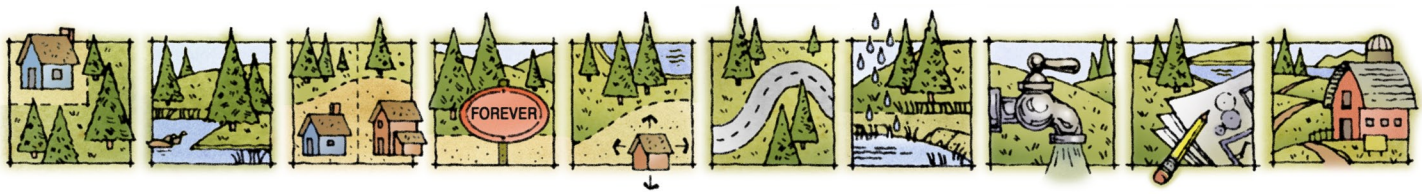
A CONSERVATION DESIGN SCORECARD



An easy-to-use scorecard to help planners, planning commissions, local officials, developers, and citizens measure to what degree a proposed Conservation Design development achieves the optimal balance of development with conservation.

This scorecard was made possible by grants from the Minnesota Pollution Control Agency (MPCA), the Minnesota Department of Natural Resources (DNR) and the Initiative Foundation, as well as contributions by 1000 Friends of Minnesota and the North Central Lakes Collaborative (NCLC). This scorecard could not have happened without the generous intellectual contributions of the Advisory Committee, which was made up of planners, developers, local government representatives and conservation professionals.

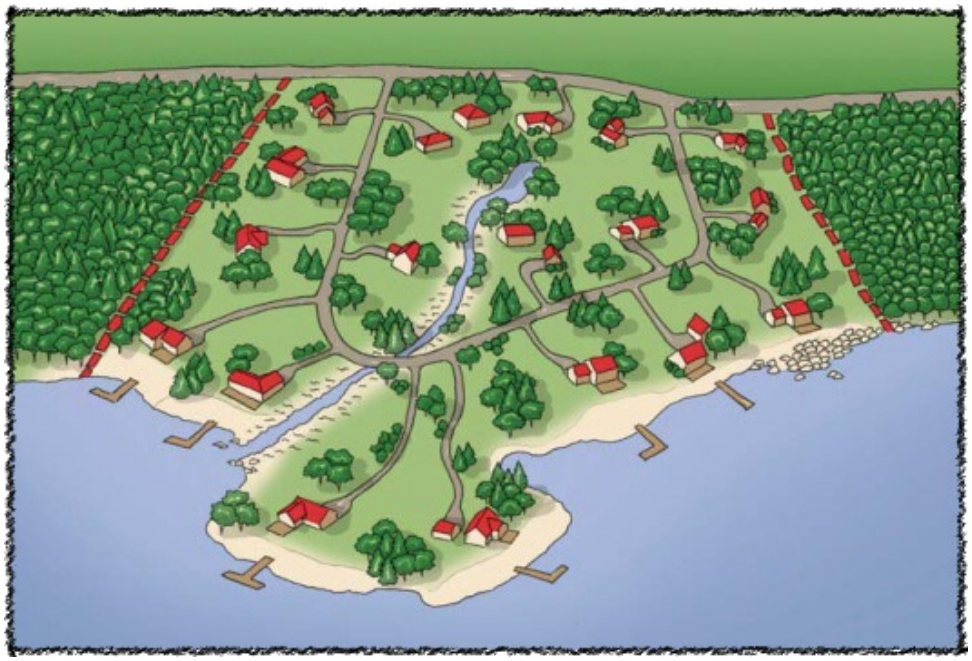
The BIG question:
Can we develop land and still protect it?

Because of its high quality of life, Minnesota is the fastest growing state in the Upper Midwest. To accommodate this growth, new housing subdivisions continue to spring up around the state – often in rural areas, or just outside of small towns, or near sensitive natural areas. Is it possible to meet our development needs in such a way that we add economic value to a community AND create a unique sense of place AND still respect the environment?

