onal Green Bui	NGBS Scoring for New Construction			Current Stat		Performance Level Minimums			;
NAHB	ICC 700-2008 National Green Building Standard™	This project has not met all the requirements for Bronze, Silver,		Score	Mandatory	Bronze	Silver	Gold	Emerald
RESEARCH CENTER	Revised August 17, 2011	Gold, or Emerald.	This Chapter This Project	0	N/A Not Met	39 222	66 406	93 558	119 697
Practice #	Chapter 5: Lot Design, Prepara	ation, and Development		Points	Points	Required Do	cumentation	Approved	Notes
500 - Lot Design,	Preparation, and Development			Available	Claimeu			Products	
500.0	INTENT. This section applies to lot development for the eventual construction of residential buildings, multi- unit buildings, or additions thereto that contain dwelling units. The buildings on the lot earn their own performance level by complying with the provisions of Sections 303, 304, or 305.5, as applicable.								
501 - Lot Selectio	n								
501.1	Lot. The lot is selected to minimize environmental impact Claim points for all that apply from (1)-(2) below:	by one or more of the following cond	litions.						
(1)	An infill lot is selected.			4		None.			
(2)	A greyfield lot or an EPA-recognized brownfield lot is selected. 5 Evidence that the site was a previously developed site with abandoned or underutilized structures, or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site or an EPA map showing site is previously developed site is previously developed site o						-		
Additional Info:	NOTE: Indicate if the lot is greyned of EPA-recognized bro	whileid in the Additional into box be	iow.			u recognized	brownield.		
501.2	Mass transporation. A range of mass transportation choic	es are promoted by one or more of t	he following						
	conditions:								
(1)	A lot is selected within one-half mile (805 m) of pedestrian miles (8046 m) of a mass transit station with provisions fo	access to a mass transit system or v r parking.	within five	3		Map showin transportatio the building.	g location of on relative to	-	
(2)	Walkways, street crossings, and entrances designed to pro Buildings are connected to existing sidewalks and areas of	mote pedestrian activity are provide development.	d. New	3		None.			
(3)	A lot is selected within one-half mile (805 m) of six or mor (such as pools, tennis courts, basketball courts), parks, gro community center, daycare center, bank, school, restaurar	e community resources (e.g., recrea cery store, post office, place of wors t, medical/dental office, laundroma	tional facilities hip, t/dry cleaner).	3		Map or appr showing loca committed o resources re	oved site plan ation of community lative to		
Additional Info:	NOTE: List the 6 community resources in the Comments be	ox below.				bullullig.			
502 - Project Tea	m, Mission Statement, and Goals								
502.1	Project team, mission statement, and goals. A knowledge are identified with respect to green lot design, preparation objectives are written into a mission statement.	able team is established and team n , and development. The project's gre	nember roles een goals and	4		Project missi goals, and sp member role	ion statement, pecific team es identified.	-	
503 - Lot Design						4			
503.0	INTENT. The lot is designed to avoid detrimental environmental impacts first, minimize any unavoidable impacts, and mitigate for thoses impacts that do occur. The project is designed to minimize environmental impacts and to protect, restore, and enhance the natural features and environmental quality of the lot.								
	NOTE: To be awarded points allocated for design, the inter	nt of the design must be implemente	ed.						
503.1	Natural resources. Natural resources are conserved by one Claim points for all that apply from (1)-(6) below:	e or more of the following conditions	5.			Lot coosific info	mation for		
(1)	A natural resources inventory is completed under the direc	tion of a qualified professional.		5		Natural reso signed by qu professional	urce inventory alified	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(2)	A plan is implemented to conserve the elements identified resources.	by the resource inventory as high pr	riority	6		Conservation	n plan.		
(3)	Items listed for protection in the resource inventory plan a professional.	re protected under the direction of a	qualified	4		Statement fr professional directed plar implemental	om that he/she າ tion.		
(4)	Basic training in tree or other natural resource protection i	s provided for the on-site supervisor.		4		Evidence of s training.	site supervisor		
(5)	All tree pruning on-site is conducted by a Certified Arborist			2		Invoice or ot from Certifie	her evidence d Arborist.		
(6)	Ongoing maintenance of vegetation during construction is	in accordance with TCIA A300.		3		Statement fr professional maintenance during const complies.	om that e of vegetation ruction		
503.2	Slope disturbance. Slope disturbance is minimized by one Claim points for all that apply from (1)-(5) below: NOTE: Points awarded only if there are developable steep All or a percentage of development on steep slopes is avoi Claim points for only one from (a)-(c) below:	or more of the following conditions. slopes on the lot. ded.				, · · · · · · · · · · · · · · · · · · ·			
(a)	<25% 25 - 75%			2		Lot specific p	lan with		
(c)	>75%			<u>3</u> 4		existing and contour lines of slopes in e (if any), and that are dist Calculation s area of slope undisturbed	proposed s. Identify areas excess of 25% areas of slopes urbed. howing the % es that are	_	

Pra	ctice	#	Chapter 5: Lot Design, Preparation, and Development	Points Available	Points Claimed	Required Documentation	Approved Products	Notes	
	(2)		Hydrological/soil stability study for steep slopes is completed and used to guide the design of all buildings on			Report from qualified			
			the site.	5		professional stating intent			
						been met.			
	(3) All or a percentage of roads and parking are aligned with natural topography to reduce cut and fill.								
			Claim points for only one from (a)-(c) below:			,			
		(a)	<25%	1		Report from qualified			
		(c)	>75%	3		of the requirement has			
		.,		5		been met.			
	(4)		Long-term erosion effects are reduced through the design and implementation of terracing, retaining walls,			Report from qualified			
			landscaping, and restabilization techniques.	6		of the requirement has	See Products		
						been met.			
	(5)		Underground parking uses the natural slope for parking entrances.						
				4		None.			
503.3			Soil disturbance and erosion. Soil disturbance and erosion are minimized by one or more of the following						
			Claim points for all that apply from (1)-(3) below:						
			NOTE: Points must be taken in 503.3 to claim points in 504.1. (Also see Section 504.3.)						
	(1)		Construction activities are scheduled to minimize length of time that soils are exposed.	5		Construction schedule.			
	(2)			5					
	(2)		(a) tunneling instead of trenching						
			(b) use of smaller (low ground pressure) equipment or geomats to spread the weight of construction			Plans & scopes of work			
			equipment	5		showing alternative means			
			(c) shared utility trenches or easements (d) placement of utilities under payed surfaces instead of yards			used.			
			NOTE: List alternative means of installing utilities in the additional info box below						
	(3)		Limits of clearing and grading are demarcated on the plan.	_		Plans showing grading &			
				5		clearing limits.			
Addit	ional I	Info:	Starm water management Starm water is managed using one or more of the following low impact						
505.4	(1)		Natural water and drainage features are preserved and used.			Photos or other document			
	. ,		·····	6		showing water & natural			
				-		drainage prior to			
	(2)		A storm water management plan is developed and implemented that minimizes concentrated flows and			Storm water management	•		
			simulates flows found in natural hydrology (e.g., vegetative swales, french drains, wetlands, drywells, and	6		plan.			
	(2)		rain gardens).						
	(5)		parking areas, walkways, and patios.						
	Claim points for only one from (a)-(c) bel		Claim points for only one from (a)-(c) below:	<u>v:</u>		_			
		(a)	<25%	1		Calculation showing % of			
		(b)	25 - 75%	3		hardscape surface covered	See Products		
	(4)	(C)	>/5%	5		with permeable materials.			
	(4)		A minimum of 75% of the root is vegetated (green root).	3		None.			
503.5	5 Landscape plan. A landscape plan is developed to limit water and energy use while preserving or enhancing								
			the natural environment.						
	(1)		<u>Claim points for all that apply from (1)-(8) below:</u>			Lot specific information:			
	(1)		Landscaping is phased to coincide with achievement of final grades to ensure denuded areas are quickly			natural vegetation prior to			
			vegetated.	5		development. Landscape			
			NOTE: Points must be taken for 503.5(1) to claim points in 801.7.4(3)			plan.			
	(2)		lurf grass species, other vegetation, and trees are selected that are native or regionally appropriate for local growing conditions			List of regionally			
			Brown's conditions.	4		Landscape contractor			
						statement or labels on			
	(=)					plants.			
	(3)		A percentage or all turt areas are limited. Claim points for only one from (a)-(d) below:						
		(a)	0%	4		Calculation showing % of			
		(b)	>0 - <25%	3		lot (minus building			
		(c)	25 - <50%	2		footprint & hardscape) that			
	(4)	(a)	50 - 75% Plants with similar watering needs are grouned (hydrozoning)	1		is turi.			
	(.)		riano mensimilar natering needs are grouped (nyarozoning).	_		Landscape plan by qualified			
				5		showing watering needs.			
	(5)								
	(5)		species and locations for tree planting are identified that will provide summer shading of streets, parking areas, and buildings to moderate temperatures.	5		Landscape plan by qualified	See Products		
				5		landscape professional.	beerroudeeb		
	(6)		Vegetative wind breaks or channels are designed as appropriate for local conditions.			Landscape plan by qualified			
1				4		landscape professional.			
1	(7)		On-site tree trimmings or stump grinding of regionally appropriate trees are used to provide protective mulch						
	(*)		during construction, and cleared trees are recycled as sawn lumber or pulp wood.	3		PO or invoice for contractor			
1						providing onsite recycling.			
1	(8)		An integrated pest management plan is developed to minimize chemical use in pesticides and fertilizers.	4		Pest management plan.			
