Joint Meeting of the Environmental Section and Land Use Section
International Municipal Lawyer's Association "IMLA"
2008 Annual Conference - Las Vegas, NV - September 14, 2008

IT'S NOT EASY BEING GREEN:
PROMOTING SUSTAINABILITY IN DEVELOPMENT REGULATIONS

A Panel Discussion of examples of provisions of local codes and ordinances that address "green" issues such as form-based codes and how they can be used to promote sustainability:

I. INTRODUCTION AND REVIEW OF DRAFT MODEL ORDINANCE- Overview of the Model Ordinance being drafted for IMLA using a template developed by Amy Bartell and Gary Baum of the Palo Alto City Attorney's Office.

Barbara L. Quirk
Vice-Chair, IMLA Environmental Section
Carls, McDonald & Dalrymple, LLP, Austin, Texas

II. BUILDING AND CONSTRUCTION ISSUES – PERMIT INCENTIVES AND MANDATORY SALVAGE/RECYCLING - Review of two ordinances focusing on building and construction issues, including permit incentives for green buildings, and keeping demolition waste out of landfills by requiring salvage or recycling.

Barbara A. Adams
Chair, IMLA Land Use Section
Village Attorney
Kenilworth, Illinois
Holland & Knight, LLP, Chicago, Illinois

III. FORM BASED ZONING CODES - Discussing examples of form based zoning codes relating to green issues.

Mary M. Bak
Director of Development and Special Counsel
Village of Glenview, Illinois

IV. QUESTION AND ANSWER SESSION

SPEAKER BIOS

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Barbara Quirk represents local government entities in the Austin area and throughout Central and North Texas. She began her career as an Assistant City Attorney for the City of San Antonio from 1993 to 1997 and has continued to focus her practice in local government law. She is an IMLA Local Government Fellow and has served as City Attorney or Assistant City Attorney for various Texas cities. Ms. Quirk has been a contributing editor for *Texas Municipal Zoning Law, 3rd Ed.*, Mixon since 2005. She holds licenses to practice in Texas State courts and in the federal district courts in the Northern, Southern and Western District of Texas and handles both litigation and administrative matters for local government entities. Ms. Quirk holds a BBA from SMU in Dallas, Texas and received her J.D. from St. Mary's University School of Law in San Antonio in 1991.

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Barbara Adams is a partner in Holland & Knight LLP. She serves as Village Attorney for the Village of Kenilworth, Illinois, and as General Counsel for the Kenilworth Park District, the DuPage Water Commission (IL), and the Northwest (IL) Water Commission, and represents a variety of municipalities and local governments, in Illinois and around the country. She is Chair of the Land Use Section of IMLA and a past Chair of IMLA Sections on Contracts, Franchises and Technology and Health and Environment. She also serves on the IMLA Program Planning Committee. A graduate of Northwestern University School of Law in Chicago and Knox College in Galesburg, Illinois, she is a frequent speaker and author on legal issues of interest to local governments.

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Mary is the Director of Development/Special Counsel for the Village of Glenview, IL. She has experienced first hand the issues relating to the development of a green building code during her work on the Code developed by the Village of Glenview and is passionate about this issue.

I. INTRODUCTION TO GREEN BUILDING

Presented by Barbara L. Quirk, Carls, McDonald & Dalrymple, LLP

Green Building is an approach to design and construction which strives to protect the sustainability of energy, water, and material resources.

A. Overview of Green Building Code Techniques

Require verification of green building status for projects based on type and size, utilizing rating systems such as the Leadship in Energy and Environmental Design (LEED) rating system developed by the U.S. Green Building Council (USGBC). Can use permit fee waiver incentive.

Consider form based green building code provisions.

Incorporate salvaged, recycled, & sustainably harvested materials and encourage renovation

Require construction and demolition debris salvage and recycling

Require windows designed to allow natural light while reducing heat transference

Require water efficient toilets and other equipment

Use swales and permeable paving to control runoff water

Reclaim water for landscaping and use drought-resistant landscaping

Protect native plants and trees and use trees shade to cool buildings

Use energy efficient fixtures and lighting, including HVAC systems

Use natural heating and cooling, including solar power and water heating

Encourage use of Pedestrian, Bicycle and Public Transportation.

B. Review Of Palo Alto Ordinance Being Proposed For Imla Model Ordinance

The Palo Alto ordinance became effective July 2, 2008 and is applicable to residential and non-residential private development projects. It incorporates many of the techniques discussed above. Comments on the proposed IMLA Model Ordinance are welcome.

C. Texas Cities Beware of Tex. Loc. Gov't Code §245.002 Vesting Landowner Rights

Dallas and Frisco have green building code information on their websites. Austin Energy has a voluntary program intended to increase the number of buildings that are energy efficient, water efficient, healthier for occupants and more durable. Per Program Specialist John Umphress, the program offers points in the areas of energy efficient envelopes and mechanical systems, efficient lighting and appliances, resource efficient construction, water use, and landscaping and is a precursor to local amendments to the energy code that will result in the construction of zero energy capable homes.

ADDITIONAL COURSE MATERIALS AVAILABLE ON-LINE

Part I (Presentation by Barbara Quirk)

Draft Proposed IMLA Model Green Building Ordinance from Palo Alto City Attorney's Office.
Table A to Proposed Model Ordinance
Table B to Proposed Model Ordinance

Austin Energy Residential Rating Form provided by John Umphress

Part II (Presentation by Barbara Adams)

Northbrook Illinois Ordinance 8-24
Northbrook Illinois Ordinance 8-53

Part III (Presentation by Mary Bak)

Form Based Codes Presentation

Additional Contacts

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ORDINANCE _____

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALO ALTO AMENDING TITLE 18 (ZONING) OF THE PALO ALTO MUNICIPAL CODE TO ADD A NEW CHAPTER 18.44 (GREEN BUILDING REGULATIONS)

WHEREAS, the City of Palo Alto's (City) Comprehensive Plan sets forth goals for preserving and improving the City's natural and built environment, protecting the health of its residents and visitors, conserving water and energy, and fostering its economy; and

WHEREAS, the City Council of the City of Palo Alto has identified Environmental Protection as one of its top four goals, and green building is a key component of environmental protection; and

WHEREAS, green building design, construction, restoration, operation, and maintenance can have a significant positive effect on energy, water, and resource conservation, waste management and pollution generation, and the health and productivity of a property's residents, workers, and visitors over the life of a building and/or site; and

WHEREAS, the provisions of California Assembly Bill 32 (Global Warming Solutions Act) require actions on the part of State and local governments to significantly reduce greenhouse gas (GHG) emissions such that statewide GHG emissions in 2020 are lowered to 1990 levels; and

WHEREAS, failure to address and significantly reduce greenhouse gas emissions could result in rises in sea level, including in San Francisco Bay, that could put at risk Palo Alto homes and businesses, public facilities, and Highway 101 (Bayshore Freeway); and

WHEREAS, green building regulations comprise an important component of a whole systems approach to the City's sustainability program related to building and land development, other components of which include but are not limited to requirements for: disposal of construction and demolition debris, storm water quality and flood protection, tree protection, water conservation, recyclable materials storage, parking lot landscaping, and transportation demand management.

Now, the Council of the city of Palo Alto does ORDAIN as follows:

SECTION 1. Findings. The City Council finds as follows:

A. The City's Climate Protection Plan (CPP), adopted by the City Council on December 3, 2007, identifies green building as an important approach to reducing greenhouse gases generated in the Palo Alto community. The CPP notes that building construction and maintenance accounts for approximately 38% of U.S. greenhouse gas emissions (U.S. Department of Energy) and approximately 40% of the energy use in the Palo Alto community. Buildings

also account for much of the 14% of emissions that are generated by waste materials; and

B. Green building and landscape design, construction, operations and maintenance techniques are increasingly widespread in residential and commercial building construction, and green building benefits can be spread throughout the systems and features of a building, such that green buildings can include: the use of certified sustainable wood products and high-recycled content products; reuse of existing facilities and recycling and salvage; reduced demands on heating and cooling systems; increased energy efficiency; enhancement of indoor air quality; reduced per capita demand on water resources and infrastructure; and the installation of alternative and renewable energy systems; and

C. At the national and state levels, the U.S. Green Building Council has taken the lead in promoting and defining commercial green building by developing the Leadership in Energy and Environmental Design (LEED) Rating System™; and

D. At the state level, Build It Green has taken the lead in promoting and defining residential green building by developing the GreenPoint Rated Rating System™; and

E. Nothing in this ordinance is intended to duplicate, contradict, or infringe upon provisions of state law, including the California Building Standards Code. The ordinance and the associated checklists provide many opportunities to achieve required points and credits that do not impact areas where state law has established building standards.

F. On April 9, 2008, the Planning and Transportation Commission held a duly noticed public hearing and heard testimony regarding a green building ordinance, and recommended adoption of the green building ordinance to the City Council.

G. On May 12, 2008, the City Council held a duly noticed public hearing and heard testimony regarding the proposed green building ordinance.

H. Because the design, restoration, construction, and maintenance of buildings and structures within the City can have a significant impact on the City's environment, greenhouse gas emissions, resource usage, energy efficiency, waste management and the health and productivity of residents, workers and visitors over the life of the building, requiring commercial and residential projects to incorporate green building measures is necessary and appropriate to achieve the public health and welfare benefits of green building.

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SECTION 2. A new Chapter 18.44 (Green Building Regulations) of Title 18 (Zoning) of the Palo Alto Municipal Code is hereby added to read as follows:

Chapter 18.44

GREEN BUILDING REGULATIONS

Sections:

18.44.010	Purpose
18.44.020	Applicability
18.44.030	Definitions
18.44.040	Standards for Compliance
18.44.050	Incentives for Compliance
18.44.060	Administrative Procedures and Promulgation of Implementing Regulations
18.44.070	Hardship or Infeasibility Exemption
18.44.080	Appeal

18.44.010 Purpose.

The purpose of this Chapter is to enhance the public health and welfare by promoting the environmental and economic health of the City through the design, construction, maintenance, operation and deconstruction of buildings and other site development by incorporating green building practices into all development. The green building provisions referred to in this Chapter are designed to achieve the following goals:

(a) Increase energy efficiency in buildings;

(b) Encourage water and resource conservation;

(c) Reduce waste generated by construction projects;

(d) Provide durable buildings that are efficient and economical to own and operate;

(e) Promote the health and productivity of residents, workers, and visitors to the city; and

(f) Recognize and conserve the energy embodied in existing buildings.

18.44.020 Applicability

This ordinance applies to all projects defined as "Covered Projects," as defined below, except that it shall not apply to any project for which a planning entitlement application (except for a preliminary architectural review application) or building permit application has been submitted prior to the effective date of this ordinance. However, commercial covered projects with planning applications submitted after December 3, 2007, but for which building permits have not yet been issued as of the effective date of this ordinance, shall be subject to compliance with this Chapter.

18.44.030 Definitions.

The following terms shall have the ascribed definition for the purposes of applying the criteria of this chapter. When the definition differs from a definition in Section 18.04 of this code, the provisions of this section shall apply.

(a) "Addition" means new construction square footage added to an existing structure.

(b) "Applicant" means any entity that applies to the city for the applicable permits to undertake any covered project within the city, or any subsequent owner of the site.

(c) "Compliance official" means the Director of Planning and Community Environment or his or her designee.

(d) "Compliance threshold" means the minimum number of points or rating level of a green building rating system that must be attained for a particular Covered Project, as outlined in the Standards for Compliance in Section 18.44.040.

(e) "Covered project" means any planning entitlement application(s) or building permit application(s) for commercial (nonresidential) new construction or renovations, or for any multi-family or single-family or two-family residential new construction or renovation subject to the Standards for Compliance outlined in Section 18.44.040.

(f) "Good faith effort" means a project that has not met the required compliance threshold, but for extenuating reasons or reasons beyond the control of the applicant, the Compliance Official has found the project meets the good faith effort provisions of Section 18.44.060.

(g) "Green building" means a whole systems approach to the design, construction and operation of buildings that substantially mitigates the environmental, economic, and social impacts of buildings. Green building practices recognize the relationship between the natural and built environments and seek to minimize the use of energy, water and other natural resources and provide a healthy, productive indoor environment.

(h) "Green building project checklist" means a checklist or scorecard developed for the purpose of calculating a green building rating.

(i) "Green building rating system" means the rating system associated with specific green building criteria and used to determine compliance thresholds, as outlined in the Standards of Compliance adopted by City Council resolution. Examples of rating systems include, but are not limited to, the LEED and GreenPoint Rated systems.

(j) "GreenPoint Rated" means a residential green building rating system developed by the Build It Green organization.

(k) "GreenPoint Rated Verification" means verification of compliance by a certified GreenPoint Rater, resulting in green building certification by Build It Green including green points allocation across all of the resource categories.

(l) "LEED®" means the "Leadership in Energy and Environmental Design" green building rating system developed by the U.S. Green Building Council.

(m) "LEED®/USGBC Verification" means verification to meet the standards of the U.S. Green Building Council (USGBC) and resulting in LEED certification of the project by the USGBC.

(n) "Mixed use" means the construction of a building or buildings that include both commercial and residential uses.

(o) "Multi-family residential" means a building containing three or more attached dwelling units.

(p) "New construction, commercial (nonresidential)" means the construction of a new or replacement retail, office, industrial, warehouse, service, or similar building(s), or additions to such building(s).

(q) "New construction, residential" means the construction of a new or replacement single-family or two-family dwelling unit or of new or replacement multi-family residential building(s), or additions to such building(s).

(r) "Qualified green building professional" means a person trained through the USGBC as a LEED accredited professional or through Build It Green as a certified green building professional, or similar qualifications if acceptable to the Compliance Official. For projects requiring "self-verification," the project architect or designer is considered a qualified green building professional.

