1	Amend Section 604 - Manholes, Inlets and Catch Basins to read a	as follows:
2	"SECTION 604 - MANHOLES, INLETS AND CATCH BASI	NS
4	,	
5 6 7 8	604.01 Description. This work includes constructing and/or manholes, inlets, catch basins, and/or standard valve boxes according to the contract.	
9	604.02 Materials. Concrete for structures shall be of the class	s specified.
10		concrete in
11	structures is to come in direct contact with sewage or sewage	gases. the
12	Contractor shall modify the proportioning of concrete according to S	ection 625 -
	Sewer System.	0001. 0_0
13	Sewer System.	
14	Brick for water valve manhole shall be concrete brick. Bri	ck for water
15	valve manhole shall conform to Subsection 704.02 - Concrete Brick.	CK IOI Water
16	valve mannole shall conform to Subsection 704.02 - Concrete Brick.	
17	Ottom was to state at all assufance to the fallowings	
8	Other materials shall conform to the following:	
19		702.07
20	Asphalt Filler	702.07
21	Of the LOUISIAN CO.	702.20
22	Structural Backfill Material	703.20
23		700.04
24	Trench Backfill Material	703.21
25	A 1 1/54 N T O A b - b	705 06/01
26	Asphalt (Filler) Type C Asphalt	705.06(C)
27	OL COLOR Didelo	704.04
28	Clay or Shale Brick	704.01
29		705.00
30	Mortar for Manholes	705.08
31		700.04
32	Reinforcing Steel	709.01
33		740.00
34	Precast Concrete Units	712.06
35		740.07
36	Frames, Grates, Covers and Ladder Rungs	712.07
37		- 10.00
88	Pipe Collar for Valve Box	712.22
39		
Ю	Cullet Materials for Utility Structures	717.03
11		
12	Cullet Materials for Drainage Systems	717.04
13		
14	When the location of manufacturing plants allows, the Er	
15	inspect the plants periodically for compliance with specified m	anufacturing
16	methods. The Engineer may get material samples to verify com	pliance with

46

47 48	the contract. This may be the basis for acceptance of manufacturing lots regarding quality.			
49	rogarumg quanty.			
50 51	The condition of materials will be subject to inspection for acceptance before or during incorporation of materials into the work.			
52				
53	604.03 Construction Requirements.			
54				
55 56	(A) General. Concrete construction shall conform to Section 503 - Concrete Structures.			
57	Deleterate a start and the first Court Cooperate to			
58	Reinforcing steel work shall conform to Section 602 - Reinforcing			
59	Steel.			
60 61	A cortified wolder shall do the abon and field wolding according to			
62	A certified welder shall do the shop and field welding according to Section 501 - Steel Structures.			
63	Cection 501 - Cleer Ciractares.			
64	Dip or soak the brick in water before laying the bricks. Joints			
65	shall be full mortar joints. Joints shall not be more than 0.5-inch wide.			
66	Joints in the brick work on the inside portion of the brick manhole shall be			
67	neatly struck.			
68				
69	The Contractor may furnish and install storm drain manholes,			
70	inlets, and catch basins as precast units or combined precast and			
71	cast-in-place units. Units completed in place shall conform to			
72	cast-in-place construction specified in the contract. If the Contractor			
73	uses precast units or combination of precast and cast-in-place units, the			
74	Contractor shall submit shop drawings to the Engineer for acceptance			
75	before construction.			
76	(D) 14 1 1 1 1 1 1 1 0 1 1 D 1 1 0 1 1 1 1 1 1			
77	(B) Manholes, Inlets, and Catch Basins. Construct the concrete			
78 70	base according to the contract. Allow the concrete to set for at least 24			
79	hours before constructing additional material on this base. Do not remove the forms for at least 24 hours after placing the concrete. Finish			
80 81	remove the forms for at least 24 hours after placing the concrete. Finish the concrete while the concrete is still fresh.			
82	the concrete while the concrete is still hest.			
83	(1) Sewer Manholes. The Contractor may make the sanitary			
84	sewer manholes entirely of bricks from the concrete base upwards			
85	if:			
86	••• · · · · · · · · · · · · · · · · · ·			
87	(a) the invert to the top of the frame is 10 feet deep or			
88	less,			
89				
90	(b) the invert is not below the ground water table, and			
91				
92				