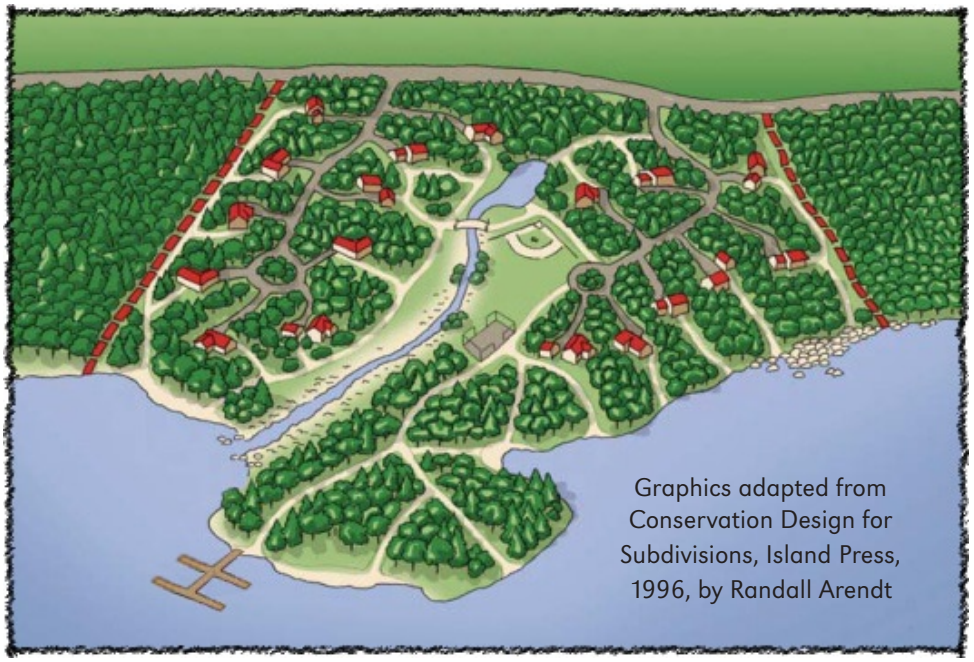
The short answer is "Yes." The "bigger" answer is, "Yes, and it's called Conservation Design."

What is Conservation Design?

Conservation Design is a thoughtful development process by which the most ecologically and culturally significant areas of a property are first identified and set aside to be permanently protected. Then, buildings, roads and other infrastructure are designed on the least-sensitive areas of the property. The result is a development with character, profitability and ecological integrity.



In Conventional Suburban-Style Development, land is often chopped up into equal parts (in this case, 18), roads and buildings are placed for convenience, and very little, if any, attention is paid to preserving the ecological integrity of the site. There is little or no shared open space. Only lakeshore lots have water access. Privacy is valued over creating a neighborhood with a sense of community.



Graphics adapted from Conservation Design for Subdivisions, Island Press, 1996, by Randall Arendt

In a Conservation Design Development, the same number of lots can be created (18), but the best natural and cultural areas are preserved, too. 40% – 80% of the land becomes permanent open space to be enjoyed by all property owners. Buildings and roads are placed in the least sensitive areas of the property. Walking trails, parks and shared water access help to create a unique sense of place.

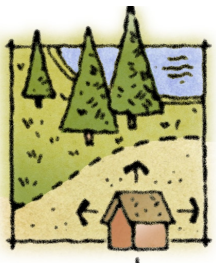
There are 10 basic qualities associated with good Conservation Design:

1. A significant amount of open space is permanently protected to preserve the site's ecological integrity and function.

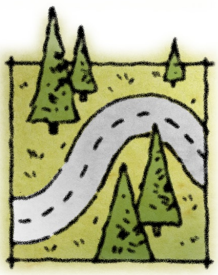
2. Permanently protected open space is selected based on its relatively high natural resource values.

3. Permanently protected open space has connectivity within the development and with natural areas on neighboring properties so as to create a larger, interconnected, community-wide network of open space.

4. Open space is permanently protected through legal measures.

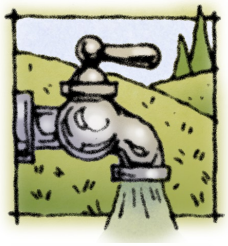


5. After open space has been designated, built structures are sited where there will be minimal adverse environmental impacts and where scenic vistas are maximized for both residents and non-residents.

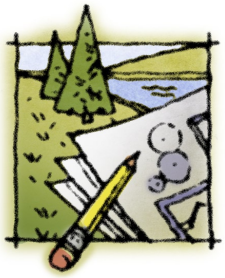


6. Roads servicing the development promote safety, minimize negative visual impacts and minimize impervious surfaces.

7. **Stormwater is managed on-site such that pre-development runoff and post-development runoff (volume and patterns) are the same.**



8. **Wastewater is appropriately treated and managed so as to minimally impact the environment.**



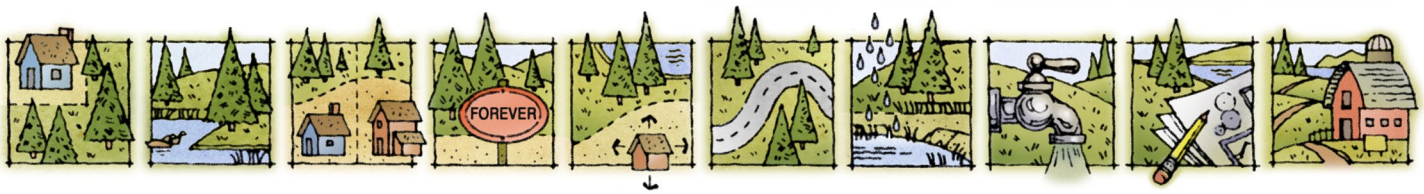
9. **The application process is transparent and includes pre-application guidance by local planning staff, site visits to aid in the design process, and ample opportunities for abutting neighbors and local conservation experts to weigh in.**

