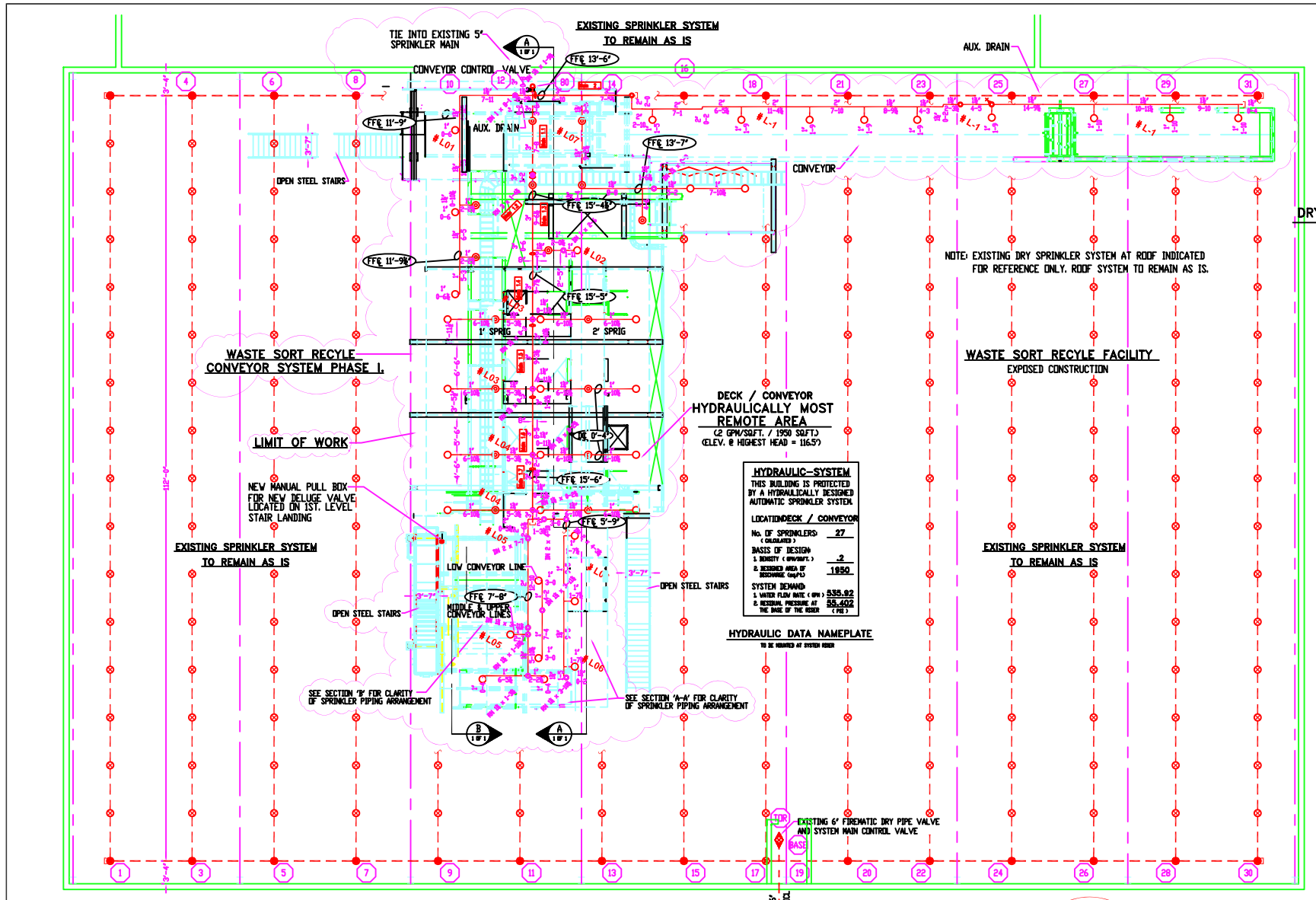


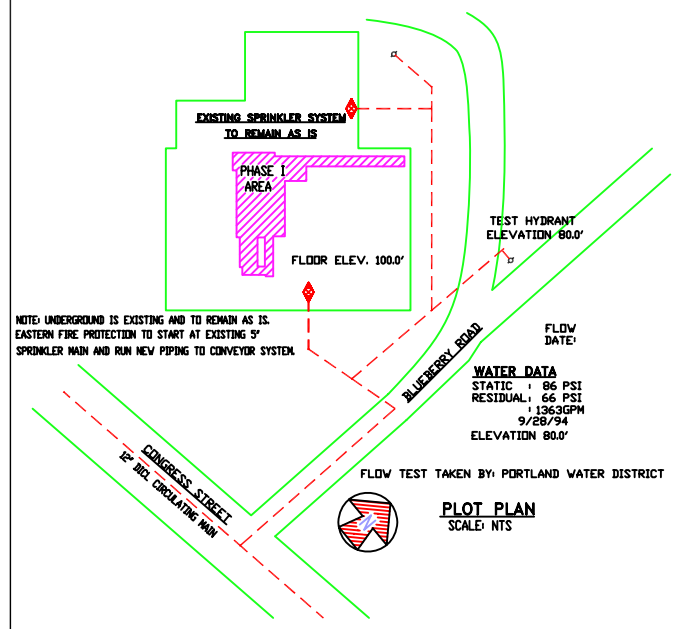
FIRE SPRINKLER PLAN – PHASE I CONVEYOR SYSTEM

SCALE: 1/8"=1'-0"
AREA PROTECTED: 3745 SQ.FT.
FINISH FLOOR ELEVATION 100.0'
COLOR CODE:
NOTE: AREA PROTECTED FOR PHASE I CONVEYOR SYSTEM ONLY

EXISTING CENTRAL 165° 270 — BRASS UPRIGHT — K-FACTOR = 8.0
TYCO MOD. 'TY-B' 155° 14 — BRASS UPRIGHT DN SPRIG — K-FACTOR = 5.6 SIN# TY3151
TYCO MOD. 'TY-B' 155° 41 — DN LINE — K-FACTOR = 5.6 SIN# TY3151

NOTE: DRY SYSTEM PIPING TO BE PITCHED PER NFPA 13
¼" PER 10FT. MINIMUM FOR MAINS
½" PER 10FT. MINIMUM FOR LINES

0 1' 2' 3' 8' 16' 24'
1/8"=1'-0" GRAPHIC SCALE



PLOT PLAN

SCALE: NTS

SPRAY NOZZLE REFERENCE TABLE

MAKE	MODEL	NUMBER	FACTOR	ORIFICE/NPT	AXIAL DISTANCE	SPRAY ANGLE	FIXED ANGLE HORIZONTAL	FIXED ANGLE VERTICAL	LISTING/ APPROVALS