1						1			

Pra	ictice #	Chapter 5: Lot Design, Preparation, and Development	Points Available	Points Claimed	Required Documentation	Approved Products	Notes		
503.6		Wildlife habitat. Measures are planned that will support wildlife habitat.	4		Development wide or lot specific wildlife management plan by a qualified professional				
503.7		Mixed-use development. Mixed-use development is incorporated.	6		None.				
503.8		Environmentally sensitive areas. Environmentally sensitive areas are considered by one or more of the			I				
		following conditions. Claim points for all that apply from (1)-(2) below:							
	(1)	Environmentally sensitive areas are avoided.	3		Lot specific plan showing no sensitive areas.				
	(2)	Compromised environmentally sensitive areas are mitigated or restored.	3		Lot specific plan showing original location of sensitive areas. Plan by qualified professional showing appropriate mitigations steps.				
503.9		Density. The average density on a net developable area basis is one of the following conditions. Claim points for only one from (1)-(3) below:							
	(1)	7 to <14 dwelling units per acre (per 4047 m ²)	4		Density calculation of the				
	(2)	14 to <21 dwelling units per acre (per 4047 m ²)	7		units per acre for this				
504 - L	(3) ot Constru	≥21 dwelling units per acre (per 4047 m ⁺) Jotion	10		bullding.				
504.0		INTENT. Environmental impact during construction is avoided to the extent possible; impacts that do occur							
		are minimized, and any significant impacts are mitigated.							
504.1		On-site supervision and coordination. Un-site supervision and coordination is provided during clearing, grading, trenching, paving, and installation of utilities to ensure that specified green development practices are implemented. (also see section 503.3)	4		List of practices implemented from 503.3.	-			
504.2		NOTE: Points must be taken in 503.3 to claim points in 504.1. Trees and vegetation. Designated trees and vegetation are preserved by one or more of the following							
		conditions.							
	(1)	Claim points for all that apply from (1)-(3) below: Fencing or equivalent is installed to protect trees and other vegetation.	3		None.				
	(2)	Trenching, significant changes in grade, and compaction of soil and critical root zones in "tree save" areas are avoided.	4		None.				
	(3)	Damage to designated existing trees and vegetation is mitigated during construction through pruning, root	4		Invoice or other evidence				
504.3		Soil disturbance and erosion. On-site soil disturbance and erosion are minimized by one or more of the			from qualified arborist.				
following conditions. (Also see Section 503.3)									
	(1)	Liam points for all that apply from (1-18) below:	5		None.				
	(2)	"No disturbance" zones are created using fencing or flagging to protect vegetation and sensitive areas from	5		None.				
	(3)	construction activity. Sediment and erosion controls are installed and maintained in accordance with the storm water pollution	5		None.	-			
	(4)	Topsoil is stockpiled and stabilized for later use to establish landscape plantings.	-		None				
	(5)		5		None.				
	(5)	Soli compaction from construction equipment is reduced by distributing the weight of the equipment over a larger area (laying lightweight geogrids, mulch, chipped wood, plywood, OSB, metal plates, or other materials capable of weight distribution in the pathway of the equipment).	3		None.				
	(6)	Disturbed areas that are complete or to be left unworked for 21 days or more are stabilized within 14 days using methods as recommended by the EPA, or in the approved storm water pollution prevention plan, where required.	3		As-built construction schedule.				
	(7)	Soil is improved with organic amendments and mulch.	3		Invoice or evidence from landscape contractor.	-			
	(8)	Utilities are installed using one or more alternative means (e.g., tunneling instead of trenching, use of smaller equipment, use of low ground pressure equipment, use of geomats, shared utility trenches or easements).	5		Plans and scope of work showing alternative means used.				
Addit	tional Info	NOTE: List alternative means of installing utilities in the Additional Info box below.							
505 - Ir	nnovative	Practices							
505.0		INTENT. Innovative lot design, preparation and development practices are used to enhance environmental performance. Waivers or variances from local development regulations are obtained, and innovative zoning practices are used to implement such practices.							
505.1		Driveways or parking areas. Driveways or parking areas are shared. Waivers or variances from local development regulations are obtained to implement such practices, as applicable. In a <u>multi-unit project</u> , parking capacity is not to exceed the local minimum requirements.	4		None.		<u>, , , , , , , , , , , , , , , , , , , </u>		
505.2		Heat island mitigation. Any combination of the following strategies are provided for a minimum of 50% of							
		 the horizontal surface area of the hardscape: (1) Shading of hardscaping: Shade is provided from existing or new vegetation (within 5 years) or from trellises. Shade of hardscaping is to be measured on the summer solstice at noon. (2) Light-colored hardscaping: Horizontal hardscaping materials are installed with a solar reflectance index of 29 or greater. 	4		Calculation showing percent of hardscape included in heat island minimization.	-			
Additional Info:									