10. **A sense of community/sense of place is created by preserving cultural/historical features of the site and by creating walking trails and other opportunities for positive neighborhood interaction.**

About this Scorecard:

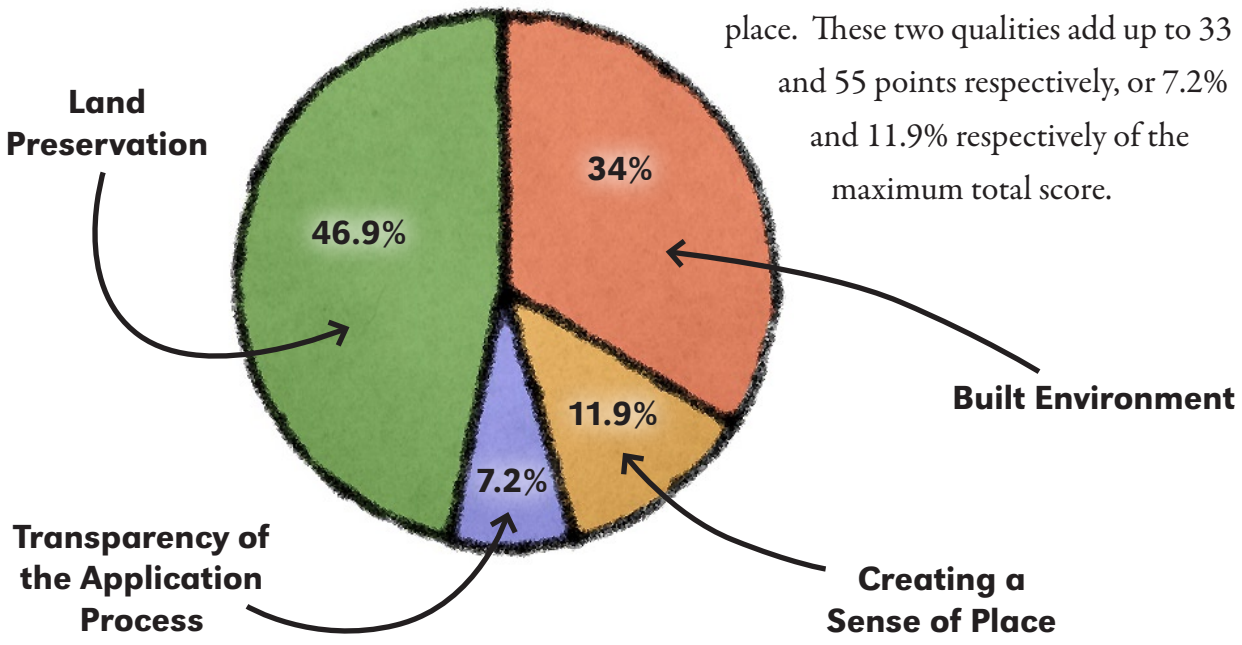
This scorecard is as much a conceptual model as it is a practical tool. In fact, with this scorecard, we have tried to expand the definition of Conservation Design to include concepts that are especially appropriate in today's economy – things like energy efficiency and affordability, which are good ideas for all developments. Conservation Design is needed because many rapidly growing communities throughout Minnesota are looking for ways to balance unprecedented growth with conservation of limited natural resources. But as developments spring up, so do questions. Do these developments really preserve the environmental integrity of the site as well as they could? Do they strike a true balance of development with conservation? Are they as good for the community as they could be? This scorecard can help communities develop a common understanding of the concept of Conservation Design and help raise the bar for future Conservation Design developments that are put on the ground. But a scorecard is only the beginning. A community concerned about how it develops and how it preserves its unique sense of place must have good policies and ordinances in place that promote sensible, innovative ideas like Conservation Design.

Conservation Design Scorecard



Directions:

The scorecard is broken up into ten sections, one for each of the ten Conservation Design qualities. Simply read through the sections and circle the correct answer for each measurement listed. The measurements are weighted differently so that the maximum score for each measurement reflects its importance to the goals of Conservation Design. To calculate the score, multiply the points for a given answer by the measurement's weight and enter it into the score column. Add up the scores for each measurement and write that number (subtotal) in the space provided. The first four qualities deal with land preservation, which is the most important aspect of Conservation Design. Therefore, these four qualities add up to 216 points, or 46.9% of the maximum total score, which is 461 points. The next four qualities (5-8) deal with the built environment and these four qualities add up to 157 points, or 34% of the maximum total score. The last two qualities (9 and 10) deal with transparency of the application process and creating a sense of place. These two qualities add up to 33 and 55 points respectively, or 7.2% and 11.9% respectively of the maximum total score.