TYCO	NO. 32 65°	01	5.6	.438 / 1/2"	9'-8"	65°	PERPENDICULAR TO TARGET	19°	19°
TYCO	NO. 32 80°	02	5.6	.438 / 1/2"	5'-5"	80°	PERPENDICULAR TO TARGET	38°	38°
TYCO	NO. 32 80°	03	5.6	.438 / 1/2"	3'-9"	80°	PERPENDICULAR TO TARGET	36°	36°
TYCO	NO. 32 95°	04	5.6	.438 / 1/2"	3'-2"	95°	PERPENDICULAR TO TARGET	38°	38°
TYCO	NO. 32 95°	05	5.6	.438 / 1/2"	4'-10"	95°	PERPENDICULAR TO TARGET	12°	12°
TYCO	NO. 32 95°	06	5.6	.438 / 1/2"	3'-7"	95°	PERPENDICULAR TO TARGET	12°	12°

GENERAL NOTES

SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13

OCCUPANCY DESCRIPTION AND CLASSIFICATION:
WASTE RECYCLE -CLASS IV COMMODITY
LESS THAN 10' STORAGE
FIGURE 12.1.10 CURVE 3

SCOPE OF WORK

EXPAND EXISTING SPRINKLER SYSTEM TO PROTECT NEW WASTE SORT RECYCLE CONVEYOR SYSTEM PHASE I IN ACCORDANCE WITH NFPA 13 STANDARDS. SPRINKLER PROTECTION TO BE INSTALLED UNDER ALL CONVEYOR SPACES OVER 4'-0".

