***Food Engineering*’s JUNE 2020 Food Plant Construction/Renovation Survey (3 pages)**

**INSTRUCTIONS**: Please list all **U.S., Mexico and Canada** food/beverage/nutraceutical manufacturing plant projects (**human or pet food/beverage and cannabis-related food/beverage**) of $1 million (US) or more planned, started or completed between **January 1, 2019 through December 31, 2019**. Enter one project per row as shown in the example entry. To navigate the table, use the **tab** button. To start another row, simply use the **tab** button when in the last row, last column. There is no limit to the number of projects you can list! When finished, save your file and email it back to us at **labsw@bnpmedia.com**. Note: Projects can include processing spaces, equipment or automation upgrades, distribution centers/logistics, etc. Please don’t include corporate offices or R&D unless the project also includes processing and/or packaging as well.

**Please note: For any projects that are proprietary (that is, you can’t list the client name), please do not include them in the list as we can’t use them in the final table. ALSO—IF YOU CAN’T PROVIDE COST OR SQ.-FT. INFO, JUST LEAVE THE SPACE BLANK--No need to use N/A or the like. If you don’t fill in the month and year, I will just use “19” to show it was recorded for the calendar year 2019.**

**→ Before you send this back, please answer the questions on the second and third pages of this survey!**

**Your name:**

**Your company’s name:**

**Title:**

**Phone number:**

**Email address:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Food/Beverage Company Name** | Plant Location**(City)** | Plant Location**(State)** | **Primary Products Made**(or purpose—such as cold storage) | Type of project(Enter **New**, **Ren.** for **Ren**ovation or **Exp.** for **Exp**ansion) | **Square footage in thousands (rounded)** (e.g., 35,200 sq.-ft. = 35 or 1 million sq-ft = 1000) | Estimated cost in $ millions (rounded)(projects of $1 million or more only)Enter 15 for $15 million | **Architects/Engineers** | **Month & Year** of actual or estimated completion date **(e.g., 7/18 for July, 2018)** |
| Example Beef Inc. | Anytown | PA | Beef | Exp. | 35 | 15 | John Doe A&E Co., Ltd. | 7/19 |
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**→ Please return this form as a Word document via email by April 10, 2020 to labsw@bnpmedia.com**.
**Wayne Labs, *Food Engineering*, 617 Hampton Court, Doylestown, PA 18901. Questions? Call 1-215-345-4548.**

**→ Please be sure the words Plant Construction Survey are in the subject line of your return email; this will direct the email to the appropriate folder.**

**Please participate in our yearly feature article by responding to the following questions on the next two pages!**

**Please comment on trends in food manufacturing and plant construction.**

**Your name:**

**Your title:**

**Your company:**

**Your phone number:**

**Your email:**

**1. What trends do you see emerging in construction projects? To what do you attribute these trends? Now that we’ve had three years of the Trump administration, are there any new changes since last year in the cost or availability of construction materials and labor? How are clients reacting? See Hot Trends Survey last page!**

Response:

**2. Do you see any changes in capital spending on projects? If yes, on what types of projects (new vs. upgrade/renovation) and key issues are food and beverage plants focusing? Has the current financial/political climate increased/decreased spending on projects? What about buy-outs and/or consolidation? Any cannabis projects?**

Response:

**3. How have changing consumer tastes and demands affected new projects or renovations and expansions? How have delivery options by Amazon and others offering meal kits and/or fresh food home deliveries affected processing/packaging systems and/or warehouse designs? Are you building more fulfillment centers/warehouses?**

Response:

**4**. **Food safety and security: With FSMA a “given,” what design/build considerations are being taken for food safety? Allergens? What about physical plant security for protecting both employees and food? What security solutions (architectural/technical) are used in protecting both plants and distribution centers/coolers?**

Response:

**5. What about site-related issues? For example, flood plain, extreme weather events, availability of utilities, transportation/logistics? Are they cramped for space? What about back-ups for utilities? Have you seen an increase in wastewater treatment projects? Why? Any other site-related issues? How about choosing a location?**

Response:

**6. What trends do you see in automation? For example, integrated security, HVAC, energy, robotics/cobotics and process controls; more integrated processing/
primary packaging/secondary packaging; other needs such as warehousing, logistics; etc. How about tradeoffs for speed vs. quality and changeovers?**

Response:

**7. Are there any other trends that you’d like to discuss (e.g., plant safety, machine safety, human aspects, labor force, LEED, sustainability, design tools, etc.)?**

Response:

**To whom should we send this questionnaire next year (name, title, phone, email)?**

**Thank you for your assistance with this project—but, please, do the quick survey, “Hot Trends for 2019-2020” at the end of this document!!**

**Please return this form via email by April 10, 2020 to labsw@bnpmedia.com; put Plant Construction Survey in the subject field of your email!** Wayne Labs,*Food Engineering*, 617 Hampton Ct., Doylestown, PA 18901. **Questions? Call 215-345-4548**

**Hot trends for 2019-2020**

Identify the five hottest trends listed below that (Column A) affect you as an architectural & engineering/construction firm, and (Column B) are of concern to your food and beverage clients/customers. Rate the five trends you’ve selected from **5** for **most significant** to **1** for **least significant**. If a category isn’t there, feel free to add it at the bottom, but please **fill in only five choices for each column**. Please return with the other responses.

**A&E/C Name:**

**Your name:**

|  |  |  |
| --- | --- | --- |
| **Possible trend:** | **(A) A&E/C importance** | **(B) Importance to a F&B processor** |
| Ability to change design when building |  |  |
| Ability to easily manage subcontractors |  |  |
| Allergen separation design |  |  |
| Automation: process control, robotics, packaging, etc. |  |  |
| Capital availability |  |  |
| Distribution center with AS/RS capability |  |  |
| Employee welfare, break-rooms, cafeterias, exercise rooms |  |  |
| Energy costs/conservation (drives, stack recovery, etc.) |  |  |
| Environmental/air handling |  |  |
| Facility that allows visitors to see operations without dressing |  |  |
| Fast project deployment |  |  |
| Flexibility in plant design to accommodate flexible manufacturing |  |  |
| Food safety: FSMA regulations/GFSI (design. layout, etc.) |  |  |
| Increasing production to meet demand |  |  |
| Integrated energy/process/security/access control systems |  |  |
| Internet access |  |  |
| LEED design principles |  |  |
| Old plant vs. build new—Easier to build new than upgrade |  |  |
| On-site wastewater treatment |  |  |
| On-site wastewater treatment/energy recovery system |  |  |
| Overall cost/controlling costs |  |  |
| Plant security/video system/access control |  |  |
| Power back-up capability |  |  |
| Raw vs. cooked (RTE) side design |  |  |
| Scheduling equipment arrival to job site |  |  |
| Site location related to extreme weather conditions |  |  |
| Site location related to transportation, logistics, utilities  |  |  |
| Sustainability (energy, water, etc.) |  |  |
| Upgrades to existing equipment |  |  |
| Upgrades to existing plant interiors |  |  |
| Utilities: Electricity, natural gas, oil, etc. |  |  |
| Virtual reality/augmented reality/3-D facility design tools |  |  |
| Workforce availability (line workers) |  |  |
| Workforce availability (tech staff) |  |  |
| Workplace safety |  |  |
| Other: Fill in |  |  |
| Other: Fill In |  |  |