(s) "Renovation" means any rehabilitation, repair, remodeling, change, or modification to an existing building, where changes to floor area and the footprint of the building are negligible. The valuation of renovation improvements shall be determined by the Director of Planning and Community Environment, upon recommendation of the Chief Building Official. The Chief Building Official may exclude from such valuation the cost of (a) seismic upgrades, (b) accessibility upgrades, or (c) photovoltaic panels or other solar energy or similar devices exterior to the building. Renovation valuation thresholds identified in the Standards for Compliance shall be adjusted annually to reflect changes in the City's valuation per square foot for new construction in Palo Alto, using valuations in effect as of July 1, 2008, as the base index.

(t) "Self verification" means verification by the project architect, designer or a qualified green building professional certifying that the project has met the standards and has

attained the compliance threshold as indicated for the Covered Project type as set forth in the Standards for Compliance outlined in Section 18.44.040.

(u) "Single-family or two-family residential" means a single detached dwelling unit or two units in a single building.

(v) "Square footage," for the purposes of calculating commercial, multi-family residential, and single-family and two-family new construction square footage, means all new and replacement square footage, including basement areas (7 feet or greater in height) and garages, except that unconditioned garage space shall only count as 50% of that square footage. Areas demolished shall not be deducted from the total new construction square footage.

(w) "Threshold Verification by LEED AP" means verification by a LEED accredited professional certifying that each LEED checklist point listed was verified to meet the requirements to achieve that point. The LEED AP shall provide supporting information from qualified professionals (e.g. civil engineer, electrical engineer, Title 24 consultant, commissioning agent, etc.) to certify compliance with each point on the checklist. Documentation of construction consistent with building plans calculated to achieve energy compliance is sufficient verification in lieu of post-construction commissioning.

18.44.040 Standards for Compliance.

The City Council shall establish by resolution, and shall periodically review and update as necessary, Green Building Standards for Compliance. The Standards for Compliance shall include, but are not limited to, the following:

(a) The types of projects subject to regulation (Covered Projects);

(b) The green building rating system to be applied to the various types of projects;

(c) Minimum thresholds of compliance for various types of projects; and

(d) Timing and methods of verification of compliance with these regulations.

The Standards for Compliance shall be approved after recommendation from the Director of Planning and Community Environment, who shall refer the Standards for recommendation by the Architectural Review Board, prior to Council action.

18.44.050 Incentives for Compliance.

(a) In addition to the required standards for compliance, the City Council may, through ordinance or resolution, enact financial, permit review process, or zoning incentives and/or award or recognition programs to further encourage higher levels of green building compliance for a project.

(b) For residential projects, the number of GreenPoint checklist points required shall be reduced by:

(1) 5 points for maintaining a minimum of 75% of existing walls, floors, and roof of a structure;

(2) 5 points (in addition to (1) above) for maintaining a minimum of 95% of existing walls, floors, and roof of a structure; and/or

(3) 10 points (in addition to (1) and/or (2) above) when applied to a structure that is designated on the City's Historic Inventory as a Category 1 or Category 2 historic structure as defined in Section 16.49.020 of this code or any contributing structure located within a locally designated historic district, and Category 3 and 4 historic structures on the local inventory and those structures eligible for the National Register of Historic Places, subject to determination by the Historic Resources Board that such additions and/or renovations are consistent with the Secretary of the Interior's Standards for Rehabilitation.

18.44.060 Administrative Procedures and Promulgation of Implementing Regulations.

(a) The Director of Planning and Community Environment shall promulgate any rules and regulations necessary or appropriate to achieve compliance with the requirements of this Chapter. The rules and regulations shall provide, at a minimum, for the incorporation of green building requirements of this Chapter into checklist submittals with planning entitlement and building permit applications, and supporting design, construction, or development documents to demonstrate compliance with this Chapter.

(b) The procedures for compliance documentation shall include, but not be limited to, the following:

(1) Preliminary Documentation. Applicants for a Covered Project are encouraged, but not required, to meet with the Compliance Official or his or her designated staff, in advance of submittal of an application, to determine required green building thresholds for compliance and to review the proposed green building program and details to achieve compliance.

(2) Discretionary Planning Entitlements. Upon submittal of an application for any discretionary planning entitlement for any Covered Project, including but not limited to Individual Review, Major or Minor Architectural Review, Site and Design, Planned Community, Conditional Use Permit, or Variance requests, application materials shall include the appropriate completed checklists, as required by the Standards for Compliance specified in Section 18.44.040, accompanied by a text description of the proposed green building program and expected measures and milestones for compliance. The Compliance Official may allow the use of alternative

checklists for historic buildings or for buildings that retain or re-use substantial portions of the existing structure.

(3) Building Plan Check Review. Upon submittal of an application for a building permit, building plans for any Covered Project shall include a checklist and green building program description, reflecting any changes proposed since the planning entitlement phase (if a planning entitlement was required). The checklist shall be incorporated onto a separate plan sheet included with the building plans. A qualified green building professional shall provide evidence of adequate green building compliance or documentation to the Compliance Official to satisfy the requirements of the Standards for Compliance outlined in Section 18.44.040, prior to issuance of a building permit.

(4) Final Building Inspection, Verification, and Occupancy. Prior to final building inspection and occupancy for any Covered Project, a qualified building professional shall provide evidence of adequate green building compliance or documentation to the Compliance Official to satisfy the requirements of the Standards for Compliance outlined in Section 18.44.040. This information shall include, but is not limited to:

i. Documentation that verifies incorporation of the design and construction related credits specified in the project approval for the Covered Project;

ii. A letter from the qualified green building professional that certifies that the Covered Project has been constructed in accordance with the approved green building project checklist;

iii. Any additional documentation that would be required by the LEED reference guide for LEED certification (if required), or by the GreenPoint Rated manuals for GreenPoint Rated certification (if required); and

iv. Any additional information that the applicant believes is relevant to determining that a good faith effort has been made to comply with this chapter.

(5) Final Determination of Compliance and Good Faith Effort to Comply. Prior to the scheduling of a final building inspection for a Covered Project, the Compliance Official shall review the documentation submitted by the applicant, and determine whether the applicant has achieved the required compliance threshold as set forth in the Standards for Compliance outlined in Section 18.44.040 and/or demonstrate that measures are in place to assure compliance not later than one year after approval of final building inspection. If the Compliance Official determines that the applicant has met the requirements of Section 18.44.040 for the project, the final building inspection may proceed, provided the Covered Project has

received approval of all other inspections required by the Chief Building Official. If the Compliance Official determines that the required green building rating has not been achieved, the Compliance Official shall find one of the following:

i. Good Faith Effort to Comply: When an applicant submits a request in writing to the Compliance Official for approval of a good faith effort to comply, the Compliance Official shall determine that the applicant has made a good faith effort to comply with this chapter when finding that either a) the cost for providing green building documentation or assuring compliance is disproportionate to the overall cost of the project, or b) the green building materials and technologies on the green building checklist are no longer available or not yet commercially available, or c) at least 80% of the required green point credits have been achieved, and measures are in place to assure full compliance not later than one year after approval of the final building inspection. Determination of a good faith effort to comply shall be made separately for each item on the green building project checklist. Granting of a good faith effort to comply for one item does not preclude the need for the applicant to comply with the other items on the green building checklist.

ii. Non-Compliant Project. If the Compliance Official determines that the applicant has not made a good faith effort to comply with this chapter, or if the applicant fails to submit the documentation required within the required time period, then the project shall be determined to be non-compliant, and the final inspection and approval for the project shall be withheld. A final inspection shall not take place until the applicant has implemented equivalent alternate measures approved by the Compliance Official or unless an exemption is granted for the project.

(6) Post Final Inspection Requirement. Not later than one year after approval of the final building inspection, the applicant or current owner shall submit to the Compliance Official documentation detailing compliance with the operation, efficiency, and conservation related credits from the approved checklist documentation for any Covered Project, if required by the Compliance Official. The applicant may also provide any additional information the applicant believes is relevant to determining its good faith efforts to comply with this chapter.

(7) Non-Compliance. If, as a result of any inspection, the City determines that the Covered Project does not or is unlikely to comply with the approved plans or green building checklist, a stop order shall be issued if the Compliance Official determines that continuation of construction activities will jeopardize the project's ability to meet the required compliance threshold. The stop order shall remain in effect until the Compliance

Official determines that the project will be brought into compliance with the approved plans and/or checklist.

(8) Interim Compliance Effort. For residential projects initiating construction not later than two years after the effective date of this ordinance, a good faith effort shall be deemed to have been made when at least 75% of the required minimum total green points and the GPR allocation of minimum points across all resource categories have been achieved prior to final building inspection, and adequate remaining checklist points are outlined to demonstrate that at least 90% of the minimum points and GreenPoint certification will be achieved not later than one year after final inspection. If 75% of the required minimum green points are not achieved prior to the request for final building inspection, the final inspection shall be withheld unless an exemption is granted by the Compliance Official.

(9) Lack of Inspectors. If the Compliance Official determines that there is a lack of third party or City inspectors available to perform green building inspections within a timely manner, the Compliance Official may allow self-verification of the project and determine that green building requirements have been met.

(c) The Compliance Official shall have the responsibility to administer and monitor compliance with the green building requirements set forth in this chapter and with any rules and regulations promulgated thereunder, and to grant exemptions from the requirements, where so authorized.

(d) Compliance with the provisions of this chapter shall be listed as a condition of approval on any Architectural Review or other discretionary permit approval, and on the building plans for building permit approval, for any Covered Project.

18.44.070 Hardship or Infeasibility Exemption.

(a) Exemption. If an applicant for a Covered Project believes that circumstances exist that make it a hardship or infeasible to meet the requirements of this Chapter, the applicant may request an exemption as set forth below. In applying for an exemption, the burden is on the Applicant to show hardship or infeasibility.

(b) Application. If an applicant for a Covered Project believes such circumstances exist, the applicant may apply for an exemption at the time of application submittal. The applicant shall indicate the maximum threshold of compliance he or she believes is feasible for the covered project and the circumstances that he or she believes create a hardship or make it infeasible to fully comply with this Chapter. Circumstances that constitute hardship or infeasibility include, but are not limited to the following:

(1) There is conflict with the compatibility of the green building rating system with other City goals, such as those requiring historic preservation;

(2) There is conflict with the compatibility of the green building rating system and the California Building Standards Code;

(3) There is conflict with the compatibility of the green building rating system and the City's Zoning Ordinance and/or Architectural Review criteria;

(4) The green building compliance standards do not include enough green building measures that are compatible with the scope of the covered project; and/or

(5) There is a lack of commercially available green building materials and technologies to comply with the green building rating system.

(c) Review by Architectural Review Board (ARB) and/or Historic Resources Board (HRB). For any covered project for which an exemption is requested and Architectural Review is required by the ARB, the ARB shall provide a recommendation to the Director regarding whether the exemption shall be granted or denied, along with its recommendation on the project. For any project for which an exemption is requested based on the historic character of the building or site, the Historic Resources Board (HRB) shall provide a recommendation to the Director regarding whether the exemption shall be granted or denied and shall determine whether the project is consistent with the Secretary of the Interior's Standards for Historic Rehabilitation.

(d) Granting of Exemption. If the Director determines that it is a hardship or is infeasible for the applicant to fully meet the requirements of this chapter based on the information provided, the Director shall determine the maximum feasible threshold of compliance reasonably achievable for the project. The decision of the Director shall be provided to the applicant in writing. If an exemption is granted, the applicant shall be required to comply with this chapter in all other respects and shall be required to achieve, in accordance with this chapter, the threshold of compliance determined to be achievable by the Director.

(e) Denial of Exemption. If the Director determines that it is reasonably possible for the applicant to fully meet the requirements of this chapter, the request shall be denied and the Director shall so notify the applicant in writing. The project and compliance documentation shall be modified to comply with this chapter prior to further review of any pending planning or building application.

(f) Council Review of Exemption. For any covered project that requires review and action by the City Council, the Council shall act to grant or deny the exemption, based on the criteria outlined above, after recommendation by the Director.

18.44.080 Appeal.

(a) Any aggrieved Applicant or person may appeal the determination of the Director regarding: (1) the granting or denial of an exemption pursuant to Section 18.44.070; or (2) compliance with any other provision of this ordinance.

(b) Any appeal must be filed in writing with the Department of Planning and Community Environment not later than fourteen (14) days after the date of the determination by the Director. The appeal shall state the alleged error or reason for the appeal.

(c) The appeal shall be processed and considered by the City Council in accordance with the provisions of Section 18.77.070(e) of the City of Palo Alto Municipal Code.

SECTION 3. Not later than one year after the effective date of the ordinance, a report shall be prepared for presentation to the Architectural Review Board, Historic Resources Board, Planning and Transportation Commission, and City Council regarding the results of implementation of the ordinance. The report shall include, but is not limited to, documentation of the number and types of projects subject to the ordinance, explanation of whether and how compliance was achieved, identification of any problems arising from implementation, the costs of enforcement, and any recommendations for revisions to the ordinance or accompanying resolution and Standards for Compliance tables.

SECTION 4. Severability. If any section of this ordinance, or part hereof, is held by a court of competent jurisdiction in a final judicial action to be void, voidable or unenforceable, such section, or part hereof, shall be deemed severable from the remaining sections of this ordinance and shall in no way affect the validity of the remaining sections hereof.

SECTION 5. The Council hereby finds this ordinance is categorically exempt from the requirements of the California Environmental Quality Act ("CEQA") pursuant to Section 15308 of the CEQA Guidelines because it is an action taken by a regulatory agency for the protection of the environment.

