



# KING COUNTY

1200 King County Courthouse  
516 Third Avenue  
Seattle, WA 98104

## Signature Report

December 10, 2013

Ordinance 17709

Proposed No. 2013-0324.2

Sponsors Phillips

1 AN ORDINANCE requiring the use of green building and  
2 sustainable development practices in all King County  
3 capital projects that meet certain requirements; amending  
4 Ordinance 16147, Section 2, as amended, and K.C.C.  
5 18.17.010, Ordinance 16147, Section 3, as amended, and  
6 K.C.C. 18.17.020, Ordinance 16147, Section 4, and K.C.C.  
7 18.17.030 and Ordinance 16147, Section 3, as amended,  
8 and K.C.C. 18.17.020 and repealing Ordinance 16147,  
9 Section 4, Ordinance 17166, Section 7, and Ordinance  
10 17420, Section 74.

11 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

12 SECTION 1. Findings:

13 A. Green building and sustainable development practices support the goals of the  
14 King County Strategic Plan, including, but not limited to, growth management, economic  
15 development, historic preservation, fiscal responsibility, environmental protection, access  
16 to public transportation, social equity, stewardship of resource lands, climate change  
17 initiatives, efficient energy and other natural resource uses, preserving fish and wildlife  
18 habitat, reducing and creating resources from wastes and protecting and improving  
19 citizen health.

20 B. Green building and sustainable development policies are also included in the  
21 King County Comprehensive Plan, which calls for the incorporation of sustainable  
22 practices into the design, construction and operation of King County capital improvement  
23 projects. Sustainable and green building practices can reduce greenhouse gas emissions,  
24 reduce pollution, reduce the use of natural resources, reduce energy and other operating  
25 costs, enhance asset value, optimize performance, promote cultural sustainability by  
26 preserving historic resources and create healthier and more appealing environments for  
27 the visiting public and for King County employees.

28 C. King County has shown leadership in establishing climate protection goals  
29 and energy conservation goals through the completion of its Strategic Climate Action  
30 Plan. The built environment plays a significant role in greenhouse gas emissions and  
31 energy consumption. Green building has made significant contributions to reducing  
32 energy and the consumption of materials, both of which are two key goal areas of the  
33 Strategic Climate Action Plan.

34 D. Ordinance 16147, adopted June 23, 2008, established a green building policy  
35 for all King County buildings, renovations and remodel projects. It requires that projects  
36 seek the United States Green Building Council's Leadership in Energy and  
37 Environmental Design ("LEED") certification whenever possible. The LEED rating  
38 system is a nationally recognized system for rating the performance of buildings and to  
39 guide project design. A study done by the Pacific Northwest National Laboratory found  
40 that LEED certified buildings operated by the United States General Services  
41 Administration used twenty-five percent less energy than the national average and cost  
42 nineteen percent less to operate. Ordinance 16147 expires December 31, 2013.

43 E. King County currently has twenty-one projects registered with the United  
44 States Green Building Council. Two buildings have achieved LEED Platinum  
45 certification, including Shoreline Recycling and Transfer Station in 2008 and the  
46 Brightwater Education and Community Center in 2012. By continuing and building on  
47 the green building policies in the current ordinance, the county will further its  
48 sustainability goals.

49 F. In addition to LEED certification, King County recognizes the value of  
50 alternative sustainable development certifications, such as: the Evergreen Sustainable  
51 Development Standard administered by the Washington state Department of Commerce;  
52 the Built Green Four-Star administered by the Master Builders Association of King and  
53 Snohomish counties; the Sustainable Sites Initiative Program developed by the American  
54 Society of Landscape Architects and Lady Bird Johnson Wildflower Center and United  
55 States Botanical Garden; Salmon Safe founded by the Stewardship Partners; and the  
56 Living Building Challenge administered by the International Living Future Institute.

57 G. King County has also shown its commitment to incorporating green building  
58 and sustainable development practices in capital improvement projects for projects where  
59 LEED certification is not applicable, including bus passenger shelters, trails, park  
60 facilities, restroom facilities, pump stations, parking garages, roads, sidewalks, bridges,  
61 flood control improvements, conveyance lines and rehabilitation of designated landmarks  
62 or properties that are eligible for landmark designation.

63 H. King County develops, owns and operates many facilities that require ongoing  
64 operation and maintenance. Designing, operating and maintaining these facilities using



65 green and sustainable practices can reduce operating and maintenance costs, conserve  
66 energy, reduce greenhouse gas emissions and improve indoor air quality.

67 I. Ensuring that public funds are expended in the most beneficial way necessitates  
68 careful consideration and accounting of the costs of construction, operations and  
69 maintenance of all county facilities.

70 J. On September 9, 2013, the King County council approved Motion 13969,  
71 which amended the King County auditor's office work program to include a review of the  
72 county's green building ordinance and the life-cycle cost analysis model used to evaluate  
73 potential green building features.

74 SECTION 2. Ordinance 16147, Section 2, as amended, and K.C.C. 18.17.010 are  
75 each hereby amended to read as follows:

76 The definitions in this section apply throughout this chapter unless the context  
77 clearly requires otherwise.

78 A. "Capital project" refers to a project with a scope that includes one or more of  
79 the following elements: acquisition of a site or acquisition of an existing structure, or  
80 both; program or site master planning; environmental analysis; design; construction;  
81 major equipment acquisition; reconstruction; demolition; or major alteration of a capital  
82 asset. A capital project shall include: a project program plan; scope; budget by task; and  
83 schedule.

84 B. "County green building team" or "green building team" means a group that  
85 includes representatives from county agencies with capital project or building  
86 management staff including, but not limited to, the department of transportation, the  
87 department of natural resources and parks, the department of executive services, the

88 department of permitting and environmental review, the department of public health  
89 ~~((and)), the historic preservation program ((in the office of business relations and~~  
90 ~~economic development)) and the department of community and human services. The~~  
91 members represent staff with expertise in project management, construction management,  
92 architecture, landscape architecture, environmental planning, design, engineering, historic  
93 preservation and resource conservation, public health, building energy systems, building  
94 management, budget analysis and other skills as needed. The green building team  
95 provides assistance and helps to disseminate information to project managers in all  
96 county agencies.

