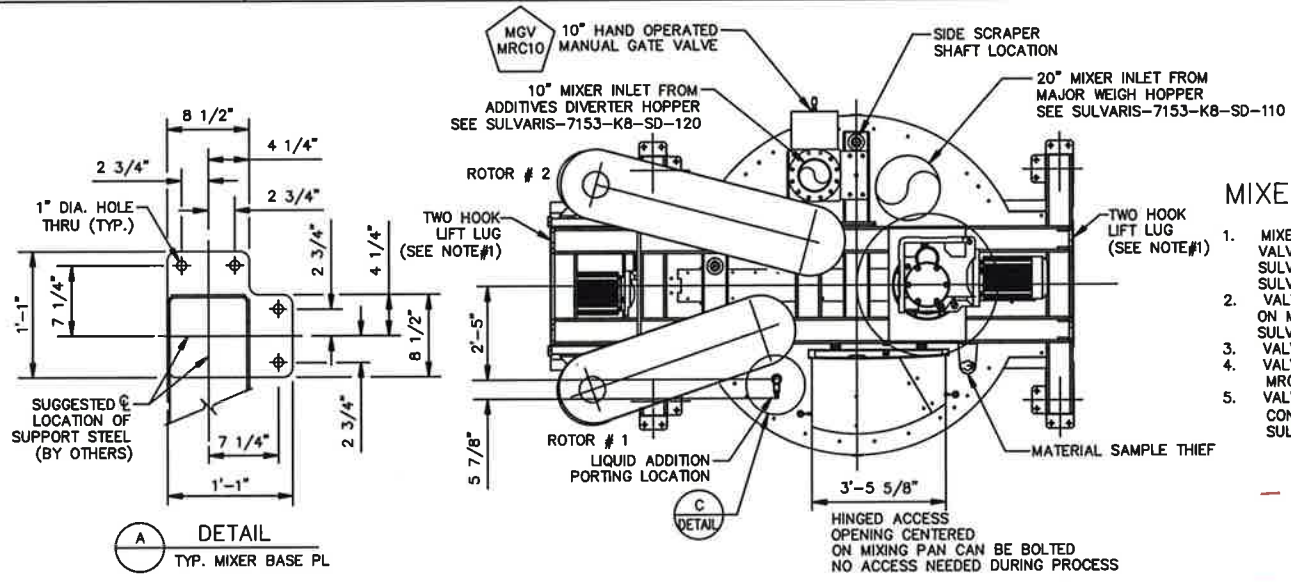


BASE PLATE LOCATIONS
 MINIMUM APPLIED LOAD PER MACHINE MOUNTING BASE PLATE:
 21,562 LBS. (VERTICAL), 4400 LBS. (RADIAL SHEAR)
 BASED UPON SAFETY FACTOR INCLUDING DYNAMIC LOADS.

EXCELSIOR ENGINEERING LTD.
 SQUAD CHECK # 5QV 0004-005
 EXC # 4397KEY-POP-0004-GAD-001
 TAG #
 DESIGN LEAD CHAD
 RESPONSIBLE ENGINEER NDNJ
 REVIEW DUE DATE 2015.06.24

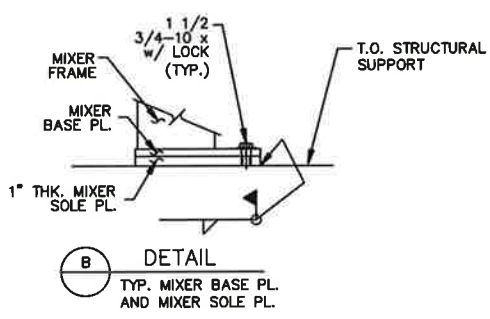


PLAN VIEW w/ ACCESS OPTIONS
 MIXER COVER PLATE IS NOT TO ACCEPT ANY INTERFACE LOADINGS.
 ALL ASSOCIATED EQUIPMENT MUST BE SELF SUPPORTING.
 ALL CONNECTIONS ARE TO BE VERTICALLY & HORIZONTALLY FLEXIBLE

MIXER INLET NOTES:

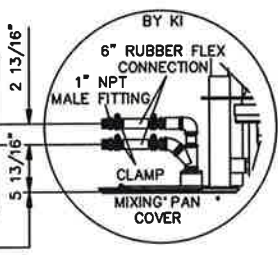
- MIXER IS SUPPLIED WITH A MANUAL SAFETY VALVE AND SUPPORT, SEE DWGS.: SULVARIS-7153-K8-TF60-GA-110
- VALVE SUPPORTS TO BE SHOP INSTALLED ON MIXER, SEE DWG.: SULVARIS-7153-K8-106-01
- VALVES TO BE SHOP INSTALLED ON SUPPORTS.
- VALVES TO BE SALINA VORTEX MRC10-WS1-E56779 AS PER P.O.# 20271-KI
- VALVE MOUNTING TO INCLUDE FLEX CONNECTION FLANGES "08" & "09" AS PER SULVARIS-7153-K8-SD-120

*- Are the motors CSA labelled?
 - Provide manufacturer's motor datasheets. (P.L)*

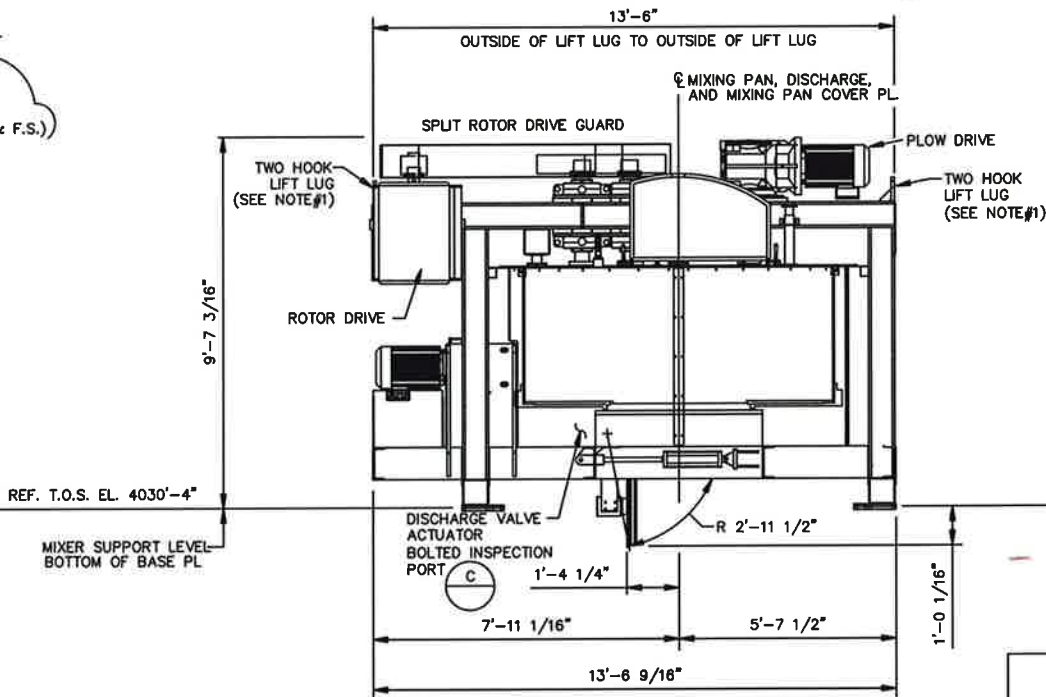
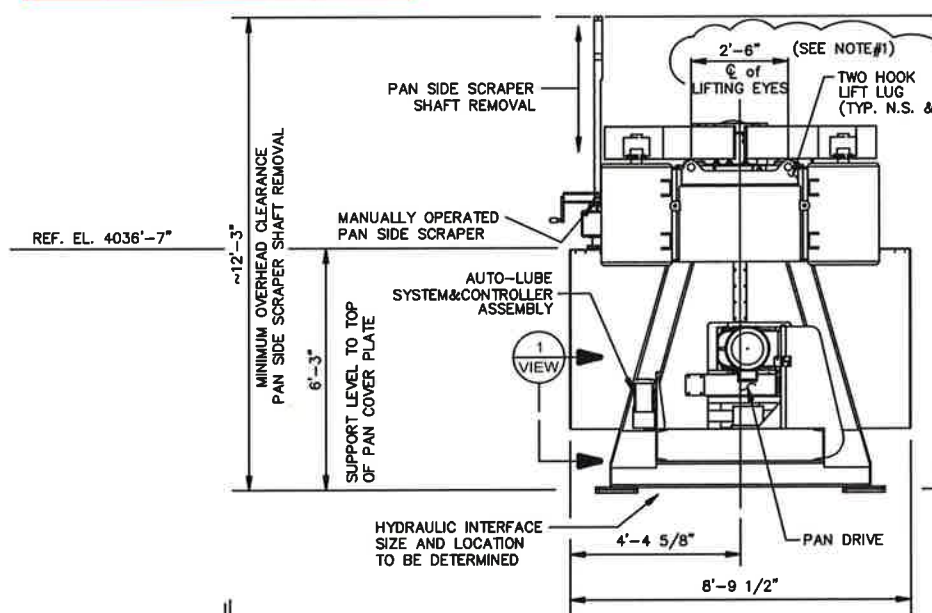


