

V. L. & W. CO.

May 6, 1914.

FILE

Mr. Ed. Fletcher,

Manager V.L. & W. Co.

Dear Sir:

I hand you herewith a letter from Mr. Huber enclosing an important protest of the State Water Commission against the granting of a power right-of-way for the Volcan Land & Water Co.

You will understand that this situation is identical with our situation in the Boulder Creek application of the Cuyamaca Water Co. You have the irrigation rights, but as I advised you at the time, where power is concerned, you must deal with the State Water Commission.

Upon examination of the application of the Volcan Land & Water Co., I observe that unfortunately all of the water claims listed are subsequent to May 20th, 1911, which makes it necessary to conform to the Water Commission's request. There were earlier filings, as for instance March 16th and March 17th, 1911, one by A. H. Nelson and the other by myself. It is a question of policy as to whether these old filings can now be referred to, and in my opinion the failure to list them in the right-of-way application has lost them. The protection which they would have had if they had been included in the list under the State law which requires no work done upon a water filing while the forestry application is pending.

You will have to confer with Mr. Henshaw as to who shall make out this power application. This should not be delayed, because, as the situation now stands, there are no filings for power by this company.

Very sincerely yours,

ERC [CASE]

yc
Mr Case

, 7/20/17.

Mr. Ed. Fletcher, Pres.,
San Dieguito Mutual Water Co.,
San Diego, Calif.

Dear Sir: Letting 7/19/17 Pipe Line

After checking the figures submitted by bidders 7/19 (yesterday) it has occurred to me an analysis from our point of view will be interesting.

Roughly the complete work with cast iron pipe for the line will cost \$300,000.00, and with material other than cast iron \$150,000.00. Doubtless all of us are agreed that Cast Iron is best, the most permanent, and the cheapest material in the end.

L I F E

The life of cast iron can safely be figured at 100 years.

Leakage

There is less leakage, and consequent loss of water, in a cast iron line with properly made joints.

Mainten-
ance

The maintenance charge is practically nothing say 2/10 % on the cost, per year.

Ditching

If cast iron is laid there will be about 30% less ditching than in the case of continuous wood stave pipe. This on account of the working space necessary in the case of the latter and probably in the case of other kinds of pipe.

Time of Com-
pletion 90
days

Cast Iron can be furnished in sixty days and a good contractor should complete the job of laying in 30 days thereafter. If water is ready in 90 days - to run through the line the revenues should commence considerably sooner than in the case of other materials being used.

V A L U E

Should this pipe line become obsolete the cast iron in the pipes will be worth at least 40% of the ruling market price for pipe at the time the line is abandoned, or the pipe can be taken up and relaid at other ~~points~~ pipes salvage value obtained with no

#2.

I have just been advised by an engineer, who was associated with the City Engineer of Augusta, Georgia, in 1883 (34 years ago), 1500 feet of light weight 6" cast iron pipe was taken up on account of obsolescence, relaid in clay soil, and is still in service under 50# pressure. This pipe was imported from England in 1760, laid in Savannah, Ga., for a period of years and then taken up, shipped, and relaid, in Augusta, until again taken up and relaid in 1883, as above mentioned. A life of 157 years and still in use is a good instance to quote for the permanence of cast iron for a pipe line.

I analyze the present situation in the following way for your careful consideration, it being understood funds can be made available for a permanent pipe line and a job which is to be of the lowest cost for the service required. The elements used in a comparison of steel, wood, (probably concrete) vs Cast Iron are:

(Cast Iron 2/10%
Maintenance (other material 1%

(Cast Iron 5%
Interest on investment (other material 5%

Life ----- (Cast Iron 100 Years
(Other Material 20 Years.

Basis used in calculation, for all material, 60 years.

Cost Complete	Steel)	\$150,000.00
	Wood)	
	Cast)	\$300,000.00
	Iron)	

---000---

Estimated cost of cast iron line at end of 60 years.

First Cost	-----	\$	300,000.00
Interest 60 years @ 5%	-----		900,000.00
Maintenance 60 years @ 2/10%	-----		36,000.00
Less 40 years, further life to	-----		1,236,000.00
make 100 years	-----		120,000.00
	-----	\$	1,116,000.00

#3.

Estimated cost of Wood, or other material at end of 60 years.

