

Our QC/QA process is straightforward, disciplined, and enforceable. Key steps include:

- **Prepare a QC/QA Plan** calibrated to the complexity and stakes of the deliverables.
- **Assign a QC/QA Manager** responsible for implementing and enforcing the plan—independent of the day-to-day production team.
- **Perform QC/QA Reviews** at each milestone submittal, before any document is transmitted to District staff.
- **Conduct Independent Reviews** by qualified staff who have no active role in construction task production and whose experience exceeds the work being reviewed.

..... SCOPE OF WORK/WORK PROGRAM

PHASE 1 – 60% DESIGN

At 60%, structural systems, geometry, materials, and primary loads are defined and confirmed. For the **Seawall**, we will establish wall geometry and typology (e.g., sheet-pile, soldier-pile, cantilever/counterfort concrete, or hybrid) using the reviewed geotechnical parameters; perform global stability (sliding, overturning, bearing, deep-seated) and pseudo-static seismic (Mononobe-Okabe) analyses; compute hydrostatic, hydrodynamic, and wave pressures; and size primary elements, tie-backs/anchors, cap/wale, and toe/scour protection. For **Pier 1**, we will develop the framing and pile layout; select pile type; compute gravity, berthing/mooring (PIANC), current, wind, wave, hoist, and seismic loads; and perform preliminary axial/lateral pile capacity (p-y / LPILE) and member sizing.

Task 1 – Data Collection and Review

The Kimley-Horn team will review the existing 30% design, survey, geotechnical information, utility records, environmental documents, permit applications, grant requirements, and agency comments. We will then conduct a focused site visit and prepare a data-gap and design-decision matrix identifying the information needed to advance the work.

TASK 1.1 – PERFORM DATA COLLECTION AND REVIEW

- The Kimley-Horn team will gather and review available data from the District's archives for the existing facilities. This relevant data may include plans and specifications of previously built nearby features, previous site surveys (topographic and bathymetric to help understand water depths), previous design criteria and permit requirements, and, if available, previous geotechnical soils reports to confirm what existing data is available and if additional studies are required.
- The Kimley-Horn team will review available electrical system and wet utility system data. It is assumed that record drawings are available for existing electrical shore power and potable water systems. Additional data requested may include electrical bill records, transformer record documents, available water flow rates, and available utility surveys.
- In addition, Kimley-Horn will provide requests for and/or summarize additional data that may be needed to support the future final design phase of the project. The purpose of this effort is to identify any data gaps and additional information that may be required for final design. A summary matrix of any missing data or information needed for future final design will be summarized in a matrix to identify any gaps. Any additional data collection will be conducted as additional services.
- Kimley-Horn will conduct a Design Confirmation Workshop:
 - **We assume one (1) in-person workshop for a half day (4 hours) in length with three (3) staff attending.**

Design Confirmation Workshop Purpose:

- Confirm the design basis
- Identify elements to preserve
- Identify decisions that must be reconsidered
- Confirm budget
- Confirm permit constraints
- Confirm owner priorities
- Establish decision dates

TASK 1.2 – PERFORM SITE VISIT

The Kimley-Horn team will perform one site visit to observe existing site constraints and confirm available data identified during the data collection phase. It is not the intention of the site visit to provide a full condition assessment; however, damages observed to the existing facilities, especially those proposed to be reused, will be noted and recommendations for improvement alternatives summarized in field notes and submitted to the District for consideration. Efforts will focus on collecting data needed to develop design criteria for the proposed marina improvement system.

