



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 ~~((H))~~ 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 ~~((ØF))~~, 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.))~~ I. 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 ((4-)) 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 ~~((Ø-))~~ 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-)) I. 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


Larry Gossett, Chair

ATTEST:


Anne Noris, Clerk of the Council

APPROVED this 19 day of DECEMBER 2013.


Dow Constantine, County Executive

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CLERK
KING COUNTY COUNCIL

Attachments: None