First Cost	-----	\$	150,000.00
Twenty Years interest @ 5%	-----		150,000.00
Maintenance twenty years @ 1%	-----		30,000.00
	-----		330,000.00
New Pipe Line end of 20 years	-----		150,000.00
Interest on \$300,000.00 for twenty	-----		300,000.00
years at 5%	-----		
Maintenance on \$150,000.00 for twenty	-----		30,000.00
years @ 1%	-----		
	-----		810,000.00
New Pipe Line end of 40 years	-----		150,000.00
	-----		960,000.00
Interest on \$450,000.00 (three lines)	-----		450,000.00
for twenty years @ 5%	-----		
Maintenance on \$150,000.00 for twenty	-----		30,000.00
years @ 1%	-----		
Cost end of sixty years	-----	\$	1,440,000.00

Result at end of sixty years

Cost Wood or Steel	-----	\$	1,440,000.00
Cost Cast Iron	-----	\$	1,116,000.00
Saving	-----	\$	324,000.00

or more than the original cost of the cast iron line.

Inasmuch as the Santa Fe is interested, they can make a considerable saving by transporting the pipe under their "Company Freight Rate", probably saving \$15,000.00 on the freight item.

Also, in order to make our proposition for furnishing the pipe still more interesting, we will absorb up to \$5.00 per ton against your unloading, hauling and distributing charge, which will amount to about \$17,500.00.

In the matter of joints, I have a telegram from H. Gould, a contractor, now at Lindsay, Calif., who has laid complete water systems of cast iron pipe with cement joints under working pressures up to 125# per square inch, with entire success. Mr. Gould states that the pipe can be placed in the ditch, all material, yarn, cement, etc., and labor furnished and the joints made of cement for the following prices:

#4.

26"	---\$4.50	per joint	or	34.6c	per laid foot.
24"	---34.15	"	"	or 35.0c	"
22"	---3.62	"	"	or 28.0c	"
16"	---2.47	"	"	or 20.6c	"

The following have used cement for joints successfully:

Los Angeles Water Department, Thos. Brooks, Supt.

Long Beach Water Department, Clark Shaw, Eng.

Glendale Water Department, J. C. Lynch, Mgr.

Santa Ana Water Department, Ransom Reid, Supt.

Oxnard Water Department, Edw. Walker, Supt.

Redlands Water Department, Geo. Hinkley, Eng.

The San Diego Water Department experimentally, and the joints are satisfactory a years service.

Also, there are numerous other water and gas companies throughout the country who have used cement successfully for joints.

To Summarize, -

Cast Iron Pipe --

Permanent say 150 years life

Lower Maintenance

Lowest leakage

Standard practice

Quickest installation

Lowest cost based on 60 years service.

The Santa Fe would like the haul across the continent. There will be upwards of 3500 tons or 100 carloads. The Santa Fe uses cast iron pipe in their water lines.

Would appreciate your advice when you are ready to purchase.

Yours truly,

U. S. CAST IRON PIPE AND FOUNDRY CO.

Pacific Coast Mgr.

Ed Fletcher Company
FLETCHER BUILDING
820 EIGHTH ST.
SAN DIEGO, CALIFORNIA

AGENTS
FINE HILLS
DEL MAR
GROSSMONT

August 31, 1917.

Mr. E. W. Case,
Box 601,
Escondido, California.

My dear Mr Case:

Every tree just outside the boundary line is very valuable and I want you, immediately, to stake off every fifteen or twenty feet of the boundary line, where the Oak trees are at or near the line, and mark the trees that can be cut and those that cannot. I understand they are cutting trees outside the boundary line. I have cautioned you two or three times about this and will hold you responsible if you allow any trees to be cut outside of the line of the 315 foot contour.

I understand a number of trees have been cut both on the Jim Carroll place and on the Nulton place, as well as on the Eucalyptus Culture Co. property. You gave me positive assurance that the line was properly defined and properly marked.

I would like an immediate report on the situation, covering each tract of land mentioned.

Yours very truly,

Ed Fletcher

EF: B

Ed Fletcher Company
FLETCHER BUILDING
920 EIGHTH ST.
SAN DIEGO, CALIFORNIA

AGENTS
PINE HILLS
DEL MAR
GROSSMONT

Sept. 26, 1917.

Mr. E.W. Case,
Escondido, Cal.

My dear Mr. Case:

I want you to immediately show to Mr. J. B. Lippincott, who is our Chief Engineer, the plans and specifications for the conduit line, the San Dieguito Reservoir, the conduit line to the ocean. Also your recommendations for a high line pipe line to Del Mar and the line to Carlsbad to connect with the present pipe line of the South Coast Land Co. which runs to Carlsbad. Mr. Lippincott will check up the work and criticise it and give his report.

