Department of Design and Construction

PUBLIC BUILDINGS: DESIGN FORUM

HOSTED BY:
THOMAS FOLEY, PE, CCM
Deputy Commissioner

MARCH 3, 2020

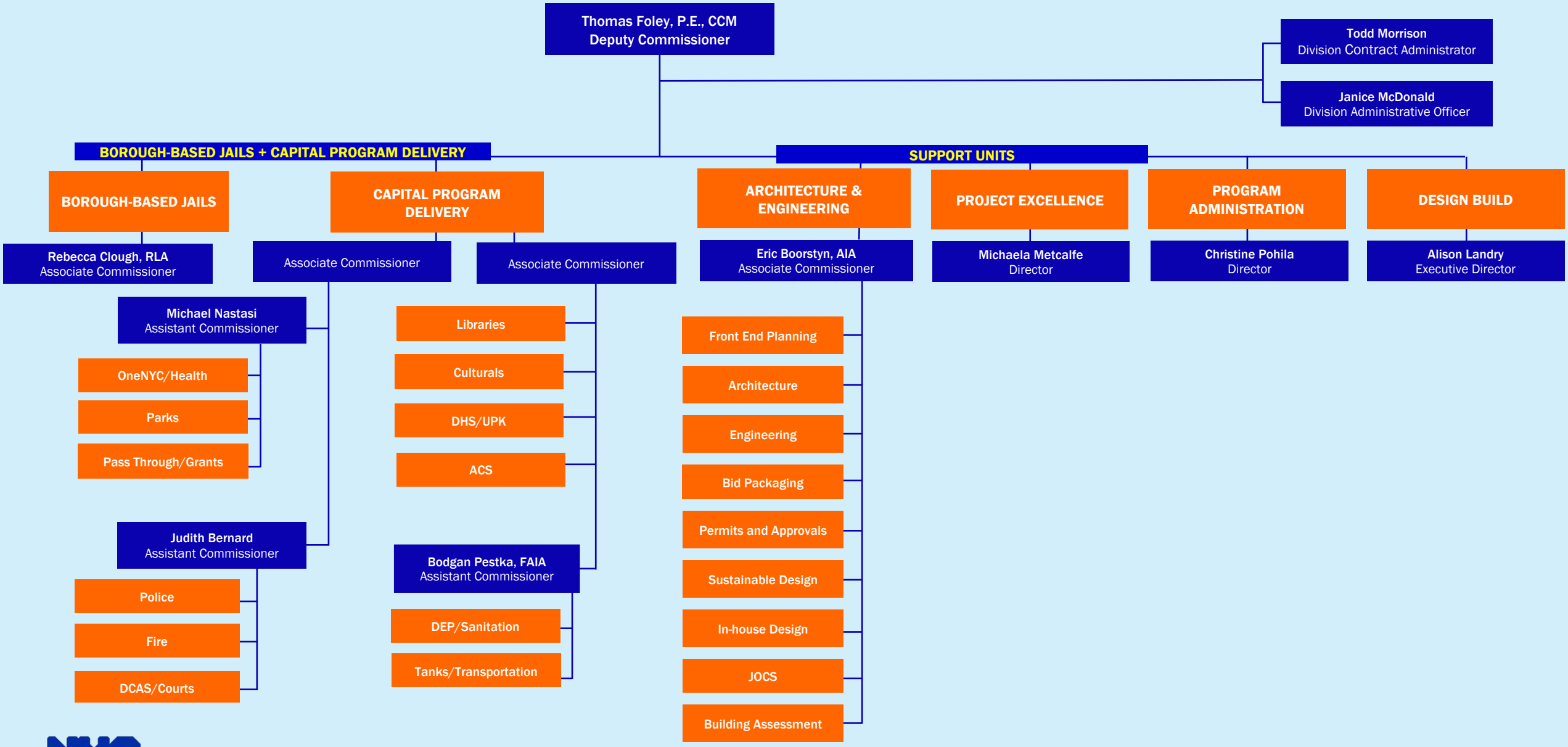
Department of Design and Construction

PB WELCOME & INTRODUCTION

WE ARE PUBLIC BUILDINGS

450 executive, managerial, professional and administrative staff responsible for the design and construction of over **490** active projects for **28** sponsor agencies with portfolios valued at over **$15** billion dollars.

PUBLIC BUILDINGS DIVISION



AGENDA

1. **DDC Strategic Plan**
2. **PB Overview & Process Improvements**
3. **Design Consultant Expectations**
4. **Upcoming Opportunities with DDC**
5. **Initiatives In-depth**
    - Contracts, Design Consultant Guide, Sustainability and Resiliency, Cost Estimating, OMS

PROJECT EXCELLENCE

DDC is committed to delivering capital project that are:

- Inspiring
- Enduring
- Practical
- Constructible
- Cost-Sensitive


QUEENS LIBRARY







122CC

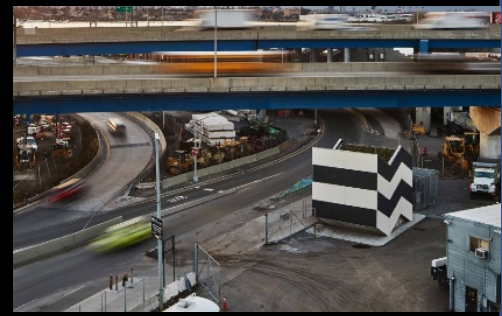




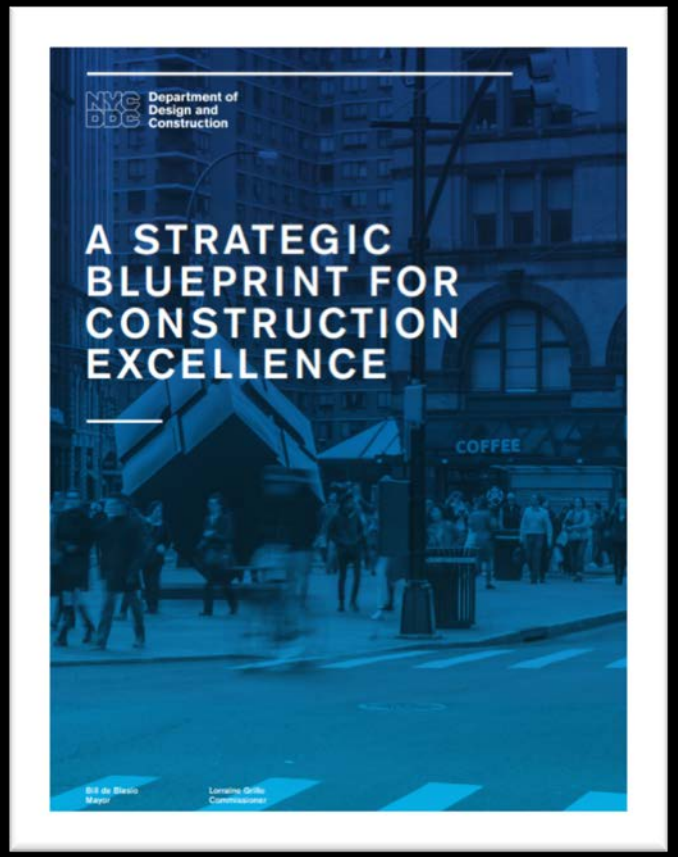


NYPD



DDC'S STRATEGIC PLAN



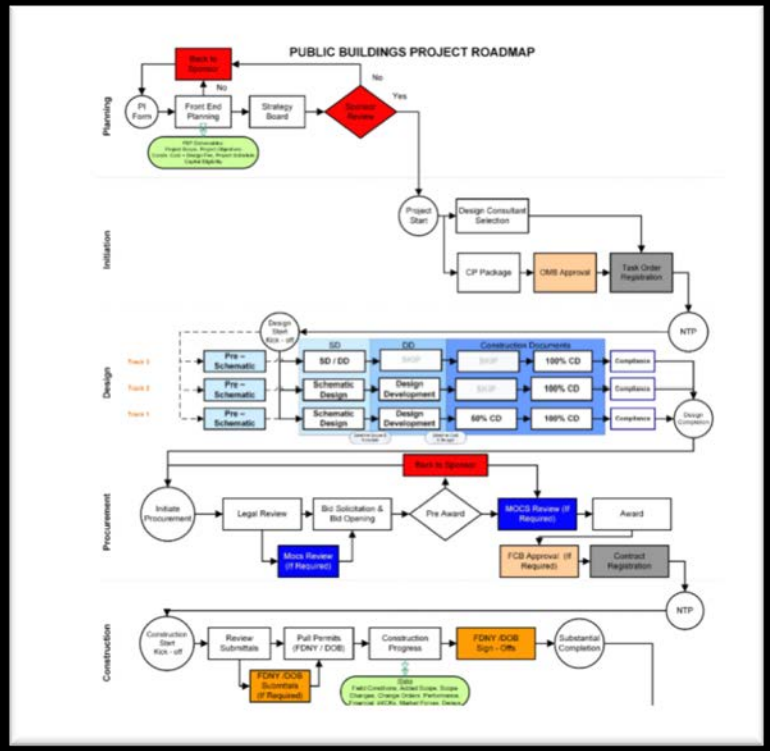
Released Jan 2019

- Improving the Pipeline
- Managing Projects more effectively
- Getting more from our Contractors & Consultants
- Modernizing Internal Systems & Technology


Gifsforum.com

PB IMPROVEMENT INITIATIVES

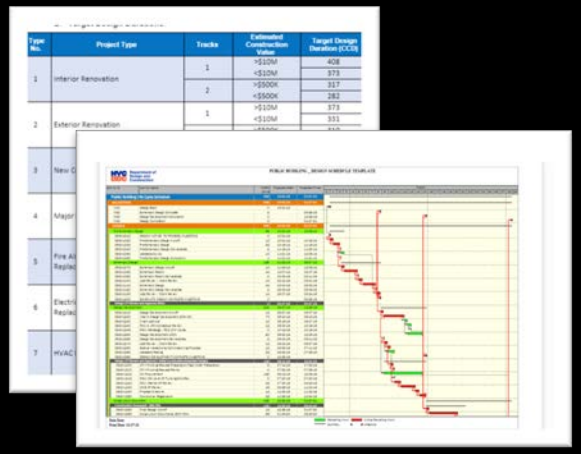
- ✓ Planning & Initiation
- ✓ Design
- ★ Construction
- Close-Out



PB Roadmap

IMPLEMENTING CHANGE

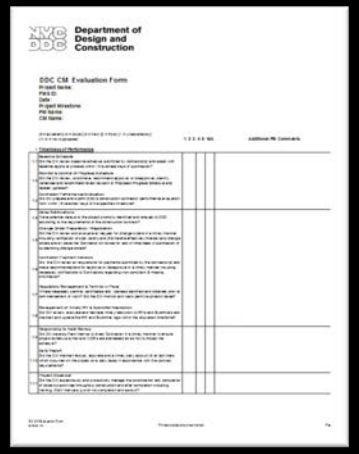
Policies & SOPs



Job-Aids, Templates, Checklists

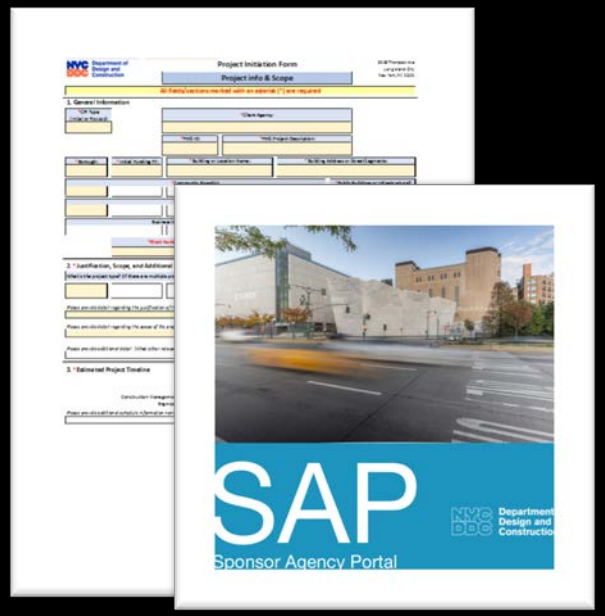
Standards & Guidelines

Contracts

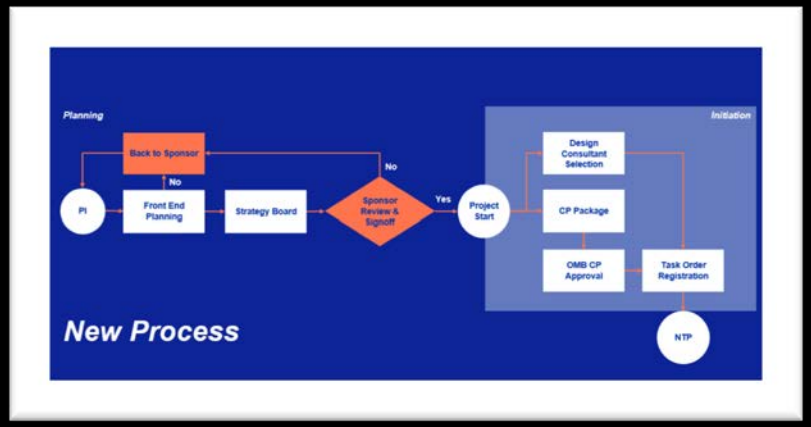


Performance Evaluations

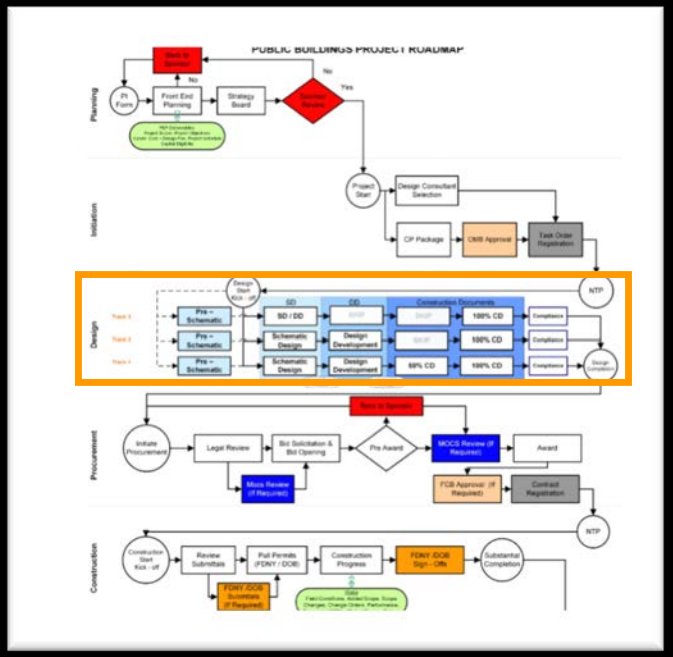
IMPROVING PLANNING, INITIATION & DESIGN



Standardizing Intake of Projects



Streamline FEP & CP Processes



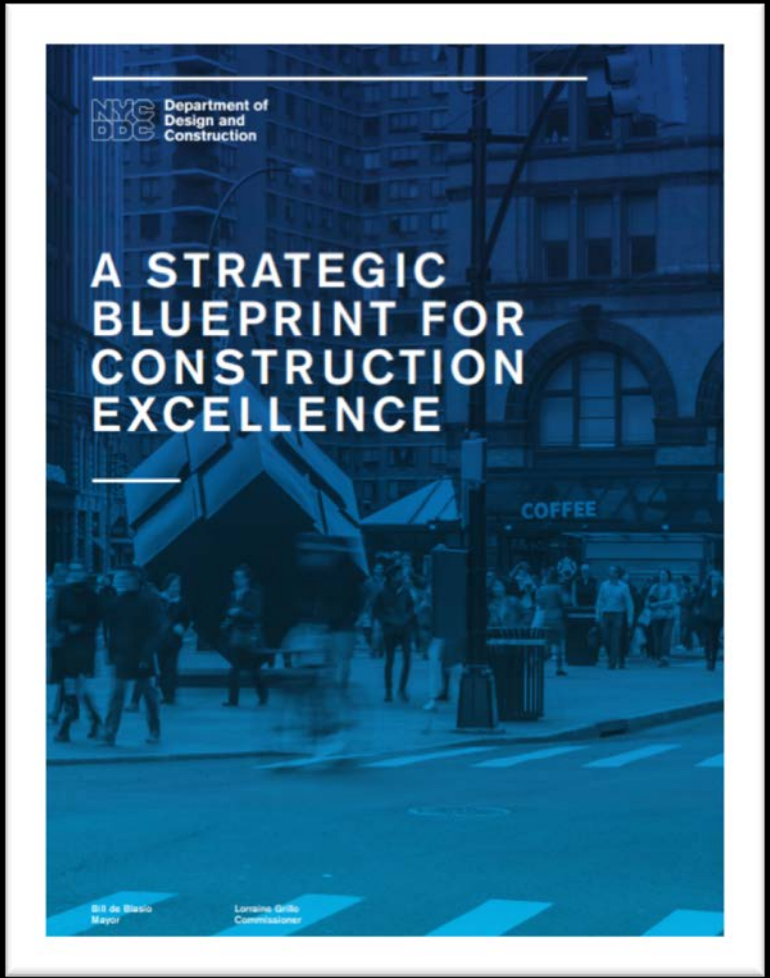
Design

PB DESIGN PHASE IMPROVEMENTS

- Sponsor Agencies
- External Constraints
- Design Consultants
- PB Internal Improvement
- CMs

SPONSOR AGENCIES

- DDC's Strategic Blueprint
- Limit Sponsor Added Scope
- Design Standards for Sponsors
- Advanced Capital Planning Unit



PB DESIGN PHASE IMPROVEMENTS

- Sponsor Agencies
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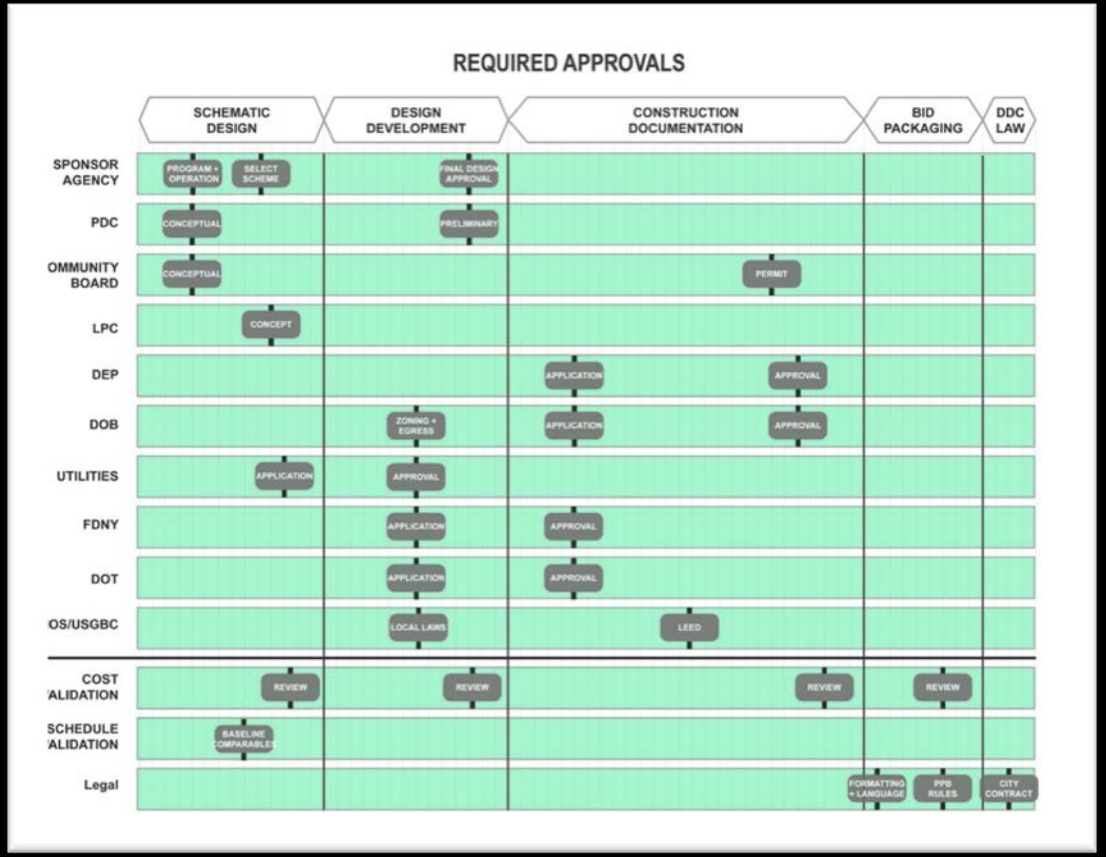
IMPROVE OUTSIDE AGENCY COORDINATION

Regulatory Approvals

- DOB Advocate
- FDNY Liaison
- Utility Coordination
- Point of Contact Agency Database



FUNDING CONSTRAINTS

- Streamline CP Process
- Standard CP Templates
- OMB Workshops on Capital Eligibility
- Partnership & Coordination with OMB

