CITY OF GALLUP
CENTRAL PURCHASING OFFICE
P.O. BOX 1270
GALLUP, NEW MEXICO 87305-1270
Phone: 505-863-1232; Fax: 505-722-5133

GRANDVIEW RESERVOIR REHABILITATION
FORMAL BID NO. 1703
CITY OF GALLUP

AMENDMENT NO.: **One (1)**
PAGES: **# (12)**

FORMAL BID NO.: **1703**

THE FOLLOWING REVISIONS, ADDITIONS AND/OR CLARIFICATIONS SHALL FORM A PART OF THE CONTRACT DOCUMENTS AND EACH BIDDER SHALL INDICATE ON THEIR BID THE RECEIPT OF THIS NUMBERED AMENDMENT. REVISIONS, ADDITIONS, AND/OR CLARIFICATIONS ARE AS FOLLOWS:

This Amendment No. 3 Contains the Following:
- Modifications to the Project Drawings and Specifications
- Responses to Inquiries received by the City of Gallup and DePauli Engineering & Surveying, LLC and Miscellaneous Clarifications
-Questions and Answers from the 2/28/17 Pre-Bid Site Viewing
- Pre-Bid Viewing Attendance Sheet – 1 page (page 6)
- Plan Holders List as of 3/2/17 – 2 pages (pages 7-8)
- Appendix D – 4.0 MG Construction Shop Drawings. (pages 9-12)

MODIFICATIONS TO PROJECT DRAWINGS AND DOCUMENTS

Modifications to Project Drawings:

Sheet 6 of 10 – Grandview Reservoir Elevation (Looking North)
The tank diameter dimension of "85'± DIA." is hereby replaced with the dimension of "170'± DIA."

Modifications to Project Documents:

Page I-4 – Information to Bidders, Paragraph 17 Form Completion
The following language is hereby added to the end of the paragraph: "The Subcontractor Listing shall include the NACE inspector and lead abatement company complete with license/certification number with expiration dates.

Page BP-2 – Grandview Reservoir Rehabilitation – Base Bid Item #14 Removal and Salvage of Existing Abandoned Tank
This item of work is hereby deleted from the project. The Bid Proposal shall hereby be completed by entering *"NA"* in the "Unit Price" and "Amount" columns.

Page SC-2 – Special Conditions, Paragraph SC-10 Time of Completion and Liquidation Damages
The language "two hundred forty (240) calendar days thereafter." is hereby replaced with the language "three hundred (300) calendar thereafter, including weather delays.

Page SC-6 – Special Conditions, Description of Bid Items and Basis of Payment:
Grandview Reservoir Rehabilitation Base Bid – Item #1
The following numbered items of work is hereby added immediately after item #10:
" 11. Removal of existing interior and exterior ladders and replacement with OSHA approved interior and exterior ladders.
12. Installation of up to 10' of new kick rail on existing safety hand rails."

Page SC-6 – Special Conditions, Description of Bid Items and Basis of Payment:
Grandview Reservoir Rehabilitation Base Bid – Item #4
The following language is hereby added immediately following the first sentence:
"This item includes any heating, dehumidification, and tenting that may be required to complete interior coating system and returning tank to service within completion time. Contractor shall note seasonal weather factors including late summer/early fall monsoons and low (freezing) temperatures during fall and winter months."

Page SC-8 – Special Conditions, Description of Bid Items and Basis of Payment:
Grandview Reservoir Rehabilitation Base Bid – Item #14
This item of work and language is hereby deleted from the project.

Page 505R-3 – Technical Specifications, Section 505R Welded Steel Storage Tank Rehabilitation
Paragraph 505.1.1 Quality Assurance
The following language "Contractor shall employ the services of a qualified testing organization approved by the Engineer to perform all tests required by these Specifications. Organizations responsible for Quality Assurance of tank coatings shall be NACE Certified." is hereby replaced with the following language "Contractor shall employ the services of a qualified independent testing organization approved by the Engineer to perform all tests required by these Specifications. Organizations responsible for Quality Assurance of tank coatings shall be NACE Level 3 Certified."

