DESIGN DRAFT

CLIMATE SMART WOOD SPECIFICATION

FOR PEER REVIEW DISTRIBUTION September 28, 2023



ATTENTION

Climate Smart Wood Group thanks you for being part of the design collaboration process for continuing to develop this specification

This work product is under development

Climate Smart Wood Group has not approved this work product as meeting our standards of quality for general use – we neither recommend nor endorse its use beyond design collaboration at this time

DESIGN DRAFT

CLIMATE SMART WOOD PROCUREMENT & SPECIFICATION LANGUAGE

INTRODUCTION:

The Climate Smart Wood Group (CSWG) helps the building industry in North America differentiate and procure climate-smart wood products. CSWG produced a <u>working definition of climate-smart forestry</u> and a set of <u>procurement guidance</u> in 2022, updated to v2.0 in 2023. Following their release, we canvassed architecture, engineering and construction firms to identify next steps that would aid in operationalizing the framework for climate-smart wood procurement. Specification language consistently arose as an area that would help project teams make more informed real-world decisions, so we have since been working to develop those tools.

OBJECTIVES:

This draft specification approach will be evaluated and adapted through a design collaboration process and released for test-case use in early 2024.

CSWG aims to create a performance-based specification. The approach is intended to solicit a range of options from bidders that provide a range of climate-smart benefits, levels of transparency and traceability documentation, and price. It does not seek to set out a "standard" specification for climate-smart wood, but rather, a process by which project teams can readily select among products with differentiated climate-smart wood attributes. This way, decision space is preserved around price, availability, product type, and schedule, while encouraging competition among suppliers and decreasing the risk of a sole-source scenario.

Ideally this approach would work with suppliers of varying sophistication and willingness to differentiate material among alternative timber harvest practice approaches. A bidder who does not wish to differentiate themselves would simply submit a "business-as-usual" bid. Those wishing to earn project teams' business, however, would recognize this approach as a practical and readily achievable means of describing upstream timber harvest practices that add value for the project's climate objectives and therefore make their bid more attractive than their competitors.

Time and again, we have found that the most important determinant of success is working with supply chain partners in advance. Issuing an unfamiliar specification to uninitiated vendors and suppliers will likely result in a much less robust response than desired. So we offer this development process with that objective in mind as well and intend to make supply chain actors a focal point in the peer review process.

CSWG offers guidance and recommendations regarding wood sourcing and supply chain engagement throughout key <u>project design stages</u>. Suppliers who receive some outreach early in the project will be far likelier to respond favorably to this bid proposal approach.

ORGANIZATION:

The core elements of this specification approach are within Division 06 of the standard MasterSpec format, followed by a bid form. As design progresses we intend to develop one or more sample bid responses with the help of regional AEC and supply chain partners.

In addition, our hope is for the development process to yield one or more template provisions for consideration in Division 00 and Division 01 that help reinforce the sourcing approach by:

- Creating shared expectations between the owner, contractor and architect around the sourcing and procurement process, and continuity as the project timely unfolds
- Including prohibitions on unacceptable sources of wood at multiple points within the specification structure
- Addressing product options and product substitutions

Brief placeholders and conceptual language for Divisions 00 and 01 are included below Division 06.

TERMINOLOGY:

CSWG's objective is to create a proposal evaluation system that does not require a high level of forestry expertise to understand and utilize. Yet there is a need for the procurement team and bidders to have a shared understanding of some of the terminology used in this document. We have created a **Glossary of Terms section at the end of the document** for users to list terms that need a clear definition for the purposes of accurately submitting and evaluating bids.

DESIGN COLLABORATION PROCESS:

CSWG invites partners to participate in a design collaboration to produce procurement, construction document and specification language for use in building projects. The review and written input period opens September 28, 2023 and closes November 15, 2023. CSWG will then assess and make amendments using the feedback we receive and produce a draft-final version for further dialogue in a series of web-based forums to be held the week of December 4, 2023.

