



Mechanical Handling Data Sheet

Top Running, Double Girder

CM

Data Sheet No

R10319622

24590-LAW-MOD-LPH-00003

Plant Item No

Rev.

24590-LAW-MJ-LPH-CRN-00002

5

Project	RPP-WTP	Description	Top Running, Double Girder
Project No	24590	Supporting Calculation No.	24590-LAW-MOC-LRH-00001
Planning Area	3	Associated Drawing No	24590-LAW-MO-LPH-00014001, 24590-LAW-MO-LPH-00014002; 24590-LAW-MO-LPH-00014003; 24590-LAW-M7-LPH-00001004
System No.	LPH	Associated Specification No	24590-LAW-3PS-MJG-T0001
Building No	20	Associated MR No.	24590-CM-MRA-MJG-00003
Quality Level	Commercial		
Seismic Criteria	SC-III (UBC Zone 2B)		
Function	Transport ILAW Containers into/out of Buffer Storage		

ISSUED BY  
  
 DATE

DESIGN CRITERIA

Design Life	40 years	Safety Class	Non-Important To Safety
-------------	----------	--------------	-------------------------

OPERATING ENVIRONMENT

			In-Cave	Rm #	L-B025C	Out-Cave	Rm #	L-B019A	List All Special
			Min	Max		Min	Max		Conditions
Temperature		deg F	59	113		59	95		In-Cave temperature may be as high as 130 deg F Max
Relative Humidity		%	5	85		5	85		
Radiological Equip Dose	gamma	rad/ 40 yrs	3.5x10e3	3.5x10e4		875	3.5x10e3		
	neutron	rad/ 40 yrs	Negligible	Negligible		Negligible	Negligible		
Radiological Classification			R5	R5		R3	R3		
Contamination Classification			C5	R5		C3	C3		

CRANE REQUIREMENTS

Type of Crane	Top Running, Double Girder		
Service Information	CMAA-70: Class D		Capacity (tons)
Crane Operation Indoors?	Yes	Main Hoist	10
Material Handled	Filled ILAW Product Containers	Auxiliary Hoist	N/A
Class Information	CMAA-70, Class D	Bridge	10
ASCE Rail Type or Beam Size	104# CR [Buyer (CSA) supplied]		

Lifts	Symbol	(ft)	(in)	Quantity	Main Speed	Creep Speed
Main Hoist Lift Height	A	15	5.5	Lifts/day 7	VAR 0-25 (ft/min)	N/A (ft/min)
Aux. Hoist Lift Height	N/A	N/A	N/A	Lifts/day N/A	N/A (ft/min)	N/A (ft/min)
Average Moves - Bndge	N/A	48	6	Moves/day 7	VAR 0-25 (ft/min)	N/A (ft/min)
Average Moves - Trolley	N/A	10	0	Moves/day 14	VAR 0-25 (ft/min)	N/A (ft/min)

6/14/04	5	Incorporate 24590-WTP-SDDR-PROC-04-00414 and 24590-WTP-SDDR-PROC-04-00450	WA Frier		L Harrison	Dave Wilsey
04/29/04	4	Revised hook approach in accordance with 24590-CM-POA-MJG-00003-16-01. Revised motor control center rating in accordance with 24590-WTP-SDDR-PROC-04-00284. Editorial revision	WA Frier	E. Szavay	L Harrison	Dave Wilsey
09/09/03	3	Revised calc no., crane type & hook approach notation. Dose calculation based upon 24590-LAW-Z0C-W13T-00002, Rev A & CCN 068694. Revised dim 'F' Revised decon maint req'mt Clarified lighting requirements. Added note on configuration. Added grapple profile & revised 'A' & 'B' dim in sketch	WA Frier	E. Szavay	J Weamer/Mark Johnson	Dave Wilsey
05/01/03	2	Note 1 changed to state 2 cameras required as close to each end truck as possible. Template updated. Dimensions A and E improved based on Supplier information. Includes vendor information for motor sizing. Incorporates SDDR 24590-WTP-SDDR-PROC-03-0006	B Kempe	R. Leyva	J Weamer/Mark Johnson	Dave Wilsey
09/26/02	1	Issued for Procurement	B Kempe	C. Weddle	S Crow/J Weamer	Dave Wilsey
03/27/02	0	Issued for Procurement	M Meyer	Craig Keller	Mark Johnson	Dave Wilsey
Date	REV	Revisions	By	Checked	Supervisor	Approved
Doc Number	24590-LAW-MOD-LPH-00003	REV	5	Page	1	of 4





