

STATE OF NORTH CAROLINA
Division of Community Revitalization (DCR)
Amended Best and Final Offer

Refer **ALL** Inquiries regarding this to:
angela.dunaway@commerce.nc.gov
(919) 526-8340

Amended Best and Final Offer (BAFO)

RFP # Doc1539254856_Builder

Amended Best and Final Offer Issue Date: July 23, 2025

BAFOs will be received until: July 28, 2025, at 10:00 am EST

Using Agency: North Carolina Department of Commerce, Division of Community Revitalization

NOTICE TO VENDOR


Vendor may choose to accept the State's selected house plan sets and pricing shown herein and sign the Amended Best and Final Offer (BAFO), which will finalize the contract. If a Vendor does not accept the house plan sets and pricing and sign the BAFO, Vendor will not be contracted for the services identified in Request for Proposal #Doc1539254856. The BAFO is being amended to correct the pricing for Garage per square foot in the Reconstruction Site Specific table attached. Please disregard the original BAFO and execute this Amended BAFO instead.

Submit the executed BAFO (this form) to angela.dunaway@commerce.nc.gov by the due date and time indicated above. Offers are subject to rejection unless submitted as described herein.

EXECUTION

In compliance with this Amended Best and Final Offer, and subject to all the terms and conditions herein, those in the original Request for Proposal (unless superseded herein) and in Vendor's offer thereto, the undersigned offers and agrees to furnish and deliver any or all goods/services which are offered, at the prices agreed upon in the BAFO and within the time specified. Pursuant to GS §143-54 and §143-59.2 and under penalty of perjury, the undersigned Vendor certifies that this offer has not been arrived at collusively or otherwise in violation of Federal or North Carolina law and this offer is made without prior understanding, agreement, or connection with any firm, corporation, or person submitting an offer for the same services, and is in all respects fair and without collusion or fraud.

Failure to sign this Amended BAFO will render offer invalid and it SHALL BE REJECTED.

COMPLETE/FORMAL NAME OF VENDOR: Locke-Lane Construction, INC.		
STREET ADDRESS: 5063 Taylorsville Highway	P.O. BOX: 139	ZIP: 28678
CITY & STATE & ZIP: Stony Point, NC 28678	TELEPHONE NUMBER: 704-585-6625	TOLL FREE TEL. NO:
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE :		
PRINT NAME & TITLE OF PERSON SIGNING ON BEHALF OF VENDOR: Andrew Sherrill President		FAX NUMBER: 704-585-6640
VENDOR'S AUTHORIZED SIGNATURE: 	DATE: 07/24/25	EMAIL: dsherrill@lockelaneconstruction.com

Best and Final Offer

The State has determined the house plan sets to be used and the pricing provided to be paid to all Vendors for the services defined in Request for Proposal #Doc1539254856, which are included as attachments to this Amended BAFO. Vendors may choose to accept the plan sets and pricing and sign this Best and Final Offer, which will finalize the contract. If a Vendor does not accept this BAFO, it will not be contracted for the services identified in this RFP.

IMPORTANT NOTE:

It is the Vendor's sole responsibility to ensure its BAFO has been received at angela.dunaway@commerce.nc.gov by the specified time and date. Upon receipt of the signed BAFO from the vendor, a confirmation email will be sent. If the Vendor does not receive a confirmation email within a reasonable time after BAFO submission, within normal business hours, it is the sole responsibility of the Vendor to send a follow up email to confirm receipt PRIOR to the due time and date. Vendors are cautioned not to wait until the time immediately preceding the due time and date to submit the BAFO. The State will countersign the BAFO and at that time a contract will be created. The State will send a fully executed contract (including the offer and the BAFO) to each vendor upon full execution.


CONFIDENTIALITY AND PROHIBITED COMMUNICATIONS DURING EVALUATION:

The RFP is still in the evaluation period. During this period and prior to award, possession of the BAFO, original RFP response and accompanying information is limited to personnel of the Division of Community Revitalization responsible for participating in the evaluation. Responding Vendor, including any subcontractors and suppliers, is prohibited from engaging in conversations intended to influence the outcome of the evaluation. Any Vendor not in compliance with this provision shall be disqualified from evaluation and award. See RFP Section 3.2.

ACCEPTANCE OF OFFER

If the State accepts any or all parts of this offer, an authorized representative of the Department of Commerce shall affix his/her signature to the Vendor's response to this Amended BAFO. The acceptance shall include the response to this Amended BAFO, any provisions and requirements of the original RFP which have not been superseded by this BAFO and all Terms and Conditions. These documents shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful vendor(s).

FOR STATE USE ONLY

Offer  Signed by: _____ ded this 30th day of July 2025, as indicated on attached certification,
by _____ (Authorized representative of the Department of Commerce).

PRICING

Rehabilitation Cost
Combined overhead and profit rate to be provided on top of approved Xactimate cost estimates.
27.76%

MHU Price						
Scope of Work: The prices are inclusive of the following items: All permits/fees; taxes/sales tax; disconnection of all utilities; Demolition and disposal of the existing storm damaged MHU in an approved facility; Sitework and grading required to install the new MHU; Purchase of the new MHU; Hauling of the new MHU to the applicant address; Installation of the new MHU to be applicant address in accordance with program and code requirements; stairs; Skirting; Connection of all appliances and HVAC system; GC testing of all mechanical, electrical, and plumbing systems; All required code inspections; Placement of a minimum of 4 pallets of sod or minimum required to pass code inspections, whichever is greater; Fill dirt included as required to ensure proper drainage; Completion of all required program inspections; Title work (title to new MHU to be issued in applicant name prior to program final inspection); Certificate of Occupancy prior to key turn over; Warranty requirements as required in GC contract. All MHUs required to be HUD Compliant for the applicable thermal and wind zones and furnished with all appliances including central HVAC (mini-splits not allowed), refrigerator, stove/oven, dishwasher, water heater.						
	Price Singlewide MHU 2 Bedroom / 2 Bathroom	Price Singlewide MHU 3 Bedroom / 2 Bathroom	Price Singlewide MHU 4 Bedroom / 2 Bathroom	Price Doublewide MHU 2 Bedroom / 2 Bathroom	Price Doublewide MHU 3 Bedroom / 2 Bathroom	Price Doublewide MHU 4 Bedroom / 2 Bathroom
Price Per Square Foot	\$ 152.74	\$ 141.59	\$ 141.33	\$ 148.30	\$ 138.79	\$ 130.18
Price per Square Foot Wheelchair Friendly Unit	\$ 164.60	\$ 150.12	\$ 149.76	\$ 155.90	\$ 144.97	\$ 135.48

Reconstruction Base Plan Costs; 2 Bedroom / 2 Bathroom

All construction must be completed with radon resistant construction techniques and the pricing includes GC provided post construction radon testing results indicating that the radon levels in the home are below federal, state, or local action levels.

	2 Bedroom / 2 Bathroom
Site Work	\$ 11,294.44
Foundation - Slab on Grade	\$ 24,575.02
Plumbing	\$ 20,251.91
Electrical	\$ 16,736.99
Framing	\$ 43,764.92
Doors & Windows	\$ 12,046.30
Insulation	\$ 7,124.78
Exterior Surface	\$ 15,345.43
Interior Surface	\$ 11,870.78
Mechanical	\$ 17,975.12
Finish Carpentry	\$ 8,158.73
Cabinets	\$ 10,644.86
Appliances	\$ 6,446.18
Flooring	\$ 9,200.19
Paint	\$ 9,453.32
Roofing	\$ 11,318.63
Finish Details	\$ 7,264.68
Miscellaneous	\$ 10,676.57
Total Price	\$ 254,148.85
Design Square Footage (Conditioned Space) on Selected House Plans	1184
Price Per Square Foot (Conditioned Space)	\$ 214.65
Price Per Square Foot Slab Foundation	\$ 214.65
Price Per Square Foot Pier and Beam Foundation	\$ 228.36
Price Per Square Foot Stem Wall Foundation	\$ 226.99
Price Per Square Foot Timber Pile Foundation up to 4' above grade	\$ 234.54
Price Per Square Foot Timber Pile Foundation from 4.1' to 8' above grade	\$ 244.87

Reconstruction Base Plan Costs; 3 Bedroom / 2 Bathroom

All construction must be completed with radon resistant construction techniques and the pricing includes GC provided post construction radon testing results indicating that the radon levels in the home are below federal, state, or local action levels.

	3 Bedroom / 2 Bathroom
Site Work	\$ 14,302.39
Foundation - Slab on Grade	\$ 29,626.24
Plumbing	\$ 22,249.78
Electrical	\$ 19,036.13
Framing	\$ 51,466.79
Doors & Windows	\$ 14,133.71
Insulation	\$ 8,546.72
Exterior Surface	\$ 18,789.45
Interior Surface	\$ 14,268.18
Mechanical	\$ 19,724.03
Finish Carpentry	\$ 9,866.08
Cabinets	\$ 12,541.91
Appliances	\$ 6,949.16
Flooring	\$ 11,316.75
Paint	\$ 11,353.58
Roofing	\$ 13,094.69
Finish Details	\$ 8,984.19
Miscellaneous	\$ 12,846.16
Total Price	\$ 299,095.94
Design Square Footage (Conditioned Space) on Selected House Plans	1450
Price Per Square Foot (Conditioned Space)	\$ 206.27
Price Per Square Foot Slab Foundation	\$ 206.27
Price Per Square Foot Pier and Beam Foundation	\$ 218.76
Price Per Square Foot Stem Wall Foundation	\$ 217.01
Price Per Square Foot Timber Pile Foundation up to 4' above grade	\$ 222.72
Price Per Square Foot Timber Pile Foundation from 4.1' to 8' above grade	\$ 232.30

Reconstruction Base Plan Costs; 4 Bedroom / 2 Bathroom

All construction must be completed with radon resistant construction techniques and the pricing includes GC provided post construction radon testing results indicating that the radon levels in the home are below federal, state, or local action levels.

	4 Bedroom / 2 Bathroom
Site Work	\$ 16,010.69
Foundation - Slab on Grade	\$ 32,696.92
Plumbing	\$ 23,435.96
Electrical	\$ 21,006.80
Framing	\$ 56,417.16
Doors & Windows	\$ 15,409.87
Insulation	\$ 9,622.79
Exterior Surface	\$ 20,861.24
Interior Surface	\$ 16,128.12
Mechanical	\$ 21,114.59
Finish Carpentry	\$ 11,029.63
Cabinets	\$ 13,403.06
Appliances	\$ 7,320.15
Flooring	\$ 12,671.02
Paint	\$ 12,548.74
Roofing	\$ 14,480.24
Finish Details	\$ 9,828.19
Miscellaneous	\$ 13,826.97
Total Price	\$ 327,812.14
Design Square Footage (Conditioned Space) on Selected House Plans	1645
Price Per Square Foot (Conditioned Space)	\$ 199.28
Price Per Square Foot Slab Foundation	\$ 199.28
Price Per Square Foot Pier and Beam Foundation	\$ 210.62
Price Per Square Foot Stem Wall Foundation	\$ 210.00
Price Per Square Foot Timber Pile Foundation up to 4' above grade	\$ 225.75
Price Per Square Foot Timber Pile Foundation from 4.1' to 8' above grade	\$ 223.45

Reconstruction Site-Specific Unit Cost Pricing

All construction must be completed with radon resistant construction techniques and the pricing includes GC provided post construction radon testing results indicating that the radon levels in the home are below federal, state, or local action levels.

Demolition:	Price
Addition to MHU (100 - 500 SF)	\$ 6,833.93
Addition to MHU (> 500 SF)	\$ 7,902.74
House Demolition (up to 1000 SF under roof)	\$ 10,650.47
House Demolition (1000 - 1500 SF under roof)	\$ 14,966.79
House Demolition (1500 - 2000 SF under roof)	\$ 18,731.50
House Demolition (2000 - 2500 SF under roof)	\$ 21,618.36
House Demolition (2500 - 3000 SF under roof)	\$ 25,662.76
House Demolition (> 3000 SF under roof)	\$ 31,660.47
Shed or Carport (10-200 SF)	\$ 1,341.21
Shed or Carport (201 - 400 SF)	\$ 2,569.33
Shed or Carport (401 - 600 SF)	\$ 3,589.72
Shed or Carport (601 - 800 SF)	\$ 4,592.18
Shed or Carport (801 - 1000 SF)	\$ 5,761.41
Concrete Flatwork (10-200 SF)	\$ 1,383.95
Concrete Flatwork (201 - 400 SF)	\$ 2,522.80
Concrete Flatwork (401 - 600 SF)	\$ 3,736.59
Concrete Flatwork (601 - 800 SF)	\$ 4,720.37
Concrete Flatwork (801 - 1000 SF)	\$ 5,925.87
Concrete Flatwork (1001 - 1500 SF)	\$ 8,841.97
Concrete Flatwork (1501 - 2000 SF)	\$ 11,082.09
Concrete Flatwork (2001 - 2500 SF)	\$ 13,907.34
Wooden Deck (10-200 SF)	\$ 1,250.53
Wooden Deck (201 - 400 SF)	\$ 2,401.44
Wooden Deck (401 - 600 SF)	\$ 3,469.77
Wooden Deck (601 - 800 SF)	\$ 4,644.09
Wooden Deck (801 - 1000 SF)	\$ 5,663.49
Wooden Deck (1001 - 1500 SF)	\$ 7,687.84
Wooden Deck (1501 - 2000 SF)	\$ 10,111.84
Wooden Deck (2001 - 2500 SF)	\$ 11,559.73

Accessibility Accommodations	
RA-1 Tub/Shower with Blocking & Grab Bar	\$ 1,644.76
RA-2 Tub/Shower with Blocking, Grab Bars, Fold-up Seat, Shower Wand	\$ 3,101.88
RA-3 Roll In Shower with Grab Bars, Fold-up Seat, Shower Wand	\$ 3,983.21
Wooden Ramp (0-4' above grade) including no step entrance	\$ 8,685.53
Wooden Ramp (4' - 8' above grade) including no step entrance	\$ 14,773.49
Exterior Platform Lift (4' - 8' above grade) - inclusive of pad, framing, electrical*	\$ 20,494.56
Exterior Platform Lift (8' - 12' above grade) - inclusive of pad, framing, electrical*	\$ 26,134.27
Accessible Kitchen (appliances with knobs in front, roll under sink)	\$ 2,779.19
Hearing Impaired (strobe smoke detectors)	\$ 624.15
Utilities	
Complete Septic System Replacement	\$ 17,755.44
Septic Drain Field Replacment	\$ 9,881.37
Decommission Septic System	\$ 3,620.42
Water Well Pump Replacement	\$ 4,433.08
Water Well Replacement (up to 100 feet below ground surface)**	\$ 12,071.66
Water Well Replacement (101 - 150 feet below ground surface)**	\$ 13,170.40
Water Well Replacement (151 - 200 feet below ground surface)**	\$ 14,412.29
Water Well Replacement (201 - 250 feet below ground surface)**	\$ 15,208.93
Water Well Replacement (251 - 300 feet below ground surface)**	\$ 17,366.23
Water Well Replacement (301 - 350 feet below ground surface)**	\$ 18,665.97
Water Well Replacement (351 - 400 feet below ground surface)**	\$ 20,182.93
Water Well Replacement (401 - 450 feet below ground surface)**	\$ 22,583.54
Water Well Replacement (451 - 500 feet below ground surface)**	\$ 24,604.44
Decommission Water Well	\$ 2,381.45
Flatwork	
Flatwork Installed (50-100 SF)	\$ 1,352.84
Flatwork Installed (101 - 200 SF)	\$ 2,441.99
Flatwork Installed (201 - 300 SF)	\$ 3,587.18
Flatwork Installed (301 - 400 SF)	\$ 4,675.15
Flatwork Installed (401 - 500 SF)	\$ 5,822.76
Flatwork Installed (501 - 600 SF)	\$ 6,958.71
Flatwork Installed (601 - 700 SF)	\$ 8,090.77
Flatwork Installed (701 - 800 SF)	\$ 9,173.97
Flatwork Installed (801 - 900 SF)	\$ 10,552.94
Flatwork Installed (901 - 1000 SF)	\$ 11,627.28
Flatwork Installed (1001 - 1500 SF)	\$ 15,753.34
Flatwork Installed (1501 - 2000 SF)	\$ 20,634.68

Other Site-Specific Costs	
Site Survey (set backs and structure location)	\$ 2,067.05
Elevation Survey (confirm base flood elevation and final elevation)	\$ 1,424.48
Garage (per SF)	\$ 101.06
Sod (per pallet installed)	\$ 654.53
Tree Trimming (per tree)	\$ 695.65
Stump Grinding (per stump)	\$ 702.68
Stump Removal	\$ 1,220.09
New Water Tap	\$ 3,302.19
New Sewer Tap	\$ 3,743.31
Underground electric (per linear foot)	\$ 65.24
Stairs for elevated home (3.1' - 6' above grade)	\$ 2,300.38
Stairs for elevated home (6.1' - 9' above grade)	\$ 3,470.05
Stairs for elevated home (9.1' - 12' above grade)	\$ 4,792.18
Tree removal (2" - 10" diameter)	\$ 806.50
Tree removal (11" - 15" diameter)	\$ 1,360.38
Tree removal (16" - 20" diameter)	\$ 1,832.06
Tree removal (21" - 25" diameter)	\$ 2,484.60
Tree removal (26" - 30" diameter)	\$ 3,065.34
Tree removal (31" - 36" diameter)	\$ 3,866.61
Concrete Culvert (12")	\$ 1,703.15
Concrete Culvert (15")	\$ 1,900.65
Concrete Culvert (16")	\$ 2,085.62
Concrete Culvert (18")	\$ 2,239.60
Concrete Culvert (20")	\$ 2,602.33
Concrete Culvert (24")	\$ 3,037.21
Fill Dirt (5 -15 CY)	\$ 658.90
Fill Dirt (16 - 25 CY)	\$ 1,104.24
Fill Dirt (26 - 35 CY)	\$ 1,442.22
Fill Dirt (36 - 45 CY)	\$ 1,857.20
Fill Dirt (46 - 60 CY)	\$ 2,419.18
Fill Dirt (61 - 80 CY)	\$ 2,977.30
Caliche or Crushed Concrete (5 -15 CY)	\$ 1,104.75
Caliche or Crushed Concrete (16 - 25 CY)	\$ 1,703.44
Caliche or Crushed Concrete (26 - 35 CY)	\$ 2,309.56
Caliche or Crushed Concrete (36 - 45 CY)	\$ 2,902.60

* Exterior platform lift price includes purchase of a 1 year maintenance package after installation of the lift.

** Water well replacement to include min 1 HP pump and steel casing.

Demolition - Only Site-Specific Unit Cost Pricing	
Demolition	Price
House Demolition (up to 1000 SF under roof)	\$ 11,098.13
House Demolition (1000 - 1500 SF under roof)	\$ 15,521.23
House Demolition (1500 - 2000 SF under roof)	\$ 19,356.99
House Demolition (2000 - 2500 SF under roof)	\$ 22,288.23
House Demolition (2500 - 3000 SF under roof)	\$ 26,494.61
House Demolition (> 3000 SF under roof)	\$ 32,402.10
Shed or Carport (10-200 SF)	\$ 1,365.76
Shed or Carport (201 - 400 SF)	\$ 2,611.36
Shed or Carport (401 - 600 SF)	\$ 3,654.24
Shed or Carport (601 - 800 SF)	\$ 4,663.11
Shed or Carport (801 - 1000 SF)	\$ 5,872.95
Concrete Flatwork (10-200 SF)	\$ 1,393.34
Concrete Flatwork (201 - 400 SF)	\$ 2,517.89
Concrete Flatwork (401 - 600 SF)	\$ 3,724.21
Concrete Flatwork (601 - 800 SF)	\$ 4,695.10
Concrete Flatwork (801 - 1000 SF)	\$ 5,877.99
Concrete Flatwork (1001 - 1500 SF)	\$ 8,820.10
Concrete Flatwork (1501 - 2000 SF)	\$ 11,066.78
Concrete Flatwork (2001 - 2500 SF)	\$ 13,920.40
Wooden Deck (10-200 SF)	\$ 1,274.59
Wooden Deck (201 - 400 SF)	\$ 2,423.20
Wooden Deck (401 - 600 SF)	\$ 3,519.21
Wooden Deck (601 - 800 SF)	\$ 4,699.65
Wooden Deck (801 - 1000 SF)	\$ 5,733.88
Wooden Deck (1001 - 1500 SF)	\$ 7,763.46
Wooden Deck (1501 - 2000 SF)	\$ 10,102.15
Wooden Deck (2001 - 2500 SF)	\$ 12,096.73
Utilities	
Decommission Septic System	\$ 3,561.58
Decommission Water Well	\$ 2,643.82

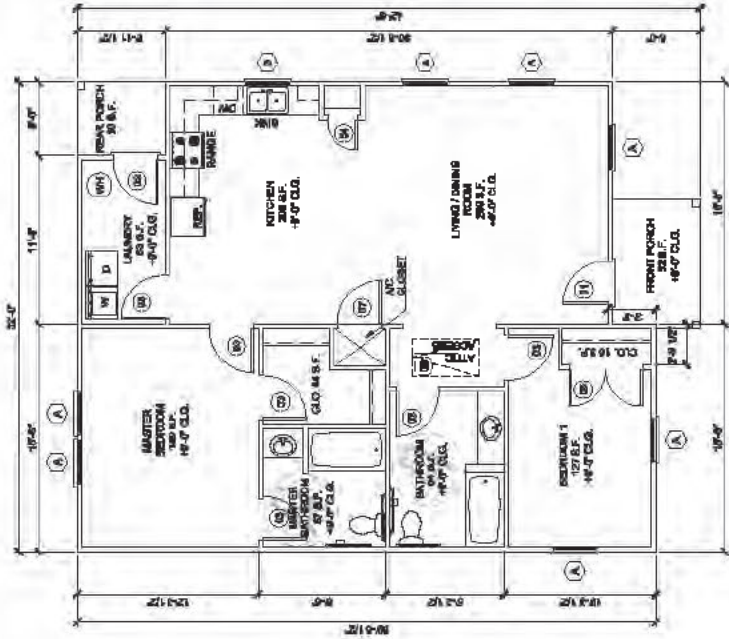
Other Site-Specific Costs	
Sod (per pallet installed)	\$ 654.76
Tree Trimming (per tree)	\$ 704.03
Stump Grinding (per stump)	\$ 715.21
Stump Removal	\$ 1,237.84
Tree Removal (2" - 10" diameter)	\$ 828.37
Tree Removal (11" - 15" diameter)	\$ 1,381.02
Tree Removal (16" - 20" diameter)	\$ 1,895.20
Tree Removal (21" - 25" diameter)	\$ 2,539.86
Tree Removal (26" - 30" diameter)	\$ 3,132.03
Tree Removal (31" - 36" diameter)	\$ 3,812.32
Fill Dirt (5 -15 CY)	\$ 665.44
Fill Dirt (16 - 25 CY)	\$ 1,114.62
Fill Dirt (26 - 35 CY)	\$ 1,453.76
Fill Dirt (36 - 45 CY)	\$ 1,874.04
Fill Dirt (46 - 60 CY)	\$ 2,443.31
Fill Dirt (61 - 80 CY)	\$ 2,997.93

House Plan Sets

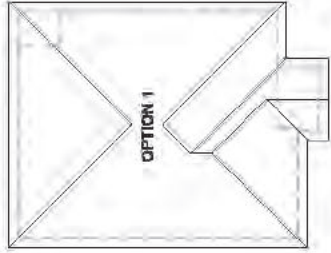
SQUARE FOOTAGE CALCULATIONS			
LOCATION	SQUARE FOOTAGE	REMARKS	
FLOOR PLAN	1,194 SQ.FT.		
FRONT PORCH	65 SQ.FT.		
REAR PORCH	33 SQ.FT.		

DOOR SCHEDULE			
MARK	QTY	DESCRIPTIONS	REMARKS
1	1	3'-0" X 6'-0"	EXTERIOR WITH FRESHCOLE
2	1	3'-0" X 6'-0"	EXTERIOR
3	1	3'-0" X 6'-0"	INTERIOR
4	1	2'-0" X 6'-0"	INT. DOOR
5	1	2'-0" X 6'-0"	DOUBLE DOOR
6	1	30" X 64" ATTIC ACCESS	2ND FLOOR LADDER RATING
7	1	3'-0" X 6'-0"	SET FLOORING WITH A MINIMUM OF 30 MINUTE FIRE RATING (VERIFY)

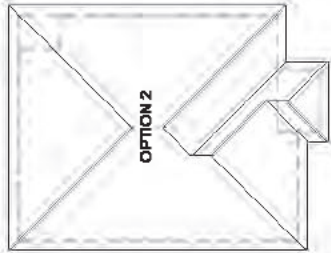
WINDOW SCHEDULE			
MARK	QTY	DESCRIPTIONS	REMARKS
A	7	3'-0" X 6'-0"	MINIMUM 15 MIN
B	1	3'-0" X 6'-0"	MINIMUM 15 MIN



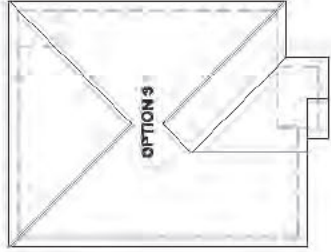
FLOOR PLAN



ROOF PLAN



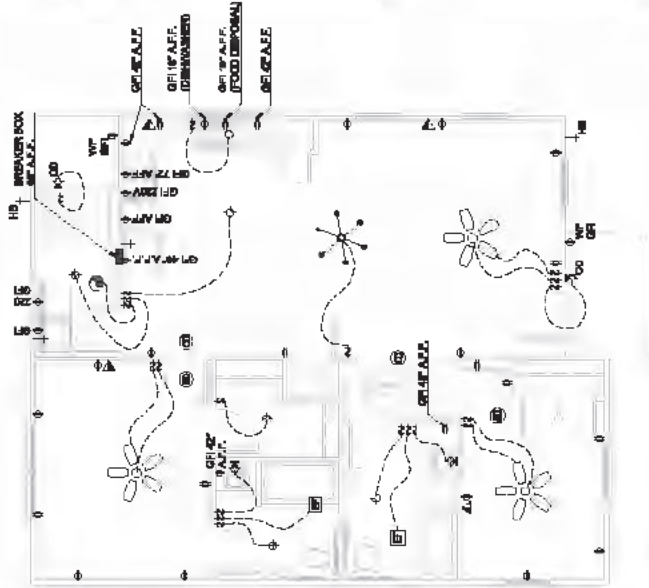
OPTION 1



OPTION 2



OPTION 3



ELECTRICAL PLAN



2 BED 2 BATH

POTTOK



OPTIONAL STORAGE CLOSET ON 2ND FLOOR. SEE PLAN FOR LOCATION. WHEN APPLICABLE, USE SELF-LOCKING DOOR WITH MINIMUM OF 20 MINUTE RATING (PREFERRED) REFER TO DOOR SCHEDULE.

FRONT ELEVATIONS (SIDING)

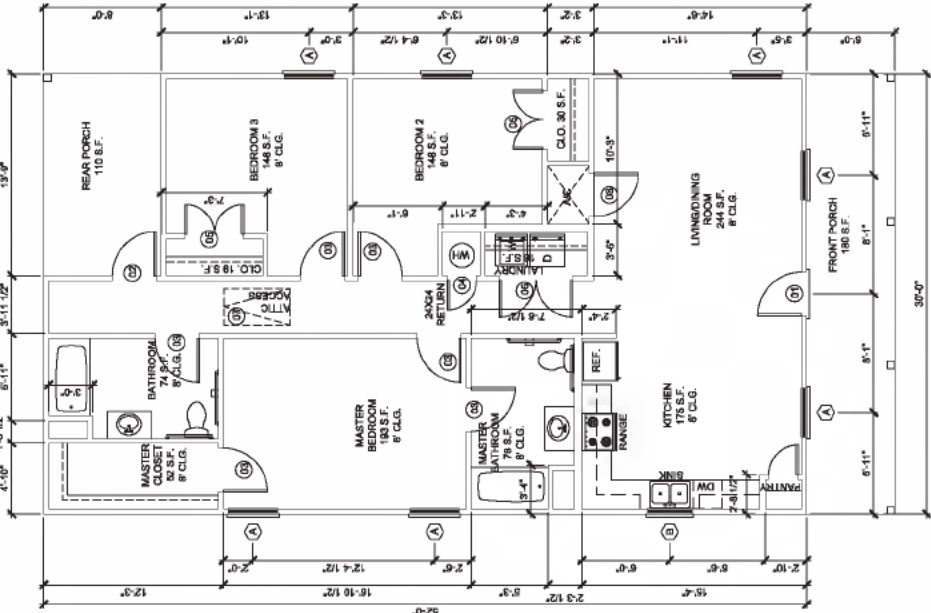
NOTE: ELEVATED HOMES TO BE CONSTRUCTED OUT OF WOOD FRAME CONSTRUCTION.

DOOR SCHEDULE			REMARKS
MARK	QTY	DESCRIPTIONS	
01	1	3'-0" X 6'-6"	EXTERIOR WITH PEEPHOLE
02	1	3'-0" X 6'-6"	EXTERIOR
03	6	3'-0" X 6'-6"	INTERIOR
04	1	2'-0" X 6'-6"	INTERIOR VENTED WHEN GAS APPLIANCE
05	2	6'-0" X 6'-6"	DOUBLE DOORS
06	1	3'-0" X 6'-6"	DOUBLE DOORS
07	1	30" X 54" ATTIC ACCESS	350 POUND LADDER RATING
08	1	2'-4" X 8'-0"	VENTED

SQUARE FOOTAGE CALCULATIONS			REMARKS
LOCATION	SQUARE FOOTAGE		
FLOOR PLAN	1,458 S.F.		
FRONT PORCH	180 S.F.		
REAR PORCH	110 S.F.		

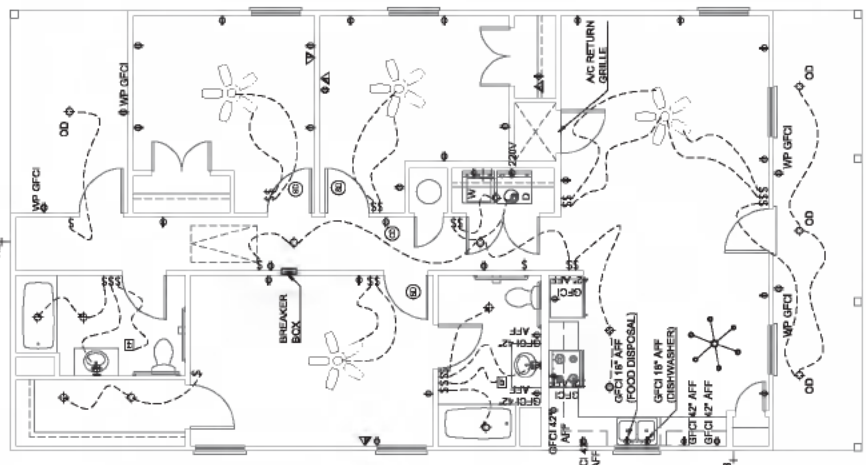
WINDOW SCHEDULE			REMARKS
MARK	QTY.	DESCRIPTIONS	
A	7	3'-4" X 5'-0"	SINGLE HUNG
B	1	3'-0" X 3'-0"	SINGLE HUNG

ROOF PLAN



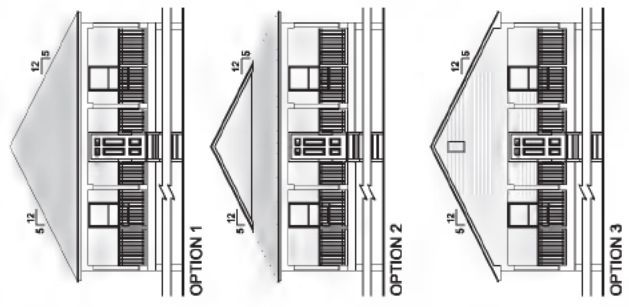
FLOOR PLAN

ELECTRICAL PLAN



EXTERIOR ELEVATIONS (SIDING)

NOTE: ELEVATED HOMES TO BE CONSTRUCTED OUT OF WOOD FRAME CONSTRUCTION.



3 BED 2 BATH

SUMBA

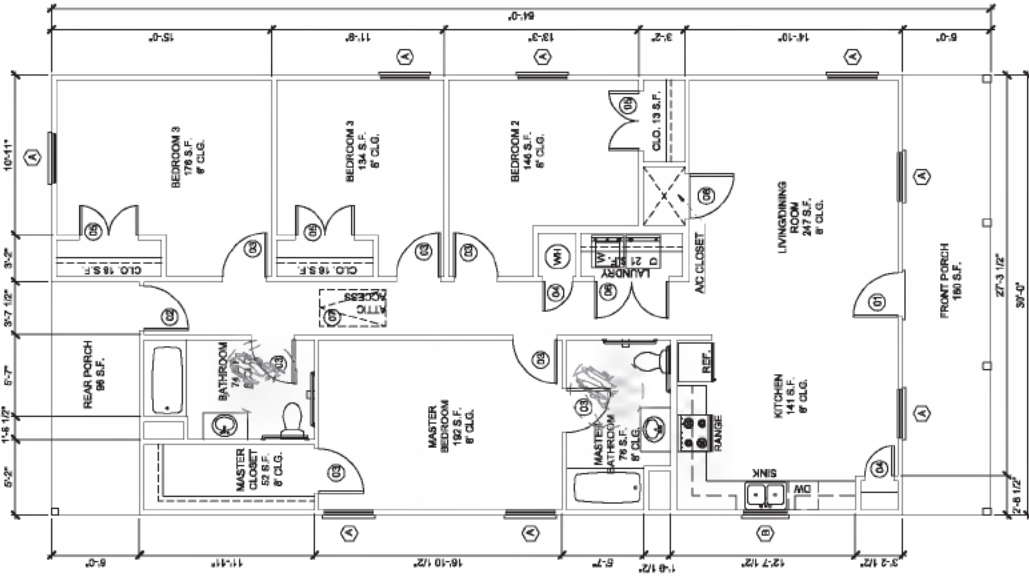
OPTIONAL STORAGE CLOSET OR
STORAGE CLOSET WITH SELF
CLOSING DOOR WITH MINIMUM OF
20 MINUTE RATING (VENTED)
N.T.S.
REFER TO DOOR SCHEDULE
PERMITTING.

THIS HOUSE PLAN IS FOR THE SOLE PURPOSE AND USE
FOR THE NORTH CAROLINA DIVISION OF COMMUNITY
RENTALIZATION (DCR) AND THE HURRICANE HELPER
PROGRAM. IT IS NOT TO BE REPRODUCED, COPIED,
REPLICATED OR RECREATED FOR USE FOR SITE
SPECIFIC RECONSTRUCTION PLAN SETS. THIS
SPECIFIC DRAWING SHALL NOT BE USED FOR
PERMITTING.

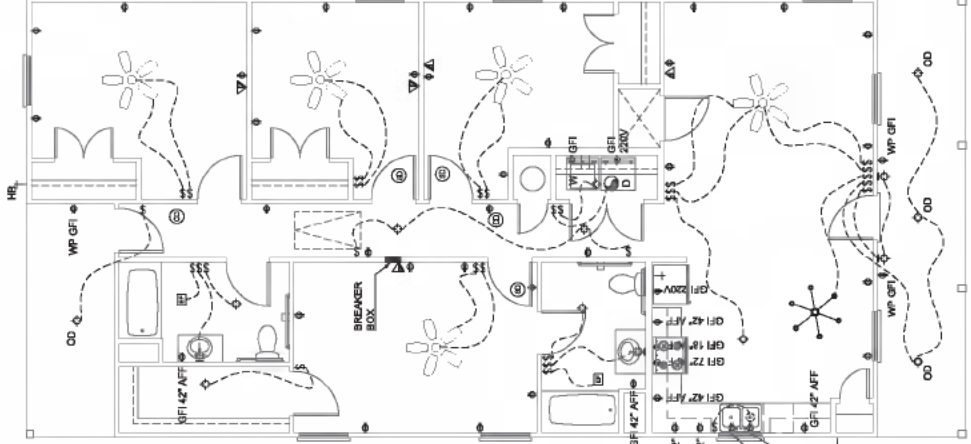
DOOR SCHEDULE			REMARKS
MARK	QTY	DESCRIPTIONS	
01	1	3'-0" X 5'-6"	EXTERIOR WITH PEEPHOLE
02	1	3'-0" X 5'-6"	EXTERIOR
03	7	3'-0" X 6'-9"	INTERIOR
04	2	2'-0" X 5'-6"	INTERIOR
05	3	6'-0" X 6'-9"	BI-FOLD
06	1	5'-0" X 6'-9"	BI-FOLD
07	1	30" X 64" ATTIC ACCESS	350 POUND LADDER
08	1	3'-0" X 6'-9"	SELF CLOSING WITH A MINIMUM OF 20 MINUTE FIRE RATINGS (VENTED)

SQUARE FOOTAGE CALCULATIONS			REMARKS
LOCATION	SQUARE FOOTAGE		
FLOOR PLAN	1,846 S.F.		
FRONT PORCH	180 S.F.		
REAR PORCH	96 S.F.		

WINDOW SCHEDULE			REMARKS
MARK	QTY.	DESCRIPTIONS	
A	8	3'-4" X 5'-0"	SINGLE HUNG
B	1	3'-0" X 5'-0"	SINGLE HUNG



FLOOR PLAN



ELECTRICAL PLAN



ROOF PLAN

HAFLINGER

4 BED 2 BATH

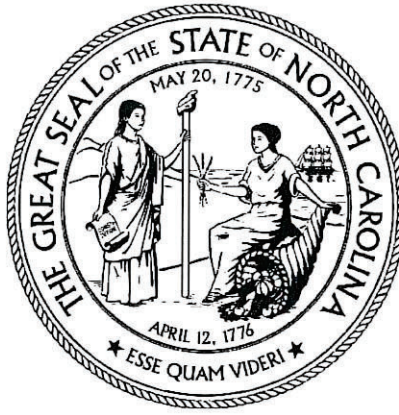


OPTIONAL STORAGE CLOSET OR STORAGE CLOSET WITH SELF CLOSING DOOR WITH MINIMUM OF 20 MINUTE RATING (VENTED) REFER TO DOOR SCHEDULE PERMITTING.

THIS HOUSE PLAN IS FOR THE SOLE PURPOSE AND USE FOR THE NORTH CAROLINA DIVISION OF COMMUNITY REHABILITATION (CCR) AND THE NURCARE HELPER PROGRAM. THIS PLAN IS NOT TO BE REPRODUCED OR RECREATED FOR USE FOR SITE SPECIFIC RECONSTRUCTION PLAN SETS. THIS SPECIFIC DRAWING SHALL NOT BE USED FOR PERMITTING.

EXTERIOR ELEVATIONS (SIDING)

NOTE: ELEVATED HOMES TO BE CONSTRUCTED OUT OF WOOD FRAME CONSTRUCTION



**STATE OF NORTH CAROLINA
DEPARTMENT OF COMMERCE**

Division of Community Revitalization

Request for Proposal #: Doc1539254856

**Residential Demolition, Reconstruction, Rehabilitation, and
Manufactured Housing Unit Replacement for
Hurricane Helene impacted Counties**

Date of Issue: April 16, 2025

Proposal Opening Date: May 8, 2025, by 2:00 PM ET

Direct all inquiries concerning this RFP to:

Angie Dunaway
DCR Procurement Director
angela.dunaway@commerce.nc.gov
919-526-8340

STATE OF NORTH CAROLINA
Division of Community Revitalization (DCR)

Refer <u>ALL</u> Inquiries regarding this RFP to: angela.dunaway@commerce.nc.gov	Request for Proposal # Doc1539254856
	Proposals will be publicly opened: May 8, 2025, at 2:00 pm ET
Using Agency: North Carolina Department of Commerce, Division of Community Revitalization	Commodity No. and Description: 721110 – Single Family Dwelling Construction Services

In compliance with this Request for Proposal (RFP), and subject to all the conditions herein, the undersigned Vendor offers and agrees to furnish and deliver any or all items upon which prices are offered, at the prices set opposite each item within the time specified herein.

By executing this proposal, the undersigned Vendor understands that False certification is a Class I felony and certifies that:

- this proposal is submitted competitively and without collusion (G.S. 143-54),
- none of its officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (G.S. 143-59.2), and
- it is not an ineligible Vendor as set forth in G.S. 143-59.1.

Furthermore, by executing this proposal, the undersigned certifies to the best of Vendor's knowledge and belief, that:


- it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal or State department or agency.

As required by G.S. 143-48.5, the undersigned Vendor certifies that it, and each of its sub-Contractors for any Contract awarded as a result of this RFP, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement for each employer with more than 25 employees in North Carolina to verify the work authorization of its employees through the federal E-Verify system.

G.S. 133-32 and Executive Order 24 (2009) prohibit the offer to, or acceptance by, any State Employee associated with the preparing plans, specifications, estimates for public Contract; or awarding or administering public Contracts; or inspecting or supervising delivery of the public Contract of any gift from anyone with a Contract with the State, or from any person seeking to do business with the State. By execution of this response to the RFP, the undersigned certifies, for Vendor's entire organization and its employees or agents, that Vendor are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

By executing this proposal, Vendor certifies that it has read and agreed to the INSTRUCTIONS TO VENDORS and the NORTH CAROLINA GENERAL TERMS AND CONDITIONS. This procurement complies with the State's own procurement laws, rules and procedures per 2 CFR § 200.317.

Failure to execute/sign proposal prior to submittal may render proposal invalid and it MAY BE REJECTED. Late proposals shall not be accepted.

COMPLETE/FORMAL NAME OF VENDOR: Locke-Lane Construction, Inc.		
STREET ADDRESS: 5063 Taylorsville Highway	P.O. BOX: 139	ZIP: 28678
CITY & STATE & ZIP: Stony Point, NC, 28678	TELEPHONE NUMBER: 704-585-6625	TOLL FREE TEL. NO:
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE :		
PRINT NAME & TITLE OF PERSON SIGNING ON BEHALF OF VENDOR: Andrew Sherrill, President		FAX NUMBER: 704-585-6640
VENDOR'S AUTHORIZED SIGNATURE: 	DATE: 5-8-2025	EMAIL: dsherrill@lockelaneconstruction.com

VALIDITY PERIOD

Offer valid for at least 90 days from date of proposal opening, unless otherwise stated here: _____ days, or if extended by mutual agreement of the parties. Any withdrawal of this offer shall be made in writing, effective upon receipt by the agency issuing this RFP.

ACCEPTANCE OF PROPOSAL

If your proposal is accepted, all provisions of this RFP, along with the written results of any negotiations, shall constitute the written agreement between the parties ("Contract"). The NORTH CAROLINA GENERAL TERMS AND CONDITIONS are incorporated herein and shall apply.

FOR STATE USE ONLY: Offer accepted and Contract awarded this _____ day of _____, 2025, as indicated on the attached certification, by _____ (Authorized Representative of DCR).

Contents

1.0	PURPOSE AND BACKGROUND.....	6
2.0	GENERAL INFORMATION	6
2.1	REQUEST FOR PROPOSAL DOCUMENT AND SCOPES OF WORK.....	6
2.2	ePROCUREMENT FEE.....	7
2.3	NOTICE TO VENDORS REGARDING RFP TERMS AND CONDITIONS	7
2.4	RFP SCHEDULE.....	7
2.5	PRE-PROPOSAL CONFERENCE	8
2.6	PROPOSAL QUESTIONS	8
2.7	PROPOSAL SUBMITTAL.....	9
2.8	PROPOSAL CONTENTS.....	10
2.9	DEFINITIONS, ACRONYMS, AND ABBREVIATIONS	10
3.0	METHOD OF AWARD AND PROPOSAL EVALUATION PROCESS	11
3.1	METHOD OF AWARD.....	11
3.2	CONFIDENTIALITY AND PROHIBITED COMMUNICATIONS DURING EVALUATION	12
3.3	PROPOSAL EVALUATION PROCESS.....	12
3.4	EVALUATION CRITERIA.....	13
3.5	PERFORMANCE OUTSIDE THE UNITED STATES.....	15
3.6	INTERPRETATION OF TERMS AND PHRASES.....	15
4.0	REQUIREMENTS.....	15
4.1	MINIMUM QUALIFICATIONS.....	15
4.2	OTHER REQUIREMENTS	16
4.3	PAYMENT STRUCTURE	16
4.4	INVOICES	17
4.5	HUB PARTICIPATION	17
4.6	BACKGROUND CHECKS.....	17
4.7	PERSONNEL	17
4.8	VENDOR'S REPRESENTATIONS	17
4.9	BOND AND INSURANCE REQUIREMENTS	18
4.10	LOBBYING ACTIVITY CERTIFICATION FOR FEDERAL GRANTS.....	18
5.0	SCOPE OF WORK	19
5.1	SCOPE OF SERVICES.....	19
5.2	TASKS/DELIVERABLES.....	20

5.3	REASONABLE ACCOMMODATION REQUESTS.....	29
5.4	ADDITIONAL REQUIREMENTS	30
5.5	NOTICE TO PROCEED.....	31
5.6	PROJECT ASSIGNMENT METHODOLOGY	31
5.7	LIQUIDATED DAMAGES	31
5.8	TRANSITION ASSISTANCE	31
6.0	CONTRACT ADMINISTRATION.....	32
6.1	PROJECT MANAGER AND CUSTOMER SERVICE	32
6.2	PERFORMANCE	32
6.3	DISPUTE RESOLUTION.....	32
6.4	CONTRACT CHANGES	32
7.0	REQUIRED VENDOR INFORMATION.....	32
7.1	Vendor Information.....	32
7.2	Company Narrative	32
7.3	Company Profile.....	33
7.4	Key Staffing Profile	33
7.5	References.....	34
7.6	Litigation History	34
7.7	Conflicts.....	34
7.8	Annual Report	35
7.9	Safety Information	35
7.10	Quality Control Program	35
7.11	Cost Control Program.....	35
7.12	Warranty Program.....	36
7.13	Reconstruction Plan Sets (for Vendors seeking to perform reconstruction projects)	36
	ATTACHMENT A: PROJECT TYPE	37
	ATTACHMENT B: NORTH CAROLINA INSTRUCTIONS TO VENDORS	38
	ATTACHMENT C: NORTH CAROLINA GENERAL CONTRACT TERMS & CONDITIONS.....	47
	ATTACHMENT D: LOCATION OF WORKERS UTILIZED BY VENDOR	63
	ATTACHMENT E: HISTORICALLY UNDERUTILIZED BUSINESSES INFORMATION	64
	ATTACHMENT F: CERTIFICATION FOR CONTRACTS, GRANTS, LOANS AND COOPERATIVE AGREEMENTS.....	65
	ATTACHMENT G: DISCLOSURE OF LOBBYING ACTIVITIES.....	66
	ATTACHMENT H: EXPERIENCE, QUALIFICATIONS, REFERENCES.....	67

1.0 PURPOSE AND BACKGROUND

The Department of Commerce, Division of Community Revitalization (DCR), is seeking proposals from highly qualified North Carolina licensed general contractors to perform demolition, rehabilitation, and/or reconstruction of single-family residential structures and repair and replacement of Manufactured Housing Units (MHUs) in Western North Carolina counties impacted by Hurricane Helene. Construction shall be in compliance with local, federal and state statutory requirements for grants under the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program.

The United States Department of Housing and Urban Development (U.S. HUD) announced that the State of North Carolina (the State) will receive \$1,428,120,000 in funding to support long-term recovery efforts following Hurricane Helene (FEMA DR-4827-NC) through the North Carolina Department of Commerce (NCDOC). Of those funds, \$807,354,000 has been allocated for the Reconstruction and Rehabilitation (R&R) Program for single family owner-occupied units and \$57,400,000 has been allocated for Small Rental Reconstruction and Rehabilitation. Community Development Block Grant—Disaster Recovery (CDBG-DR) funding is designed to address needs that remain after all other assistance has been exhausted. These funds will help meet remaining unmet housing, economic development, mitigation, and infrastructure needs destroyed by Hurricane Helene in September 2024. Hurricane Helene brought historic rainfall, strong winds, and tornadoes generated by the storm. On September 27, 2024, former Governor Roy Cooper requested a Major Disaster Declaration from the federal government for thirty-nine (39) North Carolina counties and the Eastern Band of Cherokee Indians. On September 28, 2024, twenty-five (25) counties in the State were declared a major disaster by former President Biden under provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or P.L. 93-288), approving Individual and Public Assistance (IA and PA) for these counties as well as the Eastern Band of Cherokee Indians. On October 5, 2024, two (2) additional North Carolina counties were declared eligible for federal individual assistance, followed by twelve more counties on October 16, 2024.

1.1 CONTRACT TERM

The Contract shall have an initial term of three (3) years, beginning on the date of final Contract execution (the "Effective Date").

At the end of the Contract's initial term, the State shall have the option, in its sole discretion, to renew the Contract on the same terms and conditions for up to three (3) additional one-year terms. The State will give the Vendors written notice of its intent to exercise each option no later than thirty (30) days before the end of the Contract's then-current term. In addition to any optional renewal terms, and with the Vendor's concurrence, the State reserves the right to extend the Contract after the last active term.

Proposals shall be submitted in accordance with the terms and conditions of this RFP and any addenda issued hereto.

2.0 GENERAL INFORMATION

2.1 REQUEST FOR PROPOSAL DOCUMENT AND SCOPES OF WORK

This RFP is comprised of the base RFP document, any attachments, and any addenda released before Contract award, which are incorporated herein by reference. DCR, or an Implementation Vendor on behalf of DCR, will issue Scopes of Work for specific project assignments to Vendors that are qualified and awarded pursuant to this RFP. The site-specific Scope of Work will contain requirements, terms, and conditions particular to that project, which are intended to supplement the requirements, terms, and conditions herein.

2.2 ePROCUREMENT FEE

This RFP does not incorporate the eProcurement fee; however, the purchase order may be issued through the eProcurement System. See Paragraph 17 of the attached Terms and Conditions as amended. General information on the eProcurement Services can be found at: <http://eprocurement.nc.gov/>.

2.3 NOTICE TO VENDORS REGARDING RFP TERMS AND CONDITIONS

It shall be the Vendor's responsibility to read the Instructions to Vendors, the North Carolina General Terms and Conditions, all relevant exhibits and attachments, and any other components made a part of this RFP and comply with all requirements and specifications herein. Vendors are also responsible for obtaining and complying with all Addenda and other changes that may be issued in connection with this RFP.

If Vendors have questions or issues regarding any component of this RFP, those must be submitted as questions in accordance with the instructions in the PROPOSAL QUESTIONS Section. If the State determines that any changes will be made as a result of the questions asked, then such decisions will be communicated in the form of an RFP addendum. The State may also elect to leave open the possibility for later negotiation of specific provisions of the Contract that have been addressed during the question-and-answer period, prior to contract award.

Other than through the process of negotiation under 01 NCAC 05B.0503, the State rejects and will not be required to evaluate or consider any additional or modified terms and conditions submitted with Vendor's proposal or otherwise. This applies to any language appearing in or attached to the document as part of the Vendor's proposal that purports to vary any terms and conditions or Vendors' instructions herein or to render the proposal non-binding or subject to further negotiation. Vendor's proposal shall constitute a firm offer that shall be held open for the period required herein ("Validity Period" above).

The State may exercise its discretion to consider Vendor proposed modifications. By execution and delivery of this RFP Response, the Vendor agrees that any additional or modified terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect, and will be disregarded unless expressly agreed upon through negotiation and incorporated by way of a Best and Final Offer (BAFO). Noncompliance with, or any attempt to alter or delete, this paragraph shall constitute sufficient grounds to reject Vendor's proposal as nonresponsive.

2.4 RFP SCHEDULE

The table below shows the *intended* schedule for this RFP. The State will make every effort to adhere to this schedule.

Event	Responsibility	Date and Time
Issue RFP	State	April 16, 2025
Hold Pre-Proposal Conference	State	April 24, 2025, at 10:00 am ET via TEAMS and Call In Number
Submit Written Questions	Vendor	April 28, 2025, by 10:00 am ET <i>Please attend the Pre-Proposal Conference prior to submitting questions.</i>
Provide Response to Questions	State	May 1, 2025
Submit Proposals	Vendor	May 8, 2025, BEFORE 2:00 pm ET (by 1:59:59)
Oral Presentation (optional)	Vendor	TBD (if needed)
Contract Award	State	As soon as possible after evaluation of offers.

2.5 PRE-PROPOSAL CONFERENCE

Urged and Cautioned Pre-Proposal Conference

Date: April 24, 2025
 Time: 10:00 am Eastern Time
 Virtual via TEAMS: [Join the meeting now](#) CLICK the Link to Join the Meeting
 Meeting ID: 252 799 845 437 4
 Passcode: 6Fw9Nf2W

Dial in by phone: [+1 984-204-1487,,387645570#](#)
 Phone conference ID: 387 645 570#

Join on a video conferencing device:

Tenant key: ncgov@m.webex.com
 Video ID: 111 212 995 2

Instructions: Vendor representatives are **URGED and CAUTIONED** to attend the pre-proposal conference and apprise themselves of the conditions and requirements which will affect the performance of the work called for by this RFP. A non-mandatory pre-proposal conference is scheduled for this RFP. Submission of a proposal shall constitute sufficient evidence of this compliance and no allowance will be made for unreported conditions which a prudent Vendor would recognize as affecting the performance of the work called for in this RFP.

Vendor is cautioned that any information released to attendees during the pre-proposal conference, and which conflicts with, supersedes, or adds to requirements in this RFP, must be confirmed by written addendum before it can be considered to be a part of this RFP and any resulting contract.

2.6 PROPOSAL QUESTIONS

Upon review of the RFP documents, Vendors may have questions to clarify or interpret the RFP in order to submit the best proposal possible. To accommodate the Proposal Questions process, Vendors shall submit any such questions by the "Submit Written Questions" date and time indicated in the RFP SCHEDULE Section above, unless modified by Addendum.

Written questions related to the content of this solicitation, shall be emailed to angela.dunaway@commerce.nc.gov by the date and time specified above. Vendors should enter "**Vendor Name_Builder RFP_Questions**" as the subject of the email. Question submittals should include a reference to the applicable RFP section and be submitted in the format shown below:

Reference	Vendor Question
RFP Section Number and Section Title	
RFP Page Number	

PLEASE attend the pre-proposal conference prior to submitting questions.

Questions received prior to the submission deadline date and time, the State's response, and any additional terms deemed necessary by the State will be posted in the form of an addendum to the *electronic Vendor Portal (eVP)*, <https://evp.nc.gov>, and shall become an Addendum to this RFP. No information, instruction or advice provided orally or informally by any State personnel, whether made in response to a question or otherwise in connection with this RFP, shall be considered authoritative or binding. Vendors shall rely *only* on written material contained in the RFP and an addendum to this RFP.

Questions or issues related to using eProcurement Sourcing must be directed to the **eProcurement Help Desk** at 888-211-7440, Option 2. Help Desk representatives are available Monday through Friday from 7:30 AM ET to 5:00 PM ET.

2.7 PROPOSAL SUBMITTAL

IMPORTANT NOTE: This is an absolute requirement. Late bids, regardless of cause, will not be opened or considered, and will be automatically disqualified from further consideration. Vendor shall bear the sole risk of late submission due to unintended or unanticipated delay. It is the Vendor's sole responsibility to ensure its proposal has been received as described in this RFP by the specified time and date of opening. The time and date of receipt will be marked on each proposal when received. Any proposal or portion thereof received after the proposal deadline will be rejected.

Offers must be submitted through eProcurement Sourcing. For training on how to use eProcurement Sourcing, <https://eprocurement.nc.gov/training/vendor-training>. Questions or issues related to using eProcurement Sourcing must be directed to the eProcurement Help Desk at 888-211-7440, Option 2. Help Desk representatives are available Monday through Friday from 7:30 AM ET to 5:00 PM ET.

If confidential and proprietary information is included in the proposal, also submit one (1) signed, REDACTED copy of the proposal. Such information may include trade secrets defined by N.C. Gen. Stat. § 66-152 and other information exempted from the Public Records Act pursuant to N.C. Gen. Stat. §132- 1.2. Vendor may designate information, Products, Services or appropriate portions of its response as confidential, consistent with and to the extent permitted under the statutes and rules set forth above. By so redacting any page, or portion of a page, the Vendor warrants that it has formed a good faith opinion, having received such necessary or proper review by counsel and other knowledgeable advisors, that the portions determined to be confidential and proprietary and redacted as such, meet the requirements of the Rules and Statutes set forth above. However, under no circumstances shall price information be designated as confidential.

If the Vendor does not provide a redacted version of the proposal with its proposal submission, the Department may release an unredacted version if a record request is received.

Failure to submit a proposal in strict accordance with these instructions shall constitute sufficient cause to reject a Vendor's proposal(s). Vendors are strongly encouraged to allow sufficient time to upload proposals.

Critical updated information may be included in Addenda to this RFP. It is important that all Vendors responding to this RFP periodically check the State's eVP website for any Addenda that may be issued prior to the bid opening date. All Vendors shall be deemed to have read and understood all information in this RFP and all Addenda thereto.

The public proposal opening will be held via Microsoft Teams. Below is the information regarding the public solicitation opening. Only Vendor names will be announced at the opening.

Date: May 8, 2025

Time: 2:00 pm ET

Virtual via Teams: [Join the meeting now](#) CLICK the Link to Join the Meeting

Meeting ID: 210 056 931 998 4
Passcode: cY2hU9H2

Dial in by phone: [+1 984-204-1487,,731631828#](tel:+19842041487731631828#)
Phone conference ID: 731 631 828#

2.8 PROPOSAL CONTENTS

Vendor shall populate all attachments of this RFP that require the Vendor to provide information and include an authorized signature where requested. Failure to provide all required items, or Vendor's submission of incomplete items, may result in the State rejecting Vendor's proposal, in the State's sole discretion.

All pages of the RFP should be returned. Organize the offer in the exact order in which items appear in this RFP.

Vendor response to Section 7: REQUIRED VENDOR INFORMATION should not exceed twenty (20) pages. This does not include cover page (title page), cover letter, table of contents, all pages of the RFP, certificate of insurance, compensation experience modification rate (EMR), copy of safety manual, copy of quality control manual, litigation history, and the completed attachments to this RFP.

2.9 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

Relevant definitions for this RFP are provided in 01 NCAC 05A .0112 and in the Instructions to Vendors found below which are incorporated herein by this reference.

The following definitions, acronyms, and abbreviations are also relevant to this RFP:

- a) **ACTION PLAN:** the State's Community Development Block Grant-Disaster Recovery (also referred to as the CDBG-DR) Funding Action Plan in Response to Hurricane Helene impacted Counties in Western North Carolina.
- b) **BAFO:** Best and Final Offer, submitted by a Vendor to alter its initial offer, made in response to a request by the issuing agency.
- c) **CDBG-DR:** Community Development Block Grant for Disaster Recovery grant.
- d) **CONTRACT LEAD:** The Procurement Contracting Officer listed in the RFP.
- e) **CONTRACT ADMINISTRATOR:** The Division of Community Revitalization program administrator.
- f) **DCR:** The North Carolina Division of Community Revitalization
- g) **ePROCUREMENT SERVICE(S):** The program, system, and associated Services through which the State conducts electronic procurement.
- h) **HUD:** U.S. Department of Housing and Urban Development
- i) **NOTICE TO PROCEED (NTP):** Written notice provided by the Program to begin construction of a Project.
- j) **OFFER:** Vendor (general contractor) entire response to this Solicitation, including all documents and information requested in this Solicitation.
- k) **OSHA:** Occupational Safety and Health Administration; www.OSHA.gov.
- l) **PRINCIPAL PLACE OF BUSINESS:** The principal place from which the overall trade or business of the Vendor is directed or managed.
- m) **PROGRAM:** Division of Community Revitalization Hurricane Helene Recovery Program.
- n) **PROJECT:** Demolition, rehabilitation, reconstruction, MHU replacement of a specified residential structure.
- o) **QUALIFIED PROPOSAL:** A responsive proposal submitted by a responsible Vendor.

- p) **RFP:** Request for Proposal
- q) **SERVICES or SERVICE DELIVERABLES:** The tasks and duties undertaken by the Vendor to fulfill the requirements and specifications of this solicitation.
- r) **SOLICITATION:** This RFP.
- s) **SOP:** Standard Operating Procedures
- t) **SOR:** System of Record
- u) **SOW:** Scope of Work, which is the document that will be issued to assign a specific project to an awarded Vendor and will contain site-specific requirements, terms, and conditions. The Scope of Work will incorporate by reference the Contract resulting from this RFP.
- v) **STATE:** The State of North Carolina, including any of its sub-units recognized under North Carolina law.
- w) **STATE AGENCY:** Any of the more than 400 sub-units within the executive branch of the State, including its departments, boards, commissions, institutions of higher education and other institutions.
- x) **VENDOR:** Supplier, bidder, proposer, company, firm, corporation, partnership, individual or other entity submitting a response to a Request for Proposal.

3.0 METHOD OF AWARD AND PROPOSAL EVALUATION PROCESS

3.1 METHOD OF AWARD

This RFP first seeks to determine the qualifications of general contractors who can provide services including residential demolition, reconstruction, rehabilitation, and MHU repair and replacement. Vendors will be evaluated based on their experience, expertise, references, past performance, financial capacity, proposed methodology, and technical proposal. The State intends to select up to 25 of the most qualified Vendors. Once a pool of the most qualified Vendors is identified, the State will then engage in a Best and Final Offer (BAFO) negotiation phase. Vendors who intend to perform reconstruction projects will be asked for reconstruction plan sets as part of the BAFO process. Plans sets may include traditional Stick-Built construction or modular construction. Costs for all project types will be negotiated during that process as well. More information regarding what the State will seek during the BAFO process is included in Section 3.3. Engaging in a BAFO process with the State does not guarantee that a Vendor will be awarded a Contract pursuant to this RFP.

North Carolina G.S. 143-52 provides a general list of criteria the State shall use to award contracts, as supplemented by the additional criteria herein. All award decisions shall be in the State's best interest. All qualified proposals will be evaluated, and awards will be made to the Vendors meeting the specific RFP Specifications and achieving the highest and best final evaluation. Prospective Vendors shall not be discriminated against on the basis of any prohibited grounds as defined by Federal or State law.

While the intent of this RFP is to award a Contract to multiple Vendors, the State reserves the right to make separate awards to different Vendors for one or more project types, to not award one or more line items, or to cancel this RFP in its entirety without awarding a Contract, if it is considered to be most advantageous to the State to do so. The State makes no guarantees as to whether awarded Vendors will receive assignments, the volume of assignments, or the project types of the assignments.

The State reserves the right to waive any minor informality or technicality in proposals received.

3.2 CONFIDENTIALITY AND PROHIBITED COMMUNICATIONS DURING EVALUATION

While this RFP is under evaluation, the responding Vendor, including any subcontractors and suppliers, is prohibited from engaging in conversations intended to influence the outcome of the evaluation. See Paragraph 28 of the Instructions to Vendors entitled COMMUNICATIONS BY VENDORS.

Each Vendor submitting a proposal to this RFP, including its employees, agents, subcontractors, suppliers, subsidiaries and affiliates, is prohibited from having any communications with any person inside or outside the using agency; issuing agency; other government agency office or body (including the purchaser named above, any department secretary, agency head, members of the General Assembly and Governor's office); or private entity, if the communication refers to the content of Vendor's proposal or qualifications, the content of another Vendor's proposal, another Vendor's qualifications or ability to perform a resulting contract, and/or the transmittal of any other communication of information that could be reasonably considered to have the effect of directly or indirectly influencing the evaluation of proposals, the award of a contract, or both.

Any Vendor not in compliance with this provision shall be disqualified from evaluation and award. A Vendor's proposal may be disqualified if its subcontractor and/or supplier engage in any of the foregoing communications during the time that the procurement is active (*i.e.*, the issuance date of the procurement until the date of contract award or cancellation of the procurement). Only those discussions, communications or transmittals of information authorized or initiated by the issuing agency for this RFP or inquiries directed to the purchaser named in this RFP regarding requirements of the RFP (prior to proposal submission) or the status of the award (after submission) are excepted from this provision.

3.3 PROPOSAL EVALUATION PROCESS

Only responsive submissions will be evaluated.

The State will conduct a One-Step evaluation of Proposals:

Proposals will be received according to the method stated in the Proposal Submittal Section above.

All proposals must be received by the issuing agency not later than the date and time specified in the RFP SCHEDULE Section above, unless modified by Addendum. Vendors are cautioned that this is a request for offers, not an offer or request to contract, and the State reserves the unqualified right to reject any and all offers at any time if such rejection is deemed to be in the best interest of the State.

At the date and time provided in the RFP SCHEDULE Section above, unless modified by Addendum, the proposal from each responding Vendor will be opened publicly and all offers (except those that have been previously withdrawn, or voided bids) will be tabulated. The tabulation shall be made public at the time it is created. Only the names of offerors and the Goods and Services offered shall be tabulated at the time of opening. Negotiation is anticipated, therefore cost and price shall become available for public inspection at the time of the award.

At their option, the evaluators may request oral presentations or discussions with any or all Vendors for clarification or to amplify the materials presented in any part of the proposal. Vendors are cautioned, however, that the evaluators are not required to request presentations or other clarification—and often do not. Therefore, all proposals should be complete and reflect the most favorable terms available from the Vendor.

Upon completion of the evaluation and BAFO process, the State will make award(s) based on the evaluation and negotiation and post the award(s) to the State's eVP website under the RFP number for this solicitation. Pursuant to

01 NCAC 05B .0503, the State reserves the right to negotiate with one or more vendors, or to reject all original offers and negotiate with one or more sources of supply that may be capable of satisfying the requirement.

Negotiation and Best and Final Offer (BAFO)

Cost: During the BAFO process, the State will evaluate and negotiate cost by project type, including Reconstruction Base Plan, Reconstruction Site-Specific, MHU, MHU Site-Specific, and Demolition. Rehabilitation low offer determination will be based on Overhead and Profit percentage. The State will provide pricing worksheets for the most qualified vendors to complete and submit.

Reconstruction Plans: During the BAFO process, Vendors who intend to perform reconstruction projects may submit reconstruction plan sets for single-family homes, including options for Stick-Built and/or modular homes, for consideration by the program for use in the reconstruction phase of the program. DCR will consider the plans submitted and select one or more plan sets for program use. After DCR identifies its preferred plan set(s), DCR will request reconstruction pricing from the qualified reconstruction Vendors.

The Vendor must obtain permission from the designers for free reuse by the program by any Vendor selected by the Program. Vendors will be responsible for performing site-specific engineering requirements when using the plan set selected by DCR for program use. Plan sets will be required to have 2 bathrooms. Vendors providing plan sets should provide a minimum of a 2-bedroom, 3-bedroom, and 4-bedroom plan set. Multiple plan sets per configuration are allowed if the Vendor believes it best addresses construction challenges in western North Carolina.

Bedroom / Bathroom Configuration	Conditioned Square Footage
2 Bedroom / 2 Bathroom	1000 – 1200 SF
3 Bedroom / 2 Bathroom	1200 – 1500 SF
4 Bedroom / 2 Bathroom	1300 – 1700 SF

Submitted plan sets should provide sufficient detail for DCR to assess suitability for the program and for Vendors to provide accurate pricing. Full construction drawings are not necessary at this time, but, if selected, will be required within 14 days of contract execution.

DCR prefers plan sets that align with the types of homes constructed in western North Carolina, offer reasonable cosmetic variability, accommodate reasonable home elevation, and anticipate unique topographical and lot size/set back challenges. Accessibility will be offered to all applicants with approved disability modifications. Preferred plan sets will account for the accessibility requirements detailed in this Solicitation.

3.4 EVALUATION CRITERIA

Per RFP Section 5.1 SCOPE OF SERVICES, General contractors may choose to submit an offer for MHU project types only, for rehabilitation and reconstruction projects only, or for both, to be indicated in Attachment A.

- **Project Type 1: MHU projects.** General Contractors may select to apply for MHU repair, replacement, and relocation projects only and not be considered for reconstruction, repair, or demolition project assignments.
- **Project Type 2: Rehabilitation and Reconstruction projects (non-MHU).** General Contractors who are selected for rehabilitation and reconstruction award types will be considered for reconstruction, repair, or demolition project assignments.

It is the intention of DCR to identify qualified vendors on the basis of demonstrated competence and qualification for the type of professional services required without regard to fee at this stage, and thereafter to negotiate for those services at a fair and reasonable fee with the most qualified vendors. Because DCR will solicit plan sets for the reconstruction work, for the avoidance of doubt, it will separate the evaluation of qualifications from the price negotiation pursuant to NCGS § 143-64.31.

DCR will evaluate responsive proposals based on the following criteria, which are listed in order of importance:

1. Qualifications
 - a. Conformity with the specifications and ability to meet minimum requirements
 - b. Financial stability and solvency
 - i. Ability to meet short-term obligations, debts, liabilities, payroll, and expenses
 - ii. Sufficient cash flow and/or available financing from a financial institution to perform the proposed contract until receiving payment from the state
 - iii. Ability to meet minimum bonding capacity requirements and insurance requirements
 - c. Ability and capacity to perform the work
 - d. Staffing plan
2. Experience
 - a. Years of experience in the business
 - b. Experience with providing construction services for CDBG-DR programs, including number of homes built as part of a CDBG-DR program
 - c. Past performance, including quality and timely construction and safety information
 - d. Experience with relevant policies and requirements (e.g. HUD Community Development Block Grant disaster laws, regulations, and guidelines; the Davis Bacon Act; and Section 3 of the Housing and Urban Development Act of 1968; North Carolina Building Code, Municipal Building Code, local and/or regional Housing Guidelines, if applicable)
 - e. Experience servicing home warranty claims for CDBG-DR programs
 - f. Experience restoring historic properties (for non-MHU projects)
3. References
 - a. Three references for projects of similar type and size performed within the last five years, preferably for state and/or local government entities (See Section 7.5 and Attachment H)
4. Proposed Methodology and Technical Proposal
 - a. How Vendor will ensure quality and timely construction
 - b. How Vendor proposes to manage applicant service including move out, applicant communication, and warranty management
 - c. How Vendor will scale construction services across a broad geography
 - d. How Vendor proposes to accommodate topography and challenging site conditions
 - e. How Vendor intends to attract and retain subcontractors and trades

DCR will evaluate proposals using a narrative evaluation method, where it identifies strengths and weaknesses of each proposal. Once DCR has identified the most qualified Vendors and after it has received cost proposals during the negotiation phase, it will select vendors using a Best Value evaluation methodology, which is defined in statute as the selection of vendors based on "the best trade-off between price and performance, where quality is considered an integral performance factor. The award decision is made based on multiple factors, including: total cost of ownership, meaning the cost of acquiring, operating, maintaining, and supporting a product or service over its projected lifetime; the evaluated technical merit of the vendor's proposal; the vendor's past performance; and the evaluated probability of performing the requirements stated in the solicitation on time, with high quality, and in a manner that accomplishes the stated business objectives and maintains industry standards compliance." N.C.G.S. § 143-135.9

DCR reserves the right to take any of the following actions: cancel this RFP if funds are not available; disqualify any responses to this RFP for nonconformance to the terms described herein; negotiate with specific Vendors to achieve

the best value; establish a timeline during the negotiation phase for the submission of design plans, cost worksheets, and a best and final offer; and extend the time to respond to this RFP.

3.5 PERFORMANCE OUTSIDE THE UNITED STATES

Vendor shall complete ATTACHMENT D: LOCATION OF WORKERS UTILIZED BY VENDOR. In addition to any other evaluation criteria identified in this RFP, the State may also consider, for purposes of evaluating proposed or actual contract performance outside of the United States, how that performance may affect the following factors to ensure that any award will be in the best interest of the State:

- a) Total cost to the State
- b) Level of quality provided by the Vendor
- c) Process and performance capability across multiple jurisdictions
- d) Protection of the State's information and intellectual property
- e) Availability of pertinent skills
- f) Ability to understand the State's business requirements and internal operational culture
- g) Particular risk factors such as the security of the State's information technology
- h) Relations with citizens and employees
- i) Contract enforcement jurisdictional issues

3.6 INTERPRETATION OF TERMS AND PHRASES

This RFP serves two functions: (1) to advise potential Vendors of the parameters of the solution being sought by the State; and (2) to provide (together with other specified documents) the terms of the Contract resulting from this procurement. The use of phrases such as "shall," "must," and "requirements" are intended to create enforceable contract conditions. In determining whether proposals should be evaluated or rejected, the State will take into consideration the degree to which Vendors have proposed or failed to propose solutions that will satisfy the State's needs as described in the RFP. Except as specifically stated in the RFP, no one requirement shall automatically disqualify a Vendor from consideration. However, failure to comply with any single requirement may result in the State exercising its discretion to reject a proposal in its entirety.

4.0 REQUIREMENTS

This Section lists the requirements related to this RFP. By submitting a proposal, the Vendor agrees to meet all stated requirements in this Section as well as any other specifications, requirements, and terms and conditions stated in this RFP. If a Vendor is unclear about a requirement or specification, or believes a change to a requirement would allow for the State to receive a better proposal, the Vendor is urged to submit these items in the form of a question during the question and answer period in accordance with the Proposal Questions Section above.

4.1 MINIMUM QUALIFICATIONS

Vendor should indicate that it meets each of the following requirements by providing documentation and/or specific proof of experience and qualifications to carry out each task:

- Vendor must have been in the residential construction business for a minimum of five (5) years, or the principals/owners must have had a minimum of five (5) years of ownership/executive management experience in a previous company that provided residential construction services.
- Vendor must either: 1) hold a current North Carolina general contractor license; or 2) commit to securing such licenses prior to entering any contractual obligations, while meeting the timelines set out herein.

- For Project Type 2 (rehabilitation and reconstruction) Vendor must demonstrate that it has a minimum of three (3) years' experience in the rehabilitation and reconstruction of residential housing funded by Community Development Block Grant Disaster-Recovery funds, or the principals/owners must have had a minimum of three (3) years' experience in the rehabilitation and reconstruction of residential housing funded by the Community Development Block Grant Disaster-Recovery funds.
- For Project Type 1 (MHU replacement), Vendor must demonstrate that it has a minimum of three (3) years' experience in the in the installation of Manufactured Housing Units and that it has the ability to meet the Manufactured Home Construction and Safety Standards (HUD Code) in order for units to meet the definition of manufactured housing and qualify for federal program assistance.
- Vendor must demonstrate as applicable to its proposal for the project type:
 - the ability to carry residential reconstruction projects to completion within 150 days;
 - ability to carry MHU replacement projects to completion within 60 days;
 - ability to carry residential demolition projects to completion within 30 days; and/or
 - ability to carry residential rehabilitation projects to completion within 30 days for projects with a scope <\$50,000, 60 days for projects with a scope >\$50,000 and <\$100,00, 90 days for projects with a scope >\$100,000 and <\$150,000, 120 days for projects with a scope >\$150,000.
 - These timelines do not include pre-construction activities such as engineering.
- For Project Type 2 (rehabilitation and reconstruction) Vendor must demonstrate the ability to, and have experience with, lead based paint and asbestos removal and environmental mitigation related to the rehabilitation and reconstruction of residential properties (DCR will identify lead based paint abatement needs through its environmental review).
- Vendor and/or it's principals/owners must have experience in managing and completing projects of a similar size and nature with respect to disaster recovery.
- Vendor must have experience in achieving compliance and reporting on compliance with state and federal construction laws, regulations and procedures, and producing the payroll documentation necessary for compliance.
- Vendor must be financially solvent, adequately capitalized, and demonstrate it has the financial resources to perform and complete the work and to provide all required warranties.

4.2 OTHER REQUIREMENTS

- The work to be performed under a contract awarded pursuant to this Request for Proposal will utilize funds provided by HUD and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible and consistent with existing state and federal law, opportunities for training and employment be given to lower-income residents in the project area and contracts for work in connection with this project be awarded to business concerns which are located in or owned in substantial part by persons residing in the area of the program.
- Vendors must commit to securing and/or maintain office space somewhere within the Western North Carolina Hurricane Helene impacted area for the duration of the project. Vendors should indicate in their narrative proposal where the office(s) is/are anticipated to be located and provide the vendor's plan for staffing each office.
- Vendor must provide a two-year warranty on all materials and workmanship; Vendor will remain liable for defects as provided by North Carolina law.

4.3 PAYMENT STRUCTURE

Payment will be a fixed fee for construction services based on the scope of work for each project. DCR's implementation vendor will recommend an inspection schedule for each project type and payments will be based on the Vendor completing construction milestones for each project (e.g. foundation, framing, wallboard, final, etc.).

4.4 INVOICES

Vendors will send monthly invoices to DCR's implementation vendor for validation prior to sending to DCR for payment.

- a) Vendor must submit one monthly invoice within fifteen (15) calendar days following the end of each month in which work was performed.
- b) Invoices must be submitted in electronic format on the Vendor's official letterhead stationery and must be identified by a unique invoice number unless otherwise directed. All invoice backup reports and spreadsheets must be provided in electronic format.
- c) Invoices must bear the correct contract number and purchase order number to ensure prompt payment. Vendor's failure to include the correct purchase order number may cause delay in payment.
- d) Invoices must include an accurate description of the work for which the invoice is being submitted in DCR-approved format, the services provided, the invoice date, the period of time covered, the amount of fees due to Vendor and the signature of Vendor's project manager.

4.5 HUB PARTICIPATION

Pursuant to North Carolina General Statute G.S. 143-48, it is State policy to encourage and promote the use of small, minority, physically handicapped, and women contractors in purchasing Goods and Services. As such, this RFP will serve to identify those Vendors that are minority owned or have a strategic plan to support the State's Historically Underutilized Business program by meeting or exceeding the goal of 10% utilization of diverse firms as 1st or 2nd tier subcontractors. Vendor shall complete ATTACHMENT E: HUB SUPPLEMENTAL VENDOR INFORMATION.

4.6 BACKGROUND CHECKS

Any personnel or agent of Vendor performing Services under any Contract arising from this RFP may be required to undergo a background check at the expense of the Vendor, if so requested by the State.

4.7 PERSONNEL

Vendor warrants that qualified personnel shall provide Services under this Contract in a professional manner. "Professional manner" means that the personnel performing the Services will possess the skill and competence consistent with the prevailing business standards in the industry. Vendor will serve as the prime contractor under this Contract and shall be responsible for the performance and payment of all subcontractor(s) that may be approved by the State. Names of any third-party Vendors or subcontractors of Vendor may appear for purposes of convenience in Contract documents; and shall not limit Vendor's obligations hereunder. Vendor will retain executive representation for functional and technical expertise as needed in order to incorporate any work by third party subcontractor(s).

Should the Vendor's proposal result in an award, the Vendor shall be required to agree that it will not substitute key personnel assigned to the performance of the Contract without prior written approval by the Contract Lead. Vendor shall further agree that it will notify the Contract Lead of any desired substitution, including the name(s) and references of Vendor's recommended substitute personnel. The State will approve or disapprove the requested substitution in a timely manner. The State may, in its sole discretion, terminate the Services of any person providing Services under this Contract. Upon such termination, the State may request acceptable substitute personnel or terminate the contract Services provided by such personnel.

4.8 VENDOR'S REPRESENTATIONS

If Vendor's Proposal results in an award, Vendor agrees that it will not enter any agreement with a third party that may abridge any rights of the State under the Contract. If any Services, deliverables, functions, or responsibilities not

specifically described in this solicitation are required for Vendor's proper performance, provision and delivery of the Service and deliverables under a resulting Contract, or are an inherent part of or necessary sub-task included within such Service, they will be deemed to be implied by and included within the scope of the Contract to the same extent and in the same manner as if specifically described in the Contract. Unless otherwise expressly provided herein, Vendor will furnish all of its own necessary management, supervision, labor, facilities, furniture, computer and telecommunications equipment, software, supplies and materials necessary for the Vendor to provide and deliver the Services and/or other Deliverables.

4.9 BOND AND INSURANCE REQUIREMENTS

Insurance requirements are indicated in ATTACHEMENT C: NORTH CAROLINA GENERAL TERM AND CONDITIONS, Paragraph 15 (b)(3) Contracts valued in excess of \$1,000,000.

Vendor must maintain performance and payment bonds in an amount equal to the value of the active construction projects issued under the awarded contract. DCR's implementation vendor will award contracts in different amounts based upon the work that is required. Vendor must provide evidence of the maximum performance and payment bonding capacity with the Solicitation Response, and the form of the bond that shall be executed and produced by the selected Vendor at the time of Project assignment. For demolition, rehabilitation, and/or reconstruction of single-family residential structures, Vendor must provide evidence of a minimum bonding capacity of Five Million and No 00/100 Dollars (\$5,000,000) with the Solicitation Response. For Vendors whose intention it is to complete only MHU replacement or rehabilitation projects, Vendor is encouraged to provide evidence of a minimum bonding capacity of Five Million and No 00/100 Dollars (\$5,000,000); however, in its sole discretion, DCR may consider the selection of Vendors who can provide evidence of a maximum performance and payment bonding capacity of not less than Two Million and No 00/100 Dollars (\$2,000,000) for a smaller number of projects. In no event shall the bond requirement be for less than one hundred percent (100%) of a Vendor's amount under contract at any given time. All bonds must be issued by a bonding agent with at least an "A" rating, and the bonding companies must be listed in the Department of the Treasury's Listing of Certified Companies. Bond riders will be required to capture increased costs resulting from approved change orders such that 100% of the project cost is always covered by a valid performance and payment bond.

For the duration of any contract resulting from this Solicitation, Vendor shall acquire insurance and bonds with financially sound and reputable independent insurers, in the type and amount specified in this RFP. The required coverage is to be with companies licensed in the state of North Carolina, with an "A" rating from A.M. Best, authorized to provide the corresponding coverage and must be listed in the Department of the Treasury's Listing of Certified Companies. Work on any contract shall not begin until after Vendor has submitted acceptable evidence of bonds and insurance. Failure to maintain insurance coverage or acceptable alternative methods of insurance shall be deemed a breach of contract. Vendor shall submit acceptable evidence of insurance and bonds not later than seven days following the effective date of a Contract.

4.10 LOBBYING ACTIVITY CERTIFICATION FOR FEDERAL GRANTS

Federal law prohibits recipients of federal funds, whether through grants, contracts, or cooperative agreements, from using those funds to influence or attempt to influence (lobby) a federal official in connection with obtaining, extending, or modifying any federal contract, grant, loan, or cooperative agreement. Further, federal law requires that applicants for federal funds certify:

- That they abide by the above restriction;
- That they disclose any permissible (non-federal) paid lobbying on the Federal Awards being applied for; and

- That such certification requirements will also be included in any subawards meeting the applicable thresholds.

Vendors must complete and submit ATTACHMENT F: CERTIFICATION FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS and ATTACHMENT G: DISCLOSURE OF LOBBYING ACTIVITIES (OMB STANDARD FORM LLL) when responding to this solicitation.

5.0 SCOPE OF WORK

5.1 SCOPE OF SERVICES

The selected Vendors will perform, or cause to be performed, MHU replacement, demolition, rehabilitation, or reconstruction of residential construction projects (the "Project"), for Hurricane Helene impacted Counties in Western North Carolina, in compliance with local, federal and state statutory requirements for grants under the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program. DCR prefers vendors that have experience with the repair of historic properties. DCR makes no guarantee regarding the number of vendors awarded under this solicitation.

General contractors may choose to submit an offer for rehabilitation and reconstruction types, and/or only MHU project types, as described below. While general contractors may choose which project type, DCR nor DCR's implementation vendor makes no guarantee of award, volume of assignments selected contractors will receive, or the project types of assignments selected contractors will receive. General Contractors must clearly state in their response to this RFP (in Attachment A) which project type(s) the GC will perform work. Assignments will not be made outside of the project type selected by the General Contractor during this solicitation process. Demolition only projects are not an option. DCR does not intend to hire construction trades directly.

- **Project Type 1: MHU projects.** General Contractors may select to apply for MHU repair, replacement, and relocation projects only and not be considered for reconstruction, repair, or demolition project assignments.
- **Project Type 2: Rehabilitation and Reconstruction projects (non-MHU).** General Contractors who are selected for rehabilitation and reconstruction award types will be considered for reconstruction, repair, or demolition project assignments.

DCR is procuring an implementation vendor to assist with the implementation of the Reconstruction and Rehabilitation (R&R) Program and the operation of intake centers for program applicants. DCR will use contractors to manage and complete the construction process for homeowners approved for funding through the Reconstruction and Rehabilitation (R&R) Program. DCR and/or DCR's implementation vendor intends to issue multiple Indefinite Delivery/Indefinite Quantity (IDIQ) contracts to create a pool of contractors to perform the services requested under this Solicitation. Related companies or individuals conducting work as an individual/independent entity are permitted to both submit proposals under this RFP. Companies sharing common insurance policies are not considered individual/independent entities.

DCR and/or DCR's implementation vendor shall assign projects to contractors based upon capacity, capability and performance. Vendors that respond to this Solicitation must demonstrate the ability to mobilize within 45 days of award and complete assigned construction projects within the contracted time (not to exceed 150 days for reconstruction projects, 30 days for demolition only, 60 days for MHU replacement projects, and 45 days for rehabilitation projects with a scope <\$50,000, 60 days for rehabilitation projects with a scope >\$50,000 and <\$100,000, 90 days for rehabilitation projects with a scope >\$100,000 and <\$150,000, 120 days for rehabilitation projects with a scope >\$150,000) to reduce potential hazards to public welfare and safety. These timelines do not include pre-construction activities.

To ensure effective Low and Moderate Income (LMI) benefit in the R&R program, the State will prioritize very low and low income households, with the highest prioritization for households with incomes less than 60% of AMI (Area Median Income) as well as households that have one or more of the following characteristics: households with members 62 or older, households with children under the age of 18, and households with special needs or special accommodation requirements (disabled). Further details on these recovery programs, including the State's Action Plan and Program Manuals, can be found on the State's website: commerce.nc.gov/recovery. DCR may receive additional State and Federal funds and may require construction services of those funds as well. The Contract Award shall include the similar service for all funds, anticipated and unanticipated, received or managed by DCR during the contract term, at DCR's discretion.

