# SECTION 6 GENERAL INFORMATION

# Conveyor Layout Sketches

## Sketching Houses and other Buildings

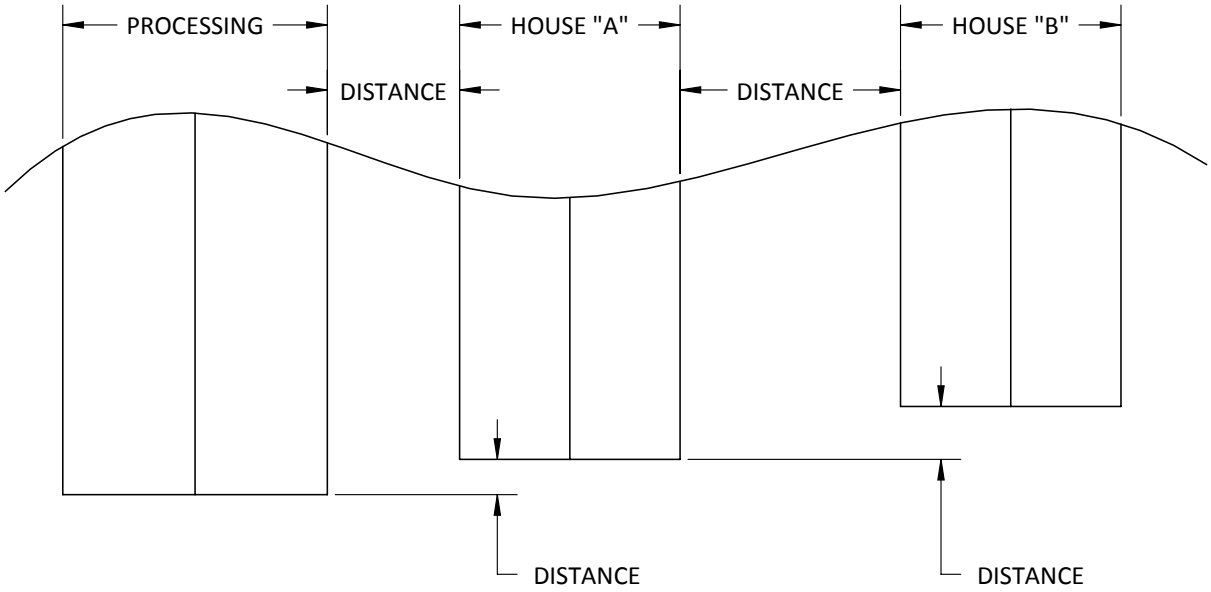
1. A House layout is often beneficial when submitting a conveyor sketch. See the following view for locating houses.

   Note: Please communicate house widths, distances between, elevation changes, and/or any offset distances if the houses are not in line with one another.

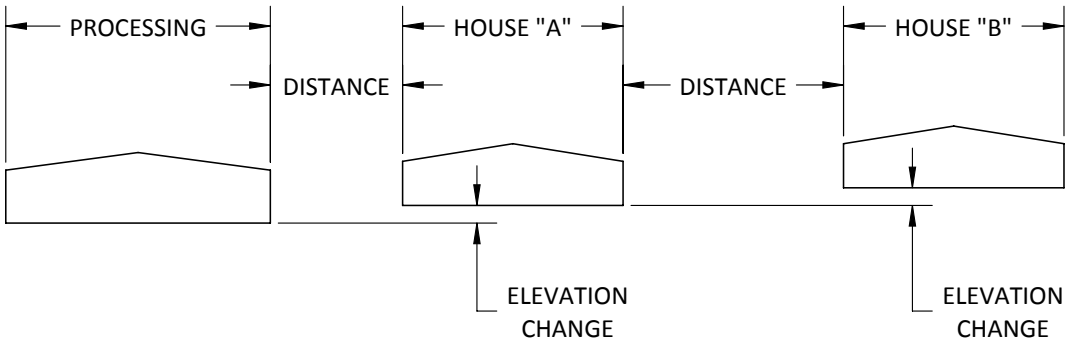
   House/Building designations (e.g. Processing, House #1, etc.) can be specified and will be referenced on the provided Lubing Systems Conveyor Layout.

2. Not all House layouts require a Plan (Top) View and an Elevation (Side) View. Provide only the view(s) needed to communicate the locations of the houses relative to one another.

3. When submitting a House layout, consider any future expansion or construction projects. When this information is provided, Lubing Systems can better engineer the layout to accommodate these changes and will specify the appropriate actions at each phase of the installation to decrease the amount of changes required as the expansion is completed.




***PLAN VIEW***




***ELEVATION VIEW***

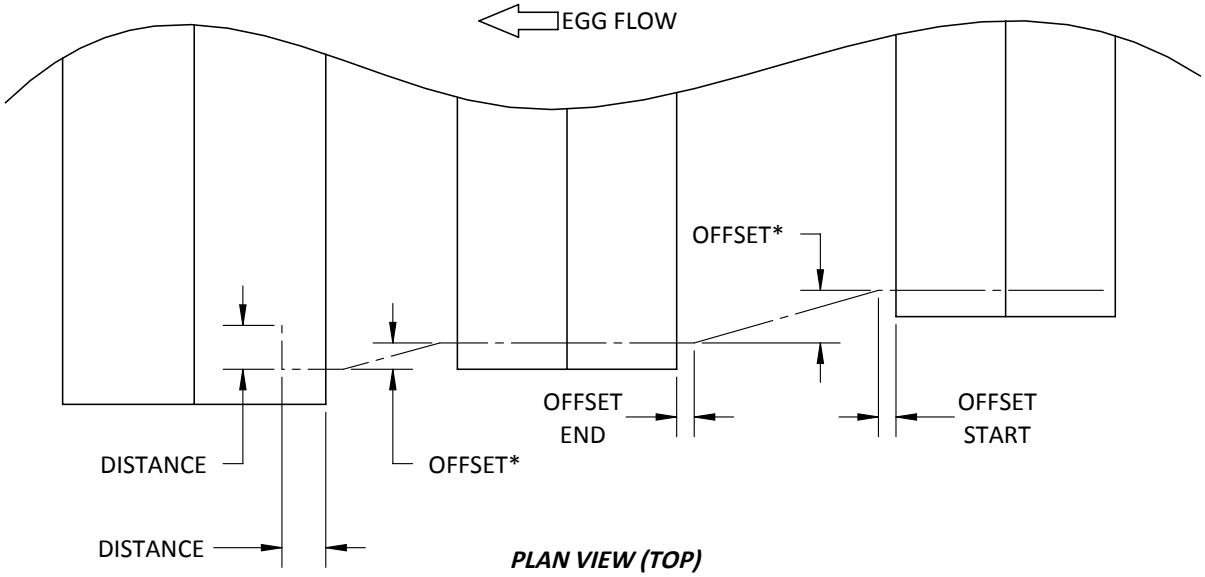
HOUSE DIMENSIONS AND LOCATIONS SHOULD BE AS ACCURATE AS POSSIBLE. ERRORS IN ESTIMATION OVER THE ENTIRE LAYOUT CAN ACCUMULATE AND EEFECT THE DESIGN.