We want a report from Mr. Lippincott approving the plan and the size of pipe lines, etc. We also want a report from Mr. Lippincott approving everything you and Mr. Kelley do.

A copy of this letter has gone to Mr. Lippincott. Please get him at Camp Kearny and make arrangements to take him over the entire system. He will probably want a plan of Carroll Dam as well. You will also show him the proposed plan of the boundary of the District.

Yours very truly,

Ed Fletcher

EF.B

Ed Fletcher Company
FLETCHER BUILDING
920 EIGHTH ST.
SAN DIEGO, CALIFORNIA

AGENTS
PINE HILLS
DEL MAR
GROSSMONT

October 17, 1917.

Mr. E. W. Case,
Escondido, Cal.

My dear Mr. Case:

Go ahead and make your exploration work for earth filled dam at San Dieguito immediately.

Yours very truly,

EF/K

*Make survey
San Elijo Creek
from Brotherton*

October 15, 1917.

Mr. Case:

Please take up with me immediately the matter of surveying the San Elijo Creek from the dam to the ocean, to determine what are riparian right lands, and what not. Did you not survey the T. W. Brotherton land? If so, write me a letter to the effect that his land's South line does not reach the river.

J. Fletcher.

F-S

(Copy for Mr. Case)

October 22, 1917.

Mr. E. R. Bowen,
c/o W. E. Hampton Co.,
Camp Kearney,
Linda Vista, Calif.

My dear Mr. Bowen:

Answering yours of October 20th, will say that in talking with Capt. Christensen over the phone he suggested that I write him a letter. Enclosed find copy of Christensen's letter, which is explanatory.

Regarding the water supply of Carroll Dam, will say that Mr. Post's estimate of the net safe yield from the San Dieguito system, which includes the construction of Carroll, San Dieguito and San Elijo Dams, is 2000 miners inches; the Santa Fe hydraulic engineer estimated it as 2000 miners inches, also.

Both of these gentlemen included the pumping of 250 miners inches of water from the San Dieguito gravels, in time of emergency. To this must be added the net safe yield of the pumping plant of the South Coast Land Company out of the San Luis Rey River, estimated at between 200 and 300 inches.

Whenever you are ready, Mr. Case will be glad to go over the entire system with you. Kindly let me know what day is agreeable, and as far ahead as possible. Mr. Case will have all the data, etc.

Neither Mr. Faulkner nor I feel that there is any necessity for a soil expert. The actual development on the property proves that. However, can you give me an estimate of what it is going to cost and the reasons for it? However, if Mr. Hodges orders us to make this soil test we will make it.

My understanding is that you will check up the capacity of the entire system within the proposed district; also make your estimates of cost, and any suggestions of changes you have to make, so that when Mr. Lippincott comes back he can check over the work and give us a final statement within a week or ten days after his return from the East. Mr. Case or our engineering office will assist you in every way possible.

A copy of this letter has been sent to Mr. Case.

Yours very truly,

SAN DIEGUITO MUTUAL WATER CO.

(Signed) Ed Fletcher
President.

Nov. 10, 1917.

Mr. Case:

Please take up with me the matter of measuring the stream flow on the Escondido Creek; also the San Dieguito River. I want a conference with you and Ellis on the subject.

Ed Fletcher.

F-S

San Dieguito Mutual Water Company

ED. FLETCHER,
President
E. O. FAULKNER
Secy-Treas.

Fletcher Building
San Diego, Calif.,

E. W. CASE,
Engineer

December 4, 1917.

Mr. E. W. Case,
Escondido, Calif.

Dear Sir:

I return herewith your letter of the 3d, together with estimates of cost. Is it not a fact that if the low line is put in at Del Mar, it will not irrigate the entire land that we have planned, and a pipeline and pumping plant will have to be installed. Also a large reservoir for storage purposes, back of Del Mar? In figuring the low line to Del Mar, is that figured clear to the City limits of San Diego or to that point overlooking the Sorrento Valley? In other words, were both the low line and the high line figured to the same point?

I wish you would rewrite this letter and go on and say that if the low line is built to Del Mar it will be necessary to put in a pumping plant and pipeline to the top of the mesa and a reservoir at the highest point; give an estimate of that cost; also an estimate of the annual cost of power for pumping and maintenance. Then sum up the totals in your letter, showing the cost of the building of the low line; the cost of the pipe line to San Dieguito from San Elijo, the cost of installing the pumping plant, pipe line and the reservoir costing say about \$1000, and give me the totals of the whole thing.