97 C. "Facility" means all or any portion of buildings, structures, infrastructure,  
98 sites, complexes, equipment, utilities and conveyance lines.

99 D. "GreenTools program" means the support team located within the solid waste  
100 division of the department of natural resources and parks that provides green building  
101 technical assistance to county divisions, cities and the general public within King County.

102 E. ~~((Integrated))~~ Integrative design process" means an approach to project  
103 design that seeks to achieve high performance on a wide variety of well-defined  
104 environmental and social goals while staying within budgetary and scheduling  
105 constraints. It relies on a multidisciplinary and collaborative team whose members make  
106 decisions together based on a shared vision and a holistic understanding of the project. It  
107 is an iterative process that follows the design through the entire project life, from  
108 predesign through operation.

109 F. "Leadership in Energy and Environmental Design" or "LEED" means a  
110 voluntary, consensus-based national standard for developing high-performance,

111 sustainable buildings, created by the United States Green Building Council. ~~((A LEED~~  
112 ~~certification is available for: new construction and major renovation projects, which is~~  
113 ~~LEED-NC; existing building operations, which is LEED-EB; commercial interior~~  
114 ~~projects, which is LEED-CI; and core and shell projects, which is LEED-CS. LEED~~  
115 ~~certifications that are in the pilot phase now include LEED for Homes and LEED for~~  
116 ~~Neighborhood Development.))~~

117 G. "LEED-eligible building" means a ~~((new construction))~~ project larger than  
118 five thousand gross square feet of occupied or conditioned space ~~((as defined in the~~  
119 ~~Washington state energy code, which is chapter 51-11 WAC, or a major building remodel~~  
120 ~~or renovation project))~~ that meets the minimum program requirements for LEED  
121 certification.

122 H. "Major remodel or renovation" means work that demolishes space down to the  
123 shell structure and rebuilds it with new interior walls, ceilings, floor coverings and  
124 systems, when the work affects more than twenty-five percent of a LEED-eligible  
125 building's square footage and the affected space is at least ~~((five thousand))~~ five thousand  
126 square feet or larger.

127 I. "Minor remodel or renovation" means any type of remodel or renovation that  
128 does not qualify as a major remodel or renovation.

129 J. "New construction" means a new building or structure.

130 K. "Present value" means the value on a given date of a future payment or series  
131 of future payments, discounted to reflect the time value of money and other factors such  
132 as investment risk.



133 L. "Retrocommissioning" is a detailed, systematic process for investigating an  
134 existing building's operations and identifying ways to improve performance. The  
135 primary focus is to identify operational improvements to obtain comfort and energy  
136 savings.

137 M. "Sustainable development practices" means whole system approaches to the  
138 design, construction and operation of buildings and infrastructure that help to mitigate the  
139 negative environmental, economic, health and social impacts of construction, demolition,  
140 operation and renovation while maximizing the facilities' positive fiscal, environmental  
141 and functional contribution. Sustainable development practices recognize the  
142 relationship between natural and built environments and seek to minimize the use of  
143 energy, water and other natural resources while providing maximum benefits and  
144 contribution to service levels to the system and the connecting infrastructures.

145 N. "Sustainable infrastructures" means those infrastructures and facilities that are  
146 designed, constructed and operated to optimize fiscal, environmental and functional  
147 performance for the lifecycle of the facility. Sustainable performance of infrastructure  
148 shall be determined through an integrated assessment, one that accounts for fiscal,  
149 environmental and functional costs and benefits, over the life of the facility.

150 O. "Sustainable Infrastructure Scorecard" is an alternative green building and  
151 sustainable development rating system developed by the county green building team as  
152 required by K.C.C. 18.17.020.E. The Sustainable Infrastructure Scorecard was  
153 developed for capital projects that are not eligible for the LEED rating system.

154 SECTION 3. Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020 are  
155 each hereby amended to read as follows:

156           A. The intent of this policy is to ensure that the planning, design, construction,  
157 remodeling, renovation, maintenance and operation of any King County-owned or  
158 financed capital project is consistent with the latest green building and sustainable  
159 development practices.

160           B. This policy applies to all King County-owned or lease-to-own capital projects,  
161 excluding projects that have already completed thirty percent of the design phase by  
162 ~~((June 23, 2008))~~ the effective date of this section.

163           C. All capital projects to which this chapter applies shall utilize relevant  
164 ~~((LEED))~~ green building and sustainable development criteria to implement sustainable  
165 development practices in planning, design, construction and operation as set forth in this  
166 chapter.

167           D. All LEED-eligible new construction and major remodels and renovations shall  
168 be registered through the United States Green Building Council and should plan for and  
169 achieve a LEED Gold certification, as long as a Gold certification can be achieved with  
170 no incremental cost impact to the ~~((current expense))~~ general fund over the life of the  
171 asset and an incremental cost impact of no more than two percent to other funds over the  
172 life of the asset, as compared to a project that is not seeking ~~((an LEED rating))~~ a green  
173 building or sustainable development rating system certification. ~~((At or before the~~  
174 ~~project has reached thirty percent of the design phase, the project team shall conduct an~~  
175 ~~analysis that determines the incremental costs for achieving a LEED Gold rating as~~  
176 ~~compared to a building that is not seeking a green building or sustainable development~~  
177 ~~rating system certification. The analysis shall include the up front incremental~~  
178 ~~construction costs, the up front costs of registration and certification and the present~~



179 value of operations and maintenance cost savings over the life of the asset. For the  
180 purposes of this analysis, operations and maintenance cost savings shall be comprised of  
181 projected costs the county will incur over the life of the asset. The costs included in this  
182 analysis shall be quantifiable, documented and verifiable by third-party review upon  
183 project completion and thereafter.

184 At thirty percent of the design phase, the project team shall also provide a  
185 summary discussion of the LEED points that the project will achieve and the LEED  
186 points that are technically infeasible for the project to obtain.