SECTION 6. This ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSTENTIONS:

ABSENT:

ATTEST: APPROVED:

_____
City Clerk

_____
Mayor

APPROVED AS TO FORM:

_____
City Manager

_____
Deputy City Attorney

_____
Director of Planning and
Community Environment

Note: Applicants are advised to use this table only in conjunction with the entirety of requirements in Chapter 18.44 (Green Building Regulations)

Table A

City of Palo Alto
Green Building Standards for Compliance for Private Development

Nonresidential Construction and Renovation

Type of Project[5]	Building Improvements		
	Checklist Required[2]	Minimum Threshold	Verification
Nonresidential Construction and Renovation[1]			
New construction ≥ 25,000 sf	LEED-NC Checklist	LEED Silver (33 points)	Threshold verification by LEED AP Final verification by USGBC
New construction ≥ 5,000 sf and < 25,000 sf	LEED-NC Checklist	LEED Silver (33 points)	Threshold verification by LEED AP
New construction ≥ 500 sf and < 5,000 sf	LEED-NC Checklist	LEED Pro-rated points[3]	Threshold verification by LEED AP
Renovation ≥ 5,000 sf and ≥ 50% of project sf and ≥ $500,000[6] valuation[3]	LEED-NC Checklist	LEED Certified (26 points)	Threshold verification by LEED AP
Other renovation ≥ $100,000[6] valuation	LEED-CI Checklist	Submit checklist; include on building plans	Self verification
New construction < 500 sf and renovation < $100,000[6] of valuation	No requirement		
Mixed Use or Other Development	Commercial and residential criteria as applicable[4]		

[1] Cumulative new construction or renovations over any 2-year period following adoption of these requirements shall be considered as a single project, unless exempted by the Planning Director as impractical for compliance.

[2] Compliance with other LEED® checklists, including but not limited to LEED-CS (Core & Shell), LEED-CI (Commercial Interiors), or LEED-EB (Existing Buildings) may be substituted for the designated rating system where deemed appropriate by the Planning Director, after recommendation by the Architectural Review Board (if ARB review is required).

[3] Pro-rated formula = (new construction sf/5,000) x 33 points, but not less than 17 points.

[4] To be determined by the Planning Director; generally the provisions of Table A will apply to the commercial portion of the development, and the provisions of Table B will apply to the residential portions of the development.

[5] Exemptions may be available for historic structures, pursuant to Section 18.44.070 of the ordinance. The Compliance Official may allow the use of alternative checklists for historic buildings or for buildings that retain or re-use substantial portions of the existing structure.

[6] To be adjusted annually to reflect changes to the City's valuation per square foot of new construction.

Note: Applicants are advised to use this table only in conjunction with the entirety of requirements in Chapter 18.44 (Green Building Regulations)

Table B

City of Palo Alto
Green Building Standards for Compliance for Private Development
Residential Construction and Renovation

Type of Project[4]	Building Improvements		
	Checklist Required	Minimum Threshold	Verification
Multi-Family Residential[1]			
New construction of 3 or more (attached) units[2]	Multifamily GreenPoint Checklist	70 points[4, 6]	GreenPoint Rated verification
Additions and/or renovations with permit valuation ≥ $100,000[5]	Multifamily GreenPoint Checklist	Submit checklist; include on building plans	Self verification
Additions and/or renovations with permit valuation < $100,000[5]	No requirement		
Single-Family and Two-Family Residential[1]			
New construction of ≥ 2,550 sf	Single-Family GreenPoint Checklist	70 points + 1 point per additional 70 sf (150 points maximum)[4, 6]	GreenPoint Rated verification
New construction of ≥ 1,250 sf and < 2,550 sf	Single-Family GreenPoint Checklist	70 points[4, 6]	GreenPoint Rated verification
Additions <1,250 sf and/or renovations ≥$75,000[5]	Home Remodeling Green Building Checklist	Submit checklist; include on building plans	Self verification
Additions and/or renovations of <$75,000[5] permit valuation	No requirement		
Mixed Use or Other Development	Commercial and residential criteria as applicable[3]		

[1] Cumulative new construction or renovations over any 2-year period following adoption of these requirements shall be considered as a single project, unless exempted by the Planning Director as impractical for compliance.
[2] For any multi-family residential project with 30 or more new units proposed, a LEED-ND (Neighborhood Development) checklist shall also be completed and submitted with the application, for information only.
[3] To be determined by the Planning Director; generally the provisions of Table A will apply to the commercial portion of the development, and the provisions of Table B will apply to the residential portions of the development.
[4] Exemptions and incentives may be available for historic structures, pursuant to Section 18.44.070. The Compliance Official may allow the use of alternative checklists for historic buildings or for buildings that retain or re-use substantial portions of the existing structure, and may reduce the minimum threshold (points) required as outlined in Section 18.44.050.
[5] To be adjusted annually to reflect changes to the City's valuation per square foot of new construction.
[6] Points shall include GPR minimum points across all resource categories.

Please note that this is an example of our rating only.

Please contact an Austin Energy Green Building representative to find out how to rate a project.

AUSTIN ENERGY GREEN BUILDING

SINGLE-FAMILY HOME RATING 2008.2

Update 5.20.08

0	
0	
Stars Achieved	No Stars

STAR LEVELS

1 Star	★	Basic Requirements (BR) + points: 0
2 Stars	★★	BR + points: 50
3 Stars	★★★	BR + 3.01, 2 or 3; 4.17, 4.18 or 4.19 + points: 75
4 Stars	★★★★	BR + 3-Star Requirements + 10.07 or 10.08 + points: 100
5 Stars	★★★★★	BR + 4-Star + 3.04, 3.05, 11.06, 11.08 + points: 125

RATING RESULTS

Total Points	0
Basic Requirements	Not Fulfilled
3-5 Star special measures met	
Square feet per ton of cooling	
TCV score	0

PROJECT INFORMATION

Submitter (Designer or Builder)

Contact | Phone

E-mail

Complete Mailing Address

Rater (if other than AEGB)

Contact | Phone

E-mail

Complete Mailing Address

Architect/Designer (if not submitter)

Phone

Contact

Builder (if not submitter)

Phone

Contact

Mechanical Contractor Phone

TCV Score | Contact

Electric Source Austin Energy

Describe: | Other

Water Source City of Austin

All rainwater

Describe other: Exterior-only rainwater

Describe: | Other

Wastewater City of Austin

Describe: | Other

Heating Gas furnace

Heat pump

Describe: | Other

Cooling Split-system AC

Mini-split system

Other: | Heat p'mp

Tons of cooling per unit: Unit 1

Unit 2

Unit 3

Unit 4

Total # of cooling tons: 0

Sq. ft. ***gross*** living space measured from outside of exterior walls

Sq. ft. ***net*** conditioned floor area derived from the Manual J calculation

Project Street Address (or Base Rating)

City | Zip

County | Subdivision

Austin building permit | Other

Approx. permit date | Lot size

Required-Rating Information

S.M.A.R.T. Housing

Mandatory (e.g. PUD agreement)

Minimum Star level required

Construction Type		Project Type	
Slab foundation		Single-Family	
Pier & beam		Duplex	
Wood frame		Condo	
Altern.exterior wall (describe)		New home	
		Renovation	
W'd frame roof		Addition: sf	
Altern. roof sys. (describe)		Begun as spec	
		Begun as custom	

To the best of my knowledge, this project meets the requirements for the Rating requested at time of submittal.

Submitter Name | **Date**

INSTRUCTIONS TO SUBMITTER (DESIGNER OR BUILDER)

A. Submit Rating and Manual J Report to Rater (AEGB staff or other approved Rater).

Projects requiring a ***mandatory*** Rating must receive an **AEGB Conditional Approval** for the Rating and Manual J report prior to construction.

For more information about all aspects of the Rating, see the "Guide to the Single-Family Rating": Rating Guide

1. **Fill in all applicable light-yellow cells.**
2. **Basic Requirements must be met for all Ratings.**
3. **Measures for Points:**
   If information is not known at time of submittal, leave cell blank and revise for final submittal. **If item is either/ OR, check only one.**
   If "Stars Achieved" does not match point total, a Basic or required Star level measure has not been met.
   If square feet per ton of cooling or TCV score do not meet requirements, Star Rating shown will not be awarded.
4. **Manual J Report:** submit complete report calculated according to the AEGB "Manual J Inputs for SF Homes". Manual J Inputs
5. **Production builders:** enter "Base Rating" in address cell above.
   See PRODUCTION tab below for instructions for pre-construction approval, inspections and final submittals.

B. Schedule inspections and submit documentation to Rater.

Note that AEGB Rating inspections do not substitute for inspections required by other jurisdictions to which submitter may be subject.

No inspections will be made until Rater has approved the Rating, the Manual J Report and (if applicable) has issued a Conditional Approval.

1. **Schedule a rough AEGB inspection** (post rough mechanical, insulation, air barrier and pre-drywall).
2. **Submit a copy of the home performance testing report and any other requested documentation.**
3. **Schedule an AEGB final inspection** (after all items have been implemented).

Items marked with dot pattern must be viewable at rough.

C. Complete the rating process.

1. **Rater will finalize Rating and send submitter an AEGB Certificate and Homeowner Packet.**
2. **Submitter agrees to convey Certificate and Homeowner Packet to the homeowner.**

Prelim		Man J		Conditional Approval		Rough Inspection		Testing	Test.	Final Inspect			Prem #
Date	By	Approv.	By	Date	By	By	Date	By	Appr'd	Date	By		

Sample

A green home is comfortable, efficient, durable, and healthy and safe for inhabitants, workers, and the planet.

A green home must be designed and constructed so all parts interact successfully with each other and their environment to manage heat, air and moisture. Since it is difficult to address all crucial design and construction matters within a rating, please see the following publication from the Energy and Environmental Building Association (EEBA) for effective construction details:

Builder's Guide for Hot-Humid Climates and the Water Management Guide. Purchase at Builders Guide

A. Basic Requirements

See "Guide to the Single-Family Rating" for explanations of all measures. Rating Guide

Place an x in each box. All items must be included in any rated home.

☐ 1 **Energy-efficient home design: minimum of 500 sq. ft. of living space per ton of cooling as calculated by correct Manual J, based on site orientation, plans and specifications**

Use calculation design inputs for Austin, TX, and "GBP Manual J Inputs for Single-Family Homes." Manual J Inputs

☐ 2 **Cooling and heating equipment minimum efficiency for split systems**

Cooling: 14.0 SEER/11.5 EER AC or heat pump
Gas furnace: ≥ 80 AFUE or Heat Pump ≥ 8.2 HSPF

Brand _____ SEER _____ +EER
Model _____ AFUE _____ /HSPF

☐ 3 **Window efficiency: ≤0.35 SHGC and ≤0.55 U-Value in Climate Zone 2** (Zone 3: ≤0.40 and ≤0.40)

Climate Zone _____

☐ 4 **Wall insulation--one of the following:**

Approved by: _____

☐ **a. Energy Star Grade 1 installation**
☐ **b. Batts + insulative exterior sheathing with R-value of ≥2.0, taped at seams** (unfaced batts preferred)
☐ **c. "Total fill" type (e.g. blown cellulose, BIBS, spray foam, SIPs)**

☐ 5 **Floor insulation over ambient or unconditioned space: ≥R-13 with air barrier**

☐ 6 **Blocking for grab bar installed in all showers and tub-shower combinations**

☐ 7 **Gas water heater minimum efficiency (EF): 40 Gal: 0.61; 50 Gal: 0.59; 60 Gal: 0.57; 80 Gal: 0.53; tankless: 0.80**
Or WH is solar thermal: Or if no gas available in right-of way, electric WH meets current Austin code requirements

☐ 8 **No unvented gas logs/fireplaces**

☐ 9 **Exhaust fans venting to outside for cooktop/stove/microwave and baths with tub or shower**

☐ 10 **Ceiling fans: minimum of 2 installed within heated and cooled space**

☐ 11 **A minimum of 75% of all lamps/bulbs are Energy Star-compliant**

☐ 12 **Low-VOC interior wall and ceiling paint: VOC ≤100 grams per liter or is CoA recycled paint**

Brand _____ Product _____ VOC gpl _____ Paint from CoA Household Hazardous Waste _____

For information on "Second Chance Paint": (512) 974-4343 CoA Recycled Paint

☐ 13 **Minimum of 2 toilets selected from current Austin Water Conservation Program Rebate list**

One per one-bath home; check list for available rebates CoA Toilet List

Brand _____ Model, type _____

Brand _____ Model, type _____

☐ 14 **Planting beds have a minimum depth of 6" of soil containing 25% compost (such as Dillo Dirt) and minimum depth of 2" organic mulch**

☐ 15 **A minimum of 90% of new plants are from current Grow Green plant list** Grow Green

☐ 16 **Current City of Austin IRC, IECC Codes and Amendments must be met, regardless of project location (including complete air barrier and restrictions on electric water heaters)** CoA Codes Scroll to Energy Code 2006

If you intend to obtain an Energy Star Rating, code-required testing must be done by a HERS rater.

☐ **All Basic Requirements Fulfilled**

Sample

B. Measures For Points

Place an x in the yellow column to the left of the items you are incorporating in your project.

If items are either/or, do not check both: points will subtract.

See far-left green column for star level requirements above One Star and S.M.A.R.T. Housing requirements.
Required star items are cumulative: e.g. all items required for a 3-Star Rating are required for a Four-Star Rating.