DETAIL A
 TYP. MIXER BASE PL AND MIXER SOLE PL.

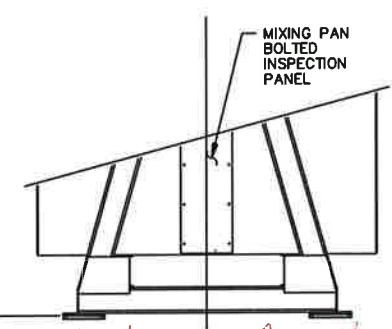
ALL PIPING TO LIQUID METERING PANELS BY OTHERS
 HARD INTERCONNECTING 1" PIPING AND SUPPORT FOR WATER AND SOLUTION BY OTHERS
 MUST MAINTAIN A MINIMUM OF 24 INCH DROP BELOW MIXER PAN COVER
 ALL INTERCONNECTING PIPING MUST BE SELF SUPPORTED AND NOT SUPPORTED IN ANYWAY BY MIXER AND ALL CONNECTIONS TO MIXER MUST BE VIA FLEX CONNECTION.



DETAIL C
 LIQUID ADDITION PORT
 WORK WITH SULVARIS-7153-K8-PI-102



FRONT VIEW SWING DISCHARGE



- Provide drawings for motor terminal box. (P.L)

GENERAL NOTES AND FEATURES:

- APPROX. MACHINE WEIGHT: 24,000 LBS. (LIFTING PURPOSES ONLY)
 FIELD TO SUPPLY 4 POINT LIFTING SPANNER TO FACILITATE VERTICAL TENSION PICK AT EACH OF THE FOUR 4 HOOK LOCATIONS.
- MAXIMUM MIXER WORKING CAPACITY OF 105 CUBIC FEET: 10,500 LBS. (MATERIAL DENSITY OF 100 LBS./CU.FT.)
- ALL MOTORS: 575 VAC / 3ø / 60 Hz
- HIGH SPEED ROTOR DRIVE ASSEMBLY:
 TYPICAL ROTOR #1 & #2:
 125 HP MOTOR.
 1800 APPROX. MOTOR RPM
 444T MOTOR FRAME SIZE
 1351 LBS. APPROX. MOTOR WEIGHT
 DRIVER SHEAVE SIZE: 4 GROOVE, 14" O.D.
 DRIVEN SHEAVE SIZE: 4 GROOVE, 20" O.D.
 BELT TENSION: 12-13 LB.
 ROTOR #1:
 BELT DESIGNATION: 8V1200
 ROTOR #2:
 BELT DESIGNATION: 8V1600
- PLOW DRIVE ASSEMBLY:
 30 HP GEAR MOTOR.
 1800 RPM TO 37 RPM
 ~1000 LBS. DRY
- MIXING PAN DRIVE ASSEMBLY:
 30 HP GEAR MOTOR.
 1800 RPM TO 51 RPM
 ~1000 LBS. DRY
- TOOLING ELECTRICAL CONTROL LOGIC:
 START: ROTORS FIRST, PLOW SECOND, PAN THIRD
 (TOOLING TO BE AT FULL SPEED BEFORE SUBSEQUENT TOOL STARTUP.)
 STOP: REVERSE ORDER AS SHOWN ABOVE.
- STATIONARY PAN SIDE WALL SCRAPER:
 MANUALLY ADJUSTED PAN SIDE SCRAPER
- REMOVABLE SIDE & BOTTOM PAN WEAR LINERS:
 (3/16" WARE ALLOWANCE)
- ALL WETTED PARTS MATERIAL OPTIONS:
 - STANDARD CARBON STEEL
- AUTOMATIC LUBRICATION SYSTEM:
 GRACO - PUMP WITH INTEGRATED CONTROLLER, RESERVOIR, & DISTRIBUTION VALVES.
 INTERVAL - INSPECT EVERY 40 HRS OF OPERATION.
 TYPE: BEL-RAY MOLYLUBE 126 EP GREASE - PRODUCT NO. 23220
- ALL EXTERIOR SURFACES TO RECEIVE:
 KI STD. SURFACE PREP., PRIME COAT, & TOP COAT COATING SYSTEM TO BE:
 SHERWIN WILLIAMS "SYSTEM 4000"
 "POLANE B POLYURETHANE ENAMEL FINISH"
 FINISH COLOR NO. SW4026....."GYPSUM"
- HYDRAULICALLY OPERATED PAN DISCHARGE VALVE
- CONTROL SOLENOIDS: 24 VDC

