Sheet List Table

Sheet	Rev	Description
1.0	B	Elevation and Notes For TK-3322
1.1	B	Elevation and Notes For TK-3326
2.0	0	Anchor Bolts Details
2.1	0	Anchor Bolts Layout
3.0	B	Plan & Apps For TK-3322
3.1	B	Plan & Apps For TK-3326
3.2	A	Bottom Cone Plan View
4.0	B	Shell Rollout For TK-3322
4.1	B	Shell Rollout For TK-3326
4.2	A	Compression Ring Layout
4.3	A	Shell Detail
4.4	A	Cone Details
4.5	A	Cone Details
4.6	A	Weld Map For TK-3322
4.7	A	Weld Map For TK-3326
5.0	B	Support Columns For TK-3322
5.1	B	Support Columns For TK-3326
5.2	B	Support Columns Details
5.3	B	Support Columns Details
5.4	A	Support Columns Details
5.5	A	Support Columns Details
6.0	B	Roof Layout
6.1	B	Roof Details
9.0	B	Baffle Plates
9.1	B	Baffle Plates Details
20.0	A	30"Ø Manway With Davit For TK-3322
20.1	A	30"Ø Manway With Davit For TK-3326
20.2	B	30"Ø Manway Details
20.3	B	30"Ø Manway Details
20.4	A	30"Ø Manway Details
21.0	B	8"Ø Gooseneck Vent
22.0	B	3"Ø Roof Nozzle
23.0	A	4"Ø Roof Nozzle
24.0	B	60"Ø Roof Nozzle With Blind Flg
24.1	B	60"Ø Roof Nozzle With Blind Flg
25.0	A	18"x18" Roof Inspection Hatch
25.1	B	18"x18" Roof Inspection Hatch Details
27.0	B	8"Ø Cone Nozzle
28.0	A	14"Ø Cone Nozzle
30.0	B	1"Ø Shell Coupling
30.1	B	1"Ø Shell Nozzle
31A	A	3"Ø Studding Outlet
33.0	A	6"Ø Shell Nozzle
35.0	A	Straw Inlet
35.1	A	Straw Inlet Details
36.0	A	Straw & Pressate Inlet For TK-3322
36.1	A	Straw & Pressate Inlet For TK-3326
36.2	A	Straw & Pressate Inlet Details
36.3	A	Straw & Pressate Inlet Details
45.0	A	Lifting Lugs
46.0	A	Tailing Lug
48.0	B	Support Repads
50.0	0	Anchor Templates Layout
60.0	B	Shipping Information For TK-3322
60.1	B	Shipping Information For TK-3326

On Hold!

Notes:

PULPING LINE MIX TANK A 330-TK-3322
TANK B 330-TK-3326

REV.	BY	DATE	DESCRIPTION
1	PJ	07/09/18	Revised Drawings And Resubmitted For Approval
0	PJ	04/13/18	Released Anchor Bolts And Templates For Fabrication
A	PJ	06/11/18	For Approval

REVISIONS

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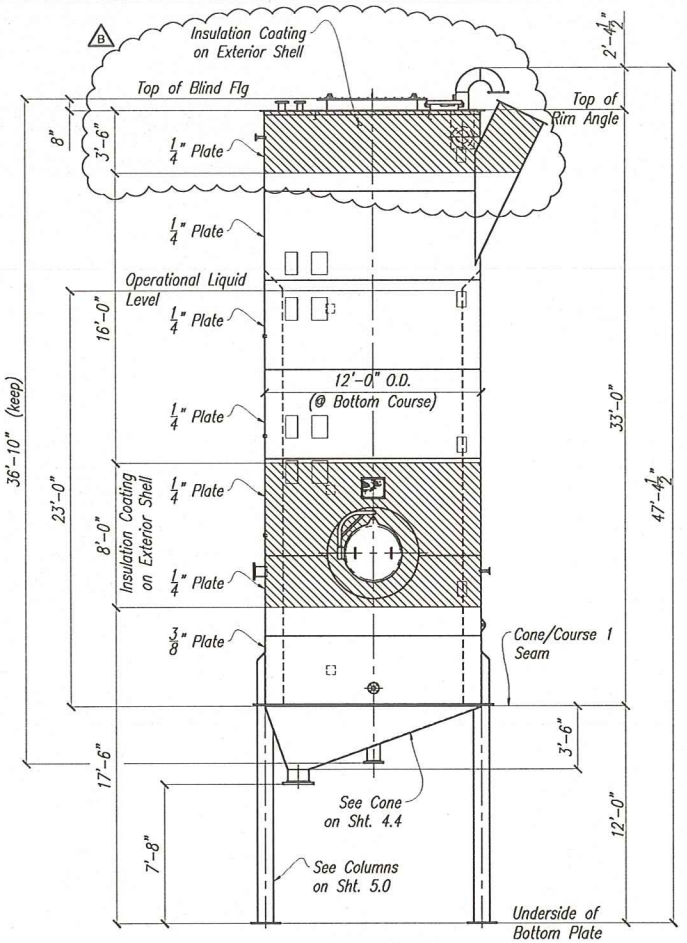
AISC CERTIFIED FABRICATOR

