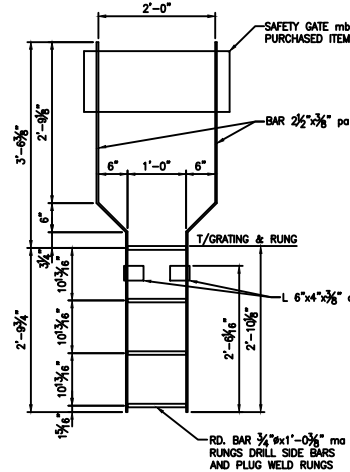
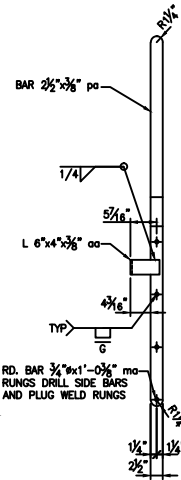
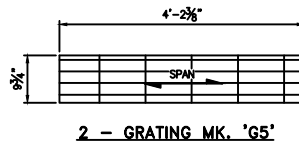


BILL OF MATERIAL								
SERIAL	SHIP NAME	PIECE DATA	NO. OF PIECES	DESCRIPTION	LENGTH		REMARKS	UNIT
					FEET	INCHES		
—	G1	2	2	GRATING				—
		2	2	1 1/2"x1/4"x35 7/8" HEAVY DUTY	2	11 7/8		—
				3B94 OR HWE SERIES GRATING				—
				2 3/8" C/C OF BEARING BARS				—
	G2	ONE	1	GRATING				—
		ONE	2	1 1/2"x1/4"x24 1/2" HEAVY DUTY	3	9 7/8		—
				3B94 OR HWE SERIES GRATING				—
				2 3/8" C/C OF BEARING BARS				—
	G3	ONE	1	GRATING				—
		ONE	2	1 1/2"x1/4"x22 7/8" HEAVY DUTY	3	9 7/8		—
				3B94 OR HWE SERIES GRATING				—
				2 3/8" C/C OF BEARING BARS				—
	G4	ONE	1	GRATING				—
		ONE	2	1 1/2"x1/4"x12 5/8" HEAVY DUTY	6	7 7/8		—
				3B94 OR HWE SERIES GRATING				—
				2 3/8" C/C OF BEARING BARS				—
	G5	2	2	GRATING				—
		2	2	1 1/2"x1/4"x9 3/4" HEAVY DUTY	4	2 3/8		—
				3B94 OR HWE SERIES GRATING				—
				2 3/8" C/C OF BEARING BARS				—
	M1	ONE	1	LADDER				—
	aa	2	2	16x4x3/8	0	3		—
	pa	2	2	BAR 2 1/2 x 1/2	6	6 5/8		—
	mo	4	4	RD. BAR 3/4"	1	0 3/8		—
	mb	ONE	1	SAFETY GATE - PURCHASED ITEM PER AISC/LRMOI/RTAL STANDARDS				—
	M2	9	9	HANDRAIL POST				—
		9	9	BAR 2 1/2 x 1/2	4	2 1/2		—
	M3	2	2	HANDRAIL				—
		2	2	RD. BAR 1"	20	0	PLAIN MATERIAL	
	B1	3	3	BEAM				—
		3	3	C6x8.2	1	4 1/8	PLAIN MATERIAL	
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FABRICATION NOTES:
 -ALL RE-ENTRANT CORNERS TO BE SHAPED NOTCH FREE TO MIN. $\frac{1}{8}$ " RADIUS
 -STANDARD FABRICATION PRACTICES AND TOLERANCES PER AISC CHAPTER M AND CODE OF
 STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES SHALL APPLY UNLESS NOTED

GENERAL NOTES:

SPECIFICATIONS:	A.I.S.C., LATEST EDITION
MATERIAL:	
- "W" AND "WT" SHAPES:	ASTM A992, GRADE 50
- CHANNELS, Ls, PLs & BARS:	ASTM A36, GRADE 36
OPEN HOLES:	1 1/8" Ø, UNLESS NOTED
BOLTS:	3/4" A325 BOLTS, UNLESS NOTED
SURFACE PREP:	SSPC-SP3 OR SP6
FINISH:	TBD
WELDING:	YES, PER AWS, USE E70XX ELECTRODES

FOR LOCATION OF SHIPPING PIECES SHOWN SEE DRAWING 713474

DRAWING CODE INDEX								
LEVELS	1	2	3	4	5	6	7	8
	2.	1.	03.	35.	05.	01.	6.	3

NOTE:
GRATING WILL HAVE TO BE CUSTOM
ORDERED FOR OPENING SIZE.

FOR CONSTRUCTION
ISSUE DATE: 09-27-2019

ENSP
ENGINEERING CONSULTANTS
PROJ. No. 19-9248
SHEET No. D1

REVISION SIGNOFF			
1	Date	Initial	
2	08/19	JMD	ArcelorMittal INDIANA HARBOR WEST BLAST FURNACE ORE YARD STACKER/RECLAIMER PULL BOX CHUTE PLATFORM SHOP FABRICATION DETAILS DRAWN: MAC 08-19 CHECKED: JMD 09-19 SCALE: 1"=1'-0"
3			
4			
5			
6			
7			
8			
9			
10			
11			

No. 713475

BILL OF MATERIAL

QTY.	ITEM NO.	DESCRIPTION	UNIT		REMARKS	WEIGHT
			FEET	SQUARE		
-	G1	2 GRATING 2 1/2"x1/4"x36 7/8" HEAVY DUTY 30M4 OR HME SERIES GRATING 2 3/8" C/C OF BEARING BARS	2	11 7/8		--
	G2	ONE GRATING ONE 2 1/2"x1/4"x24 1/2" HEAVY DUTY 30M4 OR HME SERIES GRATING 2 3/8" C/C OF BEARING BARS	3	9 7/8		--
	G3	ONE GRATING ONE 2 1/2"x1/4"x22 7/8" HEAVY DUTY 30M4 OR HME SERIES GRATING 2 3/8" C/C OF BEARING BARS	3	9 7/8		--
	G4	ONE GRATING ONE 2 1/2"x1/4"x12 5/8" HEAVY DUTY 30M4 OR HME SERIES GRATING 2 3/8" C/C OF BEARING BARS	6	7 7/8		--
	G5	2 GRATING 2 2 1/2"x1/4"x36 3/4" HEAVY DUTY 30M4 OR HME SERIES GRATING 2 3/8" C/C OF BEARING BARS	4	2 3/8		--
	M1	ONE LADDER 2 L6x4x3/8 2 BAR 2 1/2 x 1/2 RD. BAR 3/4" SAFETY GATE - PURCHASED ITEM PER AISI/AISC STANDARDS	0	3		--
	M2	9 HANDRAIL POST BAR 2 1/2 x 1/2	4	2 1/2		--
	M3	2 HANDRAIL RD. BAR 1"	20	0	PLAIN MATERIAL	--
	B1	3 BEAM C6x8.2	1	4 1/8	PLAIN MATERIAL	--
						TOTAL WT.

FABRICATION NOTES:
-ALL RE-ENTRANT CORNERS TO BE SHAPED NOTCH FREE TO MIN. 1/4" RADIUS
-STANDARD FABRICATION PRACTICES AND TOLERANCES PER AISC CHAPTER M AND CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES SHALL APPLY UNLESS NOTED

GENERAL NOTES:
SPECIFICATIONS: A.I.S.C., LATEST EDITION
MATERIAL:
-"W" AND "WT" SHAPES: ASTM A992, GRADE 50
-CHANNELS, Ls, PLs & BARS: ASTM A36, GRADE 36
OPEN HOLES: 1/4", UNLESS NOTED
BOLTS: 3/4" A325 BOLTS, UNLESS NOTED
SURFACE PREP: SSPC-SP3 OR SP6
FINISH: TBD
WELDING: YES, PER AWS, USE E70XX ELECTRODES
FOR LOCATION OF SHIPPING PIECES SHOWN SEE DRAWING 713474

DRAWING CODE INDEX

LEVELS	1	2	3	4	5	6	7	8
	2	1	03	35	05	01	6	3

ArcelorMittal USA
INDIANA HARBOR WEST

BLAST FURNACE ORE YARD STACKER/RECLAIMER PULL BOX CHUTE PLATFORM SHOP FABRICATION DETAILS

No. 713475

FOR CONSTRUCTION
ISSUE DATE: 09-27-2019

ENSPECT ENGINEERING CONSULTANTS
PROJ. No. 19-9248 SHEET No. D1

3300 MISSOURI STREET
MARIETTA, GA 30067
PHONE: (770) 736-6002
FAX: (770) 736-6003

DATE: 09-27-19 FOR CONSTRUCTION
DESIGNER/CHECKER: MAC/JMD