPOSED SIGN

PROPOSED BOLLARD

SITE NOTES

- 1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A.
- ALL WORK AND WATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND C.S.H.A. STANDARDS.
   CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
   ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
   EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
- NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID. 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID. 6. THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED "THE SITE SPECIFIC SPECIFICATIONS".

![](_page_46_Picture_13.jpeg)

![](_page_46_Picture_14.jpeg)

![](_page_46_Picture_17.jpeg)

![](_page_46_Picture_18.jpeg)

![](_page_47_Picture_0.jpeg)

 $\bigcirc$ ( )

![](_page_47_Figure_2.jpeg)

# ALL PICKUP WAYFINDING AND STALL SIGNS ARE WALMART SUPPLIED AND CONTRACTOR INSTALLED. CONTRACTOR TO PLACE SIGN ORDER AT LEAST 3 WEEKS IN ADVANCE. ORDER SHALL BE SENT VIA EMAIL TO GETTY THOMAS (Getty.Thomas@walmart.com) AND BRAD KEENER (Bradley.Keener@walmart.com). REQUEST SHALL CONTAIN A DELIVERY ADDRESS, DESIRED DELIVERY DATE, AND ANY SITE SPECIFIC SIGN SIZE AND/OR COLORS BASED ON APPROVED PLANS.

	PICKUP EXTERIOR SIGN SCH	EDULE	
	DESCRIPTION	DIMENSIONS	Q
	WAITING SPACES LEFT	18 X 24	
	WAITING SPACES RIGHT	18 X 24	
	WAITING SPACES AHEAD	18 X 24	
	RESERVED WAITING	18 X 24	
	PICKUP LEFT PHARMACY RIGHT	18 X 24	
	PICKUP RIGHT PHARMACY LEFT	18 X 24	
	STOP THANKS FOR ORDERING	18 X 36	
<u>,</u>	PICKUP HOURS	18 X 36	
1	RESERVED	18 X 18	
	PHONE NUMBER	8 X 18	
	VERTICAL PICKUP	18 X 36	
	PICKUP LEFT	18 X 24	
	PICKUP AHEAD	18 X 24	
	PICKUP RIGHT	18 X 24	

2. REFERENCE SITE DETAILS FOR SIGN LOCATION & VESTIBULE CROSSWALK DETAILS FOR SITE SIGNAGE OFFSETS.

THIS PLAN WAS PREPARED BASED ON AN AERIAL CAPTURED 08/14/2020. THIS PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY SIGNIFICANTLY FROM THIS DRAWING.

SITE SIGNAGE NOTES

![](_page_47_Picture_8.jpeg)

SITE SIGNAGE LEGEND

- (7) EXISTING PICKUP PAVEMENT MARKING TO BE REMOVED AND RECEIVE SEALCOAT.
- 6 existing signage to be removed and properly disposed of and base to be reused and left in place.
- $\bigcirc$  new sign mounting and base with break away post.
- 4 proposed pickup signage to be mounted to existing sign post. (Ref. site details)
- (3) PROPOSED PICKUP SIGNAGE, RIGHT. SEE DETAIL SHEET CS3 FOR SIGNAGE AND LOCATION DETAILS.
- 1) PROPOSED PICKUP SIGNAGE, LEFT. SEE DETAIL SHEET CS3 FOR SIGNAGE AND LOCATION DETAILS. 2 PROPOSED PICKUP SIGNAGE, STRAIGHT. SEE DETAIL SHEET CS3 FOR SIGNAGE AND LOCATION DETAILS.

SIGNAGE & STRIPING SCHEDULE NOTES

15	16	17	18	19	20	21	22

![](_page_47_Figure_18.jpeg)

![](_page_47_Figure_19.jpeg)

![](_page_47_Picture_21.jpeg)

![](_page_47_Picture_22.jpeg)

CS2

![](_page_48_Figure_0.jpeg)

![](_page_49_Figure_0.jpeg)

Α

_____

С

D

_____

Ε

_____

F

	PROPERTY BOUNDARY LINE
	PROPOSED SAWCUT LINE
— — 445 — — — –	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
66)	PROPOSED MINOR CONTOUR
15.00	PROPOSED SPOT ELEVATION
TBC	PROPOSED TOP OF CURB ELEVATION
FL	PROPOSED FLOWLINE ELEVATION
FF	FINISHED FLOOR
FG	FINISHED GRADE
ME	MATCH EXISTING
2.00%	EXISTING SLOPE
2.00%	PROPOSED SLOPE
SD	EXISTING STORM MANHOLE
9	EXISTING STORM INLET

![](_page_49_Picture_14.jpeg)

![](_page_49_Picture_15.jpeg)

![](_page_50_Figure_0.jpeg)

EROSION & SEDIMENT CONTROL PLAN scale: 1"=20'

Include COP Standard Grading, Erosion, and Sedimentation Control Notes from COP Standards Section 505. [Civil Plans, CS5]

_____

_____

_____

С

_____

D

_____

Ε

_____

F

![](_page_50_Figure_4.jpeg)

![](_page_50_Figure_5.jpeg)

POST

![](_page_50_Picture_6.jpeg)

ERUSION	X	SEDIN	/IEIN I	CON	IKUL	LE	JEND
			6	D	LIMITS	OF	DISTURBA
			$\sim$	<b>`</b>			

(CF)	CONSTRUCTION FENC
TTM	TEMPORARY TRACKO
	INLET PROTECTION

	LIMITS OF DISTURBANCE TABLE	
	TOTAL LOD = $34,640$ SF/ 0.7953 ACR	ES
	EXISTING	
PERVIOUS AREA WITHIN LOD	1747 SF/ 0.0401 ACRES	8,
IMPERVIOUS AREA WITHIN LOD	32879 SF/ 0.7548 ACRES	26,
		•

Remove all Limits of disturbance tables except for on the cover page. [Civil Plans, CS5, CS6]

![](_page_50_Picture_15.jpeg)

 $\sim$ 

![](_page_51_Figure_0.jpeg)

![](_page_51_Figure_2.jpeg)

	LOD	LIMITS OF DISTURBA
	(IP3)	INLET PROTECTION
_00	SDP	SILT DIKE ON PAVEN
CFCFCF	CF	CONSTRUCTION FENC
	TTM	TEMPORARY TRACKC
		PROPOSED ASPHALT

TO	TAL LOD = 34,640 SF/ 0.7953 ACR	ES
	EXISTING	
PERVIOUS AREA WITHIN LOD	1747 SF/ 0.0401 ACRES	
IMPERVIOUS AREA WITHIN LOD	32879 SF/ 0.7548 ACRES	

![](_page_51_Picture_12.jpeg)

 $\sim$ 

![](_page_52_Picture_0.jpeg)

![](_page_52_Picture_1.jpeg)

KEY M approx. 1"