187 For projects achieving a LEED rating, the project team shall ensure that energy  
188 efficiency is given the highest priority. Project teams shall submit a completed LEED  
189 checklist, which documents which LEED points the project team expects to achieve, to  
190 the green building team, initially at the schematic or thirty percent design phase of the  
191 project and then at the completion of the project.

192 If it is determined that costs are too high to achieve a LEED Gold rating, or that  
193 the project is unable to achieve that rating for technical reasons, projects shall achieve the  
194 highest rating possible with no incremental cost impact to the current expense fund over  
195 the life of the asset and an incremental cost impact of no more than two percent to other  
196 funds over the life of the asset as compared to a project that is not seeking a green  
197 building or sustainable development rating system certification. There may be  
198 extenuating circumstances for some LEED-eligible projects that make it cost prohibitive  
199 to achieve any level of LEED certification. These projects must submit a written  
200 summary to the director of the department managing the project for approval,

201 ~~documenting the reasons why the project is not getting a LEED certification.))~~ The  
202 incremental cost impact shall be determined as described in subsection F. of this section.

203 E. All capital projects, where the scope of the project or type of structure limits  
204 the ability to achieve LEED certification, shall incorporate cost-effective green building  
205 and sustainable development practices based on relevant LEED criteria and other  
206 applicable sustainable development goals and objectives. These projects shall use ((a  
207 ~~project scorecard that is to be developed by the green building team))~~ the King County or  
208 division-specific Sustainable Infrastructure Scorecard, along with guidelines for using the  
209 scorecard. ((~~The project scorecard and guidelines will be developed by the green~~  
210 ~~building team in conjunction with divisions that have capital project or building~~  
211 ~~management staff and the GreenTools technical support team. Project teams shall submit~~  
212 ~~a completed project scorecard to the green building team, initially at the schematic or~~  
213 ~~thirty percent design phase of the project and then at the completion of the project.))~~

214 Each Sustainable Infrastructure Scorecard project shall plan for and achieve a Platinum  
215 rating as long as a Platinum rating can be achieved with no incremental cost impact to the  
216 general fund over the life of the asset and an incremental cost impact of no more than two  
217 percent to other funds over the life of the asset as compared to a project not achieving a  
218 green building or sustainable development rating. The incremental cost impact shall be  
219 determined as described in subsection F. of this section. If a Platinum rating cannot be  
220 achieved with no incremental cost impact to the general fund and an incremental cost  
221 impact of no more than two percent to other funds over the life of the asset as compared  
222 to a project not achieving a green building or sustainable development rating, a  
223 Sustainable Infrastructure Scorecard project shall plan for and achieve a Gold rating. If a



224 Gold rating cannot be achieved with no incremental cost impact to the general fund over  
225 the life of the asset and an incremental cost impact of no more than two percent to other  
226 funds over the life of the asset, Sustainable Infrastructure Scorecard projects shall plan  
227 for and achieve a silver rating where practicable. Silver is the lowest allowable rating for  
228 Sustainable Infrastructure Scorecard projects. For small, related capital projects (~~with~~  
229 ~~construction costs of less than seven hundred and fifty thousand dollars each~~) that are  
230 implemented as part of a program, ~~(the)~~ a project scorecard and reporting requirements  
231 may be done for the program rather than for each individual small project. For reporting  
232 purposes, county divisions may apply a single Sustainable Infrastructure Scorecard for a  
233 bundle of small capital projects in the most efficient manner as determined by the county  
234 division director to reflect the division's line of business.

235 F.1. For each project subject to subsection D. or E. of this section, at or before the  
236 time the project has reached thirty percent of the design phase, the project team shall  
237 conduct an analysis that determines the incremental costs for achieving the rating  
238 required in subsection D. or E. of this section as compared to a project that is not seeking  
239 a green building or sustainable development rating system certification. The analysis  
240 shall include the up-front incremental construction costs, the up-front costs of registration  
241 and certification and the present value of operations and maintenance cost savings over  
242 the life of the asset. For the purposes of this analysis, operations and maintenance cost  
243 savings shall be comprised of projected costs the county will incur over the life of the  
244 asset. The costs included in this analysis shall be quantifiable, documented and verifiable  
245 by third-party review upon project completion and thereafter.



246           2. At thirty percent of the design phase and project completion, the project team  
247 shall submit to the green building team a completed LEED checklist or Sustainable  
248 Infrastructure Scorecard that documents which LEED or scorecard points that the project  
249 expects to achieve.

250           3. For projects achieving a LEED rating, the project team shall ensure that  
251 energy efficiency is given the highest priority. Project teams shall submit a completed  
252 LEED checklist, which documents which LEED points the project team expects to  
253 achieve, to the green building team, initially at the schematic or thirty percent design  
254 phase of the project and then at the completion of the project.

255           4. If it is determined that costs are too high to achieve a LEED Gold rating, or  
256 that the project is unable to achieve that rating for technical reasons, projects shall  
257 achieve the highest rating possible with no incremental cost impact to the general fund  
258 over the life of the asset and an incremental cost impact of no more than two percent to  
259 other funds over the life of the asset as compared to a project that is not seeking a green  
260 building or sustainable development rating system certification. There may be  
261 extenuating circumstances for some LEED-eligible projects that make it cost prohibitive  
262 to achieve any level of LEED certification. These projects must submit a written  
263 summary to the director of the department managing the project for approval,  
264 documenting the reasons why the project is not getting a LEED certification.

265           ((F.)) G. A project may request use of an alternative green building or  
266 sustainability rating system in lieu of LEED or the Sustainable Infrastructure Scorecard.  
267 Alternative green building and sustainable rating systems include: the Evergreen  
268 Sustainable Development Standard, administered by the Washington State Department of

269 Commerce; the Built Green Four-Star administered by the Master Builders Association  
270 of King and Snohomish Counties; Sustainable Sites Initiative Program, developed by the  
271 American Society of Landscape Architects and Lady Bird Johnson Wildflower Center  
272 and United States Botanical Garden; Salmon Safe founded by the Stewardship Partners;  
273 or the Living Building Challenge administered by the International Living Future  
274 Institute. A project manager shall make a request to use an alternative green building  
275 rating system to the department director responsible for that project and to the green  
276 building team if a project elects not to use the LEED Rating System. The project's  
277 department director in consultation with the Green Building Team, shall make the final  
278 determination. All projects using an alternative green building or sustainable  
279 development rating system shall plan for and achieve the highest certification level that  
280 can be achieved with no incremental cost impact to the general fund over the life of the  
281 asset and an incremental cost impact of no more than two percent to other funds over the  
282 life of the asset, as compared to a project that is not seeking certification.

