CHECKLIST 2: Design Brief: Design Concepts

Dome Concepts (Inside Space)

- What magnitude of immersion would you prefer: 180°, or higher?
- Will your dome be flat or tilted? If tilted, at what angle?
- Will your floor be flat or tilted? If tilted, at what angle?
- What viewer orientation is preferred: concentric or directional seating?
- Should seating be fixed or moveable/flexible?
- What seating types will work best: bench, individual, reclining, ergonomic?
- Will you need an interaction area up-front for a stage or performance, or a narrator, teacher, individual, or a group?
- Do you want to showcase your projection technology inside the dome (e.g. see the starball all the time, or raise and lower it on an elevator)?
- What type(s) of ambient lighting are needed: cove or specialty lights, or general house lights?
- Where should the control booth be located: inside the dome, or directly outside the dome?

Systems Concepts (Outside Space)

- What control equipment is needed in the control booth, or immediately adjacent to the control booth?
- Projectors? How many would you like, where are the best locations and what are the ranges of projection angles?
- Projector support? How much power do they need? How much do they weigh? How much heat do they generate? How loud are the projectors (especially from fans)?
- Speakers? How many, best locations, orientations, power, weight, heat?
- Acoustics? What sound control is needed for the customers within the dome, and to the spaces outside the planetarium?
- How will the building systems be integrated: heating, air conditioning, environment, lighting?
- What building structure is needed to hold the dome framework and screen? What vibration and seismic control is necessary?
- What provisions should be made for energy-efficiency and sustainability?
○ What are the local codes and regulations: fire protection, sprinklers, emergency exiting, signage?
○ What accessibility provisions will you make for those who are disabled: wheelchairs, mobility, vision, hearing?

**Building Concepts (Outside Space)**

○ Will you provide a light transition space for visitors’ eyes to adjust from bright-to-dark?
○ How will visitors flow into the building and dome? Will you have a lobby, foyer, kiosks or a ticket counter? How will they queue at the entry? How will they exit after the show?
○ What complementary experiences for visitors would you like to have: exhibits, collections, classes, workshops, demonstrations, hands-on activities, lunch room, cafe, retail shop?
○ What support functions and staff spaces should there be for operations? Where should those spaces be located for convenience and efficiency?
○ Will the building be constructed all-at-once, or phased over a long-range timeframe?
○ Will the planetarium be a free-standing structure, part of a larger building, or housed within an existing building?
○ Will there be outdoor spaces: observation decks, gardens, plazas, courtyards?
○ Will students or visitors arrive in school buses or private coaches?
○ Is there a mass-transit train station or public bus stop nearby?
○ How much auto parking is required, for visitors and staff?
○ What is the visitor experience sequence as they come to the planetarium site and building?
○ Should the dome geometry be expressed in the building form outside, or be a surprise?