# LEGEN

31ST	AVE SE	1755 Telstar Drive. S Colorado Springs. CC 719.900.7220 GallowayUS.com
Star AKESH	SITE SITE SITE SITE SITE SITE SITE SITE	STIPULATION FOR REUSE THIS DRAWNG WAS PREPARED FOR UVE ON A SPECIFIC SITE AT: DUYALLUP, WA CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 09/08/2021, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWNG FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICE OF PROJECT REQUIRES AND ENGINEERS. REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.
KEY MAP		BRANDON AT HERE
LEGEND	Ν	S6606 PECISTERED THE
X	EXISTING CURB AND GUTTER TO REMAIN EXISTING FENCE/GAURDRAIL TO REMAIN EXISTING EASEMENT	09/01/2022
UEUE W SD	EXISTING SANITARY SEWER LINE TO REMAIN EXISTING UNDERGROUND ELECTRIC LINE TO REMAIN EXISTING WATER LINE TO REMAIN EXISTING STORM SEWER LINE TO REMAIN	NCMNT
G	EXISTING GAS LINE TO REMAIN PROPOSED GAS LINE EXISTING CONCRETE PAVING TO REMAIN.	
	PROPOSED CONCRETE PAVING/SIDEWALK EXISTING ASPHALT PAVING TO REMAIN EXISTING BOLLARD TO REMAIN	WE SE 2403-2
	EXISTING FIRE HYDRANT TO REMAIN EXISTING FIRE HYDRANT TO REMAIN EXISTING SANITARY SEWER CLEANOUT TO REMAIN	LLUP 31ST A NO: 02 NO: 02
	EXISTING SANITARY SEWER MANHOLE TO REMAIN EXISTING WATER VALVE TO REMAIN EXISTING WALMART BUILDING TO REMAIN	<b>310</b> 7002403
-¢- © SD	EXISTING LIGHT POLE TO REMAIN PROPOSED STORM SEWER CLEANOUT PROPOSED STORM LINE	
SCHEDULE		JOB NUM
1     EXISTING WATER LINE TO       2     EXISTING FIRE HYDRANT	o remain. 7 To remain.	ISSUE BLOCK $\uparrow$ PR#1 01/25/22
<ul> <li>(3) EXISTING SANITARY SEW</li> <li>(4) EXISTING SANITARY SEW</li> </ul>	VER LINE TO REMAIN. VER MANHOLE TO REMAIN.	<u> </u>
5 EXISTING STORM SEWER	LINE TO REMAIN.	
(6)     EXISTING STORM INLET       (7)     EXISTING STORM MANHO	TO REMAIN. DLE TO REMAIN.	
8 EXISTING STORM INLET	TO BE REMOVED.	
(10) EXISTING SITE LIGHT TO	BE REMOVED.	
(1)EXISTING IRRIGATION CO(12)PROPOSED SITE LIGHT.	INTROL BOX TO REMAIN.	
13PROPOSED 12" STORM I14PROPOSED CB TYPE 1	LINE. STORM INLET.	CHECKED BY: RCJ
EASEMENT SCHEDULE	IT (RECEPTION NO. 9502281042)	PROTO CYCLE: -
B 20' WATERLINE EASEMEN	NT (RECEPTION NO. 9610150317)	
OF STRUCTURE TO SHOWN ARE APPRO WIDTHS.	CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. THEREFORE, LENGTHS XIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE	
SURVEYOR TO OBTA DIMENSIONING PRIOF BASIS OF BEARING HORIZONTAL AND VI PRIOR TO CONSTRU ENGINEER PRIOR TO	AIN AUTOCAD FILE FROM ENGINEER AND VERIFY ALL HORIZONTAL CONTROL R TO CONSTRUCTION STAKING. SURVEYOR MUST VERIFY ALL BENCHMARK, AND DATUM INFORMATION TO ENSURE IMPROVEMENTS WILL BE AT THE SAME ERTICAL LOCATIONS SHOWN ON THE DESIGN CONSTRUCTION DRAWINGS. CTION STAKING ANY DISCREPANCY MUST BE REPORTED TO OWNER AND O CONTINUATION OF ANY FURTHER STAKING OR CONSTRUCTION WORK.	
CONTRACTOR IS RE: WORK FOR ANY LOC OR DISTRICT HAVINO IS NOT LIMITED TO,	SPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF CAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY G APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.	
NOTE: CONTRACTOR BEGINNING WORK AN COMPLETE WORK AN	R MUST COORDINATE WORK WITH UTILITY COMPANY AND CITY PRIOR TO ND IS RESPONSIBLE FOR ALL MATERIALS, LABOR, REPAIRS, ETC. TO ND RESTORE AREA TO SAME STATE PRIOR TO STARTING WORK	
NOTE: CONTRACTO SHALL HAVE LICENS THEIR COST.	OR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION. CONTRACTOR SED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT	
UNLESS OTHERWISE MATCH IF DISTURBE MAINTAIN IRRIGATIO	NOTED, CONTRACTOR TO PROTECT LANDSCAPING IN PLACE AND REPLACE TO D. CONTRACTOR TO CAP AND REINSTALL IRRIGATION AS NECESSARY TO N TO EXISTING LANDSCAPING.	
CONTRACTOR RESPO CERTIFICATES OR IN DISTRICTS OR ANY	DNSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS AND/OR ANY OTHER IFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY OTHER GOVERNING AGENCY.	
BENCHMAF site benchmar	RK K: ELEVATION = 445.61' NAVD88, SET MAG NAIL	
CAUTION — 1. ALL UTILITY LOCA UTILITY COMPANY CONSIDERED AN TO FIELD VERIFY SHOWN ON THE F THE ENGINEER PE	NOTICE TO CONTRACTOR ATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE Y AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY THE FIELD LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO RIOR TO CONSTRUCTION.	-   PLAN
2. WHERE A PROPO RESPONSIBILITY T EXISTING UTILITY, INFORMATION TO	SED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH , EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT THE ENGINEER PRIOR TO CONSTRUCTION.	

# SCHEDUL

(1)	EXISTING WATER LINE TO REMAIN.
2	EXISTING FIRE HYDRANT TO REMAIN.
3	EXISTING SANITARY SEWER LINE TO REMAIN.
4	EXISTING SANITARY SEWER MANHOLE TO REMAIN.
5	EXISTING STORM SEWER LINE TO REMAIN.
6	EXISTING STORM INLET TO REMAIN.
7	EXISTING STORM MANHOLE TO REMAIN.
8	EXISTING STORM INLET TO BE REMOVED.
9	EXISTING STORM LINE TO BE REMOVED.
(10)	EXISTING SITE LIGHT TO BE REMOVED.
(11)	EXISTING IRRIGATION CONTROL BOX TO REMAIN.
(12)	PROPOSED SITE LIGHT.
(13)	PROPOSED 12" STORM LINE.
(14)	PROPOSED CB TYPE 1 STORM INLET.
EASEMEN	T SCHEDULE
$\langle A \rangle$	20' SANITARY EASEMENT (RECEPTION NO. 9502281042)
B	20' WATERLINE EASEMENT (RECEPTION NO. 9610150317)