283       H. For those projects (~~which~~) that only involve making either renewable energy  
284 improvements or energy efficiency improvements, or both, at or before the project has  
285 reached thirty percent of the design phase, the project team shall conduct an analysis that  
286 determines the incremental costs of making such improvements. The costs to be included  
287 in this analysis shall include the up-front incremental construction costs and the present  
288 value of the operations and maintenance cost savings over the life of the asset. For the  
289 purposes of this analysis, operations and maintenance cost savings shall be comprised of  
290 projected costs the county will incur over the life of the asset. The costs included in this

291 analysis shall be quantifiable, documented and verifiable by third-party review upon  
292 project completion and thereafter.

293        (~~(G.)~~) I. To help achieve a standard level of green building operations in existing  
294 buildings, the green building team, in coordination with divisions that have capital project  
295 or building management staff and the GreenTools technical support team, shall develop a  
296 set of both mandatory and recommended green building operational guidelines for  
297 divisions to incorporate into their facility operations procedures. The guidelines shall  
298 provide direction on the use of green practices in minor remodels and renovations, water  
299 and energy conservation, waste reduction and recycling expectations, green cleaning  
300 standards and retrocommissioning to improve a facility's operating performance.

301        (~~(H.)~~) J. No later than January 31 of each year, all divisions responsible for  
302 capital improvement projects or building management shall submit a report to the  
303 department of natural resources and parks, detailing the green building and sustainable  
304 development accomplishments for the previous year. Information to be submitted shall  
305 include, but not be limited to:

306            1. The total number of capital projects a division is responsible for, and the  
307 number of LEED projects and other sustainable development projects, such as historic  
308 restoration and adaptive reuse, and their status;

309            2. The additional costs associated with achieving LEED certification;

310            3. The total number of non-LEED projects that have completed a sustainable  
311 development scorecard;

312            4. The green strategies employed;



- 313           5. The operations and maintenance costs for all completed projects  
314 incorporating green building principles and practices and projects incorporating  
315 renewable energy or energy efficiency components, as well as the operations and  
316 maintenance costs that were projected before construction;
- 317           6. The reductions in greenhouse gas emissions;
- 318           7. The construction waste recycled; renewable resources used;
- 319           8. The green materials used; and
- 320           9. The fiscal performance of all projects incorporating green building principles  
321 and practices including an accounting of all project costs and benefits that can be  
322 quantified, documented and verified.
- 323           ~~(I.)~~ K. The executive shall report on the progress of implementing K.C.C.  
324 18.17.020 in accordance with K.C.C. 18.50.010.
- 325           ~~(J.)~~ L. The green building team shall coordinate and share information about the  
326 use of sustainable development practices countywide and, with assistance from the  
327 GreenTools program, develop tools and training for project managers to implement this  
328 legislation. Its role includes:
- 329           1. Helping to assess regionally appropriate green building and sustainable  
330 development practices;
- 331           2. Developing regionally appropriate building and infrastructure design  
332 standards and guidelines;
- 333           3. Developing tools and procedures for assessing life-cycle fiscal,  
334 environmental and functional costs and benefits;

335 4. Convening and facilitating sustainable development planning and charrette  
336 workshops;

337 5. Evaluating performance of projects and facilities, including conducting post  
338 occupancy surveys, energy and water use audits and evaluating benefits realized; and

339 6. Tracking and reporting progress on implementation of green building and  
340 sustainable development practices.

341 ~~((K.))~~ M. Each division with capital project ~~((Ø.))~~, operations and maintenance,  
342 building management or permitting staff shall designate one or more green building team  
343 member or members. The team member is expected to regularly attend meetings and  
344 actively participate in disseminating sustainable development practices information back  
345 to the respective division. Green building team members should also receive either  
346 specialized training or additional training, or both, in green building design and should be  
347 encouraged to achieve the LEED Accredited Professional designation, as appropriate.

348 ~~((L.))~~ N. County capital improvement project managers that are currently  
349 managing or will manage projects that fit the criteria in subsections D. and E. of this  
350 section are responsible for attending appropriate LEED and sustainable development  
351 training and annual refresher courses. Trainings shall be coordinated by the green  
352 building team.

353 ~~((M.))~~ O. The GreenTools program shall provide technical support for the county  
354 green building team and to cities and the general public in the county as appropriate,  
355 including, but not limited to, training on LEED and other green building and sustainable  
356 development technologies, research, project review, assisting with budget analysis and

357 convening groups to develop strategies and policies relating to green buildings and  
358 sustainable infrastructures.

359 ~~((N.))~~ P. The green building team shall work with the historic preservation  
360 program to develop a pilot format of the Sustainable Infrastructure Scorecard applicable  
361 to renovations of facilities listed under the county's historic preservation program and  
362 funded through King County. The preservation, restoration and adaptive reuse of  
363 existing buildings is an important green building strategy because historic preservation is,  
364 in itself, sustainable development. As part of the county green building strategy, the  
365 county shall preserve and restore the historic landmarks and properties eligible for  
366 landmark designation that are owned by the county, except in cases where a certificate of  
367 appropriateness is granted by the King County landmarks commission. Projects  
368 involving designated landmarks or properties that are eligible for landmark designation  
369 shall seek to maximize green building strategies such as natural daylighting and passive  
370 ventilation. However, the King County landmarks commission or other applicable  
371 regulatory body may waive requirements of this section upon issuing findings that strict  
372 compliance with this chapter would adversely affect the historic character of the resource  
373 in question, or that there are no feasible alternatives for preservation.