FOR APPROVAL

DRAWN BY: PJ	DATE: 04/03/18	CHK'D BY: TM	DATE: -/-/-

CUSTOMER: Columbia Pulp, LLC 12'-0"ø X 36'-10"H
PROJECT: Lyons Ferry Straw Pulp Plant, Project # 15NA0050
TITLE: Drawing List
JOB#: 600-01-3322 SHT#: DL 1



Tank Elevation View

Tank TK-3322

		VESSEL DATA
DESIGN DATA	DESCRIPTION	12'-0" OD x 33'-0" H.
	NUMBER REQUIRED	1
	CAPACITY	25,500 GALLONS NOMINAL
	DESIGN PRESSURE	PRODUCT HEAD @ SP. GR. = 1.0 , MAX. = ATM. PRESSURE and MIN. = 1.7" W.C. VACUUM
	OPERATING PRESSURE	ATMOSPHERIC + PRODUCT HEAD @ SP. GR. = 1.0
	TEST PRESSURE	PER API 620 12th ED.
	DESIGN METAL TEMPERATURE	18°F
	MAXIMUM OPERATING TEMPERATURE	250°F
	DESIGN TEMPERATURE	200 °F
	JOINT EFFICIENCY	0.70 ON SHELL
	CORROSION ALLOWANCE	0" ON SHELL, ROOF, BOTTOM
	CODE & STAMP	PER API-620 12th ED. AS A GUIDELINE
	ROOF LOAD	SNOW LIVE LOAD = 30 PSF ROOF LIVE LOAD = 25 PSF
	SEISMIC LOAD	Ss= 0.330 g; S1=0.125 g; SUG=II; SITE CLASS=D
	WIND LOAD	110 MPH (3 sec. gust - ULT)
MATERIALS	SHELL	A240-316L
	BOTTOM	A240-316L
	ROOF	A240-316L
	NOZZLE	NECK A312-TP316L FLANGE A182-F316L
	MANWAY	NECK A240-316L FLANGE A240-316L COVER A240-316L
	REINFORCING PADS	A240-316L
	PIPING	A312-TP316L
	COUPLINGS	A403 GR. WP316L
	BOLTING	BOLTS SS316 NUTS SS316 STUDS NONE
	GASKETS	1/8" THK Garlock Graph-Lock 3125SS
	STRUCTURAL	A36
	ELECTRODES	IN ACCORDANCE W/API-620
CONSTRUCTION	STRESS RELIEF	NONE
	CLEANING	BROOM CLEAN AFTER FABRICATION
	SURFACE PREPARATION	N/A
	INTERNAL PAINTING	N/A
	EXTERNAL PAINTING	N/A
	LINING	NONE
	INSULATION	Prime: Carbozinc 609HB, Finish: Carbotherm 551
	LADDERS & PLATFORMS	NONE
	CATHODIC PROTECTION	NONE
	FOUNDATION	CONCRETE BY OTHERS
QUALITY ASSURANCE	Q.A. MANUAL	-
	MILL CERTIFICATIONS	REQUIRED ON PLATE
	WELDERS	QUALIFIED PER ASME SECTION IX
	WELDING	PER API 620 12th ED.
	NON-DESTRUCTIVE TESTING	PER API 620 12th ED.
		RT 10% OF SHELL BUTT WELDS
	TESTING: SPECIAL TESTING	PER API 620 12th ED.
		AIR PRESSURE TEST REPADS PER API 620 12th ED.
	TESTING: SHELL	PER API 620 12th ED.
	TESTING: BOTTOM	PER API 620 12th ED.
	TESTING: ROOF	PER API 620 12th ED.