——— INDICATES NEW SPRINKLER PIPING
- - - - INDICATES EXISTING SPRINKLER PIPING

EXISTING SPRINKLER PROTECTION OUTSIDE LIMIT OF WORK TO REMAIN AS IS.

ALL DIMENSIONS ARE SHOWN FOR GENERAL LOCATION OF SPRINKLER HEADS PIPING MAY VARY TO SUIT ACTUAL FIELD CONDITIONS.

⬡ = INDICATES HYDRAULIC REFERENCE POINTS.

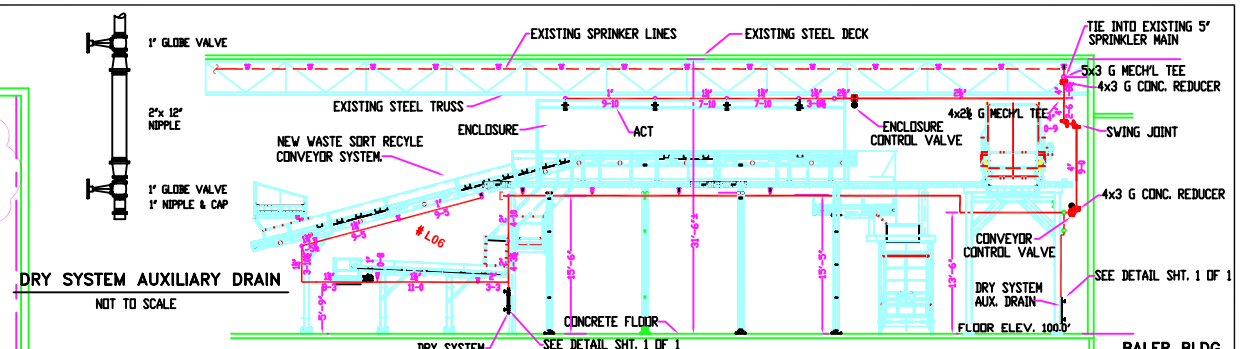
D. L INDICATES DECK DOWN TO CENTERLINE OF PIPE.

F.F. L INDICATES FINISH FLOOR UP TO CENTERLINE OF PIPE.

DN INDICATES VERTICAL PIPE DOWN
RN INDICATES VERTICAL PIPE UP

ALL WIRING TO BE DONE BY OTHERS

MAXIMUM HEIGHT OF STORAGE TO BE 18" BELOW DEFLECTOR, OR 10' A.F.F. WHICH LEVEL IS GREATER.

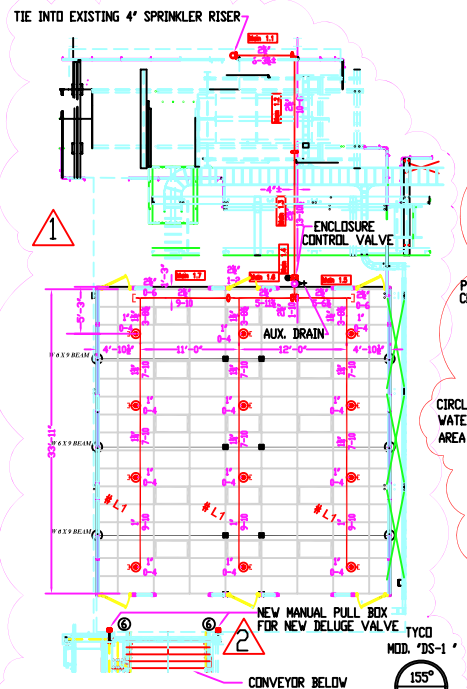


DRY SYSTEM AUXILIARY DRAIN

NOT TO SCALE

SECTION "A-A"

