Consultant Coordination Meeting

August 5, 2026

HRSD

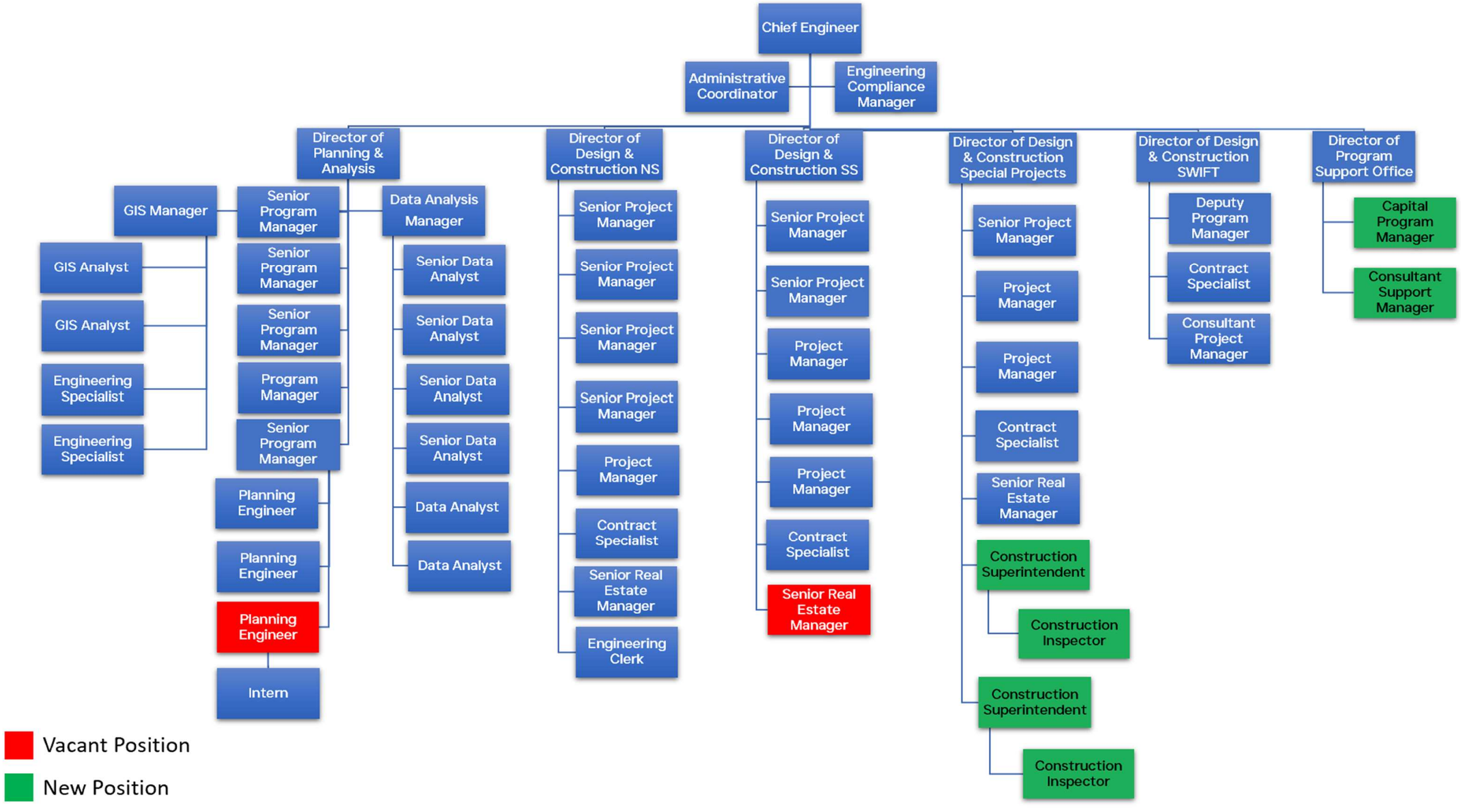
Sustainable, Innovative Wastewater Treatment

Agenda

- Admin. Items, FY26 CIP Performance, and Cost Estimates – Jeff S.
- Operations Division Updates – Eddie A.
- Program Support Office – Sree K.
- D&C Standards Update and Industry Outreach Efforts – Laura K.
- Quality Expectations for Services During Construction – Mike H.
- Preconstruction Assessments, Claims, and Davis-Bacon Wage Compliance – Melissa J-W.
- O&M and Asset Data Submittals – Anas M.
- Asset Location Requirements During Construction – Jules R.
- Construction Cost Database – Jeff L.
- Consultant Questions/Comments

HRSD
Sustainable, Innovative Wastewater Treatment

Engineering Division



Recent Staff Additions

- Sree Kolapalli (PSO Director)

- Lyndsey Davis (Project Manager)

- Ryan Delo (Sr. Project Manager)

- Tim Kearney (Sr. Project Manager)

- Stella Koutoupi (Project Manager)

Administrative Items

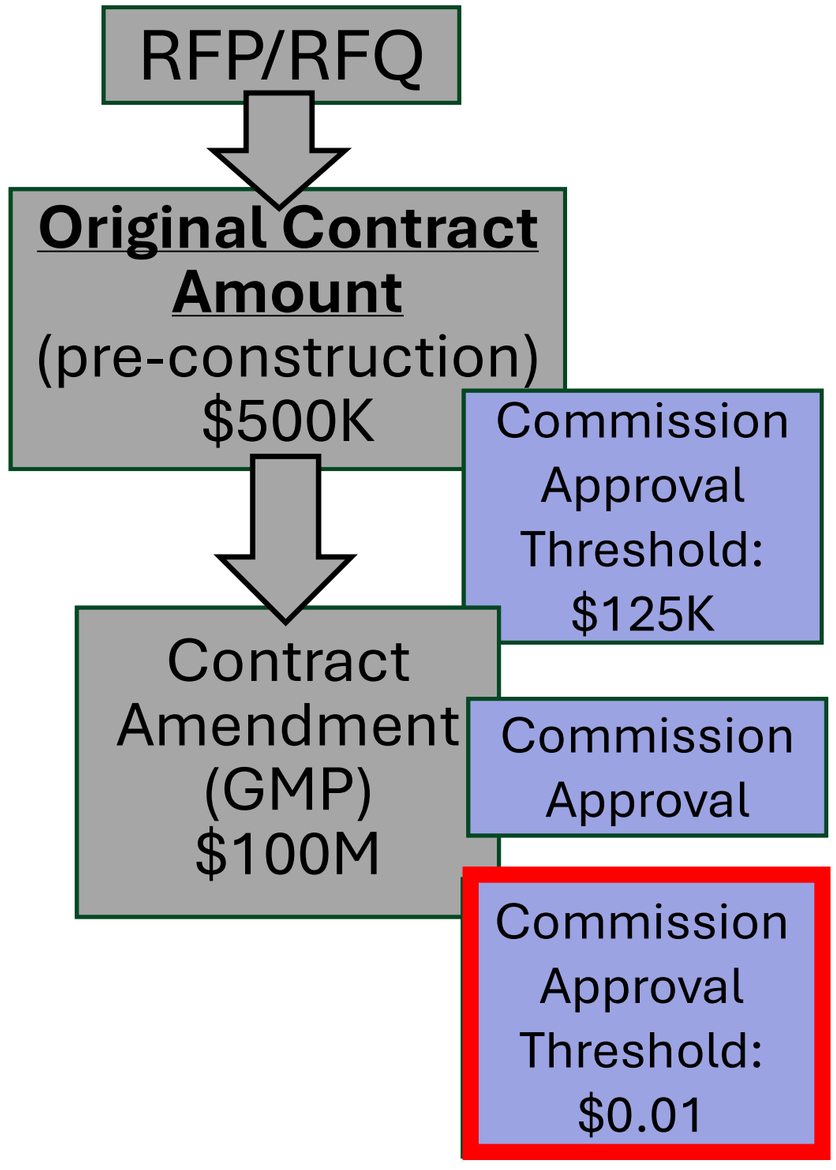
- Approvals for Articles, Advertising, and Presentations
- Drones on projects
- Project Communications SOP in development
- Revisions to HRSD Procurement Policy related to CMAR contracts

Current Procurement Policy - CMAR

HRSD

Commission Governance Guidelines
Adopted May 22, 2007
Effective August 1, 2025

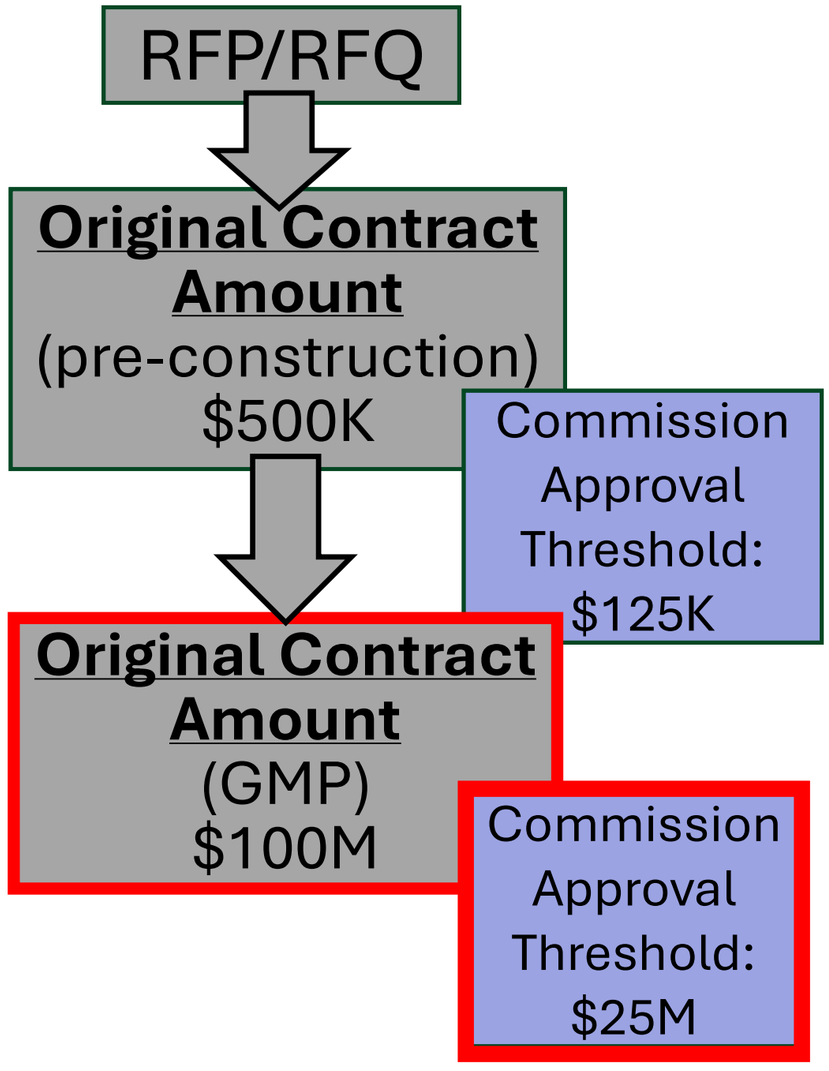
Item (In alphabetical order)	Regular Agenda	Consent Agenda
Change Orders		>25% of original contract value or $50,000, whichever is greater



Revised Procurement Policy - CMAR

Commission Governance Guidelines
Adopted May 22, 2007
Effective August 1, 2025

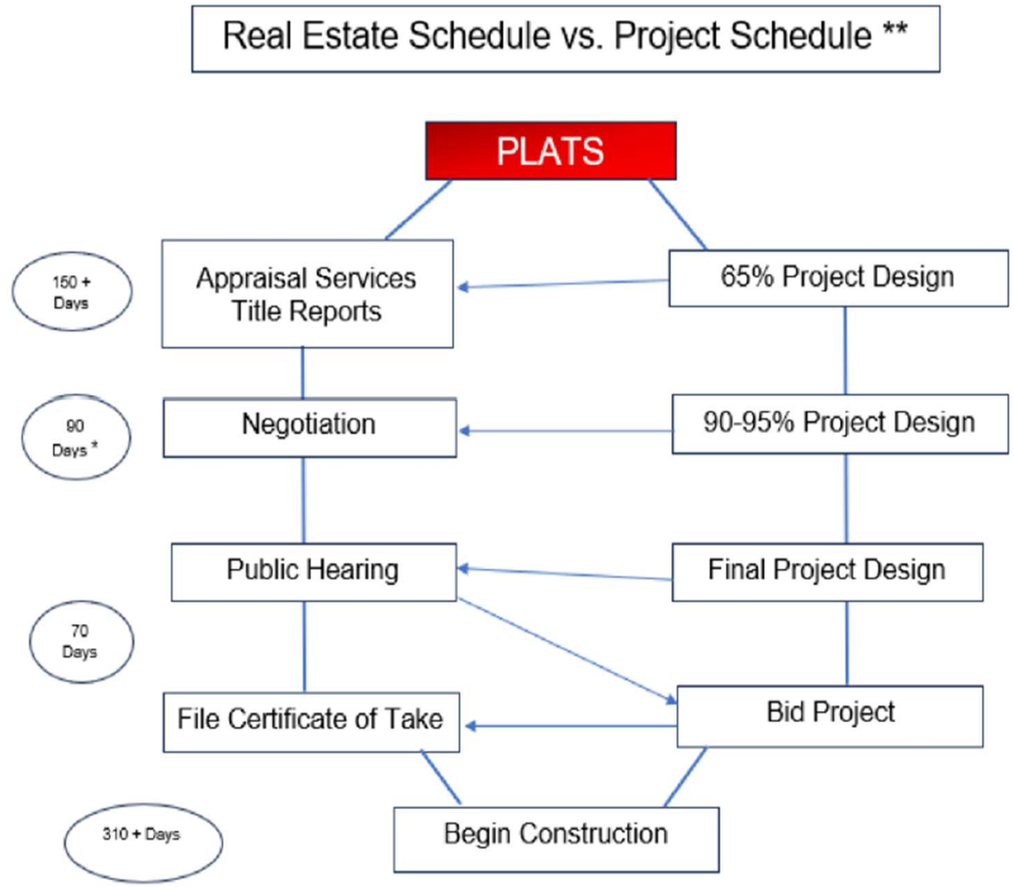
Item (In alphabetical order)	Regular Agenda	Consent Agenda
Change Orders		>25% of original contract value or $50,000, whichever is greater



You all often ask me, “What can we do better?”

