

From: Greg Stiltner <gstiltner@stiltnelectric.com>

To: Josiah D. Bilskemper <jbilskemper@shive-hattery.com>; Jim Glasgow <jimglasgow@q.com>

Cc: Josh Slattery <Josh-Slattery@iowa-city.org>; pbb338koser <pbb338koser@aol.com>

Subject: Re: ULP - Utility Capacity - Water and Sewer

Date: Mon, Jul 31, 2017 8:40 am

Attachments: image001.png (23K)

You bet, I think that's a good idea. I called him and left a voice mail. I have also cc'd him on this email.

Greg Stiltner
President
Stiltner Electric Inc
340 Herky St
North Liberty, IA 52317
Ph: 319-626-2800
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Fax: 319-626-3709



From: "Josiah D. Bilskemper" <jbilskemper@shive-hattery.com>

Date: Monday, July 31, 2017 at 8:04 AM

To: Jim Glasgow <jimglasgow@q.com>, Greg Stiltner <gstiltner@stiltnelectric.com>

Cc: "Pat Bauer (pbb338koser@aol.com)" <pbb338koser@aol.com>

Subject: RE: ULP - Utility Capacity - Water and Sewer

Greg and Jim,

Just to confirm on coordination here, are you wanting me to forward this e-mail below to City of Iowa City Engineering department (Josh Slattery) in response to the additional questions they asked in their e-mail to you on July 12?

Thanks,

Josiah D. Bilskemper, P.E.

Shive-Hattery, Inc.
2839 Northgate Drive
Iowa City, IA 52245
(319) 354-3040

From: Jim Glasgow [<mailto:jimglasgow@q.com>]

Sent: Friday, July 28, 2017 10:19 AM

To: Josiah D. Bilskemper <jbilskemper@shive-hattery.com>

Cc: Greg Stiltner <gstiltner@stiltnelectric.com>; Pat Bower <pbb338koser@aol.com>

Subject: Re: ULP - Utility Capacity - Water and Sewer

Marriott University Heights: Plumbing

Water system - preliminary

Two water mains will be supplied to the building. A 4" main for domestic water and a 6" or 8" main to supply the fire sprinkler. The sanitary sewer and storm sewer will be in 8" schedule 40 solid PVC underground. Flow rates will be included in the Plumbing Design and Calculations submittal in the 90% review documents. Both these water mains will be reduced after entering the building to a size needed for servicing the building.

There will be four (4) water heaters – Conquest by PVI. Three water heaters are 500,000 BTU with 120 gallon tank to serve the guest rooms. One water heater 200,000 BTU, 100 gallon tank, will serve the laundry and kitchen and will operate at a higher temperature. These heaters are 98% efficient, have a modulating gas burner, all stainless steel and can be monitored and controlled off site.

A twin-tank water softening system with 200 GPM will be included. There is a completely separate drinking water system that supplies purified water to drinking fountains, ice machines, coffee makers, juice and bottle fillers. The plumbing layouts along with the plumbing design and calculations will be posted to the 90% review folder.

Drainage Fixture Calculations:

The HOTEL building has five floor levels. The first floor has a combination of guest rooms, mechanical rooms, restaurant, laundries, reception, offices and some guest rooms. Floor levels 2, 3, 4 and 5 are guest rooms only.

The total sanitary sewer load is **1202** DFU which will require an 8" main into the building based on a sanitary sewer run at a minimum 2% grade.

Typical Guest Room	- DFU Value (Total)
1 - Toilet	- 3
1 - Tub/Shower	- 2
1 - Lavatories	- 1
-	
Total Drainage Fixtures/Room	= 6 (140 rooms) = Guest room total - 840 DFU

Sanitary sewer longest developed length ending at guest laundry is 240' or 60" of fall at ¼" per foot. Sewer depth entering the building is over 72" deep which would allow adequate fall.

Provide a 6" clean out from the 8" sanitary main at building perimeter.

Note: All sewer piping below slab shall be laid in a firm bed of approved materials throughout its entire length. All sewer piping below slab shall use long sweep fittings. All PVC drainage pipe below slab shall be schedule 40 solid PVC.