Page 505R-5 – Technical Specifications, Section 505R Welded Steel Storage Tank Rehabilitation
Paragraph 505.3.4 Ladders
The entire paragraph is replaced with the following language: "Removal of existing ladders (interior and exterior) and replacement with OSHA approved ladders. Exterior ladder shall extend from 7'-0" above the ground to the tank roof. The exterior ladder shall be equipped with a lockable trap door and a safety cage that extends a minimum 3'-6" above top of steel reservoir and attaches to the top railing. Ladders shall be attached to tank shell and roof with 3"x7"x1/4" brackets spaced at 4'-0" (min.) intervals"

Appendix D: Tank Shop Drawings
The attached copy of the 4 MG reservoir shop drawings are hereby included as part of the contract drawings (Pages 9-12)

RESPONSES TO INQUIRIES RECEIVED BY THE CITY OF GALLUP AND DEPAULI ENGINEERING & SURVEYING AND MISCELLANEOUS CLARIFICATIONS

Contractor Questions: Questions are taken directly from contractor or supplier emails. Inquiries received prior to February 28, 2017 were addressed at the Pre-Bid Site Viewing.

Q: *Per Specification 501.8 a hydraulic valve operator is proposed. I have noticed this is a common specification on multiple jobs engineered by DePauli, therefore, will it in fact be required on this particular job and under which bid item will it be paid under?*
A: Hydraulic valve operators are not required on this particular job.

Q: *Specification 501.2.2 proposes that valve body fasteners must be 316 stainless steel. Will type 304 stainless steel be acceptable?*

A: Valve body fasteners shall be 316 stainless steel as specified.

Q: *What is the size of the knuckle on the tank?*
A: See the attached Shop drawings. Pages 9-12.

Q: *What is the first ring shell thickness?*
A: See the attached Shop drawings. Pages 9-12

Q: *Confirm diameter of the tank. Specifications sec. 505.2.1 states tank diameter is 170 feet, but drawing 6 of 10 plan view calls for radius 84'-9", elevation view looking north shows 85' Dia +/-. Which one is correct?*
A: The Tank has a diameter of 170 feet, plus or minus

Q: *Specification 505.3.4 calls for modification of exterior and interior ladders. What is the scope of work required?*
A: See the above Modifications to Project Drawings and Documents.

Q: *Contract drawings Sheet 6 of 10, Detail 5/6 roof hatch. What is the length of handrail on each side of roof access ladder?*
A: See the above Modifications to Project Drawings and Documents.

Q: *Contract drawings, Sheet 5 of 10, Detail AA shows 16" diameter inlet. Detail EE shows overflow 12" diameter. Shall the overflow piping match the inlet piping?*
A: Inlet and overflow piping dimensions shall remain as shown on project drawings.

Q: *Just wanted to clarify that the 16" mjxflg valves on this job do NOT have to have a bypass. The bypass starts at the 18" valves?*
A: Yes, bypasses are not required on 16" gate valves.

Q: *Section 505.4.3 Paint Systems identifies various Tnemec coating products as acceptable for the project. Will the equivalent products from Sherwin Williams, with appropriate supporting information, be considered for approved equal?*
A: Yes, 'or equal' items are acceptable. Please see page I-2 Paragraph 5 in the Specifications. "All items equal or equivalent to these requirements and standards will be considered, except where otherwise noted. All materials used and incorporated into this project shall be new unless otherwise agreed upon."

RESPONSES TO INQUIRIES RECEIVED BY THE CITY OF GALLUP AND DEPAULI ENGINEERING & SURVEYING AND MISCELLANEOUS CLARIFICATIONS ADDRESSED DURING PROJECT PRE-BID SITE VIEWING ON TUESDAY, FEBRUARY 28, 2017 AT 10:00AM.