## Sketching the Conveyor Path

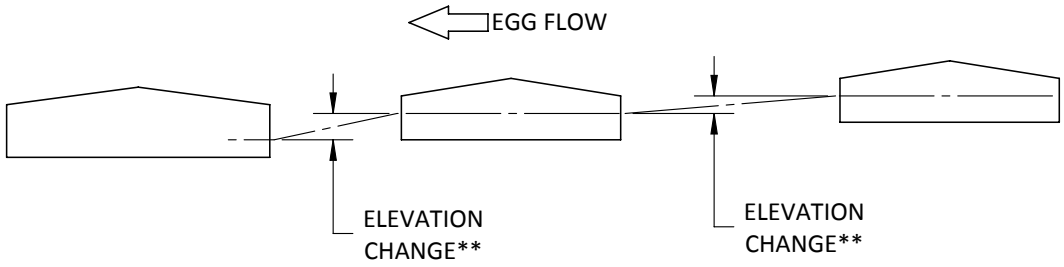
4. The following view illustrates an example of sketching the conveyor path. Communicate any obstacles, offsets, or elevation changes required.

   Note: A Lubing Sales Representative can assist in sizing the conveyor for your application.

   Note: Lubing Systems will engineer a layout based on this recommendation and communicate any deviations based on design parameters and components requested.




***PLAN VIEW (TOP)***




***ELEVATION VIEW (SIDE)***

HOUSE DIMENSIONS AND LOCATIONS SHOULD BE AS ACCURATE AS POSSIBLE. ERRORS IN ESTIMATION OVER THE ENTIRE LAYOUT CAN ACCUMULATE AND EFFECT THE DESIGN.

* ***OFFSETS*** ARE DEFINED AS ANY SIDE-TO-SIDE CHANGES IN DIRECTION ACCOMPLISHED WITH A PAIR OF BEND UNITS

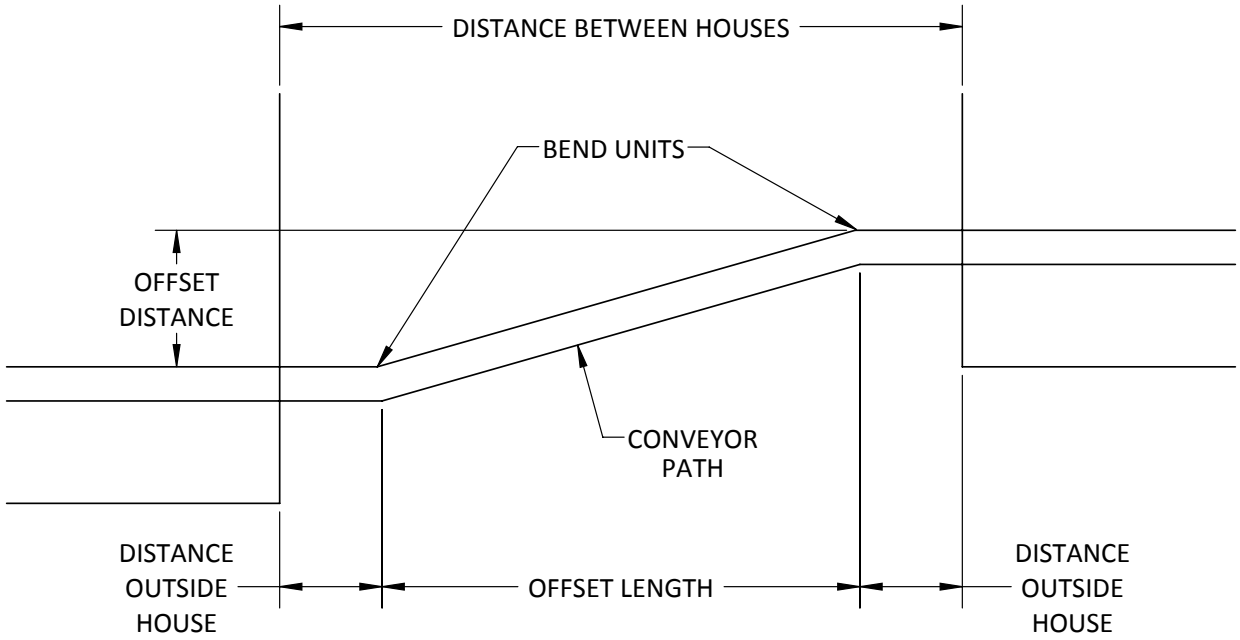
** ***ELEVATION CHANGES*** ARE DEFINED AS ANY UP OR DOWN CHANGES IN HEIGHT ACCOMPLISHED WITH PIVOT UNITS

## Sketching Offsets

5. The following view illustrates proper techniques for sketching offsets in the conveyor path.

   Note: The following view illustrates an offset between houses as example only. Note the obstacles or any limiting factors to the offset. If no limitations are given, Lubing Engineering will apply the slightest angles possible to achieve the desired offset amount for best possible performance.