PB DESIGN PHASE IMPROVEMENTS

- Sponsor Agencies
- External Constraints
- Design Consultants
- PB Internal Improvement
- CMs

DESIGN INDUSTRY OUTREACH

June 2019

Listening session at AIANY Center for Architecture

July 2019

Conducted Industry Survey

October 2019

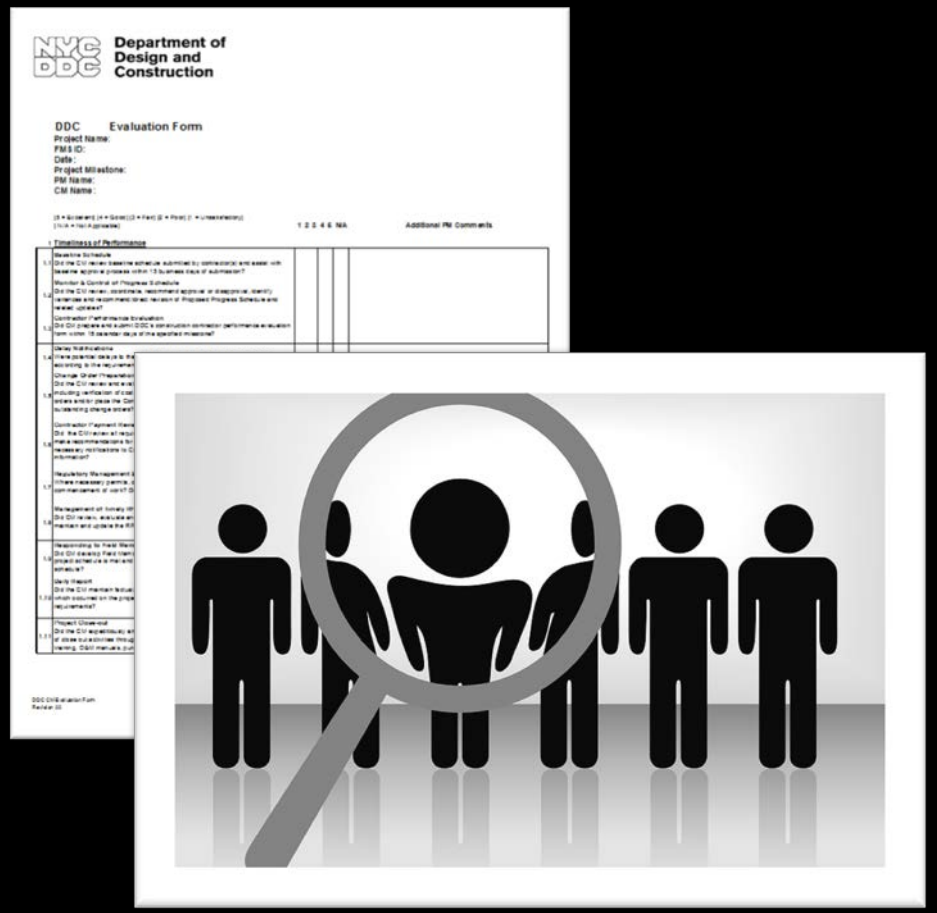
DDC Open House

November 2019

Industry Outreach with AIANY

HOLDING DESIGNERS ACCOUNTABLE

- Designers will be held to design schedules
- Performance Evaluations as a basis for:
  - Corrective Measures
  - Termination
  - Skipping rotation

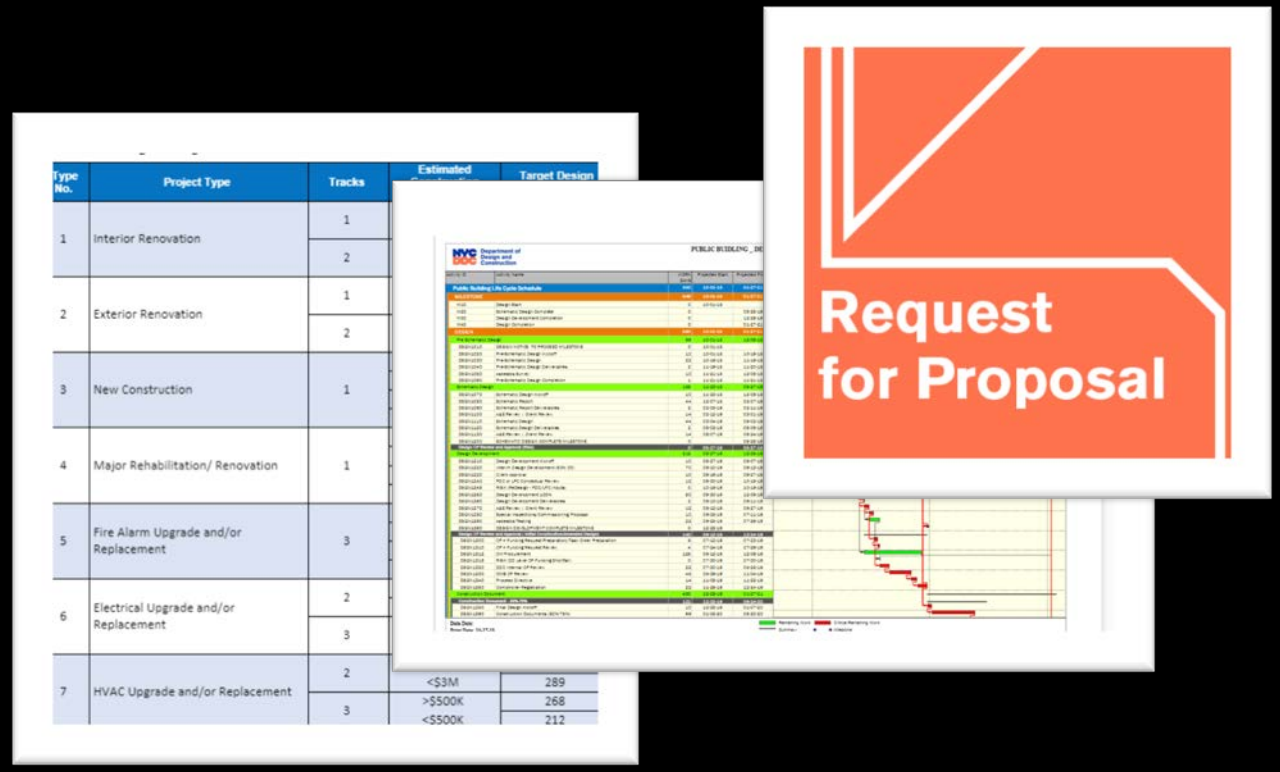


PB DESIGN PHASE IMPROVEMENTS

- Sponsor Agencies
- External Constraints
- Design Consultants
- **PB Internal Improvement**
- CMs

DESIGN DURATIONS

- Design Target Durations
- Schedule Templates
- Durations in Design Contracts



IMPROVING COST ESTIMATES

- 3rd Party Estimators
- Standard Cost Estimates & Format
- Collaboration with Project Controls
- Cost Estimating Guide

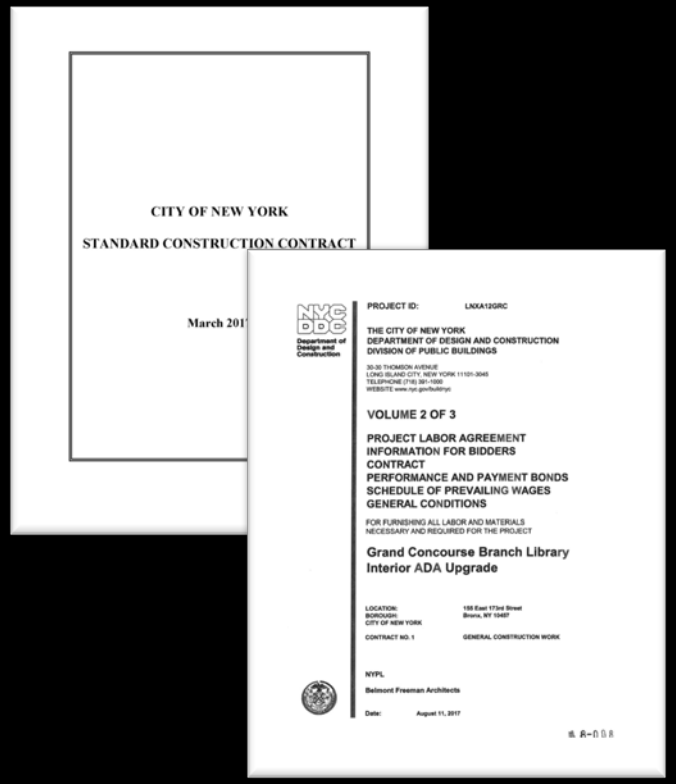
PB DESIGN PHASE IMPROVEMENTS

- Sponsor Agencies
- External Constraints
- Design Consultants
- PB Internal Improvement
- CMs

EXPAND CM SERVICES

- Design Reviews
- Constructability Review
- Cost Estimating Services
- Scheduling Services
- Specifications and Bid Packaging

NYC CONTRACT REVISIONS



Updating General Conditions

- Scheduling Specifications (P6)
- Mobilization
- Time-related costs (Field office, fencing)
- Special Experience Requirements

DDC'S EXPECTATIONS FOR DESIGN CONSULTANTS

- Deliver projects on-time and within budget
- Deliver according to DDC standards
- Responsive, dedicated and collaborative

DESIGN BUILD

- DDC granted Design-Build authority
- Public Buildings Open House – Spring 2020
- Owners Representative Service for Public Buildings

CONTRACT OPPORTUNITIES

Standard Requirements	3 Years On Call
Stand-Alone	Project Specific
Stand-Alone M/WBE Micro Purchase	Project Specific
Stand-Alone Design/Build	Project Specific

DESIGN STANDARD REQUIREMENTS CONTRACT

		Micro	Small	Medium	Large
Round 1	2004		24 firms projects under $5 million		8 firms over $5 million
Round 2	2007		24 firms under $10 million		8 firms over $10 million
Round 3	2010		20 firms under $15 million		8 firms over $15 million
Round 4	2013		20 firms under $15 million		6 firms over $15 million
Round 5	2016	10 firms under $5 million	10 firms $2 – 15 million	3 firms $10 – 35 million	3 firms $25 – 50 million
Round 6	2020		5 firms $0 – 10 million	10 firms $10 – 50 million	5 firms $50 – 200 million

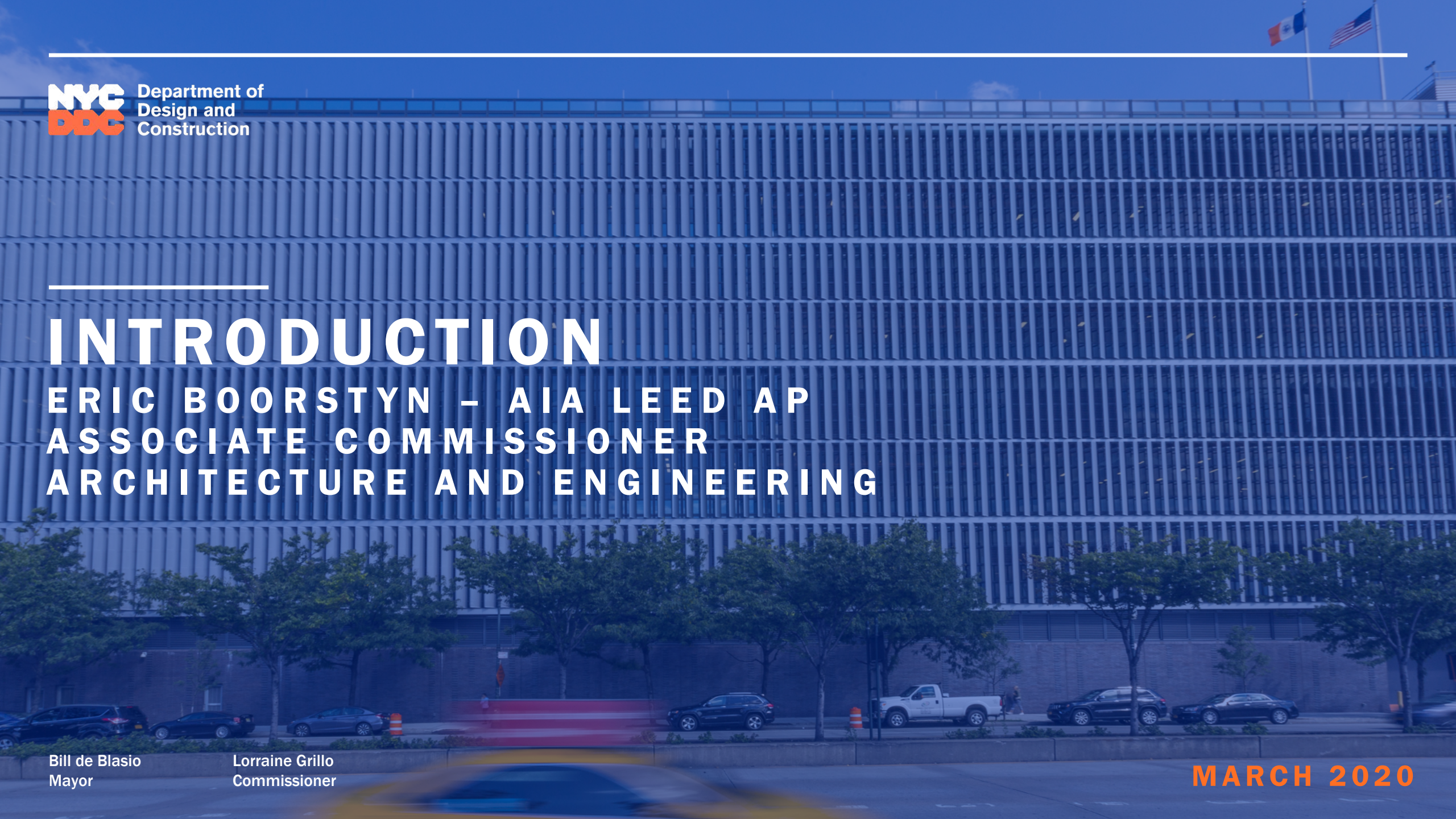
New Construction, Major Renovation or CPSD – Architect Prime
Includes A/E bridging services for Design/Build

UPCOMING OPPORTUNITIES

- NYPD Property Clerk Storage/Operations Facility
- NYPD Crime Lab
- Parks Cromwell Recreation Center
- Parks Coney Island Beach Operations Headquarters

UPCOMING OPPORTUNITIES

- FDNY Fort Totten Infrastructure Improvement
- NYCHA Van Dyke Houses Boxing Gym
- DOT Harper Street Administration Building



Department of Design and Construction

INTRODUCTION

ERIC BOORSTYN – AIA LEED AP
ASSOCIATE COMMISSIONER
ARCHITECTURE AND ENGINEERING

Bill de Blasio
Mayor

Lorraine Grillo
Commissioner

MARCH 2020

AGENDA

1. **Introduction**
   Eric Boorstyn

2. **Project Excellence and Design Contracts**
   Michaela Metcalfe

3. **Design Build**
   Alison N. Landry

4. **Design Consultant Guide**
   Starling Keene + Kate Solis

5. **Sustainability, Resiliency, Cx**
   Chris Diamond + Rebecca Schmidt

6. **Cost Estimating**
   Subhash Tuladhar

7. **Office Master Specifications (OMS)**
   Richard Jones

MEET DDC

PB CAPITAL PROJECT CORE TEAM:

Project Manager

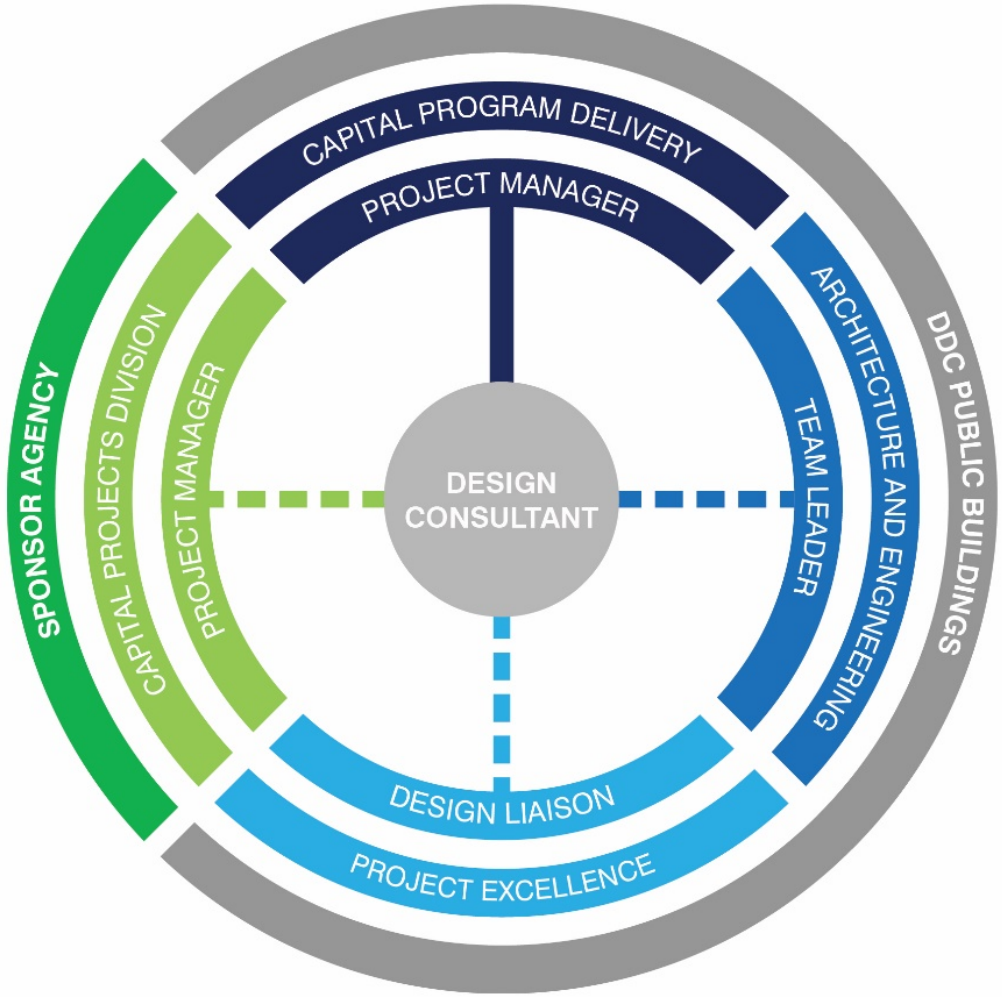
Leads project, manages Design Consultant and ensures design delivered within schedule and budget (in collaboration with Proje Controls)

A&E Team Leader

Coordinates support services and provides design and technical expertise (Architectural, Engineering, Landmark, Landscape, Sustainability, Permits and Approvals etc.…)

Design Liaison

Ensures development of a design that is responsive to key agen priorities and civic design criteria.