Under separate letter, I want you to write me another letter, giving your estimate of cost of building the conduit line from Lake Hodges to the San Dieguito Reservoir to the coast; and going through the Lida Scripps property and building a \$1000 reservoir just west north of the Scripps line, and extending the pipeline one-half mile North of the reservoir.

Mr. Hodges will be here Wednesday and Thursday and I must have these figures no later than Thursday morning, at 10:00 o'clock -- both letters.

Yours very truly,

Ed Fletcher
Fin

F-8

December 8, 1917.

Messrs. Bent Bros.,
W. A. Sumner,
John S. Eastwood,
E. W. Case.

Gentlemen:

I have just received a telegram from the State Engineer that upon written statement of Engineer Case that excavation is completed "permit the pouring of concrete in buttress No. 31," so Mr. Case will pass on the foundation and this will not delay matters at all.

Yours very truly,

(Signed) Ed Fletcher.

F-8

President.

SAN DIEGO, CALIFORNIA, August 15, 1918.

Col. Ed Fletcher,
Office.

Dear Sir:-

At the request of Mr. Harritt I accompanied him to the Chocolate Siphon of the Cuyamaca flume to study the conditions menacing the stability of the siphon at this point.

I am of the opinion that unless some steps are taken to prevent, that the siphon will be undermined by the next flood or High water coming down Chocolate Creek.

This condition is caused from the fact that at a point about 1,000 feet above the siphon the trend of the channel is diverted by striking a solid bank on the left or south west side of stream.

This diversion tends to force the water to the right or northeast bank and as this bank is nothing but a deposit of soil and sand, it melts rapidly falling into the stream and will in course of time take out this bank, thus forming a new channel from 100 to 200 ft. north and east of the present channel and will therefore undermine the pipe siphon allowing it to fall and probably pull apart. Two plans are proposed for protection:

1st, To put in a training wall beginning about 500 ft. upstream from the siphon. This should be constructed of cyclopean concrete built from bedrock up for a distance of approximately 125 ft. in length. Thence protecting the remainder of the bank by sinking or driving posts into the sand stringing wire and filling in behind with brush, rock, etc.

2nd, Lower the entire siphon from the present channel to the northeasterly bluff or across the threatened new channel. In my judgment the 1st plan with possible modifications when work is started, will be the cheaper.

Yours truly,

E. W. Case [E. W. CASE]
CSM

Engineer.

EWC:EK

Copy to Mr. Harritt.

September 18, 1918

Col. Ed Fletcher,
President S D M W Co.

Dear Sir:-

I have Mr. Bartl's letter of criticism of the construction of the Conduit and its relation to the San Dieguito Dam.

It is difficult to reply to this latest letter without showing impatience. But I shall again attempt to explain the true construction and relation.

It is true that the spillway lip and overflow is at Elevation 250 and that the top of the conduit walls are at Elevation 250. The conduit is so constructed that the water cannot raise in the conduit itself to the 250 ft. elevation as the top of the steel flume at Station 117+37 is 249.97. So that before the water can reach the 250 elevation, it spills over at this trestle onto hard rock and runs into the San Dieguito River and cannot damage the structure.

About 1200 ft. from the inlet into the San Dieguito Reservoir or the outlet of conduit, an automatic 42" Drainage Gate has been put in, that if a flow of water starts up the conduit, this gate automatically closes and stops the flow. The result will be that in the event of a cloudburst within the drainage of the San Dieguito Dam, when full or nearly so, water will back up the conduit to the Drainage Gate which closes and then backs up filling the conduit which acts as a Reservoir until the siphon spillway begins to operate when the excess water will be drawn off. The banks of this 1200 ft. is sufficiently high on both sides that the water will not overflow them. Therefore no damage need be feared.

I have already made plain the fact that it is impossible to fill the San Dieguito Reservoir above the 250 elevation from the conduit. Therefore the only danger is that a cloudburst may occur within the drainage of the Reservoir, but even so we are entirely protected by the siphon spillway both for the safety of the Dam and Conduit.

Very truly yours,

E. W. Case
Engineer.

EWC:EK

Ed Fletcher Papers

1870-1955

MSS.81

Box: 4 Folder: 25

General Correspondence - Case, E.W.



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