Responses and Inquires addressed during the Pre-Bid Site Viewing at the office of DePauli Engineering & Surveying, LLC and at the project site:

Q: *What if you come into steel replacement?*
A: Steel replacement is included as part of this project. See Bid Item #6 of the Bid Proposal and the associated description of bid item for more information

Q: *What if you get more steel replacement than anticipated?*
A: The associated schedule and time implications of structural steel replacement in excess of estimated quantity will be addressed as required should the situation arise.

Q: *Was this a mandatory pre-bid meeting?*
A: No.

Q: *What about noise?*
A: Contractors may work from 7am to 7pm. Contractor shall notify adjacent residences of project work hours.

Q: *Is the alternate tank the same age as the main one?*
A: The age of the alternate tank is unknown.

Q: *Where does the salvaged tank go once it is cut down?*
A: This item of work has been removed from the project. See the above Modifications to Project Drawings and Documents.

Q: *You want the tank cut down not demolished?*
A: This item of work has been removed from the project. See the above Modifications to Project Drawings and Documents.

Q: *Have you found as-builts on the tanks?*
A: Construction Shop Drawings for the 4.0 MG Tank are included in Appendix D (Pages 9-12). See the above Modifications to Project Drawings and Documents.

Q: *Is there any way to isolate and keep one pump running?*
A: Yes, the water system will be able to maintain water service during tank rehabilitation. All work shall be coordinated with City personnel to minimize disruptions in service.

Q: *Do you know how you want the salvaged tank taken down?*
A: This item of work has been removed from the project. See the above Modifications to Project Drawings and Documents.

Q: *Does the tank have lead inside and out?*
A: Yes, the existing 4.0 MG tank coatings contain lead.

Q: *Where is the header that needs to be replaced?*
A: Immediately in front of the pump station.

Q: *How deep is the tank foundation?*
A: Design drawings show tank ringwall at 3' deep, as detailed in project drawings.

Q: *Do you have gravel replacement?*
A: The new tank floor shall be placed on top of a 6" thick pea gravel bed inside a non-woven geo-fabric envelope as detailed in project drawings.

Q: *Do ladders, manways and handrails meet OSHA Requirements?*
A: New ladders and handrails shall meet OSHA requirements.

Q: *Is there any lab testing on the tank that is being cut down? Do we need this?*
A: This item of work has been removed from the project. See the above Modifications to Project Drawings and Documents.

Q: *New Gauge Board?*
A: Yes a new, double throw gauge board is included in this project.

Q: *Is any work being performed inside the pump house?*
A: Yes, the pressure sensing stand with display

Q: *Existing concrete wall on the outside existing tank?*
A: Yes, see contract drawings. The wall is not anticipated to affect new piping.

Q: *You want to be able to put the salvaged tank back together?*
A: This item of work has been removed from the project. See the above Modifications to Project Drawings and Documents.

Q: *Are they capping abandoned pipe?*
A: Yes, all pipes abandoned in place shall be capped or plugged with concrete. See contract drawings for additional details.

Q: *Where does tank drain?*
A: To the south between two existing residences. See contract drawings for more information

Q: *Are you still thinking this will bid out Tuesday March 7, with the required lead abatement?*
A: Yes, tank salvage has been removed from the project.

Q: *Is there a bunch of off scale buildup?*
A: Scale was/is not evident in the inspection photos or noted in the inspection report.

Q: *Is the tank cleaned out now or do we have to do it?*
A: Tank shall be cleaned, sediment and other debris shall be dried and spread out on site.

Q: *Can the interior tank surfaces be commercially blast cleaned in accordance with SSPC-SP5 versus SSPC-SP10?*
A: No, interior tank surfaces shall be commercially blast cleaned in accordance with SSPC-SP10 as specified in project documents.

Bid opening time and date remain unchanged.

This amendment consists of **12** pages. If you do not receive all **12** pages, contact the City of Gallup Purchasing Office immediately.

