Criteria For Spatial Qualities:

1. design a facility that displays a public image for the city.

2. exhibit an architectural statement which expresses an industrial image rather than to hide the true function behind a typical multi-use facade.

3. create an environmental space which displays a visual playground of curious forms.

4. create an environment which enhances a union between mechanical functions and environmental concerns: context of processing tanks with ground orientation of the plant to the river.

5. create an environment which stimulates human curiosity towards both the visual forms and the mechanical functions.

6. allow use and access to be oriented to the people as well as serving functional needs.

7. priority elements:
   - people
   - processing
   - environment
Concept 3

1. process containment
   a. massing of all the elements together into one solid form

2. people control
   a. restrict freedom of people due to centralization of all elements together

3. environmental mass
   a. one solid visual form
Concept 2

1. process loop sequence
   a. process elements are organized to create a loop according to the sequence of processing treatment

2. people semi-control
   a. limitation on the access of people to various process elements

3. environmental linear mass
   a. massing of elements linearly to create the necessary sequence of flow; loop arrangement
Concept 1

1. separation of process functions
   a. processing elements become individual elements of form
   b. people can read elements by associating with forms.

2. people pathways
   a. people/service circulation becomes varied spatial path

3. environmental sculpture
   a. earth becomes important visual form as well as serving to direct circulation
   b. large earth masses become environmental sculpture as well as architectural form.
Schematic Development of Concept 1.

wastewater treatment plant
Schematic Presentation of Concept 1.
Schematic Presentation of Concept 1.
Jury Comments:

Adams
1. more development of the use of methane
2. better integration of parts with site
3. questionable use of one large roof concept

Geda
1. good understanding of "parts" and how they relate
2. use of sludge from area where watered sludge has been dumped on the soil
3. what will be done with sludge from digestors

Wyman
1. large roof concept is not convincing
2. simply the association of forms, too many things happening
3. too much planning done up to this point get more into the technology and architectural potential
4. develop a "clean machine" architecturally
5. good graphic presentation
6. good verbal/technical presentation
wastewater treatment plant
Design Development Change to Concept 2

1. more of a linear massing.
2. future expansion will run horizontally with road
3. retain varied pathway for people
4. mounding around tanks will become a massing sculpture
1. building needs respond to site influences in building form.
2. massing of building into one form
1. Use of space frame for roof structure
2. Trying to retain one large roof for the purpose of protection from the elements over treatment and to hold solar collectors.
3. Horizontal element forming with building overhang and mounding
wastewater treatment plant
Jury Comments:

Adams:
1. investigate closely the use of methane & solar;
   do some calculations
2. work on wall section detailing

Geda
1. central space is not well thought out
   for people and circulation
2. put together sketches on moundong details
End detail of round secondary treatment tank.
Jury Comments:

Adams:
1. Methane will now supply all of energy needs and solar is not needed.
2. What about building HVAC? more detailed.

Geral:
1. More work needed on central area.
2. Linear mass housing works good.

Hyden:
1. Need more building overhang.
2. Do some sketches for proportions & details.
3. Refine to a nice aesthetic.
Color-Tone Housing Studies
Treatment Facade Studies
1. screening
2. grit settling
3. primary
4. aeration
5. secondary
6. chlorine
   a. sludge thickening
   b. anaerobic digestion

wastewater treatment processing
Wednesday
September 15, 1976

Memorandum of Meeting with Bob Taylor
Engineers at Shambaugh & Co., Indianapolis

Re: Processing Design of Wastewater Treatment Plants

I made contact with Shambaugh & Co. through Bob Paige, a fellow architecture student. They supplied me with information pertaining to the engineering process of sewage treatment. I received a sketch of the processing they used on a New Buffalo, Michigan District Sewage Treatment Plant. Mr. Taylor also explained the steps of how the influent comes in, goes through the clarifier, primary clarifiers, aeration tanks, secondary clarifiers and then to the chlorine tank before the effluent is expelled.