- HRSD has and will continue to pay for best-in-class work

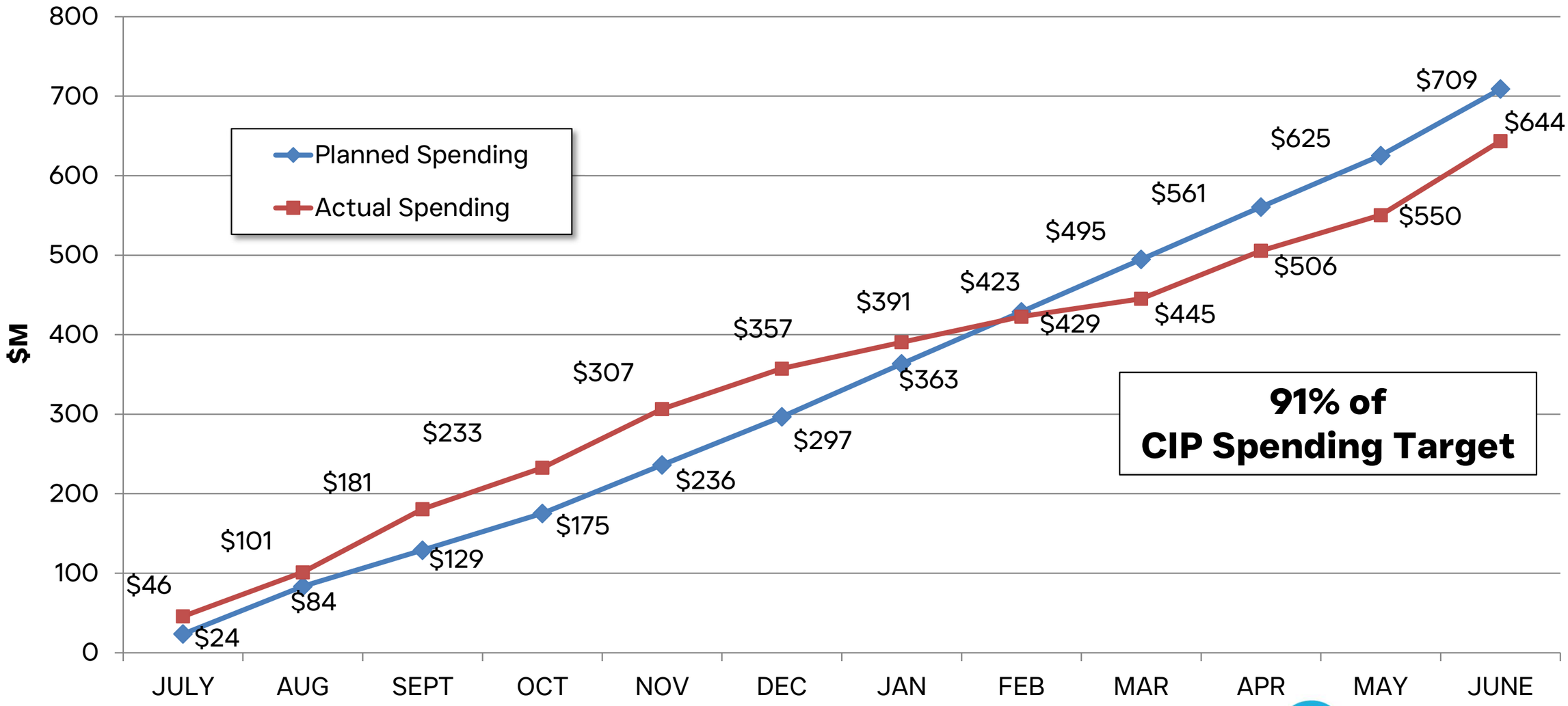
- Biggest opportunities:
  - PM experience
  - Timeliness of deliverables/responses
  - Cost estimating
  - Inspector checklists/reports
  - Engaging REMs during PER/early design
  - Accounting for real estate in project timeline



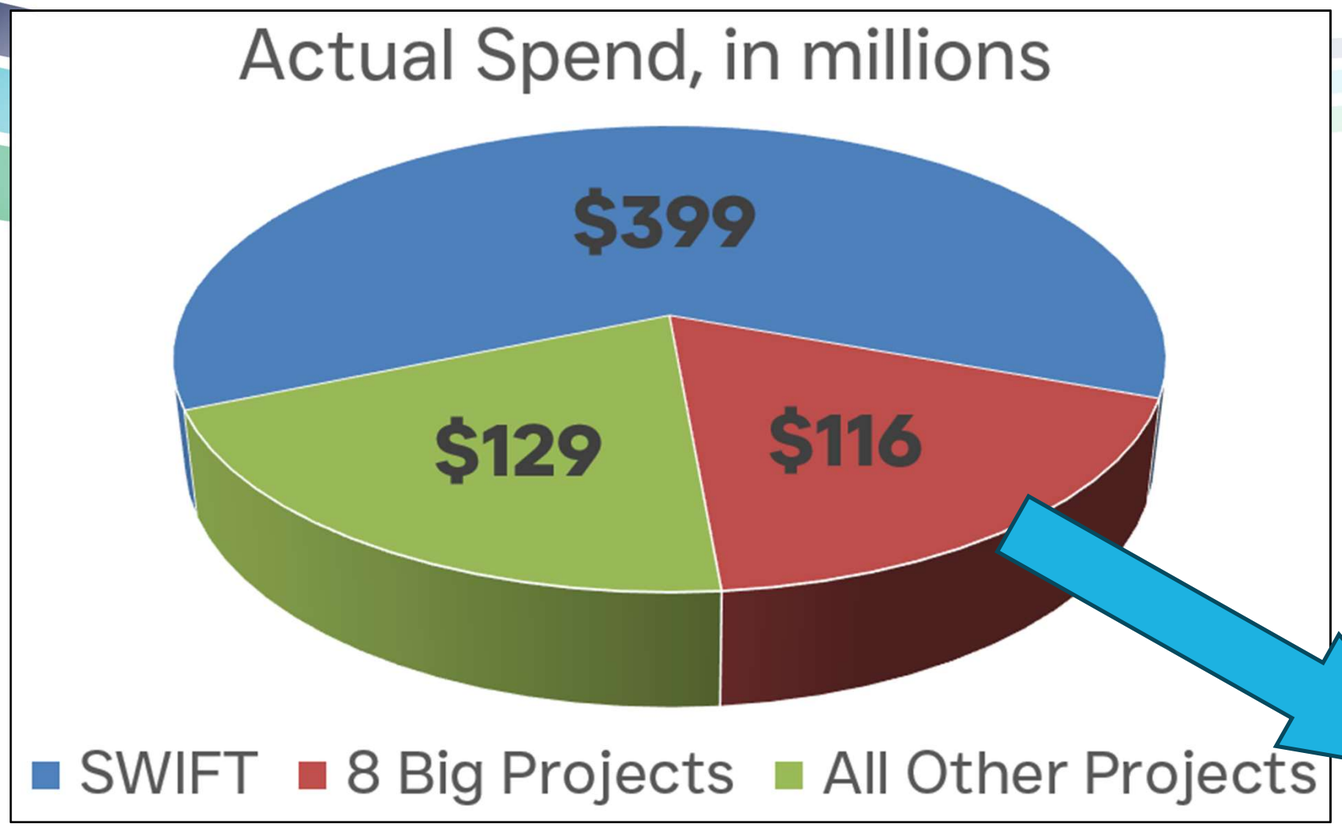
Construction Cost Estimating Expectations

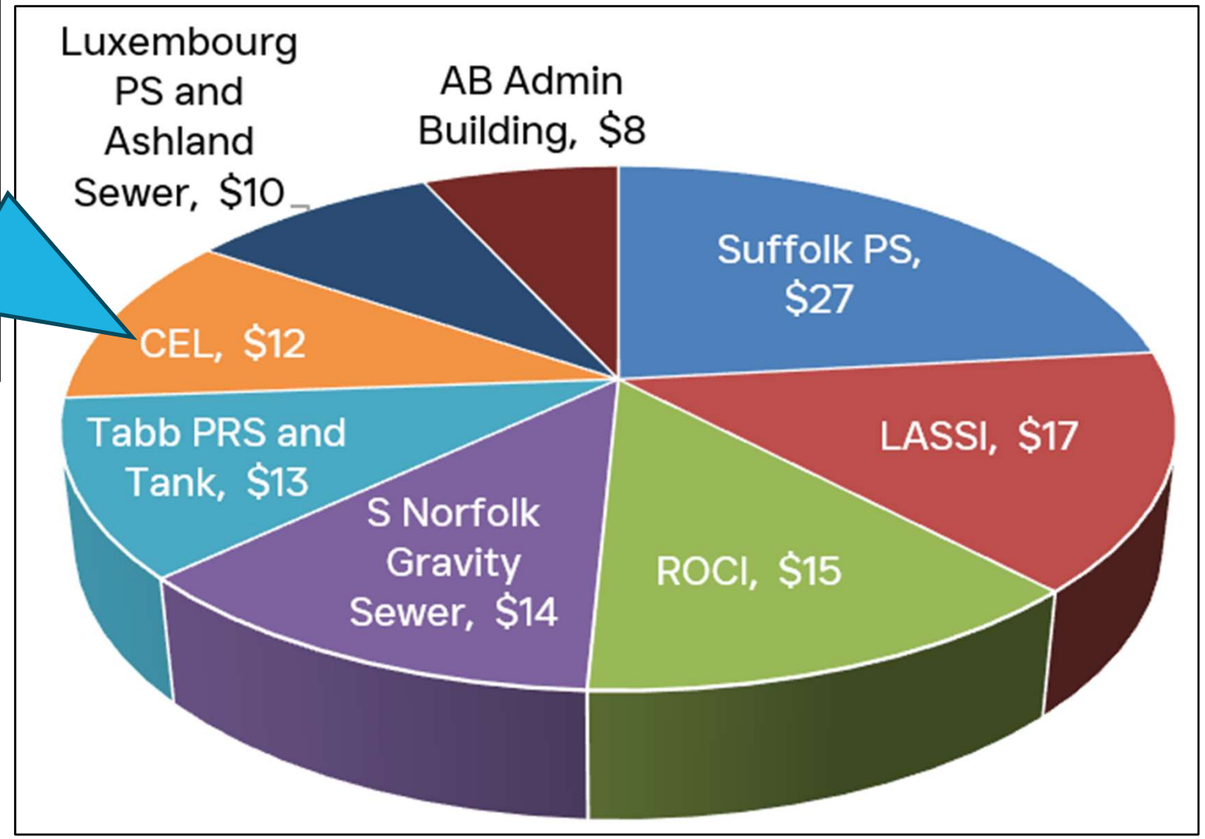
- Attend CCEUG meetings
- Outreach to potential contractors before bid advertisement
- Review updates to D&C Standards - Section 5
  - Level of effort for OPCC's
  - Independent OPCC for large projects (>$50M)
  - Letter from Firm's principal on **all** OPCCs
- OPCC should target the AVERAGE of all bids
- If low bid is more than +/-10% of the OPCC, a letter from the consultant, based on a conversation with the low bid contractor, is required to explain the difference
- If the low bid is significantly lower than the other bids, ask the contractor WHY

CIP Expenditures for FY26

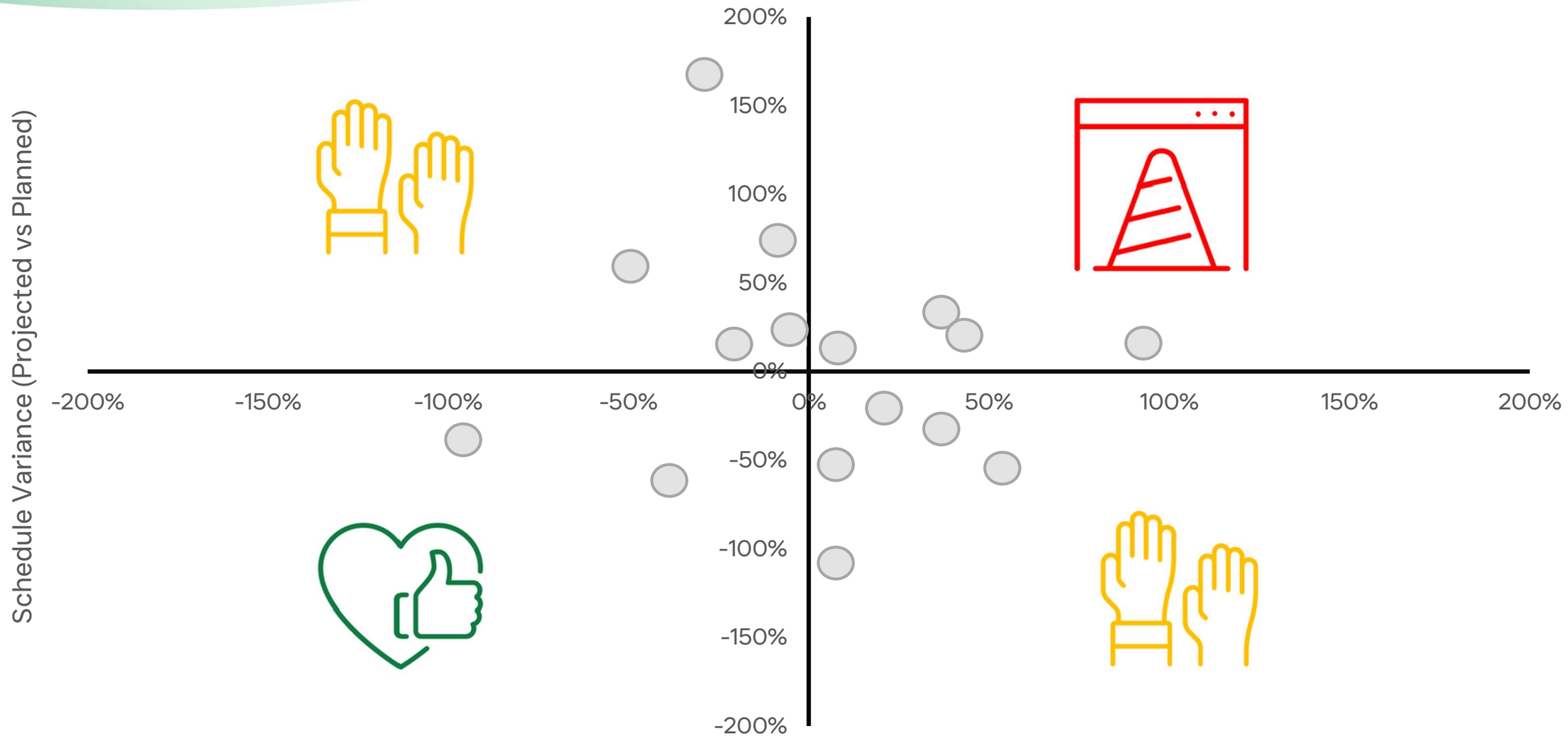


FY26 CIP Spend

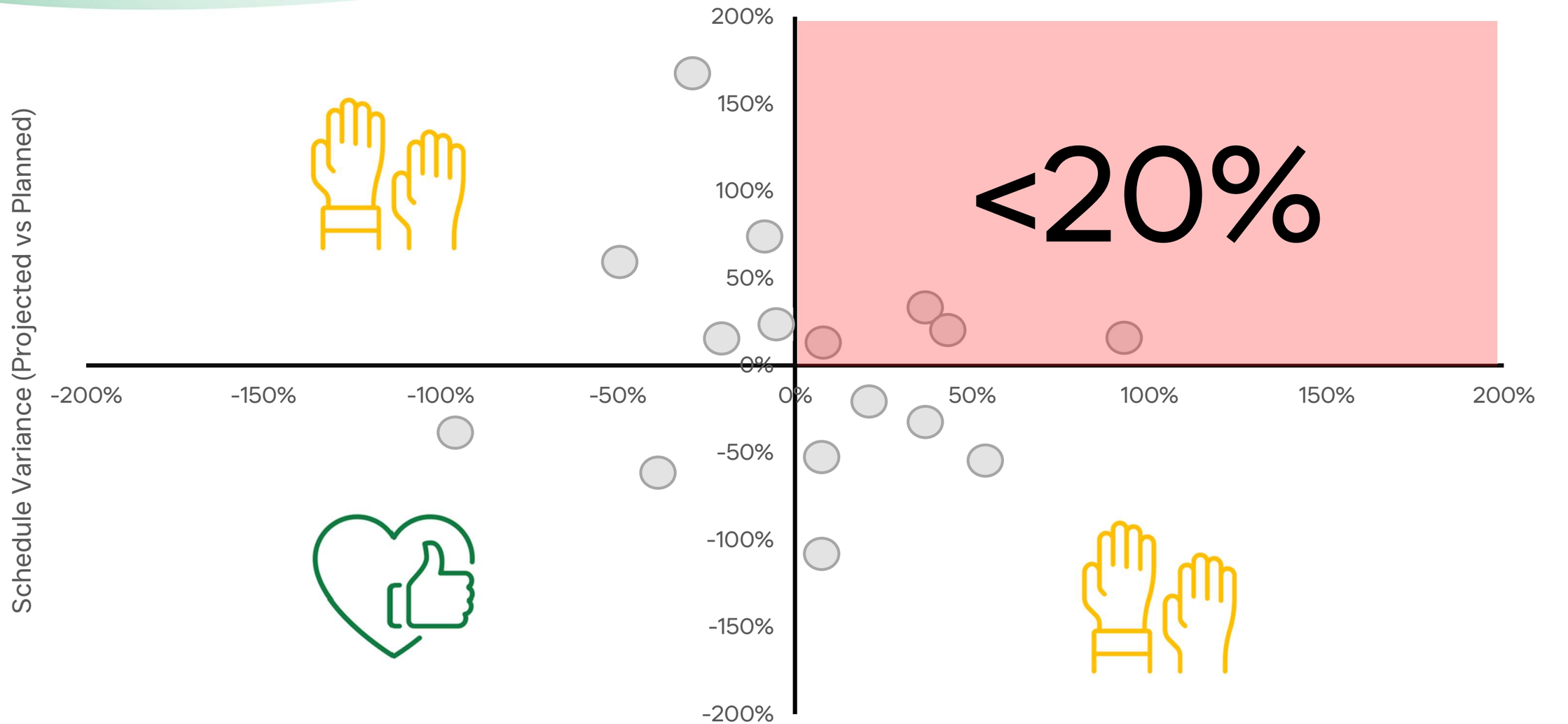




Future Project Variance Metrics



Future Project Variance Metrics



Questions?

Sustainable, Innovative Wastewater Treatment

Organizational Realignment & Operations Division Updates

Eddie Abisaab

2030 VISION
STRATEGIC PLAN

HRSD
Sustainable, Innovative Wastewater Treatment

HRSD EMPLOYEE BENEFITS & WORKFORCE INVESTMENTS

Major Enhancements Since July 2022

COMPENSATION & INCENTIVES

- ✓ Wastewater License Bonus
- ✓ CDL Bonus
- ✓ Signing Bonus
- ✓ Spot Bonus
- ✓ Employee Referral Bonus
- ✓ **Standby Pay DOUBLED (Increased 100%)**
- ✓ **Shift Differential Increased (6.59% → 15%)**

EDUCATION & PROFESSIONAL DEVELOPMENT

- ✓ Paid Apprenticeship Program
- ✓ Tuition Reimbursement
- ✓ Professional Certifications
- ✓ Professional Memberships
- ✓ Licensing & Registration Support
- ✓ Leadership Development Programs

WORK-LIFE BALANCE

- ✓ Flexible Work Schedules
- ✓ Hybrid/Remote Work Opportunities
- ✓ 13 Paid Holidays
- ✓ Improved Annual Leave Policy

BY THE NUMBERS

OPS BUDGET IS APPROX.
$150 MILLION

+67
NEW OPERATIONS POSITIONS

STANDBY PAY DOUBLED (100% INCREASE)

OPS ATTENDANCE & UNSCHEDULED LEAVE STANDARDIZATION
Consistent. Fair. Accountable.

CAREER FAIR – OUT-OF-THE-BOX HIRING STRATEGY
Expanding our talent pipeline.

COMPENSATION & BENEFITS

- ✓ Market Salary Adjustments
- ✓ Enhanced Benefits Package
- ✓ Federal GSA Travel Reimbursement
- ✓ Retiree Health Plan Improvements
- ✓ New 457 Investment Options

WORKFORCE & ORGANIZATIONAL IMPROVEMENTS

- ✓ **67 New Operations Positions**
- ✓ **Career Fair – Out-of-the-Box Hiring Strategy**
- ✓ Hiring Flexibility
- ✓ Updated Nepotism Policy
- ✓ Updated Ethics Policy
- ✓ **OPS Attendance & Unscheduled Leave Standardization**

EMPLOYEE WELLBEING

- ✓ Wellness Program
- ✓ Gym Discounts
- ✓ Employee Assistance Program (EAP)
- ✓ Attendance Policy Standardization

INVESTING IN OUR PEOPLE

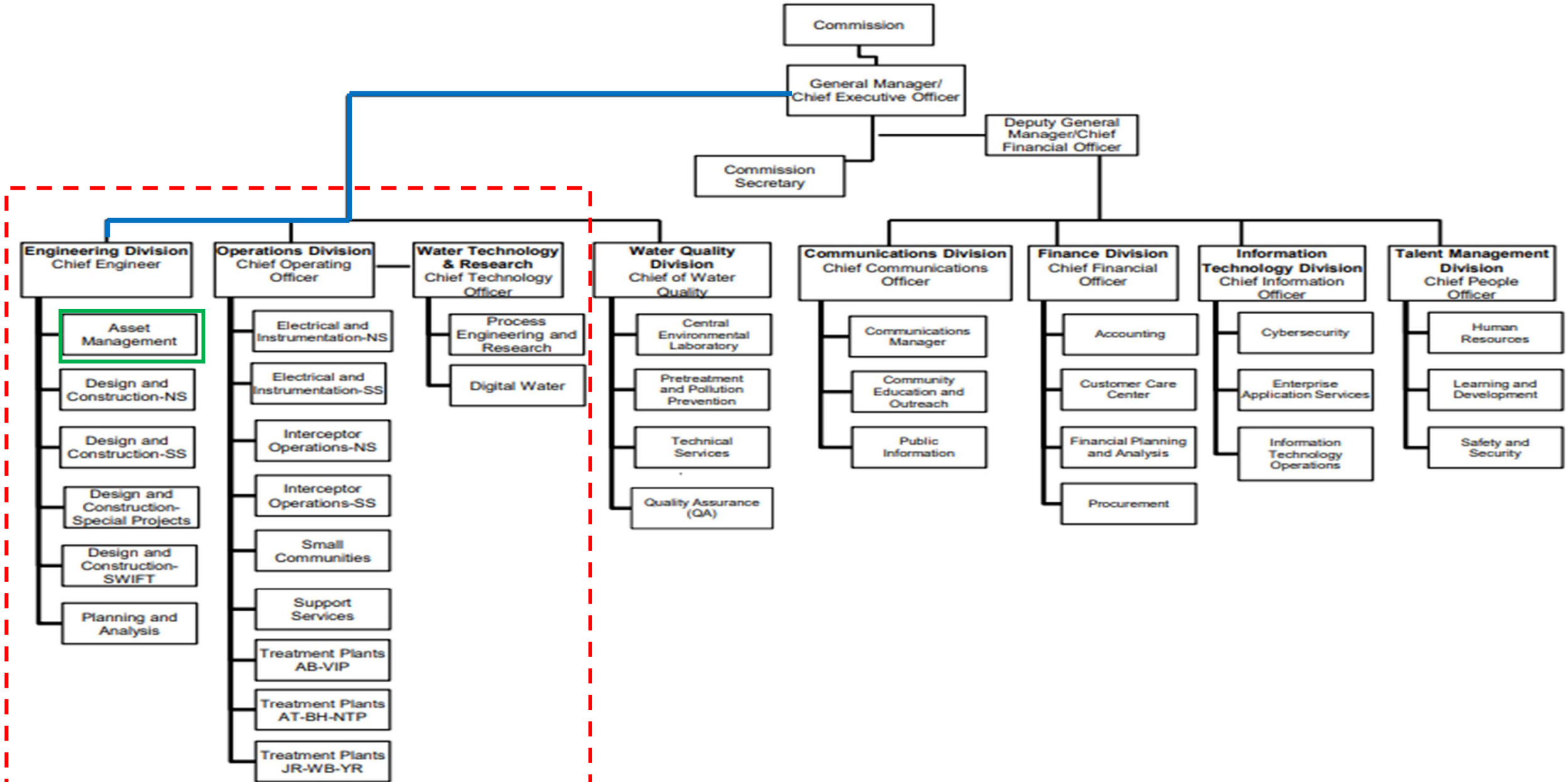
Building a Stronger HRSD Today and for the Future.

Competitive Compensation | Career Growth | Work-Life Balance | Professional Development | Employee Wellness | Organizational Excellence

PEOPLE FIRST. MISSION ALWAYS.

HRSD
Sustainable. Innovative. Resilient.

HRSD Organization Chart
July 1, 2025



HRSD Organization Chart

2025 / 2026

New Position

Realignment

New Department

Jan 1, 2026

Jul 1, 2026

Jan 1, 2026

Jul 1, 2026

- Commission
  - Commission Secretary
  - General Manager/Chief Executive Officer
    - Chief Engineer
      - Design and Construction-NS
      - Design and Construction-SS
      - Design and Construction-Special Projects
      - Design and Construction-SWIFT
      - Planning and Analysis
      - PSO
    - Chief Operating Officer
      - Deputy COO
      - Deputy COO
      - Electrical & Instrumentation-NS
      - Electrical & Instrumentation-SS
      - Interceptor Operations-SS
      - Interceptor Operations-NS
      - Treatment Plants AT-NP-BH
      - Treatment Plants AB-VIP
      - Treatment Plants JR-WB-YR
      - Support Services
      - Small Communities
      - Asset Management
    - Chief Technology Officer
      - Process Engineering and Research
      - Digital Water
    - Chief of Water Quality
      - Central Environmental Laboratory
      - Pretreatment and Pollution Prevention
      - Technical Services
      - Quality Assurance
    - Deputy General Manager/Chief Financial Officer
      - Admin Coordinator
      - Chief Communications Officer
        - Community Education and Outreach
        - Public Information
      - Chief Financial Officer
        - Accounting
        - Customer Care Center
        - Financial Analytics and Data Systems
        - Procurement
      - Chief Information Officer
        - Cybersecurity
        - Enterprise Application Services
        - Information Technology Operations
      - Chief People Officer
        - Human Resources
        - Learning and Development
        - Safety and Security

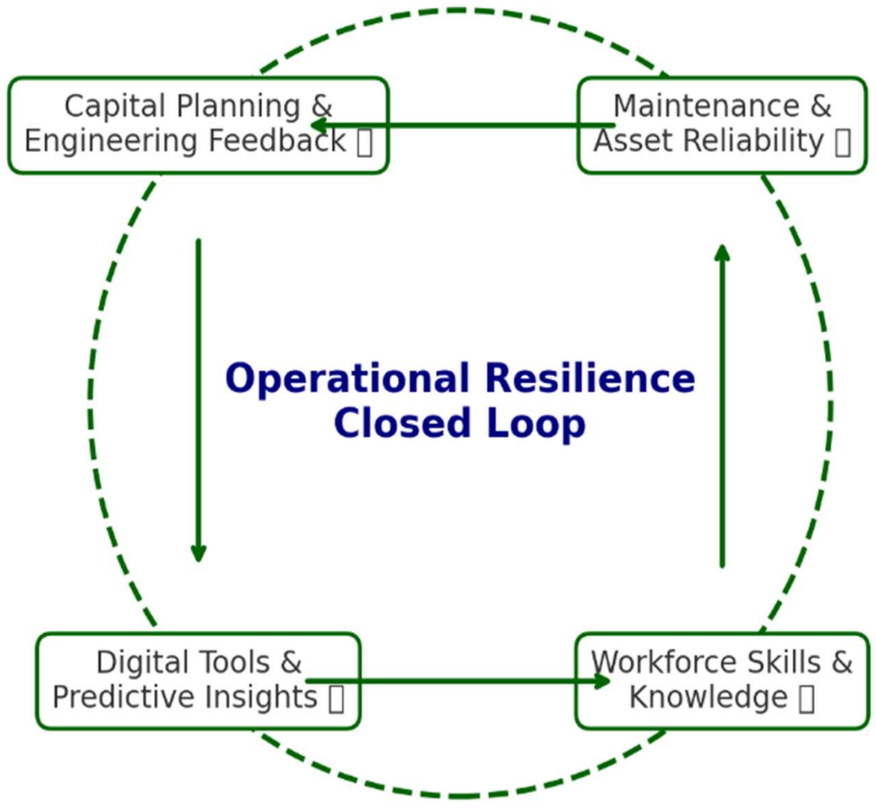
Why the Realignment?

GOALS:

1. Operational Resilience
2. Vertical Integration
3. Reduce Span of Control
4. Create Career Growth Opportunities

Why Now?

Why the Realignment?



GOALS:

1. Operational Resilience
    a. Asset Reliability & Maintenance Optimization – COO
    b. Capital Project Planning/Delivery/Integration – CE
    c. Digital Innovation and Process Modernization – CTO
    d. People

➢ SHARED RESPONSIBILITY

Why the Realignment?

GOALS:

2. Vertical Integration
    a. Asset Management
        i. Improved maintenance planning, CIP project development
        ii. Aligning long-term asset plans with operational needs
        iii. CMMS – Preventative Maintenance, Spare Parts Inventory & CCTV
    b. Construction Support Team (CST)
        i. Execute CIP projects - requiring direct and ongoing support from the Design & Construction Departments - ensure seamless project delivery, alignment with engineering standards, and efficient resource allocation
    c. Construction Inspections
        i. Support CIP project design development reviews and construction efforts
    d. Project Support Office (PSO)
        i. Improved accountability and reporting of CIP

Building the Silicon Valley of Water Tech in Hampton Roads

HRSD's Innovation Ecosystem – Drives Economic Development

Incubators/Accelerators

RISE Resilience Innovations

CLIMATEHAVEN WATER INNOVATION HUB — Commercialization and deployment of advanced water technologies to address critical water challenges.

YALE

UCONN HUSKIES

xylem Let's Solve Water

VT

757 COLLAB

INNOVATE HAMPTON ROADS

IMAGINE H2O

Global Utility Partners

Watercare An Auckland Council Organisation

aarhusvand

PUB SINGAPORE'S NATIONAL WATER AGENCY

K water

Startups

CREW

EAOS

rl core technologies

WINTEC GLOVIS

AM Team

T03 TIDEWATER TRIDENT TECHNOLOGIES

TeamSolve

Jefferson Lab Radiance e-beam Co.

Venture Capital

S2G

PureTerra Ventures

MELIORATE PARTNERS

emerald

FERGUSON VENTURES

SNØCAP

Burnt Island Ventures

Ember Infrastructure

Aqualateral

XPV WATER PARTNERS

Industry Partners

GARNEY

meb.

TOMORROW WATER

PENTAIR

xylem

WM WASTE MANAGEMENT

world water works

VEOLIA

HDR

Hazen

AECOM

Virginia Natural Gas

FERGUSON

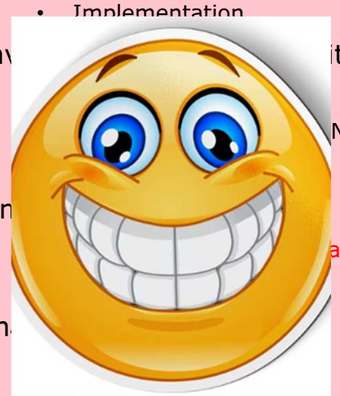
5 YEAR ROADMAP – Operations Division

FY25

- Skills Gap Analysis
- Environmental Responsibility
  - Integrated Plan/ENRCP
  - SWIFT, ROCI, SCADA
  - Curing / solids mgmt.
- I
  - p
- I
  - es
  - abilities
  - m
  - ors
  - Hauling OPS
- Talent
  - Apprenticeship Program
  - Recruiting & Retention
    - JD Revisions
- Re-organization
  - Infrastructure Assessment
  - OPS Project Team

FY26

- Re-organization
  - Vertical Integration
  - BHTP Closure
- Skills Gap Analysis
  - Implementation
- Env
  - ity
  - NG
- Inn
  - ater
- Fin
  - Annual contracts
  - Enhance Internal capabilities
    - Projects Team
    - Lawn Care
    - Janitorial
- Talent
  - Apprenticeship Program
  - Recruiting & Retention
- Succession Planning



FY27

- Re-organization
  - Alignment w/Divisions
- Skills Gap Analysis
  - Implementation
  - Resource Allocation
- Environmental Responsibility
  - Integrated Plan/ENRCP
  - SWIFT, ROCI, RNG
  - Curing / solids mgmt.
- Innovation - Research
  - Optimization
- Financial Stewardship
  - Operational Efficiencies
  - Enhance Internal capabilities
- Talent
  - Apprenticeship Program Revamp
    - Training
    - Competency
  - Recruiting & Retention
- Succession Planning
  - Forecasting

FY28

- Re-organization
  - Alignment w/Divisions
- Environmental Responsibility
  - Integrated Plan/ENRCP
  - SWIFT, ROCI
- Innovation - Research
  - Optimization
- Financial Stewardship
  - Operational Efficiencies
  - Enhance Internal capabilities
    - Projects Team
      - PM
      - Design Eng
- Talent
  - Apprenticeship Program Revamp
    - Training
    - Competency
  - Recruiting & Retention
- Succession Planning
  - Forecasting
  - Over hires
  - Cross training

FY29

- Re-evaluate
- Environmental Responsibility
  - Integrated Plan/ENRCP
  - SWIFT
- Innovation - Research
  - Optimization
  - Digital Water team
- Financial Stewardship
  - Operational Efficiencies
  - Enhance Internal capabilities
- Talent
  - Apprenticeship Program Revamp
    - Training & Competency
  - Recruiting & Retention
- Succession Planning
  - Over hires
  - Cross training

VERTICAL INTEGRATION & INTERNAL CAPABILITIES ENHANCEMENT

Building a Stronger, More Self-Reliant Operations Division

Strategically investing in internal capabilities to reduce costs, improve quality, strengthen schedule performance, and enhance long-term operational resilience.

FROM: TRADITIONAL MODEL	TO: HRSD INTERNAL CAPABILITY
Contract Project Management	**Construction Support Team** — In-house construction coordination and support
Contractor CCTV	**Internal CCTV Inspection Team** — In-house collection and assessment
Utility Locate Contracts	**Internal Utility Locating** — In-house locating services
Contract Biosolids Hauling	**Operations Hauling Group** — In-house hauling and logistics
Contract Lawn Maintenance	**Internal Grounds Maintenance** — In-house lawn care
Contract Janitorial Services	**Internal Janitorial Services** — In-house cleaning services
Contract Construction Inspections	**Construction Inspections Team** — In-house construction inspections and QA/QC
Asset Management Support (External Contracts)	**Asset Management – Internal Capabilities** — Added staff to build internal capability for asset data, analysis, and planning – reducing reliance on external contracts.
External Process Optimization	**Operations Process Optimization** — In-house expertise and continuous improvement
External Digital Solutions	**Digital Water Operations Team** — In-house implementation and support

WHY IT MATTERS

- **Lower Lifecycle Costs** — *Primary Driver*
- **Greater Quality Control**
- **Better Schedule Performance**
- **Faster Response Times**
- **Operational Efficiency**
- **Institutional Knowledge**

INVESTING IN OUR PEOPLE
Strengthening HRSD through intentional investments in talent and internal capability.

67 MORE POSITIONS. STRONGER HRSD.
Increased staffing levels by 67 POSITIONS over the past 4 years (FY21–FY25).

OPERATIONS DIVISION ANNUAL BUDGET
$150 MILLION

THE RESULT:
Lower Costs · Better Quality · Better Schedule Performance · Stronger Internal Capabilities

Stronger Internal Capabilities

HRSD — CLEAN WATER. HEALTHY ENVIRONMENT.

Intentional investments today. Sustainable capabilities tomorrow. Delivering long-term value for our community.

STRONG OPERATIONS. STRONGER COMMUNITY.

What This Means for Our Consultants

Building on the strong partnerships we already have to deliver even greater value together.

1. EARLIER COLLABORATION

- More opportunities for Operations input during planning and design
- Earlier alignment on project objectives
- Better understanding of operational priorities

You'll have greater access to the people who will operate and maintain these facilities earlier in the process.

2. BETTER INTEGRATION

- Stronger coordination between Operations, Engineering, Technology, and Asset Management
- More consistent communication
- Unified project teams

A more integrated team means you'll receive consistent input and a unified approach from start to finish.

3. FASTER DECISIONS

- Clear points of contact
- Quicker issue resolution
- More efficient project coordination

Clear roles and streamlined processes help decisions get made faster so projects stay on track.

4. GREATER INNOVATION

- Increased collaboration on Digital Water initiatives
- Pilot new technologies together
- Share ideas and lessons learned to solve complex challenges

We encourage fresh ideas and look forward to partnering with you to bring innovative solutions to life.

5. BETTER PROJECT OUTCOMES

- Improved constructability
- Enhanced operational readiness
- Lifecycle value
- Long-term reliability

Working together early and throughout the project leads to high-quality results that perform well over the long term.

6. LONG-TERM PARTNERSHIP

- Continued transparency
- Open communication
- Shared accountability
- Mutual success

We value the relationships we've built and are committed to long-term partnerships that create value for our communities.

Our consultants are not vendors—***they are trusted partners*** and an extension of the HRSD project team.

HRSD

HRSD values the expertise our consultants bring to every project. This organizational realignment is not about changing that relationship—it is about ***strengthening it*** by improving communication, coordination, and collaboration so we can continue ***delivering exceptional projects together.***

STRONGER TOGETHER.
BETTER FOR OUR COMMUNITIES.

People First | Mission Always | Environmental Stewardship | Community Focused

What Success Looks Like

When we work together, everyone benefits.

HRSD

GREATER RELIABILITY
Stronger operational resilience and asset performance

FASTER PROJECT DELIVERY
Streamlined processes and faster decision-making

SMARTER INVESTMENTS
Better planning and prioritization to maximize value

ENGAGED & EMPOWERED PEOPLE
Clear roles, career growth opportunities, and shared purpose

STRONGER ENVIRONMENTAL STEWARDSHIP
Protecting water quality and supporting sustainable communities

OUR CONSULTANTS

EARLIER COLLABORATION
Involvement from the start with better access to Operations and other teams

FASTER DECISIONS
Clear points of contact and quicker issue resolution

INTEGRATED PROJECT TEAMS
Stronger coordination across disciplines and departments

INNOVATION PARTNERSHIPS
Opportunities to bring ideas forward and pilot new technologies together

MUTUAL SUCCESS
Shared accountability, transparency, and long-term relationships

OUR COMMUNITY

RELIABLE SERVICES
Consistent, high-quality water services they can depend on

BETTER PROJECTS
Well-designed, constructible, and sustainable infrastructure

GREATER VALUE
Responsible use of resources and long-term cost savings

HEALTHIER ENVIRONMENT
Protecting our waterways and natural resources

STRONGER COMMUNITIES
Building a better quality of life for today and generations to come

Our shared success is built on collaboration, trust, and a commitment to excellence.

Together, we deliver projects that protect our environment and strengthen our communities.

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Program Support Office

Sree Kolapalli

The Backstory

Why PSO?

In alignment with HRSD's Strategic Plan, a Program Support Office is integrated into the Engineering Division to optimize delivery of the capital improvement program (CIP) through transparency, consistency, and efficiency.

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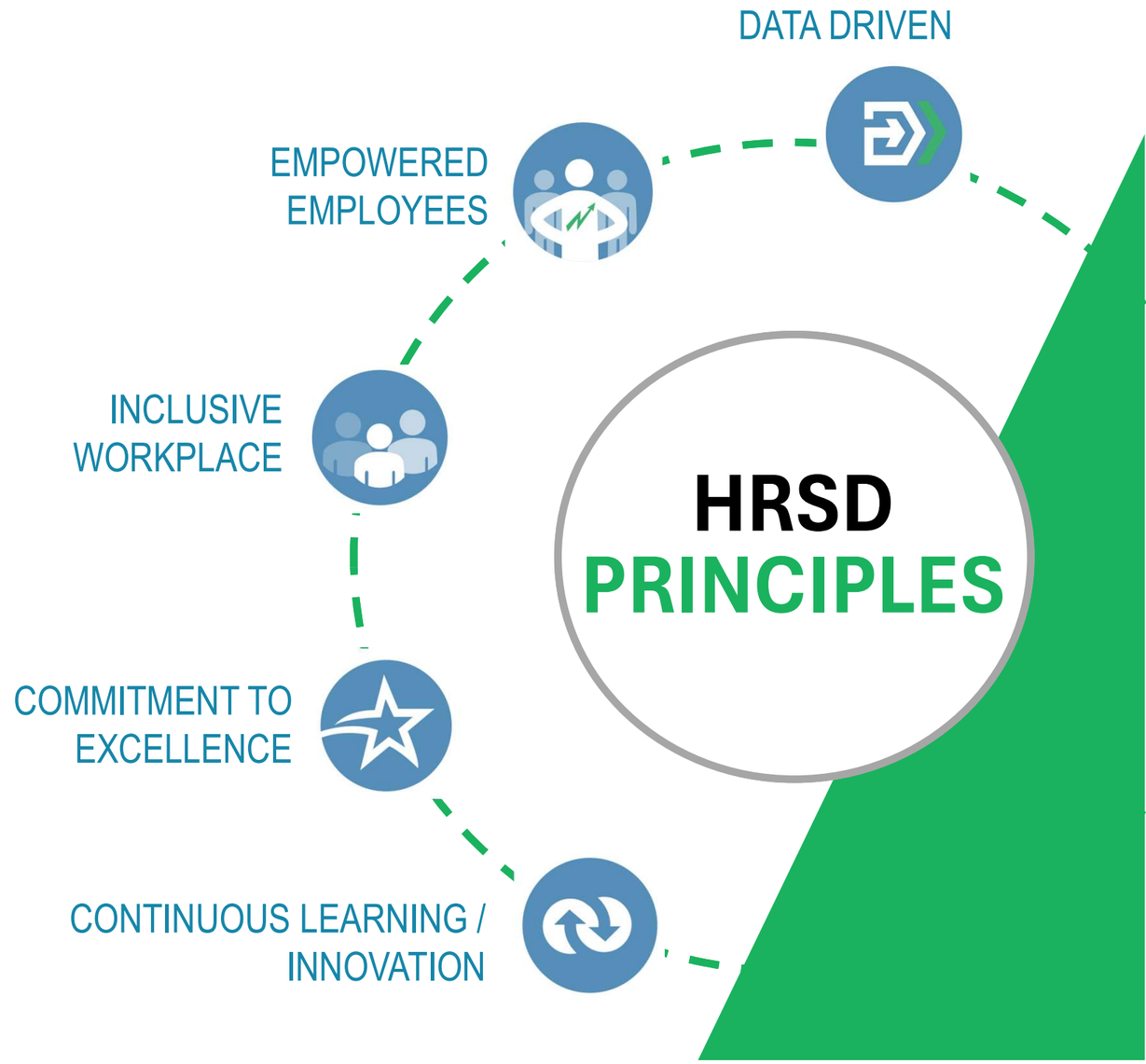
Strategic Plan
Priorities & Principles



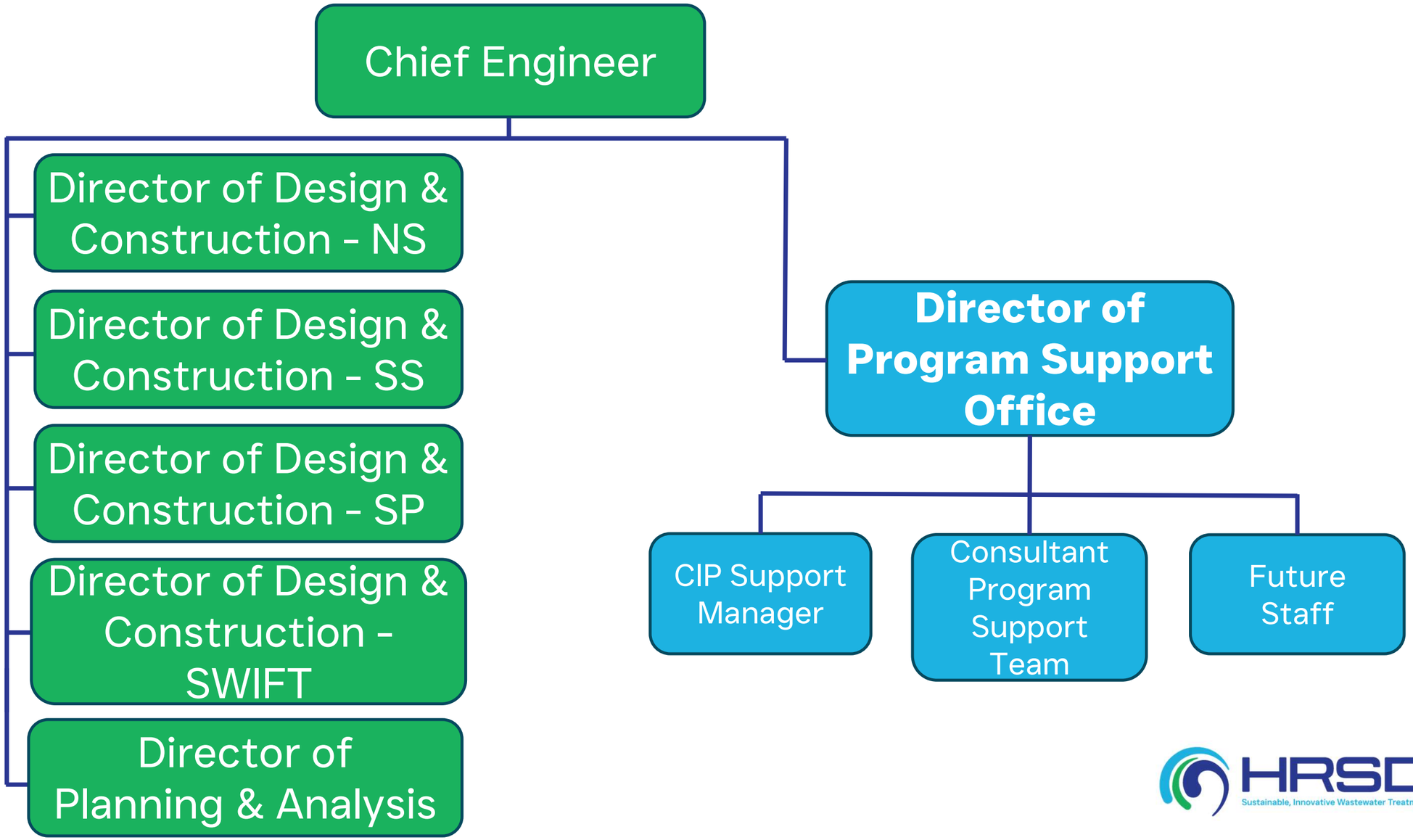
We preserve financial integrity and sustainability through sound planning to help ensure long-term affordability.

Strategic Planning effort acknowledged potential for structural and procedural changes in CIP implementation

FINANCIAL STEWARDSHIP

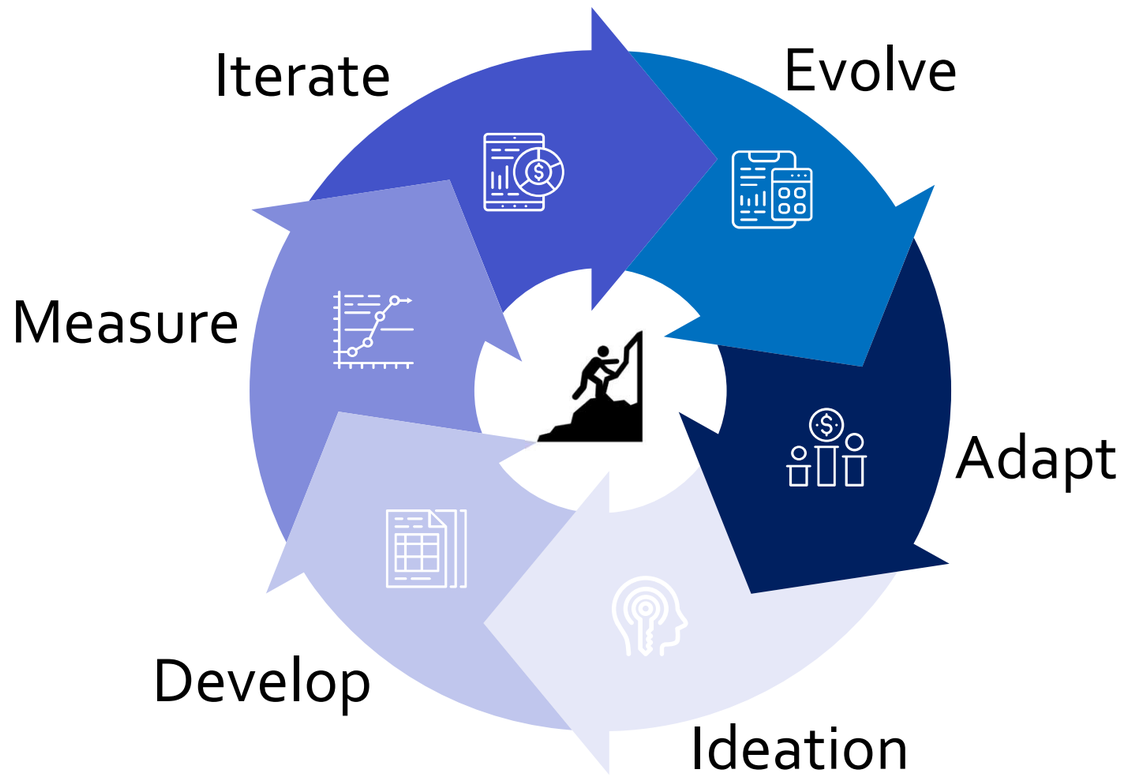
Objectives	Actions
Improve CIP prioritization, planning, and implementation.	• Establish a Project Management Office for HRSD.
Optimize financial solutions to manage funding opportunities and minimize/mitigate inefficiencies.	• Create a CIP "fundability" plan (i.e., review planned CIP projects and identify and align projects to potential funding sources).

PSO Organizational Structure



Framing the PSO

- PSO is tasked to provide some controlling functions, but will **not** directly own or manage projects
- Focus on **people, along with processes and tools**
- **Governance and Change Management are Key Factors**



Vision & Purpose

TRUSTED PARTNER

STRATEGIC FOCUS

VALUE ADDITION

- Transparency
- Standardization
- Optimization
- Support Departments for Informed Decisions
- Continuous Improvement

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Pre-RFP Information Session

- Plan is to engage Consultant to support PSO
- Information Session: August 6, 2026: 3:30 pm: in-person and virtual
- RSVP Details on Industry Page
- **107 Personnel from 31 Firms**

Questions?

D & C Standards Update and Industry Outreach Efforts

Laura Kirkwood

Updating the Standards Takes a Village

- Updates will occur by June 30 of each year and are managed by the Directors of D&C
- Committees meet throughout the year to discuss topics with a very focused effort from February through May to take action on suggested changes.
- Committee rosters are currently being updated, and the Directors are considering new Committees

	Pump Stations	Treatment Plants	Miscellaneous	Electrical and Instrumentation	Pipelines & Appurtenances	Rehabilitation of Sanitary Sewer Systems	Trenchless Crossing Installations	Corrosion Management	Standard Details
Committee Sponsor	Heselton, Shawn	Poe, Matt	McAdoo, Sam	Wright, Charles	Stephan, Chris	Kirkwood, Laura	Layne, Jeff	Malkawi, Anas	Hess, Mike
Committee Leader	**Denny, Ted**	**Weatherhead, Angie**	**Smith, Shirley**	**Pressey, Sherman**	**Opp, Virginia**	**Rutledge, Gene**	**Taschner, Nick**	**Burford, Jeremiah**	**Charalambous, B.**
Committee Members	Beaman, Buddy	Disomma, Amber	Beaman, Buddy	Girard, Bill	Beaman, Buddy	Barker, Justin	Beaman, Buddy	Thomas, John	Amy Chewning
	Brewster, Ryan	Currall, Becky	Jackson, Eric	Inman, Lee	Fox, Jeremy	Davis, Bobby	Denny, Ted	Heath, Lee	Korey Kendall
	Hypes, Sean	Matel, Holly Anne	Taschner, Nick	Lowery, Dean	Hughes, Phil	Shepherd, Jon	Rutledge, Gene	Miller, Matthew	
	Inman, Lee	VanKleeck, Craig	Weatherhead, Angie	Nelson, Andy	Lamm, Bruce	Hughes, Phil		Morrisette, Calvin	
	Wilson, Justin	Elliott, Benjamin	Stanley, Doug	Peake, John	Carty, Delane	Adkins, Brett		Disomma, Amber	
	McCoy, Kayla		Sidwa, John	Currall, Becky	Davis, Lyndsey	Granato, Santino			
				Hypes, Sean	Rickard, Mackenzie				
				Ward, Donnie					
				Stephan, Chris					

Section #	Title	Author / Reviewer
0-0	Forward - Chief Engineer's Viewpoint	Chief Engineer
1-1	Introduction	Dir. of D&C
2-1	Architectural and Landscaping Design and Review Process	Dir. of D&C / Architectural Review Committee
3-1	Use of Technical Memorandum for CIP Projects	Dir. of D&C
4-1	Monthly Project Status Reporting	Dir. of D&C
5-1	Capital Project Cost, Schedule, and Risk Reporting	Dir. of D&C
6-1	Drawings, Record Drawings, and Valve Guides	J. Robichaud
7-1	HRSD BIM Requirements	A. Malkawi
8-1	PER, Design, and Construction Submittal Requirements	Dir. of D&C
9-1	Real Estate Acquisition and Plat Guidelines	Real Estate Manager
10-1	Flood Elevation Requirements	R. Martz
11-1	Public Communication Program	Public Information Specialist
12-1	Preconstruction Assessments and Damage Mitigation Procedures	Dir. of D&C / M. Josey-White
13-1	Coordination with VDEQ for CTC and CTO	Dir. of D&C
14-1	Coordination of Preconstruction Phase Issues	Contract Specialists
15-1	Preparation of and Format for Construction Addenda	Contract Specialists
16-1	Preparation of and Format for Conformed Documents	Dir. of D&C
17-1	Tracking of Construction Phase Milestones and Performance Metrics	Dir. of D&C
18-1	Expectation for Construction Administration and Construction Inspection	Dir. of D&C
19-1	Use of Air Vent Proving Tool	V. Opp
20-1	Condition Assessment Protocol	P. Hughes
21-1	Regulatory Reporting Requirements for Spills	L. Grimmer
22-1	HRSD Safety Program	S. Laughinghouse
23-1	VDOT WAPM	S. Laughinghouse
24-1	Pipelines and Appurtenances	V. Opp
25-1	Checklist for Line Stop Installations	V. Opp
26-1	Checklist for Tie-Ins to Existing Interceptor Force Mains	V. Opp
27-1	Trenchless Crossing Installations	N. Taschner
28-1	Checklist for Trenchless Crossing Operations	N. Taschner
29-1	Rehabilitation of Sanitary Sewer Systems	G. Rutledge
30-1	Deep Excavation Support Systems	Dir. of D&C
31-1	Pump Stations	T. Denny
32-1	Treatment Plants	B. Currall
33-1	Electrical and Instrumentation	S. Pressey
34-1	IT Infrastructure Hardware	J. Peake
35-1	Miscellaneous	S. Smith
36-1	Standard for Capital Improvement Projects that Involve Construction Dewatering Activities	S. Smith / P3
37-1	Standard Details	B. Charalambous
38-1	Suggested Division 1 Items	Chief/Dir. of D&C
39-1	Front End Documents	Contract Specialists
40-1	Construction Admin Forms / Formats	Contract Specialists
41-1	Master Specs (*to be reviewed by D&C Directors and others as assigned)	Dir. of D&C
42-1	VDEQ Project Funding	M. Josey-White

While there are only nine D&C Standards committees currently, there are many more sections and HRSD individuals, groups, and departments who provide valuable input

HRSD Sustainable, Innovative Wastewater Treatment

There is a combined copy of the D&C Standards.

- Scroll to the bottom of the D&C Standards webpage.
- You will need to access the attachments under each section, although they are linked in the consolidated PDF.

DOWNLOAD THE HRSD DESIGN AND CONSTRUCTION STANDARDS IN ITS ENTIRETY

A consolidated PDF is provided for convenience. All attachments maintained in their native (non-PDF) formats are linked to their respective URLs on HRSD's website and are not embedded in the consolidated PDF. Selecting one of these attachment links will not open the document in Adobe Acrobat; instead, it will download the file directly through your web browser.

Noteworthy Updates

- **Section 4 – Monthly Project Status Reporting:**
  - Diversity Procurement
    - For Capital Projects - The involvement of small, women-owned, and minority-owned (SWaM) businesses, service-disabled veteran-owned business (SDVOB), or disadvantaged business enterprises (DBE) is to be provided on the **diversity data tab in Unifier while creating a payment request.**
    - For non-Capital Projects - The template in Attachment D shall be used by each FIRM, unless otherwise agreed to by the HRSD Project Manager in writing as part of the Record of Negotiation, to indicate the involvement of small, women-owned, and minority-owned (SWaM) businesses, service-disabled veteran-owned business (SDVOB), or disadvantaged business enterprises (DBE).

Noteworthy Updates

- **Section 5 – Capital Project Cost, Schedule, and Risk Reporting:**
  - A letter from the FIRM, signed by the FIRM's principal in charge, shall be included with all OPCCs and shall document **conformance with all of the requirements herein [within section 5].**
  - Attachments
    - Project Budget and Schedule Estimate Report and OPCC Classification
    - Project Risk Table
    - Schedule Data Template

Costs (*rounded to nearest $1,000)

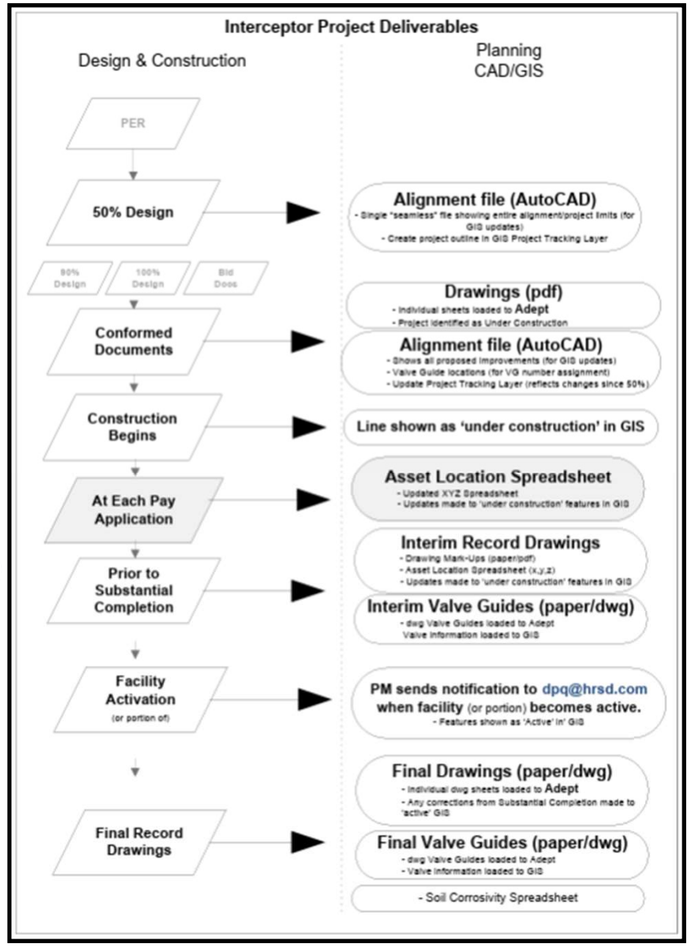
Stage of Budget Estimate	AACE Cost Class	PER	Design	Bid Phase	Construction Administration	Construction Inspection	Construction	Closeout	Total
Initial Budget Development	5								$ -
Final PER	4								$ -
Preliminary Design	3								$ -
Pre-Final Design	2								$ -
Construction Bid Advertisement	1								$ -

Notes:
- Identify specific reasons for variance between each stage if total project cost changes by more than 10% and provide reasons in the same file as this Cost Report by phase.
- The stages called out above are a minimum requirement. Additional estimates may be added if appropriate. Make note of the current estimate with an asterisk (*).

HRSD Sustainable, Innovative Wastewater Treatment

Noteworthy Updates

- **Section 6 – Drawings, Record Drawings and Valve Guides**
  - — Abbreviations, Fonts and Standard Symbols update
- **Section 8 – PER, Design, and Construction Submittal Requirements**
  - — Relocated Attachment: PER Minimum Required Table of Contents Chapters
  - — NEW Attachment: Interceptor Project GIS Deliverables Flow Chart
- **Section 11 – Public Communication Program**
  - — There were changes in most of the attachments / templates.



Noteworthy Updates

- **Section 12 – Preconstruction Assessment and Damage Mitigation**
  - Engineering Compliance Manager, Project Manager, and Director are your primary reviewers of this document.
  - Stage 1 shall be submitted after the 50/60% design review with HRSD staff
    - During this workshop, conduct a virtual walk-through of the project location
- **Section 14 – Coordination of Preconstruction Phase Items**
  - Prior to the bid opening date, the FIRM shall create a response to the solicitation in ERP and shall enter the most recent OPCC, providing each bid item on the online bid form.
  - New Attachment: Sample Bid Recommendation Letter

Noteworthy Updates

- **Section 18 – Expectations for Construction Administration and Construction Inspection**
  - Inspector(s) to have NASSCO ITCP-CIPP training for CIPP rehabilitation project work and NASSCO ITCP-MR training for manhole rehabilitation.

Noteworthy Updates

- **Section 24 – Pipelines and Appurtenances**
  - FIRM shall also consider additional measures (e.g., matting, helical piles, or flexible joints) to eliminate post-installation settlement at the tie-in location to accommodate site or project-specific conditions.
  - Hydrostatic pressure tests on taps shall be a two-part test: first on the valve fully closed against an acceptable end plug or flange, and then on the valve fully open to test the saddle installation. The tests shall be in accordance with saddle manufacturer's recommendations or to a wet pressure test of 50 psi for 30 minutes with zero leakage, whichever is the greater test. **Test pressures shall be coordinated through the Interceptor Operations Manager prior to performing any pressure test.**

Noteworthy Updates

- **Section 32 – Treatment Plants**
  - — Updated Abbreviations
  - — Emergency Power
    - Remove requirement “to power all sewage treatment operations at 2.5 times max monthly wastewater flow…”
    - Added provisions for portable generator connection.
  - — If sump pumps are being utilized to convey chemicals, an alarm system shall be included to notify operations if the pump is running.

Noteworthy Updates

- **Section 32 – Treatment Plants (continued)**
  - Gates, frames, and stems -to be fabricated of 316 stainless steel. Other materials may be considered on a case-by-case basis if there are concerns related to compatibility with process flow and up/downstream chemical discharge, or in cases where longevity is not a concern.
  - Consider gate width and whether dual stem or single stem should be specified to prevent gate racking
  - The current functional description for the unit process being upgraded should be requested by the FIRM. The HRSD Project Manager will coordinate with the plant staff to confirm the functional to be used. The draft functional description shall be provided to HRSD for review in track changes.

Noteworthy Updates

- **Section 33 – Electrical and Instrumentation**
  - The Utility Service Transformer shall be located within 50 feet of the Utility Service Metering Base (or as required by the specific utility) such that the **transformer secondary cabling is installed, owned, and maintained by the respective utility**
    - The installation of conduit for the secondary cabling shall be conducted in accordance with the requirements of the respective utility.
    - If circumstances prevent the requirements above to be followed and HRSD is responsible to own and maintain the transformer secondary cabling, the conduit for this cabling shall be installed in accordance with the requirements as specified in this standard.

Noteworthy Updates

- **Section 34 – IT Infrastructure Hardware and Third-Party Integration**
  - — Operational Technology (OT) Cybersecurity Standards
  - — Operational Technology (OT) Cybersecurity Standards Supporting Guidance
  - — Physical Security Infrastructure Standards


FEDERAL BUREAU OF INVESTIGATION

Public Service Announcement

Alert: I-073026-PSA | 30 JULY 2026

Malicious Cyber Actors Targeting Water and Wastewater Sector Internet-Facing Programmable Logic Controllers, Causing Operational Disruptions

Noteworthy Updates

- **Section 36 – Standards for Capital Improvement Projects that Involve Construction Dewatering Activities**
  - The FIRM shall follow HRSD's Construction Dewatering Policy, found on www.hrsd.com, to ensure proper permitting is in place before beginning work.
  - Appropriate discharge permits must be secured by the selected contractor before discharging contaminated groundwater from dewatering sites. The permits available for the discharge of contaminated groundwater are as follows:
    - VDEQ VPDES General Permit or Individual Permit for discharges of contaminated groundwater into the storm sewer system or state waters.
    - **HRSD Letter of Authorization for discharges into the sanitary sewer system. A Letter of Authorization may only be issued when VDEQ rejects coverage via a VPDES General Permit or Individual Permit.**
  - Depending on site contamination and VDEQ permitting, some projects may require both a VPDES General Permit and an HRSD Letter of Authorization.

Noteworthy Updates

- **Section 41 – Master Specifications**
  - Submittals: Any submitted “or equal” equipment/manufacturer must obtain HRSD approval through the applicable Design and Construction Standards Committee. Engineer to coordinate with the HRSD Project Manager to initiate the review process.
  - Maintenance of Pipeline and Pumping Operations: The Contractor shall test operate bypass pumping system for 24 hours to confirm reliable operation of pumps, temporary systems, and alarms prior to bypass use. **The start of the 24-hour bypass pumping test shall be between the hours of 8:00 AM on Monday and Noon on Wednesday.** Existing station(s) must remain online and viable for the duration of the 24-hour test.

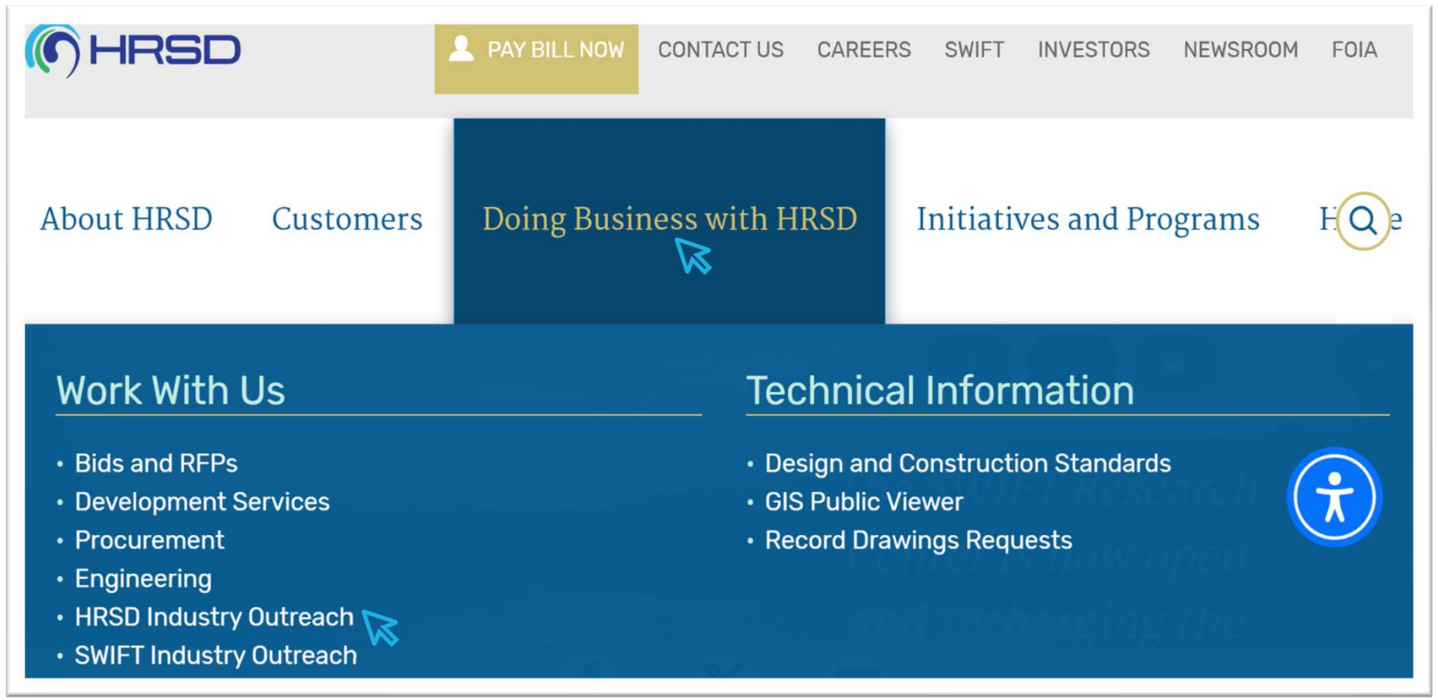
Noteworthy Updates

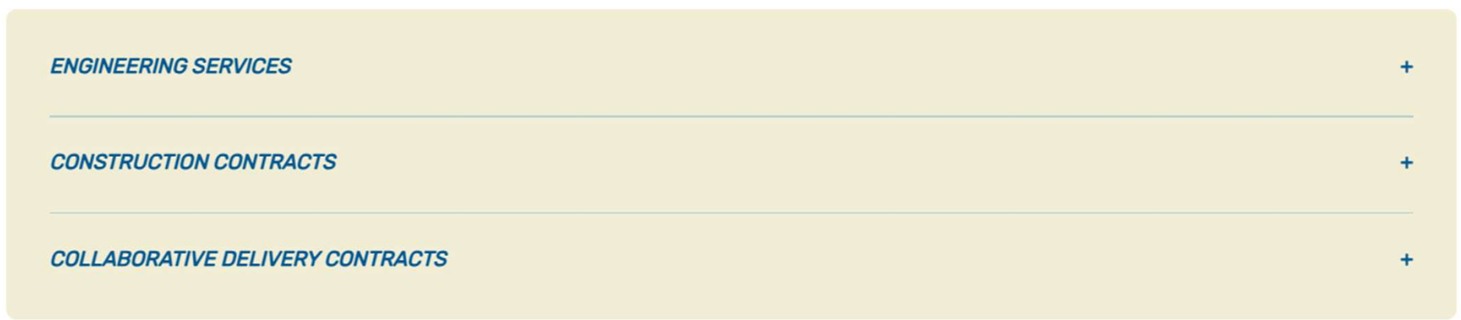
- **Section 41 – Master Specifications (continued)**
  - Valves
    - Spare Parts: *{Engineer to discuss this requirement with HRSD and delete if not needed}*
      - Products supplied must be identical to valve model and sizes supplied on the project.
      - Spare parts shall not be ordered and/or invoiced until authorized by Engineer. Engineer to verify need for spare parts based on HRSD inventory and valve manufacturer selected by the Contractor.
      - *Engineer to specify the type (ie. Gear box, etc.) and quantity of spare parts for each valve size based on discussions with HRSD. Separate bid item allowance for spare parts to be included in the Contract Documents*
  - Contaminated Groundwater Management
    - Updated to reflect changes in Standards Section 36.

And if you have any suggestions…

- Send an e-mail to **DesignConstructionStandards@hrsd.com**
- Inbox Purpose:
  - Communicate directly with Committee Leaders and D&C Directors on important topics that may need to be updated. Be specific.
  - **Request review of an "or equal" product during construction.**
  - **Capture variance requests**
    - **For these last two items, coordinate through your Project Manager and copy DesignConstructionStandards@hrsd.com**

HRSD Industry Outreach Page





- Provide business partners with a forward-looking view, up to one year, of anticipated contract opportunities related to current and upcoming CIP projects.
- Desired Outcome: Increase participation from both new and existing partners by providing earlier visibility into upcoming contract opportunities.

HRSD Industry Outreach: How can you help?