General contractors will be awarded Projects at the sole discretion of DCR and/or DCR's awarded implementation vendor. Vendors must demonstrate the ability to provide services in the thirty-nine (39) counties affected by Hurricane Helene within the timeframe specified in this RFP.

5.2 TASKS/DELIVERABLES

In addition to the services and requirements described in this RFP, Contractors must perform any other ancillary construction-related services that may be required for a given property. Thus, it is imperative that vendors(s) enumerate any other services they can provide. These ancillary services may go beyond what would be required for the repair/construction and/or demolition of a property.

Vendor must be familiar with North Carolina Building Code, Municipal Building Code, local and/or regional Housing Guidelines, if applicable. Each municipality will be nuanced depending on local construction requirements, community recovery needs, program goals and other applicable locally approved program requirements.

5.2.1 DEMOLITION

Demolition Scope of Work

In certain cases, a property owner may only be eligible for the demolition of his/her home and site restoration of the parcel to open space. The Scope of Work for each demolition will vary but may include, although not be limited to, the following:

- Coordination with the property owner and his/her family from assignment to obtaining a certificate of completion (or permit signoff equivalent) for closing;
- Utility disconnection and deactivation;
- Demolition of existing structure;
- Debris removal in accordance with all federal, state, and local requirements, including the disposal of potential asbestos containing materials;
- Conduct site specific analysis for surveying, zoning, and plot plans;
- Final site restoration to open space.

5.2.2 REPAIR

Eligible applicants may qualify for repair scopes depending on the extent of damage and the policies established by DCR. Eligible applicants with manufactured housing unit (MHU) properties qualify for a repair award type when the estimated cost to repair is less than \$25,000 and the MHU is fewer than five (5) years old, and the property is not otherwise deemed not suitable for rehabilitation.

Not Suitable for Rehabilitation

"Not suitable for rehabilitation" is defined as:

- The amount needed to bring the unit to housing habitability standards will exceed the program cap.
- Condemned or tagged for demolition by local jurisdiction.
- Property owners have received a substantial damage letter for the local jurisdiction.
- The housing unit has been demolished.
- Structural assessment by licensed engineer deems the home not safe for rehabilitation.
- The housing unit is a construction on a slab on grade and requires elevation.
- Mobile home units requiring more than \$25,000 in repairs.

Eligible applicants with homes deemed not suitable for rehabilitation may be offered reconstruction assistance, if the applicant owns the land on which the structure sits and reconstruction is feasible. Such eligibility determination will be made by the Division of Community Revitalization and/or DCR's implementation vendor.

Repair Scope of Work

Program repairs are intended to repair remaining storm damage and to make the home decent, safe and sanitary. The Division of Community Revitalization Program ("Program") does not provide "like for like" repairs. Program repairs will be completed using standard economy/builders' grade materials, not with materials that were there before. For example, if a repair award calls for replacement of cabinets, the program will replace existing cabinets with standard grade cabinets regardless of the grade of the pre-existing cabinets.

Repair Scopes of Work will be limited to those items identified by the program as in need of repair to bring the home back up to safe conditions. Repairs, upgrades or modifications requested by the homeowner will not be considered. For example, if some windows are in need of repair or replacement, the program will replace those windows in need of repair only; other operable windows will not be replaced or repaired.

Standard essential appliances that are not functioning or non-existent at the time of damage assessment will be replaced. Essential appliances include stove/range, oven, water heater and refrigerator only. Dishwashers may be replaced only if a dishwasher previously existed in the home. Repair awards will not include a dishwasher if a dishwasher was not present at time of damage assessment. Washing machines and dryers, microwaves, stand-alone freezers and other non-essential appliances are not eligible for replacement. Any obsolete products replaced as part of the repairs must be replaced with ENERGY STAR®, Water Sense, or other Federal Energy Management Program (FEMP)-designated products or appliances.

Luxury items, including but not limited to, high-end countertops, high-end appliances, stone flooring, security systems, swimming pools, spas, fireplaces, sheds, outbuildings, fences and television satellite dishes are not eligible under this program.

Because repair scopes of work only address items in need of repair for the home to be decent, safe, and sanitary, the Program does not guarantee that work completed as part of a repair award will match other items in the home. Some examples of this include, but are not limited to:

- Flooring replaced in portions of a home may not match flooring in other rooms. The Program will replace flooring by room, to the nearest cased opening;
- Light fixtures replaced may not match pre-existing light fixtures or fixtures in other parts of the home;
- If only a portion of the windows require replacement, all the windows in the home may not match;
- If a portion of the home requires paint, paint in the repaired portion of the home may not match paint in other rooms (interior) or on other elevations (if exterior). The Program will paint whole interior rooms, to the door casing, or whole exterior sections to the next architectural break. Additional rooms or elevations will not be painted for aesthetic reasons alone.

Reasonable Accommodations – Repair Award Type

Applicants who qualify for a repair award type may qualify for reasonable accommodations in rooms/areas where program Scope of Work exists. In general, reasonable accommodations will only be made in repair projects if the program scope of work impacts the item and room where a reasonable accommodation is requested. For example, if the program scope of work does not include removal/replacement of a tub/shower, the program will not modify the existing tub/shower for the sole purpose of installing or modifying the existing facilities to include accessibility features.

If the Program Scope of Work impacts the kitchen, bathroom or entryway in a repair project, the applicant may request reasonable accommodations in those areas. Reasonable accommodations for bathrooms are offered in three (3) tiers, so that the applicant may request the level of accommodation that best suits his/her need.

Applicants who request accommodations in a bathroom may select one (1) of three (3) standard available options. Accessibility modifications will only be made in one (1) bathroom. If the repair project scope includes more than one (1) bathroom, the reasonable accommodation will be installed in the bathroom that is in the program scope of work where modifications are the most feasible within the existing dimensions and scope of work in the room.

The program will not move walls to expand the size of an existing bathroom or move plumbing lines to install an accessibility accommodation. Because repair projects are largely constrained by the size of existing rooms, there is no standard width/length size requirements for tub/shower compartments. The program will attempt to replace tub/showers with fixtures similar in size to the existing fixtures.

Bathroom Reasonable Accommodation 1 (RA-1)

Applicants who opt for Reasonable Accommodation 1 (RA-1) will be provided one (1) bathroom with the following accessibility modifications:

- Tub/Shower combination with blocking and a grab bar
- Chair height toilet with grab bars

Bathroom Reasonable Accommodation 2 (RA-2)

Applicants who request Reasonable Accommodation 2 (RA-2) will be provided one (1) bathroom with the following accessibility modifications:

- Tub/Shower combination with blocking, grab bars, seat and shower wand
- Chair height toilet with grab bars

Bathroom Reasonable Accommodation 3 (RA-3)

Applicants who request Reasonable Accommodation 3 (RA-3) will be provided one (1) bathroom with the following accessibility modifications:

- Roll-in shower compartment to fit existing tub/shower space, equipped with grab bars, seat and shower wand
- Chair height toilet with grab bars
- Roll under vanity, only upon request

Kitchen Reasonable Accommodations

Applicants may indicate reasonable accommodations to make a kitchen more accessible. Reasonable accommodations in kitchens for repair award types must be accommodations to items included in the Program Scope of Work, and may include:

- Wheelchair accessible cook top (knobs on front of the appliance)
- Roll under kitchen sink

Items not included in the Program Scope of Work will not be modified for the sole purpose of providing an accessibility modification. Accessibility modifications will only be made to the primary kitchen at the property, in the event the property has more than one kitchen.

Repair Scope of Work

It is anticipated that homes eligible for rehabilitation will require an array of repairs ranging from minor to major. The Scope of Work for each repaired structure will vary, but may include, although not be limited to, the following:

- Coordination with the property owner and his/her family and case management from assignment to obtaining a certificate of occupancy (or permit signoff equivalent) for closing;
- Coordinating applicant move out, and providing temporary housing, if eligible;
- Development of a thorough scope of necessary repairs using a program-prescribed form;
- Obtaining all necessary state and local permits and approvals prior to the commencement of the work for each structure;
- Providing architectural and house plan renderings (no particular software program has been determined for those renderings and Vendors are encouraged to select a design software that is capable of satisfying local permitting and plan review requirements, including, but not limited to digital seal/signature requirements for professional services);
- Demolition of damaged interior and exterior materials;
- Foundation leveling, repair and/or elevation, including the Vendor providing all structural drawings for the scope when required;
- Structural damage repair;
- Building envelope repair, including:
 - Roof repair or replacement and attendant damage
 - Door and window replacement
 - Siding/veneer repair or replacement
 - Mechanical (HVAC), electrical, and plumbing systems repair or replacement
 - Drywall repair or replacement
- Rough and trim carpentry;
- Surface preparation and painting;
- Flooring repair or replacement;
- Cabinet, countertop and appliance replacement;

- Appliances to be replaced must meet federal register requirements for energy efficiency;
- Lead-based paint mitigation;
- Specialty construction elements associated with historic properties, including coordination with State Historic Preservation Office (SHPO), and other local historic districts and stakeholders in other jurisdictions;
- Addressing special needs accessibility requirements; and Conducting close-outs for each project, which may include obtaining certificate(s) of occupancy from applicable state and local authorities, elevation certificates, flood insurance policies and/or as-built surveys.

5.2.3 RECONSTRUCTION

Eligible applicants may qualify for a reconstruction award type when the estimated cost to repair exceeds DCR policy. Eligible applicants with properties otherwise deemed not suitable for rehabilitation may also qualify for a reconstruction award if the applicant owns the land and it is feasible to reconstruct the structure on the property.

Eligible applicants with Manufactured Housing Units (MHUs) may qualify for reconstruction if it is infeasible to replace an MHU on the applicant's property and the applicant owns the land on which the MHU is situated. The Program considers it infeasible to replace an MHU if it must be elevated above the standard 3-foot installation height, if zoning or municipal regulations prohibit installation of a MHU on the property, or if other engineering, environmental or site constraints make installation of an MHU onsite infeasible. Applicants with MHU property types shall not be awarded a reconstruction award on the basis of applicant preference only.

Homes that meet the threshold for a reconstruction award will be demolished and reconstructed in substantially the same footprint, when feasible. Reconstructed homes will meet local building codes and will incorporate HUD building requirements and resilience measures to the extent possible.

Size and New Unit Configuration

The Program will provide applicants who qualify for reconstruction awards with standard program floorplan homes. The program offers 2-, 3-, and 4-bedroom homes; all standard floorplans include 2 bathrooms. Which standard floorplan the applicant receives is based on DCR policy. Exceptions to reconstructed home bedroom/bathroom configuration will only be considered if overcrowding exists within the home or if an applicant elects to reduce the number of bedrooms and/or bathrooms to reduce a DOB gap.

To reduce the required time from award to completion as related to reconstruction, the Program will provide plans and specifications for "model homes" available to applicants. The Vendor will be given floor plans only. Architectural and Structural plans will be the responsibility of Vendor. The Vendor is responsible for necessary site surveys and elevation surveys to confirm structure location and base flood elevation. The Vendor is responsible for ensuring completion of all plans required for permit issuance and ultimately, Certificate of Occupancy issuance. The Program has available 2-, 3-, and 4-bedroom "model homes." Standard floorplans are offered in the following square footage ranges only.

Bedroom / Bathroom Configuration	Conditioned Square Footage
2 Bedroom / 2 Bathroom	1000 – 1200 SF
3 Bedroom / 2 Bathroom	1200 – 1500 SF
4 Bedroom / 2 Bathroom	1300 – 1700 SF

Reconstructed homes do not include reconstruction of garages (attached or detached), sheds, pool houses or other outbuildings. Such outbuildings may be demolished during reconstruction to allow enough space for the new home to be built or because such structures pose a health or safety issue. Attached garages are allowable when required by code or HOA requirements.

The following is a non-exhaustive list of items that are not included or considered when determining the floorplan, bedroom/bathroom configuration, or size of the reconstructed home. The Program does not reconstruct like for like:

- Interior or exterior finishes;
- Square footage;
- Number of bathrooms (if more than 2);
- Extra/Bonus rooms such as dens, playrooms, offices, studies, libraries, etc.

Reasonable Accommodations – Reconstruction Award Type

All reconstruction projects are designed with the following accommodations. All reconstructions will receive the following universal accommodations, regardless of whether a Reasonable Accommodation has been requested by the applicant:

- 36" hallways, wide enough to accommodate a standard wheelchair;
- Adequate turning radius for a wheelchair in the kitchen;
- Adequate turning radius for a wheelchair in both bathrooms¹;
- All doors installed with levers instead of knobs;
- Exterior doors, all bedroom doors and all bathroom doors are 36" wide.

In addition, the applicant may request reasonable accommodations in the bathroom, kitchen, entrance, and/or strobe smoke detectors throughout.

Reasonable Accommodations – Bathroom

Applicants who request accommodations in a bathroom may select one (1) of three (3) standard available options. Accessibility modifications will only be made in one (1) bathroom. By default, the modified bathroom will be the master bathroom, unless otherwise specified on a completed Reasonable Accommodation Request Form.

Bathroom Reasonable Accommodation 1 (RA-1)

Applicants who opt for Reasonable Accommodation 1 (RA-1) will be provided one (1) bathroom with the following accessibility modifications:

- Tub length of 60" and tub width of 36" in master bath. Hallway bathtub is 60" x 30", with no seat²; grab bars installed in tub/shower enclosure;
- Chair height toilet with grab bars.

Bathroom Reasonable Accommodation 2 (RA-2)

Applicants who request Reasonable Accommodation 2 (RA-2) will be provided one (1) bathroom with the following accessibility modifications:

¹ If the applicant requests a reasonable accommodation for the bathroom, the reasonable accommodation will be installed in the bathroom with adequate turning radius for a wheelchair, unless otherwise specified on the Verification of Disability Form.

² If a bathroom is removed for scope reduction this may vary.

- Tub/Shower combination with blocking, grab bars, seat and shower wand;
- Chair height toilet with grab bars.

Bathroom Reasonable Accommodation 3 (RA-3)

Applicants who request Reasonable Accommodation 3 (RA-3) will be provided one (1) bathroom with the following accessibility modifications:

- 30" x 60" roll-in shower compartment, equipped with grab bars, seat and shower wand;
- Chair height toilet with grab bars;
- Roll under vanity.

Reasonable Accommodation – Kitchen

Applicants may request reasonable accommodations to make a kitchen more accessible. Standard reasonable accommodations for kitchens in reconstruction project types include:

- Wheelchair accessible cook top (knobs on front of appliance);
- Roll under kitchen sink.

Reconstruction Scope of Work

In certain cases, a property owner may only be eligible for the complete reconstruction of his/her home, either substantially within the same footprint as the prior home (reconstruction) or a different footprint. The Scope of Work for each reconstructed or newly constructed structure will vary but may include, although not be limited to, the following:

- Coordination with the property owner and his/her family from assignment to obtaining a certificate of occupancy for closing;
- Coordinating applicant move out, and providing temporary housing, if eligible;
- Utility disconnection and deactivation;
- Demolition of existing structure;
- Debris removal in accordance with all federal, state, and local requirements, including the disposal of potential asbestos containing materials;
- Providing architectural and house plan renderings that meet the following requirements, at a minimum:
 - Comply with local code requirements;
 - Fiber cement siding or Stucco (for Concrete Block/CMU Homes);
 - Roof shall be constructed with radiant barrier sheathing, ice & water shield with architectural shingles;
 - Strapping and impact resistant window requirements per local code;
 - Vinyl windows;
 - Flooring shall be either carpet or vinyl plank flooring (no sheet goods);
 - Plans must be adaptable for all 3 different accessibility accommodation scenarios outlined herein (RA-1, RA-2, and RA-3);
 - Bedrooms shall be a minimum of 100 SF with a minimum of 25 SF closet space for the master bedroom; and
 - Comply with HUD building requirements.
- Conduct site specific analysis for surveying, zoning, plot plans, elevation and site specific engineering;
- Site preparation;
- Construction of new residential structures including 2-, 3-, and 4-bedroom floor plans in accordance with all applicable local and state codes and standards; and

- Addressing special needs accessibility accommodations in accordance with program guidelines.

5.2.4 MANUFACTURED HOUSING UNITS

Eligible applicants with manufactured housing unit (MHU) properties qualify for a replacement award type when the estimated cost to repair is greater than \$25,000 and/or the MHU is five (5) years old or older. Eligible applicants with MHUs on leased land must have landowner consent to replace an MHU on the land prior to award, or must have identified a suitable alternate location. Homes that meet the threshold for a replacement award will be demolished and a new MHU will be installed in substantially the same footprint, when feasible. MHU projects that require elevation may be awarded reconstruction and will follow the Reconstruction requirements outline in Section 5.2.3.

Size and New Unit Configuration

The Program will provide applicants who qualify for replacement awards with 2-, 3-, and 4-bedroom singlewide or doublewide MHUs; all bedroom configurations include 2 bathrooms. Which unit configuration an applicant receives is based on DCR policy. After-market additions are not considered when determining the width or number of bedrooms in the storm damaged MHU (i.e., if a 3rd bedroom was added on to a singlewide 2-bedroom MHU, the home will be considered a 2-bedroom, singlewide MHU). Exceptions to replacement MHU bedroom configuration will only be considered by the County if overcrowding exists within the home or if the applicant elects to reduce the number of bedrooms via scope reduction to reduce or eliminate a DOB gap.

The storm-damaged MHU width configuration will also be based on the width of the storm-damaged MHU. The Program only provides singlewide and doublewide units. Triple-wide or larger units are not provided.

- If the storm damaged MHU was a singlewide, the applicant will receive a singlewide.
- If the storm damaged MHU was a doublewide, triple wide or larger width configuration, the applicant will receive a doublewide.

To reduce the required time from award to completion as related to replacement awards, the Program will task the assigned General Contractor to source an MHU in the awarded singlewide or doublewide bedroom/bathroom configuration. The Program does not offer standard floorplans for MHUs. The Program offers standard bedroom/bathroom configurations in singlewide or doublewide units in the following standard square footage ranges. All MHUs sourced by the program must be HUD approved units. The table below outlines square footage ranges for singlewide and doublewide units.

Bedroom / Bathroom Configuration	Conditioned Square Footage
Singlewide 2 Bedroom / 2 Bathroom	750 – 900 SF
Singlewide 3 Bedroom / 2 Bathroom	1000 – 1200 SF
Singlewide 4 Bedroom / 2 Bathroom	1000 – 1200 SF
Doublewide 2 Bedroom / 2 Bathroom	1000 – 1250 SF
Doublewide 3 Bedroom / 2 Bathroom	1250 – 1500 SF
Doublewide 4 Bedroom / 2 Bathroom	1400 – 1800 SF

Program replacement MHUs do not include replacement or reconstruction of garages (attached or detached), sheds, pool houses, carports or other outbuildings. Such outbuildings may be demolished during construction to allow ample space for the new MHU to be delivered/installed, or in the event such structures pose a health or safety issue. However, the Vendor will be required to satisfy all

community association requirements, covenants, and AHJ requirements such as a mobile home park that requires a car port or shed.

The following is a non-exhaustive list of items that are not included or considered when determining the bedroom/bathroom configuration or size of the replacement MHU. The Program does not provide like for like:

- Interior or exterior finishes;
- Square footage;
- Manufacturer of the storm damaged unit;
- Number of bathrooms (if more than 2);
- Extra/Bonus rooms such as dens, playrooms, offices, etc.;
- After market additions such as additional rooms or covered porches.

Manufactured Housing Unit (MHU) Relocation

The Program allows for replacement of a manufactured housing unit (MHU) in an alternate location only when replacing the MHU in the same location as the storm damaged MHU is not feasible or is prohibited. MHU relocations may be considered under the following circumstances:

- If an otherwise eligible applicant does not own the land on which the storm damaged MHU is situated, and the landowner does not consent to a new unit being replaced on the land;
- If MHU must be elevated above the standard 3-foot installation height;
- If zoning or municipal regulations prohibit installation of a MHU on the property; or
- If other engineering, environmental or site constraints make installation of an MHU onsite infeasible or unreasonable.

The Program does not provide replacement property for applicants. To be allowed to replace an MHU on an alternate property, the applicant must source and obtain ownership or permission to install a MHU at the alternate location. Alternate locations must be zoned to allow for installation of a MHU, have ready access to sewer, water, and electric connections, and must not be located in a 100-year floodplain. Alternate MHU sites must pass an environmental review before the applicant makes a binding commitment to lease or purchase land (environmental reviews will be provided to the GC from the program). If an applicant enters into a binding agreement to lease or purchase alternate land before the program has environmentally cleared the alternate parcel, the applicant may be ineligible for assistance, as this constitutes a choice-limiting action.³

Reasonable Accommodations – Manufactured Housing Unit Replacement Award Type

Applicants who qualify for a replacement award type may request reasonable accommodations. Reasonable accommodations in MHU projects are limited by manufacturer specifications and unit availability. Applicants who request reasonable accommodation will be provided with a “wheelchair friendly” MHU.

Wheelchair friendly Mobile Home Units should include at minimum:

³ 24 CFR 58.22(a) Neither a recipient nor any participant in the development process, including public or private nonprofit or for-profit entities, or any of their contractors, may commit HUD assistance under a program listed in § 58.1(b) on an activity or project until HUD or the state has approved the recipient's RROF and the related certification from the responsible entity. In addition, until the RROF and the related certification have been approved, neither a recipient nor any participant in the development process may commit non-HUD funds on or undertake an activity or project under a program listed in § 58.1(b) if the activity or project would have an adverse environmental impact or **limit the choice of reasonable alternatives**.

- One bathroom with:
 - Step-in, low-threshold shower, with threshold no higher than nine (9) inches from the floor covering,
 - Shower wand on an adjustable rail and a seat in the shower, and
 - Comfort height toilet, with seat 17" – 19" above the floor
- Minimum 32" width for exterior doors
- Minimum 36" hallway width, and
- Minimum 32" bathroom and bedroom doors

Additional accommodations, such as hearing-impaired smoke detectors or roll-in/no threshold shower compartments will be considered separately and, on a case-by-case basis, based on the applicant's needs.

Manufactured Housing Unit (MHU) Replacement Scope of Work

Property owners of MHUs may qualify for a MHU replacement award, which consists of the demolition and disposal of the existing MHU and installation of a new MHU, either substantially within the same footprint as the prior home (reconstruction) or a different footprint. The Scope of Work for each MHU replacement will vary but may include, although not be limited to, the following:

- Coordination with the property owner and his/her family for all activities, from assignment to obtaining a certificate of occupancy for closing;
- Coordinating applicant move out, and providing temporary housing, if eligible;
- Utility disconnection / reconnection;
- Demolition of existing structure;
- Debris removal in accordance with all federal, state and local requirements, including the disposal of potential asbestos containing materials;
- Obtaining applicant approval of replacement MHU floorplan;
- Conduct site specific analysis for surveying, zoning, plot plans or any activity required to obtain permits/certificate of occupancy;
- Site preparation;
- Order, delivery and installation of new, HUD-certified MHU and all supporting activities to complete per industry standard;
- Incorporation of accessibility needs prior to key turnover; and
- Provide MHU manufacturer's warranty registered in applicant's name.

5.3 REASONABLE ACCOMMODATION REQUESTS

Physically disabled homeowners, or homeowners with a disabled household member, may be entitled to additional construction considerations such as low threshold showers, bathroom grab bars, outward swinging doors, exterior ramps, comfort height toilet with grab bars or other accessibility features that will assist with an individual's functional needs. DCR and/or DCR's implementation vendor will assess eligibility for these features on a case-by-case basis per assistance benefit type. Awards may include expenses for additional costs related to accessibility modifications for the disabled.

Reasonable accommodations are available for repair, reconstruction, and MHU replacement projects. Standard reasonable accommodations to the bathroom for each repair or reconstruction award type are offered in three 'tiers' to allow each applicant to select the level of modification most appropriate for his/her household. Applicants for any award type may also request reasonable accommodations including a "no step" entrance or strobe smoke detectors.

Standard reasonable accommodations for home entrance and strobe smoke detectors are standard for all award types. A no step entrance is a home entrance that has no steps and a minimal threshold. Only one (1) no step entrance will be installed upon request, per property. If a home is above grade, a no step entrance may require installation of a ramp or lift. Homes on grade may not require installation of anything to accommodate a no step entrance. Ramps will be the preferred method to achieve a no step entry. Lifts will be considered on a case-by-case basis, based on cost reasonableness compared to the cost of a site-built ramp, site conditions, and local zoning/set back requirements.

5.4 ADDITIONAL REQUIREMENTS

These requirements apply to both project types included in this solicitation:

- Provide professional labor, equipment, and materials adequate to perform the work in accordance with the Scope of Work issued for each eligible applicant's residential structure while ensuring that all applicable housing standards and codes are met;
- Comply with all applicable local, state and federal laws, regulations, and guidelines, which may include: HUD Community Development Block Grant disaster laws, regulations, and guidelines; the Davis Bacon Act, as applicable; and Section 3 of the Housing and Urban Development Act of 1968;
- Mobilize in the Western North Carolina Hurricane Helene impacted counties within 45 days from the execution of a Contract;
- Provide documentation and tracking of construction progress in the program system of record and upon request by any DCR or DCR implementation vendor staff;
- All communications, updates, interactions, site visits, etc. with any applicant or in direct support of progressing an applicant must be recorded in the system of record supporting the program implementation. It is expected that General Contractors will input notes in the system of record no less than twice weekly for all assigned, active projects. System of record access will be provided to awarded vendors by DRC's implementation vendor;
- Meet with the program and individual property owners to review the Scope of Work to be performed, including establishing a work schedule acceptable to property owners and reviewing work upon final inspection. The initial meeting between the general contractor, applicant and Program will be done through a preconstruction meeting at one of the Program offices located within the Western North Carolina Hurricane Helene impacted counties area;
- Start construction activities within 90 days of the Pre-Construction phase from project assignment to Notice to Proceed. The 90-day Pre-Construction phase starts at the time of Cost estimate approval and execution of the project work order;
- Meet Program 150-day Construction Phase completion requirement from the Notice to Proceed to passed Final Inspection for reconstruction projects, 30-day Construction Phase completion requirement from the Notice to Proceed to passed Final Inspection for demolition only, 60-day Construction Phase completion requirement from the Notice to Proceed to passed Final Inspection for MHU replacement projects, and 30-day Construction Phase completion requirement from the Notice to Proceed to passed Final Inspection for rehabilitation projects with a scope <\$50,000, 60-day Construction Phase completion requirement from the Notice to Proceed to passed Final Inspection for rehabilitation projects with a scope >\$50,000 and <\$100,00, 90-day Construction Phase completion requirement from the Notice to Proceed to passed Final Inspection for rehabilitation projects with a scope >\$100,000 and <\$150,000, 120-day Construction Phase completion requirement from the Notice to Proceed to passed Final Inspection for rehabilitation projects with a scope >\$150,000;
- Meet all federal, state and local requirements for the transport and disposal of municipal solid, industrial, hazardous and other wastes from demolished structures;
- Provide a two-year warranty for all work performed; and
- Assist homeowners in vacating their damaged home, if necessary.

5.5 NOTICE TO PROCEED

A notice to proceed (NTP) will be issued by the DCR implementation vendor. No onsite construction activities are to proceed without an NTP.

5.6 PROJECT ASSIGNMENT METHODOLOGY

DCR's implementation vendor will assign projects to general contractor's based on the general contractor's performance history and the general contractor's capacity to take on additional jobs at the time the project is ready to be assigned.

All project Scopes of Work shall be in writing, and shall include a scope of services, a list of tasks to be performed by the general contractor, a time schedule, a list of deliverables, if any, and such other information or special conditions as may be necessary for the work requested.

Initial assignment of projects will be based on the implementation vendor's construction management methodology. DCR's implementation vendor will determine which GC is best suited to receive an assignment by considering factors including, but not limited to, the location and award type of projects, GC capacity at the time the project is ready for assignment, and GC score at time of assignment. As such, the highest scoring GC at the time projects are ready for assignment is not guaranteed to receive the projects.

GCs who are assigned projects can accept or reject the project. If projects are rejected, the GC must provide an explanation for why they were rejected. Rejection of projects may impact the likelihood of the GC receiving additional projects.

If a project must change award type after being assigned, DCR's implementation vendor reserves the right to assign the project with new award type to the same GC who accepted the project originally, or to a different contractor who is more suitable to complete the project at the time the project is again ready for assignment. Although rare, projects may change award type for a variety of reasons including but not limited to zoning regulations, changed property conditions, change order, or municipal regulations.

Projects may be taken away from assigned GCs if performance, capacity or customer service fail to meet DCR's expectations.

5.7 LIQUIDATED DAMAGES

The Program has set liquidated damages for not completing the work within 150 calendar days for reconstruction projects, 60 calendar days for MHU replacement projects, 30 calendar days for demolition projects, and 30 calendar days for rehabilitation projects with a scope <\$50,000, 60 calendar days for rehabilitation projects with a scope >\$50,000 and <\$100,00, 90 calendar days for rehabilitation projects with a scope >\$100,000 and <\$150,000, 120 calendar days for rehabilitation projects with a scope >\$150,000 commencing on the date specified in written Notice to Proceed, including all officially approved extensions thereto, to be One Hundred Dollars and No/100 (\$100.00) PER DAY, per individually assigned Project. The Contractor may be liable for liquidated damages in the amount of One Hundred Dollars and No/100 (\$100.00) PER DAY, per affected Projects, if Contractor fails to complete the work within the contracted period. Additionally, DCR will not compensate the general contractor for storage fees or temporary housing expenses beyond the approved construction timelines.

5.8 TRANSITION ASSISTANCE

If the contract, or any part thereof, is not renewed or is terminated for any reason, or as part of the closeout process, the Vendor shall provide, at DCR's sole discretion, immediate and ongoing transition assistance to the new Vendor until the project is complete.

6.0 CONTRACT ADMINISTRATION

6.1 PROJECT MANAGER AND CUSTOMER SERVICE

The Vendor shall designate and make available to the State a Project Manager. The project manager shall be the State's point of contact for contract related issues and issues concerning performance, progress review, scheduling, and service. The services of the Project Manager will not be invoiced. The Project Manager will be a representative of the Vendor authorized to make decisions on its behalf.

6.2 PERFORMANCE

The Contract Administrator for the State will conduct quarterly performance reviews of performance under the contract. The format and content of the quarterly review will be shared with the Vendor Project Manager. The quarterly performance reviews will assess the onsite staff and Vendor's compliance with the Scope of Work and the individual performance of the onsite contract staff as needed. The performance reviews may include requirements of the Vendor to take corrective action related to onsite staff performance.

6.3 DISPUTE RESOLUTION

The parties agree that it is in their mutual interest to resolve disputes informally. A claim by the Vendor shall be submitted in writing to the State's Contract Administrator for resolution. A claim by the State shall be submitted in writing to the Vendor's Project Manager for resolution. The Parties shall negotiate in good faith and use all reasonable efforts to resolve such dispute(s). During the time the Parties are attempting to resolve any dispute, each shall proceed diligently to perform their respective duties and responsibilities under this Contract. If a dispute cannot be resolved between the Parties within thirty (30) days after delivery of notice, either Party may elect to exercise any other remedies available under this Contract, or at law. This term shall not constitute an agreement by either party to mediate or arbitrate any dispute.

6.4 CONTRACT CHANGES

Contract changes, if any, over the life of the contract shall be implemented by contract amendments agreed to in writing by the State and Vendor.

7.0 REQUIRED VENDOR INFORMATION

Vendor response should not exceed twenty (20) pages.

7.1 Vendor Information

Vendor must provide satisfactory evidence of its ability to manage and coordinate the types of activities described in this Solicitation and to provide the services within the timeframe (period of performance) described in this RFP.

7.2 Company Narrative

A detailed narrative explaining why Vendor is qualified to provide the services in this RFP, focusing on its company's key strengths and competitive advantages. Vendor must provide a summary of capacity based on past experience including, at minimum, number of projects completed annually on a single program, number of projects assigned at a single time on a single program.

7.3 Company Profile

A company profile to include:

- a) The company ownership structure (corporation, partnership, LLC, or sole proprietorship), including any wholly-owned subsidiaries, affiliated companies, or joint ventures. *(Please provide this information in a narrative and as a graphical representation)*. If Vendor is an Affiliate of, or has a joint venture or strategic alliance with, another company, please identify the percentage of ownership and the percentage of the parent's ownership. Finally, please provide a proposed operating structure for the services requested under this Solicitation and which entities (i.e. parent company, Affiliate, Joint Venture, subcontractor) will be performing them;
- b) The year the company was founded and/or legally organized. If organized as a business entity other than a sole proprietorship (e.g., corporation, LLC, LLP, etc.), please indicate the type of entity, the state under whose laws the company is organized and the date of organization;
- c) The location of company headquarters and any field office(s) that may provide services for any resulting contract under this Solicitation, including subcontractors. Identify the location(s) served by your company;
- d) The number of employees in the company, both locally and nationally, and the location(s) from which employees may be assigned;
- e) The name, title, mailing address, e-mail address, telephone number, and fax number of Vendor's point of contact for any resulting contract under this Solicitation;
- f) Whether the company has ever been engaged under a contract with the state of North Carolina. If "Yes," specify when, for what duties, and for which project; and
- g) Whether the company has ever been engaged under a contract for CDBG funded residential construction and whether you were involuntarily terminated from participation in the program or voluntarily ceased participation in the program without completing all construction projects.

NOTE: A Company that is not organized under the laws of the state of North Carolina must register with the State before it may transact business in North Carolina.

7.4 Key Staffing Profile

Vendor must provide a key staffing profile and résumés for staff that will be responsible for the day-to-day performance of the services required under this Solicitation. Vendor shall designate a dedicated construction lead who will be located in the Western North Carolina Hurricane Helene recovery area.

Staff members listed in the Key Staffing Profile who are independent contractors and not employees of the Vendor may also qualify as subcontractors. Vendor shall use only licensed subcontractors as required by the State of North Carolina.

Vendor's staffing profile must not reflect a greater than 8:1 jobsites to superintendent ratio.

Vendor must identify which employees, including if applicable the Project Manager, will be physically located in the responding area as regular face-to-face meetings with the program and applicants will be required (i.e., mandatory preconstruction meetings with applicants for each application).

Key staff must include the following (DCR prefers for the three referenced positions to be held by three separate individuals qualified to perform each role):

- **Project Manager** – The project manager is the individual who is ultimately responsible for all Program CDBG-DR related operations. The project manager is accountable for planning and allocating resources, preparing

budgets, monitoring progress, and keeping applicants and DCR's implementation vendor informed throughout the project lifecycle;

- **Superintendent(s)** – Superintendents are responsible for managing a group of individual project sites. Superintendent(s) should manage a maximum of eight (8) active project sites at any given time.
- **Warranty Coordinator** – The warranty coordinator is responsible for ensuring timely completion of all warranty claims assignable to the General Contractor. The warranty coordinator is responsible for recording warranty claims in the program system of record, communicating with the applicant to schedule warranty repairs and keep the applicant apprised of progress to completion of the repairs. The warranty coordinator is also responsible for providing evidence of completed warranty repairs to the program.

7.5 References

Vendor shall provide a minimum of three references for projects of similar type and size performed within the last five years, preferably for state and/or local government entities. DCR reserves the right to check references prior to making any award hereunder. Any negative responses received may be grounds for disqualification of the proposal. DCR reserves the right to contact programs other than those listed by the Vendor in which DCR knows the Vendor participated.

Vendor must verify current contacts. Information provided shall include:

- a) Client name;
- b) Project description;
- c) Total dollar amount of project;
- d) Key staff assigned to the referenced project that will be designated for work under this Solicitation; and
- e) Client project manager name, telephone number, and e-mail address. Vendors who do not provide accurate contact information (e-mail addresses and phone numbers) waive the right to have those references considered in the evaluation of their Solicitation Response.

7.6 Litigation History

Vendor must include in its Solicitation Response a complete disclosure of any actual or alleged breaches of contract, which have been asserted or claimed against it. In addition, Vendor must disclose any civil or criminal litigation or investigation pending at any point during the last three years to which Vendor is/was a party or in which Vendor has been judged guilty or liable. For each instance of litigation or investigation, Vendor shall list: basic case information (e.g., cause number/case number, venue information, names of parties, name of investigating entity); a description of claims alleged by or against Vendor or its parent, subsidiary, or other affiliate; for each resolved case, a description of the disposition of Vendor's involvement (e.g., settled, dismissed, judgment entered, etc.).

Failure to comply with the terms of this provision may disqualify any Vendor. Solicitation Responses may be rejected based upon Vendor's prior history with any other party that demonstrates, without limitation, unsatisfactory performance, adversarial or contentious demeanor or significant failure(s) to meet contractual obligations.

If Vendor has no litigation history, as described above, it must so indicate in the appropriate section of the Solicitation Response.

7.7 Conflicts

Vendor must disclose any potential conflict of interest it may have in providing the services described in this Solicitation, including all existing or prior business dealings resulting in such conflicts. Vendor must also disclose any

such activities of affiliated or parent organizations and individuals who may be assigned to manage this account. If there are no conflicts, as described herein, Vendor must indicate same in the appropriate section of the Solicitation Response.

7.8 Annual Report

If Vendor is an entity that is required to prepare audited financial statements, Vendor shall submit an annual report that includes:

- a) Last two years of audited accrual-basis financial statements, including an income statement, cash flow statement and balance sheet;
- b) If applicable, last two years of consolidated statements for any holding companies or affiliates;
- c) An audited or un-audited accrual-basis financial statement of the most recent quarter of operation; and
- d) A full disclosure of any events, liabilities, or contingent liabilities that could affect Vendor's financial ability to perform this contract.

If Vendor is a privately-owned entity or sole proprietorship for which audited financial statements are not required, Vendor shall submit an annual report that includes:

- a) Last two years of un-audited accrual-basis financial statements, including an income statement, cash flow statement and balance sheet;
- b) An audited or un-audited accrual-basis financial statement of the most recent quarter of operation; and
- c) A full disclosure of any events, liabilities, or contingent liabilities that could affect Vendor's financial ability to perform this contract;

OR

- d) Other financial information sufficient for the Program, in its sole judgement, to determine if Vendor is financially solvent and adequately capitalized.

7.9 Safety Information

Vendor must provide its workers' compensation experience modification rate (EMR) for the last five years. Vendor shall submit this information on its insurance carrier's letterhead, signed by the carrier. Vendor must also provide the name and job title of the person in its organization that manages its safety program, and a description of that program. A copy of Vendor's safety manual may also be required. The safety manual will become part of the Contract if your Solicitation Response is selected.

7.10 Quality Control Program

Vendor must provide the name and job title of the person responsible for the Vendor's quality control program, as well as a description of the quality control program. A copy of Vendor's quality control manual may be required. The quality control manual will become part of the Contract if Vendor's Solicitation Response is selected.

7.11 Cost Control Program

Vendor is encouraged to suggest any possible cost reduction items to be taken into consideration prior to awarding a contract under this Solicitation. Vendor should include possible cost reduction items in their Narrative Proposal and provide a full description of the alternative work and the estimated cost savings. In addition, Vendor should detail the necessity of any additional drawings, specifications, or revisions to the construction sequencing and schedule that may be needed as a result of the implementation of the cost saving measures.

7.12 Warranty Program

Vendor must provide a description of their warranty program, including key personnel, and timeframes within which warranty complaints will be resolved. Warranty claims, communications, and resolutions will be required to be maintained in the DCR and/or DCR's implementation vendor system of record.

7.13 Reconstruction Plan Sets (for Vendors seeking to perform reconstruction projects)

Provide examples of single-family construction projects where you have provided the plan sets and specifications; DCR is specifically interested in examples of any CDBG-DR work where you have provided the plan sets and specifications. During the BAFO process, Vendors who intend to perform reconstruction projects may submit reconstruction plan sets of single-family homes, including options for Stick-Built or Modular homes, for consideration by the program for use in the reconstruction phase of the program. The Contractor must obtain permission from the designers for free reuse by the program by any contractor selected by the Program.

ATTACHMENT A: PROJECT TYPE

Per RFP Section 5.1 SCOPE OF SERVICES, General contractors may choose to submit an offer for MHU project types only, for rehabilitation and reconstruction projects only, or for both. Indicate below which project type(s) Vendor would like to perform work.

☐ YES ☒ NO **Project Type 1: MHU projects only.** General Contractors may select to apply for MHU repair, replacement, and relocation projects only and not be considered for reconstruction, repair, or demolition project assignments.

☒ YES ☐ NO **Project Type 2: Rehabilitation and Reconstruction projects only (non-MHU).** General Contractors who are selected for rehabilitation and reconstruction award types will be considered for reconstruction, repair, or demolition project assignments.

☐ YES ☒ NO **BOTH Project Type 1: MHU Projects and Project Type 2: Rehabilitation and Reconstruction Projects.**

ATTACHMENT B: NORTH CAROLINA INSTRUCTIONS TO VENDORS

I. READ, REVIEW AND COMPLY

It shall be the Vendor's responsibility to read this entire document; review all enclosures, attachments, and any Addenda; and comply with all requirements specified, whether appearing in these Instructions to Vendors or elsewhere in the Solicitation document.

Any gender-specific pronouns used herein, whether masculine or feminine, shall be read and construed as gender neutral, and the singular of any word or phrase shall be read to include the plural and vice versa.

II. REQUEST FOR OFFERS

Vendors are cautioned that this is a request for Offers, not an offer or request to contract, and the State reserves the unqualified right to reject any and all bids at any time if such rejection is deemed to be in the best interest of the State.

By submitting Your Bid or Proposal, You are offering to enter into a contract with the State.

The Contract is a separate document that represents the Vendor's and the State's entire agreement. If Your bid is accepted and results in a Contract, You will be expected to accept the North Carolina General Terms And Conditions included in the Solicitation document as part of the Contract. Depending upon the good or service being offered, other terms and conditions may apply.

III. DUTY TO INQUIRE

Offeror, by submitting an Offer, represents that it has read and understands the Solicitation and that its Offer is made in compliance with the Solicitation. Offerors are expected to examine the Solicitation thoroughly and should request an explanation for any ambiguities, discrepancies, errors, omissions, or conflicting statements in the Solicitation. Failure to do so will be at the Offeror's risk. All ambiguities, discrepancies, errors, omissions, or conflicting statements in the Solicitation shall be interpreted to require the better quality or greater quantity of work and/or materials, unless otherwise directed by Addendum. Offeror assumes responsibility for any patent ambiguity in the Solicitation that Offeror does not bring to the State's attention.

IV. DEFINITIONS, ACRONYMS AND ABBREVIATIONS

The following definitions, acronyms, and abbreviations may be used within the Solicitation document.

1. **AGENCY SPECIFIC TERM CONTRACT:** A contract generally intended to cover all normal requirements for a commodity for a specified period of time based on estimated quantities for a single entity.
2. **ADDENDUM:** a document issued to supplement or modify the original Solicitation document. Addenda may be issued following a pre-bid/pre-proposal conference or as a result of a specification or work scope changes to the Solicitation.
3. **BAFO:** Best and Final Offer, submitted by a Vendor to alter its initial bid, made in response to a request by the issuing agency.
4. **BUYER:** The employee of the State or Other Eligible Entity that places an order with the Vendor.
5. **COMMUNITY COLLEGE:** Any of the fifty-eight (58) public North Carolina Community Colleges.
6. **CONTRACT:** A contract resulting from or arising out of Vendor responses to this Solicitation.

7. **CONTRACT ADMINISTRATOR:** A representative of the Agency who is responsible for the functions that are performed after all parties have signed a contract, including any modifications to the contract.
8. **CONTRACT MANAGER:** A representative of the agency or awarded vendor who ensures compliance with the contract terms and conditions while giving attention to the achievement of the stated output and outcome of the contract.
9. **ELECTRONIC VENDOR PORTAL (eVP):** System for vendors to do business with the State of North Carolina, including registering to do business, responding to bid opportunities, and certifying as a HUB and/or NCSBE.
10. **E-PROCUREMENT SERVICES:** The program, system, and associated services through which the State conducts electronic procurement.
11. **FOB-DESTINATION:** Title changes hand from Vendor to purchaser at the destination point of the shipment; Vendor owns the commodity in transit and files any claims. Vendor pays all freight and any related transportation charges. A Solicitation may request that a Vendor separately identify freight charges in its bid, but no amount or charge not included as part of the total bid price will be paid.
12. **HUB:** Historically Underutilized Business <https://ncadmin.nc.gov/businesses/hub>
13. **IFB:** Invitation for Bids (a type of Solicitation document)
14. **LOT:** A grouping of similar products within this Solicitation document.
15. **OFFER:** the bid or proposal submitted in response this Solicitation. The terms Bid and Proposal are used interchangeably with the term Offer.
16. **OFFEROR:** the single legal entity submitting the Offer. The term Bidder is used interchangeably with the term Offeror. See bidding provisions entitled Signing Your Offer and Bid/Proposal As Offer To Contract.
17. **ON-TIME DELIVERY:** The delivery of all items within a single order to the receiving point designated by the ordering entity within the delivery time required.
18. **PROCUREMENT LEAD:** Representative of the agency identified on the first page of the Solicitation document who will correspond with potential Vendors concerning Solicitation issues, will contract with the Vendor providing the best offer to the State, and is the individual who will administer the Contract for the State.
19. **QUALIFIED BID/PROPOSAL:** A responsive bid submitted by a responsible Vendor.
20. **RESPONSIBLE:** Refers to a Vendor who demonstrates in its Offer that it has the capability to perform the requirements of the Solicitation.
21. **RESPONSIVE:** Refers to an Offer that conforms to the Requirements of the Solicitation in all respects to be considered by the State for award.
22. **RFI:** Request for Information (an information gathering tool that does not result in a contract)
23. **RFP:** Request for Proposals (a type of Solicitation document)
24. **RFPQ:** Request for Pre-Qualifications (a type of Solicitation document)

25. **RFQ:** Request for Quotes (a type of Solicitation document)
26. **STATE:** The State of North Carolina, including any of its sub-units recognized under North Carolina law.
27. **STATE AGENCY:** Any of the more than 400 sub-units within the executive branch of the State, including its departments, institutions, boards, commissions, universities, and units of the State.
28. **STATE DEPARTMENTS:** Department of Administration, Department of Agriculture and Consumer Services, Department of Commerce, Department of Natural and Cultural Resources, Department of Environmental Quality, Department of Health and Human Services, Department of Information Technology, Department of Insurance, Department of Justice, Department of Labor, Department of Military and Veteran Affairs, Department of Public Instruction, Department of Public Safety, Department of Revenue, Department of State Treasurer, Office of the Secretary of the State, Department of Transportation, Wildlife Resources Commission, Office of Budget and Management, Office of the Governor, Office of the Lieutenant Governor, Office of The State Auditor, Office of the State Controller.
29. **VENDOR:** The supplier, bidder, proposer, company, firm, corporation, partnership, individual or other entity submitting a response to a Solicitation document. Following award of a contract, the term refers to an entity receiving such an award.
30. **WORK:** All labor, materials, equipment, services, or property of any type, provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract.
31. **YOU and YOUR:** Offeror.

V. INTERPRETATION OF TERMS AND PHRASES

The Solicitation document serves to advise potential Vendors of the parameters of the solution being sought by the State. The use of phrases such as "shall," "must," and "requirements" are intended to create enforceable contract conditions. In determining whether bids should be evaluated or rejected, the State will take into consideration the degree to which Vendors have proposed or failed to propose solutions that will satisfy the State's needs as described in the Solicitation. Except as specifically stated in the Solicitation, no one requirement shall automatically disqualify a Vendor from consideration. However, failure to comply with any single requirement, if determined to be essential under the circumstances then existing, may result in the State exercising its discretion to reject a bid in its entirety.

VI. BID SUBMISSION

1. **VENDOR'S REPRESENTATIVE:** Each Vendor shall submit with its bid the name, address, and telephone number of the person(s) with authority to bind the Vendor and answer questions or provide clarification concerning the Vendor's bid.
2. **SIGNING YOUR OFFER:** Every Offer must be signed by an individual with actual authority to bind the Offeror.
 - a) If the Offeror is an individual, the Offer must be signed by that individual. If the Offeror is an individual doing business as a firm, the Offer must be submitted in the firm name, signed by the individual, and state that the individual is doing business as a firm.
 - b) If the Offeror is a partnership, the Offer must be submitted in the partnership name, followed by the words by its Partner, and signed by a general partner.

c) If the Offeror is a corporation, the Offer must be submitted in the corporate name, followed by the signature and title of the person authorized to sign.

d) An Offer may be submitted by a joint venture involving any combination of individuals, partnerships, or corporations. If the Offeror is a joint venture, the Offer must be submitted in the name of the Joint Venture and signed by every participant in the joint venture in the manner prescribed in paragraphs (a) through (c) above for each type of participant.

e) If an Offer is signed by an agent, other than as stated in subparagraphs(a)through (d) above, the Offer must state that is has been signed by an Agent. Upon request, Offeror must provide proof of the agent's authorization to bind the principal.

3. **EXECUTION:** Failure to sign the Execution Page (numbered page 1 of the Solicitation document) in the indicated space may render an Offer nonresponsive, and it may be rejected.

4. **STATE OFFICE CLOSINGS:** If an emergency or unanticipated event interrupts normal government processes so that Offers cannot be received at the State office designated for receipt of bids by the exact time specified in the Solicitation, the time specified for receipt of Offers will be deemed to be extended to the same time of day specified in the Solicitation on the first work day on which normal government processes resume. In lieu of an automatic extension, an Addendum may be issued to reschedule the bid opening. If State offices are closed at the time a pre-bid or pre-proposal conference is scheduled, an Addendum will be issued to reschedule the conference.

5. **BID IN ENGLISH and DOLLARS:** Offers submitted in response to this Solicitation shall be in the English language and in US dollars, unless otherwise permitted by the Solicitation.

6. **LATE BIDS:** Late bids, regardless of cause, will not be opened or considered, and will automatically be disqualified from further consideration. It shall be the Vendor's sole responsibility to ensure delivery at the designated office by the designated time.

a) Vendor shall bear the risk for late submission due to unintended or unanticipated delay— whether submitted electronically, delivered by hand, U.S. Postal Service, courier or other delivery service. It is the Vendor's sole responsibility to ensure that its bid has been received by this Office by the specified time and date of opening. The date and time of submission will be marked on each bid when received, and any bid received after the bid submission deadline will be rejected.

b) For proposals submitted via U.S. mail, please note that the U.S. Postal Service generally does not deliver mail to a specified street address but to the State's Mail Service Center. Vendors are cautioned that proposals sent via U.S. Mail, including Express Mail, may not be delivered by the Mail Service Center to the agency's purchasing office on the due date in time to meet the proposal deadline. All Vendors are urged to take the possibility of delay into account when submitting a proposal by U.S. Postal Service, courier, or other delivery service.

7. **DETERMINATION OF RESPONSIVENESS:** Any Offer which fails to conform to the material requirements of the Solicitation maybe rejected as nonresponsive. Offers which impose conditions that modify material requirements of the Solicitation may be rejected. If a fixed price is required, an Offer will be rejected if the total possible cost to the State cannot be determined. Offerors will not be given an opportunity to correct any material nonconformity. Any deficiency resulting from a minor informality may be cured or waived at the sole discretion of the Procurement Officer.

8. CONTENTS OF OFFER:

- a) Offers should be complete and carefully worded and should convey all of the information requested.
- b) Offers should be prepared simply and economically, providing a straightforward, concise description of the Offeror's capabilities to satisfy the requirements of the Solicitation. Emphasis should be on completeness and clarity of content.
- c) If Your Offer includes any comment over and above the specific information requested in the Solicitation, you are to include this information as a separate appendix to Your Offer. Offers which include either modifications to any of the Solicitation's contractual requirements or an Offeror's standard terms and conditions may be deemed non-responsive and not considered for award at the State's discretion.

9. **MULTIPLE OFFERS.** If specifically stated in the Solicitation document, Offerors may submit more than one Offer, provided that each Offer has significant differences other than price. Each separate Offer must satisfy all Solicitation requirements.

10. **CLARIFICATION:** The State may elect to communicate with You after bid opening for the purpose of clarifying either Your Offer or the requirements of the Solicitation. Such communications may be conducted only with Offerors who have submitted an Offer which obviously conforms in all material aspects to the Solicitation. Clarification of an Offer must be documented in writing and included with the Offer. Clarifications may not be used to revise an Offer or the Solicitation.

11. **ACCEPTANCE AND REJECTION:** The State reserves the right to reject any and all bids, to waive any informality in bids and, unless otherwise specified by the Vendor, to accept any item in the bid.

12. **BASIS FOR REJECTION:** Pursuant to 01 NCAC 05B .0501, the State reserves the right to reject any and all Offers, in whole or in part, by deeming the Offer unsatisfactory as to quality or quantity, delivery, price or service offered, non-compliance with the requirements or intent of this Solicitation, lack of competitiveness, error(s) in specifications or indications that revision would be advantageous to the State, cancellation or other changes in the intended project or any other determination that the proposed requirement is no longer needed, limitation or lack of available funds, circumstances that prevent determination of the best offer, or any other determination that rejection would be in the best interest of the State.

13. **INFORMATION AND DESCRIPTIVE LITERATURE:** Vendor shall furnish all information requested in the Solicitation document. Further, if required elsewhere in this bid, each Vendor shall submit with its bid any sketches, descriptive literature, and/or complete specifications covering the goods and services offered. Reference to literature submitted with a previous bid or available elsewhere will not satisfy this provision. Do not submit bid samples or descriptive literature unless expressly requested. Unsolicited bid samples or descriptive literature will not be examined or tested, will not be used to determine responsiveness, and will not be deemed to vary any of the provisions of the Solicitation. Failure comply with these requirements shall constitute sufficient cause to reject a bid without further consideration.

14. **WITHDRAWAL OF BID OR PROPOSAL:** Proposals submitted electronically may be withdrawn at any time prior to the date for bid opening identified on the cover page of this Solicitation document (or such later date included in an Addendum). Proposals that have been delivered by hand, U.S. Postal Service, courier, or other delivery service may be withdrawn only in writing and if receipt is acknowledged by the office issuing the Solicitation document prior to the time for opening identified on the cover page of the Solicitation document (or such later date included in an Addendum). Written withdrawal requests shall be submitted on the Vendor's letterhead and signed by an official of

the Vendor authorized to make such request. Any withdrawal request made after bid opening shall be allowed only for good cause shown and in the sole discretion of the Division of Purchase and Contract.

15. **COST FOR BID OR PROPOSAL PREPARATION:** Any costs incurred by Vendor in preparing or submitting Offers are the Vendor's sole responsibility.

16. **INSPECTION AT VENDOR'S SITE:** The State reserves the right to inspect, at a reasonable time, the equipment, item, plant, or other facilities of a prospective Vendor prior to Contract award, and during the Contract term as necessary for the State's determination that such equipment, item, plant, or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Contract.

17. **RECYCLING AND SOURCE REDUCTION:** It is the policy of the State to encourage and promote the purchase of products with recycled content to the extent economically practicable, and to purchase items which are reusable, refillable, repairable, more durable, and less toxic to the extent that the purchase or use is practicable and cost-effective. We also encourage and promote using minimal packaging and the use of recycled/recyclable products in the packaging of commodities purchased. However, no sacrifice in quality of packaging will be acceptable. The company remains responsible for providing packaging that will adequately protect the commodity and contain it for its intended use. Companies are strongly urged to bring to the attention of purchasers those products or packaging they offer which have recycled content and that are recyclable.

18. **CERTIFICATE TO TRANSACT BUSINESS IN NORTH CAROLINA:** As a condition of Contract award, each out-of-State Vendor that is a corporation, limited-liability company, or limited-liability partnership shall have received, and shall maintain throughout the term of The Contract, a Certificate of Authority to Transact Business in North Carolina from the North Carolina Secretary of State, as required by North Carolina law. A State contract requiring only an isolated transaction completed within a period of six months, and not in the course of a number of repeated transactions of like nature, shall not be considered transacting business in North Carolina and shall not require a Certificate of Authority to Transact Business.

19. **SUSTAINABILITY:** To support the sustainability efforts of the State of North Carolina we solicit Your cooperation in this effort. Pursuant to Executive Order 156 (1999), it is desirable that all responses meet the following:

- a) If paper copies are requested, all copies of the bid are printed double sided. All submittals and copies are printed on recycled paper with a minimum post-consumer content of 30%.
- b) Unless absolutely necessary, all bids and copies should minimize or eliminate use of non- recyclable or non-reusable materials such as plastic report covers, plastic dividers, vinyl sleeves, and GBC binding. Three-ringed binders, glued materials, paper clips, and staples are acceptable.
- c) Materials should be submitted in a format which allows for easy removal, filing and/or recycling of paper and binder materials. Use of oversized paper is strongly discouraged unless necessary for clarity or legibility.

20. **HISTORICALLY UNDERUTILIZED BUSINESSES (HUB):** The State is committed to retaining Vendors from diverse backgrounds, and it invites and encourages participation in the procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. In particular, the State encourages participation by Vendors certified by the State Office of Historically Underutilized Businesses, as well as the use of HUB-certified vendors as subcontractors on State contracts.

21. **RECIPROCAL PREFERENCE:** G.S. 143-59 establishes a reciprocal preference requirement to discourage other states from favoring their own resident Vendors by applying a percentage increase to the price of any bid from a North Carolina resident Vendor. To the extent another state does so, North Carolina applies the same percentage increase to the bid of a Vendor resident in that state. Residency is determined by a Vendor's "Principal Place of Business," defined as that principal place from which the overall trade or business of the Vendor is directed or managed.

22. **INELIGIBLE VENDORS:** As provided in G.S. 147-86.59 and G.S. 147-86.82, the following companies are ineligible to contract with the State of North Carolina or any political subdivision of the State:

a) any company identified as engaging in investment activities in Iran, as determined by appearing on the Final Divestment List created by the State Treasurer pursuant to G.S. 147-86.58, and

b) any company identified as engaged in a boycott of Israel as determined by appearing on the List of restricted companies created by the State Treasurer pursuant to G.S. 147-86.81. A contract with the State or any of its political subdivisions by any company identified in a) or b) above shall be void *ab initio*.

23. **VALID TAXPAYER INFORMATION:** All persons or entities desiring to do business with the State must provide correct taxpayer information on North Carolina specified forms. The Substitute W-9 and Instructions are here: https://files.nc.gov/ncosc/documents/NCAS_forms/State_of_North_Carolina_Sub_W-9_01292019.pdf

24. **VENDOR REGISTRATION AND SOLICITATION NOTIFICATION SYSTEM:** The North Carolina electronic Vendor Portal (eVP) allows Vendors to electronically register free with the State to receive electronic notification of current procurement opportunities available as well as notifications of status changes to those Solicitations. Online registration and other purchasing information is available at the following website: <https://evp.nc.gov>.

25. The status of a Vendor's E-Procurement Services account(s) shall be considered a relevant factor in determining whether to approve the award of a Contract resulting from this Solicitation document. Any Vendor with an E-Procurement Services account that is in arrears by 91 days or more at the time of bid opening may be suspended or deactivated, at the State's discretion, and may be disqualified from further evaluation or consideration.

26. **TABULATIONS:** Bid tabulations can be electronically retrieved at the Electronic Vendor Portal (eVP), <https://evp.nc.gov>. Tabulations will normally be available at this web site not later than one working day after the bid opening. If negotiation is anticipated under 01 NCAC 05B.0503, pricing may not be public until award. Lengthy or complex tabulations may be summarized, with other details not made available on eVP. Requests for additional details or information concerning such tabulations cannot be honored.

27. **CONFIDENTIAL INFORMATION:** To the extent permitted by applicable statutes and rules, the State will maintain as confidential trade secrets in bids that the Vendor does not wish disclosed. As a condition to confidential treatment, each page containing trade secret information shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the Vendor, with specific trade secret information enclosed in boxes, marked in a distinctive color or by similar indication. Cost information shall not be deemed confidential under any circumstances. Regardless of what a Vendor may label as a trade secret, the determination whether it is or is not entitled to protection will be determined in accordance with G.S. 132-1.2. Any material labeled confidential constitutes a representation by the Vendor that it has made a reasonable effort in good faith to determine that such material is, in fact, a trade secret under G.S. 132-1.2. Vendors are urged to limit the marking of information as a trade secret or as confidential so far as is possible. If a legal action is brought to require the disclosure of any material so marked confidential, the State will notify Vendor of such action and allow Vendor to defend the confidential status of its information.

28. **COMMUNICATIONS BY VENDORS:** In submitting its bid, the Vendor agrees not to discuss or otherwise reveal the contents of its bid to any source, government or private, outside of the using or issuing agency until after the award of the Contract or cancellation of this Solicitation. All Vendors are forbidden from having any communications with the using or issuing agency, or any other representative of the State concerning the Solicitation, during the evaluation of the bids (i.e., after the public opening of the bids and before the award of the Contract), unless the State directly contacts the Vendor(s) for purposes of seeking clarification or another reason permitted by the Solicitation. A Vendor shall not: (a) transmit to the issuing and/or using agency any information commenting on the ability or qualifications of any other Vendor to provide the advertised good, equipment, commodity; (b) identify defects, errors and/or omissions in any other Vendor's bid and/or prices at any time during the procurement process; and/or (c) engage in or attempt any other communication or conduct that could influence the evaluation or award of a Contract related to this Solicitation. Failure to comply with this requirement shall constitute sufficient justification to disqualify a Vendor from a Contract award. Only those communications with the using agency or issuing agency authorized by this Solicitation are permitted.

29. **INFORMAL COMMENTS:** The State shall not be bound by informal explanations, instructions or information given at any time by anyone on behalf of the State during the competitive process or after award. The State is bound only by information provided in writing in this Solicitation document and in formal Addenda.

30. **PROTEST PROCEDURES:** When a Vendor wishes to protest a contract awarded by the Division of Purchase and Contract or awarded by an agency when the award amount exceeds the agency's general delegation and the contract is not subject to a special delegation or exemption, a Vendor shall submit a written request addressed to the State Purchasing Officer at: Division of Purchase and Contract, 1305 Mail Service Center, Raleigh, NC 27699-1305.

When a Vendor wishes to protest a contract awarded by an agency when the award amount is less than an agency's general delegation or when the contract is subject to a special delegation or exemption the Vendor shall submit a written request to protest to the purchasing officer of the agency that issued the award.

The protest request must be received in the proper office within thirty (30) consecutive calendar days from the date of the Contract award. Protest letters shall contain specific grounds and reasons for the protest, how the protesting party was harmed by the award made and any documentation providing support for the protesting party's claims.

Note: Contract award notices are sent only to the Vendor actually awarded the contract, and not to every person or firm responding to a Solicitation. Award notices are posted on eVP at <https://evp.nc.gov>. All protests will be handled pursuant to the North Carolina Administrative Code, 01 NCAC 05B .1519.

31. **ORDER OF PRECEDENCE:** In cases of conflict between specific provisions in this Solicitation or those in any resulting Contract documents, the order of precedence shall be (high to low) (1) any special terms and conditions specific to this Solicitation document, including any negotiated terms, (2) requirements and specifications and administration, (3) North Carolina General Terms and Conditions in North Carolina General Terms And Conditions, (4) Instructions To Vendors, (5) Pricing, and (6) Vendor's Bid.

32. **ADDENDA:** Critical updated information may be included in Addenda to the Solicitation. It is important that all Vendors bidding on the Solicitation periodically check for any Addenda that may be issued prior to the bid opening date. All Vendors shall be deemed to have read and understood all information in the Solicitation document and all Addenda thereto. Vendors are also responsible for obtaining and complying with all Addenda and other changes that may be issued concerning the Solicitation.

33. **ORAL EXPLANATIONS NON-BINDING:** Oral explanations or instructions will not be binding. Any information given a prospective Offeror concerning a Solicitation will be furnished promptly to all other prospective Offerors as an Addendum to the Solicitation, if that information is necessary for submitting offers or if the lack of it would be prejudicial to other prospective Offerors. See clause herein entitled "Duty to Inquire." The State will not identify You in its answer to Your question.

34. **MAXIMUM COMPETITION:** The State seeks to permit the maximum practicable competition. Offerors are urged to advise the State, as soon as possible, regarding any aspect of this procurement, including any aspect of the Solicitation that unnecessarily or inappropriately limits full and open competition. If the State determines that any changes will be made resulting from the questions asked, then such decisions will be communicated in the form of an Addendum.

35. **FIRM OFFER:** Vendor's bid shall constitute a firm offer. By execution and delivery of a bid in response to a Solicitation, the Vendor agrees that any additional or modified terms and conditions, whether submitted purposefully or inadvertently, shall have no force or effect, and will be disregarded. Any bid that contains language that indicates the bid is non-binding or subject to further negotiation before a contractual document may be signed shall be rejected.

ATTACHMENT C: NORTH CAROLINA GENERAL CONTRACT TERMS & CONDITIONS

1. PERFORMANCE:

- a) It is anticipated that the tasks and duties undertaken by the Vendor under the contract which results from the State solicitation in this matter (Contract) shall include Services, and/or the manufacturing, furnishing, or development of goods and other tangible features or components, as deliverables.
- b) Vendor agrees to perform under the Contract in at least the same or similar manner provided to comparable users and customers. The State shall notify the Vendor of any defects or deficiencies in performance or failure of deliverables to conform to the standards and specifications provided in this Contract. Vendor agrees to timely remedy defective performance or any nonconforming deliverables on its own or upon such notice provided by the State.
- c) Vendor has a limited, non-exclusive license to access and use State Data provided to Vendor, but solely for performing its obligations under and during this Agreement and in confidence as further provided for herein or by law.
- d) Vendor or its suppliers, as specified and agreed in the Contract, shall provide support assistance to the State related to all Services performed or other deliverables procured hereunder during the State's normal business hours. Vendor warrants that its support, customer service, and assistance will be performed at a minimum in accordance with generally accepted and applicable industry standards.
- e) The State may document and take into account in awarding or renewing future procurement contracts the general reputation, performance, and performance capabilities of the Vendor under this Contract as provided by G.S. 143-52 and 143-135.9 (a) and (b) (Best Value).

2. DEFAULT AND TERMINATION.

- a) In the event of default by the Vendor, the State may, as provided by NC law, procure goods and services necessary to complete performance hereunder from other sources and hold the Vendor responsible for any excess cost occasioned thereby. *See*, G.S. 25-2-712. In addition, and in the event of default by the Vendor under the Contract, or upon the Vendor filing a petition for bankruptcy or the entering of a judgment of bankruptcy by or against the Vendor, the State may immediately cease doing business with the Vendor, terminate the Contract for cause, and take action to recover relevant damages, and if permitted by applicable law, debar the Vendor from doing future business with the State. 01 NCAC 05B.1520.
- b) Liquidated damages for not completing the work within 150 calendar days for reconstruction projects, 60 calendar days for MHU replacement projects, 30 calendar days for demolition projects, and 30 calendar days for rehabilitation projects with a scope <\$50,000, 60 calendar days for rehabilitation projects with a scope >\$50,000 and <\$100,00, 90 calendar days for rehabilitation projects with a scope >\$100,000 and <\$150,000, 120 calendar days for rehabilitation projects with a scope >\$150,000 commencing on the date specified in written Notice to Proceed, including all officially approved extensions thereto, are to be One Hundred Dollars and No/100 (\$100.00) PER DAY, per individually assigned Project. The Contractor may be liable for liquidated damages in the amount of One Hundred Dollars and No/100 (\$100.00) PER DAY, per affected Project, if Contractor fails to complete the work within the contracted period. If, through any cause, Vendor shall fail to fulfill in a timely and proper manner the obligations under the Contract, including, without limitation, in these North Carolina General Terms and Conditions, the State shall have the right to impose liquidated damages per affected Project as described herein, issue a Stop Work Order requiring Vendor to immediately Stop Work on any or all of Vendor's Projects, demand return of expended funds, and/or terminate the Contract by giving at least five days written notice to the Vendor and specifying the effective date thereof. In the event of a Stop Work Order or a Contract termination, any or all finished or unfinished deliverables that are prepared by the Vendor under the Contract shall, at the option of the

State, become the property of the State until such time as the State can identify another Vendor to complete the work (and shall include any applicable Vendor license and permits to the extent necessary for the State to use such property), and the Vendor may be entitled to receive just and equitable compensation for any acceptable deliverable completed (or partially completed at the State's sole discretion) as to which such option is exercised. Notwithstanding, Vendor shall not be relieved of liability to the State for damages sustained by the State by virtue of any breach of the Contract, and the State may withhold any payment due the Vendor for the purpose of setoff until such time as the exact amount of damages due the State from such breach can be determined. The State, if failing to receive proper performance or provision of goods deliverables, or if documented Vendor Services performance issues exist, under this Contract, may make a claim upon the Vendor's surety. G.S. 143-52(a); 01 NCAC 05B.1521; G.S. 25-2-609. If this Contract contemplates deliveries or performance over a period of time, the State may terminate this Contract for convenience at any time by providing 30 days' notice in writing from the State to the Vendor. In that event, any or all finished or unfinished deliverables prepared by the Vendor under this Contract shall, at the option of the State, become its property, and under any applicable Vendor license and permits to the extent necessary for the State to use such property. If the Contract is terminated by the State for convenience, the State shall pay for those items or Services for which such option is exercised, less any payment or compensation previously made.

- c) The State may terminate this Contract, and any Scope of Work assigned under this Contract, immediately upon discovery of the Vendor's commission of fraud.
- d) This Contract may be terminated at any time by mutual agreement of the State and the Vendor, to be effective upon a date agreed to by the State and the Vendor.
- e) If funds for the project become unavailable for any reason, including without limitation, a change in state or federal laws, the State shall have the right to terminate this Contract, and any Scope of Work assigned thereto, after giving Vendor written notice of termination at least 5 calendar days in advance of the termination date. The notice of termination shall contain the effective termination date of this Contract. Upon notice, the Vendor shall not expend any funds without the State's express written authorization.
- f) The Vendor acknowledges and agrees that the rights and remedies of the State as set forth herein and elsewhere in this Contract are not exclusive and are in addition to any other rights and remedies provided by law.

3. INTERPRETATION, CONFLICT OF TERMS.

- a) The definitions in the Instructions to Vendors in the relevant solicitation for this Contract, and in 01 NCAC 05A.0112 are specifically incorporated herein.
- b) If federal funds are involved in the transactions under this Contract, the Vendor shall comply with all applicable state and federal requirements and laws, except where State requirements are more restrictive. See the additional federal requirements included in the "Federal Funds Provisions" section below.
- c) "Purchasing Agency" herein is as defined in 01 NCAC 05A.0112, except that if this Contract has been entered into by the NC Department of Administration, Division of Purchase and Contract (P&C) as indicated in the Contract (e.g., a State Term Contract), then P&C will then be a Purchasing Agency for the purposes herein and in the Federal Funds Provisions, below.
- d) Contracts made in contravention of General Statutes, Chapter 143, Article 3 and the Rules in 05 NCAC Chapter 5, are void. G.S. 143-58.
- e) In cases of conflict between specific provisions in this Contract and any other referenced documents, the Order of Precedence shall be (high to low) (1) any special terms and conditions specific to this Contract, including any negotiated terms; (2) requirements, specifications and administrative terms; (3) these NORTH CAROLINA GENERAL TERMS AND CONDITIONS, including the Federal Funds Provisions; (4)

Definitions and other provisions in INSTRUCTIONS TO VENDORS in this solicitation, which is specifically incorporated in this Contract; (5) PRICING, and (6) Vendor's Bid, to the extent specifically and mutually incorporated into this Contract.

- f) In the event of conflict of terms between applicable provisions of the Federal Funds Provisions and the other provisions of these North Carolina General Contract Terms and Conditions, the more restrictive provision will govern.

4. **GOVERNMENTAL RESTRICTIONS:** In the event any Governmental restrictions are imposed which necessitate alteration of the goods, material, quality, workmanship, or performance of the Services offered, prior to acceptance, it shall be the responsibility of the Vendor to notify the State Contract Lead or Administrator indicated in the Contract at once, in writing, indicating the specific regulation which requires such alterations. The State reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.

5. **AVAILABILITY OF FUNDS:** Any and all payments to the Vendor shall be dependent upon and subject to the availability of funds appropriated or allocated to the agency for the purpose set forth in the Contract.

6. **TAXES:** Any applicable taxes shall be invoiced as a separate item.

- a) G.S. 143-59.1 bars the Secretary of Administration from entering into Contracts with Vendors if the Vendor or its affiliates meet one of the conditions of G.S. 105-164.8(b) and refuses to collect use tax on sales of tangible personal property to purchasers in North Carolina. Conditions under G.S. 105-164.8(b) include: (1) Maintenance of a retail establishment or office, (2) Presence of representatives in the State that solicit sales or transact business on behalf of the Vendor and (3) Systematic exploitation of the market by media-assisted, media-facilitated, or media-solicited means. By execution of the proposal document the Vendor certifies that it and all of its affiliates, (if it has affiliates), collect(s) the appropriate taxes.
- b) The agency(ies) participating in the Contract are exempt from Federal Taxes, such as excise and transportation. Exemption forms submitted by the Vendor will be executed and returned by the using agency.
- c) Prices offered are not to include any personal property taxes, nor any sales or use tax (or fees) unless required by the North Carolina Department of Revenue.

7. **SITUS AND GOVERNING LAWS:**

- a) This Contract is made under and shall be governed by and construed in accordance with the laws of the State of North Carolina, including, without limitation, the relevant provisions of G.S. Chapter 143, Article 3, and the Rules in 01 NCAC Chapter 05, and any applicable successor provisions, without regard to its conflict of laws rules, and within which State all matters, whether sounding in Contract, tort or otherwise, relating to its validity, construction, interpretation and enforcement shall be determined. G.S. 22B-3.
- b) Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and its performance in accordance with the Contract, including those of federal, state, and local agencies having jurisdiction and/or authority, and including, without limitation, the applicable requirements in the Federal Funds Provisions, below.
- c) Non-resident Vendor corporations not formed under NC law must be domesticated in the Office of the NC Secretary of State in order to contract with the State of North Carolina. G.S. 55A-15-01.

8. **NON-DISCRIMINATION COMPLIANCE:**

- a) The Vendor will take affirmative action in complying with all State requirements and laws concerning fair employment and employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin or disability or rights, such as preserved by Governor Roy Cooper Order E.O. 24 or 25, and will take necessary action to ensure

that its internal employee policies and procedures are consistent with Executive Order #82 (Roy Cooper, December 6, 2018), which extends workplace protections and accommodations to pregnant employees.

- b) Federal Law, such as the following, applies as provided for therein: Titles VI and VII of the Civil Rights Act of 1964 (PL 88-352), and the regulations issued pursuant thereto (prohibiting discrimination on the basis race, color, national origin and ensuring that individuals are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age); Title IX of the Education Amendments of 1972 (codified as amended at 20 U.S.C. § 1681 et seq.) (prohibiting discrimination on the basis of sex); Titles I, II, III, IV, and V of the Americans with Disability Act of 1990 (prohibiting discrimination on the basis of disability); Section 504 of the Rehabilitation Act of 1973 (codified as amended at 29 U.S.C. § 794) (prohibiting discrimination on the basis of handicap); the Age Discrimination Act of 1975 (codified as amended at 42 U.S.C. § 6101 et seq.) (prohibiting age discrimination); and Section 109 of the Housing and Community Development Act of 1974, as amended.

9. **PAYMENT TERMS:** Payment terms are net not later than 30 days after receipt of a correct invoice or acceptance of goods, whichever is later. The Procuring Agency is responsible for all payments to the Vendor under the Contract. Payment by some agencies may be made by procurement card. If the Vendor accepts Visa, MasterCard, etc., from other customers, it shall accept procurement card payment by the State under the terms provided for the procurement card. 01 NCAC 05B.1523. If payment is made by procurement card, then payment for amounts then due may be processed immediately by the Vendor.

The State does not agree in advance, in contract, pursuant to Constitutional limitations, to pay costs such as interest, late fees, penalties or attorney's fees. This Contract will not be construed as an agreement by the State to pay such costs, and will be paid only as ordered by a court of competent jurisdiction.

10. **CONDITION AND PACKAGING:** Unless otherwise expressly provided by special terms and conditions or specifications in the Contract or by express, specific federal law or rule, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose, is newly manufactured, and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.

11. **INTELLECTUAL PROPERTY WARRANTY AND INDEMNITY:** Vendor shall hold and save the State, its officers, agents and employees, harmless from liability of any kind, including costs and expenses, resulting from infringement of the rights of any third party in any Services or copyrighted material, patented or patent-pending invention, article, device or appliance delivered in connection with the Contract.

- a) Vendor warrants to the best of its knowledge that:

- i) Performance under the Contract does not infringe upon any intellectual property rights of any third party; and
- ii) There are no actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party;

- b) Should any deliverables supplied by Vendor become the subject of a claim of infringement of a patent, copyright, trademark or a trade secret in the United States, the Vendor, shall at its option and expense, either procure for the State the right to continue using the deliverables, or replace or modify the same to become non-infringing. If neither of these options can reasonably be taken in Vendor's judgment, or if further use shall be prevented by injunction, the Vendor agrees to cease provision of any affected deliverables and refund any sums the State has paid Vendor for such deliverables and make every reasonable effort to assist the State in procuring substitute deliverables. If, in the sole opinion of the State, the cessation of use by the State of any such deliverables due to infringement issues makes the retention of other items acquired from the Vendor under this Agreement impractical, the State shall then have the option of terminating the Agreement, or applicable portions thereof, without penalty or termination charge; and Vendor agrees to refund any sums the State paid for unused Services or other deliverables.

- c) The Vendor, at its own expense, shall defend any action brought against the State to the extent that such action is based upon a claim that the deliverables supplied by the Vendor, their use or operation, infringe on a patent, copyright, trademark or violate a trade secret in the United States. The Vendor shall pay those costs and damages finally awarded or agreed in a settlement against the State in any such action. Such defense and payment shall be conditioned on the following:
 - i) That the Vendor shall be notified within a reasonable time in writing by the State of any such claim; and
 - ii) That the Vendor shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise provided, however, that the State shall have the option to participate in such action at its own expense.
- d) Vendor will not be required to defend or indemnify the State to the extent any claim by a third party against the State for infringement or misappropriation results solely from the State's material alteration of any Vendor-branded deliverables or Services, or from the continued use of the Services or other deliverables after receiving written notice from the Vendor of the claimed infringement.

12. ADVERTISING: Vendor agrees not to use the existence of the Contract or the name of the State of North Carolina as part of any commercial advertising or marketing of products or Services except as provided in 01 NCAC 05B.1516. A Vendor may inquire whether the State is willing to be included on a listing of its existing customers.

13. ACCESS TO PERSONS AND RECORDS:

- a) During, and after the term hereof during the relevant period required for retention of records by State law (G.S. 121-5, 132-1 *et seq.*, typically five years), the State Auditor and any Purchasing Agency's internal auditors shall have access to persons and records related to the Contract to verify accounts and data affecting fees or performance under the Contract, as provided in G.S. 143-49(9). However, if any audit, litigation or other action arising out of or related in any way to this project is commenced before the end of such retention of records period, the records shall be retained for one (1) year after all issues arising out of the action are finally resolved or until the end of the record retentions period, whichever is later.
- b) The following entities may audit the records of this contract during and after the term of the contract to verify accounts and data affecting fees or performance:
 - i. The State Auditor.
 - ii. The internal auditors of the affected department, agency or institution.
 - iii. The Joint Legislative Commission on Governmental Operations and legislative employees whose primary responsibility is to provide professional or administrative services to the Commission.
- c) The Joint Legislative Commission on Governmental Operations has the authority to:
 - i. Study the efficiency, economy and effectiveness of any non-State entity receiving public funds.
 - ii. Evaluate the implementation of public policies, as articulated by enacted law, administrative rule, executive order, policy, or local ordinance, by any non-State entity receiving public funds.
 - iii. Investigate possible instances of misfeasance, malfeasance, nonfeasance, mismanagement, waste, abuse, or illegal conduct by officers and employees of a non-State entity receiving, directly or indirectly, public funds, as it relates to the officer's or employee's responsibilities regarding the receipt of public funds.
 - iv. Receive reports as required by law or as requested by the Commission.
 - v. Access and review

1. Any documents or records related to any contract awarded by a State agency, including the documents and records of the contractor, that the Commission determines will assist in verifying accounts or will contain data affecting fees or performance; and
 2. Any records related to any subcontract of a contract awarded by a State agency that is utilized to fulfill the contract, including, but not limited to (i) records related to the drafting and approval of the subcontract, and (ii) documents and records of the contractor or subcontractor that the Commission determines will assist in verifying accounts or will contain data affecting fees or performance.
- d) The Joint Legislative Commission on Governmental Operations has the power to:
- i. Compel access to any document or system of records held by a non-State entity receiving, directly or indirectly, public funds, to the extent the documents relate to the receipt, purpose or implementation of a program or service paid for with public funds.
 - ii. Compel attendance of any officer or employee of any non-State entity receiving public funds, provided the officer or employee is responsible for implementing a program or providing a service paid for with public funds.
- e) Unless prohibited by federal law, the Commission and Commission staff in the discharge of their duties under this Article shall be provided access to any building or facility owned or leased by a non-State entity receiving public funds provided (i) the building or facility is used to implement a program or provide a service paid for with public funds and (ii) the access is reasonably related to the receipt, purpose, or implementation of a program or service paid for with public funds.
- f) Any confidential information obtained by the Commission shall remain confidential and is not a public record as defined in G.S. 132-1.
- g) Any document or information obtained or produced by Commission staff in furtherance of staff's duties to the Commission is confidential and is not a public record as defined in G.S. 132-1.
- h) A person who conceals, falsifies, or refuses to provide to the Commission any document, information, or access to any building or facility as required by this Article with the intent to mislead, impede, or interfere with the Commission's discharge of its duties under this Article shall be guilty of a Class 2 misdemeanor.

14. ASSIGNMENT OR DELEGATION OF DUTIES.

- a) As a convenience to the Vendor, the State may include any person or entity designated by the Vendor in writing as a joint payee on the Vendor's payment check. In no event shall such approval and action obligate the State to anyone other than the Vendor.
- b) If Vendor requests any assignment, or delegation of duties, the Vendor shall remain responsible for fulfillment of all Contract obligations. Upon written request, the State may, in its unfettered discretion, approve an assignment or delegation to another responsible entity acceptable to the State, such as the surviving entity of a merger, acquisition or a corporate reorganization if made as part of the transfer of all or substantially all of the Vendor's assets. 01 NCAC 05B.1507. Any purported assignment or delegation made in violation of this provision shall be void and a material breach of the Contract. G.S. 143-58.

15. INSURANCE: This section provides minimum insurance coverage rates that are applicable to most moderate risk solicitations. Agency Risk Analysis will determine if higher insurance coverage amounts are needed based on the likelihood and severity of exposure to the State. The analysis is documented in writing in the official file and considers the following non-exclusive factors:

1. Potential for damage to State property or property of a third party,
2. Potential for bodily injury to State employees or third parties,

3. Whether Vendor will transport State property, clients, or employees,
4. Use of a vehicle to accomplish the work or to travel to or from State locations,
5. Anticipated physical contacts of the Vendor with the State,
6. Anticipated number and activity of Vendor personnel within the State, and
7. Any other unique considerations that could result in harm, bodily injury, or property damage.

The Purchasing Agency has specified elsewhere in this Contract any increase in the minimum insurance coverage requirements below if the risk from the above factors is high.

a) REQUIREMENTS - Providing and maintaining adequate insurance coverage is a material obligation of the Vendor and is of the essence of the Contract. All such Insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the NC Commissioner of Insurance to do business in North Carolina. The Vendor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or the Contract. The limits of coverage under each insurance policy maintained by the Vendor shall not be interpreted as limiting the Vendor's liability and obligations or the indemnification requirements under the Contract. As provided above, a State agency is authorized, upon written evaluation and substantiation in the official file of the significant risk of bodily injury and/or property or other damage in the contract, to require and enforce higher coverage limits to mitigate the potential risk of liability to the State.

b) COVERAGE - During the term of the Contract, the Vendor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. At a minimum, the Vendor shall provide and maintain the following coverage and limits, subject to higher requirements by an agency after the risk analysis indicated above:

1. **For Small Purchases** as defined under North Carolina Administrative Code 01 NCAC 05A.0112 (35) and 05B.0301 (1), the minimum applicable insurance requirements for Worker's Compensation and Automobile Liability will apply as required by North Carolina law. The Purchasing Agency may require Commercial General Liability coverage consistent with the assessed risks involved in the procurement.
2. **For Contracts valued in excess of the Small Purchase threshold, but up to \$1,000,000.00 the following limits shall apply:**
 - i. **Worker's Compensation** - The Vendor shall provide and maintain Worker's Compensation Insurance, as may be required by the laws of North Carolina, as well as employer's liability coverage, with minimum limits of \$250,000.00, covering all of Vendor's employees who are engaged in any work under the Contract in North Carolina. If any work is sub-Contracted, the Vendor shall require the sub-contractor to provide the same coverage for any of its employees engaged in any work under the Contract within the State.
 - ii. **Commercial General Liability** - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$500,000.00 Combined Single Limit. Defense costs shall be in excess of the limit of liability.
 - iii. **Automobile** - Automobile Liability Insurance, to include liability coverage covering all owned, hired and non-owned vehicles, used within North Carolina in connection with the Contract. The minimum combined single limit shall be \$250,000 bodily injury and property damage; \$250,000 uninsured/under insured motorist; and \$2,500 medical payment.
3. **For Contracts valued in excess of \$1,000,000 the following limits shall apply:**
 - i. **Worker's Compensation** - The Vendor shall provide and maintain Worker's Compensation Insurance, as may be required by the laws of North Carolina, as well as employer's liability coverage, with minimum limits of \$500,000, covering all of Vendor's employees who are engaged

in any work under the Contract in North Carolina. If any work is sub-Contracted, the Vendor shall require the sub-contractor to provide the same coverage for any of its employees engaged in any work under the Contract within the State.