1. A significant amount of open space is permanently protected to preserve the site's ecological integrity and function. The ultimate goal of conservation design is to preserve natural resources and community character, and to use development to enhance those priorities. In conservation design, the size of the open space matters. The more open space a developer protects, the more points s/he gets. Some communities have chosen to give developers a density bonus if their design protects more than the required minimum amount of open space. Designated open space, however, shouldn't just be composed of wetlands, floodplains, bluffs and steep slopes -- areas typically restricted from development of any kind -- but should include a large percentage of uplands. According to the Minnesota Environmental Quality Board (EQB), when calculating open space, it "does not include the area within 25 feet of any structure, any impervious surface, or the area between buildings within an individual cluster of buildings when the development is designed using clustered compact lots or clustered units or sites to create and preserve green space, such as in a conservation subdivision..."

Measurement	Answer	Points	Weight	Score
Project permanently protects a large percentage of land on the parcel.	70% or greater 60%-69% 50%-59% 40%-49% 30%-39% 20%-29% Less than 20%	10 9 8 3 2 1 0	X 5	
Of land protected on the parcel, no more than 25% is made up of wetlands, steep slopes, bluffs, floodplains, and other areas typically considered to be "non-buildable areas."	yes no	3 0	X 3	
			Subtotal: _____	

2. Permanently protected open space is selected based on its relatively high natural resource values. Quantity is important, but so is quality. Protected lands can be considered either primary or secondary conservation areas. Primary conservation areas are the most severely constrained lands where development is typically restricted. These include wetlands, steep slopes and floodplains. Primary conservation areas can also include any lands that are already protected such as parks and properties under permanent conservation easements. Secondary conservation areas include all other significant features worth protecting on the parcel such as mature woodlands, wildlife habitat, trout streams, wildlife travel corridors, sensitive shorelands, prime farmland, groundwater recharge areas, greenways and trails, native prairies, historic/cultural features, potential recreational areas, and scenic viewsheds. Developers, even Conservation Design developers, are not conservation biologists. Therefore, it is imperative that developers seek out expert conservation opinions when selecting areas to be permanently protected. These expert conservation opinions can come from the outside, such as soliciting input from local conservation experts, or referencing published studies of the area in question that justify selections, such as the County Biological Survey, or natural resource inventories. Expert conservation opinions can also come from the inside if the developer's design team includes conservation-specific expertise. The design team's selections of permanently protected lands should be based on sound conservation values. Lastly, it is always a good idea for developers to ask the opinions of abutting neighbors. They may have some anecdotal information to share and getting them on board with the project as soon as possible makes good business sense.

Measurement	Answer	Points	Weight	Score
Project delineates primary and secondary conservation areas.	Yes No	2 0	X 3	
Project delineates which land is developable and all developable land is located outside of all primary and secondary conservation areas.	Yes No	2 0	X 3	
Primary and secondary conservation areas were selected after first talking with abutting neighbors and getting their opinions.	Yes No	2 0	X 3	

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Primary and secondary conservation areas were selected based on: 1) existing scientific studies; 2) consulting with local conservation experts; or 3) the developer's design team includes conservation expertise that guides the selection and justification of permanently protected conservation areas. Acceptable studies to reference might include local natural resource inventories, the County Biological Survey and regional parks, trails and open space master plans. Local conservation experts may include personnel from the DNR, the SWCD, or other conservation organizations.	Yes to all 3 Yes to 2 of 3 Yes to 1 of 3 No to all 3	6 4 2 0	X 4	
No wetlands are filled.	Left intact Disturbed	3 -3	X 4	
			Subtotal: _____	

Notes & Observations

3. Permanently protected open space has connectivity within the development and with natural areas on neighboring properties so as to create a larger, interconnected, community-wide network of open space. To the maximum reasonable extent, all open space in a conservation design development should be physically connected AND contiguous with open space on adjacent parcels in order to promote large expanses of open space. Connections should be made to preserve and connect known wildlife corridors and to keep natural systems intact -- things like wetland complexes, forests and water flowage patterns. When determining open space connections with neighboring properties, it is vitally important that developers consult any existing scientific studies that might show where natural connections exist, as well as solicit the opinions of local conservation experts and neighbors, who might have anecdotal information to share. Again, if a developer's design team includes conservation-specific expertise, their selection of open space connections should be based on sound conservation values.

Measurement	Answer	Points	Weight	Score
The open space within the development parcel is physically connected rather than separated as isolated pockets of open space. If all permanently protected open space on a parcel is physically connected, you may claim 100%. If there are breaks in the open space which create multiple areas of permanent protection, only count the largest contiguous area for scoring.	is connected 100% 90%-99% 80%-89% 70%79% 60%-69% 50%-59% 40%-49% 30%-39% Less than 30%	 8 7 6 5 4 3 2 1 0	X 2	
The project connects its open space with natural areas identified on neighboring properties.	Yes No	4 0	X 4	
Open space connections were based at least partially on solicited opinions of abutting neighbors.	Yes No	2 0	X 3	