They also supplied me with some information on cost and on flow capacity of most typical plants. As well as the verbal information they also supplied me with 3 pamphlets explaining sewage treatment as well as plant design.
Thursday
September 16, 1976

Memorandum of Meeting with Robert Hinnick, City Engineer
and Harold Gordon, Sewage Plant Superintendent.

Re: Proposed Design of New Sewage Treatment Plant

I contacted the City Engineer and we discussed the idea of an
addition to the Sewage Plant. He supplied me with the background
information to this type of project in addition to the Preliminary
Engineering Report which discusses the city's plans for the addition.

We visited the plant where I received a tour explaining the
process of the existing plant. Presently the plant is set up for a
6 MGD capacity but will soon be expanded to hold 9 MGD.
Monday
September 20, 1976

Memorandum of Meeting with Logansport City Engineer,
County Surveyor, Soil Conservation Service Office, and
Indiana Department of Natural Resources.

Re: Procuring Maps for Sewage Treatment Plant

Today's visit to Logansport was for the purpose of obtaining maps of the county and city scale. I first visited the City Engineer's office to obtain city maps and also to get some information as to the proposed processing design for the sewage plant as prepared by Clyde E. Williams & Associates.

Next I visited the County Surveyor where he gave me some county maps and information as to the bedrock level throughout the county.

Finally within Logansport I went to the Soil Conservation Service where I gained information on the soils of the area as well as some aerial photos. They also gave me some more information on the situation with bedrock.

My last stop for the day was in Indianapolis where I went to the State Office Building to obtain a topography map from the Department of Natural Resources.
Memo: Meeting with Clyde E. Williams & Assoc. Inc. Engineers
South Bend, Indiana

%Keith Fujihara

Re: Concerning Logansport Wastewater Treatment Plant

We discussed much of the design input involved with the
Logansport plant. The environmental problems with the new plant and
some of the processes, such as the new sludge disposal facilities.

They also supplied me with a complete set of drawings on the work
in engineering involved. These drawings are of a vital asset to me as
an Architectural Consultant because I must know the design concepts of
the project engineers.

I was surprised to find that this job was the largest wastewater
treatment project which they had ever undertaken. Most of their work
is in the range of 1 million gallons but Logansport utilizes a capacity
of 9 million gallons. Quite a project for even a big firm such as this.

The meeting proved very successful from a resource standpoint and
also from a public relations standpoint.

Helen Hoover
Oct. 21, 1976
September 25, 1975

Blake M. Williams and Associates, Inc.
100 South Valley Avenue
North Palm Beach, Florida 33408

Dear Blake:

My name is Blake Hoover and I am an Architectural Thesis Student from Bell State University. Presently, I'm working on my thesis project which is involved with the addition to the Lago Corona Water Supply Treatment Plant. My involvement with the project doesn't pertain to the actual treatment design, but rather in the architectural work involved with building facilities. Also, I'm very much concerned with the ecology of such a facility and I'm researching an environmental impact study.

I particularly chose such a project for my thesis work because it involves an engineering solution as well as an architectural solution. Projects of this type have architects work closely with engineers, and knowing them is necessary today. I find this type of project to be good preparation for work prior to any professional work in an office. I hope that you can find it appropriate to be looking closely with the Architectural problems.

I am preparing the set of blueprints you mentioned. I am preparing a set of the plans of Lago Corona, which I've been studying. I have already completed the first two sets. The drawings are complete, but I need your approval. If you could possibly check the plans, I would appreciate your help. I've already received the plans from the designer and I'm sure you will find them useful. If this is not feasible with your time, do you have any idea who you could give some information as a help to the design of the new plant.

My goal in the design of the building is to utilize your knowledge of water treatment plants and the profession as an engineer. This is the type of career I desire. I very much need the contact in the consultant rather than the project consultant. I hope that you can be of assistance to me because it would be a nice contribution to my future career and to the professional career of engineering. I hope you can find time to help me.

Thank you,

Blake Hoover

Please reply to:
Blake Hoover
410 Riverside
Naples, Florida 33408