93	(c) the Contractor locates the manhole in a relatively dry
93 94	area.
	ai ca.
95	Make the manhole walls below the 10-foot depth of
96	·
97	concrete.
98	O to the second seconds seconds membels continue
99	Construct precast concrete sewer manhole sections
100	according to the contract and ASTM C 478.
101	
102	Place the reinforcing steel for precast sections according to
103	ASTM C 478.
104	
105	Construct cast-in-place sewer manhole walls according to
106	the contract.
107	
108	Place the reinforcing steel for cast-in-place manhole walls
109	according to the contract.
110	according to the confiden
111	An expert cement finisher shall shape and finish the sanitary
112	sewer manhole inverts using accepted mortar.
113	Sever marriolo inverto dellig decepted mertar.
113	Plaster the outer portion of the sewer manhole bricks with a
	one inch thickness of accepted mortar. Plaster the interior brick
115	work to present a smooth surface.
116	work to present a smooth surface.
117	(0) Mater Value Manhales If nortion of the brick manhale is
118	(2) Water Valve Manholes. If portion of the brick manhole is
119	below the four-foot elevation, USGS datum, or ground water
120	table, waterproof the depth of the manhole below such elevation.
121	Apply an interior and exterior coat of accepted mortar. The
122	mortar coat shall have a thickness of not less than five-eighths inch
123	on each face. Extend the waterproof from the four-foot elevation or
124	ground water table:
125	
126	(a) down to the bottom of the floor slab on the outside
127	portion of the manhole and
. 128	
129	(b) to the top of the floor slab on the inside portion of the
130	manhole.
131	
132	Leave a space of at least two inches between the brick and
133	the upper half of the barrel of the pipe. Fill that space with a
134	specified asphalt filler. Install reinforced concrete lintels, made
135	from Class B Concrete, in the Type A Manholes shown in the
136	contract.
137	
138	Upon completion, clean the manhole thoroughly of debris
139	and paint the frame and cover with one coat of accepted asphaltum
140	paint.
141	Panto
171	

142	(3) Storm Drain Manholes, Inlets, and Catch Basins. The
143	contract requires rungs at 12 inches on centers when the height of
144	the structure is greater than 4.5 feet. Measure the height of the
145	structure from the invert to the top of the structure.
146	
147	Install one rung 16 inches from the bottom or as specified by
148	the Engineer if the height of the structure is 4.5 feet or less.
149	Install additional rungs when specified by the Engineer.
150	
151	Construct precast concrete storm drain manhole sections
152	according to the contract and ASTM C 478.
153	•
154	Place reinforcing steel for precast sections according to
155	ASTM C 478.
156	
157	(C) Setting Frames. Place the frames in the concrete according to
158	the contract. Carefully tamp the concrete around the frame.
159	
160	Set the frame in full mortar beds. Bring the mortar up around the
161	bottom of the frame.
162	·
163	(D) Excavation and Backfill. Excavate and backfill according to
164	Section 206 - Excavation and Backfill for Conduits and Structures.
165	
166	(E) Reconstructing Manholes. Reconstruct the existing manholes
167	to the required elevations according to the contract and as ordered by the
168	Engineer. Adjust the manhole frame to the required grade using the
169	same type of material used in its original construction. Carefully
170	remove, clean, and paint the existing frame and cover with accepted
171	asphaltum paint before reinstallation.
172	and the state of t
173	(F) Constructing and/or Adjusting Valve Boxes. Construct or
174	adjust the valve boxes to the required elevations according to the contract
175	and as ordered by the Engineer.
176	Out of senten the Olinah nine college plumb over the valve stem
177	Set and center the 8-inch pipe collar plumb over the valve stem. Ends of the pipe collar shall have smooth, machined edges. Backfill
178	Eligo of the pipe conditional trave entreeting interest of
179	around the gate valve and pipe collar with trench backfill by hand.
180	Backfill 8 inches below the surface of the ground.
181	lives assumbtion of installation, along and paint the valve hav
182	Upon completion of installation, clean and paint the valve box
183	frames and covers with one coat of accepted asphaltum paint.
184	Adjust the existing valve boxes to the required grade using the
185	same type of material used in its original construction. Carefully
186	same type of material used in its original construction. Carefully remove, clean, and paint the existing cast iron frame and cover with
187	accented asphaltum paint. Cut the existing cast from frame and cover with
	ar emen asonannu nann tan me exiamu bibe bolidi ol moldi di kow Pipo