- **We assume one (1) in-person site visit for a half-day (4 hours) in length with three (3) staff attending to observe site constraints and review preliminary design alternatives.**

Task 2 – Engineering Design and Calculations

The calculation package will accompany the construction documents as part of the design package and will include the following:

- Basis of Design criteria, referencing relevant codes, and a synthesis of engineering criteria for the site.
 - » Metocean (wind, wave, water level elevation) design parameters will be prepared by the Kimley-Horn team based on information available through public records, other nearby previous projects, or directly from the District. The scope does not include studies for determining site-specific Metocean design parameters nor advanced modeling for determination of loading parameters.
 - » Summarize currently adopted editions of governing design codes and references including: ACI 318-19/ACI 350 (marine concrete), AISC 360-16 (LRFD), AASHTO / NDS 2018 (timber/composite piles), ASCE 7-22 (loads, seismic, and wave/hydrodynamic), USACE EM 1110-2-1100, ASCE 41 / USACE EM 1110-1-1905 (geotechnical basis), NACE SP0176 and AASHTO HB-17 (corrosion), and NCS v6 (drawing standards). Our EOR will document all governing references in the design calculations and prepare a Design Basis Memorandum for each structure establishing site-specific tidal datums (MHHW/MLLW), design wave height and period, seismic parameters, corrosion exposure zones, and a minimum 50-year sea level rise / tsunami planning horizon.
- The Kimley-Horn team will prepare structural calculations for pier system, sheet pile seawall system, and support hoist and equipment support framing, adhering to current design codes (CBC 2025), and coordinate with the District to define operational parameters. Depending on structural support system determined for final design, this may require coordinating soil loading on existing piles with a geotechnical engineer. Geotechnical evaluation of pile foundations or soil conditions is excluded from the proposal but is required for final design and assumed to be contracted separately by the District. Furthermore, the scope of design is limited to the new pile systems and design of the existing piles is excluded from the proposal.
- The Kimley-Horn team will prepare designs for utility elements including electrical and mechanical/plumbing in conformance with current building code (CBC 2025) including the most recent Title 24 Energy and CalGreen requirements. Designs for utility systems on the landside will be provided up to the main service feeds.
 - » Electrical distribution lines are assumed to originate from the existing electrical panels on the landside. Our scope of work does not include expansion of the existing main service feeds located within these panels, nor upstream, and these panels are assumed not to require code compliance (CBC 2025) an upgrade for the pier facilities.
 - » Proposed wet utility distribution lines include potable water only and are assumed to be tied into existing landside utilities. Our scope of work does not include expansion of existing main service feeds, and it is assumed that there is no need for landside improvements to bring the system up to building code compliance (CBC 2025).

Task 3 – Plans and Technical Specifications

This task includes preparation of plans, specifications, and estimates (PS&E) for the project improvements. PS&E documents will be prepared with the purpose of issuing the construction documents for advertising for competitive bid by construction contractors.

- The Kimley-Horn team will prepare plans to include layouts, demolition plans, and structural and utility sheets for the proposed improvements. Technical specifications will also be provided to accompany the District's front-end standard specifications.
- The drawing package will include the following plan sheets:

Seawall — 60% Sheets (~16)	Citizens' Dock, Pier 1 — 60% Sheets (~28)
Cover Sheet & General Notes (2)	Cover Sheet & General Notes (2)
Demolition & Removal Plan (2)	Demolition Plan & Details (2)
Seawall Overall Plan, Alignment, and Notes (2)	Pier Overall Plan and Notes (2)
Seawall Structural Plan (2)	Pier Layout & Framing Plan (1)
Seawall Longitudinal Profile (1)	Pile Layout & Pile Schedule (1)
Seawall Typical Sections (2)	Pier Longitudinal & Transverse Sections (4)
Seawall Details — Cap, Tie-back/Anchor, Joints (3)	Structural Details & Pile-to-Cap Connections (4)
Scour / Toe Protection & Drainage Details (1)	Fender, Mooring & Hoist Support Details (2)
Anode Corrosion Protection Details (1)	Electrical Notes, Plan, Single-Line & Details (5)
	Potable / Fire Water & Mechanical Notes, Plan & Details (4)
	Anode Corrosion Protection Plan & Details (1)

- The Kimley-Horn team will prepare technical specifications (CSI 3-part) and a bid-items list; the District will provide front-end/boilerplate documents. It is assumed that all front-end boilerplate General Provisions and Standard Agreements will be provided by the District as required; the only new documents created will be technical specifications for the improvements and bid item list.

Task 4 – Estimate of Probable Construction Cost

- The Kimley-Horn team will complete initial reconciliation against available construction funding (based on 30% design)
- The Kimley-Horn team will prepare a 60% opinion of probable construction cost at AACE Class C (order-of-magnitude) for one improvement scenario.

Task 5 – Project Management, Meetings, and Industry Day

- The Kimley-Horn team will provide project management and up to two (2) teleconference progress meetings with the District, maintaining the comment-response matrix.
- **Industry Day:** Following the 60% submittal, Kimley-Horn will facilitate one (1) Industry Day workshop, prepare a 60% concept package, host a half-day session (on-site or hybrid) with qualified marine contractors/fabricators, conduct confidential one-on-one sessions, and consolidate anonymized constructability, means-and-methods, sequencing, and lead-time input into a memorandum to inform the 100% design (4-week duration; see **Section 7. Timeline** for details).

CONSTRUCTION DESIGN SERVICES

*for a New Seawall and Citizens' Dock, Pier 1***Phase 1 Deliverables:**

- Data-gap matrix and site-visit field notes and Design Confirmation Memorandum
- 60% drawings (≈44 sheets), CSI outline specifications, and bid-items list
- Preliminary structural calculations and Design Basis Memoranda (Seawall and Pier 1)
- 60% opinion of probable construction cost (AACE Class C)
- Industry Day summary memorandum (anonymized)
- Comment-response matrix

PHASE 2 – 100% CONSTRUCTION-READY DESIGN

At 100%, all 60% review comments (including those from the independent third-party advisor) and the District-directed changes are incorporated; calculations are finalized to support the EOR stamp; and the complete Issued-for-Construction set is produced. For the Seawall, this includes finalized global stability with factors of safety, seismic demand-capacity ratios, connection design, corrosion design, and quantity takeoffs. For Pier 1, this includes final pile capacity with site-specific p-y curves, pile schedule and driving resistance, deck-framing and connection design, ADA compliance, electrical design per NFPA 303, fendering/mooring hardware, and navigational lighting. **All final structural drawings and calculations are signed and stamped by the Engineer of Record.** Full 3-part CSI specifications, a permit-ready package suitable for direct agency submittal, and a Class B (budget) cost estimate complete the deliverables.

Task 1 – Final Engineering Design and Calculations

- The Kimley-Horn team will finalize all structural, electrical, and mechanical calculations for the seawall and Pier 1; **all final drawings and calculations will be signed and stamped by the Engineer of Record.**

Task 2 – Final Plans and Specifications (IFC)

- The Kimley-Horn team will advance the ~44-sheet set to 100% IFC completeness and finalize full 3-part CSI specifications and bid-items list, prepare reduced-scale (11×17) permit exhibits and a project-description narrative.

Task 3 – Estimate of Probable Construction Cost

- The Kimley-Horn team will prepare the 100% opinion of probable construction cost at AACE Class B (budget).

Task 4 – Building Permit and Agency Design Coordination

- The Kimley-Horn team will submit construction documents to Del Norte County for local building-permit review and address comments (two rounds assumed) and attend up to one (1) coordination meeting. We will provide permit-ready exhibits and technical information to support CCHD-led regulatory (USACE/CCC/RWQCB/CDFW/NMFS/USCG) coordination; regulatory permit applications are led by the District, and all permit/review fees are paid by CCHD.

Task 5 – Project Management and Meetings

- The Kimley-Horn team will provide project management and up to two (2) teleconference progress meetings with the District through 100% and permit-ready issuance.

Phase 2 Deliverables:

- 100% IFC drawing set (~44 sheets), signed and stamped by the EOR
- Final stamped structural/electrical/mechanical calculations
- Full 3-part CSI specifications and bid-items list; 11×17 permit exhibits
- 100% opinion of probable construction cost (AACE Class B)
- Del Norte County building-permit submittal and response to comments
- Permit-ready, contractor-biddable package

..... KEY EXCLUSIONS AND ASSUMPTIONS

The scope and fee assume the following key exclusions and assumptions. If these assumptions and exclusions change, the scope and fee may need to be adjusted.