- ii. **Commercial General Liability** - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$1,000,000 Combined Single Limit. Defense costs shall be in excess of the limit of liability.
- iii. **Automobile** - Automobile Liability Insurance, to include liability coverage covering all owned, hired and non-owned vehicles, used within North Carolina in connection with the Contract. The minimum combined single limit shall be \$500,000 bodily injury and property damage; \$500,000 uninsured/under insured motorist; and \$5,000 medical payment.

16. GENERAL INDEMNITY:

- a) The Vendor shall indemnify, defend and hold and save the State, its officers, agents, and employees, harmless from liability of any kind, including all claims and losses accruing or resulting to any other person, firm, or corporation furnishing or supplying work, Services, materials, or supplies in connection with the performance of the Contract, and also from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the Vendor in the performance of the Contract that are attributable to the negligence or intentionally tortious acts of the Vendor, provided that the Vendor is notified in writing within 30 days from the date that the State has knowledge of such claims.
- b) The Vendor, at its own expense shall defend any action brought against the State, under this section. The Vendor shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise, provided, however, that the State shall have the option to participate in such action at its own expense.
- c) The Vendor represents and warrants that it shall make no claim of any kind or nature against the State's agents who are involved in the delivery or processing of Vendor deliverables or Services to the State.
- d) As part of this provision for indemnity, if federal funds are involved in this procurement, the Vendor warrants that it will comply with all relevant and applicable federal requirements and laws, and will indemnify, defend and hold and save the State harmless from any claims or losses resulting to the State from the Vendor's noncompliance with such federal requirements or law in the performance of this Contract. The representations and warranties in the preceding two sentences shall survive the termination or expiration of the Contract.
- e) The State does not participate in indemnification due to Constitutional restrictions, or arbitration, which effectively and unacceptably waives jury trial. *See, G.S. 22B-3, -10.*

17. ELECTRONIC PROCUREMENT:

- a) Purchasing shall be conducted through the Statewide E-Procurement Service. The State's third-party agent shall serve as the Supplier Manager for this E-Procurement Service. The Vendor shall register for the Statewide E-Procurement Service within two (2) business days of notification of award in order to receive an electronic purchase order resulting from award of this Contract.
- b) RESERVED. The Supplier Manager will capture an order from a State approved user, including the shipping and payment information, and submit the order in accordance with E-Procurement Service procedures. Subsequently, the Supplier Manager will send those orders to the appropriate Vendor on State Contract. The State or State-approved user, not the Supplier Manager, shall be responsible for the solicitation, bids received, evaluation of bids received, award of Contract, and the payment for goods delivered.
- c) Vendor shall at all times maintain the confidentiality of its username and password for the Statewide E-Procurement Services. Vendor shall be responsible for all activity and all charges by its agents or employees.

Vendor agrees not to permit a third party to use its E-Procurement Services account. If there is a breach of security through the Vendor's account, Vendor shall immediately change its password and notify the Supplier Manager of the security breach by email. Vendor shall cooperate with the State and the Supplier Manager to mitigate and correct any security breach.

- 18. SUBCONTRACTING:** The Vendor may subcontract the performance of required Services under the Contract. Upon request, Vendor shall identify its subcontractors to the State; identify any financial interest it has in any subcontractor to the State; and/or provide the State with complete copies of any agreements made by and between Vendor and any subcontractors. The Vendor remains solely responsible for the performance of its subcontractors. Subcontractors shall adhere to all applicable requirements, terms, and conditions set forth in this Contract and the subsequent Scope of Work. It may be required as a condition of award that an authorized officer or agent of a subcontractor sign a statement to the effect that the subcontractor has read, and will agree to abide by, Vendor's obligations under any contract awarded pursuant to this Solicitation. Any contracts made by the Vendor with a subcontractor shall include an affirmative statement that the State is an intended third party beneficiary of the Agreement; that the subcontractor has no agreement with the State; and that the State shall be indemnified by the Vendor for any claim presented by the subcontractor. Notwithstanding any other term herein, Vendor shall timely exercise its contractual remedies against any non-performing subcontractor and, when appropriate, substitute another subcontractor. **CONFIDENTIALITY:** Vendor information that cannot be shown to be, e.g., a trade secret, may be subject to public disclosure under the terms of the State Public Records Act (SPRA), beginning at G.S. 132.1. Blanket assertions of confidentiality are not favored, but confidentiality of specific material meeting one or more exceptions in the SPRA will be honored. Vendors are notified that if the confidentiality of material is challenged by other parties, the Vendor has the responsibility of defending the assertion of confidentiality. G.S. 143-52(a).
- 19. CARE OF STATE DATA AND PROPERTY:** Any State property, information, data, instruments, documents, studies or reports given to or prepared or assembled by or provided to the Vendor under the Contract shall be kept as confidential, used only for the purpose(s) required to perform the Contract and not divulged or made available to any individual or organization without the prior written approval of the State.
- The State's data and property in the hands of the Vendor shall be protected from unauthorized disclosure, loss, damage, destruction by a natural event or another eventuality. The Vendor agrees to reimburse the State for loss or damage of State property while in Vendor's custody. Such State Data shall be returned to the State in a form acceptable to the State upon the termination or expiration of this Agreement.
- The Vendor shall notify the State of any security breaches within 24 hours as required by G.S. 143B-1379. For further information, see, G.S. 75-60 *et seq.* **Notice** is given to the Vendor that the NC Department of Information Technology (DIT) has requirements relating to the security of the State network, and rules relating to the use of the State network, IT software and equipment, that the Vendor must comply with, as applicable. See, e.g., G.S. 143B-1376.
- 20. OUTSOURCING:** Any Vendor or subcontractor providing call or contact center services to the State of North Carolina or any of its agencies shall disclose to inbound callers the location from which the call or contact center services are being provided.
- If, after award of a Contract, and consistent with any applicable NC DIT security provisions, the Contractor wishes to relocate or outsource any portion of performance to a location outside the United States, or to Contract with a subcontractor for any such performance, which subcontractor and nature of the work has not previously been disclosed to the State in writing, prior written approval must be obtained from the State Purchasing Agency. Vendor shall give notice to the Purchasing Agency of any relocation of the Vendor, employees of the Vendor, subcontractors of the Vendor, or other persons providing performance under a State Contract to a location outside of the United States. See, G.S. 143-59.4.
- 21. ENTIRE AGREEMENT:** The Contract (including any documents mutually incorporated specifically therein) resulting from a relevant solicitation represents the entire agreement between the parties and supersedes all prior oral or

written statements or agreements. All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the Contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.

- 22. ELECTRONIC RECORDS:** The State will digitize all Vendor responses to the relevant solicitation, if not received electronically, as well as any awarded Contract together with associated procurement-related documents. These electronic copies shall constitute a preservation record and shall serve as the official record of this procurement with the same force and effect as the original written documents comprising such record. Any official electronic copy, printout or other output readable by sight shown to reflect such record accurately shall constitute an "original."
- 23. AMENDMENTS:** This Contract may be amended only by a written amendment duly executed by the State and the Vendor.
- 24. NO WAIVER:** Notwithstanding any other language or provision in the Contract or in any Vendor-supplied material, nothing herein is intended nor shall be interpreted as a waiver of any right or remedy otherwise available to the State under applicable law. The waiver by the State of any right or remedy on any one occasion or instance shall not constitute or be interpreted as a waiver of that or any other right or remedy on any other occasion or instance.
- 25. FORCE MAJEURE:** Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including, without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, other catastrophic epidemic or pandemic, natural event or Act of God.
- 26. SOVEREIGN IMMUNITY:** Notwithstanding any other term or provision in the Contract, nothing herein is intended nor shall be interpreted as waiving any claim or defense based on the principle of sovereign immunity or other State or federal constitutional provision or principle that otherwise would be available to the State under applicable law.
- 27. FEDERAL FUNDS PROVISIONS**

Where federal funds are utilized in connection with this procurement, and to the extent applicable and absent stricter or controlling State provisions, the following federal provisions (in addition to the North Carolina General Terms and Conditions above) may apply consistent with Uniform Guidance in 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, and its Appendix II and HUD requirements. Relevant federal authorities may require additional provisions depending on the scope and context of the Contract. Failure or unwillingness of the Vendor to continually meet any of these requirements, as applicable, may result in Contract termination.

Any links to websites not maintained by the State are provided as a courtesy. The State does not warrant or guarantee the accuracy of the hyperlink or the information contained therein.

- a) **No governmental non-competes.** Vendor shall not impose or enforce any non-competition agreement upon the employees included in Vendor's bid that would prevent those employees from accepting any offer of employment from the State of North Carolina outside of the first Term of the Contract. By executing this Contract, the Vendor affirms this condition. This affirmation is a material condition for the State's award of any work under this Contract.
- b) **Program Monitoring.** Vendor agrees to assist and cooperate with the Federal grantor or funding agency and the relevant Purchasing Agency or their duly designated representatives in the monitoring of the project or projects to which this Contract relates, and to provide in form and manner approved by the Purchasing Agency such monitoring reports, progress reports, and the like as may be required and to provide such reports at the times specified.
- c) **Remedies and Termination,** For purposes of this section the State Remedies and Termination provisions above apply as written.

d) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708).Compliance with the Contract Work Hours and Safety Standards Act.

1. *Overtime requirements.* No Vendor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in 29 C.F.R. §5.5(b)(1) the Vendor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Vendor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in 29 C.F.R. §5.5(b)(1), in the sum of \$33 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 C.F.R. §5.5(b)(1).
3. *Withholding for unpaid wages and liquidated damages.* The Purchasing Agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Vendor or subcontractor under any such contract or any other Federal contract with the same prime Vendor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Vendor, such sums as may be determined to be necessary to satisfy any liabilities of such Vendor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in 29 C.F.R. §5.5(b)(2).
4. *SubContracts.* The Vendor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of 29 C.F.R. §5.5 and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Vendor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 C.F.R. §5.5(b)(2) through (4).

e) CLEAN AIR ACT AND THE FEDERAL WATER POLLUTION CONTROL ACT.Clean Air Act

1. The Vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The Vendor agrees to report each violation to the Purchasing Agency and understands and agrees that the Purchasing Agency will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The Vendor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance.

Federal Water Pollution Control Act

1. The Vendor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. The Vendor agrees to report each violation to the Purchasing Agency and understands and agrees that the Purchasing Agency will, in turn, report each violation as required to assure notification to the federal agency providing funds hereunder, and the appropriate Environmental Protection Agency Regional Office.
3. The Vendor agrees that these requirements will be included in each subcontract exceeding \$150,000

financed in whole or in part with Federal assistance.

f) Debarment and Suspension.

1. This Contract, if federal funding is used, is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Vendor is required to verify that none of the Vendor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
2. The Vendor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
3. This certification is a material representation of fact relied upon by a federal agency providing federal funds herein and the Purchasing Agency. If it is later determined that the Vendor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to federal agency providing federal funds herein and the Purchasing Agency, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
4. The Vendor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of the Contract resulting from a relevant solicitation herein. The Vendor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

g) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) (as Amended).

To the extent applicable, Vendors that apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal Contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

Required Certification. Vendors must sign and submit to the Purchasing Agency the certification attached hereto as Attachment F and, if applicable, complete the disclosure form in Attachment G. See the latest version of "Certification for Contracts, Grants, Loans, and Cooperative Agreements" found at <https://ncadmin.nc.gov/documents/vendor-forms>.

h) Procurement of Recovered Materials.

1. Unless specified otherwise in the Contract, in the performance of this Contract, the Vendor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
 - Competitively within a timeframe providing for compliance with the Contract performance schedule;
 - Meeting Contract performance requirements; or
 - At a reasonable price.
2. Information about this requirement, along with the list of EPA designated items, is available at EPA's Comprehensive Procurement Guidelines web site: <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
3. The Vendor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

- i) **Access to Records.** In addition to the North Carolina General Contract Terms & Conditions section entitled **"ACCESS TO PERSONS AND RECORDS"** included in this Contract, the following access to records requirements apply to this Contract:
1. The Vendor agrees to provide the Purchasing Agency, the Administrator of the federal agency providing funds hereunder, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Vendor which are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts, and transcriptions.
 2. The Vendor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
 3. The Vendor agrees to provide the Administrator of the federal agency providing funds hereunder or his authorized representative access to construction or other work sites pertaining to the work being completed under the Contract.
 4. In compliance with the Disaster Recovery Act of 2018, the Purchasing Agency and the Vendor acknowledge and agree that no language in this Contract is intended to prohibit audits or internal reviews by the Administrator of the federal agency providing funds hereunder or the Comptroller General of the United States.
- j) **Modifications to Contract.** Modifications to the Contract are governed by the North Carolina General Contract Terms & Conditions section above entitled **"AMENDMENTS,"** except as approval and signature by any federal official may also be required.
- k) **Records Retention.** All records required to be kept on the project shall be maintained for at least eight (8) years after final payments and until all other pending matters under the grant for this project have been closed. However, if any audit, litigation or other action arising out of or related in any way to this project is commenced before the end of the eight (8) year period, the records shall be retained for one (1) year after all issues arising out of the action are finally resolved or until the end of the eight (8) year period, whichever is later.
- l) **Energy Efficiency.** All participants in the projects funded hereby shall recognize mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (PL 94-163).
- m) **Program Fraud and False or Fraudulent Statements or Related Acts.** Vendor acknowledges that 31 U.S.C. Chapter 38 (Administrative Remedies for False Claims and Statements) applies to its actions pertaining to the Contract.
- n) **No Obligation by Federal Government.** The Federal Government is not a party to this Contract and is not subject to any obligations or liabilities to the non-Federal entity, Vendor, or any other party pertaining to any matter resulting from the Contract.
- o) **Compliance with Federal Law, Regulations, and Executive Orders.** This is an acknowledgement that federal financial assistance will be used to fund all or a portion of the Contract. The Vendor will comply with all applicable Federal law, regulations, executive orders, the policies of the federal agency(ies) providing funding, procedures, and directives.
- p) **Federal Seals, Logos, and Flags.** In addition to the prohibitions of the North Carolina General Contract Terms & Conditions section above entitled **"ADVERTISING,"** the Vendor shall not use the seal(s), logos, crests, or reproductions of flags of a federal agency providing funding herein, or likenesses of federal agency officials without specific pre-approval of the relevant federal agency.
- q) **System for Awards Management.** Vendor shall be responsible to ensure that it has checked the federal System for Awards Management (SAM) <https://www.sam.gov/SAM> and the State Debarred Vendors Listing, <https://ncadmin.nc.gov/documents/nc-debarred-vendors> to verify that Contractors or sub-Recipients have

not been suspended or debarred from doing business with federal or State government.

r) **Section 3 Clause.** Vendor will comply with the following clauses from 24 CFR 135.38:

The Contractor shall comply with the provisions of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 USC 1701u, and implementing its regulations at 24 CFR Part 75, as expressed below:

1. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended by the Housing and Community Development Act of 1992 (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
2. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 75, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.
3. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
4. The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 75.
5. The contractor will certify that any vacant employment positions, including training positions that are filled (1) after the contractor is selected by before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 75.
6. Noncompliance with HUD's regulations in 24 CFR part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
7. With respect to work performed in connection with Section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).

- s) **Non-Discrimination.** Vendor will comply with all Federal statutes relating to non-discrimination. These include but are not limited to:
1. Title VI of the Civil Rights Act of 1964 (42 U.S.C 2000(d)) and implementing regulations (24 CFR part 1), which provide that no person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or otherwise be subject to discrimination under any program or activity that receives Federal financial assistance.
 2. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as amended, and implementing regulations at 24 CFR part 8, the American Disabilities Act (42 U.S.C. §§ 12101 et.seq.), and implementing regulations at 28 CFR part 35 or 36, as applicable, and the Age Discrimination Act of 1975 (42 U.S.C. §§ 6101-6107) as amended, and implementing regulations at 24 CFR part 146, which together provide that no person in the United States shall, on the grounds of disability or age, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity that receives Federal financial assistance.
 3. The Fair Housing Act (42 U.S.C. 3601- 19), as amended, and the implementing regulations at 24 CFR part 100, which prohibit discrimination in housing on the basis of race, color, religion sex (including gender identity and sexual orientation), disability, familial status, or national origin and will affirmatively further fair housing, will apply.
 4. Title IX of the Education Amendments of 1972, as amended (20 USC §§ 1681 – 1683, and 1685-1686), which prohibits discrimination on the basis of sex.
 5. The Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended relating to nondiscrimination on the basis of drug abuse.
 6. The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism.
 7. §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C §§ 290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records.
 8. Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental, or financing of housing.
 9. Any other applicable Federal nondiscrimination requirements, including those listed at 24 CFR §§ 5.105(a) and 5.106 as applicable.
- t) **URA.** The acquisition and relocation requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601) and implementing regulations at 49 CFR part 24 and, as applicable, Section 104(d) of the Housing and Community Development Act of 1974 (42 U.S.C. 5304(d)) and implementing regulations at 24 CFR part 42, subpart A, will apply.
- u) **National Environmental Policy Act.** The environmental requirements of the National Environmental Policy Act (42 U.S.C. 4321 et.seq.) and related Federal authorities prior to the commitment or expenditure of funds for property will apply.
- v) **Plans, supervision, and reports.** Vendor will comply with HUD requirements with regard to the drafting, reviewing and approval of construction plans and specifications. Vendor will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by HUD or the State.
- w) **Davis-Bacon Act.** Vendor will comply with the David-Bacon Act, as amended (40 U.S.C. 3141-3148), if required by the federal program legislation, in Construction contracts involving an excess of \$2000, and

subject to any other federal program limitations, all laborers and mechanics must be paid at a rate not less than those determined by the Secretary of Labor to be the prevailing wages. These wage rates are a federally mandated minimum only, and will be superseded by any State or local requirement mandating higher wage rates. Vendor also agrees to comply with Department of Labor Regulations pursuant to the Davis-Bacon Act found in 29 CFR Parts 1, 3, 5 and 7 which enforce statutory labor standards provisions. Wage determinations are available at <https://sam.gov/wage-determinations>.

- x) **Lead Based Paint.** Vendor will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.), which prohibits the use of lead-based paint in construction or rehabilitation of residence structures, and HUD's lead based paint regulations at 24 CFR Part 35.
- y) **Copeland Act.** Vendor will comply, as applicable, with the Copeland Act (40 U.S.C. §§ 276c and 18 U.S.C. §874).
- z) **Environmental.** Vendor will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91- 190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
- aa) **Wild and Scenic Rivers Act of 1968.** Vendor will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- bb) **Preservation.** Vendor will assist HUD and the State in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq).
- cc) **Audits.** Vendor will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and 2 CFR Part 200 Subpart F Audit Requirements.

ATTACHMENT D: LOCATION OF WORKERS UTILIZED BY VENDOR

In accordance with NC General Statute 143-59.4, the Vendor shall detail the location(s) at which performance will occur, as well as the manner in which it intends to utilize resources or workers outside of the United States in the performance of this Contract. The State will evaluate the additional risks, costs, and other factors associated with such utilization prior to making an award. Please complete items a, b, and c below.

a) Will any work under this Contract be performed outside the United States?

☐ YES ☒ NO

If the Vendor answered "YES" above, Vendor must complete items 1 and 2 below:

1. List the location(s) outside the United States where work under this Contract will be performed by the Vendor, any sub-Contractors, employees, or other persons performing work under the Contract:

2. Describe the corporate structure and location of corporate employees and activities of the Vendor, its affiliates or any other sub-Contractors that will perform work outside the U.S.:

b) The Vendor agrees to provide notice, in writing to the State, of the relocation of the Vendor, employees of the Vendor, sub-Contractors of the Vendor, or other persons performing services under the Contract outside of the United States

☒ YES ☐ NO

NOTE: All Vendor or sub-Contractor personnel providing call or contact center services to the State of North Carolina under the Contract **shall** disclose to inbound callers the location from which the call or contact center services are being provided.

c) Identify all U.S. locations at which performance will occur:

North Carolina

ATTACHMENT E: HISTORICALLY UNDERUTILIZED BUSINESSES INFORMATION

The State is committed to retaining Vendors from diverse backgrounds, and it invites and encourages participation in the procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. In particular, the State encourages participation by Vendors certified by the State Office of Historically Underutilized Businesses, as well as the use of HUB-certified vendors as subcontractors on State contracts.

Historically Underutilized Businesses (HUBs) consist of minority, women and disabled business firms that are at least fifty-one percent owned and operated by an individual(s) of the categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled.

Pursuant to G.S. 143B-1361(a), 143-48 and 143-128.4, the State invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. This includes utilizing subcontractors to perform the required functions in this RFP. Any questions concerning NC HUB certification, contact the [North Carolina Office of Historically Underutilized Businesses](#) at (919) 807-2330. The Vendor shall respond to question a) and b) below.

a) Is Vendor a Historically Underutilized Business? ☒ Yes ☐ No

b) Is Vendor Certified with North Carolina as a Historically Underutilized Business? ☒ Yes ☐ No

ATTACHMENT F: CERTIFICATION FOR CONTRACTS, GRANTS, LOANS AND COOPERATIVE AGREEMENTS

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and Contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Vendor, Locke-Lane Construction, Inc., certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Vendor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.



Signature of Vendor's Authorized Official

Andrew Sherrill President
Name and Title of Vendor's Authorized Official

5-8-2025
Date

ATTACHMENT G: DISCLOSURE OF LOBBYING ACTIVITIES

The Disclosure of Lobbying Activities form, is located at <https://www.doa.nc.gov/pandc/onlineforms/form-omb-standard-form-III-7-2020/download>.

ATTACHMENT H: EXPERIENCE, QUALIFICATIONS, REFERENCES

Complete one form for each of up to three (3) examples of **CDBG-DR housing engagements** delivered by the proposing General Contractor (prime contractor). Subcontractor qualifications will not be considered. Client Points of Contact must have an adequate understanding of the services delivered. **Reference points will not be awarded if the client cannot be contacted with the contact information provided.** If the program example provided is not for CDBG-DR single family housing, then the program example will be considered non-responsive. The proposing entity must submit at least one minimally qualified program example for award consideration. **Each program example can earn up to 15 points for a total maximum score of 45 points.**

Example 1: CDBG-DR Housing Engagements Delivered	
Client Name:	Homeowner: Hytha Marshall
Program:	NCORR CDBG-DR
Client Point of Contact:	Trace Allard
POC Contact Information (email and phone):	Cell: 919-500-0307 Email: trace.allard@ncdps.gov
Total Number of Homes Completed:	1
Brief Description of Services Rendered:	<p>Rehabilitation of the home located at 2068 Porter Road, Currie, NC 28435. Repairs included but were not limited to:</p> <ul style="list-style-type: none"> - Floor joist repair - Drywall removal & replacement - Exterior siding removal & replacement - Plumbing upgrades - Bathroom remodel - Electrical Upgrade - Subfloor removal & replacement - New flooring throughout

Example 2: CDBG-DR Housing Engagements Delivered	
Client Name:	APP-06833 + APP-06760
Program:	NCORR CDBG-DR
Client Point of Contact:	Dana Phillips
POC Contact Information (email and phone):	Mobile Phone #: 910-850-1234 dphillips@waccamawdermatology.com
Total Number of Homes Completed:	2 Awarded
Brief Description of Services Rendered:	Reconstruction of Single family Homes. Scope of work included demolition + reconstruction of two residences impacted by natural disaster.

Example 3: CDBG-DR Housing Engagements Delivered	
Client Name:	Patricia Williams (Leicester, NC) Tammy Gurley (Burnsville, NC) Chuck Krohn (Burnsville, NC)
Program:	OSBM - Disaster Recovery
Client Point of Contact:	Kristin Moyle
POC Contact Information (email and phone):	Mobile Phone #: 919-608-6915 Email: kristin.moyle@ncdps.gov
Total Number of Homes Completed:	3
Brief Description of Services Rendered:	<p>Reconstruction of three single family homes in Western, NC impacted by Hurricane Fred in 2021.</p> <p>Scope of work included:</p> <ul style="list-style-type: none"> - Demolition - Site rehabilitation - Reconstruction of homes using CLT construction for the floor & wall system.



May 08, 2025

**Locke-Lane Construction Company, Inc.
5063 Taylorsville Highway, Stony Point, NC 28678 | 704-585-6625**

**State of North Carolina Department of Commerce | Division of Community Revitalization
Re: RFP #Doc1539254856 – Residential Reconstruction Services**

To Whom It May Concern,

Locke-Lane Construction Company, Inc. is pleased to submit our proposal in response to RFP #Doc1539254856 issued by the North Carolina Department of Commerce, Division of Community Revitalization, for Residential Reconstruction Services. Locke-Lane Construction is the largest certified Disabled Veteran Owned Construction Company in North Carolina. Locke-Lane is a proud Service-Disabled Veteran-Owned Small Business (SDVOSB), Disadvantaged Business Enterprise (DBE), and Historically Underutilized Business (HUB), with more than 17 years of experience in emergency infrastructure and residential reconstruction projects across North Carolina.

Locke-Lane Construction is actively engaged in the ongoing disaster recovery mission of the State of North Carolina and is currently managing seven residential reconstruction contracts. Three of these were awarded under the North Carolina Office of State Budget and Management (OSBM)- Disaster Recovery, now transitioned to the Department of Public Safety, Division of Emergency Management, Hazard Mitigation. These contracts are a part of the long-term recovery efforts in response to Hurricane Fred (2021) and include one home in Leicester, NC and two in Burnsville, NC. In parallel, we are executing four additional contracts in collaboration with Purple Heart Homes Inc. to build homes for veterans in New Bern, NC and Eden, NC—two in each location. Our active role in these projects demonstrates our ability to deliver safe, durable, and cost-effective housing for families impacted by natural disasters.

To enhance the long-term value and resiliency of these residential homes, Locke-Lane has partnered with Evergreen CLT, an organization that shares our commitment to building sustainable and affordable housing to assist in new home reconstruction. Locke-Lane Construction has a certified manufacturing facility in Stony Point, NC where the structural panels are constructed using North Carolina sourced yellow pine. Through this collaboration, we are able to deliver structures that exceed minimum code standards in energy efficiency, material integrity, and overall durability. Locke-Lane ensures that disaster-impacted families are not only restored to safe living conditions, but are also equipped with homes designed to withstand future environmental challenges.

Our experience extends well beyond residential rebuilding. Locke-Lane Construction has led multiple emergency infrastructure projects that support community safety and access in the wake of natural disasters. We have completed culvert and bridge replacement projects that were critical to restoring essential roadways, mitigating flood risks, and reestablishing local transportation networks. Our portfolio of completed culvert and bridge infrastructure work includes:

North Carolina Office of State Budget and Management (OSBM)- Disaster Recovery Projects

Reconstruction Project (Winslow II Floorplan) – Brookshire Rd, Leicester, NC (2025)
Reconstruction Project (Cameron II Floorplan) – State Hwy 80S, Burnsville, NC (2025)
Reconstruction Project (Cameron II Floorplan) – Little Creek Rd, Burnsville, NC (2025)
Scardo Culvert Removal and Bridge Replacement, Fairview, NC (2023)
Swartwood Bridge Removal and Bridge Replacement, Fairview, NC (2023)
Cordle Bridge Removal and Replacement, Canton, NC (2022)
Tracee Reeves Bridge Deck and Drainage Improvements, Canton, NC (2022)
Daniel Holladay Culvert and Retaining Wall Replacement, Arden, NC (2022)
George Reidesel Culvert Replacement, Weaverville, NC (2023)
Barbara Buchanon Site Grading and Storm Drain Piping, Marion, NC (2022)
Tamara Arbogast Culvert Replacement and Asphalt Paving, Marshall, NC (2023)
Alex Shields Culvert Replacement, Candler, NC (2023)
Dewey Williams Culvert Replacement, Burnsville, NC (2023)
Elaine Price Culvert Replacement, Leicester, NC (2023)

Our ability to respond quickly, work within the strict requirements of state-funded programs, and manage both residential and infrastructure recovery projects underscores our reliability, versatility, and commitment to the communities we serve. Each project has strengthened our ability to coordinate with homeowners, municipalities, and state agencies while navigating the complexities inherent to disaster recovery.

Locke-Lane Construction takes pride in serving the people of North Carolina during their most challenging times. We understand the responsibility of rebuilding homes and infrastructure not only as a technical service, but as a human commitment to safety, dignity, and long-term resilience. We are honored to offer our expertise in response to this request for proposal and look forward to the opportunity to continue contributing to North Carolina's recovery efforts.

Respectfully,



Makayla Warren
Locke-Lane Construction, Inc.

7.1 | Vendor Information

Company Overview

Locke-Lane Construction Company, Inc. is a North Carolina-based, licensed general contractor with more than 20 years of experience delivering high-quality construction services across residential, infrastructure, and commercial sectors. We are a Service-Disabled Veteran-Owned Small Business (SDVOSB), Disadvantaged Business Enterprise (DBE), and Historically Underutilized Business (HUB). Annually, we complete over \$35 million in construction projects, supported by a full-time staff and fleet of owned equipment that allows us to self-perform key scopes and maintain control of cost and schedule.

While Locke-Lane is well known for our residential reconstruction services, we are a full-scale contractor with active commercial and infrastructure work. Our portfolio includes projects for major clients such as Duke Energy, local municipalities, and Google Data Center Work, in addition to state and federally funded disaster recovery programs. This diversity in experience enhances our operational resilience and allows us to apply industry best practices to housing recovery efforts.

Disaster Housing Reconstruction Experience

Locke-Lane Construction is currently managing **seven active residential reconstruction contracts** across North Carolina:

- Rehabilitation of a Residence in Currie, NC with the North Carolina Office of Recovery and Resiliency
- Three homes under contract with the North Carolina Office of State Budget and Management (OSBM) / Disaster Recovery-now under the Department of Public Safety, Division of Emergency Management, Hazard Mitigation-as part of the Hurricane Fred (2021) recovery effort. These homes are located in Leicester, NC and Burnsville, NC and are progressing on schedule.
- Four additional homes through a partnership with Purple Heart Homes, serving veterans in New Bern, NC and Eden, NC.

Our team handles permitting, inspections, environmental compliance, electrical, construction management and homeowner coordination directly. This in-house capability eliminates excessive reliance on subcontractors and ensuring faster mobilization and tighter schedule control.

Field Capacity and Self-Performance Capabilities

Unlike many residential-focused firms, Locke-Lane owns and operates a fleet of construction equipment and employs a skilled labor force capable of self-performing many project scopes. This includes site development, grading, framing, concrete, utility installation, and finishes. We also have an Electrical Division which enables us to complete our homes on schedule with no subcontractor delay. This internal capacity gives us flexibility to meet aggressive timelines and quickly adapt to on-the-ground needs, which is particularly critical in post-disaster environments.

Innovation Through Partnership: Evergreen CLT

To further reduce delivery timelines and increase the durability of reconstructed homes, Locke-Lane has partnered with **Evergreen CLT**, a regional leader in sustainable building materials. Their **Cross-Laminated Timber (CLT)** systems allow for expedited home assembly—with dry-in (from masonry foundation to roofing) achievable in **10 days or less**. This system enables faster occupancy for families and enhances long-term resilience through high-performance, energy-efficient structures.

Emergency Infrastructure Experience

Locke-Lane has also managed a wide range of emergency infrastructure projects tied to storm damage and erosion control. These include culvert and bridge replacements essential to restoring transportation and drainage in disaster-affected communities. Examples include:

North Carolina Office of State Budget and Management (OSBM)- Disaster Recovery Projects

- Reconstruction Project (Winslow II Floorplan) – Brookshire Rd, Leicester, NC (2025)
- Reconstruction Project (Cameron II Floorplan) – State Hwy 80S, Burnsville, NC (2025)
- Reconstruction Project (Cameron II Floorplan) – Little Creek Rd, Burnsville, NC (2025)
- Scardo Culvert Removal and Bridge Replacement, Fairview, NC (2023)
- Swartwood Bridge Removal and Bridge Replacement, Fairview, NC (2023)
- Cordle Bridge Removal and Replacement, Canton, NC (2022)
- Tracee Reeves Bridge Deck and Drainage Improvements, Canton, NC (2022)
- Daniel Holladay Culvert and Retaining Wall Replacement, Arden, NC (2022)
- George Reidesel Culvert Replacement, Weaverville, NC (2023)
- Barbara Buchanon Storm Drain and Grading, Marion, NC (2022)
- Tamara Arbogast Culvert and Paving, Marshall, NC (2023)
- Alex Shields Culvert Replacement, Candler, NC (2023)
- Dewey Williams Culvert Replacement, Burnsville, NC (2023)
- Elaine Price Culvert Replacement, Leicester, NC (2023)

These projects were completed on time and in compliance with state and local requirements, many in hard-to-access and flood-prone areas. Our fleet of construction equipment to include tracked dump trucks allow us to carry construction materials and build access roadways to adversely affected areas.

Conclusion

Locke-Lane Construction is a proven, scalable, and mission-aligned vendor with the infrastructure, experience, and partnerships to deliver high-volume reconstruction services statewide. We combine the personal service and responsiveness of a North Carolina-based firm with the operational depth to complete complex projects efficiently and to the highest standard. We are ready and fully capable of fulfilling the scope of RFP #Doc1539254856.

7.2 | Company Narrative

Locke-Lane Construction Company, Inc. is a full-service general contractor with extensive experience in disaster recovery and residential reconstruction across North Carolina. We bring the structural capacity, technical depth, and program familiarity required to deliver the services outlined in this RFP.

Core Strengths and Competitive Advantages

- 1. Experience with State-Funded Disaster Programs**

Locke-Lane has successfully performed work under the North Carolina Office of State Budget and Management (OSBM) / Disaster Recovery and the Department of Public Safety's Division of Emergency Management. We also worked with the North Carolina Office of Recovery and Resiliency (NCORR) and its housing program structure. In 2023, we completed rehabilitation projects through NCORR demonstrating our ability to meet their technical standards and reporting requirements. We are well-versed in program-specific expectations, including environmental review compliance, homeowner coordination, schedule reporting, and adherence to Davis-Bacon wage requirements.

- 2. Self-Performance with Internal Resources**

Locke-Lane is equipped with its own fleet of heavy equipment, licensed electricians and full-time construction crews. This reduces our reliance on subcontractors, allows tighter control over project schedules, and ensures consistency in quality across jobs. We self-perform key scopes of work including site development, foundations, framing, electrical and utilities.

- 3. Partnership with Evergreen CLT**

To further enhance delivery speed and structural durability, Locke-Lane has partnered with Evergreen CLT. Their Cross-Laminated Timber (CLT) systems allow us to dry-in homes—from foundation to roof—within 10 days, significantly shortening construction timelines while delivering high-performance, sustainable homes to disaster-impacted families.

- 4. Commercial and Infrastructure Capacity**

Locke-Lane performs approximately \$35 million in construction annually, including projects for Duke Energy, Google, and local municipalities. This diversified portfolio enables us to apply commercial-level field management and logistics to residential recovery programs, supporting scalability and resilience.

- 5. Strong Financial and Bonding Position**

Locke-Lane maintains an \$80 million bonding capacity, positioning us to confidently support multi-home programs and contract structures without overextension.

Demonstrated Capacity and Programmatic Experience

Over the past three years, Locke-Lane has delivered and actively managed multiple residential reconstruction projects under live program conditions, including disaster recovery efforts in coordination with state agencies and nonprofit partners. Our demonstrated program capacity includes:

- **Current Program (NCORR):** Awarded 3 separate projects funded by CDBG-DR (included one rehabilitation and two reconstruction projects)
- **Current Program (OSBM / Hurricane Fred):** 3 homes currently under construction
- **Current Program (Purple Heart Homes):** 4 homes under contract and sitework underway
- **Typical Assignment Volume:** 4–6 homes simultaneously under a single program
- **Annual Delivery Capacity:** 12-15 completed homes per year under one program
- **Subcontractor Oversight:** Managed through dedicated PMs with a mix of in-house and partner trades
- **Project Types:** New construction, reconstruction, infrastructure support, and rehabilitation

Locke-Lane is a qualified, well-equipped partner capable of delivering consistent results across disaster recovery programs. Our experience with NCORR, OSBM, and DEM—as well as our ability to self-perform work and manage multiple projects at once—makes us an ideal fit for this RFP.

7.3 | Company Profile

a) Ownership Structure and Operating Model

Locke-Lane Construction, Inc. is a privately held corporation, with no wholly-owned subsidiaries, affiliates, or joint ventures. The company is independently owned and operated. All services proposed under this Solicitation will be performed directly by Locke-Lane Construction, Inc., using a combination of in-house construction teams and local, licensed trade subcontractors. Locke-Lane will oversee all aspects of performance including project management, field execution, scheduling, and compliance from its Stony Point, NC headquarters.

b) Year Established and Legal Organization

Locke-Lane Construction, Inc. was established in 2008 and is organized as a corporation under the laws of the State of North Carolina.

c) Headquarters and Service Area

- **Headquarters:** 5063 Taylorsville Highway, Stony Point, NC, 28678
- **Service Area:** All of North Carolina; Licensed in NC, SC, GA, and VA
The company's centralized office in Stony Point serves as the administrative and operational base for all work performed under disaster recovery and general contracting programs.

d) Staffing

Locke-Lane employs 36 full-time personnel, all of whom are based in the Stony Point / Statesville, NC area. Our internal workforce includes project managers, field supervisors, licensed electricians, skilled laborers, equipment operators, and administrative support. Project needs beyond our in-house staff are fulfilled through a prequalified network of local subcontractors.

e) Contract Point of Contact

Andrew Sherrill
 CEO / President
 Locke-Lane Construction, Inc.
 5063 Taylorsville Highway
 Stony Point, NC 28678
 Email: dsherrill@lockelaneconstruction.com
 Phone: 704-585-6625
 Fax: 704-585-6640

f) Experience with the State of North Carolina

Locke-Lane Construction has extensive experience under state contracts related to disaster recovery and reconstruction. We are currently engaged in residential construction projects under the North Carolina Office of State Budget and Management (OSBM), and the Department of Public Safety Division of Emergency Management, including:

- Three reconstruction projects related to Hurricane Fred (2021) in Burnsville and Leicester, NC
- A completed rehabilitation project through the North Carolina Office of Recovery and Resiliency (NCORR) in Currie, NC
- Three NCORR reconstruction contracts awarded in 2023 (included one rehabilitation and two reconstruction projects)

g) Experience with CDBG-Funded Residential Construction

Locke-Lane Construction has direct experience with residential construction projects funded through the Community Development Block Grant – Disaster Recovery (CDBG-DR) program, a federal HUD initiative designed to help communities recover from presidentially declared disasters by rebuilding housing, infrastructure, and local economies.

Locke-Lane completed a rehabilitation project in Currie, NC under the administration of the North Carolina Office of Recovery and Resiliency (NCORR). This project was completed with exemplary satisfaction and well within the expected timeline, demonstrating our ability to perform under CDBG-DR program standards.

Also in 2023, Locke-Lane was awarded two additional reconstruction contracts through NCORR.

Additionally, although the North Carolina Office of State Budget and Management (OSBM) administers its recovery efforts using state funds rather than CDBG-DR, the structure and requirements of their programs closely mirror those of federally funded CDBG-DR work. Locke-Lane has ongoing reconstruction contracts under OSBM related to Hurricane Fred, which have required us to meet the same standards in program documentation, homeowner engagement, reporting, and quality control as CDBG-DR funded projects.

To support rapid and resilient construction under these programs, Locke-Lane, in partnership with Evergreen CLT, owns engineered stamped (PE) CLT construction drawings for three of the most commonly used home models in the NCORR disaster recovery housing program:

- Haywood II Ranch
- Winslow II
- Cameron II

These drawings were developed by Tightlines Designs for the CDBG-DR NCORR Program, can have an unlimited production with no additional design costs and are ready for immediate deployment. By owning the Engineered Stamped CLT drawings with unlimited production rights, Locke-Lane is uniquely prepared as a partner for high-quality, fast-paced residential recovery work.

7.4 | Key Staffing Profile

Locke-Lane Construction Company, Inc. has selected a team of highly experienced professionals to execute the day-to-day responsibilities outlined in this Solicitation. The team is structured to ensure full compliance with all program requirements, including the CDBG-DR staffing expectations for on-site management, preconstruction meetings, and post-construction warranty support.

All key personnel listed below are full-time employees of Locke-Lane Construction and will be physically present in the Western North Carolina Hurricane Helene recovery area as required. Our superintendent staffing model ensures no more than eight (8) job sites per superintendent at any given time, as outlined in the RFP.

Project Manager – Andrew Sherrill

Role: Responsible for overall management of all CDBG-DR operations under this program, including planning, resource allocation, budget oversight, progress monitoring, reporting, and coordination with the Division of Community Revitalization (DCR) and its implementation vendor.

Background & Qualifications:

Andrew Sherrill is the President and Founder of Locke-Lane Construction Company, Inc. A graduate of the U.S. Military Academy at West Point with a B.S. in Civil Engineering and an MBA from Columbus State University, Andrew served as a Captain with the U.S. Army Corps of Engineers, where he led mission-critical construction efforts. With over 20 years of contracting experience in heavy civil construction, homebuilding, and municipal infrastructure, Andrew has led Locke-Lane in completing over 13 disaster recovery projects under the North Carolina OSBM. He holds an unlimited general contractor's license in NC and SC. Andrew will be fully responsible for delivering compliant, timely, and high-quality work across all program phases and will serve as the primary point of contact for the State.

Superintendent – John Livengood

Role: Responsible for managing multiple active project sites (no more than 8), supervising daily construction operations, coordinating subcontractors and labor, ensuring on-site compliance with safety and quality standards, and attending **mandatory applicant preconstruction meetings**.

Background & Qualifications:

John Livengood is Locke-Lane's **Operations Manager** and a licensed qualifying agent for Locke-Lane in NC, SC, and GA. He holds a **B.S. in Construction Management** and a **minor in Business Administration** from **Western Carolina University**. John oversees weekly scheduling and logistics of all Locke-Lane equipment and crews and has managed a wide range of project types, including **turnkey site development, municipal water/wastewater systems, concrete flatwork, interior renovations, pre-engineered metal buildings, and NERC/CIP utility security upgrades**. His field leadership ensures effective resource utilization, site coordination, and real-time issue resolution for all assigned job sites.

Superintendent – Makayla Warren

Role: Responsible for managing a separate portfolio of up to 8 active job sites in the program area. Duties include daily on-site supervision, progress tracking, trade coordination, safety and quality assurance, and participation in all applicant-facing preconstruction meetings.

Background & Qualifications:

Makayla Warren is a graduate of NC State University with a B.S. in Mechanical Engineering and a minor in Graphic Communications. She has served as the primary point of contact on multiple Locke-Lane residential recovery efforts, including OSBM-funded and Purple Heart Homes reconstruction projects. Makayla holds certifications in SolidWorks and MasterCam, which she uses to enhance preconstruction planning, execution, and 3D design analysis. Her experience coordinating subcontractors, managing quality control, and communicating with homeowners uniquely qualifies her to lead multiple project sites while ensuring consistency and client satisfaction.

Warranty Coordinator / Estimator / Preconstruction Services – Brad Warren

Roles:

- As Warranty Coordinator, Brad will be responsible for receiving, documenting, and resolving all post-construction warranty claims. He will manage all applicant communication, coordinate required repairs, and provide final documentation of completed warranty work to the program.
- As Lead Estimator, Brad will oversee project takeoffs, pricing, and proposal accuracy in accordance with DCR expectations.
- As Preconstruction Representative, he will attend mandatory preconstruction meetings, present schedules and scopes to homeowners, and ensure expectations are aligned.

Background & Qualifications:

Brad Warren is a Project Manager and Locke-Lane's lead estimator with extensive design/build experience. His past project portfolio includes the Sparta Splash Pad, Crouse Park Concession Stand and Restroom, and major commercial and utility projects for Duke Energy (including the Marshville Operations Center, Gruber Road Pump Station at Fort Bragg, Lark High Bay Facility, and Combustion Turbine Warehouse). He brings hands-on experience in water/sewer systems, pre-engineered metal buildings, and public infrastructure. Brad will play a central role in both early-stage homeowner coordination and long-term warranty compliance, ensuring Locke-Lane delivers durable and well-supported outcomes.

Western North Carolina Staffing Commitment

Locke-Lane has made a firm commitment to station its project leadership team in the Western North Carolina Hurricane Helene recovery area for the duration of the program. Our production facility and Office headquarters is only 85 miles from most of the affected areas in Western North Carolina. All superintendents, the warranty coordinator, and field staff will conduct frequent on-site visits, attend preconstruction and warranty meetings, and maintain face-to-face communication with applicants and DCR representatives. This local presence ensures real-time responsiveness, homeowner support, and program accountability.

7.5 | References

Locke-Lane Construction Company, Inc. provides the following references for projects of comparable type, scope, and scale. Each project listed involved disaster recovery or complex infrastructure work and was managed by staff members proposed under this Solicitation. These projects reflect our capacity to manage regulatory compliance, construction quality, and applicant coordination under state and private contracts.

Reference 1: Sparta Earthquake Infrastructure Repairs

Client:

North Carolina Department of Public Safety – Division of Emergency Management

Project Description:

Emergency response infrastructure project following the August 2020 earthquake in Sparta, NC. Work included the replacement of damaged sanitary sewer mains, manhole rehabilitation, site excavation and restoration, and installation of new lift stations to restore critical public utility service in a mountainous and logistically challenging environment.

Contract Value:

\$5,364,633.00

Key Staff Assigned:

- **Andrew Sherrill (Project Manager):** Led overall project strategy and agency coordination, ensuring compliance with environmental standards, reporting protocols, and technical specifications.
- **John Livengood (Field Superintendent / Operations Manager):** Coordinated heavy equipment logistics, daily site management, and crew resourcing; ensured safety and productivity standards were met throughout the emergency response phase.

Client Contact:

Dana Phillips

Operations Manager | NC Department of Public Safety – Disaster Recovery

Phone: (910)850-1234

Email: dphillips@waccamawdermatology.com

Reference 2: Hurricane Fred Reconstruction – Western North Carolina

Client:

North Carolina Office of State Budget and Management (OSBM) – Disaster Recovery Division

Project Description:

Construction of three single-family homes in Burnsville and Leicester, NC for homeowners impacted by Hurricane Fred (2021). All homes were constructed under OSBM's disaster recovery housing initiative, following state standards for site development, environmental clearance, procurement compliance, and applicant coordination.

Contract Value:

\$906,679.00 (combined total)

Key Staff Assigned:

- **Andrew Sherrill (Program Manager):** Managed program-level execution, compliance documentation, and interfacing with OSBM's oversight personnel.
- **Makayla Warren (Superintendent):** Served as the field lead, managing subcontractors, conducting homeowner communications, and maintaining daily logs, schedules, and preconstruction meetings.

Client Contact:

Kristin Moyle

Assistant Director | NC Office of State Budget and Management – Disaster Recovery

Phone: (919) 608-6915 (Cell) | Email: kristin.moyle@ncdps.gov

Reference 3: WS Lee Fuel Tank Foundation and Replacement Project**Client:**

Duke Energy

Project Description:

Large-scale energy sector infrastructure project involving the demolition of aging fuel infrastructure, construction of specialized concrete foundations, and installation of new bulk fuel tanks. The project required strict adherence to Duke Energy's engineering and safety protocols, coordination across departments, and delivery within live facility constraints.

Contract Value:

\$6,884,537.99

Key Staff Assigned:

- **Andrew Sherrill (Executive Oversight):** Provided leadership, contractual oversight, and risk management for the project.
- **John Livengood (Operations Manager):** Scheduled labor and equipment, led site-level execution, and ensured NERC/CIP compliance standards were maintained during construction.

Client Contact:

Bennie Deese

CDG Services-Carolinas Dispatchable Generation | Duke Energy / Regulated and Renewable Energy

Phone: (864)313-3470 (Mobile) | Email: bvdeese@gmail.com

7.6 | Litigation History

Locke-Lane Construction, Inc. affirms that it has no history of actual or alleged breaches of contract, and has not been involved in any civil or criminal litigation or investigation at any point during the past three years. The company, its parent (if any), subsidiaries, affiliates, and all key personnel have not been judged guilty or liable in any court or administrative proceeding.

This includes:

- No pending or resolved lawsuits
- No government investigations
- No breach of contract claims

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- No judgments, settlements, or formal disputes against the company or its officers

Locke-Lane Construction maintains a strong record of contractual performance and professional conduct across all projects and jurisdictions in which it operates.

7.7 | Conflicts

Locke-Lane Construction, Inc. affirms that it has no known or potential conflicts of interest related to the services described in this Solicitation. This includes:

- No current or prior business relationships that would interfere with impartiality or objectivity in performing the contract
- No conflicts involving any affiliated or parent organizations
- No conflicts involving any individuals assigned to manage or participate in the performance of this contract

All personnel designated for this program operate independently and without financial or organizational ties to any state agencies, vendors, or applicants that would impair judgment or execution under this Solicitation.

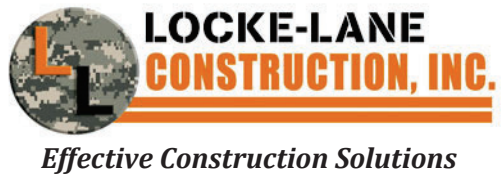


7.8 | Annual Report

Locke-Lane Construction Audited Financial Statements

A Service Disabled Veteran Owned Small Business

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7.9 | Safety Information

Locke-Lane Construction Safety Handbook

Copy of Handbook Attached in eProcurement Portal

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7.10 | Quality Control Program

Locke-Lane Construction Quality Control Handbook
Copy of Handbook Attached in eProcurement Portal

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7.11 | Cost Control Program

Locke-Lane Construction Possible Cost Reductions

Locke-Lane Construction, Inc., in partnership with Evergreen CLT, proposes the use of Cross-Laminated Timber (CLT) panel systems to reduce costs and increase construction efficiency. CLT offers clear advantages in material predictability, labor reduction, and schedule condensing, resulting in measurable cost savings across multiple phases of residential reconstruction.

CLT panels are manufactured in-house under controlled conditions, allowing Locke-Lane to avoid third-party markups and insulate material pricing from lumber market volatility. This direct control provides stable, predictable pricing and reduces risk related to procurement delays and cost escalation.

In the field, CLT systems arrive pre-cut and pre-labeled, significantly reducing framing labor. A four-person crew can dry-in a home, from masonry to roofing, within 10 working days, minimizing labor costs, trade overlap, and exposure to weather-related delays. The prefabricated nature of CLT also reduces the number of site mobilizations and shortens the overall construction timeline.

Although the North Carolina Office of State Budget and Management (OSBM) administers its recovery efforts using state funds rather than CDBG-DR, the structure and requirements of their programs closely mirror those of federally funded CDBG-DR work. Locke-Lane has ongoing reconstruction contracts under OSBM related to Hurricane Fred, which have required us to meet the same standards in program documentation, homeowner engagement, reporting, and quality control as CDBG-DR funded projects.

To support rapid and resilient construction under these programs, Locke-Lane, in partnership with Evergreen CLT, owns engineered stamped (PE) CLT construction drawings for three of the most commonly used home models in the NCORR disaster recovery housing program:

- Haywood II Ranch
- Winslow II
- Cameron II

These drawings were developed by Tightlines Designs for the CDBG-DR NCORR Program, can have an unlimited production with no additional design costs and are ready for immediate deployment. By owning the Engineered Stamped CLT drawings with unlimited production rights, Locke-Lane is uniquely prepared as a partner for high-quality, fast-paced residential recovery work.

This construction method supports cost containment through standardized fabrication, shorter build durations, and lower labor inputs, while maintaining high structural integrity and resilience. Locke-Lane recommends the adoption of CLT as a cost-effective alternative for program delivery.



7.12 | Warranty Program

Locke-Lane Construction Warranty Policy

Locke-Lane Construction, Inc. maintains a responsive warranty program to ensure all completed work meets long-term performance expectations and program compliance standards.

Locke-Lane hereby guarantees and warrants all work performed for a period of twelve (12) months from the date of substantial completion. During this warranty period, the company will repair or replace, at no cost to the owner, any defects in workmanship or materials resulting from services provided by Locke-Lane or its subcontractors.

Key Personnel:

All warranty operations will be managed by Brad Warren, Locke-Lane's designated Warranty Coordinator for this program. Brad will be responsible for:

- Logging and tracking all warranty claims
- Communicating directly with applicants to schedule repairs
- Coordinating with trade contractors for corrective work
- Providing documentation and evidence of completed repairs
- Ensuring compliance with all reporting and closeout requirements

Response & Resolution Timeframes:

- Repair Completion: Within 21 business days, unless delayed due to material lead times or weather-related constraints

All warranty communications, scheduling, and confirmations will be documented. Locke-Lane is committed to ensuring that warranty concerns are addressed promptly, respectfully, and thoroughly in compliance with the standards of the Division of Community Revitalization.

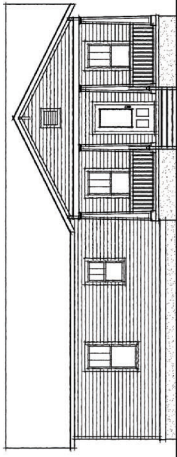


7.13 | Reconstruction Plan Sets

Engineer Stamped CLT Construction Floorplan Drawings
(Tightlines Designs and Robert Stephen, PE)

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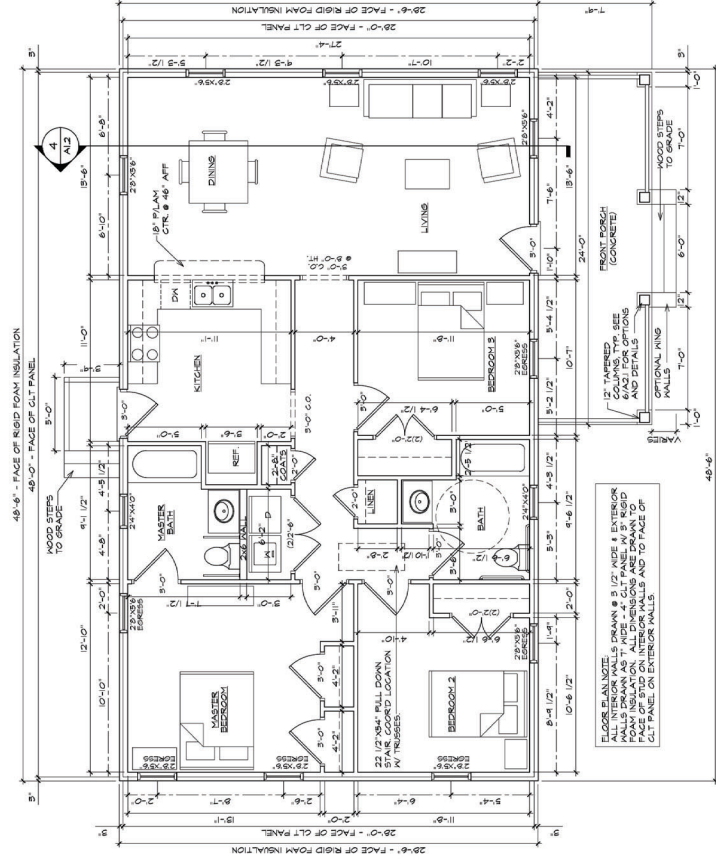
Haywood II Ranch
1302 TOTAL HEATED SF
186 SF FRONT PORCH

GENERAL STRUCTURAL NOTES:

1 THE STRUCTURE IS ONLY STABLE IN ITS COMPLETED FORM. THE CONTRACTOR SHALL MAINTAIN REQUIRED TEMPORARY BRACING DURING CONSTRUCTION TO STABILIZE THE STRUCTURE.

2 THE ARCHITECT IS NOT RESPONSIBLE FOR CONSTRUCTION SEQUENCES, METHODS, OR TECHNIQUES IN CONNECTION WITH THE CONSTRUCTION OF THIS STRUCTURE. THE ARCHITECT'S CONSTRUCTION DOCUMENTS SHOULD NOT BE CONSIDERED TO BE A CONTRACT FOR THE CONSTRUCTION OF ASSIGNED FIELD CONDITIONS. IT IS NOT THE RESPONSIBILITY OF THE ARCHITECT TO REPORT ANY DISCREPANCIES TO FORTNIGHTLY DESIGNS BEFORE CONSTRUCTION BEGINS.

3 THE STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE 2015 INTERNATIONAL BUILDING CODE AND ALL LOCAL LAWS WHERE THE STRUCTURE IS LOCATED.



FLOOR PLAN

SEE S.O. 1 FOR CODES NOTES AND
ASSUMED STRUCTURAL LOADS.
SEE S.I. 1 FOR FOUNDATION PLAN

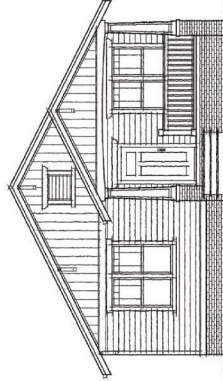
2 FOUNDATION PLAN



date	05.08.24
drafter	S.S.P.
checked by	C.L.B.
proj. no.	T240201
revisions	date

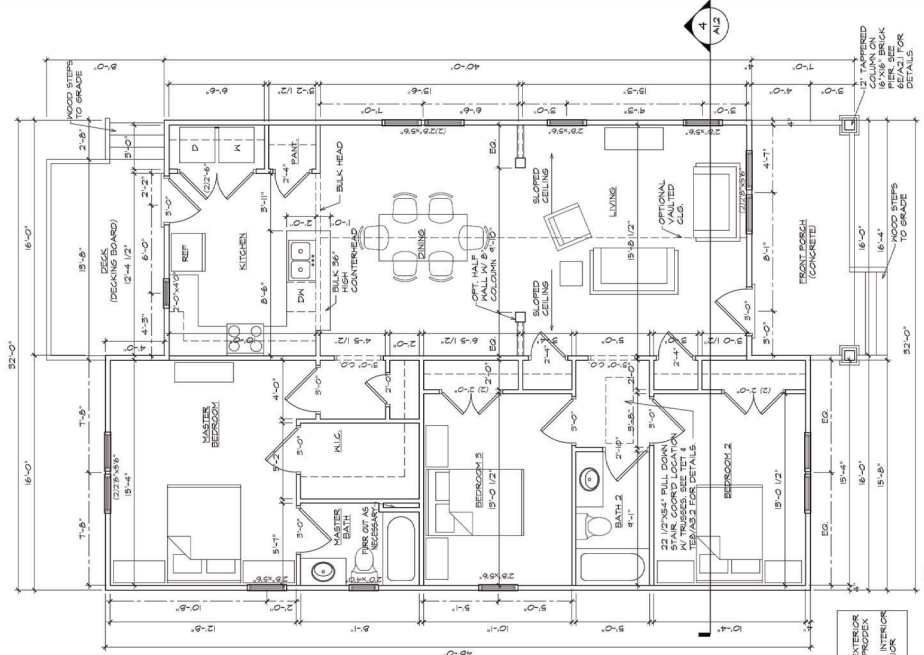
Floor Plan,
Foundation Plan,
Notes

A1.1



Cameron II
102 SF FRONT PORCH
106 SF REAR DECK

GENERAL STRUCTURAL NOTES
1. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
2. The contractor shall provide all necessary bracing to stabilize the structure during construction.
3. The contractor shall provide all necessary bracing to stabilize the structure during construction.
4. The contractor shall provide all necessary bracing to stabilize the structure during construction.
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8. The contractor shall provide all necessary bracing to stabilize the structure during construction.
9. The contractor shall provide all necessary bracing to stabilize the structure during construction.
10. The contractor shall provide all necessary bracing to stabilize the structure during construction.



FLOOR PLAN

FLOOR PLAN NOTE
1. FLOOR PLAN IS DRAWN AS 1/2" HORIZ & EXTERIOR WALLS DRAWN AS 1/2" HORIZ & 1/2" VERT. ALL DIVISIONS ARE DRAWN TO FACE OF GRID ON INTERIOR WALLS AND TO FACE OF CUT PANEL ON EXTERIOR WALLS.

SEE S0.1 FOR CODES NOTES AND ASSUMED STRUCTURAL LOADS.
SEE S1.1 FOR FOUNDATION PLAN.

FOUNDATION PLAN

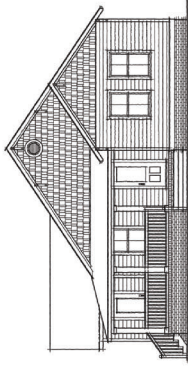
|| MOW!



date	09.26.2024
drafter	S.S.P.
checked by	C.L.B.
proj. no.	T-24020.3
revisions	date

Floor Plan,
Foundation Plan,
Notes

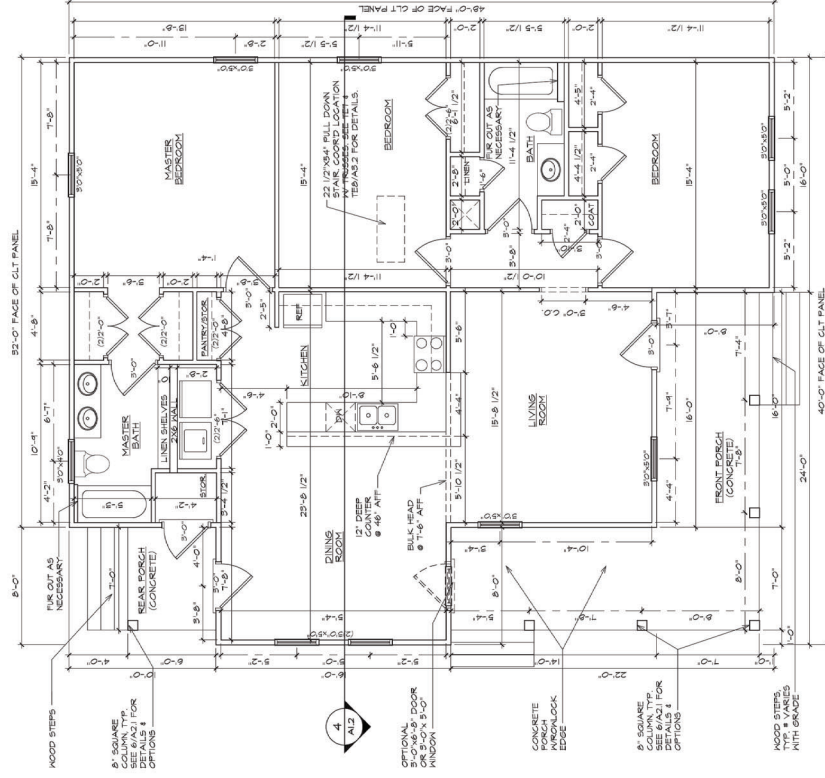
A1.1



Winslow 11 CLT
1523 TOTAL HEATED SF
254 SF FRONT PORCH

GENERAL STRUCTURAL NOTES:

1. The structure is a single station in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
2. The contractor shall be responsible for obtaining all necessary permits, easements, or franchises for installation and construction of this structure. The contractor shall not be held responsible for the contractor's failure to obtain the necessary permits, easements, or franchises.
3. Verify that the construction documents, including any non-conformities occur.
4. Confirm that assumed field conditions are not the responsibility of the architect. The contractor shall be responsible for obtaining and reporting all measurements to facilitate design of the structure.
5. The structure and all construction work shall conform to all applicable sections of the North Carolina Building Code.



SEE S.O. 1 FOR CODES NOTES AND
ASSUMED STRUCTURAL LOADS.
SEE S.I. 1 FOR FOUNDATION PLAN



Letter From Surety Company

States Locke-Lane Construction's Ability to Bond All Projects
& Signed by Attorney in Fact

A Service Disabled Veteran Owned Small Business

5063 TAYLORSVILLE HIGHWAY, STONY POINT, NC 28678 PH 704-585-6625 FAX 704-876-2107



May 8, 2025

Re: Surety Capabilities of Locke-Lane Construction, Inc.

To Whom it May Concern,

We are privileged to have served as the surety broker for **Locke-Lane Construction, Inc.**, one of our most valued clients, since 2008. Performance, payment, and other various surety bonds are provided by Travelers Casualty and Surety Company of America, which is one of the country's leading sureties. Travelers Casualty and Surety Company of America has an A.M. Best rating of "A++" and is listed on the Department of the Treasury's Listing of Approved Sureties (Circular 570) and is licensed in all fifty states.

The management team of Locke-Lane Construction, Inc. demonstrates excellence and added value to the projects they undertake. Without question, we can recommend this company to you and we think that you will quickly see the high degree of professionalism and expertise they offer. Locke-Lane Construction, Inc. is financially sound and has in the past and currently has the ability to bid on **single projects in the \$40,000,000 range with an aggregate of \$80,000,000**. Locke-Lane Construction, Inc.'s performance is of a magnitude and quality that cast them in a significant and unique role in the construction marketplace. They have earned the respect of their surety, owners, architects and engineers through the years.

Should Locke-Lane Construction, Inc. be awarded a contract for this project, it is our current intention to issue any necessary bonds if requested by our client. Naturally, the execution of any said bonds would be subject to a review of the final contract terms, conditions and financing by our client and Travelers Casualty and Surety Company of America. Travelers Casualty and Surety Company of America, Locke-Lane Construction, Inc., and/or McGriff assume no liability to third parties or to you if for any reason we do not execute said bonds. This letter of recommendation is valid for a period of one hundred and eighty (180) days.

If we can provide you with any further information concerning this fine contractor, please do not hesitate to call.

Sincerely,

Christina Worrells
Attorney-In-Fact



Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and the Companies do hereby make, constitute and appoint **Christina Worrells** of **DURHAM**, **North Carolina**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.


IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **16th** day of **February, 2024**.



State of Connecticut

City of Hartford ss.

By:


Bryce Grissom, Senior Vice President

On this the **16th** day of **February, 2024**, before me personally appeared **Bryce Grissom**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**




Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is


FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **18th** day of **October**, **2024**




Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/28/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER McGriff, a MMA LLC Company 4309 Emperor Blvd, Suite 300 Durham, NC 27703 919 281-4500	CONTACT NAME: NC CERTIFICATE TEAM PHONE (A/C, No, Ext): FAX (A/C, No): 888 746-8761 E-MAIL ADDRESS: NCCertificateTeam@mcgriff.com INSURER(S) AFFORDING COVERAGE INSURER A : Phoenix Insurance Company INSURER B : Travelers Property Casualty Co of Amer INSURER C : Builders Premier Insurance Company INSURER D : INSURER E : INSURER F :
INSURED Locke-Lane Construction, Inc. 5063 Taylorsville Hwy Stony Point, NC 28678-9201	NAIC # 25623 25674 13036

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> PD Ded:2,500 GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			DTCO8X843151PHX25	03/31/2025	03/31/2026	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$300,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			8108X8460852426G	03/31/2025	03/31/2026	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$10000			CUP8X8639852526	03/31/2025	03/31/2026	EACH OCCURRENCE \$10,000,000 AGGREGATE \$10,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	PWC101287906	03/31/2025	03/31/2026	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

PROJECT: ALL ON-GOING PROJECTS

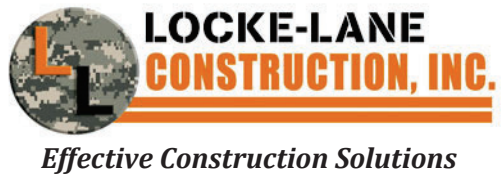
Yadkin Valley Sewer Authority, Contractor, Subcontractors, Engineers and any other individuals or entities identified herein, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them are included as additional insured as respects to General Liability if required by written contract for the referenced project, pursuant to and subject to policy terms, definitions, conditions and exclusions.

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



North Carolina General Contractor License

Current Locke-Lane Construction GC & Electrical License

A Service Disabled Veteran Owned Small Business

5063 TAYLORSVILLE HIGHWAY, STONY POINT, NC 28678 PH 704-585-6625 FAX 704-876-2107

Expiration Date

2025

License No.

66575

North Carolina

Licensing Board for General Contractors

This is to Certify That:

Locke-Lane Construction Inc.

Stony Point, NC

is duly registered and entitled to practice

General Contracting

Limitation: Unlimited

Classification: Building, Public Utilities

until

December 31, 2025

when this Certificate expires.

Witness our hands and seal of the Board.

Dated, Raleigh, N.C.

01/01/2025

This certificate may not be altered.



Chairman

Secretary-Treasurer

LICENSE NUMBER
U.25868

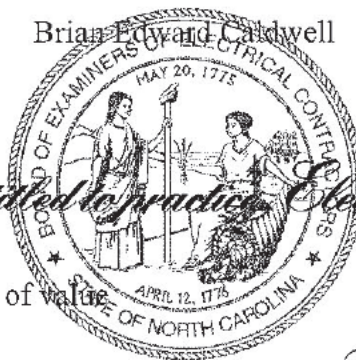
STATE OF NORTH CAROLINA
BOARD OF EXAMINERS OF ELECTRICAL CONTRACTORS

EXPIRATION DATE
02/26/2026

THIS IS TO CERTIFY THAT:

Locke-Lane Construction Inc.

Brian Edward Caldwell



is duly registered and entitled to practice Electrical Contracting in the
Unlimited Classification License
Limitation: Any project regardless of value

Locke-Lane Construction Inc.

PO Box 139
Stony Point, NC 28678

Witness our hands and seal of the Board

[Redacted Signature]

[Redacted Signature]

Secretary - Treasurer



Service Disabled Veteran Owned Small Business (SDVOSB) Certification

Disability:IN Certified through 01/24/2027

HUB Certification

Certified through 04/12/2028

Certificate Number: US00394
Expiration Date: 24 January 2027
Renewal required by date above



Disability:IN
Hereby Recognizes:

Locke-Lane Construction, Inc.

As a Certified Disability-Owned Business Enterprise™
(DOBE)



Jill Houghton
President & CEO





North Carolina
Department of Administration
Office for Historically Underutilized Businesses

Pamela B. Cashwell
Secretary

Alicia Lyon
Interim Director

4/12/2024

Andrew Sherrill

Certification Number: HUB-357160
Locke-Lane Construction Inc. (Disabled Owned)
5063 Taylorsville Hwy,
Stony Point, North Carolina 28678

Dear Andrew Sherrill:

The Office for Historically Underutilized Businesses (HUB Office) is pleased to inform you that your company is now certified as a Historically Underutilized Business. Your firm is listed in the Statewide Uniform Certification (SWUC) Program database. This certification will remain in effect for four (4) years from the date of this letter.

You must notify the HUB Office in writing within 30 days of any changes affecting your compliance with SWUC Program eligibility requirements, including changes in ownership, day-to-day management and operational control. Failure to notify the HUB Office of these changes or reapply for certification in a timely manner may cause your HUB Certification to be revoked. In addition, please be advised your status may be changed if there is a 3rd party challenge granted against your firm. The link to the HUB Office 3rd party challenge form can be located at <https://files.nc.gov/ncdoa/documents/ThirdpartyEligibilityChallengerev080811.pdf>. All information submitted to the Office for Historically Underutilized Business is subject to audit and review.

The HUB Office collaborates with local Minority/Women/Small Business (M/W/SBE) Offices who offer assistance to certified HUB firms with identifying contract opportunities with state and local government. Many of these offices also offer assistance with business development. Please visit our website at <https://ncadmin.nc.gov/businesses/historically-underutilized-businesses-hub> to locate the local office near you.

It is important to note that although your status as a certified HUB firm greatly improves your access to state and local government contracts, this certification does not guarantee contract awards. Your ability to research opportunities and bid competitively will be important to your success in this program. We are committed to assisting you through the process. We provide ongoing assistance to help you navigate state government contracting along with Business Development and Supportive Services to assist you in developing strategies to meet your business goals and objectives.

Thank you for your interest and participation in the SWUC Program as a Historically Underutilized Business firm with the State of North Carolina.

Sincerely,

A black rectangular redaction box covering the signature of Alicia Lyon.

Alicia Lyon
Interim
Director

Veteran Small Business Certification (VetCert)

Locke-Lane Construction, Inc.

Service Disabled Veteran Owned Small Business

Certification Information

DUNS	DBA	Last Verified	Expiration Date
827921201	-----	Dec 16, 2021	Dec 16, 2026

Business Information

SAM UEI	Cage Code	Entity Type	Year Established
EJM9SHAHBXL7	59N01	Corporation	2008

Website
<http://www.lockelaneconstruction.com>

Business Address 1	Business Address 2	City	State/Territory	Zip Code
5063 Taylorsville Hwy.	-----	Stony Point	NC	28678

<https://veterans.certify.sba.gov>



Company Information

2025

Name of Business: Locke-Lane Construction, Inc.

Date of Incorporation: May 14, 2008

Business Type: General Contractor

Small Business Certification: Service-Disabled Veteran Owned Small Business (SDVOSB)

Contact(s): Andrew Sherrill – President
John Livengood – Project Manager
Brad Warren- Project Manager

Brian Caldwell – Project Manager
Michael Letourneau – Project Manager
Makayla Warren – Project Manager

Mailing address: 5063 Taylorsville Highway
Stony Point, NC 28678

E-mail: dsherrill@lockelaneconstruction.com
Voice: 704.585.6625
Fax: 704.585.6640

EIN: 26-2758057
DUNS #: 827921201
Contractor Classification: Unlimited
NC Contractor License #: 66575
NC Electrical License #: U.25868
SC Contractor License #: G115164
SC Mechanical License #: M115956
GA Contractor License #: GCCO004842
VA Contractor License #: 2705188738

Bank Reference: The Huntington National Bank
Lindsay Whitehead
Commercial Services Manager, Carolinas
101 South Tryon Street, Suite 1810
Charlotte, NC 28280
Ph. 540-392-0035
Email: Lindsay.whitehead@huntington.com

Credit References:

City Electric Supply
Ms. Melissa Jones
melissa.jones@cityelectricsupply.com
Voice: 336.808.0528

Price Landscape Supply
Mr. Ben Price
landscape4126@gmail.com
Voice: 704.902.4126

Ferguson Waterworks
Ms. Melissa Charlotte
melissa.charlotte@ferguson.com
Voice: 704.509.5901

Unique Entity ID:
EJM9SHAHBXL7

CAGE/NCAGE:
59N01

Doing Business As:
(blank)

Physical Address:
**5063 TAYLORSVILLE HWY
STONY POINT, NC 28678-9201
USA**

Expiration Date
Oct 25, 2025

Purpose of Registration:
All Awards

Return to Result List

Locke-Lane Construction Inc.

Detail Information

Contact: Andrew Sherrill

Added on: 5/25/2012 10:29:52 AM

Address: 5063 Taylorsville Hwy
Stony Point, NC 28678 IREDELL
United States

Phone: 704-585-6625

Fax: 704-585-6640

Toll Free:

Email Address: dsherrill@lockelaneconstruction.com

Small Business: Yes

HUB Certified: Yes D

Business Type: Corporation

Service Type/License/Work Classification

General Contractor NC License No. 66575 Limitation - Unlimited - Building/Utilities

Registered Construction Codes

02050 Basic Site Materials and Methods
02100 Site Remediation
02200 Site Preparation
02300 Earthwork
02400 Tunneling, Boring, and Jacking
02450 Foundation and Load-Bearing Elements
02500 Utility Services
02600 Drainage and Containment
02700 Bases, Ballasts, Pavements, and Appurtenances
02800 Site Improvements and Amenities
02900 Planting
02950 Site Restoration and Rehabilitation
03050 Basic Concrete Materials and Methods
03100 Concrete Forms and Accessories
03200 Concrete Reinforcement
03300 Cast-In-Place Concrete
03400 Precast Concrete
03500 Cementitious Decks and Underlayment
03600 Grouts
03700 Mass Concrete
03900 Concrete Restoration and Cleaning
16050 Basic Electrical Materials and Methods
16100 Wiring Methods
16200 Electrical Power
16300 Transmission and Distribution
16400 Low-Voltage Distribution
16500 Lighting

Summary (e Procurement)

Vendor Status: Active

Company Information

General Vendor Information

Vendor Name:
Locke-Lane Construction Inc.

Company Website:
<https://www.lockelaneconstruction.com>

Dun and Bradstreet #:
827921201

Customer #:
357160

Tax Information

North Carolina Based:
Yes

Individual/Sole Proprietorship:
No

IRS Verification Status:
Verified

Name on tax documentation:
Locke-Lane Construction Inc.

Business Characteristics

Small Business:
Yes

Educational Entity:
No

Government Entity:
No

Not for Profit:
No

Disabled Business Enterprise:
No

Non Profit Work Center for the blind
and severely disabled:
No

Contacts

Sherrill, Andrew

dsherrill@lockelaneconstruction.com - +1 (704) 585-6625

Location Maintenance, Main Account Contact, HUB Main Contact, Account Owner

Locations

Locke-Lane Construction Inc.

Location Information

Location Name:
Locke-Lane Construction Inc.

Location Status:
Active

Customer #:
357160-A

Default Purchasing Location:
Yes

Subscribing Services:
NC eProcurement, IPS

Location Contacts:

Andrew Sherrill

NC eProcurement Order From

Order From Name:
Andrew Sherrill

Contact Name:
Andrew Sherrill

Address:
5063 Taylorsville Hwy
5063 Taylorsville Hwy
Stony Point, NC 28678
Iredell

Email:
dsherrill@lockelaneconstruction.com

NC eProcurement Remit To

Remit To Name:
Locke-Lane Construction, Inc.

Contact Name:
Andrew Sherrill

Make Checks Payable To:
Vendor Name

Address:
5063 Taylorsville Hwy
5063 Taylorsville Hwy
Stony Point, NC 28678
Iredell

Fax:
+1 (704) 585-6640

NC eProcurement Bill To

Bill To Name:
Andrew Sherrill

Contact Name:
Andrew Sherrill

Address:
5063 Taylorsville Hwy
5063 Taylorsville Hwy
Stony Point, NC 28678
Iredell

Email:
dsherrill@lockelaneconstruction.com

IPS

IPS Name:
IPS 1

Contact Name:
Andrew Sherrill

Address:
5063 Taylorsville Hwy
5063 Taylorsville Hwy
Stony Point, NC 28678
Iredell

Fax:
+1 (704) 585-6640

Toll-Free Phone:
Not Specified

Electronic Notifications:
No

Categories:
N/A

Commodity Codes

Not Specified

Construction Codes

Basic Site Materials and Methods - 02050
Site Remediation - 02100
Site Preparation - 02200
Earthwork - 02300
Tunneling, Boring, and Jacking - 02400
Foundation and Load-Bearing Elements - 02450
Utility Services - 02500
Drainage and Containment - 02600
Bases, Ballasts, Pavements, and Appurtenances - 02700
Site Improvements and Amenities - 02800
Planting - 02900
Site Restoration and Rehabilitation - 02950
Basic Concrete Materials and Methods - 03050
Concrete Forms and Accessories - 03100
Concrete Reinforcement - 03200
Cast-In-Place Concrete - 03300
Precast Concrete - 03400
Cementitious Decks and Underlayment - 03500
Grouts - 03600
Mass Concrete - 03700
Concrete Restoration and Cleaning - 03900
Basic Electrical Materials and Methods - 16050
Wiring Methods - 16100
Electrical Power - 16200
Transmission and Distribution - 16300
Low-Voltage Distribution - 16400
Lighting - 16500

Design Services

Not Specified

Construction Services

General Contractor

Limitation:
Unlimited

NC Licensing Board #:
66575

Work Classifications:
Building
Public Utilities

Sourcing/Contracts

Sherrill, Andrew

HUB

HUB Certification Status was last updated on 02/15/2023

HUB Certification Status:
Certified

Category:
Disabled

Certification Period:
04/29/2020 - 04/29/2024

HUB Main Location:
IPS 1

HUB Main Contact:
Andrew Sherrill

Ownership of Firm:

Jennifer Dickerson Sherrill
Ownership: 49 | Voting: 49
12 Years Owned - Caucasian - Female - No Disabilities

Andrew Lee Sherrill
Ownership: 51 | Voting: 51
12 Years Owned - Caucasian - Male - Has Disabilities

Terms of Use

NC eProcurement Registration
Status:
Active

NC eProcurement Terms of Use:

NC eProcurement Terms of Use Accepted by
Andrew Sherrill on 03/31/2017

IPS Registration Status:
Active

IPS Registration:

IPS Terms of Use Accepted by Andrew Sherrill
on 05/25/2012

HUB Terms of Use:

HUB Terms of Use Accepted by Andrew Sherrill
on 05/25/2012



BID ADDENDUM

May 1, 2025

FAILURE TO RETURN THIS ADDENDUM MAY SUBJECT YOUR BID TO REJECTION

Solicitation Number	Doc1539254856
Solicitation Description	Residential Demolition, Reconstruction, Rehabilitation, and Manufactured Housing Unit Replacement for Hurricane Helene impacted Counties
Addendum Number	1

CHANGE TO SOLICITATION:

1. **ATTACHMENT H: EXPERIENCE, QUALIFICATIONS, REFERENCES** the reference to “points” has been removed. Amended to read:

Complete one form for each of up to three (3) examples of **CDBG-DR housing engagements** delivered by the proposing General Contractor (prime contractor). Subcontractor qualifications will not be considered. Client Points of Contact must have an adequate understanding of the services delivered. ~~Reference points will not be awarded if the client cannot be contacted with the contact information provided. If the program example provided is not for CDBG-DR single family housing, then the program example will be considered non-responsive. The proposing entity must submit at least one minimally qualified program example for award consideration. Each program example can earn up to 15 points for a total maximum score of 45 points.~~

2. **2.8 PROPOSAL CONTENTS** amended to read:

Vendor response to Section 7: REQUIRED VENDOR INFORMATION should not exceed twenty (20) pages. This does not include cover page (title page), cover letter, table of contents, all pages of the RFP, **résumés, Annual Report, Litigation History**, certificate of insurance, compensation experience modification rate (EMR), copy of safety manual, copy of quality control manual, litigation history, and the completed attachments to this RFP.

RESPONSE TO QUESTIONS:

State's Responses to Questions Received by the due date and time of April 28, 2025, by 10:00 am ET. The Question appears exactly as submitted by the Vendor.

	CITATION	VENDOR QUESTION	DCR RESPONSE
1	7.13 Reconstruction Plan Sets, Page 36	Do plan sets have to be included with the RFP submittal or only during the BAFO process?	Plan sets are <u>not</u> required to be provided with the RFP submittal. Plan sets will be requested during the BAFO process.
2	7.13 Reconstruction Plan Sets, Page 36	Can you please clarify what is required in the section? Should the vendor simply list previous CDBG-DR programs where the vendor has provided plan sets?	Correct, list previous CDBG-DR programs where the vendor has provided plan sets.
3	2.8 Proposal Contents, Page 10	Will resumes be included against the 20 page limit?	The 20-page limit does <u>not</u> include résumés.
4	4.9 Bond and Insurance Requirements, Page 18	Will blanket payment & performance bonds be allowed for this program?	DCR will consider, but not require, blanket payment & performance bonds.
5	5.1 Scope of Services, Page 19	Please clarify the time requirement for rehab projects with a scope less than \$50,000. Page 19 says 45 days, other pages state 30 days.	Rehabilitation projects with a scope <\$50,000 shall be completed within 45 calendar days from the Notice to Proceed to passed Final Inspection.
6	2.8 Proposal Contents, Page 10	Are the personnel resumes, project history, and Annual Report included in the 20 page limit?	The 20-page limit does <u>not</u> include résumés and Annual Report. The 20-page limit <u>does</u> include project history.
7	7.4 Key Staffing Profile, Pages 33-34	May resumes be excluded from the 20-page limit?	See answer to Question #3 and #6.
8	7.5 References, Page 34 Attachment H, Page 67	May a Letter of Reference be included as proof of endorsement if a person is unreachable when the Program attempts to contact them?	Yes.

9	7.6 Litigation History, Page 34	May the Litigation History be excluded from the 20-page limit? May it be included as an appendix to Section 7?	The 20-page limit does <u>not</u> include Litigation History.
10	7.8 Annual Report, Page 35	May the Annual Report (financial statements) be excluded from the 20-page limit? May it be included as an appendix to Section 7?	See answer to Question #6.
11	ATTACHMENT C: NORTH CAROLINA GENERAL CONTRACT TERMS & CONDITIONS, Section 7c) SITUS AND GOVERNING LAWS, Page 49	Please clarify the requirement for domestication. If the Vendor corporation is not legally formed in North Carolina but registered with the North Carolina Secretary of State as a foreign corporation in North Carolina and in good standing, does this satisfy the "domestication" process?	Yes. A foreign corporation must obtain a Certificate of Authority from the N.C. Secretary of State, which will satisfy the domestication requirement in Attachment C, Section 7c.
12	5.0 Scope of Work, Page 19 4.1 Minimum Qualifications, Page 16	There are two different timeframes prescribed for rehabilitation projects <\$50,000. We recommend 45 days as the standard acceptable timeframe. Please clarify. Section 5.0 Scope of Work (page 19) states "... 45 days for rehabilitation projects with a scope <\$50,000..." Section 4.1 Minimum Qualifications (page 16) states "ability to carry residential rehabilitation projects to completion within 30 days for projects with a scope <\$50,000..."	Rehabilitation projects with a scope <\$50,000 shall be completed within 45 calendar days from the Notice to Proceed to passed Final Inspection.
13	5.7 Liquidated Damages, Page 31	On the pre-bid call, one of the speakers said that these timelines would be enforced unless there are "excusable delays approved by the state." Can you please provide a list of excusable delays and how the state will manage approving them? For example, are delays in getting permits, environmental mitigation delays or inspections from local governments excusable delays?	An exhaustive list of excusable delays cannot be provided. Requests by general contractors for an extension to the period of performance will be reviewed on a case-by-case basis.