City of Gallup:

Frances Rodriguez

Digitally signed by Frances Rodriguez
DN: cn=Frances Rodriguez, o=City of Gallup, ou=Purchasing Dept, email=frodriguez@ci.gallup.nm.us, c=US
Date: 2017.03.02 09:48:15 -07'00'

DATE: **March 2, 2017**

BY/S/ Frances Rodriguez, CPPB
Frances Rodriguez, CPPB,
Purchasing Director

Acknowledge
Receipt No. **One (1)**

Contractor:
BY/S/_____
Authorized Signature of Seller/Bidder

Company Name: _____

[ACKNOWLEDGE RECEIPT ON BID OR SIGN AND RETURN ONE (1) COPY WITH BID]

Grandview Reservoir Rehabilitation
City of Gallup Formal Bid No. 1703
Pre-Bid Viewing 2/28/17
10:00am DES 307 S. 4th Street, Gallup, NM

NAME	COMPANY	PHONE /E-MAIL
Kurt Spolar	DES	863-5440/kuspolar@depauliengineering.com
Daniella Aretino-Murillo	DES	863-5440/daretino@depauliengineering.com
Ben Davis	Luckinbill Inc	405-315-3225 ben.davis@luckinbill.com
Donnie Ansley	D+R Tank	505-873-1101 jamesc D R Tank .Com
Lee Russell	D+R Tank	505-873-1101 " "
David Slade	Coating Consultant	505.220-2414 DW SLADE@COMCAST.NET
Mike Morris	PRT-BMT	505-379-9306 MMORRIS@prt-bmt.com
Rick Sandoval	File Const.	505-554-1780 jcruz@fconst.com
Virjinia Harp	Blastco	281-590-3200 virjinia.harp@TFwarren.com
Dave De Coste	RMCI, Inc.	505-345-0008 ddecoste@rmciinc.com
Ralph S. Dodkin	Riley Indl. Ser	505-327-4947 ralphd@rileyindustrial.com
Frances Rodriguez	City of Gallup	frodriguez@gallupnm.gov

BIDDERS LIST
CITY OF GALLUP, FORMAL BID NO. 1703
GRANDVIEW RESERVOIR REHABILITATION
BID OPENING: 03/7/2017 AT 2:00 pm
ENGINEERS ESTIMATE: Base Bid $3,262,372.50 Additive Alt: $324,937.50 Total: $3,587,310

SET #	SENT TO	PHONE # FAX #	DATE	BP pg. 2	RETURNED
1	DePauli Engineering & Surveying Office Copy	Phone: (505) 863-5440 Fax: (505) 863-1919			
2	Frances Rodriguez City of Gallup	Phone: (505) 863-1334 Fax: (505) 722-5133	Delivered 2/17/2017		
3	Dennis Romero City of Gallup	Phone: (505)863-1289 Fax: (505) 726-1278	Delivered 2/17/2017		
4	Dodge Data & Analysis 3315 Central Avenue Hot Springs, AR 71913	Phone: (951) 547-4485 Fax: (800) 768-5594	USPS 2/17/2017	☑	
5	Construction Reporter 1609 2nd St. NW Albuquerque, NM 87102	Phone: (505) 243-9793 Fax: (505) 242-4758	USPS 2/17/2017	☑	
6	The Plan Room at Sun Glass 648 West Broadway Farmington, NM 87401	Phone: (505) 327-0700 Fax: (505) 324-9885	USPS 2/17/2017	☑	
7	CMD 30 Technology Pkwy South, Ste. 100 Norcross, GA 30092	Phone: 800-364-2059 Fax: 800-303-8629	Fed Ex 2/22/2017	☑	
8	RMCI, INC 6211 Chappell Rd. NE Albuquerque, NM 87113	Phone: (505) 345-0008 Fax: (505) 345-0111	Fed Ex 2/21/2017	☑	
9	RMCI, INC 6211 Chappell Rd. NE Albuquerque, NM 87113	Phone: (505) 345-0008 Fax: (505) 345-0111	Fed Ex 2/21/2017	☑	
10	TMI Coatings, Inc. 3291 Terminal Drive St. Paul, MN 55121	Phone: (651) 452-6100 Fax: (651) 452-0598	Fed Ex 2/21/2017	☑	
11	D&R Tank 1210 Prosperity SE Albuquerque, NM 87105	Phone: (505) 873-1101 Fax: (505) 877-6548	Fed Ex 2/21/2017	☑	
12	Riley Industrial Services, Inc. 2615 San Juan Blvd. Farmington, NM 87401	Phone: (505) 327-4947 Fax: (505) 326-0305	Fed Ex 2/22/2017	☑	