31ST AVE SE	1755 Telstar Drive, S colorado Springs, C( 719.900,7220 GallowayUS.com
SITE SITE SITE SITE SITE SITE SITE SITE	STIPULATION FOR REUSE THIS DRAWIG WAS PREPARED FOR USE ON A SPECIFIC SITE AT: PUYALLUP, WA CONTEMPORANEOUSLY WTH ITS ISSUE DATE ON 09/08/2021, AND IT IS NOT SUITABLE FOR NAT A LATER TIME. USE OF THIS DRAWIG FOR REFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWIG FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROJERTY LUCENTRES THE SERVICES OF PROJERTY LUCENTRES THE SERVICES OF PROJECT REPORDETION OF THIS DRAWIG FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.
DO'	THE SOCIONAL ENGINE
EXISTING CORE AND GOTTER TO REMAIN	NUMBER: WDP002403.20 PROTO: PICKUP ENHNCMNT
XISTING WATER LINE TO REMAIN. XISTING FIRE HYDRANT TO REMAIN. XISTING SANITARY SEWER LINE TO REMAIN. XISTING SANITARY SEWER MANHOLE TO REMAIN. XISTING STORM SEWER LINE TO REMAIN. XISTING STORM INLET TO REMAIN. XISTING STORM INLET TO REMAIN. XISTING STORM INLET TO BE REMOVED. XISTING STORM LINE TO BE REMOVED. XISTING STORM LINE TO BE REMOVED. XISTING STORM LINE TO BE REMOVED. XISTING STELLIGHT TO BE REMOVED. XISTING IRRIGATION CONTROL BOX TO REMAIN. ROPOSED SITE LIGHT. ROPOSED SITE LIGHT. ROPOSED CB TYPE 1 STORM INLET. SCHEDULE DO' SANITARY EASEMENT (RECEPTION NO. 9502281042)	ISSUE BLOCK         Image: Ample of the system       PR#1       01/25/22         Image: Image: Ample of the system       Op/01/22         Image: Image: Image: Ample of the system       Op/01/22         Image: Im
NOTE: LENGTHS OF STORM/SANITARY SEWER ARE THE HORIZONTAL DISTANCES FROM CENTER         OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. THEREFORE, LENGTHS         SHOWN ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE         WIDTHS.         SURVEYOR TO OBTAIN AUTOCAD FILE FROM ENGINEER AND VERIFY ALL HORIZONTAL CONTROL         DIMENSIONING PRIOR TO CONSTRUCTION STAKING. SURVEYOR MUST VERIFY ALL BENCHMARK,         BASIS OF BEARING AND DATUM INFORMATION TO ENSURE IMPROVEMENTS WILL BE THE SAME         HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DESIGN CONSTRUCTION DRAWINGS.         PRIOR TO CONSTRUCTION STAKING ANY DISCREPANCY MUST BE REPORTED TO OWNER AND         ENGINEER PRIOR TO CONTINUATION OF ANY FURTHER STAKING OR CONSTRUCTION WORK.         CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF         WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY         OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT         IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.         NOTE: CONTRACTOR MUST COORDINATE WORK WITH UTILITY COMPANY AND CITY PRIOR TO         BEGINNING WORK AND IS RESPONSIBLE FOR ALL MATERIALS, LABOR, REPAIRS, ETC. TO         COMPLETE WORK AND RESTORE AREA TO SAME STATE PRIOR TO STARTING WORK         NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION. CONTRACTOR         SHALL HAVE LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTAT	
CONTRACTOR RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS OR ANY OTHER GOVERNING AGENCY.	UTILITY PLAN
2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.	SHEET: CS7

ay

![](_page_53_Picture_0.jpeg)

![](_page_53_Picture_1.jpeg)

![](_page_53_Picture_2.jpeg)

1 OF 1

SHEET:

80

![](_page_54_Figure_0.jpeg)

LANDSCAPE CALCULATION TABLE

_____

_____

_____

С

_____

D

_____

_____

REQUIREMENT	REQUIRED	PROVIDED
PERIMETER LANDSCAPE ISLANDS	12' WIDE 200 SF 1 TREE	12' WIDE 200 SF 1 TREE
INTERNAL LANDSCAPE ISLANDS	15' WIDE 500 SF 2 TREES	15' WDE 500 SF 2 TREES
HEAD TO HEAD PARKING LANDSCAPE	5' WIDE 1 TREE PER 20 LF	5' WIDE 12 TREES FOR 237 LF
COVERAGE	90% AFTER 3 YEARS	90% OF 8,246 SF = 7,422 SF OF COVERAGE, SEE PLANTING LEGEND

# UTILITY NOTES

1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.

2. THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.

3. THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY

WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

	PLANTING SIZE	MATURE	WATER USE		
ION NAME	(MINIMUM)	SIZE	(VL,L,M,H)	(SF)	SUN/SHADE
MIDAL EUROPEAN HORNBEAM	2" CAL. B&B	35'X25'	М		SUN
MN GOLD GINKGO	2" CAL. B&B	40'X30'	М		SUN
MNAR ENGLISH OAK	2" CAL. B&B	40'X20'	М		SUN
	2" CAL. B&B	50'X25'	L/M		SUN
TIER ELM	2" CAL. B&B	40'X30'	М		SUN
N VASE ZELKOVA	2" CAL. B&B	40'X30'	М		SUN/PART SHADE
RIAN PINE	6' HEIGHT B&B	50'X20'	L	630	SUN/PART
RADO BLUE SPRUCE	6' HEIGHT B&B	60'X25'	L	491	SUN/PART
ON PYGMY BARBERRY	#5 CONT. 18-24"	4'X4'	М	247	SUN/PART SHADE
MIST SPIREA	#5 CONT. 18-24"	3'X3'	VL	920	SUN
F BURNING BUSH	#5 CONT. 18-24"	5'X4'	L/M	988	SUN/PART SHADE
F ENGLISH LAUREL	#5 CONT. 18-24"	5'X5'	VL	780	SUN/PART SHADE
L BEAUTY COTONEASTER	#5 CONT. 18-24"	1'X5'	М	860	SUN/PART SHADE
MUGO PINE	#5 CONT. 18-24"	5'X6'	L	1960	SUN
ITAIN FIRE PIERIS	#5 CONT. 18-24"	2'X2'	М	520	SUN
				7 422 85	

Stand I and . have		
	and the second se	10.01/01
		R DATE
14 ASS		The FAILER
	and the second second	
		FILE
	31ST AVE SE	
	······································	
	Barris Constant	
	The state of the second second	
IS TOND AD ADT.	A STATE AND A STATE OF	
and the second s	SITE	1. 1. 1. 1.
The state of	JIL	
	A CONTRACT OF	
	and the second s	
ų	COLUMN THE REAL PROPERTY AND	- Branchester
ST I	A CARLEN THE COMPANY AND A CARLEN	
The second se	an an 2 is the the desired with the second	and the second second
SI		
		L S
	1. S. Servanian S. Lat.	H S
I maintain a principal the		51
	35TH AVE SE	
		- SEP. 2
1 - Traine - A train of the	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
KEY MAP		
APPROX. 1" = 500'		

CAUTION - NOTICE TO CONTRACTOR

- 1. ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FIELD LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- 2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

ROCK COBBLE MULCH WITH WOOD CH RING AROUND ALL PLANT MATERIAL, PLANTING NOTES & DETAILS	MULCH	N/A	
E BROWN SHREDDED HARDWOOD	MULCH	N/A	

![](_page_54_Picture_16.jpeg)

![](_page_54_Picture_17.jpeg)

![](_page_54_Picture_18.jpeg)

![](_page_54_Picture_19.jpeg)

![](_page_54_Picture_20.jpeg)

ISSUE	ISSUE BLOCK				
	PR#1	01/25/22			
2	PR#2	05/23/22			
CHECK	ED BY:	KES			

DRAWN BY:	EDN
PROTO CYCLE:	_
DOCUMENT DATE:	09/08/21

![](_page_54_Picture_23.jpeg)

L1.0

SHEET:

<u>EN</u>	ERAL ALL WORK SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES, STANDARDS, AND SPECIFICATIONS.
2.	ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN TAKEOFFS AND QUANTITY CALCULATIONS FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT THE SPACING SHOWN. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE LANDSCAPE LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN SHALL TAKE PRECEDENCE AND NOTIFY THE LANDSCAPE ARCHITECT OF THESE DISCREPANCIES. MINOR ADJUSTMENTS TO THE LANDSCAPE MATERIAL AND LOCATIONS MAY BE PROPOSED FOR CITY CONSIDERATION AT THE CONSTRUCTION DOCUMENT STAGE TO RESPOND TO MARKET AND FIELD CONDITIONS. HOWEVER, THERE SHALL BE NO REDUCTION IN THE NUMBER AND SIZE OF MATERIALS.
3.	PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
4.	THE CONTRACTOR SHALL TAKE EXTREME CARE NOT TO DAMAGE ANY EXISTING PLANTS INDICATED AS "TO REMAIN". ANY SUCH PLANTS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED WITH THE SAME SPECIES, SIZE, AND QUANTITY AT THE CONTRACTOR'S OWN EXPENSE, AND AS ACCEPTABLE TO THE OWNER. REFER TO THE TREE PROTECTION NOTES ON THE PLANS (AS APPLICABLE).
5.	LANDSCAPE CONTRACTOR SHALL EXAMINE THE SITE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND NOTIFY THE GENERAL CONTRACTOR IN WRITING OF UNSATISFACTORY CONDITIONS. IF SITE CONDITIONS OR PLANT AVAILABILITY REQUIRE CHANGES TO THE PLAN, THEN AN APPROVAL WILL BE OBTAINED FROM THE CITY. DO NOT PROCEED UNTIL CONDITIONS HAVE BEEN CORRECTED.
6.	ALL CONSTRUCTION DEBRIS AND MATERIAL SHALL BE REMOVED AND CLEANED OUT PRIOR TO INSTALLATION OF TOPSOIL, TREES, SHRUBS, AND TURF.
7. 8.	FOR ALL INFORMATION ON SURFACE MATERIAL OF WALKS, DRIVES, AND PARKING LOTS, SEE THE SITE PLAN. SEE PHOTOMETRIC PLAN FOR FREE STANDING LIGHTING INFORMATION. ALL LANDSCAPE NOTES SHALL BE COORDINATED WITH ALL APPLICABLE SPECIFICATION SECTIONS. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND LANDSCAPE ARCHITECT BEFORE
9.	PROCEEDING WITH WORK. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT ONE WEEK PRIOR TO BEGINNING CONSTRUCTION. PICTURES OF ALL PLANT MATERIAL SHALL BE INCLUDED WITH SAMPLES OF OTHER LANDSCAPE MATERIALS TO THE LANDSCAPE ARCHITECTS AND OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
10.	WINTER WATERING SHALL BE AT THE EXPENSE OF THE CONTRACTOR UNTIL SUCH TIME AS FINAL ACCEPTANCE IS RECEIVED.
11.	ALL LANDSCAPE CONSTRUCTION PRACTICES, WORKMANSHIP, AND ETHICS SHALL, BE IN ACCORDANCE WITH INDUSTRY STANDARDS.
12.	LANDSCAPE AND IRRIGATION WORK SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY.
INIS 13	SH GRADING AND SOIL PREPARATION CONTRACTOR SHALL CONSTRUCT AND MAINTAIN FINISH GRADES AS RECOMMENDED BY THE GEOTECHNICAL REPORT
14	ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GEOTECHNICAL REPORT, THE GRADING PLANS, THESE NOTES, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND OWNER.
15.	AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY FOR THE FOLLOWING: GENERAL SOIL FERTILITY, pH, ORGANIC MATTER CONTENT, SALT (CEC) LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT. EACH SAMPLE SUBMITTED SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL. CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): GENERAL SOIL PREPARATION AND BACKFILL MIXES, PRE-PLANT FERTILIZER APPLICATIONS, AND ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE FOLLOWING HAVE AND AND AND CONTACT OF AND FOR LONG TERMAMAINTENANCE.
16.	AT A MINIMUM, PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL, INCLUDING SOD, APPLY A MINIMUM OF 4 CUBIC YARDS OF SOIL AMENDMENT PRODUCT PER 1,000 SQUARE FEET OF PERMEABLE AREA. THIS SOIL AMENDMENT PRODUCT MUST BE INCORPORATED OR ROTOTILLED TO A DEPTH OF 4-6 INCHES. THE SITE MUST BE RAKED SMOOTH AND FINISH GRADES MUST BE ESTABLISHED. ROCKS AND DEBRIS OVER 1-INCH DIAMETER THAT MAY INTERFERE WITH PLANTING AND MAINTENANCE OPERATIONS MUST BE REMOVED.
LAN 17.	ITING REFER TO SPECIFICATIONS FOR INFORMATION NEEDED FOR IMPLEMENTATION OF PLANTING PLANS.
18.	ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BUR LAPPED AS INDICATED IN THE PLANT LIST.
19. 20.	ALL DECIDUOUS TREES SHALL HAVE A STRAIGHT TRUNK WITH FULL, WELL-SHAPED HEADS/ALL EVERGREENS SHALL HAVE A STRAIGHT TRUNK UNSHEARED AND FULL TO THE GROUND; UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE AND SHALL BE HEALTHY, VIGOROUS, AND A FORM TYPICAL FOR
21.	THE SPECIES. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTABLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT SHALL BE THE SOLE JUDGE AS TO THE ACCEPTABILITY OF PLANT MATERIAL. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A
22.	ALL TREES MUST BE STAKED AS SHOWN IN THE DETAILS.
23.	ALL PLANT MATERIALS SHALL BE TRUE TO TYPE, SIZE, SPECIES, QUALITY, AND FREE OF INJURY, BROKEN ROOT BALLS, PESTS, AND DISEASES, AS WELL AS CONFORM TO THE MINIMUM REQUIREMENTS DESCRIBED IN THE "AMERICAN STANDARD FOR NURSERY STOCK".
24.	CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
25.	ALL TREE AND SHRUB BED LOCATIONS ARE TO BE STAKED OUT ON SITE FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
26.	ALL TREES PLANTED ADJACENT TO PUBLIC AND/OR PEDESTRIAN WALKWAYS SHALL BE PRUNED CLEAR OF ALL BRANCHES BETWEEN GROUND AND A HEIGHT OF EIGHT (8) FEET FOR THAT PORTION OF THE PLAN LOCATED OVER THE SIDEWALK
27.	AND/OR ROAD. NO PLANT MATERIAL SHALL BE PLANTED PRIOR TO INSTALLATION OF TOPSOIL.
28.	ALL PLANT BEDS SHALL BE CONTAINED WITH STEEL EDGER. STEEL EDGER IS NOT REQUIRED ALONG CURBS, WALKS OR BUILDING FOUNDATIONS. ALL EDGING SHALL OVERLAP AT JOINTS A MINIMUM OF 6-INCHES, AND SHALL BE FASTENED WITH A MINIMUM OF 4 PINS PER EACH 10 FOOT SECTION. THE TOP OF ALL EDGING MATERIAL SHALL BE A ROLLED TOP AND 1/2 INCH ABOVE THE FINISHED GRADE OF ADJACENT LAWN OR MULCH AREAS. COLOR: BLACK.
29.	THE DEVELOPER, HIS SUCCESSOR, OR ASSIGNEE SHALL BE RESPONSIBLE FOR ESTABLISHING AND CONTINUING A REGULAR PROGRAM OF MAINTENANCE FOR ALL LANDSCAPED AREAS. SEE LANDSCAPE GUARANTEE AND MAINTENANCE NOTE.
30. 31.	A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCOMPERENCE OF ALL FIRE HYDRANTS. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OF OUTLOT TO PROVIDE
32.	PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT. THIS PLAN IS TO BE IMPLEMENTED COOPERATIVELY WITH SWPPP PLAN, AS NEEDED, TO MAXIMIZE THE EFFECTIVENESS OF THE SWPPP PLAN FOR THIS SITE.
33.	THE CONTRACTOR IS ENCOURAGED TO COMPLETE TEMPORARY OR PERMANENT SEEDING OR SODDING IN STAGES FOR SOIL STABILIZATION AS AREAS ARE COMPLETED AFTER GRADING.
34. 35.	THIS PLAN DOES NOT PRESENT ANY TEMPORARY STABILIZATION REQUIRED AS PART OF SWPPP PLAN. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION. LANDSCAPE CONTRACTOR TO SUBMIT SAMPLES OF MISCELLANEOUS LANDSCAPING MATERIALS TO THE LANDSCAPE ARCHITECTS AND OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION, IE.; MULCH, EDGER, LANDSCAPE FABRIC, ETC.
36.	TREE WRAP ON ALL TREES IN PARKING LOT FOR 1ST 3 YEARS, TREE WRAP REMOVED IN SPRING (MAY 21ST).
<u>IUL(</u> 37.	AFTER ALL PLANTING IS COMPLETE, THE CONTRACTOR SHALL INSTALL A MINIMUM 4" THICK LAYER OF MULCH AS SPECIFIED IN THE PLANTING LEGEND. INSTALL A 4" THICK RING OF SHREDDED HARDWOOD MULCH AROUND ALL PLANT MATERIAL IN ROCK MULCH BEDS WHERE LANDSCAPING IS SHOWN ON THE PLANS. WOOD MULCH RINGS SHALL BE EQUAL TO THE DIAMETER OF THE CONTAINER OR EQUAL TO THE SPREAD OF THE PLANT, WHICHEVER IS GREATER. TREE WOOD MULCH RING SIZE SHALL BE INDUSTRY STANDARD WIDTH.
38. 39.	ALL MULCH SHALL BE HARVESTED IN A SUSTAINABLE MANNER FROM A LOCAL SOURCE. INSTALL WEED BARRIER FABRIC UNDER ALL ROCK MULCH SHRUB BEDS AND PARKING ISLANDS AS SPECIFIED ON THE PLANS ONLY. NO LANDSCAPE FABRIC SHALL BE USED IN WOOD MULCH AREAS. NO PLASTIC WEED BARRIERS SHALL BE SPECIFIED.
40.	ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER MULCH HAS BEEN INSTALLED.
41.	ALL PLANTING AREAS WITH LESS THAN A 4:1 GRADIENT SHALL RECEIVE A LAYER OF MULCH, TYPE AND DEPTH PER PLANS. SUBMIT 1 CUBIC FOOT SAMPLE OF MULCH (ONE SAMPLE PER TYPE) TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. THE MULCH SHALL BE SPREAD EVENLY THROUGHOUT ALL PLANTING AREAS EXCEPT SLOPES 4:1 OR STEEPER, OR AS OTHERWISE DENOTED ON THE PLAN. ABSOLUTELY NO EXPOSED GROUND SHALL REMAIN IN AREAS TO RECEIVE MULCH AFTER MULCH HAS BEEN INSTALLED.
42.	ALL PLANTING AREAS ON SLOPES OVER 4:1 SHALL RECEIVE COCONUT FIBER EROSION CONTROL NETTING FROM ROLLS. NETTING SHALL BE #CT-125, AS MANUFACTURED BY NORTH AMERICAN GREEN (OR EQUAL). INSTALL AND STAKE PER MANUFACTURER'S SPECIFICATIONS. SEE ALSO THE CIVIL ENGINEER'S EROSION CONTROL PLAN.