374 Q. The green building and sustainable development practices in this policy are  
375 intended to ensure high performance in energy, water and waste reduction. In addition to  
376 the requirements of this chapter, the following minimum requirements shall be applied to  
377 all projects when applicable:



378           1. Meet energy and climate goals and performance requirements as directed in  
379 the King County Strategic Climate Action Plan, developed under K.C.C. chapter 18.25.  
380 The project team shall ensure that energy efficiency is given the highest priority;

381           2. Meet King County Surface Water Design Manual Standards and  
382 requirements, regardless of jurisdiction location. If a project is located in a jurisdiction  
383 where the surface water design manual standards and requirements are different than  
384 King County's, the project shall implement the more stringent requirement; and

385           3. By 2025, achieve an eighty-five percent diversion rate for construction and  
386 demolition materials with an eighty percent diversion rate achieved by 2016.

387           R. The King County Strategic Climate Action Plan includes goals and measures  
388 related to green building. To encourage green building practices on a community wide  
389 level, King County shall implement practices that will increase the awareness,  
390 certification, and innovation in green building and sustainable development. Efforts shall  
391 include, but not be limited to, the following:

392           1. The department of permitting and environmental review shall develop a  
393 handbook that includes, but is not limited to: a comprehensive inventory of green  
394 building techniques and materials for relevant county customer base; a description of  
395 permitting application materials related to various green building techniques; and  
396 instructional details that inform county staff on how to review permitting applications  
397 that involve new or rarely-used green building techniques and materials;

398           2. The department of public health, water and land resources division of the  
399 department of natural resources and parks, and department of permitting and  
400 environmental review staff who review and approve permits related to development will

401 receive training in green building and high performance rating systems, such as Built  
402 Green Emerald Star and the Living Building Challenge. An interagency review  
403 committee will be formed with members from permitting agencies, including the  
404 department of public health, water and land resources division of the department of  
405 natural resources and parks, department of permitting and environmental review and the  
406 Green Building Team, to facilitate review of projects that involve multiple green building  
407 systems and to facilitate approval of buildings using high performance rating systems or  
408 features:

409       3. The department of permitting and environmental review shall participate in  
410 the existing regional code collaboration to unify building department codes throughout  
411 King County that promote green building. The development of unified green codes  
412 encourages economic growth and environmental sustainability, and is an integral tenet of  
413 the King County Strategic Plan. Applicable code revisions will be adopted, with initial  
414 emphasis on minimum recycling requirements for construction and demolition projects;  
415 and

416       4. The department of public health, water and land resources division of the  
417 department of natural resources and parks and department of permitting and  
418 environmental review shall implement a Living Building Challenge demonstration  
419 ordinance in partnership with members of the regional code collaboration to promote and  
420 encourage carbon neutral buildings and development. These departments will utilize the  
421 International Living Future Institute's guidelines to develop best management practices  
422 associated with this certification.

423            SECTION 4. Ordinance 16147, Section 4, and K.C.C. 18.17.030 are each hereby  
424 amended to read as follows:

425            A. The department of natural resources and parks shall continue, as permitted by  
426 available funding, the green building grant program established to provide incentives to  
427 the private sector, nonprofit organizations and suburban cities to adopt green building and  
428 sustainable development practices.

429            B. Grant funding shall be ~~((supported by the solid waste division, the water and~~  
430 ~~land resources division and the wastewater treatment division))~~ identified by the green  
431 building team by researching possible funding sources for grant opportunities. Other  
432 county department and divisions may also participate in the grant program. ~~((Grant~~  
433 ~~funding shall be identified annually, consistent with approved funding of each division's~~  
434 ~~annual budget.))~~

435            C. Grant funds shall be managed by the ~~((GreenTools program))~~ green building  
436 team in cooperation with ~~((the wastewater treatment and water and land resources))~~ other  
437 county divisions.

438            D. Green building grant funding may go to residential or commercial projects  
439 that meet a discrete set of eligibility requirements, are in the service area of the division  
440 providing the grant funding and are selected in a competitive award process. Grant  
441 projects must provide educational opportunities to the public to increase the awareness  
442 and benefits of green building and sustainable development in King County.

443            SECTION 5. Ordinance 16147, Section 4, Ordinance 17166, Section 7, and  
444 Ordinance 17420, Section 74, are each hereby repealed.

445            SECTION 6. Section 7 of this ordinance takes effect August 1, 2014.



446            SECTION 7. Ordinance 16147, Section 3, as amended, and K.C.C. 18.17.020 are  
447 each hereby amended to read as follows:

448            A. The intent of this policy is to ensure that the planning, design, construction,  
449 remodeling, renovation, maintenance and operation of any King County-owned or  
450 financed capital project is consistent with the latest green building and sustainable  
451 development practices.

452            B. This policy applies to all King County-owned or lease-to-own capital projects,  
453 excluding projects that have already completed thirty percent of the design phase by ~~((the~~  
454 ~~effective date of this section))~~ August 1, 2014. This policy also applies to housing  
455 projects partly or totally financed by King County that are required by law to follow  
456 statewide green building standards in that it requires such projects to report on the  
457 statewide green building standards.

458            C. All capital projects to which this chapter applies shall utilize relevant green  
459 building and sustainable development criteria to implement sustainable development  
460 practices in planning, design, construction and operation as set forth in this chapter.

461            D. All LEED-eligible new construction ~~((and major remodels and renovations))~~  
462 shall be registered through the United States Green Building Council and should plan for  
463 and achieve a LEED ~~((Gold))~~ Platinum certification, as long as a ~~((Gold))~~ Platinum  
464 certification can be achieved with no incremental cost impact to the general fund over the  
465 life of the asset and an incremental cost impact of no more than two percent to other  
466 funds over the life of the asset, as compared to a project that is not seeking a green  
467 building or sustainable development rating system certification. The incremental cost  
468 impact shall be determined as described in subsection ~~((F-))~~ G. of this section.

469           E. All LEED-eligible major remodels and renovations shall be registered through  
470 the United States Green Building Council and should plan for and achieve a LEED Gold  
471 certification, as long as a Gold certification can be achieved with no incremental cost  
472 impact to the general fund over the life of the asset and an incremental cost impact of no  
473 more than two percent to other funds over the life of the asset, as compared to a project  
474 that is not seeking a green building or sustainable development rating system  
475 certification. The incremental cost impact shall be determined as described in subsection  
476 G. of this section.

