Capital PEC Report

Project Name VERONA GENE SILENCING/GENE THERAPY MANUFACTURING BLDG.

Project Type Plant Expansion

TIV (USD) 160,000,000

SIC Code 2836 Biological Products, Except

Industry Code 13 Pharmaceutical & Biotech

Diagnostic Substances

Sector Final Formulation (Oral. Solid, Parenteral, Topical,

Project ID: 30073735

PEC Activity Diagram

etc.)

SIC Product 2836*0035 Cellular and Gene Therapy Products

Status Active Last Update 21-Mar-2022 Initial Release 25-Oct-2021

Environmental Air (A) Land (L) Water (W)

Construction Labor Preference Union, Non-Unior **Operations Labor Preference** Unconfirmed

Square Footage

New Sq. Ft. 164,000 Sq. Ft.

Plant Owner Arrowhead Pharmaceuticals

Incorporated

Plant Name Verona RNA Chemistries/Gene

Silencing/Gene Therapies

Plant ID 3481810

Location 1080 Arrowhead Way, Connecting John P. Livesey Boulevard &

Kettle Moraine Trail

City/State Verona, Wisconsin 53593 U.S.A.

Plant Parent Arrowhead Pharmaceuticals Incorporated

Unit Name

Phone +1 626 304 3400

Zone/County WI*02, Dane

Project Responsibility Project Company Project Contact Project Director Arrowhead Pharmaceuticals Incorporated Fred Fleitz 502 South Rosa Road Group Vice President, Chemistry, Manufacturing & Controls (CMC)

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G/C Vogel Brothers Building Company Ryan Mears 5460 Fen Oak Drive Project Manager

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(Mobile)

U.S.A.

PEC® Timing P1 Project Probability Medium (70-80%) PEC® Activity Detailed Design

[E-Mail] rmears@vogelbldg.com

Scope Arrowhead Pharmaceuticals Incorporated with DPS Global and Vogel Brothers Building Company performs Detailed Design for Gene Silencing/Gene Therapy Manufacturing Building Addition ("Project Veneto"-Phase 1B). DETAILS: On approximately 13acre site, within Verona Technology Park, as Phase 1B of a 2-phase project (Phase 1A-108,000 sqft laboratory/administrative building #300737292), construct 2-story, approximately 164,000 sqft building and equip for the production of gene silencing and gene therapy products and related therapeutics plus tank farm. REQUIRES: Building, Building Automation Systems (BAS), Building Management Systems (BMS), Temperature and Humidity Controls, Fire and Security System, Voice/Data/Wireless System, Air/Gas Vacuum System, Industrial Gas Supply and Storage, Single-Use Bioreactors, Aseptic Filling Equipment, Cell Culture Tanks, Purification Equipment, Cell Banking Equipment, Clarification Equipment, Cleanrooms (ISO 5-8/Class 100-100,000), Controls (PLC/DCS), Ultrafiltration Equipment, Chromatography Equipment, Clean Steam Generators, Flow Filtration Equipment, Bar Coding/Scanning/Labeling Equipment, Cryopreservation Equipment, Refrigeration, Freezers, Electrical Distribution, Water Purification System, NGF Boiler, Chiller, Heat Exchangers, Tank Farm, Conveyors (Roller/Belt), Packaging Equipment, Emergency Generators, Uninterrupted Power Supply, Pumps, Motors, Valves. ENVIRONMENTAL: (A) HEPA Filtration System, Scrubbers, Dust Collectors; (L) Containment; (W) Pre-Wastewater Treatment System, Stormwater Drainage

Schedule Arrowhead Pharmaceuticals Incorporated with DPS Global and Vogel Brothers Building Company continues with Detailed Design through 1Q22 (Apr-May). Overlapping Phase 1A-laboratory building, Arrowhead with Vogel releases any remaining Equipment RFQs plus Subcontractor Bid Documents 2Q22 (Apr)-3Q23 (Sep). Construction Kick-Off 2Q22 (Jun). Project Completion 1Q24 (Feb).

AFE 202204 Sub Bid Doc 202204 Completion 29-Feb-2024 Precision YEAR **Project Milestones** Equip RFQ 202204 Kick-Off 202206 Kickoff Slippage 1 Months **Duration 21 Months** Engineering Instrumentation Mechanical Structural Contracting Civil Environmental HVAC Electrical

Process Equip Heat Project Key Needs Civil/Site Structural

Transfer

Storage Instrumentation Electrical Mechanical **HVAC**

Piping/Fittings Insulation/Coatings Environmental Utilities Valves Communications Batch Packaging Process Material Handling **Matter Phase** Liquid Solid Energy Boiler Generator Buy Sell **Plant Standard Contacts** Functional/Actual Title Contact Name/E-mail QC Date/LinkedIn ID Telephone/On-site Plant Manager Jacob Griffin [Phn.] +1 608 316 3890 x3899 Oct-2021 Scientist & Facilities Manager jgriffin@arrowheadpharma.com No jacob-griffin-76a91733

Historical Reports			
Project Name	Report Date	TIV	Phase
VERONA GENE SILENCING/GENE THERAPY MANUFACTURING BLDG ADD (PROJECT VENETO-PH 1B)	25-Oct-2021	120,000,000 USD	Detailed Design (P1
VERONA GENE SILENCING/GENE THERAPY MANUFACTURING BLDG ADD (PROJECT VENETO-PH 1B)	21-Dec-2021	145,000,000 USD	Detailed Design (P1
VERONA GENE SILENCING/GENE THERAPY MANUFACTURING BLDG ADD (PROJECT VENETO-PH 1B)	21-Mar-2022	160,000,000 USD	Detailed Design (P1

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