Chart continued on next page

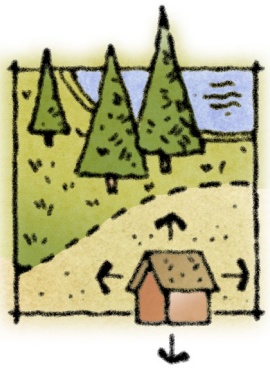
Open space connections were selected based on: 1) existing scientific studies; 2) the opinions of local conservation experts; or 3) the opinions of conservation experts who are part of the developer's design team. Studies referenced might include local natural resource inventories, the County Biological Survey and regional parks, trails and open space master plans. Local conservation experts may include personnel from the DNR, the SWCD, or conservation organizations.	Yes to all 3 Yes to 2 of 3 Yes to 1 of 3 No to all 3	3 2 1 0	X 5	
				Subtotal: _____

Notes & Observations

4. Open space is permanently protected through legal measures. The most effective way to ensure that open space will remain undeveloped forever is to place a permanent conservation easement on it. Easements are legally binding agreements typically held by local units of government (LGUs), or private, nonprofit organizations that qualify under Section 501 (c)(3) of the Internal Revenue Code. Deed restrictions and covenants are, by comparison, not as effective as easements and are not recommended. Ownership of the underlying fee title of lands to be permanently protected can be held by a Homeowners Association (HOA) or a Community Association (CA), but membership in the HOA/CA must be automatic -- a precondition of property purchase in the development. Detailed maintenance plans for permanently protected lands should be required by LGUs as a condition of approval. Protected lands should be designed so that they can be effectively defended from encroachment. Using trails, fences and property markers to identify the boundaries of protected lands make them more identifiable and understandable. This is important so adjacent property owners are not tempted to treat the conservation areas as an extension of their own private yards.

Measurement	Answer	Points	Weight	Score
Project places a permanent conservation easement on all areas designated as common open space, and the easement is held by an LGU or a qualified independent entity like a conservation nonprofit.	Yes No	4 0	X 6	
Project has a well-developed plan for maintaining/restoring the open space. This plan addresses issues of ownership by the HOA/CA, management, protection, monitoring and financing through HOA/CA fees or other means.	Yes No	4 0	X 5	
Boundaries of open space are well defined so they can be readily identified and effectively defended from encroachment.	Yes No	2 0	X 3	
			Subtotal: _____	

5. After open space has been designated, built structures are sited where there will be minimal adverse environmental impacts



and where scenic vistas are maximized for both residents and non-residents. Lots and building sites should be located within the area designated as "developable," which is outside of primary and secondary conservation areas. To combat sprawl, the conservation development should occur within a municipality's designated growth area. Homes within the development should be situated so that views of the open space are maximized. The siting of homes in unsewered areas should also depend on the soil's septic suitability. In today's energy-aware economy, conservation design developments should be rewarded for not only protecting open space, but also incorporating energy efficiency and green building design elements into their built structures. These can be as simple as situating buildings to take advantage of passive solar energy to something more advanced like the use of energy efficient building materials and technologies. The conservation design developments of "yesterday" tended to target wealthier homebuyers. Everyone, no matter what their socio-economic condition may be, should have the option to live in a development with permanently protected open space, scenic views, energy-efficient homes and a sense of place. Today's conservation design developments should offer housing options for median- and below-median income households. Additionally, where allowed, some conservation design developments are including a mixed-use component to the development. Typically, mixed-use means a "mix" of residential and commercial uses. Mixed use might include a coffee shop where residents can gather, or a tele-work center that facilitates telecommuting options for residents, or another small commercial business that contributes to the development's sense of place.

Measurement	Answer	Points	Weight	Score
Built structures are only sited in areas designated as "developable," which includes soil conditions appropriate for Subsurface Sewage Treatment Systems (SSTSs), if applicable.	Yes No	2 0	X 2	
Development occurs within a municipality's designated growth area where infrastructure already exists, or where infrastructure will extend in the near future based on planned growth of the municipality.	Yes No	3 0	X 5	

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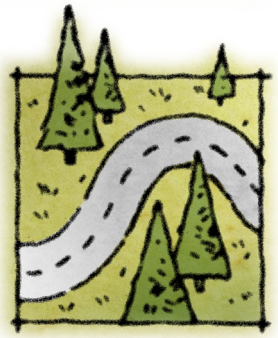
Built structures achieve a minimal level of green building performance as certified or measured using a local, statewide or national system such as MN GreenStar, or LEED (Leadership in Energy and Environmental Design).	Yes No	2 0	X 3	
Project offers housing options for median income households.	Yes No	2 0	X 2	
Project offers a percentage of "affordable" housing options for those who earn less than 80% of the Area Median Income (AMI).	15% or greater is "affordable" 5% - 14% Less than 5%	2 1 0	X 2	
Project: 1) sites homes to take advantage of scenic viewsheds; 2) screens development internally through the use of vegetation, topography and use of natural elements in structures; and 3) screens the development externally as it is viewed from nearby arterial roads.	Yes to all 3 Yes to 2 Yes to 1 No to all 3	3 2 1 0	X 3	
There is a mixed-use component to the development.	Yes No	2 0	X 3	
			Subtotal: _____	