_____

_____

_____

С

_____

D

_____

_____

- CONTRACTOR SHALL INSTALL TEMPORARY FENCING AROUND ALL EXISTING TREES WITHIN THE CONSTRUCTION ZONE THAT ARE TO BE SAVED. THE FENCE SHALL BE INSTALLED NO CLOSER TO THE TREE THAN THE EDGE OF THE TREE'S PROTECTED ZONE, GENERALLY DEFINED AS THE AREA BEGINNING FIVE FEET OUTSIDE OF THE TREE'S DRIPLINE AND EXTENDING TOWARDS THE TREE (OR AS FAR AWAY FROM THE TRUNK AS PRACTICABLE). THE FENCING SHALL BE OF A MATERIAL AND HEIGHT ACCEPTABLE TO THE LANDSCAPE ARCHITECT. ALL CONTRACTORS AND THEIR CREWS SHALL NOT BE ALLOWED INSIDE THIS "PROTECTED ZONE" NOR SHALL THEY BE ALLOWED TO STORE OR DUMP FOREIGN MATERIALS WITHIN THIS AREA. NO WORK OF ANY KIND, INCLUDING TRENCHING, SHALL BE ALLOWED WITHIN THE PROTECTED ZONE EXCEPT AS DESCRIBED BELOW. THE FENCING SHALL REMAIN AROUND EACH TREE TO BE SAVED UNTIL THE COMPLETION OF CONSTRUCTION OPERATIONS.
- 3. TEMPORARY MULCH: TO ALLEVIATE SOIL COMPACTION IN ANTICIPATED AREAS OF HIGH CONSTRUCTION TRAFFIC, AND ONLY WHERE FENCING CANNOT BE SET FIVE FEET OUTSIDE OF THE DRIPLINE, THE CONTRACTOR SHALL INSTALL A LAYER OF MULCH, 9"-12" THICK, OVER ALL EXPOSED EARTH FROM THE TREE TRUNK TO 5' OUTSIDE OF THE DRIPLINE. THIS LAYER SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. WHEN PLANTING OPERATIONS ARE COMPLETED, THE MULCH SHALL BE REDISTRIBUTED THROUGHOUT ALL PLANTING AREAS IN A 3" THICK "PERMANENT" MULCH LAYER. 4. NECESSARY WORK: WHEN IT BECOMES NECESSARY TO ENTER THE "PROTECTED ZONE", SUCH AS FOR FINE GRADING,
- IRRIGATION INSTALLATION, AND PLANTING OPERATIONS, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE FOLLOWING RULES: A. EVERY EFFORT SHALL BE MADE TO PRESERVE THE EXISTING GRADE AROUND PROTECTED TREES IN AS WIDE AN AREA AS POSSIBLE.
- B. TRENCHING WITHIN THE PROTECTED ZONE OF EXISTING TREES SHALL BE PERFORMED BY HAND, AND WITH EXTREME CARE NOT TO SEVER ROOTS 1-1/2" IN DIAMETER AND LARGER. WHERE ROOTS 1-1/2" IN DIAMETER AND LARGER ARE ENCOUNTERED, THE CONTRACTOR SHALL TUNNEL UNDER SAID ROOTS. EXPOSED ROOTS THAT HAVE BEEN TUNNELED UNDER SHALL BE WRAPPED IN WET BURLAP AND KEPT MOIST WHILE THE TRENCH IS OPEN.
- C. WHERE ROOTS 1-1/2" IN DIAMETER OR LARGER MUST BE CUT DUE TO EXTENSIVE GRADE CHANGES, THOSE ROOTS MUST BE EXPOSED BY HAND DIGGING AND CUT CLEANLY. RAGGED CUTS GENERALLY DO NOT HEAL PROPERLY, AND MAY LEAVE THE TREE OPEN TO PESTS AND PATHOGENS.
- D. WHERE TRENCHING NEAR TREES HAS ALREADY OCCURRED FROM PREVIOUS CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL MAKE EVERY EFFORT TO CONFINE HIS TRENCHING OPERATIONS TO THE PREVIOUSLY-CREATED TRENCHES, WHILE ADHERING TO THE CONDITIONS SET FORTH IN 3B.

- PROTECTION AND SURVIVAL OF EXISTING TREES.
- A. REMOVE ALL DEAD WOOD.

- LARGE WOUNDS SHALL NOT BE MADE.
- EACH TREE SPECIES.
- SET FORTH IN THIS DOCUMENT.
- FOLLOWING GUIDELINES:
- PROTECTED ZONE.

![](_page_55_Figure_20.jpeg)

![](_page_55_Figure_21.jpeg)

![](_page_55_Figure_22.jpeg)

![](_page_55_Figure_23.jpeg)

- 1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE
- TOP OF ROOTBALL. WHEN USED IN MASSES-PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM
- MASS/HEIGHT. 3. 4" MINIMUM OF HARDWOOD MULCH COMPACTED OR AS
- SPECIFIED. 4. EXCAVATE ENTIRE BED

SPECIFIED FOR

- GROUNDCOVER BED. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE
- (SEE GRADING PLAN). PREPARED PLANTING SOIL AS SPECIFIED. <u>NOTE:</u> WHEN GROUND- COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED IN THE PLANTING SPECIFICATION.
- 7. SCARIFY ROOTBALL SIDES AND BOTTOM.