Notes:

PULPING LINE MIX TANK A 330-TK-3322
TANK B 330-TK-3326

REV.	BY	DATE	DESCRIPTION
B	PJ	07/09/18	Revised Per Approval, Resubmit For Approval
A	PJ	06/11/18	For Approval

REVISIONS

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FOR APPROVAL

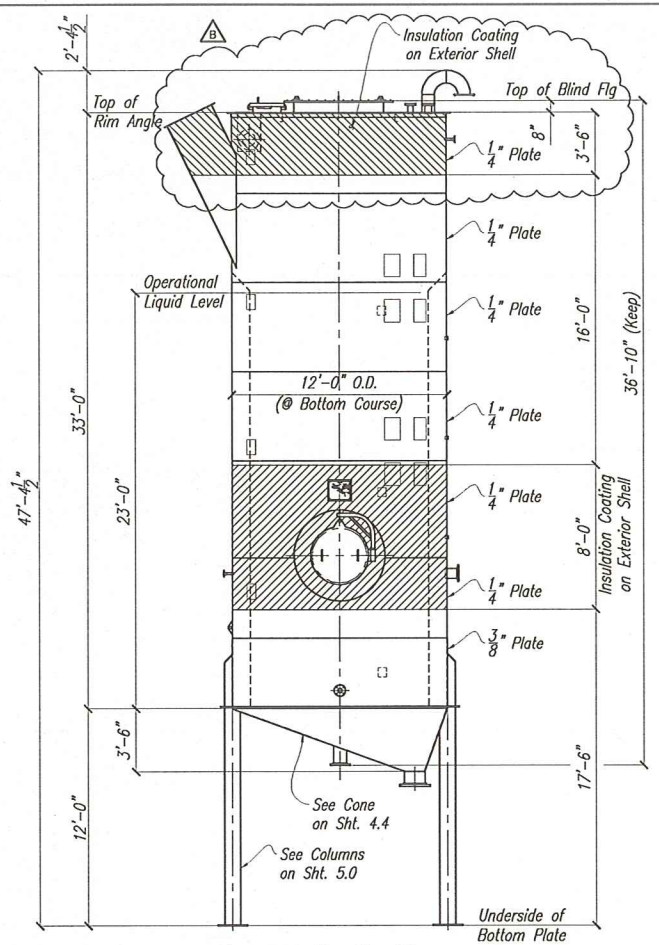
DRAWN BY: PJ	DATE: 05/11/18	CHK'D BY: TM	DATE: -/-/-

CUSTOMER: Columbia Pulp, LLC 12'-0"ø X 36'-10"H

PROJECT: Lyons Ferry Straw Pulp Plant, Project # 15NA0050

TITLE: Elevation And Notes For TK-3322

JOB#: 600-01-3322 SHT#: 1.0 B



Tank Elevation View

Tank TK-3326

		VESSEL DATA
DESIGN DATA	DESCRIPTION	12'-0" OD x 33'-0" H.
	NUMBER REQUIRED	1
	CAPACITY	25,500 GALLONS NOMINAL
	DESIGN PRESSURE	PRODUCT HEAD @ SP. GR. = 1.0 , MAX. = ATM. PRESSURE and MIN. = 1.7" W.C. VACUUM
	OPERATING PRESSURE	ATMOSPHERIC + PRODUCT HEAD @ SP. GR. = 1.0
	TEST PRESSURE	PER API 620 12th ED.
	DESIGN METAL TEMPERATURE	18°F
	MAXIMUM OPERATING TEMPERATURE	250°F
	DESIGN TEMPERATURE	200 °F
	JOINT EFFICIENCY	0.70 ON SHELL
	CORROSION ALLOWANCE	0" ON SHELL, ROOF, BOTTOM
	CODE & STAMP	PER API-620 12th ED. AS A GUIDELINE
	ROOF LOAD	SNOW LIVE LOAD = 30 PSF ROOF LIVE LOAD = 25 PSF
	SEISMIC LOAD	Ss= 0.330 g; S1=0.125 g; SUG=II; SITE CLASS=D
	WIND LOAD	110 MPH (3 sec. gust - ULT)
MATERIALS	SHELL	A240-316L
	BOTTOM	A240-316L
	ROOF	A240-316L
	NOZZLE	NECK A312-TP316L FLANGE A182-F316L
	MANWAY	NECK A240-316L FLANGE A240-316L COVER A240-316L
	REINFORCING PADS	A240-316L
	PIPING	A312-TP316L
	COUPLINGS	A403 GR. WP316L
	BOLTING	BOLTS SS316 NUTS SS316 STUDS NONE
	GASKETS	1/8" THK Garlock Graph-Lock 3125SS
	STRUCTURAL	A36
	ELECTRODES	IN ACCORDANCE W/API-620
CONSTRUCTION	STRESS RELIEF	NONE
	CLEANING	BROOM CLEAN AFTER FABRICATION
	SURFACE PREPARATION	N/A
	INTERNAL PAINTING	N/A
	EXTERNAL PAINTING	N/A
	LINING	NONE
	INSULATION	Prime: Carbozinc 605HB. Finish: Carbotherm 551
	LADDERS & PLATFORMS	NONE
	CATHODIC PROTECTION	NONE
	FOUNDATION	CONCRETE BY OTHERS
QUALITY ASSURANCE	Q.A. MANUAL	-
	MILL CERTIFICATIONS	REQUIRED ON PLATE
	WELDERS	QUALIFIED PER ASME SECTION IX
	WELDING	PER API 620 12th ED.
	NON-DESTRUCTIVE TESTING	PER API 620 12th ED.
		RT 10% OF SHELL BUTT WELDS
	TESTING: SPECIAL TESTING	PER API 620 12th ED.
		AIR PRESSURE TEST REPADS PER API 620 12th ED.
	TESTING: SHELL	PER API 620 12th ED.
	TESTING: BOTTOM	PER API 620 12th ED.
	TESTING: ROOF	PER API 620 12th ED.