14	4.9 Bonds and Insurance, Page 18	With respect to the ongoing value of the P&P bonds, will Contractor be permitted to reduce the value of the bonds by the contract amount associated with completed projects? If so, will the trigger to reduce the bond value be based on the date of passed final inspection or the date of final payment for the completed project?	Yes, as long as the vendor maintains performance and payment bonds in an amount equal to (or greater than) the value of the active construction projects issued under the awarded contract. Reduction will be based on the date of final payment.
15	4.9 Bonds and Insurance, Page 18	The RFP states that bond riders will be required to capture increased costs resulting from approved change orders such that 100% of the project cost is always covered by a valid P&P bond. Assuming change orders will be relatively frequent, will Contractor be permitted to establish a set interval (i.e. quarterly) to reconcile the contract and bond values to a change order log and issue such riders based on changes that occur within that period? Else, it's possible that multiple riders will need to be issued weekly.	If the builder is operating at its bond ceiling, then riders will need to be issued in a timely manner to account for change orders.
16	4.3 Payment Structure, Page 16	Is it DCR's intention to withhold retainage on Vendor's monthly invoices? If so, what % will be withheld and what will be the trigger for DCR to release the retainage?	The implementation vendor will inform the payment schedule as a part of its construction management strategy.
17	4.3 Payment Structure, Page 16	In lieu of withholding retainage, if any, will DCR accept a Retention Bond in addition to the P&P bonds?	DCR may consider a Retention Bond if it integrates with the implementation vendor's construction management strategy.
18	5.2.4 Manufactured Housing Units, Page 27	Does the contractor who is buying and installing MHU's in NC need to have a resellers license?	DCR does not require a resale license; the vendor must comply with all relevant local, state, and federal tax laws and regulations.
19	5.6 Project Assignment Methodology, Page 31	Would the program consider awarding projects within a centralized region(s)? Concentrating efforts in a	DCR will consider geographic clustering for builder assignments if it aligns with the

		specific area could potentially lead to a higher success rate for both the program and its vendors by streamlining logistics, reducing travel time, and enhancing overall efficiency.	implementation vendor's construction management strategy.
20	2.1 Request for Proposal Document and Scopes of Work, Page 6	<p>"DCR, or an Implementation Vendor on behalf of DCR, will issue Scopes of Work for specific project assignments to Vendors that are qualified and awarded pursuant to this RFP."</p> <p>What will be the methodology used by DCR or the implementation vendor to assign work to general contractors? Will this methodology or scorecard be shared with the general contractors? Will DCR or the implementation vendor award contractors with more assignments for completing homes under the contractual deadlines?</p>	The implementation vendor will assign projects in accordance with their construction management strategy. The strategy will be communicated to the builders and updated regularly based on performance and capacity.
21	3.1 Method of Award, Page 11	<p>"The State intends to select up to 25 of the most qualified Vendors. Once a pool of the most qualified Vendors is identified, the State will then engage in a Best and Final Offer (BAFO) negotiation phase. Vendors who intend to perform reconstruction projects will be asked for reconstruction plan sets as part of the BAFO process. Plans sets may include traditional Stick-Built construction or modular construction. Costs for all project types will be negotiated during that process as well."</p> <p>Are construction plan sets required to be submitted with the response to this RFP? Or will they be required only if the contractor is selected to participate in the BAFO negotiation phase.</p>	See answer to Question #1.
22	5.2.2 Repair Scope of Work, Page 23	"The Scope of Work for each repaired structure will vary, but may include, although not be limited to, the following: Providing architectural and house plan renderings"	Renderings are only necessary if required by the jurisdiction.

		Are architectural and house plan renderings to be required on every repair project or only if required by the jurisdiction.	
23	5.2.3 Size and New Unit Configuration, Page 24	<p>“Which standard floorplan the applicant receives is based on DCR policy”</p> <p>How many “Standard floorplans” does the program plan on including in the program? Is it the programs intent to keep the number of standard floorplans to a minimum? Will the program consider two or more story homes?</p>	DCR will limit the number of floor plans selected. Plans for two or more story homes will only be considered in site limiting circumstances with no other alternatives.
24	5.4 Additional Requirements, Page 30	<p>“Meet with the program and individual property owners to review the Scope of Work to be performed, including establishing a work schedule acceptable to property owners and reviewing work upon final inspection.”</p> <p>What will the program’s policy be towards homeowner access to the property during construction? Will homeowners be attending the program inspections? Will homeowners determine quality standards, or will quality standards only be upheld by DCR and the implementation vendor?</p>	Builders should establish safe practices for homeowner access to their property. Homeowners are not required to attend or approve program inspections or quality standards.
25	2.4 RFP Schedule, Page 7 2.6 Proposal Questions, Page 8	To allow proper consideration, review, and question submittal, please extend all dates by one week, starting with extending submittals of RFIs until May 5.	The RFP Schedule remains as indicated in the Solicitation.
26	2.8 Proposal Contents, Page 10 7.4 Key Staffing Profile Page 33	Are resumes exempt from the page count?	See answer to Question #3.
27	2.8 Proposal Contents, Page 10 7.9 Safety Information, Page 35	Are the Safety & Quality Manuals required with submission?	Per 7.9 Safety Information, “A copy of Vendor’s safety manual may also be required. <u>The safety manual will become part of the Contract if your Solicitation Response is selected.</u> ” Vendors

	7.10 Quality Control Program, Page 35		<p>are not required to submit with their offer their Safety Manual; however, vendors are welcome to provide it with their offer submission. If the safety manual is not provided with offer submission; if awarded a contract, the safety manual must be provided.</p> <p>Per 7.10 Quality Control Program, <i>"A copy of Vendor's quality control manual may be required. <u>The quality control manual will become part of the Contract if Vendor's Solicitation Response is selected.</u>"</i> Vendors are not required to submit with their offer their Quality Control Manual; however, vendors are welcome to provide it with their offer submission. If the quality control manual is not provided with offer submission; if awarded a contract, the quality control manual must be provided.</p>
28	2.8 Proposal Contents, Page 10 7.8 Annual Report, Page 35	Are financial statements exempt from the page count?	See answer to Question #6.
29	2.8 Proposal Contents, Page 10	The description of required vendor information does not include Section 7.8 Annual Report. Annual Report documents (such as audited financials) can easily be dozens of pages. What is the recommendation for including Annual Reports while adhering to the limitation of 20 pages?	See answer to Question #6.
30	3.1 Method of Award, Page 11	If a vendor is awarded reconstruction projects, can they elect to replace all eligible homes with modular homes,	If vendors submit modular plan sets for DCR consideration and if

		rather than offering stick-built reconstruction as an option?	DCR selects a modular plan set for program use, then yes, the vendor may use the DCR approved modular plan set for reconstruction projects.
31	5.2.4 MANUFACTURED HOUSING UNITS Manufactured Housing Unit (MHU) Replacement Scope of Work Page 29	<p>"Coordinating applicant move out, and providing temporary housing."</p> <p>Section 5.2.4 references the contractor coordinating applicant move-out and providing temporary housing, if eligible. Could the State please clarify the contractor's responsibilities in this process? Specifically, is the contractor responsible for locating, securing, and paying for alternative living arrangements? If so, what eligibility criteria and requirements must be followed so that contractors can accurately account for these costs in their bids?</p> <p>Regarding the provision of temporary housing during the move-out period, who holds liability for the applicant's welfare, property, and behavior while in temporary accommodations?</p>	Temporary housing will not be offered to all applicants. The implementation vendor will determine which, if any applicants, qualify for temporary housing. The implementation vendor will include temporary housing in the vendor's scope of work. The vendor will be required to issue a voucher to the qualified applicant for temporary housing. The applicant will use the voucher to acquire temporary housing.
32	5.4 Additional Requirements, Page 30	<p>"The initial meeting between the general contractor, applicant and Program will be done through a preconstruction meeting at one of the Program offices located within the Western North Carolina Hurricane Helene impacted counties area."</p> <p>Is an in-person preconstruction meeting required between the applicant and Vendor Representative before each site evaluation?</p> <p>Are there any other face-to-face meetings requirements?</p> <p>"Assist homeowners in vacating their damaged home." Will the state provide</p>	<p>In person meetings are encouraged for each site evaluation, but DCR will consider alternative approaches that accelerate recovery or improve applicant service.</p> <p>The implementation vendor will scope pods or temporary storage facilities for each applicant.</p>

		<p>Pods or the funds to purchase the pods for assistance?</p>	
33	<p>4.1 Minimum Qualifications, Pages 15-16</p> <p>7.0 Required Vendor Information, Pages 32-36</p>	<p>Do you want the Evaluation Criteria to refer to the relevant responses within 4.1 Minimum Qualifications and 7.0 Required Vendor Information, or are standalone responses for each of the Evaluation Criteria requested?</p> <p>For example, 3.4, a, ii Financial Stability and Solvency could refer to 4.1 Financial Solvency and Stability and 7.8 Annual Report, or we could provide a narrative response to 3.4.</p> <p>In the interest of not submitting a voluminous proposal, we want to avoid duplicative responses in multiple sections unless explicitly requested.</p>	<p>Standalone responses for each of the Evaluation Criteria are not required or expected. The Evaluation Criteria are intended to communicate to Vendors how DCR will evaluate Vendors' responses and are based on the specifications elsewhere in the RFP.</p>
34	<p>7.4 Key Staffing Profile, Page 33</p>	<p>"Vendor must provide a key staffing profile and résumés for staff that will be responsible for the day-to-day performance of the services required under this Solicitation. Vendor shall designate a dedicated construction lead who will be located in the Western North Carolina Hurricane Helene recovery area."</p> <p>Are we providing their personal résumés or are we providing just their name, contact information and their job description?</p>	<p>Vendor must provide a key staffing profile and résumés for staff that will be responsible for the day-to-day performance of the services required under this Solicitation.</p> <p>Vendor must identify which employees, including if applicable the Project Manager, will be physically located in the responding area as regular face-to-face meetings with the program and applicants will be required (i.e., mandatory preconstruction meetings with applicants for each application).</p> <p>Key staff must include the following (DCR prefers for the three referenced positions to be held by three separate individuals qualified to perform each role):</p> <ul style="list-style-type: none"> -Project Manager -Superintendent (s) -Warranty Coordinator

35	7.5 References, Page 34	<p>“Vendor shall provide a minimum of three references for projects of similar type and size performed within the last five years, preferably for state and/or local government entities. DCR reserves the right to check references prior to making any award hereunder. Any negative responses received may be grounds for disqualification of the proposal. DCR reserves the right to contact programs other than those listed by the Vendor in which DCR knows the Vendor participated.”</p> <p>Can we provide more than three references even if they are in the same state/local government entity, where we have been assigned/contracted to complete projects from demo, abatement, rehabilitation, MHU replacement, reconstruction and elevation projects?</p>	Vendor shall provide a minimum of three references for projects of similar type and size performed within the last five years, preferably for state and/or local government entities.
36	7.13 Reconstruction Plan Sets (for Vendors seeking to perform reconstruction projects), Page 36	<p>“Provide examples of single-family construction projects where you have provided the plan sets and specifications; DCR is specifically interested in examples of any CDBG-DR work where you have provided the plan sets and specifications. During the BAFO process, Vendors who intend to perform reconstruction projects may submit reconstruction plan sets of single-family homes, including options for Stick-Built or Modular homes, for consideration by the program for use in the reconstruction phase of the program. The Contractor must obtain permission from the designers for free reuse by the program by any contractor selected by the Program.”</p> <p>Do you want the entire plan set, or just an overview? Is that outside of our 20 page limit when submitting our RFP?</p>	<p>See answer to Question #1.</p> <p>Plan sets are not to be submitted at this time; just identify projects where you have provided those.</p>
37	5.2.3 Reconstruction, Reconstruction Scope of Work, Page 26	It states Fiber Cement Siding or stucco has to be used. Would it be acceptable to use vinyl siding instead? What we have found working with the	Vinyl siding is an acceptable cladding.

		homeowners in the eastern part of NC is that using the fiber cement siding is putting extra work on the homeowners with the upkeep and maintenance every 7-10 years. It is additional work in long run and an added expense for homeowners that are already tight financially.	
38	7.0 REQUIRED VENDOR INFORMATION 7.8 Annual Report, Page 35	Can privately-held companies submit financials under a separate cover for confidentiality?	<p>Per 2.7 PROPOSAL SUBMITTAL, “<i>If confidential and proprietary information is included in the proposal, also submit one (1) signed, REDACTED copy of the proposal.</i>”</p> <p>In eProcurement Sourcing there are two fields for Vendors to upload files – UNREDACTED offer and REDACTED offer. Please also see Attachment B, No. 27, page 44 for instructions on marking pages and content confidential. The REDACTED version should be a document that can be made public once an award is made.</p>
39	5.2 TASKS/ DELIVERABLES 5.2.3 Reconstruction Scope of Work, Page 26	Please verify that the DCR Implementation vendor will perform LBP testing, and the CM will be responsible for the Asbestos testing as necessary?	The implementation vendor will perform lead based paint testing and the vendor will be responsible for all other testing required by the jurisdiction.
40	5.2 TASKS/ DELIVERABLES 5.2.3 Reconstruction Scope of Work, Page 21	Will a damage assessment and feasibility analysis be performed prior to assignment?	Yes.
41	5.2 TASKS/ DELIVERABLES 5.2.2 Repair Scope of Work, Pages 20-24	In our experience when both the implementation vendor and CM do not perform the scope assessments together, the scope assessment tends to be performed at the substantial and final milestones inspections. Please verify that both the DCR Implementation vendor and CM	The implementation vendor is the construction manager. The implementation vendor will perform the scope assessment and assign the scope to the building vendor.

		perform an assessment together to obtain the SOW?	
42	5.2 TASKS/ DELIVERABLES 5.2.2 Repair Scope of Work	Will Exactimate Pricing be reviewed biannually or annually in order to adjust to the current market?	Xactimate pricing will be reviewed quarterly and adjusted if necessary.
43	5.2 TASKS/ DELIVERABLES 5.2.2 Repair Scope of Work	What is the expectation with pricing adjustments to address tariffs and escalation associated with the tariffs?	Xactimate pricing will be reviewed quarterly and adjusted if necessary.
44	5.2 TASKS/ DELIVERABLES 5.2.3 Reconstruction Scope of Work	Please verify the DCR implementation vendor will provide assistance and coordination with the applicant for temporary relocation.	The implementation vendor will qualify the applicant for temporary assistance. The implementation vendor will include scope for temporary assistance in the builder assignment. The builder will schedule move out and relocation. The builder will pay a voucher to the applicant per their scope.
45	4.0 REQUIREMENTS 4.4 Invoices, Page 17	If in fact performed by the CM please verify that a separate billing process will be allowed to receive continual reimbursement of the task?	Builder payments will be made in accordance with the payment schedule established by the implementation vendor and its construction management strategy.
46	5.2 TASKS/ DELIVERABLES 5.2.2 Repair Scope of Work, Page 23	Please verify that operational expenses and fees will be allowed on Temporary Relocation Assistance.	The implementation vendor will include scope in the builder assignment for temporary housing for qualified applicants.
47	5.0 SCOPE OF WORK 5.7 Liquidated Damages, Page 31	In our experience additional time must be added to the Temporary Relocation Assistance outside of the approved construction timeframes. This is due to the process of homeowner moveout needing to be performed prior to the notice to proceed and the delays after final inspection due to may different factors. Please verify that additional time of reimbursement for temp relo will be allowed upon program review of the process.	DCR will consider exceptions to the timeline in accordance with the implementation vendor's construction management strategy. In general, additional temporary housing assistance outside the prescribed construction timelines will not be considered.

48	5.2 TASKS/ DELIVERABLES 5.2.3 Reconstruction Scope of Work, Page 25	Reasonable Accommodations – Bathroom: Please confirm that all RA's will be performed and finalized prior to design.	In most instances, Reasonable Accommodations will be scoped prior to project assignment to the builder.
49	5.0 SCOPE OF WORK 5.1 Scope of Services, Page 19	What is the repair cap?	The implementation vendor will perform feasibility analysis on each site and establish the repair scope. The scope will not exceed the reconstruction cap, unless exceptional circumstances are approved by DCR.
50	5.0 SCOPE OF WORK 5.1 Scope of Services, Page 19	In the Pre-Bid meeting, it was discussed that it was expected that a large percentage of the task orders would be reconstruction. With such a large repair task order value what are the criteria to flip from repair to reconstruction?	The implementation vendor will establish a repair or reconstruction feasibility policy that will establish criteria for scoping each project.
51	5.2 TASKS/ DELIVERABLES 5.2.2 Repair Scope of Work, Page 23	Will the historic repair process and pricing be the same or will there be separate pricing to accommodate the different processes, fees and materials outside of the standard?	Scoping for historic projects will reflect with costs for materials and activities required by the jurisdiction.
52	5.0 SCOPE OF WORK 5.1 Scope of Services, Page 19	Will additional time be allowed for Historic Properties that require specialty repairs?	DCR will consider additional time for historic properties, depending on the scope and complexity.
53	5.2 TASKS/ DELIVERABLES 5.2.3 Reconstruction Scope of Work, Page 26	Please confirm that scoping is allowed for infrastructure and roads outside of the applicant's property to allow access to the property. Especially regarding MHU delivery and Heavy Equipment access.	Private road and bridge repair scope will be limited to the applicant's property. The State has other programs for repairing roads and bridges.
54	5.2 TASKS/ DELIVERABLES 5.2.2 Repair Scope of Work, Page 23	Please verify that the DCR implementation vendor will obtain or verify the Flood insurance policies?	Yes.
55	5.0 SCOPE OF WORK 5.4 Additional Requirements, Page 30	Will there be opportunities to add additional milestones if necessary, such as preconstruction to assist in the cash flow of the homes?	The implementation vendor will establish a payment schedule in accordance with its construction management strategy.

56	5.0 SCOPE OF WORK 5.7 Liquidated Damages, Page 31	Will there be a cap to LD's?	There is no cap on liquidated damage.
57	4.0 REQUIREMENTS 4.4 Invoices, Page 17	What will be the contracted payment terms?	Per ATTACHMENT C: NORTH CAROLINA GENERAL TERMS & CONDITIONS, #9 PAYMENT TERMS, "Payment terms are net not later than 30 days after receipt of a correct invoice or acceptance of goods, whichever is later." Additional information regarding payment may be included in the project Scope of Work.
58	5.2 TASKS/ DELIVERABLES 5.2.2 Repair Scope of Work, Page 23	Please address the process of applicant appeals during the construction process. In our experience appeals have been allowed up to and after the completion of construction requiring remobilization of the contractor. Will the applicants be allowed to submit multiple appeals of the scope during and after the construction process? Will the program establish a last day of submission for each task order?	The applicant will not be allowed to appeal the design, materials, or services defined in the construction scope. The vendor is expected to perform according to the scope, provide quality and timely work, and honor the warranties.
59	5.2 TASKS/ DELIVERABLES 5.2.3 Reconstruction Scope of Work, Page 26	Please confirm that scaffolding and additional safety measures outside of the standard model home will be scoped through the site-specific pricing outside of the Hard Cost of the model.	The implementation vendor will scope necessary equipment.
60	3.0 METHOD OF AWARD AND PROPOSAL EVALUATION PROCESS 3.1 Method of Award, Page 11	Please verify what scope is to be included within the Hard cost of the standard models or if this information will be provided during the BAFO process.	The BAFO will clarify pricing.
61	3.1 Method of Award, Negotiation and Best Final Offer, Page 13	"During the BAFO process, Vendors who intend to perform reconstruction projects may submit reconstruction plan sets for single-family homes, including options for Stick-Built and/or modular homes, for	It is estimated Vendors will be provided 7 days to respond to the BAFO.

		<p>consideration by the program for use in the reconstruction phase of the program.”</p> <p>Do you know an approximately timeline that will be placed for builders to return pricing and house plans if selected to reach the BAFO phase?</p>	
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Execute Addendum:**VENDOR:** Locke-Lane Construction, Inc.**AUTHORIZED SIGNATURE:** **NAME and TITLE (Print or Typed):** Andrew Sherrill, President**DATE:** 5/8/2025

RESIDENTIAL CONSTRUCTION PERFORMANCE GUIDELINES

Consumer Reference
Sixth Edition



NAHB Remodelers
Single-Family Builders Committee

Residential Construction Performance Guidelines for Professional Builders & Remodelers, Sixth Edition

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Contents

Acknowledgments	vii
Introduction	ix
History of the <i>Residential Construction Performance Guidelines</i>	ix
Sixth Edition Review	ix
Scope of the <i>Residential Construction Performance Guidelines</i>	ix
Scope of Responsibilities	x
Remodeling Projects	xi
How to Use This Manual	xi
General Instructions	xii
Definition of Terms	xii
Incorporating the Guidelines into a Warranty or Dispute Resolution Program	xiii
Other Uses for the Guidelines	xiii
Taking Measurements	xiv
Comments Welcomed	xiv
 1. Site Work	 1
 2. Foundation	 3
General	3
Concrete Slabs	4
Concrete Block Basement and Crawl Space Walls	6
Poured Concrete Basement and Crawl Space Walls	7
Moisture and Water Penetration	9
<i>Basement Walls and Floor</i>	9
<i>Crawl Spaces</i>	9
Structural Columns, Posts, or Piers	11
 3. Interior Floor Construction	 13
Floor System	13
Beams, Columns, and Posts	13
Subfloor and Joists	14
 4. Walls & Ceilings	 17
Wall Framing	17
Moisture Barriers and Flashing	18
Insulation	18
Windows and Glass	19
Exterior Doors	21

5. Exterior Finish	27
Wood and Wood Composite Siding	27
Aluminum or Vinyl Siding	29
Fiber Cement Board Siding	31
Masonry and Veneer	32
Stucco and Parged Coatings	34
Exterior Trim	36
Paint, Stain, and Varnish	37
6. Roof	39
Roof Structure	39
Roof Sheathing	40
Roof Vents	40
Roof Coverings	41
Chimney	45
Gutters and Downspouts	45
Skylights and Light Tubes	46
7. Plumbing	47
Water Supply System	47
Plumbing Fixtures	49
Sanitary Sewer or Septic System	51
8. Electrical	55
Fuses and Circuit Breakers	55
Outlets and Fixtures	56
9. Interior Climate Control	61
Air Infiltration and Drafts	61
Humidity Control and Condensation	62
Ducts and Airflow	62
Heating and Cooling Systems	63
Ventilation	66
10. Interior Finish	69
Interior Doors	69
Interior Stairs	71
Trim and Moldings	73
Cabinets	74
Countertops	77
Interior Wall Finish	80
<i>Lath and Plaster</i>	80
<i>Gypsum Wallboard or Drywall</i>	80
<i>Paint, Stain, and Varnish</i>	82
<i>Wallpaper and Vinyl Wall Coverings</i>	83
11. Flooring	85
Carpeting	85
Vinyl Flooring and/or Resilient Flooring	86
Hardwood Flooring	89
Tile, Brick, Marble, and Stone Flooring	92

12. Miscellaneous	95
Fireplace and Wood Stove	95
Concrete Stoops and Steps	96
Garage	96
Driveways and Sidewalks	97
Wood and Composite Decks	99
13. Landscaping	103
Glossary	105
Resources	113
Index	115

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Michael Elman, Construction Dispute Resolution Services
Bob Frost, Frost Construction Company
John Gill, Quality Builders Warranty Corporation
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Joseph Irons, CAPS, CGP, CGR, GMB, GMR, Irons Brothers Construction, Inc.
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This book would not exist today had it not been for the original outstanding commitment from many individuals and organizations who produced the first edition of *Residential Construction Performance Guidelines*:

Bill Asdal, Chair, NAHB Remodelers

Suzanne Grove, Chair, Single-Family Small Volume Builders Committee

The following organizations and groups contributed to all editions of the *Residential Construction Performance Guidelines*:

Home Innovation Research Labs (formerly NAHB Research Center)

NAHB Remodelers

NAHB Standing Committees

Business Management & Information Technology

Construction, Codes & Standards

Construction Liability, Risk Management & Building Materials

Construction Safety & Health

Custom Home Builders

Single-Family Builders

Other Organizations

Bonded Builders Home Warranty Association

Builders Association of Greater Indianapolis

Building Industry Association of Washington

Canadian Home Builders Association

Greater Atlanta Home Builders Association

Home Buyers Warranty Corporation

MacLellan Wolfson Associates

Metropolitan Builders Association of Greater Milwaukee

Michigan Association of Home Builders

Portland Cement Association

Professional Warranty Service Corporation

National Tile Contractors Association

National Wood Flooring Association

Quality Builders Warranty Corporation

Residential Warranty Company

Southern Nevada Home Builders Association

Texas Association of Builders

Texas Residential Construction Commission

Tile Council of America

2-10 Home Buyers Warranty, Inc.

U.S. Department of Housing and Urban Development

Introduction

Beyond building codes and local regulations, both contractors and their customers have long sought measurable benchmarks that deal with the expectations of performance in the goods and services provided by the residential construction industry. Although codes and regulations address matters of health, safety, and welfare, matching a consumer's expectations entails having objective criteria regarding performance. Upon this premise, the Residential Construction Performance Guidelines were developed and refined to offer achievable minimum levels of workmanship for the products delivered.

History of the *Residential Construction Performance Guidelines*

The core of these criteria was first established as a basis for coverage under the insured warranty program, initially offered some 30 years ago. More than 20 years ago, the NAHB Remodelers (previously the Remodelers Council) embraced a similar compilation of guidelines, which led to the published editions of *Quality Standards for the Professional Remodeler*. The joint effort of the NAHB Remodelers and the Single-Family Builders Committee (formerly the Single-Family Small Volume Builders Committee) culminated in the first edition of these guidelines in 1996. Many of the individual guidelines have remained time-honored measures of residential construction performance.

Indeed, the *Residential Construction Performance Guidelines* have become the accepted tool in many locations throughout the country for evaluating performance by parties under residential construction contracts when a dispute may lead to litigation or arbitration.

Sixth Edition Review

The performance guidelines in this manual were initially created and reviewed by more than 300 builders and remodelers, as well as representatives of specialty trade organizations. This exhaustive review resulted in a first edition that builders and remodelers used as a reference with confidence as they communicated with their customers. Subsequent editions, including this one, are substantially similar to the initial publication, although certain guidelines have been updated to make them easier for both contractors and consumers to understand.

A few guidelines were deleted and others were added to make the text more comprehensive and consistent with current building science advancements. NAHB members strive to continually refine these guidelines to promote greater mutual understanding of expectations between contractors and their customers. It is hoped that this will reduce the potential for disputes throughout the new construction and remodeling process.

Scope of the *Residential Construction Performance Guidelines*

These guidelines are a collection of minimum performance criteria and should be interpreted as such. Many contractors routinely build to tighter tolerances than those expressed here. Moreover, the guidelines are intended as a reference that should be interpreted with common sense. They should be applied only within the scope of the particular project built; they are not intended to answer all questions pertaining to construction workmanship that might arise in the course of a typical residential construction project. The guidelines selected for this manual deal with the issues that most frequently prompt questions for the contractor and the consumer.

The developers of these guidelines examined typical building techniques and quality measures based on a general overview of residential construction within the United States. Local variation in construction techniques, materials, requirements, and environmental conditions may render the application of some of these guidelines inappropriate either for evaluation or suggested remedy. In such cases, the parties should expressly provide in writing that some standard other than the related guideline will apply. Similarly, if a specific problem has prompted locally developed guidelines or practices, or changes in the prevailing building code, the parties may choose the local guideline or practice to take precedence over these guidelines.

These guidelines neither constitute nor are they intended to substitute for a warranty. However, parties may agree to incorporate the guidelines by referencing them within a warranty or within another construction contract provision. The guidelines are separate and distinct from any manufacturers' or fabricators' warranties that may apply to materials and products used in a project.

Contractors often refer to these guidelines in the Dispute Resolution sections of their contracts as the first step, prior to invoking any formal dispute resolution process such as mediation, arbitration, or litigation. Using these guidelines as the basic performance criteria has eliminated the need to invoke a formal dispute resolution process in many cases.

The use and application of the *Residential Construction Performance Guidelines* is strictly optional and completely at the discretion of individual users. If they are used, they refer only to contractor-installed materials and services and not to any elements the consumer has contracted for through a third party, including other trade contractors.

Nothing in this manual should be construed as a policy, endorsement, warranty (express or implied), or guaranty by the National Association of Home Builders (NAHB) or any of its members or other persons or organizations involved in the creation of this manual, with respect to any technical descriptions, systems, details, requirements, materials, or products.

NAHB accepts no responsibility for any inaccuracies or omissions and expressly disclaims any responsibility for damage, liability, loss, or risk, whether personal, financial, or otherwise, that is incurred as a direct or indirect consequence of using, applying, or relying on any of the recommendations and/or information contained in this manual.

Scope of Responsibilities

Typically, numerous parties are involved in a residential construction project, whether it entails building a new home or remodeling an existing one. Each of these parties has specific responsibilities to fulfill. The contract documents should provide a clear statement of the agreement between the contractor and the consumer. In addition to the specific provisions of any contract, the following general responsibilities should be noted:

Contractor: For the purposes of this manual, the contractor is the entity named in the contract that has primary responsibility for completing the project. The contractor often employs others to assist in the project. In most cases, the contractor is responsible for all work assigned in the contract regardless of who performs the work. If the contractor is acting in a special role (for instance, as a construction manager), or the consumer selects others to work on the project who are outside the contractor's control, then the responsibility for evaluation and remedy of potential problems will fall to those other parties.

Consumer: The consumer is the buyer of the product or service named in the contract. As such, the consumer is responsible for carefully reviewing the contract to ensure it accurately represents the expectations for the final product. Once the consumer accepts the project and moves into the home or occupies the newly renovated space, then the consumer is responsible for routine maintenance and upkeep. Homes require a certain amount of care and maintenance, which are the consumer's responsibility. Consumers should note that in some of the guidelines contained herein, the contractor is not obligated to make repairs to items that fall within the consumer's maintenance responsibilities.

Manufacturer: Manufacturers warrant many residential construction components that may fall outside the scope of the contractor's responsibilities, such as kitchen appliances, furnaces, air conditioners, and lighting and plumbing fixtures. Certain types of siding, roofing, or flooring also may be covered by a manufacturer's warranty. If there is a warranty question with one of these components, the consumer should be aware that the contractor may not be responsible for the product's performance after installation. If a problem occurs, the consumer often will need to contact the manufacturer or fabricator directly to have the problem evaluated and, if necessary, rectified, unless otherwise specified in a contract. The contractor's responsibilities may end once the contractor provides the appropriate information on how to contact the manufacturer or fabricator, unless otherwise specified in the contract.

Remodeling Projects

Remodeling, the process of expanding or enhancing an existing structure, presents inherent difficulties in melding the new and old into a home or room that meets the consumer's needs and is aesthetically pleasing. Some circumstances call for the suspension of some or all the guidelines to successfully complete a remodeling project. These circumstances include, but are not limited to, the meeting of old, out-of-plumb or out-of-level structures with new structures; the appearance of new materials near weathered, existing materials; aging plumbing and mechanical systems and the practical considerations for new projects to work within the limitations of existing buildings.

Because of the unique challenges of joining new and old construction, a remodeling contractor may build some or all of the project outside the scope of these guidelines to achieve the contract objectives. The contractor may note an existing condition with the consumer before construction. It is also normal for a contractor, during the course of construction, to discover and accommodate conditions in the old structure that require different solutions from those suggested in these guidelines. In these circumstances, the governing factor is meeting the needs of the consumer as outlined in the contract.

How to Use This Manual

This manual is divided into chapters organized according to the usual sequence of events in the construction process. Nearly every chapter contains sections within it, and some chapters also have more specific subsections. Each chapter contains individual construction performance guidelines.

The guidelines are numbered as follows:

Chapter Number–Section Number–Guideline Number

Each construction performance guideline has three parts, as follows:

Observation: A description of a particular construction condition.

Performance Guideline: The specific criterion for acceptable workmanship.

Corrective Measure: A description of the work required to meet the performance guideline and/or the consumer's maintenance responsibility.

Some guidelines also include the following elements:

Remodeling Specific Performance Guideline (listed as applicable): The specific criterion for acceptable workmanship for remodeling.

Discussion: An explanation of unique factors pertinent to the observation, performance guideline, or corrective measure.

General Instructions

Many locales require construction work to comply with the prevailing building code. If a conflict arises between these guidelines and the prevailing building code, as a matter of law, the code requirements may take precedence over these guidelines.

These performance guidelines apply only to work specified in the contract documents for the project. They do not apply to designs, plans, materials, or workmanship that is supplied by the consumer or is outside the scope of the project. They are also designed to apply only to the part of the job addressed in each guideline.

In order to obtain a specific result, many plans or specifications utilize styles, materials, or specific workmanship details that are designed to be outside of the specifications herein, to obtain a specific result. In order to avoid conflict, the contractor and consumer should specify in writing that these specific items are excluded from the performance guidelines.

Definition of Terms

The following terms are crucial to understanding the *Residential Construction Performance Guidelines, Sixth Edition*:

Substantial completion of the project. The point at which the areas in the home are functional for their intended use as stated in the contract. Substantial completion for a remodeling project is when the consumer occupies or uses the space for its intended purpose. The contract should include a specific definition of completion.

Warranty period. A 12-month period unless otherwise specified by the contract or prevailing state or local law.

Manufacturer's warranty. The warranty provided by the manufacturer of a product that has been incorporated into a newly-constructed home or a remodeling project.

Prevailing building code. The building code that has been adopted by the state, county, city, or other applicable local governing authority. These codes vary greatly and require an understanding of the codes specifically applicable to each individual project.

Other selected terms are italicized on first reference and defined in the glossary.

Incorporating the Guidelines into a Warranty or Dispute Resolution Program

The warranty, like the contract, should clearly express the intent of the parties. The limited warranty describes the issues the contractor will be responsible for after substantial completion of the project and specifies the time period during which the warranty is in force. Moreover, if a contractor warrants workmanship and materials in a warranty, the contractor should provide a clear definition of compliance with the terms of the warranty. Failure to do so may result in having an arbitrator or a court decide for them. Accordingly, consideration should be given to incorporating the *Residential Construction Performance Guidelines* by reference into the contract.

A contract may validly include provisions of a document that is not physically part of the contract itself – this is referred to as “incorporation by reference.” Incorporation by reference is a common tool in the drafting of construction contracts. Matters incorporated into a contract by reference are as much part of the agreement as if they had been set out in the contract word-for-word. Consideration should be given to incorporating by reference into the contract the *Residential Construction Performance Guidelines*. Please refer to the Appendix to see examples of suggested contract language to incorporate the RCPG into your contract, warranty, or related document.

To ensure that the consumer agrees with the specific performance guidelines stated herein, the contractor should review the specific guidelines and the procedures recommended with the consumer before entering into a contract. Providing the consumer with a copy of the guidelines at contract signing is highly recommended. Reviewing the performance guidelines again at closing or at the walk-through inspection is also recommended.

If there are guidelines within this publication that the contractor or consumer does not want to use, they should be specifically excluded in writing from all warranty or contract documents applicable to the project. Likewise, if there are issues that are not addressed in the guidelines, then by written agreement the contractor and consumer should refer to those issues in the warranty and/or contract documents.

Other Uses for the Guidelines

The *Residential Construction Performance Guidelines* can promote a better understanding of the home construction process among consumers, inspectors, and public officials. Following are some suggestions for building awareness of these guidelines:

- Make the guidelines available to consumers simultaneous with or prior to entering into a contract to help them understand the construction process. Whether or not your contract refers to the guidelines, the contractor and consumer should acknowledge in writing that they agree to specific performance tolerances.
- Avoid disputes by referring to this objective set of guidelines with third-party credibility.
- Share the guidelines with mediators, arbitrators, and judges to help them understand the acceptable performance criteria.
- Show the guidelines to building code officials so they can distinguish performance guidelines from code compliance issues.
- Make the guidelines available to trade contractors whose profession is integral to the construction process.

- Ensure agreements with trade contractors include a guarantee from them that their work will comply with the guidelines.
- Take the guidelines to city, county, and state officials and urge them to consider adopting the guidelines as their accepted criteria.
- Make the guidelines available to private, third-party home inspectors, and their trade associations.

Taking Measurements

You can quickly assess whether certain ridges, cracks, gaps, lippage, or variations in plumbness or levelness are within the *Residential Construction Performance Guidelines* recommended tolerances. Tolerances in most of these areas are less than 1 inch. The edges of U.S. coins can be used to approximate measurements of variation as follows:

Dime = approximately $\frac{1}{32}$ inch

Quarter = approximately $\frac{1}{16}$ inch

Comments Welcomed

NAHB encourages readers to provide comments and suggestions regarding their experiences using the *Residential Construction Performance Guidelines, Sixth Edition*, including their own methods or tools for determining whether a project complies with the guidelines. Submit your comments in writing, with the subject line "Residential Construction Performance Guidelines, Sixth Edition" to the NAHB Business Management Department, 1201 15th Street NW, Washington, DC 20005. Comments will be considered in preparing future editions of this book.

Site Work

1-1-1 Observation: The ground has settled around the *foundation*, over utility trenches, or in other areas.

Performance Guideline: The ground will slope away from the foundation at least 6 inches within the first 10 feet of the building. Settled ground, outside of the building's 10-foot line, that is over utility trenches, or in other filled areas shall not interfere with water drainage away from the home.

Corrective Measure: If the contractor provided final grading, then one time only during the *warranty period*, the contractor will fill areas that settle more than 6 inches or that affect proper drainage. Any removal, repair, replacement or modification of landscaping, including but not limited to grass, sod, plantings, or lawn irrigation systems, etc., by the consumer shall negate any obligation on behalf of the builder. The contractor will make a good faith effort to preserve plantings, but it is the consumer's responsibility to replace shrubs, grass, other landscaping, pavement, sidewalks, or other improvements affected by placement of such fill.

1-1-2 Observation: The property does not properly drain.

Performance Guideline: To ensure proper drainage within 10 feet around the home, the contractor will establish necessary grades and swales within the property if the work is included in the contract. Standing water should not remain for extended periods (generally no more than 24 hours), within 10 feet of the home after a rain, except in swales that drain other areas or in areas that receive discharge from sump pumps, down spout drain lines, foundation or crawl space drains, etc. In these areas a longer period can be anticipated (generally no more than 48 hours). Water may stand longer during periods of heavy rains, especially when heavy rains occur on successive days. Removal, repair, replacement, or modification of landscaping, including but not limited to grass, sod, plantings, or lawn irrigation systems, etc., by the consumer shall negate any obligation on behalf of the builder. No grading determination will be made while frost or snow is on the ground or while the ground is saturated.

Remodeling Specific Guideline: Contractor is not responsible for problems caused by prior construction, preexisting conditions, changes in code requirements (prior codes caused problems later, for example), or existing materials and surfaces.

Corrective Measure: If grading is part of the contract, the contractor is responsible for initially establishing the proper grades and swales.

Discussion: Grass and other landscaping are integral components of the storm water management practice needed to minimize erosion from the property. It is the consumer's responsibility to maintain grass and other landscaping to help ensure the property drainage system functions properly. The consumer is responsible for maintaining such grades and swales once the contractor has properly established them. Irrigation of new plants is especially vital to their health and survival. In some seasons, daily water may be necessary to be applied by consumers until plants have established themselves into new soil, their new home.

1-1-3 Observation: The property has soil erosion.

Performance Guideline: The contractor is not responsible for soil erosion.

Corrective Measure: No corrective action is required by the contractor.

1-1-4 Observation: Water from a nearby or adjacent property flows onto the consumer's property.

Performance Guideline: The contractor is responsible for providing a reasonable means of draining water from rain, melting snow, or ice on the property, but the contractor is not responsible for water flowing from a nearby or adjacent property.

Corrective Measure: No corrective action is required by the contractor.

1-1-5 Observation: Existing trees, shrubs, or other vegetation were damaged during construction.

Performance Guideline: The contractor will use their best judgment in making a reasonable and cost-effective effort to preserve existing landscaping as predetermined by the contractor and consumer, but the survival of existing landscaping cannot be guaranteed.

Corrective Measure: No corrective action is required by the contractor.

1-1-6 Observation: Grass, grade or landscape areas are disturbed or damaged on the property as a result of work performed by the contractor in conjunction with a correction of a deficiency.

Performance Guideline: Grass, grade or landscape areas disturbed or damaged will be restored.

Corrective Measure: Contractor will repair disturbed or damaged areas affected during construction.

Discussion: Damage to grass, grade or landscaping caused by a third party, e.g., a utility provider, is not the responsibility of the contractor. Replacement material shall be of the same size and variety as the dead or damaged material.

Foundation

General

2-1-1 Observation: The foundation is out of square.

Performance Guideline: As measured at the top of the foundation wall, the diagonal of a triangle with sides of 12 feet and 16 feet will be no more than 1 inch more or less than 20 feet.

Remodeling Specific Guideline: A contractor and consumer may agree to build an addition out of square in order to keep a new exterior wall in line with an existing wall of an out-of-square home.

Corrective Measure: The contractor will make necessary modifications to the foundation not complying with the performance guideline for squareness to provide a satisfactory appearance. The contractor may square the first-floor deck or walls by cantilevering over the foundation or locating the deck or walls inset from the outside face of the foundation.

Discussion: Squareness is primarily an aesthetic consideration. The corrective measure emphasizes the primarily aesthetic nature of squareness and makes the criterion for correction satisfactory appearance. This allows the contractor to make either a structural change or some cosmetic modification as is most appropriate. There are many instances in which the squareness of a foundation is inconsequential because subsequent construction provides an opportunity to make corrections.

2-1-2 Observation: The foundation is not level.

Performance Guideline: This guideline applies only when the levelness of the foundation adversely impacts subsequent construction. As measured at the top of the foundation wall, no point will be more than ½ inch higher or lower than any point within 20 feet.

Remodeling Specific Guideline: The contractor and the consumer may agree to build an addition out of level to keep the floor of an addition on the same plane, and the roof ridge on the same line, as those of an existing, out-of-level structure.

Corrective Measure: The contractor will make necessary modifications to any part of the foundation or to subsequent construction to meet the performance guideline for levelness. This can be affected by leveling the sills with *shims*, *mortar*, appropriate fillers, or other methods.

Discussion: There are many instances in which the levelness of a foundation is not of consequence because subsequent construction provides an opportunity to make corrections.

2-1-3 Observation: There is a crack in a concrete footing.

Performance Guideline: Cracks greater than $\frac{1}{4}$ inch in width are considered excessive.

Corrective Measure: The contractor will repair any cracks in excess of the performance guideline, using a material designed to fill cracks in concrete.

Concrete Slabs

2-2-1 Observation: A concrete *slab* within the structure has separated or moved at control (expansion and contraction) joints.

Performance Guideline: Concrete slabs within the structure are designed to move at *control joints*.

Corrective Measure: Because this is a normal occurrence, no corrective action is required by the contractor.

Discussion: Control joints are placed in concrete for the very purpose of encouraging separation or cracking to take place at the joints instead of in random locations.

2-2-2 Observation: Efflorescence is present on the surface of the basement floor.

Performance Guideline: If the efflorescence is caused solely by basement water leakage (actual flow and accumulation), the contractor will eliminate the leaks into the structure.

Corrective Measure: The contractor will repair to meet the performance guideline.

Discussion: Efflorescence is a typical condition caused by moisture reacting with the soluble salts in concrete and forming harmless carbonate compounds. It is evidenced by the presence of a white film or powder on the surface of the concrete. It is a particularly common occurrence where masonry or concrete are in contact with high moisture levels as may be found in basements or crawl spaces.

2-2-3 Observation: The concrete floor or slab is uneven.

Performance Guideline: Except where the floor or portion of the floor has been designed for specific drainage purposes, concrete floors in living areas should not have pits, depressions, or areas of unevenness exceeding $\frac{3}{8}$ inch in 32 inches.

Remodeling Specific Guideline: Existing concrete floors or slabs may be uneven. In these situations, no corrective action is required by the contractor.

Corrective Measure: The contractor will correct or repair the floor to meet the performance guideline.

Discussion: A repair can be accomplished by leveling the surface with a material designed to repair uneven concrete.

2-2-4 Observation: The concrete floor slab is cracked.

Performance Guideline: Minor cracks in concrete floor slabs are normal. Cracks exceeding $\frac{3}{16}$ inch in width will be repaired.

Corrective Measure: Using a material designed to fill cracks in concrete, the contractor will repair horizontal cracks that do not meet the performance guideline.

Discussion: If the cracks are observed at the control joints no corrective action is required by the contractor. Control joints are placed in concrete for the very purpose of encouraging separation or cracking to take place at the joints instead of in random locations.

2-2-5 Observation: The concrete floor has a crack that has a vertical displacement.

Performance Guideline: Minor cracks in concrete floor slabs are normal. Cracks exceeding $\frac{3}{16}$ inch in vertical displacement will be repaired.

Corrective Measure: Using a material designed to fill cracks in concrete, the contractor will repair vertical cracks that do not meet the performance guideline. Any crack that creates a possible trip hazard will be ground down.

2-2-6 Observation: Interior concrete is *pitting* or *spalling*. Pitting is evidenced by concrete that has chipped. Spalling is evidenced by concrete that has flaked or peeled from the outer surface.

Performance Guideline: Interior concrete surfaces should not pit or spall unless the deterioration is caused by factors outside of the contractor's control.

Corrective Measure: The contractor will repair concrete surfaces using materials designed for this purpose.

2-2-7 Observation: The interior concrete slab, i.e. basement or garage slab, has a loose, sandy surface, sometimes referred to as "dusting."

Performance Guideline: The surface should not be so sandy that it creates a problem for flooring being installed by the owner after the contractor has completed the project.

Corrective Measure: The surface will be repaired to be suitable for the finish flooring that the contractor had reason to anticipate would be applied.

Concrete Block Basement and Crawl Space Walls

2-3-1 Observation: A concrete block basement or crawl space wall is cracked.

Performance Guideline: Cracks in concrete block basement or crawl space walls should not exceed $\frac{1}{4}$ inch in width.

Corrective Measure: The contractor will repair cracks to meet the performance guideline using a material designed to fill cracks in concrete.

Discussion: *Shrinkage cracks* are common in concrete block masonry and should be expected in crawl space and basement walls. Cracks may be vertical, diagonal, horizontal, or in stepped-in masonry joints.

2-3-2 Observation: A concrete block basement wall is out of plumb.

Performance Guideline: Concrete block walls should not be out of plumb greater than 1 inch in 8 feet when measured from the base to the top of the wall.

Remodeling Specific Guideline: If tying into an existing foundation that is out of plumb, the contractor and consumer will review the existing conditions and scope of work. The contractor will use his or her best judgment in making a reasonable and cost-effective effort to meet the performance guideline while complying with the existing building code.

Corrective Measure: The contractor will repair any deficiencies in excess of the performance guideline unless the wall is to remain unfinished according to the contract, and the wall meets building code requirements as evidenced by passed inspections, in which case no corrective action is required by the contractor.

2-3-3 Observation: A concrete block basement wall is bowed.

Performance Guideline: Concrete block walls should not bow in excess of 1 inch in 8 feet.

Corrective Measure: The contractor will repair any deficiencies that do not meet the performance guideline unless the wall is to remain unfinished according to the contract, and the wall meets building code requirements, in which case no corrective action is required.

2-3-4 Observation: Efflorescence is present on the surface of the basement or crawl space concrete block wall.

Performance Guideline: If the efflorescence is caused solely by water leakage (actual flow and accumulation), the contractor will eliminate the leak into the structure.

Corrective Measure: The contractor will repair to meet the performance guideline.

Discussion: Efflorescence is a typical condition caused by moisture reacting with the soluble salts in concrete and forming harmless carbonate compounds. It is evidenced by the presence of a white film or powder on the surface of the concrete. It is a particularly common occurrence where masonry or concrete are in contact with high moisture levels as may be found in basements or crawl spaces.

Poured Concrete and Concrete Panel Basement, and Crawl Space Walls

2-4-1 Observation: A concrete basement wall is out of plumb.

Performance Guideline: Finished concrete walls should not be out of plumb greater than 1 inch in 8 feet when measured vertically.

Remodeling Specific Guideline: If tying into an existing foundation that is out of plumb, the contractor and consumer will review the existing conditions and scope of work. The contractor will use his or her best judgment in making a reasonable and cost-effective effort to meet the performance guideline while complying with the existing building code.

Corrective Measure: The contractor will repair any deficiencies that do not meet the performance guideline. If the wall is to remain unfinished according to contract and the wall meets building codes, no corrective action is required by the contractor.

2-4-2 Observation: An exposed concrete wall has pits, surface voids, or similar imperfections in it.

Performance Guideline: Surface imperfections larger than 1 inch in diameter or 1 inch in depth are considered excessive.

Corrective Measure: The contractor will repair imperfections, which do not meet the performance guideline, using a material designed to fill holes in concrete.

Discussion: Pits, surface voids, and similar imperfections are called "air surface voids" and are caused by air trapped between the concrete and concrete form interface. Air surface voids are not structurally significant. The technical term for larger voids is honeycomb. These must be dealt with in accordance with this guideline. The repaired area is unlikely to match the color or texture of the surrounding concrete.

2-4-3 Observation: A concrete basement wall is bowed.

Performance Guideline: Concrete walls should not bow in excess of 1 inch in 8 feet when measured from the base to the top of the wall.

Corrective Measure: The contractor will repair any deficiencies that do not meet the performance guideline. If the wall is to remain unfinished according to contract and the wall meets building codes, no corrective action is required by the contractor.

2-4-4 Observation: A concrete basement or crawl space wall is cracked.

Performance Guideline: Cracks in concrete walls should not exceed $\frac{1}{4}$ inch in width.

Corrective Measure: Using a material designed to fill cracks in concrete, the contractor will repair any cracks to meet the performance guideline.

Discussion: Shrinkage cracks and other cracks are common and are inherent in the drying process of concrete walls. They should be expected in these walls due to the nature of concrete. The only cracks considered under warranty claims are cracks that permit water penetration or horizontal cracks that cause a bow in the wall.

2-4-5 Observation: A *cold joint* is visible on exposed poured concrete foundation walls.

Performance Guideline: A cold joint is a visible joint indicating where the pour terminated and continued. Cold joints are normal and should be expected to be visible. Cold joints should not be an actual separation or a crack that exceeds $\frac{1}{4}$ inch in width.

Corrective Measure: Using a material designed to fill cracks in concrete, the contractor will repair any cold joint to meet the performance guideline.

2-4-6 Observation: A *joint* is visible on exposed panel concrete foundation walls.

Performance Guideline: A visible joint indicating where the panels connect are normal and should be expected to be visible. Joints should not be an actual separation.

Corrective Measure: Using a material designed to fill cracks in concrete, the contractor will repair any panel joint to meet the performance guideline.

2-4-7 Observation: Efflorescence is present on the surface of the concrete basement wall.

Performance Guideline: If the efflorescence is caused by basement water leakage (actual flow and accumulation), the contractor will eliminate the leak into the structure.

Corrective Measure: The contractor will repair to meet the performance guideline.

Discussion: Efflorescence is a typical condition caused by moisture reacting with the soluble salts in concrete and forming harmless carbonate compounds. It is evidenced by the presence of a white film or powder on the surface of the concrete. It is a particularly common occurrence where masonry or concrete are in contact with high moisture levels as may be found in basements or crawl spaces.

Moisture and Water Penetration

Basement Walls and Floor

2-5-1 Observation: Dampness is evident on basement walls or the floor.

Performance Guideline: The contractor is not responsible for dampness caused by *condensation* of water vapor on cool walls and floors. Dampness caused by moisture intrusion should be addressed by the contractor.

Corrective Measure: The contractor will repair to meet the performance guideline unless the consumer's action caused the dampness.

Discussion: Excessive dampness caused by consumer action, such as changing the grade around the home or irrigation systems, is not the contractor's responsibility.

2-5-2 Observation: Water has accumulated in the basement.

Performance Guideline: Water should not accumulate in the basement.

Remodeling Specific Guideline: The contractor is not responsible for problems caused by prior construction, preexisting conditions, changes in code requirements (prior codes caused problems later), or existing materials and surfaces and installation techniques and technology.

Corrective Measure: The contractor will take such actions as are necessary to prevent water from accumulating in the basement unless consumer action caused the accumulation.

Discussion: Water accumulation caused by consumer action, such as changing the grade around the home or irrigation systems, is not the contractor's responsibility.

Crawl Spaces

2-5-3 Observation: Water accumulates in a vented crawl space.

Performance Guideline: Crawl spaces should be graded and proper exterior foundation drains installed as required by the prevailing building codes to prevent water from accumulating.

Remodeling Specific Guideline: The contractor is not responsible for problems caused by prior construction, preexisting conditions, changes in code requirements (prior codes caused problems later), or existing materials and surfaces and installation techniques and technology.

Corrective Measure: The contractor will take corrective measures to meet the performance guideline.

2-5-4 Observation: Condensation is evident on the vented crawl space surfaces.

Performance Guideline: The contractor will install the ventilation and vapor barrier required by the prevailing building code.

Corrective Measure: The contractor will take corrective actions to meet the performance guideline. If the crawl space is ventilated as required by applicable building codes, then no corrective action is required by the contractor. Further reduction of condensation is a consumer maintenance responsibility.

Discussion: Temporary conditions that cause condensation that cannot be eliminated by ventilation and a vapor barrier may include:

- Night air gradually cools the interior surfaces of the crawl space. In the morning, moisture picked up by sun-warmed air migrates into the crawl space and condenses on cool surfaces.
- At night, outside air may rapidly cool foundation walls and provide a cool surface on which moisture may condense.
- If the home is left unheated in the winter, floors and walls may provide cold surfaces on which moisture in the warmer crawl space air may condense.
- Moisture inside a heated home may reach the dew point within floor insulation or on the colder bottom surface of the vapor barrier. Moisture on or under the poly vapor barrier may result from condensation or hydrostatic pressure. This is a normal condition.
- The consumer can reduce condensation, if necessary, by enclosing the crawl space and dehumidifying (*closed crawl*) or by enclosing and intentionally heating and cooling the crawl space (*conditioned crawl*).

2-5-5 Observation: Sealed crawl/closed/conditioned has moisture or standing water.

Performance Guideline: Sealed crawl spaces should have adequate methods to drain the possible sources for ground moisture entering the space as required by applicable building codes.

Remodeling Specific Guideline: The contractor is not responsible for problems caused by prior construction, preexisting conditions, changes in code requirements (prior codes caused problems later), or existing materials and surfaces and installation techniques and technology.

Corrective Measure: The contractor will take corrective measures to meet the performance guideline.

Structural Columns, Posts, or Piers

2-6-1 Observation: An exposed wood column is bowed or is out of plumb.

Performance Guideline: Exposed wood columns should not bow or be out of plumb more than $\frac{3}{4}$ inch in 8 feet at substantial completion of the project.

Corrective Measure: The contractor will repair any deficiencies that do not meet the performance guideline.

Discussion: Wood columns may become distorted as part of the drying process. Bows and other imperfections that develop after installation cannot be prevented or controlled by the contractor.

2-6-2 Observation: An exposed concrete column is installed bowed or out of plumb.

Performance Guideline: Exposed concrete columns should not be installed with a bow more than 1 inch in 8 feet. They should not be installed out of plumb more than 1 inch in 8 feet.

Corrective Measure: The contractor will repair any deficiencies that do not meet the performance guideline.

2-6-3 Observation: A masonry column or pier is out of plumb.

Performance Guideline: Masonry columns or piers should not be constructed out of plumb more than 1 inch in 8 feet.

Corrective Measure: The contractor will repair any deficiencies that do not meet the performance guideline.

2-6-4 Observation: A steel post/column is out of plumb.

Performance Guideline: Steel posts/column should not be out of plumb in excess of $\frac{3}{8}$ inch in 8 feet when measured vertically.

Corrective Measure: The contractor will repair any deficiencies that do not meet the performance guideline.

Interior Floor Construction

Floor System

3-1-1 Observation: Springiness, bounce, shaking, or visible sag is present in the floor system.

Performance Guideline: All *beams, joists, headers*, and other dimensional or manufactured structural members will be sized according to the manufacturers' specifications or prevailing building codes.

Corrective Measure: The contractor will reinforce or modify, as necessary, any member of the floor system not meeting the performance guideline.

Discussion: *Deflection* may indicate insufficient stiffness in the lumber or may reflect an aesthetic consideration independent of the strength and safety requirements of the lumber. Structural members are required to meet standards for both stiffness and strength. If a consumer expresses a preference to the contractor before construction, the contractor and the consumer may agree upon a higher standard of deflection.

Beams, Columns, and Posts

3-2-1 Observation: An exposed wood column, post, or beam is split.

Performance Guideline: Sawn wood columns, posts, or beams will meet the grading standard for the species used at the span and load as prescribed in the applicable building code.

Corrective Measure: The contractor will repair or replace any wood column, post, or beam that does not meet the performance guideline. Filling splits with appropriate filler is an acceptable method of repair.

Discussion: Columns, posts, and beams will sometimes split as they dry after installation. Splitting is acceptable and is not a structural concern if the columns, posts, or beams have been sized according to manufacturer's specifications or applicable building codes. Some materials have inherent cracks or imperfections; these do not require repair.

3-2-2 Observation: An exposed wood beam or post is twisted or bowed.

Performance Guideline: Exposed wood posts and beams will meet the grading standard for the species used. Posts and beams with bows and twists exceeding $\frac{3}{4}$ inch in an 8-foot section are considered excessive.

Corrective Measure: The contractor will repair or replace any beam or post with a bow or twist that exceeds the performance guideline.

Discussion: Beams and posts, especially those $3\frac{1}{2}$ inches or greater in thickness (which normally are not kiln dried) will sometimes twist or bow as they dry after milling or installation. Twisting or bowing is usually not a structural concern if posts and beams have been sized according to manufacturers' specifications or applicable building codes.

3-2-3 Observation: An exposed wood beam or post is cupped.

Performance Guideline: Cups exceeding $\frac{1}{4}$ inch in $5\frac{1}{2}$ inches are considered excessive.

Corrective Measure: The contractor will repair or replace any beam or post with a defect that does not meet the performance guideline.

Discussion: Cupped lumber is lumber that has warped or cupped across the grain in a concave or convex shape. Beams and posts, especially those $3\frac{1}{2}$ inches or greater in thickness (which normally are not kiln dried), may cup as they dry after milling or installation and is not a defect.

Subfloor and Joists

3-3-1 Observation: The wood *subfloor* squeaks or seems loose.

Performance Guideline: Although a totally squeak-proof floor cannot be guaranteed, frequent, loud squeaks caused by improper installation or loose subflooring are deficiencies.

Corrective Measure: The contractor will refasten or take other corrective action of any improperly installed or loose subfloor to attempt to reduce squeaking to the extent possible within reasonable repair capability without removing floor or ceiling finishes.

Discussion: There are many possible causes of floor squeaks. One of the more common sources of squeaks is wood moving along the shank of a nail. Squeaking frequently occurs when lumber, floor sheathing, or boards move slightly when someone walks over them. Boards and floor sheathing may become loose due to shrinkage of the floor structure or subfloor as it dries after installation or seasonal changes in temperature and humidity. Nails used to fasten metal connectors (*joist hangers*, tie-down straps, etc.) may cause squeaks. The nature of wood and construction methods makes it practically impossible to eliminate all squeaks during all seasons. Fastening loose subflooring with casing nails into carpet and counter sinking the head is an acceptable method of repair. Snap-off screws may also be used to refasten subflooring through carpet. If there is no finish ceiling below, repairs can be made by shimmiing or other techniques to repair squeaks are an acceptable alternative.

3-3-2 Observation: A wood subfloor is uneven.

Performance Guideline: Subfloors should not have more than a $\frac{1}{4}$ inch ridge or depression within any 32-inch measurement. Measurements should not be made at imperfections that are characteristic of the material used. This guideline does not cover transition points between different materials.

Remodeling Specific Guideline: The consumer and the contractor may agree to build a wood floor not level to match or otherwise compensate for preexisting conditions.

Corrective Measure: The contractor will correct or repair the subfloor to meet the performance guideline.

3-3-3 Observation: A wood subfloor is not level.

Performance Guideline: The floor should not slope more than ½ inch in 20 feet. Crowns and other lumber characteristics that meet the standards of the applicable grading organization for the grade and species used are not defects. Deflections due to overloading by the consumer are not the contractor's responsibility.

Remodeling Specific Guideline: The contractor and the consumer may agree to build an addition not level to keep the floor of an addition on the same plane, and/or the roof ridge on the same line, as those of an existing, out-of-level structure, or to compensate for some other preexisting condition.

Corrective Measure: The contractor will make a reasonable and cost- effective effort to modify the floor to comply with the performance guideline.

Discussion: Sloped floors have both an aesthetic and functional consideration. Measurements for slope should be made across the room, not in a small area.

3-3-4 Observation: Deflection and/or flex is observed in a floor system constructed of wood I-joists, floor trusses, or similar products.

Performance Guideline: All wood I-joists and other manufactured structural components in the floor system will be sized and installed as provided in the manufacturers' instructions and applicable building codes.

Corrective Measure: The contractor will reinforce or modify as necessary any floor component that does not meet the performance guideline.

Discussion: Some deflection and/or flex is normal and is not an indication of deficiency in the strength and safety of the product. If a consumer requests it, the contractor and consumer may agree to more stringent criteria in writing prior to construction. Code requirements allow for deflection under load that includes human traffic and at "rest" which may seem more springy than solid sawn lumber.

3-3-5 Remodeling Specific Observation: Wood flooring is not level at the transition of an existing floor to a room addition floor.

Performance Guideline: Flooring at a transition area should not slope more than ¼ inch over 6 inches unless a threshold is added. Overall step-down, unless previously agreed upon with the consumer, should not exceed 1½ inches. Variations caused by seasonal or temperature changes are not a defect.

Corrective Measure: The contractor will correct the floor transition to meet the performance guideline.

Discussion: All wood members shrink and expand seasonally, with variations in temperature and humidity, and with aging. After installation, dimensional lumber can shrink up to ½ inch for some boards. If the flooring, subfloor, or underlayment was not purposely overlapped onto the existing floor, the resulting irregularity is not a defect, but a natural result and characteristic of the wood's aging process. Either the old or the new floors may slope along the floor joist span. Joists in an older home may have deflected under load. This and other conditions may cause a hump at the juncture of the old to new.

3-3-6 Remodeling Specific Observation: The floor pitches to one side in the door opening between the existing construction and the addition.

Performance Guideline: If the pitch is the result of the floor of the existing dwelling not being level, in most situations a transition threshold is an appropriate and acceptable means of addressing the preexisting condition.

Corrective Measure: The contractor will use best judgment in making a reasonable and cost-effective effort to meet the performance guideline.

Discussion: If the difference between the existing home and addition was not evident at the time of construction or consumer did not express a transition-based solution, adding a transition threshold may incur additional costs.

3-3-7 Observation: Exterior sheathing or subfloor materials have delaminated or swollen.

Performance Guideline: Subfloor and exterior sheathing for the surfaces upon which finish materials will be attached/laid shall be flat enough and strong enough to prevent failure of finish materials on that side of the material. The non-finish side shall be based on strength of material only.

Corrective Measure: Defective materials shall be replaced or repaired.

Discussion: If replacement of finish materials is necessary, it shall be done to match existing finishes as closely as practical. Some swelling may occur during construction due to the added moisture from concrete, joint compound, primers and paints, which may remain until the space is closed in and heat is available. Some swelling can be removed by sanding or planing to return the edging and swollen areas to a more uniform condition. Sheathing with delamination on more than $\frac{1}{2}$ of the plys or $\frac{1}{4}$ of the OSB thickness should be replaced, otherwise the panels have enough strength to not cause structural issues.

Walls & Ceilings

Wall Framing

4-1-1 Observation: A wood-framed wall is not plumb.

Performance Guideline: The interior face of wood-framed walls should not be more than $\frac{3}{8}$ inch out of plumb for any 32 inches in any vertical measurement.

Remodeling Specific Guideline: The contractor and consumer may agree to intentionally build walls out of plumb to match the existing structure to accommodate or compensate for inaccuracies in the existing structure, and to disregard the performance guideline to match a preexisting structural condition.

Corrective Measure: The contractor will correct the wall to meet the performance guideline.

4-1-2 Observation: The wall or ceiling is bowed.

Performance Guideline: Walls and ceilings should not bow within the warranty period by more than $\frac{1}{2}$ inch out of line within any 32-inch horizontal measurement, or $\frac{1}{2}$ inch out of line within any 8-foot vertical measurement. This vertical or horizontal measurement shall be taken a minimum of 16 inches from any drywall or plaster corner or opening.

Remodeling Specific Guideline: If new wall cladding is installed on existing framed walls, the contractor and consumer may agree to straighten the wall as part of the scope of work, or to install new cladding over existing framing, and to disregard the performance guideline to match a preexisting structural condition.

Corrective Measure: The contractor will repair the wall to meet the performance guideline.

Discussion: All interior and exterior walls have slight variances in their finished surface. On occasion, the underlying framing may warp, twist, or bow after installation, which is not a structural deficiency.

4-1-3 Observation: Deflection is observed in a beam, header, girder, or other dimensional or manufactured structural member in a wall.

Performance Guideline: All beams, headers, girders, and other dimensional or manufactured structural members in the wall system will be sized according to the manufacturers' specifications and applicable building codes that allow for specified amounts of deflection.

Corrective Measure: The contractor will reinforce or modify, as necessary, any beam, header, girder, or other dimensional or manufactured structural member in the wall system that does not meet the performance guideline.

4-1-4 Observation: Warping, checking or splitting of wood framing which materially affects its intended purpose.

Performance Guideline: If a condition exists where checking, splitting or warping materially affects the structural integrity of the individual framing member or any contractor-applied surface material attached thereto, then that condition shall be remedied.

Corrective Measure: Contractor will repair, replace, or stiffen the frame member as needed.

Moisture Barriers and Flashing

4-2-1 Observation: Bulk moisture movement (or liquid flow) is penetrating around a window or door and is visible from inside the home.

Performance Guideline: Windows and doors should be installed and flashed in accordance with manufacturer's specifications and/or as required by prevailing building codes.

Corrective Measure: The contractor will correct to meet the performance guideline.

Discussion: Windows and doors are not completely water resistant. They always (except fixed windows and doors) have cracks or joints through which, with enough wind pressure, wind-driven rain can penetrate. The wind rating specifications for windows and doors are higher than the water rain events, such as short-term intense thunderstorms and tropical storms, because water can be expected to penetrate windows and doors. The consumer is responsible for keeping *weep holes* clean of debris as they are designed to allow wind driven rain to be diverted from the window sill. Any consumer applied caulking that causes water to not weep out would not require corrective measures by the contractor.

4-2-2 Observation: An exterior wall leaks because of improper *caulking* installation or failure of the caulking material.

Performance Guideline: Joints and cracks in exterior wall surfaces and around openings should be protected and/or caulked to prevent the entry of water.

Corrective Measure: One time only during the warranty period, the contractor will repair or caulk joints and cracks with exterior grade caulk, as necessary, to correct deficiencies.

Discussion: Even when properly installed, caulk eventually will shrink and crack. Maintenance of caulk is the consumer's responsibility.

Insulation

4-3-1 Observation: Insulation is insufficient.

Performance Guideline: The contractor should install insulation according to R-values designated in the contract documents or as required by the prevailing building code.

Corrective Measure: The contractor will install insulation to meet the performance guideline.

4-3-2 Observation: Foam or cellulose insulation appears to sag or shrink away from the cavity during the warranty period.

Performance Guideline: Shrinkage/sagging should not be more than ½ inch at the top and ⅓ inch on sides.

Corrective Measure: The contractor will correct insulation to meet the performance guideline.

Discussion: Some space is created by the shrinkage of the framing members and not the insulation and is both expected and acceptable.

4-3-3 Observation: Insulation around interior penetrations is either lacking or allows noticeable air flow.

Performance Guideline: Penetrations shall be treated with insulation, air barrier membrane or moisture barrier materials to prevent conditioned air to pass.

Corrective Measure: The contractor will correct to prevent air movement around penetrations.

Windows and Glass

4-4-1 Observation: A window is difficult to open or close.

Performance Guideline: Windows should require no greater operating force than that described in the manufacturer's specifications.

Remodeling Specific Guideline: Windows covered by the contractor that are inoperable or operable at greater than stated force are the contractor's responsibility.

Corrective Measure: The contractor will correct or repair the window as required to meet the performance guideline.

4-4-2 Observation: Window glass is broken and/or a screen or window hardware is missing or damaged.

Performance Guideline: Glass should not be broken and screens and hardware should not be damaged or missing at the time of substantial completion of the project. Only screens included in the original contract will be installed.

Corrective Measure: Broken glass, missing or damaged screens, or missing or damaged hardware reported to the contractor prior to substantial completion of the project will be installed or replaced. Broken glass, missing or damaged screens, or missing or damaged hardware reported after substantial completion of the project are the consumer's responsibility.

4-4-3 Observation: Water is observed in the home around a window unit during or after rain.

Performance Guideline: Window installation should be performed in accordance with manufacturer's specifications so that water does not intrude beyond the drainage plane of the window during normal rain conditions. Windows should resist water intrusion as specified by the window manufacturer.

Corrective Measure: The contractor will correct any deficiencies attributed to improper installation. Any deficiencies attributed to the window unit's performance will be addressed by the window manufacturer's warranty.

Discussion: Leakage at the glazing interface is covered under the manufacturer's warranty. Windows have a limited ability to resist excessive wind-driven rain but should perform according to manufacturer's specifications. The consumer is responsible for keeping weep holes clean of debris as they are designed to allow wind-driven rain to be diverted from the windowsill.

4-4-4 Observation: Window *grids, grilles, or muntins* fall out or become out of level.

Performance Guideline: Window grids, grilles, or muntins should not disconnect, fall, or become out of level.

Corrective Measure: One time only during the warranty period, window grids, grilles, or muntins will be repositioned, repaired, or replaced.

4-4-5 Observation: Glass surfaces are scratched.

Performance Guideline: Glass surfaces should not have scratches visible from 10 feet under *normal lighting* conditions at the time of substantial completion of the project.

Remodeling Specific Guideline: This guideline does not apply to existing windows unless they are part of the remodeling contract or are damaged by the contractor. The contractor and consumer should examine existing windows prior to contract execution.

Corrective Measure: The contractor will repair or replace any scratched glass surface if noted prior to substantial completion of the project.

4-4-6 Observation: Double hung windows do not stay open.

Performance Guideline: Windows should stay within a 2 inch tolerance up or down when placed in an open position.

Corrective Measure: One time only during the warranty period, Contractor shall adjust balances and show consumer that method of adjustment for future client use.

Discussion: A too tightly sealed window may become too difficult to lift or one not sealed enough may fall or rise on its own.

4-4-7 Observation: Condensation or frost appears on window frames or glass panes.

Performance Guideline: Windows and doors installed in accordance with the manufacturer's instructions and the prevailing building codes may exhibit condensation or frost.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Condensation usually results from conditions beyond the contractor's control. Moisture in the air can condense into water and collect on cold surfaces, particularly in the winter months when the outside temperature is low. Blinds and drapes can prevent air within the home from moving across the cold surface and picking up the moisture. Occasional condensation on windows and doors in the kitchen, bath, or laundry area is also common. It is the consumer's responsibility to maintain proper humidity by properly operating heating and cooling systems' exhaust fans and allowing moving air within the home to flow over the interior surface of the windows. In hot, humid climates, condensation can occur on the outside of windows when the outdoor humidity is especially high (in early mornings when windows are cool). Air conditioning vents are usually aimed at windows and glass doors to maximize comfort and can cause surface condensation.

Exterior Doors

4-5-1 **Observation:** An exterior door is warped.

Performance Guideline: Exterior doors should not warp to the extent that they become inoperable or cease to be weather-resistant. A ¼-inch tolerance as measured diagonally from corner to corner is acceptable.

Corrective Measure: The contractor will correct or replace exterior doors that do not meet the performance guideline.

Discussion: Most exterior doors will warp to some degree due to the difference in the temperature and humidity between inside and outside surfaces; ¼ inch across the plane of the door measured diagonally from corner to corner is an acceptable tolerance. Warping may also be caused by improper or incomplete finishing of the door including sides, top, and bottom. The contractor is not responsible for warpage if painting of doors is not within the contractor's scope of work.

4-5-2 **Observation:** Raw wood shows at the edges of an inset panel inserted into a wood exterior door during the manufacturing process.

Performance Guideline: This is a common occurrence in wood doors with panels.

Corrective Measure: Since this occurrence is common, no corrective action is required by the contractor.

Discussion: Wood products expand and contract with changes in temperature and humidity. Wooden inserts are intentionally loosely fitted into the rails by the manufacturer to allow the inserts to move, which minimizes splitting of the panel or other damage to the door.

4-5-3 **Observation:** A wooden door panel is split.

Performance Guideline: A split in a panel should not allow light to be visible through the door.

Corrective Measure: One time only during the warranty period, the contractor will repair and paint or stain the split panel that does not meet the performance guideline. Caulking and fillers are acceptable.

Discussion: Wooden inserts are loosely fitted into the door to allow the inserts to move, which minimizes splitting of the panel or other damage to the door. On occasion, a panel may become "locked" by paint or expansion of the edges with changes in temperature and humidity and no longer "float" between the rails. This may result in the panel splitting. The repainted area may not blend with the remainder of the door or other doors on the home.

4-5-4 **Observation:** An exterior door sticks or binds.

Performance Guideline: Exterior doors should operate smoothly, except a door may stick during periods of high humidity or with variations in temperature.

Corrective Measure: The contractor will adjust or replace the door to meet the performance guideline if the problem is caused by faulty workmanship or materials.

Discussion: Exterior doors may warp or bind to some degree because of the difference in the temperature and/or humidity between inside and outside surfaces. The contractor is not responsible for warpage if painting of doors was not within the contractor's scope of work. Any changes to originally installed door hardware, *weather stripping* or other door components that cause improper operation are not the contractor's responsibility.

4-5-5 Observation: An exterior door will not close and latch.

Performance Guideline: Exterior doors should close and latch.

Corrective Measure: One time only during the warranty period, the contractor will adjust the door or latching mechanism to meet the performance guideline.

Discussion: Exterior doors may warp or bind to some degree because of the difference in the temperature, humidity, or both, between inside and outside surfaces. Latching also can be affected by natural settling. Subsequent adjustments may be necessary by the consumer. The contractor is not responsible for warpage if painting of doors was not within the contractor's scope of work.

4-5-6 Observation: The plastic molding on the primary door behind the storm door droops/melts from exposure to sunlight.

Performance Guideline: It is a common occurrence for the plastic molding behind storm doors to droop/melt.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Plastic moldings may melt or deform if the exterior door is covered by a storm door during a warm season, or if it faces the sun. This is not a defect of the door, but a problem caused by the trapping of heat between the primary door and the storm door. The storm door, or if a combo unit, the storm panel should be removed and reinstalled by the consumer as a part of normal seasonal maintenance (i.e., removed in the spring and reinstalled in the fall). The consumer is also cautioned to follow the manufacturer's recommendations on painting the moldings. Dark colors will tend to absorb more heat.

4-5-7 Observation: Caulking or glazing on the primary door behind the storm door cracks or peels.

Performance Guideline: It is a common occurrence for caulking or glazing on the primary door behind the storm door to crack or peel.

Corrective Measure: No corrective action is required by the contractor.

Discussion: High temperatures may cause glazing and caulking to harden and/or fail prematurely if the door is covered by a storm door during a warm season or if it faces the sun. This is not a defect of the door, caulking, or glazing, but a problem caused by the trapping of heat between the primary door and the storm door. The storm door, or if a combo unit, the storm panel should be removed and reinstalled by the consumer as a part of normal seasonal maintenance (i.e., removed in the spring and reinstalled in the fall). The consumer is also cautioned to follow the manufacturer's recommendations on painting the moldings. Dark colors will tend to absorb more heat.

4-5-8 Observation: A door swings open or closed by the force of gravity.

Performance Guideline: Exterior doors should not swing open or closed by the force of gravity alone.

Remodeling Specific Guideline: This guideline does not apply where a new door is installed in an existing wall that is out of plumb.

Corrective Measure: The contractor will adjust the door to prevent it from swinging open or closed by the force of gravity.

4-5-9 Observation: The reveal around an exterior door edge, doorjamb, and/or threshold is uneven.

Performance Guideline: Gaps between adjacent components should not vary by more than $\frac{3}{16}$ inch along each side of the door.

Remodeling Specific Guideline: This guideline does not apply where a new door is installed in an existing wall that is out of plumb or an existing opening that is out of square.

Corrective Measure: The contractor will repair the existing unit to meet the performance guideline.

Discussion: Doors must have gaps at their perimeter to accommodate expansion/contraction due to variations in temperature and/or humidity and to enable the door to operate over a wide range of environmental conditions.

4-5-10 Observation: Air movement or light is observed around a closed exterior door.

Performance Guideline: Weather stripping will be installed and sized properly to seal the exterior door when closed in order to prevent excessive air infiltration.

Corrective Measure: The contractor will adjust exterior door unit or weather stripping to meet the performance guideline.

Discussion: Doors must have gaps at their perimeter to accommodate expansion/contraction due to variations in temperature and/or humidity and to enable the door to operate over a wide range of environmental conditions. Weather stripping seals the gaps required for proper operations to prevent excessive air infiltration. At times of high wind or temperature differentials inside the home and outside, there may be noticeable air movement around a closed door's perimeter. A small glimmer of light seen at the corners of the door unit is normal. Weather stripping should be kept cleaned and maintained by the consumer.

4-5-11 Observation: Exterior door hardware or kickplate has tarnished.

Performance Guideline: Finishes on door hardware or kickplates installed by the contractor are covered by the manufacturer's warranty.

Corrective Measure: No corrective action is required by the contractor.

4-5-12 Observation: A sliding patio door or screen does not stay on track.

Performance Guideline: Sliding patio doors and screens should slide properly on their tracks at the time of substantial completion of the project. The cleaning and maintenance necessary to preserve proper operation are consumer responsibilities.

Corrective Measure: One time only during the warranty period, the contractor will adjust the door or screen.

Discussion: Proper operation should be verified by the consumer and the contractor at the time of substantial completion of the project.

4-5-13 Observation: A sliding patio door does not roll smoothly.

Performance Guideline: Sliding patio doors should roll smoothly at the time of substantial completion of the project. The cleaning and maintenance necessary to preserve proper operation are consumer responsibilities.

Corrective Measure: One time only during the warranty period, the contractor will adjust the door.

Discussion: Proper operation should be verified by the consumer and the contractor at the time of substantial completion of the project.

4-5-14 Observation: A doorknob, deadbolt, or lockset does not operate smoothly.

Performance Guideline: A doorknob, deadbolt, or lockset should not stick or bind during operation.

Corrective Measure: One time only during the warranty period, the contractor will adjust, repair, or replace knobs that are not damaged by the consumer.

Discussion: Locksets may feel heavy or stiff but are operating as intended by the manufacturer. This can be true for locksets of all price ranges. Electronic locks can be more sensitive than traditional lock sets and may need adjustment. If installed by the contractor, one time only during the warranty period, the contractor will adjust so the lock latches.

4-5-15 Observation: Storm doors, windows or screens do not operate or fit properly.

Performance Guideline: Storm doors, storm windows or screens shall work as intended and fit to provide the protection intended.

Corrective Measure: Contractor will adjust, repair, or replace to ensure proper fit and operation.

4-5-16 Observation: Condensation or frost appears on exterior door, door glass or frame.

Performance Guideline: Exterior doors installed in accordance with the manufacturer's instructions and the prevailing building codes may exhibit condensation or frost.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Condensation usually results from conditions beyond the contractor's control. Moisture in the air can condense into water and collect on cold surfaces, particularly in the winter months when the outside temperature is low. Blinds and drapes can prevent air within the home from moving across the cold surface and picking up the moisture. Occasional condensation on windows and doors in the kitchen, bath, or laundry area is also common. It is the consumer's responsibility to maintain proper humidity by properly operating heating and cooling systems' exhaust fans and allowing moving air within the home to flow over the interior surface of the windows. In hot, humid climates, condensation can occur on the outside of windows when the outdoor humidity is especially high (in early mornings when windows are cool). Air conditioning vents are usually aimed at windows and glass doors to maximize comfort and can cause surface condensation.

Exterior Finish

Wood and Wood Composite Siding

5-1-1 Observation: Siding is bowed.

Performance Guideline: Bows exceeding $\frac{1}{2}$ inch in 32 inches are considered excessive.

Remodeling Specific Guideline: If new wall covering is installed on existing framed walls, the contractor and consumer may agree to straighten out the walls as part of the scope of work. Alternatively, the parties may agree to install new wall covering over existing framing and disregard the performance guideline to match a preexisting structural condition.

Corrective Measure: The contractor will replace any bowed wood siding that does not meet the performance guideline and will finish the replacement siding to match the existing siding as closely as possible.

Discussion: If the siding is fastened by nails driven into studs, expansion caused by changing relative temperatures and/or humidity may cause bulges or waves. Even with proper installation, siding will tend to bow inward and outward in adjacent stud spaces.

5-1-2 Observation: An edge or gap is visible between adjacent pieces of siding or siding panels and other materials.

Performance Guideline: Gaps wider than $\frac{3}{16}$ inch are considered excessive, unless the siding is installed as prescribed by the manufacturer's instructions, which may include the options to caulk as with cement board siding and spacing required for expansion and contraction of composite siding.

Corrective Measure: The contractor will repair gaps that do not meet the performance guideline.

Discussion: Proper repair can be completed by providing joint covers or by caulking the gap. This is important if the gaps were intentionally left at joints for expansion and contraction. If the siding is painted, the contractor will paint the new caulking to match the existing siding as closely as possible, but an exact match cannot be guaranteed or promised.

5-1-3 Observation: Siding is not parallel with the course above or below.

Performance Guideline: A piece of siding should not be more than $\frac{1}{2}$ inch off parallel with contiguous courses in any 20-foot measurement.

Remodeling Specific Guideline: The contractor and consumer may agree to install siding to match existing conditions on the existing structure and to disregard the performance guideline for this item. If the contractor and consumer have agreed that the floor of an addition is to be on a different plane from an existing floor (i.e., out of level), the siding on the addition may not be parallel and in line with the existing siding.

Corrective Measure: The contractor will reinstall siding to meet the performance guideline for straightness and will replace with new siding any siding damaged during removal.

5-1-4 Observation: Face nails have been driven below the surface of wood composite siding.

Performance Guideline: Siding nails should be driven in accordance with the manufacturer's installation instructions.

Corrective Measure: The contractor will repair as necessary to meet the performance guideline by filling with appropriate filler. Touch-up paint may not match the surrounding area.

5-1-5 Observation: Siding boards have buckled, warped, or cupped.

Performance Guideline: Boards that project more than $\frac{3}{16}$ inch within $5\frac{1}{2}$ inches of siding are considered excessive.

Corrective Measure: The contractor will repair or replace any boards that do not meet the performance guideline.

Discussion: Buckling, warping, or cupping is caused by wood expanding because of increased temperature, relative humidity, or both.

5-1-6 Observation: Siding boards have split.

Performance Guideline: Splits wider than $\frac{1}{8}$ inch and longer than 1 inch are considered excessive.

Corrective Measure: The contractor will repair siding boards that do not meet the performance guideline by filling with appropriate filler. Touch-up paint may not match the surrounding area.

5-1-7 Observation: Wood siding, shakes, or shingles have bled through paint or stain applied by the contractor.

Performance Guideline: Resins and extractives bleeding through paint or stain, or blackening of siding, shakes, or shingles is considered normal, and is especially noticeable if natural weathering, white paint, or semitransparent stain is specified for the project.

Corrective Measure: No corrective action is required by the contractor.

5-1-8 Observation: Siding has delaminated.

Performance Guideline: Siding should not delaminate.

Corrective Measure: Delaminating of siding is covered under the manufacturer's warranty unless the delaminating was caused by the consumer's actions or negligence. After substantial completion of the project, the consumer should contact the manufacturer for warranty coverage. Delaminated siding installed by the contractor shall be fixed at the time of substantial completion of the project.

5-1-9 Observation: Nail stains are visible on siding or ceiling boards.

Performance Guideline: Stains exceeding ½ inch from the nail which are readily visible from a distance of more than 20 feet are considered excessive.

Corrective Measure: The contractor will remove stains that do not meet the performance guideline.

Discussion: Stains can be caused by oxidation of nails or leaching of extractives from the wood. Use of galvanized nails (even double hot dipped) may not necessarily prevent staining.

Aluminum or Vinyl Siding

5-2-1 Observation: Aluminum or vinyl siding is bowed or wavy.

Performance Guideline: Some waviness in aluminum or vinyl siding is expected. Waves or similar distortions in aluminum or vinyl lap siding are considered excessive only if they exceed ½ inch within 32 inches of siding.

If the new siding is applied to existing walls as part of a remodel, the siding will follow the underlying surface. Prior to commencement of the work, the contractor and consumer should agree on whether the existing surface is to be modified.

Corrective Measure: The contractor will correct any waves or distortions to comply with the performance guideline by reinstalling or replacing siding, as necessary. If the walls will not be modified, the Performance guideline will not apply, and the remodeler will take no corrective measure.

5-2-2 Observation: Siding is faded.

Performance Guideline: Any color siding, when exposed to the ultraviolet rays of the sun, will fade. Fading cannot be prevented by the contractor. However, panels installed on the same wall and under the same conditions should fade at the same rate.

Corrective Measure: No corrective action is required by the contractor. The consumer should contact the siding manufacturer for issues with inconsistent fading.

Discussion: Color warranties are provided by the siding manufacturer. The consumer should contact the manufacturer with questions or claims regarding changes in color of vinyl or aluminum siding. Color and fade imperfections beyond an expected degree may be covered by the manufacturer's warranty, except where siding is shaded differently from the rest of the wall, such as under shutters or behind vegetation.

5-2-3 Observation: Aluminum or vinyl siding trim is loose.

Performance Guideline: Trim should not separate from the home by more than ¼ inch.

Corrective Measure: The contractor will reinstall trim as necessary to comply with the performance guideline.

Discussion: Vinyl siding and accessories should not be caulked in most circumstances, as caulking could impact the product's contraction and expansion characteristics.

5-2-4 Observation: Aluminum or vinyl siding courses are not parallel with eaves or wall openings.

Performance Guideline: Any piece of aluminum or vinyl siding more than ½ inch off parallel in 20 feet with a break such as an eave or wall opening is considered excessive.

Remodeling Specific Guideline: If the contractor and consumer agree that the floor of an addition is to be on a different plane from the existing floor (e.g., a preexisting out-of-level condition), the siding on the addition may not be parallel and in line with existing siding. The contractor and consumer may agree to install siding to match existing conditions on the existing structure and to disregard the performance guideline for this item.

Corrective Measure: The contractor will reinstall siding to comply with the performance guideline and will replace with new siding any siding damaged during removal.

5-2-5 Observation: Nail heads show in aluminum or vinyl siding.

Performance Guideline: No nail heads in the field of the siding should be exposed.

Corrective Measure: The contractor will install trim as necessary to cover the nails and will install proper trim accessories to avoid face nailing.

Discussion: Vinyl siding generally should not be face nailed. However, there are appropriate and typical occasions when a single face nail may be needed to reinforce a joint or fasten the siding to the wall when it is cut to fit around window frames, doors, roofs, or other obstructions on the wall.

In most cases (the only exception would be the top piece on a gable end), vinyl siding should not be face nailed when proper accessory products are used. For example, under a window application the contractor can use the J-channel trim and utility trim, and snap punch the top of the vinyl siding. If face nailing is the only option, the contractor should predrill a ⅛ inch diameter hole to allow for expansion and contraction.

5-2-6 Observation: Aluminum or vinyl siding trim accessory is loose from caulking at windows or other wall openings.

Performance Guideline: Siding trim accessories should not separate from caulking at windows or other wall openings during the warranty period.

Corrective Measure: One time only during the warranty period, the contractor will repair or caulk, as necessary, to eliminate the separation.

5-2-7 Observation: Aluminum or vinyl siding has gaps or inconsistent cuts.

Performance Guideline: Gaps will comply with the manufacturer's guidelines, but cuts should be concealed by trim. Field cut edges of vinyl or aluminum siding should not be visible when proper trim and accessories are used.

Remodeling Specific Guideline: The contractor and consumer may agree to install siding to match conditions on the existing structure and to disregard the performance guideline for this item.

Corrective Measure: The contractor will ensure that the appropriate trim/ accessory is installed to eliminate potentially revealing site cuts. If cuts in siding panels are so uneven that they are not concealed by trim, the panel will be replaced.

5-2-8 Observation: Aluminum or vinyl siding is not correctly spaced from moldings.

Performance Guideline: Prescribed spacing between siding and accessory trim is typically ¼ inch, or should comply with the manufacturer's installation instructions.

Remodeling Specific Guideline: The contractor and consumer may agree to install siding to match conditions on the existing structure and to disregard the performance guideline for this item.

Corrective Measure: The contractor will correct the spacing to meet the performance guideline.

5-2-9 Observation: Aluminum or vinyl siding is rattling or banging on house.

Performance Guideline: Prescribed nailing for siding should meet manufacturers installation specifications.

Corrective Measure: The contractor will correct the nailing to meet the performance guideline.

Discussion: During times of high winds the siding will have some movement and there will be noise from the siding against the house.

Fiber Cement Board Siding

5-3-1 Observation: Fiber cement board siding is cracked or chipped.

Performance Guideline: As a cement product, this siding is susceptible to the same characteristic limitations as other cement products. Cracks more than 2 inches in length and ⅛ inch in width are considered excessive. Chips or dents not reported at the time of substantial completion of the project are not covered.

Corrective Measure: Cracked or chipped cement board will be repaired or replaced as necessary, as determined by the contractor.

Discussion: The manufacturer's instructions include guidelines to reduce chipping or cracking of siding.

5-3-2 Observation: Cement board siding is improperly fastened.

Performance Guideline: Siding should be nailed flush and perpendicular per the manufacturer's instructions. Staples should not be used.

Corrective Measure: The contractor will correct or repair improperly fastened boards. Overdriven nail heads or nails driven at an angle can be filled with siding manufacturer's specified product.

5-3-3 Observation: Cement board siding and trim have visible gaps.

Performance Guidelines: Fiber cement siding shall have a $\frac{1}{8}$ inch gap between trims of windows and doors. Install all butt ends and joints in contact with one another.

Corrective Measure: Contractor will repair siding to meet the performance guidelines.

Discussion: All fiber cement installation, caulking should be in accordance with each manufacturer's instructions and specifications.

Masonry and Veneer

5-4-1 Observation: A masonry or veneer wall or mortar joint is cracked.

Performance Guideline: Cracks visible from distances in excess of 20 feet, or more than $\frac{1}{4}$ inch in width are not acceptable.

Corrective Measure: The contractor will repair cracks in excess of the performance guideline by tuck pointing, patching, or painting, as deemed most appropriate by the contractor.

Discussion: Hairline cracks resulting from shrinkage and cracks due to minor settlement are common in masonry or veneer walls and mortar joints, and do not necessarily represent a defect. An exact match of mortar after a repair cannot be guaranteed.

5-4-2 Observation: Cut bricks below openings in masonry walls are of different thickness.

Performance Guideline: Cut bricks used in the course directly below an opening should not vary from one another in thickness by more than $\frac{1}{4}$ inch. The smallest dimension of a cut brick should be greater than 1 inch.

Corrective Measure: The contractor will repair the wall to meet the performance guideline.

Discussion: Bricks are cut to achieve required dimensions at openings and ends of walls when it is not possible to match unit/mortar coursing. An exact match of brick and mortar after a repair cannot be guaranteed.

5-4-3 Observation: A brick course is not straight.

Performance Guideline: No point along the bottom of any course will be more than ¼ inch higher or lower than any other point within 10 feet along the bottom of the same course, or ½ inch in any course length.

Remodeling Specific Guideline: The contractor and consumer may agree to install brick veneer to match conditions on the existing structure and to disregard the performance guideline for this item.

Corrective Measure: The contractor will rebuild the wall as necessary to meet the performance guideline.

Discussion: Dimensional variations of the courses depend upon the variations in the brick selected. An exact match of brick and mortar after a repair cannot be guaranteed.

5-4-4 Observation: Brick veneer is spalling.

Performance Guideline: Spalling of newly manufactured brick should not occur and is considered excessive. Spalling of used manufactured brick is acceptable.

Corrective Measure: Spalling of newly manufactured brick is covered by the manufacturer's warranty. No corrective action is required by the contractor.

5-4-5 Observation: Mortar stains are observed on exterior brick or stone.

Performance Guideline: Exterior brick and stone should be free from mortar stains detracting from the appearance of the finished wall when viewed from a distance of 20 feet.

Corrective Measure: The contractor will clean the mortar stains to meet the performance guideline.

5-4-6 Observation: Efflorescence is present on the surface of masonry or mortar.

Performance Guideline: This is a common condition caused by moisture reacting with the soluble salts in the mortar.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Efflorescence is evidenced by the presence of a white film on the surface of masonry or mortar. It is a particularly common occurrence where masonry or concrete are in contact with high moisture levels because masonry products absorb and retain moisture.

5-4-7 Observation: There is water damage to interior walls as a result of a leak in the exterior brick or stone during normal weather conditions.

Performance Guideline: Exterior brick and stone walls should be constructed and flashed according to the prevailing building code to prevent water penetration to the interior of the structure under normal weather conditions.

Corrective Measure: The contractor will repair the wall to meet the performance guideline, unless the water damage resulted from factors beyond the contractor's control.

Discussion: Water penetration resulting from external factors such as extreme weather conditions, grading alterations or any landscape alterations by others that raises the grade or impacts the proper drainage away from the walls of the structure, or improper use of sprinkler systems are not the contractor's responsibility.

Stucco and Parged Coatings

5-5-1 Observation: An exterior stucco wall surface is cracked.

Performance Guideline: Cracks in exterior stucco wall surfaces should not exceed $\frac{1}{8}$ inch in width.

Corrective Measure: One time only during the warranty period, the contractor will repair cracks exceeding $\frac{1}{8}$ inch in width using an exterior grade caulking or sealant. Caulking and touch-up painting are acceptable. An exact color or texture match may not be attainable.

Discussion: Hairline cracks in stucco or cement plaster (parging) are common, especially if the coatings have been applied directly to masonry back up.

5-5-2 Observation: The color, texture, or both, of exterior stucco walls are not uniform.

Performance Guideline: Exterior stucco walls may not match when applied on different days or under differing environmental conditions (e.g., temperature, humidity, etc.).

Remodeling Specific Guideline: The color, texture, or both, of new exterior stucco walls may not match those of old exterior stucco walls.

Corrective Measure: Stucco finishes are unique and an exact match of color, texture, or both may not be practical; therefore, no corrective action is required by the contractor.

Discussion: Stucco includes cement-based coatings and similar synthetically based finishes. Several variables affect coloring and texture of stucco. It is difficult, if not impossible, to achieve a color match between stucco coatings applied at different times. Approved samples prior to installation can minimize misunderstandings about color and texture.

5-5-3 Observation: Coating has separated from the base on an exterior stucco wall.

Performance Guideline: The coating should not separate from the base on an exterior stucco wall.

Corrective Measure: The contractor will repair areas where the coating has separated from the base in accordance with the performance guideline, unless the damage resulted from factors beyond the contractor's control.

Discussion: A number of variables affect coloring and texture of stucco. It is not possible to achieve an exact color and/or texture match between stucco coatings applied at different times.

5-5-4 Observation: Lath is visible through stucco.

Performance Guideline: Lath should not be visible through stucco, nor should the lath protrude through any portion of the stucco surface.

Corrective Measure: The contractor will make necessary corrections to meet the performance building guidelines. The finish color and/or texture may not match.

Discussion: A number of variables affect coloring and texture of stucco. It is not possible to achieve an exact color and/or texture match between stucco coatings applied at different times.

5-5-5 Observation: Rust marks are observed on the stucco finish coat.

Performance Guideline: Rust marks on the stucco surface are considered excessive if more than five marks measuring more than 1 inch long occur per 100 square feet.

Corrective Measure: The contractor will repair, replace, or seal the rusted areas of wall.

Discussion: Rusting may be present in more humid climates due to the natural state of sand used in cement-based products which could include metallic components.

5-5-6 Observation: The stucco finish coat does not go all the way to the ground.

Performance Guideline: Weep screed or gap between ground and finish coat of stucco is a proper installation requirement.

Corrective Measure: No corrective measure is necessary.

5-5-7 Observation: There is water damage to the exterior wall cavity as a result of a leak in the stucco wall system.

Performance Guideline: Stucco walls should be constructed and flashed to prevent water penetration to the interior of the structure under normal weather and water conditions. Damage to the stucco system caused by external factors out of the contractor's control that result in water penetration is not the contractor's responsibility.

Corrective Measure: If water penetration is the result of a system failure and does not result from external factors, the contractor will make necessary repairs to prevent water penetration through the stucco wall system.

Discussion: The contractor is not responsible for water penetration resulting from external factors such as windblown moisture or sprinkler systems.

5-5-8 Observation: Efflorescence is present on the surface of stucco finished surfaces.

Performance Guideline: This is a common condition caused by moisture reacting with the soluble salts in the mortar.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Efflorescence is evidenced by the presence of a white film on the surface of masonry or mortar. It is a particularly common occurrence where masonry or concrete are in contact with high moisture levels because masonry products absorb and retain moisture.

Exterior Trim

5-6-1 Observation: Gaps show in exterior trim.

Performance Guideline: Joints between exterior trim elements, including siding and masonry, should not be wider than $\frac{1}{4}$ inch. In all cases, the exterior trim will perform its function of excluding the elements.

Corrective Measure: The contractor will repair open joints that do not meet the performance guideline. Caulking is an acceptable repair.

Discussion: Reasonable attempts will be made to make repairs using products that match the manufacturer's recommended application instructions.

5-6-2 Observation: Exterior trim board is split.

Performance Guideline: Splits wider than $\frac{1}{8}$ inch and longer than 1 inch are considered excessive.

Corrective Measure: The contractor will repair splits by filling with durable filler. Touch-up painting may not match the surrounding area.

5-6-3 Observation: Exterior trim board is bowed or twisted.

Performance Guideline: Bows and twists exceeding $\frac{3}{8}$ inch within 8 feet of trim board are considered excessive.

Corrective Measure: The contractor will repair defects that do not meet the performance guideline by refastening or replacing deformed boards. Touch-up painting may not match the surrounding area.

5-6-4 Observation: Exterior trim board is cupped.

Performance Guideline: Cups exceeding $\frac{3}{16}$ inch per every $5\frac{1}{2}$ inches of trim board width is considered excessive.

Corrective Measure: The contractor will repair defects that do not meet the performance guideline by refastening or replacing cupped boards. Touch-up painting may not match the surrounding area.

Paint, Stain, and Varnish

- 5-7-1 Observation:** Exterior painting, staining, or refinishing is needed because the repair work does not match existing exterior finish.

Performance Guideline: Repairs required under these performance guidelines will be finished to match the immediate surrounding areas as closely as possible when viewed under normal lighting conditions from a distance of 20 feet.

Corrective Measure: The contractor will finish repaired areas as indicated, matching as closely as possible.

Discussion: Touch-up painting, staining, or refinishing may not match the surrounding area exactly in color or sheen because the original coating may have been exposed to sunlight, pollution, weather, and other conditions over a period of time.

- 5-7-2 Observation:** Exterior paint or stain has peeled, deteriorated, or flaked.

Performance Guideline: Exterior paints and stains should not peel or flake during the first year.

Corrective Measure: If exterior paint or stain has peeled, developed an alligator pattern, or blistered, the contractor will properly prepare and refinish the affected areas and match their color as closely as practical. Where deterioration of the finish affects more than 50 percent of the piece of trim or wall area, the contractor will refinish the affected component according to manufacturer's product application instructions, or in the absence of such instructions, generally accepted trade practices.

- 5-7-3 Observation:** Exterior paint or stain has faded.

Performance Guideline: Fading of exterior paints and stains is common. The degree of fading depends on environmental conditions including ultraviolet (UV) exposure.

Corrective Measure: Because fading is a common occurrence in paint and stains, no corrective action is required by the contractor.

- 5-7-4 Observation:** There is paint or stain overspray on surfaces not intended for paint or stain.

Performance Guideline: Paint or stain overspray on surfaces not intended for paint or stain that is visible at a distance of 6 feet under normal natural lighting conditions is not acceptable.

Corrective Measure: The contractor will clean the affected surfaces without damaging the surface.

- 5-7-5 Observation:** Extensive bleeding of knots, wood or pitch stains show through paint on exterior trim and siding.

Performance Guideline: Knots and other pitch-produced defects should not show through during the warranty period.

Corrective Measure: One time only during the warranty period, the wood will be sealed, stain killed and touch-up painted in affected areas to match as closely as possible.

Roof

Note: Remodeling Specific Guideline: *Where applicable, in the following guidelines the contractor is responsible only for areas of the home where work was performed as specified in the contract, and not for the entire home. The contractor shall not be responsible for repairs and patches made to existing roof.*

Roof Structure

6-1-1 Observation: The roof ridge has deflected.

Performance Guideline: Deflections greater than 1 inch within 8 feet of the roof ridge is considered excessive.

Corrective Measure: The contractor will repair the affected ridge that does not meet the performance guideline.

6-1-2 Observation: A rafter or ceiling joist bows (up or down).

Performance Guideline: Bows greater than 1 inch within 8 feet of rafter or ceiling joist are excessive.

Corrective Measure: The contractor will repair the affected rafters or joists that bow in excess of the performance guideline.

6-1-3 Observation: Roof trusses have deflected.

Performance Guideline: All roof trusses and other manufactured structural roof components in the roof system should be sized according to the manufacturer's specifications or structural engineer's requirements as well as prevailing building codes.

Corrective Measure: The contractor will reinforce or modify as necessary any roof truss or other manufactured structural roof components in the roof system to meet the performance guideline.

Discussion: Deflection is a normal condition that is considered as part of the engineering design of the roof trusses and other manufactured structural roof components. Deflection may be an aesthetic consideration independent of the strength and safety requirements of the product. Deflection and truss movement may be visually evident at the joint of *drywall*. This is common and somewhat unavoidable when there are heavy snow loads or when strong winds have blown on the building and roof causing them to move slightly, but enough to crack brittle drywall joints.

6-1-4 Observation: Roof trusses have lifted from the adjoining interior walls.

Performance Guideline: Moisture differences between the *upper chord* and *lower chord* (unheated versus adjacent interior heated spaces) may cause the lower chords to move. Deflection is a normal condition that is considered as part of the engineering design of the roof trusses.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Truss uplift is an aesthetic consideration and is independent of the strength and safety requirements of the truss. This situation will be more prevalent in the winter due to greater variance in moisture and temperature in some regions.

Roof Sheathing

6-2-1 Observation: Roof sheathing is wavy or appears bowed.

Performance Guideline: Roof sheathing should not bow more than ½ inch per every 2 feet.

Remodeling Specific Guideline: If new sheathing is installed over existing rafters, the sheathing will follow the bows of the existing rafters. The consumer and contractor should agree on whether the rafters are to be straightened. If they are not to be straightened, the performance guideline for this item will be disregarded.

Corrective Measure: The contractor will straighten bowed roof sheathing as necessary to meet the performance guideline.

Discussion: The contractor may install blocking between the framing members to straighten the sheathing. Under certain viewing conditions and light, minor irregularities in the roof sheathing may be observed. This may be particularly apparent on truss framing with asphalt shingles.

6-2-2 Observation: Nails or staples are visible through sheathing or boards (decking) at overhangs.

Performance Guideline: The length of nails and staples used to secure roofing materials is determined by the manufacturer's installation instructions and the prevailing building code.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Nails and staples may protrude through sheathing at overhangs. Their appearance is only an aesthetic concern.

Roof Vents

6-3-1 Observation: An attic vent or louver leaks.

Performance Guideline: Attic vents and louvers properly installed should not leak. Infiltration of wind-driven rain and snow are not considered leaks and are beyond the contractor's control.

Corrective Measure: The contractor will repair or replace improperly installed vents as necessary to meet the performance guideline.

6-3-2 Observation: Roof vents and attic ventilation seem to create inadequate flow.

Performance Guideline: The total roof vent area should meet the requirements of the prevailing building codes.

Remodeling Specific Guideline: Existing attic ventilation conditions are not the responsibility of the contractor.

Corrective Measure: The contractor will correct roof ventilation as necessary to meet the performance guideline.

Discussion: Attic ventilation can be provided in variety of ways and proper ventilation may be obtained through ridge vents, soffit vents, gable vents, attic fans, fresh air vents or any combination thereof. Some attics are sealed or finished as conditioned space and do not require outside ventilation. It is the consumer's responsibility to keep the vent locations free from obstructions. In high wind-driven rain events (e.g., over 40 mph), rain that is in the wind will flow with the wind into attics. Louvers in gable end vents can keep large drops of water out of attics when wind speeds are low. However, at even moderate wind speeds the wind will carry water drops with it. It is unavoidable because there is no practical mechanism to separate drops (especially very small ones) from air. Small drops can be like trying to separate drops of fog from air. In short-duration rain events, the accumulation of water may be so small as not to be noticed; however, during tropical depressions and hurricanes, the water can accumulate to damaging quantities. The best preventative measure is to completely block gable end vents during such events. Gable end vents with hinged louvers still can allow wind driven rain to enter an attic in damaging quantities. When rain enters an attic, it can accumulate to such an extent on the top of ceiling drywall that the drywall weakens and the ceiling collapses.

Roof Coverings

Note: *There are many kinds of roofing products. For the purpose of the following performance guidelines, regardless of the actual material used, the term "shingle" will be used to refer to all types of roof coverings.*

6-4-1 Observation: The roof or flashing leaks.

Performance Guideline: Roofs and flashing should not leak under normal conditions.

Corrective Measure: The contractor will repair any verified roof or flashing leaks not caused by ice buildup, leaves, debris, abnormal weather conditions, or the consumer's actions or negligence.

Discussion: It is the consumer's responsibility to keep the roof drains, gutters, and downspouts free of ice, leaves, and debris.

6-4-2 Observation: Ice builds up on the roof.

Performance Guideline: During prolonged cold spells ice is likely to build up on a roof, especially at the eaves. This condition can occur naturally when snow and ice accumulate.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Prevention of ice buildup on the roof is a consumer maintenance item.

6-4-3 Observation: Shingles have blown off.

Performance Guideline: Shingles shall be rated for the wind zone of the project and shall be installed in accordance with the applicable prevailing building code and the instructions provided by the manufacturer on the packaging of the shingles.

Corrective Measure: If shingles were not installed per the manufacturer's installation instructions, the contractor will repair or replace shingles that have blown off.

Discussion: Correctly installed shingles are covered by the manufacturer's warranty. The wind rating of shingles is determined for brand-new shingles using tests of questionable accuracy in predicting actual wind performance especially when time elapses. Generally, shingles lose wind resilience with time as short as a few months. Shingles are not regarded as having sealed to one another until they have reached 135 degrees Fahrenheit for at least 18 hours. In warm, sunny weather, these sealing conditions can occur in just a few days, but until then, shingles are vulnerable to wind. Replacement shingles may not match existing shingles.

6-4-4 Observation: Shingles are not horizontally aligned.

Performance Guideline: Shingles should be installed according to the manufacturer's installation instructions.

Remodeling Specific Guideline: The consumer and the contractor may agree prior to installation that the horizontal line of shingles on the roof of an addition need not line up with those of the existing structure if the floors (and hence, the eaves and ridge) are not to be built on the same plane.

Corrective Measure: The contractor will remove shingles that do not meet the performance guideline and will repair or replace them with new shingles that are properly aligned.

Discussion: The bottom edge of dimensional shingles may be irregular; the irregularity is an inherent feature of the design. Replacement shingles may not match existing shingles.

6-4-5 Remodeling Specific Observation: New shingles do not match existing shingles.

Remodeling Specific Guideline: The color of new shingles may not exactly match the color of the existing shingles because of weathering and manufacturing variations.

Corrective Measure: The contractor is not responsible for precisely matching the color of existing shingles.

6-4-6 Observation: Asphalt shingle edges or corners curl or cup.

Performance Guideline: These conditions are a manufacturer's warranty issue.

Corrective Measure: No corrective action is required by the contractor.

6-4-7 Observation: Roofing shingles do not overhang the edges of the roof or they hang too far over the edges of the roof.

Performance Guideline: Shingles should be installed according to the manufacturer's instructions and the prevailing building code.

Corrective Measure: The contractor will reposition or replace shingles as necessary to meet the performance guideline.

Discussion: In high-wind areas, shingles may be purposely installed so they do not extend beyond the edges of the roof. This is to reduce the chance of wind picking the edges up.

6-4-8 Observation: Shading or a shadowing pattern is observed on a new shingle roof.

Performance Guideline: Shading or shadowing differences may occur on a new roof.

Corrective Measure: No corrective action is required by the contractor.

6-4-9 Observation: Asphalt shingles have developed surface buckling.

Performance Guideline: Asphalt shingle surfaces need not be perfectly flat. However, buckling higher than ¼ inch is considered excessive.

Corrective Measure: The contractor will repair or replace the affected shingles to meet the performance guideline.

Discussion: Reasonable time should be given in cooler weather for shingles to warm and lay flat. Replacement shingles may not match existing shingles.

6-4-10 Observation: Sheathing nails have loosened from framing and raised the shingles.

Performance Guideline: Nails should not loosen from roof sheathing enough to raise shingles from surface.

Corrective Measure: The contractor will make corrections as necessary to meet the performance guideline.

Discussion: It is not uncommon for nails to withdraw from the framing because of temperature variations. The contractor can re-drive or remove and replace fasteners that withdraw from the framing. Any resulting holes should be sealed or the shingle should be replaced. Consumer is advised that replacement shingles may not match existing shingles.

6-4-11 Observation: Roofing nails or fasteners are exposed at the ridge or hip of a roof.

Performance Guideline: Nails and fasteners should be installed according to manufacturer's instructions.

Corrective Measure: The contractor will seal and/or repair areas to meet the performance guideline.

6-4-12 Observation: Areas of a shingle roof are stained.

Performance Guideline: Shingles on a roof may stain.

Corrective Measure: Staining on shingles is unavoidable, no corrective action is required by the contractor.

Discussion: Black stains are indicative of mold that is unavoidable even when stain resistant shingles are installed. Whitish stain can be caused by chemicals in the metals of roof vents or the surrounding metal of pipes leaching onto the roof.

6-4-13 Observation: Holes from construction activities are found on the roof surface.

Performance Guideline: Holes from construction activities should be flashed or sealed to prevent leaks.

Corrective Measure: The contractor will repair or replace the affected shingles to meet the performance guideline.

6-4-14 Remodeling Specific Observation: Existing roof shingles are telegraphing through new shingles.

Remodeling Specific Guideline: Some telegraphing is common when re-roofing over existing roofing.

Corrective Measure: Because this is an expected and common unavoidable occurrence, no corrective action is required by the contractor.

6-4-15 Observation: Water is trapped under membrane roofing.

Performance Guideline: Water should not become trapped under membrane roofing.

Corrective Measure: If water becomes trapped under membrane roofing, the contractor will repair or replace the roofing as necessary to meet the performance guideline.

6-4-16 Observation: Membrane roofing is blistered but does not leak.

Performance Guideline: Surface blistering of membrane roofing is caused by conditions of heat and humidity acting on the membrane and is a common occurrence.

Corrective Measure: No corrective action is required by the contractor.

6-4-17 Observation: There is standing water on a flat roof.

Performance Guideline: Water should drain from a flat roof, except for minor ponding, within 24 hours of a rainfall or according to manufacturer's specifications.

Corrective Measure: The contractor will take corrective action to meet the performance guideline.

6-4-18 Observation: There are visible defects in steep slope roofing.

Performance Guideline: Defects in the roofing surfaces resulting from the contractor's installation that allow water penetration or are easily visible from the ground are the contractor's responsibility.

Corrective Measure: Improper installation will be corrected by the contractor. Failure of the roofing surface due to a manufacturer defect is the responsibility of the manufacturer whose products have specific specifications, standards, and warranty coverage.

6-4-19 Observation: Roof tiles are broken.

Performance Guideline: Roof tiles should not be broken within the warranty period unless caused by natural events.

Corrective Measure: One time only during the warranty period, broken tiles that are not the result of natural events will be replaced with closely matching tiles.

Chimney

6-5-1 Observation: A crack in a masonry chimney cap or crown causes leakage.

Performance Guideline: It is common for caps to crack from expansion and contraction. As a result, leaks may occur.

Corrective Measure: Contractor will repair leaks in new chimney cap or crown. Applying caulk or another sealant is an acceptable repair.

Discussion: Inevitable expansion and contraction at caps and crowns can result in leaks. After the warranty period, maintenance is the consumers responsibility.

6-5-2 Observation: New chimney flashing leaks.

Performance Guideline: New chimney flashing should not leak under normal conditions.

Corrective Measure: The contractor will repair leaks in new chimney flashing that are not caused by ice buildup or by the consumer's actions or negligence.

Discussion: The accumulation of ice and snow on the roof is a natural occurrence and cannot be prevented by the contractor.

Gutters and Downspouts

6-6-1 Observation: The gutter or downspout leaks.

Performance Guideline: Gutters and downspouts should not leak.

Corrective Measure: The contractor will repair leaks in gutters and downspouts. If the leaks are the results of debris, it is not the responsibility of the contractor to repair. Sealants are acceptable.

Discussion: Occasionally water may get between the gutter and fascia. Following the warranty period, this is a consumer maintenance issue as it frequently is caused by gutters that have debris built up inside.

6-6-2 Observation: The gutter overflows during a heavy rain.

Performance Guideline: Gutters should not overflow during normal rain.

Corrective Measure: The contractor will repair the gutter if it overflows during normal rains.

Discussion: Gutters may overflow during a heavy rain. The consumer is responsible for keeping gutters and downspouts free from debris that could cause overflow.

6-6-3 Observation: Rainwater on the roof is not directed into the gutters.

Performance Guideline: Most of the rainwater should be diverted into gutters and downspouts except under unusual circumstances.

Corrective Measures: Contractor will adjust drip edges and other flashings to deflect water into the gutters.

6-6-4 Observation: Water remains in the gutter after a rain.

Performance Guideline: The water level should not exceed ½ inch in depth if the gutter is unobstructed by ice, snow, or debris.

Corrective Measure: The contractor will repair the gutter to meet the performance guideline.

Discussion: The consumer is responsible for maintaining gutters and downspouts and keeping them unobstructed. Contractors install residential gutters with minimal slope in order to maintain an attractive appearance. Installing gutters with a 1/32-inch drop per every 1 foot generally will prevent water from standing in the gutters. Even so, small amounts of water may remain in some sections of the gutter for a time after a rain. In areas with heavy rainfall and/or ice buildup, a steeper pitch or additional downspouts may be desirable. During fall season when leaves fall from trees, frequent removal of leaves may be necessary, perhaps weekly.

Skylights and Light Tubes

6-7-1 Observation: A skylight or a light tube leaks.

Performance Guideline: Skylights and light tubes should be installed in accordance with the manufacturer's installation instructions. Leaks resulting from improper installation are considered excessive.

Corrective Measure: The contractor will repair any improperly installed skylight and light tube to meet the performance guideline.

Discussion: Condensation on interior surfaces is not a leak.

Plumbing

Note: Remodeling Specific Guideline: *Where applicable, in the following guidelines the contractor is responsible only for areas of the home where work was performed as specified in the contract, and not for the entire home.*

Water Supply System

7-1-1 Observation: A pipe, valve, or fitting leaks.

Performance Guideline: No leaks of any kind should exist from any water pipe, valve, or fitting.

Corrective Measure: The contractor will make repairs to eliminate leaks.

7-1-2 Observation: Condensation is observed on pipes, fixtures, or plumbing supply lines.

Performance Guideline: Condensation on pipes, fixtures, and plumbing supply lines may occur at certain temperatures and indoor humidity levels.

Corrective Measure: The consumer is responsible for controlling humidity in the home. No corrective action is required by the contractor.

Discussion: The consumer may insulate pipes and supply lines.

7-1-3 Observation: A water pipe freezes or has burst due to freezing temperatures.

Performance Guideline: The contractor should provide adequate freeze protection to drain waste, vent, and supply line in accordance with the prevailing building code.

Corrective Measure: The contractor shall repair bursted pipe and bring freeze protection measure into compliance with the prevailing building code.

Discussion: The consumer is responsible for maintaining the home at appropriate temperatures and taking appropriate precautions during freezing conditions (e.g. leaving faucets dripping and cabinet doors open).

7-1-4 Observation: The water supply system fails to deliver water.

Performance Guideline: All on-site service connections to the municipal water main or private water supply are the contractor's responsibility at the time of substantial completion.

Corrective Measure: The contractor will repair the water supply system if the failure results from improper installation or failure of materials and if the connections are a part of the construction agreement. Conditions beyond the control of the contractor that disrupt or eliminate the water supply are not covered.

7-1-5 Observation: The water pressure is low.

Performance Guideline: The plumbing system, including wells provided by contractor, shall be designed and installed in accordance with the prevailing plumbing code. The system should deliver water at the expected water pressure based on the pressure supplied to the home. If the water source is from a public source or (a well) supplied by the consumer, then the contractor has no control over the pressure thus no responsibility.

Remodeling Specific Guideline: If the problem is a condition caused by the existing system, the consumer is responsible for necessary corrections (e.g., sludge, pipe corrosion, scaling, etc.).

Corrective Measure: When water pressure is determined by public or private (well) water source, no corrective action is required by contractor.

Discussion: Low water flow may result from the installation of low-flow fixtures required by the prevailing plumbing code. These fixtures affect flow, not water pressure.

7-1-6 Observation: The water pressure is high.

Performance Guideline: The plumbing system, including wells provided by contractors, shall be designed and installed according to the prevailing plumbing code.

Corrective Measure: If the water pressure exceeds what is specified in the prevailing plumbing code, the contractor shall install a water pressure reducing device to adjust pressure to acceptable pressure according to prevailing code.

7-1-7 Observation: A water supply line is noisy.

Performance Guideline: Because of the flow of water and pipe expansion/contraction, the water piping system may emit some noise.

Corrective Measure: The contractor cannot eliminate all noises caused by water flow and pipe expansion/contraction.

Discussion: Banging sounds can be caused by high-pressure dishwashers, washing machines, and high-efficiency toilets.

7-1-8 Observation: The water heater is not properly secured.

Performance Guideline: The water heater should be properly installed per manufacture's specifications and the prevailing building code.

Corrective Measure: The contractor will secure the water heater as necessary to meet the performance guideline.

7-1-9 Observation: Water hammer is evident when a fixture or valve is turned off.

Performance Guideline: Pipes should not make a pounding noise called water hammer.

Remodeling Specific Guideline: If the problem is a condition caused by the existing system, the consumer is responsible for necessary corrections. Some newer fixtures are more likely to present water hammer due to closing suddenness of the water flow.

Corrective Measure: The contractor will provide the water hammer prevention required by the prevailing plumbing code.

Plumbing Fixtures

7-2-1 Observation: A faucet leaks.

Performance Guideline: A faucet should not leak.

Corrective Measure: The contractor will stop the leak or replace a leaking faucet if the contractor provided the fixture.

7-2-2 Observation: Water flows outside a bathtub or shower.

Performance Guideline: Bathtubs and showers should be installed properly according to the manufacturer's guidelines.

Corrective Measure: The contractor will repair bathtub or shower leaks as necessary to meet the performance guideline during the warranty period.

Discussion: Proper repair can be achieved by sealing areas around bathtubs and showers. The consumer is responsible for maintaining caulk seals after the point of substantial completion of the project. The consumer is responsible for leaks related to the use of curtains in bathtubs and showers.

7-2-3 Observation: A plumbing fixture, appliance, or trim fitting is defective.

Performance Guideline: Plumbing fixtures, appliances, and trim fittings should perform in accordance with manufacturer's specifications at the time of substantial completion of the project.

Corrective Measure: Defective fixtures, appliances, or trim fittings are covered under the manufacturer's warranty. Contractor will be responsible for repairing or replacing fixtures, appliances and trim fittings provided by contractor during the warranty period.

7-2-4 Observation: The surface of a plumbing fixture is cracked, chipped, or scratched.

Performance Guideline: Cracks, chips, or scratches in surfaces of showers, bathtubs, and sinks are considered excessive if they are visible from 3 feet in normal lighting conditions at the time of substantial completion of the project.

Corrective Measure: The contractor shall repair any fixture that does not meet the performance guideline. The contractor is not responsible for repairs unless the damage is reported to the contractor prior to substantial completion or move in.

- 7-2-5 Observation:** The surface of a plumbing fixture is stained. The fixture has an accumulation of minerals on it, or the fixture has been etched or corroded.
- Performance Guideline:** High mineral content in water can cause staining or corrosion of plumbing fixtures.
- Corrective Measure:** No corrective action is required by the contractor.
- 7-2-6 Observation:** A bathtub or shower enclosure base flexes excessively.
- Performance Guideline:** The bathtub or shower enclosure should be installed according to the manufacturer's instructions and perform in accordance with the manufacturer's specifications; however, some noticeable flex can be expected and is normal.
- Corrective Measure:** The contractor will repair the base to meet the manufacturer's guideline.
- Discussion:** It is normal for bathtub and shower enclosure designs and materials to exhibit some flexing. Minimal noises may be associated with such movement.
- 7-2-7 Observation:** A vanity top with a one-piece sink top is cracked.
- Performance Guideline:** Vanity tops should not have cracks.
- Corrective Measure:** The contractor will repair or replace the vanity top to meet the performance guideline. Cracks must be noted prior to substantial completion of the project.
- 7-2-8 Observation:** A plumbing fixture does not deliver hot water.
- Performance Guideline:** The plumbing lines and fixtures should be correctly installed.
- Corrective Measure:** The contractor will correct the plumbing lines and/or adjust fixtures to meet the performance guideline.
- Discussion:** Hot water tanks or tankless water heaters are sometimes set at low temperatures to conserve energy and prevent young children from burning themselves. Some building codes limit the maximum temperature.
- 7-2-9 Observation:** Hot water takes too long to get to a fixture.
- Performance Guideline:** Plumbing system will deliver hot water to the fixture.
- Corrective Measure:** Contractor will repair to meet the performance guideline. If hot water is delivered to the fixture, no corrective action is required by the contractor.
- Discussion:** Delays in water reaching certain fixtures can occur due to the proximity of fixture from the hot water source. Longer delays are typical with tankless water heaters. Point of use heaters or recirculating pumps are an option that can be installed by the consumer.

7-2-10 Observation: The sink waste disposer is clogged.

Performance Guideline: Disposer should not clog during normal use.

Corrective Measure: The contractor will correct the disposer unless the clog is due to improper use.

Discussion: Consumer should be aware that certain food items are difficult to grind in a disposer and will cause a clog and back up in the drain (ie., potato peels, carrot peels, shrimp shells, and other fibrous foods).

Sanitary Sewer or Septic System

7-3-1 Observation: Wastewater drain system components and pipes clog frequently, drain slowly, or back up into sink.

Performance Guideline: Sewer components and drains should drain as designed.

Remodeling Specific Guideline: If the problem is caused by issues with drain lines contained in the existing system, the consumer is responsible for necessary corrections. In a remodeled home drain blockage or inadequate flow can occur due to tree roots, sludge, etc. ... found in an existing drain line.

Corrective Measure: The contractor will correct problems caused by improper installation. If consumer action or negligence caused the problem, the consumer is responsible for the necessary repairs.

Discussion: There are many items that should not be introduced to the wastewater drains, such as:

- Grease
- Fat
- Fruit
- Vegetable peels, rinds, and other fibrous foods
- Feminine products
- Cotton swabs
- Diapers
- Baby wipes
- Dental floss
- Paper towels

7-3-2 Observation: The septic (onsite wastewater collection and treatment system) does not operate as designed.

Performance Guideline: The septic system will function as designed and approved by the applicable local governing authority.

Corrective Measure: The contractor will correct problems caused by improper installation. The consumer is responsible for the proper maintenance of the system. If consumer action is the cause, the consumer is responsible for correcting the problem.

Discussion: Septic systems are sensitive biological systems whose function is dependent upon proper biological conditions and chemical balance that will promote the livelihood of the bacteria living with the system. More information regarding proper operation and management can be found at the National Environmental Services Center at www.nesc.wvu.edu/subpages/septic.cfm. Consumer actions that will negate corrective measure by the contractor under this performance guideline include but are not limited to the following:

- Connection of sump pump, roof drains, or backwash from a water conditioner into the system.
- Placement of non-biodegradable or nominally biodegradable items, such as personal wipes and feminine hygiene products into the system.
- Excessive use of a food waste disposer.
- Placement of surfaces not permeable to water over the disposal area of the system.
- Allowing vehicles to drive or park over the disposal area of the system.
- Failure to pump out the septic tank periodically, as required.
- Use that exceeds the system's design standards.
- Lack of vegetation maintenance over drain fields.
- Allowing water to pond over the disposal area.
- Using the system during chemotherapy drug treatment (including use on a temporary basis).

7-3-3 Observation: A toilet does not discharge wastewater properly.

Performance Guideline: Toilet should perform in accordance with manufacturer's specification.

Corrective Measure: The contractor will repair or replace the toilet not meeting the performance guideline.

Discussion: Toilets are designed to flush personal waste and toilet paper. Consumers should not flush products that are nominally biodegradable, such as personal wipes, paper towels, or napkins. Similarly, non-biodegradable items like feminine hygiene products, cotton balls or plastics should not be flushed. While many of these items may clear the toilet, they may cause blockage in the drainpipe. Consumers should avoid flushing prescription medications and other drugs.

7-3-4 Observation: The flushing level does not result in initiating a flush or water constantly enters the toilet.

Performance Guideline: The flushing mechanism should function properly at the time of substantial completion.

Corrective Measure: The contractor shall repair the flushing mechanism so that it operates properly.

7-3-5 Observation: A sewer odor is noticeable inside the home coming from the wastewater system.

Performance Guideline: A sewer odor should not be detectable inside the home under normal conditions.

Corrective Measure: The contractor should take the steps necessary to meet the performance guideline.

Discussion: The consumer should keep the plumbing traps filled with water. Extended non-use of a water fixture can allow the water in its trap to evaporate, thus providing a path for sewer gases to enter the home. Depending on humidity conditions, the consumer should fill traps by adding a quart of water to bathtubs, laundry tubs, and the like that are not used regularly, approximately every couple of months.

7-3-6 Observation: The grinder pump stops working (alarm sounding).

Performance Guideline: A grinder pump should work as indicated by manufacturer unless the power is off.

Corrective Measure: The contractor should take the steps necessary to meet the performance guideline.

Discussion: Grinder pump breakers can trip due to a close lightning strike. The consumer is responsible to maintain the pump according to manufacturer's instructions. Grinder pumps will fail if items such as nominally biodegradable, such as personal wipes, paper towels, or napkins. Similarly, non-biodegradable items like feminine hygiene products, diapers, some wipes, cotton balls, or plastics. Grinder pumps that use floats to sense the level in the holding tank are prone to grease build up and may turn the pump on unnecessarily or not at all causing the tank to fill up with sewage and possibly back up in the home or yard.

Electrical

Note: Remodeling Specific Guideline: *Where applicable, in the following guidelines the contractor is responsible only for areas of the home where work was performed as specified in the contract and not for the entire home. Some existing circuitry protection outlets or switches may be inadequate for newer lighting, appliances, and modern equipment.*

Fuses and Circuit Breakers

8-1-1 Observation: A ground fault circuit interrupter (GFCI) or arc fault circuit interrupter (AFCI) trips frequently.

Performance Guideline: GFCIs and AFCIs should perform as intended and will be installed and tested in accordance with prevailing electrical codes during warranty period.

Corrective Measure: The contractor will install ground fault and arc fault circuit interrupters in accordance with the prevailing electrical codes. Tripping is to be expected; however, the contractor will repair or replace components that frequently trip due to component failure or incorrect installation during warranty period.

Discussion: AFCIs are installed to protect bedroom circuits and all other habitable areas of a residence. GFCIs protect outlets in wet areas (e.g., bathrooms, kitchens, garages, laundry, exterior, etc.) Because outlets protected by GFCIs may be connected in a series, it may not be readily apparent that an inoperative convenience outlet is the result of a tripped GFCI in another room (not necessarily in the electrical panel). Both ground fault and arc fault circuit interrupters are sensitive devices that detect ground fault and arc fault conditions and consumers occasionally will experience nuisance tripping. The most common causes of nuisance tripping by AFCIs are damaged cords or plugs on consumers' lamps, small appliances, or other devices. Some vacuum cleaners, exercise equipment, light fixtures, and electronics may trip an AFCI-protected circuit. Static electricity, some electronic devices, televisions, computers, and printers may also cause nuisance tripping of circuit interrupters. The consumer should pay particular attention to refrigerators and freezers, as nuisance tripping of these devices may result in food spoilage.

8-1-2 Observation: A circuit breaker trips.

Performance Guideline: Circuit breakers should not be tripped by normal usage.

Corrective Measure: The contractor will check wiring, circuits, and components for conformity with prevailing electrical code. The contractor will correct noncompliant elements during warranty period.

Discussion: Prevailing electrical code determines the types of circuits, their locations, and their design loads. When maximum capacity is exceeded the fuse or breaker will trip. If a 15-amp circuit is tripped, the consumer should try plugging the device into a 20-amp circuit to see if the amperage of the device exceeds the lower 15-amp capacity. Blown fuses and tripped breakers are symptoms of a problem in some part of the home's electrical system or a consumer product connected to the system. Although

components may be defective, consumer-owned fixtures and appliances usually are responsible for electrical malfunctions and nuisance tripping, larger devices such as treadmills and ellipticals, may not operate properly on these circuits designed for lower loads (e.g., bedrooms). The consumer should unplug or disconnect fixtures and appliances on the circuit and then replace the fuse or reset the breaker. If the problem reoccurs, the consumer should notify the contractor.

8-1-3 Observation: The home has lost partial power.

Performance Guideline: The electrical supply to the home should be installed in accordance with the prevailing electrical codes.

Corrective Measure: The contractor will check the wiring for conformity with prevailing electrical codes. The contractor will correct noncompliant elements during the warranty period.

Discussion: The consumer should check the circuit breakers and reset as needed. If this does not correct the situation, one leg of the power supply serving the home may no longer be operational. This may happen following a storm. The consumer should contact the local utility company and report the situation. The contractor is not responsible for the failure of wiring or connectors located before the service enters the home or of the adequate supply of service by the local utility company.

Outlets and Fixtures

8-2-1 Observation: Electrical outlets, switches, or fixtures malfunction.

Performance Guideline: All electrical outlets, switches, and fixtures should operate as designed.

Remodeling Specific Guideline: Existing recess cans may malfunction that are not IC (insulation contact) rated. Over time the adjacent insulation required gap for heat dissipation maybe missing. The light will flicker, burn out, or turn off when thermal coupling cuts the power.

Corrective Measure: The contractor will repair or replace malfunctioning electrical outlets, switches, and fixtures to meet the performance guideline during the warranty period.

8-2-2 Observation: Wiring fails to carry its designed load.

Performance Guideline: Wiring should be capable of carrying the designed load for normal residential use.

Corrective Measure: The contractor will verify that wiring conforms to prevailing electrical code. The contractor will correct wiring that does not conform to meet the performance guideline during the warranty period.

Discussion: Consumer needs to be aware of the circuit load capacity for specific breakers in their home, and not exceed that capacity. If they exceed the capacity of the circuit that has been provided per code specification, it will trip.

8-2-3 Observation: Interior receptacle or switch covers protrude from the wall.

Performance Guideline: Interior receptacle or switch covers should not protrude more than $\frac{1}{16}$ inch from the wall.

Remodeling Specific Guideline: Covers installed on an existing wall do not fall under this guideline.

Corrective Measure: The contractor will adjust the covers to meet the performance guideline.

Discussion: Some textured walls or tile may not allow a cover to be installed flush.

8-2-4 Observation: The consumer's 220-volt appliance plug does not fit the outlet provided by the contractor.

Performance Guideline: The contractor should install electrical outlets required by the prevailing electrical code.

Remodeling Specific Guideline: New 220-volt electrical outlets will not accept an appliance designed to be with older 220-volt outlets. The consumer is responsible for obtaining the appropriate appliance plug.

Corrective Measure: No corrective action is required by the contractor.

Discussion: The consumer is responsible for obtaining an appliance plug that is appropriate for their appliance and fits the outlets provided by the contractor.

8-2-5 Observation: Lighting dims or flickers when other electrical devices are in use.

Performance Guideline: General lighting outlets should be installed per the prevailing electrical codes.

Corrective Measure: The contractor will repair or replace outlets to meet the performance guideline.

Discussion: Lighting outlets are designed for moderate use devices such as clocks, radios and lamps. When larger devices such as vacuum cleaners, copiers, space heaters and irons are added, the startup surge may cause lights to dim or flicker. Air conditioners and heat pumps have the potential to cause all light fixtures in the home to dim or flicker. All circuits have the potential for dimming.

8-2-6 Observation: Lighting fixture on a dimmer switch does not operate properly.

Performance Guideline: Dimmer switches should be installed that are compatible to the bulbs installed.

Corrective Measure: The contractor will repair or replace bulbs or switches to meet the performance guideline, if provided by the contractor.

Discussion: Light fixtures require specific bulbs specified by the manufacturer. Some bulbs, particularly LED, are not compatible with standard dimmers and will blink, hum, flicker or not dim properly.

8-2-7 Observation: Low-voltage lighting flickers.

Performance Guideline: Low-voltage lighting should operate as designed.

Corrective Measure: The contractor will repair or replace malfunctioning low-voltage fixtures to meet the performance guideline during the warranty period.

Discussion: Low-voltage transformers are sized according to the fixtures that are installed on a circuit. The transformers must have sufficient ventilation around them. Consumers who add fixtures or change the wattage in fixtures after the circuit is designed and installed may cause the transformer to be undersized for a particular application.

8-2-8 Observation: Ceiling fan vibrates excessively and/or is noisy.

Performance Guideline: The contractor should install ceiling fans in accordance with the manufacturer's instructions (including blade balances).

Corrective Measure: The contractor will correct any fan installation not in accordance with the performance guideline if the fan was supplied and installed by the contractor.

Discussion: There are varying levels of performance for ceiling fans and some noise or vibration may be inherent in the specific fan installed.

8-2-9 Observation: A smoke or carbon monoxide detector chirps or otherwise malfunctions.

Performance Guideline: Detectors should operate as designed at substantial completion of the project.

Corrective Measure: The contractor will repair or replace the smoke or carbon monoxide detector to meet the performance guideline during the warranty period.

Discussion: Most smoke or carbon monoxide detectors are powered by both the electrical power and a backup battery. Chirping may indicate intermittent power loss, power surges or, most typically, that the battery is weak or is not installed. If the chirping occurs on a new detector, the contractor will check the battery, verify that the detector is wired correctly, and replace the device if necessary. Safety officials recommend that consumers change the batteries in detectors semiannually when Daylight Saving Time begins and ends.

8-2-10 Observation: Telephone and cable television wiring do not operate as intended.

Performance Guideline: Telephone and cable television wiring should be installed by the building contractor in accordance with the prevailing building codes.

Corrective Measure: The contractor shall repair telephone or cable television wiring not meeting the performance guideline during the warranty period.

Discussion: The contractor is not responsible for the failure of wiring or connectors located before the service provider enters the home.

8-2-11 Observation: Recessed can lights turn off.

Performance Guideline: Recessed lighting should operate as designed.

Remodeling Specific Guidelines: Older recessed can lights were not rated for insulation contact "(IC)". If a consumer is adding insulation near existing recessed can lights not rated IC, proper baffling and spacing is required to avoid a fire hazard or bulbs burning out.

Corrective Measure: The contractor shall repair recessed can lights not meeting the performance guideline.

Discussion: Recessed can lights have temperature sensors, or "thermal cutouts" that shut the lights off if the temperature gets too high. The temperature will get too high if a bulb higher than the maximum design wattage is used. Lights fitted with an enclosed trim (shower trim) will shut off if left on for an extended time and are operating as intended.

Interior Climate Control

Note: Remodeling Specific Guideline: *Where applicable, in the following guidelines the contractor is responsible only for areas of the home where work was performed as specified in the contract, not for the entire home.*

Air Infiltration and Drafts

9-1-1 Observation: Air infiltrates around exterior doors or windows.

Performance Guideline: Weather stripping should be installed and sized properly to seal the exterior door when closed. Windows will be installed per the manufacturer's instructions.

Corrective Measure: The contractor will correct to meet the performance guideline. Some infiltration is usually noticeable around doors and windows.

Discussion: At times of high wind or temperature differentials inside and outside the home, there may be noticeable air movement around a closed door's perimeter or window. In high-wind areas, the consumer may elect to have storm windows and doors installed to further reduce drafts. Doors must have gaps at their perimeter to accommodate expansion and contraction due to variations in temperature and/or humidity and to enable the door to operate over a wide range of environmental conditions. Weather stripping seals the gaps required for proper operations to prevent excessive air infiltration. A small glimmer of light seen at the corners of the door unit is normal. Weather stripping should be kept clean and maintained by the consumer.

9-1-2 Observation: A draft comes through an electrical outlet.

Performance Guideline: Electrical outlets and switch boxes on exterior walls may allow air to flow through or around an outlet into a room, as allowed by prevailing building code.

Corrective Measure: No corrective action is required by the contractor, except to conform to the prevailing building code.

Discussion: To increase energy efficiency, the consumer may elect to install foam insulation pads under switch and outlet plates to help decrease drafts.

9-1-3 Observation: The temperature or humidity of the home seems to change when the central vacuum system is operated.

Performance Guideline: Temperature of home may change when central vacuum system is operated.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Most central vacuum systems expel air to the outside (i.e., out of the home). This results in a partial vacuum that causes outside air to be drawn into the home to make up for the expelled air. The introduction of unconditioned outside air may be perceptible.

Humidity Control and Condensation

9-2-1 Observation: Water, ice, frost, or condensation is observed on the interior frame or glass surface of a window or exterior door.

Performance Guideline: Windows and exterior doors should be installed in accordance with the manufacturer's instructions and the prevailing building codes.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Condensation usually results from conditions beyond the contractor's control. Moisture in the air can condense into water and collect on cold surfaces, particularly in the winter months when the outside temperature is low. Blinds and drapes can prevent air within the home from moving across the cold surface and picking up the moisture. Occasional condensation on windows and doors in the kitchen, bath, or laundry area is also common. It is the consumer's responsibility to maintain proper humidity by properly operating heating and cooling systems' exhaust fans and allowing moving air within the home to flow over the interior surface of the windows. In hot, humid climates, condensation can occur on the outside of windows when the outdoor humidity is especially high (in early mornings when windows are cool). Air conditioning vents are usually aimed at windows and glass doors to maximize comfort and can cause surface condensation.

Ducts and Airflow

9-3-1 Observation: The *ductwork* makes noises.

Performance Guideline: Ductwork should be constructed and installed in accordance with applicable mechanical code requirements.

Corrective Measure: No corrective action is required by the contractor unless the *duct* does not comply with the prevailing building code.

Discussion: Metal expands when it is heated or subjected to pressure during startup and contracts when it cools. The ticking or crackling sounds caused by the metal's movement are common.

9-3-2 Observation: The ductwork produces excessively loud noises commonly known as "oil canning."

Performance Guideline: The stiffening of the ductwork and the thickness of the metal used should be such that ducts do not "oil can." The booming noise caused by oil canning is considered excessive.

Corrective Measure: The contractor shall correct the ductwork to eliminate oil canning.

9-3-3 Observation: There is airflow noise at a *register*.

Performance Guideline: The register should be correctly installed according to the prevailing building code.

Corrective Measure: No corrective action is required by the contractor unless registers are not installed according to the prevailing building code.

Discussion: Under certain conditions, there will be some noise with the normal flow of air even when registers are installed correctly.

9-3-4 Observation: The ductwork is separated or detached.

Performance Guideline: Ductwork should remain intact and securely fastened.

Corrective Measure: The contractor will reattach and secure all separated or unattached ductwork.

9-3-5 Observation: There is insufficient airflow to registers.

Performance Guideline: The ductwork should be correctly installed according to the prevailing building code and the applicable mechanical code.

Corrective Measure: The contractor will correct ductwork to meet the performance guideline. If the airflow is adequate to properly condition the room, no corrective action is required of the contractor.

Discussion: The adequacy of airflow may be subjective. See Sections 9-4-1 and 9-4-4 regarding the adequacy of the heating and cooling systems.

9-3-6 Observation: There is moisture accumulating on supply registers.

Performance Guideline: The ductwork should be correctly installed according to the prevailing building code and the applicable mechanical code.

Corrective Measure: No corrective action is required by the contractor unless registers are not installed according to the prevailing building code.

Discussion: Condensation usually results from conditions beyond the contractor's control. Moisture in the air can condense into water and collect on cold surfaces.

Heating and Cooling Systems

9-4-1 Observation: The heating system is inadequate.

Performance Guideline: The heating system should be capable of producing an inside temperature of 70 degrees Fahrenheit, as measured in the center of each room at a height of 5 feet above the floor under local outdoor winter design conditions. National, state, or local energy codes supersede this performance guideline where such codes have been adopted. Work should be done in accordance with the prevailing building codes.

Remodeling Specific Guideline: For new living spaces created by remodeling projects, heating guidelines may not apply to areas where living space has been created without providing additional heating and/or resizing the ductwork.

Corrective Measure: The contractor will correct the heating system to provide the required temperature in accordance with the performance guideline or applicable code requirements. However, the consumer will be responsible for balancing dampers and registers and for making other necessary minor adjustments.

Discussion: Closed interior doors, closed registers, and dirty filters can restrict airflow and may affect the system's performance. To promote energy conservation, heating design codes typically are meant to maintain indoor temperature when the outdoor temperatures are within 10 degrees of normal, by climate zone. If the outdoor temperature is below that, the properly designed system will be unable to maintain 70 degrees Fahrenheit.

9-4-2 Observation: Some rooms are colder or hotter, or more humid than others.

Performance Guideline: The conditioning system should perform in accordance with the prevailing building code.

Corrective Measure: The contractor shall correct the flow of air to rooms to bring the flow into accordance with the prevailing building code.

Discussion: A temperature difference of several degrees Fahrenheit can be expected between rooms due to a number of factors, including registers that have been partially or completely closed, the number of people in a room (even sleeping), the number of appliances, even those that are ostensibly off, the amount of glass in the room, the number of and extent of exterior walls, the sun exposure at the time, and the temperature difference between inside and outside. When the temperature difference is relatively low in hot, humid climates, humidity can increase to give the perception of an increase in temperature.

9-4-3 Observation: The *radiant* floor has cold spots.

Performance Guideline: The radiant floor should be installed according to the manufacturer's instructions.

Corrective Measure: The contractor will correct to meet the performance guideline.

Discussion: Depending on the size, shape, flooring material, manufacturer, and type of radiant floor system, the number and size of cold spots in a floor will vary. A normally operating radiant floor system may include cold spots in perimeter areas and in areas between the heating sources.

9-4-4 Observation: The cooling of a room is inadequate.

Performance Guideline: If air conditioning is installed by the contractor, the cooling system should be capable of maintaining a temperature of 78 degrees Fahrenheit, as measured in the center of each room at a height of 5 feet above the floor under local outdoor summer design conditions. National, state, or local codes will supersede this guideline where such codes have been adopted. Work should be done in accordance with the prevailing building codes.

Remodeling Specific Guideline: For new living spaces created by remodeling jobs, cooling guidelines may not apply to areas where living space has been created without providing additional cooling and/or resizing the ductwork.

Corrective Measure: The contractor will correct the cooling system to provide the required temperature in accordance with the applicable code requirements.

Discussion: Closed interior doors without proper gap at bottom of the door, closed registers, and dirty filters can restrict airflow and may affect the system's performance. Some cooling systems have two filters. To promote energy conservation, cooling design codes typically are meant to maintain indoor temperature when the outdoor temperatures are within 15 degrees of normal. If the outdoor temperature is above normal, based on climate zone, the properly designed system will be unable to maintain 78 degrees Fahrenheit.

9-4-5 Observation: The air handler or furnace vibrates.

Performance Guideline: The units should be installed in accordance with the manufacturer's instructions and the prevailing building codes.

Corrective Measure: The contractor will correct the items according to the manufacturer's instructions and prevailing building code requirements.

Discussion: Under certain conditions, some vibration may occur with the normal flow of air when air handlers and furnaces are installed correctly. Debris in the furnace or air handler could cause the unit to become out of balance and vibrate. It is the consumer's responsibility to keep units clear of debris.

9-4-6 Observation: A condensate line is clogged.

Performance Guideline: Condensate lines should be free of all clogs at the time of substantial completion and have consistent pitch to drain as designed.

Corrective Measure: The contractor shall correct clogs existent before substantial completion. If a clog occurs after substantial completion of the project, no corrective action is required of the contractor.

Discussion: Condensate lines will eventually clog under normal use. The consumer is responsible for checking and maintaining clear lines. The addition of a tablespoon of bleach at the condensate trap can inhibit the growth of algae that is the frequent cause of clogging.

9-4-7 Observation: A leak in a refrigerant line or fittings.

Performance Guideline: Refrigerant lines and fittings should not leak.

Corrective Measure: The contractor will repair leaking refrigerant lines or fittings and recharge the air conditioning/heat pump unit unless the damage was caused by the consumer's actions or negligence.

9-4-8 Observation: There is condensation on the outside of air handlers, refrigerant lines, or ducts.

Performance Guideline: Moisture can be expected to condense and/or freeze on the exterior surfaces of air handlers, lines, and ducts when the air temperature is different from the surface temperature.

Corrective Measure: No corrective action is required by the contractor unless the condensation is directly attributed to faulty installation.

Discussion: Condensation is most likely to occur when air handlers, refrigerant lines, or ducts are in unconditioned locations such as a crawl space, basement, attic, or in exterior locations. Condensation usually results from conditions beyond the contractor's control. Moisture in the air can condense to form water and collect on cold duct surfaces, particularly in the summer months when the humidity is high.

Ventilation

9-5-1 Observation: Kitchen or bath fans allow air infiltration or make a flapping noise.

Performance Guideline: Bath and kitchen fans should be installed in accordance with the manufacturer's instructions and prevailing building code requirements and perform in accordance with the manufacturer's specifications.

Corrective Measure: No corrective action is required by the contractor if the fan installation meets the performance guideline.

Discussion: It is possible for outside air to enter the home through a ventilation fan. The dampers in most fans do not seal tightly. It is possible for the damper to be lodged open due to animal activity (including nesting in the outside opening), or the accumulation of grease, lint, and other debris. Maintenance of ventilating fans is the consumer's responsibility, and the consumer should make periodic inspections to assure the proper flow of air. Opening and closing exterior doors changes the interior pressure and may cause the dampers to open and close causing a noise.

9-5-2 Observation: HVAC vent or register covers protrude from a smooth wall or ceiling surface.

Performance Guideline: Registers should not protrude more than $\frac{1}{16}$ inch from a smooth wall or ceiling surface at the time of substantial completion of the project.

Corrective Measure: The contractor will correct to meet the performance guideline.

Discussion: Registers and vents may deflect over time. This can result in gaps occurring between the vents or register and the wall or ceiling. If the vent or register is securely attached, this is not a warranty item.

9-5-3 Observation: HVAC vent or register covers protrude from a rough or texture wall or ceiling surface.

Performance Guideline: Registers should not protrude more than $\frac{1}{16}$ inch from a rough or texture wall or ceiling surface at the time of substantial completion of the project. Some texture wall finishes may not allow a register to be installed flush.

Corrective Measure: The contractor will correct to meet the performance guideline.

Discussion: Registers and vents may deflect over time. This can result in gaps occurring between the vents or register and the wall or ceiling. If the vent or register is securely attached, this is not a warranty item.

9-5-4 Observation: HVAC vent or register covers protrude from floors.

Performance Guideline: Registers should not protrude more than $\frac{1}{16}$ inch from floor surface at the time of substantial completion of the project.

Corrective Measure: The contractor will correct to meet the performance guideline or prevailing building code.

Discussion: Registers and vents may deflect over time. This can result in gaps occurring between the vents or register and the wall or ceiling. If the vent or register is securely attached, this is not a warranty item.

9-5-5 Observation: Exhaust fan does not discharge directly to the exterior.

Performance Guideline: Exhaust fans should vent in accordance with the prevailing building code.

Corrective Measure: The contractor will correct to meet the performance guideline.

Interior Finish

Note: Remodeling Specific Guideline: *Where applicable, in the following guidelines the contractor is responsible only for areas of the home where work was performed as specified in the contract, not for the entire home.*

Interior Doors

10-1-1 Observation: An interior door is warped.

Performance Guideline: Except as noted, interior doors should not become inoperable due to warping. A ¼ inch tolerance, as measured diagonally from corner to corner, is acceptable.

Corrective Measure: The contractor will correct or replace and refinish defective doors to match existing doors as closely as practical.

Discussion: In bathroom or utility areas, exhaust fans or an open window must be used to minimize moisture to prevent warpage of door units. The contractor is not responsible for refinishing if doors were finished by the consumer.

10-1-2 Observation: Bifold and bypass doors come off their tracks during normal operation.

Performance Guideline: *Bifold* and *bypass* doors should slide properly on their tracks.

Corrective Measure: One time only during the warranty period, the contractor will adjust the bifold or bypass doors that do not stay on its track or slide properly during normal operation.

Discussion: Proper operation should be verified by the consumer and the contractor at the time of substantial completion of the project and confirm that floor guides are in place.

Consumers should be aware that bifold and bypass doors are inherently more sensitive than swing doors and need to be treated accordingly. The consumer is responsible for cleaning and maintenance necessary to preserve proper operation.

10-1-3 Observation: Barn doors or pocket doors roll open on their own or do not stay closed.

Performance Guideline: Barn doors and pocket doors should not roll open or shut on their own.

Corrective Measure: One time only during the warranty period, the contractor will adjust the barn or pocket door that does not stay in place during normal operation.

Discussion: Proper operation should be verified by the consumer and the contractor at the time of substantial completion of the project and that jam guides are properly installed.

10-1-4 Observation: A *pocket* door rubs in its pocket during normal operation.

Performance Guideline: Pocket doors should operate smoothly during normal operation.

Corrective Measure: One time only during the warranty period, the contractor will adjust the pocket door to meet the performance guideline.

Discussion: Pocket doors commonly rub, stick, or derail because of the inherent nature of the product. It is necessary for the door to also rub against the guides provided by the manufacturer.

10-1-5 Observation: A wooden door panel has shrunk or split.

Performance Guideline: Wooden door panels should not split to the point that light is visible through the door.

Corrective Measure: One time only during the warranty period, the contractor will fill splits in the door panel with wood filler and will match the paint or stain as closely as practical.

Discussion: Contractor may check if defective door is covered by a manufacturers' warranty.

10-1-6 Observation: A door rubs on *jamb*s or contractor-installed floor covering.

Performance Guideline: Doors should not rub on jamb>s or contractor- installed floor covering.

Corrective Measure: One time only during the warranty, the contractor will adjust the door as necessary to meet the performance guideline.

10-1-7 Observation: A door edge is not parallel to the door jamb.

Performance Guideline: When the contractor installs the door frame and door, the door edge should be within $\frac{3}{16}$ inch of parallel to the door jamb.

Remodeling Specific Guideline: Where the contractor installs the door in an existing frame the performance guideline does not apply.

Corrective Measure: One time only during the warranty period, the contractor will adjust the door as necessary to meet the performance guideline.

10-1-8 Observation: A door swings open or closed from the force of gravity.

Performance Guideline: Doors should not swing open or closed from the force of gravity alone.

Remodeling Specific Guideline: This guideline does not apply where a door is installed in an existing wall that is out of plumb.

Corrective Measure: One time only during the warranty period, the contractor will adjust the door as necessary to meet the performance guideline.

10-1-9 Observation: A door hinge squeaks.

Performance Guideline: Door hinges should not squeak.

Corrective Measure: One time only during the warranty period, the contractor will adjust the door as necessary to meet the performance guideline.

10-1-10 Observation: Interior doors do not operate smoothly.

Performance Guideline: Doors should move smoothly with limited resistance.

Corrective Measure: One time only during the warranty period, the contractor will adjust the door to meet the performance guideline.

10-1-11 Observation: A doorknob or latch does not operate smoothly.

Performance Guideline: A doorknob or latch should not stick or bind during operation.

Corrective Measure: One time only during the warranty period, the contractor will adjust, repair, or replace knobs or latches that are not operating smoothly.

Discussion: Because locksets are rather complex mechanical devices, some may have a heavy or stiff feel but are operating as intended by the manufacturer. This can be true for locksets of all price ranges. Slamming doors or hanging items on the doorknob will affect knob or latch operation; it is not the contractor's responsibility to adjust or repair problems caused by such conditions.

Interior Stairs

10-2-1 Observation: An interior stair tread deflects.

Performance Guideline: The maximum vertical deflection of an interior stair tread should not exceed $\frac{1}{8}$ inch at 200 pounds of force.

Corrective Measure: The contractor will repair the stair to meet the performance guideline.

10-2-2 Observation: Gaps exist between interior stair risers, treads, and/or skirts.

Performance Guideline: Gaps between adjoining parts that are designed to meet flush should not exceed $\frac{1}{8}$ inch in width.

Corrective Measure: The contractor will repair or replace the parts as necessary to meet the performance guideline.

Discussion: The use of filler is an appropriate method to fill gaps.

10-2-3 Observation: A stair riser or tread squeaks.

Performance Guideline: Loud squeaks, pops or creeks caused by a loose stair riser or tread are considered excessive; however, totally squeak-proof stair risers or treads cannot be guaranteed.

Corrective Measure: The contractor will refasten any loose risers or treads or take other reasonable and cost-effective corrective action, based on his or her best judgment, to reduce squeaking without removing treads or ceiling finishes.

Discussion: Squeaks in risers or treads may occur when a riser has come loose from the tread, deflects from the weight of a person and rubs against the nails that hold it in place. Movement may occur between the riser and the tread or other stairway members when one tread is deflected while the other members remain stationary. Using trim screws to fasten the tread to the riser from above sometimes will reduce squeaking. If there is no ceiling below, gluing or re-nailing the riser to the tread or shimming will reduce squeaks but completely eliminating squeaks is not always possible.

10-2-4 Observation: Gaps exist between interior stair railing parts.

Performance Guideline: Gaps between interior stair railing parts should not exceed $\frac{1}{8}$ inch in width.

Corrective Measure: One time only during the warranty period, the contractor will ensure that individual parts of the railing are securely mounted. Any remaining gaps will be filled or the parts will be replaced to meet the performance guideline.

10-2-5 Observation: An interior stair railing lacks rigidity.

Performance Guideline: Interior stair railings should be installed in accordance with prevailing building codes.

Corrective Measure: The contractor will secure any stair railing parts that loosen with normal use, to meet the performance guideline.

Discussion: Stair railings are designed to protect an individual while stepping up and down a stairwell. Damages caused by the consumer from pulling, swinging, hanging, or sliding on railings may loosen the rail system and the contractor is not responsible for repair of such.

10-2-6 Observation: An interior balcony or horizontal railing lacks rigidity.

Performance Guideline: Interior railings should be installed in accordance with prevailing building codes.

Corrective Measure: The contractor will secure any railing parts that loosen with normal use, to meet the performance guideline.

Trim and Moldings

10-3-1 Observation: There are gaps at non-*mitered* trim and molding joints.

Performance Guideline: At the time of substantial completion of the project, openings at joints in trim and moldings, and at joints between moldings and adjacent surfaces, should not exceed 1/8 inch in width.

Corrective Measure: The contractor will repair joints to meet the performance guideline.

Discussion: Failing to control indoor relative humidity may cause separation of trim and moldings in excess of the performance guideline. Joints that separate under these conditions are not considered defective. The consumer is responsible for controlling temperature and humidity in the home.

10-3-2 Observation: Nails are not properly set or nail holes are not properly filled.

Performance Guideline: *Setting* nails and filling nail holes are considered part of painting and finishing. After finishing, nails and nail holes should not be readily visible from a standing position facing the surface at distance of 6 feet under normal lighting conditions. After staining, putty colors will not exactly match variations in wood color.

Corrective Measure: Where the contractor is responsible for painting, the contractor will take action necessary to meet the performance guideline. Puttying of nail holes in base and trim molding installed in unfinished rooms and areas not exposed to view (such as inside of closets) is not included in this guideline.

10-3-3 Observation: An inside corner is not coped or mitered.

Performance Guideline: Trim and molding edges at inside corners should be coped or mitered. However, square-edge trim and molding may be butted.

Corrective Measure: The contractor will finish inside corners to meet the performance guideline.

10-3-4 Observation: Trim or molding mitered edges do not meet.

Performance Guideline: At the time of substantial completion of the project, gaps between mitered edges in trim and molding should not exceed 1/8 inch.

Corrective Measure: The contractor will repair gaps that do not meet the performance guideline. Caulking or puttying with materials compatible with the finish is acceptable.

Discussion: Separation of trim and moldings in excess of the performance guideline may be caused by lack of control of indoor relative humidity. Joints that separate under these conditions are not considered defective. It is the consumer's responsibility to control temperature and humidity in the home.

10-3-5 Observation: Interior trim is split.

Performance Guideline: Splits, cracks, and checking greater than 1/8 inch in width are considered excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair the affected area to meet the performance guideline. Refinished or replaced areas may not match surrounding surfaces exactly.

10-3-6 Observation: Hammer marks are visible on interior trim.

Performance Guideline: Hammer marks on interior trim should not be readily visible from a standing position facing the surface at a distance of 6 feet under normal lighting conditions.

Corrective Measure: The contractor will fill hammer marks and refinish or replace affected trim to meet the performance guideline. Refinished or replaced areas may not match surrounding surfaces exactly.

Discussion: Dents and marks on trim due to consumer's actions are not the contractor's responsibility.

10-3-7 Observation: Wood trim appearance is uneven.

Performance Guideline: Variations in natural wood trim are common.

Corrective Measure: No corrective action is required by the contractor.

Cabinets

10-4-1 Observation: Cabinets do not meet the ceiling or walls.

Performance Guideline: Gaps greater than ¼ inch in width are considered excessive.

Corrective Measure: The contractor will repair the gap with caulk, putty, scribe molding, or will reposition/reinstall cabinets to meet the performance guideline.

Discussion: Remodeling Specific Guideline: When installed in rooms with out-of-plumb walls or out-of-level floors and ceilings, "square" cabinets cannot be installed parallel to walls and ceilings and still be kept on line. For example, if the floor is not level and the installer measures up from it, snaps a line on which to place the tops of the wall cabinets, and then plumbs the first cabinet, one corner of the cabinet will leave the line, and the bottom of successive cabinets will not be in line. Similarly, cabinets will not line up with each other if they are installed on a level line, starting against an out-of-plumb wall instead of a plumb wall. The contractor should explain the aesthetic options to the consumer and select the best option with the consumer.

10-4-2 Observation: Cabinets do not line up with each other.

Performance Guideline: Cabinet faces more than ⅛ inch out of line, and cabinet corners more than ⅜ inch out of line are considered excessive.

Remodeling Specific Guideline: The consumer and the contractor may agree to disregard this guideline to match or otherwise compensate for preexisting conditions.

Corrective Measure: The contractor will make necessary adjustments to meet the performance guideline.

Discussion: Remodeling Specific Guideline: In remodeling projects, many times the rooms are out of square, walls are not plumb, and floors are not level. Cabinets and countertops may have to be shimmed or otherwise adjusted to make the cabinets and countertops fit together properly. Cabinets may not fit flush against the walls on the ends or bottoms and may not fit flat against the floor.

10-4-3 Observation: A cabinet door or drawer front is warped.

Performance Guideline: Door or drawer warpage should not exceed $\frac{1}{4}$ inch as measured from the face frame to the point of furthest warpage, with the door or drawer front in closed position.

Corrective Measure: The contractor will correct or replace doors and drawer fronts as necessary to meet the performance guideline.

Discussion: Failing to control indoor relative humidity may cause warpage that exceeds the performance guideline. Doors or drawers that warp under these conditions are not considered defective. It is the consumer's responsibility to control temperature and humidity in the home.

10-4-4 Observation: A cabinet door or drawer binds.

Performance Guideline: Cabinet doors and drawers should open and close with reasonable ease.

Corrective Measure: The contractor will adjust or replace cabinet door hinges and/or drawer hardware as necessary to meet the performance guideline.

10-4-5 Observation: A cabinet door will not stay closed.

Performance Guideline: The catches or closing hardware for cabinet doors should be adequate to hold the doors in a closed position.

Corrective Measure: One time only during the warranty period, the contractor will adjust or replace the door catches or closing hardware as necessary to meet the performance guideline.

10-4-6 Observation: Cabinet doors or drawer fronts are cracked.

Performance Guideline: Cabinet doors and drawer fronts should not crack.

Corrective Measure: The contractor will replace or repair cracked panels and drawer fronts. No corrective action is required by the contractor if the cracked drawer fronts or panels result from the consumer's abuse.

Discussion: Paint or stain on the repaired or replaced door or drawer front may not match the stain on the existing panels or drawer fronts. Grain patterns or intensity cannot be matched perfectly. The contractor will use his or her best efforts to match as closely as possible the stain on the existing panels or drawer fronts. However, some species of wood will age and darken over time and an exact match may not be possible. Use of manufacturer-provided touch-up kits is acceptable to address minor imperfections in the cabinet finish.

10-4-7 Observation: Cabinet units are not level.

Performance Guideline: Individual cabinets should not have a deviation of more than $\frac{3}{16}$ inch out of level.

Remodeling Specific Guideline: The consumer and the contractor may agree to disregard this guideline to match or otherwise compensate for preexisting conditions.

Corrective Measure: The contractor will level cabinets to meet the performance guideline.

Discussion: Remodeling Specific Guideline: In remodeling projects, many times the rooms are out of square, walls are not plumb, and floors are not level. Cabinets and countertops may have to be shimmed or otherwise adjusted to make the cabinets and countertops fit together properly. Cabinets may not fit flush against the walls on the ends or bottoms and may not fit flat against the floor.

10-4-8 Observation: A cabinet frame is out of square.

Performance Guideline: A cabinet frame, when measured diagonally from corner to corner, should not exceed a difference of more than $\frac{1}{4}$ inch.

Corrective Measure: The contractor will repair or replace the cabinet to meet the performance guideline.

10-4-9 Observation: Cabinet doors do not align when closed.

Performance Guideline: Gaps between doors should not deviate more than $\frac{1}{8}$ inch from top to bottom.

Corrective Measure: The contractor will adjust doors to meet the performance guideline.

10-4-10 Observation: Soft or self-closing hinges or drawer slides are not functioning properly.

Performance Guideline: Hinges and slides should operate properly.

Corrective Measure: One time only during the warranty period, the contractor will adjust hinges or slides to meet the performance guidelines.

10-4-11 Observation: Cabinet doors and drawer fronts delaminate or discolor.

Performance Guideline: Cabinet doors and drawer fronts should not delaminate or discolor.

Corrective Measure: Cabinet defects are covered by the manufacturer's warranty.

Discussion: Under counter steam and heat from appliances such as dishwashers, drawer micro-waves, ovens, steam dryers, and others can also cause damage to cabinets and is not a contractor responsibility.

10-4-12 Observation: Cabinet shelves are sagging or deflecting.

Performance Guideline: Cabinet shelves should not sag with normal storage loads.

Corrective Measure: Cabinet defects are covered by the manufacturer's warranty.

Discussion: Consumer is responsible for proper use and not exceeding maximum storage weight.

Countertops

10-5-1 Observation: High-pressure laminate on a countertop is delaminated.

Performance Guideline: Countertops fabricated with high-pressure laminate coverings should not delaminate.

Corrective Measure: The contractor will repair or replace delaminated coverings unless the *delamination* was caused by the consumer's misuse or negligence.

Discussion: Consumers should refrain from leaving any liquids near the countertop seams or allowing the surface to become excessively hot. Under counter steam and heat from appliances such as dishwashers, drawer microwaves, ovens, steam dryers, etc., can also cause damage to countertops and is not a contractor responsibility.

10-5-2 Observation: The surface of high-pressure laminate on a countertop is cracked or chipped.

Performance Guideline: At the time of substantial completion of the project, cracks or chips greater than a $\frac{1}{16}$ inch are considered excessive.

Corrective Measure: The contractor will repair or replace cracked or chipped countertops to meet the performance guideline only if they are reported at the time of substantial completion of the project.

10-5-3 Observation: Countertops are visibly scratched.

Performance Guideline: At the time of substantial completion of the project, countertops should be free of scratches visible from 6 feet under normal lighting conditions.

Corrective Measure: The contractor will repair scratches in the countertop to meet the performance guideline.

Discussion: Minor imperfections and scratches will be more visible in dark, glossy tops.

10-5-4 Observation: A countertop is not level.

Performance Guideline: Countertops should be no more than $\frac{3}{8}$ inch in 10 feet out of parallel with the floor.

Remodeling Specific Guideline: For projects where the floor is out of level, the countertop may be installed proportionately out of level.

Corrective Measure: The contractor will make necessary adjustments to meet the performance guideline.

Discussion: Remodeling Specific Discussion: In remodeling projects, many times the rooms are out of square, walls are not plumb, and floors are not level. Cabinets and countertops may have to be shimmed or otherwise adjusted to make the cabinets and countertops fit together properly.

10-5-5 Observation: A tile countertop or backsplash has uneven grout lines.

Performance Guideline: Tile will be installed with grout lines as defined in the manufacturer's installation instructions.

Corrective Measure: The contractor will make corrections as necessary to bring the grout lines into compliance to meet the performance guideline.

Discussion: Different tiles require different widths of grout lines. Some tiles are designed to have varied-width grout lines. Irregularly sized tiles will also often result in uneven and variable grout width.

10-5-6 Observation: Tile countertop or backsplash grout lines are cracked.

Performance Guideline: Tile grout is a cement product and is subject to cracking. Cracks that result in loose tiles or gaps of $\frac{1}{16}$ inch are excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair the grout lines of cracks that result in loose tiles or gaps of $\frac{1}{16}$ inch by adding grout, caulking, or replacing grout.

10-5-7 Observation: The surface of countertop or backsplash tile has excessive lippage from the adjoining tile.

Performance Guideline: Generally, lippage greater than $\frac{1}{16}$ inch is considered excessive, except for materials that are designed with an irregular thickness (such as handmade tile).

Corrective Measure: The contractor will repair or replace the tile to meet the performance guideline, except for materials that are designed with an irregular thickness (such as handmade tile).

Discussion: Different types of tiles may have varying tolerances.

10-5-8 Observation: A natural stone, or solid-surface countertop is cracked.

Performance Guideline: At the time of substantial completion of the project, cracks greater than $\frac{1}{32}$ inch in width are considered excessive.

Corrective Measure: If the crack is found to be a result of faulty installation or product, the contractor will repair or replace the countertop. Patching is an acceptable repair.

Discussion: Imperfections in natural stone are inherent and normal and do not require corrective measures.

10-5-9 Observation: A natural stone countertop is discolored due to water, oil, pans, cleaners, etc.

Performance Guideline: At the time of substantial completion countertops should be clear of discoloration and sealed.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Countertops can discolor during normal use. Resealing countertops is a home owner maintenance item.

10-5-10 Observation: A natural stone or solid-surface countertop is chipped.

Performance Guideline: At the time of substantial completion of the project, chips greater than $\frac{1}{32}$ inch in width are considered excessive.

Corrective Measure: The contractor will repair or replace affected areas to meet the performance guidelines. The use of an appropriate filler is an acceptable repair.

10-5-11 Observation: A natural stone, or solid-surface countertop has visible seams.

Performance Guideline: Seams may be visible and especially noticeable with certain countertop materials and darker finishes.

Corrective Measure: No corrective action is required by the contractor.

10-5-12 Observation: A natural stone countertop has excessive lippage between sections.

Performance Guideline: Lippage greater than $\frac{1}{32}$ inch is considered excessive.

Corrective Measure: The contractor will repair or replace the countertop to meet the performance guideline.

10-5-13 Observation: A solid-surface or laminate countertop has a bubble, burn, stain, or other damage.

Performance Guideline: At the time of substantial completion of the project, solid-surface or laminate countertops should be free of bubbles, burns, or stains.

Corrective Measure: The contractor will repair or replace the countertop to meet the performance guideline.

Discussion: Solid-surface and laminate products may be subject to damage by hot surfaces placed on or near the product. The consumer is responsible for maintaining the countertop and protecting it from damage.

10-5-14 Observation: Manmade cultured marble top has hairline cracking around or near the drain.

Performance Guideline: At the time of substantial completion of the project, no visible cracks should be apparent to the naked eye. The countertop should withstand water temperatures of 130 degrees Fahrenheit without cracking.

Corrective Measure: The contractor will repair or replace the countertop to meet the performance guideline.

Discussion: Cultured marble tops are sensitive to rapid temperature changes, and may become thermally shocked. This process will cause cracking of the gel coat finish at or near the point of the temperature change. Water heater should be set at or below 130 degrees Fahrenheit. The contractor is not responsible for damage caused by thermal shocking.

10-5-15 Observation: Quartz countertop has chips or pits.

Performance Guideline: Quartz material can have minor chips or pits.

Corrective Measure: The contractor will repair the countertop with a material for filling quartz.

Interior Wall Finish

Lath and Plaster

10-6-1 Observation: Cracks are visible on a finished wall or ceiling.

Performance Guideline: Cracks should not exceed $\frac{1}{16}$ inch in width.

Corrective Measure: One time only during the warranty period, the contractor will repair cracks exceeding $\frac{1}{16}$ inch in width. The contractor will touch up paint on repaired areas if the contractor was responsible for the original interior painting. A perfect match between original and new paint cannot be expected and the contractor is not required to paint an entire wall or room.

Gypsum Wallboard or Drywall

10-6-2 Observation: Nail pops are visible on a finished wall or ceiling.

Performance Guideline: Nail pops are a defect only when there are signs of spackle compound cracking or falling away.

Corrective Measure: One time only during the warranty period, the contractor will repair such blemishes. The contractor will touch up paint on repaired areas if the contractor was responsible for the original interior painting. A perfect match between original and new paint cannot be expected, and the contractor is not required to paint an entire wall or room. The contractor is not required to repair defects that are covered by wall coverings and that, therefore, are not visible.

Discussion: When drywall has been placed on lumber surfaces subject to shrinkage and warpage and which are not perfectly level and plumb, problems may often occur through stress and strain placed on drywall during the stabilization of the lumber, which is inherent in the construction of the home. Due to the initial stabilization problem that exists with the new home, it is impossible to correct each defect as it occurs, and it is essentially useless to do so. The entire home will tend to stabilize itself. Correcting the drywall near the end of the warranty period provides the consumer with the best possible solution.

10-6-3 Observation: Blisters or other blemishes are visible on a finished wall or ceiling.

Performance Guideline: Any such blemishes that are readily visible from a standing position facing the surface at distance of 6 feet under normal lighting conditions are considered excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair such blemishes. The contractor will touch up paint on repaired areas if the contractor was responsible for the original interior painting. A perfect match between original and new paint cannot be expected, and the contractor is not required to paint an entire wall or room. The contractor is not required to repair defects that are covered by wall coverings and that, therefore, are not visible.

Discussion: When drywall has been placed on lumber surfaces subject to shrinkage and warpage and which are not perfectly level and plumb, problems may often occur through stress and strain placed on drywall during the stabilization of the lumber, which is inherent in the construction of the home. Due to the initial stabilization problem that exists with the new home, it is impossible to correct each defect as it occurs, and it is essentially useless to do so. The entire home will tend to stabilize itself. Correcting the drywall near the end of the warranty period provides the consumer with the best possible solution.

10-6-4 Observation: Cracked or exposed corner bead, excess joint compound, trowel marks, or blisters in tape joints are observed on the drywall surface.

Performance Guideline: Defects resulting in cracked or exposed corner bead, *trowel marks*, excess joint compound or blisters in tape are considered excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair the affected area of the wall to meet the performance guideline.

10-6-5 Observation: Joints protrude from the surface.

Performance Guideline: Any joints that are readily visible from a standing position facing the surface at distance of 6 feet under normal lighting conditions are considered excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair affected areas.

Discussion: Visible joints often occur in long walls, stairwells, ceilings, and areas of two-story homes where framing members have shrunk and caused the drywall to protrude.

10-6-6 Observation: Angular *drywall joints* are uneven.

Performance Guideline: This is a common condition that occurs with randomly applied materials.

Corrective Measure: No corrective action is required by the contractor.

10-6-7 Observation: The texture of drywall does not match.

Performance Guideline: Any variations that are readily visible from a standing position facing the surface at a distance of 6 feet under normal lighting conditions are considered excessive.

Corrective Measure: The contractor will repair the affected area to meet the performance guideline.

10-6-8 Observation: Drywall is cracked.

Performance Guideline: Drywall cracks greater than $\frac{1}{16}$ inch in width are considered excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair cracks and touch up paint in affected areas. The texture and paint color may not exactly match the existing texture and paint color.

10-6-9 Observation: Sprayed or textured ceilings have uneven textures.

Performance Guideline: This is a common condition that occurs with randomly applied materials.

Corrective Measure: No corrective action is required by the contractor.

Paint, Stain, and Varnish

10-6-10 Observation: Interior paint does not cover the underlying surface.

Performance Guideline: The surface being painted should not show through new paint when viewed from a standing position facing the surface at distance of 6 feet under normal lighting conditions.

Corrective Measure: The contractor will recoat affected areas as necessary to meet the performance guideline as closely as practical.

Discussion: The amount and direction of sunlight can have a significant effect on how a surface appears. It is not unusual for the underlying surface to be visible in direct sunlight; no corrective action is required of the contractor in such instances.

10-6-11 Observation: An interior surface is spattered with paint.

Performance Guideline: Paint spatters should not be readily visible on walls, woodwork, floors, or other interior surfaces when viewed from a standing position facing the surface at distance of 6 feet under normal lighting conditions.

Corrective Measure: The contractor will remove paint spatters to meet the performance guideline.

10-6-12 Observation: Brush and roller marks show on interior painted surface.

Performance Guideline: Brush marks should not be readily visible on interior painted surfaces when viewed from a standing position facing the surface at a distance of 6 feet under normal lighting conditions.

Corrective Measure: The contractor will refinish as necessary to meet the performance guideline and match affected areas as closely as practical.

10-6-13 Observation: *Lap marks* show on interior painted or stained areas.

Performance Guideline: Lap marks should not be readily visible on interior painted or stained areas when viewed from a standing position facing the surface at distance of 6 feet under normal lighting conditions.

Corrective Measure: The contractor will refinish as necessary to meet the performance guideline and match affected areas as closely as practical.

10-6-14 Observation: Interior painting, staining, or refinishing of repair work does not match.

Performance Guideline: A perfect match between original and new paint cannot be expected. Repairs required under the performance guideline will be finished to match the immediate surrounding areas as closely as practical.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Where the majority of the wall or ceiling area is affected, the area will be painted from break line to break line. The contractor is not required to paint an entire room.

10-6-15 Observation: Tannin from wood has bled through the paint on interior trim.

Performance Guideline: This is a common condition with natural materials such as wood.

Corrective Measure: No corrective action is required by the contractor.

Wallpaper and Vinyl Wall Coverings

10-6-16 Observation: The wall covering has peeled.

Performance Guideline: The wall covering should not peel.

Corrective Measure: The contractor will reattach or replace the loose wall covering if the contractor installed the covering and peeling is not due to consumer actions.

Discussion: Wallpaper applied in high moisture areas is exempt from this guideline because the problem results from conditions beyond the contractor's control.

10-6-17 Observation: Patterns in wall covering are mismatched.

Performance Guideline: Patterns in wall coverings should match. Irregularities in the patterns themselves are the manufacturer's responsibility.

Remodeling Specific Guideline: This guideline does not apply if material is installed on existing out-of-plumb walls or where trim is not square with corners.

Corrective Measure: The contractor will correct the wall covering to meet the performance guideline.

Discussion: Some wall coverings have patterns that do not need to be matched.

10-6-18 Observation: Mold and mildew are found on a wall, floor or ceiling surface.

Performance Guideline: Mold and mildew are naturally occurring conditions wherever there is moisture.

Corrective Measure: No corrective action is required by the contractor unless it is the result of construction deficiencies defined elsewhere in this document.

Flooring

Carpeting

11-1-1 Observation: Carpet does not meet at the seams.

Performance Guideline: Visible gaps at the seams are considered excessive.

Corrective Measure: It is not unusual for carpet seams to be visible from a standing position. If the carpet was installed by the contractor, the contractor will correct visible gaps at carpet seams.

11-1-2 Observation: Carpet is loose or wrinkled.

Performance Guideline: When stretched and secured properly, wall-to-wall carpeting should not unfasten, loosen or separate from the points of attachment.

Corrective Measure: One time only during the warranty period the contractor will restretch or resecure the carpeting as necessary to meet the performance guideline.

Discussion: Consumer is responsible for adhering to the manufacturer's maintenance and cleaning instructions. Excessive moisture during cleaning causes the carpet fibers to stretch and not return to their normal position. This is not a contractor warranty responsibility. The following suggestions help maintain carpeting.

Vacuum regularly and more frequently in high-traffic areas, and everywhere according to a vacuuming schedule.

- Clean spots and spills quickly with products that do not damage the carpet or cause it to resoil quicker.
- Professionally deep clean your carpets every 12 to 18 months to remove embedded dirt and grime.
- Stop dirt at the door by using mats outside and in, taking your shoes off when you enter the house and changing your air filters to reduce airborne dust particles.

11-1-3 Observation: Carpet has faded or discolored.

Performance Guideline: Fading or discoloration of carpet is covered by the manufacturer's warranty.

Corrective Measure: No corrective action is required by the contractor.

Discussion: Consumer is responsible for adhering to the manufacturer's maintenance and cleaning instructions. Fading or discoloration may result from the consumer spilling liquids on the carpet, improper cleaning, exposure to sunlight, or from the consumer's failure to properly maintain the carpet.

11-1-4 Observation: Carpet appears to be different colors.

Performance Guideline: Carpet for a room should be ordered and installed from a single manufacturer's dye lot. Carpet shade variance is the manufacturer's responsibility.

Corrective Measure: No corrective action is required by the contractor.

Discussion: When viewed under *normal lighting conditions*, carpet may have the appearance of color variations. These differences may result from the direction of the carpet nap or from fibers being crushed on the roll. Over time, vacuuming will make the appearance more uniform.

11-1-5 Observation: *Dead spots*, dips or lumps are observed below the carpet surface.

Performance Guideline: Carpeted areas should not have dead spots, or voids dips or lumps that exceed ½ inch.

Corrective Measure: The contractor will repair dips, remove lumps or replace padding in the affected areas to meet the performance guideline.

Discussion: Because carpet padding comprises a number of materials of various densities and feel, there may be an inconsistent feel even with adequate coverage. Some dips may be created with heavy furniture and are not the responsibility of the contractor.

Vinyl and/or Resilient Flooring

11-2-1 Observation: Nails or fasteners raised below the flooring surface are readily visible on the surface of vinyl or resilient flooring.

Performance Guideline: Nail or other fasteners from under floor coverings that are raised above the surrounding area and readily visible from a standing position under normal lighting conditions are considered excessive.

Corrective Measure: The contractor will repair or replace flooring.

Discussion: At the contractor's option, the contractor will repair or replace the floor covering in the affected areas with similar materials and in accordance with manufacturer's recommendations. The contractor is not responsible for discontinued patterns or color variations when replacing or repairing the floor covering.

11-2-2 Observation: Depressions or ridges are observed in flooring because of subfloor irregularities.

Performance Guideline: Depressions or ridges exceeding ¼ inch, which are visible from a standing position facing the surface at a distance of 6 feet under normal lighting conditions, are excessive.

Remodeling Specific Guideline: Existing subflooring may have depressions or ridges that exceed the performance guideline. If new floor covering is installed on existing subflooring, the contractor and consumer may agree to disregard the performance guideline to match a pre-existing structural condition.

Corrective Measure: The contractor will take the necessary corrective action to meet the performance guideline. The contractor should not be responsible for discontinued patterns or color variations when replacing or repairing the floor covering. The ridge or depression measurement is taken at the end of a 6-inch straightedge centered over the depression or ridge with 3 inches of the straightedge held tightly to the floor on one side of the affected area. Measure under the straightedge to determine the depth of the depression or height of the ridge.

11-2-3 Observation: Vinyl or resilient flooring has lost adhesion.

Performance Guideline: Floor covering should be securely attached to the substrate or underlayment. Some minor voids that exhibit some variance in the sound underfoot may occur. Provided that the flooring material is not otherwise detached and loose at the edges, these variations are not a performance defect.

Corrective Measure: If flooring becomes detached because of improper installation by the contractor, the contractor will repair or replace the affected flooring as necessary. The contractor is not responsible for discontinued patterns or color variations when replacing or repairing the floor covering.

Discussion: The performance guideline does not apply to perimeter- attached vinyl floors.

11-2-4 Observation: Seams or shrinkage gaps show at vinyl or resilient flooring joints.

Performance Guideline: Gaps at joints/seams in flooring should not exceed $\frac{1}{32}$ inch in width. Where dissimilar materials abut, the gaps should not exceed $\frac{1}{16}$ inch.

Corrective Measure: The contractor will repair or replace the flooring as necessary to meet the performance guideline. The contractor should not be responsible for discontinued patterns or color variations when repairing or replacing the floor covering.

Discussion: Proper repair can be accomplished by sealing the gap with seam sealer.

11-2-5 Observation: Bubbles are observed in vinyl or resilient flooring.

Performance Guideline: Bubbles resulting from trapped air or debris and that protrude higher than $\frac{1}{16}$ inch from the floor are considered excessive.

Corrective Measure: The contractor will repair the floor to meet the performance guideline in accordance with manufacturer's recommendations.

Discussion: The performance guideline does not apply to perimeter-attached floors.

11-2-6 Observation: The patterns on vinyl or resilient flooring are misaligned.

Performance Guideline: Patterns at seams between adjoining pieces should be aligned to within $\frac{1}{8}$ inch.

Remodeling Specific Guideline: Existing subflooring may have irregularities that result in misalignment. If new floor covering is installed on existing subflooring, the contractor and consumer may agree to disregard the performance guideline to match a preexisting structural condition.

Corrective Measure: The contractor will correct the flooring to meet the performance guideline.

11-2-7 Observation: Yellowing is observed on the surface of vinyl or resilient floor covering.

Performance Guideline: The contractor should install vinyl flooring in accordance with the manufacturer's instructions.

Corrective Measure: If the yellowing resulted from improper installation by the contractor, the contractor will repair or replace the flooring. Yellowing resulting from a manufacturer's defect or from the consumer's misuse or lack of maintenance is not covered by the contractor.

Discussion: Some chemical compounds, such as the tar residue from a recently paved asphalt driveway, may cause a chemical reaction with the flooring material and result in permanent damage to the floor. The consumer is responsible for the proper use and maintenance of the floor. Yellowing caused by the consumer's improper use or inadequate maintenance of the floor is not the contractor's or the manufacturer's responsibility.

11-2-8 Observation: A resilient floor tile or plank (*LVT, LVP and EVP*) is loose.

Performance Guideline: Resilient floor tiles or planks should be properly installed per manufacturers instructions. Some minor voids that exhibit some variance in the sound underfoot may occur. Provided that the flooring material is not otherwise detached and loose at the edges, these variations are not a performance defect.

Corrective Measure: The contractor will attach loose resilient floor tiles or planks properly per manufacturers instructions. The old adhesive will be removed if necessary to resecure the tiles.

11-2-9 Observation: LVP, LVT and EVP flooring makes noise when walking across the floor such as creaks or popping.

Performance Guideline: The contractor should install LVP, LVT and EVP flooring in accordance with the manufacturer's instructions.

Remodeling Specific Guideline: Older subfloors that are unlevel or have existing imperfections may make sounds. Contractor will make best efforts to prepare a level substrate, but it may not be possible and flooring may have some noise.

Corrective Measure: If noises are due to installation, the contractor will repair.

Discussion: If the flooring noise is caused by the subfloor, refer to Guideline 3-3-1 or 3-3-2 for wood subfloors or 2-2-3 for concrete substrate.

11-2-10 Observation: The corners or patterns of resilient floor tiles or planks are misaligned.

Performance Guideline: The corners of adjoining resilient floor tiles or planks should be aligned to within $\frac{1}{8}$ inch. Misaligned patterns are not covered unless they result from improper orientation of the floor tiles.

Remodeling Specific Guidelines: Existing substrate may have irregularities that result in misalignment. If new floor covering is installed on existing subflooring, the contractor and consumer may agree to disregard the performance guideline to match a preexisting structural condition.

Corrective Measure: The contractor will correct resilient floor tiles or planks with misaligned corners to meet the performance guideline.

Hardwood Flooring

11-3-1 Observation: Gaps exist between hardwood floorboards.

Performance Guideline: At the time of substantial completion of the project, gaps between hardwood floorboards should not exceed $\frac{1}{8}$ inch in width.

Corrective Measure: The contractor will repair gaps that do not meet the performance guideline.

Discussion: Gaps appearing after installation may be caused by fluctuations in the relative humidity in the home. This is a common seasonal phenomenon in some climates and certain areas of the home that experience significant shifts of humidity. The consumer is responsible for maintaining proper humidity levels in the home.

11-3-2 Observation: Hardwood floorboards are cupping or crowning.

Performance Guideline: Cupping or crowning in hardwood floorboards should not exceed $\frac{1}{16}$ inch in height in a 3-inch maximum span measured perpendicular to the long axis of the board. Cupping or crowning appearing after installation are a result of fluctuations in the moisture conditions in the home, causing a noticeable curvature in the face of the floorboards. Cupping or crowning caused by exposure to moisture or humidity fluctuations are beyond the contractor's control and are not the contractor's responsibility.

Corrective Measure: The contractor will correct or repair boards to meet the performance guideline if the cupping or crowning was caused by factors within the contractor's control, only after the moisture content of the flooring and/or the environmental conditions have stabilized.

Discussion: The consumer is responsible for proper maintenance of the floor and for maintaining proper humidity levels and moisture conditions in the home, crawl space or basement.

11-3-3 Observation: Excessive lippage is observed along the joints of prefinished wood flooring products.

Performance Guideline: Lippage greater than $\frac{1}{16}$ inch is considered excessive.

Corrective Measure: The contractor will repair lippage in the affected areas to meet the performance guideline if the lippage was caused by elements within the contractor's control.

11-3-4 Observation: A wood floor is out of square.

Performance Guideline: The diagonal of a triangle with sides of 12 feet and 16 feet along the edges of the floor should be no more than $\frac{1}{2}$ inch more or less than 20 feet.

Remodeling Specific Guideline: The consumer and the contractor may agree to build a wood floor out of square in order to match or otherwise compensate for pre-existing conditions.

Corrective Measure: The contractor will make the necessary modifications in the most practical manner to any floor that does not comply with the performance guideline for squareness. The modification will produce a satisfactory appearance and may be either structural or cosmetic.

Discussion: Squareness is primarily an aesthetic consideration. Regularly repeated geometric patterns in floor and ceiling coverings show a gradually increasing or decreasing pattern along an out-of-square wall. The performance guideline tolerance of plus or minus ½ inch in the diagonal allows a maximum increasing or decreasing portion of about ¾ inch in a 12-foot wall of a 12 × 16 foot room.

11-3-5 Observation: Voids or skips are observed in the floor finish.

Performance Guideline: Voids that are readily visible from a standing position under normal lighting conditions are considered excessive.

Corrective Measure: The contractor will repair the floor finish in the affected area(s) to meet the performance guideline.

Discussion: This guideline does not apply to distressed, character grade, hand scraped, or other similar flooring finishes.

11-3-6 Observation: The top coating on hardwood flooring has peeled or chipped.

Performance Guideline: Field-applied coating should not peel during normal usage. Prefinished coatings are the manufacturer's responsibility.

Remodeling Specific Guideline: Refinishing of existing hardwoods can be affected by previous coatings, including wax, cleaning products and/or pet stains. Consumers recognize that these conditions are not the responsibility of contractor.

Corrective Measure: The contractor will refinish any field-applied finishes that have peeled during the warranty period. Prefinished coatings should not have peeled at the time of substantial completion.

Discussion: The consumer should contact the manufacturer regarding factory-applied finishes that have peeled. It is recommended that painter's tape should never be taped to any hardwood flooring as it may remove the finishes.

11-3-7 Observation: Hardwood flooring has buckled.

Performance Guideline: Under normal conditions and usage, hardwood flooring should not buckle.

Corrective Measure: The contractor will repair the affected area to meet the performance guideline if buckling was caused by elements within the contractor's control.

Discussion: Wood floors are naturally susceptible to high levels of moisture. Buckling results from water or high levels of moisture in contact with the floor. Controlling excessive moisture and high humidity levels during cleaning or from other sources is the consumer's responsibility.

11-3-8 Observation: Hardwood flooring has released from the substrate.

Performance Guideline: Under normal conditions and usage, hardwood flooring should not lift from the substrate. Some minor voids that exhibit some variance in the sound underfoot may occur. Provided that the flooring material is not otherwise detached and loose at the edges, these variations are not a performance defect.

Corrective Measure: To meet the performance guideline, the contractor will repair the affected area if the lifting was caused by factors within the contractor's control.

11-3-9 Observation: Excessive knots and color variations are observed in hardwood flooring.

Performance Guideline: The contractor should install the grade of hardwood specified for the project. All wood should be consistent with the grade or quality specified.

Corrective Measure: The contractor will replace any improper grade or quality of wood.

Discussion: Hardwood flooring is a natural product and consequently can be expected to exhibit variations in color, grain and stain acceptance. This guideline does not apply to distressed, character grade, hand scraped, or other similar flooring finishes.

11-3-10 Observation: Slivers or splinters are observed in hardwood flooring.

Performance Guideline: Slivers or splinters should not be visible.

Corrective Measure: The contractor will repair flooring in the affected areas to meet the performance guideline.

Discussion: Slivers or splinters that occur during installation of unfinished wood flooring can be shaved and the area filled prior to sanding and finishing. In most cases, slivers or light splintering in prefinished floors can be corrected. Excessive slivers or splintering of prefinished flooring after installation is covered under the manufacturer's warranty.

11-3-11 Observation: Hardwood flooring has visible scratches and dents.

Performance Guideline: At the time of substantial completion of the project, hardwood flooring should not have scratches and dents visible from a standing position under normal lighting conditions.

Corrective Measure: The contractor will repair flooring in the affected areas to meet the performance guideline.

Discussion: The wide varieties of solid and engineered hardwood flooring available to consumers have varying hardness and wear resistance. The contractor is not responsible for the choice of a softer material, which may be more susceptible to damage during or after construction. High-heeled shoes, pets and heavy foot traffic will create scratches and dents in all hardwood floors, some more than others.

11-3-12 Observation: *Sticker burn* is observed on the surface of strip flooring.

Performance Guideline: Discoloration from stacking strips on hardwood flooring is considered excessive in certain grades of flooring but is allowable in others.

Corrective Measure: The contractor will repair or replace areas with sticker burn if they are not permitted in the grade of wood specified for the project.

11-3-13 Observation: Hardwood flooring is squeaking.

Performance Guideline: Frequent, loud hardwood flooring squeaks are considered deficiencies.

Corrective Measure: The contractor will repair flooring in the affected areas to meet the performance guideline.

Remodeling Specific Guideline: Flooring in an existing home that was not newly installed will squeak and are not covered by this guideline.

Discussion: There are numerous acceptable repairs, such as face nailing, fillers, etc. If the flooring squeaks are caused by the subfloor, refer to Guideline 3-3-1.

Tile, Brick, Marble and Stone Flooring

11-4-1 Observation: Tile, brick, marble or stone flooring is broken or loosened.

Performance Guideline: Tile, brick, marble or stone flooring should not be broken or loose.

Corrective Measure: The contractor will replace broken tiles, bricks, marble or stone flooring, and resecure loose tiles, bricks, marble or stone, unless the flooring was damaged by the consumer's actions or negligence. The contractor is not responsible for discontinued patterns or color variations when replacing tile, brick, marble or stone flooring.

11-4-2 Observation: Cracks are observed in the tile grout or at the junctures with other materials, such as a bathtub.

Performance Guideline: Cracks in grouting of tile joints commonly result from normal shrinkage conditions. Cracks that result in loose tiles or gaps greater than $\frac{1}{16}$ inch are considered excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair grout to meet the performance guideline. The contractor is not responsible for color variations or discontinued colored grout. The consumer is responsible for re-grouting these joints after the contractor's one-time repair.

Discussion: The use of grout caulk, typically a flexible material, at junctures between tile and other materials can be more effective than grout and is considered an acceptable method of repair.

11-4-3 Observation: There is lippage between the transition of marble or ceramic tile floor to another type of flooring surface.

Performance Guideline: Lippage greater than $\frac{1}{16}$ inch is considered excessive, except where the materials are designed with an irregular height, such as handmade tile or large format tiles.

Remodeling Specific Guideline: Because existing subflooring may be uneven and create lippage that exceeds the performance guideline, the contractor and consumer may agree to disregard the performance guideline to match a pre-existing structural condition.

Corrective Measure: The contractor will adjust the affected areas to meet the performance guideline, except where the materials are designed with an irregular height, such as handmade tile or large format tiles.

Discussion: With the increased popularity in irregular and large format tile, lippage can be greater than the performance guideline. Manufacturer's tolerances will supersede this guideline.

11-4-4 Observation: A grout or mortar joint is not a uniform color.

Performance Guideline: After the grout or mortar has cured, any color variation that is readily visible from a standing position facing the surface at a distance of 6 feet under normal lighting conditions is considered excessive.

Corrective Measure: One time only during the warranty period, the contractor will repair the joint to meet the performance guideline.

Discussion: Grout or mortar cannot be expected to match exactly in repaired areas.

Miscellaneous

Fireplace and Wood Stove

12-1-1 Observation: A fireplace flue/chimney does not consistently draw properly.

Performance Guideline: A properly designed and constructed fireplace and chimney should function correctly.

Remodeling Specific Guideline: In an older remodeled home, energy upgrades as part of the improvements may adversely affect the function of an existing fireplace.

Corrective Measure: One time only during the warranty period, the contractor will repair the flue/chimney, based on the manufacturer's specifications or the design specifications, to draw correctly.

Discussion: High winds can cause temporary negative drafts or downdrafts. Obstructions such as tree branches, steep hillsides, adjoining homes, and certain ventilation systems in the home also may cause negative drafts. Homes that have been constructed to meet stringent energy criteria may need to have a nearby window opened slightly to create an effective draft.

12-1-2 Observation: The masonry chimney is separated from the structure.

Performance Guideline: Newly built chimneys will often incur slight amounts of separation. The amount of separation from the main structure should not exceed ½ inch in any 10-foot vertical measurement.

Corrective Measure: The contractor will repair gaps that do not meet the performance guideline.

Discussion: Proper repair can be completed by caulking unless the cause of the separation is a structural failure of the chimney foundation itself. In that case, caulking is not an acceptable repair.

12-1-3 Observation: The *firebox* paint is cracked or discolored by a fire in the fireplace.

Performance Guideline: Cracking and discoloration are common occurrences.

Corrective Measure: No corrective action is required by the contractor.

Discussion: The consumer should obtain the recommended paint from the manufacturer if he or she chooses to touch up the interior of the firebox for aesthetic reasons.

12-1-4 Observation: A *firebrick* or mortar joint is cracked.

Performance Guideline: Heat and flames from normal fires can cause cracking.

Corrective Measure: Where a firebrick or mortar joint is cracked because of normal fires, no corrective action is required by the contractor.

12-1-5 Observation: A simulated firebrick panel is cracked.

Performance Guideline: This is a common condition.

Corrective Measure: No corrective action is required by the contractor.

12-1-6 Observation: Rust is observed on the fireplace damper.

Performance Guideline: This is a common condition.

Corrective Measure: No corrective action is required by the contractor.

12-1-7 Observation: Water is getting in the home around the chimney.

Performance Guideline: A chimney should be properly flashed and chimney cap properly installed to prevent water from leaking into the house.

Corrective Measure: Contractor will repair to meet the performance guideline.

Concrete Stoops and Steps

12-2-1 Observation: Stoops or steps have settled, heaved or separated from the home structure.

Performance Guideline: Concrete stoops and steps should not settle, heave or separate in excess of 1 inch from the home structure.

Corrective Measure: The contractor will use his or her best judgment in making a reasonable and cost-effective effort to meet the performance guideline.

12-2-2 Observation: Water remains on stoops or steps after rain has stopped.

Performance Guideline: Water should drain off outdoor stoops and steps. Minor amounts of water can be expected to remain on stoops and steps for up to 24 hours after rain.

Corrective Measure: The contractor will take corrective action to ensure proper drainage of stoops and steps.

Garage

12-3-1 Observation: The garage floor slab is cracked.

Performance Guideline: Cracks in a concrete garage floor greater than $\frac{3}{16}$ inch in width or $\frac{3}{16}$ inch in vertical displacement are considered excessive.

Corrective Measure: The contractor will repair cracks in the slab using a material designed to fill cracks in concrete.

Discussion: The repaired area may not match the existing floor in color and texture.

12-3-2 Observation: A garage concrete floor has settled, heaved or separated.

Performance Guideline: The garage floor should not settle, heave or separate in excess of 1 inch from the structure.

Corrective Measure: The contractor will use his or her best judgment in making a reasonable and cost-effective effort to meet the performance guideline.

Discussion: The repaired area may not match the existing floor in color and texture.

12-3-3 Observation: Garage doors fail to operate properly under normal use.

Performance Guideline: Garage doors should operate as designed.

Corrective Measure: The contractor will correct or adjust garage doors as required, unless the consumer's actions caused the problem.

Discussion: The safety sensors can be easily knocked and misaligned so that the doors will not operate properly. The consumer should avoid storing items near the sensors. Direct sunlight or spider webs can also cause the sensors to indicate that something is blocking the opening and prevent the doors from shutting.

12-3-4 Observation: Garage doors allow the entry of snow or water.

Performance Guideline: Garage doors should be installed as recommended by the manufacturer. Some snow or water can be expected to enter under normal conditions.

Corrective Measure: The contractor will adjust or correct the garage doors to meet the manufacturer's installation instructions.

Driveways and Sidewalks

12-4-1 Observation: An asphalt driveway has cracked.

Performance Guideline: Longitudinal or transverse cracks greater than ¼ inch in width or vertical displacement are considered excessive.

Corrective Measure: The contractor will repair the affected area to meet the performance guideline using a material designed to fill cracks in asphalt.

12-4-2 Observation: Standing water is observed on an asphalt pavement surface.

Performance Guideline: Standing water greater than ⅜ inch in depth should not remain on the surface 24 hours after a rain.

Corrective Measure: The contractor will repair the affected area to meet the performance guideline.

Discussion: Patched asphalt surfaces because of repairs may not match existing surface in color or texture.

12-4-3 Observation: The aggregate of asphalt pavement is coming loose in areas other than the edges.

Performance Guideline: Asphalt pavement aggregate should not come loose.

Corrective Measure: The contractor will repair the affected area to meet the performance guideline, using a material designed to repair asphalt surfaces.

Discussion: Patched asphalt surfaces because of repairs may not match existing surface in color or texture. It is not unusual to have aggregate coming loose along the edges of a driveway where the material is not as compactable. Some aggregate under normal circumstances may come loose and is not an indication of a defect in the driveway.

12-4-4 Observation: A concrete driveway or sidewalk is cracked.

Performance Guideline: Cracks (outside of control joints) that exceed $\frac{1}{4}$ inch in width or $\frac{1}{4}$ inch in vertical displacement are excessive.

Corrective Measure: The contractor will repair affected areas to eliminate cracks that exceed the performance guidelines using a material designed to fill cracks in concrete.

Discussion: Minor concrete cracking is normal and to be expected. Control joints are placed in the concrete to help control cracks and provide a less visible area for them to occur. Cracking can be caused by elements outside of the contractor's control. The repaired area may not match the existing area in color and texture.

12-4-5 Observation: Adjoining exterior concrete flatwork sections deviate in height from one section to another.

Performance Guideline: Adjoining concrete sections should not deviate in height by more than $\frac{1}{2}$ inch unless the deviation is intentional at specific locations such as at garage door openings.

Corrective Measure: The contractor will repair deviations to meet the performance guideline.

Discussion: Some areas of the country experience lift or settlement at the junction of the garage floor and the driveway, which occurs because of seasonal fluctuations in moisture and temperature. Repairs will only be made after the effects of the current seasonal fluctuations have subsided and the true determination of repair can be made. The repaired area may not match the existing area in color and texture.

12-4-6 Observation: A sidewalk and other exterior concrete flatwork has settled or lifted.

Performance Guideline: Adjoining concrete sections should not deviate in height by more than $\frac{1}{2}$ inch.

Corrective Measure: The contractor will repair deviations to meet the performance guideline.

Discussion: Some areas of the country experience lift or settlement at the junction, which occurs because of seasonal fluctuations in moisture and temperature. Repairs will only be made after the effects of the current seasonal fluctuations have subsided and a true determination of repair can be made. The repaired area may not match the existing area in color and texture.

12-4-7 Observation: Water collects or ponds on the sidewalk.

Performance Guideline: Standing water that is $\frac{3}{8}$ inch deep on a sidewalk 24 hours after the end of a rain is considered excessive.

Corrective Measure: The contractor will repair or replace the affected area to meet the performance guideline.

Discussion: The repaired area may not match the existing area in color and texture.

Wood and Composite Decks

12-5-1 Observation: A wood deck is springy or shaky.

Performance Guideline: All structural members in a wood deck should be sized, and fasteners spaced, according to the prevailing building codes and manufacturer's instructions.

Corrective Measure: The contractor will reinforce or modify, as necessary, any wood deck not meeting the performance guideline.

Discussion: Deflection may indicate insufficient stiffness in the lumber or may reflect an aesthetic consideration independent of the strength and safety requirements of the lumber. Structural members are required to meet standards for both stiffness and strength. When a consumer's preference is made known before construction, the contractor and the consumer may agree upon a higher standard.

12-5-2 Observation: The spaces between wood decking board sides are not uniform.

Performance Guideline: At the time of substantial completion of the project, the side-to-side gap between deck boards should not differ in average width by more than $\frac{3}{16}$ inch unless otherwise agreed upon by the consumer and the contractor.

Corrective Measure: If, at the time of substantial completion, the wood decking board sides did not meet the performance guidelines, then the contractor will realign or replace decking boards to meet the performance guideline.

Discussion: The spaces will naturally tend to change over time because of shrinkage and expansion of individual boards. The contractor is only responsible for correct spacing at the time of substantial completion of the project. Replaced decking boards may have a variance in color from board to board.

12-5-3 Observation: The spaces between composite decking board sides are not uniform.

Performance Guideline: At the time of substantial completion of the project, the side-to-side gap between deck boards should be installed per the manufacturer's instructions. The side-to-side gaps of individual deck boards should not differ in average width by more than $\frac{1}{8}$ inch unless otherwise agreed upon by the consumer and the contractor.

Corrective Measure: The contractor will realign or replace decking boards to meet the performance guideline.

Discussion: Spacing may be adjusted to keep full-size boards against the edge of the structure or along the edge of the deck. Composite decking must be gapped both end-to-end and width-to-width. Gapping is necessary for drainage and the slight thermal expansion and contraction of composite decking boards. Gapping also allows for shrinkage of the wood joist system. Temperature and humidity variances affect spacing based on the length of the boards installed. Approximately $\frac{1}{16}$ inch per 40-degree temperature change for a 16-foot board can be expected. Replaced decking boards may have a variance in color from board to board.

12-5-4 Observation: The end-to-end or butt-to-butt spacing between composite deck boards is excessive.

Performance Guideline: Deck boards should be installed per the manufacturer's installation instructions.

Corrective Measure: Contractor will replace or repair deck boards to meet the performance guideline.

Discussion: Composite decking must be gapped both end-to-end and width-to-width. Gapping is necessary for drainage and the slight thermal expansion and contraction of composite decking boards. Gapping also allows for shrinkage of the wood joist system. Temperature and humidity variances affect spacing based on the length of the boards installed. Approximately $\frac{1}{16}$ inch per 40-degree temperature change for a 16-foot board can be expected. Replaced decking boards may have a variance in color from board to board.

12-5-5 Observation: The railings on wood decking contain slivers/splinters in exposed areas.

Performance Guideline: Railings on wood decks should not contain slivers/splinters longer than $\frac{1}{8}$ inch in exposed areas.

Corrective Measure: At the time of substantial completion, the contractor will repair slivers/splinters on railings. Repair of slivers/splinters after that time is a consumer maintenance responsibility.

Discussion: Slivers/splinters can develop when wood weathers.

12-5-6 Observation: A wood framed deck has settled.

Performance Guideline: The plane of the deck surface should not be more than $\frac{1}{4}$ inch per foot out of level in 10 feet as measured along the outward bearing points, independent of the attachment to the house.

Remodeling Specific Guideline: The consumer and contractor may agree to intentionally build a wood deck out of level to match or to compensate for inaccuracies in the existing structure.

Corrective Measure: The contractor will repair the deck supports/piers as necessary to meet the performance guideline.

Discussion: A slope of approximately $\frac{1}{8}$ inch per foot or more is desirable in the perpendicular direction to the house in order to shed water and prevent ice buildup.

12-5-7 Observation: Wood decking boards, railings and/or pickets are split, warped, or cupped.

Performance Guideline: At the time of substantial completion of the project, splits, warps and cups in wood decking boards, railings and/or pickets should not exceed the allowances established by the official grading rules issued by the agency responsible for the lumber species specified for the deck boards.

Corrective Measure: The contractor will replace decking boards, railings and/or pickets as necessary to meet the performance guideline.

Discussion: Pressure-treated lumber is required for exterior applications, and it will likely check, crack and split over time.

12-5-8 Observation: A wood deck has applied stain color variations.

Performance Guideline: Stain color variations are not acceptable if they result from improper stain application or failure to mix the stain properly. Stain color variations resulting from other causes — such as weathering or natural variations in the wood used to build the deck — are common and are not covered by this guideline.

Corrective Measure: If the contractor stained the deck, the contractor will re-stain the affected area to meet the performance guideline.

12-5-9 Observation: A fastener protrudes from a decking board.

Performance Guideline: Fasteners should not protrude from the floor of the deck.

Corrective Measure: One time only during the warranty period, the contractor will address fasteners that protrude from the floor of the deck so that the heads are flush with the surface.

Discussion: Fasteners should be driven or screwed flush when the deck is installed, but they may pop from a wood deck over time as the wood shrinks and expands.

12-5-10 Observation: Fasteners on a wood deck are bleeding.

Performance Guideline: Staining from fasteners is expected on a wood deck.

Corrective Measure: No corrective measure required.

12-5-11 Observation: A deck railing lacks rigidity.

Performance Guideline: Deck railings should be attached to structural members in accordance with the prevailing building codes.

Corrective Measure: The contractor will repair deck railings as necessary to meet the performance guideline.

12-5-12 Observation: Deck railing lacks rigidity

Performance Guideline: Handrail assemblies and guards shall be able to resist a single concentrated load of 200 pounds, applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building.

Corrective Measure: The contractor will repair deck railings as required to meet the performance guidelines.

12-5-13 Observation: Cable railing has *catenary*.

Performance Guideline: Wire/cable rails shall be tensioned sufficiently so that the wire components have no deflection while in a static position. However, care shall be taken so as to not tension the cable so much that the security of the post connection is compromised or the post is deflected. Because cable is flexible, at midspan the cable shall not be able to deflect greater than the 4-inch spacing required by code. Properly tensioned cables may loosen over time due to stretch of the components.

Corrective Measure: For sagging cables, the contractor shall one time only during the warranty period re-tension the cables. For deflection exceeding 4-inch spacing that cannot be corrected by re-tensioning, the contractor will repair as required to meet the performance guidelines.

Landscaping

Note: Remodeling Specific Guideline: *Moving or protecting plants, trees, shrubs and any other landscaping items prior to and during construction are the responsibility of the consumer and must be dealt with before construction begins. Other handling of these items must be specified in the contract to designate the responsible party.*

13-1-1 Observation: Tree stumps are left in a *disturbed* area of the property.

Performance Guideline: The contractor is responsible for removing stumps from trees that were on the property in the disturbed area prior to the substantial completion of the project, unless stumps are located within the septic drain field areas or stumps were present prior to the contractor beginning construction.

Corrective Measure: The contractor will remove the stumps from the disturbed area.

13-1-2 Observation: Sod, shrubs, plants or trees that were planted as part of the contract are dead.

Performance Guideline: At the time of closing and/or conveyance or occupancy of the property, whichever comes first, any shrub, plant, tree or sod planted by the contractor as part of the contract should be alive.

Remodeling Specific Guideline: All plantings watering and maintenance are the responsibility of the consumer after substantial completion of the project.

Corrective Measure: Any shrub, plant, tree or sod planted by the contractor as part of the contract that is dead at the time of closing and/or conveyance or occupancy of the property, whichever comes first, will be replaced to meet the performance guideline. Replacement material shall be of the same size and variety as the dead or damaged material.

Discussion: After closing and/or conveyance or occupancy of the property, whichever comes first, proper lawn and landscape care are the consumer's responsibility. New landscaping requires adequate watering until roots of plantings have become established. Watering is the consumer's responsibility.

13-1-3 Observation: Grass seed does not germinate.

Performance Guideline: Germination is dependent on certain climatic conditions, which are beyond the contractor's control.

Corrective Measure: The contractor is only responsible for seeding. No corrective action is required by the contractor.

Discussion: After closing and/or conveyance or occupancy of the property, whichever comes first, proper lawn care and maintenance are the consumer's responsibility. New landscaping requires adequate watering until roots of plantings have become established. Watering is the consumer's responsibility.

13-1-4 Observation: Plants moved by the contractor at the consumer's request or by the consumer during work are dead.

Performance Guideline: Plants that must be moved during the work should be moved, transplanted and maintained by the consumer.

Corrective Measure: No corrective action is required by the contractor.

Discussion: The contractor should not be responsible for delays in the schedule when plants are moved by the consumer. It is the consumer's responsibility to provide a water source to any tree they wish to survive construction.

13-1-5 Observation: Existing trees on the property are dead.

Performance Guideline: Even with best efforts, trees in the area of construction activity may not survive because of damage to underground root systems or changes in conditions.

Corrective Measure: No corrective action is required by the contractor.

Glossary

arbitration. A process in which the parties submit their case to a neutral third person or panel of individuals (arbitrators) for a final and binding resolution

arc fault circuit interrupter (AFCI). A specific duplex receptacle or circuit breaker designed to help prevent electrocution or fires by detecting an unintended electrical arc and disconnecting the power before the arc starts a fire

asphalt. A brownish-black solid or semisolid mixture of bitumens used in paving, roofing, damp proofing, and foundation waterproofing.

barn door. A wall mounted door or doors hung by a track and sliding along the face of a wall

beam. A structural member that transversely supports a load

bifold doors. Doors that are hinged at the center and guided by a track

bleed. Discoloration of the materials caused by weathering and/or aging

blocking. Small pieces of wood used to secure, join, or reinforce members, or to fill spaces between members

bow. The longitudinal deflection of a piece of lumber, pipe, or rod

breakline. A dividing point between two or more surfaces

brick veneer. A nonstructural outer covering of brick

buckled. Original plane of material has been altered

bulges. Original plane of material has been altered

bulk moisture. Typically thought of as rain or snow, bulk moisture also includes flowing groundwater

bypass doors. Doors that hang on a track and slide side to side in front of and/or behind one another

cantilever. Outward projection from plane of structure that is supported at one end

catenary. The curve a hanging flexible wire or chain assumes when supported at its ends and acted upon by a uniform gravitational force

caulking. Material used to fill a void between two other materials

cement board. A cementitious manufactured building material

checking. Cracks in wood

chimney cap. A metal or masonry surface that covers the top portion of a chimney and prevents the penetration of water

circuit. The complete path of electricity away from and back to its source

circuit breaker. A device that automatically interrupts an electrical circuit when it becomes overloaded or is used to turn off a circuit

closed crawl. Crawl space with no outside ventilation

closing. The final phase of mortgage loan processing in which the property title passes from the contractor to the consumer

cold joint. A joint in poured concrete where the pour terminated and continued

concrete flatwork. Horizontal poured concrete surface

condensation. The conversion of moisture in the air to water

condition[ed] crawl. Crawl space with mechanical ventilation and/or heat/cool source

concrete control joint. Grooves and/or saw cut manually made on concrete to help control where the concrete may crack

coped. A piece of trim material that is cut to fit together in profile to another piece of trim

corner bead. A strip of metal, plastic, or vinyl used to shape corners before finishing a wall and fiberglass

crawl space. An area under a home that is not a basement or cellar and is not considered habitable space

crowning. A condition occurring when the center of a board is higher than its outside edges

cupped. A condition wherein the center of a board is lower than its outside edges

damper. A device used to regulate airflow

dead spot. Areas below a carpeted surface where padding seems to be missing or improperly installed

deflection. The bend of a joist, truss or beam under a load

delamination. Split or separation of a laminated product into layers

dew point. The temperature at which moisture in the air condenses into liquid

dimensional lumber. Building material of stated length. Lumber that is cut to predetermined sizes.

disturbed area. Any area adjacent to a dwelling where original vegetation has been altered or removed

doorjamb. Vertical piece of door frame to support a lintel

doorknob, deadbolt, lockset. Hardware to secure, allow a door to open/close

downspout. A pipe that carries rainwater from the roof to the ground or to a groundwater management system

drywall. Gypsum board

duct. A round, oval or rectangular pipe used to transmit and distribute warm or cool air from a central heating or cooling unit, or a pipe connected to a bath or kitchen exhaust fan to transmit air to the exterior of the home

ductwork. A system of ducts, dampers, plenums, and fans that creates a continuous passageway for the transmission of air

eave. The lower or outer edge of a roof that projects over the side walls of a structure

efflorescence. White powder that appears on the surface of masonry walls. It is usually caused by moisture reacting with the soluble salts in concrete and forming harmless carbonate compounds.

EVP. Engineered Vinyl Plank is a vinyl flooring that has a realistic hardwood look (and feel) and is durable, waterproof and has a strong high density fiberboard core.

fasteners. A product to attach, fix, or join

finish flooring. The top flooring material that covers the subflooring surface, such as carpeting, hardwood, tile, laminate or vinyl

firebox. An enclosure for a fire in a fireplace

firebrick. A brick that can withstand very high temperatures that is used in a fireplace

flashing. Strips of metal or plastic used to prevent moisture from entering roofs, walls, windows, doors, and foundations

floating floors. A floor that does not need to be nailed or glued to the floor underneath it

floor joist. A horizontal framing member to which flooring is attached

footing. The system at the base of a foundation wall that supports and distributes loads from the foundation to the ground

foundation. That part of a building which starts below the surface of the ground and upon which the superstructure rests

gable end. Triangle wall section at the end of a pitched roof

gable vents. Vents to allow air flow at gable ends

grid, grille, and muntin. Strips of wood, metal, or plastic installed within two pieces of glass or on the inside and/or exterior surface of the glass that divide a window into panes

ground fault circuit interrupter (GFCI). A type of circuit breaker that is extremely sensitive to moisture and changes in resistance to an electrical current flow. A GFCI protects against electrical shock or damage.

gypsum. Hydrous calcium sulphate mineral rock used to make wallboards

gypsum wallboard. A type of drywall or sheetrock

hammering. See water hammer

hardwood. A term used to designate wood that is from deciduous trees, which lose their leaves annually

header. A structural member placed across the top of an opening to support loads above

hip. The external angle formed by the upper juncture of two sloping sides of a roof

honeycomb. Pits, surface voids, and similar imperfections caused by air entrapped at the concrete and concrete form interface

HVAC. Heating, ventilating, and air conditioning

I-joist. An "I" shaped engineered wood structural member

jamb. The side framing or finish material of a window, door, or other opening

joist. An on-edge horizontal lumber member, such as a 2 x 6, 2 x 8, 2 x 10, 2 x 12, I-beam, truss, or other material which spans from wall to wall or beam to provide main support for flooring, ceiling, or roofing systems

joist hangers. Metal straps or brackets used to connect framing members

kick plates. Protective cover at bottom of door panel

knots. A hard node of the tree as it appears on cut lumber

LVT. Luxury Vinyl Tiles. A high-performance semi-flexible floor covering composed of several laminated layers which mimics tile and is waterproof

LVP. Luxury Vinyl Planks. Vinyl flooring that is made up of planks, as opposed to one large sheet of vinyl which mimic hardwoods and is waterproof

lath. Any material used as a base for plastering or stucco surfacing

lippage. The difference in surface alignment between two materials, such as tile or stone slabs

louver. An opening with horizontal slats that allows for the passage of air, but not rain, light, or vision

lower chord. Lower design member of a truss system

manufacturer's warranty. The warranty provided by a manufacturer on a specific product

masonry. Brick, stone, concrete block, and other similar building materials bonded together with mortar

mediation. A process whereby the parties meet voluntarily to negotiate a private and mutually satisfactory agreement aided by a neutral third party

membrane roofing. A type of roofing system for buildings with flat or nearly flat roofs designed to prevent leaks and move water off the roof

mitered. Two pieces of trim beveled at 45-degree angles to form (when joined) a 90-degree corner. It also applies to any joint between trim materials that is cut at $\frac{1}{2}$ the angle of their intersection. It is the opposite of a coped inside corner.

mortar. An adhesive and leveling material used in brickwork, stone, block, and similar masonry construction. Also, to set exterior and interior tile.

nail pop. The protrusion of a nail or screw in a panel of drywall or underlayment usually attributed to the shrinkage of or curing of wood framing

natural stone. For the purposes of this manual, any of the following:

- Igneous rocks such as granite
- Sedimentary stone such as limestone, shale, sandstone, onyx, and travertine
- Metamorphic rock – such as marble and slate

Typical residential uses of natural stone include wall and floor surfaces, counter tops, stairs, and other decorative and structural elements

normal lighting. Moderate light level, as measured in lumens, associated with interior conditions on an overcast day. A lumen rating between 150 and 250 is considered normal. Light should not be obstructed with curtains, blinds or other window or door coverings

occupancy. The time at which the consumer possesses or resides in the house

parging. A rough coat of mortar applied over a masonry wall

picket. A vertical member in a railing system used to create a fall barrier

pier. Vertical supporting structure

pitch. The degree of incline in a sloped roof or structure

pitting. Small cavities in a concrete surface

plane. A surface in which any two points are chosen, a straight line joining them lies wholly in that surface

plumb. A measurement of true vertical

pocket door. A door that slides into a wall usually into a pocket-style hardware system

ponds. Accumulation of water before draining/absorption/evaporation occurs

radiant floor. A floor that is heated by a hot water system with pipes or by electrical mats, or cables that are placed in the floor

rafter. Structural members that shape and form the support for the roof deck and the roof covering

register. A louvered device that allows air travel from the ducts into a room

reveal. The space between two adjacent components

ridge. The horizontal line at the junction of the top edges of two sloping roof surfaces

riser (stairway). A vertical stair member that supports a tread

roof ridge. The apex of a roof system

roof sheathing. Boards or sheet materials nailed to the top edges of trusses or rafters to tie a roof together and support the roofing material

rust marks. Stains caused by the oxidation of metallic components

scaling. Peeling or flaking of surface of concrete

setting. The driving of a fastener flush or below the surface of a material

settlement. The act of soil compacting due to natural or artificial pressure

shading/shadowing. A slight variation/difference in color

shakes. Split wooden shingles that are random in thickness

sheathing. The application of panels to the face of framing members. Also known as "decking."

shim. A thin, tapered piece of material (usually wood) that is used to adjust or provide support or alignment.

shrinkage cracks. Surface cracks due to curing process

siding. Building material used to protect/decorate the side of a structure

skip. A natural depression below the surface of a planed board

skirt. In a stair system, the board that runs along the ends of each step. On masonry it is the outer layer of protection in the system to cover step or other flashing pieces.

slab. A concrete floor or surface

soffit. The enclosed undersurface of an eave which may be vented or non-vented

spalling. The breaking away of a small piece of concrete

sticker burn. The discoloration from stacking strips which occurs during the drying and storage of hardwood boards

stucco. An exterior finish product composed of sand, lime, and cement installed over a concrete wall or lath system

subfloor. A floor decking material installed on top of the floor joists over which a finish floor is to be laid often with another layer of sheathing for support and an appropriately smooth surface for some flooring types

substantial completion of the project. The point in a project when areas of the residence are functional for their intended use as defined by the contract

sump pump. A pump installed in a crawl space, basement, or other low area to discharge water that might collect.

swale. A shallow depression in the ground that is used to drain water

tannin. A yellowish or brownish organic substance present in some woods

tarnish. To dull or lose luster from exposure to natural conditions

telegraphing. A condition of a subsurface projecting through the finish material, as with existing shingles through a new layer of shingles.

tread. A horizontal stair member. The surface one steps upon when walking up or down stairs.

trowel marks. Impressions in dried joint compound made by a trowel or other drywall finishing tool

truss. An engineered assembly of wood or metal components that is generally used to support roofs or floors

tuck pointing. Application of building material to fill voids

underlayment. A building material used to provide a layer of protection

upper chord. Upper design member of a truss system. Opposite of a lower chord.

vapor barrier. Material to prevent moisture infiltration

vented crawl space. Crawl space vented by air infiltration

vertical displacement. Movement of a building material in a vertical direction

warp. To distort out of shape

warranty period. The duration of the applicable warranty agreed upon by the contractor and the consumer in a contract

water hammer. A hammering or stuttering sound in a pipeline that sometimes accompanies a sudden and significant change in the flow rate of the fluid through the pipeline

weather stripping. Material placed around doors, windows, and other openings to prevent the infiltration of air, dust, rain, or other elements

weep hole. A small hole in a wall or windowsill that allows water to drain

Resources

BuilderBooks

The following resources are available at BuilderBooks.com:

Elkman, Mollie. *The House That She Built*, Washington, DC: BuilderBooks, 2021.

National Association of Home Builders. *Your New Home & How to Take Care of It*, Washington, DC: BuilderBooks, 2022.

Index

A

air conditioning, 64–65
air handler vibration, 65. *See also* heating and cooling
air surface voids, 7
appliances, electrical outlets for, 57
arc fault circuit interrupter (AFCI), 55
asphalt, 97–98
attic ventilation, 40–41

B

backsplashes, 78
balconies, 72
banging sounds, 48–49
barn doors, 69
basements, 6–8
bathtubs, 49–50. *See also* plumbing
beams, 13–14, 17
bifold doors, 69
blisters, 81
bowing
 basement walls, 6–8
 ceilings, 17, 39
 columns, 11, 13
 exterior trim, 36
 framing, 17
 roofs, 39–40
 siding, 27, 29
bricks, 32–34, 92–93
brush marks, 82–83
bubbling, 87
buckling, 28, 43, 90
bypass doors, 69

C

cabinets, 74–77
cable railings, 102
cable television wiring, 58
can lights, 59
carbon monoxide detectors, 58
carpet, 85–86

caulk

bathrooms, 49
exterior doors, 22
exterior trim, 36
exterior walls, 18
siding, 27, 30, 32
windows, 18

ceiling, bowing, 17, 39

ceiling fans, 58

ceilings

bowing, 17, 39
paint, 80–81
stains on, 29
textured, 82

central vacuums, 61

checking, 18

chimneys, 45, 95–96

chips

concrete floors, 5
countertops, 77, 79–80
fiber cement board siding, 31–32
hardwood flooring, 90
plumbing fixtures, 49

circuit breakers, 55–56

climate control

air infiltration and drafts, 61
ducts and airflow, 62–63
heating and cooling, 63–65
humidity and condensation, 62
ventilation, 66–67

closed crawls, 10

cold joints, 8

columns, 11, 13–14

composite decks, 99–102

concrete. *See also* foundations

columns, 11
driveways and sidewalks, 98
slabs, 4–5, 96–97
stoops and steps, 96

condensate lines, 65

condensation. *See also* humidity; moisture; water

basement walls and floor, 9
climate control, 62–63, 65
crawl spaces, 9–10
exterior doors, 25

- plumbing, 47
- skylights and light tubes, 46
- windows, 20, 25, 62
- conditioned crawls, 10
- consumers, scope of responsibilities, xi
- contractors, scope of responsibilities, x
- contracts, x–xi, xiii
- control joints, 4–5
- cooling and heating, 63–65
- countertops, 75–80
- cracks
 - basement and crawl space walls, 6, 8
 - cabinets, 75
 - chimneys, 45
 - concrete floor slabs, 4–5, 96
 - concrete footings, 4
 - countertops or backsplash, 78, 80
 - driveways, 98
 - drywall and gypsum, 81–82
 - fiber cement board siding, 31–32
 - fireplaces, 95–96
 - garages, 96
 - masonry and veneer, 32
 - plumbing fixtures, 49
 - sidewalks, 98
 - stucco, 34
 - tile, brick, marble, and stone flooring, 92
 - vanities, 50
 - walls, 80
- crawl spaces, 1, 6–10. *See also* foundations
- crowning, 89
- cupping
 - decks, 101
 - exterior trim, 36
 - flooring, 89
 - shingles, 42
 - siding, 28
 - wood beams or posts, 14
- curling, shingles, 42

D

- dampers, 96
- dampness. *See* condensation; humidity; moisture; water
- dead spots in carpet, 86
- decks, 99–102

- deflection and flex
 - bathtubs and showers, 50
 - beams, 17
 - cable railings, 102
 - decks, 99
 - drywall, 39
 - floor system, 13, 15
 - roofs, 39
 - stair treads, 71
 - wall framing and, 17

- dents, 91
- dimmer switches, 57
- dips in carpet, 86
- doorknobs, 71
- doors
 - bulk moisture movement, 18
 - cabinets, 75–76
 - exterior, 21–25, 62
 - garages, 97
 - hardware, 24
 - interior, 69–71
 - sliding patio doors, 24
 - storm doors, 22, 24, 61
- downspouts and gutters, 1, 45–46
- drafts, 61
- drainage, 1
- drawers, cabinet, 75–76
- driveways, 97–99
- drywall, 39, 80–82
- ductwork, 62–63, 65
- dusting, 5

E

- efflorescence, 4, 6, 8, 33, 36
- electrical, 55–59
- erosion, 2
- exhaust fans, 66–67
- exterior finish
 - aluminum or vinyl siding, 29–31
 - fiber cement board siding, 31–32
 - masonry and veneer, 32–34
 - paint, stain, and varnish, 37
 - stucco and parged coatings, 34–36
 - trim, 36–37
 - wood and wood composite siding, 27–29

F

fading, 29
fans, 66–67
faucets, 49. *See also* plumbing
fill, 1
finish. *See* exterior finish; interior finish
fireboxes, 95
firebricks, 95–96
fireplaces, 95–96
fixtures, 49–51, 56–59
flashing, 18, 96
flex. *See* deflection and flex
floors
 beams, columns, and posts, 13–14
 carpeting, 85–86
 concrete, 4–5
 cracks, 4–5
 delamination, 16
 hardwood, 89–92
 pitch, 16
 radiant, 64
 subfloors, 14–16, 86–87
 system, 13
 tile, brick, marble, and stone, 92–93
 unevenness, 4
 vinyl and resilient, 86–89
flues. *See* chimneys
footings, cracks in, 4
foundations
 basement and crawl space walls, 6–8
 concrete slabs, 4–5
 drainage from, 1
 generally, 3–4
 moisture and water penetration, 9–10
 slope away from, 1
 structural columns, posts, and piers, 11
frost, 20, 62
furnace vibration, 65. *See also* heating and cooling
fuses, 55–56

G

garages, 96–97
glass. *See* windows
glazing, exterior doors, 22
grading, 1–2, 9

grass. *See* landscaping
grinder pumps, 53
ground, settling of. *See* settlement
ground fault circuit interrupter (GFCI), 55
grout, 78, 92–93
gutters and downspouts, 1, 45–46
gypsum, 80–82

H

hammer marks, 74
handrails. *See* railings
hardwood, 89–92
heating and cooling, 63–65
honeycomb, 7
humidity. *See also* condensation; moisture
 cabinets, 75
 climate control, 62, 64
 exterior doors, 21–25, 61
 flooring, 14–15, 89
 membrane roofing, 44
 sewer odor, 53
 siding, 27–28
 trim affected by, 73
 windows, 20
hurricanes, 41
HVAC, 63–65

I

ice buildup, 41, 62
incorporation by reference, xiii
insulation, 18–19, 47, 61
interior finish
 cabinets, 74–77
 countertops, 77–80
 doors, 69–71
 stairs, 71–72
 trim and moldings, 73–74
 walls, 80–84

J

jambs, 70
joints, 8, 81

L

laminate countertops, 77, 79
land, settling of. *See* settlement
landscaping, 1–2, 103–104
lap marks, 83
latches, 71
latching, 22
lath and plaster, 80
leaks. *See* moisture; water
levelness
 cabinets, 74–76
 countertops, 77–78
 decks, 100
 drywall and, 81
 foundations, 3–4
 siding, 27, 30
 subfloors, 15–16, 88
 windows, 20
light tubes, 46
lighting, 57–59
locksets, 24, 71
louvers, 40
low-voltage transformers, 58
lumps in carpet, 86

M

manufacturers, scope of responsibilities, xi
manufacturer's warranty, xii
marble, 92–93
masonry, 11, 32–33. *See also* chimneys
measurements, taking with coins, xiv
mildew, 84
moisture. *See also* condensation; humidity; water
 barriers and flashing, 18
 basement walls and floor, 9
 carpets and, 85
 concrete flatwork and, 98–99
 crawl spaces, 9–10
 efflorescence due to, 4, 6, 8, 33, 36
 fans to minimize, 69
 flooring, 85, 89–90
 mold and mildew, 84
 roof trusses, 40
 supply registers, 63
 wallpaper and, 84
mold, 44, 84

moldings, 22, 73–74
mortar stains, 33

N

nails
 flooring, 86
 interior finish, 73, 80
 roof sheathing, 40, 43
 siding, 28–31

O

odors, 53
oil canning, 62
outlets, 56–59, 61

P

paint
 bleeding through, 28, 37, 83
 cabinets, 75
 deterioration of, 37
 drywall, 82
 exterior doors, 21–22
 exterior trim, 36
 fireboxes, 95
 interior doors, 70
 interior finish, 82–83
 matching, 37
 nails showing through, 73
 overspraying of, 37
 siding, 27–28
 stucco, 34
 walls and ceilings, 80–81
parged coatings, 34–36
piers, 11
pipes, 47–49
pitch, 16
pitting, 5, 7, 80
plants. *See* landscaping
plumb, out of, 6–7, 11, 17, 75
plumbing
 fixtures, 49–51
 sewer and septic, 51–53
 traps, 53
 water supply systems, 47–49

pocket doors, 70
posts, 11, 13–14
power loss, 56
prevailing building code, defined, xii

R

radiant floors, 64
railings, 72, 100–102
receptacle covers, 57
refrigerant, 65
registers, 62–63, 66–67
remodeling considerations
 attic ventilation, 40–41
 basement water accumulation, 9
 brick veneers, 33
 cabinets, 74–76, 78
 can lights, 59
 concrete slabs, 4
 countertops, 77–78
 crawl spaces and, 9–10
 decks, 100
 difficulties with, xi
 drainage, 1
 electrical outlets, switches, or fixtures, 56–57
 exterior doors, 23
 fireplaces, 95
 floor system and, 15–16
 flooring, 86–90, 92
 heating and cooling, 63–64
 interior doors, 70
 landscaping, 103
 levelness and, 3
 limitations of guidelines, ix–x
 plumbing, 6–7, 17
 roof sheathing, 40
 roof shingles, 42, 44
 siding, 27, 31
 squareness and, 3
 stucco, 34
 subfloors, 14
 tile, brick, marble, and stone flooring, 93
 wall cladding and bowing, 17
 wall covering, 83
 wastewater drainage issues, 51
 water hammer, 48–49
 water pressure, 48
 windows, 19–20

resilient flooring, 86–89
roller marks, 82–83
roofs. *See also* gutters and downspouts
 coverings, 41–45
 sheathing, 40
 structure of, 39–40
 vents, 40–41
rust in fireplace damper, 96
rust marks, 35

S

scratches, 20, 49, 77, 91
screens, 19
seams, 79
septic systems, 51–53
settlement
 decks, 100
 exterior doors and, 22
 garages, 96, 98
 ground, 1
 masonry and veneer, 32
 sidewalks, 98
 stoops and steps, 96
sewer system, 51–53
sheathing, 16, 40
shelving, cabinets, 77
shingles, 42–44
showers, 49–50. *See also* plumbing
shrinkage cracks, 6, 8
shrubs. *See* landscaping
sidewalks, 97–99
siding
 aluminum or vinyl, 29–31
 fading of, 29
 fiber cement board, 31–32
 gaps in, 31
 waves in, 29
 wood and wood composite siding, 27–29
sinks, 51
site work, 1–2
skylights, 46
slabs, 4–5, 96–97
splinters and splinters, 91, 100
slope of floors, 14–15
slope of gutters, 46
smoke detectors, 58
snow, 97

- sod, 103. *See also* landscaping
- soil erosion, 2
- spalling, 5, 33
- splinters and slivers, 91, 100
- splitting. *See* wood
- squareness
 - cabinets and countertops, 74–76, 78
 - exterior doors, 23
 - foundations and, 3
 - hardwood flooring, 89–90
 - wall covering, 83
- squeaks, 14, 71–72, 92
- stain (finish)
 - after repair, 83
 - bleeding through, 37
 - cabinets, 75
 - decks, 101
 - deterioration of, 37
 - exterior doors, 21
 - hardwood flooring, 90–91
 - interior doors, 70
 - interior finish, 83
 - matching, 37
 - overspraying of, 37
 - wood bleeding through, 28
- stains (discoloration)
 - ceiling boards, 29
 - countertops, 79
 - decks, 101
 - exterior brick and stone, 33
 - plumbing fixtures, 50
 - shingle roofs, 44
 - siding, 28, 37
 - trim, 37
- stairs, 71–72
- staples, roof sheathing and, 40
- steel posts and columns, 11
- steps and stoops, 96
- sticker burn, 92
- stone, 92–93. *See also* countertops
- storm doors, 22, 24, 61
- storm windows, 24, 61
- stucco, 34–36
- subfloors, 14–16, 86–87
- substantial completion of the project, defined, xii
- sump pumps, drainage from, 1
- surface voids, 7
- swales, 1
- switch covers, 57
- switches, 56–59, 61

T

- tankless water heaters, 50
- tarnish, 23
- telephone wiring, 58
- television wiring, 58
- temperature variations between rooms, 64
- thermal cutouts, 59
- tile flooring, 92–93
- tile roofs, 45
- toilets, 52. *See also* plumbing
- tolerances, measurement of, xiv
- traps, 53
- treads, stair, 71–72
- trees. *See* landscaping
- trim, 36–37, 49, 73–74
- tropical depressions, 41

U

- unevenness, subfloors, 14

V

- vacuum systems, 61
- vanities, 50
- varnish, 37, 83
- vegetation. *See* landscaping
- veneer, exterior finish, 32–33
- vent covers, 66–67
- ventilation, 10, 40–41, 66–67
- vinyl flooring, 86–89
- vinyl wall coverings, 83–84

W

- wallpaper, 83–84
- walls, 17–19, 80–84. *See also* foundations
- warping
 - cabinets, 75
 - decks, 101
 - doors, 21–22, 69
 - siding, 28
 - wood framing, 18
- warranties, xii–xiii
- warranty period, defined, xii

- waste disposal, 51
- wastewater, 51–53
- water. *See also* condensation; drainage; moisture; plumbing
 - asphalt, 97
 - basement walls and floor, 9
 - chimneys, 45, 96
 - crawl spaces, 9–10
 - drainage, 1
 - exterior finishes, leaks in, 34–35
 - garages, 97
 - gutters and downspouts, 1, 45–46
 - for landscaping, 1
 - from nearby properties, 2
 - roof vents and, 40–41
 - roofs, 44
 - sidewalks, 98–99
 - skylights and light tubes, 46
 - stoops and steps, 96
 - supply systems, 47–49
- water hammer, 48–49
- water heaters, 48, 50
- water pressure, 48
- weather stripping, 23, 61
- weep holes, 18–19

- windows
 - air around, 61
 - condensation, 20, 25, 62
 - double hung, 20
 - grids, grilles, or muntins, 20
 - moisture and water issues, 18–20
 - opening and closing, 19
 - screens, 19
 - storm windows, 24, 61
- wiring, 55–59
- wood. *See also* floors
 - bleeding through paint, 28, 37, 83
 - bowing and twisting, 13
 - columns, 11, 13
 - cupping, 14
 - decks, 99–102
 - door panels, 21, 70
 - exterior doors, 21–22
 - siding, 27–29
 - splits in, 13, 18, 28, 36, 73–74, 101
 - trim and moldings, 73–74
- wood stoves, 95–96

Y

- yellowing of vinyl flooring, 88

A Service Disabled Veteran Owned Small Business



Health and Safety Plan

PREFACE

Locke-Lane Construction, Inc. has prepared this Health and Safety Plan to assist fellow employees, subcontractors and all personnel associated with the project on the applicable health and safety laws, procedure, and practices. Locke-Lane Construction urges you to study this publication carefully to become aware of the practices and procedures to ensure a safe work environment.

The Health and Safety policy is not meant to serve as a substitute to all applicable federal, state, and local statutes, regulations, ordinances, or good practices. This simply provides an overview of site health and safety as it pertains to this project. The contractor and all associated subcontractor(s) are responsible for knowing the applicable laws and procedures.

Although Locke-Lane Construction believes all information contained in this manual to be correct, no warranty or representation, expressed or implied, is made with respect to any or all of the content thereof; and Locke-lane Construction assumes no legal responsibility of any misrepresentation.

TABLE OF CONTENTS

1. PROJECT BACKGROUND INFORMATION
2. OSHA FORM 300 LOG
3. COMPANY SAFETY AND HEALTH POLICY
4. MEANS FOR CONTROLLING SUBCONTRACTORS & SUPPLIERS
5. TRAINING/INDOCTRINATION OF NEW EMPLOYEES
6. ACCIDENT REPORTING
7. MEDICAL SUPPORT
8. PERSONAL PROTECTIVE EQUIPMENT
9. SAFETY & HEALTH EXPECTATIONS, PROGRAMS, & COMPLIANCE
10. HOUSEKEEPING
11. EMERGENCY RESPONSE PLAN
12. HAZARD COMMUNICATION PROGRAM
13. RESPIRATORY PROTECTION PROGRAM
14. SILICA EXPOSURE PROGRAM
15. BLOOD BORNE PATHOGENS PROGRAM
16. ASBESTOS MANAGEMENT
17. LEAD SAFETY PROGRAM
18. HEARING CONSERVATION PLAN

- 19.HEALTH HAZARD CONTROL PROGRAM
- 20.CONFINED SPACE ENTRY
- 21.HAZARDOUS ENERGY CONTROL PLAN
- 22.CRITICAL LIFT PROCEDURES
- 23.PREVENTION OF ALCOHOL AND DRUG ABUSE
- 24.ELECTRICAL SAFETY
- 25.MACHINERY AND MECHANIZED EQUIPMENT
- 26.FALL PROTECTION
- 27.SCAFFOLDING
- 28.TRENCHING AND EXCAVATION
- 29.SANITATION
- 30.JOB HAZARD ANALYSIS
- 31.RADIOLOGICAL EQUIPMENT
- 32.FIRST AID / ROUTE TO HOSPITAL
- 33.PERSONAL COMMUNICATION DEVICES
- 34.TRAFFIC CONTROL/ DRIVING PLAN
- 35.HEAT AND COLD STRESS / HYDRATION PLAN
- 36.DROPPED OBJECT PREVENTION
- 37.FORKLIFT OPERATIONS
- 38.CONCRETE / MASONRY STANDARD

39.LADDER INSPECTION PROCEDURES

40. PNEUMATIC TOOLS

41.ACCIDENT / INCIDENT INVESTIGATIONS

42.WORK ALONE POLICY

43.WRITTEN ERGONOMICS PROGRAM

44.PROCESS SAFETY MANAGEMENT

45.COVID 19 EXPOSURE PREVENTION, PREPARDNESS AND RESPONSE

1. PROJECT BACKGROUND INFORMATION:

Locke-Lane Construction, Inc.

Project Title: **Project Specific**

PROJECT DESCRIPTION: **Project Specific**

PHASES OF WORK:

The following phases of work will require individual Activity Hazard Analyses:

2. OSHA FORM 300 – (Provided upon request)

3. COMPANY SAFETY AND HEALTH POLICY

We are dedicated to providing a safe and healthy environment for employees and customers, protecting the public, and preserving the assets and property of Locke-Lane Construction, Inc.

At Locke-Lane Construction, Inc., our most valuable resources are the people who work for us. Injuries can be prevented. Locke-Lane Construction, Inc. will make all reasonable efforts to comply with all government regulations pertaining to safety and health issues. An effective Safety and Health Program will be carried out throughout our organization.

The Project Safety and Health Plan will assist management and non-supervisory employees in controlling hazards and risks which will minimize both employee and customer injuries, damage to customers' property, and damage or destruction of Locke-Lane Construction, Inc. property.

All employees will follow the guidelines of the Safety and Health Program and the site-specific Safety and Health Plan. The safety program is designed to encourage all employees to promote the safety of their fellow employees and customers. To accomplish our safety and health goals, all members of management are responsible and accountable for implementing this policy and ensuring that it is followed.

Locke-Lane Construction, Inc. is sincerely interested in our employees' safety. The company policy is to provide safe equipment, adequate tools and training, and any necessary protective equipment. It is the employees' responsibility to follow the rules of safety as established for their protection and the protection of others, and to use the protective devices provided by Locke-Lane Construction, Inc.

RESPONSIBLE INDIVIDUALS

The Project Superintendent will be responsible for implementing the Safety and Health Plan. His responsibilities include, but are not limited to the following:

- Monitor and assist in the implementation and enforcement of the Safety and Health Plan
- Conducting daily safety inspections

- Organizing, scheduling, and directing personnel and subcontractors
- Conducting daily safety meetings and preparing minutes
- Enforcing all safety rules and procedures
- Maintaining project discipline
- Ensuring testing coordination
- Coordinating and maintaining equipment
- Field procurement
- Keeping accurate field notes and producing daily reports

HEALTH AND SAFETY OFFICER

Andrew Sherrill is the designated Health and Safety Officer. Mr. Sherrill has a great deal of experience in the construction industry and is a certified competent person.

A general description of his duties, including lines of authority (i.e., stop work authority) is provided. The specific responsibilities of the HEALTH AND SAFETY OFFICER should include, but are not limited to:

- Being responsible for the development, implementation, oversight, and enforcement of the Safety and Health Plan
- Conducting initial site-specific training
- Being responsible for evaluating air monitoring data and recommending changes to engineering controls, work practices, and Personal Protective Equipment (PPE).
- Providing continued support for upgrading/downgrading of the level of PPE.
- Having authority to ensure site compliance with specified safety and health requirements, federal, state and OSHA regulations, and all aspects of the Safety and Health Plan including, but not limited to, activity hazard control, standard operating procedures used to minimize hazards, safe use of engineering controls, the emergency response plan, spill containment program, and preparation of records by performing a daily safety and health inspection and documenting the results on the Daily Safety Inspection Log.
- Having authority to stop work if unacceptable health or safety conditions exist and take necessary action to re-establish and maintain safe working conditions.
- Identifying, modifying, and coordinating any deficiencies in the Safety and Health Plan with the Owner.
- Conducting accident investigation and prepare accident reports.
- Reviewing results of daily quality control inspection and documenting safety and health findings in the Daily Safety Inspection Log.
- He/she is also responsible heat/cold stress monitoring.

The Project Superintendent will be responsible for the control and coordination of the subcontractors. The subcontractors will be provided a copy of this Safety and Health Plan and the Quality Control Plan. Each subcontractor is required to review and discuss the SAFETY AND HEALTH PLAN with their employees and provide a copy of the attendance log. The Safety and Health Plan describes the personal protection and safety procedures to be followed by the subcontractor during on-site work. Prior to commencement of any

phase of work the subcontractors will attend a meeting to review and discuss the Activity Hazard Analysis (AHA).

BBO (Behavioral Based Observations)

In addition to the HEALTH AND SAFETY OFFICER conducting daily safety inspections, the subcontractors' foremen or supervisors will also conduct daily safety inspections and monitor the work throughout the day. Any subcontractor employee who knowingly commits an unsafe act, creates unsafe conditions, disregards the SAFETY AND HEALTH PLAN, or is a repeated safety or health offender, will be removed and prohibited from returning to the project site. As part of the Superintendent and HSO duties they observe workers on a daily basis, looking for trends in behavior as well as unforeseen hazards that may not be covered in the safety plan. When a trend is noticed the HSO and Superintendent will discuss it and find a solution or fix. This fix is to be discussed at the next morning's pre-work meeting. If the trend or hazard possess an immediate threat, all work is to be stopped and a meeting held with all personal till a fix can be found. It is the HSO's responsibility to log these occurrences and fixes in his daily reports.

HEALTH AND SAFETY OFFICER QUALIFICATIONS

Andrew Sherrill, Locke-Lane Construction, Inc.

Mr. Sherrill has worked as a Project Manager and Project Engineer responsible for the safe execution of construction work for more than 12 years. As a Civil Engineer and Project Manager, the majority of his experience is in the field of heavy civil construction and underground utility construction including waterlines, gravity sewer lines, sewer force-mains, sewer lift stations, water distribution, etc. He also has extensive Military Construction experience with the U.S. Army Corps of Engineers. He has an impeccable safety record as a Project Manager. Mr. Sherrill has attended numerous safety courses and first aid/CPR. He is a Certified Competent Person capable of managing excavations per OSHA regulations. He has attended the 80-hour USACE Construction Safety Course, the 30-hour OSHA Occupational Health & Safety Course and the 10-hour OSHA safety course as well.

4. MEANS FOR CONTROLLING SUBCONTRACTORS & SUPPLIERS

Contracts with subcontractors will include provisions which require all subcontractor personnel to adhere to the Locke-Lane Construction, Inc. Safety and Health Plan.

Prospective subcontractors are required to furnish their EMR for the past three years, directly from the subcontractor's broker. An EMR greater than 1.0 will require a more detailed evaluation of their safety program. OSHA logs (or equivalent summary data) for the previous three years and applicable hours of exposure are also required. Documents will be evaluated by the Safety Officer.

Subcontractors are at a minimum, required to comply with Locke-Lane Construction, Inc.'s Safety/Safety and Health Plan required per the contract and all OSHA regulations. The subcontractor shall provide documentation to demonstrate compliance with the minimum performance standards (MPS).

Within the Safety Plan the following topics will be addressed:

General Expectations- Subcontractor shall develop and maintain safety, health and environmental programs and procedures that meet or exceed Federal, State and Local laws, regulations, and standards.

Staffing Requirements- Subcontractor shall have a designated safety person (DSP) on site at all times work is being performed regardless of staffing levels. The DSP shall have responsibility and authority to make decisions related to safety on behalf of the subcontractor.

Orientation and Training- Subcontractor shall require their employees to attend a site-specific safety orientation. Subcontractor is responsible for all safety, health, and environmental training for their employees.

Incident/Accident Investigation- Any injury that involves lost time will be reported to the owner immediately. If the injury involves a subcontractor employee, the subcontractor shall conduct an incident/accident investigation for any injuries or equipment/property damage occurrences. Immediate notification and copies of reports shall be provided to Locke-Lane Construction, Inc., which in turn are provided to the OWNER.

Enforcement- Subcontractor shall have a plan for disciplinary action for employee violation of safety requirements; this plan shall be included in subcontractors' injury and illness prevention program.

Housekeeping- Subcontractor is responsible for daily cleanup of their work areas and removal of debris into a dumpster provided by Locke-Lane Construction, Inc.

Hazardous Material- Subcontractor shall have a Hazard Communication Program in place available on site.

Personal Protective Equipment- Subcontractor shall insure all employees assigned to this project will be equipped with personal protective equipment (PPE) and trained in the usage and care. Minimum PPE shall comply with Locke-Lane Construction, Inc. requirements (safety glasses, hardhat, work boots, no tank tops, or shorts). The cost of PPE shall be the responsibility of the subcontractor and their employees.

5. TRAINING/INDOCTRINATION OF NEW EMPLOYEES

Employee training will consist of new employee orientation, periodic group meetings, and one-on-one training. The Safety and Health training provided to employees will include:

1. CORPS OF ENGINEERS SAFETY MANUAL EM-385-1-1
2. First Aid
3. Locke-Lane Construction, Inc. Safety and Health Policy
4. Locke-Lane Construction, Inc. Safety and Health Program
5. Incident Reporting
6. Hazard Communication
7. Hazardous Material Spill Response
8. Personal Protective Equipment requirements
9. Emergency Procedures

In addition to the aforementioned training, onsite employees are trained in the following:

- Engineering controls and safe work practices associated with each employee work assignment
- Emergency response procedures, sources of assistance, location of emergency escape routes and emergency phone numbers

- Basic operation safety, emphasizing hazards that could be expected on site and methods for their control and management
- Site housekeeping
- Review of Safety and Health Plan
- Proper tools and equipment selections
- Use of Personal Protective equipment

Employees will be given site-specific emergency response training, which will include:

- Full site evacuation drill
- Limited firefighting and control
- Signs, symptoms and first aid for accidents
- Emergency notification procedures and resources

The Project Superintendent will maintain the training record, a copy of these records will be kept in the project file on-site and the original records will be maintained by the Company Safety Director.

Locke-Lane Construction, Inc. management and superintendents have received additional training specializing in the following areas:

- Employer's health and safety programs
- Personal protective equipment program
- Spill containment program
- Health hazard monitoring procedure and techniques

In addition to the aforementioned training, employees are also trained in first aid, CPR, and the following:

Crane/Equipment Operation Training

In accordance with OSHA, it is Locke-Lane Construction, Inc. policy that licensed vehicle and equipment operators demonstrate their proficiency in order to operate cranes and other material handling equipment. The subcontractor is required to provide written documentation to the Health and Safety Officer that the equipment operator has successfully completed a written test to prove their technical knowledge of the equipment, and to satisfactorily demonstrate their proficiency in the operation of each type of crane or equipment, for which they are licensed.

Hazardous Energy Control Training

The purpose in providing training to employees is to ensure that they understand the purpose and function of the lock-out/tag-out program and procedures, and that they have the knowledge and skills required for the safe application, usage, and removal of energy controls.

Personnel who work around electrical equipment but who do not perform a primary duty of electrical system installation or maintenance will be briefed by their supervisor on the hazards of electricity and the proper precautions to observe.

Each authorized employee who will use lock-out/tag-out procedures must receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for isolation and control.

Employees must be retrained whenever there is a change in their job assignment; a change in machines, equipment, or processes that present a new hazard; or when there is a change in the lock-out/tag-out procedures.

DAILY TOOLBOX SAFETY MEETINGS

Locke-Lane Construction, Inc. will hold daily toolbox safety meetings which include in-house and subcontractor employees. Locke-Lane Construction, Inc. will document these Daily Toolbox Safety Meetings along with the Monthly Supervisor's Safety Meeting to the Owner.

SAFETY AND HEALTH INSPECTIONS

Although the Health & Safety Officer/ Project Superintendent are ultimately responsible for the safety plan, it is the responsibility of each worker to correct any safety deficiencies and/ or report the violation to the Health & Safety Officer. The Project Superintendent will conduct a safety-inspection daily. Any violation of the Safety and Health Plan will be recorded in a daily report and deficiency log. The following information will be recorded in the log:

1. The date of the violation
2. The name of the person committing the violation
3. The phase of work during which violation occurred
4. The corrective action taken
5. The date of the correction
6. The date on which to conduct a follow-up

The Health & Safety Officer/Project Superintendent will conduct a safety inspection daily and monitor work throughout the day. Any violation or deficiencies will be reported in the Daily report. The violations will be addressed during the weekly Toolbox meeting. Any unusual or changing work conditions and safe work practices to be followed in accomplishing the daily work assignment will also be addressed.

This meeting will be held weekly prior to the commencement of work. It will be conducted by the Project Superintendent/Health & Safety Officer. Every onsite employee is required to attend the Toolbox Meeting. An employee attendance sign in sheet, along with a list of items discussed at the meeting, will be attached to the Health & Safety Officer's daily report.

6. ACCIDENT REPORTING

All accidents that occur will be investigated, reported, and analyzed. The Project Superintendent will be responsible for recording and reporting all accidents, accidental exposures and experiences that occur on the job site. At a minimum, these records will include exposure work hours and a log of occupational

injuries and illnesses (OSHA Form 300). All diagnosed occupational illnesses or injuries that result in a lost workday, or a fatality, will be reported to the designated authority. Lost time injuries and property damage accidents, in which the property damage exceeds two thousand dollars (\$2,000) will be reported to the designated authority within 24 hours of the accident/incident. A first aid treatment log/record will also be maintained.

Major accidents will be reported to the Project Superintendent/Health & Safety Officer immediately. The Project Superintendent/Health & Safety Officer will notify the Owner within 4 hours. In the event of an employee being sent to a doctor for treatment, a release will be obtained from the doctor on the date of treatment stating that either: (1) the employee is not fit for duty (2) the employee is fit for light duty, or (3) the employee is fit for duty. A copy of this release will accompany the accident report.

7. MEDICAL SUPPORT

The following facilities have been contacted and arrangements have been made for prompt attention to injuries and consultation on occupational health.

These telephone numbers and site-specific reporting instructions will be conspicuously posted on a bulletin board at the site.

POLICE.....911
FIRE DEPARTMENT.....911
AMBULANCE.....911
OFF-SITE MEDICAL FACILITY...(Site Specific)

8. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Careful selection and use of PPE is essential to protect the health and safety of the workers. The purpose of PPE is to shield or isolate workers from the chemical, physical, radiological, and biological hazards that may be encountered at the site.

The specific levels of PPE and necessary components for each level have been divided into four categories according to the degree of protection afforded. General guidelines for use are:

Level A: Worn when the highest level of respiratory, skin and eye protection is needed.

Level B: Worn when the highest level of respiratory protection is needed, but a lesser level of skin protection is needed.

Level C: Worn when the criteria for using air-purifying are met, and a lesser level of skin protection is needed.

Level D: Refers to work conducted without respiratory protection. This level will be used only when the atmosphere contains no known or suspected airborne chemical or radiological contaminants and oxygen concentrations are between 19.5% and 23%. Level D protective clothing

provides a low level of skin protection. It is used when there is no potential for contact with hazardous levels of chemicals or radiological contamination.

Based on the phase of work and the Activity Hazard Analysis the applicable level of PPE will be level D. This will consist of the following:

- Work uniform (mid-sleeved shirts and long pants)
- Work gloves where applicable
- Safety glasses or safety goggles when using cutting tools or rotary tools
- Steel-toe boots at all times
- Hearing protection when sound levels are at or above 80 dB
- Hardhat at all times (except when operating vehicles)

Each day, the Superintendent / Health & Safety Officer will review the results of the Daily Safety Inspection reports. Based on these results, along with information from the Toolbox meeting and an evaluation of engineering controls/ work practices, the Health & Safety Officer will conduct a hazard assessment in an effort to eliminate any existing hazards. Most hazards will be eliminated by upgrading the tools and equipment utilized to perform the task. However, should the Health & Safety Officer encounter a hazard which cannot be eliminated, he will upgrade the existing Personal Protective Equipment. A hazard assessment will also be conducted during any accident investigation. All workers on the site will be required to wear at a minimum: safety glasses, a hard hat, steel-toed shoes, gloves, long-sleeved shirts, and long pants.

Employees Personal Protective Equipment Training consists of the following:

- When PPE is necessary
- What type of PPE is necessary
- How to properly put on, take off, adjust, and wear the PPE
- The limitations of the PPE
- Proper care, maintenance, useful life, and disposal of the PPE

Employees are provided PPE training at their hiring orientation, during periodic group meeting, initial onsite training and during weekly Toolbox meeting.

9. SAFETY & HEALTH EXPECTATIONS, PROGRAMS, AND COMPLIANCE

All company personnel have the responsibility of complying with safe and healthy work practices, including applicable regulations, company policy, company safety procedures and project SAFETY AND HEALTH PLAN. Overall performance and the maintenance of a safe work environment should be recognized by the superintendent and noted in performance evaluations. Employees will not be discriminated against for work-related injuries, and injuries will not be included in performance evaluations, unless the injuries were a result of an unsafe act on the part of the employee.

Standard progressive disciplinary measures in accordance with the applicable personnel policy will result when employees fail to comply with applicable regulations, company policy, and/or company safety

procedures. All personnel will be given instruction and an opportunity to correct any unsafe behavior. Repeated failure to comply, or willful and intentional non-compliance, may result in disciplinary measures up to and including termination. Any employee who knowingly commits an unsafe act, creates an unsafe condition, disregards the safety policy, or is a repeated safety or health offender, will be discharged. Grounds for immediate discharge are:

1. Drinking alcohol, and/or drug use prior to or during working hours
2. Fighting
3. Theft
4. Willful damage to property
5. Failure to wear eye protection, hearing protection, safety helmets, steel toe shoes etc.
6. Failure to utilize safety belts and lanyards when there is a potential for falling
7. Removing and/or making inoperative the safety guards on tools and equipment
8. Removing barriers and/or guardrails and not replacing them
9. Failure to follow recognized industry practices
10. Engaging in dangerous horseplay
11. Failure to notify Locke-Lane Construction, Inc. of a hazardous situation

Project Managers, Superintendents and all supervisors are all charged with the responsibility of implementing the safety program. This safety program will encompass and adhere to all the policies and standard operating procedures of Locke-Lane Construction, Inc., the Owner for whom the work is being performed, and all federal, state, and local regulations. This company safety program represents the minimum requirements that will be adhered to at all job sites but in no way limits the scope of the program, can be developed at each job site.

Project Managers, Superintendents and all supervisors have the responsibility of ensuring that the program is understood, maintained, utilized, and enforced. Health and Safety Officers, Superintendents and supervisors have responsibility for the daily implementation and enforcement of the safety program and the Safety and Health Plan. Each employee is expected to be aware of and understand that safety is a condition employment. Each employee shall be knowledgeable of and always adhere to all company rules and regulations.

10. HOUSEKEEPING

The job site will be cleaned up daily. Equipment and material not in use will be stored in order to avoid site congestion and creating a trip or fall hazard. The work areas will be inspected daily for adequate housekeeping. Any unsatisfactory finding will be recorded on the daily inspection report.

11. EMERGENCY RESPONSE PLAN(S)

This Emergency Plan will ensure the safety of the employees in case of fire or other emergency. The plan will be reviewed; all affected employees will also test the procedures and routes during the site-specific emergency training. If an incident occurs that requires the declaration of an emergency, all personnel will assemble at the designated emergency meeting location for further instruction. Arrangement for

decontamination, evacuation and/or transport will be made at that time. The Owner Representative will be notified of the incident as soon as possible.

A. NOTIFICATION/REPORTING PROCEDURES

In the event of an emergency, the Project Superintendent will be notified as soon as possible regarding the nature of the incident and emergency service contacts will be notified as needed.

B. SPILL PLANS (UNEXPECTED HAZARDOUS SUBSTANCE RELEASE)

In the event that potentially hazardous substances migrate from the work zone and potentially endanger unprotected areas or the community, all onsite activities will cease until the release is brought under control.

SPILL CONTAINMENT

Spills related to the project activities will be reported to the National Response Center (NRC) and the Owner's Representative immediately following the discovery and will comply with applicable State requirement. A written follow-up will be submitted to the Owner's Representative not later than 7 days after the initial report. The written report will be in narrative form and as a minimum include the following:

1. Description of the material spilled (including identity, quantity, and manifest number).
2. Whether amount spilled is EPA/State reportable and when and to who it was reported.
3. Exact time and location of spill, including description of the area involved.
4. Receiving stream or waters
5. Cause of incident and equipment and personnel involved.
6. Injuries and/or property damage.
7. Duration of discharge.
8. Containment procedures initiated.
9. Summary of any communications with the press, agencies, or Government officials other than Owner's Representative.
10. Description of cleanup procedures employed (or to be employed at the site), including disposal location of spill residue.

C. FIRE FIGHTING PLAN (FIRE PREVENTION AND PROTECTION)

PURPOSE:

Fire Prevention/Protection Policy is intended to provide compliance with all related regulation and standard safe work practice. The purpose of the policy is to prevent fires and to provide guidelines for action in the event that a fire does occur.

Fire prevention program combines the following policies:

- PPE Policy
- Electrical Safety Policy
- Emergency Action Plan

These policies encompass methods used for incidence avoidance, incident response and specialized training required in the event of a fire.

Issues addressed in the above policies include, but are not limited to:

- Evacuation Procedure
- Extinguisher Training
- Basic Process Safety Training (if applicable)
- Hot Work Safety Training (if applicable)
- Confined Space Entry Safety Training (if applicable)
- Emergency Life Support Training
- Respiratory Protective Devices Training (if applicable)
- Assured Grounding Programs

POLICY:

Employees shall be informed of the proper actions to take in the event of a fire. This includes, but is not limited to, notification and evacuation procedures. It is STRESSED that at no time does the task of fighting fire supersede an employee's primary duties of:

- Ensuring their own personal safety and the safety of others.
- Reporting the incident to the proper authority and ensuring personnel accountability for yourself and all subordinates at the jobsite, in accordance with company and client policy.

PROCEDURE:

- All employees are responsible for good housekeeping practices to enhance fire prevention methods. Supervisors will be held accountable for the housekeeping of their job sites.
- If applicable, welding machine mufflers will be equipped with an approved spark arresting muffler.
- Only approved containers will be used during fueling operations. These shall be of the self-closing type.
- Flammable material shall be kept under the control. It shall be stored in compliance with applicable OSHA and client regulations. The quantity of flammable/combustible material shall be kept to a minimum on the job site.
- Welding, cutting, and grinding sparks shall be contained.

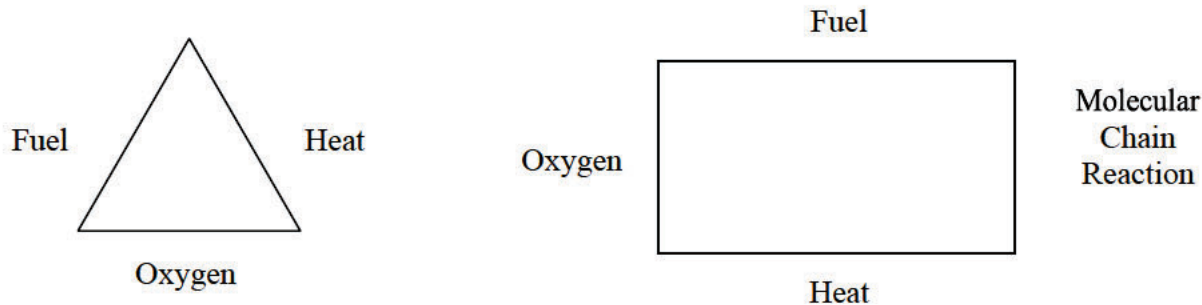
- Hot work areas shall be kept wetted down, and a fire extinguisher and hose maintained on each jobsite.
- Oily rags shall be immediately disposed of in designated hazardous waste containers.
- No hot work is to be performed without a Hot Work Permit.
- All vehicle entry into process areas requires a permit or permission from the operator.
- Use bonding straps to discharge and prevent static charges during transfer of flammable liquids from one container to another.
- Report all spills or suspicious odors immediately.
- Fire extinguishers are to be kept in areas easily accessible to employees. Only approved fire extinguishers are to be used. They must have an inspection tag attached. Extinguishers are to be maintained in a fully charged, ready to operate state. Extinguishers are to be inspected before each use and documented annually. Training is provided to all employees who use or may use fire extinguishers.
- **NEVER** put yourself or others a risk while attempting to extinguish an incipient fire.
- **DO NOT USE** any fire hoses larger than 1-3/4", unless fully trained as an industrial firefighter.
- **NEVER** attempt to extinguish a pressurized fuel fed fire.
- **DO NOT** direct a fire nozzle with a straight stream at any type of LPG fire. This action could extinguish the fire, producing an LPG vapor cloud capable of detonation.
- **DO NOT USE** fire monitors as the force can damage small equipment and certain high chrome alloy equipment cannot have water applied as cracking could occur.
- **DO NOT APPLY** water to any acid or caustic release as it can cause a violent reaction. Additionally, low concentration acids or caustics become extremely corrosive, causing an increasing leak condition.

IN THE EVENT OF A FIRE:

- Remain calm
- Only extinguish a fire when it is clearly within your abilities and the equipment available
- Know the location of the nearest alarm and how to activate the emergency system
- Know the evacuation routes and collection points
- If the fire cannot be extinguished, leave the area immediately and report to your evacuation area
- Await further instructions from the Incident Commander, or designated responsible personnel

BASIC FIRE SCIENCE:

- The combination of fuel, heat, oxygen equals the well-known fire triangle. To understand fire better, a fourth factor is added, a molecular chain reaction. This is due to the fact that fire results from a series of reactions in which complicated molecules “crack” into easily oxidized fragments. Disruption of this chain, along with the removal of fuel, heat, or oxygen, is recognized as a method of fire extinguishment through the use of dry chemical extinguishers.



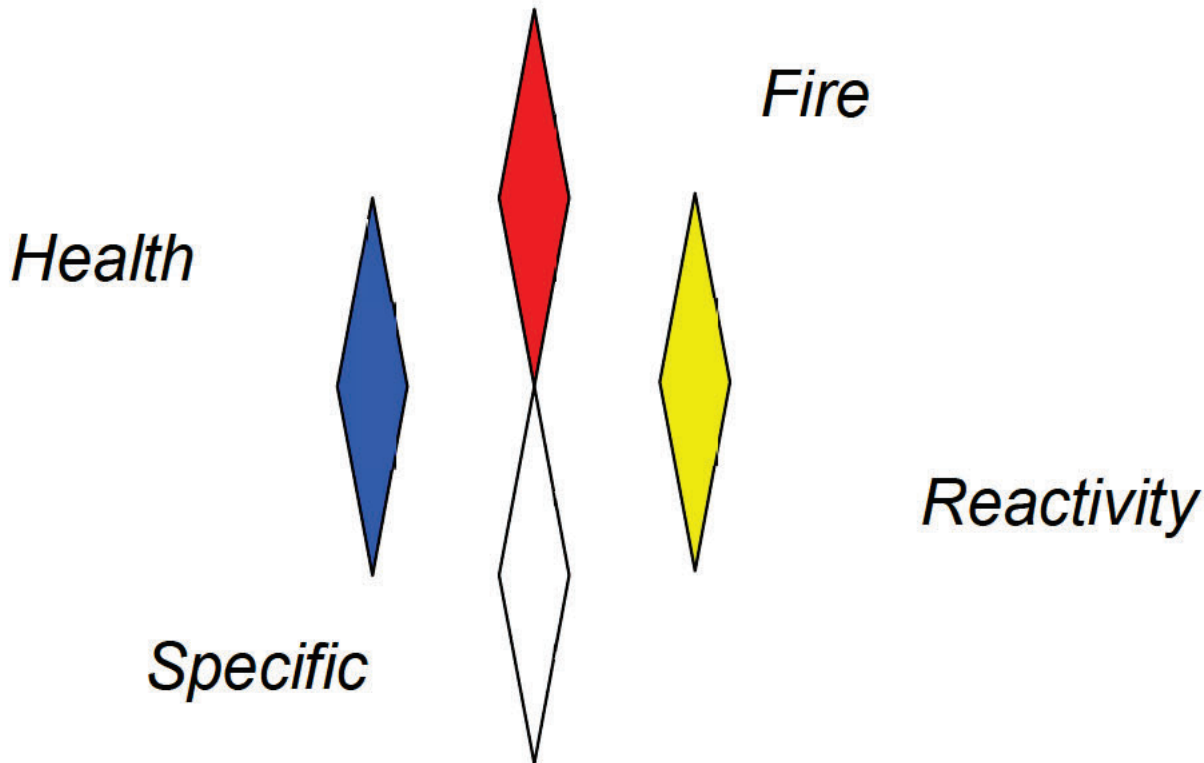
- Heat Energy** - Can be produced by building up molecules (composition) or breaking apart (decomposition) by heat or a solution when materials are dissolved in a liquid, or by combustion.
- Heat Transfer** - A law of physics states that heat tends to flow up from a hot substance or place to a cold substance or place. This is through conduction (transfer of heat through a medium such as metals) or through convection (transfer of heat with a medium-usually circulatory).
- Fuels** - Those substances that will burn when heat is applied. The most common fuels are not pure elements such as carbon, but compounds and mixtures such as paper and wood.
- Oxygen** - Makes up a major portion of the oceans and earth's crust and one-fifth of our atmosphere. Atmospheric oxygen is the major source of oxygen that supports combustion. Oxygen itself does not burn, however, without it, combustion is impossible. Normal burning is the combination of fuels with oxygen under the influence of heat.
- Combustion** - A rapid oxidation or chemical combination accompanied by heat.
- Oxidation** - The ability of materials to produce oxygen during a chemical reaction.
- Spontaneous Combustion** - When oxidation is allowed to occur, enough oxygen is available, heat is produced, molecules become more energetic and combine with oxygen at an increasing rate, temperatures rise, and visible heat (flames) are produced.

CLASSES OF FIRES:

- Class A - **Ordinary combustibles (wood/paper/textiles)**
- Class B - **Flammable liquids (gasoline/oils/grease)**
- Class C - **Live electric (wiring/generators/motors)**
- Class D - **Combustible metals (finely divided form/chips, turnings)**
- Class K – **Kitchen (oils/grease)**


TYPES OF FIRE EXTINGUISHERS:

- **Water** - extinguisher for ordinary combustibles fires
- **Dry Chemical or CO2** - extinguisher for electrical equipment fires and for flammable liquid fires
- **Multipurpose Dry Chemical** - extinguisher for ordinary combustibles fires, liquid fires, and electrical equipment fires
- **Foam** - extinguishing agent for hydrocarbon fires



Scale ranges from 0 (lowest hazard) to 4 (highest hazard)

NFPA Diamond:

Fire Hazard (Red)	Health Hazard (Blue)	Reactivity (Yellow)	Specific Hazards (White)
Flash Points			
4 below 73° F	4 Deadly	4 may detonate	Oxidizer = OX
3 below 100° F	3 Extreme Danger	3 shock and heat, may detonate	Acid = ACID
2 from 100 - 200° F	2 Hazardous	2 violent chemical change	Corrosive = COR
1 above 200° F	1 Slight Hazard	1 unstable if heated	Use no water = W
0 will not burn	0 Normal Material	0 stable	Radioactive = 

Fires and open flame devices will not be left unattended. All sources of ignition will be prohibited within 50 feet of where flammables are being used or transferred. 25 feet will separate the areas in which flammable or combustible liquids are transferred for the other operation or by construction have a fire resistance of at least one-hour. Drainage or other means will be provided to control spills. Equipment using flammable liquid fuel will be shut down during servicing or maintenance. Portable fire extinguishers will be provided where needed and inspected and maintained in accordance with Appendix L and NFPA 10, Portable Fire Extinguishers. The area will be conspicuously posted: **NO SMOKING OR OPEN FLAME**.

Refueling of the equipment will not be performed on site; the equipment will be transported off site for re-fueling.

All containers used for the storage or handling of flammable and combustible liquids will be listed by UL. The storage handling or use of flammable and combustible liquids will be under the supervision of qualified persons. Fire extinguisher equipment will be provided in the storage area according to the hazard present.

D. EMERGENCY TELEPHONE NUMBERS: WILL BE POSTED CONSPICUOUSLY THROUGHOUT THE JOBSITE

E. PERSONNEL INJURY

In the event of an injury, all personnel will assemble at the designated emergency meeting location. If the injured person is immobile, one or more persons will remain nearby to provide any necessary First Aid. If medical help is needed, the site Health & Safety Officer will summon the appropriate assistance as outlined below, or transport, as necessary.

F. EVACUATION PLAN

In the event of an onsite evacuation (i.e., fire, explosion), the following plan will be implemented:

- A signal consisting of five one-second blasts of vehicle or air horn will be used.
- All personnel will immediately evacuate downwind areas and report to the designated emergency meeting location for further instruction.
- The Project Superintendent will take a head count of employees to insure all were safely evacuated.

G. ONSITE COMMUNICATION FOR EMERGENCY SITUATIONS

The following standards hand signals will be used onsite as a means of communications:

- Hand gripping throat- (cannot breathe)
- Grip partner's wrist or both hands around waist- (leave immediately)
- Hands on top of head- (need assistance)
- Thumbs up- (OK, I am all right, I understand)
- Thumbs down- (No, negative)

12. HAZARD COMMUNICATION PROGRAM

Container Labeling will provide the following information: Chemical Name, Hazard warning, Name and address of manufacturer, importer, or responsible party.

No chemical will be used until it has been checked by the Health and Safety Officer. If chemicals are to be transferred to a separate container, the Health and Safety Officer will ensure that the new container is properly labeled and that all secondary containers are labeled. Secondary labels can be an extra copy of the manufacturer's label or a generic label. All secondary labels must list Chemical Identity, Hazard Warning, and Manufacturer.

The Health & Safety Officer will maintain a binder in his office with a SDS on every substance on the list of hazardous chemicals along with an Inventory Log. The approximate quantities of the hazardous chemicals that will be onsite at any given time will be listed. A site map indicated the storage location of the chemical will be maintained in the binder.

Prior to delivery on the site, the subcontractor and/or supplier will provide a SDS for each chemical to the Health and Safety Officer. The subcontractors/suppliers will be provided a copy of this Hazard Communication Program and they must adhere to the requirements of this Program.

Prior to bringing hazardous substances as defined in 29 CFR 1910.120 onto the job site all employees involved will be provided with SDS information and a copy of the SDS will be provided to the Owner.

Before a new employee starts work, the employee's supervisor will discuss the employee's copy of the Hazard Communication Plan and SDS applicable to the employee's job. The employee will receive the following information and training:

- An overview of the requirements contained in the Hazard Communication Standard
- Notification about the hazardous chemicals present in the employees' work area
- How to read labels and SDS to obtain hazard information
- The physical and health effects of the hazardous materials in the SDS binder at the job site.
- How to determine the presence or release of hazardous chemicals in the work area
- How to lessen or prevent exposure to these hazardous chemicals through use of control/work practices and personal protective equipment
- Emergency procedures to follow if exposed to any chemicals
- Location of SDS binder and Hazard Communication Plan

Before a new chemical hazard is brought on site or utilized, each employee will be given information and training as outlined above. Each employee will sign a form to verify that he or she has attended the training. Each employee will sign a form to verify that the Hazard Communication Plan was or is made available for review and that he or she understands the plan.

SDS provide employees with specific information on the chemicals that they use. The SDS will be a fully completed OSHA Form 174 or equivalent. The Health & Safety Officer will ensure that each division maintains an SDS for hazardous materials, in that division. SDS will be made readily available to employees at the division or job site.

The Health & Safety Officer is responsible for acquiring and updating SDS. The Health & Safety Officer will contact the chemical manufacturer or vendor if additional research is necessary or if any SDS has not been supplied with an initial shipment. All new procurements for the company must be cleared with the Health & Safety Officer.

13. RESPIRATORY PROTECTION PROGRAM

I. OBJECTIVE

The Locke-Lane Construction, Inc. Respiratory Protection Program is designed to protect employees by establishing accepted practices for respirator use, providing guidelines for training and respirator selection, and explaining proper storage, use and care of respirators. This program also serves to help the company and its employees comply with Occupational Safety and Health Administration (OSHA) respiratory protection requirements as found in 29 CFR 1910.134.

Duties of the Health and Safety Officer include:

- Identifying work areas, process or tasks that require workers to wear respirators.
- Evaluating hazards.
- Selecting respiratory protection options.
- Monitoring respirators use to ensure that respirators are used in accordance with their specifications.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respiratory protection equipment.
- Conducting qualitative fit testing with Bitrex.
- Administering the medical surveillance program.
- Maintaining records required by the program.
- Evaluating the program.
- Updating written program, as needed.

A. Supervisors

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) receive appropriate training, fit testing, and annual medical evaluation.
- Ensuring the availability of appropriate respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, and stored according to this program.
- Ensuring that respirators fit well and do not cause discomfort.

- Continually monitoring work areas and operations to identify respiratory hazards.
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding this program.

B. Employees

Each employee is responsible for wearing his or her respirator when and where required and in the manner in which they are trained. Employees must also:

- Care for and maintain their respirators as instructed, guard them against damage, and store them in a clean, sanitary location.
- Inform their supervisor if their respirator no longer fits well and request a new one that fits properly.
- Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding this program.
- Use the respiratory protection in accordance with the manufacturer's instructions and the training received.

C. Breathing Air Quality

Workers using supplied breathing air equipment shall be thoroughly trained in its use.

Breathing air is typically supplied from cylinders or via a compressor. Appropriate measure shall be taken to ensure that all compressed breathing air meets at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

1. Oxygen content (v/v) of 19.5-23.5%
2. Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less
3. Carbon monoxide (CO) content of 10 ppm or less
4. Carbon dioxide content of 1,000 ppm or less
5. Lack of noticeable odor

Suppliers of breath air cylinders shall provide Locke-Lane Construction with a certificate of analysis with each delivery certifying that the breathing air meets the requirements for Grade D breathing air; and that the moisture content in the cylinder does not exceed a dew point of -50°F (-45.6°C) at 1 atmosphere pressure. The certificate shall have the name of the breathing air supplier, the testing technician and date of test.

Breathing air cylinders shall be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and part 178).

Breathing Air Compressors

Compressors used to supply breathing air to respirators shall be constructed and situated so as to:

1. Prevent entry of contaminated air into the air-supply system.

2. Minimize moisture content so that the dew point at 1 atmosphere pressure is 10°F (-5.56°C) below the ambient temperature.
3. If required to ensure delivery of Grade D air to the user, provide suitable in-line air-purifying sorbent beds and filters. All filters, cartridges and canisters shall be labeled, and color coded with the NIOSH approval label and the label shall remain legible. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions. A tag containing the most recent change date and the signature of the person authorized by the employer to perform the change shall be attached to the equipment.
4. For compressors that are not oil-lubricated, Locke-Lane Construction shall ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.
5. For oil-lubricated compressors, Locke-Lane Construction shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.
6. The air shall be routinely tested to ensure that it meets Grade D requirements.

In addition, a stand-by attendance shall be on watch anytime workers are using breathing air supplied directly by a compressor.

Breathing air couplings shall be incompatible with outlets for non-respirable worksite or other gas systems. No asphyxiating substance shall be introduced into breathing airlines.

II. PROGRAM

A. Hazard Assessment and Respirator Selection

The Program Administrator will select respirators to be used on site, based on the hazards to which workers are exposed and in accordance with the OSHA Respiratory Protection Standard. The Program Administrator will conduct a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. A log of identified hazards will be maintained by the Program Administrator (See Sample Hazard Evaluation, Attachment C). The hazard evaluations shall include:

1. Identification and development of a list of hazardous substances used in the workplace by department or work process.
2. Review of work processes to determine where potential exposures to hazardous substances may occur. This review shall be conducted by surveying the workplace, reviewing the process records, and talking with employees and supervisors.
3. Exposure monitoring to quantify potential hazardous exposures.

The proper type of respirator for the specific hazard involved will be selected in accordance with the manufacturer's instructions.

14. SILICA EXPOSURE PROGRAM

A. Applicability

This Written Exposure Control Plan (Plan) applies to Locke-Lane personnel who are potentially exposed to airborne concentrations of respirable crystalline silica (silica) because of their work activities or proximity to the work locations where airborne silica is being emitted. This Plan also applies to Locke-Lane's superintendents, foremen, or safety personnel who may be responsible for overseeing a subcontractor's operations that have the potential to expose personnel to airborne concentrations of silica at or above regulatory and industry action levels and exposure limits.

B. Scope

This Plan describes the hazards associated with projects involving potential exposure to airborne concentrations of silica and the issues to be addressed during these projects. These projects include, but are not limited to:

- Use of stationary masonry saws used to cut concrete, tile, concrete masonry block, sheet rock, gypsum fiber roof board, or any other product containing quartz.
- Handheld power saws used to cut concrete, asphalt, concrete masonry block, sheet rock, gypsum fiber roof board, or any other product containing quartz.
- Walk-behind saws used to cut concrete or asphalt.
- Rig-mounted or free-standing core saws or drills (including impact and rotary hammer drills) used to penetrate concrete, concrete masonry block, sheet rock, gypsum fiber roof board, or any other structural component or product containing quartz.
- Jackhammers and handheld powered chipping tools used to demolish or modify concrete, concrete masonry block, or any other structural component or product containing quartz.
- Vehicle mounted hammers or chipping tools used to demolish concrete, concrete masonry block, or any other structural component or product containing quartz.
- Handheld grinders or cut-off wheels used for mortar removal or cutting/grinding of concrete, concrete masonry block, sheet rock, gypsum fiber roof board, or any other structural component or product containing quartz.
- Walk-behind milling machines or bead blasters used for surfacing activities on concrete, concrete masonry block, asphalt, or any other product containing quartz.
- Installation or demolition of sheet rock, including mudding, taping, texturizing activities with quartz containing materials.
- Hand or power tool sanding of painted surfaces. Current latex paint products contain quartz and the painted substrate (sheet rock, concrete masonry block, concrete) contains quartz.
- Drivable asphalt milling machines used to mill asphalt roadways or walkways.
- Ball mills or crushing equipment used to size products containing quartz.
- All housekeeping operations associated with the activities described above.

Locke-Lane employees who work in proximity to silica-related operations must be aware of safe work practices and take all necessary precautions associated with avoiding and minimizing airborne silica exposure.

C. Regulatory Review

Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1153: Respirable Crystalline Silica (Construction Industry) and 29 CFR 1910.1053: Respirable Crystalline Silica (General Industry),

contain regulatory requirements specific to respirable crystalline silica. This Written Exposure Control Plan is developed in accordance with the requirements in 29 CFR 1926.1153(g).

D. Project Planning (Project Specific)

E. Training Requirements

Locke-Lane employees who anticipate working on projects where they could be exposed to airborne silica will be provided training in silica hazards in accordance the Locke-Lane program established to comply with the hazard communication standard (29 CFR 1910.1200). Each employee will have access to labels on containers of crystalline silica and safety data sheets and be provided information on the health hazards of silica including cancer, lung effects, immune system effects, and kidney effects. In addition, Locke-Lane employees will be provided training and information regarding specific activities identified in this Plan that could result in airborne silica exposure, and the specific engineering controls, work practices and respiratory protection requirements to mitigate the potential airborne silica exposures. This training will provide a discussion of silica hazards, initial exposure determination either by complying with 29 CFR 1926.1153 Table 1 requirements or air monitoring, specific engineering and work practice control measures, personal protective equipment (PPE), and medical surveillance requirements. The training will also identify the competent person for silica exposure identification and determination of control requirements. All Locke-Lane employees will be provided with access to a copy of 29 CFR 1910.1153 and be trained on the contents of 29 CFR 1926.1153.

F. Medical Surveillance Requirements

Locke-Lane Construction shall institute medical surveillance for any employees required by this Plan to where a respirator 30 or more days per year. Initial medical surveillance consists of medical and work history with emphasis on: past, present, and anticipated exposure to silica, dust and other agents affecting the respiratory system; any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing); history of tuberculosis; and smoking status and history; a physical examination with emphasis on the respiratory system; chest X-ray (a single posterior-anterior radiographic projection or radiograph of the chest at full inspiration recorded on either film (no less than 14 x 17 inches and no more than 16 x 17 inches) or digital radiography systems), interpreted and classified according to the International Labor Office (ILO) International Classification of Radiographs of Pneumoconiosis by a NIOSH-certified B Reader; a pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH approved spirometry course; testing for latent tuberculosis infection; and any other tests deemed appropriate by the Occupational Medicine Provider. Subcontractors are responsible for implementing a medical surveillance program for their employees.

G. Competent Person Requirements

Locke-Lane shall identify a competent person to inspect and oversee all activities with potential airborne silica exposure. Subcontractors working on projects within the scope of this Program shall appoint a competent person capable of executing the duties described herein. The competent person must have training in the inspection of work areas and equipment and in the determination of safe working conditions. This person shall have a working knowledge of the 1926.1153 standards, shall be capable of identifying airborne silica hazards, shall determine the need for initial and additional exposure

monitoring, shall recommend and implement engineering and work practice controls, shall establish levels of PPE, and shall have the authority to take action to eliminate hazards and correct incidences of noncompliance.

H. Planning Activities

Projects where anticipated activities involve concrete cutting, grinding, sandblasting, drilling, coring, or other abrasive operations are treated as potential sources for airborne silica exposure. Additionally, existing structures and materials such as sheetrock, any painted surfaces with low volatile organic compounds, tile, brick, or some insulation products may contain silica. Likewise, new material installation may involve silica-containing mortar, paints, or insulation. Where process knowledge indicates the presence of silica, Locke-Lane will either implement all controls required by 1926.1153 Table 1- Exposure Control Methods for Selected Construction Operations or conduct an initial determination in accordance with 29 CFR 1926.1153(d)(2).

I. Project Execution (Project Specific)

J. Safe Work Practices

The requirements of this section are to be followed by Locke-Lane employees, who may be exposed to airborne concentrations of silica at or above the regulatory limits.

K. Exposure Assessment

Locke-Lane Construction will either comply with and implement all controls required by 1926.1153 Table 1- Exposure Control Methods for Selected Construction Operations or conduct an initial determination in accordance with 29 CFR 1926.1153(d)(2).

- An exposure assessment is required when employees may be exposed to airborne silica at or above the action level in order to determine the extent to which employees are exposed and the appropriate exposure controls required.
- An initial determination of exposure shall be made at the beginning of operations. The determination shall consist of the collection of personal air samples representative of a full shift including at least one sample for each job classification in each work area, either for each shift, or for the shift with the highest exposure level.
- During the initial determination, until such time that actual airborne concentrations are determined, personnel shall be protected by respiratory protection based on task-specific anticipated airborne concentrations of silica as illustrated in Table 2 below:
- During the initial determination, and in addition to the levels of respiratory protection required, personnel shall be provided with protective clothing and equipment, hygiene facilities, and training.
- Whenever a change in equipment, process, controls, or personnel occurs, or a new task has been initiated, an additional exposure assessment is required.
- When an assessment determines that exposure has occurred above the action level but below the PEL, additional monitoring shall be required at least every 6 months. Additional monitoring shall continue until such time that the monitoring results fall below the action level on two

separate occasions at least 7 days apart.

- When monitoring yields results above the PEL, then quarterly monitoring is required. In addition, the quarterly monitoring may be suspended when additional monitoring results fall below the action level on two separate occasions at least 7 days apart.
- Where the competent person can clearly demonstrate, in the absence of air monitoring data, that a work activity will not create airborne silica concentrations in excess of the action level, then air monitoring may be unwarranted. Where a negative initial determination is reached without air monitoring, the competent person must develop a written explanation as to why exposures are not expected to exceed the action level.

Communication of Hazards

- Each employee shall be provided training and demonstrate knowledge and understanding of the following:
 - Health hazards associated with exposure to respirable crystalline silica
 - Specific tasks that could result in exposure to respirable crystalline silica
 - Specific measures that are required to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, and required use of respiratory protection
 - The contents of the 29 CFR 1926.1153
 - The identity of the competent person
 - Purpose and description of the medical surveillance program
- A written compliance program shall be made available to all affected employees.
- In addition, notification to owners, contractors, and other personnel working in the area shall be made.

Control Methods

- Engineering and work practice controls, including administrative controls, shall be implemented to reduce and maintain employee exposure to silica at or below the PEL, to the extent that such controls are feasible.
- Where all feasible engineering and work practice controls that can be instituted are not sufficient to reduce employee exposure to or below the PEL, such controls shall be used, nonetheless, to reduce employee exposure to the lowest feasible level (and in conjunction with respiratory protection).
- Respiratory protection shall be selected based on guidance in 1926.1153 Table 1 or based on a Certified Industrial Hygienist's or competent person's assessment of the potential airborne exposure that may be created by the means and methods of work (high energy operations with high airborne dust generation or low energy operations with low dust generation).
- When using mechanical ventilation to control exposure, regularly evaluate the system's ability to effectively control exposure.

- If administrative controls are used to limit exposure, establish and implement a job rotation schedule that includes employee identification as well as the duration and exposure levels at each job or workstation where each affected employee is located.
- A written compliance program shall be established and implemented prior to the start of operations within the scope of this Written Compliance Plan. The written program shall outline the plans for maintaining employee exposure below the PEL.
- Maintain all surfaces as free as possible from accumulations of silica. Select methods for cleaning surfaces and floors that minimize the likelihood of silica becoming airborne (such as using a HEPA vacuum).
- If vacuuming is the method selected, specialized vacuums with HEPA filtration are required. Methods to use and empty vacuums in a manner that minimizes the reentry of silica into the workplace shall be described and used. Use of household vacuums with HEPA filters are not allowed at any time for the collection of dust or debris that contains silica.
- Never use compressed air to remove silica from any surface unless it is used in conjunction with a ventilation system designed to capture the airborne dust created while using the compressed air.
- Employees shall not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in any areas where exposure to silica is above the PEL (in other words, regulated areas).
- Do not allow employees to leave the workplace wearing any protective clothing or equipment that is required to be worn during their work shift without HEPA vacuum removal of dust.
- Where feasible, install shower facilities and require employees who work in regulated areas to shower at the end of their work shift. Also provide an adequate supply of cleaning agents and clean towels.
- Provide hand washing facilities for use by employees working in regulated areas. Furthermore, require employees to wash their hands and face at the end of the work shift and prior to eating or entering eating facilities, drinking, smoking, or applying cosmetics.
- Eating facilities or areas shall be provided for employees working in regulated areas. These facilities shall be maintained free of silica contamination and shall be readily accessible to those employees.

Personal Protective Equipment (PPE)

Respiratory protection must be used for the following conditions:

- During periods when employee exposure to airborne silica exceeds the PEL
- For work operations where engineering and work-practice controls are not sufficient to reduce employee exposure to or below the PEL during periods when an employee requests a respirator
- During periods when respirators are required to provide interim protection while conducting initial exposure assessments

- Powered air-purifying respirators (PAPR) shall be provided to employees who request such a respirator to use where it will provide adequate protection.
- Employees shall be provided, at no cost, protective work clothing and equipment including cotton coveralls or similar full-body clothing, gloves, hats, shoes or disposable shoe coverlets, face shields, vented goggles, or other appropriate PPE.

15. BLOODBORNE PATHOGENS PROGRAM

Purpose

Due to Locke-Lane Construction's close proximity to medical care we do not have designated first aid responders for bloodborne pathogens. The purpose of the Bloodborne Pathogens Program (Exposure Control) is to serve as a guide for information and protection for employees that may be exposed to blood or other human body fluids while performing first aid and CPR duties as a voluntary Good Samaritan to another individual.

Scope and Application (Exposure Determination)

Employees at Locke-Lane Construction, Inc. do not work with human blood or other potentially infectious materials. Accidentally injured employees are the only potential source of contamination by blood borne pathogens. Locke-Lane Construction, Inc. does not have designated first aid responders and relies on the Fairmont Fire Department (emergency), and Doctor's Urgent Care in Lumberton, NC (non-emergency) to perform first aid and medical treatment. In emergency situations, all employees are authorized to dial 911. Due to our close proximity to medical care if an employee volunteers to administer first aid to an injured party is doing so solely as a Good Samaritan and is not required to by Locke-Lane Construction, Inc.

Locke-Lane Construction, Inc. will provide basic awareness level training to all employees.

Program Administrator

The administrator for this program is the Health and Safety Officer. The Health and Safety Officer will review and update the program as necessary and be contacted for further information about or explanation of duties under this program. A copy of this program is located in the Health and Safety Officer's office.

Methods of Compliance

1. All employees shall observe universal precautions should any human blood or other potentially infectious materials.
2. Locke-Lane Construction, Inc. does not have designated first aid responder's due to our close proximity to medical care. **We encourage the following for employees volunteering as a Good Samaritan:**
 - a. Universal precautions should be observed at all times while administering first aid or decontaminating equipment or work surfaces. All blood or other human body fluids should be handled as though they were known to be infected with the human immunodeficiency virus (HIV).
 - b. While administering first aid employees should wear, at minimum, disposable protective

- gloves, masks, and either face shields or glasses with solid sides.
- c. Good Samaritans should wash their hands with soap and water immediately after removing personal protective equipment.
 - d. Good Samaritans should wash hands, with soap and water, and any other skin surfaces, and flush mucus membranes with water that have been contacted by blood or other potentially infectious materials immediately after contact.
 - e. No hypodermic needles should be used for any reason.
 - f. Bloodborne pathogen kits are made available at our first aid stations.
 - g. The Health and Safety Officer will examine first aid supplies periodically. Any supplies found in an unsatisfactory condition shall be discarded and replaced.
 - h. Disposable gloves shall be discarded and replaced when contaminated, and when torn or when their ability to act as a barrier has been compromised.
 - i. Any garment penetrated by blood or other potentially infectious material shall be removed.
 - j. Contaminated reusable sharps (e.g., scissors, tweezers, and picks) shall be placed in appropriate containers immediately after contamination.
 - k. Broken glassware that has been contaminated by blood or other potentially infectious materials shall be cleaned up using only mechanical means, such as brush and pan, or forceps. Contaminated broken glass shall be placed in designated containers for disposable sharps. Disposable sharps containers shall be red in color, puncture resistant, labeled with a biohazard label, closable, and leak-proof on the sides and bottom. Disposable sharps containers shall be closed once the broken glassware has been placed within and shall not be reopened.
 - l. Eating, drinking, applying cosmetics or lip balm, and handling contact lenses shall not be allowed in any area that an injury has occurred until the victim has been removed, and all contaminated equipment and surfaces have been decontaminated.
 - m. All first aid and decontamination procedures shall be conducted in such a manner as to minimize the possibility of splashing or other generation of droplets of blood or other potentially infectious materials.
 - n. After first aid has been administered, pooled blood or other potentially infectious liquids shall first be solidified by Red-ZTM or a similar solidifying agent with decontaminating properties. Solidified liquids and any other disposable materials contaminated with blood or other potentially infectious material shall then be placed in a biohazard disposal bag. All contaminated equipment and surfaces shall then be disinfected by a solution of 0.5% or greater sodium hypochlorite (one-part household bleach diluted with 10 parts water), or other product known to be as equally effective.
 - o. A volunteer or outside vendor under the supervision of appropriate personnel shall perform a decontamination of blood or other infectious material spill within machinery or equipment. All lockout/tagout or other controls of hazardous energy shall be accomplished as prescribed by routine maintenance personnel.

Post Exposure Evaluation and Follow-Up

1. Any employee who has had an exposure incident (a specific eye, mouth, mucous membrane, broken skin, or contact with blood or other potentially infectious material) while at work shall be provided with a post-exposure evaluation and follow-up, including prophylaxis, at no cost to the employee. Doctor's Urgent Care shall perform the evaluation and follow-up.
2. In the event of an exposure incident or other blood borne pathogen emergency, employees should immediately notify their Supervisor or the Health and Safety Officer.
3. Evaluation and follow-up shall be provided according to the recommendations of the United States Public Health Service (USPHS), current at the time the evaluations and procedures take place.

The evaluation and follow-up shall include, at a minimum, the following elements:

- a. Documentation of the routes of exposure and circumstances of exposure.
- b. Identification and documentation of the source individual.
- c. If permission is obtained, the source individual's blood shall be tested for HIV and HBV status.
- d. Results of the test(s) shall be made available to the employee.
- e. The exposed employee shall be informed for the laws concerning disclosure of the identity and serological status of the source individual.
- f. If the exposed employee consents, a baseline blood sample shall be obtained as soon as possible.
- g. If the exposed employee consents, the baseline blood sample shall be tested for HIV serological status.
- h. If the exposed employee does not give consent for HIV testing at the time the baseline blood sample is collected, the sample shall be retained for 90 days. If within the 90-day period, the exposed employee elects to have the baseline sample tested; it shall be tested as soon as possible.
- i. Post exposure prophylaxis when medically indicated and as recommended by the USPHS.
- j. Counseling.
- k. Evaluation of reported illnesses.

Information Provided to Healthcare Professionals

1. The healthcare professional responsible for the post-exposure evaluation and follow-up shall be provided with:
 - a. A copy of 29 CFR 1910.1030
 - b. A description of the exposed employee's duties as related to the exposure incident.
 - c. Documentation of the routes of exposure and the circumstances of exposure.
 - d. Results of the source individual's blood testing if available.
 - e. All relevant medical records maintained by Locke-Lane Construction, Inc.
2. It shall be the responsibility of the Health and Safety Officer to ensure that all information required by this written program is given to the appropriate health care providers.
3. A written opinion, as described by the copy of 29 CFR 1910.1030 provided to the healthcare professional, shall be obtained from the healthcare professional responsible for post-exposure evaluations within 15 days of completing the evaluation.

Communication of Hazards to Employees

Any container holding blood or other potentially infectious material, or containing any materials or objects contaminated thereby, shall bear this biohazard label shown below:

Training Program

All employees shall participate in Bloodborne Pathogens Training Program. Since Locke-Lane Construction, Inc. does not have designated first aid responders; only general awareness level training will be given. Training shall be given upon initial hiring and as needed thereafter. The Health and Safety Officer is responsible for ensuring that training is provided. The training shall include, at a minimum:

- a. Universal precautions for all employees.
- b. The modes of transmission of blood borne pathogens.
- c. Methods used to recognize tasks that may involve potential exposures to blood borne pathogens.
- d. Use and limitation of methods used to reduce or prevent exposure.
- e. Information on the use, selection, availability, disposal, and handling of personal protective equipment.

- f. Advantages, disadvantages, and availability of the Hepatitis B vaccine; should an exposure occur.
- g. Procedures to follow and persons to contact in the event of emergencies involving blood or other potentially infectious materials.
- h. Procedures to follow in the event of an exposure incident.
- i. Information on post exposure evaluation and follow-up.
- j. Signs, labels, and color-coding.

Recordkeeping

1. A record of all training conducted under this written exposure plan shall be maintained for no less than three years following the date of training. This record shall include, at a minimum, dates of training, names and titles of employees attending the training, name and qualifications of the person conducting the training, and the contents or a summary of the training.
2. Training records shall be made available for copying to all employees, employee representatives, and representatives of federal OSHA and the North Carolina Department of Labor.
3. A medical record shall be maintained in accordance with 29 CFR 1910.20 for any employee who has an exposure to blood or other potentially infectious materials. This medical record shall contain, at a minimum:
 - a. Name and social security number of the employee.
 - b. Dates of Hepatitis B vaccines and any other medical information relevant to Hepatitis B vaccine status.
 - c. Results of all examinations, medical testing, and follow-up procedures conducted in accordance with this written plan.
 - d. Copies of all written opinions provided by healthcare professionals, and information provided to the healthcare professionals.
4. Medical records kept in accordance with this written plan shall be kept confidential and released (internally or externally) only with the express written consent of the employee, except as required by law.
5. Medical records kept in accordance with this written plan shall be provided, for copying, to the subject employee, anyone with the written consent of the subject employee, and to representatives of federal OSHA and the North Carolina Department of Labor.
6. If Locke-Lane Construction, Inc. ceases to do business, and there is no successor to receive records, the Director of the Division of Occupational Safety and Health of the North Carolina Department of Labor shall be contacted at least three months prior to the disposal of records. If requested during the three-month period, records shall be transmitted to the Director.

16. ASBESTOS MANAGEMENT

Locke-Lane Construction does not personally remove asbestos. If there is a possibility of asbestos on site before any work can be started a licensed asbestos testing company will inspect and test the site. If asbestos is found to be present, a licensed asbestos removal service will be brought in to remove the hazard at the customer's expense unless otherwise noted in the contract.

17. LEAD SAFETY PROGRAM

Locke-Lane Construction does not personally remove lead. If there is a possibility of lead on site before any work can be started a licensed lead testing company will inspect and test the site. If lead is

found to be present, a licensed lead removal service will be brought in to remove the hazard at the customers expense unless otherwise noted in the contract.

18. HEARING CONSERVATION PLAN

Noise exposure/hazard (sound levels greater than 80 dB or 120 dB peak sound pressure level or greater) is often not constant and is difficult to control with either engineering or administrative solutions. PPE- Hearing protection is often the only choice to reduce noise exposure.

Employees are possibly exposed to noise hazards by using impact equipment and tools, pneumatically powered equipment, heavy equipment, and in the vicinity where there are noisy activities.

Listed below are examples of equipment and decibel level which will be utilized on this project which will present potential hazards to the workers.

<u>Equipment</u>	<u>Decibels</u>
Pneumatic chip hammer	103-113
Jackhammer	102-111
Concrete joint cutter	99-102
Earth Tamper	90-96
Earthmover	87-94
Backhoe	84-93
Hammer	87-95

In accordance with 385-1-1, Section 05.C.02 when personnel are subjected to sound-pressure levels exceeding the limits specified in Table 5-3, feasible engineering or administrative control shall be used. When such controls fail to reduce sound-pressure levels within the specified limits, PPE shall be selected, evaluated, provided, and used in accordance with the hearing conservation program.

Based on the phase of work, the AHA and the noise hazards listed above; PPE will be utilized to reduce or control the noise hazards.

Examples of hearing protections which will be utilized are listed below:

Insert Type Earplugs- Pre-molded earplugs, Formable and Custom Molded Earplugs

Earmuffs

This Noise and Hearing Conservation Program is a part of the Project Safety and Health Plan; thus, the Health and Safety Officer is responsible for the enforcement of the Hearing Conservation. The Health and Safety Officer will conduct inspection and record any violation in the daily reports and deficiency log. The violations will be addressed during the weekly Toolbox meeting.

The subcontractors will be provided a copy of this Safety and Health Plan. Each subcontractor is required to review and discuss the AAP with their employees and provide a copy of the attendance log. The Safety and Health Plan describes the personal protection and safety procedures to be followed by the subcontractor during on-site work. Prior to commencement of any phase of work the subcontractors will attend a meeting to review and discuss the activity hazard analysis (AHA).

In addition to the HEALTH AND SAFETY OFFICER conducting daily safety inspections, the subcontractors' foremen or supervisors will also conduct daily safety inspections and monitor the work throughout the day. Any subcontractor employee who knowingly commits an unsafe act, creates unsafe conditions, disregards the SAFETY AND HEALTH PLAN, or is a repeated safety or health offender, will be removed and prohibited to return to the project site. Attached is a copy of Noise and Hearing Conservation Program.

Noise and Hearing Conservation Program

Introduction:

Evidence is well established that worker exposure to noise of sufficient intensity and duration can result in hearing damage. Noise-induced hearing loss rarely results from just one exposure; it can progress unnoticed over a period of years. Initial noise-induced hearing loss occurs at the higher frequencies where the consonant portion of speech is found, making communications difficult.

Engineering controls such as mufflers on heavy equipment exhausts or on-air release valves are required where possible. If engineering solutions cannot reduce the noise, administrative controls such as increasing the distance between the noise source and the worker or rotation of jobs between workers in the high noise area should be used if possible.

Noise exposure is often not constant and is difficult to control with either engineering or administrative solutions. Hearing protection is often the only choice available.

Employees will be given the opportunity to select hearing protective devices from a variety of suitable ones provided by the Safety and Health Manager. In all cases the chosen hearing protectors shall have a Noise Reduction Ratio (NRR) high enough to reduce the noise at the ear drum to 85 dB (A) or lower.

Area noise monitoring will be conducted by the Safety and Health Manager using a sound level meter to determine the need for personnel monitoring or engineering controls. If any work areas register levels of 80 dB (A) or greater, personnel monitoring will be conducted. Personnel monitoring is accomplished by using noise dosimeters which are worn by employees for their full work shift. The cumulative noise dose for the employee is then read at the end of their work shift.

Policy:

It is the policy of Locke-Lane Construction, Inc. to provide employees with a safe working environment. This is accomplished by utilizing facilities and equipment that have all feasible safeguards incorporated into their design. When effective engineering controls are not feasible, or when they are being initiated, administrative controls will be used when and where possible followed by the use of personal protective equipment.

The primary goal of the Hearing Conservation Program is to reduce, and eventually eliminate hearing loss due to workplace noise exposures. The program includes the following elements:

- a. Work environments will be surveyed to identify potentially hazardous noise levels and personnel at risk.
- b. Environments that contain or equipment that produces potentially hazardous noise should, wherever it is technologically and economically feasible, be modified to reduce the noise level to acceptable levels.
- c. Where engineering controls are not feasible, administrative controls and/or the use of hearing protective devices will be employed.
- d. Periodic hearing testing will be conducted to monitor the effectiveness of the hearing conservation program. Early detection of temporary threshold shifts will allow further protective action to be taken before permanent hearing loss occurs.
- e. Education is vital to the overall success of a hearing conservation program. An understanding by employees of the permanent nature of noise-induced hearing loss, the Hearing Conservation Program, and the employee's responsibilities under the program are all essential for program effectiveness.

Responsibilities:

Safety and Health Manager-

The Safety and Health Manager is responsible for developing, implementing, and administering the Hearing Conservation Program. Additional responsibilities include:

1. Identification of work areas and equipment on the jobsite where noise levels equal or exceed 80 dB (A).

2. Identification, through personnel monitoring, of employees whose noise exposure level equals or exceeds an 8-hour TWA (Time-Weighted Average) of 80 dB(A). Notification of employee exposure measurements is sent to the Safety and Health Manager to be included in employees' medical files.
3. Annual re-monitoring of identified at-risk employees.
4. Resurvey of work areas and equipment where noise levels exceed 80 dB (A) every 2 years.
5. Training of employees in the need for, proper use and care of hearing protection devices.
6. Identification of noise control measures (including engineering and administrative controls) and recommendations.

The Safety and Health Manager is also responsible for coordinating and scheduling health and safety training courses and seminars. The Safety and Health Manager also maintains documentation of the training courses presented in accordance with the Safety Program requirements.

Superintendents-

It is the responsibility of Superintendents to ensure that all of their employees exposed to noise levels equal to or greater than 80 dB(A) have access to appropriate hearing protective devices in the work area. Superintendents are also responsible for enforcing the use of hearing protective devices and engineering and administrative controls in designated noise hazardous areas.

Employees-

Employees are responsible for wearing and maintaining hearing protective devices as instructed. Employees exposed to excessive levels of noise must also participate in annual training programs and the medical surveillance program that includes audiometric testing.

NOISE EVALUATION AND SURVEILLANCE PROCEDURES

Identification of Hazardous Noise Areas-

The Safety and Health Manager will identify work areas within jobsite where noise levels equal or exceed 80 dB (A). Records shall be maintained by the Safety and Health Manager and updated at least every two years to determine if any alteration in noise levels has occurred. Those areas where the noise levels are below 80 dB (A) will not be routinely monitored. Identification of hazardous noise areas and equipment and any subsequent noise monitoring will be conducted by the Safety and Health Manager.

Signs will be posted at the entrance to any work area where noise levels exceed 80 dB (A), requiring anyone entering the area to wear proper hearing protection. Personnel who work in these areas shall have hearing protection supplied to them, shall be instructed in its proper use, and be required to wear this equipment when in these identified areas. It is the responsibility of the superintendent to ensure that these precautions are maintained.

Equipment which produces noise levels greater than 80 dB (A), or 120 dB peak sound pressure levels shall also be appropriately labeled.

Noise Measurements and Exposure Assessments-

In order to effectively control noise, it is necessary that the noise be accurately measured according to standard procedures and that the measurements are properly evaluated against accepted criteria. All noise monitoring will be conducted in accordance with established standard operating procedures.

The monitoring of employees for noise exposure is made up of two parts, area, and personal monitoring. Area measurements are generally obtained first. If noise levels are at or above 80 dB (A), personal monitoring using dosimeters is then performed. Sample data sheets will be used to record monitoring data for both area and personal noise monitoring results.

Area Measurements

In an area survey, measurements of environmental noise levels are recorded using a sound level meter to identify work areas where employees' exposures may be above hazardous levels, and where more thorough exposure monitoring may be needed. Area monitoring is conducted using a calibrated sound level meter set to the A scale, slow response. Within the area of interest, several different locations will be measured. Typical measurement locations would include:

- In the hearing zone at the employee's normal work location.
- Next to the noise source(s).
- At the entrance(s) to the work area.
- At other locations within the area where the employee might spend time working.

If the noise levels are below 80 dB (A) on a time-weighted average basis in the area, no further routine monitoring will be required for that area. Should any of the noise measurements equal or exceed 80 dB (A), records shall be maintained as to the noise levels recorded, where they were taken, and the source(s) of the noise. These records shall be updated at least once every two years to determine if any changes have occurred that would warrant re-monitoring of exposed personnel. If any of the measurements equal or exceed a noise level of 80 dB (A), employees who work in or near the high noise area or equipment shall have their noise exposure determined through personnel monitoring using dosimeters.

Personnel Monitoring

Determination of the noise exposure level will be accomplished using calibrated noise dosimeters. Each employee to be monitored will have a dosimeter placed on him/her at the beginning of his/her normal work shift with the microphone placed in the "hearing zone". The dosimeter will be worn for the full duration of the work shift while the employee performs his/her normal work tasks. At the end of the work shift, the dosimeter will be removed, and information printed out as soon as possible. Background information will be collected from each employee detailing job description, unusual job activities, etc., for the time period sampled. Those employees whose noise exposure equals or exceeds 80 dB(A) on an 8-hour TWA (Time-Weighted Average) will be referred to the Safety and Health Manager for inclusion in the Hearing Conservation Medical Surveillance Program.

Re-monitoring of Hazardous Noise Areas

All areas where noise levels equal or exceed 80 dB (A) shall be re-monitored at least every two years. Employees who work for extended periods of time (>2 hours) in the high noise areas and where their 8-hour TWA (Time-Weighted Average) equals or exceeds 80 dB (A) will be monitored every year to determine their personal noise exposure.

Whenever an employee exhibits a standard threshold shift, as determined by the Safety and Health Manager, the employee's workplace shall be re-monitored to identify and ameliorate the cause.

Re-monitoring Due to Changes

Any area with noise levels that equal or exceed 80 dB(A) shall also be re-monitored whenever a change in production process, equipment, or controls increase the noise exposure such that additional employees are exposed to noise levels at or above 80 dB(A) on a time-weighted average basis. Areas where the noise levels have dropped below 80 dB (A) due to alterations in equipment, controls or process changes shall be eliminated from the monitoring program.

NOISE CONTROL METHODS

Engineering and Administrative Controls

The primary means of reducing or eliminating personnel exposure to hazardous noise is through the application of engineering controls. Engineering controls are defined as any modification or replacement of equipment, or related physical change at the noise source or along the transmission path that reduces the noise level at the employee's ear. Engineering controls such as mufflers on heavy equipment exhausts or on-air release valves are required where possible. Administrative controls are defined as changes in the work schedule or operations that reduce noise exposure. If engineering solutions cannot reduce the noise, administrative controls such as increasing the distance between the noise source and the worker or rotation of jobs between workers in the high noise area should be used if possible.

The use of engineering and administrative controls should reduce noise exposure to the point where the hazard to hearing is eliminated or at least more manageable.

Personal Protective Equipment

Hearing protective devices (ear plugs, muffs, etc.) shall be the permanent solution only when engineering or administrative controls are considered to be infeasible or cost prohibitive. Hearing protective devices are defined as any device that can be worn to reduce the level of sound entering the ear. Hearing protective devices shall be worn by all personnel when they must enter or work in an area where the operations generate noise levels of:

- Greater than 80 dB (A) sound levels, or
- 120 dB peak sound pressure level or greater

Types of Hearing Protective Devices Hearing protective devices include the following:

a. Insert Type Earplugs

A device designed to provide an air-tight seal with the ear canal. There are three types of insert earplugs – pre-molded, formable, and custom earplugs.

1. Pre-molded Earplugs

Pre-molded earplugs are pliable devices of fixed proportions. Two standard styles, single flange, and triple flange, come in various sizes, and will fit most people. Personnel responsible for fitting and dispensing earplugs will train users on proper insertion, wear, and care. While pre-molded earplugs are reusable, they may deteriorate and should be replaced periodically.

2. Formable

Formable earplugs come in just one size. Some are made of material which, after being compressed and inserted, expands to form a seal in the ear canal. When properly inserted, they provide noise attenuation values that are similar to those from correctly fitted pre-molded earplugs. Individual units may procure approved formable earplugs. Supervisors must instruct users in the proper use of these earplugs as part of the annual education program.

2. Formable Earplugs (continued)

Each earplug must be held in place while it expands enough to remain firmly seated. A set of earplugs with a cord attached is available. These earplugs may be washed and therefore are reusable but will have to be replaced after two or three weeks or when they no longer form an airtight seal when properly inserted.

3. Custom Molded Earplugs

A small percentage of the population cannot be fitted with standard pre-molded or formable earplugs. Custom earplugs can be made to fit the exact size and shape of the individual's ear canal. Individuals needing custom earplugs will be referred to an audiologist.

b. Earmuffs

Earmuffs are devices worn around the ear to reduce the level of noise that reaches the ear. Their effectiveness depends on an airtight seal between the cushion and the head.

Selection of Hearing Protective Devices

Employees will be given the opportunity to select hearing protective devices from a variety of suitable ones provided by the Office of Health and Safety. In all cases the chosen hearing protectors shall have a Noise Reduction Ratio (NRR) high enough to reduce the noise at the ear drum to 80 dB (A) or lower.

Issuance of Hearing Protective Devices

The issuance of hearing protective devices is handled through the Safety and Health Manager. The Safety and Health Manager will issue and fit the initial hearing protective devices (foam inserts, disposables). Instruction on the proper use and care of earplugs and earmuffs will be provided whenever HPDs (hearing protective devices) are dispensed. Personnel requiring earmuffs in addition to earplugs will be informed of this requirement and educated on the importance of using proper hearing protection. The Safety and Health Manager will dispense earmuffs when necessary and will maintain a supply of disposable earplugs.

Use of Hearing Protective Devices

- a. Always use and maintain HPDs as originally intended and in accordance with instructions provided.
- b. Earmuff performance may be degraded by anything that compromises the cushion-to-circumoral flesh seal. This includes other pieces of personal protective equipment such as eyewear, masks, face shields, and helmets.

Maintenance of Hearing Protective Devices

- a. Reusable earplugs, such as the triple flange or formable devices should be washed in lukewarm water using hand soap, rinsed in clean water, and dried thoroughly before use. Wet or damp earplugs should not be placed in their containers. Cleaning should be done as needed.
- b. Earmuff cushions should be kept clean. The plastic or foam cushions may be cleaned in the same way as earplugs, but the inside of the muff should not get wet. When not in use, earmuffs should be placed in open air to allow moisture that may have been absorbed into the cups to evaporate.

Hearing Protection Performance Information

The maximum of sound attenuation one gets when wearing hearing protection devices is limited by human body and bone conduction mechanisms. Even though a particular device may provide outstanding values of noise attenuation the actual noise reductions may be less because of the noise surrounding the head and body bypasses the hearing protector and is transmitted through tissue and bone pathways to the inner ear.

The term “double hearing protection” is misleading. The attenuation provided from any combination earplug and earmuff is not equal to the sum of their individual attenuation values.

MEDICAL SURVEILLANCE

Notification

Upon identification of employees whose 8-hour TWA (Time-Weighted Average) equals or exceeds 80 dB(A), the Safety and Health Manager will recommend to the employee’s Superintendent, in writing, of the need to enroll certain employee(s) in the Hearing Conservation Medical Surveillance Program. Information supplied to the Safety and Health Manager will include the employee(s).

Employees are encouraged to use hearing protective devices when they are exposed to hazardous noise during activities at home, e.g., from lawn mowers, chain saws, etc.

All personnel identified for inclusion in the hearing conservation program should receive a minimum of one hour of initial instruction in the requirements of the program. Ideally this will be done when hearing protection is dispensed.

A refresher training annually thereafter and will be provided by the immediate supervisor. Superintendent will be provided annual training by the Office of Health and Safety.

PROGRAMEVALUATION

Periodic program evaluations will be conducted to assess compliance with federal and state regulations and

Program requirements. Both the monitoring and audiometric testing portions of the Hearing Conservation Program will be reviewed annually to assure its quality and effectiveness.

An evaluation of the Program, including wearer acceptance, appraisal of protection afforded, and field audits of hearing protection use and record keeping will be conducted at least annually. Items to be considered include:

- a. Standard operating procedures
- b. Training records and course content for supervisors and employees.
- c. Maintenance of HPDs (hearing protection devices)
- d. Field audits of HPD use
- e. Review of recorded threshold shifts on OSHA log.

The findings of the Hearing Conservation Program evaluation will be documented, and this documentation will list plans to correct faults in the program and set target dates for the implementation of the plans.

RECORDKEEPING

All non-medical records (ex., work area and equipment surveys) will be maintained for a period of five years. Results of hearing tests and medical evaluations performed for hearing conservation purposes as well as noise exposure documentation shall be recorded and shall be a permanent part of an employee's health record.

All personnel who routinely work in designated hazardous noise areas shall be identified and a current roster of such personnel shall be maintained and by the Safety and Health Manager and updated periodically.

NOISE

Superintendents and exposed workers must become aware of and understand about the adverse effects of noise and how to prevent noise-induced hearing loss. People exposed to hazardous noise must take positive action if progressive permanent hearing loss is to be prevented. Each exposed worker and supervisor should know the following.

A. Noise exposure may result in permanent damage to the auditory system and there is no medical or surgical treatment for this type of hearing loss. Though the use of a hearing aid may provide some benefit, normal hearing will not be restored. Many people do not realize loud sounds can cause hearing loss. Furthermore, in its initial stages, the person may not notice a problem since noise-induced hearing loss is invisible, painless, and occurs in the high frequencies. It is dangerous to ignore the temporary characteristics of noise-induced hearing loss (such as ringing or buzzing in the ears, excessive fatigue, etc.).

B. Each person should know how to recognize hazardous noise even if a noise survey has not been conducted. Recognizing and understanding the adverse effects of off-duty noise exposures is also important. The best rule to follow is: "If you have to shout at arm's length (approximately three feet) to talk face-to-face, you are probably being exposed to hazardous levels of noise."

C. Preventing noise-induced hearing loss is accomplished by reducing both the time and intensity of exposure. Reducing exposure time is accomplished by avoiding any unnecessary exposure to loud sound. Reducing intensity is usually accomplished by wearing personal hearing protection. Each person must be able to properly wear and care for the particular type of hearing protection selected. Speech communication is difficult in

high intensity noise. However, most people do not realize it is easier to understand speech if hearing protection is worn in a hazardous noise environment. Hearing protection reduces the noise and the level of speech, resulting in a more favorable listening level. Hearing protection reduces the intensity of frequencies above the speech range; thus, reducing the noise and accentuating speech. People who claim wearing hearing protection makes it difficult to hear speech are probably in noise levels less than 85 dB (A) or have already developed a hearing loss.

D. Each person must know how to tell if they have been overexposed to loud sound. Overexposure may occur even while wearing hearing protection. Earplugs and/or earmuffs alone may not be enough protection. Each time a temporary threshold shift (TSS) occurs, a certain degree of permanent loss results. The recognizable symptoms of overexposure are described as “dullness in hearing or ringing in the ears.”

19. HEALTH HAZARD CONTROL PROGRAM

All operation, materials and equipment will be evaluated to determine the presence of hazardous environments or of hazardous or toxic agents could be released into the work environment. Activity and/or position hazard analyses will be used for the evaluation. The analyses will identify all substances; agents and environments that present a hazard and recommend hazard control measures. Engineering and administrative controls will be used to control hazards; in cases where engineering or administrative controls are not feasible, PPE may be used. An activity hazard analysis form and a hazard assessment form will be completed. These analyses will identify hazards and serve as certification of hazard assessment evaluated.

20. CONFINED SPACE

Purpose

The purpose of the Permit-Required Confined Space Program is to maximize personnel safety by preventing injuries when performing duties in permit-required confined spaces and to comply with OSHA’s standard 29 CFR 1910.146 for permit-required confined spaces.

Scope and Application

Locke-Lane Construction, Inc. has developed and implemented the permit-required confined space program to ensure safe entry into, and work within, permit spaces by authorized employees and for the prevention of unauthorized employee entry. This program applies to all employees and to all permit- required confined spaces known to be located at Locke-Lane Construction, Inc.

Procedures for Contractors Working in Designated Confined Space Areas

When Locke-Lane Construction, Inc. arranges to have employees of another employer (contractor) perform work that involves permit space entry, the Health and Safety Officer shall:

1. Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of this document.
2. Apprise the contractor of the elements, including the hazards identified with the space that makes the space in question a permit space.
3. Apprise the contractor of any precautions or procedures that Locke-Lane Construction, Inc., has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.

4. Debrief the contractor at the conclusion of the entry operations regarding the permit space program and regarding any hazards confronted or created in permit space during entry operations.

Entry Permit System

1. Before entry is authorized the Health and Safety Officer shall document the completion of measures necessary for safe entry operations including, but not limited to, the following:
 - a. Specifying acceptable entry conditions.
 - b. Isolating the permit space.
 - c. Purging, inserting, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards.
 - d. Providing barriers as necessary to protect entrants from external hazards.
 - e. Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.
2. Before entry begins, the entry supervisor identified on the permit shall sign the entry permit to authorize entry.
3. The completed permit shall be made available at the time of entry to all authorized entrants, by posting it at the entry portal or by any other equally effective means, so that the entrants can confirm that pre-entry preparations have been completed.
4. The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit.
5. The entry supervisor shall terminate entry and cancel the entry permit when:
 - a. The entry operations covered by the entry permit have been completed, or
 - b. A condition that is not allowed under the entry permit arises in or near the permit space.
6. The Health and Safety Officer shall retain each canceled entry permit for at least one year to facilitate review of the permit space program. Any problems encountered during an entry operation shall be noted on the pertinent permit, so that appropriate revisions to the permit space program can be made.
7. Review the permit space program annually using the canceled entry permits retained in Step F. Revise the permit space program as necessary to ensure that employees participating in entry operations are protected from permit space hazards.

Emergency Notification

It is the responsibility of the Entry Supervisor and/or the Entry Attendant to immediately notify the senior company employee on the worksite of a potential emergency by radio or cell phone (if allowed on site). The senior company employee will assess the situation and contact emergency response personnel if applicable.

Only those individuals trained and certified in confined space entry procedures on the worksite may assist in emergency rescue operations.

Rescue / Retrieval Systems

To facilitate emergency rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a confined space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant.

The entry supervisor, prior to the initial entry of personnel into a confined space, shall ensure the rescue equipment and retrieval system is functioning properly.

Retrieval systems shall meet the following requirements to the greatest extent possible.

- Each authorized entrant shall use a full body harness with a retrieval lifeline attached at the center of the entrant's back near shoulder level, or above the entrant's head or safety coveralls with built-in harness, with a retrieval lifeline attached at the near shoulder level of the entrant's back, or above the entrant's head
- Wristlets may be used in lieu of the full body harness if the entry supervisor can demonstrate that the use of a full body harness is not feasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative
- The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the confined space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type confined spaces more than 5 feet deep
- The safety harness shall be of the type that permits easy rescue of personnel from the confined space during emergency conditions and may be either the harness type that suspends a person in an upright position or the wrist type rescue harness. (A hoisting device or other effective means for lifting personnel from confined spaces is preferred)
- Lifelines shall have a minimum breaking strength of 5,400 pounds

Hazard Controls

1. Training:
 - a. Authorized entrants, attendants, and individuals authorizing or in charge of entry, must undergo permit confined space training or refresher training prior to confined space entry (See Section XI).
 - b. The Health and Safety Officer or designated person will conduct training and all training will be documented.
2. Employee Information: Signs shall be posted near permit space to notify employees of what hazards may be present and that only authorized entrants may enter the space.
3. Prevention of unauthorized entry: Measures such as training and posting signs will be used to prevent unauthorized employees from entry. Access within the confined space work area will be restricted to only those employees performing Confined Space Entry procedures.
4. Equipment:

The following equipment will be provided to employees, maintained properly, and employees will be instructed in the proper use of the equipment. Testing and monitoring equipment needed to comply with the Permit Space Entry Procedures:

 - a. Ventilating equipment needed to obtain acceptable entry conditions.
 - b. Communications equipment as necessary for compliance with the Entry Permit.
 - c. Personal protective equipment (in so far as feasible engineering and work practice controls do not adequately protect employees).
 - d. Lighting equipment needed to enable employees to see well enough to work safely and to exit the space quickly in an emergency.
 - e. Barriers and shields as requires by the Entry Permit.
 - f. Equipment, such as ladders, needed for safe ingress and egress by authorized entrants.
 - g. Rescue and emergency equipment as needed, except to the extent that the equipment is provided by rescue services.
 - h. Any other equipment necessary for safe entry in to and rescue from permit spaces.

21. HAZARDOUS ENERGY CONTROL PLAN

The procedures specified in this section comply with the requirements for the isolation or control of hazardous energy sources set forth in the OSHA standard (29 CFR 1910.147 – proposed). The accidental release of energy during maintenance or installation operation work can and frequently does cause severe injuries, amputations, and death. Energy can be present in the form of electricity, potential energy (due to gravity) stored in elevated masses, chemical corrosivity, chemical toxicity, or pressure.

The only exceptions (allowed by OSHA to these requirements) are those situations involving “hot tap” operations. For this exception to be valid, Company personnel involved must demonstrate that the continuity of services is essential, that shutdown of the energy source is impractical, and that documented (written) procedures and special equipment have been implemented that will provide proven effective protection.

These procedures apply to all maintenance or installation operations conducted on construction site.

TAG-OUT DEVICES

Tags affixed to energy isolating devices are warning devices that do not provide the physical restraint on those devices that a lock would provide. Any tag so attached to an energy-isolating device must not be removed without the authorization of the person who attached it, and it must never be bypassed, ignored, or otherwise defeated. Tags must be legible and understandable in order to be effective. Tags must be made of materials, which will withstand any environmental conditions that might be encountered on the construction site. When utilized, tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use. Tag-out devices must be substantial enough to prevent inadvertent or accidental removal.

Tag-out devices must warn against hazardous conditions if the machine or equipment is energized and must include appropriate warnings such as:

- DO NOT START
- DO NOT ENERGIZE
- DO NOT OPEN
- DO NOT OPERATE
- DO NOT CLOSE

LOCK-OUT DEVICES

Lockout devices and practices vary by nature and function. Several effective lockout devices and practices are listed as follows:

- Padlocks. Key operated padlocks are recommended and should be assigned individually.
- Multiple lock adapters will enable more than one worker to place their own padlock on the isolating

device to guarantee that the machine or equipment will remain deactivated until each and every employee completes their own task, and only then will the last padlock be removed.

- Chains or other commercially available devices should be used to prevent valves from being opened or, in some cases, closed. The principle of multiple lock adapters still applies even when chains or other devices are used on operations requiring more than one employee.

PROCEDURES:

GENERAL

If energy-isolating devices are not capable of being locked out, they must be modified so that they are capable of being locked out whenever major replacement, repair, renovation, or modification of the machine or equipment takes place. Whenever new machines or equipment are installed, energy-isolating devices for such machines or equipment must be designed to accept a lockout device.

If an isolating device cannot be locked out for any reason, then additional steps must be taken to assure full employee protection such as removing fuses, blocking switches, blanking off lines, etc.

If the machine or equipment is not capable of being locked out, a tag-out procedure must be documented and utilized. The tag-out procedure must provide full employee protection equivalent to a lockout system. For full employee protection, when a tag-out device is used on an energy-isolating device, the device must be attached at the same location that the lockout device would have been attached and must demonstrate that the tag-out device will provide a level of safety that is equivalent to that of a lockout system.

PLUG/CORD AND HOSE-CONNECTED TYPE EQUIPMENT

When servicing or installing plug/cord or hose connected electrical, pneumatic, or hydraulically powered equipment, the cord or hose shall be disconnected from the equipment to be worked on, prior to starting the work. A tag warning against reconnecting the plug or hose shall be affixed to the plug or hose end.

Any stored energy (e.g., capacitor voltage, hydraulic pressure) shall be safely released prior to the start of maintenance or installation work.

ELECTRICALLY POWERED EQUIPMENT

Electrically powered equipment shall be de-energized, and their source of electricity manually disconnected from them prior to the removal of protective covers or the start of other maintenance or installation work. It is important to recognize that locking and tagging on/off switches is often not sufficient to prevent accidental start up or prevent voltage from being present in the equipment. If the equipment is not wired properly (i.e., the polarity is reversed) or the switch is of the single pole type, voltage can be present even if the operating switch is in the off position. For these reasons, manual disconnects must be placed in the off position and/or the equipment's power fuses removed from the motor control center.

THE LOCK-OUT/TAG-OUT PROCEDURE IS AS FOLLOWS:

Each person working on the circuit or piece of equipment shall place a padlock and warning tag on the electrical isolation device (e.g., disconnect switch).

Each person working on the circuit or piece of equipment shall attempt to energize or start the piece of equipment prior to starting work. Each on/off switch capable of energizing the equipment must be “tried.”

If the try step reveals that the equipment is capable of being energized, the proper disconnects must be located and locked out and the try step repeated.

As each person completes his or her task, they shall remove their padlock and tag from the energy-isolating device.

All protective covers or panels shall be securely re-attached prior to energizing the equipment after work is completed. In the event that protective covers must be removed to make adjustments on energized equipment, appropriate guards must be constructed and attached in such a manner as to prevent employee contact with live circuitry capable of causing human injury. Such guards must be of durable construction, adequate to prevent injurious contact, and remain in place at all times that the equipment is energized.

STORED MECHANICAL ENERGY

In situations where equipment to be worked on has stored mechanical energy (e.g., in a flywheel or drop hammer), the stored energy must be released or blocked in a safe manner before starting maintenance or installation work. Effective blocking practices may include the installation of safety blocks or adequate supports. Under no circumstances will “bumper jacks” or “scissor jacks” be considered to be adequate blocks.

TRAINING

The purpose in providing training to employees is to ensure that they understand the purpose and function of the lock-out/tag-out program and procedures, and that they have the knowledge and skills required for the safe application, usage, and removal of energy controls.

Personnel who work around electrical equipment but who do not perform a primary duty of electrical system installation or maintenance will be briefed by their supervisor on the hazards of electricity and the proper precautions to observe.

Each authorized employee who will use a lock-out/tag-out procedure must receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available on the construction site, and the methods and means necessary for isolation and control.

Employees must be retrained whenever there is a change in their job assignment; a change in machines, equipment, or processes that present a new hazard; or when there is a change in the lock-out/tag-out procedures.

22. CRITICAL LIFT PROCEDURES

The plan covers minimum requirement for operating and maintaining mobile hoisting and personnel lifting equipment. The operation of the hoisting equipment includes traveling plant roads, entering blocks, setting up equipment and the actual lifting.

A Crane safe work permit is defined as the permit that must be issued by the block owner (or his designee) to the crane operator before any mobile hoisting work is done.

A Crane safe work permit will be issued by the block owner:

- For all lifts with mobile hoisting equipment having a capacity greater than ten (10) tons
- For all cranes if a critical lift is involved
- For all cranes if personnel are being lifted

The Critical lift plan will specify the exact size and weight of the load to be lifted and all crane and rigging components, which add to the weight. The Manufacturer's maximum load limits for the entire range of the lift as listed in the load charts will be specified.

The lift geometry and procedures including the crane position, height of the lift, the load radius, and the boom length and angle, for the entire range of the lift will be specified.

The crane operator lift supervisor and rigger will be designated and the qualifications stated.

The rigging plan will show the lift points and describes rigging procedures and hardware requirements.

The ground conditions, outrigger, or crawler track requirements, and if necessary, the design of the mats, to achieve a level stable foundation of sufficient bearing capacity for the lift will be describe.

Environmental or weather conditions under which lift operation will be suspended will be listed.

23. PREVENTION OF ALCOHOL AND DRUG ABUSE

Before an applicant is approved for employment, he/she must take a drug test. The drug test procedures will include urine sample collection, laboratory analysis reporting and record keeping of the final results.

If an applicant tests positive, he/she will be considered medically unqualified, and he/she will not be employable under these conditions.

If an applicant refuses to be tested, he/she will be considered medically unqualified and will not be employed.

Locke-Lane Construction, Inc. conducts random drug testing on our current employees. We will conduct a drug or alcohol test on any employee if a company official or a supervisor witnesses an employee performing in a manner that indicates the use of alcohol or a control substance. Management will prepare and sign a statement documenting the observation within 24 hours.

LOCKE-LANE CONSTRUCTION, INC. HAS AN EMPLOYEE ASSISTANCE PROGRAM (EAP)

The EAP program consists of the following:

- Effective training program of supervisory personnel and all employees.
- The effects and consequences of alcohol and drug abuse on personal health, safety, and the work environment.

- The manifestations and behavioral changes that may indicate alcohol or drug abuse.
- Documentation of training given to company supervisory personnel and employees
- The program for all employees and supervisory personnel consists of at least 60 minutes of training.

24. ELECTRICAL SAFETY

All electrical wiring and equipment will be a type listed by UL, Factory Mutual Engineering Corp., or another recognized test or listing agency for the specific application. All installation will comply with the (NESC) and NEC. Personnel familiar with code requirements and qualified for the class of work will perform all work.

Temporary power lines, switch boxed, receptacle boxed, metal cabinets, and enclosures around equipment will be marked to indicate to maximum operating voltage.

NEMA standard plug and receptacle will be used where a NEMA standard configuration exists for a particular voltage, amperage, frequency, or type of circuit.

Extension cords or cables will not be fastened with staples, hung from nails, or suspended by bare wire. All electrical circuits will be grounded in accordance with the NEC and the NESC.

A multi-conductor cord having an identified grounding conductor will ground portable and semi-portable electrical tools and equipment and multi-contact polarized plug-in receptacle.

Ground fault circuit interrupters (GFCI) will be in all circuits used by portable electric tools. The GFCI will be calibrated to trip within the threshold values of 5 MA & 1 MS as specified in UL standard 943. All GFCI will be listed and installed in accordance with most recent edition NEC.

HAND AND POWER TOOLS

All hand tools will be in good repair and used only for the purpose for which designed. Only non-sparking tools will be used in location where sources of ignition may cause a fire or explosion. Power tools will be inspected, tested, and determined to be in safe operating condition prior to use. Continued periodic inspection will be made to assure safe operating and proper maintenance.

Guarding, use care and protection abrasive wheels will be in accordance with ANSI B7.1. Work or tools rest will not be adjusted wheel grinding while in is in motion.

Safety clips or retainers will be installed and maintained on pneumatic impact tool to prevent dies and tools from being accidentally expelled from the barrel.

Safety lashing will provide a connection between tools and hose, and at all quick makeup-type connections.

25. MACHINERY AND MECHANIZED EQUIPMENT

Before any machinery or mechanized equipment is placed in use it will be inspected and tested by the Health and Safety Officer, a Subcontractor or Rental Company's competent mechanic and certified to be in safe operating conditions. All mechanical equipment (trucks, cranes, forklifts, backhoes, graders, etc.) shall be inspected prior to use and at fixed intervals throughout the life of the contract. The inspection results will be

recorded on an SAP form 1666D-R and 1666E-R. The designated authority will be furnished a copy of the form. The Health and Safety Officer and a person designated by the subcontractor will be responsible for the inspection of all machinery and equipment daily and during use to make sure it is in safe operating condition. Tests are conducted at the beginning of each shift during which the equipment is to be used to determine that the brakes and operating systems are in proper working conditions.

Hoisting equipment will be loaded tested in accordance with manufacturer instructions. Machinery and mechanized equipment will be operated in accordance with manufacturer instruction and operation.

Before any piece of equipment is brought onto the job it will be equipped with Roll Over Protection Structures (ROPS) or a certificate from: (1) the manufacturer of the piece of equipment, (2) the manufacturer of ROPS or (3) a registered professional engineer.

26. FALL PROTECTION

Policy

It is the policy of Locke-Lane Construction, Inc. to take all practical measure possible to prevent employees from being injured by falls from heights. Locke-Lane Construction, Inc. will comply fully with OSHA Fall Protection standard (CFR 1926, Subpart M, Fall Protection).

Personal fall arrest system requires the use of body harnesses; body belts are not acceptable as part of the personal fall arrest systems. The use of a body belt is permitted in a positioning device system. The personal fall arrest system will be in accordance with EM 385-1-1.

Body belts and harnesses: Connectors will be drop forged, pressed, or formed steel, or made of equivalent material; will have corrosion resistant finish; and all surfaces and edges will be smooth to prevent damage to interfacing parts of the system. D-rings, snap hooks, and other connectors will have a minimum tensile strength of 2,270 kg (5,000 lbs.); D-rings and snap hooks will be proof-tested to a minimum tensile load of 1,600 kg (3,600 lbs.) without cracking, breaking, or taking permanent deformation. Proof testing is typically conducted by manufacturer, and a specification of proof testing supplied with the manufactured good.

Body belt/harness systems will decelerate and bring the employee to a complete stop with 1-m (42 in), excluding lifeline elongation, after free fall distance. Body belt harness systems, when stopping or preventing a fall, shall not produce an arresting force on an employee of more than 10 times the employee's weight or 800 kg (1,800 lbs.) whichever is lower. Body belts shall be at least 4-cm (1-5/8 in wide).

Lanyards and vertical lifelines will have a minimum tensile strength of 2,270-kg (5,000 lbs.). Horizontal lifelines will be designed, installed, and used under the supervision of a qualified person as part of a complete personal fall arrest system, which maintains a factor of safety of at least two. Self-retracting lifelines and lanyards that automatically limit free fall distance to 60 cm (2 ft) or less will be capable of sustaining a minimum tensile load of 1,360 (3,000 lbs.) applied to the device with the lifeline or lanyard in the fully extended position. Self-retracting lifelines and lanyards that do not limit free fall distance to 60 cm (2 ft) or less rip stitch lanyards, and tearing and deforming lanyards will be capable of sustaining a minimum tensile load of 2,270 kg (5,000 lbs.) applied to the device with the lifeline or lanyard in fully extended position.

27. SCAFFOLDING AND ELEVATED PLATFORMS

Only coupler or tubular welded frame scaffolding will be utilized on site. It shall be fabricated according to OSHA standards, as specified in 29 CFR 1910.22, .23, and .28 and 385-1-1.

The Health and Safety Officer and the subcontractor's supervisor will inspect all platforms or scaffolds prior to use.

Only qualified and competent personnel are allowed to modify scaffolding systems. Non-qualified personnel may create more hazards. If modifications are attempted by non-qualified personnel, they will be subject disciplinary action up to and including termination of employment.

Our employees who erect, disassemble, move, operate, repair, maintain or inspect scaffolds will be trained by our competent person to recognize the hazards associated with the work being done. The training will include the following, as applicable:

- The nature of scaffold hazards.
- The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting and maintain the type of scaffold in question.
- The design criteria, maximum intended load-carrying capacity and intended use of the scaffold.
- Tagging of scaffolds.

All elevated platforms shall be surrounded by a standard guardrail, securely fastened to a stationary object, and have a floor capable of withstanding a working load of 75 pounds per square foot.

Scaffolds with wheels constructed on the base (bottom) section shall not be used unless all wheels are intact and at least one wheel on each side is locked to prevent movement.

The following are general scaffolding rules:

- 1) Know scaffolding safety rules prior to set up, during operations, and for dismantling of scaffolding. Ensure manufacturer's instructions and safety warnings are legible and remain on scaffolding.
- 2) Inspect the equipment before use for damage or deterioration.
- 3) Keep equipment in good repair.
- 4) Inspect fabricated scaffolds regularly to ensure they are maintained in a safe condition.
- 5) Provide adequate sills and posts and use base plates.
- 6) Anchor wall scaffolds securely between structure and scaffold.
- 7) Use caution when working near power lines. Never be any closer than 10 feet to electrical power lines.
- 8) Use adjusting screws instead of blocking to adjust for uneven grades. Use outriggers where so equipped.

- 9) Equip all planked areas with proper guardrails and toe-boards.
- 10) Do not ride rolling scaffolding.
- 11) Do not leave materials and equipment on the platform when moving scaffolding.
- 12) Do not try to move rolling scaffolding without help.
- 13) Do not extend adjusting screws over 12 inches.
- 14) Do not let working platform height exceed four times the smallest base dimension unless guyed or otherwise stabilized.
- 15) Do not overload scaffold.
- 16) Do not use ladders or makeshift devices on top of scaffolds to increase height.
- 17) Ensure the footing and anchorage for scaffolds are sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Do not use unstable objects such as barrels, boxes, loose bricks, or concrete blocks, etc., to support scaffolds or planks.

A copy of this Safety and Health Plan will be provided to our subcontractors. Subcontractors performing work which required fall protection and scaffolding are required to submit detailed fall protection and scaffolding policy.

28. TRENCHING AND EXCAVATION

Prior to opening an excavation, underground utilities will be located and protected from damage or displacement.

INSPECTION

The excavation will be inspected daily, as needed throughout work shifts, and after every rainstorm or other hazard increasing occurrence by a competent person. The sides of all excavations in which employees are exposed to danger from moving ground will be guarded by a support system, sloping, or benching of the ground, or other equivalent means.

Excavation less than 5 feet in depth and which a competent person examines and determines there to be no potential for cave-in does not require protective systems. Sloping and benching of the ground will be in accordance with section 25.C of EM 385-1-1. Where sloping and benching is not feasible due to size constraints, trench boxes or other approved methods of shoring will be employed in all excavations over 4 feet in depth. All shoring (trench boxes) used will be load certified by a registered professional engineer and all employees will be trained in their use.

PROTECTIVE SYSTEMS

Protective systems will have the capacity to resist without failure all loads that are intended or could reasonably occur until underpinning and shoring have been installed.

PROTECTION FROM WATER

Diversion ditches, dikes, or other means will be used to prevent surface water from entering the excavation and to provide good drainage of the area adjacent to the excavation. Employees will not be allowed to enter or work in excavations in which there is accumulated water without controls in place. Controls such as portable pumps and well points may be required.

PROTECTION FROM FALLING MATERIAL

Excavated material will be placed at least 2 feet from the edge of the excavation. Excavations will be constantly monitored and backfilled as soon as possible. Barricades and protective measures will be provided to protect pedestrians and vehicular traffic. Locke-Lane Construction, Inc. does not intend to ever leave an excavation open overnight. Open trenches adjacent to rural highways such as NC Highway 73 are extremely dangerous and cannot be left open or unprotected.

SAFE ACCESS

Where personnel are required to enter an excavation over 4 feet in depth, sufficient stairs, ramps, or ladders will be provided at no more than 25 feet of lateral travel. At least 2 means of exit will be provided for personnel working in excavations.

29. SANITATION

Portable chemical toilet units will be used to manage human waste. Locke-Lane Construction, Inc. will contract directly with a North Carolina licensed portable toilet company that shall provide adequate quantities of portable toilet units to accommodate the construction crew population (per suggested standard, one unit per 20 workers, or as specified in EM 385-1-1).

Portable toilet units shall be strategically located immediately adjacent from work areas.

The Portable Toilet Contractor shall maintain portable toilet facilities. Frequency of maintenance program shall be, as a minimum once per week and or on an as needed basis. Portable toilet Contractor shall respond to maintenance calls within a one workday period.

Locke-Lane Construction, Inc. and subcontractors will provide potable water for drinking purposes but the distribution of this water & the provision of drinking cups will be the responsibility of the subcontractors. For crews, insulated water jugs will be provided for each crew including disposable water cups.

30. ACTIVITY HAZARD ANALYSIS

At the beginning of each phase of construction, an Activity Hazard Analysis will be performed, which will be documented and added as an addendum to this Safety and Health Plan. JHA's will be developed for the tasks related to each definable feature of work as defined by the Preparatory Meeting. Examples of various tasks are lifting and handling materials, fall hazards, excavation/backfilling, material storage, employee exposure, etc. The Job Hazard Analysis shall include as necessary:

- Description of the work
- Identify Probable Hazards related to that work

- Precautionary measures to be taken to reduce or eliminate the hazard.

31. RADIOLOGICAL EQUIPMENT

Locke-Lane Construction, Inc. does not plan to use radiological equipment.