- **No geotechnical services:** Kimley-Horn will review and incorporate the District's existing geotechnical reports and will not perform borings, CPTs, or laboratory testing. If additional geotechnical work is required, the District will retain a geotechnical engineer to provide a signed and stamped report and design coordination.
- **No survey or on-site utility identification:** Design relies on existing topographic/bathymetric survey and utility records provided by the District. No new surveys or subsurface utility locating/potholing will be performed by Kimley-Horn.
- **No eelgrass/biological work or mitigation design:** Biological surveys, wetlands delineation, and eelgrass mitigation/monitoring design are excluded. The South Crescent City Harbor Habitat Restoration Project is a separate effort.
- **Environmental review complete; permitting led by the District:** NEPA (FONSI) and CEQA (MND) are complete. The District will lead regulatory permit applications and coordination with USACE, CCC, RWQCB, CDFW, NMFS, and USCG; Kimley-Horn provides permit-ready drawings and technical support. All permit and review fees are paid by the District.
- **Design limited to new structures:** Design is limited to the new seawall and Pier 1 systems. Responsibility for existing/legacy pile elements remains with the original Engineer of Record for those elements.
- **Utilities:** Pier utilities are limited to marine electrical (per NFPA 303) and potable water, taken to the existing landside service. Expansion of existing main service feeds, low-voltage/communications, fire water, sewage pump-out, and fuel systems are excluded.
- **Excluded design elements:** Landside grading, pavement, stormwater drainage, and site improvements more than 5–10 feet landward of the seawall; landscaping, parking lot, and building sitework beyond the seawall toe / pier edge; stormwater, water-quality, and erosion-control reports; all dredging, including dredging for navigation depth; and hazardous-materials abatement and disposal are excluded from the design.
- **Review cycles and data:** One round of District/agency review comments per phase is included (the Del Norte County building permit assumes two rounds); additional cycles are additional services. The District provides all existing reports, drawings, utility records, geotechnical data, and survey within 10 days of Notice to Proceed (NTP).
- **Design hand-off:** All previously prepared 30% design documents will be provided at project initiation, including but not limited to electronic CAD drawing files, cost-estimate spreadsheets, technical specification outlines, basis-of-design and calculation files, and previously prepared technical studies.
- **RFP intent/studies:** The Engineer of Record will review the studies and analyses referenced in the RFP against the design approach; items not required to complete the seawall and Pier 1 design are excluded. Additional studies, if determined necessary, will be negotiated as additional services.

CONSTRUCTION DESIGN SERVICES

for a New Seawall and Citizens' Dock, Pier 1

- **Bid and construction services:** Engineering services during bidding and construction, and as-built preparation are excluded from this design fee and are available as additional services and/or under the separate Project Management contract.
- **Independent technical advice:** The independent third-party technical advice at the 60% and 100% milestones is provided and funded under Kimley-Horn's awarded Project Management contract and is not included in this design fee.

..... ADDITIONAL SERVICES

Any services not specifically provided in the above scope will be billed as additional services and performed at Kimley-Horn's then-current hourly rates. Additional services can be provided by Kimley-Horn, including but not limited to the following:

- Engineering support during bidding
- Engineering support during construction
- Environmental documentation and regulatory permitting
- Value engineering (VE) workshop facilitation
- Construction-phase services: shop-drawing review, RFI response, field observations, special-inspection oversight
- As-built drawing preparation and record-document management
- Structural health monitoring system design
- Physical hydraulic model coordination and testing oversight
- Expert witness or litigation support services
- Peer review of contractor-proposed design modifications or value-engineering proposals
- Post-construction inspection and condition-assessment report
- Preparation of Operations & Maintenance (O&M) manual for completed structures
- Seismic vulnerability assessment of existing adjacent structures
- Additional permit-agency response rounds beyond those included above

6. Fees

Our proposed fee to perform each element of the scope is presented on the following page on a **not-to-exceed, time-and-materials basis**, organized by phase and task consistent with Exhibit 1, so that the District may add or remove elements from the final award. Labor categories and rates shown are for estimating purposes; the total is the not-to-exceed ceiling, and Kimley-Horn invoices monthly based on the percentage of services performed. Project controls and coordination provided under Kimley-Horn's separate Project Management contract are not duplicated in this design fee. Formal QC/QA reviews required by the RFP are included in this fee. Separately, Kimley-Horn will provide independent technical advice through James LaFaso, PE, under our existing Project Management contract. By leveraging resources already established for the District, you will receive the benefit of experienced outside technical advice without funding a separate advisory effort under the design contract. Please contact **Jerry Holcomb, PE** (Project/Design Manager) with any questions or requests for additional information at 562.363.5051 or jerry.holcomb@kimley-horn.com during the evaluation process.