Notes:

PULPING LINE MIX TANK A 330-TK-3322
TANK B 330-TK-3326

REV.	BY	DATE	DESCRIPTION
B	PJ	07/09/18	Revised Per Approval, Resubmit For Approval
A	PJ	06/11/18	For Approval

REVISIONS

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FOR APPROVAL

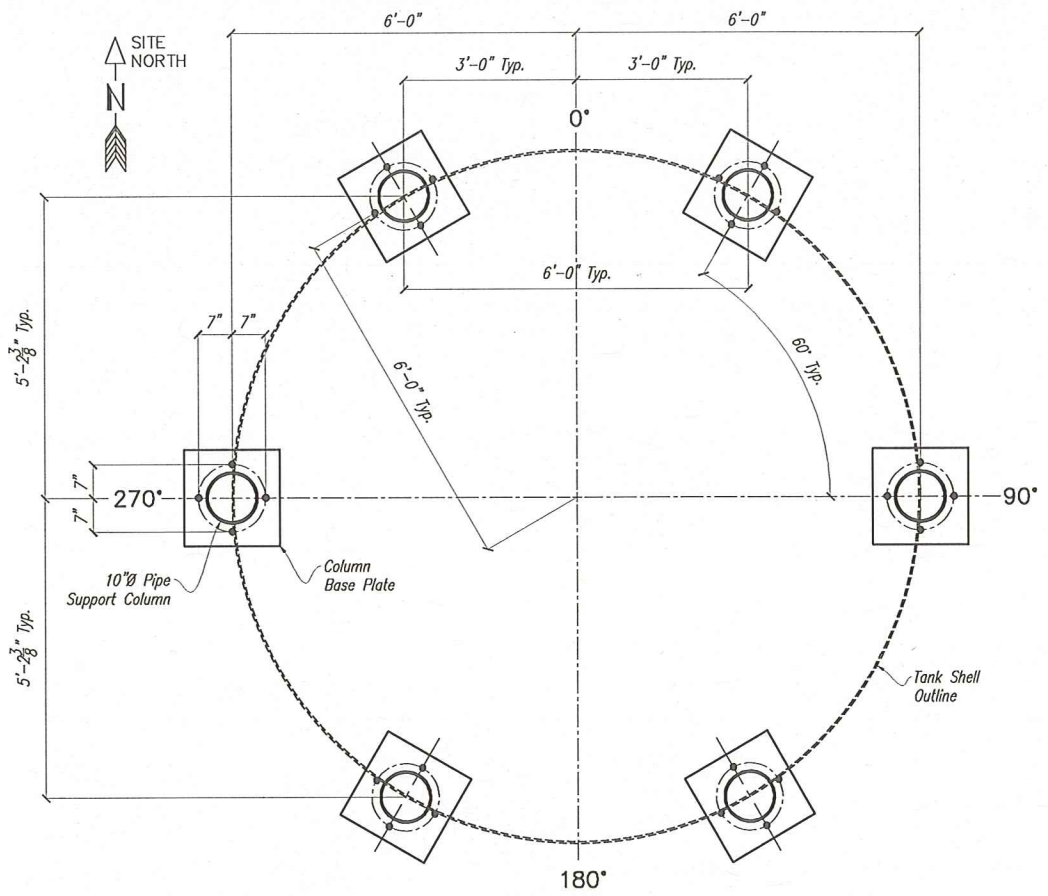
DRAWN BY: PJ	DATE: 05/14/18	CHK'D BY: TM	DATE: -/-/-

