APPENDIX F SUSTAINABLE DEVELOPMENT INCENTIVES

SDI Checklist

SDI Ordinance

SDI Worksheet Example (Excel)

SDI Demonstration

The Sustainable Development Incentives process is an optional alternative method of compliance in Section 51A-10.135(d). This method of mitigation is a comprehensive approach for developments which pre-conditionally plan for a sustainable development and will build with the intent and results for significant land and water conservation. It is not applicable to all developments. It is expected that the applicant for this method will seek early consultation with the building official on the sustainable development concepts and ways to implement them.

SDI uses tree canopy coverage as a goal to establish a threshold for tree reduction and tree canopy retention. If the canopy goal is retained on the property after construction, the mitigation for trees removed would be completed with no additional steps required.

SDI also has an additional tool to account for landscape design options focused on site conservation through the Green Site Points calculator. If the tree canopy cover is not enough to reduce the mitigation fully, certain landscape improvements may provide enough credit to complete the mitigation by work done on site.

The legacy tree is also used in this provision to be measured by the tree canopy dimensions by square feet. Large legacy trees intended to be installed and maintained in optimum conditions for the tree are given an enhanced mitigation credit.

SDI implementation standards are a pre-requisite for requests for a <u>Development Impact Waiver</u> (10.132) to seek removal of mitigation in a development impact area on a building site over 2 acres.

The incentives listed within this document are applied to encourage the property owner to consider more than just the built environment as they develop it. This requires the owner to consider early various concepts for designing with the land and to minimize the impact to sensitive land areas and to sustain the natural resources associated with the property. If the owner has the will and means to implement certain levels of control over the development on the property to help the city attain its long-term objectives, then the City of Dallas provides these incentives by design to support their effort.

Beginning

The first considerations must be to look at the property for its existing natural conditions and identifying particular aspects that provide an intrinsic value to the property and to the community. There are numerous sources of information on the subject of conservation development we recommend you read for inspiration and guidance.

- <u>Land Trust Alliance: Protecting Land Through Conservation Development: Lessons</u> from Land Trust Experience (2014)
- Conservation Subdivision Handbook NC State University

Consider the uses proposed for the site and use the model of the balance for sustainability in your decision-making. Review the pros and cons with conservation-oriented consultants on all aspects conservation design and determine how tree canopy conservation can work with your budget and vision.

Consult with the city arborist, engineers, and planners, to consider how the ideas can be made reality with the minimal negative impact to the property and its established resources.

Begin the process of the forest stand delineation to provide a narrative of the conditions on the property for your baseline information. Provide as much detail as is suitable for the site to begin to make choices.

At this point, we introduce the principal criteria for the prerequisite for attaining the credits under the Sustainable Development Incentives.

The checklist below takes you through the provisions in the code that will aid you in evaluating the property for SDI credit.

SDI CHECKLIST

PRE-CONDITIONS
Items must be provided by landscape architect or consulting arborist before a building permit is issued.

	Soil Resource Assessment (for SDI & Legacy tree mitigation requirements) 10.104(b)
	Forest Stand Delineation Tree Protection Plan 10.136
	Conceptual Landscape Plan Identify tree preservation areas, natural features, landscape areas, proposed buildings and any other site elements or improvement in as much detail as possible.
oubmi	Provide additional details as needed to support request for SDI application. Refer to 10.123 issions.
vicinity	Date, scale, north point, and names, addresses, contact information for property owners Location of existing boundary lines and dimensions of the lot, zoning of lot and adjacent lots;
	Centerlines of existing water courses, flood plain, escarpment and GIS, drainage features, streets, alleys, utility easements, driveways, and sidewalks.
	Location of centerlines of overhead and underground utility lines within and adjacent to the building site, and location of all utilities, easements, including utility poles, generators, and equipment, and items in 10.104.
	Project name, street address, lot and block descriptions. de all relevant information in the conceptual plan to determine a confident assessment of the opment.
Additi	onal mandatory criteria:
	All healthy top soils disturbed during construction must be restored.
	2. Development must be fitted to the topography and soils to minimize cut and fill sections.
	3. Grading and clearing in or around the development impact area may not encroach into a
	primary natural area, except in conjunction with the construction of drainage facilities, approved
	through engineering review.
	4. Grading near preserved trees and around the edge of the development impact area must be
	planned and implemented to insure minimal impact to natural topography, watercourses,
	vegetation, and wildlife.
	5. Indigenous vegetation must be retained and protected except in development impact areas or
	to control or remove invasive plants.
	6. Utility easement planning and locations must be designed to ensure minimal impact to
	preserved trees and primary natural areas.
	7. All tree preservation and legacy tree plantings must fully comply with the tree protection requirements and soil area and tree spacing standards of this article.
	8. A consulting arborist is required for: 1) design and implementation of a tree protection plan;
	2) to periodically inspect preserved trees; 3) to insure the standards of legacy tree plantings are
	implemented, and 4) to confirm compliance with the requirements to the building official before
	the final landscape inspection.
	9. Irrigation standards must be designed for efficient water conservation management on the
	property including dedicated irrigation for all legacy trees.
	10. A site maintenance schedule and implementation plan for site sustainability covering a
	minimum of five years must be approved by a consulting arborist or landscape architect and
	fully implemented. The plan must be retained on the property.

PRE-DEVELOPMENT ASSESSMENT

FINAL LANDSCAPE PLAN:

TREE CANOPY COVER CREDIT = Combined tree canopy cover of existing preserved trees

+ planted legacy trees

+ planted landscape trees

The combined total canopy cover in square feet is compared to the CANOPY COVER GOAL to determine % of reduction to be provided.

Tree Canopy Cover Goal – determined by <u>Street Typology</u> of the adjacent streets, as listed in the most current form of the Complete Streets Vision Map (Complete Streets Manual).

Street Typology	(circle) <u>Canopy Cover Goal</u>	Street Name
Residential	40 percent	
Mixed Use	35 percent	
Commercial & Freeways	30 percent	
Industrial	25 percent	
Parkways	45 percent	
calculate the base mitigation re-	ubtracted from the total replacement quirement in diameter inches. ation reduction	requirements for the building site to
10.134(c)(6)	alion reduction	
Transplanted t	ree on site	
SUSTAINABLE DEVELO	PMENT CREDITS	
Tree Canopy Cover Co Canopy cover credit (so	redit µ. ft.) / Tree Canopy Goal (sq.ft.) = %	reduction
(Base mitigation	n requirement - % reduction = # of in	nches due
	e Canopy Cover Credit cover (sq.ft.)	
Preserved tree	cover in PNA (0.25:1)	
	ee Canopy Credit ium nursery stock trees @ 300 sq.ft.	per tree
Legacy Tree C Large legacy tree	anopy Credit ees (@1200 sq.ft. per tree)	

GREEN SITE POINTS (must comply when applicable)

Required green site points are calculated by determining the percentage of the tree canopy cover goal or the percentage of existing tree canopy cover compared to the overall building site area before development. The percentage is rounded and converted to points at a 1:1 ratio (i.e., 30 percent = 30 points). For building sites three acres or less, the required number of points is (i) determined by the tree canopy cover goal or the tree canopy cover before construction, whichever is greater. For all other building sites, the required number of points is determined by the tree canopy cover before construction, but must be a minimum of 50 points. (1) Green Site Landscape Plan - 5 points maximum A green site landscape plan must meet the minimum standards of this article, be designed by a landscape architect, and include the following: - a plan for the design, implementation, and maintenance of a water-wise program and water-wise planting materials on a minimum of 75 percent of development impact area; and - a soil resource assessment throughout development for all landscape areas and required trees. (2) Tree preservation plan. Five points. A tree preservation plan must include a tree protection plan, soil resource assessment, and a complete tree survey performed by a consulting arborist. The tree preservation plan must be implemented and monitored by a consulting arborist. A report of soil planting conditions and tree protection during construction is required before a final landscape inspection. (3) Engineered solutions in an urban streetscape for replacement trees. 10 points maximum - A building site must have a minimum of five landscape design option points to qualify. Green site points are awarded when engineered solutions allow required large or medium trees in the street buffer zone to be planted in impervious environments. Soil volume must be a minimum of 480 cubic feet per required tree. A minimum of 75 percent of required street buffer trees must meet the soil volume minimum for credits to apply. Options: Minimum required soil volume, 5 pts.; increase in soil volume 10% above minimum requirements, 6 pts.: + 15%, 7 pts.; + 20%, 8 pts.; ____ + 25%, 9 pts.: + 30% or more, 10 pts. (4) Enhanced buffer zone and increased landscape area. 15 points maximum. A building site must have a minimum of 10 landscape design option points in street buffer zone and residential buffer zone enhancements to qualify. A street buffer zone or residential buffer zone may be enlarged by a minimum average of five feet deeper than the required average buffer depth. Five points for each five feet average increase in depth along each buffer zone on the building site. (5) Conservation through tree preservation or habitat restoration. 20 points maximum. A

building site must have a minimum of 10 landscape design option points to qualify. Conservation or preservation programs on the tree removal property may qualify for credits where primary natural areas and secondary natural areas are retained for conservation purposes. Each individual area must be

identified on the landscape plan and must be a minimum of five percent of the building site.

(aa) Habitat preservation. Five points. The applicant must preserve existing healthy native and mixed species grassland or woodland areas. Habitat preservation and restoration using an active (bb) management plan. 10 points. The applicant may create or restore natural habitat conditions if designed and implemented by a qualified professional. Site maintenance must be continual for the purpose of sustaining the vegetated area. Five additional points is available for each additional area. (cc) Habitat preservation, restoration, and maintenance of natural forest edge using an active management plan - adjacent to primary natural areas. 15 points. The applicant may preserve and restore land areas adjacent to wetlands, creeks, floodplain, and slopes which help buffer the protected creeks, slopes, habitat and woodland in primary natural areas from the development impact area. An additional five points may be allotted if 90 percent of the development impact area boundary adjacent to the primary natural area is a minimum of 100 feet from the primary natural area. (6) Development impact development. 20 points maximum. A building site must have a minimum of six landscape design option points to qualify. (i) Rain garden. Maximum 10 points. One to 5,000 square feet: 3 points; and each additional 1,000 square feet: 1 point. (bb) (ii) Bioswale. Maximum 15 points per bioswale. 50 to 100 feet long: 3 points; and (bb) each additional 50 feet: 1 point. Water-wise plant materials and planting beds. Maximum 10 (iii) points. The applicant may provide landscaping that uses water conservation techniques including waterwise plants, mulch, and efficient irrigation. For providing water conservation techniques in a (aa) minimum of 50 percent of landscape areas: 3 points; or (bb) in a minimum of 80 percent of landscape areas: 5 points. For providing low-water consumption grasses for 80 (cc) percent of turf surfaces: 3 points; or (dd) low-water consumption grasses for all turf surfaces: 5 points. (7) Parking lots. The applicant may improve the interior zone to provide wider landscape areas and an enhanced shade tree environment. The enhancements may be combined for a maximum of 30 points. An additional five points are available if the building site achieves a 50 percent or greater projected tree canopy coverage over the parking lot with combined existing trees, legacy trees, and landscape trees. **Option 1.** Provide a protected pedestrian pathway that is between three feet in width and 15 feet in width, through a parking lot to a building from a public or private street or the expansion of a wide landscape median with trees and a walkway through the parking lot. A minimum of one large or medium tree is required for each 40 linear feet of pedestrian pathway or landscape median. Five points. **Option 2.** Provide a maximum of 10 parking spaces between (ii)

Option 3. Increase the parking lot landscape area to a minimum

parking lot landscape islands. 5 points.

(iii)

of 200 square feet for each large or	medium tree	Э.
landasana jalanda. E najuta	(aa)	Increase of 50 percent of the required parking lot
landscape islands. 5 points. landscape islands. 10 points.	(bb)	Increase of 75 percent of the required parking lot
(iv) of 300 square feet for each large or		4. Increase the parking lot landscape area to a minimum e. Increase of 50 percent of the required parking lot
landscape islands. 5 points.	(bb)	Increase of 75 percent of the required parking lot
landscape islands. 10 points.	(55)	increase of 75 percent of the required parking for
3 points. (v)	Option	5. Each additional parking lot landscape island provided,
(vi) with large or medium trees extending	Option g the length	6. Provide a minimum 10-foot-wide landscape median of a minimum 12 space parking row. 5 points.
(vii or medium trees extending the leng median for a maximum of 20 poin	th of a minin	7. Provide a 12-foot-wide landscape median with large num 12 space parking row. 10 points for each full ot.
(vii or medium trees extending the leng median for a maximum of 30 poin	th of a minin	8. Provide a 16-foot-wide landscape median with large num 12 space parking row. 15 points for each full ot.
(ix) contiguous open soil surface area to		9. Provide a minimum of 2,500 square feet of pocket park. 20 points.
		s. The applicant may protect the primary and secondary development indefinitely through a conservation
		plicant may protect the primary and secondary natural ction for a minimum time-period of 25 years with 25 year
TOTAL POINTS	REQUI	RED POINTS

SDI ORDINANCE

- (d) SUSTAINABLE DEVELOPMENT INCENTIVES. Sustainable development incentives must be calculated on a **form** provided by the director.
- (1) **Requirements**. For a development to qualify for sustainable development incentives it must meet the requirements in this subsection.
- (A) Properties must be a minimum of two acres with no residential uses except multifamily uses and shared access developments.
- (B) Properties must contain commercial or multifamily uses or a shared access development.
- (C) Before a building permit is issued, a consulting arborist or landscape architect must provide the following to the building official:
 - (i) A forest stand delineation.
- (ii) A **conceptual landscape plan** identifying tree preservation, areas, natural features, landscape areas, proposed buildings, and any other site elements or improvements in as much detail as possible.
- (iii) A **soil resource assessment** for all landscape areas.
- (D) All healthy top soils disturbed during construction <u>must</u> be restored.
- (E) Development must be fitted to the topography and soils to minimize cut-and-fill sections.
- (F) Grading and clearing in or around the **development impact area** may not encroach in a **primary natural area**, except in conjunction with the construction of drainage facilities, approved through engineering review.
- (i) Grading near preserved trees and around the edge of the development impact area must be planned and implemented to insure minimal impact to natural topography, watercourses, vegetation, and wildlife.
- (ii) Indigenous vegetation must be retained and protected except in development impact areas or to control or remove invasive plants.
- (G) Utility easement planning and locations must be designed to insure minimal impact to preserved trees and primary natural areas.
- (H) All tree preservation and legacy tree plantings must fully comply with the tree protection requirements and soil area and tree spacing standards of this article.
 - (I) A consulting arborist is required;

- (i) for design and implementation of a tree protection plan and soil resource assessment;
 - (ii) to periodically inspect preserved trees;
 - (iii) to insure the standards for legacy tree plantings are

implemented; and

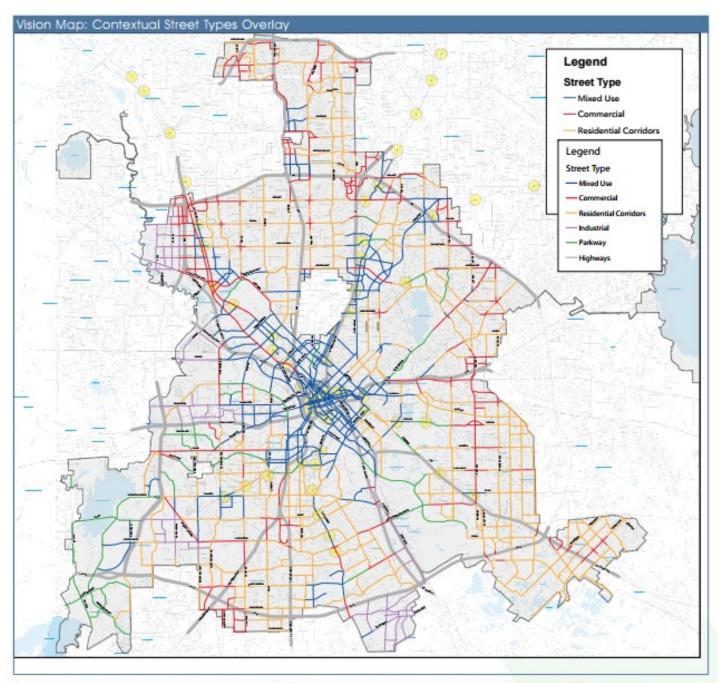
- (iv) to confirm compliance with these requirements to the building official before the final landscape inspection.
- (J) Irrigation standards must be designed for efficient water conservation management on the property including dedicated irrigation for all legacy trees.
- (K) A site maintenance schedule and implementation plan for site sustainability covering a minimum of <u>five years</u> must be approved by a consulting arborist or landscape architect and fully implemented. The schedule and plan must be available at the property.

(2) Sustainable development assessment.

- (A) <u>Tree canopy cover goal and credit</u>. The combined tree canopy cover of existing preserved trees, planted legacy trees, and planted landscape trees, shown on the final approved landscape plan, determines the <u>tree canopy cover credit for sustainable development incentives</u>.
- (i) The combined preserved and planted legacy and landscape tree canopy cover measured in square feet is compared to the tree canopy cover goal for the property to determine the <u>percentage of tree replacement reduction to be provided</u>.
- (ii) The **tree canopy cover goal** for the property is determined by the **street typology** of the adjacent streets. In this subsection, street typology is determined using the **Complete Streets Manual**, unless another publication is designated by the building official. Where a building site faces two or more street frontages with differing typologies, the greater canopy cover goal controls.

Street Typology	Canopy Cover Goal
Residential	40 percent
Mixed Use	35 percent
Commercial & Freeways	30 percent
Industrial	25 percent
Parkways	45 percent

Canopy cover goal percentages are converted to square feet by multiplying the percent and the total square footage of the building site.



This vision map is intended to be incorporated into the Thoroughfare Plan and periodically updated through the Thoroughfare Plan amendment process.

(B) **Tree mitigation deductions**. Tree mitigation deductions are subtracted from the total replacement tree requirements for the building site to calculate the base mitigation requirement in diameter inches. Available tree mitigation deductions are:

(i) Old-field mitigation reduction credit under Section 51A-10.134(c)(6).

(ii) Transplanted tree on site credit under Section 51A-10.133.1(c).

(3) Sustainable development credits.

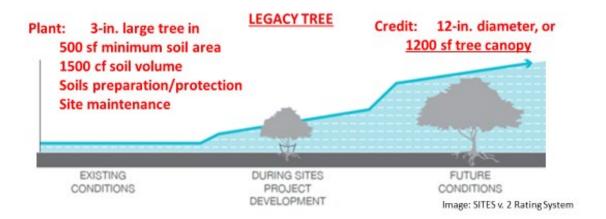
(A) Tree canopy cover credit.

- (i) Canopy cover credit square footage is divided by the tree canopy goal for the building site, measured in square feet, to obtain the percentage reduction.
- (ii) The base mitigation requirement is reduced by the percentage above to determine the number of inches of mitigation remaining due.

(B) Preserved tree canopy credit.

- (i) Preserved tree canopy cover is determined by completing a forest stand delineation and a conceptual landscape plan showing the protected trees to be preserved.
- (ii) Preserved tree canopy cover credit, measured in square feet, must be confirmed before final inspection. Preserved tree canopy cover in a primary natural area is calculated at a rate of 0.25:1.
- (C) Landscape tree canopy credit. Large and medium nursery stock landscape trees may be counted towards the tree canopy cover total for a building site at a rate of 300 square feet per tree.
- (D) **Legacy tree canopy credit**. Large or medium legacy trees may be installed in enhanced landscape areas for legacy tree credit. Legacy tree credit is determined as follows:
- (i) Large legacy trees are counted towards the tree canopy cover total at a rate of 1,200 square feet per tree.
- (ii) Medium legacy trees are counted towards the tree canopy cover total at a rate of 750 square feet per tree.

In Section 51A-10.135(b), Mitigation by legacy tree, the legacy tree is credited for 12 diameter inches when a 2-inch or greater healthy nursery stock tree is planted. In both processes, refer to Section 51A-10.104 for Soil Resource Assessment and Soil Area requirements for legacy trees.



(4) Green site points.

- (A) Additional tree mitigation reductions are available through enhanced site planning and design, landscape, and water conservation improvements that directly promote urban forest conservation.
- (B) Required green site points are calculated by determining the percentage of the tree canopy cover goal or the percentage of existing tree canopy cover compared to the overall building site area before development. The percentage is rounded and converted to points at a 1:1 ratio (i.e., 30 percent = 30 points).
- (i) For building sites three acres or less, the required number of points is determined by the tree canopy cover goal or the tree canopy cover before construction, whichever is greater.
- (ii) For all other building sites, the required number of points is determined by the tree canopy cover before construction, but must be a minimum of 50 points.
 - (C) Green site points from enhanced landscaping are determined as follows:
- (i) **Green site landscape plan**. Five points. A green site landscape plan must meet the minimum standards of this article, be designed by a landscape architect, and include the following:
- (aa) a plan for the design, implementation, and maintenance of a water-wise program and water-wise planting materials on a minimum of 75 percent of development impact area; and

(bb) a soil resource assessment throughout development for all landscape areas and required trees.

- (ii) **Tree preservation plan**. Five points. A tree preservation plan must include a tree protection plan, soil resource assessment, and a complete tree survey performed by a consulting arborist. The tree preservation plan must be implemented and monitored by a consulting arborist. A report of soil planting conditions and tree protection during construction is required before a final landscape inspection.
- (iii) Engineered solutions in an urban streetscape for replacement trees. 10 points maximum. A building site must have a minimum of five landscape design option points to qualify. Green site points are awarded when engineered solutions allow required large or medium trees in the street buffer zone to be planted in impervious environments. Soil volume must be a minimum of 480 cubic feet per required tree. A minimum of 75 percent of required street buffer trees must meet the soil volume minimum for credits to apply.
 - (aa) Minimum required soil volume: five points
 - (bb) Increase in soil volume 10 percent above

minimum requirement: six points.

(cc) Increase in soil volume 15 percent above

minimum requirement: seven points.

(dd) Increase in soil volume 20 percent above

minimum requirement: eight points.

(ee) Increase in soil volume 25 percent above

minimum requirement: nine points.

(ff) Increase in soil volume 30 percent or greater above minimum requirement: 10 points.

- (iv) Enhanced buffer zone and increased landscape area. 15 points maximum. A building site must have a minimum of 10 landscape design option points in street buffer zone and residential buffer zone enhancements to qualify. A street buffer zone or residential buffer zone may be enlarged by a minimum average of five feet deeper than the required average buffer depth. Five points for each five feet average increase in depth along each buffer zone on the building site.
- (v) Conservation through tree preservation or habitat restoration. 20 points maximum. A building site must have a minimum of 10 landscape design option points to qualify. Conservation or preservation programs on the tree removal property may qualify for credits where primary natural areas and secondary natural areas are retained for conservation purposes. Each individual area must be identified on the landscape plan and must be a minimum of five percent of the building site.

(aa) **Habitat preservation**. Five points. The applicant must preserve existing healthy native and mixed species grassland or woodland areas.

(bb) **Habitat preservation and restoration** using an active management plan. 10 points. The applicant may create or restore natural habitat conditions if designed and implemented by a qualified professional. Site maintenance must be continual for the purpose of sustaining the vegetated area. Five additional points is available for each additional area.

(cc) Habitat preservation, restoration, and maintenance of natural forest edge using an active management plan - adjacent to primary natural areas. 15 points. The applicant may preserve and restore land areas adjacent to wetlands, creeks, floodplain, and slopes which help buffer the protected creeks, slopes, habitat and woodland in primary natural areas from the development impact area. An additional five points may be allotted if 90 percent of the development impact area boundary adjacent to the primary natural area is a minimum of 100 feet from the primary natural area.

- (D) **Development impact development**. 20 points maximum. A building site must have a minimum of six **landscape design option** points to qualify.
 - (i) Rain garden. Maximum 10 points.
 - (aa) One to 5,000 square feet: three points; and
 - (bb) each additional 1,000 square feet: one point.
 - (ii) Bioswale. Maximum 15 points per bioswale.
 - (aa) 50 to 100 feet long: three points; and
 - (bb) each additional 50 feet: one point.
- (iii) Water-wise plant materials and planting beds. Maximum 10 points. The applicant may provide landscaping that uses water conservation techniques including water-wise plants, mulch, and efficient irrigation.
- (aa) For providing water conservation techniques in a minimum of 50 percent of landscape areas: three points; or
 - (bb) in a minimum of 80 percent of landscape

(cc) For providing low-water consumption grasses for 80 percent of turf surfaces: three points; or

areas: five points.