Water/Sprinkler Mechanical Room Design to include the following items:

1. 8" or 6" fire sprinkler and 4" domestic water mains

2. Domestic water meter (3")
3. Tandem backflow devices, 2 – 2" device allowing minimum of 200 GMP flow
4. Floor drain (4") for catastrophic flow from backflow devices
5. Water softener, twin tank with salt saver and brine tank, 200 GPM
6. Water softener standpipe for discharge (3")
7. Fire sprinkler system (by others)
8. Water heaters for guest rooms (3 – 120 gallon, 500,000 BTU, high efficiency)
9. Water heater for laundry and kitchen area (1 - 120 gallon, 199,000 BTU, high efficiency)
10. Expansion tank ASME rated
11. Recirculation pumps for water heater using a reverse return loop design
12. Eye wash stations

Sanitary mains are calculated for maximum unit loading using Table 703.2 as follows:

8" Horizontal Load - 2640 DFU @ 1/4"

6" Horizontal Load - 720 DFU @ 1/4"

4" Horizontal Load - 216 DFU @ 1/4"

Local Code issues:

1. Elevator sump discharge, 50 GPM per elevator.
2. Condensate discharge (directed to outside the building, storm or sanitary sewer)

Construction installation requirements:

1. All under slab piping to be backfilled with granular fill.
2. Seal piping as it penetrates through the floor slab.
3. Note: there are three eye wash stations – restaurant, mech., and laundry.
4. Allow for expansion and contraction of piping and building shrinkage (1/4" per floor). Horizontal piping through wood studs should be avoided and if necessary oversize the holes on the top and bottom (oblong design) to allow for settling and shrinking of studs.
5. There will be a floor drain in the bottom of the laundry chute for wash down.

I can give you more detailed information but it will get really technical

Jim Glasgow
Metro Plumbing

From: "Josiah D. Bilskemper" <jbilskemper@shive-hattery.com>

To: "Greg Stiltner" <gstiltner@stiltnerelectric.com>

Cc: "Jim Glasgow" <jimglasgow@q.com>

Sent: Thursday, July 27, 2017 3:11:30 PM

Subject: RE: ULP - Utility Capacity - Water and Sewer

Greg,

Does someone on your team have knowledge of what a similar size hotel uses for water and sewer, a rough estimate?

Josiah D. Bilskemper, P.E.

Shive-Hattery, Inc.
2839 Northgate Drive
Iowa City, IA 52245
(319) 354-3040

From: Greg Stiltner [<mailto:gstiltner@stiltnelectric.com>]
Sent: Thursday, July 27, 2017 3:07 PM
To: Josiah D. Bilskemper <jbilskemper@shive-hattery.com>
Cc: Jim Glasgow <jimglasgow@q.com>
Subject: Re: ULP - Utility Capacity - Water and Sewer

Josiah,

We have not yet started on building design or capacity of what's needed because Marriott won't even discuss that portion of the project with us until we get a property that has the correct zoning for the proposed type of Hotel. But, we are willing to pay for the cost of any upgrades to the system that will need to be done. Thanks again.

Sent from my iPhone

On Jul 27, 2017, at 2:49 PM, Josiah D. Bilskemper <jbilskemper@shive-hattery.com> wrote:

Greg,

I reviewed the attachment you just sent. It looks like both MidAmerican gas and electric have replied that they are able to serve the proposed development.

The e-mail from Josh Slattery with the City of Iowa City Engineering Department indicates they require additional information to determine if there is capacity to serve the proposed development for both water and sanitary sewer.

Has that additional information been provided to them, and were they able to determine if there is capacity to serve the proposed development with water and sewer?

Thanks,

Josiah D. Bilskemper, P.E.

Shive-Hattery, Inc.
2839 Northgate Drive
Iowa City, IA 52245
(319) 354-3040

From: Greg Stiltner [<mailto:gstiltner@stiltnelectric.com>]
Sent: Thursday, July 27, 2017 2:40 PM
To: Josiah D. Bilskemper <jbilskemper@shive-hattery.com>
Subject: utilities

Josiah, thanks for all your help.

Greg Stiltner

7/31/2017

Re: ULP - Utility Capacity - Water and Sewer

President
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