Star Requirements	Total Points	x		
SECTION 1: PLANNING PROCESS				
	3		1.01	AEGB Green by Design workshop attended by homeowner before completion of design stage
	3		1.02	AEGB Green by Design workshop attended by design staff +/or builder staff
	3		1.03	Documented design team meeting held in design stage (including owner, designer, builder, mechanical contractor)
SECTION 2: SITE SELECTION				
	3		2.01	Lot size is less than 5,750 sq. ft.
	3		2.02	Street, electricity, water and wastewater have been in place for a minimum of 25 years
	2		2.03	Public transit stop is within a 1/4 mile walk
	2		2.04	Grocery store is within a 1/2 mile walk
	2		2.05	Public hike and bike trail, green belt, or park is within a 1/2 mile walk
SECTION 3: DESIGN				
3	2		3.01	Energy-efficient design allows for a minimum of 600 sq. ft. of living space per ton of cooling if home is 1500 sq. ft. or larger (Smaller homes: square footage per ton must be approved by Rater for these points if 600 sf is not met)
	3		3.02	**OR** Home design allows for a minimum of 700 sq. ft. of living space per ton of cooling
	4		3.03	**OR** Home design allows for a minimum of 800 sq. ft. of living space per ton of cooling
5	3		3.04	Indoor cooling equipment is located within the thermal envelope
5	5		3.05	All duct work is located within the thermal envelope OR home has no duct work
	2		3.06	All water heaters in 1-story home located within 20 piped feet of appliances +/or fixtures they serve; 30 piped feet for 2-story
	1		3.07	No fireplace located within conditioned space
	2		3.08	Covered, usable front porch (minimum side dimension: 6'; minimum area: 100 sf)
	2		3.09	Covered, usable porch other than front porch (minimum side dimension: 6'; minimum area 100 sf)
	2		3.10	All roof overhangs project a minimum of 24" horizontally
	4		3.11	Overhang projection factor for all windows facing east and west is ≥0.5 — See projection factor calculation: Overhangs
	3		3.12	Windows designed for daylighting (e.g. high windows not requiring privacy treatment)
	2		3.13	Designed, effective cross-ventilation in main living areas
	2		3.14	Designed, effective stack ventilation (e.g. operable cupola, clerestory, or stairwell exhaust)
	2		3.15	Shading on east and west walls of living space for at least 50% of wall area (e.g. covered porch, pergola, trees)
	3		3.16	Total glazing area is no greater than 18% of conditioned floor area
	5		3.17	Glazing on east and west walls combined does not exceed 25% of total glazing area; glazing on west wall does not exceed 10% of west wall and glazing on east wall does not exceed 10% of east wall
	1		3.18	No skylights into conditioned space (solar tubes are acceptable)
	3		3.19	Garage is detached from the house or house has no garage
	2		3.20	**OR** Attached garage has exhaust fan with timer or passive vent openings installed 18" above floor
	2		3.21	Basic access to house provided according to *City of Austin Visitability Ordinance* — SMART Housing Rating Guide
	4		3.22	**OR** Accessibility provided according to *Barrier-Free Residential Construction Guidelines*
SECTION 4: MATERIAL EFFICIENCY AND CONSTRUCTION WASTE				
	4		4.01	Lot has more than one dwelling unit
	3		4.02	Existing home removed from site is reused (deconstructed and recycled/reused or relocated)
	4		4.03	Project is renovation of, and/or addition to existing home
	4		4.04	Home is factory-built modular construction placed on a permanent foundation — Make and model:
	3		4.05	Conditioned space: maximum of 1,500 sq. ft.
	4		4.06	**OR** Conditioned space: maximum of 1,200 sq. ft.
	5		4.07	**OR** Conditioned space: maximum of 900 sq. ft.
	2		4.08	Exterior structure dimensions are in modules of 4'
	2		4.09	Exterior wall system is constructed off-site (e.g. panelized wood frame, SIPs)
	2		4.10	**OR** Exterior wall system is ICF, AAC block, straw, earth or other AEGB-approved system
	2		4.11	**OR** Wall framing is by the "Optimum Value Engineering" or "advanced framing" method: employ a minimum of 3 measures:
				a. Exterior wall framing 24" o.c. / b. Interior wall framing 24" o.c. / c. Headers sized for loads / d. 2-stud corners and ladder blocking; drywall clips / e. No wood wall sheathing (corners excepted) / f. Window framing without jack studs
	1		4.12	Finger-jointed studs
	1		4.13	Roof framing system: engineered trusses or materials/products such as I-joists, truss joists, LVLs, SIPs

Sample

B. Measures for Points Continued

SECTION 4: CONTINUED

1		4.14	A minimum of 50% of framing or sheathing or decking material is SFI-certified engineered products or lumber	
2		4.15	A minimum of 50% of framing or sheathing or decking material is FSC-certified engineered products or lumber	
2		4.16	Use of reclaimed materials, such as doors, hardware, flooring: list in Section 12	
4		4.17	80% of excess lumber and drywall is recycled/reused (not landfilled); approved documentation required	Documentation
3 4		4.18	**OR** Minimum 40%-by-weight of waste is recycled/reused (not landfilled); approved documentation required	Documentation
4		4.19	**OR** Approved construction waste management plan; approved documentation for reuse/recycling required	
1		4.20	Concrete-truck wash-out managed to recycle concrete residue and treat wash-out water	

SECTION 5: INTEGRATED PEST MANAGEMENT

2		5.01	Sand or mechanical-barrier termite control system is used: OR structure is not termite-edible	
3		5.02	All wood framing is treated with borate to a minimum of 3 feet above the foundation; OR structure is not termite-edible	
1		5.03	All exterior wood-to-concrete connections are separated by metal or plastic fasteners/dividers (e.g. deck posts)	
1		5.04	All new plants, shrubs and trees have trunk, base or stem located at least 36" from foundation	

SECTION 6: THERMAL ENVELOPE AND MOISTURE CONTROL

See "Builder's Guide to Hot-Humid Climates" + "Water Management" for design and construction guidelines.
In Central TX, make wall system as air-tight as possible but vapor permeable and able to dry to both inside and outside.

2		6.01	Window U-value of 0.51 or lower	
2		6.02	Glazing has a SHGC of 0.30 or lower	
1		6.03	"Raised-heel"/"energy" roof trusses	
2		6.04	Vented attic system: continuous ridge and continuous soffit vents (no functioning gable vents)	
5		6.05	**OR** Closed/sealed attic system: unvented; polyurethane foam insulation at roof; minimum 5.5" depth	
3		6.06	"Total fill" insulation in walls (e.g. blown cellulose, BIBS, spray foam, SIPs)	
2		6.07	Insulation has no added formaldehyde	
2		6.08	Wall and attic insulation have average total-recycled-content of 75% minimum	
2		6.09	Roofing meets requirements of Energy Star; minimum 10-year warranty	Energy Star
4		6.10	Tile roof ____ or Metal roof ____	Cool Roofs
2		6.11	Gutter and downspout system directs stormwater away from foundation to landscaping or catchment system	
2		6.12	Blower door test performed results in envelope leakage no greater than 0.40	

SECTION 7: PLUMBING AND APPLIANCES

1		7.01	≥R-2 insulation of all water lines located outside the thermal envelope and in exterior walls	
2		7.02	Gas water heater is sealed-combustion/direct vent model (required if located in sealed attic)	
2		7.03	Gas water heater is tankless/on-demand; minimum 0.82 efficiency	
4		7.04	**OR** Water heater is solar thermal	
2		7.05	Push-button on-demand hot water recirculation system (not continuously-operating pump system)	
2		7.06	Toilet is dual-flush or HET model from current CoA toilet list (at least one)	
2		7.07	Toilet is ADA model from current CoA toilet list (at least one)	CoA Toilet List
3		7.08	All shower heads have maximum flow of 2.0 gallons per minute; no more than one shower head per shower or tub	
3		7.09	Clothes washer is from the current CoA Water Conservation WashWise list	CoA Washer List

SECTION 8: M ECHANICAL

1		8.01	Cooling tonnage does not exceed 5 tons	
2		8.02	**OR** cooling tonnage does not exceed 4 tons	
3		8.03	**OR** cooling tonnage does not exceed 3 tons	
4		8.04	**OR** cooling tonnage does not exceed 2 tons (If tonnage is lower than 2, write amount in Section 12.)	
5		8.05	Whole-house, ductless, mini-split heating and cooling system	Brand, model #:
3		8.06	Variable-speed air handler and minimum 600 sq. ft./ton of cooling	Brand, model #:
2		8.07	Variable-capacity compressor and minimum 600 sf/ton of cooling	Brand, model #:
3		8.08	Ground-source heat pump	
2		8.09	Gas furnace is sealed-combustion/direct-vent model (CoA requirement if in sealed attic)	Texas Gas Service
2		8.10	Hydronic space heat is supplied by gas water heater or is solar-assisted	
4		8.11	Sheet metal plenum and main trunk lines; any flex-duct take-offs are no longer than 10'	
2		8.12	Air-tight supply boots (ductboard or pre-fabricated)	
2		8.13	Ceiling registers are curved-blade type located high on walls or in ceiling	
1		8.14	Ductwork system is masked/sealed at supplies and returns during construction	
2		8.15	HVAC filter: ≥ 4" pleated-media, or electronic (not electrostatic); easily accessed (HVAC system designed for filter type)	
3		8.16	Mechanical ventilation with automatic damper + humidity sensor provides fresh air into return-air plenum	
1		8.17	Stand-alone hygrometer; OR thermostat has integral hygrometer or humidistat	
1		8.18	Energy Star programmable thermostat	
2		8.19	Air distribution system leakage no greater than 5% as ascertained by duct-blaster testing method	

Sample

B. Measures for Points Continued

SECTION 9: ELECTRICAL

2		9.01	Ceiling fans in all bedrooms	
2		9.02	Whole-house fan with insulated cover	
2		9.03	Bathroom exhaust fans are connected to humidistat or timer	
2		9.04	Recessed-can lighting fixtures do not break through the thermal envelope; OR no recessed-can fixtures are installed	
2		9.05	Energy Star Advanced Lighting Package requirements met	Advanced Lighting Package
2		9.06	Energy Star-qualified fixtures--≥5 from following list: appliances, light fixtures/luminaires, ceiling fans, +/or ventilation fans	
3		9.07	A minimum of 90% of lamps/bulbs are Energy Star-compliant	Energy Star lamps/bulbs
2		9.08	All exterior light fixtures are designed to reduce up-lighting/light pollution; OR fixture locations are shielded from above	
1		9.09	All exterior lighting has motion detectors with photocell controllers; OR is solar-powered	
1		9.10	Central vacuum system; exhausts to outside	
5		9.11	Solar photovoltaic (PV) power system installed: 1.5 kW minimum	kW installed:
2		9.12	A minimum of 1.5 kW additional solar PV installed (in addition to 9.11)	Additional kW installed:

SECTION 10: INTERIOR CONSTRUCTION AND FINISHES

1		10.01	Interior moulding is finger-jointed or MDF	
2		10.02	**OR** Interior moulding is locally milled local species; made from agricultural waste product; or is FSC-certified wood	
2		10.03	Cabinet boxes, doors, drawers + adhesives: a) meet E1; or b) CARB Phase I; or c) have no added urea-formaldehyde	
2		10.04	At least 75% of all cabinet faces are locally milled local species; or FSC-certified wood	a, b or c
2		10.05	At least 75% of all doors are locally milled local species; or FSC-certified wood	
2		10.06	Structural floor is the finish floor for a minimum 50% of all floor area (e.g. exposed concrete, single-layer wood)	
4 2		10.07	Finish flooring is durable material for a minimum of 50% of all floor area (e.g. ceramic tile, concrete, wood)	
4		10.08	**OR** Flooring is 100% durable material	
2		10.09	Flooring is rapidly renewable material for a minimum 25% of all floor area (e.g. cork, wool)	
1		10.10	Carpet, carpet padding and flooring adhesives have the CRI Green Label	Product: Green Label
3		10.11	Interior wall and ceiling paint has maximum VOC level of 10 grams per liter	Product: VOCs:
1		10.12	All doors have lever handles	
2		10.13	Grab bars installed in tub +/or shower of at least one bathroom	
1		10.14	Carbon monoxide detector installed (may be combined with smoke detector)	

SECTION 11: SITEWORK AND LANDSCAPING

			See Grow Green for information on appropriate, water-wise landscaping for Central Texas.	Grow Green
3		11.01	Permanent erosion and storm-water control measures (e.g. piped drainage system, berms and swales)	
2		11.02	Decking material of raised porch/deck is recycled-plastic/composite lumber	
2		11.03	Existing vegetation retained on at least 50% of pervious cover area	
3		11.04	No turfgrass installed or planned	
2		11.05	**OR** Turfgrass/lawn area does not exceed 50% of pervious cover area	
5 0		11.06	Existing vegetation substantially retained; OR all new plants from Grow Green list AND turgrass area installed ≤**2000** sq. ft.	
2		11.07	Turfgrass/lawn in full sun is AEGB-approved low-water variety (e.g. common bermuda, zoysia japonica, buffalo)	
5 4		11.08	Newly installed turfgrass areas have at least 6" of soil containing 25% compost; OR no turfgrass installed or planned	
2		11.09	Trees are protected with fencing at the drip line; or a tree protection plan by a professional arborist is followed	
2		11.10	Rainwater harvesting: 110-600 gallons storage	
3		11.11	**OR** Rainwater harvesting: 601-2,000 gallons storage	
4		11.12	**OR** Rainwater harvesting: 2,001 or more gallons storage	
3		11.13	Rainwater is sole source of indoor water	

SECTION 12: ADDITIONS AND INNOVATIONS

Describe other green measures incorporated in this project. Your AEGB Rater will determine points.

12.01
12.02
12.03
12.04
12.05
12.06
12.07
12.08
12.09
12.10
12.11
12.12
12.13
12.14
12.15

Sample

ORDINANCE NO. 08-24

AN ORDINANCE AMENDING CHAPTER 10
OF THE NORTHBROOK MUNICIPAL CODE (1988)
REGARDING THE ESTABLISHMENT OF A
GREEN BUILDING INITIATIVE

Passed by the Board of Trustees, May 13, 2008

Printed and Published, May 14, 2008

Printed and Published in Pamphlet Form
by Authority of the
President and Board of Trustees

VILLAGE OF NORTHBROOK
COOK COUNTY, ILLINOIS

I hereby certify that this document
was properly published on the date
stated above.