Notes & Observations



6. Roads servicing the development promote safety, minimize negative visual impacts and minimize impervious surfaces. The location of streets and trails are determined only after open space is designated and after built structures are sited. Streets should be designed to minimize the visual size and scale of the development and take advantage of traffic calming features to discourage excessive speeds. Almost without exception, neighborhoods that have narrow, meandering streets are more desirable to live in than neighborhoods that have excessively wide and straight streets. Wide streets are the greatest sources of impervious cover (and stormwater runoff) in most residential developments. Narrower roads can reduce stormwater runoff, reduce development costs, and with reduced speed limits, increase safety. They can still provide for emergency vehicle access. For these reasons, many communities across the U.S. are recommending narrower road widths, which typically range from 29' to 36'. The National Fire Protection Association recommends widths of just 20'. The American Association of State Highway and Transportation Officials recommends 22'. The City of Portland, Oregon recommends 18' with one lane of parking, or 26' with parking on both sides. Baltimore County, Maryland recommends 24' with on-street parking and just 16' with no on-street parking. Cass County, Minnesota uses standards recognized by the American Society of Civil Engineers (ASCE), which allows more flexibility in road widths. Many communities are also looking at alternatives to traditional curb-and-gutter construction, such as open-section roadways flanked by filter strips, swales and rain gardens to filter roadway runoff, promote infiltration and reduce runoff velocity. Looped roadways are preferred over cul-de-sacs. Driveways can be shared, or limited to 9' in width, and should be sloped or crowned to drain evenly onto adjacent vegetated areas, and not directly onto the street.

Measurement	Answer	Points	Weight	Score
Roads within the development are narrower than traditional standards.	Road widths: Less than 20' 21' – 24' 25' – 30' Greater than 30'	 5 3 2 0	X 3	
Roads use alternatives to traditional curb-and-gutter design to better manage stormwater runoff.	Yes No	5 0	X 2	

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Road geometry is appropriate within the development – meandering with lower traffic speeds to fit the site, or straight if appropriate within a grid.	Appropriate Not appropriate	3 0	X 2	
Paved driveways are designed to limit both width and length.	Yes No	2 0	X 2	
			Subtotal: _____	

Notes & Observations

7. Stormwater is managed on-site such that pre-development runoff and post-development runoff (volume and patterns) are the same. Protecting large amounts of open space has many advantages. One important function of open space is to provide opportunities for the efficient and economic management of stormwater. An undeveloped site is probably already efficiently managing stormwater with natural drainage patterns and infiltration areas. The trick is to continue to allow the developed site to handle any excess stormwater that might be created from an increase in impervious surfaces like roofs, roads and driveways. There are better ways to manage stormwater than simply collecting it in old-fashioned rectangular stormwater retention ponds. Rain gardens and natural swales are not only esthetically pleasing, but they can hold stormwater and allow it to percolate gently into the soil, maintaining natural hydrology, and replenishing our groundwater supply. Minimizing impervious surface area is important, too. Science tells us that when impervious surface percentages rise above 12%, we start to see a degradation of nearby water resources, no matter how much one does to mitigate the impacts of excess stormwater. New technologies to limit impervious surfaces include pervious pavement and green roof designs. Wetlands and shorelines found on the development parcel should be buffered with native vegetation to reduce sedimentation from runoff in order to protect water quality, which in turn protects property values. Finally, stormwater shouldn't just be viewed as a problem to be remedied. It should be viewed as an asset -- something that if collected in rain barrels or cisterns can help residents economically water their gardens or lawn areas.

Measurement	Answer	Points	Weight	Score
Project promotes Low Impact Development principles. These include: 1) taking advantage of the open space's natural landscape of hills, valleys, swales and channels to effectively hold stormwater on-site; 2) the use of pervious pavement; 3) inclusion of green roof designs; 4) the use of rain gardens, rain barrels or cisterns to collect and hold stormwater.	LID qualities: 3 or more 2 1 0	 3 2 1 0	X 3	

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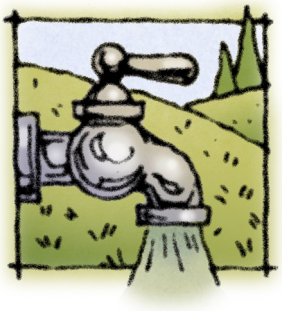
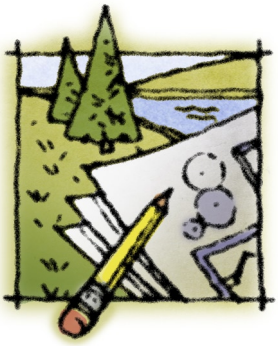
Project limits the percentage of impervious surface from hardscapes such as roofs, roads and driveways.	10% or less 11% - 12% 13%-15% 16%-20% 21% -25% Greater than 25%	4 3 2 1 0 -4	X 3	
If project uses traditional stormwater retention ponds, they are well designed as determined by the local Soil And Water Conservation District. Good design includes cleanout forebays and vegetated shelves, and they do not "short circuit." If the project does not use traditional stormwater ponds, you may circle "yes" and claim the maximum number of points.	Yes No	2 -2	X 2	
Buffers of native vegetation are established and maintained along wetlands and shorelines found on the parcel. These sensitive areas require extra protection to maintain water quality. If there are no wetlands or shorelands on the development parcel, you may claim the maximum number of points.	Average buffer depth: 50 feet or greater 40-49 feet 30-39 feet 20-29 feet Less than 20 feet	 4 3 2 1 0	X 4	
				Subtotal: _____