189 190	collar. Reinstall the frame and cover and pour the four inch thick concrete.			
191				
192	604.04 Method of Measurement.			
193				
194	(1) Manholes, inlets, catch basins, and other types of drainage			
195 196	structure will be paid per each in accordance with the contract documents.			
190	(2) The Engineer will measure steel from grates steel grates and			
198	(2) The Engineer will measure steel frame grates, steel grates, and cast iron frame and cover, and adjusting frame and cover per each in			
199	accordance with the contract documents, for work on grates, frames, and			
200	covers that do not affect their respective drainage structure body or neck.			
201	The state of the s			
202	604.05 Basis of Payment. The Engineer will pay for the accepted pay			
203	items listed below at the contract price per pay unit, as shown in the proposal			
204	schedule. Payment will be full compensation for the work prescribed in this			
205	section and the contract documents.			
206	The Franke and the second of the first terms of the second			
207 208	The Engineer will pay for each of the following pay items when included in			
208	the proposal schedule:			
210	Pay Item Pay Unit			
211	r uy ttom Pay Offit			
212	Type Manholes, feet to feet			
213	The Engineer will pay for:			
214				
215	(1) 20 percent of the contract bid price upon completion of excavating			
216 217	to the depth established for the manhole.			
217	(2) 60 percent of the contract bid price upon completion of constructing			
219	(2) 60 percent of the contract bid price upon completion of constructing the manhole.			
220	ino mamolo.			
221	(3) 20 percent of the contract bid price upon completion of backfilling			
222	around the manhole.			
223				
224	Type Inlet, feet to feet Each			
225				
226	The Engineer will pay for:			
227 228	(4) 20 percent of the contract hid miss was a small "			
229	(1) 20 percent of the contract bid price upon completion of excavating to the depth established for the inlet.			
230	to the depth established for the lillet.			
231	(2) 60 percent of the contract bid price upon completion of constructing			
232	the inlet.			
233				
234	(2) 00 managed of the second of			
235	(3) 20 percent of the contract bid price upon completion of backfilling around the inlet.			

236	Type	_ Catch Basins, _	feet to _	feet		Each
237 238 239	Th	e Engineer will pa	y for:			
240 241 242	(1) to	20 percent of the depth establish		•	•	on of excavating
243 244 245	(2) the	60 percent of catch basin.	the contract	bid price u	oon completion	n of constructing
246 247 248	(3) arc	20 percent of ound the catch bas		bid price	upon completi	on of backfilling
249 250	Type	_Structure,	feet to	feet		Each
251 252	The	e Engineer will pay	for:			
253 254 255	(1) to t	20 percent of the depth establish		•	ipon completio	on of excavating
256 257 258	(2) the	60 percent of testructure.	he contract I	oid price up	oon completion	n of constructing
259 260	(3) aro	20 percent of und the structure.	the contract	bid price	upon completi	on of backfilling
261 262 263	Reconstru	cted Type M	lanholes,	feet to	feet	Each
264 265	The	Engineer will pay	for:			
266 267 268	(1) rec	80 percent onstructing the ma		tract bid	price upon	completion of
269 270	(2) clea	20 percent of aning, and paintin		•	•	on of removing,
271272273	Reconstru	cted Type Ir	let,fe	et to	feet	Each
274 275	The	e Engineer will pay	for:			
276 277	(1) reco	80 percent o		tract bid	price upon	completion of
278 279 280 281 282	(2) clea	20 percent of aning, and paintin				ion of removing,

283	Reconstructed Type Catch Basins, feet to feet Each
284	The Engineer will pay for:
285 286	The Engineer will pay for.
287	(1) 80 percent of the contract bid price upon completion of
288	reconstructing the catch basin.
289	
290	(2) 20 percent of the contract bid price upon completion of removing,
291	cleaning, and painting the existing frame and cover.
292	Took
293	Adjusting Frame and Cover Each
294	The Engineer will now for
295	The Engineer will pay for:
296	(1) 80 percent of the contract bid price upon completion of adjusting
297 298	the frame and grate.
299	the name and grate.
300	(2) 20 percent of the contract bid price upon completion of installing,
301	cleaning, and painting the frame and cover.
302	
303	Adjusting Steel Frames and Grates Each
304	
305	The Engineer will pay for:
306	to an a state of the state of a division of a division of
307	(1) 80 percent of the contract bid price upon completion of adjusting
308	the steel frame and grate.
309 310	(2) 20 percent of the contract bid price upon completion of installing,
311	cleaning, and painting the frame and cover.
312	Glocaling, and partially the name and cover.
313	Type Steel Grates Each
314	
315	The Engineer will pay for:
316	
317	(1) 100 percent of the contract bid price upon completion of the
318	furnishing and installing steel grate.
319	Type Cast Iron Frame and Cover Each
320 321	Type Cast Iron Frame and Cover Each
322	The Engineer will pay for:
323	
324	(1) 100 percent of the contract bid price upon completion of furnishing
325	and installing cast iron frame and grate."
326	
327	
328	END OF SECTION 604