/s/ Debra J. Ford
Village Clerk

ORDINANCE NO. 08-24

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook, State of Illinois, THAT:

AN ORDINANCE AMENDING CHAPTER 6
OF THE NORTHBROOK MUNICIPAL CODE (1988)
REGARDING THE ESTABLISHMENT OF A
GREEN BUILDING INITIATIVE

be and is hereby adopted as follows:

SECTION 1. BACKGROUND.

Chapter 6, entitled "Building and Construction Regulations," of the Northbrook Municipal Code (1988), as amended, sets forth regulations governing the erection, repair, alteration, occupation, maintenance and demolition of all buildings and structures in the Village.

The Village has the authority, pursuant to its home rule powers, to adopt ordinances and to promulgate rules and regulations that pertain to its government and affairs and that protect the public health, safety and welfare of its citizens.

The built environment has a large impact on energy and resource consumption, the health of the Village's residents and the surrounding ecology.

The U.S. Green Building Council ("***USGBC***"), an organization comprised of the nation's foremost leaders from the building industry, is committed to promoting the development of buildings that are environmentally responsible, profitable and healthy places to live and work. To this end, the USGBC has developed the Leadership in Energy and Environmental Design ("***LEED***") Green Building Rating Systems, which are performance-oriented rating systems for both new construction and existing buildings based on generally accepted energy and environmental principles.

Municipalities across the United States have committed to LEED standards for their own projects and implemented incentive programs to encourage developers to incorporate LEED standards into new construction projects and substantial alterations of existing buildings and structures.

In a joint report dated January 24, 2008, the Village's Architectural Control Commission and Environmental Quality Commission Subcommittee recommended that the Village implement a "Green Building Initiative" to (i) demonstrate that green building can be undertaken economically, (ii) promote a market for green building techniques, (iii) reduce energy and resource consumption, and (iv) encourage the general health and welfare of the Village's residents.

The President and the Board of Trustees have determined that it is in the best interests of the Village and its residents to amend Chapter 6 of the Municipal Code by adding a new article which establishes a Green Building Initiative for new construction and substantial alterations of existing buildings and structures in the Village.

SECTION 2. NEW ARTICLE XV.

Chapter 6, entitled "Building and Construction Regulations," of the Northbrook Municipal Code (1988), as amended, shall be and is hereby, amended by adding a new Article XV, which article shall hereinafter be and read as follows:

ARTICLE XV. GREEN BUILDING INITIATIVE

Sec. 6-230. Purpose.

The Village desires to establish a set of incentives to promote the use of environmentally friendly building techniques for both public and private sector construction projects and encourage sustainable development throughout the Village.

Sec. 6-231. Definitions.

As used in this Article, the following terms shall have the following meanings:

(a) *Covered Permits* means permits issued by the Building and Development Department for new buildings, additions, demolitions, alterations and site work.

(b) *Green Building Official* means the member of the Village staff appointed by the Village Manager to oversee the administration of the Green Building Initiative.

(c) *LEED* means the Leadership in Energy and Environmental Design Green Building Rating System, which is a USGBC designed voluntary, consensus-based national rating system for developing high-performance, sustainable buildings.

(d) *LEED Accredited Professional* means a person who has received the LEED Accredited Professional designation from either USGBC, the Green Building Certification Institute or another entity authorized by the USGBC to grant such designation.

(e) *LEED Rating System* means either the most current version of a LEED Green Building Rating System that has been adopted by the USGBC or a pilot LEED rating system accepting project applications, as determined at the time of commencement of building design (for Projects described in Section 6-232(a)) or application for the Green Building Initiative (for all other Projects).

(f) *LEED Checklist* means a scorecard developed by USGBC to show the credits pursued and total points anticipated for a Project under the selected LEED Rating System.

(g) *Project* means new construction or alteration undertaken on a building or structure by any person or entity.

(h) *USGBC* means the United State Green Building Council, a private nonprofit organization.

Sec. 6-232. Village Projects.

(a) For each Project involving construction of a new building for use and occupancy by Village employees commenced after June 1, 2008, Village staff shall seek the highest level of certification achievable under the most appropriate LEED Rating System, as determined by the Green Building Official and Village Manager; provided that attaining such certification must be cost-effective and within the limits of available funding for the project.

(b) If the scope, design, or type of a Project described in Section 6-232(a) limits the feasibility of attaining LEED certification, Village staff shall incorporate cost-effective green building practices into the design and operational plans for the Project to the extent practicable.

Sec. 6-233. Incentive program.

(a) *Voluntary program.* Any person or entity required to obtain Covered Permits for a Project may participate in the Green Building Initiative incentive program described in this Section. Participation in the Green Building Initiative is entirely voluntary. Any person or entity not participating in the Green Building Initiative shall have the right to undertake a Project in any manner otherwise authorized under the Northbrook Municipal Code.

(b) *Application.*

(1) Fee. No fee shall be required in connection with an application for the Green Building Initiative incentive program.

(2) Contents. Any person or entity that desires to apply for the Green Building Initiative incentive program set forth in this Section must submit to the Village, on a form provided by the Village, the following information:

(A) proof of registration of the Project with the USBGC;

(B) identification of the specific LEED Rating System to be applied to the Project, as determined by the applicant;

(C) a LEED Checklist indicating the LEED credits the applicant intends for the Project to achieve; and

(D) the name and contact information of a member of the project team who is a LEED Accredited Professional.

(3) Partial applications. A person or entity may apply for the Green Building Initiative incentive program for only a portion of a Project if the applicant intends to seek LEED certification for only a portion of the buildings included within the scope of its application for the Covered Permits. In such event, the Green Building Official shall determine which, if any, Covered Permits are eligible for expedited permitting and review pursuant to Section 6-233(c) and a pro-rata portion of the Covered Permit fees eligible for rebate under Section 6-233(d).

(4) Acknowledgment. Any person or entity who files an application for the Green Building Initiative incentive program shall be deemed to acknowledge and agree that: (i) participation in the Green Building Initiative is entirely voluntary; (ii) any action, inaction, approval, or disapproval by USGBC does not constitute any deprivation of rights by the Village; (iii) any decision by the Green Building Official or Village Manager to expel an applicant from the Green Building Initiative incentive program pursuant to this Section does not constitute a deprivation of such applicant's rights; and (iv) the applicant shall have no right to appeal or otherwise challenge a determination of the Green Building Official or Village Manager with respect to an application except as expressly set forth in this Section.

(5) Timing.

(A) An applicant seeking expedited permitting and review, as provided in Section 6-233(c) must submit its application for enrollment into the Green Building Initiative simultaneously with its application for the Covered Permits.

(B) An applicant seeking only permit fee rebates, as provided in Section 6-233(d), may submit its application for enrollment into the Green Building Initiative at any time prior to obtaining a final certificate of occupancy from the Department of Building and Development.

(6) Approval. The Green Building Official will review all applications. If the Official determines that the application is complete, he will enroll the Project in the Green Building Initiative and notify all affected departments.

(7) Subsequent documentation. An applicant with a Project enrolled in the Green Building Initiative shall provide documentation to the Green Building Official relating to the status of the Project's registration and application for LEED certification upon request. Documentation requested by the Green Building Official may include, without limitation, a copy of the Project's LEED application (which may be in draft form) that includes LEED submittal templates and supporting documentation for all LEED prerequisites and credits proposed for the Project. An applicant shall, if offered by the USGBC, submit its Project for design phase review to determine the likelihood of receiving LEED certification. The applicant shall provide to the Village copies of all materials prepared for and resulting from such review, including, but not limited to, comments and determinations provided by USGBC.

(c) *Expedited permitting and review.*

(1) Prioritization. After receiving notice that a Project has been enrolled in the Green Building Initiative, the Department of Building and Development shall prioritize the enrolled Project over all other Projects not enrolled in the Green Building Initiative for permitting and review for the Covered Permits. Enrolled Projects shall be processed in the order received.

(2) Non-compliant determinations. At any time prior to the issuance of the final certificate of occupancy for a Project seeking expedited permitting and review, the Green Building Official may, in consultation with the Village Engineer and after discussion with the applicant, determine that the applicant has not incorporated into a Project's design, engineering, or construction green building elements and requirements (a) identified in the applicant's Green Building Initiative application, or (b) otherwise

sufficient to qualify the Project for certification under the selected LEED Rating System. Upon such determination, the Green Building Official shall issue a notice of noncompliance to the applicant and, subject to the appeal process described in subsection (c)(3), expel the Project from the Green Building Initiative. If a Project is expelled from the Green Building Initiative, the Green Building Official shall have the discretion, after consulting with the Director of the Department of Building and Development, to revoke the priority status of any permit submitted by the applicant relating to the expelled Project.

(3) Appeals of non-compliant determinations. An applicant may appeal to the Village Manager a non-compliant determination made by the Green Building Official pursuant to subsection (c)(2) by filing a written appeal with the Village Clerk within 15 days of such determination. The appeal shall state the alleged error or reason for the appeal, and include supporting documentation demonstrating the applicant's intent to comply with the requirements of this Article. The Village Manager may request additional written or oral information from the applicant or Green Building Official in considering the appeal. Within thirty (30) days of the receipt of the appeal, the Village Manager shall issue a written determination:

(A) affirming the determination of noncompliance by the Green Building Official, in which case the expulsion shall remain in place;

(B) finding the applicant has made a good faith effort to pursue LEED certification but is unable to incorporate sufficient green building elements and requirements for causes outside of the reasonable control of the applicant, in which case the expulsion may be lifted and the Project re-enrolled in the Green Building Initiative; or

(C) reversing the determination of the Green Building Official, in which case the expulsion shall be lifted and the Project shall be re-enrolled in the Green Building Initiative.

The determination of the Village Manager shall be final.

(d) *Permit fee rebates*. Projects enrolled in the Green Building Initiative shall be eligible for rebates of fees paid for the Covered Permits in the amounts set forth in this subsection (d). The rebates set forth in this Section shall be paid to the applicant upon submission to the Green Building Official of proof of receiving the applicable level of LEED certification from USGBC and a determination by Village Staff that the Project is otherwise in compliance with all other Village codes and requirements. All requests for payment of permit rebates under this subsection (d) must be made no later that three years after the Village has issued a certificate of occupancy for the property.

(1) The first of each of the following Projects to attain a LEED Certified rating or higher shall receive a 100% refund of all Covered Permit fees:

(A) newly constructed commercial building,

(B) newly constructed institutional building,

(C) newly constructed residential building, and

(D) alteration of an existing building, regardless of the use of the property.

The Green Building Official shall determine the classification of Projects for purposes of this subsection (d)(1).

(2) Subsequent Projects that are rated LEED Certified shall earn a 10% rebate for all Covered Permit fees.

(3) Subsequent Projects that are rated LEED Silver shall earn a 20% rebate for all Covered Permit fees.

(4) Subsequent Projects that are rated LEED Gold shall earn a 30% rebate for all Covered Permit fees.

(5) Subsequent Projects that are rated LEED Platinum shall earn a 40% rebate for all Covered Permit fees.

(6) For each Project that achieves any of the following credits in the LEED for New Construction Rating System version 2.2 (or similar credits in another LEED Rating System, as determined by the Green Building Official), the Project shall receive an additional 1% rebate in Covered Permit fees for each credit achieved:

(A) Sustainable Sites Credit 6.1: Stormwater Design: Quantity Control;

(B) Sustainable Sites Credit 6.2: Stormwater Design: Quality Control;

(C) Water Efficiency Credit 1.1: Water Efficient Landscaping: Reduce by 50%;

(D) Water Efficiency Credit 2: Innovative Wastewater Technologies; and

(E) Water Efficiency Credit 3.1: Water Use Reduction: 20% Reduction.

(e) *Recognition.* Each Project enrolled in the Green Building Initiative shall receive the following forms of public recognition:

(1) permission to include a statement of enrollment in the Green Building Initiative on construction signs and marketing materials for the enrolled Project; and

(2) a featured mention of the Project on a dedicated section of the Village website and monthly newsletter promoting the Green Building Initiative;

provided, however, that any Project expelled from the Green Building Initiative shall lose the right to all forms of recognition set forth in this Section 6-233(e) and shall promptly remove or discontinue the same.

Sec. 6-234 – 6-240. Reserved.

SECTION 3. EFFECTIVE DATE. This Ordinance shall take effect after its passage, approval and publication in pamphlet form in the manner provided by law.

PASSED: This 13th day of May, 2008

AYES: (5) Trustees Frum, Buehler, Scolaro, Heller, and Kole

NAYS: (0)

ABSENT: (1) Trustee Karagianis

ABSTAIN: (0)

/s/ Eugene Marks
Village President

ATTEST:

/s/ Debra J. Ford
Village Clerk

5278632_v6

ORDINANCE NO. 08-53

AN ORDINANCE AMENDING CHAPTER 6
OF THE NORTHBROOK MUNICIPAL CODE (1988) REGARDING
CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING

Passed by the Board of Trustees, August 26, 2008

Printed and Published, August 26, 2008

Printed and Published in Pamphlet Form
by Authority of the
President and Board of Trustees

VILLAGE OF NORTHBROOK
COOK COUNTY, ILLINOIS

I hereby certify that this document
was properly published on the date
stated above.

/s/Debra J. Ford
Village Clerk

ORDINANCE NO. 08-53

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook, State of Illinois, THAT:

AN ORDINANCE AMENDING CHAPTER 6
OF THE NORTHBROOK MUNICIPAL CODE (1988) REGARDING
CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING

be and is hereby adopted as follows:

SECTION 1.BACKGROUND.

Chapter 6, entitled "Building and Construction Regulations," of the Northbrook Municipal Code (1988), as amended, sets forth regulations governing the erection, repair, alteration, occupation, maintenance and demolition of all buildings and structures in the Village.

The Village has the authority, pursuant to its home rule powers, to adopt ordinances and to promulgate rules and regulations that pertain to its government and affairs and that protect the public health, safety and welfare of its citizens.