# Mechanical Handling Data Sheet

Top Running, Double Girder

Data Sheet No

24590-LAW-M0D-LPH-00003

Plant Item No.

24590-LAW-MJ-LPH-CRN-00002

Rev

5

## MAINTENANCE REQUIREMENTS

Retrieval	Crane must be retrievable including hoist, bridge drive, and trolley drive Grapple sequence requires a lower-raise-lower to release
Decontamination	Cranes shall be decontaminated by hands on contact.

## ADDITIONAL REQUIREMENTS

- Two crane mounted cameras capable of pan, zoom and tilt. One camera mounted as close to each end truck as possible. (Buyer supplied).
- Four crane mounted lights mounted to underside of bridge beam - capable of 40-60 foot candle at 7.5 ft from floor level
- Room maximum operational temp is 113 degrees F. Peak temperature may be as high as 130 degrees F.
- Deleted
- Hoist shall have a load cell, as shown in 24590-LAW-M7-LPH-00001004.



# Mechanical Handling Data Sheet

Top Running, Double Girder

Data Sheet No

24590-LAW-MOD-LPH-00003

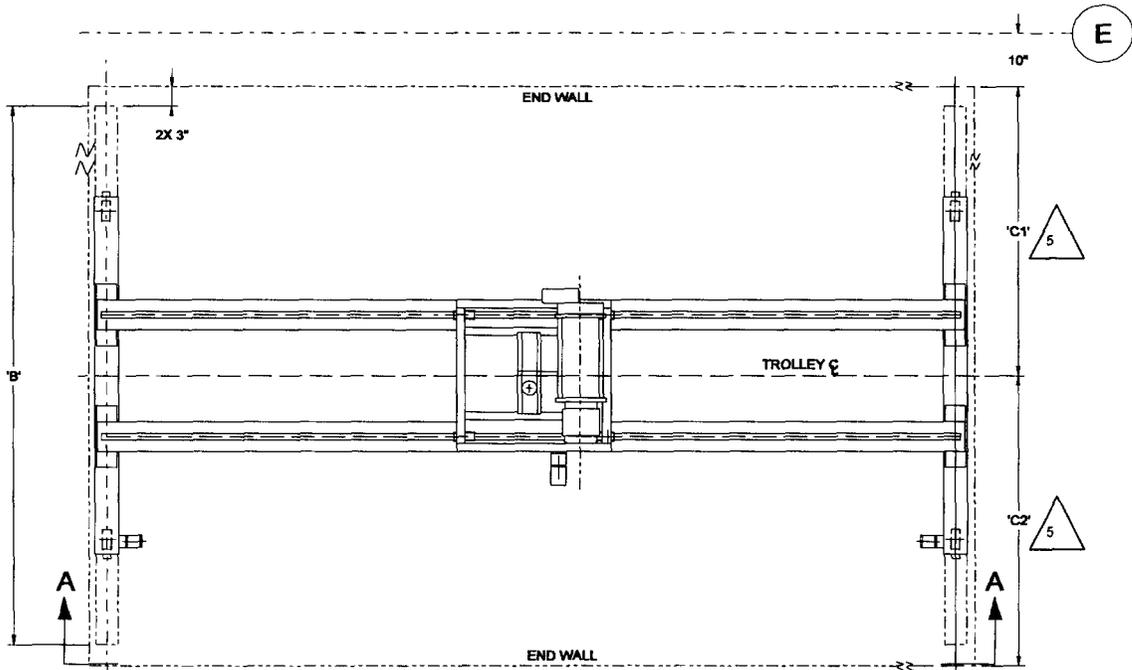
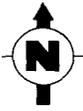
Plant Item No.