DIVISION 06

WOOD, PLASTICS & COMPOSITES

PART 1 GENERAL

1.01 SECTION INCLUDES

Α. ...

1.02 RELATED REQUIREMENTS

Α. ...

1.03 REFERENCE STANDARDS

- Α. ...
- B. Climate-Smart Forestry, as defined by the Climate Smart Wood Group < link >
- C. Procurement options for climate-smart wood, as defined by the Climate Smart Wood Group <<u>link</u>>
- D. Source forest disclosure levels, as defined by the Climate Smart Wood Group <link>
- E. TBD definition/framework for ecological forest classification < link >
- F. ...

1.04 QUALITY ASSURANCE

- Α. ...
- B. ...

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- Α. ...
- B. All materials shall be grade-stamped unless noted otherwise.
- C. Wood lacking documentation of having been lawfully harvested, was generated from the permanent conversion of forestland to non-forest land use, or that was harvested from primary (previously unharvested) or old growth forest is not permitted.
- D. Each wood product [alt: apply only to specific products] sourced for the project shall submit a Climate Smart Wood Evaluation Bid Form

Ε. ..

This is the real "specification" language per se. Item C is the "red list" unacceptable sources provisions from a climate-smart standpoint, and item D points to the use of an evaluation bid form (below) that is meant to be a 'performancebased' method of differentiating wood products on their climate attributes.

BID FORM

CLIMATE SMART WOOD EVALUATION

PART 1 PROJECT AND THE PARTIES

1.01 TO:

A. [Project wood procurement lead]

1.02 FOR:

- A. [Project Name]
- B. [Specified wood product(s)]

1.03 DATE: _____ (BIDDER TO ENTER DATE)

1.04 SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)

Bidder's Full Name:		
Address:	 	
City, State, Zip:		

1.05 OFFER

A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by LHB for the above-mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Price as shown on the Bid Form immediately following this section.

1.06 CONTRACT TIME

- A. If this Bid is accepted, we will:
 - 1. Complete the Work by [date] // Deliver product by [date]
 - 2. Substantial Completion by [date].

1.07 UNIT PRICES

- A. The following are Unit Prices for specific portions of the Work as listed. The following is the list of Unit Prices:
 - 1. [Item 1]: [XYZ wood product] For delivery of highest-performing Climate-Smart Wood product:

 - a. BAU: \$ _____ per [CF/BDF1/LF/piece] b. Option 1: \$ _____ per [CF/BDFT/LF/piece] contion 2: \$ _____ per [CF/BDFT/LF/piece]
 - 2. [Item 2]: [XYZ wood product] For delivery of highest-performing Climate-Smart Wood product:
 - _____ per [CF/BDFT/LF/piece] a. BAU: \$
 - b. Option 1: \$ per [CF/BDFT/LF/piece]
 - c. Option 2: \$ per [CF/BDFT/LF/piece

This sets up a basis of price comparison between business-asusual (BAU) options and others presented by the bidder that have different climate smart attributes. Bidders are free to submit as many or as few options as they choose. Specifiers can require that each product receives a separate evaluation, or a group of products, or only selected products (see Division 01 Products --General Requirements).

PART 2 CLIMATE SMART FORESTRY DISCLOSURE

2.01 BUSINESS-AS-USUAL (BAU) BID OPTION [Item 1]

2.01.1 SOURCE FOREST DISCLOSURE

For the source forest that was harvested to produce Item 1 BAU, provide:

- A. Level III forest ecoregion
- B. Tree species
- C. Land ownership/management category(ies) [if multiple, supply percentage by timber volume]
- D. Primary wood product manufacturing facility(ies) [if multiple, supply percentage by timber volume]
- E. Harvest time period (1st/2nd half of CY at minimum)

2.01.2 FORESTRY DISCLOSURE

Describe the BAU timber harvest practices that are applicable to the forest ecosystem, species and land ownership/management category that generated [Item 1]. Bids that do not provide a response to each of the requested information items will be rejected as incomplete.