- Work with your Project Manager to
  - develop a project description that enables potential bidders to assess their interest, whether to submit a bid, request additional information, or forego
  - publish and update your OPCC and planned advertisement date
  - coordinate advertisement release with other potential advertisements
  - illustrate your project with relevant photos or 3D model images
- Talk to contractors and share the Industry Outreach webpage
- Reach out to contractors before your project's advertisement

Upcoming RFPs

- SWIFT RESEARCH CENTER EDUCATIONAL AND OUTREACH IMPROVEMENTS (GN016230) – ADVERTISE 3RD QUARTER CY-2026 +
- ANNUAL ON-CALL CONTRACT - PSO SUPPORT SERVICES - ADVERTISE AUGUST 2026 +
- DOUGLAS AVENUE INTERCEPTOR FORCE MAIN (SF-219) IMPROVEMENTS - PHASE I (VP020100) - ADVERTISE SEPTEMBER 2026 +
- COMMANDER SHEPARD BOULEVARD INTERCEPTOR FORCE MAIN REPLACEMENT (YR015500) - ADVERTISE 4TH QUARTER CY-26 +
- ANNUAL ON-CALL CONTRACT - LINEAR INFRASTRUCTURE - ADVERTISE FEB - 27 +
- ANNUAL ON-CALL CONTRACT - ARCH/MECH/ELEC - ADVERTISE FEB - 27 +
- ANNUAL ON-CALL CONTRACT - REAL ESTATE - ADVERTISE FEB - 27 +
- ANNUAL ON-CALL CONTRACT - CONDITION ASSESSMENT - ADVERTISE FEB - 27 +
- ANNUAL ON-CALL CONTRACT - SURVEYING - ADVERTISE FEB - 27 +
- ANNUAL ON-CALL CONTRACT - CONSTRUCTION INSPECTION - ADVERTISE FEB - 27 +
- ANNUAL ON-CALL CONTRACT - ENVIRONMENTAL - ADVERTISE FEB - 27 +

- Three project-specific RFPs in the next few months
- Eight (8) annual on-call contracts
  - PSO RFP to advertise September 2026
  - Seven (7) others to advertise January through March 2027

HRSD Sustainable, Innovative Wastewater Treatment

Questions?

Sustainable, Innovative Wastewater Treatment

Quality Expectations for Services During Construction

Mike Hess

HRSD
Sustainable, Innovative Wastewater Treatment

Quality Expectations for Services During Construction

- Most projects receive full time or almost full-time construction inspection. However, there have been **some** deficiencies or mistakes made during the construction phase.
- These deficiencies or mistakes have a big impact on our Operations staff.
- Often requiring the Operations staff to spend more time in taking the system back out of service, by-passing, valve operation, and double checking to make the construction was performed properly.

Quality Expectations for Services During Construction

- During the construction phase, we need good coordination and communication between the Construction Inspector, Consultants, HRSD PM and Operations.
- Facility meets milestone expectations when Operations buy-in is requested.

Quality Expectations for Services During Construction - Valves

- Orientation
  - **Multiple valves installed in wrong orientation**
  - Yard valve ordered in wrong orientation and then installed
  - Gear box installed in the wrong orientation
- Broken gear box installed and buried
- Verify valve turn count prior to installation

Quality Expectations for Services During Construction - Pipelines

- Megalug restraint bolts not inspected. Some spun the opposite direction requiring new bolt installation w/ torque wrench and some bolts simply not even touched, providing no restraint.

- Improper pipe cap / plug. Plywood and spray foam were used to seal a small diameter yard pipe leading a leak discovered by Operations.

Quality Expectations for Services During Construction – Pipelines

- Gravity main installed not on grade requiring it to be removed and reinstalled
- Force main installed in an easement offset from the designed location

Quality Expectations for Services During Construction – <u>Odor Control</u>

- Air intake installed below high float level

- Leaks and unsealed openings in ductwork

Quality Expectations for Services During Construction – <u>System Activation</u>

- By-pass systems being removed prior to new facility inspection and w/o notice to Operations resulting in an SSO.
- Facilities being brought on-line w/o Operations notice and/or prior inspection.

Quality Expectations for Services During Construction – Startup and Commissioning

- Point to point verification
  - Loose wires, inverted points, proper power
- Loop checks
  - Communications, screens, SCADA
- Witness Combined Loop Testing
- Independent Functional System Testing
- Operational Demonstration

Quality Expectations for Services During Construction – Startup and Commissioning

- Items impacting quality
  - First to be compromised by schedule compression
  - Programming and screen development start late
  - Limited number of dedicated system integrators

Quality Expectations for Services During Construction – <u>Requests for Information</u>

- Clarification — Not Contract Modification
- Opportunity to Influence Positive Change
- Think Beyond the Immediate Question
- Address Issues Before They Become Costly

Questions?

Preconstruction Assessments, Claims, and Davis-Bacon Wage Compliance

Melissa Josey-White

Risk Mitigation and Claims

Pre Construction

Pre Construction and Damage Mitigation Deliverables:

- Stage 1 – Construction Impact Research and Evaluation
  - Submitted after the 50% design
  - Include maps of Sensitive Structures as well as Zones of Influence for Vibration, Sound, and Dewatering
- Stage 2 – Risk Mitigation Analysis and Recommendations
  - Submitted and accepted by HRSD before the 90% Design
- Stage 3 – Pre Condition Assessments, Baseline Construction Monitoring and Bid Document Development
  - Complete before construction
  - Provide copies of Assessments to Engineering Compliance Manager

Claims

Construction Claims

- Contact Contractor, Engineer, HRSD Project Manager and Engineering Compliance Manager when issues arise
- Track issues in Project Meetings
- Claims should be resolved in 60 days or less

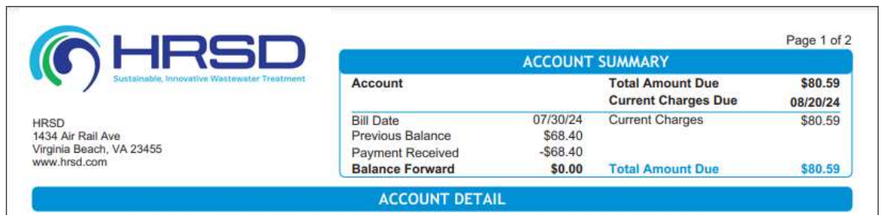
Loans and Grants

VCWRLF Reminders

- VCWRLF (Virginia Clean Water Revolving Fund)
  - Contract Documents
    - 2025 VCWRLF Inserts need to be included at all tier levels for Subcontractors and Vendors
  - Good Faith Efforts
    - All procurement opportunities at all tier levels
  - Davis Bacon
    - Wage Conformance Rates as needed
    - Ensure current Wage Determination
      - 10 day/90 day rule

Invoice Reminders

- Invoices-Please ensure Construction Invoices are signed (digital or wet)
- Please ensure logos are located on all invoices


HRSD
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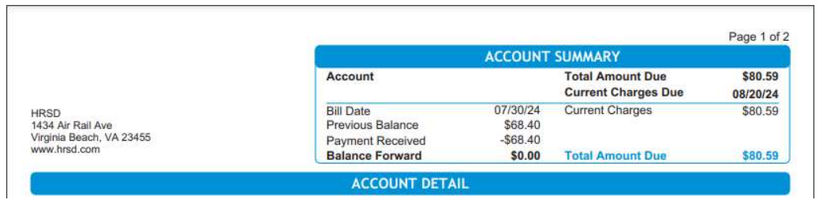
Page 1 of 2

HRSD
1434 Air Rail Ave
Virginia Beach, VA 23455
www.hrsd.com

ACCOUNT SUMMARY

Account		Total Amount Due	$80.59
		Current Charges Due	08/20/24
Bill Date	07/30/24	Current Charges	$80.59
Previous Balance	$68.40		
Payment Received	-$68.40		
Balance Forward	$0.00	Total Amount Due	$80.59

ACCOUNT DETAIL


Page 1 of 2

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Balance Forward	$0.00	Total Amount Due	$80.59

ACCOUNT DETAIL

HRSD
Sustainable, Innovative Wastewater Treatment

Invoice Reminders

- Please notate or include mark up items

Expenses

Account / Vendor	*Cost*	*Multiplier*	*Amount*
Subconsultant Services			
ENGINEERING & TESTING SERVICES INC	9,500.00	1.0500	9,975.00

- Or

Includes 5% markup at billing - added $718.00

- Or

$	2,550.00	see sub invoice for breakdown
$	255.00	Sub write up 10% (P/T)
$	24,739.68	see sub invoice for breakdown
$	21,679.06	see sub invoice for breakdown
$	17,514.96	see sub invoice for breakdown
$	4,795.03	Sub write up 7.5% (F/T)
$	5,000.00	see sub invoice for breakdown -

HRSD Sustainable, Innovative Wastewater Treatment

Documentation

- Needs to originate from the Manufacturer not the Distributor
- Documentation needs to include the 5 key elements
- Confirm items are manufactured in the US and match what is delivered to documentation
- Notate when assets are received in inspection reports

De Minimis

- Item needs to be incidental to the project not just based on item price
- Contractor, Engineering Firm and HRSD need to concur

LS Caldwell Non-SWIFT

PRE-CONSTRUCTION

- Contract
  - Compliance
  - Contract
  - Wage
- Pre-Bid
- 10 Dav /90 Dav Determination Review
- Bid Closing/ Addendums
- Final Contracts with
- Notification to
  - Start
  - Prime Contractor Information
  - Contract
- Conformance
- CÔR Proiect and Setup

CONSTRUCTION

- Kick off
- Engagement
  - Subcontractor
  - Scheduling Ahead
- CÔR and Training
- Davis
  - Certified Review
  - Site
  - Pav
- Good Faith
- DEO
- Conformance
- Audits as needed.

CLOSEOUT

- Final Davis Bacon
- Verification of Discrepancies
- Track/Log all documents
- Final DEO
- Audits as needed

Questions?

Sustainable, Innovative Wastewater Treatment

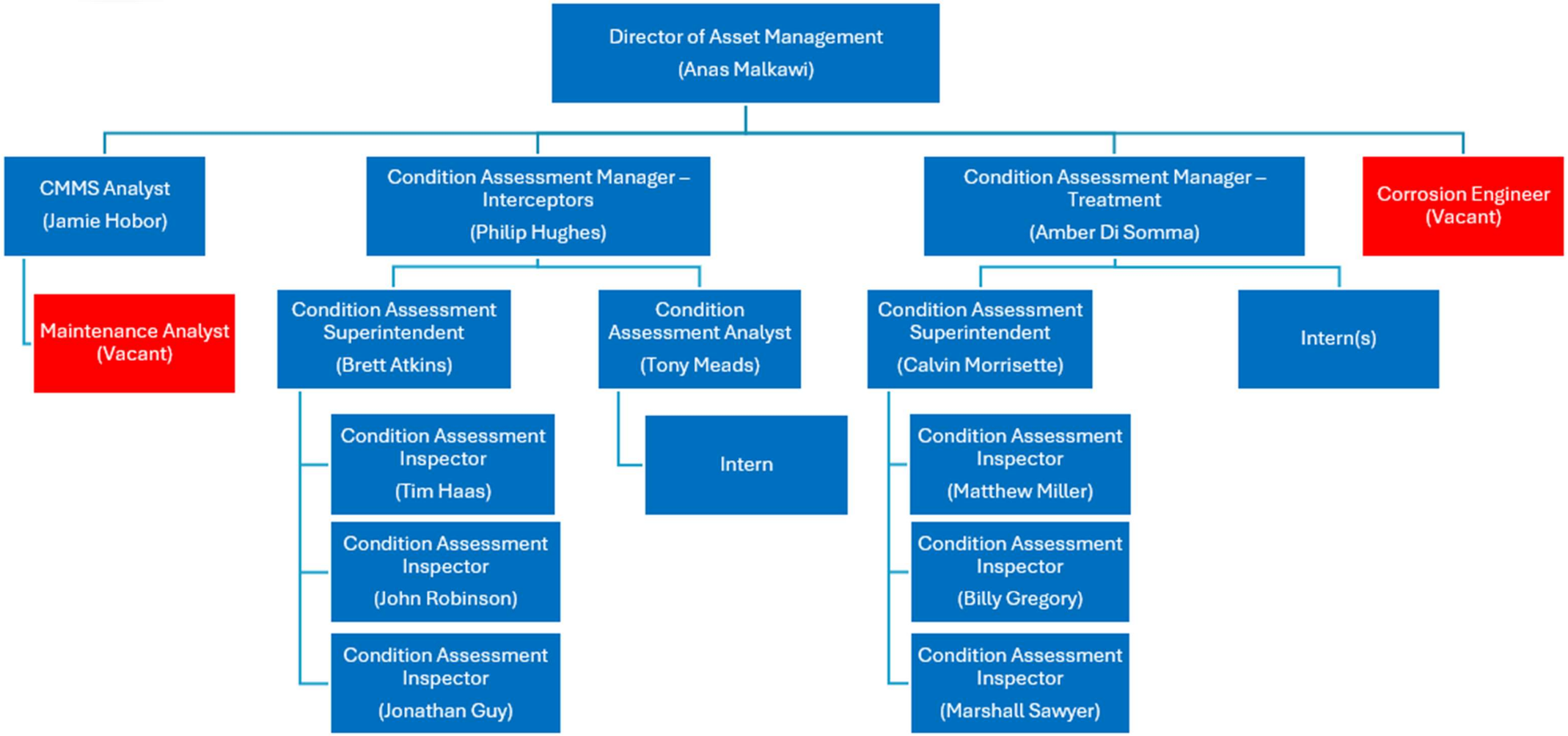
O&M and Asset Data Submittals

Anas Malkawi

Topics

- AM Org Chart
- O&M Manual and Asset Data Submittals
- PER Condition Assessment Plan

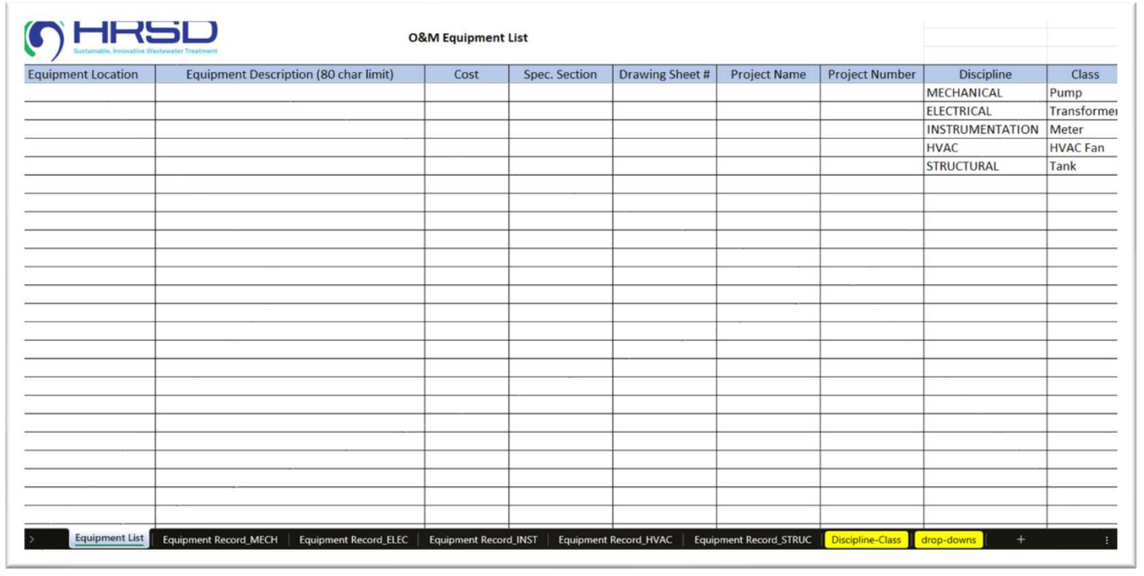
Asset Management Org Chart



O&M Manual and Asset Data Submittals

- Challenges:
  - Waiting until end of construction to prepare these submittals causes delays
  - Not enforced consistently
- Gap Assessment underway
  - internal and external processes – update D&C Standards and internal SOPs
- Equipment List @ 100% Design should be used to determine which assets need O&M Manuals and Equipment Data
- Engineer should be more involved throughout the life of the project

C. Interim Record Drawing submittals must be submitted to the HRSD Project Manager a minimum of 5 business days in advance of the scheduled tie-in for the force main project or HRSD taking operational possession of the constructed facility. The FIRM will incorporate this requirement into the Construction Bid Documents.