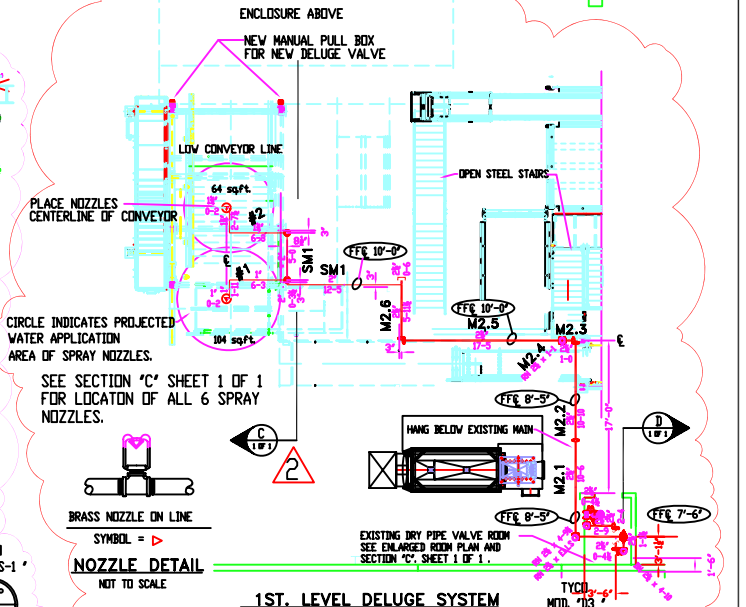
SCALE: N.T.S.



FIRE SPRINKLER PLAN – ENCLOSURE

SCALE: 1/8"=1'-0"
AREA PROTECTED: 1094 SQ.FT.
FINISH FLOOR ELEVATION 116.83'
COLOR CODE: WHITE

TYCO MOD. 'DS-1' 155° 12 — CHROME DRY PENDENT — K-FACTOR = 5.6 SIN# TY3255



NOZZLE DETAIL

NOT TO SCALE

BRASS NOZZLE ON LINE
SYMBOL = ▷

TYCO MOD. "13" 155° 6 — DIRECTIONAL SPRAY NOZZLE — K-FACTOR = 5.6 ORIFICE NO.32

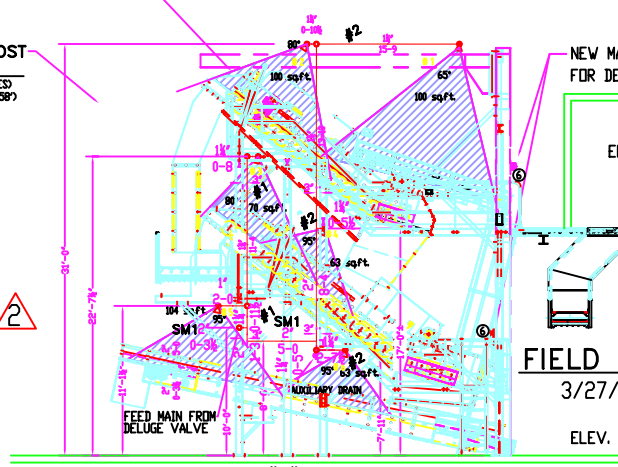
1ST. LEVEL DELUGE SYSTEM

SCALE: 1/8"=1'-0"
AREA PROTECTED: 530 SQ.FT.
FINISH FLOOR ELEVATION: 100.0'

6X2½ MECH'L TEE, 2½" G-BUTTERFLY VALVE & G-ELL 2' AFF.

HATCHED AREA INDICATES PROJECTED WATER APPLICATION AREA OF SPRAY NOZZLES.

HYDRAULICALLY MOST REMOTE AREA
(.25 GPM/SQFT. / 6 NOZZLES)
(ELEV. @ HIGHEST HEAD = 130.58')



SECTION "C" DELUGE SPRAY NOZZLES

SCALE: N.T.S.