32. FIRST AID / ROUTE TO HOSPITAL

First aid and medical facilities will be made available. In the absence of those facilities Locke-Lane Construction, Inc. employees are trained each year to render emergency first aid if needed. A first aid kit will be available and easily accessible on site. Before workers are sent to a work site, Locke-Lane Construction ensures that arrangements are in place to transport injured or ill workers from the work site to the nearest health care facility. An ambulance service will be used when readily available to the work site with normal traveling conditions. If an ambulance service is not readily available to the work site, or if travel conditions are not normal Locke-Lane Construction will have transportation available to travel with the injured or ill employee.

Emergency Medical Support will be provided by (Name of Hospital) located at (Address of Facility). This facility is located approximately () miles from the jobsite and () minutes from the (Project Site). Map for site specific emergency routes will be attached.

33.PERSONAL COMMUNICATION DEVICES

Locke-Lane Construction will not allow any employees to use cellphones during operation of any equipment on the job site. Earphone use will not be allowed by any employee on the job site.

34.TRAFFIC CONTROL/ DRIVING PLAN

Locke-Lane will provide traffic control if the job deems it necessary. Possible controls are as follows: traffic cones, barrels, signage, barricades along with flagmen. With every site being different a site-specific driving shall be written for each job. This will include any and all speed limits, acceptable routes, whether or not spotters are required. Seatbelts shall be worn at all times in both vehicles and equipment. Any special instructions given by the customer shall be part of the site-specific driving plan.

35.HEAT AND / OR COLD STRESS - HYDRATION PLAN

During all seasons not just summer, hydration issues are to be addressed. This is carried out through PJB's and reminding employees multiple times a day to hydrate. Locke-Lane shall provide drinking water at all times and can be found in a cooler inside the office trailer. During summer months the number of breaks taken per day shall be adjusted according to the temperature and humidity. Employees are encouraged to take breaks in a shaded area or the office trailer where AC is provided. Employees are taught the signs and symptoms of heat stress (pale clammy skin, nausea, etc.) and to inform the superintendent or HSO

immediately who will then notify the IM and control room. Employees are also taught to hydrate the night before a hot day, that hydration beforehand helps twice as much as the day of. If a case of heat stress is spotted it is to be handled by injury protocols. Inform proper personnel allow control room to call for an ambulance. As soon as the individual has professional medical care the event is to be recorded and all available information provided to Duke for the Root Cause Analyses. Our process for determining heat stress possibility's is as follows.

1. Planning the work

2. Measuring the conditions
3. Incorporating controls
4. Implementing work practice methods and observation of workers
5. Implementing work/rest administrative controls each step-in detail:
 1. Taking the time to properly examine the work to be done and the location of the work has to be considered. For example, there are large differences between working elevated in an open-air environment and working in a trench where a natural breeze is very unlikely. The type of work has to be looked at as well, will the employee be performing lightwork (In a sitting position with just light hand work/ driving equipment/ standing with light hand work and occasional walking.) Moderate work: (Sustained moderate hand work, moderate arm and leg work, normal walking.) Heavy work: Intense arm and torso work, carrying heavy loads, pushing pulling heavy loads, walking and or working at a fast pace. Next the appropriate PPE shall be looked at as to how it will increase the insulative value of their clothing. When planning the work acclimatization is to be considered, when is the last time the employee worked in high temperatures. Use the following chart to decide appropriate intervals for exposer.

Schedule of Re-acclimation after Different Periods Away from Heat Exposures		
Routine Absence	Illness	Percent (%) Exposure
3 - 5 days	1 - 3 days	90% 1 st Day
6 - 12 days	4 - 5 days	50% 1st Day 90% 2nd Day
13 - 20 days	6 - 8 days	50% 1st Day 75% 2nd Day
>20 days	>8 days	50% 1st Day 60% 2nd Day 70% 3rd Day 80% 4th Day

Example: A worker has not been working in high heat environment for 19 days. The worker should become acclimated by working the following schedule:

1st day back: Half the Action Time

2nd day back: Three Quarters of the Action Time 3rd day back: 90% of the Action Time

The worker has the right to work at their own pace and remove themselves from the hazardous heat environment when experiencing the beginning of heat signs.

2. When measuring conditions, it is the site HSO's responsibility to monitor temperatures and heat indexes for the day. Adhere to all NOAA heat alerts and respond accordingly. In extreme conditions work cancellation may be necessary or time of day for shift start may be changed. As with the planning of the work clothing and PPE must be taken into consideration when monitoring conditions. The preferred method for measuring the heat load on employee's is WBGT which approximates the evaporation of sweat, heat absorbed by radiation and general temperature. When WBGT is not available the Heat Stress Index may be used.

Heat Index Chart

Humidity	80	82	84	86	88	90	92	94	96	98	100	102	104	106
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124
45	80	82	84	87	89	92	96	100	104	109	114	119	124	130
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137
55	81	84	86	89	93	97	101	106	112	117	124	130	137	145
60	82	84	88	91	95	100	105	110	116	123	129	137	145	153
65	82	85	89	93	98	103	108	114	121	128	136	144	153	162
70	83	86	90	95	100	106	112	119	126	134	143	152	161	172
75	84	88	92	97	103	109	116	124	132	141	150	160	171	182
80	84	89	94	100	106	113	121	129	138	148	158	169	181	193
85	85	90	96	102	110	117	126	135	145	155	167	179	191	204
90	86	91	98	105	113	122	131	141	152	164	176	189	202	216
95	86	93	100	108	117	127	137	148	160	172	185	199	214	229
100	87	95	103	112	121	132	143	155	168	181	195	210	226	243
<div>Caution</div> <div>Extreme Caution</div> <div>Danger</div> <div>Extreme Danger</div>														

Personal Protective Gear: Add 10° F (Rubber Sleeves, Rain Suit, Chaps, etc.)

Heat Index	Signs of Heat
Caution	Fatigue
Extreme	Likely: Fatigue, Heat Rash and Heat Cramps Possible Heat
Danger	Likely: Fatigue, Heat Rash, Heat Cramps, Heat Exhaustion Possible:
Extreme	Likely: Heat Stroke

3. Incorporating Controls: Once initial information is collected, decisions can be made about controls to reduce heat stress risk. All jobs in high temperature environments should address heat controls in the planning stages.

Possible Controls are: a. Equipment to cool and or dehumidify the environment

b. Potable water, shade, and a cooling recovery area

c. Tools which require less physical effort to operate

d. Changing clothing requirements to aid in cooling

e. Add general air movement and ventilation

f. Shield radiant heat sources, example portable tent to cover localized work area

4. Work practice methods, Administrative Controls and Observing and Monitoring Workers Hydration is the most imperative control for heat stress. Workers are encouraged repeatedly to drink water at home as well as at work. Locke-Lane goes through great pains to insure our employees and sub- contractors understand the importance of hydration. Education on the symptoms and signs of dehydration have made considerable difference in preventing heat related injuries. Our workers are taught not to rely on thirst as an indicator, but rather to drink at least 8 ounces of water every 15-20 minutes during high exertion activities. We also teach the importance of hydrating regularly when not at work so as to maintain proper hydration levels at work. Employees are also taught to stay away from drinks that contain caffeine, alcohol and/or diuretics, because all make it harder for your system to adsorb and retain water.

Heat Index	Work Level	Work / Recovery	Hydration
< 90	Light	55 / 5	1 - pint / hr.
	Moderate	50 / 10	2 - pint / hr.
	Heavy	45 / 15	3 - pint / hr.
90 - 103	Light	50 / 10	1 - pint / hr.
	Moderate	45 / 15	2 - pint / hr.
	Heavy	40 / 20	3 - pint / hr.
104 - 111	Light	50 / 10	2 - pint / hr.
	Moderate	40 / 20	3 - pint / hr.
	Heavy	35 / 25	3 - pint / hr.
112 - 121	Light	40 / 20	2 - pint / hr.
	Moderate	30 / 30	3 - pint / hr.
	Heavy	20 / 40	3 - pint / hr.
122 - 129	Light	30 / 30	2 - pint / hr.
	Moderate	20 / 40	3 - pint / hr.
	Heavy	15 / 45	4 - pint / hr.
> 129	No Work	No work	Ensure hydration
Caution: Water Intoxication - Drinking too much water			

Observation of the workers is an important aspect of heat stress management. Issues to look for include:

- a. Behavior, knowing and observing our workers can give leading indicators to the onset of heat stress
- b. Signs of a medical emergency can include one or more of the following:
 - I. Disorientation
 - II. Unexplained irritability
 - III. Chills
 - IV. Vague feeling of unease
 - V. Exhaustion
 - VI. . Prolonged and profuse sweating

To maintain useful observation the hours worked, and number of breaks taken by each employee during excessive temperatures shall be recorded and gone over at the start of each day to ensure workers are receiving adequate recovery time.

5. Administrative Controls: Using all of the information acquired in the previous steps, the site HSO who is designated as the hydration monitor will make decisions as to a worker's ability to perform his or her job safely. Looking at hours worked, time since last day off and temperatures he has worked in will be used to create scheduling that gives all employees required rest periods. To determine the action time, recovery time and check time use the following formula and charts.

Determine the WBGT - measure the air temperature (dry bulb), radiant heat (globe temperature), and humidity (wet bulb). If your measurement device does not calculate the WBGT, use the following information:

WBGT Index is measured using the natural wet bulb temperature (NWB), the globe temperature (GT) and the dry bulb air temperature (DB). WBGT values are calculated by the following equations:

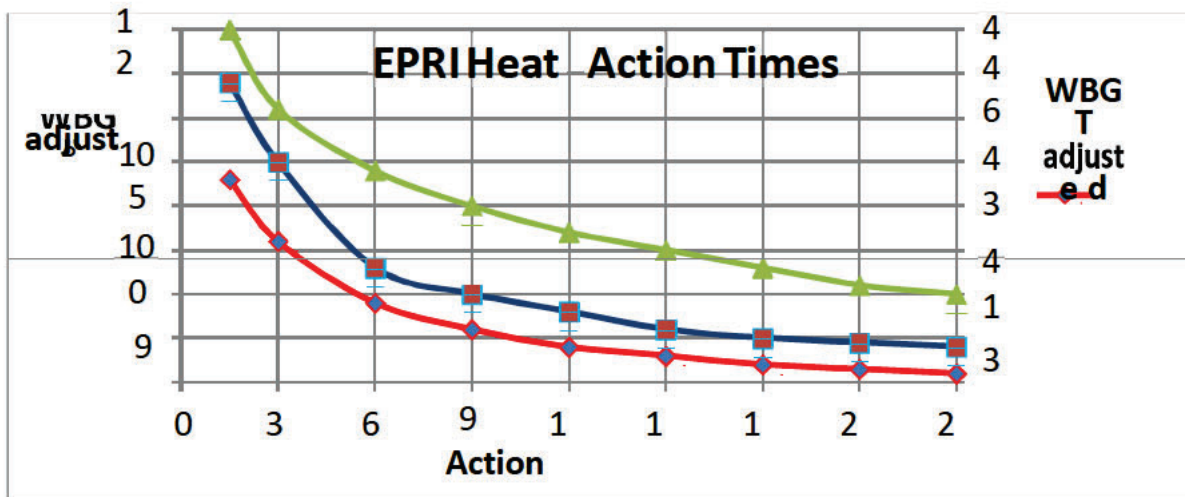
- a) Indoor exposure or outdoor exposure with no solar load: **WBGT = 0.7NWB + 0.3GT**
- b) Outdoor exposure with solar load: **WBGT = 0.7NWB + 0.2GT + 0.1DB**

NOTE: In some cases, it may not be feasible to measure the WBGT level. In those cases, an estimate can be made.

EPRI Heat Stay Times based on Workload and Sum of WBGT and Clothing factor1 (EPRI 1991)

Action Time (min)	Work Level		
	Heavy Work	Moderate	Light
	Effective Temperature is WBGT + Clothing		
15	104°F	115°F	120°F
30	96	105	111
60	89	93	104
90	86	90	100
120	84	88	97
150	83	86	95
180	82	85	93
210	81.5	84.5	91
240	81	84	90

1 The WBGT shown are the sum of the Instrument WBGT *plus* Adjustment for Clothing. Clothing Factors are provided below.



In the event of a heat stress event use the following questionnaire to help evaluate the incident.

This is an effort to help collect information for heat related incidents, so the information can be used to make changes to our program or increase efforts in preventing heat stress incidents.

What was the weather outside? (check all that apply)

_ Sunny _ Overcast _ Rainy _ Muggy _ Windy _ _ Stale _ Cloudy Other _____

1. Was there any air movement at the work location? Yes No _
2. What was the guidance given to the worker to prevent heat stress?
3. Was a hydration coach noted on the job brief for this job?
4. What was the worker's work history the last week? (#hours worked, double shift worked, call out worked)
5. Was heat stress recognized as a potential safety issue for this job? Yes No _
6. What was the worker's task prior to the job where the heat stress incident occurred?
7. Where did the incident occur? Indoors Outdoors _
8. What was the job scope for the day?
9. What was the temperature and humidity levels at the time of the incident?

Temperature o F	Check	Humidity %	Check
80-85		Below 50	
85-90		60- 70	
90-95		70-80	
95-100		80-85	
100-105		85-90	
105-110		90-95	
110 and above		95-100	

10. What type of clothing was the worker wearing?

All cotton shirt/pants	
Cotton shirt /denim	
FR Shirt/ denim pants	
FR Shirt and pants	
Other?	

11. Was the worker wearing layers of clothing? Yes _____ No _____ Sleeves? Yes _____ No _____
12. Was the worker wearing gloves? Yes _____ No _____
13. What was the weather outside? (check all that apply)
- _____ Sunny _____ Overcast _____ Rainy _____ Muggy _____ Windy _____ Stale _____ Cloudy Other _____

14. Was there any air movement at the work location? Yes No_
15. What was the guidance given to the worker to prevent heat stress?
16. Was a hydration coach noted on the job brief for this job?
17. What was the worker's work history the last week? (#hours worked, double shift worked, call out worked)

Locke-Lane Construction will monitor weather reports daily and provide drinking water, radiant heaters and / or reduce wind chill / drifts to all personnel exposed to high heat and / or cold temperatures. Employees are trained on noticing signs of cold and heat related illnesses (i.e., heat stroke, heat cramps, heat rash, frostbite, hypothermia, trench foot) and the steps it takes to help treat such illnesses or request emergency medical help by calling 911.

36. DROPPED OBJECT PREVENTION

Locke-Lane Construction has trained all employees on potential dropped object hazards. All hand-held tools used in overhead work must be secured/tethered to the employee during transit. When materials are transferred via forklift or material handler, they will be strapped securely to the forks. An exclusion zone will be established around the work zone. No one may enter the established work zone unless they received permission from the Locke-Lane Construction superintendent. If an incident occurs, they are to report it immediately to the Locke-Lane Construction Safety Personnel on site.

Policy:

The employee or acting as a subcontractor of Locke-Lane Construction shall follow safe work practices and methods when working with objects from height to prevent injury and equipment damage.

Inspection:

Routine inspections will occur to identify any potential of dropped-objects and for safe work practices to minimize the potential for injury or equipment damage caused by falling objects. Dropped objects will be included on the Health & Safety Officer daily safety inspections, the subcontractor's foremen or supervisors will also conduct daily safety inspections and monitor the work throughout the day.

Equipment and Training:

Preventing tools and overhead from falling requires proper training. Workers should know how to use tools overhead, understand primary and secondary means of securement, and most of all, they should understand exactly what they are looking for when inspecting an item. Hands on training will be conducted as needed for the job tasks identified by the PRE- JOB BRIEF.

Safe workers' measures should include but are not limited to:

- All tools will be secured with manufactured tool tethers except when working around rotating equipment when at elevations greater than six feet above grade or where dropped tools could fall more than six feet
- Provide barricades and signage below elevated work areas to prevent personnel from

entering

- Utilize tool bags for lifting and lowering tools and equipment. The tool bags shall be equipped with a locking snap hook
- Provide and installed netting or plywood on the guardrails (toe board – to-rail) on elevated platforms (including aerial lifts) and scaffolds where the potential for falling objects exist
- Secure all materials stored on elevated work platforms
- Secure materials during transport to ensure positive control at all times
- Conduct periodic dropped / falling object hazard assessments and inspections Accountability
- All workers shall read, understand, and commit to the Locke-Lane Construction DROPPED OBJECT policy, which subjects them to the disciplinary procedure for non-compliance.

37. FORKLIFT OPERATIONS

Policy

Forklifts (powered industrial trucks) shall be operated, maintained, and controlled in a safe manner.

This policy covers minimum performance standards applicable to all Locke-Lane Construction employees and locations. Local practices requiring more detailed or stringent rules, or local, state, or other federal requirements regarding this subject can and should be added as an addendum to this procedure as applicable.

Purpose

To define the procedures and standards that apply to the care, control, maintenance, inspection, and operation of forklifts (powered industrial trucks).

Scope

Locke-Lane Construction work sites, i.e., **Locke-Lane Construction** offices, client job sites, etc. requiring the use of forklifts (powered industrial trucks).

Definitions

Forklift means a mobile, power-propelled truck used to carry, push, pull, lift, stack, or tier materials. Powered industrial trucks (forklifts) are also commonly known as pallet trucks, rider trucks, fork trucks, or lift trucks.

Requirements

Training

Only trained and authorized persons are permitted to operate a forklift. No employees are allowed to operate a forklift without the proper training. The Branch Safety Officer or designee will administer the forklift operator certification program and maintain training records.

Training shall occur prior to employee operation of any **Locke-Lane Construction** forklift, and at least every three years thereafter unless observed performance by the operator dictates the need for more frequent retraining. A training guide is included in Appendix 19-1. The following requirements shall be met to become a "Qualified Forklift Operator":

- Complete the educational requirement as stated above and described in detail on Appendix 19-1.
- Perform the demonstrated capability requirement satisfactorily. Each trainee, who satisfactorily completes the qualifications as outlined above, shall be issued a written document as evidence of being a Qualified Forklift Operator.

Inspection and Maintenance

Prior to placing a forklift truck into service, the truck operator shall inspect their vehicle and document this inspection on the **Locke-Lane Construction** Forklift Inspection Form (reference Appendix 19-2). This inspection is not necessary on days when the forklift will not be placed into service.

It is the responsibility of the department manager to submit the inspection checklists to the Safety Officer on a weekly basis. The Branch Safety Officer shall keep the last 30 days of inspection checklists for each forklift on file for review.

Any noted condition that affects the safe operation of the lift truck shall be reported to the operator's supervisor for corrective action and shall keep the lift truck from being operated until the unsafe condition is corrected.

Forklifts that are defective, in need of repair or are unsafe shall be tagged "Danger - Do Not Operate" and taken out of service until restored to safe operating condition.

A maintenance log shall be maintained for each forklift to determine when required maintenance is due. Only qualified personnel shall perform maintenance and repair. Maintenance records for each forklift shall be kept on file by the assigned department manager.

General Safe Operating Rules

The following safe operating rules apply to Locke-Lane Construction employees who operate a forklift. Violations of safe operating rules can and will result in retraining and/or disciplinary action.

- Only Locke-Lane Construction employees trained as per the requirements of this manual section and authorized by the department manager shall be allowed to operate forklifts
- Locke-Lane Construction forklifts shall not be loaned or rented to others for use.
- Stunt driving and horseplay shall not be permitted.
- Forklifts shall be equipped with seat belts and utilized by the operator when in use.
- Personnel are not permitted to ride on forklifts except in designated seats that are part of the equipment design.
- Forklifts shall be equipped with a portable fire extinguisher.
- Under travel conditions, the forklift shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- Traffic regulations shall be observed, including authorized work site speed limits. A safe distance shall be maintained approximately three forklift lengths from the forklift truck ahead.

- The driver shall be required to slow down and sound the horn at cross aisles and other areas where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- The driver shall be required to look in the direction of and keep a clear view of the path of travel.
- Forklifts shall have a functional horn and back-up alarm with a distinctive sound, loud enough to be heard clearly above other local background noises. There are other scenarios where a flashing yellow/amber light would be installed. An Addendum referencing any requirements of such lights shall be added to this manual section.
- Copies of the manufacturer's operating instructions for each type of forklift shall be readily available for review by operators and supervisory personnel.
- Lift trucks, stackers, etc., shall have the rated capacity clearly posted on the vehicle so as to be clearly visible to the operator. When the manufacturer provides auxiliary removable counterweights, corresponding alternate rated capacities also shall be clearly shown on the vehicle. These ratings shall not be exceeded.
- No modifications or additions, which affect the capacity or safe operation of the equipment, shall be made without the manufacturer's written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly. In no case shall the original safety factor of the equipment be reduced.
- Steering or spinner knobs shall not be attached to the steering wheel unless the steering mechanism is of a type that prevents road reactions from causing the steering hand wheel to spin. The steering knob shall be mounted within the periphery of the wheel.

Forklifts shall have the manufacturer's nameplate showing its weight with attachments, lifting capacity, lift height maximum and other pertinent data. Nameplates or markings shall be maintained in a legible condition and remain in place.

Railroad tracks shall be crossed diagonally wherever possible. Parking closer than 8 feet from the center of railroad tracks is prohibited.

- Grades shall be ascended or descended slowly.
- When ascending or descending grades in excess of 10 percent, loaded forklifts shall be driven with the load upgrade.
- Unloaded forklifts should be operated on all grades with the load engaging means downgrade.
- On grades, the load and load engaging means shall be tilted back if applicable and raised only as far as necessary to clear the road surface.
- No person shall be allowed to stand or pass under the elevated portion of any forklift, whether loaded or empty.
- There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.
- Arms or legs are prohibited from being placed between the uprights of the mast or outside the running lines of the forklift.
- ☐ When a forklift is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes set.
- Wheels shall be blocked if parked on an incline.
- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform, or freight car. Forklifts shall not be used for opening or

closing freight doors.

- Brakes shall be set, and wheel blocks shall be in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor. Prior to forklift entry, the flooring and frames of trucks, trailers and railroad cars shall be checked for breaks and weakness before they are driven into and to determine if it will bear the intended weight of the forklift and intended load.
- Dock board or bridge plates shall be properly secured before they are driven over. Dock board or bridge plates shall be driven over carefully and slowly, and their rated capacity never exceeded. Portable dock boards shall be secured in position, by being anchored or equipped with devices that will prevent their slipping.
- An overhead guard shall be used as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc. representative of the job application, but not to withstand the impact of a falling capacity load.
- Additional counter weighting of forklifts shall not be allowed unless approved by the manufacturer.
- Employees shall not jump off a forklift.
- Forklift operators shall yield to pedestrians.
- Loads carried shall be secured on the forks to prevent upset / overturn.

Refueling and Battery Changing/Charging

Refueling and battery charging operations shall be performed only in designated areas on approved containment. Open flames, smoking, sparks, or electric arcs shall be eliminated from refueling and battery changing/charging areas.

Forklifts shall be shut-off, properly positioned and brakes applied before attempting to refuel or change/charge battery. Proper PPE including eye and face protection and gloves will be worn when handling cylinders and/or batteries. Refer to Personal Protective Equipment section (25).

REFERENCES

OSHA 29 CFR 1910.178 (Powered Industrial Trucks) OSHA
29 CFR 1926.602 (c) (Lifting and Hauling Equipment)

OSHA Requirements:

In accordance with OSHA 1910.178 Powered Industrial Trucks. This program is designed to meet those requirements by covering the following:

- ***Selection of the operator:*** Consider physical qualifications and aptitude.
- ***Safety rules:*** Emphasis on safety, equipment, fellow employees.
- ***Fundamentals of the truck:*** Load limits, center of gravity, stability.
- ***Introduction to the equipment:*** Locations and function of the controls, proper use, and dangers of misuse.
- ***Supervised practice:*** Observed operation on a course designed to simulate the type of work to be done. Example: Loading box cars, stacking pallets, loading trailers.
- ***Oral, written, and operational performance tests:*** Documentation of these results following completion of the course.
- ***Refresher Training:*** Condensed version of initial training conducted at least every three years, may include: On the job observations, retaking of the written tests, supervised

practice on the simulation course.

LIFT TRUCK OPERATORS PRE-TRAINING GUIDE:

About one week prior to the training sessions, the trainees are to be given copies of the **Locke- Lane Construction** General Safe Operating Rules (See manual section 5.3), and a copy of any other available resource materials to refresh their awareness (i.e. – forklift mfg. manual, etc.).

Schedule trainees for sessions so it does not interfere with production.

Are the lift trucks standard or do they have special equipment? If special equipment applies, a thorough description of the equipment should be provided.

Materials needed for the training include:

- Training video on safe forklift truck operation.
- **Locke-Lane Construction** safe operating rules on forklift operations.
- Copies of the written test and answer sheets.
- Designated area to perform the driving simulation or obstacle course (Applicable for new operators).
- Cones and pallets to simulate loads, aisles, etc.

FORKLIFT TRUCK OPERATORS TRAINING

INSTRUCTORS GUIDE:

Why do we train lift truck operators?

Explain to the class why it is important and that is the reason why we are all here.

- **OSHA requirement.**
- **Reduction on damage to products, equipment, plant facilities and people.**

Explain to the class the seven requirements in OSHA 1910.178

1. **Selection of the operator:** Consider physical qualifications and aptitude.
2. **Safety rules:** Emphasis on safety, equipment, fellow employees.
3. **Fundamentals of the truck:** Load limits, center of gravity, stability.
4. **Introduction to the equipment:** Locations and function of the controls, proper use, and dangers of misuse.
5. **Supervised practice:** Observed operation on a course designed to simulate the type of work to be done. Example: Loading box cars, stacking pallets, loading trailers.
6. **Oral, written, and operational performance tests:** Documentation of these results

following completion of the course.

7. **Refresher course:** Condensed version of initial training conducted at least every three years, may include: On the job observations, a refresher written test, or supervised practice on the simulation course with documented results.

Tell the class that we will review each of the seven subjects. Be sure to encourage participation.

1. **Selection of the operator:** Consider physical qualifications and aptitude.

Tell the class that they could not be here as a driver if the physical requirements could not be met even with modifications to the equipment to compensate for a recognized disability.

2. **Safety rules:** Emphasis on safety, equipment, fellow employees.

Location specific rules should be reviewed along with General Safe Operating Rules. Ask the class if they have any questions regarding the safety rules. Pick out several rules that are particularly important at your worksite.

3. **Fundamentals of the truck:** Load limits, center of gravity, stability.

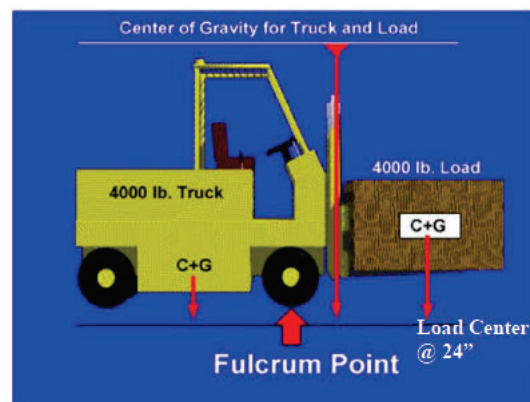
Load limits for the specific trucks to be operated should be obtained from the forklift data plate and reviewed. Capacities are generally based on a "standard" 24" load center and expressed as lbs. @ 24" unless specifically noted. (i.e. – 36", 48", etc.) The load center is the distance from the mast to the center of the load on the forks. 24" is considered "standard" reflecting the dimensions of a standard pallet (48" x 48").

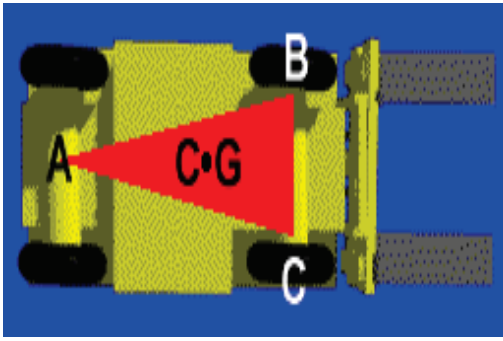
Center of Gravity: The point within a lift truck where there is equal weight all around it designated as C+G.

Fulcrum Point: The point on the truck between which balances the weight of the truck and the weight of the load being carried.

The front wheels of a lift truck serve as the Fulcrum Point between the weight of the truck and the weight of the load being carried. If the weight of the load is equal to the weight of the truck, with equal distances between the centers of gravity, it is possible to "seesaw" a lift truck on its front wheels.

Stability Triangle: The triangle formed between the three support points (A, B, & C) on the underside of the truck



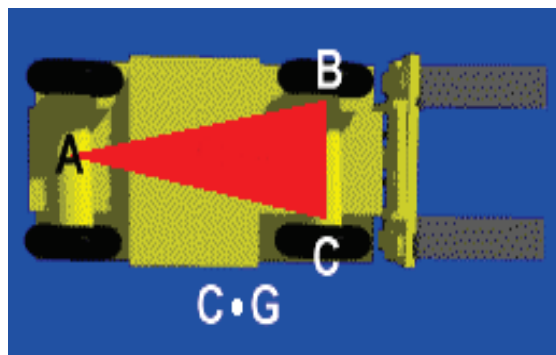


If you were to raise a lift truck up and look at its underside, you would see that the support points for the truck are located at points A, B, and C. The triangle formed between points A, B, and C is called the Stability Triangle. The lift truck will not tip over as long as the center of gravity remains inside the triangle. (The center of gravity is the point within a lift truck where there is equal weight all around it.)

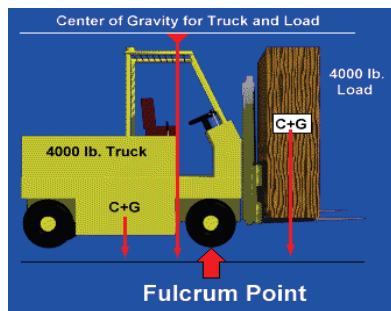
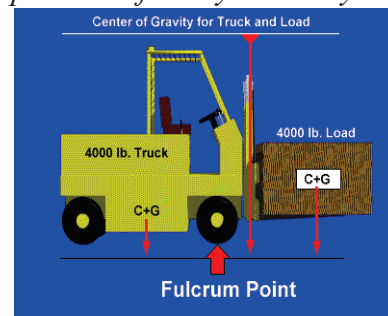
However, if the center of gravity shifts outside the stability triangle, the lift truck

will tip over. The center of gravity within a lift truck can be moved by:

- Traveling with an *unequally distributed and/or elevated load*.
- Trying to carry too heavy a load.
- Trying to turn the lift truck while it is moving too fast.
- Operating the lift truck on a hill or incline.
- Starting or stopping too fast.
- The jerky operation of the hydraulic system



If we rearrange the load so that the load's center of gravity is farther away from the fulcrum point, this will cause the center of gravity for both the truck and the load to shift beyond the front wheels of the truck, and the truck will tip forward.



If, on the other hand, we arrange the load so that load's center of gravity is closer to the fulcrum point, this will cause the center of gravity for both the truck and the load to shift behind the front wheels of the truck. With this arrangement, there is no danger of the truck tipping forward.

Show forklift truck training video. Discuss key film segments.

Procedure for inspecting the truck:

- Check all fluids.
- Check brakes / steering.
- Check lifting apparatus (mast, lifting chains & fork).
- Check general truck conditions.
- Document.

Procedure when parking the truck:

- Level surface.
- Set brake.
- Tilt mast forward.
- Lower forks to floor.
- Turn off engine.

Procedure when making a lift:

- Position forks 3" to 4" off the floor with slight back tilt of the mast.
- Align truck and move forward slowly.
- Stop 12" from load to be lifted.
- Raise forks to desired height in line with load to be lifted, and level forks by adjusting the tilt of the mast.
- Move forward slowly until the pallet touches the base of the forks.
- Raise pallet 6" to 7" from the stack or floor.
- Check behind and to the left and right, then back slowly until the load clears the stack.
- *Watch for instability in the load.*
- Stop the truck and lower the load to about 4" above the floor and tilt the mast back slightly.
- Check behind and to the left and right, then back slowly in the desired direction.

Procedure on ramps:

- Drive forward up a ramp, backwards down the ramp.
- Apply more back tilt to the mast.
- Raise forks to clear the incline.
- Never turn on a ramp.
- After clearing the ramp return the fork height and mast tilt to their normal position.

Procedure when loading a truck:

- Secure the dock board.
- Chock the wheels of the trailer.
- Check the floor of the truck trailer to be sure it is not rotten.
- Check overhead clearance when entering the trailer.

- 4. Introduction to the equipment:** Locations and function of the controls, proper use and dangers of misuse, capacity data plate information.

Ask the class if they know how to drive a lift truck and document their prior experience. Review the information pertinent to the specific vehicle the operators will be utilizing. Complete this section in detail only if you are training novice operators or those who may not be familiar with your equipment. Provide only a brief summary of the main points including capacities, hazards, etc. for experienced operators.

- 5. Supervised practice:** Observed operation on a course designed to simulate the type of work to be done. Example: Loading racks, stacking pallets, loading trailers.

You may omit this section for experience operators. Novice operators should have the opportunity to practice on the simulation course before performing the operational test. A Performance Test Score Sheet should be used to document the observation and to score the operator.

6. Oral, written, and operational performance tests: Documentation of these results following completion of the course.

You may pass out copies of the written test. There are 20 true / false and 5 fill in the blank questions for the exam. Scoring should include each question being worth 5 points each for the exam.

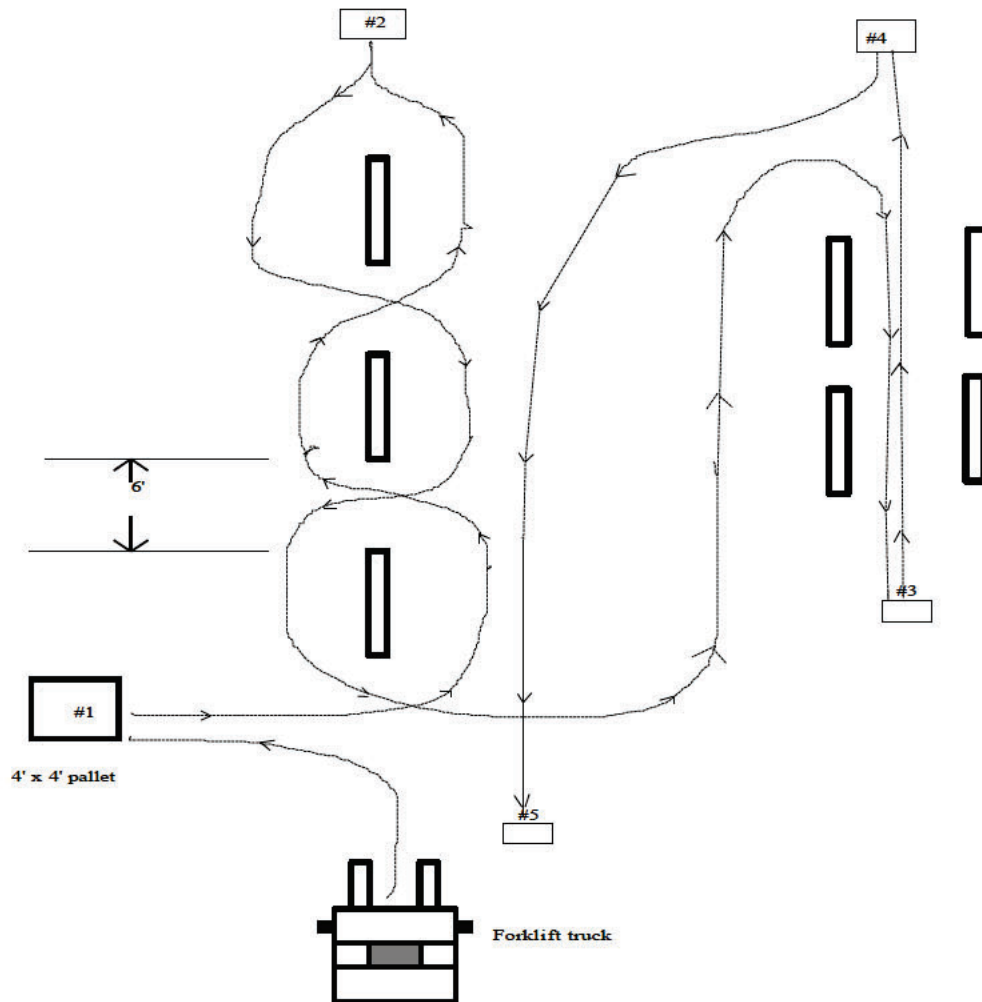
Grading of both exams should be based on the following scale:

GRADING:	SCORE:
Excellent	90+
Good	80 - 90
Passing	70 - 80
Needs additional training	Below 70

*Also pass out copies of the **practice driving score sheet (if applicable)**. Use this sheet to score how well each operator performs operational test.*

7. **Refresher Training:** At least every three years, a condensed version of initial training, may include: On the job documented observations, taking the annual refresher written test, or supervised practice on a simulation course with documented results.

PERFORMANCE TEST COURSE LAYOUT



PERFORMANCE TEST SKILLS TO EVALUATE

1. Complete pre-inspection of industrial truck.
2. Drive forward and pickup pallet, drive forward zigzagging through the course.
3. Stop and drive backwards through the course.
4. Turn around and drive backwards through the tight clearances.
5. Stop and deposit the pallet, drive backwards to station #5.
6. Stop the lift truck and dismount.

PERFORMANCE TESTING SCORE SHEET

Operators Name: _____

Date: _____

Type of maneuver: _____ Deduct points for: _____ Points earned: _____

1. PALLET PICKUP (20 points)

- Pallet not straight on forks 1
- Riding clutch or brake 3
- Improper position of forks 3
- Improper tilting of forks 3
- Backing without looking 5
- Missed approach 5

2. TRAVELING FORWARD WITH PALLET (20 points)

- Barrier Contact 2
- Barrier movement 3
- Barrier knockdown 7
- Backing without looking 5
- Riding clutch or brake 3

3. TRAVELING IN REVERSE WITH PALLET (20 points)

- Barrier contact 2
- Barrier movement 3
- Barrier knockdown 7
- Backing without looking 5
- Riding clutch or brake 3

4. OFFSET PALLET DROP (20 points)

- Poor positioning 5
- Missed approach 5
- Backing without looking 5
- Riding clutch or brake 3
- Improper approach (forks raised, tilted) 2

5. DRIVER PERFORMANCE (20 Points)

- Driver attitude 10
- Smoothness 5
- Forks lowered to ground at dismount 3
- Pre-inspection completed 2

TOTAL POINTS EARNED

GRADING:	SCORE:
Excellent	90 – 100
Good	80 – 90
Passing	70 – 80

Needs additional training	Below 70
----------------------------------	-----------------

NOTES / COMMENTS:

Operator's signature: -

Trainer's signature: -

FORKLIFT OPERATOR EXAM

NAME: _

DATE: _

I. True / False

	TRUE	FALSE
1. No truck can be safer than the person operating it. For this reason, only authorized persons are permitted to operate industrial trucks.	_____	_____
2. An operator should check the condition of his equipment as soon as he goes on duty. This should include checking the fuel level, oil level, brakes, steering, and the physical condition of the truck and its components.	_____	_____
3. You should always operate a forklift slowly and never make quick turns because a forklift has a high center of gravity and a narrow wheelbase.	_____	_____
4. The Stability Triangle states that the center of gravity of a fork truck is somewhere near the rear of the vehicle. The center of gravity shifts towards the forks when the load is raised.	_____	_____
5. If the forklift data plate notes a 5,000 lbs. maximum capacity at a 24" load center, this means you can safely lift a load weighing 5,000 lbs. if the load center is 24".	_____	_____
6. You should slow down at cross isles and intersections, sound the horn before proceeding. When vision is obstructed by doors, corners, and elevators, sound the horn.	_____	_____
7. It is not necessary to set the hand brake if parked on level ground.	_____	_____
8. If you feel sure there is no obstruction, it is not necessary to face in the direction in which you are driving.	_____	_____
9. If the forklift data plate notes a 5000 lbs. maximum capacity at a 24" load center, this means you can lift a 5000 lbs. load to the maximum height also noted on the data plate no matter what angle of the mast.	_____	_____

	<u>TRUE</u>	<u>FALSE</u>
10. An operator should not drive with wet or greasy hands.	-	_____
11. Do not attempt to enter a building through a partially opened door. The door shall be fully opened before proceeding.	_____	_____
12. No passengers are allowed on fork trucks.	_____	_____
13. When the forklift is loaded, you should go down a ramp in forward gear.	_____	_____
14. No one should be allowed to be lifted by the forklift unless a properly secured and approved fork platform with railings is provided and the operator remains at the controls at all times.	-	_____
15. When starting, the operator should race the engine and spin the wheels before proceeding.	_____	_____
16. Railroad tracks, speed bumps, or roadway transitions should never be crossed at an angle.	_____	_____
17. It is OK to stand under suspended loads.	_____	_____
18. If you tilt the mast forward with a load fully raised, the maximum lifting capacity of the forklift is increased times 2.	-	_____
19. Rest forks on the ground or floor and always set the parking brake when the fork truck is not in use.	_____	_____
20. In order to lift a heavy load, you may have someone stand on the back of the truck to act as a counterweight.	_____	_____

II. Fill In The Blank

21. Forklifts are designed to operate on the _____ principal which states that the front wheels act as the point or support on which the lever turns.
22. A fork truck operator must first _____ the fork truck before starting the engine.
23. When refueling, the forklift engine _____ be operating.
24. When dismounting, the forks should be _____.
25. The maximum capacity of the fork truck I operate at a 24" center point is _____ lbs.

FORKLIFTEXAMANSWERSHEET:

- | | | | |
|-------|-------|----------------------------|--------------|
| 1. T | 14. T | Fill in the blanks: | |
| 2. T | 15. F | | |
| 3. T | 16. T | | 21. Fulcrum |
| 4. T | 17. F | | 22. Inspect |
| 5. T | 18. F | | 23. Must Not |
| 6. T | 19. T | 24. Lowered | |
| 7. F | 20. F | 25. Lbs. | |
| 8. F | | | |
| 9. F | | | |
| 10. T | | | |
| 11. T | | | |
| 12. T | | | |
| 13. F | | | |

38. CONCRETE / MASONRY STANDARD

Locke-Lane Construction, Inc. takes into consideration all hazards associated with concrete / masonry construction. Whenever a masonry wall is constructed, employees will have established a limited access zone prior to the start of construction.

Construction Loads – Loads will not be placed on a concrete structure unless it has been determined by a professional (qualified in structural design) that the structure or portion of the structure is capable of supporting the intended loads.

Reinforcing Steel – All protruding reinforcing steel, onto and into which an employee could fall will be guarded to eliminate the hazard of impalement.

Post-Tensioning Operations – Employees, other than those essential to the post-tensioning operations must stay behind the jack during tensioning operations. Signs and barriers would be erected to limit employee access to this area.

Concrete Buckets – Employees are NOT permitted to ride concrete buckets.

Working Under Loads – Employees must NOT work under concrete buckets while the buckets are being elevated or lowered into position. Locke-Lane Construction, Inc. employees route elevated concrete buckets where fewest employees are exposed to the hazards associated with falling concrete buckets.

Personal Protective Equipment – Locke-Lane Construction, Inc. employees must wear protective head and face equipment when applying cement, sand, and water mixture through a pneumatic hose.

Equipment and Tools:

Bulk Cement Storage – Bins, containers and silos must be equipped with conical or tapered bottoms, mechanical and pneumatic means to start flow of material.

Ejection system must be shut down, locked, and tagged out prior to entry.

Concrete Mixers – Concrete mixers with one cubic yard or larger loading skips must be equipped with a mechanical device to clear skip of materials and guardrails installed on each side of the skip.

Power Concrete Trowels – Manually guided concrete troweling machine must be equipped with an automatic control switch to shut off power when hands are removed.

Concrete Buggies – Concrete buggy handles must not extend beyond the wheels on either side of the buggy.

Concrete Pumping Systems – Discharge pipes must be provided with pipe supports designed for 100% overload. Compressed air hoses must be provided with positive fail-safe connectors.

Concrete Buckets – Buckets equipped with hydraulic or pneumatic gates must have positive safety latches or similar devices to prevent accidental dumping and designed to prevent concrete from hanging up on top and sides.

Tremies – Sections of tremie and similar concrete conveyances must be secured with wire rope or equivalent in addition to the regular couplings or connections. **Bull Floats** – Handles must be constructed of nonconductive material or insulated when used where they may contact energized electrical conductors.

Masonry Saws – Must be guarded with a semicircular enclosure over the blade. No silica is allowed to be released into the surrounding air at any time, all

sawing, drilling, and grinding of products containing silica will be done using the wet method. For drilling the wet method may be bypassed if the drill is equipped with a vacuum and HEPA filtering system.

Lockout / Tagout Procedures – Employees are not allowed to perform maintenance or repair activity on equipment unless hazardous energy sources have locked out or tagged out.

Cast-in-place Concrete - Formwork will be designed, fabricated, erected, supported, braced, and maintained so that it will be capable of supporting without failure all vertical and lateral loads that might be applied to the formwork.

39. LADDER INSPECTION PROCEDURES

Ladders shall be inspected for any defects prior to each day's use, and after any occurrence, such as a dropped ladder, which could damage the ladder. Employees shall securely position any ladder on a level and firm base, making sure its slip-resistant bases are intact to prevent the ladder from slipping. All ladders shall be placed so that employees climbing are not exposed to injury from projecting objects or doors that open toward the ladder. If a ladder is damaged, it will be removed from service and tagged until repaired or discarded.

40. PNEUMATIC TOOLS

Employees are trained to use hand and powered tools and equipment safely and shall comply with manufacturer guidelines. Inspections of pneumatic tools will be done before each use. If equipment has been tagged or reported as having defects it will be taken out of service immediately and removed from the jobsite until repaired or discarded.

- Eye protection must be worn by employees
- Pneumatic tools must be checked to ensure that they are fastened securely to the air hose to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool must also be used to service as an added safeguard
- If an air hose is more than ½ inch in diameter, a safety excess flow valve will be installed at the source of the air supply to shut off the air automatically in case the hose breaks
- A safety clip or retainer must be installed to prevent attachments such as chisels on a chipping hammer from being ejected during tool operation
- Pneumatic tools that shoot nails, rivets, staples, or similar fasteners and operate at pressures more than 100 pounds per square inch, must be equipped with a special device to keep fasteners from being ejected, unless the muzzle is pressed against the work surface

41. ACCIDENT / INCIDENT INVESTIGATIONS

All accidents that occur will be investigated, reported, and analyzed. The Project Superintendent / Health & Safety Officer will be responsible for recording and reporting all accidents, accidental exposures and experiences that occur on the job site. At a minimum, these records will include

exposure work hours and a log of occupational injuries and illnesses (OSHA Form 300). All diagnosed occupational illnesses or injuries that result in a lost workday or a fatality, will be reported to the designated authority. Lost time injuries and property damage accidents, in which the property damage exceeds two thousand dollars (\$2,000) will be reported to the designated authority within 24 hours of the accident / incident. A first aid treatment log / record will also be maintained.

All accidents will be reported to the Project Superintendent / Health & Safety Officer immediately. The Project Superintendent / Health & Safety Officer will notify the Owner within 1 hour and provide a written report within 24 hours unless otherwise approved by the Owner. In the event of an employee being sent to a doctor for treatment, a release will be obtained from the doctor on the date of treatment stating that either: (1) the employee is not fit for duty, (2) the employee is fit for light duty, or (3) the employee is fit for duty. A copy of this release will accompany the accident report.

Locke-Lane Construction will fully cooperate and participate should an incident warrant a jointly conducted Root Cause Analysis by Owner and Locke-Lane Construction representatives.

42. WORK ALONE POLICY

Locke- Lane Construction employees are NEVER allowed to work alone in any circumstance.

43. WRITTEN ERGONOMICS PROGRAM

1. INTRODUCTION

Ergonomics is the study of people and their interaction with the elements of their job or task including equipment, tools, facilities, processes, and environment. It is a multidisciplinary field of study integrating industrial psychology, engineering, medicine, and design.

In a more practical sense, ergonomics is the science of human comfort. When aspects of the work or workplace exceed the body's capabilities, the result is often a musculoskeletal disorder (MSD). To help avoid MSDs, work demands should not exceed the physical capabilities of the worker. MSDs are also known by several other names including:

- * CTDs (cumulative trauma disorders)
- * RSIs (repetitive stress or repetitive strain injuries)
- * RMIs (repetitive motion injuries)
- * Overuse syndrome

The most common, recognizable name for MSDs is cumulative trauma disorders or CTDs. Whatever the name used, these injuries belong to a family or group of wear and tear illnesses that can affect muscles, nerves, tendons, ligaments, joints, cartilage, blood vessels or spinal discs of the body. MSDs do not include slips, trips and falls, cuts, motor vehicle accidents or

other similar accidents: although a close look at the reasons for acute injuries often reveals design problems that can be corrected.

2. POLICY

It is the policy of Locke-Lane Construction to provide all employees with a safe and healthy workplace. A proactive ergonomics program is integrated into our company's written safety and health program.

Records documenting the identification, prevention, and control of employee exposure to ergonomic risk factors will be maintained pursuant to all regulations.

This program is a collaborative effort that includes managers, supervisors, and labor. The Ergonomics Program Coordinator is responsible for the program's implementation, management, and recordkeeping requirements.

3. ERGONOMICS PROGRAM

The purpose of an ergonomics program is to apply ergonomic principles to the workplace in an effort to reduce the number and severity of MSDs, thus decreasing workers' compensation claims and, where possible, increase productivity, quality, and efficiency. An ergonomically sound work environment maximizes employee comfort while minimizing the risk of undue physical stress.

A proactive approach focuses on making changes when risks have already been identified, as well as incorporating ergonomics into the design phase of a new facility or process, into purchasing new equipment or tools, and into the contemplation of scheduling changes. Locke-Lane Construction has such a program which includes the following components:

- A. Management Leadership. The management of Locke-Lane Construction is committed to the ergonomics process. Management supports the efforts of the Ergonomics Program Coordinator and the Ergonomics Committee by pledging financial and philosophical support for the identification and control of ergonomic risk factors. Management will support an effective MSD reporting system and will respond promptly to reports. Management will regularly communicate with employees about the program.
- B. Employee Participation. An essential element to the success of the ergonomics program, employees will be solicited for their input and assistance with identifying ergonomic risk factors, worksite evaluations, development and implementation of controls, and training. Employee participation in the program will occur only during company time.
- C. Identification of Problem Jobs. Collecting data that identifies injury and illness trends is called surveillance. Surveillance can be either *passive* or *active*. Conducting a records review is an example of passive surveillance, which looks at existing data such as OSHA Logs, workers' compensation claims, trips to the medical facility, and absentee records. Active surveillance uses observations, interviews, surveys, questionnaires, checklists, and

formal worksite evaluation tools to identify specific high-risk activities. Locke-Lane Construction will be using both passive and active surveillance to identify problem jobs.

D. Worksite Evaluations.

- (1) Triggers for a worksite evaluation:
 - (a) When an employee reports an MSD sign or symptom.
 - (b) Jobs, processes, or work activities where work-related ergonomic risk factors have been identified which may cause or aggravate MSDs.
 - (c) Any change of jobs, tasks, equipment, tools, processes, scheduling, or changes in work shift hours (for example, going from a traditional 5-day, 8-hour shift to a compressed 4-day, 10-hour shift).
 - (d) When a safety walk-through or scheduled inspection or survey has uncovered potential MSD hazards.
- (2) Work-related risk factors to be considered in the evaluation process include, but are not limited to:
 - (a) Physical risk factors including force, postures (awkward and static), static loading and sustained exertion, fatigue, repetition, contact stress, extreme temperatures, and vibration.
 - (b) Administrative issues including job rotation/enlargement, inadequate staffing, excessive overtime, inadequate or lack of rest breaks, stress from deadlines, lack of training, work pace, work methods, and psychosocial issues.
 - (c) Environmental risk factors including noise, lighting, glare, air quality, temperature, humidity, and personal protective equipment and clothing.
 - (d) Combination of risk factors such as, but not limited to, highly repetitive, forceful work with no job rotation or precision work done in a dimly lit room.

E. Setting Priorities. Worksite evaluations will be scheduled based upon the following:

- (a) Any job, process, operation, or workstation which has contributed to a worker's current MSD.
- (b) A job, process, operation, or workstation that has historically contributed to MSDs; and
- (c) Specific jobs, processes, operations, or workstations that have the potential to cause MSDs.

F. Worksite Evaluations Methods. Various methods will be used to evaluate problem jobs including:

- Walk-through and observations
- Employee interviews
- Surveys and questionnaires
- Checklists
- Detailed worksite evaluations

G Control of the Ergonomic Risk Factors. Locke-Lane Construction will take steps to identify ergonomic risk factors and reduce hazards by using a three-tier hierarchy of control (in order of preference):

- (1) Engineering controls. The most desirable and reliable means to reduce workplace exposure to potentially harmful effects. This is achieved by focusing on the physical modifications of jobs, workstations, tools, equipment, or processes.
- (2) Administrative controls. This means controlling or preventing workplace exposure to potentially harmful effects by implementing administrative changes such as job rotation, job enlargement, rest / recovery breaks, work pace adjustment, redesign of methods, and worker education.
- (3) Personal protective equipment (PPE). Although not recognized as an effective means of controlling hazards and do not take the place of engineering or administrative controls, there are acceptable forms of PPE, which include kneepads and anti-vibration gloves.

H. Training. Training is intended to enhance the ability of managers, supervisors, and employees to recognize work-related ergonomic risk factors and to understand and apply appropriate control strategies. Training in the recognition and control of ergonomic risk factors will be given as follows:

- To all new employees during orientation.
- To all employees assuming a new job assignment.
- When new jobs, tasks, tools, equipment, machinery, workstations, or processes are introduced.
- When high exposure levels to ergonomic risk factors have been identified.

The minimum for all managers, supervisors, and employees will include the following elements:

- An explanation of Locke-Lane Construction ergonomics program and their role in the program.
- A list of the exposures which have been associated with the development of MSDs.
- A description of MSD signs and symptoms and consequences of injuries caused by work and non-work-related risk factors.
- An emphasis on the importance of early reporting of MSD signs and symptoms and injuries to management.
- The methods used by Locke-Lane Construction to minimize work and non-work-related risk factors.

Training will be provided in one, or a combination, of the following formats:

- Oral presentations
- Videos
- Distribution of educational literature
- Hands-on equipment and work practice demonstrations

Trainers will be experienced in delivering training programs that address all work and non-work-related risk factors and will be familiar with Locke-Lane Construction operations. Training will be provided from one, or a combination, of the sources listed below:

- Internally developed resources
- The workers' compensation carrier
- An outside consultant

All training will be documented:

- All employees will be required to sign a training sign-in roster.

I. MSD (Medical) Management and Early Return-to-Work.

Pursuant to the law, Locke-Lane Construction provides medical care to all employees injured at work. Locke-Lane Construction maintains a good working relationship with our health care provider. All work-related injuries and illnesses will be referred to Iredell Memorial Hospital unless the injured employee has notified Locke-Lane Construction in writing that other provisions have been made prior to an injury or illness.

In the event of a work-related injury or illness, the health care provider will:

- provide diagnosis and treatment for Locke-Lane Construction employees
- determine if reported MSD signs or symptoms are work-related
- comply with Locke-Lane Construction's Early Return-to-Work program by recommending restricted, modified, or transitional work duties when appropriate
- refer Locke-Lane Construction injured employees to other clinical resources for therapy or rehabilitation
- provide Locke-Lane Construction with timely work status reports, and develop a positive working relationship with Locke-Lane Construction workers' compensation carrier, BUILDERS MUTUAL).

Locke-Lane Construction has an aggressive Early Return-to-Work program and will offer return-to-work opportunities to all injured employees in accordance with work restrictions identified by a recognized health care provider.

J. Program Evaluation and Follow-Up. In order to ensure that issues have been addressed and that new problems have not been created, monitoring and evaluation will be conducted on an on-going basis. The methods include use of individual interviews and checklists to reevaluate the job/task to ensure that risks have been reduced, minimized, or eliminated.

4. INDIVIDUAL RESPONSIBILITIES

- A. Ergonomics Program Coordinator. The Ergonomics Program Coordinator will report directly to upper management and be responsible for this policy and program. All evaluations, controls, and training will be coordinated under the direction of the Ergonomics Program Coordinator in collaboration with management. The Ergonomics Program Coordinator will monitor the results of the program to determine additional areas of focus as needed.

The Ergonomics Program Coordinator will:

- ensure that evaluators performing worksite evaluations and training are properly trained
- ensure that control measures are implemented in a timely manner
- ensure that a system is in place for employees to report MSD signs or symptoms and suspected work-related risk factors to managers and supervisors
- ensure that accurate records are maintained and provide documentation upon request
- schedule manager, supervisor, and employee training and maintain records to include date, name of instructor, topic, and materials used, and monitor the program on a quarterly basis and provide an annual review.
- follow-up with any ergonomics strategy and / or solutions

- B. Managers. Duties of all managers will include:

- accountability for the health and safety of all employees within their departments through the active support of the ergonomics program
- allocating human and / or financial resources
- attending ergonomics training to familiarize themselves with the elements of the program, recognition and control of work-related ergonomic risk factors, MSD signs and symptoms, early reporting requirements and procedures, and medical management
- ensuring that supervisors and employees have received the appropriate training
- ensuring that ergonomics practices and principles are considered when conducting worksite evaluations and ensuring that recommended controls are implemented and/or used appropriately through active follow-up.

- C. Supervisors. Duties of all supervisors will include:

- attending ergonomics training to familiarize themselves with the elements of the program, recognition and control of work-related ergonomics risk factors, MSD signs and symptoms, early reporting requirements and procedures, and medical management
- ensuring that employees have received the appropriate training
- ensuring that employees are provided with and use the appropriate tools, equipment, parts, and materials in accordance with ergonomic requirements
- ensuring that employees understand the MSD signs and symptoms and early reporting system
- responding promptly to employee reports
- providing appropriate workers' compensation documentation to employees as required by all regulations
- seeking clarification from Human Resources when return-to-work directives from the health care provider are unclear, and maintaining clear communication with

managers and employees

D. Employees. Every employee of Locke-Lane Construction is responsible for conducting himself/herself in accordance with this policy and program.

All employees will:

- when provided, use the appropriate tools, equipment, parts, materials, and procedures in the manner established by managers and supervisors
- ensure that equipment is properly maintained in good condition and when not, report it immediately
- provide feedback to supervisors regarding the effectiveness of design changes, new tools or equipment, or other interventions
- attend ergonomics training as required and apply the knowledge and skills acquired to actual jobs, tasks, processes, and work activities
- report MSD signs or symptoms and work-related MSD hazards to the supervisor as early as possible to facilitate medical treatment and initiate proactive interventions, and take responsibility in their personal health and safety

44. PROCESS SAFETY MANAGEMENT

PURPOSE:

The primary purpose of the PSM Standard is to prevent or minimize the unwanted release of hazardous chemicals, especially into locations that would expose personnel to serious hazards.

POLICY:

It is the company's intent to comply with all applicable regulations and to provide a workforce that is trained to safely perform their jobs with a full knowledge of the hazards and safe work practices associated with refining/chemical plant or other PSM regulated industry work. In accordance with the law, employees will receive initial and refresher training in the following:

- An overview of the refinery/chemical plant/facility process and operating procedures for the process that employees will be working with or near, including the hazards of the chemicals used in the process. This will include a complete review of the company HazCom Program and all SDSs that are provided for each unit where the employees will be working Specific safety and health hazards
- Procedures and safe work practices applicable to the employee's job tasks, including personal protective equipment, permits (confined space, hot work and general safe permits, job hazard analysis and auditing
- Incident investigations are required for all incidents. When an incident occurs, an investigation will be immediately implemented, but not longer than 24 hours after the incident. Causal analysis and corrective actions will be documented and tracked for closure. Those records will be kept for a minimum of 5 years.
- The site-specific Emergency Action Plan.

Employees shall comply with established procedures and safe work practices, be on the alert for changing conditions and quickly report any accidental release or potential release of hazardous chemicals to a supervisor.

The company will promptly investigate every incident that results in, or could have resulted in, a dangerous release of a hazardous chemical.

All employees will attend the OWNER's (refinery/chemical plant/facility) process overview and any site-specific training during the refinery/chemical plant/facility orientation, including the process overview and Emergency Action Plan. Attached is a summary of applicable information taken from the PSM standard.

Process Safety Management of Acutely Hazardous Materials

These regulations contain requirements for **preventing or minimizing the consequences of catastrophic releases** of toxic, reactive, flammable, or explosive chemicals. These regulations are intended to eliminate to a substantial degree, the risks to which employees are exposed in petroleum refineries and chemical plants.

1. The employer (refinery/chemical plant/facility) shall develop and implement **written procedures** that provide clear instructions for safely conducting activities involved in each process.
 - A. **Steps for Each Operating Phase:**
 1. Start-up
 2. Normal operation
 3. Temporary operations
 4. Emergency operations, including emergency shutdowns
 5. Normal shutdown
 6. Start-up following a turnaround, or after an emergency shutdown
 - B. **Operating Limits:**
 1. Consequences of deviation
 2. Steps required to correct and/or avoid deviation
 3. Safety systems and their functions
 - C. **Safety and Health Considerations:**
 1. Properties and hazards of the chemicals used in the process
 2. Precautions necessary to prevent exposure, including PPE
 3. Control measures to be taken if physical contact or airborne exposure occurs
 4. Safety procedures for opening process equipment (such as pipeline breaking)
 5. Verification of raw materials and control of hazardous chemical inventory levels
 6. Any special or unique hazards

Note: If Hot Work is to be performed, as with any hot work, a "Hot Work" permit shall be obtained from the client before any work commences (refer to the company hot work/welding policy if applicable).

2. A copy of the operating procedures shall be readily accessible to employees who work in or near the process area or to any other person who works in or near the process area.
3. The operating procedures shall be reviewed as often as necessary to assure that they reflect safe operating practices, including changes that result from changes in process chemicals, technology and equipment and changes to facilities.
4. The employer shall develop and implement **safe work practices** to provide for the control of hazards during operations such as opening process equipment or piping and control over entrance into a facility by maintenance, contractor, laboratory, or other support

personnel. These safe work practices shall apply to employees and contractor employees.

Training:

1. **Initial training.** Each employee presently involved in operating or maintaining a process, and each employee before working in a newly assigned process, shall be trained in an overview of the process and in the operating procedures. The training shall include emphasis on the specific safety and health hazards, procedures, and safe practices applicable to the employee's job tasks.
2. **Refresher and supplemental training.** At least every three years, and more often if necessary, refresher and supplemental training shall be provided to each maintenance or operating employee and other workers necessary to ensure safe operation of the facility. The employer in consultation with employees involved in operation or maintenance of a process shall determine the appropriate frequency of refresher training.
3. **Training certification.** The employer shall ensure that each employee involved in the operation or maintenance of a process has received and successfully completed training. The employer, after the initial or refresher training shall prepare a certification record which contains the identity of the employee, the date of training, and the signatures of the persons administering the training.
4. **Testing procedures** shall be established by each employer to ensure competency in job skill levels and safe and healthy work practices.

Contractors:

1. The employer shall inform contractors performing work on, or near, a process of the known potential fire, explosion or toxic release hazards related to the contractor's work and the process and require that contractors have trained their employees to a level adequate to safely perform their jobs. The employer shall also inform contractors of any applicable safety rules of the facility and assure that the contractors have so informed their employees.
2. The employer shall explain to contractors the provisions of the emergency action plan.
3. Contractors shall assure that each of their employees have received training to safely perform their job and that the contract employees shall comply with all applicable work practices and safety rules of the facility.

General

Contractors under the Process Safety Management program are those who are involved in the installation or maintenance of (PROCESS COVERED IN THIS PROGRAM) equipment and systems at this Company. All contractors, covered in this PSM Program will be provided necessary information concerning the (PROCESS COVERED IN THIS PROGRAM) process, equipment, and procedures.

Specific Requirements

Pre-Work Review: Prior to allowing a contracting company to commence work in the (PROCESS COVERED IN THIS PROGRAM) process the following requirements must be met:

- Obtain and evaluate information regarding the contract Company's safety performance

and programs (written documentation required

- Inform contract Companies of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process
- Explain to contract Company's the applicable provisions of the emergency action plan.
- Provide contractors with copies of local safety programs, safety and emergency procedures and a copy of this PSM program.
- Complete all the requirements of the Company Contractors Liability Agreement.
- Inform the contractor that a periodic performance evaluation will be conducted to ensure the contractor and contract employees are fulfilling their obligations
- Inform the Contractor that a contract employee injury and illness log related to the contractor's work in process areas must be maintained on site for the duration of the contract work.
- The contractor Company must provide information relating to any unique hazards presented by the contractor employees work or any hazards found by the contractor employees.
- Prior to the start of any work the Contractor must provide the following documentation:
- Their safety program information and other documentation required by the Company contractors Liability and Safety Agreement.
- Certification that they have informed their employees of potential fire, explosion, or toxic release hazards may exist at or near their work area at this Company and that they have explained the Company Emergency Action Plan to their employees.
- Training documentation concerning training provided to their employees to insure they understand the safe work necessary to safely perform tasks.
- Certification that they have explained the Company Hot Works Permit Program and other permits Company uses that will be needed during their time on Company property.
- Agreement to advise Company of any unique hazards presented by their work any found during their work.
- Certification that materials, parts, and equipment to be installed in the (PROCESS COVERED IN THIS PROGRAM) system meet industry and engineering standards for the application used.
- The (PROCESS COVERED IN THIS PROGRAM) Superintendent is responsible for issuing information and documents to the contractor and collection and review of

contractor information and certifications.

Trade Secrets:

Company employees will respect and maintain the confidentiality of all “Trade Secret” information received and/or gathered from our clients (Owner Facilities). Any and all proprietary information obtained including but not limited to the following is governed by this policy:

- Development of the process hazard analysis
- Development of operating procedures
- Involvement in incident investigations
- Involvement in emergency response or emergency planning
- Involvement in compliance auditing

Management of Change (MOC)

The OWNER (refinery/chemical plant/facility) that is covered by the standard will typically handle all MOC situations, but we need to be aware of the program and be mindful that if we get involved with any changes, the necessary steps will need to take place. The company will establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and changes to facilities that affect a covered process.

Prior to the change, address the following considerations:

- The technical basis for the proposed change
- Impact of change on safety and health
- Modifications to operating procedures
- Necessary time period for the change
- Authorization requirements for the proposed change.

The Company will train affected employees and contract employees in the change prior to start-up of the process or affected part of the process.

45. COVID 19 Exposure Prevention, Preparedness, and Response

Locke-Lane Construction (hereinafter “Company”) takes the health and safety of our employees very seriously. With the spread of the coronavirus or “COVID-19,” a respiratory disease caused by the SARS-CoV-2 virus, the Company must remain vigilant in mitigating the outbreak. The Company is a proud part of the construction industry, which many have deemed “essential” during this Declared National Emergency. In order to be safe and maintain operations, we have developed this COVID-19 Exposure Prevention, Preparedness, and Response Plan to be implemented, to the extent feasible and appropriate, throughout the Company and at all of our jobsites. The Company has also identified a team of employees to monitor the related guidance that U.S. Center for Disease Control and Prevention (“CDC”) and Occupational Safety and Health Administration (“OSHA”) continue to make available.

This Plan is based on information available from the CDC and OSHA at the time of its development and is subject to change based on further information provided by the

CDC, OSHA, and other public officials. The Company may also amend this Plan based on operational needs.

I. Responsibilities of Managers and Supervisors

All managers and supervisors must be familiar with this Plan and be ready to answer questions from employees. Managers and supervisors must set a good example by following this Plan at all times. This involves practicing good personal hygiene and jobsite safety practices to prevent the spread of the virus. Managers and supervisors must encourage this same behavior from all employees.

II. Responsibilities of Employees

The Company is asking every one of our employees to help with our prevention efforts while at work. In order to minimize the spread of COVID-19 at our jobsites, everyone must play their part. As set forth below, the Company has instituted various housekeeping, social distancing, and other best practices at our jobsites. All employees must follow these. In addition, employees are expected to report to their managers or supervisors if they are experiencing signs or symptoms of COVID-19, as described below. If you have a specific question about this Plan or COVID-19, please ask your manager or supervisor. If they cannot answer the question, please contact **Andrew L.Sherrill**.

OSHA and the CDC have provided the following control and preventative guidance for all workers, regardless of exposure risk:

- Frequently wash your hands with soap and water for at least 20 seconds. When soap and running water are unavailable, use an alcohol-based hand rub with at least 60% alcohol.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Follow appropriate respiratory etiquette, which includes covering for coughs and sneezes.
- Avoid close contact with people who are sick.

In addition, employees must familiarize themselves with the symptoms of COVID-19, which include the following:

- Coughing
- Fever
- Shortness of breath, difficulty breathing
- Early symptoms such as chills, body aches, sore throat, headache, diarrhea, nausea/vomiting, and runny nose.

If you develop a fever and symptoms of respiratory illness, such as cough or shortness of breath, **DO NOT GO TO WORK** and call your supervisor and healthcare provider right away. Likewise, if you come into close contact with someone showing these symptoms, call your supervisor and healthcare provider right away.

III. Job Site Protective Measures

The Company has instituted the following protective measures at all jobsites.

A. General Safety Policies and Rules

- Any employee/contractor/visitor showing symptoms of COVID-19 will be asked to leave the jobsite and return home.
- Safety meetings will be by telephone, if possible. If safety meetings are conducted in-person, attendance will be collected verbally, and the foreman/superintendent will sign-in each attendee. Attendance will not be tracked through passed-around sign-in sheets or mobile devices. During any in-person safety meetings, avoid gathering in groups of more than 10 people and participants must remain at least six (6) feet apart.
- Employees must avoid physical contact with others and shall direct others (coworkers/contractors/visitors) to increase personal space to at least six (6) feet, where possible. Where work trailers are used, only necessary employees should enter the trailers and all employees should maintain social distancing while inside the trailers.
- All in-person meetings will be limited. To the extent possible, meetings will be conducted by telephone.
- Employees will be encouraged to stagger breaks and lunches, if practicable, to reduce the size of any group at any one time to less than ten (10) people.
- The Company understands that due to the nature of our work, access to running water for hand washing may be impracticable. In these situations, the Company will provide, if available, alcohol-based hand sanitizers and/or wipes.
- Employees should limit the use of co-workers' tools and equipment. To the extent tools must be shared, the Company will provide alcohol-based wipes to clean tools before and after use. When cleaning tools and equipment, consult manufacturing recommendations for proper cleaning techniques and restrictions.
- Employees are encouraged to limit the need for N95 respirator use, by using engineering and work practice controls to minimize dust. Such controls include the use of water delivery and dust collection systems, as well as limiting exposure time.
- The Company will divide crews/staff into two (2) groups where possible so that projects can continue working effectively in the event that one of the

divided teams is required to quarantine.

- As part of the division of crews/staff, the Company will divide employees into dedicated shifts, at which point employees will remain with their dedicated shifts for the remainder of the project. If there is a legitimate reason for an employee to change shifts, the Company will have sole discretion in making that alteration.
- Employees are encouraged to minimize ridesharing. While in vehicles, employees must ensure adequate ventilation.
- If practicable, each employee should use/drive the same truck or piece of equipment every shift.
- In lieu of using a common source of drinking water, such as a cooler, employees should use individual water bottles.

B. Workers entering Occupied Building and Homes

- Construction and maintenance activities within occupied homes, office buildings, and other establishments, present unique hazards with regards to COVID-19 exposures. Everyone working within such establishments should evaluate the specific hazards when determining best practices related to COVID-19.
- During this work, employees must sanitize the work areas upon arrival, throughout the workday, and immediately before departure. The Company will provide alcohol-based wipes for this purpose.
- Employees should ask other occupants to keep a personal distance of six (6) feet at a minimum. Workers should wash or sanitize hands immediately before starting and after completing the work.

C. Job Site Visitors

- The number of visitors to the job site, including the trailer or office, will be limited to only those necessary for the work.
- All visitors will be screened in advance of arriving on the job site. If the visitor answers “yes” to any of the following questions, he/she should not be permitted to access the jobsite:
 - Have you been confirmed positive for COVID-19?
 - re you currently experiencing, or recently experienced, any acute respiratory illness symptoms such as fever, cough, or shortness of breath?

- Have you been in close contact with any persons who has been confirmed positive for COVID-19?
- Have you been in close contact with any persons who have traveled and are also exhibiting acute respiratory illness symptoms?
- Site deliveries will be permitted but should be properly coordinated in line with the employer's minimal contact and cleaning protocols. Delivery personnel should remain in their vehicles if at all possible.

D. Personal Protective Equipment and Work Practice Controls

- In addition to regular PPE for workers engaged in various tasks (fall protection, hard hats, hearing protection), the Company will also provide:
 - Gloves: Gloves should be worn at all times while on-site. The type of glove worn should be appropriate to the task. If gloves are not typically required for the task, then any type of glove is acceptable, including latex gloves. Employees should avoid sharing gloves.
 - Eye protection: Eye protection should be worn at all times while on-site.
 - **NOTE:** The CDC is currently not recommending that healthy people wear N95 respirators to prevent the spread of COVID-19. Nevertheless, employees must wear N95 respirators if required by the work and if available.
- Due to the current shortage of N95 respirators, the following Work Practice Controls should be followed:
 - Keep dust down by using engineering and work practice controls, specifically through the use of water delivery and dust collection systems.
 - Limit exposure time to the extent practicable.
 - Isolate workers in dusty operations by using a containment structure or distance to limit dust exposure to those employees who are conducting the tasks, thereby protecting nonessential workers and bystanders.
- Institute a rigorous housekeeping program to reduce dust levels on the jobsite.

IV. Job Site Cleaning and Disinfecting

The Company has instituted regular housekeeping practices, which include cleaning and disinfecting frequently used tools and equipment, and other elements of the work environment, where possible. Employees should regularly do the same in their assigned work areas.

- Jobsite trailers and break/lunchroom areas will be cleaned at least once per day. Employees performing cleaning will be issued proper personal protective equipment (“PPE”), such as nitrile, latex, or vinyl gloves and gowns, as recommended by the CDC.
- Any trash collected from the jobsite must be changed frequently by someone wearing nitrile, latex, or vinyl gloves.
- Any portable jobsite toilets should be cleaned by the leasing company at least twice per week and disinfected on the inside. The Company will ensure that hand sanitizer dispensers are always filled. Frequently touched items (i.e., door pulls and toilet seats) will be disinfected frequently.
- Vehicles and equipment/tools should be cleaned at least once per day and before change in operator or rider.
- OSHA has indicated that a reliable report that an employee has tested positive for COVID-19 does not typically require an employer to perform special cleaning or decontamination of work environments, unless those environments are visibly contaminated with blood or other bodily fluids.¹ Notwithstanding this, the Company will clean those areas of the jobsite that a confirmed-positive individual may have contacted, and it will do so before employees can access that workspace again.
- The Company will ensure that any disinfection shall be conducted using one of the following:
 - Common EPA-registered household disinfectant
 - Alcohol solution with at least 60% alcohol
 - Diluted household bleach solutions (if appropriate for the surface).
- The Company will maintain Safety Data Sheets of all disinfectants used on site.

¹ <https://www.osha.gov/SLTC/covid-19/controlprevention.html>

V. Jobsite Exposure Situations

Employee Exhibits COVID-19 Symptoms

If an employee exhibits COVID-19 symptoms, the employee must remain at home until he or she is symptom free for 72 hours (3 full days) without the use of fever-reducing or other symptom-altering medicines (e.g., cough suppressants). The Company will similarly require an employee who reports to work with symptoms to return home until he or she is symptom free for 72 hours (3 full days). To the extent practical, employees are required to obtain a doctor's note clearing them to return to work.

- **Employee Tests Positive for COVID-19**

An employee who tests positive for COVID-19 will be directed to self-quarantine away from work. Employees that test positive and are symptom free may return to work when at least seven (7) days have passed since the date of his or her first positive test and have not had a subsequent illness. Employees who test positive and are directed to care for themselves at home may return to work when: (1) at least 72 hours (3 full days) have passed since recovery;² and (2) at least seven (7) days have passed since symptoms first appeared. Employees who test positive and have been hospitalized may return to work when directed to do so by their medical care providers. The Company will require an employee to provide documentation clearing his or her return to work.

- **Employee Has Close Contact with an Individual Who Has Tested Positive for COVID-19**

Employees who have come into close contact with an individual who has tested positive for COVID-19 (co-worker or otherwise) will be directed to self-quarantine for 14 days from the last date of close contact with that individual. Close contact is defined as six (6) feet for a prolonged period of time.

If the Company learns that an employee has tested positive, the Company will conduct an investigation to determine co-workers who may have had close contact with the confirmed positive employee in the prior 14 days and direct those individuals who have had close contact with the confirmed-positive employee to self-quarantine for 14 days from the last date of close contact with that employee. If applicable, the Company will also notify any sub-contractors, vendors/suppliers or visitors who may have had close

² Recovery is defined as: (1) resolution of fever without the use of fever-reducing medications and (2) improvement in respiratory symptoms (e.g., cough, shortness of breath).

contact with the confirmed-positive employee. If an employee learns that he or she has come into close contact with a confirmed-positive individual outside of the workplace, he/she must alert a manager or supervisor of the close contact and self-quarantine for 14 days from the last date of close contact with that individual.

VI. OSHA Recordkeeping

If a confirmed case of COVID-19 is reported, the Company will determine if it meets the criteria for recordability and reportability under OSHA's recordkeeping rule. OSHA requires construction employers to record work-related injuries and illnesses that meet certain severity criteria on the OSHA 300 Log, as well as complete the OSHA Form 301 (or equivalent) upon the occurrence of these injuries. For purposes of COVID-19, OSHA also requires employers to report to OSHA any work-related illness that (1) results in a fatality, or results in the in-patient hospitalization of one or more employee. "In-patient" hospitalization is defined as a formal admission to the in-patient service of a hospital or clinic for care or treatment.

OSHA has made a determination that COVID-19 should *not* be excluded from coverage of the rule – like the common cold or the seasonal flu – and, thus, OSHA is considering it an "illness." However, OSHA has stated that only confirmed cases of COVID-19 should be considered an illness under the rule. Thus, if an employee simply comes to work with symptoms consistent with COVID-19 but is not a confirmed diagnosis, the recordability analysis is not necessarily triggered at that time.

If an employee has a confirmed case of COVID-19, the Company will conduct an assessment of any workplace exposures to determine if the case is work-related. Work-relatedness is presumed for illnesses that result from events or exposures in the work environment unless it meets certain exceptions. One of those exceptions is that the illness involves signs or symptoms that surface at work but result solely from a non- work-related event or exposure that occurs *outside* of the work environment. Thus, if an employee develops COVID-19 *solely* from an exposure outside of the work environment, it would not be work-related, and thus not recordable.

The Company's assessment will consider the work environment itself, the type of work performed, the risk of person-to-person transmission given the work environment, and other factors such as community spread. Further, if an employee has a confirmed case of COVID19 that is considered work-related, the Company will report the case to OSHA if it results in a fatality within 30 days or an in-patient hospitalization within 24-hours of the exposure incident.

VII. Confidentiality/Privacy

Except for circumstances in which the Company is legally required to report workplace

occurrences of communicable disease, the confidentiality of all medical conditions will be maintained in accordance with applicable law and to the extent practical under the circumstances. When it is required, the number of persons who will be informed that an unnamed employee has tested positive will be kept to the minimum needed to comply with reporting requirements and to limit the potential for transmission to others. The Company reserves the right to inform other employees that an unnamed co-worker has been diagnosed with COVID-19 if the other employees might have been exposed to the disease so the employees may take measures to protect their own health. The Company also reserves the right to inform sub-contractors, vendors/suppliers, or visitors that an unnamed employee has been diagnosed with COVID-19 if they might have been exposed to the disease so those individuals may take measures to protect their own health.

VIII. General Questions

Given the fast-developing nature of the COVID-19 outbreak, the Company may modify this Plan on a case-by-case basis. If you have any questions concerning this Plan, please contact Andrew Sherrill, President.

COVID-19 Checklist for Employers and Employees

Know the Symptoms of COVID-19

- Coughing, fever, shortness of breath, and difficulty breathing.
- Early symptoms may include chills, body aches, sore throat, headache, diarrhea, nausea/vomiting, and runny nose. If you develop a fever and symptoms of respiratory illness, **DO NOT GO TO WORK**, and call your supervisor and health-care provider immediately. Do the same thing if you come into close contact with someone showing these symptoms.

Employer Responsibilities

- Develop a COVID-19 Exposure Action Plan.
- Conduct safety meetings (toolbox talks) by phone if possible. If not, instruct employees to maintain 6-feet between each other. The foreman/supervisor will track attendance verbally rather than having employees sign an attendance sheet.
- Access to the job site and work trailer will be limited to only those necessary for the work.
- All visitors will be pre-screened to ensure they are not exhibiting symptoms.
- Employees, contractors, and visitors will be asked to leave the jobsite and return home if they are showing symptoms.
- Provide hand sanitizer and maintain Safety Data Sheets of all disinfectants used on site.
- Provide protective equipment (PPE) to any employees assigned cleaning/disinfecting tasks.

Employee Responsibilities

- Become familiar with the Exposure Action Plan and follow all elements of the Plan.
- Practice good hygiene: wash hands with soap and water for at least 20 seconds. If these are not available, use alcohol-based hand rub with at least 60% alcohol. Avoid touching your face, eyes, food, etc. with unwashed hands.

Cleaning/Disinfecting Job Sites and Other Protective Measures

- Clean and disinfect frequently used tools and equipment on a regular basis. This includes other elements of the jobsite where possible. Employees should regularly do the same in their assigned work areas.
- Clean shared spaces such as trailers and break/lunchrooms at least once per day.
- Disinfect shared surfaces (door handles, machinery controls, etc.) on a regular basis.
- Avoid sharing tools with co-workers. If not, disinfect before and after each use.
- Arrange for any portable job site toilets be cleaned by the leasing company at least twice per week and disinfected on the inside.
- Trash collected from the jobsite must be changed frequently by someone wearing gloves.

Personal Protective Equipment and Alternate Work Practice Controls

- Provide and wear the proper PPE.
- Keep the dust down by using engineering and work practice controls, specifically through the use of water delivery and dust collection systems.

COVID-19 Toolbox Talk

What is COVID-19?

The novel coronavirus, COVID-19 is one of seven types of known human coronaviruses. COVID-19, like the MERS and SARS coronaviruses, likely evolved from a virus previously found in animals. The remaining known coronaviruses cause a significant percentage of colds in adults and children, and these are not a serious threat for otherwise healthy adults.

Patients with confirmed COVID-19 infection have reportedly had mild to severe respiratory illness with symptoms such as fever, cough, and shortness of breath.

According to the U.S. Department of Health and Human Services/Centers for Disease Control and Prevention (“CDC”), Chinese authorities identified an outbreak caused by a novel—or new—coronavirus. The virus can cause mild to severe respiratory illness. The

outbreak began in Wuhan, Hubei Province, China, and has spread to a growing number of other countries—including the United States.

How is COVID-19 Spread?

COVID-19, like other viruses, can spread between people. Infected people can spread COVID-19 through their respiratory secretions, especially when they cough or sneeze. According to the CDC, spread from person-to-person is most likely among close contacts (about 6 feet). Person-to-person spread is thought to occur mainly *via* respiratory droplets produced when an infected person coughs or sneezes, like influenza and other respiratory pathogens. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. It is currently unclear if a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes.

In assessing potential hazards, employers should consider whether their workers may encounter someone infected with COVID-19 in the course of their duties. Employers should also determine if workers could be exposed to environments (e.g., worksites) or materials (e.g., laboratory samples, waste) contaminated with the virus.

Depending on the work setting, employers may also rely on identification of sick individuals who have signs, symptoms, and/or a history of travel to COVID-19-affected areas that indicate potential infection with the virus, in order to help identify exposure risks for workers and implement appropriate control measures.

There is much more to learn about the transmissibility, severity, and other features associated with COVID-19, and investigations are ongoing.

COVID-19 Prevention and Work Practice Controls:

Worker Responsibilities

- Frequently wash your hands with soap and water for at least 20 seconds. When soap and running water are unavailable, use an alcohol-based hand rub with at least 60% alcohol. Always wash hands that are visibly soiled.
- Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Avoid close contact with people who are sick.
- Employees who have symptoms (i.e., fever, cough, or shortness of breath) should notify their supervisor and stay home—DO NOT GO TO WORK.
- Sick employees should follow [CDC-recommended steps](#). Employees should not return to work until the criteria to [discontinue home isolation](#) are met, in consultation with healthcare providers and state and local health departments.

General Job Site / Office Practices

- Clean AND disinfect frequently touched objects and surfaces such as workstations, keyboards, telephones, handrails, and doorknobs. Dirty surfaces can be cleaned with soap and water prior to disinfection. To disinfect, use products that meet EPA's criteria for use against SARS-CoV-2, the cause of COVID-19, and are appropriate for the surface.
- Avoid using other employees' phones, desks, offices, or other work tools and equipment, when possible. If necessary, clean and disinfect them before and after use.
- Clean and disinfect frequently used tools and equipment on a regular basis.
 - This includes other elements of the jobsite where possible.
 - Employees should regularly do the same in their assigned work areas.
- Clean shared spaces such as trailers and break/lunchrooms at least once per day.
- Disinfect shared surfaces (door handles, machinery controls, etc.) on a regular basis.
- Avoid sharing tools with co-workers if it can be avoided. If not, disinfect before and after each use.
- Arrange for any portable job site toilets to be cleaned by the leasing company at least twice per week and disinfected on the inside.
- Any trash collected from the jobsite must be changed frequently by someone wearing gloves.
- In addition to regular PPE for workers engaged in various tasks (fall protection, hard hats, hearing protection), employers will also provide:
 - Gloves: Gloves should be worn at all times while on-site. The type of glove worn should be appropriate to the task. If gloves are not typically required for the task, then any type of glove is acceptable, including latex gloves. Gloves should not be shared if at all possible.
 - Eye protection: Eye protection should be worn at all times while on-site.