PER Condition Assessment Plan

- Section 8 – Attachment A – Major Submittals List

Submittal Description	Submittal Format	Number of Copies	Distribution List	Reference Section
PER Draft	PDF upload to Enterprise Project Management (Unifier) system	N/A	• Engineering Library • Operations Division • Chief Engineer • Real Estate Manager	Section 8 – PER, Design, and Construction Submittal Requirements
	8 ½" x 11" double-sided paper copy	TBD	As requested	*{Number of copies defined in Professional Services Agreement/Amendment or as requested}*
Infrastructure Condition Assessment Plan	Incorporated into PER draft and final, or for projects without a PER	TBD	• Project Manager • Director of Asset Management	Section 20 – Condition Assessment Protocol
Building	PDF uploaded to Unifier	TBD	• Project Manager	Section 7 – HRSD Building

- Purpose:
  - Determine the CA activities needed before, during, and after construction
  - Help define the full scope of the project based on actual conditions
  - Reduce construction change orders
  - Opportunistic assessment of pipes, tanks, channels, etc.

Questions?

Asset Location Requirements During Construction

Jules Robichaud

Asset Location Requirements
Record Documents - 01323

- During pipe construction, location of new infrastructure

SECTION 41 - MASTER SPECFICATION SECTIONS OVERVIEW

I. Introduction
II. Listing of Master Specification Sections
- 01010 – Summary of Work
- 01040 – Coordination
- 01060 – Special Conditions
- 01270 – Measurement and Payment
- 01323 – Record Documents
- 01340 – Submittals
- 01520 – Maintenance of Pipeline and Pumping Operations
- 01560 – Environmental Protection and Special Controls
- 01650 – Facility and System Start-Up
- 02510 – Ductile Iron Pipe
- 02520 – Polyvinyl Chloride Pipe
- 02530 – High Density Polyethylene (HDPE) Pipe and Fittings
- 02531 – Line Stops on Sanitary Sewer Force Main Systems
- 02610 – Valves
- 02710 – Contaminated Groundwater Management

D. Recording:
1. Label each document "PROJECT RECORD" in 2-inch high printed letters.
2. Keep record documents current and updated at least weekly.
3. Do not permanently conceal any Work until required information has been recorded.
4. Contract Drawings - Legibly mark to record actual construction including:
   a. A written record of actual ground and top of pipe elevations at each joint and at all fittings, valves, air vents and connection points and at all horizontal and vertical deviations from the construction plan set.
   b. Records kept in a digital spreadsheet containing X,Y,Z coordinates for top of pipe elevations at each joint and at all fittings, valves, air vents and connection points. Accuracy must be sub-foot for horizontal (X, Y) and 0.1-ft for vertical (Z). An updated spreadsheet must be provided with each Contractor pay application. The Digital spreadsheet shall be directly compatible with ArcGIS software without requiring any additional re-formatting, such as a Shapefile, File Geodatabase, or properly formatted Excel or CSV files.

Asset Location Spreadsheet

- Updates @ each Contractor pay application
- Data keeps GIS up-to-date for Ops Staff
- Supports Miss-Utility marking

Example:

	A	B	C	D	E	G
1		**Norview Estabrook Division 1 Force Main**				
2		**AS-BUILT ASSET SHEET**				
3						
4	**FEATURE TYPE**	**DATE PLACED**	**ACTUAL STA.**	**ACTUAL TOP**	**NORTH**	**EAST**
5						
6						
7	Pipe Joint	9-Nov	12+00	1.94	3487156.00	12141229.57
8	Pipe Joint	9-Nov	12+20	2.16	3487149.09	12141248.17
9	Pipe Joint	10-Nov	12+40	2.34	3487142.19	12141266.77
10	Pipe Joint	13-Nov	12+60	2.54	3487135.09	12141286.01
11	Pipe Joint	13-Nov	12+80	2.74	3487128.57	12141305.38
12	Pipe Joint	13-Nov	13+00	2.99	3487121.63	12141323.55

Asset Location Spreadsheet

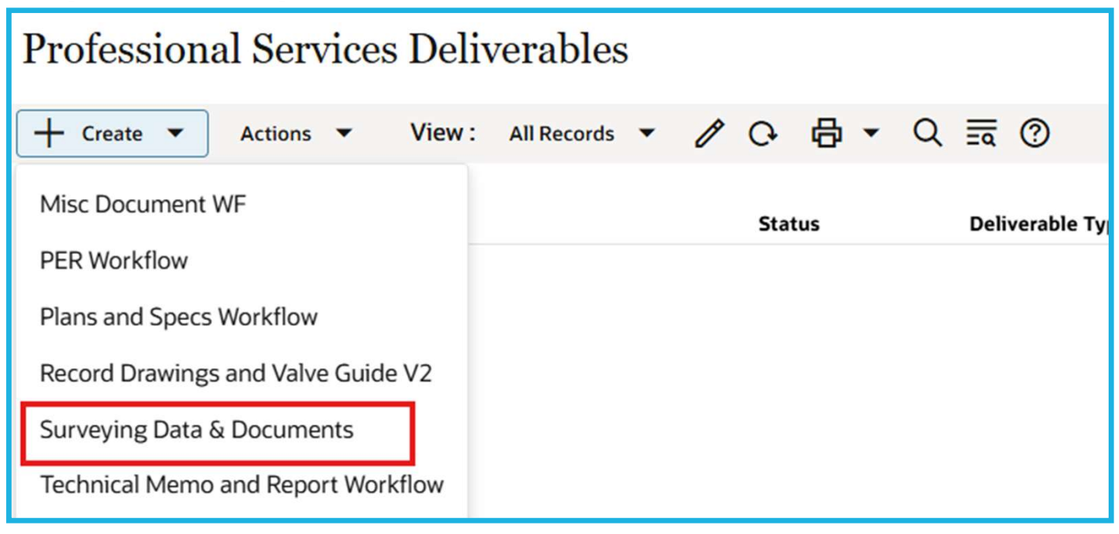
- Updated spreadsheet with each Contractor pay application

Excel template available for download:

SECTION 8 - *PER, DESIGN, AND CONSTRUCTION SUBMITTAL REQUIREMENTS*

I. Introduction
II. Requirements for Submittals
III. Attachments
- Attachment A – Major Submittals List
- Attachment B – Equipment Record Template
- Attachment C – XYZ Spreadsheet
- Attachment D – Soil Corrosivity DB Excel Template
- Attachment E – PER Minimum Requied Table of Contents Chapters
- Attachment F – Interceptor Project GIS Deliverables Flow Chart

Upload spreadsheet to Unifier:



** Record Drawings still need to reflect as-built conditions

Questions?

Sustainable, Innovative Wastewater Treatment

Construction Cost Database

Jeff Layne

Construction Cost Database Agenda

1. Why did HRSD create this database
2. How is the data collected
3. What is included in the database
4. Where to find the database
5. Future of the database

The Construction Cost database was created with help from:

Coleen Moody, HRSD IT

Raja Arokiaraj, HRSD IT

Trish Hartman, HRSD Engineering

Rebecca Ashley, HRSD Engineering

Connie Harris, HRSD Engineering

Why did HRSD create the Construction Cost database?

- HRSD Commission wants better cost estimating for construction projects and would like for the OPCC to be very close to the low bid.
- Engineering Department Improvements
  - Independent cost estimate for projects over $50M
  - Letter from upper management of design firm verifying OPCC meets requirements listed in Section 5 of D&C Standards
  - Monthly meeting to discuss HRSD and localities bids (CCEUG)
  - Create Construction Cost database

Why did HRSD create the Construction Cost database

- Create one place to find all the bid information for Design/Bid/Build projects from North Shore, South Shore, Special Projects and SWIFT

What data is included in the Construction Cost Database

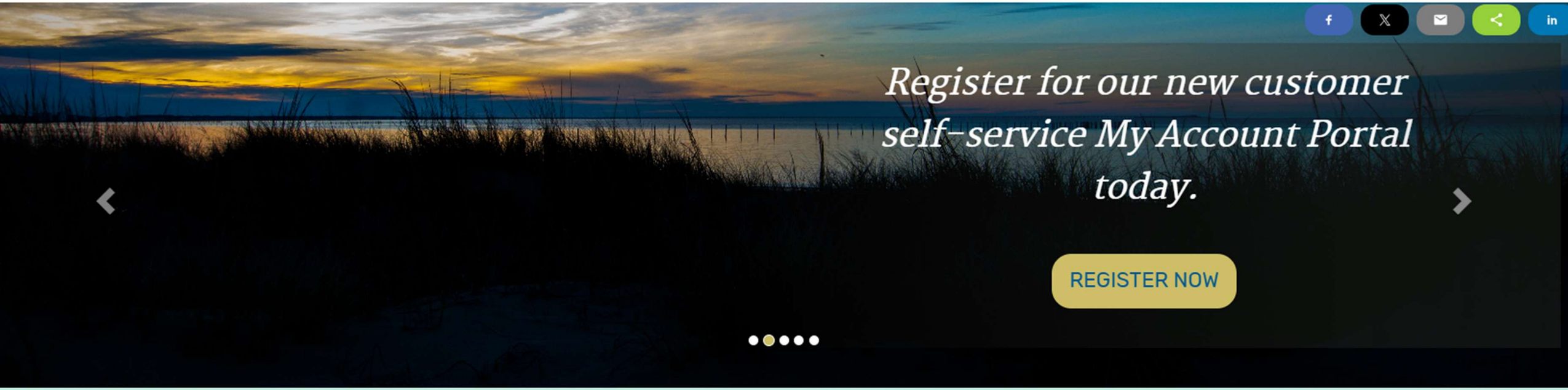
- Design/Bid/Build projects; not CMAR or DB
- All bids for the last 5 years; starting in 2021
- For each bid, the bid price for each contractor that bid this project is included as well as the OPCC
- Bid date
- Consultant
- Lump sum or each line item

How is the data collected?

- For Design/Bid/Build projects, all bids are submitted by the Contractors as Lump Sum or line items through ERP
- As a reference point, HRSD wanted to include the OPCC from the consultants
  - The consultants enter their OPCC into ERP as a “bid”
- IT has written a program to compile all the bid data and creates an Excel spreadsheet
- The first of every month, an updated spreadsheet is created

Where to find the Construction Cost Database?

— Go to HRSD.com



Customer Quick Links

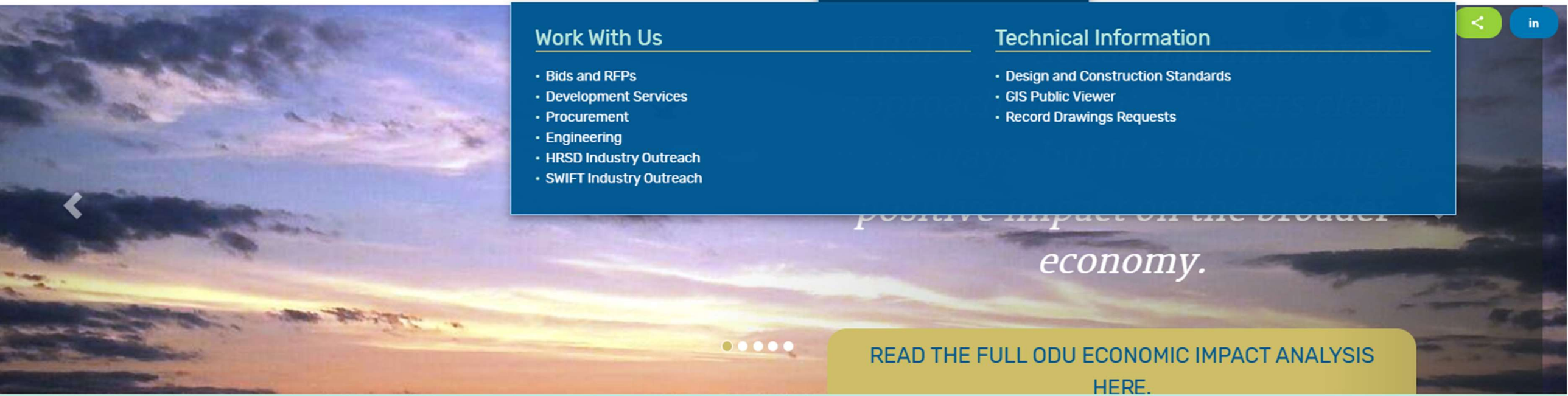
- Billing and Payments
- Career Opportunities
- Construction Status
- Customer Service
- HRSD News and Updates
- Learn More

Work With Us

- Bids and RFPs
- Development Services
- Procurement
- Engineering
- HRSD Industry Outreach
- SWIFT Industry Outreach

Technical Information

- Design and Construction Standards
- GIS Public Viewer
- Record Drawings Requests



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HRSD Industry Outreach

It was a pleasure to host our biggest crowd yet—nearly 400 people—for our seventh annual HRSD Industry Day. We were thrilled to see so many engineers, contractors, vendors, and suppliers, including Small, Women-owned, Minority-owned, Military Family-owned, and Service-disabled Veteran-owned businesses come together to learn more about HRSD and SWIFT projects.

A recording of the panel discussions, presentation materials for each of our current projects, and the attendee list are available in our Virtual Open House Space. If you attended, we kindly ask that you complete our feedback form to help us plan future events, or you can email your feedback to HRSDIndustryDay@aecom.com.

If you haven't had an opportunity to visit the SWIFT Research Center, the virtual self-tour is available at the following link: HRSD SWIFT Research Center Virtual Tour.

To stay connected with HRSD throughout the year, follow @HRSD on LinkedIn and Facebook.

Thank you for your continued interest in working with HRSD

Learn More

- CONSTRUCTION COST DATABASE
- ENGINEERING
- PROCUREMENT
- SWIFT INDUSTRY OUTREACH

Future of the Construction Cost Database

- Make the database easier to use and more helpful with better software
- Improvements with HRSD's IT department and/or AI software
- With the new PSO department, make improvements to the Construction Cost database and have better data for creating new CIPs

Questions?

Consultant Questions or Comments?

For copies of this presentation, please contact: janderson@hrsd.com