CUSTOMER: Columbia Pulp, LLC 12'-0"ø X 36'-10"H

PROJECT: Lyons Ferry Straw Pulp Plant, Project # 15NA0050

TITLE: Elevation And Notes For TK-3326

JOB#: 600-01-3322 SHT#: 1.1 B



Anchor Bolts Layout

Tank TK-3322 & TK-3326

Notes:

PULPING LINE MIX TANK A 330-TK-3322
TANK B 330-TK-3326

REV.	BY	DATE	DESCRIPTION
0	PJ	04/13/18	Released For Fabrication
A	PJ	04/05/18	For Approval

REVISIONS

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AISC CERTIFIED FABRICATOR

FOR APPROVAL

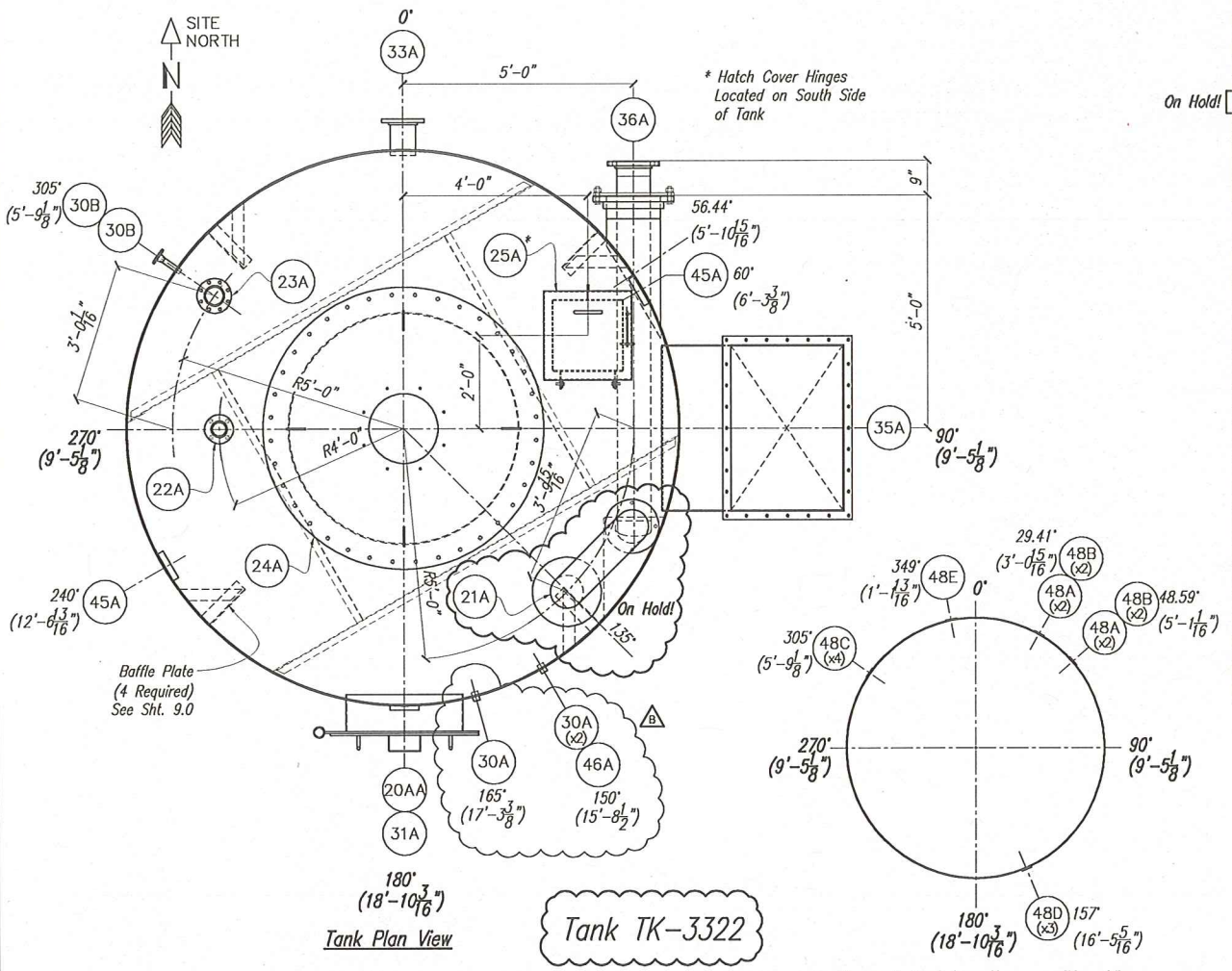
DRAWN BY: PJ	DATE: 04/03/18	CHK'D BY: TM	DATE: -/-/-

