I. Design Professional Risks Associated with Project Delivery Methods

What is a project delivery method?

A method to **deliver a project to an owner** that factors in risks associated w/ project size, complexity, scope, contractor input, budgetary constraints, lean construction principles, risk-allocation such as dispute resolution, sustainability (LEED), emerging technology (BIM), collaboration, owner control...

After considering these factors/ risks, owner selects project delivery method that provides it the best value **allocating the responsibility of the design and the construction** of the project

I. Design Professional Risks Associated with Project Delivery Methods

More conventional project delivery methods

- Design-Bid-Build
- Multi-Prime
- Design-Build
- CM-Agency
- CM-At-Risk

*Paradigm Shift – Evolving delivery methods

- Integrated Project Delivery (IPD)
- Green Sustainable Projects
 - **Public-Private Partnership (P3)**

IPD

Considerations:

- Shared risk/reward through "transparency"
- Waiver of claims among project team
- Collaborative relationship between design and construction
- Need sophisticated leadership team
- Funding requirements
- Procurement requirements
- Technology (BIM) requirements (for collaborative design)
- Sustainability
- Lean construction principles
- New school thinking regarding risk allocation
- Contingency? (unlike GMP contracts)
- Insurance considerations (e.g., project specific professional liability / manuscript policies with extended reporting period, make sure PL covers negligent design conveyed in digital data, rectification coverage, protective loss coverage)

 Note: professional liability coverage centers on conventional notions of professional liability / E&O

IPD BIM

• Digital 3D (virtual) modeling of project

- Promotes sharing of digital information among project team to increase coordination, planning, efficiency and constructability of design—optimize design at all phases (preconstruction, during construction, post-construction)
- *E.g.*, BIM would be virtual model of structure (load bearing walls, slabs, windows, etc.) and utilities (duct, piping) and can include real-time *scheduling information* in the model (manpower, coordination, etc.) and *budgetary information* (estimated cost)
 - Transparency-All this data is shared to try to imitate actual construction for the purpose of better coordinated design and construction

Note: Think also 3-D laser scanning and drone imagery

IPD

BIM & Objectives

- Less on site administration effort as conflicts and questions resolved virtually
- Fewer RFIs and architect administration because stakeholders collaboratively involved in design (and longer precon phase) and better communication of design intent
- Less shop drawing and submittal approval time
- More prefabrication
- Less waste and inefficiency
- As builts incorporated into the virtual model
- Schedule tied to virtual model (allows for visualization of deviation from planned sequences and durations)

LOWER COST, SHORTER SCHEDULE, LESS DISPUTES, BETTER VALUE

IPD

Standard Form Contracts

Both the ConsensusDOCS and AIA have issued standard documents addressing BIM and IPD (legal and administrative issues, protocols, and risk allocation):

- ConsensusDOCS 300 Multi-Party IPD Agreement
 - ConsensusDOCs 396 Tri Party Agreement for IPD
- ConsensusDOCS 301 BIM Addendum
- AIA E203 BIM and Digital Data Exhibit
- AIA G202-2008 BIM Protocol Form
- AIA B195, A295 and A195 Transitional Documents between O-C and O-A for IPD
- AIA C195-2008 Single Purpose Entity Agreement for IPD
- AIA C191-2009 Multiparty Agreement for IPD
- AIA C196-2008 Single Purpose Entity and Owner for IPD

Green Building

Sustainability (Green Building)

- LEED certification
- Financial incentives and projected cost savings
- Claims associated with achieving certification, incentives, projected cost savings, tax credits

*Be careful about representations and warranties re: certification and savings

Green Building

Identify objectives relating to sustainable design / green building elements such as LEED certifications, energy efficiency, product ratings, etc.

- AIA A101-2007 SP Agreement between O-C
- AIA A201-2007 SP General Conditions
- AIA B101-2007 SP Agreement between O-A

*Note: See AIA Document D503-2013 Guide for Sustainable Projects

• ConsensusDocs 310 Green Building Addendum

 Partnership between public and private entities to deliver project for public purposes (e.g., infrastructure) where private entity finances (and perhaps operates and maintains) project in consideration for revenue (or % of revenue) completed project will generate for "x" number of years

Considerations:

- Sophisticated leadership teams with understanding of process
- Cost of private financing (cost associated with debt)
- Increased private party participation in delivering public project
- Risk transfer to private consortium (e.g., design, construction, financing, operations and maintenance, etc.)
- Insurance considerations (similar to design-build or potentially IPD)
 - Consider contractors protective indemnity coverage / protective loss coverage