Notes & Observations



8. Wastewater is appropriately treated and managed so as to minimally impact the environment. If managed improperly, wastewater can negatively impact public water bodies like lakes and streams, as well as our groundwater, which provides drinking water for many Minnesotans. Generally, wastewater can be managed by transporting it to a treatment facility via an underground sewer pipe, or by handling it on-site using individual Subsurface Sewage Treatment Systems (SSTS), or by using shared or clustered SSTSs. With today's technology, SSTSs (individual or shared) can effectively handle wastewater just as well as large municipal wastewater facilities, but they must be managed. They must be pumped and inspected on a regular basis and users must know what can and can't be flushed down their toilets, or poured down their sinks. Common open space in a development may include subsurface treatment systems (shared drainfields or constructed wetland systems) if the use of the space is restricted to avoid adverse impacts on the system.

Measurement	Answer	Points	Weight	Score
Development site uses an approved method of wastewater treatment. This can be a sewer pipe to a treatment facility, SSTSs (shared or individual), or other innovative, environmentally friendly methods like constructed wetlands.	Yes No	5 0	X 3	
If Subsurface Sewage Treatment Systems (including constructed wetland systems) are used, they are shared/clustered rather than individual systems. If the development is hooked up to a sewer pipe system that leads to a communal treatment facility, you may also circle "yes" and claim the points.	Yes No	3 0	X 3	
Wastewater treatment is managed by a certified third party. A community sewer system that leads to a treatment facility before discharge would also be able to circle "yes" and claim these points.	Yes No	3 0	X 3	
			Subtotal: _____	



9. The application process is transparent and includes pre-application guidance by local planning staff, site visits to aid in the design process, and ample opportunities for abutting neighbors and local conservation experts to weigh in.

In conservation design, the process is as important as the finished product. Transparency of the application process, which is inclusive of all interested parties, helps to limit surprises and irate neighbors at the official hearing to approve an application. Citizens often complain that they had no idea a piece of land near them was being developed. Transparency comes when a developer openly solicits comments from potential critics of the project -- neighbors and local conservation experts -- and adjusts his/her plan based on valid responses. Some communities are now requiring that larger scale development applications be reviewed by Technical Evaluation Panels (TEPs) or Design Review Teams (DRTs), which are typically made up of personnel from the DNR, the MPCA, the SWCD, local conservation organizations, and the local COLA (Coalition of Lake Associations). These reviews, along with pre-application concept plans and site visits, shouldn't greatly increase development costs, but they may result in a higher-quality development, and they help promote an open, honest, transparent process.

Measurement	Answer	Points	Weight	Score
Prior to submitting an official application, the developer meets with local planning staff to review and comment on a concept plan, which includes things like general features of the parcel and the surrounding area, proposed streets, locations of wetlands, topography, soils, proposed location of buildings, developable land, and open space, description of water supply, sewage disposal and stormwater management, etc.	Yes No	3 0	X 3	
If required by local ordinance, the developer has his/her concept plan reviewed by a Technical Evaluation Panel (TEP) or a Design Review Team (DRT). If a TEP or DRT is not required, the developer voluntarily solicits review of his/her concept plan by local conservation experts (DNR,MPCA, SWCD, or other).	Yes No	2 0	X 3	

Chart continued on next page

Project includes site visits with neighbors, planning staff and other interested parties.	scheduled visits: 3 or more 2 1 0	 3 2 1 0	X 2	
Project includes open meetings between the developer and neighbors, local conservation experts and others who might have concerns with the project. These meetings are in addition to site visits.	scheduled meetings: 3 or more 2 1 0	 3 2 1 0	X 2	
Project has endorsements from the local neighborhood association, the nearby lake association, the COLA, abutting neighbors, and local conservation experts. Endorsements must address the issue of how the development balances development with conservation. In other words, how does the development add economic value to the community while preserving or creating a unique sense of place and still respecting the ecological integrity of the site?	endorsements: 3 or more 2 1 0	 3 2 1 0	X 2	
			Subtotal: _____	

Notes & Observations

10. A sense of community/sense of place is created by preserving cultural/historical features of the site and by creating walking trails and other opportunities for positive neighborhood interaction. The best development, not just conservation design, creates communities that are distinctive and unique. Both the natural and built environments should promote a sense of civic pride and support a more cohesive community fabric. Communities that have a strong sense of place represent the values of their residents and reflect the unique historical, cultural, economic and geographical context of the area. Preserving the history/culture/flavor of a site can be a powerful marketing tool for developers. Saving/restoring an old barn maintains a connection to the past. Many of the most successful conservation developments have set architectural design standards, which place an emphasis on creating a unique sense of place. Examples include housing designs that fit with the aesthetics of the project, the use of natural-looking building materials like wood and stone, requiring front porches, hiding garages, etc. Developments can create gathering places for residents, which can provide opportunities for vibrant exchange among neighbors. One formal way is to create a Homeowners Association (HOA) or a Community Association (CA). Other less formal ways are recreational areas, centralized mailboxes and a community center. Any trails created within a Conservation Design development should be laid out to benefit not only residents, but also the larger community outside of the development. That is, interior trails should have connections with existing and/or potential exterior trails. Interior trails that can be utilized by the general public create a public benefit and should be rewarded.