477           F. All capital projects, where the scope of the project or type of structure limits  
478 the ability to achieve LEED certification, shall incorporate cost-effective green building  
479 and sustainable development practices based on relevant LEED criteria and other  
480 applicable sustainable development goals and objectives. These projects shall use the  
481 King County or division-specific Sustainable Infrastructure Scorecard, along with  
482 guidelines for using the scorecard. Each Sustainable Infrastructure Scorecard project  
483 shall plan for and achieve a Platinum rating as long as a Platinum rating can be achieved  
484 with no incremental cost impact to the general fund over the life of the asset and an  
485 incremental cost impact of no more than two percent to other funds over the life of the  
486 asset as compared to a project not achieving a green building or sustainable development  
487 rating. The incremental cost impact shall be determined as described in subsection ~~((F-))~~  
488 G. of this section. If a Platinum rating cannot be achieved with no incremental cost  
489 impact to the general fund and an incremental cost impact of no more than two percent to  
490 other funds over the life of the asset as compared to a project not achieving a green  
491 building or sustainable development rating, a Sustainable Infrastructure Scorecard project



492 shall plan for and achieve a Gold rating. If a Gold rating cannot be achieved with no  
493 incremental cost impact to the general fund over the life of the asset and an incremental  
494 cost impact of no more than two percent to other funds over the life of the asset,  
495 Sustainable Infrastructure Scorecard projects shall plan for and achieve a silver rating  
496 where practicable. Silver is the lowest allowable rating for Sustainable Infrastructure  
497 Scorecard projects. For small, related capital projects that are implemented as part of a  
498 program, a project scorecard and reporting requirements may be done for the program  
499 rather than for each individual small project. For reporting purposes, county divisions  
500 may apply a single Sustainable Infrastructure Scorecard for a bundle of small capital  
501 projects in the most efficient manner as determined by the county division director to  
502 reflect the division's line of business.

503       ~~((F-))~~ G.1. For each project subject to subsections D. ~~((Ø))~~, E. and F. of this  
504 section, at or before the project has reached thirty percent of the design phase, the project  
505 team shall conduct an analysis that determines the incremental costs for achieving the  
506 rating required in subsection D., E. or F. of this section as compared to a project that is  
507 not seeking a green building or sustainable development rating system certification. The  
508 analysis shall include the up-front incremental construction costs, the up-front costs of  
509 registration and certification and the present value of operations and maintenance cost  
510 savings over the life of the asset. For the purposes of this analysis, operations and  
511 maintenance cost savings shall be comprised of projected costs the county will incur over  
512 the life of the asset. The costs included in this analysis shall be quantifiable, documented  
513 and verifiable by third-party review upon project completion and thereafter.



514           2. At thirty percent of the design phase and project completion, the project team  
515 shall also provide a summary discussion of the LEED checklist or Sustainable  
516 Infrastructure Scorecard points that the project expects to achieve.

517           3. For projects achieving a LEED rating, the project team shall ensure that  
518 energy efficiency is given the highest priority. Project teams shall submit a completed  
519 LEED checklist, which documents which LEED points the project team expects to  
520 achieve, to the green building team, initially at the schematic or thirty percent design  
521 phase of the project and then at the completion of the project.

522           4. If it is determined that costs are too high to achieve the LEED (~~Gold~~) rating  
523 required in subsection D. or E. of this section, or that the project is unable to achieve that  
524 rating for technical reasons, projects shall achieve the highest rating possible with no  
525 incremental cost impact to the general fund over the life of the asset and an incremental  
526 cost impact of no more than two percent to other funds over the life of the asset as  
527 compared to a project not achieving a LEED rating. There may be extenuating  
528 circumstances for some LEED-eligible projects that make it cost prohibitive to achieve  
529 any level of LEED certification. These projects must submit a written summary to the  
530 director of the department managing the project for approval, documenting the reasons  
531 why the project is not getting a LEED certification.

532           H. All housing projects financed by King County and owned and managed by  
533 either a housing authority or nongovernmental agency under contract with King County  
534 that are required by RCW 39.35D.080 or other applicable authority to use a statewide  
535 green building standard for affordable housing, shall submit a copy of the green building  
536 standard checklist to the green building team. The department of community and human

537 services shall submit the statewide green building standard checklist to the green building  
538 team at project completion.

539 I. Transit oriented development initiated by Metro transit shall follow the same  
540 green building standards and requirements as other King County capital projects. If  
541 required by RCW 39.35D.080 and other applicable authority, transit-oriented affordable  
542 housing projects in which the affordable housing is financed in whole or in part by King  
543 County shall follow the statewide green building standards.

544 ~~((G.))~~ J. A project may request use of an alternative green building or  
545 sustainability rating system in lieu of LEED or the Sustainable Infrastructure Scorecard.  
546 Alternative green building and sustainable rating systems include: the Evergreen  
547 Sustainable Development Standard, administered by the Washington State Department of  
548 Commerce; the Built Green Four-Star administered by the Master Builders Association  
549 of King and Snohomish Counties; Sustainable Sites Initiative Program, developed by the  
550 American Society of Landscape Architects and Lady Bird Johnson Wildflower Center  
551 and United States Botanical Garden; Salmon Safe founded by the Stewardship Partners;  
552 or the Living Building Challenge administered by the International Living Future  
553 Institute. A project manager shall make a request to use an alternative green building  
554 rating system to the department director responsible for that project and to the green  
555 building team if a project elects not to use the LEED Rating System. The project's  
556 department director in consultation with the Green Building Team, shall make the final  
557 determination. All projects using an alternative green building or sustainable  
558 development rating system shall plan for and achieve the highest certification level that  
559 can be achieved with no incremental cost impact to the general fund over the life of the



560 asset and an incremental cost impact of no more than two percent to other funds over the  
561 life of the asset, as compared to a project that is not seeking certification.