It is estimated that construction projects utilize approximately 40 percent of all raw materials such as steel, concrete, and glass consumed nationally, much of which eventually becomes landfill waste. In the United States, construction and demolition activities produce approximately 25 percent of solid waste generated annually.

There are vendors and facilities able to effectively collect for recycling certain materials generated by construction and demolition activity within the Village, thus diverting such materials from landfills.

The Village Board of Trustees desires to establish a construction and demolition debris recycling program to (i) encourage current efforts to recycle construction and demolition debris, (ii) support practices and procedures that promote sustainability, and (iii) encourage the general health and welfare of the Village's residents.

The President and the Board of Trustees have determined that it is in the best interests of the Village and its residents to (1) amend Chapter 6 of the Municipal Code by adding a new article which establishes a Construction and Demolition Debris Recycling Ordinance for construction and demolition activities in the Village, and (2) approve an amendment to Chapter 6 of the Municipal Code and to the Annual Fee Ordinance to provide for the various penalties required under the new Construction and Demolition Debris Recycling Ordinance.

SECTION 2. NEW ARTICLE XVI.

Chapter 6, entitled "Building and Construction Regulations," of the Northbrook Municipal Code (1988), as amended, shall be and is hereby, amended by adding a new Article XVI, which article shall hereinafter be and read as follows:

ARTICLE XVI. CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING

Sec. 6-241. Purpose.

The Village desires to establish requirements for construction and demolition debris recycling to encourage current recycling efforts and to support practices and procedures that promote sustainability.

Sec. 6-242. Definitions.

The following words, terms and phrases, when used in this Article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Applicant means a person who applies to the village for the applicable permits to undertake any covered project.

Code official means the director of building and development.

Construction means all on-site work done in building new structures to structures from land clearance to completion, including excavation, erection, and the assembly and installation of components and equipment.

Construction and demolition debris or *C&D debris* means non-hazardous construction and demolition debris, including but not limited to cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation, and debris processed into a recycled content commodity with an open market value such as wood derived fuel or alternative daily cover material. C&D debris does not include excavated soil or land-clearing debris.

Covered project means any project, unless otherwise exempt under this Article, for construction, renovation, or demolition that meets one or more of the following thresholds:

(1) Construction of new structures of two thousand (2,000) square feet or more of gross floor area;

(2) Renovations of ten thousand (10,000) square feet or more of gross floor area; or

(3) Demolition of one thousand five hundred (1,500) square feet or more of gross floor area.

Demolition means the razing and removal of all or substantially all of a structure, including at least one exterior wall, or the removal of such portions of a principal structure or at least one exterior wall as to make the structure uninhabitable or unsafe for human occupancy.

Department means Department of Building and Development.

Divert and *diversion* means the recycling of C&D debris which avoids its disposal into a landfill.

Inert debris means those materials which are virtually inert, such as rock, brick, and concrete.

Permit means any building or demolition permit as validly issued by the village.

Recycle means the process of collecting, sorting, cleansing, treating, and reconstituting C&D debris that would otherwise become solid waste, and returning them to the economic mainstream, and may include the salvage and reuse of such debris as part of the covered project.

Renovation means the improvement, alteration, repair, or reconstruction of an existing structure.

Waste reduction and recycling plan means a written plan for recycling of covered project C&D debris prepared and submitted pursuant to Section 6-246 of this Article in a form prescribed or approved by the code official.

Sec. 6-243. Applicability

(a) This Article applies to all covered projects within the Village of Northbrook except as set forth in Subsection 6-243(b) of this Article.

(b) This Article shall not apply in any of the following circumstances:

1. An immediate or emergency demolition is required to protect the public health, safety or welfare, as determined prior to such demolition by the code official; or

2. An exception is granted pursuant to Section 6-248 of this Article; or

3. A project has been issued a valid building permit or demolition permit prior to January 1, 2009.

Sec. 6-244. Condition of Approval for Building or Demolition Permits.

Compliance with the provisions of this Article is a condition of approval for all building or demolition permits issued for any covered project, unless otherwise exempt.

Sec. 6-245. Diversion Requirements.

C&D debris must be recycled at the following rates, measured by weight:

(a) For all covered projects for which a building or demolition permit application is submitted between January 1, 2009 and December 31, 2010, at least 50% of C&D debris must be recycled.

(b) For all covered projects for which a building or demolition permit application is submitted on or after January 1, 2011, at least 75% of C&D debris must be recycled.

Sec. 6-246. Waste Reduction and Recycling Plan.

(a) For covered projects, prior to issuance of a building or demolition permit, the applicant must complete and submit to the Department a waste reduction and recycling plan on a form provided by the Department. The waste reduction and recycling plan must include the following information, and such other information as the Department may require:

1. Identification of materials to be diverted from disposal to recycling;

2. A description of whether and to what extent materials will be separated on-site or co-mingled;

3. The estimated weight of C&D debris, divided between inert debris and other debris;

4. The estimated weight of the inert and other C&D debris that can be diverted;

5. The estimated weight of the inert and other C&D debris that will be landfilled as solid waste;

6. The identification of the vendors or facilities that will collect or receive the construction or demolition debris, and such information as the code official may require demonstrating that the vendor or facility will recycle all C&D debris received from the covered project;

7. The estimated date on which demolition and/or construction is to commence; and

8. Agreement by the general contractor for the covered project to comply with all of the terms of the waste reduction and recycling plan and this Article.

Where all of the facts cannot be ascertained, the applicant shall provide the best estimate based on all information reasonably available about the covered project.

(b) No permit will be issued for a covered project unless and until the code official has reviewed and approved the project's waste reduction and recycling plan. A waste reduction and recycling plan shall be approved only if the code official determines that:

1. The plan contains all of the information required by this Article; and

2. The plan demonstrates compliance with the requirements of this Article.

(c) If the code official determines that the waste reduction and recycling plan is incomplete or fails to satisfy the conditions of Subsection 6-246(a) of this Article, the code official may:

1. Return the waste reduction and recycling plan to the applicant marked "Disapproved," including a statement of reasons for disapproval; or

2. Return the waste reduction and recycling plan to the applicant marked "Further Explanation Required," including a statement of areas requiring additional information.

(d) An approved waste reduction and recycling plan may not be amended without the prior written approval of the code official.

(e) If at any time it becomes apparent to the code official that the contents of an approved plan are no longer accurate, the code official may require that the applicant submit an addendum or revision to the plan with such information as may be required by the code official.

Sec. 6-247. Compliance Report.

(a) Not less than five (5) business days prior to the scheduled date for the final inspection of a covered project, the applicant shall submit to the Department a compliance report on a form provided by the Department. The compliance report must include the following information, and such other information as the Department may require:

1. The dates demolition and/or construction actually commenced;

2. The actual weight of C&D debris, divided between inert debris and other debris;

3. The actual weight of inert and other C&D debris that was diverted;

4. A specification of the method used to determine the weight and a certification that the method used was the most accurate, commercially reasonable method available;

5. Original receipts from all vendors and facilities which collected or received C&D debris, indicating actual weights received by each; and

6. Certifications from the general contractor and any vendor or facility that handled C&D debris stating the extent to which the project complies with the requirements of this Article.

(b) Additional reporting requirements may be added at the discretion of the code official.

(c) Submission of a compliance report and, if applicable, payment of any penalties set forth in this Article is a condition precedent to the following:

1. Issuance of any certificate of occupancy pursuant to Section 6-12 of this Chapter; or

2. Determination that a lot has been restored pursuant to Section 6-16 of this Chapter.

Sec. 6-248. Exceptions.

(a) Applicants seeking partial or complete exception granting relief from the requirements of this Article must file with the Department an application on a form provided by the Department. The application must include, in addition to such other information as the Department may require, a statement from a licensed professional engineer certifying that compliance with this Article is impracticable due to exceptional or extraordinary circumstances or conditions applicable to the covered project.

(b) The code official may grant the exception only if the code official finds all of the following:

1. There are exceptional or extraordinary circumstances or conditions applicable to the covered project that do not apply generally to similar covered projects and that make compliance with this Article impracticable;

2. Granting the exception will not constitute a grant of special privilege inconsistent with limitations imposed on similar covered projects; and

3. Cost to the applicant of strict compliance with this Article is not the primary reason for granting the exception.

(c) The code official may deny applications for exceptions made pursuant to this Section 6-248.

Sec. 6-249. Inspections, Inquiries and Audits.

The code official may make any and all inspections, inquiries, and audits as necessary to determine compliance with this Article.

Sec. 6-250. Enforcement and Penalties

In addition to the general penalties set forth in Section 1-13 of the Village Code, applicants who fail to satisfy the diversion requirement established at Section 6-245 of this Article are subject to a penalty set forth in the annual fee ordinance.

Sec. 6-251. Appeals.

Any person or entity aggrieved by any decision by the code official under the provisions of this Article with respect to approving or to denying a waste reduction and recycling plan, or to granting or denying an application for an exception from compliance with this Article may file an appeal pursuant to Section 6-14 of the Village Code.

Sec. 6-252 - ___ Reserved.

SECTION 3. AMENDMENT TO THE ANNUAL FEE ORDINANCE.

Section 5, entitled "Schedule of Fees, Charges and Rates," of the Annual Fee Ordinance shall be, and is hereby, amended to add the following text corresponding to Section 6-245 and Section 6-250 of the Village Code:

Sec. 6-250 For failure to satisfy requirements of Section 6-245

(a) for projects involving the construction, demolition, or renovation of less than 10,000 square feet of gross floor area, $500 for each percentage point of difference between the amount of construction and demolition debris required to be recycled or reused and the amount actually recycled or reused; or

(b) for projects involving the construction, demolition, or renovation of 10,000 square feet or more of gross floor area, $1,000 for each percentage point of difference between the amount of construction and demolition debris required to be recycled or reused and the amount actually recycled or reused.

SECTION 4.EFFECTIVE DATE.

This Ordinance shall take effect after its passage, approval and publication in pamphlet form in the manner provided by law.

APPROVED this 26th day of August, 2008.

AYES: (5) Trustees Frum, Karagianis, Buehler, Heller, and Kole

NAYS: (0)

ABSENT: (1) Trustee Scolaro

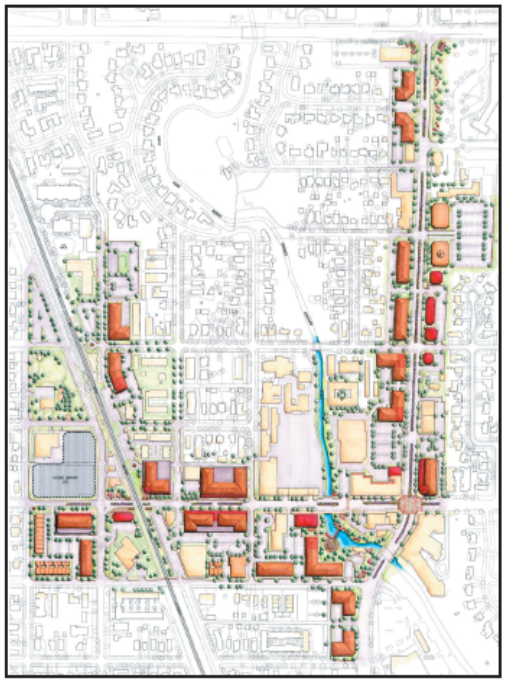
ABSTAIN: (0)

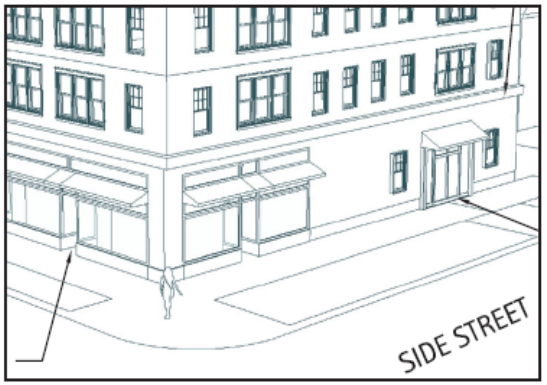
/s/Eugene Marks
Village President

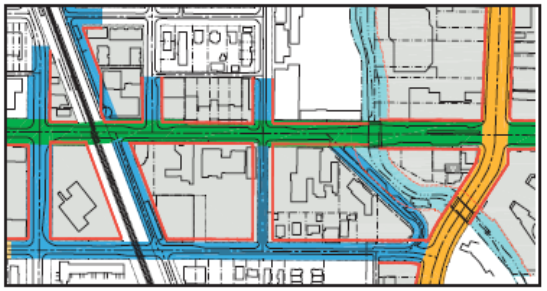
ATTEST:

/s/Debra J. Ford
Village Clerk

Village of Glenview
Downtown Development Code







THE LAKOTA GROUP

Glenview, Illinois
June 17, 2008
Ordinance Number: 5112

Downtown Revitalization Code

Regulating Plan

The “Preferred Concepts” shown in the Downtown Revitalization Plan will act as the Regulating Plan. The Plan reflects the Village’s vision for Downtown, includes acceptable building heights and details preferred land uses.