   Note: Lubing Engineering will review sketches received and communicate any issues found in the requested conveyor paths prior to providing a layout.



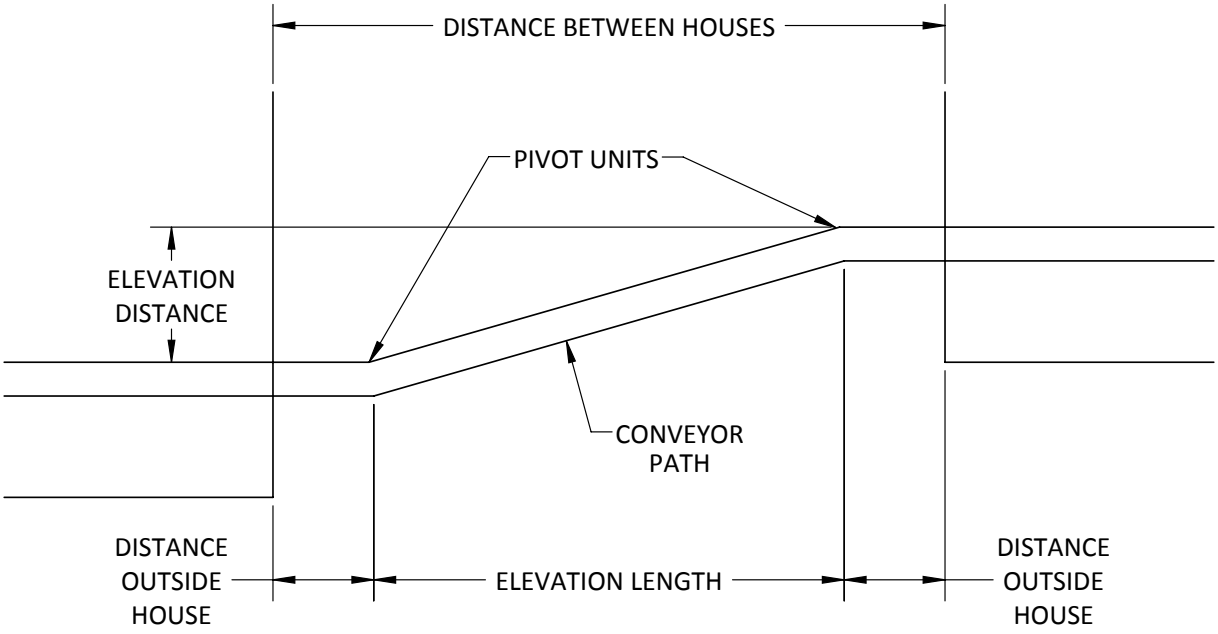

IF NO "DISTANCE OUTSIDE HOUSE" IS PROVIDED, IT IS ASSUMED THAT OFFSETS CAN BEGIN IMMEDIATELY OUTSIDE HOUSE

## Sketching Elevations

6. The following view illustrates proper techniques for sketching Elevations in the conveyor path.

   Note: The following view illustrates an elevation change between houses as example only. Note the obstacles or any limiting factors to the elevation. If no limitations are given, Lubing Engineering will apply the slightest angles possible to achieve the desired elevation change for best possible performance.

   Note: Lubing Engineering will review sketches received and communicate any issues found in the requested conveyor paths prior to providing a layout.

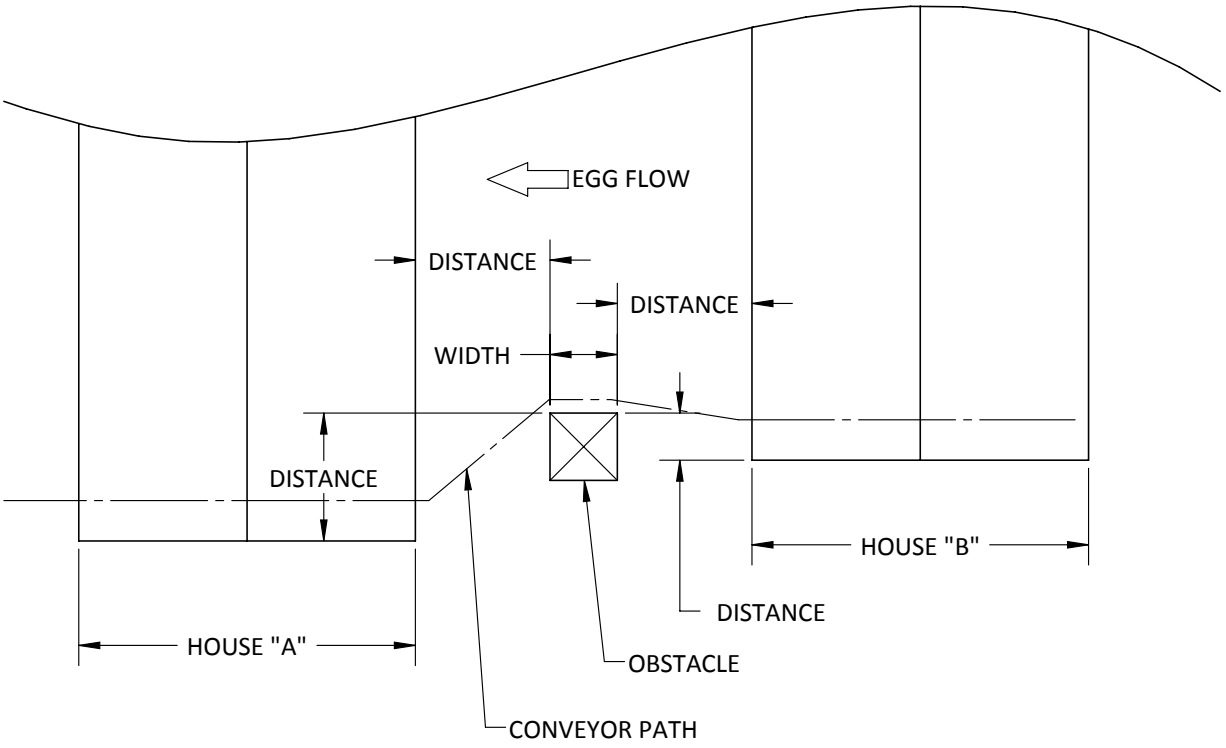



IF NO "DISTANCE OUTSIDE HOUSE"
IS PROVIDED, IT IS ASSUMED THAT
ELEVATIONS CAN BEGIN IMMEDIATELY
OUTSIDE HOUSE

## Avoiding Obstacles

7. The following view illustrates proper sketching techniques when encountering obstacles in the conveyor path. Providing the location and size of the obstacle allows the best engineering of the layout possible around or over said obstacles.

