



# **DOT DESIGN PROCESS INTEGRATED ENVIRONMENTAL REVIEW**

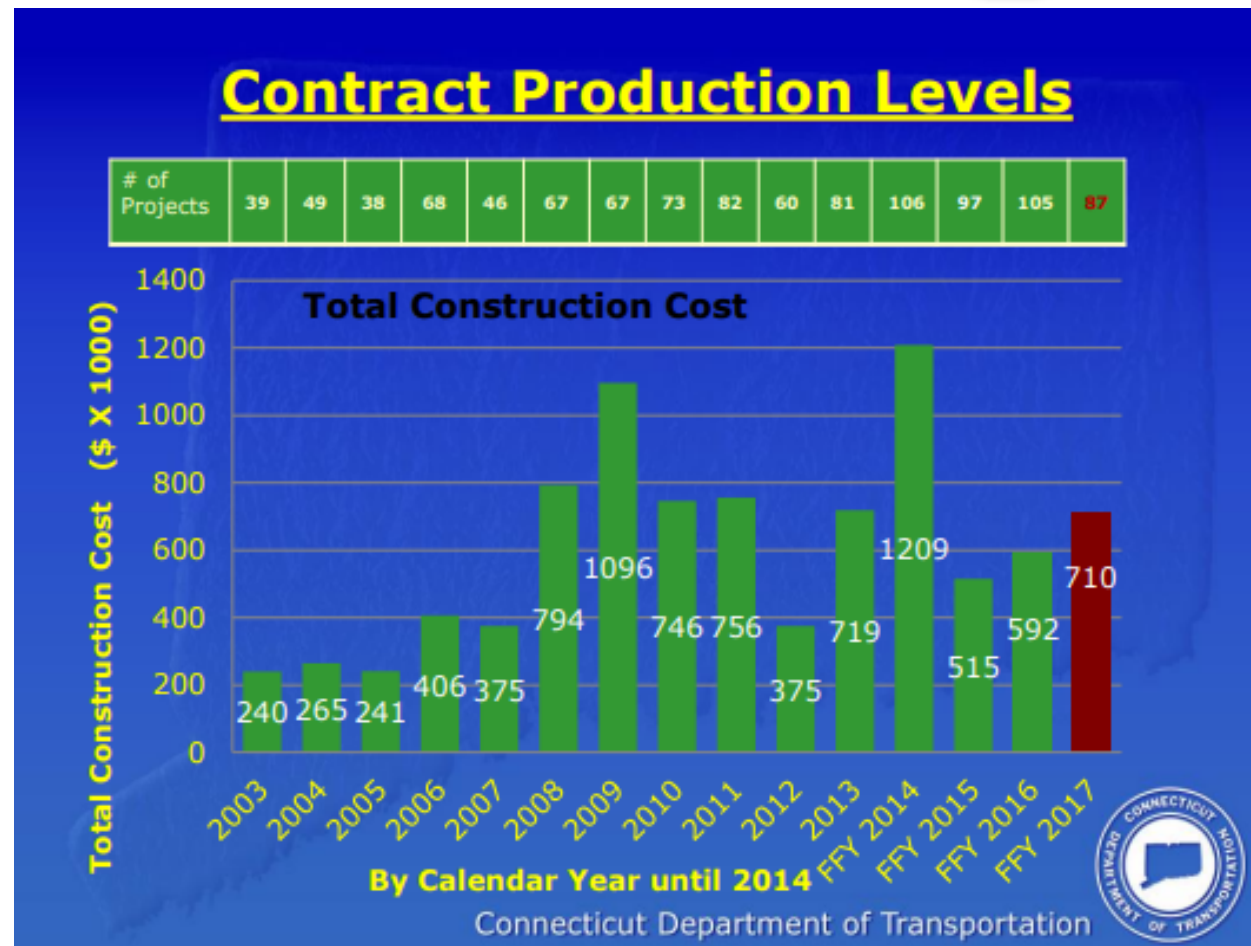
How Environmental Permits/Commitments are  
administered by the Department

Environmental Summit  
**November 20, 2018**

# DOT Capital Program



- 87 - 106 Projects Administered per year
- 33% of projects that involve DEEP input.



# Capital Plan Development



- Projects are Programmed/Initiated
  - Transportation Asset Management Plan
  - Public Transportation
    - Rail, Bus, Transit Districts
  - Highway & Bridge
    - Safety, System Preservation, Mobility Enhancements, Congestion Relief, and Criticality
  - Complete Streets – safe traffic for pedestrians, bikes, etc.
  - Locally Administered Projects
- Projects are Funded
  - Federal – Typically 80% Federal/20% State
  - State - Only



# Who is Responsible?



## COMMISSIONER OF TRANSPORTATION JAMES P. REDEKER

### BUREAU OF ENGINEERING & CONSTRUCTION

- Lead Design Units
- Environmental Permit Coordination
- Environmental Compliance
- Hydraulics & Drainage
- Construction

### BUREAU OF PUBLIC TRANSPORTATION

- Lead Design Units
  - Rail bridges
  - Railroads
  - Public Trans Facilities

### BUREAU OF POLICY & PLANNING

- Environmental Planning

### BUREAU OF FINANCE & ADMINISTRATION

- \$
- Safety

### BUREAU OF HIGHWAY OPERATIONS

- Maintenance Activities
  - Drainage
  - Roadways
  - Bridge
  - Electrical
  - Landscape