CITY OF GALLUP, FORMAL BID NO. 1703
GRANDVIEW RESERVOIR REHABILITATION

SET #	SENT TO	PHONE # FAX #	DATE	BP pg. 2	ADDENDUM No. 1
13	Great Basin Industrial 1284 W. Flint Meadow Dr. #A Kaysville, UT 84037	Phone: (801) 543-2100 Fax: (801) 543-1133	Fed Ex 2/23/2017	☑	
14	Blastco 16201 Wood Drive Channelview, TX 77530	Phone: (281) 590-3200 Fax: (281) 590-3234	Pick Up 2/28/2017	☑	
15	Luckinbill 304 E. Broadway Enid, OK 73701	Phone: (580) 233-2026 Fax: ben.davis@luckinbill.com	Pick UP 2/28/2017	☑	
16	Southern Road & Bridge 715 Wesley Ave. Tarpon Springs, FL 34689	Phone: (727) 940-5395 Fax: (727) 499-7158	Fed Ex 2/28/2017	☑	
		Phone: Fax:			
		Phone: Fax:			

Appendix D

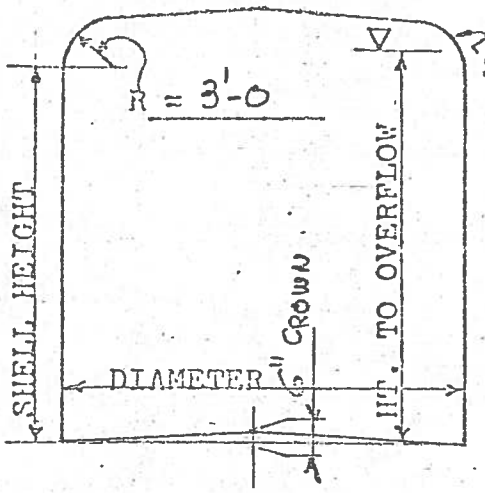
FORM WS67-A

DESIGN SPECIFICATIONS AWWA D100-67 & ENGINEER'S

RING NO.	PLATE t	RING WID.	MAT'L
10			
9			
8			
7			
6			
5			
4			
3	.321"	6.75'	A 283 C
2	9/16"	6.75'	"
No.1	.832"	8.0'	"