Define Existing Street Standards

The existing street patterns will be defined by measuring the travel lanes, parking lanes, landscaped parkways, sidewalk widths and relation of street to the building facades (Dewes – Glenview – Waukegan)

Develop Building Form Standards

Build to lines, building height and profile, building stepbacks, location of parking, window openings, required design elements

Develop Architectural Standards

Create a palette of acceptable building frontages or typologies (duplex, courtyard townhouses/condos, main street building) and architectural styles (Colonial, Victorian, Art Deco)

Figure 2.5: Downtown Uses (Based on Downtown Revitalization Plan)

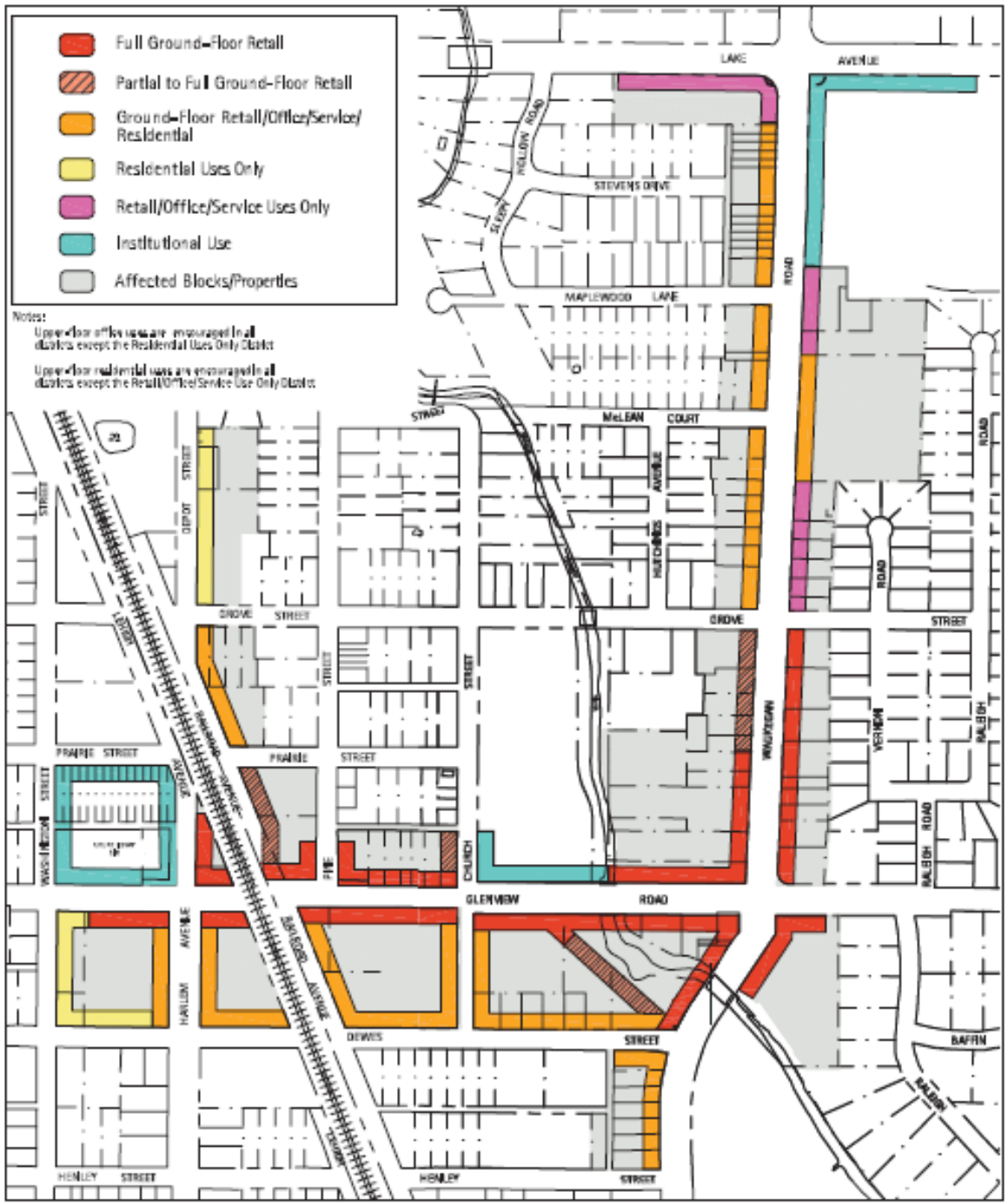


Figure 3.2: Street Frontages

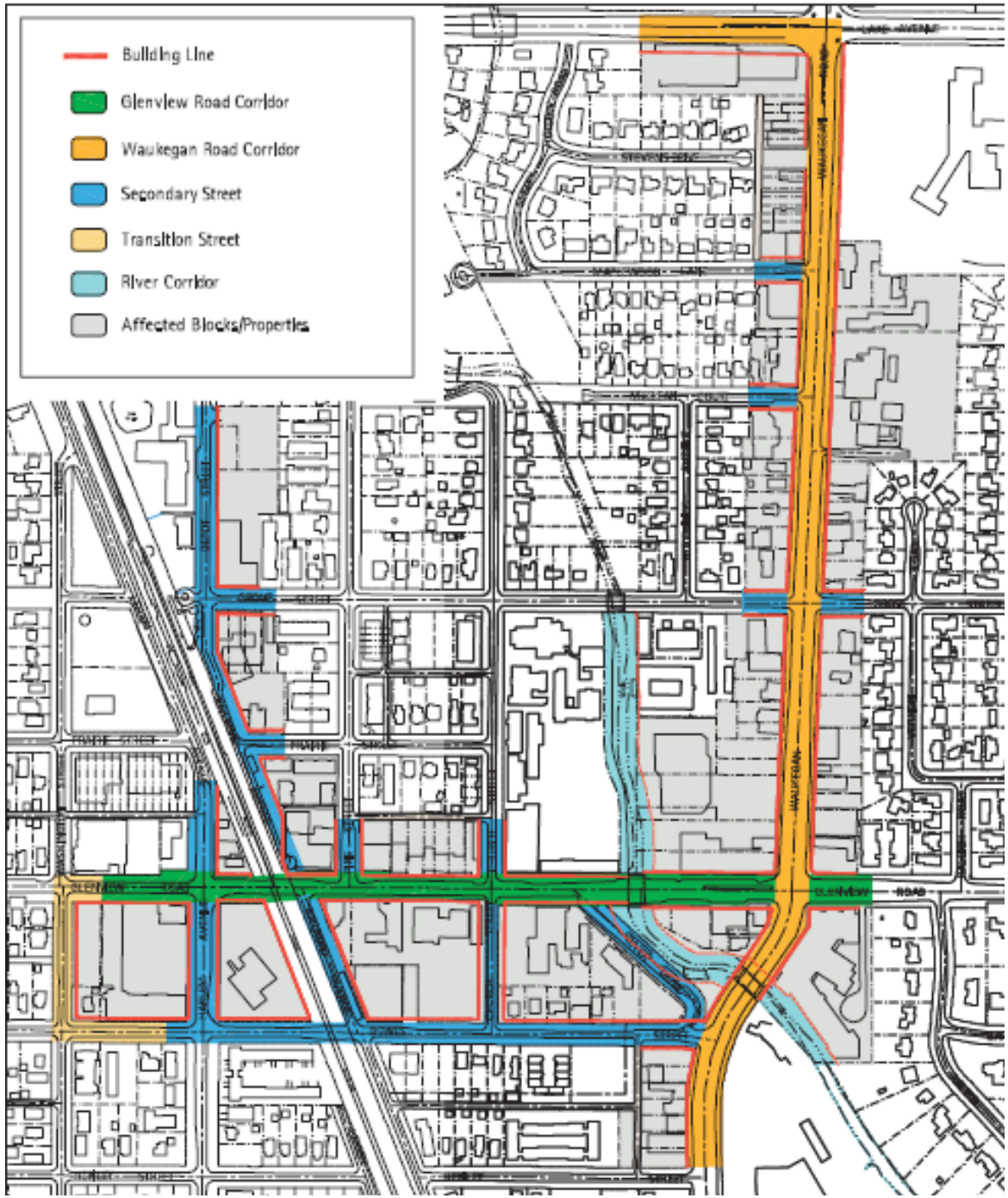


Figure 2.9: Maximum Building Heights

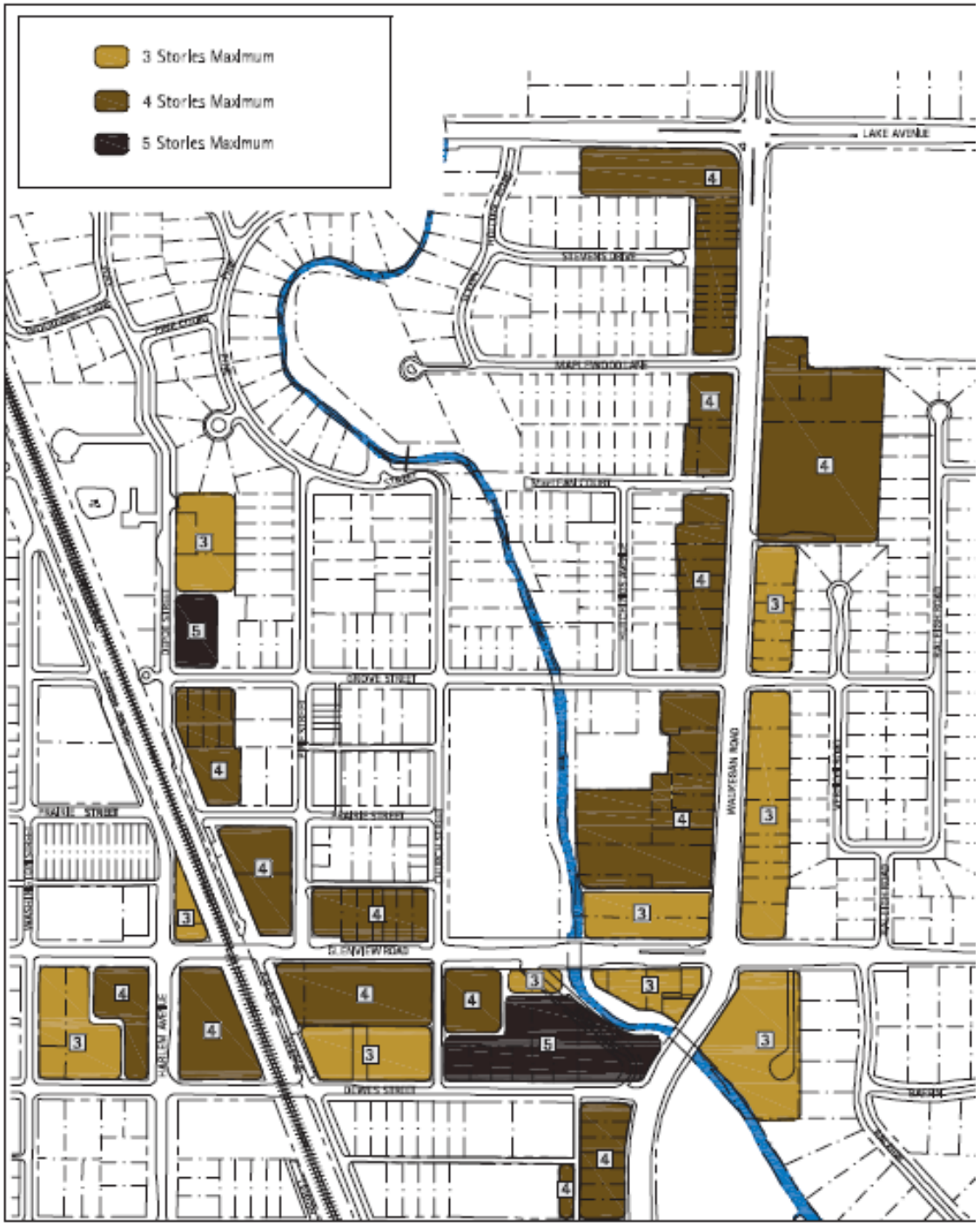
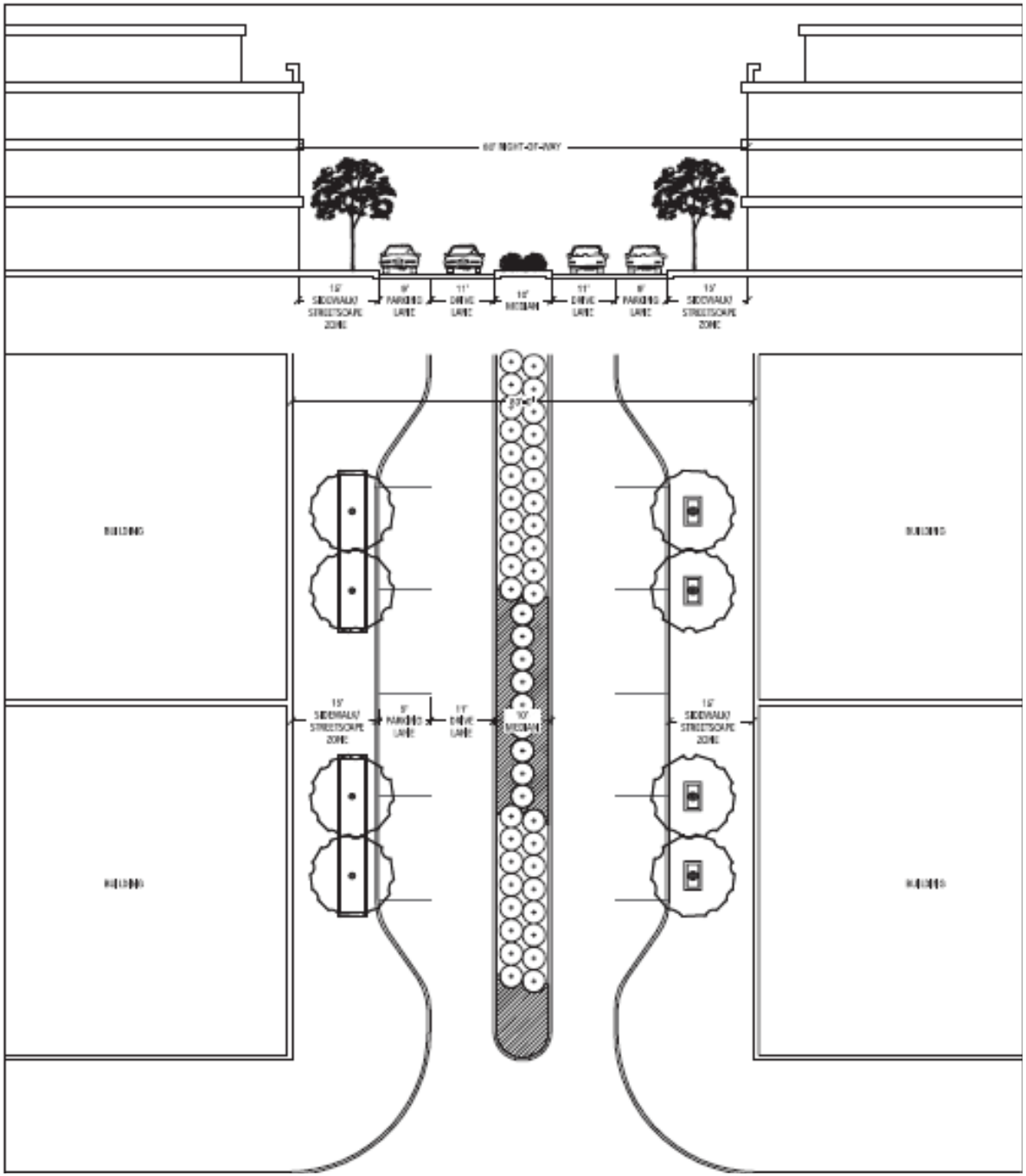


Figure 3.5: Glenview Road: Optimal 80-foot Right-of-Way - West of River.