# Policy & Planning

Bureau Chief  
Thomas Maziarz



Planning Director  
Robert Bell

Planning Director  
Robbin Cabelus

Strategic Planning and  
Projects

Environmental Planning  
Assistant Director – Kim  
Lesay

Coordination, Modelling  
and Crash Data

Roadway Information  
Systems

Highway Safety

Policy

Intermodal Planning

Trip & Traffic Analysis

Research & Performance  
Measures

Environmental/Historic  
Documents

Water/Natural Resources

Water/Noise Compliance

Statewide Transportation  
Improvement Program

RPO Coordination

Travel Demand/AQ  
Modeling

Roadway Inventory

Photolog

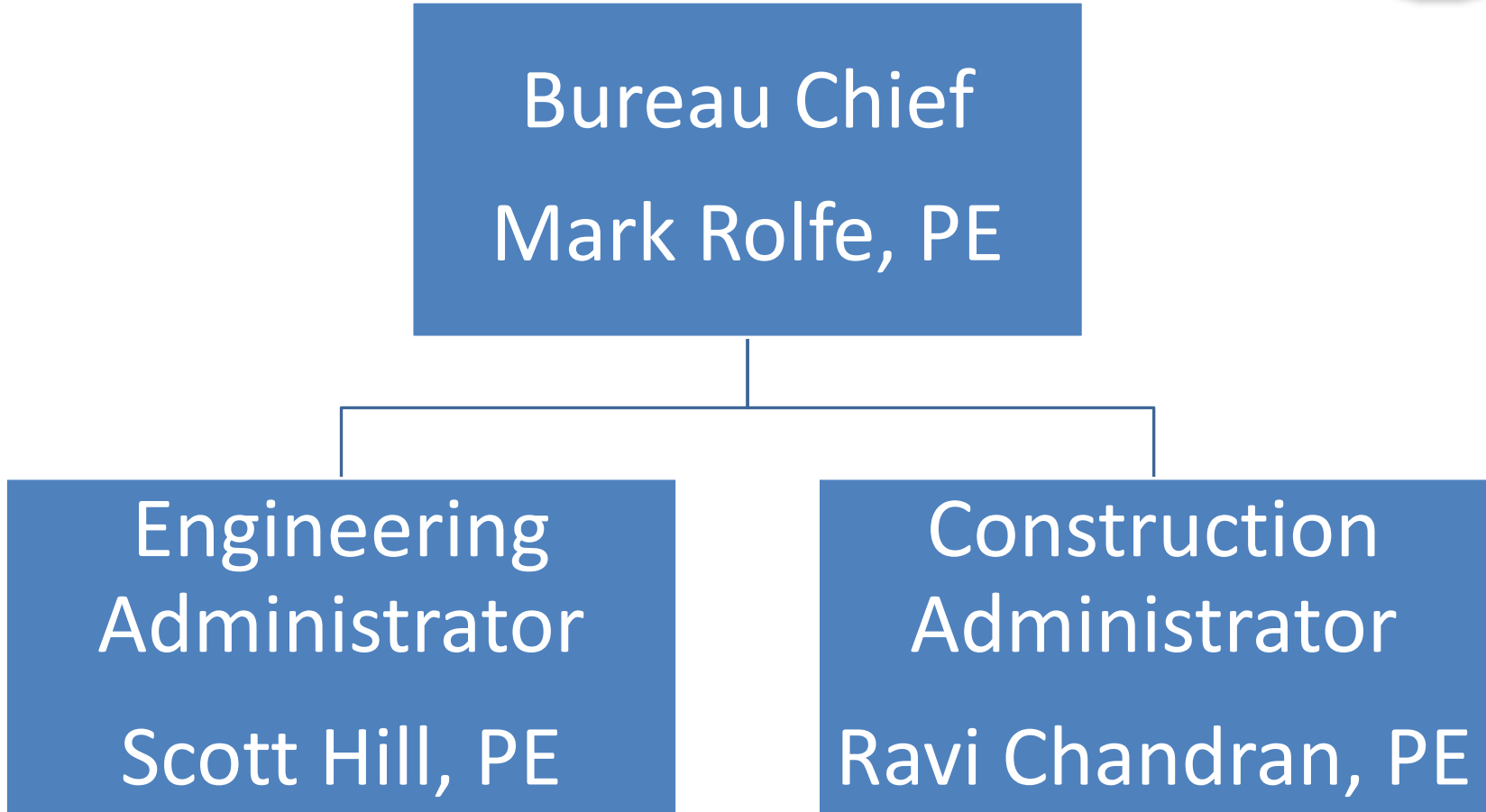
Traffic Monitoring

Programs

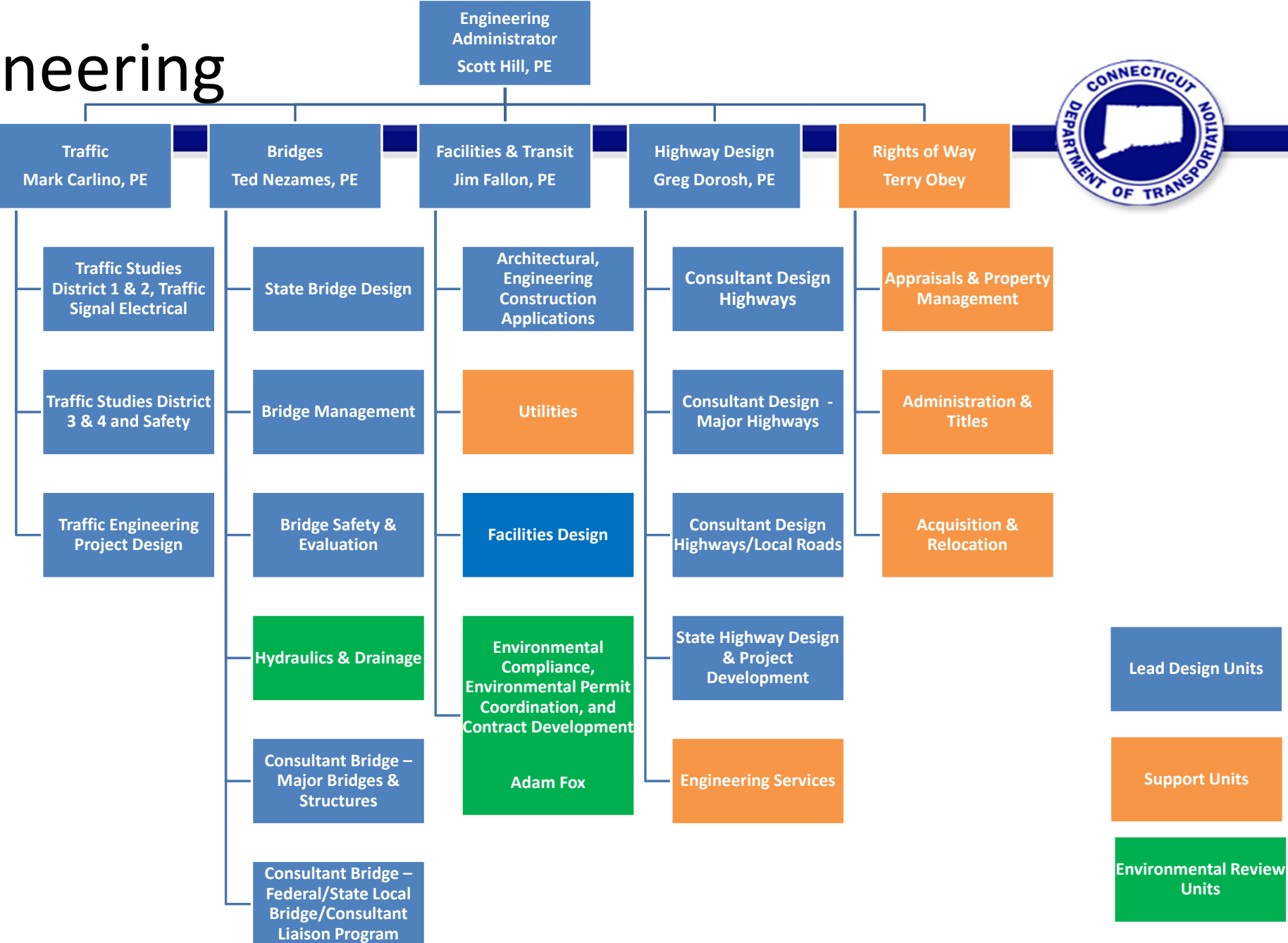
Crash Data

Environmental Review  
Units

# Bureau of Engineering & Construction



# Engineering



# Construction

**Construction Administrator**  
Ravi Chandran, PE



**Office of Construction**  
James Connery, PE

Central Surveys

Quality Assurance & Specifications

Materials Testing

Alternate Contracting/Claims & Litigation

**District Engineers**  
-District 1 – Donald Ward  
District 2 – Robert Obey  
District 3 – Domenic LaRosa  
District 4 – John Dunham

Construction - Highway

Construction –  
D1A - New Haven Rail Yard  
D3A – MetroNorth Corridor

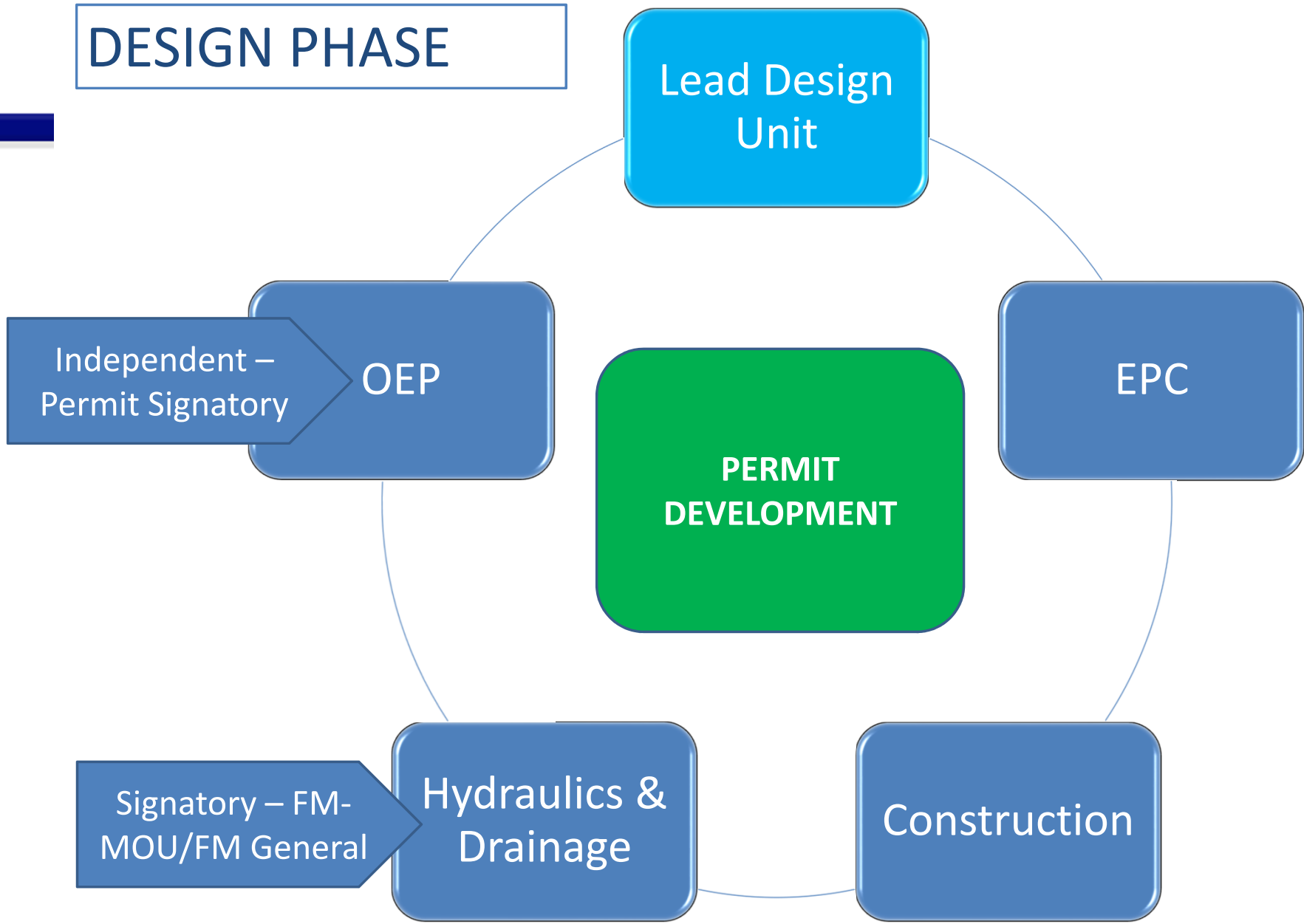
Surveys

District Environmental Coordinators

Environmental Review Units



# DESIGN PHASE





# Environmental Planning (OEP)



- Water and Natural Resources Unit

- Permit Application Development, Oversight & Review
- Coordination with Regulatory Agencies
- Wetland Delineations & Function and Values
- Listed Species and Fisheries Coordination
- Mitigation Development, Long term Monitoring and Stewardship

- Water and Noise Compliance Unit

- Develop Environmental Specifications/Special Provisions
- Plan Reviews for Constructability
- Ensure Project Compliance during Construction
- Plantings and Invasive Species Removal Oversight during Construction

- Environmental/Historic Documents Unit

- NEPA/CEPA level of Documentation Determinations, Coordination and Oversight
- Historic/Archaeological Investigations
- Section 106 Compliance, Mitigation Development and Coordination





# Hydraulics & Drainage



- Management of Flood Management Certification
  - FM General – Department Projects
  - FM MOU – Municipal Projects
- Hydraulics design/review on all projects
  - Major culverts and bridge crossings
  - Storm drainage systems
  - Temporary Bypass facilities
- Bridge safety/evaluation
  - Bridge scour/stream stabilities studies
  - Scour countermeasures and channel protection
- Design of fish & animal passage