CUSTOMER: Columbia Pulp, LLC 12'-0"ø X 36'-10"H

PROJECT: Lyons Ferry Straw Pulp Plant, Project # 15NA0050

TITLE: Anchor Bolts Layout

JOB#: 600-01-3322 SHT#: 2.1 0



APPURTENANCE SCHEDULE

* FROM BOTTOM OF COLUMN BASE PLATE

ITEM	RADIUS	DEGREE	PROJ.	*ELEV.	APPURTENANCE
9A	Ins. Shell	See Sht. 9.0	---	See Sht. 9.0	(4) Baffle Plates @ 90° Apart
20AA	Shell	180°	8"	20'-6"	30" Shell Manway W/Davit & Nameplate (M1)
21A	5'-0"	135°	---	Roof	8" Gooseneck Vent (N7)
22A	4'-0"	270°	8"	Roof	3" Level Instrument With Blind (N6)
23A	5'-0"	305°	8"	Roof	4" Vent (to Oxidizer) (N14)
24A	---	Center	7 13/16"	Roof	60" Agitator With Blind (N13)
25A	---	See Plan	6"	Roof	18"x18" Inspection Opening w/Hinged Cover (M2)
27A	Bottom Cone	Center	---	8'-10"	8" Steady Bearing (N15) *
28A	Bottom Cone	0°	---	7'-8"	14" Pump Suction (N1) *
30A	Shell	150°	---	34'-0"	1" Temperature Instrument (N3)
30A	Shell	150°	---	23'-6"	1" Temperature Instrument (N9)
30A	Shell	165°	---	13'-0"	1" Temperature Instrument (N10)
30B	Shell	305°	6"	19'-6"	1" Peroxide Inlet (N8)
30B	Shell	305°	6"	43'-6"	1" Peroxide Inlet (N4)
31A	Shell	180°	Flush	13'-0"	3" Level Instrument (N11)
33A	Shell	0°	8"	19'-6"	6" Steam Inlet/Sparger (N2)
35A	Shell	90°	---	See Elevation	Straw Inlet (N12)
36A	Shell	56.44°	---	43'-6"	14"/8" Pressate Inlet (N5)
45A	Shell	60°, 240°	---	---	Lifting Lugs (2)
46A	Shell	150°	---	16'-6"	Tailing Lug
48A	SHELL	48.59°	---	36'-6"	1/4"x12"x12" Support Repad (P1)
48A	SHELL	29.41°	---	36'-6"	1/4"x12"x12" Support Repad (P2)
48B	SHELL	48.59°	---	34'-0"	1/4"x12"x15" Support Repad (P3)
48B	SHELL	29.41°	---	34'-0"	1/4"x12"x15" Support Repad (P4)
48A	SHELL	48.59°	---	27'-6"	1/4"x12"x12" Support Repad (P5)
48A	SHELL	29.41°	---	27'-6"	1/4"x12"x12" Support Repad (P6)
48B	SHELL	48.59°	---	25'-0"	1/4"x12"x15" Support Repad (P7)
48B	SHELL	29.41°	---	25'-0"	1/4"x12"x15" Support Repad (P8)
48C	SHELL	305°	---	42'-6"	1/4"x10"x10" Support Repad (P9)
48C	SHELL	305°	---	34'-6"	1/4"x10"x10" Support Repad (P10)
48C	SHELL	305°	---	26'-6"	1/4"x10"x10" Support Repad (P11)
48C	SHELL	305°	---	18'-6"	1/4"x10"x10" Support Repad (P12)
48D	SHELL	157°	---	34'-0"	1/4"x6"x6" Support Repad (P13)
48D	SHELL	157°	---	24'-0"	1/4"x6"x6" Support Repad (P14)
48D	SHELL	157°	---	14'-0"	1/4"x6"x6" Support Repad (P15)
48E	SHELL	349°	---	13'-0"	1/4"x10"x10" Support Repad (P16)

* See Sht. 3.2 For Bottom Cone Nozzles

Notes:

1. Dimensions are right & left from 0° @ outside bottom course
   1" = 1 1/4" (1.2566")
   5" = 6 5/16" (6.2832")
2. Bolt Holes of Nozzles Flanges to Straddle Vertical Centerline
3. Bolt Holes of Roof Nozzles Flanges to Straddle 90°/270° Centerline

PULPING LINE MIX TANK A 330-TK-3322
TANK B 330-TK-3326

REV.	BY	DATE	DESCRIPTION
B	PJ	07/09/18	Revised Per Approval, Resubmit For Approval
A	PJ	06/11/18	For Approval