ROOF PLATES 3/16" (NOM.) (A283C) FILLET WELD TOP SIDE

ROOF SLOPE 3/4" TO 12



STD. PDM ROOF TORUS
t = 1/4"
MAT'L A 283 C
BUTT WELDED

GOVERNING DESIGN HEIGHT OR ELEVATION 24'-0 O/F

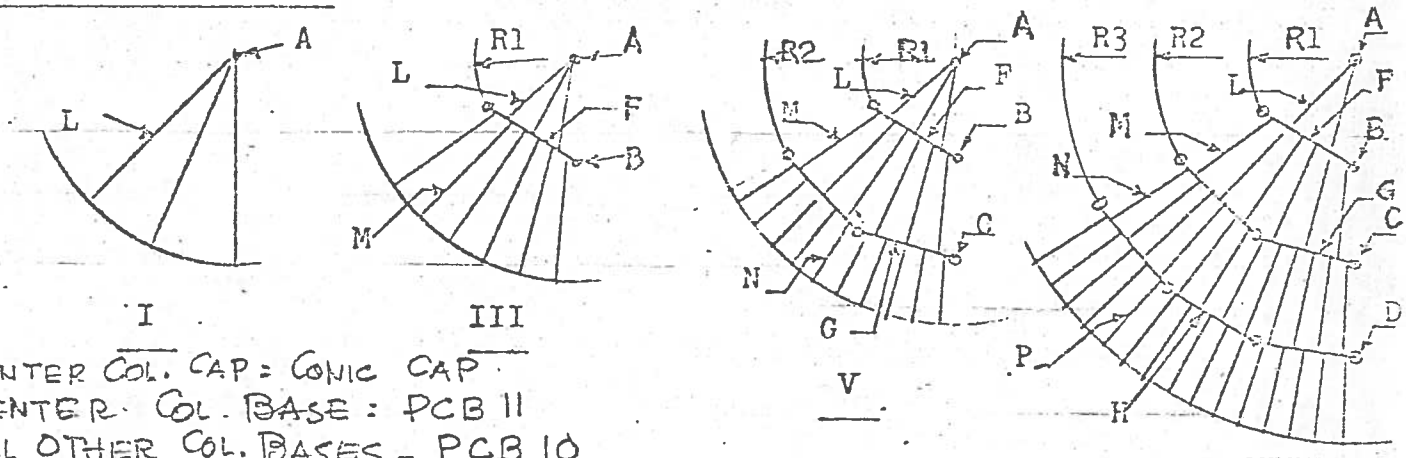
VERTICAL AND HORIZONTAL SHELL SEAMS BUTT WELDED.

SHELL TO BOTTOM FILLET WELDS BOTH SIDES

BOTTOM PLATES 1/4" (A283C) FILLET WELD TOP SIDE

DIAMETER 170' SHELL HEIGHT 21'-6 CAPACITY 4 000 000 GALS ____ BBLS

ROOF FRAMING TYPES



I III V VIII

CENTER COL. CAP = CONIC CAP
CENTER COL. BASE = PCB 11
ALL OTHER COL. BASES = PCB 10

ROOF FRAMING DESIGN TYPE V AS SHOWN ABOVE.

COLUMNS		GIRDERS		RAFTERS		COLUMN RADIUS	
1	A 6"x1/4" PIPE	8	F 14 B 26	24	L 7 L 9.8		
8	B 6"x1/4" PIPE	16	G 14 B 26	64	M 8 L 11.5	R1	27.0'
16	C 6"x1/4" PIPE		H	80	N 10 B 11.5	R2	54.25'
	D				P	R3	

Design OK
2-17-70

approved 4/13/70

WELDED STEEL RESERVOIR
For
GALLUP, NEW MEXICO
30411

PITTSBURGH-DES MOINES STEEL COMPANY
ENGINEERS • MANUFACTURERS • CONTRACTORS

Dwg. WS-170x21-6
Date 1-23-70
REV 1 1-29-70

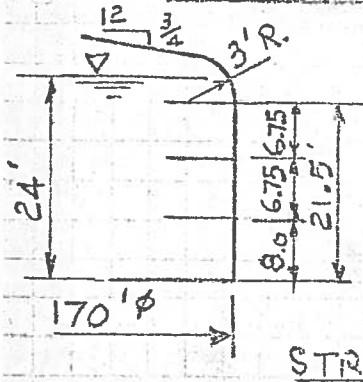
F 17577 20M-12-62

PITTSBURGH-DES MOINES STEEL CO.

FILE NO. 30411 SUBJECT GALLUP, NEW MEX. PAGE NO. 1.0
MADE BY R.J.B DATE 1-28-70 CHECKED BY DATE

SHELL DESIGN

SPEC'S : AWWA D100-67 & CUST.
MTL. A283 C



H	t DES.	t ACT.
9.25	.321	.321
16	.555	9/16
24	.832	.832

$t = \frac{2.6 D \times H}{f \times e}$, in.