WORKFLOW OVERVIEW

PLANNING & INITIATION	DESIGN	PROCUREMENT	CONSTRUCTION

WORKFLOW OVERVIEW

Front End Planning Process Establishes:

Project Scope
Project Schedule
Project Budget

→ **Consultant Scope of Work**

WORKFLOW OVERVIEW

PLANNING & INITIATION | DESIGN | PROCUREMENT | CONSTRUCTION

Interim 1 | Interim 2 | Final SD | Final DD | 75% CD | 100% CD

NTP → SCHEMATIC → DESIGN DEVELOPMENT → CONSTRUCTION DOCUMENTS → BID

SCHEMATIC	DESIGN DEVELOPMENT	CONSTRUCTION DOCUMENTS
Estimating Workshop	Estimating Workshop	Estimating Workshop
Sustainability Workshop	Sustainability Workshop	Sustainability Workshop
PDC (or LPC) Review	Bid Packaging/ OMS Workshop	Bid Packaging/ OMS Workshop
DDC Technical Review	Regulatory Approvals (DOB++)	Bid Packaging Reviews (75%+100%)
Sponsor Review	PDC (or LPC) Review	Regulatory Approvals (DOB++)
Integrative Process Workshop	DDC Technical Review	PDC (or LPC) Review
	Sponsor Review	DDC Technical Review
	Commissioning Workshop	

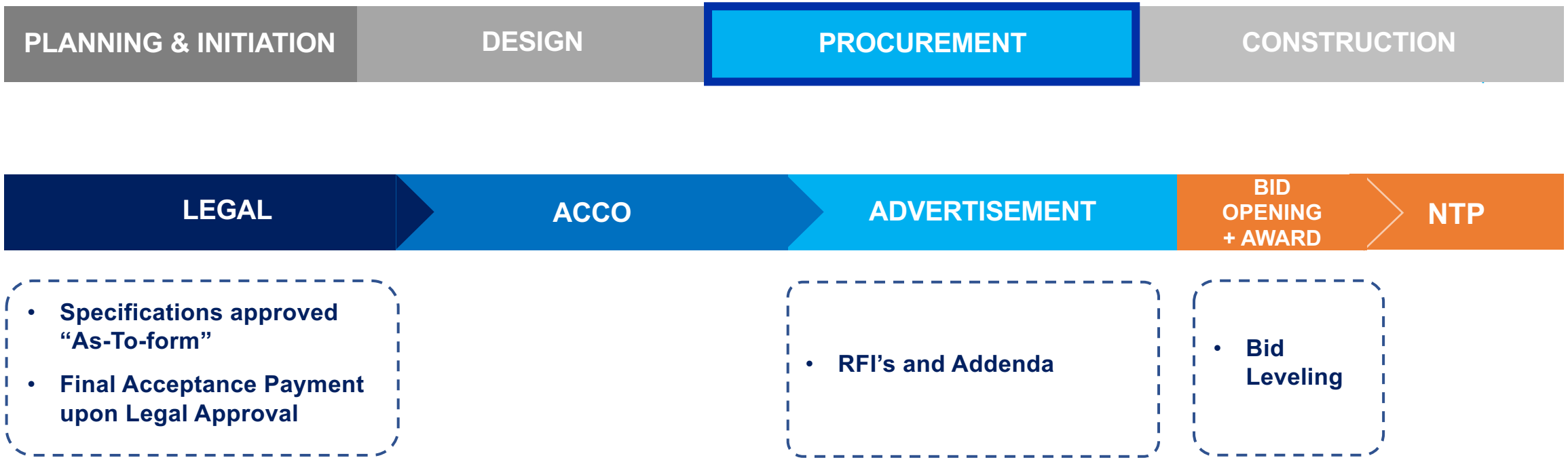
WORKFLOW OVERVIEW

- **Biweekly Progress Meetings throughout Design Phase**

  Standard agenda items include:

  - Schedule, Budget, Scope, Accessibility, Code Compliance, Constructability, Utility, Regulatory Approvals
- **Schedule & Cost Estimate provided and reviewed at each Submission**
- **Design Consultant Performance Evaluation at each Milestone**

WORKFLOW OVERVIEW



WORKFLOW OVERVIEW

- Industry-Standard Construction Administration Services
- DDC Construction PM or CM Consultant on-site
- Bi-Weekly Site Meetings

Department of Design and Construction

PB PROJECT EXCELLENCE: PROFESSIONAL SERVICES CONTRACTS

MICHAELA METCALFE – AIA, CCM, LEED AP

Bill de Blasio
Mayor

Lorraine Grillo
Commissioner

MARCH 2020


QUEENS LIBRARY







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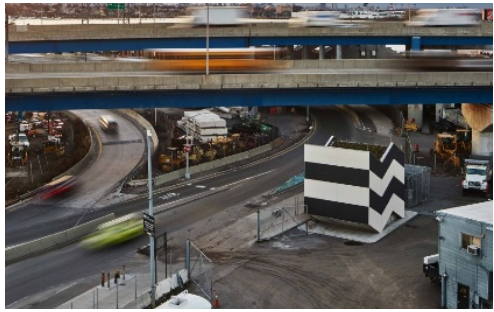


1100: Architect · Abruzzo Bodziak Architects · Agrest and Gandelsonas Architects · **Allied Works Architecture** · Ammann & Whitney Andrew Berman Architect · **Architecture in Formation** · Architecture Research Office · Arquitectonica · Asymptote Architecture · **Atelier Pagnamenta Torriani Architects Planners** · Audrey Matlock Architect · Bade Stageberg Cox · Belmont Freeman Architects · Bentel & Bentel, Architects/Planners · Bernheimer Architecture · Beyhan Karahan & Associates Architects · Biber · Bjarke Ingels Group · **BKSK Architects** · **Body Lawson Associates** · **Buro Koray Duman Architecture** · BWA + de.Sign · Caples Jefferson Architects · Charles Rose Architects · Christoff : Finio Architecture · CR Studio Architects · **Dattner Architects** · **Dean/Wolf Architects** · Deborah Berke & Partners Architects · **Elmslie Osler Architect** · Ennead Architects · Fox & Fowle · Frederic Schwartz Architects · **G Tects Architecture Gans Studio: Architecture** · Garrison Architects · Gluckman Mayner Architects · Gray Organschi Architecture · Grimshaw Architects · **H3 Hardy Collaboration Architecture** · Hanrahan Meyers Architects · HS2 Architecture and FREE · **Huff + Gooden Architects** · **IKON.5 Architects** · **Jaklitsch/Gardner Architects** · **Jordan Parnass Digital Architecture** · Karen Bausman + Associates · Keenen/Riley Kiss + Cathcart, Architects · LARC Studio · Leeser Architecture · Leroy Street Studio · **LEVENBETTS** · Locascio Architect · **LTL Architects** · Marble Fairbanks · Marpillero Pollak Architects · **Marvel Architects** · Matthew Baird Architects · Michielli + Wyetzner Architects · Monica Ponce de Leon Studio · Moorhead & Moorhead · Murphy Burnham & Buttrick Architects · nARCHITECTS · **OBRA Architects** · Ogawa/Depardon Architects · Ohlhausen DuBois Architects · Pasanella + Klein Stolzman + Berg · Pendergast Laurel Architects Rafael Vinoly Architects · **Rice + Lipka Architects** · Rietveld Architects · Rogers Marvel Architects · Sage and Coombe Architects Selldorf Architects · **Sen Architects** · Skidmore, Owings and Merrill · **Slade Architecture** · Smith-Miller + Hawkinson Architects Snøhetta · Spacesmith · Stephen Yablon Architecture · Steven Harris Architects · Steven Holl Architects · **Studio Gang** · Studio Joseph Studio SUMO · TEN Arquitectos · The Galante Architecture Studio · Thomas Phifer and Partners · Toshiko Mori Architect · Urbahn Architects · W Architecture and Landscape Architecture · Wallance + Hibbs Architects · **Weiss/Manfredi Architects** · Weisz + Yoes Architecture · WORK Architecture Company · Yoshihara McKee Architects · **Zakrzewski + Hyde Architects**

PROFESSIONAL SERVICES CONTRACTS

Standard Requirements	$0 - $50M	3 Years On Call
Stand-Alone	$50M +	Project Specific

PROFESSIONAL SERVICES CONTRACTS

Standard Requirements	$0 - $200M	3 Years On Call
Stand-Alone	$200M +	Project Specific

PROFESSIONAL SERVICES CONTRACTS

	Standard Requirements	$0 - $200M	3 Years On Call
	Stand-Alone	$200M +	Project Specific
NEW!	**M/WBE Micro Purchase**	$4M	Project Specific
NEW!	**Design/Build**		Project Specific

STANDARD REQUIREMENTS CONTRACTS

Architectural (DCE)

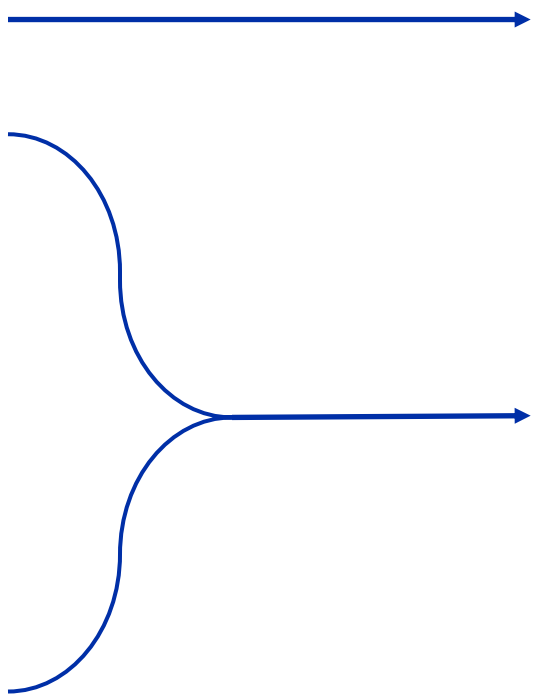
Envelope + Roof

Historic Preservation

Structural

MEP

Landscape



Architectural Design
3 Categories, 20 Firms

New Construction,
Major Renovation or
CPSD

Architect Prime

Technical Design
2 Categories, 10 Firms

Single or Multi-Trade
System Upgrade or
Replacement

Architect Prime

STANDARD REQUIREMENTS CONTRACTS

	Small	Medium	Large
Architectural Design	5 firms projects under $10 M	10 firms $10 – 50 M	5 firms $50 – 200 M
Technical Design	5 firms projects under $10 M	5 firms $10 – 50 M	

KEY CONTRACT UPDATES

- Fee Curve with CA on Time Card
- Direct Salary Rates X Multiplier
- Rotational Assignments and Sub Identification
- Design Durations

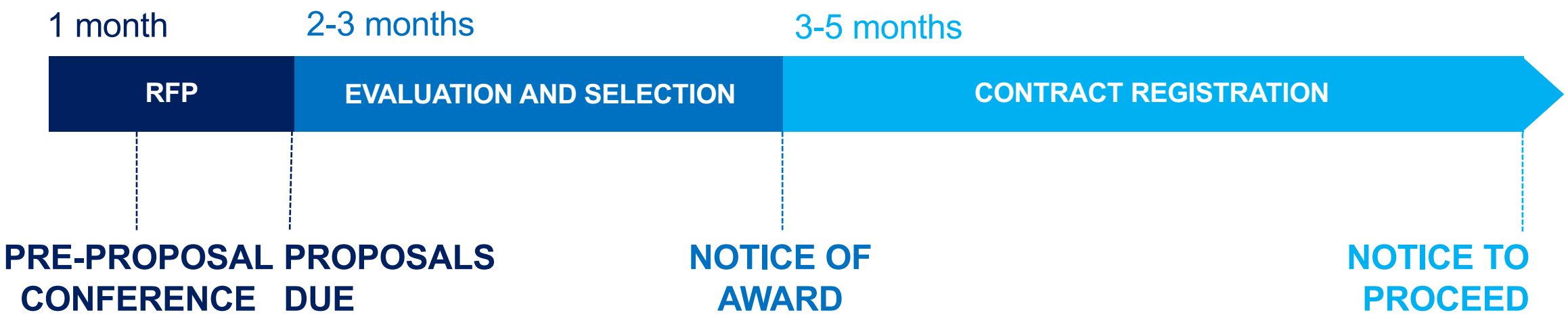
KEY PRIORITIES

PARTNERS

What are we looking for in our partners?

- Dedicated and collaborative
- Ability to deliver on-schedule and within budget
- Proven track record of delivering high quality projects
- Ability to resolve complex requirements and navigate unforeseen circumstances

STANDARD REQUIREMENTS CONTRACTS
RFP TIMELINE



Public Works

Reflecting on 15 Years of Project Excellence for New York City

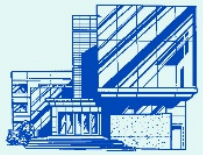
Making Enduring Structures
KEW GARDENS HILLS LIBRARY / QUEENS
WORKac

Welcoming Residents
FAST FLATBUSH LIBRARY / BROOKLYN
LEVENBETTS

Expanding Public Space
TIMES SQUARE / MANHATTAN
SNØHETTA

Building Resilience
OCEAN BREEZE ATHLETIC COMPLEX / STATEN ISLAND
SAGE AND COOMBE ARCHITECTS

Supporting Diverse Needs
ELMHURST LIBRARY / QUEENS
MARPILLERO POLLAK ARCHITECTS



Connecting Communities
40th PRECINCT / THE BRONX
BIG-BJARKE INGELS GROUP

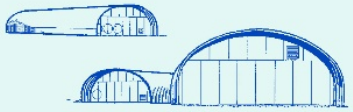
Meeting Local Needs
JOSEPH A. VERDINO JR. FIELD OF DREAMS / STATEN ISLAND
GRAY ORGANSCHI ARCHITECTURE

Adding Value
METROTECH CENTER SECURITY UPGRADE / BROOKLYN
WXY

Fostering Pride
MANHATTAN DISTRICT 1/2/6 GARAGE AND SPRING STREET SALT SHED
DATTNER ARCHITECTS AND WXY

Conveying Character
HARPER STREET YARD / QUEENS
MARCHITECTS

Finding Economical and Practical Solutions
CARRIAGE HOUSES FOR THE STATEN ISLAND HISTORICAL SOCIETY
RICE+LIPKA ARCHITECTS



Advancing Equity
WEEKSVILLE HERITAGE CENTER / BROOKLYN
CAPLES JEFFERSON ARCHITECTS

Encouraging Activity and Movement
QUEENS MUSEUM
GRIMSHAW WITH AMMANN & WHITNEY

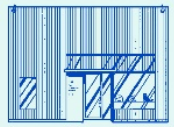
Promoting Sustainability
QUEENS BOTANICAL GARDEN VISITOR & ADMINISTRATION CENTER
BKSK ARCHITECTS

Creating Vitality
PUBLIC THEATER / MANHATTAN
ENNEAD ARCHITECTS

Honoring History
STAPLETON LIBRARY / STATEN ISLAND
ANDREW BERMAN ARCHITECT

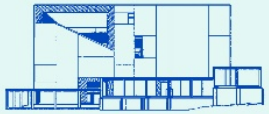
Providing Critical Resources
ZEREGA AVENUE EMS STATION 3 / THE BRONX
SMITH MILLER + HAWKINSON ARCHITECTS

Meeting the City's Needs
MANHATTAN PET ADOPTION CENTER
STUDIO JOSEPH



Promoting Health
CHELSEA SEXUAL HEALTH CLINIC / MANHATTAN
STEPHEN YABLON ARCHITECTURE

Responding Holistically
RESCUE COMPANY 2 / BROOKLYN
STUDIO GANG



Making Communities Stronger
FAR ROCKAWAY LIBRARY / QUEENS
SNØHETTA

Envisioning Change
116th PRECINCT / QUEENS
DATTNER ARCHITECTS

NYC DDC

Department of Design and Construction

PB DESIGN-BUILD: PROJECT DELIVERY STRATEGY

ALISON N. LANDRY – AIA

Bill de Blasio
Mayor

Lorraine Grillo
Commissioner

MARCH 2020

2020 PROJECT DELIVERY LOOKAHEAD

New York State recently passed the New York City Public Works Investment Act (“Act”), which authorizes DDC to award design-build contracts for certain public works within the City.

DESIGN-BUILD PROJECT DELIVERY AT DDC

The Act authorizes design-build project delivery for the following categories of public works:

- Public works projects with an estimated value above $10,000,000; and
- Public works projects with an estimated value above $1,250,000 if the public work:

DESIGN BUILD PROJECT DELIVERY AT DDC

… public works projects above $1,250,000 that meet certain criteria:

- Parks Department
- NYCHA
- Cultural institutions
- Public libraries for NYPL, BPL, and QPL
- Security infrastructure
- Right of way accessibility improvements

DESIGN BUILD PROJECT DELIVERY AT DDC

Objectives

- High quality design
- Team coordination and collaboration
- Qualitative, best value selection of builder
- Construction expertise in the design process
- Design expertise in the construction process

DESIGN BUILD PROJECT DELIVERY AT DDC

Standard Requirements		3 Years On Call
Owner's Representative Services	Design-Build Program	1 Year On Call
Stand-Alone Design Build	Design-Build Project Execution	Project Specific

DESIGN BUILD PROJECT DELIVERY AT DDC

Standard Requirements		3 Years On Call
Owner's Representative Services	Design-Build Program	1 Year On Call
Stand-Alone Design Build	Design-Build Project Execution	Project Specific

STANDARD REQUIREMENTS + DESIGN BUILD

Potential requirements contract task orders for:

- Preliminary design
- Preparation of “bridging documents”
- Scope verification and CA oversight
- Peer review

WORKFLOW: DESIGN-BID-BUILD

- **Biweekly Progress Meetings throughout Design Phase**

  Standard agenda items include:

  - Schedule, Budget, Scope, Accessibility, Code Compliance, Constructability, Utility, Regulatory Approvals
- **Schedule & Cost Estimate provided and reviewed at each Submission**
- **Design Consultant Performance Evaluation at each Milestone**

WORKFLOW: DESIGN BUILD

- **Preliminary Design: may be through Schematic or Design Development, depending on the scope or project**

  Additional tasks may include: preparation of bridging documents and procurement support
- **With Design Builder on board, Designer may stay on to support DDC, depending on the scope or project**

  Additional tasks may include: scope verification, peer review, construction administration oversight

DDC 2020 LOOK AHEAD

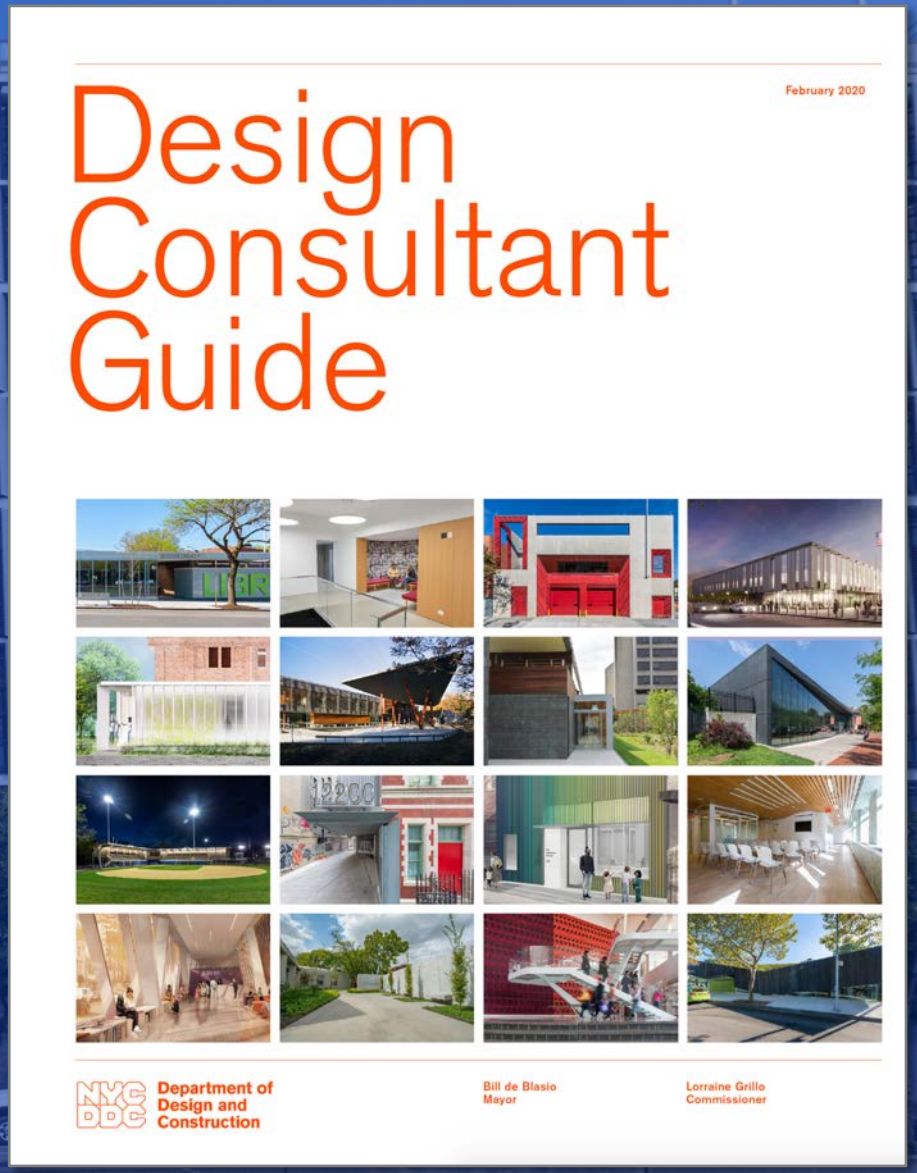
Over the next 6 months we will be

- Releasing an RFP for Owner's Representative Services for Design-Build program
- Capacity building for in-house Design-Build knowledge
- Establishing methodology for project selection in conjunction with our sponsor agencies
- Connecting with the industry
- Develop a robust Design-Build program to expand the City's project delivery options

Department of Design and Construction

DESIGN CONSULTANT GUIDE

STARLING KEENE, RA
KATE SOLIS, LEED AP



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Lorraine Grillo
Commissioner

MARCH 2020

BUILDING FOR THE CITY

PUBLIC BUILDINGS

- FEDUCIARY RESPONSIBILITY
- DURABILITY

REGULATORY APPROVALS, ETC.