562       ~~((H.))~~ K. For those projects that only involve making either renewable energy  
563 improvements or energy efficiency improvements, or both, at or before the project has  
564 reached thirty percent of the design phase, the project team shall conduct an analysis that  
565 determines the incremental costs of making such improvements. The costs to be included  
566 in this analysis shall include the up-front incremental construction costs and the present  
567 value of the operations and maintenance cost savings over the life of the asset. For the  
568 purposes of this analysis, operations and maintenance cost savings shall be comprised of  
569 projected costs the county will incur over the life of the asset. The costs included in this  
570 analysis shall be quantifiable, documented and verifiable by third-party review upon  
571 project completion and thereafter.

572       ~~((I.))~~ L. To help achieve a standard level of green building operations in existing  
573 buildings, the green building team, in coordination with divisions that have capital project  
574 or building management staff and the GreenTools technical support team, shall develop a  
575 set of both mandatory and recommended green building operational guidelines for  
576 divisions to incorporate into their facility operations procedures. The guidelines shall  
577 provide direction on the use of green practices in minor remodels and renovations, water  
578 and energy conservation, waste reduction and recycling expectations, green cleaning  
579 standards and retrocommissioning to improve a facility's operating performance.

580       ~~((J. No later than January 31 of each year,))~~ M.1. The executive shall report on  
581 the progress of implementing this section in accordance with K.C.C. 18.50.010.  
582 Reporting requirements and criteria for green building metrics shall be consistent with the



583 annual environmental sustainability report on King County's climate, energy, green  
584 building and environmentally preferred purchasing programs and the Strategic Climate  
585 Action Plan. Required green building reporting criteria shall be included in the county's  
586 project information center database, managed by the office of performance, strategy and  
587 budget. The project information center database shall be compatible and function with all  
588 county division capital project management systems to streamline and avoid duplicative  
589 reporting efforts. The green building team's program manager shall have access to data  
590 in the project information center database. ((a))All divisions responsible for capital  
591 improvement projects or ((building)) facility management shall ((submit a report to the  
592 department of natural resources and parks,)) provide information detailing the green  
593 building and sustainable development accomplishments for the previous year. The  
594 information shall be provided to the green building team, either in hard copy or  
595 electronically. Information to be submitted shall include, but not be limited to:

596 ((1.)) a. ((F))the total number of capital projects a division is responsible for((;  
597 and));

598 b. the total number of LEED projects;

599 c. the total number of Sustainable Infrastructure Scorecard projects;

600 d. the total number of alternative green building or sustainable development  
601 rating system projects, and other sustainable development projects, such as historic  
602 restoration and adaptive reuse((, and their status));

603 ((2.)) e. ((F))the additional costs associated with achieving LEED certification;

604 ((3.)) f. ((F))the total number of ((non-LEED projects that have completed a  
605 sustainable development scorecard)) projects using an integrative design process;

606           ~~((4.))~~ g. ((F))the green building and sustainable development strategies  
607 employed;

608           ~~((5.))~~ h. ((F))the operations and maintenance costs for all completed projects  
609 incorporating green building principles and practices and projects incorporating  
610 renewable energy or energy efficiency components, as well as the operations and  
611 maintenance costs that were projected before construction;

612           ~~6. The reductions in greenhouse gas emissions;~~

613           ~~7. The construction waste recycled; renewable resources used;~~

614           ~~8. The green materials used; and~~

615           ~~9.))~~ i. ((F))the fiscal performance of all projects incorporating green building  
616 principles and practices including an accounting of all project costs and benefits that can  
617 be quantified, documented and verified;

618           j. projected and actual energy savings measured;

619           k. projected and actual water savings;

620           l. a construction and demolition plan and a construction and demolition report,  
621 both of which include the diversion percentage rate and tonnage;

622           m. actual environmentally preferable products used;

623           n. projected and actual greenhouse gas emissions and saving based on the  
624 reporting that is required in the project information center database; at minimum,  
625 greenhouse gas calculations shall include the greenhouse gas emissions associated with  
626 energy and water usage, transportation impacts and construction and demolition  
627 diversion. When possible the calculation shall include the greenhouse gas savings  
628 associated with use of green strategies and environmentally preferable products;



629           o. projected and actual transportation impacts, including the transportation-  
630 related greenhouse gas emissions associated with the project; and  
631           p. other reporting criteria that may be identified in the future.

632           2. Housing projects financed by King County and owned by either a housing  
633 authority or nongovernmental agency under contract with King County are exempted  
634 from the annual reporting requirements under subsection M.1. of this section.

635           3. The green building team, along with other relevant sustainability programs,  
636 and the office of performance, strategy and budget shall develop and determine consistent  
637 understandable and relevant baselines and measurement units that are applicable to  
638 diverse lines of business. Reporting criteria and performance measures shall be  
639 consistent with other related environmental requirements.

640           4. The process for reporting for projects grouped by program shall be  
641 determined by each division with the course of action that best captures green building  
642 performance for small projects grouped by program. Divisions may consider joint review  
643 of its small projects with the green building team program manager for assistance with  
644 scorecard and annual reporting compliance.

645           N. Green building requirements should be included by the procurement services  
646 section of the department of executive services, where possible and appropriate, in capital  
647 design and construction contracts, bid documents and technical specifications. The  
648 project manager responsible for the capital project shall collaborate with procurement  
649 services section staff to determine where green building requirements are appropriate. As  
650 applicable, requests for proposals and qualifications should include a list or description of  
651 LEED experience. Procurement documents that relate to construction or capital projects



652 shall cite this chapter. The green building team shall develop minimum standards for  
653 building projects that address the monitoring of energy and water using systems that help  
654 meet energy and climate goals, and provide real time interfaces to ensure ongoing  
655 efficient operations.

656 ~~((K. The executive shall report on the progress of implementing K.C.C.~~  
657 ~~18.17.020 in accordance with K.C.C. 18.50.010.~~

658 ~~L.))~~ O. The green building team shall coordinate and share information about the  
659 use of sustainable development practices countywide and, with assistance from the  
660 GreenTools program, develop tools and training for project managers to implement this  
661 legislation. Its role includes:

- 662 1. Helping to assess regionally appropriate green building and sustainable  
663 development practices;
- 664 2. Developing regionally appropriate building and infrastructure design  
665 standards and guidelines;
- 666 3. Developing tools and procedures for assessing life-cycle fiscal,  
667 environmental and functional costs and benefits;
- 668 4. Convening and facilitating sustainable development planning and charrette  
669 workshops;
- 670 5. Evaluating performance of projects and facilities, including conducting post  
671 occupancy surveys, energy and water use audits and evaluating benefits realized; and
- 672 6. Tracking and reporting progress on implementation of green building and  
673 sustainable development practices.