24590-LAW-MJ-LPH-CRN-00002

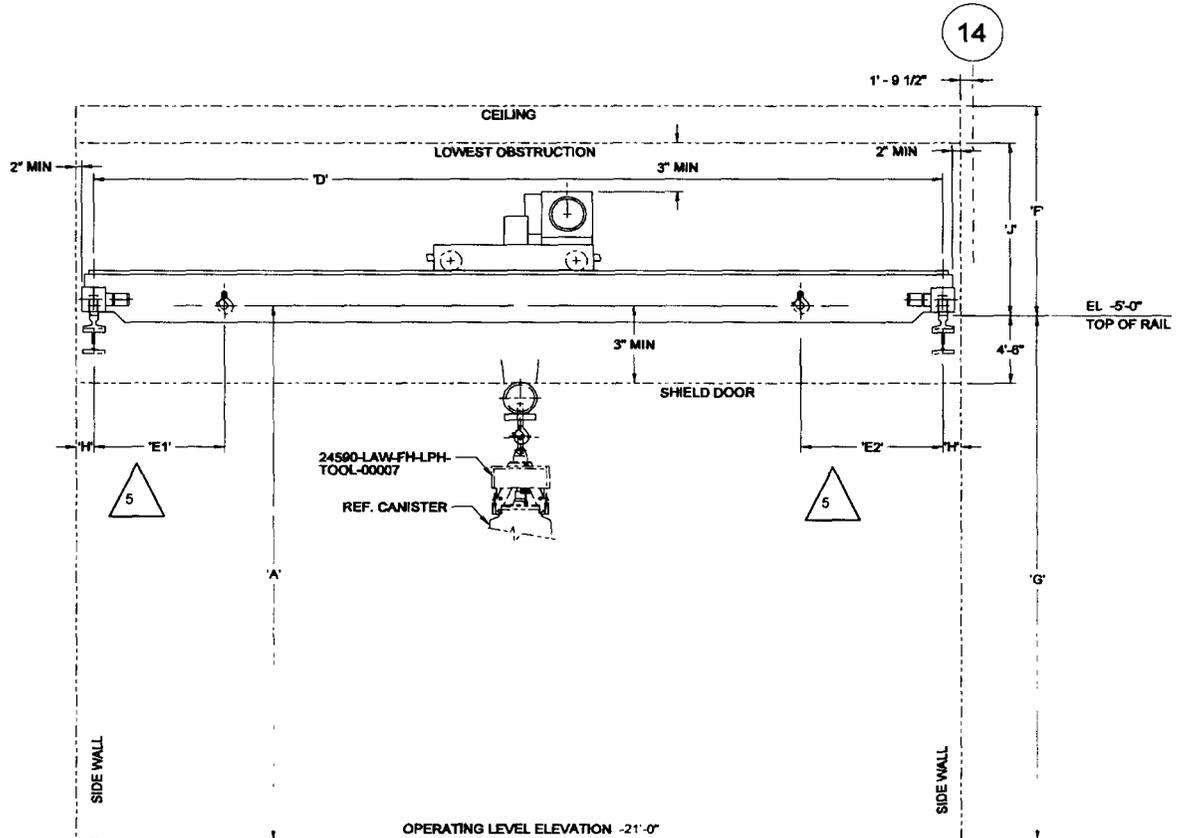
Rev

5

THIS DRAWING PROVIDES BASIC OUTLINES, DESIGN OBJECTIVES, AND BOUNDING DIMENSIONS TO CONTRACTED DESIGN OR FABRICATION SUPPLIER(S) AND SHALL NOT BE USED TO CONFIRM THE AS BUILT WTP STRUCTURE, SYSTEM OR COMPONENT IDENTIFIED HEREIN. SEE VENDOR INFORMATION FOR FINAL CONFIGURATION PROVIDED IN CONFORMANCE TO PURCHASE ORDER 24590-CM-POA-MJKG-00003.



PLAN VIEW AT ELEV. -5'-0"



VIEW A-A