3.5.3 Building Setbacks

A **Front yard:** Zero, build-to. At least 60% of the ground-floor front façade must be built to the Building Line, and it must be built to the Building Line at each interior side property line.

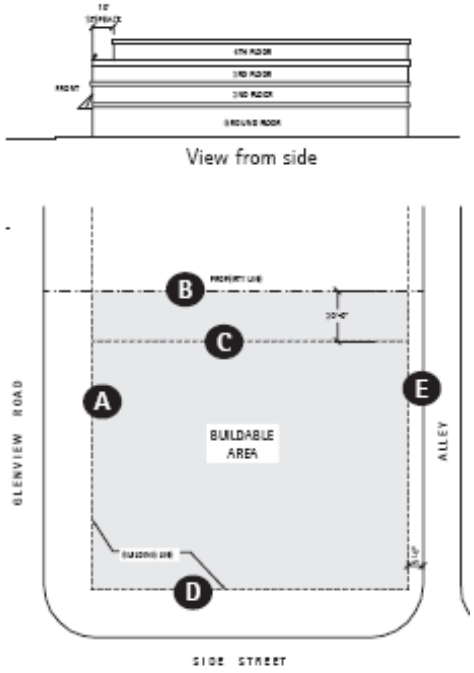
B **Side yard, interior:** Zero, build-to at ground level. A 10-foot pedestrian pass-through is allowed if necessary to access a rear parking lot.

C **Side yard, interior adjacent to residential district** (including Transitional Street Frontage): 20 feet minimum.

D **Side yard, corner lot on side street:** Zero, build-to at ground level.

E **Rear yard:** 5 feet minimum.

Figure 3.11: Building Setbacks/Stepback



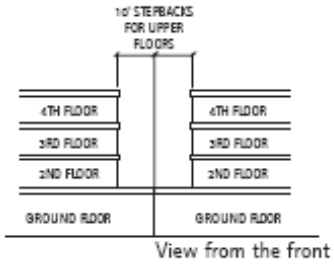
3.5.4 Building Stepbacks

3.5.4.1 **Front:** Starting with the 4th floor, 10 feet from the Building Line, except for corner elements within 50 feet of the corner of the building.

3.5.4.2 **Side, interior:** Starting with the 2nd floor, 10 feet from property line to allow air and light to windows. (See **Figure 3.12.**)

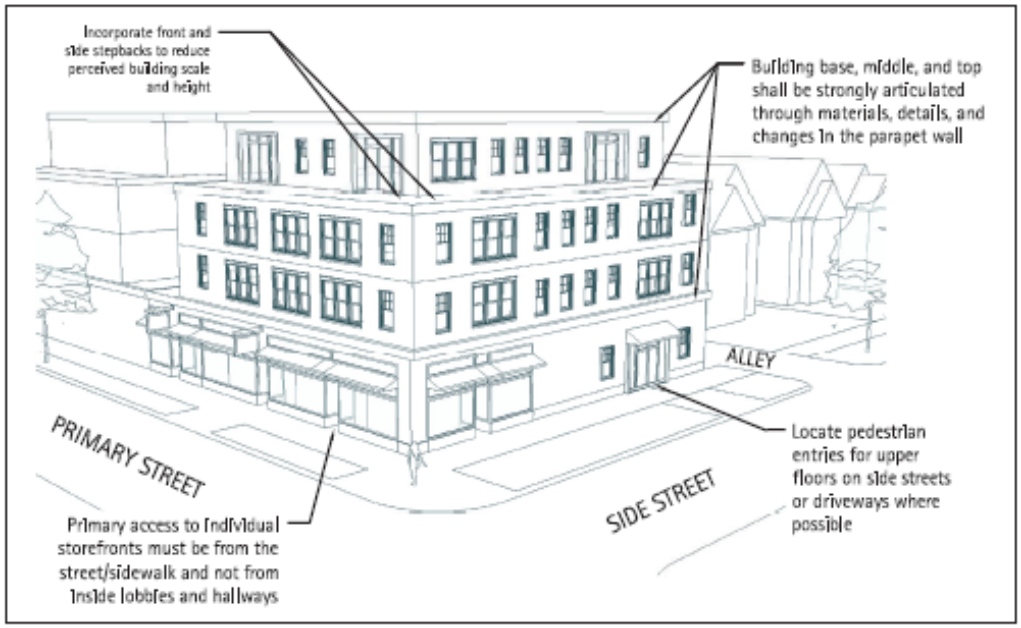
3.5.4.3 **Side, corner lot:** Starting with the 4th floor, 10 feet.

Figure 3.12: Building Stepbacks - Side



4.6.1 Mixed Use

Figure 4.1: Mixed-use Building on Corner Lot





Example of mixed-use building on corner lot with articulated architecture.

Figure 4.8: Building Articulation



Articulated building with clearly defined base, middle, and top. (4.7.2.1)

NOT ACCEPTABLE



Building with no defined base, middle, or top. (4.7.2.1)

ACCEPTABLE



Building design should feature a balance of vertical and horizontal elements, as illustrated by the lines on the above photograph. (4.7.2.4)

4.7 Building Design

4.7.1 General

4.7.1.1 To maintain an active pedestrian environment, buildings shall be oriented toward streets, sidewalks, and/or public plazas.

4.7.1.2 Façades shall be proportioned to respect the human scale.

4.7.1.3 Façade elements shall provide a change in plane, creating interest in light and shadow.

4.7.1.4 Standardized, formulaic, non-regional architecture and architectural features used primarily for advertising purposes are not allowed.

4.7.1.5 Developers should consider creative, adaptive reuse of high-quality existing buildings.

ACCEPTABLE



Design that incorporates material changes, clear glass storefronts, and distinct ground-floor base with storefronts. (4.7.2.1, 4.7.2.2)

4.7.2 Articulation

Plane/Material Changes

4.7.2.1 A building base, middle, and top shall be strongly articulated through materials, details, and changes in the plane of the wall, including stepbacks and patios on upper floors (see **Figure 4.8**).

4.7.2.2 Pitched roofs may project into space where upper story floors have been step-backed.

4.7.2.3 Mixed-use buildings must have a distinct ground-floor base with easily identifiable, traditional storefronts with clear glass and kneewalls.

4.7.2.4 Façades shall be articulated to express vertical rhythm related to structural columns and bays.

4.7.2.5 Building design should feature a balance of vertical and horizontal elements.

4.7.2.6 Unarticulated, flat-front, all-glass, or all-metal buildings are prohibited.

4.7.2.7 To prevent a "dead wall" on buildings with first-floor parking, articulate the ground floor with faux windows, banding, or other architectural features.

4.8 Building Materials

Overall

4.8.1 Wood, brick, stone, and glass are the preferred primary building materials for all structures in the Downtown. New building construction and rehabilitations should be primarily constructed of these high-quality materials (see **Table 4.1**).

4.8.2 Concrete block (smooth or decorative splitface), stucco (smooth or textured synthetic), plywood, sheet pressboard, unfinished pre-cast concrete, poured-in-place concrete, synthetic stone, smooth/textured synthetic stucco or plaster, and metal/decorative metal shall not be used as primary materials on façades or walls that are visible from streets, driveways, sidewalks, and/or parking areas. They shall be used only for decorative accent purposes and limited in their use on building façades and visible walls (see **Table 4.1**).

4.8.3 The primary building material used on front façade shall be continued as the primary material on the side and rear façades, except where the side of a building directly abuts the side of an existing building.

4.8.4 The number of materials on an exterior building face should be limited (no more than 5) to prevent clutter and visual overload.

Fencing

4.8.5 Brick, stone, or decorative metal shall be used for fencing. Decorative or non-screening fence height shall be 30 to 42 inches. Railings along terraces can be solid walls or open fencing but may not be clear glass or plastic.

ACCEPTABLE



Brick, glass and stone are preferred primary build materials. (4.8.1)

Table 4.1: Preferred/Prohibited Mate

Primary Building Materials	
PREFERRED	**PROHIBITED***
• Brick • Stone • Glass • Wood	• Concrete, including poured-in-place and unfinished pre-cast • Plywood • Sheet pressboard • Synthetic stone • Smooth/textured synthetic stucco or plaster • Metal/decorative metal

* Limited use allowed for decorative accent purposes.

LEED-ND

The U.S. Green Building Council (USGBC), the Congress for the New Urbanism (CNU), and the Natural Resources Defense Council (NRDC)—three organizations that represent some of the nation's leaders among progressive design professionals, builders, developers, and the environmental community—have come together to develop a national set of standards for neighborhood location and design based on the combined principles of smart growth, new urbanism, and green building. The goal of this partnership is to establish these standards for assessing and rewarding environmentally superior development practices within the rating framework of the LEED® (Leadership in Energy and Environmental Design) Green Building Rating System™.

LEED-ND Points

Smart Location & Linkage — 30 Possible Points

Prereq 1	**Smart Location**	Required
Prereq 2	**Proximity to Water and Wastewater Infrastructure**	Required
Prereq 3	**Imperiled Species and Ecological Communities**	Required
Prereq 4	**Wetland and Water Body Conservation**	Required
Prereq 5	**Agricultural Land Conservation**	Required
Prereq 6	**Floodplain Avoidance**	Required
Credit 1	**Brownfield Redevelopment**	2
Credit 2	**High Priority Brownfields Redevelopment**	1
Credit 3	**Preferred Locations**	2-10
Credit 4	**Reduced Automobile Dependence**	1-8
Credit 5	**Bicycle Network**	1
Credit 6	**Housing and Jobs Proximity**	3
Credit 7	**School Proximity**	1
Credit 8	**Steep Slope Protection**	1
Credit 9	**Site Design for Habitat or Wetlands Conservation**	1
Credit 10	**Restoration of Habitat or Wetlands**	1
Credit 11	**Conservation Management of Habitat or Wetlands**	1

Neighborhood Pattern & Design — 39 Possible Points

Prereq 1	**Open Community**	Required
Prereq 2	**Compact Development**	Required
Credit 1	**Compact Development**	1-7
Credit 2	**Diversity of Uses**	1-4
Credit 3	**Diversity of Housing Types**	1-3
Credit 4	**Affordable Rental Housing**	1-2
Credit 5	**Affordable For-Sale Housing**	1-2
Credit 6	**Reduced Parking Footprint**	2
Credit 7	**Walkable Streets**	4-8
Credit 8	**Street Network**	1-2
Credit 9	**Transit Facilities**	1
Credit 10	**Transportation Demand Management**	2
Credit 11	**Access to Surrounding Vicinity**	1
Credit 12	**Access to Public Spaces**	1
Credit 13	**Access to Active Public Spaces**	1
Credit 14	**Universal Accessibility**	1
Credit 15	**Community Outreach and Involvement**	1
Credit 16	**Local Food Production**	1

Green Construction & Technology — 31 Possible Points

Prereq 1	**Construction Activity Pollution Prevention**	Required
Credit 1	**Certified Green Buildings**	1-3
Credit 2	**Energy Efficiency in Buildings**	1-3
Credit 3	**Reduced Water Use**	1-3
Credit 4	**Building Reuse and Adaptive Reuse**	1-2
Credit 5	**Reuse of Historic Buildings**	1

LEED-ND Points

Credit 6	**Minimize Site Disturbance through Site Design**	1
Credit 7	**Minimize Site Disturbance during Construction**	1
Credit 8	**Contaminant Reduction in Brownfields Remediation**	1
Credit 9	**Stormwater Management**	1-5
Credit 10	**Heat Island Reduction**	1
Credit 11	**Solar Orientation**	1
Credit 12	**On-Site Energy Generation**	1
Credit 13	**On-Site Renewable Energy Sources**	1
Credit 14	**District Heating and Cooling**	1
Credit 15	**Infrastructure Energy Efficiency**	1
Credit 16	**Wastewater Management**	1
Credit 17	**Recycled Content in Infrastructure**	1
Credit 18	**Construction Waste Management**	1
Credit 19	**Comprehensive Waste Management**	1
Credit 20	**Light Pollution Reduction**	1

Innovation & Design Process — 6 Possible Points

Credit 1	**Innovation in Design**	1-5
Credit 2	**LEED Accredited Professional**	1

Project Totals — 106 Possible Points

Certification Levels:

Certified 40-49 points
Silver 50-59 points
Gold 60-79 points
Platinum 80-106 points

Questions-Further Information

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http://www.glenview.il.us/departments/development/planning/reports/formbasedcode4.pdf