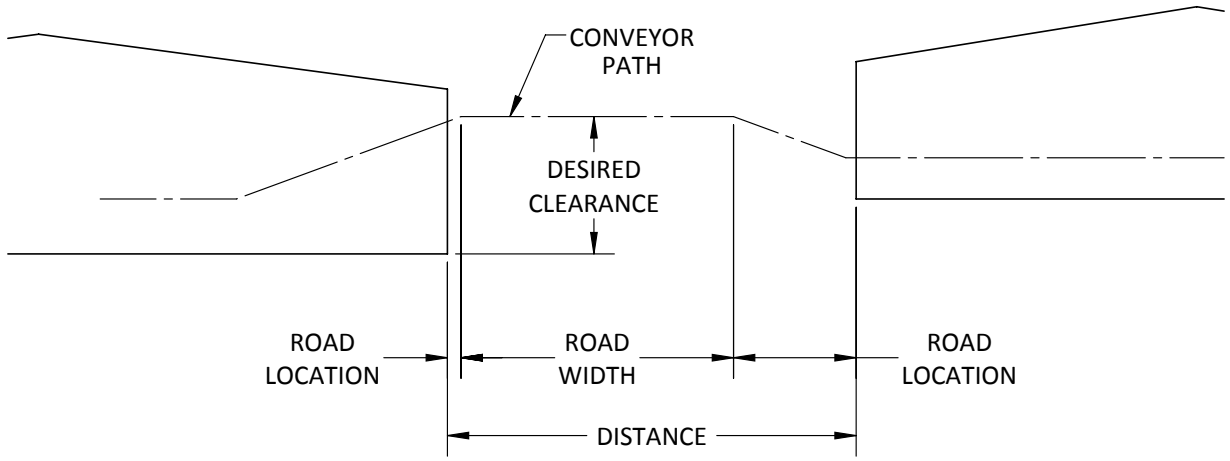
   Note: The above practice is often more accurate and easily obtained on site than attempting to provide the appropriate angles of offset or elevation changes. Include heights when the conveyor must travel over or under the obstacle.




***PLAN VIEW (TOP)***

## Road Clearance

8. The following view illustrates the information required when encountering roads where overhead clearance is critical for traffic flow.

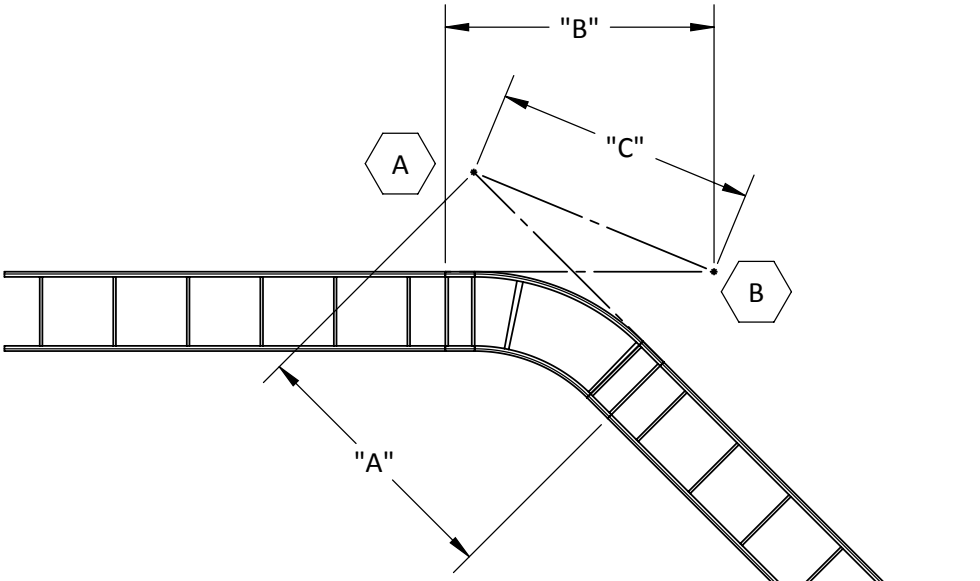


## Determining Bend Angles

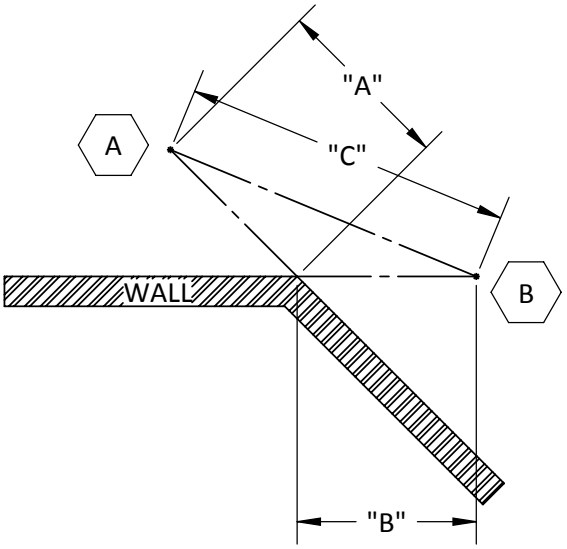
9. The following view illustrates the proper technique for determining a bend angle when encountering an existing Bend Unit or a wall where the angle is unknown.