Contract Forms

• EJCDC P3-508 (premised on design-build delivery)

II. Theories of Liability

Design Professional Liability:

1) Common Law (Tort)

2) Statutory / Administrative Obligations

3) Contractual (breach of contract)

* Note: This becomes VERY important with evolving delivery methods where A/E's role is outside of more conventional delivery method. Reason insurance considerations re: design errors & omissions become major criteria

II. Theories of Liability Common law

Design professional's standard of care **gaged under negligence theory (hence, importance of professional liability coverage...)**

 Failure to use use reasonable / due care which reasonable, careful design professional would use under like circumstances

 Failure to use reasonable / due care that conforms to acceptable standards that is detrimental to client or public

II. Theories of Liability Common law

Ex. Lochrane Engineering, Inc. v. Willingham Realgrowth Investment Fund, Ltd., 552 So.2d 228, 232 (Fla. 5th DCA 1989) – "However, the duty imposed by law upon professionals rendering professional services is to perform such services in accordance with the standard of care used by similar professionals in the community under similar circumstances."

→ Note: FL- duty of care of supervising design professional not extended to subs. See Spancrete, Inc. v. Ronald E. Frazier & Associates, P.A., 630 So.2d 1197 (Fla. 3d DCA 1994)

- Ex. Overland Constructors, Inc. v. Millard School District, School District No. 17, Douglas County, 369 N.W.2d 69, 76 (Neb. 1985) - "the test is whether the architect has exercised that degree of skill and diligence ordinarily exercised under like circumstances by architects in good standing in the same or similar communities."
- Ex. Martin v. Barge, Waggoner, Sumner & Cannon, 894 S.W.2d 750 (Tenn.App. 1994) "Tennessee courts have adopted the "same or similar community" standard of care with respect to professional negligence."
- But see ex. In re Parsons, Main, Inc., ASBCA No. 51355, 2002 WL 1307490, (June 10, 2002) USACOE project near St. Louis; A/E argued that government must apply standard of care of geotechnical engineers in St. Louis; rejected local standard in favor of national standard

II. Theories of Liability Statutory

Design Professional's reasonable / due care requirement formed based for statutory / administrative licensing requirements:

Ex: Florida Administrative Code 61G1-12.001(4)- An architect, firm, or business holding a certificate of authorization may not be negligent in the practice of architecture. <u>The term</u> <u>negligence is defined as the failure, by an architect, to exercise due care to conform to acceptable standards of architectural practice in such a manner as to be detrimental to a client or to the public at large.</u>

(a) Plans, drawings, specifications and other related documents prepared by an architect shall be of a sufficiently high standard to inform the users thereof of the requirements intended to be illustrated or described by them. Such documents shall clearly and accurately indicate the design of all essential parts of the work to which they refer. An architect shall meet a standard of practice which demonstrates his knowledge and ability to assure the safety and welfare of his clients and the public.

(b) An architect shall be required to coordinate his activities with other professionals involved in those projects wherein the architect is engaged to provide plans, drawings and specifications which result in the production of working documents which are used or intended to be used for the construction of a structure.

II. Theories of Liability Statutory

Ex. Ohio Administrative Code 4703-3-07 (A) (1)- In practicing architecture, a registered architect shall act with <u>reasonable care</u> and <u>competence</u> and shall apply the knowledge and skill which is ordinarily applied by registered architects of good standing, practicing in the <u>same locality</u>.

Ex. Alabama Administrative Code 100-X-7-.01 (1)- In practicing architecture, an architect's primary duty is to protect the public's health, safety, and welfare. In discharging this duty, an architect shall act with <u>reasonable care and competence</u>, and shall apply the knowledge and skill which is ordinarily applied by architects of good standing, practicing in the <u>same locality</u>.

II. Theories of Liability Contractual

Duties are imposed by contracts such as industry form contracts:

EJCDC E-500 – Standard Form Agreement Between Owner and Engineer for Professional Services

6.01.A. Standard of Care: The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be <u>the care</u> and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with Engineer's services.

II. Theories of Liability Contractual

AIA B101 – Standard Form Agreement Between Owner and Architect

2.2 The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances. The Architect shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.

II. Theories of Liability Contractual

Design Professional's common law duty of care can be extended / broadened by contract...WATCH OUT FOR THIS!