- LOCAL LAWS
- LPC / PDC
- ADA / ACCESSIBILITY

CITY PROCUREMENT RULES

- SEALED COMPETITIVE BID
- NO DELEGATED DESIGN
- SPECIFICATIONS + LANGUAGE REQUIREMENTS
- COST ESTIMATING UNDER CITY CONSTRUCTION CONTRACT

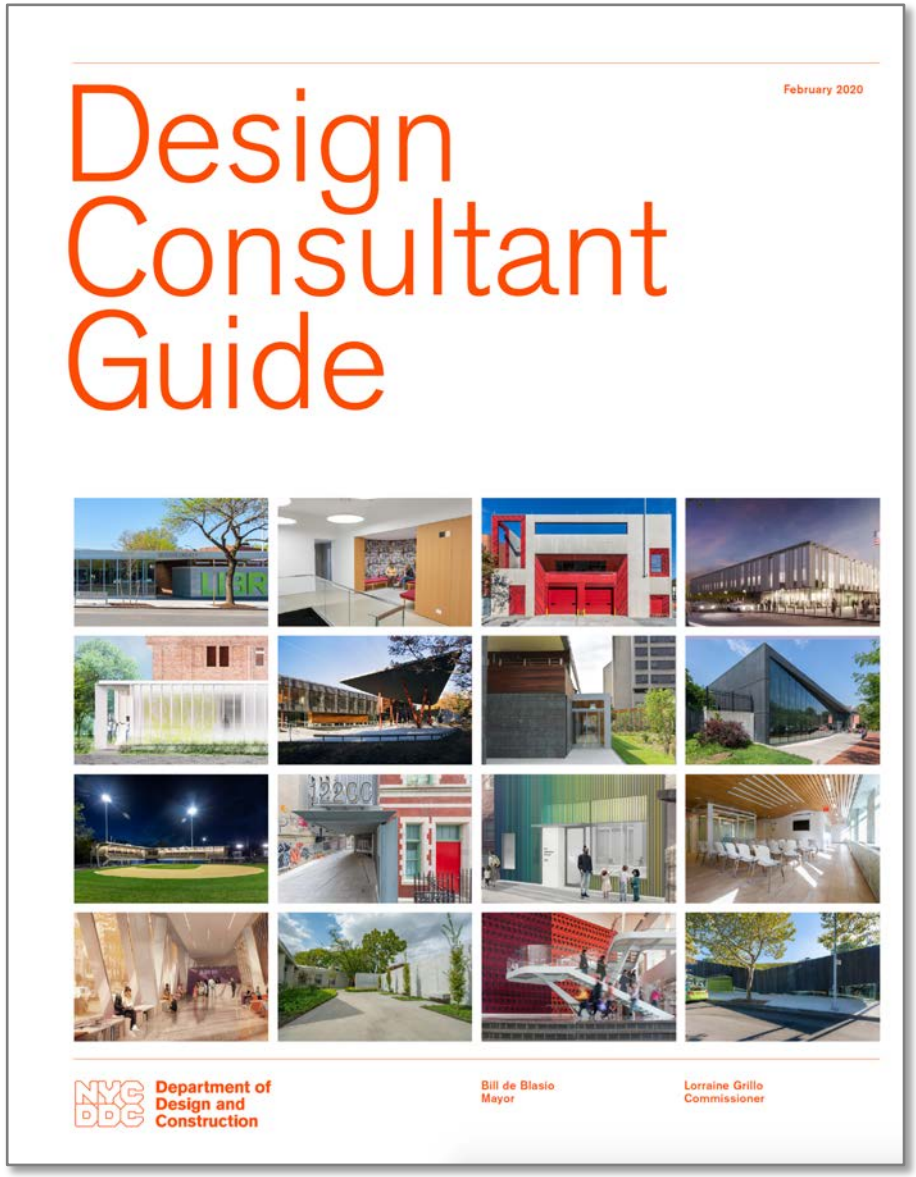
PURPOSE OF THE GUIDE

- HELP NAVIGATE CITY'S REQUIREMENTS
- PROMOTE THE OPTIMAL OUTCOME GIVEN THE ABOVE

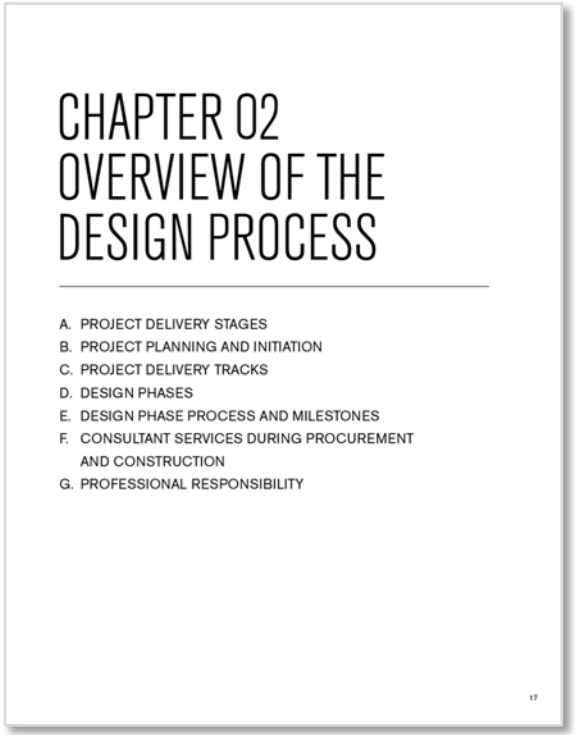
DESIGN CONSULTANT GUIDE 2020

YOUR CONTRACT CONSISTS OF:

- AGREEMENT
- TASK ORDER
- **DESIGN CONSULTANT GUIDE**



STRUCTURE OF THE DESIGN CONSULTANT GUIDE



CHAPTER 02
OVERVIEW OF THE DESIGN PROCESS

A. PROJECT DELIVERY STAGES
B. PROJECT PLANNING AND INITIATION
C. PROJECT DELIVERY TRACKS
D. DESIGN PHASES
E. DESIGN PHASE PROCESS AND MILESTONES
F. CONSULTANT SERVICES DURING PROCUREMENT AND CONSTRUCTION
G. PROFESSIONAL RESPONSIBILITY

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Design-Bid-Build Project Tracks:

TRACK 1 New Construction, Major Renovations

PRE-SCHEMATIC	SD	DD	75% CD	100% CD

TRACK 2 Complex Building System Upgrades, Envelope Reconstruction

PRE-SCHEMATIC	SD/DD	75% CD	100% CD

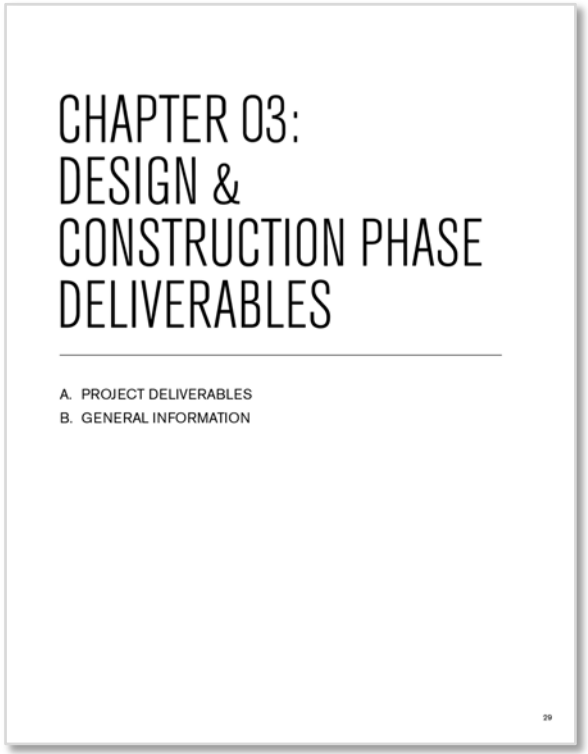
TRACK 3 Simple Building System Upgrades

SD/DD/75% CD	100% CD

TRACK 4 Expedited Design

SD/DD/CD

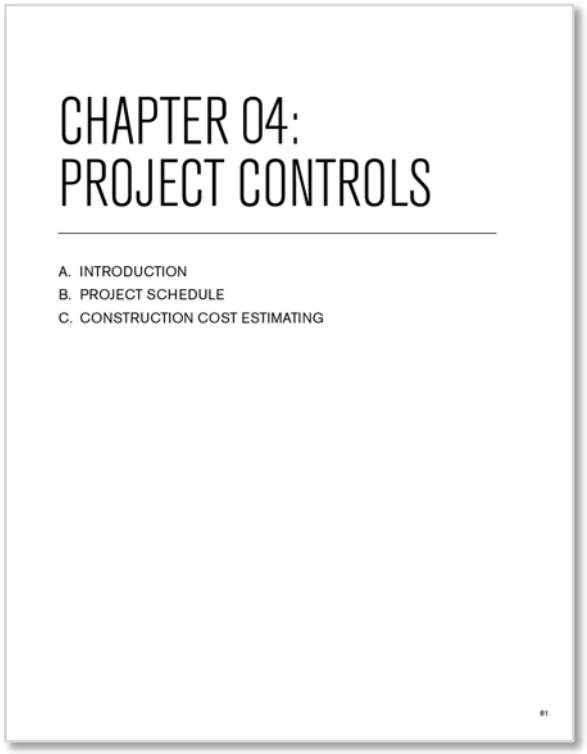
STRUCTURE OF THE DESIGN CONSULTANT GUIDE



CHAPTER 03: DESIGN & CONSTRUCTION PHASE DELIVERABLES

A. PROJECT DELIVERABLES
B. GENERAL INFORMATION

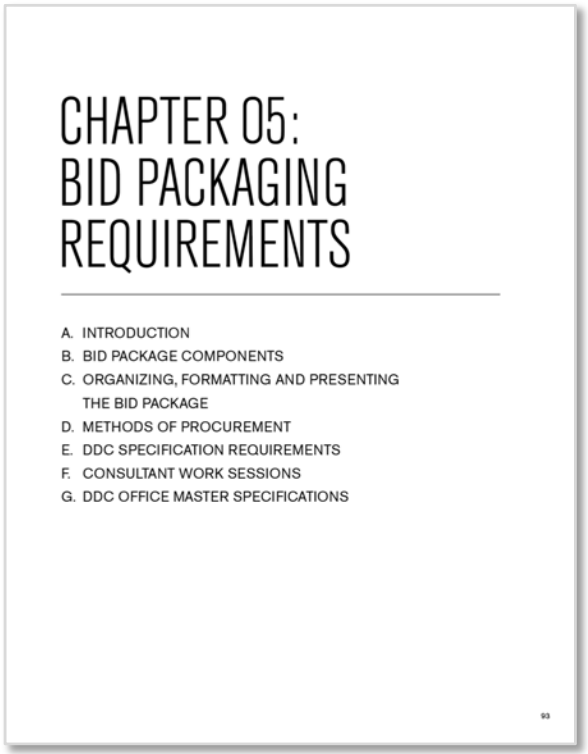
29



CHAPTER 04: PROJECT CONTROLS

A. INTRODUCTION
B. PROJECT SCHEDULE
C. CONSTRUCTION COST ESTIMATING

81



CHAPTER 05: BID PACKAGING REQUIREMENTS

A. INTRODUCTION
B. BID PACKAGE COMPONENTS
C. ORGANIZING, FORMATTING AND PRESENTING THE BID PACKAGE
D. METHODS OF PROCUREMENT
E. DDC SPECIFICATION REQUIREMENTS
F. CONSULTANT WORK SESSIONS
G. DDC OFFICE MASTER SPECIFICATIONS

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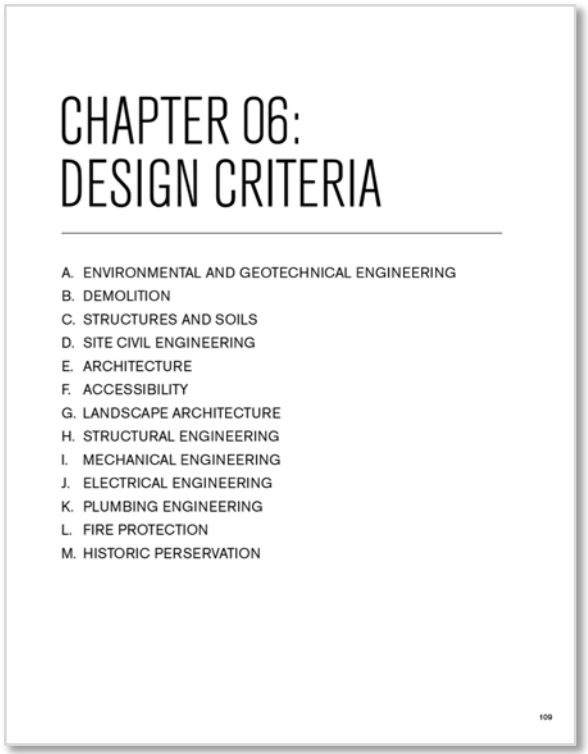

CHAPTER 06: DESIGN CRITERIA

A. ENVIRONMENTAL AND GEOTECHNICAL ENGINEERING
B. DEMOLITION
C. STRUCTURES AND SOILS
D. SITE CIVIL ENGINEERING
E. ARCHITECTURE
F. ACCESSIBILITY
G. LANDSCAPE ARCHITECTURE
H. STRUCTURAL ENGINEERING
I. MECHANICAL ENGINEERING
J. ELECTRICAL ENGINEERING
K. PLUMBING ENGINEERING
L. FIRE PROTECTION
M. HISTORIC PERSERVATION

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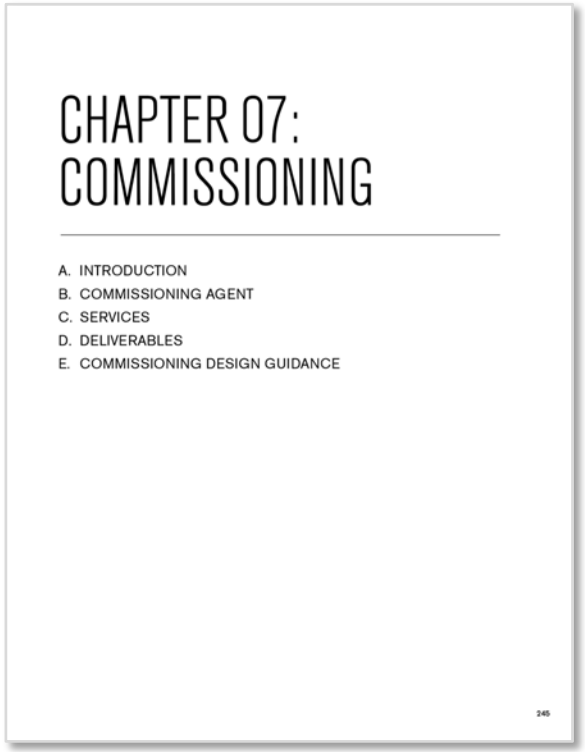
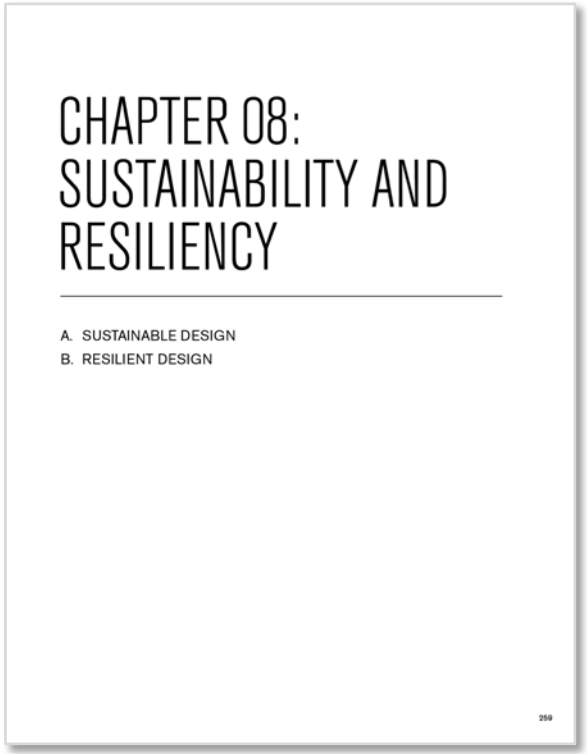
STRUCTURE OF THE DESIGN CONSULTANT GUIDE



CHAPTER 07: COMMISSIONING

A. INTRODUCTION
B. COMMISSIONING AGENT
C. SERVICES
D. DELIVERABLES
E. COMMISSIONING DESIGN GUIDANCE

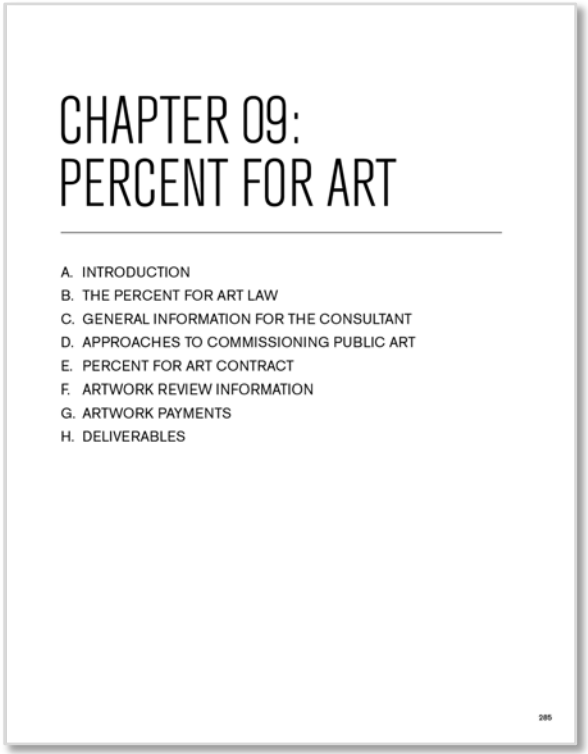
245



CHAPTER 08: SUSTAINABILITY AND RESILIENCY

A. SUSTAINABLE DESIGN
B. RESILIENT DESIGN

259



CHAPTER 09: PERCENT FOR ART

A. INTRODUCTION
B. THE PERCENT FOR ART LAW
C. GENERAL INFORMATION FOR THE CONSULTANT
D. APPROACHES TO COMMISSIONING PUBLIC ART
E. PERCENT FOR ART CONTRACT
F. ARTWORK REVIEW INFORMATION
G. ARTWORK PAYMENTS
H. DELIVERABLES

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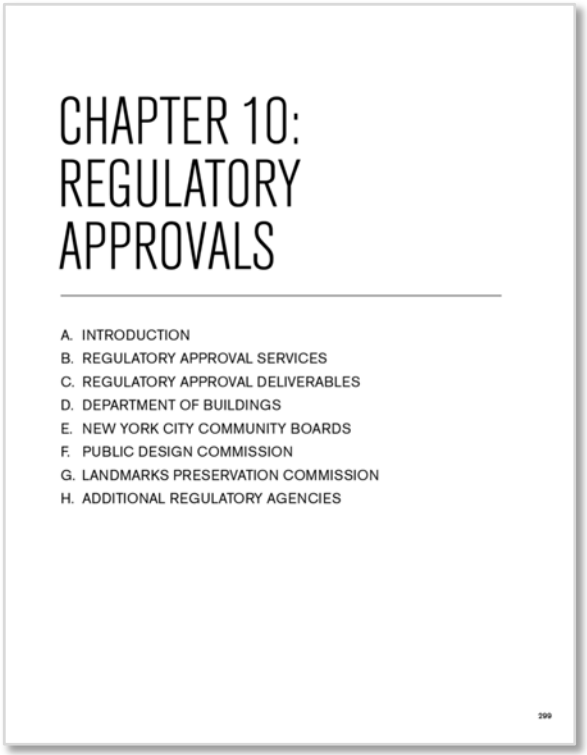

CHAPTER 10: REGULATORY APPROVALS

A. INTRODUCTION
B. REGULATORY APPROVAL SERVICES
C. REGULATORY APPROVAL DELIVERABLES
D. DEPARTMENT OF BUILDINGS
E. NEW YORK CITY COMMUNITY BOARDS
F. PUBLIC DESIGN COMMISSION
G. LANDMARKS PRESERVATION COMMISSION
H. ADDITIONAL REGULATORY AGENCIES

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DCG KEY POINTS:

CHAPTER 03: SD PHASE DELIVERABLES

SD INTERIM SUBMISSION I : INVESTIGATIONS

- ADA & ACCESSIBILITY ANALYSIS
- CODE & ZONING ANALYSIS
- LL 31 – SITING AND APPROACH TO ENERGY CONSERVATION IS FOUNDATIONAL
- FILING PATHWAY AND REQUIRED APPROVALS

SD INTERIM SUBMISSION II : OPTIONS

- COSTS
- EVALUATION OF DESIGN OPTIONS

REGARDLESS OF PROJECT DELIVERY TRACK, THESE ITEMS ARE ALWAYS REQUIRED.