Measurement	Answer	Points	Weight	Score
The project creates a Homeowner's Association (HOA) or a Community Association (CA) and membership is required for all property owners.	Yes No	2 0	X 3	
The project creates gathering places for informal resident interaction. These may include play areas, ball fields, centralized mailboxes, places where kids can build forts, a community garden, a community center, etc.	5 or more 4 3 2 1 0	5 4 3 2 1 0	X 2	

Chart continued on next page

Any historic or culturally significant features on the site are preserved. If there are no identifiable historic or culturally significant features on the site, you may circle "yes" and claim the maximum number of points.	Yes No	3 0	X 3	
The project sets architectural design standards that contribute to the creation of a unique sense of place.	Yes No	2 0	X 2	
Walking and/or biking trails are created to promote active living, which benefits the health of residents.	5 miles or more 4-5 3-4 2-3 1-2 0	5 4 3 2 1 0	X 2	
Walking and biking trails are also accessible to the general public that doesn't reside in the development. This creates a public benefit.	Yes No	2 0	X 2	
Trails within the development lead to connections with existing or proposed trails outside of the development. If there are no existing or proposed trails outside of the development, and you have an internal trail system, you may circle "yes" and claim the maximum number of points.	Yes No	2 0	X 2	
If the development is on a lake, docks, boat launching ramps and beach recreation areas are consolidated to minimize shoreland and in-lake impacts and promote neighborhood interaction. If no docks or beach recreation areas are part of the development, you may circle "yes" and claim the maximum number of points.	Yes No	2 0	X 4	
			Subtotal: _____	

Conservation Design Scorecard Final Calculations

1. **Starting at Table I below,** enter the subtotals for each section into Column 2 (Section Scores).
2. **Divide Column 2 by Column 1** (Total possible) and enter that number into Column 3 (Calculation).
3. **Multiply Column 3 by 100** and enter that number into Column 4. This is the Final Score for the section.
4. **Using Table II below, enter the letter grade for each section** into Column 5. This is the Final Grade for the section.
5. **Once the calculations are complete, ask yourself, "If this were my son's or daughter's report card from school, would I be a proud parent, or would I request an immediate conference with their teachers?"** Take a look at the areas in need of improvement. Does the project score well in terms of quantity of land protected, but poorly in terms of quality? Does the project promote innovative technologies for better management of stormwater and wastewater? Does the project promote energy efficiency and affordability? Does the project openly solicit the opinions of neighbors and local conservation experts before an official application is heard in front of a planning commission? Making determinations of this nature can turn a so-so development application into a thoughtful, well-conceived application that any community would be proud to support.

Table I	Column 1	Column 2	Column 3	Column 4	Column 5
Conservation Design Criteria	Total Possible	Section Scores	Calculation (Col 2/Col 1)	Final Score (Col 3 x 100)	Final Grade (A-F)
1. Quantity of open space	59				
2. Quality of open space	54				
3. Connectivity of open space	53				

Chart continued on next page

4. Legal means of protection	50				
5. Built structures	48				
6. Roads	35				
7. Stormwater management	41				
8. Wastewater management	33				
9. Transparent application process	33				
10. Sense of community	55				
Total Overall Criteria	461				

Table II

Final Score	Letter Grade
90%-100%	A
80%-89%	B
70%-79%	C
60%-69%	D
< 60%	F

For more information on Conservation Design, scorecards, and other good development ideas, check out the following resources:

Growing Greener: Putting Conservation into Local Codes by Randall Arendt. Available at http://www.greenerprospects.com

Conservation Subdivision Design: A Brief Overview by Randall Arendt. Available at http://www.greenerprospects.com

Information on Leadership in Energy and Environmental Design – Neighborhood Development (LEED-ND) available at http://www.usgbc.org/leed/nd

Smart Project Scorecard by the EPA. Available at http://www.epa.gov/smartgrowth/scorecards/

Smart Growth Scorecard by New Jersey Future. Available at http://njfuture.org/media/docs/development_card.pdf

Assorted scorecard ideas from Illinois, National Governor's Association, Austin, Texas, Arizona, the Met Council and Smart Growth America. Available at http://www.nextstep.state.mn.us/res_detail.cfm?id=572

Assorted information on Smart Growth and combating sprawl. Available at www.1000fom.org

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