Ex. The School Board of Broward County, FL v. Pierce Goodwin Alexander & Linville, 137 So.3d 1059 (Fla. 4th DCA 2014)

"2.1.3 As to all services provided to this Agreement, the Project Consultant [the architect] shall furnish services by experienced personnel and under the supervision of experienced professionals licensed in Florida and shall exercise a <u>degree of care and diligence in the performance of these services in accordance with the customary professional standards currently practiced by firms in Florida and in compliance with any and all applicable codes, laws, ordinances, etc. . . .</u>

2.1.5 All professional design services and associated products or instruments of those services provided by the Project Consultant shall: .1 <u>Be in accordance with all</u> <u>applicable codes, laws, and regulations of any governmental entity</u>, including, but not limited to, [list of regulatory entities] with the Owner serving as the interpreter of the intent and meaning of . . . any other applicable code."

→ In this contract, architect contracted to *heightened standard of care* and was contractually obligated to perform to more heightened standard of care than common law standard. Here, architect accepted risk of design plans not code-compliant (no matter what!)

Ex. The School Board of Broward County, FL v. Pierce Goodwin Alexander & Linville, 137 So.3d 1059 (Fla. 4th DCA 2014)

- Previously discussed

- First Cost Defense / Added First Cost Benefit Theory

Architect not responsible for costs of items left out of original design since owner would always be responsible for this cost based on cost of item if that item was included in original design

"For example, if the school board would have paid a cost for construction in accordance with the code-compliant final design plans, an award of a COI [change order item] expense against the architect attributable to a change in the initial design plans for the same cost would put the school board in a better position than if the design services had been performed as agreed. Stated another way, if there had been no change between the initial plans drawn for bidding by contractors and the final construction plans, the school board would have been solely responsible for paying all construction expenses incurred for the renovation."

A&H Properties, v. GPM Engineering, 2015 WL 9435974 (Tex.App.-Austin 2015) –owner hired design-builder to install/design energy efficient improvement including geothermal loop. Engineer hired by design-builder. No contract between engineer and owner. Owner sued engineer for negligence for design of geothermal loop that caused it financial damages. Summary judgment granted in favor of engineer under **economic loss rule**. Affirmed on appeal.

"[T]he Texas Supreme Court recently clarified in a similar factual scenario that the availability of contractual remedies in a vertical chain of contracts on a construction project precludes tort recovery when no personal injury or property damage is alleged. The record before us establishes that GPM [engineer], as subcontractor, was performing services part of of the overall construction project based on its contract with the general contractor, Bell. GPM's duty to perform work on A&H's [owner] arose of that construction subcontract, and no other duty or relationship between GPM and A&H is presented in this record.

"Application of the economic-loss rule is particularly appropriate here, where permitting A&H to sue GPM for economic loss would disrupt the risk allocations that A&H negotiated with Bell, and that Bell, in turn, negotiated with GPM."

Balfour Beatty Infrastructure, Inc. v. Rummel Klepper & Kahl, LLP, 2016 WL 360875 (Md.Ct.Sp.App. 2016)-City hired engineer to produce construction documents for wastewater treatment plant under design-bid-build. Years later successful bidder (contractor) sued engineering firm for delays associated with defective design and negligent misrepresentations. No contract between contractor and engineer. Trial court dismissed based on **economic loss rule**. Affirmed on appeal.

"[I]n the absence of privity, death, personal injury, property damage, or the risk of death or serious personal injury, no duty of care in tort runs from an engineer or architect to a contractor for purely economic losses on a public construction project."

But see Gongloff Contracting, L.L.C. v. L. Robert Kimball & Associates, Inc., 119 A.3d 1070 (Penn. 2015)- University hired A/E and GC. GC hired steel sub. Steel sub hired plaintiff (sub-sub) to erect steel. Concerns were raised with A/E roof design. During construction it was determined that roof design not sufficient to bear loads. There were 3 shut-downs of steel erection due to redesigns. Plaintiff submitted 81 change order requests resulting in itbeing unable to pay vendors, laying off its crew, and leaving site. Plaintiff sued A/E for negligent misrepresentation re: the design of the roof. Trial court granted judgment on pleadings based on **economic loss rule**. Reversed on appeal.

"We conclude that the amended complaint's allegations that Kimball's [A/E] design documents constituted negligently-supplied false information have been pled with the appropriate level of specificity to state a cause of action for negligent misrepresentation.... While Kimball might prove later in the litigation that the allegation that it provided false information concerning the integrity of its roof design was unsubstantiated, it is not entitled to judgment in its favor at this stage of the proceedings." (relying on case that A/E can be liable for negligent misrepresentation when it negligently supplies information knowing that 3rd parties will rely on such information)