REVISIONS

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Website:
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AISC CERTIFIED FABRICATOR

FOR APPROVAL

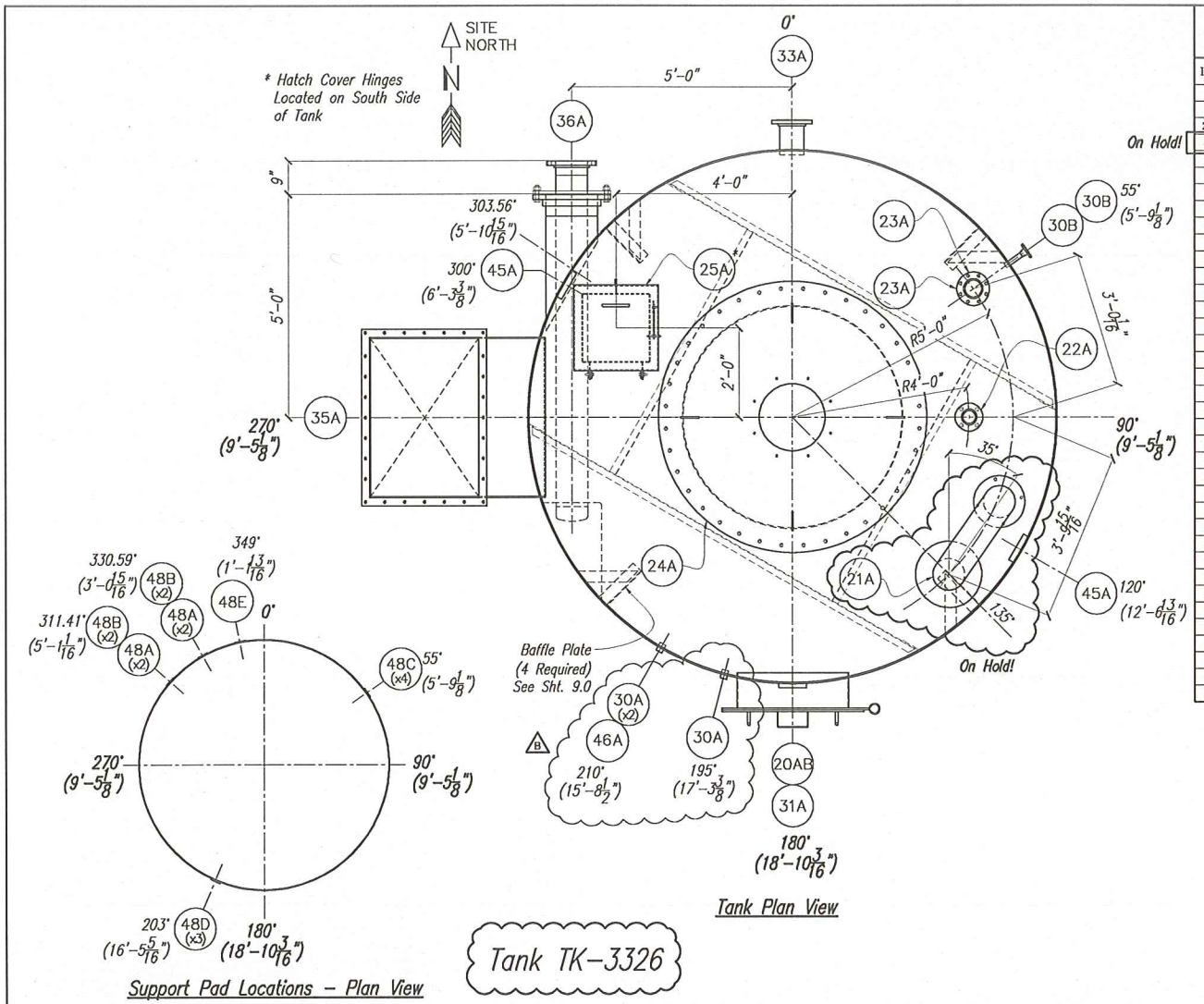
DRAWN BY: PJ	DATE: 05/11/18	CHK'D BY: TM	DATE: -/-/-