DCG KEY POINTS:

Chapter 08: Sustainability + Resiliency

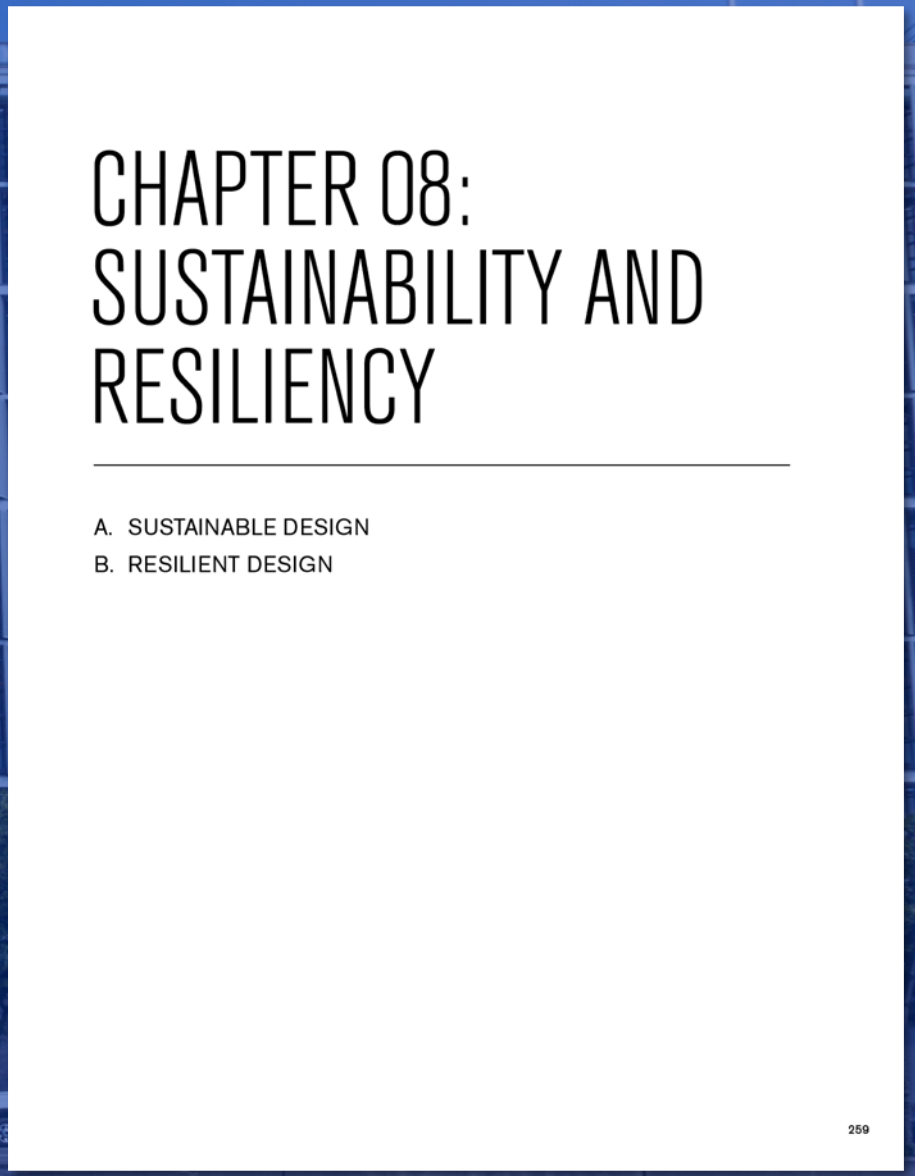
Chapter 04: Project Controls

Chapter 05: Bid Packaging Requirements

Department of Design and Construction

SUSTAINABILITY AND RESILIENCY

CHRISTOPHER DIAMOND, PE, LEED AP
REBECCA SCHMIDT, LEED AP



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Commissioner

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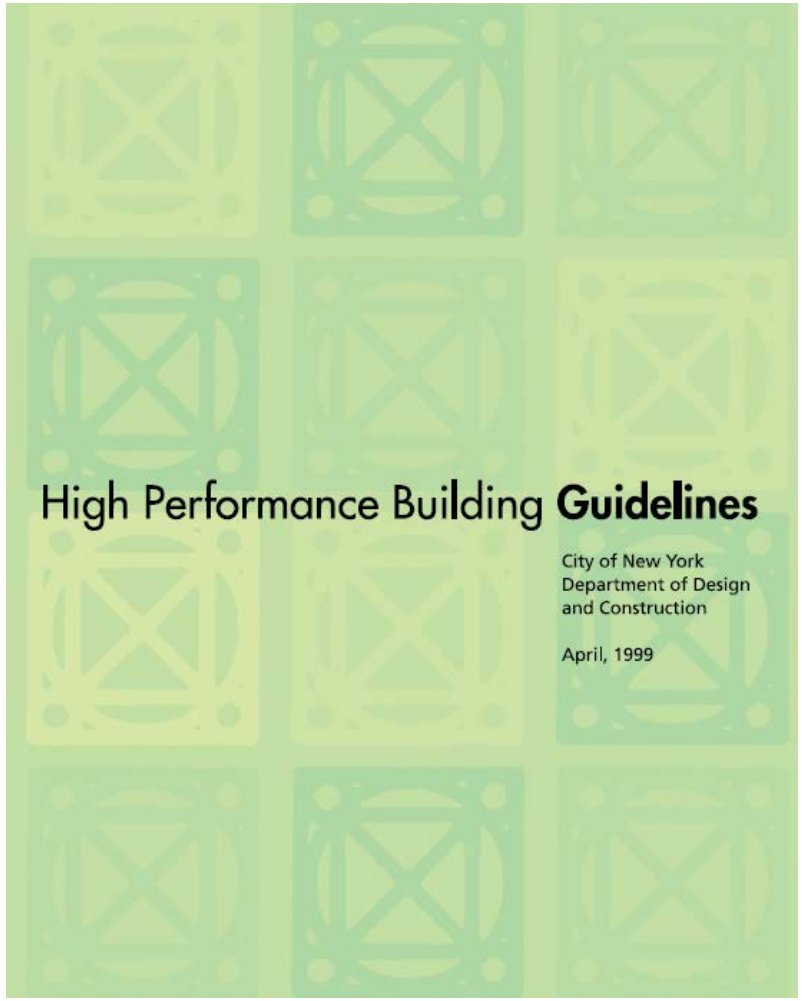
SUSTAINABILITY



DDC's High Performance Building Guidelines, 1999

Queens Botanical Gardens Visitor and Administration Center, LEED Platinum, 2007.
BKSK Architects

SUSTAINABILITY: REGULATIONS

CITY BUILDINGS ONLY

Local Law 31-2016:
Low Energy Intensity Buildings,
Passive House level by 2030

Local Law 32-2016:
LEED Gold Certification

Local Law 6-2014: Geothermal

CITY OF NY MUNICIPAL OPERATIONS

Executive Order 26-2017:
Paris Climate Agreement

Local Law 97-2019:
40% GHG reduction by 2025
50% GHG reduction by 2030

PRIVATE BUILDINGS ONLY

Local Law 97-2019:
GHG emissions cap established
for buildings 25,000sf+
by 2024 and 2030

PRIVATE AND PUBLIC BUILDINGS

NYC Energy Code 2020
(NYCECC2020)

Local Laws 92 & 94-2019
Sustainable Roofing Zones

Local Law 95-2019: Energy Grades

Local Law 97-2019: Citywide GHG reduction: 40% by 2030 and 80% by 2050

SUSTAINABILITY: REGULATIONS

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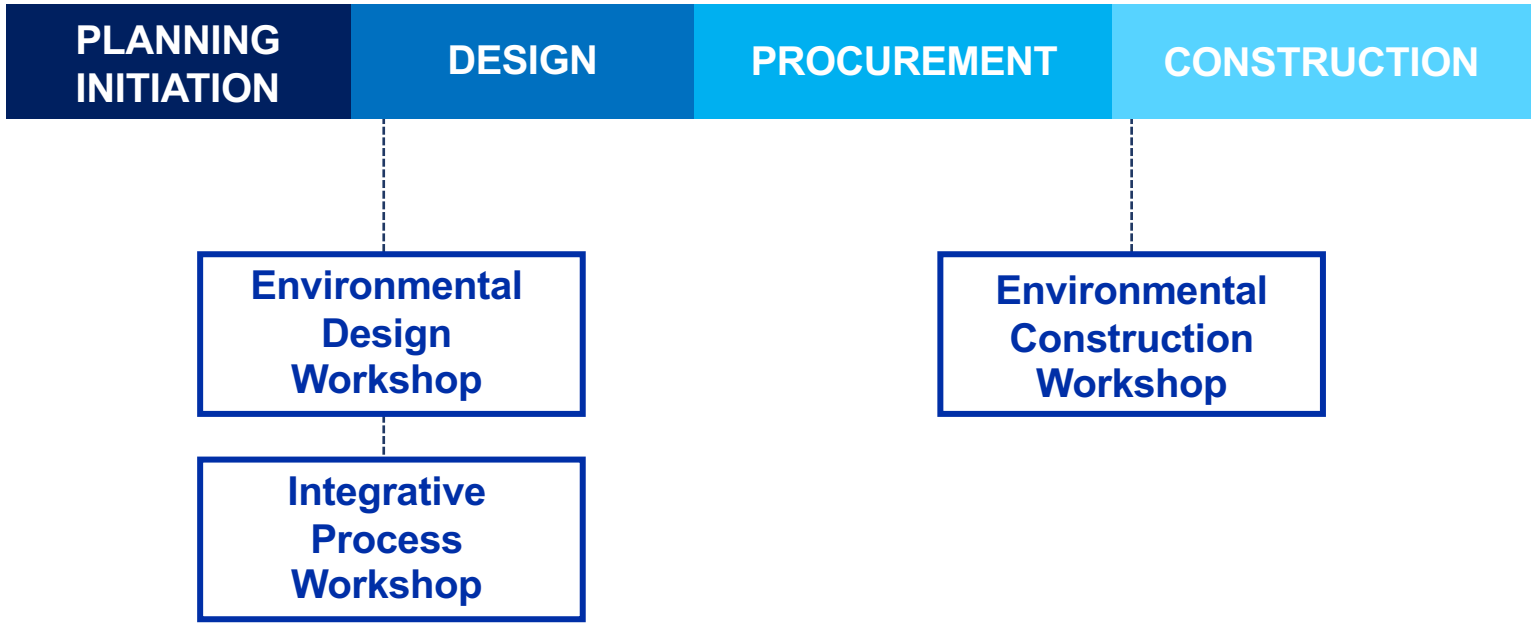
SUSTAINABILITY: INTEGRATIVE PROCESS

DESIGN CONSULTANT GUIDE:

- Focus on Collaboration
- Sustainability Workshops
- Deliverables by Phase



SUSTAINABILITY: INTEGRATIVE PROCESS

DESIGN CONSULTANT GUIDE:

- Focus on Collaboration
- Sustainability Workshops
- Deliverables by Phase

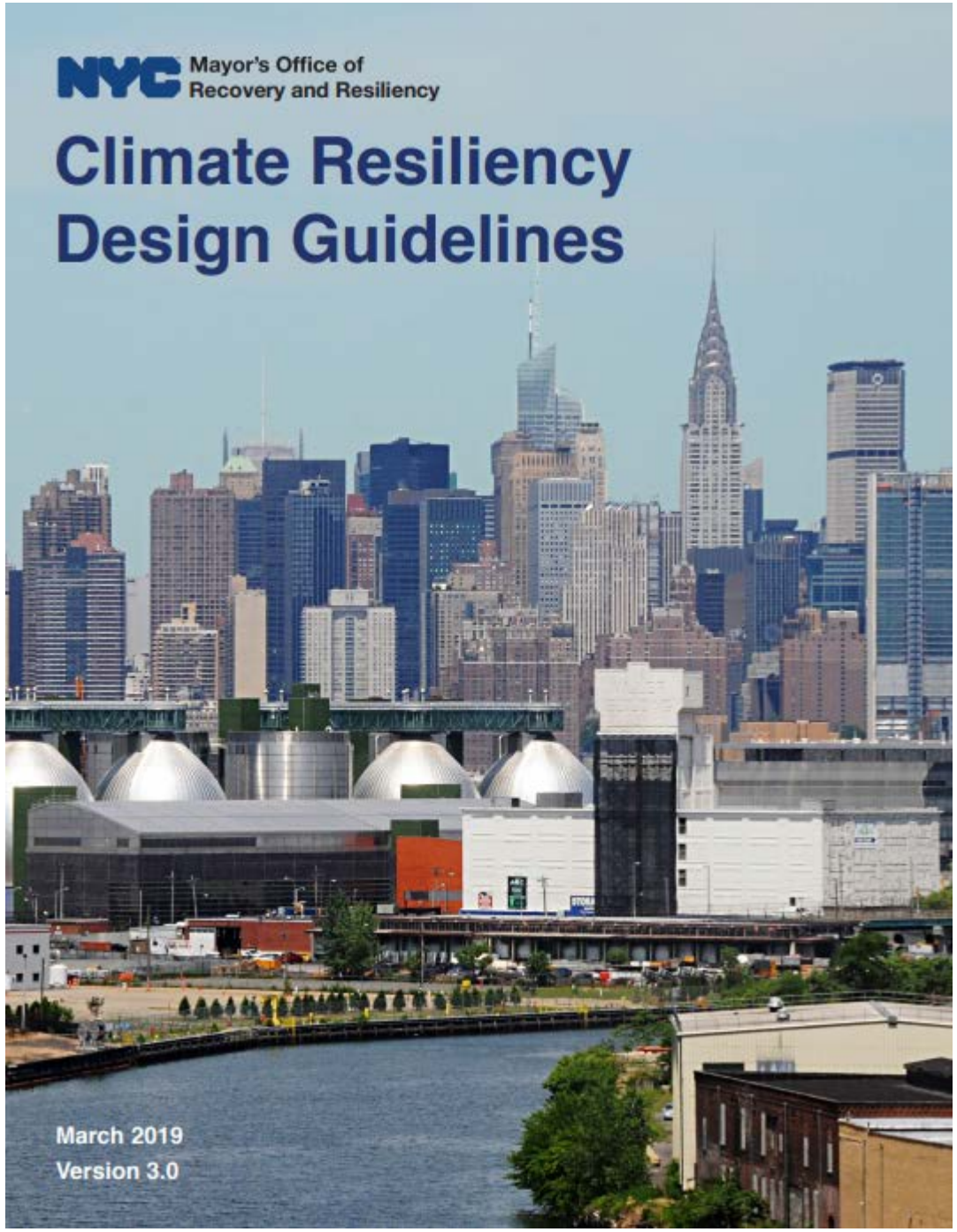
	Project Deliverables	Capital Project Phases										
		Pre-SD	SD			DD		CD		Construction		
			Int. I	Int. II	100%	50%	100%	75%	100%	Bid & Award	Constr. Admin	Post-Constr.
Energy Code	NYCECC Compliance Path Approach	X										
	EN Sheet - MEP Systems						X					
	EN Sheet - Building Envelope						X					
Systems and Whole Building Energy Performance	Energy Audit Report	X										
	Energy Analysis Report			X								
Low Energy Intensity	Approach and EUI Target	X										
	Energy Analysis for all Design Alternatives			X								
	Energy Model Report				X							
	M&V Equipment/ Monitoring Based Commissioning Protocol						X					
	On-site Renewables Feasibility Study		X									
	Net-Zero Feasibility Study		X									
	LEED Project Deliverables (see Section 4.c.vii)	X										
MOEC	Project Intake Form									X		X
GHG	Greenhouse Gas Emissions Assessment				X							
	Solar Assessment				X							

RESILIENCY

Mitigation strategies to address climate change risks:

- Increased heat
- Increased precipitation
- Sea level rise

Version 4.0 anticipated Spring 2020, with a mandatory pilot program.



RESILIENCY: INCREASED HEAT

- Over 100 New Yorkers die annually of causes exacerbated by extreme heat
- Heat waves are expected to get:
  - Longer
  - Hotter, and
  - More frequent
- NYC Panel on Climate Change predicts up to nine heats waves per year by the 2080s and approximately 87 days above 90°F

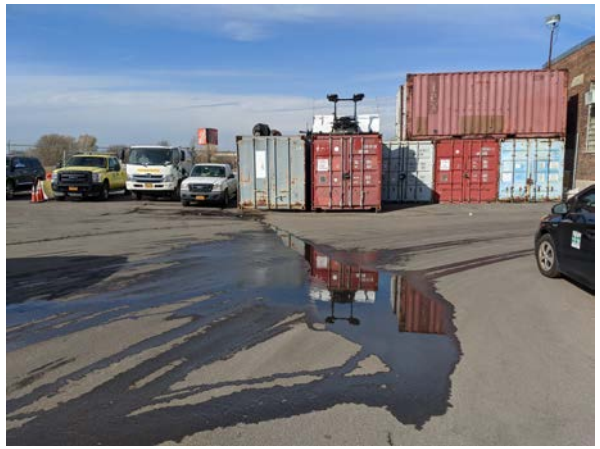
RESILIENCY: INCREASED PRECIPITATION

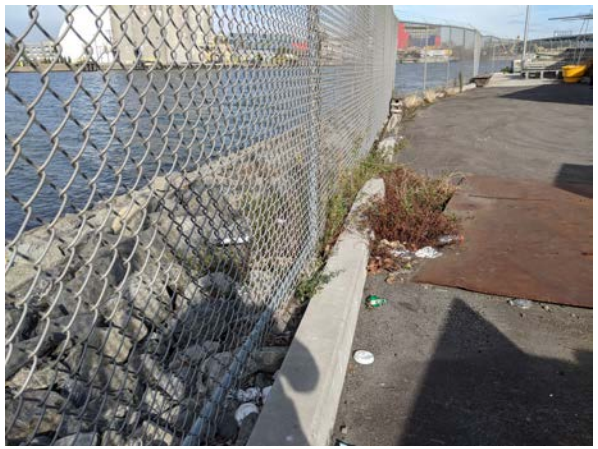
NYC Panel on Climate Change predicts:

- Increase in our “typical” storm that will lead to more releases from our CSOs
- Extreme precipitation events
  - Cloudbursts (2011 Copenhagen, 6” in two hours)
  - Hurricanes (Irene 2011, Tannersville NY, 11.6” in 24 hours)
  - Parallel movement of storm fronts (2014 Islip NY 12.6” in 24 hours)

RESILIENCY: SEA LEVEL RISE

Tidal inundation is expected to flood parts of every borough by 2100.