# Construction



- Design Phase – Office of Construction
  - Constructability Review – Water Handling
- Construction Phase – District Construction
  - Oversight and Administration of projects
  - District Environmental Coordinators – Tracking of commitments and permit adherence

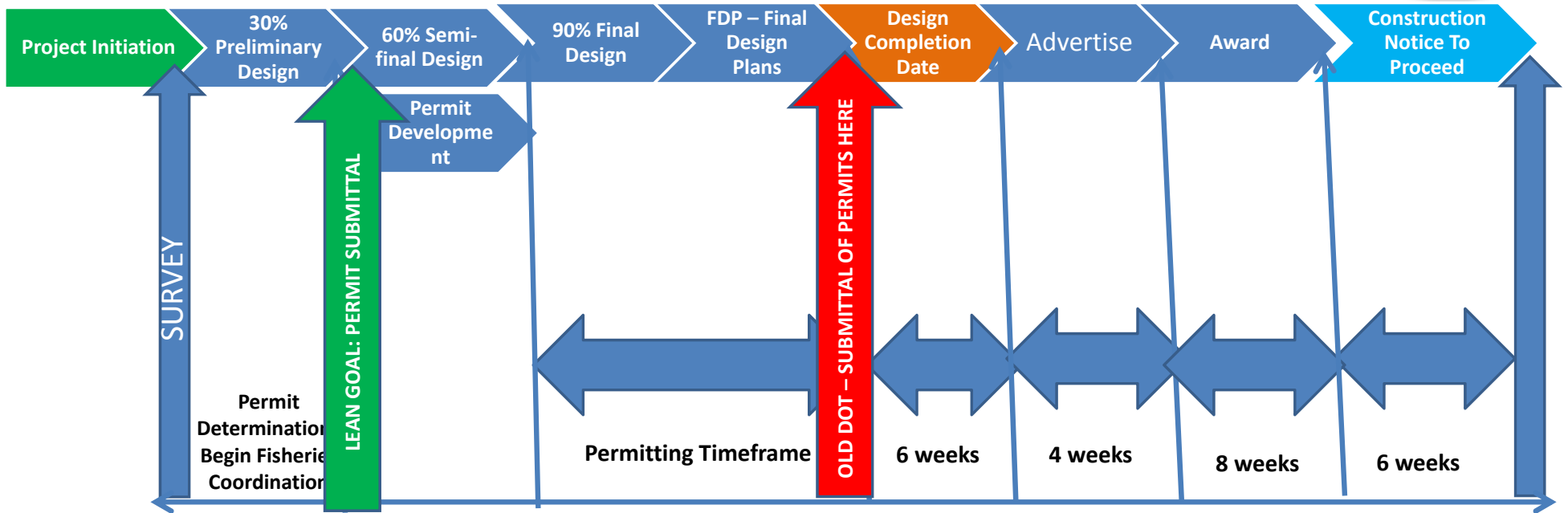
# Environmental Compliance (OEC)



- Management of contaminated soil, groundwater, & hazardous materials on Department projects
- Investigation and remediation of Department legacy sites
- Facility compliance (Industrial Stormwater, SPCC, etc.)
- MS4 Compliance



# What is the Process?



**PROJECT DESIGN TIMEFRAME**

**Construction Begins (Time of Year Restrictions)**



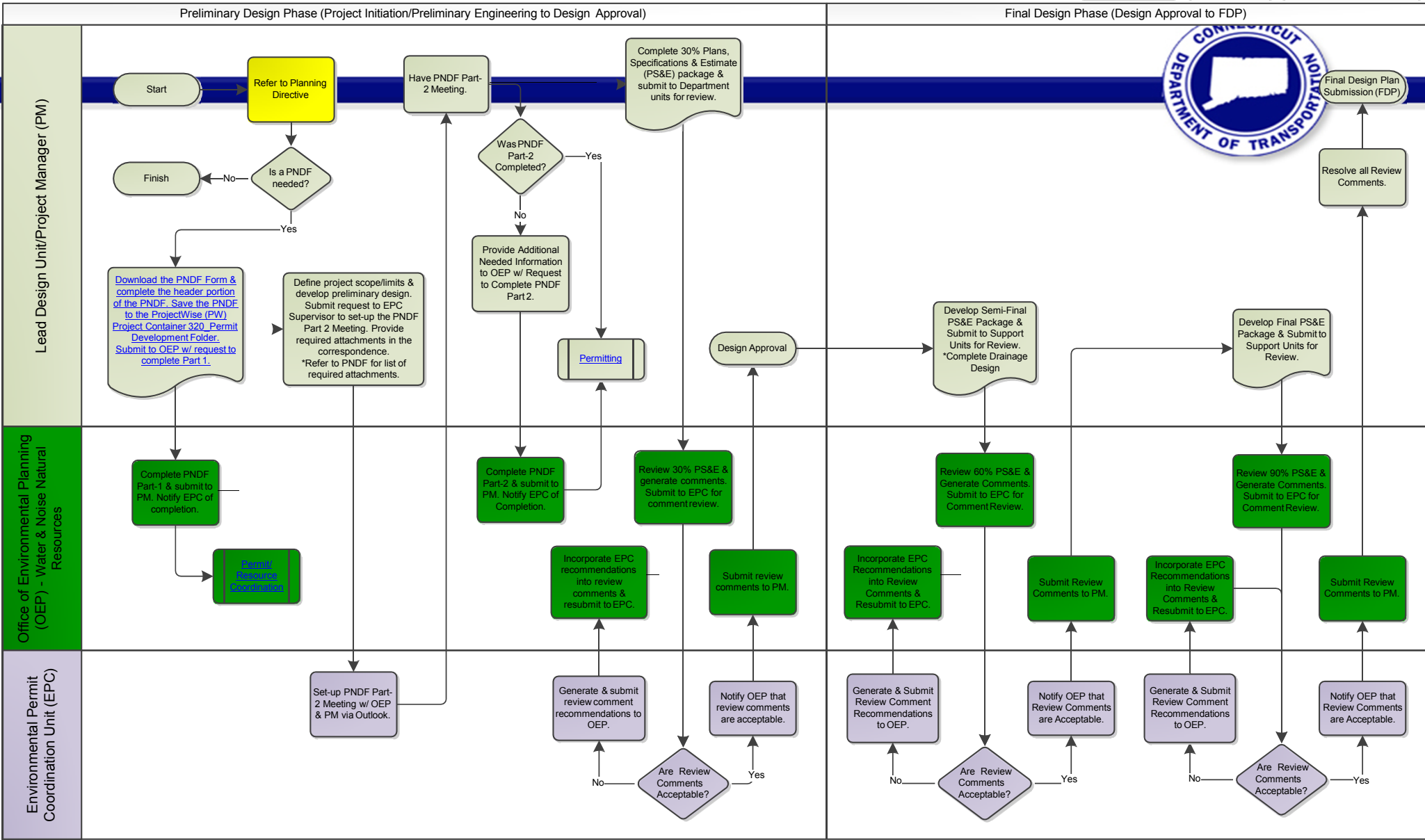
# Environmental Coordination & Permitting Process Map

The CTDOT Environmental Permit Coordination Unit (EPC) should be copied in all relevant OEP correspondence. Refer to the [OEP-EPC Distribution List](#)

[Who Contributed to this Process Map](#)

[How to Read a Process Map](#)

[Initiate Correspondence to Fix/Update the Process Map](#)

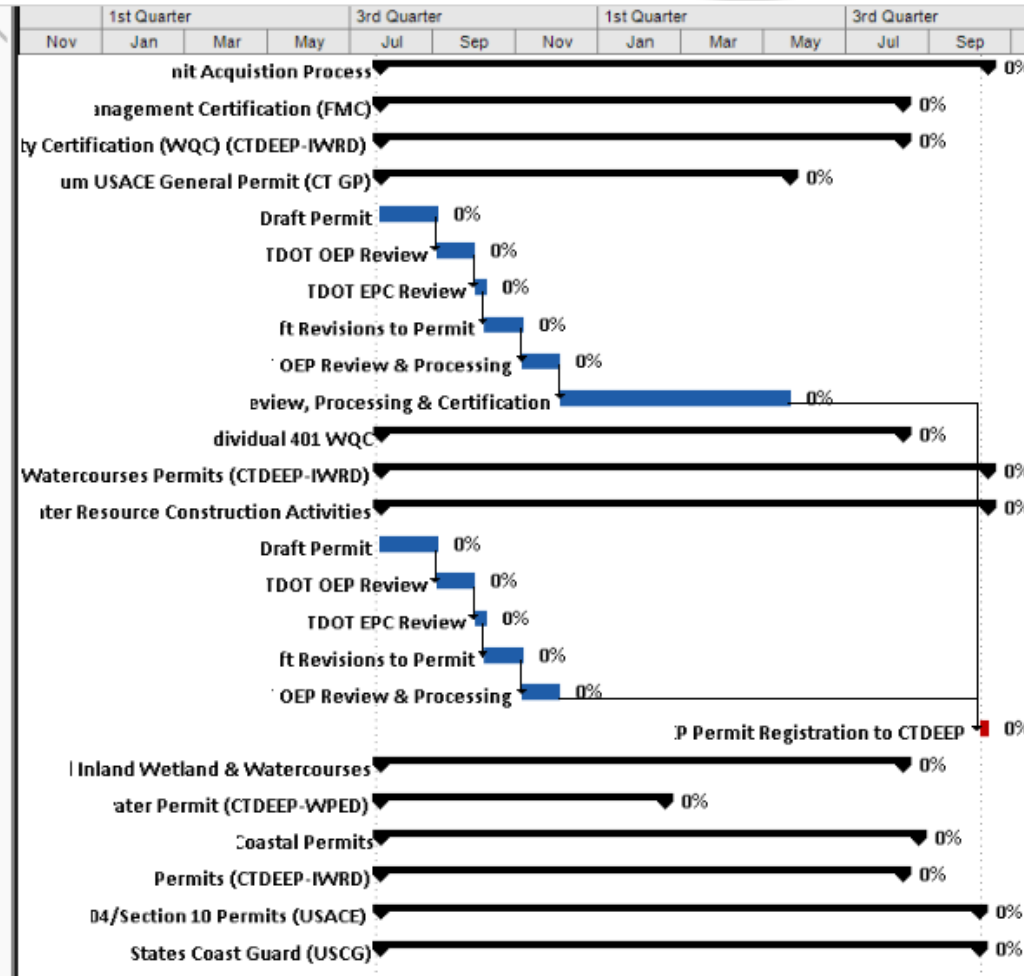


\*Disclaimer: Process maps are intended for guidance. Task duration estimates and procedure may vary based on project. Project managers may vary from mapped procedures on an as-needed basis.

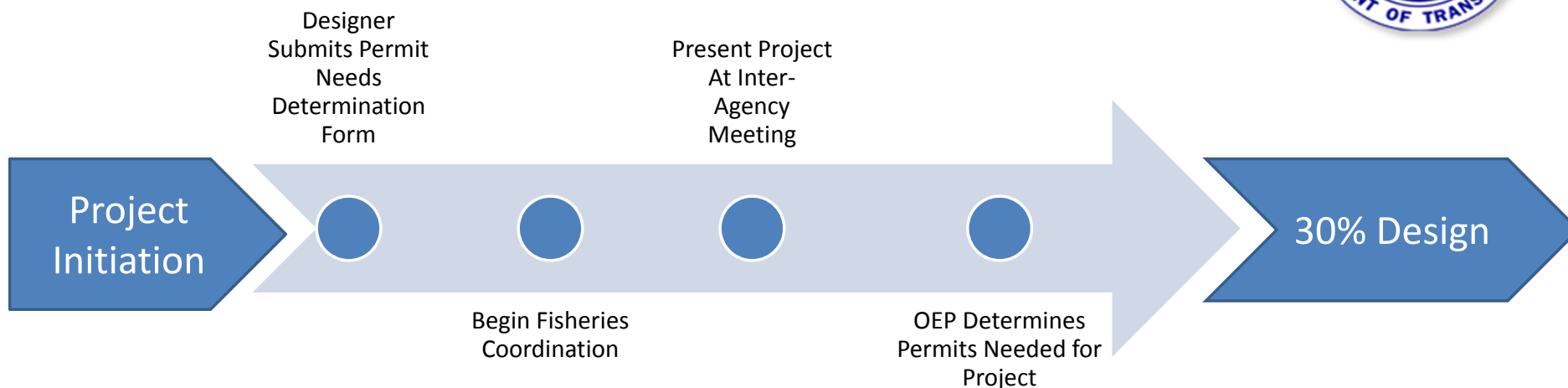
# Microsoft Project



| ID  | Task Name   | Duration   | Start       | Finish       | Priority |
|-----|---|------------|-------------|--------------|----------|
| 1   | Permit Acquisition Process                          | 15.9 mons  | Fri 7/22/16 | Wed 10/11/17 |          |
| 2   | Flood Management Certification (FMC)                | 13.75 mons | Fri 7/22/16 | Fri 8/11/17  |          |
| 31  | 401 Water Quality Certification (WQC) (CTDEEP-IWRD) | 13.75 mons | Fri 7/22/16 | Fri 8/11/17  |          |
| 32  | CT Addendum USACE General Permit (CT GP)            | 10.75 mons | Fri 7/22/16 | Fri 5/19/17  |          |
| 33  | Draft Permit  | 30 days    | Fri 7/22/16 | Fri 9/2/16   |          |
| 34  | CTDOT OEP Review                                    | 1 mon      | Fri 9/2/16  | Fri 9/30/16  | 33       |
| 35  | CTDOT EPC Review                                    | 1 wk       | Fri 9/30/16 | Fri 10/7/16  | 34       |
| 36  | Draft Revisions to Permit                           | 20 days    | Fri 10/7/16 | Fri 11/4/16  | 35       |
| 37  | CTDOT OEP Review & Processing                       | 1 mon      | Fri 11/4/16 | Fri 12/2/16  | 36       |
| 38  | CTDEEP Review, Processing & Certification           | 6 mons     | Fri 12/2/16 | Fri 5/19/17  | 37       |
| 39  | Individual 401 WQC                                  | 13.75 mons | Fri 7/22/16 | Fri 8/11/17  |          |
| 48  | Inland Wetlands/Watercourses Permits (CTDEEP-IWRD)  | 15.9 mons  | Fri 7/22/16 | Wed 10/11/17 |          |
| 49  | General Water Resource Construction Activities      | 15.9 mons  | Fri 7/22/16 | Wed 10/11/17 |          |
| 50  | Draft Permit  | 30 days    | Fri 7/22/16 | Fri 9/2/16   |          |
| 51  | CTDOT OEP Review                                    | 1 mon      | Fri 9/2/16  | Fri 9/30/16  | 50       |
| 52  | CTDOT EPC Review                                    | 1 wk       | Fri 9/30/16 | Fri 10/7/16  | 51       |
| 53  | Draft Revisions to Permit                           | 20 days    | Fri 10/7/16 | Fri 11/4/16  | 52       |
| 54  | CTDOT OEP Review & Processing                       | 1 mon      | Fri 11/4/16 | Fri 12/2/16  | 53       |
| 55  | CTDOT OEP Permit Registration to CTDEEP             | 3 days     | Fri 10/6/17 | Wed 10/11/17 | 54       |
| 56  | Individual Inland Wetland & Watercourses            | 13.75 mons | Fri 7/22/16 | Fri 8/11/17  |          |
| 65  | Stormwater Permit (CTDEEP-WPED)                     | 7.5 mons   | Fri 7/22/16 | Fri 2/17/17  |          |
| 76  | Coastal Permits                                     | 14.05 mons | Fri 7/22/16 | Mon 8/21/17  |          |
| 108 | Dam Permits (CTDEEP-IWRD)                           | 13.75 mons | Fri 7/22/16 | Fri 8/11/17  |          |
| 124 | Section 404/Section 10 Permits (USACE)              | 15.75 mons | Fri 7/22/16 | Fri 10/6/17  |          |
| 147 | United States Coast Guard (USCG)                    | 15.75 mons | Fri 7/22/16 | Fri 10/6/17  |          |

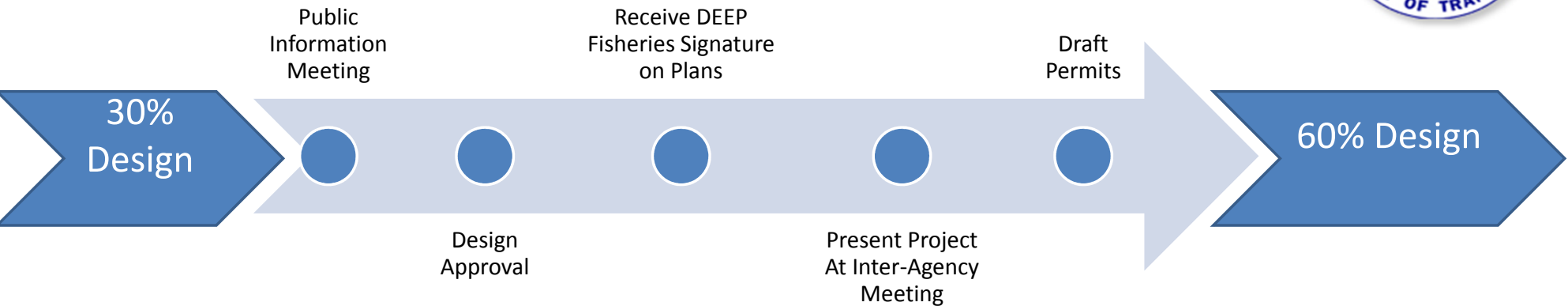


# Project Initiation to 30%



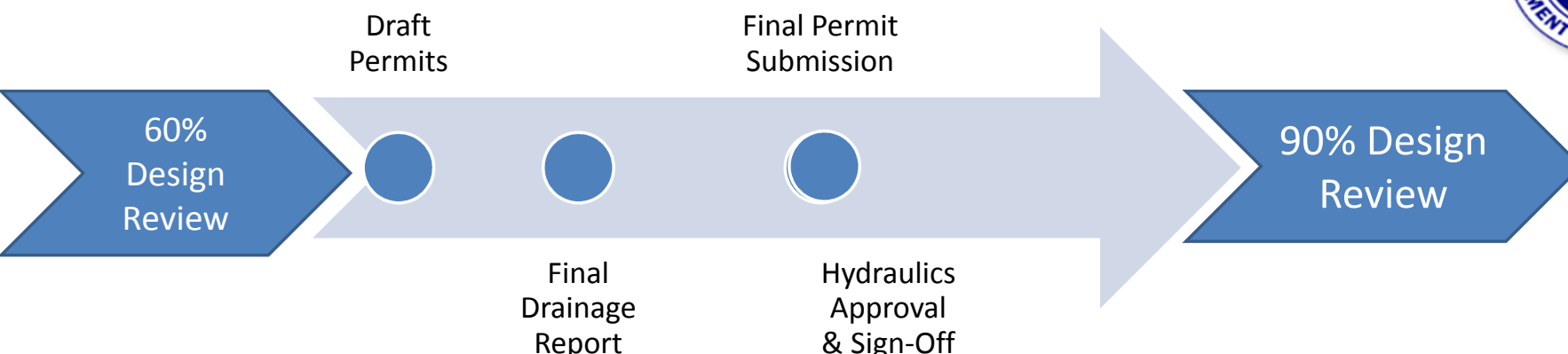
| Office/Unit      | Responsibility  |
|------------------|---|
| Lead Design Unit | Develop project scope   |
| OEP              | <ul style="list-style-type: none"> <li>• Environmental Review Form</li> <li>• Permit Needs Determination Form (PNDF)</li> </ul> |
| OEC              | Task 100 – Hazardous Materials Screening  |
| EPC              | Facilitation of PNDF  |
| H&D              | Development of Hydraulic Model  |

# 30% to 60%



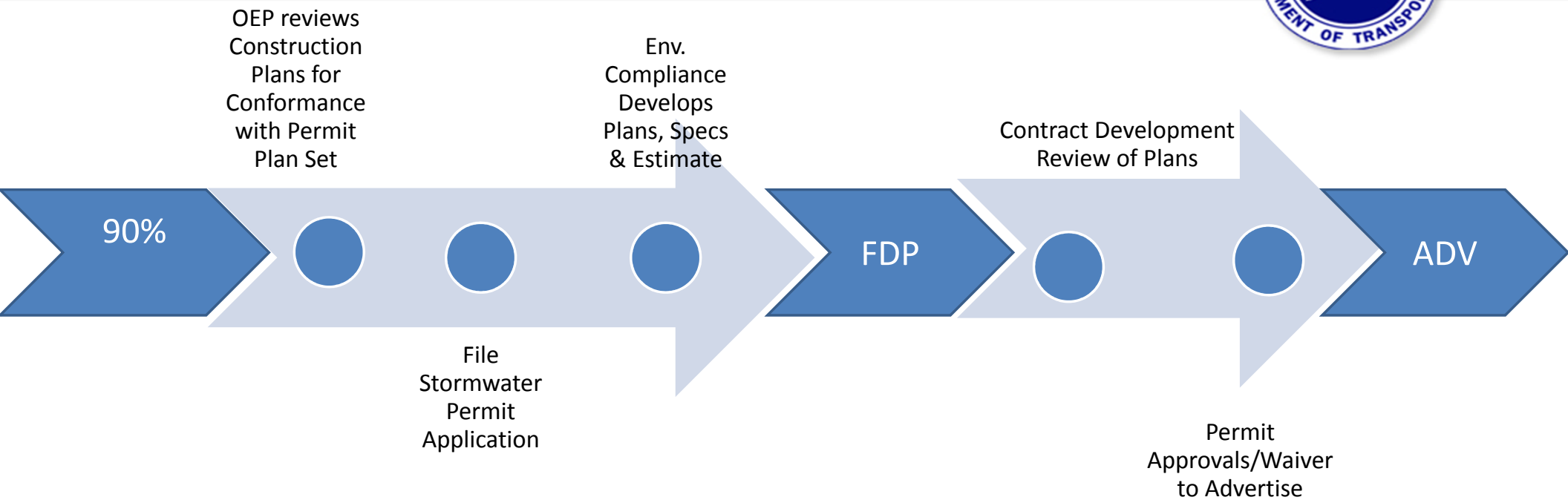
| Office/Unit      | Responsibility  |
|------------------|---|
| Lead Design Unit | <ul style="list-style-type: none"> <li>Develop design alternatives</li> <li>Develop Permit Plan Set/Permits</li> </ul>  |
| OEP              | <ul style="list-style-type: none"> <li>Review/Provide comments on design alternatives</li> <li>Determine necessary permits</li> </ul>                                 |
| EPC              | <ul style="list-style-type: none"> <li>Facilitation of determination of necessary permits</li> <li>Facilitate communication between engineers and planning</li> </ul> |
| H&D              | Finalize Drainage Report  |
| Construction     | Review/Provide constructability comments  |

# 60% to 90%



| Office/Unit      | Responsibility   |
|------------------|--|
| Lead Design Unit | <ul style="list-style-type: none"> <li>• Address comments</li> <li>• Draft Permits</li> </ul>  |
| OEP              | <ul style="list-style-type: none"> <li>• Review &amp; Comment on Draft Permits -&gt; Submit Permits</li> <li>• Review design for consistency with draft permits</li> </ul> |
| OEC              | <ul style="list-style-type: none"> <li>• Initiate site investigation for soil disturbance</li> <li>• Initiate hazmat field inspection</li> </ul>                           |
| EPC              | <ul style="list-style-type: none"> <li>• Facilitate incorporation of comments</li> <li>• Identify/Initiate overall process improvements</li> </ul>                         |
| H&D              | Hydraulics Approval and FMC/FM-MOU Signature   |
| Construction     | Review/Provide constructability comments   |

# 90% to Advertise



Close coordination with DEEP/ACOE Staff on timeframe of approvals. Contracts are not awarded without a permit

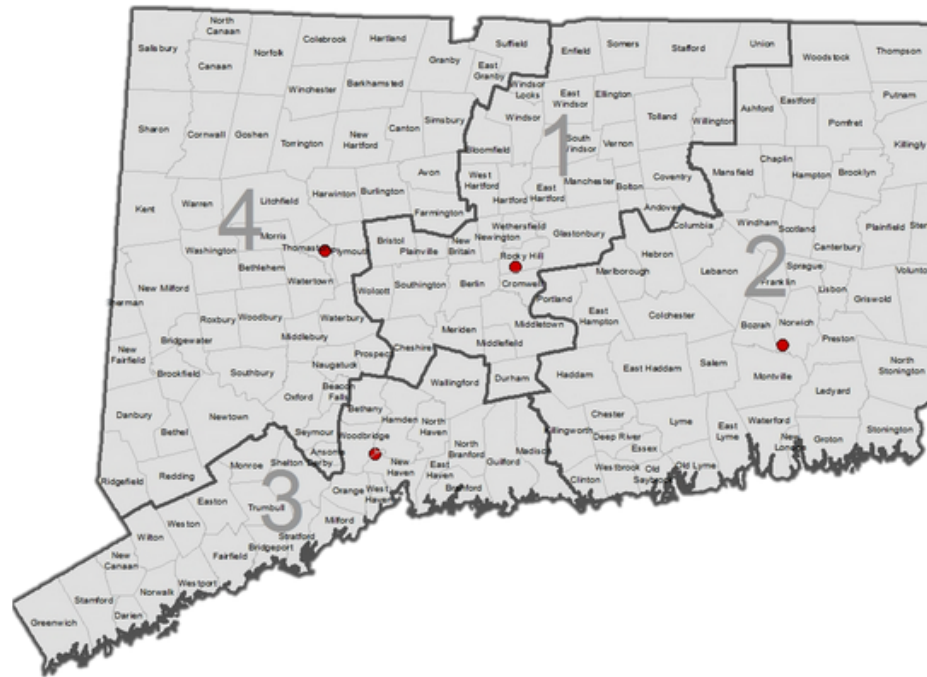
# Permitting Agency Coordination



- DEEP/DOT Quarterly Meetings
- Group of Eight – semi-weekly meetings
  - Internal Monthly
  - With DEEP Monthly
- Interagency Review Meetings - Monthly
  - Designers
  - DEEP
  - ACOE
  - EPA
- Monthly Internal Permit Priority Meetings

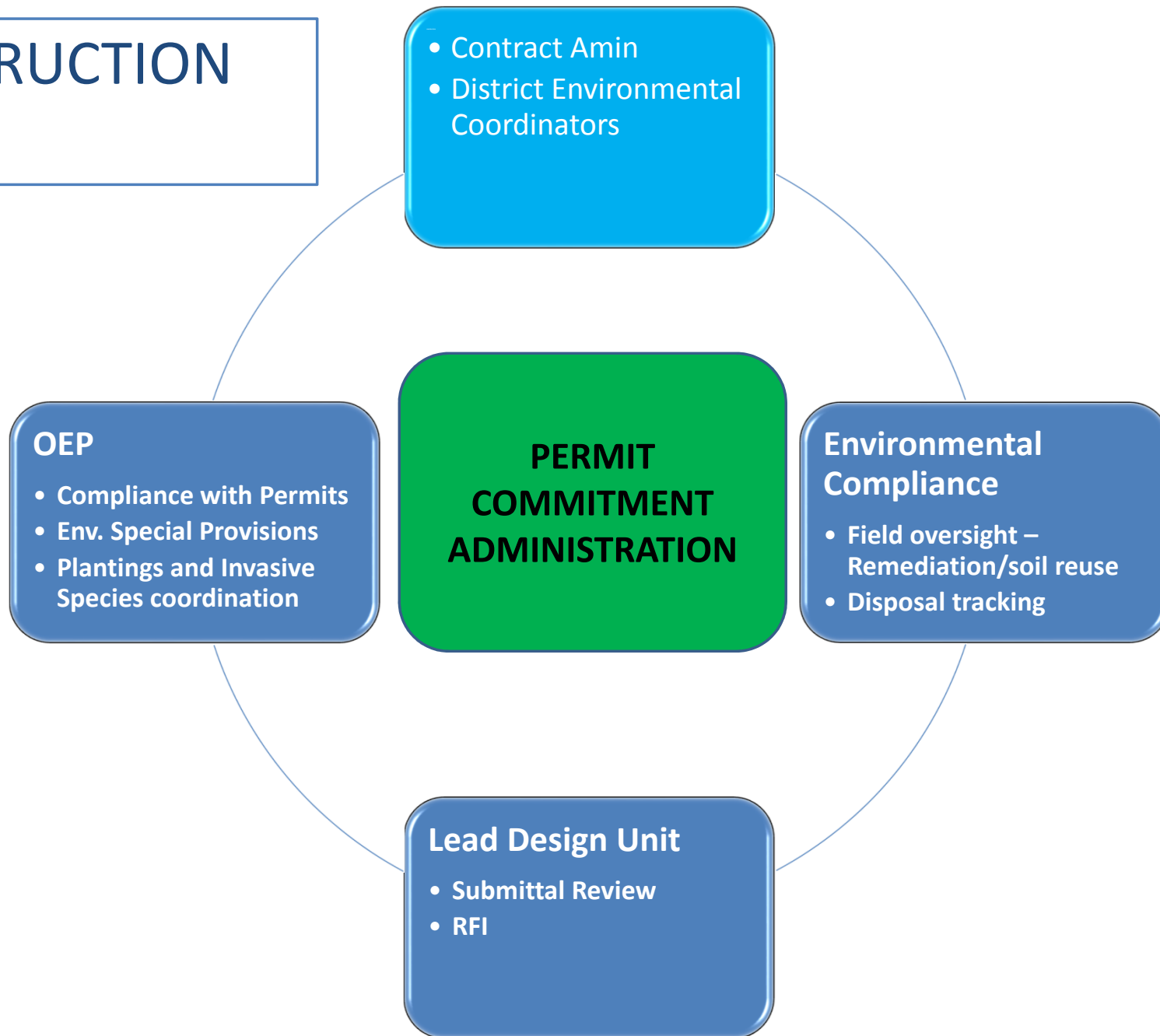


# How are permits/commitments administered in the field?





# CONSTRUCTION PHASE



# Construction



- Permits transmitted to Contractor
- Pre-Construction Meeting
  - Establish Commitments
  - Separate Environmental Coordination Meeting
- Field Oversight
  - Construction Engineer
  - District Environmental Coordinator
  - OEP – Water/Noise Compliance
  - Environmental Compliance Task-Based Consultant Inspector
- Progress Meetings

# Environmental Summit Agenda



|  |  |
|--|--|
| <b>Fisheries Enhancements – Fish Ladder Success</b>                    | Amanda Saul<br>OEP Water/Natural Resources   |
| <b>Wildlife Enhancements - Commodore Hull Bridge Falcons</b>           | <ul style="list-style-type: none"><li>• Chris Samorajczyk , OEP Water /Natural Resources</li><li>• Brian Hess, DEEP Wildlife Diversity</li></ul>                     |
| <b>Impact Avoidance Techniques – Charter Oak Greenway</b>              | Mike Lashua<br>State Highway Design  |
| <b>Greenways / Community Involvement - Cheshire Heritage Trail</b>     | Vitalij Staroverov<br>State Highway Design   |
| <b>One project - multiple considerations- CT FASTRAK</b>               | <ul style="list-style-type: none"><li>• Amie Maines, Environmental Compliance</li><li>• Kevin Carifa, OEP Water/Noise Unit</li></ul>                                 |
| <b>Q- Bridge - DOT District &amp; DEEP Environmental Collaboration</b> | <ul style="list-style-type: none"><li>• Heather Falzano, DOT District Environmental Coordinator</li><li>• Beverly Flowers, DEEP Land &amp; Water Resources</li></ul> |