(dd) low-water consumption grasses for all turf surfaces: five points.

- (E) parking lots. The applicant may improve the interior zone to provide wider landscape areas and an enhanced shade tree environment. The enhancements may be combined for a maximum of 30 points. An additional five points are available if the building site achieves a 50 percent or greater projected tree canopy coverage over the parking lot with combined existing trees, legacy trees, and landscape trees.
- (i) Option 1. Provide a protected pedestrian pathway that is between three feet in width and 15 feet in width, through a parking lot to a building from a public or private street or the expansion of a wide landscape median with trees and a walkway through the parking lot. A minimum of one large or medium tree is required for each 40 linear feet of pedestrian pathway or landscape median. Five points.
- (ii) Option 2. Provide a maximum of 10 parking spaces between parking lot landscape islands. Five points.
- (iii) Option 3. Increase the parking lot landscape area to a minimum of 200 square feet for each large or medium tree.
- (aa) Increase of 50 percent of the required parking lot landscape islands. Five points.
- (bb) Increase of 75 percent of the required parking lot landscape islands. 10 points.
- (iv) Option 4. Increase the parking lot landscape area to a minimum of 300 square feet for each large or medium tree.
- (aa) Increase of 50 percent of the required parking lot landscape islands. Five points.
- (bb) Increase of 75 percent of the required parking lot landscape islands. 10 points.
- (v) Option 5. Each additional parking lot landscape island provided, Three points.
- (vi) Option 6. Provide a minimum 10-foot-wide landscape median with large or medium trees extending the length of a minimum 12 space parking row. Five points.
- (vii) Option 7. Provide a 12-foot-wide landscape median with large or medium trees extending the length of a minimum 12 space parking row. 10 points for each full median for a maximum of 20 points on the lot.

- (viii) Option 8. Provide a 16-foot-wide landscape median with large or medium trees extending the length of a minimum 12 space parking row. 15 points for each full median for a maximum of 30 points on the lot.
- (ix) Option 9. Provide a minimum of 2,500 square feet of contiguous open soil surface area to serve as a pocket park. 20 points.
- (F) Conservation easement. 10 points. The applicant may protect the primary and secondary natural areas on the building site adjacent to the development indefinitely through a conservation easement.
- (G) **Deed restriction**. Five points. The applicant may protect the primary and secondary natural areas on a building site with a public deed restriction for a minimum time-period of 25 years with 25 year automatic renewal provisions.

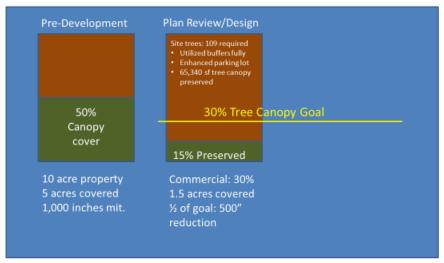
SDI Worksheet Example

Pre-Development Assessment		Type decimal								
				Survey total / Protected trees	1000	in	All protected	d trees	on survey.	
				DEDUCTION: Adjustment Area	0	in			,	
				Protected Trees after adjustment	1000	in				
Free Canopy Cover Goal		30%	%	Protected Trees Removed	1000	in	All classified	trees	subject to r	nitigation.
Tree Canopy Cover Goal (square feet)		130680	sf	Old-Field Reduction*	0	in	/ III CIGOSITICG		Judject to .	magaarom
				Transplanted trees*	0	in				
Lot Size (acs)	10.0	435600	sf							
				Base Mitigation Requirement	1000	in				
Canopy Coverage for building site (acs)	5.0	217800	sf							
		50.0%	%	of canopy cover of total building si	te prior to	constr	uction.			
Site Development										
				Preserved Tree Canopy Credit					Deduction	(inches)
NOTES:				Preserved Canopy (DIA & SNA)	65340	sf	50.0%	%	500	
SDI Minimum Requirements:				Preserved Canopy (PNA)	0	0.25	0	sf	0	
Soil quality assessment/vegetation										
Forest Stand Delineation				Landscaping / Legacy Tree Credit			% of goal			
Site Analysis				Landscape Tree (300 sf)	30	trees	6.9%	%	69	
Conceptual Plan				Large Legacy Tree (1200 sf)	20	trees	18.4%	%	184	
Central oversight of sustainable planning				Medium Legacy Tree (750 sf)	0	trees	0.0%	%	0	
Soil restoration										
Restriction for Primary Natural Areas										
Jtility easement planning				Cumulative Canopy	98340	sf	75.3%	%	% of goal	
Maintenance plan - 5 year +										
Water conservation				REDUCTION BY TREE CANOPY CO	VER		753	in	753	
				DUE			247	in		
Green Site Points		50	Mini	mum Points Required for building si	tes over 3	acres.				
GSI Sustainable Landscape Points										
	Min/Max			GSI Options						
	5			Sustainable Landscape Plan						
	5			Tree Preservation Plan						
	5-10			1. Engineered solutions in urban	streetscap	e for r	eplacement t	rees		
	10-15			2. Enhanced buffer zone increasi	ng landsca	aping a	rea.			
	5-20			3. Conservation through tree pre	servation	or hab	itat restoratio	n		
	6-20			4. Low Impact Development						
	10-30	20		5. Parking Lots						
	10			6. Conservation easement						
	5			7. Public deed restriction						
	61-120	20								
Minimum number of points required:		50		Must attain the greater of a mini	mum of <u>5</u> 6	0 point	s, or point eq	uivale	nt of initia	tree canopy
3 acres or less points required:		50		If property is 3 acres or less, prop	•		_	f the t	ree canopy	y cover goal, o
				the higher point equivalent of in	itial tree ca	anopy	percentage.			
Doot Construction Stand Order S										
Post Construction- Stand Quality Pts		20								
TOTAL REDUCTION BY GREEN SITE		20	J	0.4	WEP		247	in		
				- REDUCTION BY TREE CANOPY CO			247 99	in in		
				Post-Construction Total	LA =		148	in in		
				. ost-construction rotal			140			
Tree mitigation deductions.										
Canopy Cover Goal										
Residential - 40% (.40)										
Mixed Use -35% Commercial/Frwys - 30% Industrial - 25%										

Contact the city arborist for availability and information on the SDI worksheet.

SDI Demonstration

Sustainable Development Incentives SDI Process



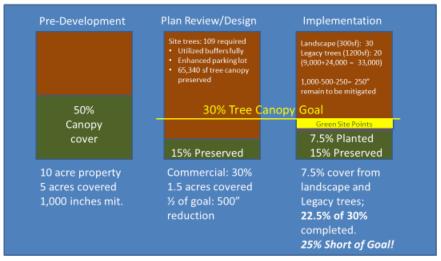
35

Sustainable Development Incentives SDI Process



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Sustainable Development Incentives SDI Process and Green Site Points



47

Sustainable Development Incentives SDI Process and Green Site Points

Pre-Development

Point total for lots over 3 acs is based on 50 points or a greater tree canopy cover prior to review.

50%
Canopy
cover
cover

10 acre property
5 acres covered
1,000 inches mit.
SDI: Reduced requirements by
75% (250" remain)

Plan Review/Design

Sustainable Landscape Plan – 5 pts.

Tree Preservation Plan – 5 pts.

#2 Enhanced buffer zone increase –
15 pts.

#5 Parking lots – 20 pts.

#7 Public deed restriction – 5 pts.

50 points attained.

Sustainable Development Incentives SDI Process and Green Site Points

Pre-Development	Plan Review/Design	Impleme	ntatio
	Sustainable Landscape Plan – 5 pts. The Personal Plan – 5 pts.	250" rer be mitig	ated. -25
50% Canopy cover	 Tree Preservation Plan – 5 pts. #2 Enhanced buffer zone increase – 15 pts. #5 Parking lots – 20 pts. #7 Public deed restriction – 5 pts. 		-25' -75' -10' -25'
10 acre property 5 acres covered 1,000 inches mit. SDI: Reduced requirements by 75% (250" remain)	50 points attained.	Total:	250 tell

45