PROPOSAL TO PROVIDE

CONSTRUCTION DESIGN SERVICES

for a New Seawall and Citizens' Dock, Pier 1

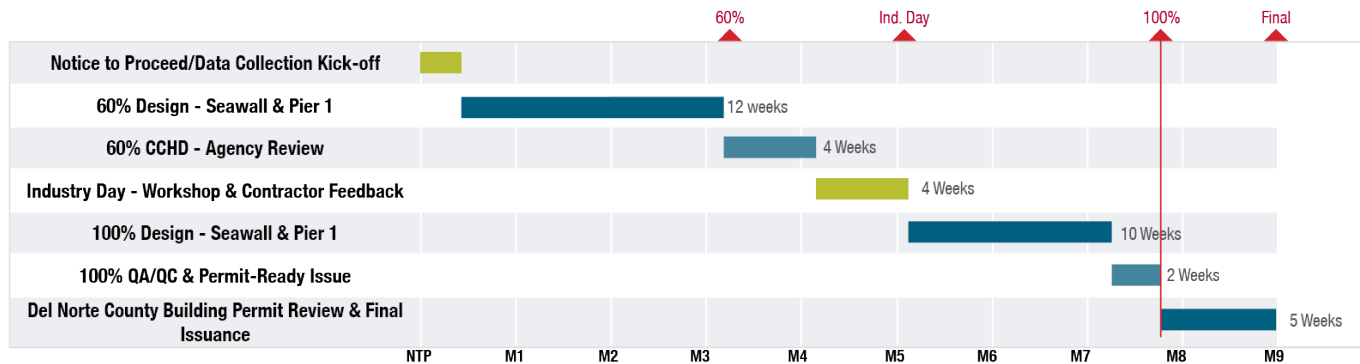
Crescent City Harbor District
Construction Design Services

Name Category/Title Direct Rate Billing Rate		Kimley-Horn and Associates, Inc.											TOTAL HOURS	TOTAL COST	
		Jerry Holcomb	Jamie Gwaltney	Rob Sloop	Principal / Subject Matter Expert	Sr. Professional III	Sr. Professional II	Sr. Professional I	Professional	Analyst II	Analyst I	Support Staff			
		Project Manager	QC/QA Manager	Principal-in-Charge											
196.75%	Overhead%		\$87.18	\$112.22	\$127.80	\$144.99	\$124.30	\$99.57	\$87.17	\$72.02	\$56.66	\$49.43	\$42.85		
195.87%	Overhead% w/o FCCM		\$284.50	\$366.22	\$417.06	\$473.16	\$405.64	\$324.93	\$284.47	\$235.03	\$184.90	\$161.31	\$139.84		
10%	Fee%														
Phase 1	60% Design Submittal		181	48	66		91	202		420		220	16	1,244	\$ 335,585.33
Task 1	Data Collection & Review		15		16		15	16		40				102	\$ 31,625.06
Task 2	Engineering Design and Calculations		40	20	10		20	50		100				240	\$ 70,737.13
Task 3	Plans and Technical Specifications		60	20	20		40	100		200		220		660	\$ 163,947.79
Task 4	Estimates of Probable Construction Costs		16	4	4		16	16		60				116	\$ 33,475.91
Task 5	Project Management and Meetings		50	4	16			20		20			16	126	\$ 35,799.43
Phase 2	100% Construction Ready Design		128	36	38		71	174		352		190	8	997	\$ 265,283.85
Task 1	Engineering Design and Calculations		20	16	8		15	40		80				179	\$ 52,770.06
Task 2	Plans and Technical Specifications		40	12	12		40	80		150		190		524	\$ 128,902.27
Task 3	Estimates of Probable Construction Costs		8	4	4		8	8		32				64	\$ 18,774.56
Task 4	Permit Agency Design Coordination		20		4		8	30		80				142	\$ 39,153.59
Task 5	Project Management and Meetings		40	4	10			16		10			8	88	\$ 25,683.37
	TOTAL HOURS		309	84	104		162	376		772		410	24	2,241	
	Subtotal Labor:		\$87,910.68	\$30,762.09	\$43,374.10		\$65,713.18	\$122,175.09		\$181,441.54		\$66,136.44	\$3,356.05		\$ 600,869.18
	Other Direct Costs														\$ 14,250.00
	Travel (Airfare, Hotel, Rental Car)														\$10,250.00
	Meals & Incidentals														\$4,000.00
	TOTAL COST:														\$ 615,119.18