RESILIENCY: SEA LEVEL RISE

NYC's existing floodplains affects:

- 19% of NYC's total land area
- 782,800 residents
- 125,500 buildings

NYC Flood Hazard Mapper
www1.nyc.gov/site/planning/data-maps/flood-hazard-mapper.page

RESILIENCY: SEA LEVEL RISE

NYC 2100 Predictions:

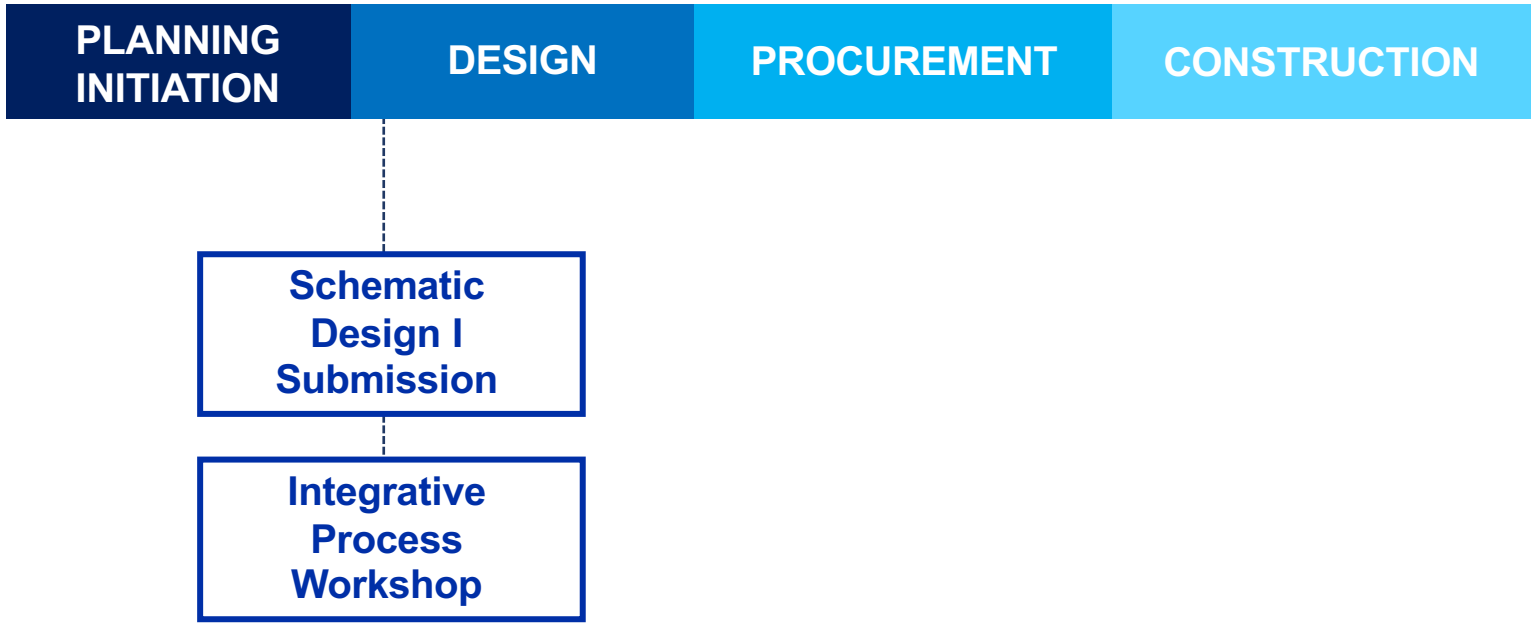
- Doubling of area in the 100-year floodplain
- 50% increase in area in the 500-year floodplain

NYC Flood Hazard Mapper
www1.nyc.gov/site/planning/data-maps/flood-hazard-mapper.page

RESILIENCY

CLIMATE RESILIENCY DESIGN GUIDELINES:

- Risks Identified in SD I
- Measures incorporated into Design
- Guidelines will be updated periodically and may require additional deliverables



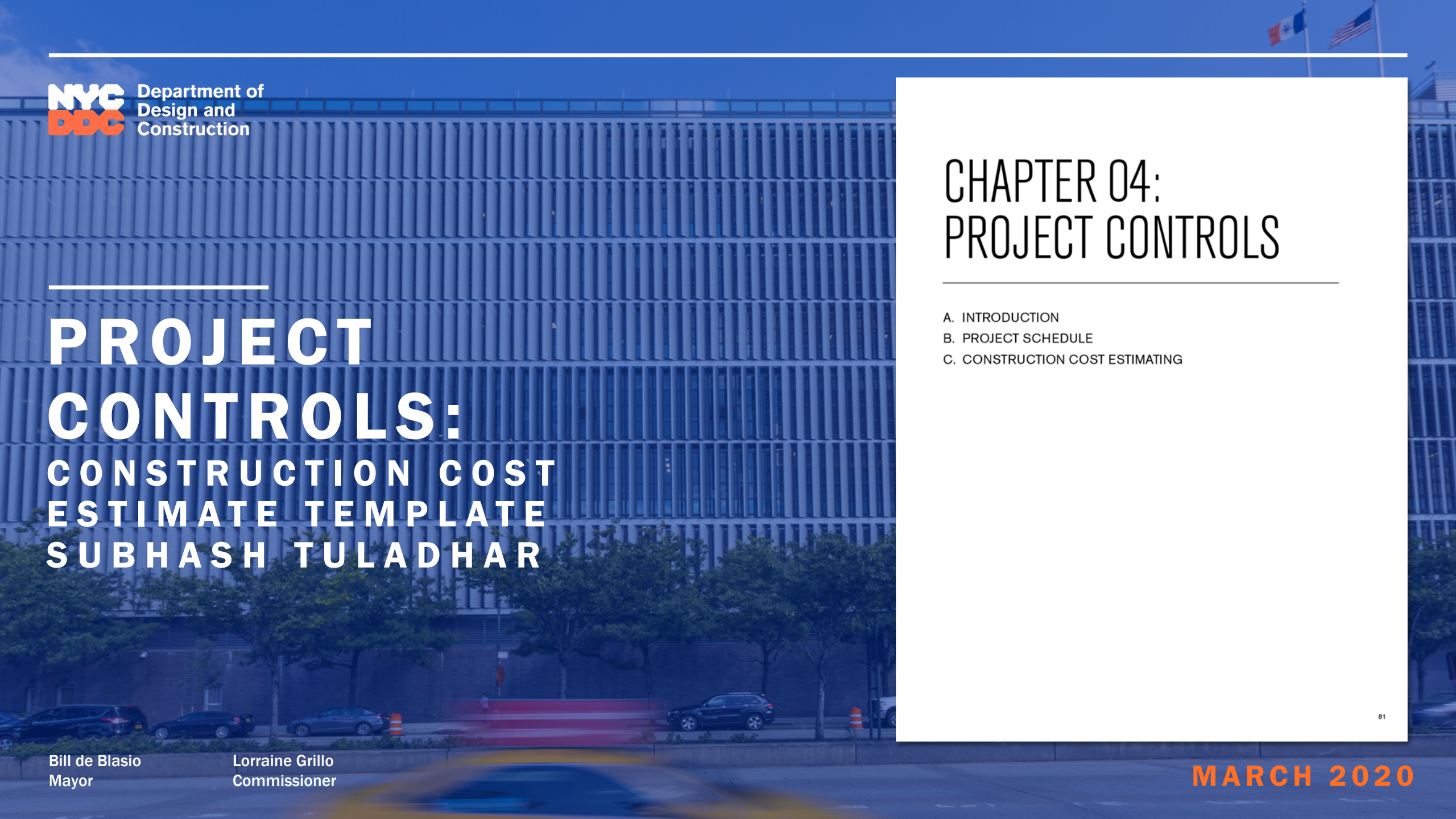
COMMISSIONING

DDC, as Owner, hires the Commissioning Agent.

- LEED Projects
- Required by the Energy Code
- Includes Envelope Commissioning
- Larger fire safety systems
- Complicated MEP systems, especially with a BMS
- If the sponsor agency requests it.

Department of Design and Construction

PROJECT CONTROLS:
CONSTRUCTION COST ESTIMATE TEMPLATE
SUBHASH TULADHAR



CHAPTER 04: PROJECT CONTROLS

A. INTRODUCTION
B. PROJECT SCHEDULE
C. CONSTRUCTION COST ESTIMATING

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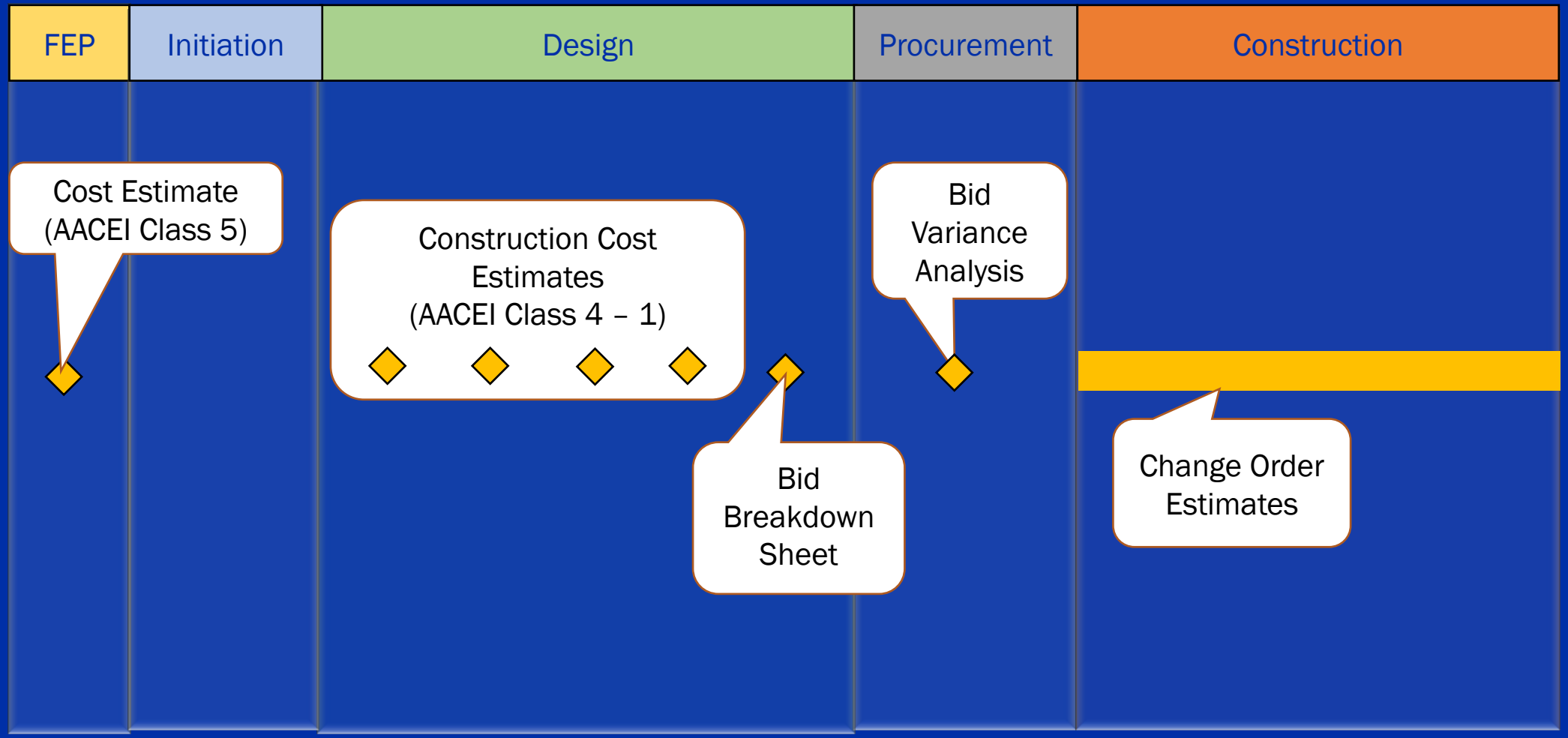
Lorraine Grillo
Commissioner

MARCH 2020

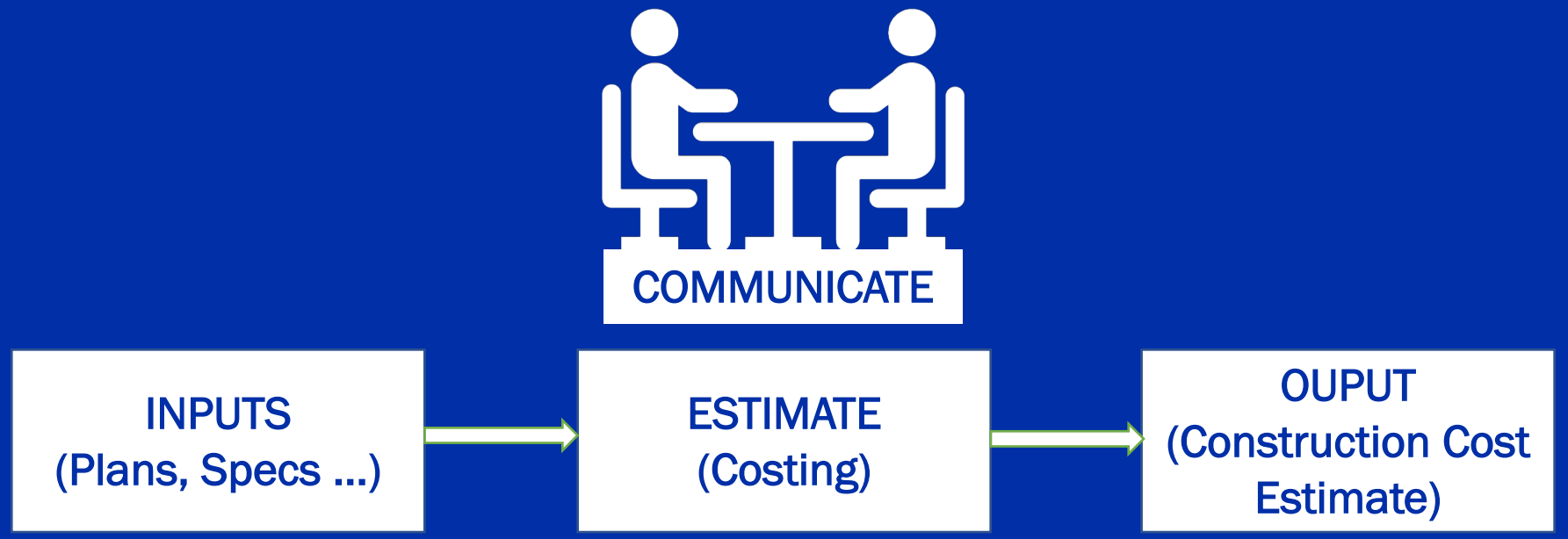
PURPOSE:

- Design to Budget
- Reduce cost growth
- Project fully funded

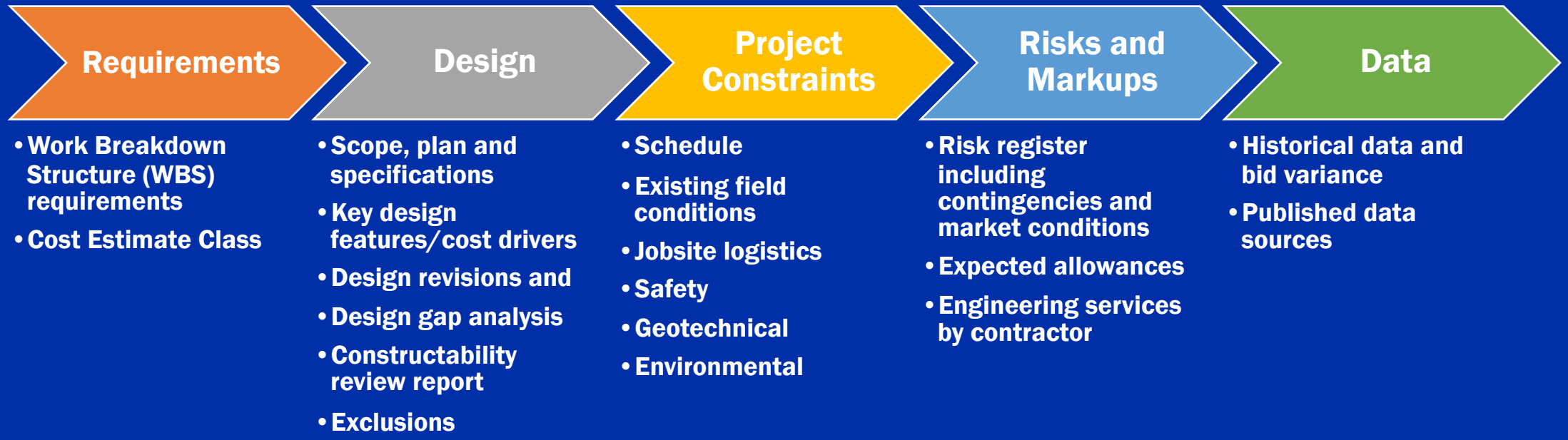
COST ESTIMATING LIFECYCLE



COST ESTIMATING PROCESS



INPUTS:


Requirements
Design
Project Constraints
Risks and Markups
Data
• Work Breakdown Structure (WBS) requirements
• Cost Estimate Class
• Scope, plan and specifications
• Key design features/cost drivers
• Design revisions and
• Design gap analysis
• Constructability review report
• Exclusions
• Schedule
• Existing field conditions
• Jobsite logistics
• Safety
• Geotechnical
• Environmental
• Risk register including contingencies and market conditions
• Expected allowances
• Engineering services by contractor
• Historical data and bid variance
• Published data sources

COST ESTIMATING PROCESS

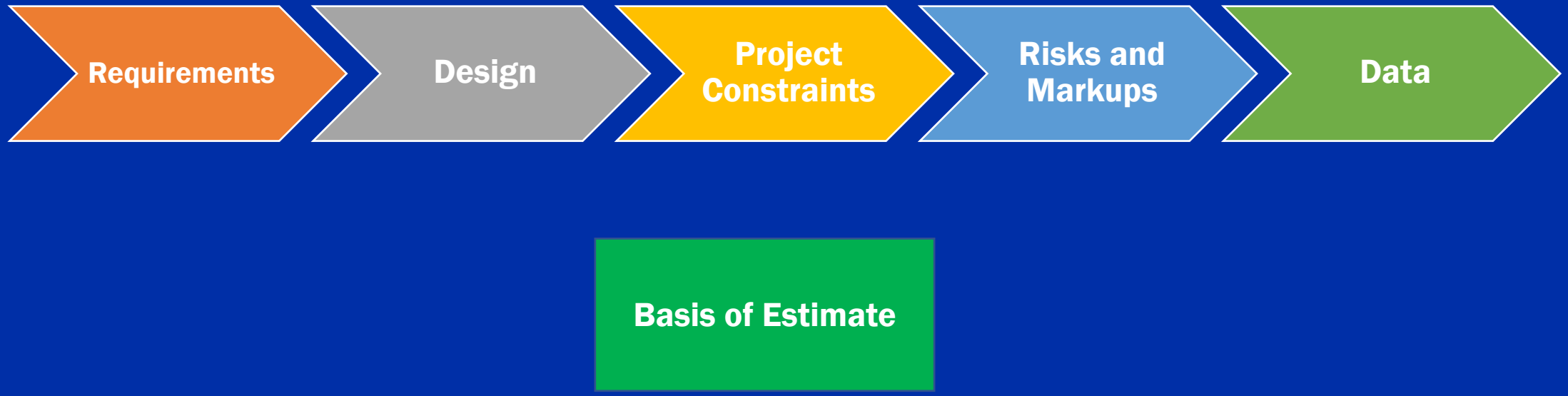
COMMUNICATE

INPUTS
(Plans, Specs ...)

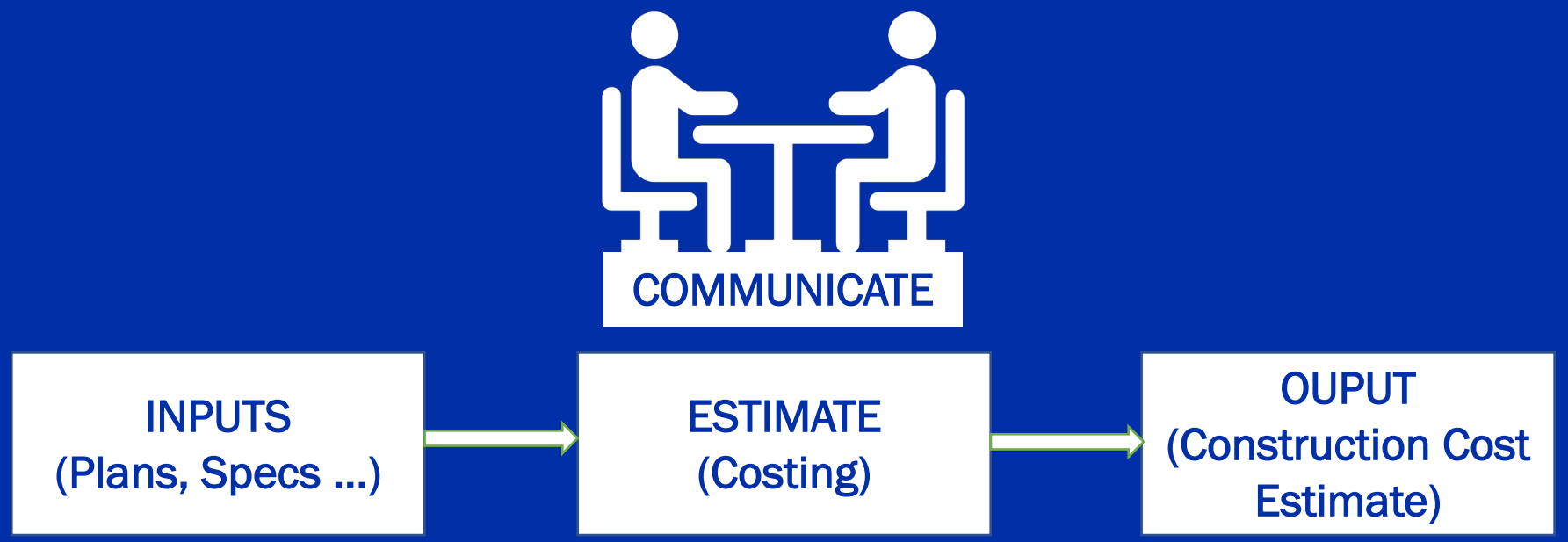
ESTIMATE
(Costing)

OUPUT
(Construction Cost Estimate)

WORKSHOPS


Requirements
Design
Project Constraints
Risks and Markups
Data
Basis of Estimate

COST ESTIMATING PROCESS



STANDARDIZED COST ESTIMATE OUTPUT

Facilities communication

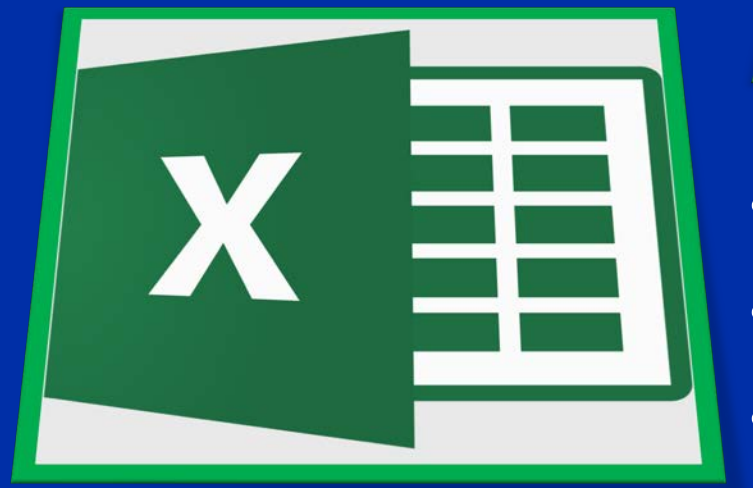
Improves QA / QC

Ensure package is complete

Expedites Reviews and Reconciliation

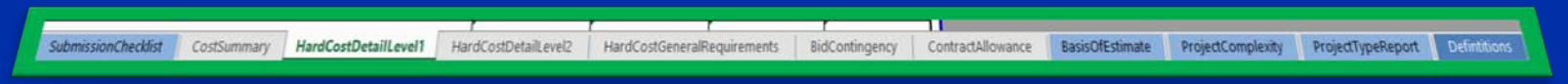
Becomes an Input to DDC historical database