$t = .03467 \times H$

D : TANK DIAM., Ft.
H : WATER DEPTH, Ft.
f : 15000 psi
e : 85 %

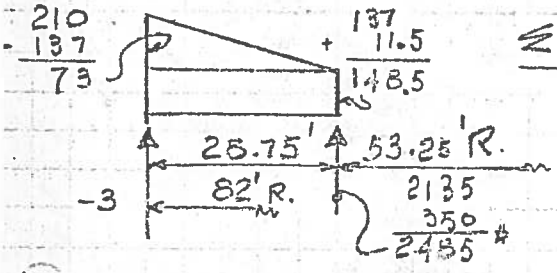
STRUCTURAL ROOF SUPPORT DESIGN

MTL. = A36

L.L. : 25.0 psf
ROOF DECK : 7.65
ROOF LOAD : 32.65 psf

OUTER RAFTER - 80 - 10 B 11.5

$S = 10.5\ in^3$, $f_s = 22$ ksi

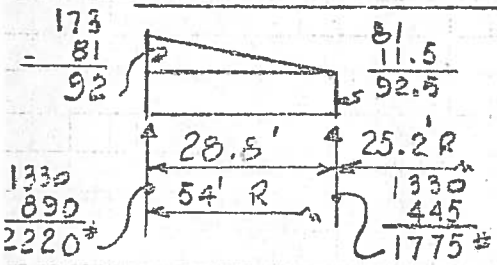


$\Sigma S's$ (REQ'D) $= (.1283)\left(\frac{73}{2}\right)(28.75)^2(12) \div 22000 = 2.12$

$\frac{148.5}{8}(28.75)^2(12) \div 22000 = 8.38$

$10.50 = 10.5$

MIDDLE RAFTER - 64 - 8 C 11.5 ; $S = 8.1\ in^3$; $f_s = 22$ ksi

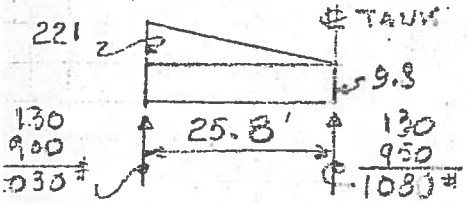


$\Sigma S's$ (REQ'D) $= (.1283)\left(\frac{92}{2}\right)(28.8)^2(12) \div 22000 = 2.78$

$\frac{92.5}{8}(28.8)^2(12) \div 22000 = 5.25$

$8.03\ in^3 > 8.1$

INNER RAFTER - 24 - 7 C 9.8 ; $S = 6.0\ in^3$; $f_s = 22$ ksi

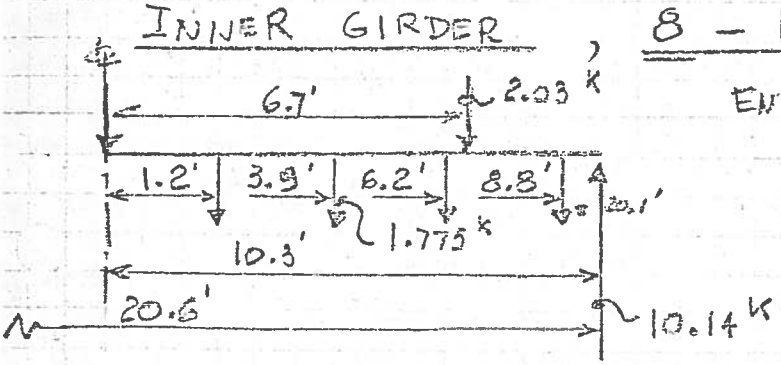


$\Sigma S's$ (REQ'D) $= (.1283)\left(\frac{221}{2}\right)(25.8)^2(12) \div 22000 = 5.15$