7. TIMELINE

Kimley-Horn will deliver the design in approximately **nine (9) months** from NTP, coordinated with the concurrent Project Management contract and the MARAD PIDP schedule. Because our team already knows the 30% design, permit conditions, and grant scope, we can begin final design immediately with no ramp-up. The schedule below shows each task duration and includes a dedicated Industry Day following the 60% design to gather contractor feedback before the 100% documents are finalized.

Approximately 9 months from Notice to Proceed (durations in weeks; adjustable to the CCHD/MARAD PIDP schedule)



Project schedule — approximately 9 months from NTP, with Industry Day following the 60% submittal.

In partnership with the District, Kimley-Horn can: (1) authorize early geotech borings/permits at NTP to protect critical path; (2) run 60% agency/permit coordination concurrently with 60%→100% production; (3) keep the 4-week Industry Review concurrent with the 60% District review, not additive; (4) early-release long-lead/Buy America material specification packages tied to the MARAD PIDP milestones we already track under the Project Management contract; (5) District decision-date commitments from the Design Confirmation Workshop; concurrent Del Norte County building-permit review.

The nine-month schedule above is achievable with no ramp-up, because our team already knows the 30% design, permit conditions, and grant scope. Rather than treating nine months as fixed, Kimley-Horn will work with the District at project initiation to identify opportunities to compress the critical path where it makes sense, without adding risk to quality, permitting, or the District's federal funding. Because Kimley-Horn also leads the District's Project Management Services contract, we already track the MARAD Port Infrastructure Development Program (PIDP) milestones and grant-compliance requirements, which allows us to align design production, procurement readiness, and permitting so that time is protected rather than lost. **The following levers (applied collaboratively and only where the District concurs), can each shorten the overall duration:**

- **Run permit-agency coordination concurrently with design production:** Kimley-Horn will provide the drawings, exhibits, and technical responses needed to support the District's ongoing permit coordination in parallel with 60%-to-100% development, so agency review time overlaps design time instead of following it.
- **Keep the Industry Review Workshop concurrent with the 60% District review:** The four-week industry-input effort is scheduled to run alongside the District's 60% review window rather than as an additional, sequential step—capturing constructability feedback without extending the critical path.
- **Release long-lead and Buy America material packages early:** Identify long-lead items and prepare domestic-preference (Buy America/Build America) material specifications early (coordinated with the compliance systems already established under our Project Management contract) positions the District to protect both the construction schedule and its grant eligibility.
- **Confirm District decision dates at the Design Confirmation Workshop:** Establishing agreed decision milestones upfront keeps engineering moving and prevents review stalls, allowing the design to advance continuously between the 60% and 100% submittals.
- **Coordinate Del Norte County building-permit review concurrently:** Initiating and running the local building-permit review in parallel with final design (rather than after 100%) reduces end-of-schedule float and supports a faster path to a bid-ready package.
- **Align milestones to the MARAD PIDP period of performance:** As the District's Project Manager, Kimley-Horn will continuously reconcile the design schedule against the grant's period-of-performance and reporting dates, so acceleration opportunities are pursued in a way that strengthens—never jeopardizes—the District's funding position.