TEMPLATE



… downloadable from DDC website

- Currently adopted in select pilot projects
- Mandatory under new design consultant contract in 2021



- **Submission Checklist**
- **Cost Summary**
- **Detail Worksheets**
  - **Hard Cost (L,M,E)**
  - **General Requirements**
- **Basis of Estimate**
- **Project Report**
- **Markup Definitions**

SUBMISSION CHECKLIST

- confirms completeness
- expedites review

Cost Estimate Submission Checklist

Project ID:	
Project Name:	

Checklist Item	Reference	Included (Y/N)	For DDC Use
Estimating Workshop Minutes of Meeting *1			
Construction Work Cost Summary Worksheet			
Detailed Worksheets			
Hard Cost Detail Worksheet (Level 1)			
Hard Cost Detail Worksheet (Level 2)			
Hard Cost Itemized General Requirements Worksheet			
Bid Contingency Worksheet			
Construction Contract Allowance Worksheet			
Basis of Estimate			
Report			
Project Complexity Report			
Project Type Report			

*1 Minutes of Meeting shall include all decisions made relevant to basis of estimate

COST SUMMARY

presents summary cost estimate in a standard format

Project ID: Construction Work Cost Summary

Line Item	Description	Calculation	Cost
A	Hard Cost	see Detail Sheet	
B	General Conditions	included in Hard Cost, General Requirements (Division 1)	
C	Design Contingency	see Basis of Estimate	
D	Overhead and Profit	see Basis of Estimate	
E	Cost Escalation	see Basis of Estimate	
F	**Subtotal**[1]	**Sum (A thru E)**	
G	Bid Contingency	see Detail Sheet	
H	Construction Contract Allowance	see Detail Sheet	
I	**Estimated Construction Cost at Award**	**F+G+H**	

HARD COST DETAIL (L1)

presents summary cost estimate by CSI Division

Project ID:

Hard Cost Estimate (Level 1)

Line Item No.	Description:	Total cost			Total Cost
		Material:	Labor:	Equipment:	
1	DIVISION 01 - GENERAL REQUIREMENTS				$0.00
2	DIVISION 02 - EXISTING CONDITIONS	$0.00	$0.00	$0.00	$0.00
3	DIVISION 03 - CONCRETE	$0.00	$0.00	$0.00	$0.00
4	DIVISION 04 - MASONRY	$0.00	$0.00	$0.00	$0.00
5	DIVISION 05 - METALS	$0.00	$0.00	$0.00	$0.00
6	DIVISION 06 - WOOD, PLASTICS & COMPOSITES	$0.00	$0.00	$0.00	$0.00
7	DIVISION 07 - THERMAL & MOISTURE PROTECTION	$0.00	$0.00	$0.00	$0.00
8	DIVISION 08 - OPENINGS	$0.00	$0.00	$0.00	$0.00
9	DIVISION 09 - FINISHES	$0.00	$0.00	$0.00	$0.00
10	DIVISION 10 - SPECIALTIES	$0.00	$0.00	$0.00	$0.00
11	DIVISION 11 - EQUIPMENT	$0.00	$0.00	$0.00	$0.00
12	DIVISION 12 - FURNISHINGS	$0.00	$0.00	$0.00	$0.00
13	DIVISION 13 - SPECIAL CONSTRUCTION	$0.00	$0.00	$0.00	$0.00
14	DIVISION 14 - CONVEYING EQUIPMENT	$0.00	$0.00	$0.00	$0.00
15	DIVISION 21 - FIRE SUPPRESSION	$0.00	$0.00	$0.00	$0.00
16	DIVISION 22 - PLUMBING	$0.00	$0.00	$0.00	$0.00
17	DIVISION 23 - HEATING VENTILATION & AIR CONDITIONING	$0.00	$0.00	$0.00	$0.00
18	DIVISION 26 - ELECTRICAL	$0.00	$0.00	$0.00	$0.00
19	DIVISION 27 - COMMUNICATIONS	$0.00	$0.00	$0.00	$0.00
20	DIVISION 28 - ELECTRONIC SAFETY & SECURITY	$0.00	$0.00	$0.00	$0.00
21	DIVISION 31 - EARTHWORK	$0.00	$0.00	$0.00	$0.00
22	DIVISION 32 - EXTERIOR IMPROVEMENTS	$0.00	$0.00	$0.00	$0.00
23	DIVISION 33 - UTILITIES	$0.00	$0.00	$0.00	$0.00
24	DIVISION 34 - TRASPORTATION	$0.00	$0.00	$0.00	$0.00
25	DIVISION 35 - WATERWAY & MARINE CONSTRUCTION	$0.00	$0.00	$0.00	$0.00
26	DIVISION 41 - MATERIAL PROCESSING & HANDLING EQUIPMENT	$0.00	$0.00	$0.00	$0.00
27	DIVISION 44 - POLLUTION & WASTE CONTROL EQUIPMENT	$0.00	$0.00	$0.00	$0.00
28	DIVISION 46 - WATER & WASTEWATER EQUIPMENT	$0.00	$0.00	$0.00	$0.00
29	DIVISION 48 - ELECTRICAL POWER GENERATION	$0.00	$0.00	$0.00	$0.00
	Hard Cost Summary:	**$0.00**	**$0.00**	**$0.00**	**$0.00**

HARD COST DETAIL (L2)

presents detailed cost estimate in CSI Master Format

Material

Labor

Equipment

Project ID:

Hard Cost Estimate (Level 2)

No.	CSI Division:	CSI Ref.:	SOURCES:	Description:	Qty	Unit:	Material $: U/Cost:	Material $: T/Cost:	Labor $: U/Time:	Labor $: T/Time:	Labor $: Wage:	Labor $: U/Cost:	Labor $: T/Cost:	Equipment $: U/Cost:	Equipment $: T/Cost:	Total $: U/Cost:	Total $: T/Cost:	DDC COMMENTS:
	DIVISION 01 - GENERAL REQUIREMENTS																	
	DIVISION 02 - EXISTING CONDITIONS																	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
				SUB TOTAL				$0.00					$0.00		$0.00		$0.00	
	DIVISION 03 - CONCRETE																	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
				SUB TOTAL				$0.00					$0.00		$0.00		$0.00	
	DIVISION 46 - WATER & WASTEWATER EQUIPMENT																	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
				SUB TOTAL				$0.00					$0.00		$0.00		$0.00	
	DIVISION 48 - ELECTRICAL POWER GENERATION																	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
								$0.00		0.000		$0.00	$0.00		$0.00	$0.00	$0.00	
				SUB TOTAL				$0.00					$0.00		$0.00		$0.00	
				Hard Cost:				$ -					$ -		$ -		$0.00	

Quanity includes expected material wastage

GENERAL REQUIREMENTS

Use an itemized general requirements for costing; Modify list, as needed

- **Bond**
- **Insurance**
- **Construction Management (site personnel)**
- **Temporary Facilities and Controls**
- **Project Start-Up**
- **Project Execution**
- **Commissioning and Closeout**

Project ID:

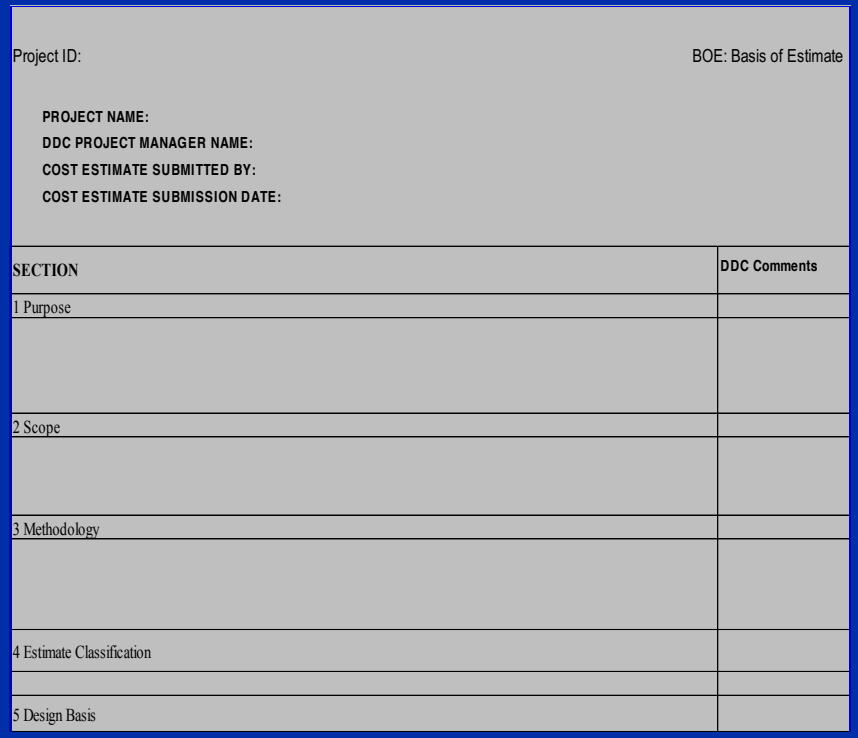
Division 1 General Requirements
(include all General Conditions)

Item#	Description	Qty	Unit	Unit Price	Total Cost	DDC COMMENTS:
	Floor Protection - Temporary scaffolds and platforms, Hoists Setup and remove				$0.00	
	Dewatering				$0.00	
4.6	**Temporary Barriers And Enclosures**					
	Barricades				$0.00	
	Dust Barriers				$0.00	
	Fences				$0.00	
	Pollution Control				$0.00	
	Protective Walkways				$0.00	
	Security Measures				$0.00	
	Tree And Plant Protection				$0.00	
	Protection of adjacent work area including Properties, utilities or equipment etc.				$0.00	
4.7	**Temporary Controls**					
	Erosion And Sediment Control				$0.00	
	Pest Control				$0.00	
	Rodent Control				$0.00	
4.8	**Project Sign**					
	Project Main sign				$0.00	
	Project Specific Identification				$0.00	
5	**Project Start-up**					
5.1	**Permits / Fees**					
	DEP, DOT, DOB Permits				$0.00	
	Expediter Fees				$0.00	
	Scaffold / Rigger Licenses				$0.00	
5.2	**Surveying**					
	Building Layout Survey				$0.00	

BASIS OF ESTIMATE

The documentation allows a full understanding of the estimate:

- **Documents overall project scope**
- **Records cost estimating inputs; how risks and design definition are incorporated**
- **Records key communications**
- **Facilitates review of baseline and changes**
- **Identify stakeholders**



Project ID: BOE: Basis of Estimate

PROJECT NAME:
DDC PROJECT MANAGER NAME:
COST ESTIMATE SUBMITTED BY:
COST ESTIMATE SUBMISSION DATE:

SECTION	DDC Comments
1 Purpose	
2 Scope	
3 Methodology	
4 Estimate Classification	
5 Design Basis	

Adopts AACEI RP 34R-05 (BOE)

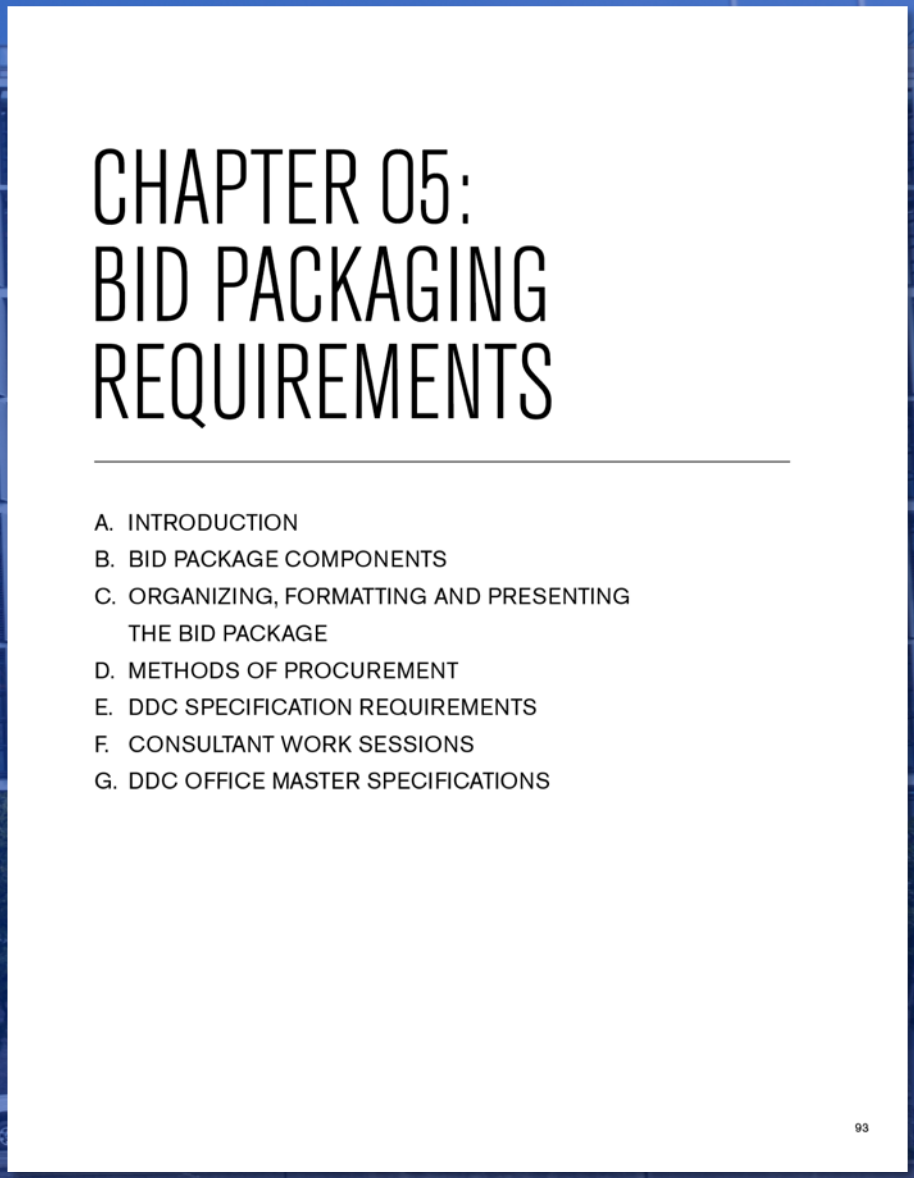
CONCLUSION

- Refer DDC Design Consultant Guide, Chapter 4
- Consider all available INPUTS
- Leverage WORKSHOPS to communicate
  - Work with DDC PM to establish bid and construction contingency
- Adopt the standard Cost Estimate Template
  - Itemize general requirements
  - Document Basis of Estimate
  - Adopt DDC provided definitions for markups

Department of Design and Construction

BID PACKAGING AND OFFICE MASTER SPECIFICATIONS

RICHARD JONES, PE CWI
EXECUTIVE DIRECTOR, SPECIFICATIONS



CHAPTER 05: BID PACKAGING REQUIREMENTS

A. INTRODUCTION
B. BID PACKAGE COMPONENTS
C. ORGANIZING, FORMATTING AND PRESENTING THE BID PACKAGE
D. METHODS OF PROCUREMENT
E. DDC SPECIFICATION REQUIREMENTS
F. CONSULTANT WORK SESSIONS
G. DDC OFFICE MASTER SPECIFICATIONS

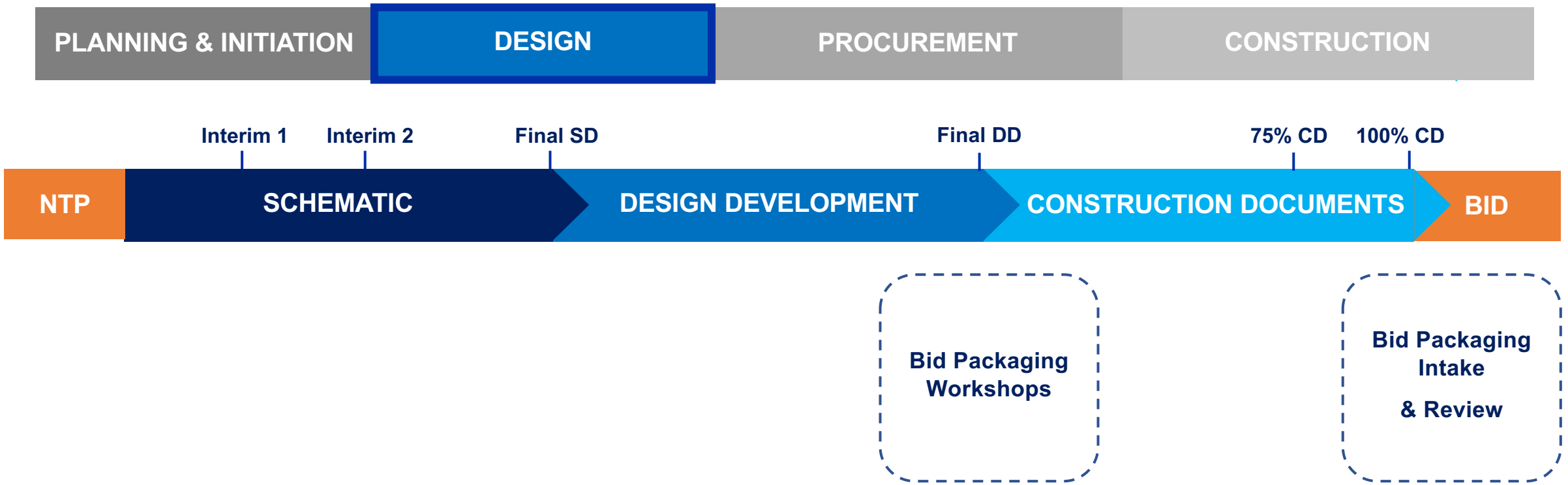
93

Bill de Blasio
Mayor

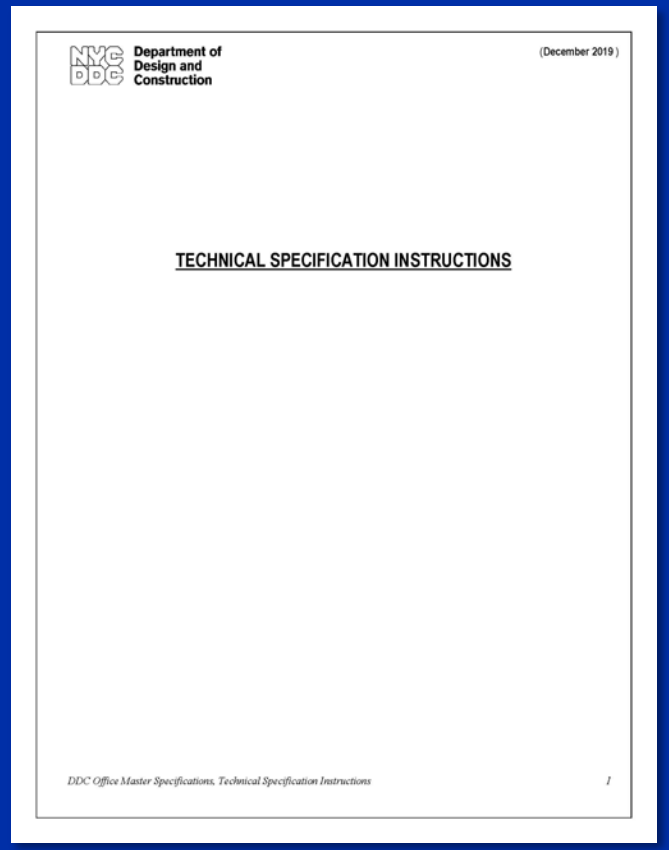
Lorraine Grillo
Commissioner

MARCH 2020

WORKFLOW OVERVIEW:



CONSULTANT BID PACKAGING EXPECTATIONS


Department of Design and Construction

(December 2019)

TECHNICAL SPECIFICATION INSTRUCTIONS

DDC Office Master Specifications, Technical Specification Instructions 1

- **Read and follow the Technical Specification Instructions (TSI) & Design Consultant Guide**
- **Acknowledge that we have special specification requirements.**

  Examples:
  - Unique Division 1 specifications
  - “Commissioner” instead of “Architect”
  - No delegated design
- **Own the clock and turn around comments promptly**