BAU timber harvest practice characteristics and objectives	Required by law/ regulation? (Y/N)	Not Applicable? (NA)
Harvest rotation length (years)		
Harvest opening size (acres)		
Tree species diversification (Y/N)		
Replanting/reforestation completed (Y/N)		
Tree size/age diversification (Y/N)		
Restoration of ecological process and function (Y/N)		
Water quality protection buffers (Y/N)		
High conservation value forest protection (Y/N)		
High conservation value tree protection/retention (Y/N)		
Adaptation strategies for anticipated climate change impacts		
(Y/N)		
Mitigation strategies for anticipated climate change impacts (Y/N)		
Chemical fertilizer, herbicide, pesticide application (Y/N)		

2.01.3 SUPPLEMENTAL DISCLOSURES

Supplemental narrative and sourcing disclosure may be appended.

If a bidder wishes to make the case that BAU has inherent climate benefits that are not recognized by this evaluation system, they may do so here.

This evaluation structure uses businessas-usual forest practices as a benchmark. Based on this characterization the bidder differentiates options on the basis of climate-smart attributes (evaluation worksheet in 2.03).

"BAU" can be subjective/variable if it is supplied by the bidder. In time, CSWG hopes to supply BAU benchmarks. Until that time, the CSWG network can be tapped to validate BAU characterization.

2.02 BID OPTION 1 [Item 1]

Submit separate evaluation worksheets for each option the bidder chooses to provide. Options are evaluated on the basis of BAU-comparison attributes, level of transparency documentation and price. Bids that do not provide a response to each of the requested information items will be rejected as incomplete.

2.02.1 SOURCE FOREST DISCLOSURE

For the source forest that was harvested to produce Item 1 Option 1, provide:

- F. Level III forest ecoregion
- G. Tree species
- H. Land ownership/management category(ies) [if multiple, supply percentage by timber volume]
- I. Primary wood product manufacturing facility(ies) [if multiple, supply percentage by timber volume]
- J. Harvest time period (1st/2nd half of CY at minimum)

2.02.2 EVALUATION WORKSHEET

Indicate the timber harvest practices and objectives implemented to generate [Item #, Option #] as compared to BAU and the level of sourcing transparency documentation available to verify them.

Harvest practice characteristics and	BAU Evaluation Check Only One			CSWG Sourcing	Certification System ¹	
objectives	Improves	BAU	Inferior	NA or No Data	Transparency Level (0,1,2,3)	
Harvest rotation length						
Harvest opening size					-	
Tree species diversification						
Tree size/age diversification						
Replanting/reforestation completed						
Restoration of ecological process and function						
Water quality protection buffers						
High conservation value forest protection			We recogi	nize that q	uantifying embodied	d carbon is a
High conservation value tree protection/retention			leading priority for many projects. However, no replicable, credible methodology for full upstream			
Adaptation strategies for anticipated climate change impacts			carbon accounting is yet available (note: industry average or regional LCA and EPD methodologies do not account for carbon stock changes resulting from different timber harvest practices)			odologies do esulting from
Mitigation strategies for anticipated climate change impacts			Here we a impacts ar	isk bidders nd the corr	s to characterize the responding	carbon
Chemical fertilizer, herbicide, pesticide application rate or practices			transparer embodied contact CS	ncy/tracea carbon is SWG for a f these cla	bility documentation a leading project ob ssistance in deciphe ims	available. If ojective, ering the
Carbon storage over harvest 🖌 rotation period						

¹Indicate all that apply, as follows: "NA" for no certification system; "TF" for American Tree Farm System; "PEFC" for Programme for the Endorsement of Forest Certification; "SFM" for SFI Forest Management; "SFS" for SFI Fiber Sourcing; "SCOC" for SFI Chain-of-Custody; "SCSC" for SFI Certified Sourcing Certificates; "FFM" for FSC Forest Management; "FCOC" for FSC Chain-of-Custody; "FGP" for FSC Group Certificate; "FCW" for FSC Controlled Wood.