   Note: The measurement in degrees does not have to be specified. The angle can be calculated if A, B, and C are provided.

   Note: If possible, A and B should be a minimum of 5’ or 1.5m. Any distance longer increases the accuracy of the measurement.




***MEASURING EXISTING CONVEYOR***




***MEASURING FOR FUTURE CONVEYOR***

A = SOME MEASURED DISTANCE ALONG CONVEYOR EDGE OR WALL

B = SOME MEASURED DISTANCE ALONG CONVEYOR EDGE OR WALL

C = MEASURED DISTANCE BETWEEN MARKS "A" AND "B"

NOTE: ACTUAL ANGLE CALCULATION IS NOT REQUIRED,
SUBMIT INFORMATION ABOVE TO ENGINEERING
FOR APPROPRIATE BEND UNIT SPECIFICATION

# Understanding Layouts

## Layout Acceptance Form (LAF)

10. After an order for the conveyor system has been placed and sketch information received, a layout will be engineered and returned to the customer for review. The following view illustrates the first sheet of the layout known as the *Layout Acceptance Form* or *LAF*.

11. A Signed *LAF* must be returned per the instructions on the sheet for approval to ship the order.

    Note: If the layout is approved with no changes, return only the signed *LAF*.

    Note: If the layout is approved with noted changes, return the signed *LAF* along with any sheets containing notes and/or changes. Lubing Systems engineering will revise the layout and submit for customer review.

# *IMPORTANT*

**FORM MUST BE SIGNED AND RETURNED BEFORE ORDER SHIPS**

- This layout is based upon information provided to Lubing Systems, LP.
- It is the responsibility of the customer and/or installer to verify all dimensions before proceeding with installation.
- It is the responsibility of the customer and/or installer to verify that the correct equipment is on the jobsite before proceeding with installation. Refer to packing list for required parts and accessories.
- Any questions and/or concerns should be addressed with your Sales Representative before installation begins.
- Any deviation from this layout could result in additional expenses to the customer and/or installer, e.g., electrical modifications, conveyor damage/breakage, downtime, premature wear, delayed startups, overall performance, etcetera.
- Before startup, conveyor must be fully installed per provided layout.
- If installing in phases is required, contact your Sales Representative. Termination points must be approved by Lubing Systems Engineering to ensure proper operation prior to installation.
- Refer to sections “Assembly and Installation” and “Start-up and Troubleshooting” in the *Curve Conveyor Systems Product Manual* #IM-707-00 before and during installation.

***Please remit any changes via fax to:***

***LUBING SYSTEMS, LP***
Attention: Engineering
135 Corporate Drive SW
Cleveland, TN 37311
(423) 709-1000 phone
(423) 709-1001 fax
(866) 289-3237 toll free fax

If approved as shown, remit this page only

If changes are required, note on respective sheets and remit

***Please remit any changes via email to:***

engineering@lubingusa.com

Subject line of email must include complete drawing number

Email must clearly state approval or changes required and customer contact information

Company/Farm Representative: _____

Company/Farm Name: _____

Date: _____

| | | | | | |
|---|---|---|---|---|---|
| MAT'L:<br>FINISH or TREATMENT:<br>WEIGHT: SCALE: 1:2 | DRAWN BY:<br>CHECKED or APPROVED BY:<br>DATE: 8/30/2013 | PROPRIETARY AND CONFIDENTIAL<br>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LUBING SYSTEMS LP. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LUBING SYSTEMS LP IS PROHIBITED. | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES<br>UNSPECIFIED ANGLES ARE 90° ±1°<br>INCH TOLERANCES: FRACTIONAL ±1/16" ANGULAR: ±1.0 X.XX ±0.01 X.XXX ±0.005 X.XXXX ±0.0005<br>METRIC TOLERANCES: ANGULAR: ±1.0 X ±0.5 X.X ±0.25 X.XX ±0.1 | LUBING A Tradition of Innovation. Lubing Systems, L.P. 135 Corporate Drive SW Cleveland, TN 37311 USA | DWG. NO.<br>DESCRIPTION: |

## Component Spacing Chart

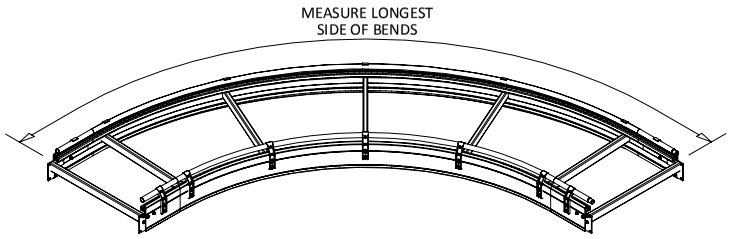
12. If applicable, the second sheet of the layout drawing will contain a *Component Spacing Chart* detailing the locations of certain milestone components such as pivots, bends, and drive units to aid in the initial layout of the conveyor and electrical systems.

    Note: *Component Spacing Charts* will match the units of the layout drawing. If the initial sketch received from the customer is in feet, the drawing and any associated charts will be communicated in feet. If the initial sketch is in meters, the drawing and charts will be in meters.

    Note: The following view illustrates the *Component Spacing Chart* and the proper practice for measuring Bend Units if encountered in the layout.

| Component Spacing Chart | |
|---|---|
| **Component** | **Distance From Front Transferring Plate** |
| Front Drive Unit | 0.00 ft |
| 3M Custom Connecting Part | 3.23 ft |
| Pivot Unit | 11.52 ft |
| 3M Custom Connecting Part | 32.29 ft |
| Pivot Unit | 33.87 ft |
| Top Intermediate Drive Unit | 94.01 ft |
| Top Intermediate Drive Unit | 174.56 ft |
| Bottom Intermediate Drive Unit | 186.20 ft |
| Tandem Drip Oiler Unit | 197.85 ft |
| 3M Custom Connecting Part | 199.82 ft |
| Pivot Unit | 200.88 ft |
| 3M Custom Connecting Part | 251.18 ft |
| Pivot Unit | 251.81 ft |
| Top Intermediate Drive Unit | 302.11 ft |
| Bottom Intermediate Drive Unit | 353.12 ft |
| 3M Custom Connecting Part | 413.98 ft |
| Pivot Unit | 417.81 ft |
| Top Intermediate Drive Unit | 418.89 ft |
| 3M Custom Connecting Part | 489.59 ft |
| Pivot Unit | 492.44 ft |
| Top Intermediate Drive Unit | 532.89 ft |
| Bottom Intermediate Drive Unit | 544.54 ft |
| Tandem Drip Oiler Unit | 615.24 ft |
| Top Intermediate Drive Unit | 676.26 ft |
| Bottom Intermediate Drive Unit | 707.59 ft |
| 3M Custom Connecting Part | 758.61 ft |
| Pivot Unit | 759.44 ft |
| 3M Custom Connecting Part | 819.58 ft |
| Pivot Unit | 823.23 ft |
| Top Intermediate Drive Unit | 824.31 ft |
| Bottom Intermediate Drive Unit | 875.33 ft |
| Top Intermediate Drive Unit | 955.87 ft |
| 3M Custom Connecting Part | 1016.73 ft |
| Pivot Unit | 1017.23 ft |
| 3M Custom Connecting Part | 1038.00 ft |
| Pivot Unit | 1040.40 ft |
| Bottom Intermediate Drive Unit | 1041.49 ft |
| Tandem Drip Oiler Unit | 1053.13 ft |
| Top Intermediate Drive Unit | 1114.16 ft |
| Bottom Intermediate Drive Unit | 1204.55 ft |
| 3M Custom Connecting Part | 1235.88 ft |
| End Unit | 1242.88 ft |

Feet or Meters




SYSTEM NOTES:

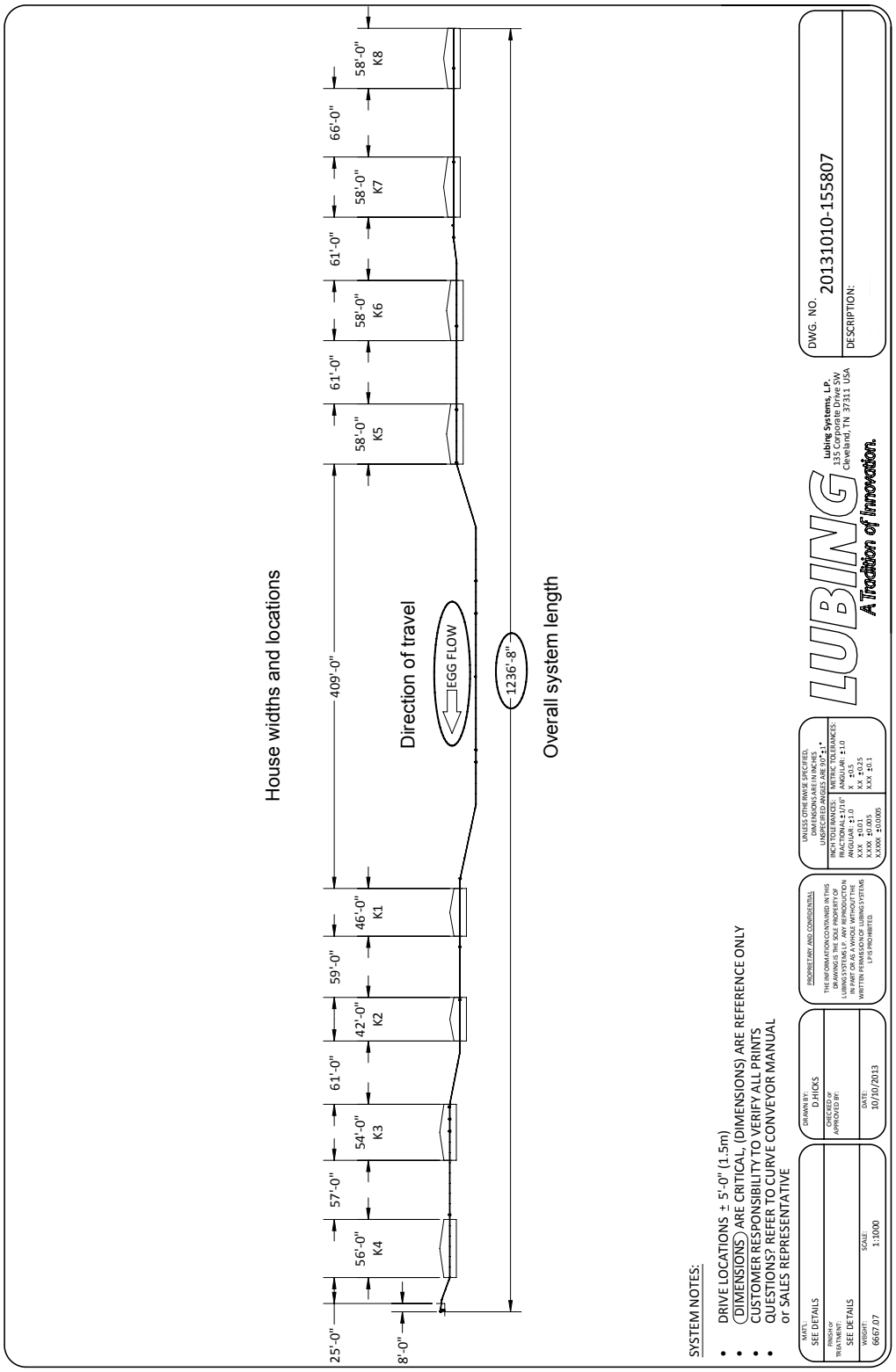
- DRIVE LOCATIONS ± 5'-0" (1.5m)
- (DIMENSIONS) ARE CRITICAL, (DIMENSIONS) ARE REFERENCE ONLY
- CUSTOMER RESPONSIBILITY TO VERIFY ALL PRINTS
- QUESTIONS? REFER TO CURVE CONVEYOR MANUAL or SALES REPRESENTATIVE

| | | | | | |
|---|---|---|---|---|---|
| MAT'L: SEE DETAILS<br>FINISH or TREATMENT: SEE DETAILS<br>WEIGHT: 6667.07 SCALE: 1:3072 | DRAWN BY: D.HICKS<br>CHECKED or APPROVED BY:<br>DATE: 10/10/2013 | PROPRIETARY AND CONFIDENTIAL<br>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LUBING SYSTEMS LP. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LUBING SYSTEMS LP IS PROHIBITED. | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES<br>UNSPECIFIED ANGLES ARE 90° ±1°<br>INCH TOLERANCES: FRACTIONAL ±1/16" ANGULAR: ±1.0 X.XX ±0.01 X.XXX ±0.005 X.XXXX ±0.0005<br>METRIC TOLERANCES: ANGULAR: ±1.0 X ±0.5 X.X ±0.25 X.XX ±0.1 | LUBING A Tradition of Innovation. Lubing Systems, L.P. 135 Corporate Drive SW Cleveland, TN 37311 USA | DWG. NO. 20131010-155807<br>DESCRIPTION: |

## System Overview

13. If possible, a single sheet overview will be included in the layout drawing provided. This sheet details the overall length of the system with houses and their designations as provided by the customer.

    Note: The following view illustrates and example of the overall conveyor layout. Not all details are provided on this sheet, but will be reflected on other sheets within the layout drawing provided.

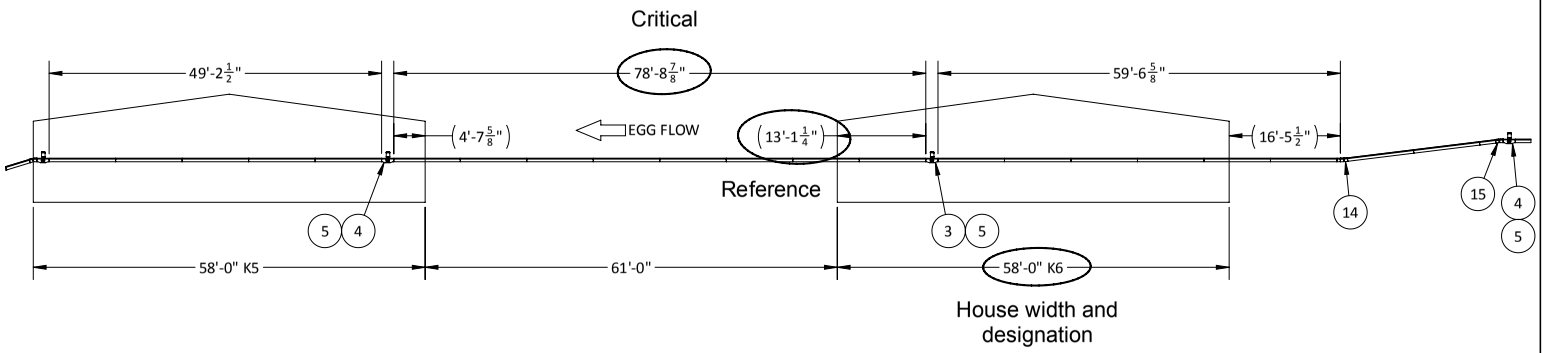

House widths and locations
Direction of travel
EGG FLOW
Overall system length
25'-0"
8'-0"
56'-0" K4
57'-0"
54'-0" K3
61'-0"
42'-0" K2
59'-0"
46'-0" K1
409'-0"
58'-0" K5
61'-0"
58'-0" K6
61'-0"
58'-0" K7
66'-0"
58'-0" K8
1236'-8"
SYSTEM NOTES:
• DRIVE LOCATIONS ± 5'-0" (1.5m)
• DIMENSIONS ARE CRITICAL (DIMENSIONS) ARE REFERENCE ONLY
• CUSTOMER RESPONSIBILITY TO VERIFY ALL PRINTS
• QUESTIONS? REFER TO CURVE CONVEYOR MANUAL or SALES REPRESENTATIVE
MATL: SEE DETAILS
FINISH or TREATMENT: SEE DETAILS
WEIGHT: 6667.07
SCALE: 1:1000
DRAWN BY: D.HICKS
CHECKED or APPROVED BY:
DATE: 10/10/2013
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LUBING SYSTEMS L.P. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LUBING SYSTEMS L.P IS PROHIBITED.
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. UNSPECIFIED ANGLES ARE 90° ± 1°
INCH TOLERANCES: FRACTIONAL ± 1/16" ANGULAR: ± 1.0 XX ±0.01 XXX ±0.005 XXXX ±0.0025
METRIC TOLERANCES: ANGULAR: ± 1.0 XX ±0.25 XXX ±0.1
LUBING
A Tradition of Innovation.
Lubing Systems, L.P.
135 Corporate Drive SW
Cleveland, TN 37311 USA
DWG. NO. 20131010-155807
DESCRIPTION:

## Locating Components

14. Lubing Systems will reference critical landmarks such as houses or other buildings on the provided layout drawing when possible. Reference dimensions, noted in parenthesis, are often provided from these landmarks to locate components within the conveyor system. However, these dimensions are superseded by critical dimensions such as lengths between two drive units or other milestone components.

    Note: To ensure best performance, measure and locate components in relation to one another. Dimensions to other external landmarks should be utilized as reference only.

    Note: The following view illustrates critical versus reference dimensions.




SYSTEM NOTES:

- DRIVE LOCATIONS ± 5'-0" (1.5m)
- (DIMENSIONS) ARE CRITICAL, (DIMENSIONS) ARE REFERENCE ONLY
- CUSTOMER RESPONSIBILITY TO VERIFY ALL PRINTS
- QUESTIONS? REFER TO CURVE CONVEYOR MANUAL or SALES REPRESENTATIVE

| | | | | | |
|---|---|---|---|---|---|
| MAT'L: SEE DETAILS<br>FINISH or TREATMENT: SEE DETAILS<br>WEIGHT: 6667.07 SCALE: 1:175 | DRAWN BY: D.HICKS<br>CHECKED or APPROVED BY:<br>DATE: 10/10/2013 | PROPRIETARY AND CONFIDENTIAL<br>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LUBING SYSTEMS LP. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LUBING SYSTEMS LP IS PROHIBITED. | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES<br>UNSPECIFIED ANGLES ARE 90° ±1°<br>INCH TOLERANCES: FRACTIONAL ±1/16" ANGULAR: ±1.0 X.XX ±0.01 X.XXX ±0.005 X.XXXX ±0.0005<br>METRIC TOLERANCES: ANGULAR: ±1.0 X ±0.5 X.X ±0.25 X.XX ±0.1 | LUBING A Tradition of Innovation. Lubing Systems, L.P. 135 Corporate Drive SW Cleveland, TN 37311 USA | DWG. NO. 20131010-155807<br>DESCRIPTION: |

## Multiple Conveyor Systems

15. When designing multiple conveyors, a total system overview may be provided as reference for the customer to review and approve areas where these systems converge. The following view illustrates a system overview of multiple conveyors to better communicate their locations relative to one another.

    Note: Often this layout drawing is used when developing process equipment layouts or Accumulator Table widths and lengths.

1
2
3
ITEM NO. | DRAWING NO. | DESCRIPTION | QTY.
1 | 20130911-094606 | T750 #1 Layout | 1
2 | 20130911-102434 | T750 #2 Layout | 1
3 | 20130911-130410 | T750 #3 Layout | 1
SYSTEM NOTES:
• DRIVE LOCATIONS ± 5'-0" (1.5m)
• (DIMENSIONS) ARE CRITICAL, (DIMENSIONS) ARE REFERENCE ONLY
• CUSTOMER RESPONSIBILITY TO VERIFY ALL PRINTS
• QUESTIONS? REFER TO CURVE CONVEYOR MANUAL or SALES REPRESENTATIVE
MAT'L: See Details
FINISH or TREATMENT: See Details
WEIGHT: 29733.62
SCALE: 1:150
DRAWN BY: D.HICKS
CHECKED or APPROVED BY:
DATE: 9/11/2013
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LUBING SYSTEMS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LUBING SYSTEMS IS PROHIBITED.
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES
INTERPRET DIMENSIONS & TOLERANCES PER ASME Y14.5M
REMOVE BURRS & SHARP EDGES
FRACTIONAL ± 1/16"
ANGULAR: ± 1.0
X.XX ± 0.01
X.XXX ± 0.005
X.XXXX ± 0.0005
X ± 0.5
XX ± 0.25
X.X ± 0.1
LUBING
A Tradition of Innovation.
Lubing Systems, LP.
135 Corporate Drive SW
Cleveland, TN 37311 USA
DWG. NO. 20130906
DESCRIPTION: System Layout

## Layout Correspondence

16. Typically, layout drawings are provided via email in PDF format for easy viewing by the customer.
17. Drawings can be provided to Lubing Systems as sketches (faxed or scanned/emailed), AutoCAD dxf/dwg formats (R2000 or older), or PDF.
18. Final Layouts can be exported and supplied to the customer in AutoCAD dxf/dwg formats as well if requested by the customer.

# Lubing System Contact Information

LUBING

Contact your local Lubing Distributor or Representative for additional information regarding Lubing products.

**Northeast/Canada** MA,VT, NH, ME, RI, CT, NY, NJ, PA, DE,
**GEORGE BAILEY** MD, VA, WV, NC, MI, OH
Cell: (540) 908-8899 East Canada: MB, ON, QC, NB, NL, PEI
Fax: (540) 433-7400
E-mail: gbailey@lubingusa.com

**Southeast** AL, FL, GA, KY, IN, MS, LA, SC, TN
**BARRY DUTTON**
Cell: (205) 612-5625
Fax: (240) 368-8784
E-mail: bdutton@lubingusa.com

**Midwest/Canada** AK, AR, CO, KS, MO, ND, NE, NM,
**STEVE KUYKENDALL** OK, SD, TX, WY
Cell: (469) 908-8899 West Canada: AB, SK, BC, YT, NT
Fax: (540) 433-7400
E-mail: skuykendall@lubingusa.com

**West Coast** AZ, CA, ID, NV, OR, UT, WA, MT, HI
**International Sales**
**KURT HUTT**
Cell: (432) 464-0500
Fax: (423) 709-1001
E-mail: khutt@lubingusa.com

LUBING Systems, L.P.
135 Corporate Drive, SW
Cleveland, TN 37312 - USA
Tel: (423) 709-1000
Fax: (423) 709-1001
E-mail: info@lubingusa.com
E-mail: support@lubingusa.com

# OEM Contact Information

**Stober USA (Gearboxes)**
1781 Downing Drive
Maysville, KY 41056 USA
(606) 759-5090 Phone
(800) 711-3588 Toll Free
888-4-STOBER (786237) Fax

www.stober.com Company Website
sales@stober.com Technical Support Email

**Marathon Electric - Motor Division**
100 E. Randolph Street
P.O. Box 8003
Wausau, WI 54401-8003
(715) 675-3311 Phone

www.marathon electric.com Company Website
motor.help@marathonelectric.com Tech Support Email

**JAX (Lubricants)**
W134 N5373 Campbell Drive
Menomonee Falls, WI 53051
(262) 781-8850 Phone
(800) 782-8850 Toll Free

www.jax.com Company Website

LUBING

Contact your local Lubing Distributor
or Representative for additional
information regarding
Lubing products.

All technical content in this manual
is subject to change.

LUBING Systems, L.P.
135 Corporate Drive, SW
Cleveland, TN 37311 - USA

T: (423) 709-1000
F: (423)-709-1001

E: info@lubingusa.com
E: support@lubingusa.com

www.lubingusa.com

Printed in the U.S.A.