$\frac{9.8}{8}(25.8)^2(12) \div 22000 = .45$

$5.60\ in^3 < 6.0$

INNER GIRDER , 8 - 14 B 26 ; $S = 34.9\ in^3$, $f_s = 24$ ksi



END REACTION : $2.03 \times 1.5 = 3.04$

$1.775 \times 4 = 7.10$

10.14 K.

$\Sigma M's = +\ 10140 \times 10.3 = +\ 105000$

$-\ 2030 \times 6.7 = -\ 13600$

$-\ 1775 \times 20.1 = -\ 35700$

$+\ (22)(20.6) \div 8 = +\ 1380$

$+\ 58580$ #

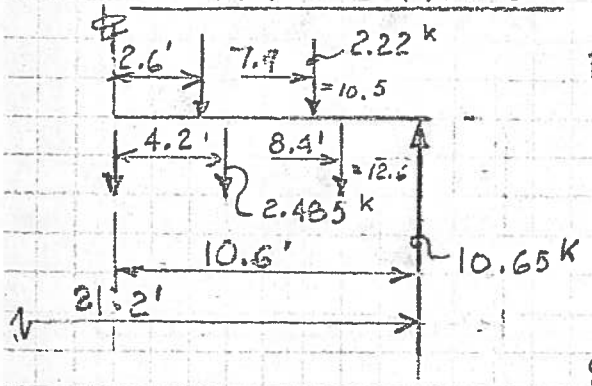
PITTSBURGH-DES MOINES STEEL CO.

FILE NO. 30411 SUBJECT GALLUP, NEW MEX. PAGE NO. 1.1
MADE BY RJB DATE 1-29-70 CHECKED BY DATE

INNER GIRDER (CONT.)

$S_{(REQ'D)} = (58080)(12) \div 24000 = 29.04 \text{ in}^3 < 34.9$

OUTER GIRDER – 16' – 14B26 ; $S = 34.9 \text{ in}^3$, $f_s = 24$ ksi



END REACTION = $(2.22)(2) = 4.44$
$(2.485)(2.5) = 6.21$
10.65 k

$\Sigma M's = +10650 \times 10.6 = +113000$
$- 2220 \times 10.5 = - 23100$
$- 2485 \times 12.6 = - 31300$
$+ (26)(21.2)^2 \div 8 = + 1460$
60060 '#

$S_{REQ'D} = (60060)(12) \div 24000 = 30.3 \text{ in}^3 < 34.9$

CENTER COL. – ONE – 6"Φ x ¼ PIPE x 17.02# ; $A = 5.01 \text{ in}^2$; $r = 2.256$

$L = (21.5) + (3.0) + (5.06) - (0.58) - (0.5) = 28.48'$; $\frac{L}{r} = \frac{(28.48)(12)}{2.256} = 152$; $F_a = 7.69$ k

$P_{(act.)} = (1.08)(24) + (.017)(28.23) = \sim 26.5$ Kips
$P_{(ALLOW.)} = (7.69)(5.01) = 38.5$ K. > 26.5.

MIDDLE COL.'S, 8 – 6"Φ x ¼ PIPE x 17.02#. $\begin{cases} A = 5.01 \text{ in}^2 \\ r = 2.256 \text{ in} \end{cases}$ ON 27' RAD

$L = (21.5) + (3.0) + (3.44) - (.34) - (2.0) = 25.6'$; $\frac{L}{r} = \frac{(25.6)(12)}{2.256} = 135$; $F_a = 8.62$ k

$P_{(ACT.)} = (10.14)(2) + (.026)(20.6) + (.017)(25.6) = 21.26$ K.
$P_{(ALLOW)} = (8.62)(5.01) = 43.2$ K. > 21.26

OUTER COL.'S, 16 – 6"Φ – ¼ PIPE x 17.02# $\begin{cases} A = 5.01 \text{ in}^2 \\ r = 2.256 \end{cases}$, ON 54.25' RAD

$L = (21.5) + (3.0) + (1.25) - (.12) - (2.0) = 23.63'$; $\frac{L}{r} = \frac{(23.63)(12)}{2.256} = 127$; $F_a = 9.22$ k

$P_{(act.)} = (10.65)(2) + (.026)(21.2) + (.017)(23.63) = 22.25$ K.
$P_{(allow.)} = (9.22)(5.01) = 46.0$ K. > 22.25