CUSTOMER: Columbia Pulp, LLC — 12'-0"ø X 36'-10"H

PROJECT: Lyons Ferry Straw Pulp Plant, Project # 15NA0050

TITLE: Plan & Apps For TK-3322

JOB#: 600-01-3322 | SHT#: 3.0 | B



APPURTENANCE SCHEDULE

* FROM BOTTOM OF COLUMN BASE PLATE

ITEM	RADIUS	DEGREE	PROJ.	*ELEV.	APPURTENANCE
9A	Ins. Shell	See Sht. 9.0	---	See Sht. 9.0	(4) Baffle Plates @ 90° Apart
20AB	Shell	180°	8"	20'-6"	30" Shell Manway W/Davit & Nameplate (M1)
21A	5'-0"	135°	---	Roof	8" Gooseneck Vent (N7)
22A	4'-0"	90°	8"	Roof	3" Level Instrument With Blind (N6)
23A	5'-0"	55°	8"	Roof	4" Vent (to Oxidizer) (N14)
24A	---	Center	7 13/16"	Roof	60" Agitator With Blind (N13)
25A	---	See Plan	6"	Roof	18"x18" Inspection Opening w/Hinged Cover (M2)
27A	Bottom Cone	Center	---	8'-10"	8" Steady Bearing (N15) *
28A	Bottom Cone	0°	---	7'-8"	14" Pump Suction (N1) *
30A	Shell	210°	---	34'-0"	1" Temperature Instrument (N3)
30A	Shell	210°	---	23'-6"	1" Temperature Instrument (N9)
30A	Shell	195°	---	13'-0"	1" Temperature Instrument (N10)
30B	Shell	55°	6"	19'-6"	1" Peroxide Inlet (N8)
30B	Shell	55°	6"	43'-6"	1" Peroxide Inlet (N4)
31A	Shell	180°	Flush	13'-0"	3" Level Instrument (N11)
33A	Shell	0°	8"	19'-6"	6" Steam Inlet/Sparger (N2)
35A	Shell	270°	---	See Elevation	Straw Inlet (N12)
36A	Shell	303.56°	---	43'-6"	14"/8" Pressate Inlet (N5)
45A	Shell	120°, 300°	---	---	Lifting Lugs (2)
46A	Shell	210°	---	16'-6"	Tailing Lug
48A	SHELL	311.41°	---	36'-6"	1/4"x12"x12" Support Repad (P1)
48A	SHELL	330.59°	---	36'-6"	1/4"x12"x12" Support Repad (P2)
48B	SHELL	311.41°	---	34'-0"	1/4"x12"x15" Support Repad (P3)
48B	SHELL	330.59°	---	34'-0"	1/4"x12"x15" Support Repad (P4)
48A	SHELL	311.41°	---	27'-6"	1/4"x12"x12" Support Repad (P5)
48A	SHELL	330.59°	---	27'-6"	1/4"x12"x12" Support Repad (P6)
48B	SHELL	311.41°	---	25'-0"	1/4"x12"x15" Support Repad (P7)
48B	SHELL	330.59°	---	25'-0"	1/4"x12"x15" Support Repad (P8)
48C	SHELL	55°	---	42'-6"	1/4"x10"x10" Support Repad (P9)
48C	SHELL	55°	---	34'-6"	1/4"x10"x10" Support Repad (P10)
48C	SHELL	55°	---	26'-6"	1/4"x10"x10" Support Repad (P11)
48C	SHELL	55°	---	18'-6"	1/4"x10"x10" Support Repad (P12)
48D	SHELL	203°	---	34'-0"	1/4"x6"x6" Support Repad (P13)
48D	SHELL	203°	---	24'-0"	1/4"x6"x6" Support Repad (P14)
48D	SHELL	203°	---	14'-0"	1/4"x6"x6" Support Repad (P15)
48E	SHELL	349°	---	13'-0"	1/4"x10"x10" Support Repad (P16)

* See Sht. 3.2 For Bottom Cone Nozzles

Notes:
1. Dimensions are right & left from 0° @ outside bottom course
   1" = 1 1/4" (1.2566")
   5" = 6 5/16" (6.2832")
2. Bolt Holes of Nozzles Flanges to Straddle Vertical Centerline
3. Bolt Holes of Roof Nozzles Flanges to Straddle 90°/270° Centerline

PULPING LINE MIX TANK A 330-TK-3322
TANK B 330-TK-3326

REV.	BY	DATE	DESCRIPTION
B	PJ	07/09/18	Added Support Pad 48E, Put Gooseneck Vent on Hold
A	PJ	06/11/18	For Approval

REVISIONS

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ASME CERTIFIED FABRICATOR

FOR APPROVAL

DRAWN BY: PJ	DATE: 05/14/18	CHK'D BY: TM	DATE: -/-/-

CUSTOMER: Columbia Pulp, LLC
12'-0"ø X 36'-10"H
PROJECT: Lyons Ferry Straw Pulp Plant, Project # 15NA0050
TITLE: Plan & Apps For TK-3326
JOB#: 600-01-3322
SHT#: 3.1 B