NEW MANUAL PULL STATION FOR DELUGE VALVE

ENCLOSURE

TYCO MOD. "D3" TO CONVEYOR DELUGE SYSTEM

FIELD PLAN

3/27/09

ELEV. 100'-0"

HYDRAULIC-SYSTEM
THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM
LOCATION CONVEYOR
No. OF SPRINKLERS (CALCULATED) 6
BASIS OF DESIGN
1. DENSITY (GPM/SQFT.) .35
2. REMOTED AREA OF DISCHARGE (SQ.FT.) 530
SYSTEM DEMAND
1. WATER FLOW RATE (GPM) 177
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER 66.7 (PSI)
HYDRAULIC DATA NAMEPLATE
TO BE MOUNTED AT SYSTEM RISER

HANG TO EXISTING MAIN
TIE INTO EXISTING 6" RISER BELOW DS&Y GATE VALVE, 2'-0" ABOVE FINISH FLOOR.

SCOPE OF WORK
INSTALL A MANUAL DELUGE SYSTEM FOR CONVEYOR AS SHOWN ON PLAN AND SECTION DRAWINGS.
BRANCH LINE PIPING 1"-2" TO BE SCHEDULE 40 GALVANIZED JOINED BY THREADED GALVANIZED FITTINGS
MAIN PIPING 2½" TO BE SCHEDULE # 10 GALVANIZED W/ GROOVED ENDS & MECHANICAL OUTLETS JOINED BY MECHANICAL COUPLINGS

ENLARGED VALVE ROOM

SCALE: N.T.S.

TO TIE-IN @ 6" RISER SPOOL PIECE

LEGEND

1. EXISTING 6" DRY PIPE VALVE & TRIM
2. NEW 2½" GROOVED BUTTERFLY VALVE
3. AUXILIARY DRAIN VALVE
4. 2½" GROOVED CHECK VALVE
5. 2" MOD. DV-5 DELUGE VALVE WITH TRIM
6. MANUAL PULL STATION
7. 24 VDC SOLENOID VALVE
8. POTTER PFC-4410RC 4 ZONE RELEASING PANEL
9. POTTER PS-10 WIRED TO ALARM SYSTEM
10. 2½x½ MECH'L TEE

ELEV. 100'-0"

SECTION "D" DELUGE VALVE ASSEMBLY

SCALE: N.T.S.

GENERAL NOTES	DATE	REVISIONS	REQUIRED APPROVALS
SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13	3/1/07	1. INSTALL SPRINKLERS IN NEW ENCLOSURE ABOVE NEW CONVEYOR SYSTEM. CONTRACT WITH KAB TECH. CONTRACT # AN-4061 DRAWN BY: RCB	OWNER STATE FIRE MARSHAL PORTLAND FIRE DEPARTMENT
BRANCH LINE PIPING TO BE BLACK SCHEDULE 40 JOINED BY THREADED DUCTILE IRON FITTINGS	3/5/09	2. INSTALL A MANUAL DELUGE SYSTEM FOR CONVEYOR CONTRACT # AN-4364-09 DRAWN BY: RCB	DRAWN BY RCB NICET LEVEL III CERT.# 069681
MAIN PIPING TO BE SCHEDULE # 10 BLACK WITH GROOVED ENDS & WELDED OUTLETS JOINED BY MECHANICAL COUPLINGS			CHECKED BY WAF NICET LEVEL III CERT.# 095574
OWNER TO PROVIDE SUFFICIENT HEAT IN DRY PIPE VALVE ROOM TO PREVENT FREEZING OF WATER FILLED SPRINKLER PIPING AND EQUIPMENT. (MIN. 40° F)			CONTRACTOR LICENSE # 101 CONTRACTOR RMS # 368

ECO MAINE PHASE I CONVEYOR UPGRADE

BLUEBERRY RD., PORTLAND, MAINE

CONTRACT WITH: VAN DYK BALER CORP

EASTERN FIRE PROTECTION
AUBURN/LEWISTON INDUSTRIAL AIRPARK, AUBURN, MAINE 04210

FIRE SPRINKLER PLANS & DETAILS
DWG. NO. 1 OF 1
JOB NUMBER AN-4054-07
SCALE AS SHOWN
DATE 2/12/07