AQUAPOINT
AN OBEH COMPANY

Date: [ ]

AquaFAS™ & AquaCELL™ (IFAS & MBBR)
RETROFIT DESIGN CRITERIA

Requested Response Time: [ ]

Engineer/Firm: [ ]	**Customer/Contact:** [ ]
Address: [ ]	**Project Name:** [ ]
[ ]	**Address:** [ ]
Email: [ ]	[ ]
Tel: [ ] **Fax:** [ ]	**E-mail:** [ ] **Tel:** [ ]

Application / Description: ☐ Residential ☐ Commercial ☐ Institutional ☐ School ☐ Industrial ☐ Other

Provide relevant details and applicable permit: [ ]

Type of collection system: ☐ Gravity ☐ Pump Station(s) ☐ Grinder Pump ☐ S.T.E.P ☐ S.T.E.G. ☐ Other

Type of disposal system: ☐ Conventional Leach Field ☐ Drip Irrigation ☐ Stream ☐ Spray Irrigation ☐ Other

Upgrade Objective: ☐ BOD Removal ☐ Nitrification ☐ Denitrification ☐ Hydraulic ☐ Phosphorus ☐ Other

CURRENT Wastewater Flow Calculations:
(Please show calculations that are basis of the design)

Current Design Flow: [ ] Max wet weather flow: [ ]

Average Daily Flow: [ ] Peaking factor: [ ]

Max dry weather flow: [ ]

Comments: (Topography, permits, flow calculations, technology requests, containerization requests, etc. Please append information as needed.)
[ ]

REQURIED Wastewater Flow Calculations:
(Please show calculations that are basis of the design)

Required Design Flow: [ ] Max wet weather flow: [ ]

Average Daily Flow: [ ] Peaking factor: [ ]

Max dry weather flow: [ ]

Comments: (Topography, permits, flow calculations, technology requests, containerization requests, etc. Please append information as needed.)
[ ]

Influent Retrofit WWTP Design Data

Note: Please provide Aquapoint, Inc. with historical influent/effluent and flow data.

Seasonal flows? ☐ Yes ☐ No

If yes, when? [ ]

Site Elevation (feet above sea level): [ ]

Parameter	Raw	Settled
pH	[ ]	[ ]
BOD_5 (mg/L)	[ ]	[ ]
COD (mg/L)	[ ]	[ ]
TSS (mg/L)	[ ]	[ ]
TKN (mg/L)	[ ]	[ ]
Ammonia-N (mg/L)	[ ]	[ ]
Alkalinity (mg/L as $CaCO_3$)	[ ]	[ ]
Oil & Grease (mg/L)	[ ]	[ ]
Phosphorus (mg/L)	[ ]	[ ]
Other: [ ]	[ ]	[ ]

AquaFAS™ / AquaCELL™ RETROFIT DESIGN CRITERIA

AquaFAS Integrated Fixed Film Activated Sludge (IFAS)
& AquaCELL Moving Bed Biofilm Reactor (MBBR) Upgrades

Please specify location of effluent requirements (e.g. System effluent
pipe, groundwater interface, property line, etc.): [_____]

Note: MLSS, SRT, and RAS data are required only for IFAS upgrades.

Parameter	Current Effluent Performance		New Effluent Requirements	
	Winter	Summer	Winter	Summer
pH				
Temp (^{o}C)				
MLSS (mg/L)				
SRT (days)				
RAS (% of influent)				
BOD_5(mg/L)				
COD (mg/L)				
TSS (mg/L)				
TKN (mg/L)				
Ammonia-N (mg/L)				
Nitrate-N (mg/L)				
TN (mg/L)				
Oil & grease (mg/L)				
Phosphours (mg/L)				
Fecal Coliform (col./100mL)				
DO (mg/L)				
Turbidity (NTU)				
Other: [_____]				

Current Performance Comments

Required Upgrade Comments

Note: Please provide Aquapoint.3, LLC with all applicable discharge permits.

AquaFAS™ / AquaCELL™ RETROFIT DESIGN CRITERIA

Existing System Information

Manufacturer: _____   **Operational Life Cycle (years):** _____

Process: _____   **Please Provide As-Built Schematics & Plans**

Tankage/Basins

Equipment	Type	Quantity	Volume	Dimensions	Comments
Primary Clarifier(s)					
Equalization					
Aerobic Reactor(s)					
Anoxic Reactor(s)					
Secondary Clarifier(s)					
Sludge Holding/Digestion					
Disinfection					
Other:					
Other:					

Mechanical

Equipment	Type	Quantity	Brand/Model	HP/Voltage	Comments
Grit Removal					
Screening					
EQ Pump(s)					
Blowers/Compressors					
Aeration Diffusers					
Mechanical Mixers					
Clarifier Sludge/Scum Pumps					
Disinfection					
Chemical Feed					
Other:					
Other:					

Additional Notes

Aquapoint Representative: _____   Engineer's Signature: _____   Date: _____

IMPORTANT: *The information provided by you on this form will be relied upon by Aquapoint.3, LLC in determining project specifications and pricing. Accordingly, all such information must be complete and accurate and any fact or circumstance that comes to your attention after the date hereof that may in any way render any information contained herein incomplete or inaccurate must be brought to the attention of Aquapoint.3, LLC immediately.*