EXCELSIOR ENGINEERING LTD.
VENDOR DOCUMENT REVIEW

- V1 - CORRECT AND RESUBMIT; WORK MAY NOT PROCEED
- V2 - CORRECT AND RESUBMIT; WORK MAY PROCEED
- V3 - RECEIVED AS IS; FOR INFORMATION ONLY
- V4 - ACCEPTED FOR CONSTRUCTION/FABRICATION; SUBJECT TO INCORPORATION OF ANY COMMENTS
- V5 - ACCEPTED AS FINAL SUBMISSION

NOTE: This review does not relieve the vendor/contractor from their due diligence nor their responsibility for errors in design/installation or the execution/detailing in conformance with the contract and regulatory requirements

DATE: 05/06/2015 PRINT: 11:00:51 SIGN: [Signature]

REVISION NOTES:

- REVISION 02 CHANGES
 - ADD VIEW "1-1" LUBE PANEL FINAL LOCATION
 - REV NOTE 01 - 4 POINT SPANNER VERT.
 - ADDED DETAIL "C" OF LIQUID ADDITION PORT
 - ADDED MANUAL GATE VALVE TAG NUMBER SHOW ON THE FPL-100 FIELD PART LIST

NO.	DATE	DESCRIPTION	DRN BY	APPROV
0	04/08/14	INITIAL ISSUE	MCW	
1	02/09/15	ADDED NOTES ABOUT PORT USAGE	LDS	
02	03/23/15	REFERENCE REVISION NOTE 01	MCW	
03	05/27/15	RESPONDED TO CUSTOMER COMMENTS	LDS	

- 500 MIXER NUMBER 1
 - 530 MIXER NUMBER 2
 - 560 MIXER NUMBER 3
- WORK THIS DRAWING WITH : SULVARIS-7153-K8-TF60-GA-110

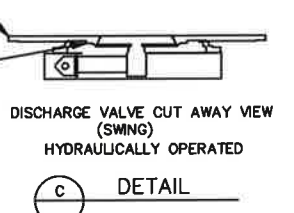
LANCASTER PRODUCTS
KERCHER INDUSTRIES, INC.
 920 Mechanic Street • Lebanon, PA 17046

LANCASTER K-8 MIXER
 PRODUCT ARRANGEMENT
 SULVARIS PROJECT

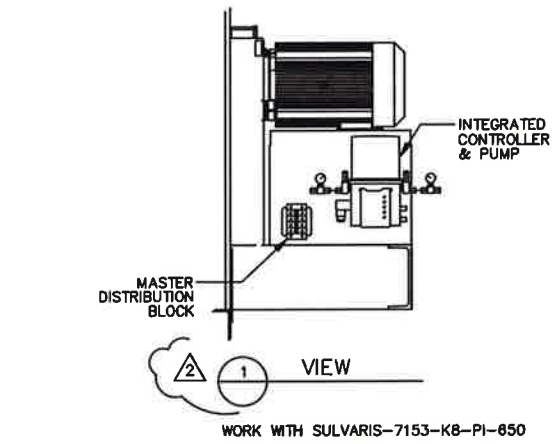
THE FOLLOWING TOLERANCES APPLY UNLESS OTHERWISE NOTED.

X.X	= ± .03
X.XX	= ± .010
X.XXX	= ± .002
X.XXXX	= ± .0005
X.X/X	= ± (PROPOSAL)

NOTICE
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DETAIL C



WORK WITH SULVARIS-7153-K8-PI-850