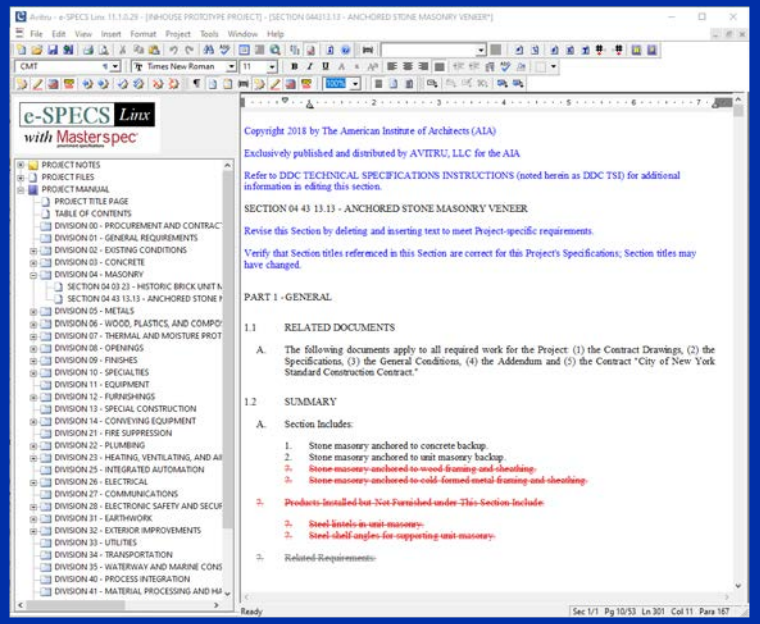
WHAT OMS IS:

- ✓ A software package (Deltek e-SPECS)
- ✓ A set of template document specs (the Office Master)
- ✓ A cloud-based system that allows for collaborative specification development and review
- ✓ Mandatory

WHAT OMS IS NOT:

- ✕ Magic 
- ✕ A replacement for professional specification writers
- ✕ Elimination of any of the current mandatory reviews

OMS SOFTWARE OVERVIEW



e-SPECS® linx

e-SPECS® desktop

- **Software is free to download, licenses provided by DDC.**
- **All files are stored on cloud storage provided by DDC.**
- **Two versions of the software:**
  - **e-SPECS Linx:** for specification writers and publishers
  - **e-SPECS Desktop:** for reviewers and project managers
- **Training will be provided by DDC.**

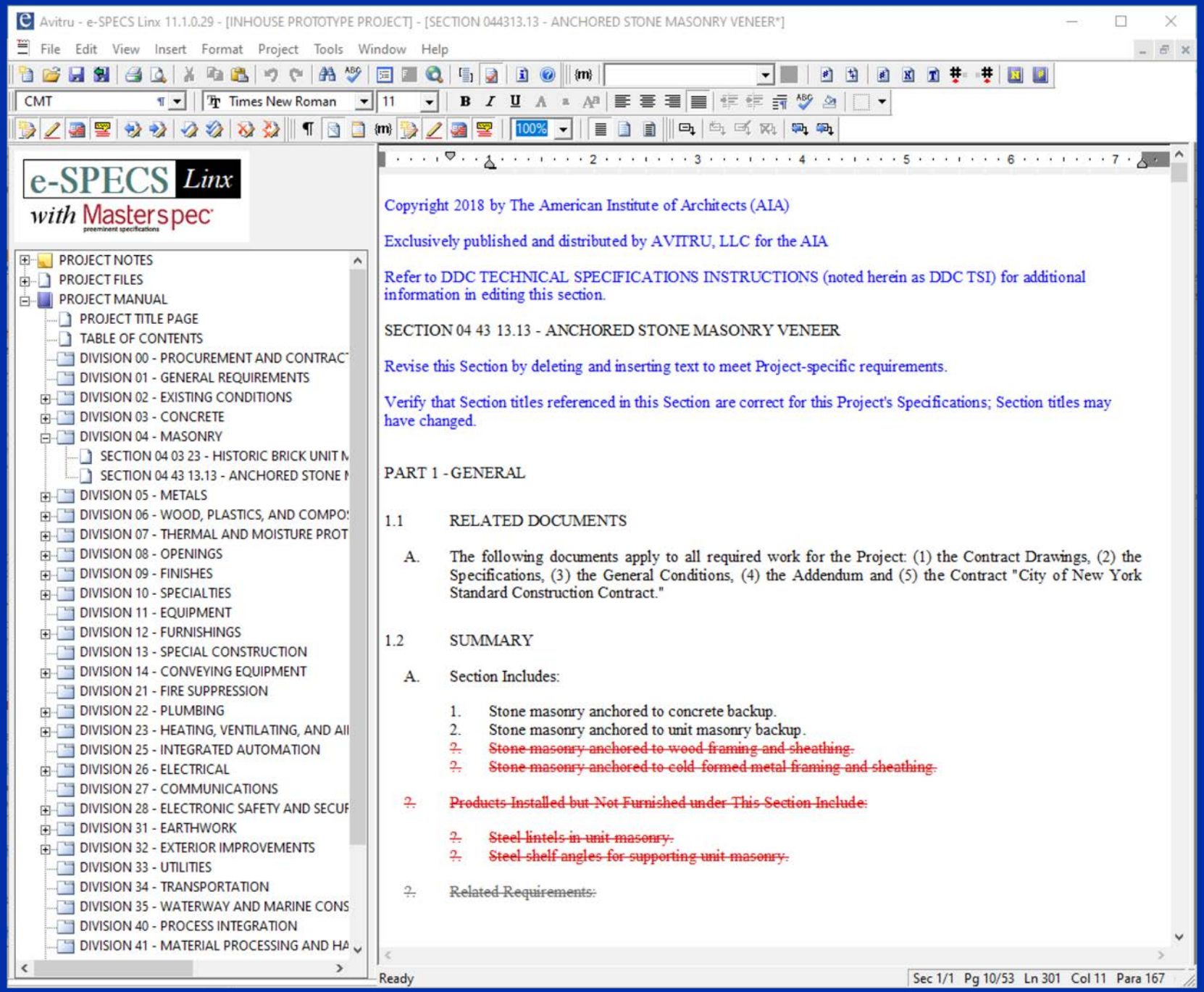
OFFICE MASTER OVERVIEW

MasterSpec®

a product of The American Institute of Architects

- **Based on the AIA Masterspec document**
- **The OM contains 857 sections, Divisions 2 through 49**
- **Customized for DDC use**
  - Word replacements (Architect → Commissioner)
  - Special Notes to Specifiers (blue text)
  - Standard references

E-SPECS


Avitru - e-SPECS Linx 11.1.0.29 - [INHOUSE PROTOTYPE PROJECT] - [SECTION 044313.13 - ANCHORED STONE MASONRY VENEER*]
File Edit View Insert Format Project Tools Window Help
CMT
Times New Roman
11
100%
e-SPECS Linx
with Masterspec
PROJECT NOTES
PROJECT FILES
PROJECT MANUAL
PROJECT TITLE PAGE
TABLE OF CONTENTS
DIVISION 00 - PROCUREMENT AND CONTRAC
DIVISION 01 - GENERAL REQUIREMENTS
DIVISION 02 - EXISTING CONDITIONS
DIVISION 03 - CONCRETE
DIVISION 04 - MASONRY
SECTION 04 03 23 - HISTORIC BRICK UNIT M
SECTION 04 43 13.13 - ANCHORED STONE M
DIVISION 05 - METALS
DIVISION 06 - WOOD, PLASTICS, AND COMPO
DIVISION 07 - THERMAL AND MOISTURE PROT
DIVISION 08 - OPENINGS
DIVISION 09 - FINISHES
DIVISION 10 - SPECIALTIES
DIVISION 11 - EQUIPMENT
DIVISION 12 - FURNISHINGS
DIVISION 13 - SPECIAL CONSTRUCTION
DIVISION 14 - CONVEYING EQUIPMENT
DIVISION 21 - FIRE SUPPRESSION
DIVISION 22 - PLUMBING
DIVISION 23 - HEATING, VENTILATING, AND AI
DIVISION 25 - INTEGRATED AUTOMATION
DIVISION 26 - ELECTRICAL
DIVISION 27 - COMMUNICATIONS
DIVISION 28 - ELECTRONIC SAFETY AND SECUF
DIVISION 31 - EARTHWORK
DIVISION 32 - EXTERIOR IMPROVEMENTS
DIVISION 33 - UTILITIES
DIVISION 34 - TRANSPORTATION
DIVISION 35 - WATERWAY AND MARINE CONS
DIVISION 40 - PROCESS INTEGRATION
DIVISION 41 - MATERIAL PROCESSING AND HA
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Refer to DDC TECHNICAL SPECIFICATIONS INSTRUCTIONS (noted herein as DDC TSI) for additional information in editing this section.
SECTION 04 43 13.13 - ANCHORED STONE MASONRY VENEER
Revise this Section by deleting and inserting text to meet Project-specific requirements.
Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.
PART 1 - GENERAL
1.1 RELATED DOCUMENTS
A. The following documents apply to all required work for the Project: (1) the Contract Drawings, (2) the Specifications, (3) the General Conditions, (4) the Addendum and (5) the Contract "City of New York Standard Construction Contract."
1.2 SUMMARY
A. Section Includes:
1. Stone masonry anchored to concrete backup.
2. Stone masonry anchored to unit masonry backup.
?. Stone masonry anchored to wood framing and sheathing.
?. Stone masonry anchored to cold-formed metal framing and sheathing.
?. Products Installed but Not Furnished under This Section Include:
?. Steel lintels in unit masonry.
?. Steel shelf angles for supporting unit masonry.
?. Related Requirements:
Ready
Sec 1/1 Pg 10/53 Ln 301 Col 11 Para 167

SELECTING SPEC PARTS WITH CHECKLIST

Selecting paragraph options

~~determine the distance to Project site.~~

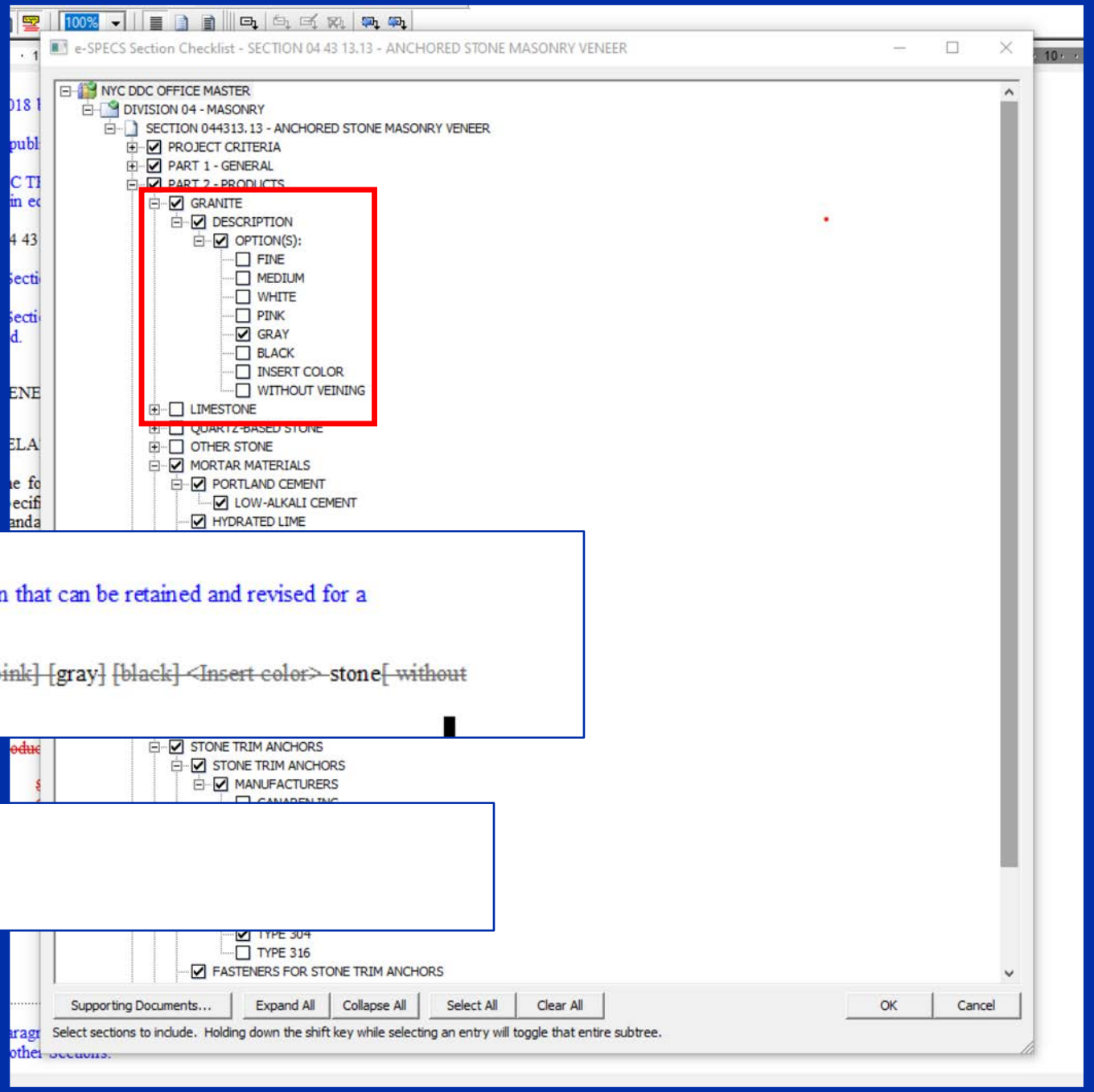
"Description" Paragraph below is an example of a generic description that can be retained and revised for a nonproprietary specification.

C. Description: Uniform, ~~[fine] [medium]~~-grained, ~~[white] [pink]~~ [gray] ~~[black] <Insert color>~~ stone~~[without veining]~~.

Selecting paragraphs

~~2.2 LIMESTONE <Insert drawing designation>~~

~~2. Material Standard: Comply with ASTM C 568/C 568M.~~



SELECTING OPTIONS WITH BRACKET TOOL

Delete first subparagraph below if not required.

4. Fabricate through-wall flashing with snaplock receiver on exterior face where indicated to receive counterflashing.

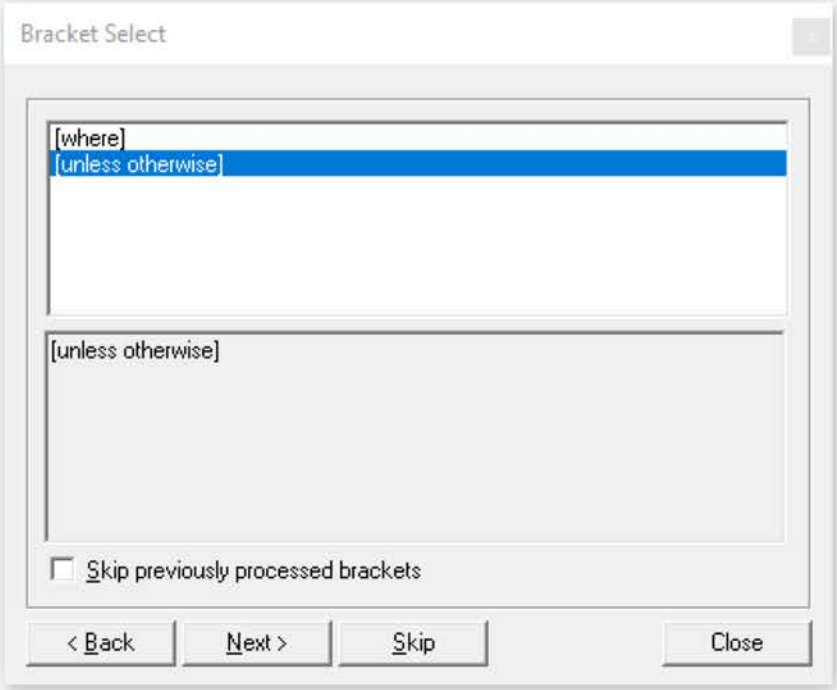
Usually, retain one of first two subparagraphs below, or both, if using metal through-wall flashing. See the Evaluations in Section 04 20 00 "Unit Masonry."

5. Fabricate through-wall flashing with drip edge ~~[where] [~~unless otherwise~~]~~ indicated. Fabricate by extending flashing 1/2 inch13 mm out from wall, with outer edge bent down 30 degrees~~[~~ and hemmed~~]~~.

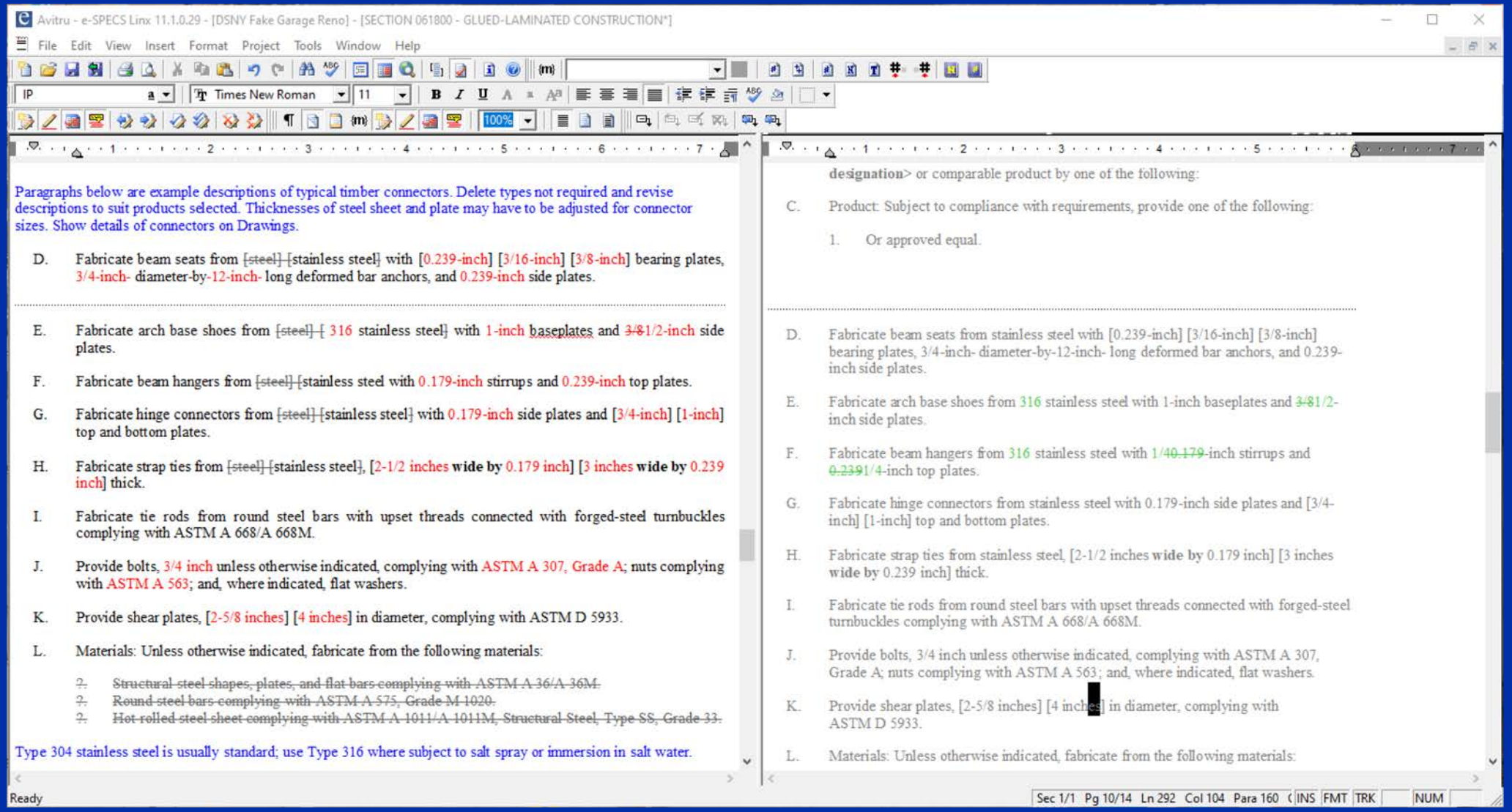
~~7. Fabricate through-wall flashing with sealant stop [where] [unless otherwise] indicated. Fabricate by bending metal back on itself 3/4 inch19 mm at exterior wall face and down into joint 3/8 inch10 mm to form a stop for retaining sealant backer rod.~~

Retain first subparagraph below if using one of first two subparagraphs above with ribbed metal flashing.

6. Fabricate metal [drip edges] [and] [sealant stops] for ribbed metal flashing from plain metal flashing



MARKUPS WITH E-SPECS DESKTOP




QUEENS LIBRARY







122CC

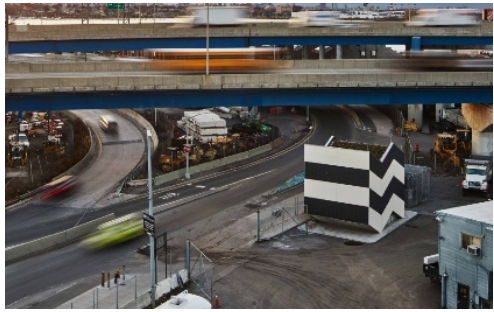












THANK YOU!
QUESTIONS?