![](_page_55_Figure_31.jpeg)

4

- (A) SILVA CELL SYSTEM (DECK, BASE, AND POSTS) (B) SUBGRADE, COMPACTED (C) GEOTEXTILE FABRIC, PLACED ABOVE SUBGRADE
- (E) SILVA CELL BASE SLOPE, 10% MAX
- (F)1" TO 6" SPACING BETWEEN SILVA CELLS AT
- G ANCHORING SPIKES, CONTACT DEEPROOT FOR ALTERNATIVE (H) GEOGRID, WRAPPED AROUND PERIMETER OF SYSTEM, WITH 6" TOE (OUTWARD FROM BASE) AND 12" EXCESS (OVER TOP OF DECK)
- () CABLE TIE, ATTACHING GEOGRID TO SILVA CELL AT BASE OF UPPER LEG FLARE, AS NEEDED

(J) PLANTING SOIL, PER PROJECT SPECIFICATIONS, PLACED IN LIFTS AND WALK-IN COMPACTED TO 75-85% PROCTOR (K) COMPACTED BACKFILL, PER PROJECT SPECIFICATIONS () GEOTEXTILE FABRIC TO EDGE OF EXCAVATION  $\bigcirc$  4" MIN AGGREGATE SUB BASE, COMPACTED TO 95% PROCTOR (M) RIBBON CURB AT TREE OPENING (TO BE USED WITH PAVERS OR ASPHALT) (N) THICKENED EDGE AT TREE OPENING (TO BE USED WITH CONCRETE) (O) PAVEMENT AND AGGREGATE BASE PER PROJECT *

*MINIMUM PAVEMENT PROFI	le opt
PAVEMENT	
<u>COURSE</u>	
4" CONCRETE	+ 4"
3" PAVER	+ 12
4" ASPHALT	+ 12'
2.6" PAVER	+ 5"

4. POTENTIAL CONFLICTS: THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARBORIST SHOULD ANY POTENTIAL CONFLICTS ARISE BETWEEN THESE SPECIFICATIONS AND/OR LARGE ROOTS ENCOUNTERED IN THE FIELD, AND CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL NOT TAKE ANY ACTION IN SUCH CONFLICTS WITHOUT THE ARBORIST'S WRITTEN APPROVAL. THE ARBORIST SHALL HAVE FINAL AUTHORITY OVER ALL METHODS NECESSARY TO HELP ENSURE THE

5. PRUNING: PRUNE ONLY THE TREES THAT ARE INDICATED ON THE PLANS AS REQUIRING PRUNING. PRUNE TREES ACCORDING TO INTERNATIONAL SOCIETY OF ARBORICULTURE / ANSI A300 STANDARDS: B. PRUNE LIVE WOOD FOR HEALTH OR STRUCTURAL REASONS ONLY, INCLUDING THE NEED TO ELIMINATE DISEASED OR

DAMAGED GROWTH, ELIMINATE STRUCTURALLY UNSOUND GROWTH, REDUCE THE POTENTIAL FOR WIND TOPPLING OR WIND DAMAGE, OR TO MAINTAIN GROWTH WITHIN LIMITED SPACE. DO NOT REMOVE MORE THAN 25% OF ANY TREE'S LIVE FOLIAGE IN ANY ONE GROWING SEASON. PRUNE ONLY TO INTERNATIONAL SOCIETY OF ARBORICULTURE/ANSI A300 STANDARDS, AND ONLY UNDER THE DIRECT SUPERVISION OF A CERTIFIED ARBORIST. C. FINAL CUTS SHALL BE MADE JUST OUTSIDE THE SHOULDER RING AREA. EXTREMELY FLUSHED CUTS WHICH PRODUCE

D. ALL TRIMMING CUTS SHALL BE PERFORMED IN SUCH A MANNER AS TO PROMOTE THE NATURAL GROWTH AND SHAPE OF

E. IMPROPER PRUNING METHODS INCLUDING, BUT NOT LIMITED TO, "TOPPING", "TIPPING", "HEADING BACK", "DEHORNING", AND "LIONTAILING" WILL NOT BE ALLOWED. THE CONTRACTOR SHALL PAY FOR ALL WORK NECESSARY TO CORRECT SUCH PRUNING WHEN PERFORMED BY HIS CREWS OR SUBCONTRACTORS.

F. SHOULD THE CONTRACTOR REQUIRE MORE INFORMATION, THE CONTRACTOR SHALL CONTACT THE ISA AT (217) 355-9411 FOR A COPY OF THE ANSI A300 PRUNING STANDARDS. CONTRACTOR SHALL ADHERE TO THE METHODS AND PRACTICES

6. LANDSCAPE AND IRRIGATION (NATIVE TREES ONLY): ANY FUTURE LANDSCAPE AND IRRIGATION SHOULD ADHERE TO THE

A. NO IRRIGATION OR PLANTING SHOULD OCCUR CLOSER THAN 8'-10' FROM THE TRUNK.

B. WHERE IRRIGATION DOES OCCUR WITHIN THE PROTECTED ZONE, DRIP IRRIGATION SHOULD BE USED WHEREVER POSSIBLE. ADDITIONALLY, ONLY PLANTS WITH LOW WATER NEEDS SHOULD BE PLANTED WITHIN THE PROTECTED ZONE, SPACED FAR APART WHERE CLOSE TO THE TREE. PLANTS MAY BE SPACED CLOSER TOGETHER NEAR THE EDGE OF THE

![](_page_55_Picture_51.jpeg)

PTIONS TO MEET H-20 LOADING + AGGREGATE BASE

AGGREGATE 12" AGGREGATE AGGREGATE CONCRETE

(P) DEEPROOT ROOT BARRIER, 12" OR 18", DEPTH DETERMINED BY THICKNESS OF PAVEMENT SECTION, INSTALL DIRECTLY ADJACENT TO

CONCRETE EDGE RESTRAINT (Q) PLANTING SOIL BELOW ROOT BALL, COMPACTED WELL TO PREVENT SETTLING (R) ROOT BALL

S) TREE OPENING TREATMENT, PER PROJECT SPECIFICATIONS

(T) DEEPROOT WATER AND AIR VENT, ROOTBALL, WHEN REQUIRED (U) DEEPROOT WATER AND AIR VENT, WHEN REQUIRED

(V) UNDERDRAIN SYSTEM, WHEN REQUIRED (LOCATION AND DETAILS BY OTHERS)

- ΝΟΤΕ S EXCAVATION SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE HEALTH AND
- SAFETY REGULATIONS INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S
- SPECIFICATIONS PROVIDE SUPPLEMENTAL IRRIGATION DO NOT SCALE DRAWINGS

CAUTION - NOTICE TO CONTRACTOR . ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FIELD LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.

WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

![](_page_55_Picture_65.jpeg)

![](_page_55_Picture_66.jpeg)

![](_page_56_Figure_0.jpeg)

_____

_____

_____

_____

DRIP EMITTERS LAYOUT SCALE: NOT TO SCALE

UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.