674           ~~((M.))~~ P. Each division with capital project, operations and maintenance, building  
675 management ~~((ØF))~~, permitting or housing staff shall designate one or more green  
676 building team member or members. The team member is expected to regularly attend  
677 meetings and actively participate in disseminating sustainable development practices  
678 information back to the respective division. Green building team members should also  
679 receive either specialized training or additional training, or both, in green building design  
680 and should be encouraged to achieve the LEED Accredited Professional designation, as  
681 appropriate.

682           ~~((N.))~~ Q. County capital improvement project managers that are currently  
683 managing or will manage projects that fit the criteria in subsections D. and E. of this  
684 section are responsible for attending appropriate LEED and sustainable development  
685 training and annual refresher courses. Trainings shall be coordinated by the green  
686 building team.

687           ~~((O.))~~ R. The GreenTools program shall provide technical support for the county  
688 green building team and to cities and the general public in the county as appropriate,  
689 including, but not limited to, training on LEED and other green building and sustainable  
690 development technologies, research, project review, assisting with budget analysis and  
691 convening groups to develop strategies and policies relating to green buildings and  
692 sustainable infrastructures.

693           ~~((P.))~~ S. The green building team shall work with the historic preservation  
694 program to develop a pilot format of the Sustainable Infrastructure Scorecard applicable  
695 to renovations of facilities listed under the county's historic preservation program and  
696 funded through King County. The preservation, restoration and adaptive reuse of

697 existing buildings is an important green building strategy because historic preservation is,  
698 in itself, sustainable development. As part of the county green building strategy, the  
699 county shall preserve and restore the historic landmarks and properties eligible for  
700 landmark designation that are owned by the county, except in cases where a certificate of  
701 appropriateness is granted by the King County landmarks commission. Projects  
702 involving designated landmarks or properties that are eligible for landmark designation  
703 shall seek to maximize green building strategies such as natural daylighting and passive  
704 ventilation. However, the King County landmarks commission or other applicable  
705 regulatory body may waive requirements of this section upon issuing findings that strict  
706 compliance with this chapter would adversely affect the historic character of the resource  
707 in question, or that there are no feasible alternatives for preservation.

708 ((Q.)) T. The green building and sustainable development practices in this policy  
709 are intended to ensure high performance in energy, water and waste reduction. In  
710 addition to the requirements of this chapter, the following minimum requirements shall  
711 be applied to all projects when applicable:

712 1. Meet energy and climate goals and performance requirements as directed in  
713 the King County Strategic Climate Action Plan, developed under K.C.C. chapter 18.25.  
714 The project team shall ensure that energy efficiency is given the highest priority;

715 2. Meet King County Surface Water Design Manual Standards and  
716 requirements, regardless of jurisdiction location. If a project is located in a jurisdiction  
717 where the surface water design manual standards and requirements are different than  
718 King County's, the project shall implement the more stringent requirement; and



719           3. By 2025, achieve an eighty-five percent diversion rate for construction and  
720 demolition materials with an eighty percent diversion rate achieved by 2016.

721           ~~((R.))~~ U. The King County Strategic Climate Action Plan includes goals and  
722 measures related to green building. To encourage green building practices on a  
723 community wide level, King County shall implement practices that will increase the  
724 awareness, certification, and innovation in green building and sustainable development.  
725 Efforts shall include, but not be limited to, the following:

726           1. The department of permitting and environmental review shall develop a  
727 handbook that includes, but is not limited to: a comprehensive inventory of green  
728 building techniques and materials for relevant county customer base; a description of  
729 permitting application materials related to various green building techniques; and  
730 instructional details that inform county staff on how to review permitting applications  
731 that involve new or rarely-used green building techniques and materials;

732           2. The department of public health, water and land resources division of the  
733 department of natural resources and parks, and department of permitting and  
734 environmental review staff who review and approve permits related to development will  
735 receive training in green building and high performance rating systems, such as Built  
736 Green Emerald Star and the Living Building Challenge. An interagency review  
737 committee will be formed with members from permitting agencies, including the  
738 department of public health, water and land resources division of the department of  
739 natural resources and parks, department of permitting and environmental review and the  
740 Green Building Team, to facilitate review of projects that involve multiple green building

741 systems and to facilitate approval of buildings using high performance rating systems or  
742 features;

743           3. The department of permitting and environmental review shall participate in  
744 the existing regional code collaboration to unify building department codes throughout  
745 King County that promote green building. The development of unified green codes  
746 encourages economic growth and environmental sustainability, and is an integral tenet of  
747 the King County Strategic Plan. Applicable code revisions will be adopted, with initial  
748 emphasis on minimum recycling requirements for construction and demolition projects;  
749 and

750           4. The department of public health, water and land resources division of the  
751 department of natural resources and parks and department of permitting and  
752 environmental review shall implement a Living Building Challenge demonstration  
753 ordinance in partnership with members of the regional code collaboration to promote and  
754 encourage carbon neutral buildings and development. These departments will utilize the

755 International Living Future Institute's guidelines to develop best management practices

756 associated with this certification.

757

Ordinance 17709 was introduced on and passed by the Metropolitan King County Council on 12/9/2013, by the following vote:

Yes: 9 - Mr. Phillips, Mr. von Reichbauer, Mr. Gossett, Ms. Hague, Ms. Patterson, Ms. Lambert, Mr. Dunn, Mr. McDermott and Mr. Dembowski  
No: 0  
Excused: 0

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON



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Larry Gossett, Chair

ATTEST:



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Anne Noris, Clerk of the Council

APPROVED this 19 day of DECEMBER 2013.



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Dow Constantine, County Executive

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KING COUNTY COUNCIL

Attachments: None