Indicate which of the following social dimensions are applicable to the harvest operations and manufacturers in the supply chain.

Social dimensions	Not Applicable? (NA)
Procured from the local area (mile radius)	
Procured in compliance with tribal treaties, intergovernmental	
agreements, or other indigenous peoples' rights (Y/N)	
Procured from indigenous-managed lands (Y/N)	
Procured from BIPOC or women-owned land (percent of timber	
volume)	
Procured from family landowners 5-500 acres in size (percent of timber volume)	
Procured from tribal or indigenous manufacturers (percent of timber	
volume)	
Procured from BIPOC or women-owned manufacturers (percent of	
timber volume)	
Procured from (poverty measure) counties (percent of timber volume)	

2.02.3 SUPPLEMENTAL DISCLOSURES

Supplemental narrative and disclosure information may be appended

SAMPLE BID RESPONSE AND EVALUATION SCORING

CSWG will partner with suppliers and forestry partners throughout the development of this specification tool to test the draft structure through several sample response and evaluation scenarios that are representative examples across North America. The specification language released for test-case utilization will include sample responses and interpretive information.

2.01 BUSINESS-AS-USUAL BID OPTION [Item 1]

2.01.1 SOURCE FOREST DISCLOSURE

For the source forest that was harvested to produce Item 1 BAU, provide:

- A. Level III forest ecoregion
- B. Tree species ____
- C. Land ownership/management category(ies) [if multiple, supply percentage by timber volume]
- D. Primary wood product manufacturing facility(ies) [if multiple, supply percentage by timber volume]
- E. Harvest time period (1st/2nd half of CY at minimum)

2.01.2 FORESTRY DISCLOSURE

Describe the BAU timber harvest practices that are applicable to the forest ecosystem, species and land ownership/management category that generated [Item 1]. Bids that do not provide a response to each of the requested information items will be rejected as incomplete.

BAU timber harvest practice characteristics and objectives	Required by law/ regulation? (Y/N)	Not Applicable? (NA)
Harvest rotation length (years)		
Harvest opening size (acres)		
Tree species diversification (Y/N)		
Replanting/reforestation completed (Y/N)		
Tree size/age diversification (Y/N)		
Restoration of ecological process and function (Y/N)		
Water quality protection buffers (Y/N)		
High conservation value forest protection (Y/N)		
High conservation value tree protection/retention (Y/N)		
Adaptation strategies for anticipated climate change impacts (Y/N)		
Mitigation strategies for anticipated climate change impacts (Y/N)		
Chemical fertilizer, herbicide, pesticide application (Y/N)		

2.01.3 SUPPLEMENTAL DISCLOSURES

Supplemental narrative and sourcing disclosures may be appended.

2.02 BID OPTION 1 [Item 1]

Submit separate evaluation worksheets for each option the bidder chooses to provide. Options are evaluated on the basis of BAU-comparison attributes, level of transparency documentation and price. Bids that do not provide a response to each of the requested information items will be rejected as incomplete.

2.02.1 SOURCE FOREST DISCLOSURE

For the source forest that was harvested to produce Item 1 Option 1, provide:

- K. Level III forest ecoregion
- L. Tree species
- M. Land ownership/management category(ies) [if multiple, supply percentage by timber volume]
- N. Primary wood product manufacturing facility(ies) [if multiple, supply percentage by timber volume]
- O. Harvest time period (1st/2nd half of CY at minimum)

2.02.2 EVALUATION WORKSHEET

Indicate the timber harvest practices and objectives implemented to generate [Item #, Option #] as compared to BAU and the level of sourcing transparency documentation available to verify them.