![](_page_56_Picture_4.jpeg)

![](_page_56_Picture_5.jpeg)

DRAIN	VALVE

# VALVE BOX, BRAND EQUIPMENT TYPE

- (3) POLYPIPE DRIP LINE
- 4 MANUAL FLUSH BALL
- 5 BRICK SUPPORTS (3)
- OF 3/4" MINUS WASHED GRAVEL

![](_page_56_Figure_12.jpeg)

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	
IP SYSTE	ΞM			
	RAINBIRD	FOR LANDSCAPE BED AREAS - XBS-XXX	XERI BLACK STRIPE PER CONTRACTOR. BELOW. USE 3/4-INC FOR LINE CHANGES INSTALL SEVERAL IN GROUP DRIP CONTR	POLY TUBING (OR APPROVED EQUAL), CONNE ATTACH TREE & SHRUB DRIP EMITTERS PER T CH POLY TUBING SIZE UNLESS OTHERWISE NO SHALL BE: (3/4"-1 TO 7 GPM), (1"-8 TO 14 GPM), ILINE CHECK VALVES IN ZONES W/ LARGE ELE ROLLER VALVES TOGETHER TO MAXIMIZE WAT
FV	NIBCO	4660-S	MANUAL DRIPLINE F	LUSH VALVE
	PROVIDE THE FOLLOWING DRIP EMITTERS FOR EACH PLANT:	PLANTS, 1 GALLON ANE PLANTS, 5 GALLON: UPRIGHT JUNIPERS, 10 TREES, 1" TO 2-1/2" CAL TREES, 3" TO 4" CALIPE	D SMALLER: -15 GALLON: IIPER: :R:	1, XB-10PC - (1 GPH) EMITTER PER PLANT 2, XB-10PC - (2 GPH) EMITTERS PER PLANT 3, XB-10PC - (3 GPH) EMITTERS PER TREE 4, XB-10PC - (4 GPH) EMITTERS PER TREE 7, XB-10PC - (7 GPH) EMITTERS PER TREE
IN LINE/	LATERALS & SLE	EVES		

# GENERAL IRRIGATION NOTES

REPRESENTATIVE IMMEDIATELY

- IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPAL ENTITIES AND THUS, IS DIAGRAMMATIC IN NATURE. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR GRAPHIC CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST
- REFER TO SPECIFICATIONS (AS APPROPRIATE) FOR SUBMITTALS, INSPECTIONS AND OTHER APPLICABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING. THE PROJECT SPECIFICATIONS ARE A PART OF THESE PLANS AND SHALL BE CONSULTED BY THE IRRIGATION CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING WORK AS SPECIFIED IN THE PROJECT SPECIFICATIONS AND ON THE PLANS.
- 3. THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER APPLICABLE PLANS & DOCUMENTS. CONTRACTOR SHALL THOROUGHLY REVIEW PLANS & REPORT ANY CONFLICTS OR DISCREPANCIES TO OWNER'S
- 4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK. DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE EXISTED AT THE TIME OF THE IRRIGATION DESIGN PREPARATION. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT GIVEN, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY TO BRING THE SYSTEM TO A PROPER WORKING CONDITION, AND TO THE OWNER'S SATISFACTION.
- 5. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, RETAINING WALLS, ETC. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALL, UNDER ROADWAY PAVING, ETC.
- 6. THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT. 7. SEE CIVIL ENGINEER'S DRAWINGS FOR IRRIGATION POINT OF CONNECTION (TAP) AND DOMESTIC WATER SUPPLY.
- 8. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS
- 9. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE POINT OF CONNECTION NOTE TAG(S) ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED OR PRESSURES HAVE GREATLY CHANGED PRIOR TO THE START OF THE IRRIGATION SYSTEM CONSTRUCTION. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR RECOMMENDING A SOLUTION AND PROVIDING AN ADD ALTERNATE BID FOR IRRIGATION COSTS.
- SCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE.
- 11. NO MORE THAN 90% OF AVAILABLE MINIMUM STATIC WATER PRESSURE WAS USED IN PREPARATION OF THESE PLANS, FURTHERMORE. THE MAXIMUM FLOW THROUGH THE METER SHOULD NOT EXCEED 75% OF THE MAXIMUM SAFE FLOW. 12. SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY
- IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN AFTER THE IRRIGATION WATER METER. 13. INSTALL ALL MATERIALS AND EQUIPMENT AS SHOWN ON THE PLANS AND DETAILS. NO SUBSTITUTIONS OF EQUIPMENT
- WILL BE ACCEPTABLE WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT OR THE OWNERS REPRESENTATIVE. THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO REMOVE AND REPLACE ALL UNAPPROVED SUBSTITUTED EQUIPMENT AT HIS OWN COST IF SO DIRECTED BY THE OWNER. 14. WHEN INSTALLING IRRIGATION PIPE AND EQUIPMENT NEXT TO HARDSCAPE (SUCH AS WALLS, CURBS, OR WALKS), PLACE PIPE AS CLOSE AS POSSIBLE TO HARDSCAPE TO AVOID CONFLICTS WITH PLANTING. REFER TO MAINLINE
- TRENCHING DETAILS FOR ADDITIONAL INFORMATION 15. THE IRRIGATION CONTRACTOR SHALL COORDINATE 120 V.A.C. ELECTRICAL POWER TO CONTROLLERS AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL SOURCE TO THE CONTROLLER UNIT ONLY.
- 16. THE RAIN SENSOR SHALL BE LOCATED NEAR THE IRRIGATION CONTROLLER, AND SHALL BE MOUNTED AS SHOWN ON THE DETAIL AND/OR LEGEND. LOCATE SENSOR AWAY FROM TALL TREES, SHRUBS, AND OTHER POTENTIAL OBSTRUCTIONS. 17. ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE
- ALLOWED EXCEPT AT VALVES AND CONTROLLER. WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN 6" ROUND VALVE BOXES WITH 3M'S "DBY-DIRECT BURIAL SPLICE KIT". THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24" COIL OF EXCESS WIRE AT EACH CONNECTION.
- 18. CONTRACTOR SHALL PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.

# UTILITY NOTES

- 1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
- 2. THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
- 3. THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE UNDERGROUND UTILITIES EXIST FIELD ADJUSTMENT MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT

REFERENCING THE ABOVE MENTIONED DOCUMENTS.

- IRRIGATION DISCLAIMER

- ARCHITECT, & IRRIGATION DESIGNER OF THE PRESSURE READING FOR THE TAP.

![](_page_56_Figure_41.jpeg)

- (2) FINISH GRADE TRENCH BACKFILL
- LOCATOR WIRE W/BURIER CAUTION TAPE
- **PVC IRRIGATION LATERAL 3URIED MIN. 12" BELOW**
- (6) SAND BACKFILL
- 7 PVC LATERIAL SLEEVE SEE PLANS FOR SIZE
- 8 2" MIN. PVC WIRE SLEEVE FOR CONTROL WIRES
- 9 PVC MAINLINE SLEEVE SEE PLANS FOR SIZE 10 PVC IRRIGATION MAINLINE
- 11) CONTROL WIRES TAPE TO MAINLINE AT 10' INTERVALS

EXTEND SLEEVES INTO LANDSCAPE AREAS 12" BEYOND EDGE OF HARDSCAPE

> PIPE AND SLEEVE INSTALLATION SCALE: NOT TO SCALE

	(

- CONTRACTOR NOTE 1. CONTRACTOR TO ENSURE IRRIGATION SYSTEM IS IN PLACE AND OPERATIONAL PRIOR TO INSTALLATION.
- 2. CONTRACTOR TO RETROFIT AND EXTEND THE EXISTING IRRIGATION SYSTEM TO NEWLY ADDED PLANT MATERIAL SHOWN ON THE LANDSCAPE
- 3. ALL IRRIGATION EQUIPMENT AND COMPONENTS USED, SHALL MATCH THE EXISTING IRRIGATION SYSTEM.
- 4. CONTRACTOR TO ENSURE THE RETROFITTED IRRIGATION SYSTEM IS OPERATIONAL UPON COMPLETION.
- 5. CONTACT THE LANDSCAPE ARCHITECT WITH ANY QUESTIONS REGARDING THIS RETROFIT.
- 19. CONNECT ALL DIRECT BURIAL WIRES TO VALVES USING 3M'S "DBY-DIRECT BURIAL SPLICE KIT" (UNLESS OTHERWISE SPECIFIED) 20. PROVIDE ADDITIONAL IRRIGATION CONTROL WIRES TO THE AMOUNT OF OPEN ZONES ON THE CONTROLLER ALONG
- EACH BRANCH OF MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF IRRIGATION CONTROLLERS 21. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. ALL SLEEVING SHALL BE PVC SCHEDULE 40 PIPE. SLEEVES FOR MAINLINE AND LATERAL LINES SHALL BE A MINIMUM TWICE THE DIAMETER OF THE ENCLOSED PIPE; SLEEVES FOR CONTROL WIRES SHALL BE AS PER THE SLEEVING / WIRING NOTE AND THE WIRING SLEEVE LEGEND ITEM AS SHOWN
- ON THESE DRAWINGS 22. TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS LARGER THAN
- 1" IN DIAMETER. BACKFILL SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY. 23. WHERE VALVES ARE LOCATED IN CLOSE PROXIMITY TO EACH OTHER, CLUSTER VALVES INTO MANIFOLDS. INSTALL NO MORE THAN ONE VALVE PER VALVE BOX.
- 24. MANUAL DRAIN VALVE, FOR FREEZE PROTECTION, ARE TO BE LOCATED AT ALL LOW POINTS OF IRRIGATION LATERAL LINES. WHERE THE LOW POINT IS AT THE END OF THE LINE, LOCATE DRAIN VALVE A MINIMUM OF 12" DOWNSTREAM FROM THE LAST SPRINKLER HEAD. SEE DETAIL FOR VALVE ORIENTATION.
- 25. USE TEFLON TAPE ON ALL PVC MALE PIPE THREADS ON ALL SWING JOINT AND VALVE ASSEMBLIES. 26. ALL IRRIGATION HEADS, INCLUDING FIXED-SPRAY AND DRIP DEVICES, SHALL BE SET PERPENDICULAR TO THE FINISH
- GRADE OF THE AREA TO BE IRRIGATED. 27. ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 3' AWAY FROM ANY BUILDING FOUNDATION. IF THIS EQUIPMENT IS SHOWN WITHIN THE 3' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
- 28. EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, IT IS THE INTENT OF THE IRRIGATION DESIGN TO INDICATE ALL SPRAY HEADS AS "POP-UPS". IN THE EVENT THAT POP-UP HEADS HAVE NOT BEEN SPECIFIED IN TURF AREAS, IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BRING THIS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING AND CONSTRUCTION.
- 29. ALL SPRAY AND ROTOR HEAD LOCATIONS SHALL BE STAKED, FLAGGED AND/OR OTHERWISE CLEARLY MARKED ON THE GROUND PRIOR TO INSTALLATION. SPRINKLER HEAD STAKING SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE OR THE LANDSCAPE ARCHITECT BEFORE INSTALLATION. STAKED LOCATIONS SHALL BE SPACED TO PROVIDE HEAD-TO-HEAD COVERAGE. RECOMMENDED SETBACK DISTANCE OF ALL PROPOSED IRRIGATION HEADS IS 12" FROM BACK OF CURB AND EDGE OF PAVEMENT.
- 30. FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE ARC AND RADIUS TO FIT THE EXISTING SITE CONDITIONS.
- 31. ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN TURF AREAS SHALL BE INSTALLED SO THE TOP OF THE SPRINKLER HEAD IS FLUSH WITH THE ADJACENT SIDEWALK, OR PAVING. ALL POP-UP HEADS AWAY FROM HARDSCAPE EDGES IN TURF SHALL BE 1" ABOVE THE FINISH GRADE TO PREVENT CONTACT WITH MOWERS. 32. EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE
- CRITICAL ROOT ZONE OF ANY TREE. 33. ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL
- PI ANTED 34. UPON COMPLETION OF INSTALLATION OF IRRIGATION SYSTEM, IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING A. ACCURATE AND COMPLETE "AS BUILT" PLANS OF IRRIGATION SYSTEM INCLUDING 8-1/2" X 11" ZONE MAP TO BE PLACED INSIDE EACH CONTROLLER BOX. B. LOG ON ALL WATER WINDOWS, RUN SCHEDULE TIMES, AND OTHER CHANGES AND/OR MODIFICATIONS TO THE IRRIGATION SYSTEM SINCE INSTALLATION. C. ONE HOUR OF TRAINING TO OWNER ON IRRIGATION SYSTEM AND CONTROLLER OPERATION. . THREE OF EACH TYPE OF HEAD AND EMITTER INSTALLED. E. ONE OF EACH TYPE OF VALVE INSTALLED.
- F. REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNERS REPRESENTATIVE. 35. PRIOR TO ACCEPTANCE OF IRRIGATION SYSTEM AT THE END OF THE MAINTENANCE PERIOD, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING: CURRENT SCHEDULE RUN TIME AND WATER WINDOW LOG, ALONG WITH NOTING ANY OTHER PERTINENT INFORMATION.
- 36. UNLESS OTHERWISE SPECIFIED, THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ANYTHING DAMAGED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER. 37. CONTRACTOR SHALL INSTALL MAINLINES ±12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND
- OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
- 38. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND SPECIFICATIONS, THE PLAN SHALL TAKE PRECEDENCE. 39. THE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR.

1. IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPALITIES ENTITIES AND THUS DIAGRAMMATIC IN NATURE.

2. CONTRACTOR SHALL INSTALL MAINLINES ±12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.

3. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE AND VISIBLE IRRIGATION EQUIPMENT (CONTROLLERS, BACKFLOW PREVENTERS, METER PITS, ETC.) WITH THE OWNER'S AUTHORIZED REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE INSTALLATION OF THESE ITEMS SHALL BE INTEGRATED WITHIN DESIGNATED LANDSCAPE AREAS. FAILURE TO LOCATE THIS EQUIPMENT IN AN APPROVED LOCATION MAY RESULT IN THE IRRIGATION CONTRACTOR BEING REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.

4. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION OF ANY COMPONENT OF THE IRRIGATION SYSTEM. AFTER FIELD VERIFICATION, THE IRRIGATION CONTRACTOR SHALL NOTIFY THE OWNER, OWNER'S REPRESENTATIVE, LANDSCAPE

5. ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 5' AWAY FROM ANY BUILDING FOUNDATION. ADDITIONAL REQUIREMENTS MAY BE LISTED IN THE GEOTECHNICAL REPORT REGARDING IRRIGATION NEAR BUILDING FOUNDATIONS. CONTRACTOR IS RESPONSIBLE TO ABIDE BY THE 5' MINIMUM DISTANCE AND/OR THE GEOTECHNICAL REPORT REQUIREMENTS. IF THIS EQUIPMENT IS SHOWN WITHIN THE 5' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY. 6. REFER TO THIS SHEET FOR IRRIGATION NOTES AND IRRIGATION DETAILS.

![](_page_56_Picture_85.jpeg)

### CAUTION - NOTICE TO CONTRACTOR 1. ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FIELD LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.

2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

![](_page_56_Picture_89.jpeg)

![](_page_56_Picture_90.jpeg)

![](_page_56_Picture_91.jpeg)

ISSUE	BLOCK			
	PR#1	01/25/22		
CHECKE	ED BY:	KES		
drawn by: EDN				

PRUID UTULE: DOCUMENT DATE: 09/08/2

> IRRIGATION PLAN

> > IR1.0