Harvest practice	BAU Evaluation			CSWG	Certification	
characteristics and	C	Check O	nly One		Sourcing	System'
objectives	Improves	BAU	Interior	NA or	Transparenc	
				Data	y Level	
Harvest rotation length					(0,1,2,0)	
Harvest opening size						
Tree species diversification						
Tree size/age diversification						
Replanting/reforestation						
completed						
Restoration of ecological						
process and function						
Water quality protection						
buffers						
High conservation value forest						
protection						
High conservation value tree						
protection/retention						
Adaptation strategies for						
anticipated climate change						
impacts						
Mitigation strategies for						
anticipated climate change						
impacts						

Chemical fertilizer, herbicide, pesticide application rate or practices						
Carbon storage over harvest						
rotation period						
¹ Indicate all that apply, as follows: "NA" f	or no certificatio	on system,	"TF" for Am	erican Tree	Farm System; "PEF	C" for Programme
for the Endorsement of Forest Certification	n; "SFM" for SF	I Forest M	lanagement;	"SFS" for S	SFI Fiber Sourcing; "S	SCOC" for SFI
Chain-of-Custody; "SCSC" for SFI Certif	ied Sourcing Ce	ertificates;	"FFM" for FS	SC Forest N	lanagement; "FCOC"	' for FSC Chain-of-
Custody; "FGP" for FSC Group Certificat	e; "FCW" for F	SC Contro	lled Wood.			

Indicate which of the following social dimensions are applicable to the harvest operations and manufacturers in the supply chain

Social dimensions	Not Applicable? (NA)
Procured from the local area (mile radius)	
Procured in compliance with tribal treaties, intergovernmental	
agreements, or other indigenous peoples' rights (Y/N)	
Procured from indigenous-managed lands (Y/N)	
Procured from BIPOC or women-owned land (percent of timber	
volume)	
Procured from family landowners 5-500 acres in size (percent of	
timber volume)	
Procured from tribal or indigenous manufacturers (percent of timber	
volume)	
Procured from BIPOC or women-owned manufacturers (percent of	
timber volume)	
Procured from (poverty measure) counties (percent of timber volume)	

2.02.3 SUPPLEMENTAL DISCLOSURES

Supplemental narrative and disclosure information may be appended

DIVISION 00 PROCUREMENT & CONTRACTING REQUIREMENTS

TBD Suggested Owner/Contractor content

Objective: offer contractually binding shared owner/contractor/architect expectation language RE wood procurement; provide look-back continuity as the procurement process unfolds.

DIVISION 01 GENERAL REQUIREMENTS

PART 1 GENERAL

•••

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

Α. ...

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. DO NOT USE products having any of the following characteristics:
 - 1. ...
 - 2. Made of wood that lacks documentation of having been lawfully harvested, was generated from the permanent conversion of forestland to non-forest land use, or was harvested from primary (previously unharvested) or old growth forest.
 - 3.
- C. Where all other criteria are met, Contractor shall give preference to products that:
 - 1. .
 - 2. If made of wood, are selected using the evaluation process for climate smart wood specified in Part 6
 - 3. ...

2.03 PRODUCT OPTIONS

- . Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed after bidding.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named 10 days prior to bidding.

PART 3 EXECUTION

Consider language for these provisions that could preserve continuity & CSW objectives as the project moves toward procurement

3.01 SUBSTITUTION PROCEDURES

- A. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- B. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Agrees to provide the same warranty for the substitution as for the specified product.

- 3. Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
- 4. Waives claims for additional costs or time extension that may subsequently become apparent. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- C. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- D. Contractor and Owner shall take responsibility for any substitution performed after Bidding.

GLOSSARY OF TERMS

CSWG's objective is to create a proposal evaluation system that does not require a high level of forestry expertise to understand and utilize. Yet there is a need for the procurement team and bidders to have a shared understanding of some of the terminology used in this document. This section is for users to list terms that need a clear definition for the purposes of accurately submitting and evaluating bids.

Please list the terms you wish to see defined below: