



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

November 8, 2011

FCD Resolution

Proposed No. FCD2011-16.1

Sponsors

1 A RESOLUTION relating to improvements to levee segments on
2 the Green River in the City of Kent, and authorizing the chair to
3 enter into an agreement with the City of Kent for construction,
4 operation, maintenance and repair of such improvements.

5 WHEREAS, in the 2011 legislative session, the Legislature passed ESHB 2020
6 which appropriated \$2,070,000 to the King County Flood Control Zone District for
7 improvement of the Boeing levee and \$900,000 for improvement of the Hawley Road
8 levee on the Green River in the city of Kent; and

9 WHEREAS, the Board of Supervisors desires to enter into an agreement with the
10 city of Kent regarding the terms and conditions of city design and construction of the
11 levee projects, and District operation, maintenance and repair of such projects; now,
12 therefore

13 BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE KING
14 COUNTY FLOOD CONTROL ZONE DISTRICT:

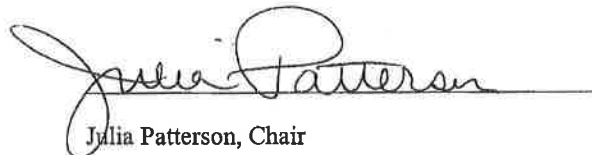
15 SECTION 1. The chair of the King County Flood Control Zone District is
16

17 authorized to enter into the "Agreement for Levee Construction, Operation and
18 Maintenance," substantially in the form of Attachment A to this Resolution.
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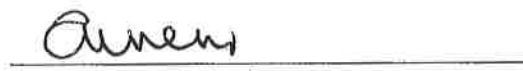
FCD Resolution was introduced on and passed by the King County Flood Control District on 11/7/2011, by the following vote:

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

KING COUNTY FLOOD CONTROL ZONE
DISTRICT
KING COUNTY, WASHINGTON


Julia Patterson, Chair

ATTEST:


Anne Noris, Clerk of the District

Attachments: A. Agreement for Levee Construction, Operation and Maintenance 10-31-11

AGREEMENT FOR LEVEE CONSTRUCTION, OPERATION AND MAINTENANCE

THIS AGREEMENT FOR LEVEE CONSTRUCTION, OPERATION AND MAINTENANCE ("Agreement") is entered into on the last date signed below by and between the Parties, the CITY OF KENT, a Washington municipal corporation ("City"), and KING COUNTY FLOOD CONTROL ZONE DISTRICT, a quasi-municipal corporation of the State of Washington ("District") (collectively, the "Parties"), with reference to the following facts:

RECITALS

A. King County, Washington, through the Water and Land Resources Division of the King County Department of Natural Resources and Parks ("WLRD"), as service provider to the District pursuant to an interlocal agreement with the District, operates and maintains a major portion of the Green River Levee System.

B. The Green River Valley is the fourth largest warehouse and distribution complex in the nation. It is home to over 100,000 jobs, with an annual payroll of \$2.8 billion, or one-eighth of the gross domestic product of the State of Washington, and generates annual taxable revenue of over \$8 billion.

C. The National Flood Insurance Act created the National Flood Insurance Program ("NFIP"). The purpose of the NFIP is to reduce future flood losses through local floodplain management and to provide protection for property owners against potential losses through flood insurance. A community's flood insurance availability, rates and requirements are affected by a community's compliance with the NFIP.

D. The Federal Emergency Management Agency ("FEMA") is responsible for managing the NFIP. In this role, FEMA is charged with accurately identifying flood hazards and assessing flood risks by producing Digital Flood Insurance Rate Maps ("DFIRMs"). DFIRMs categorize areas impacted by levees as either high-risk, referred to as Special Flood Hazard Areas ("SFHAs"), where there is a one percent chance of flooding in any given year, or low-risk or moderate-risk, where there is less than a one percent chance of flooding in any given year. As part of this process, FEMA has responsibility for verifying whether levees meet NFIP criteria. If a levee is accredited as meeting NFIP criteria, levee-impacted areas are shown on DFIRMs as low-risk or moderate-risk.

E. The NFIP allows communities to revise DFIRMs by constructing new levee projects that meet NFIP accreditation standards and therefore justify map revision. To revise a DFIRM, a community must submit an application for a Conditional Letter of Map Revision ("CLOMR") to FEMA demonstrating that the proposed levee project, if constructed as proposed, meets NFIP accreditation standards. Once the project is complete, the community must submit

an application for a Letter of Map Revision (“LOMR”) showing that the project has been constructed as proposed. Upon FEMA’s issuance of a LOMR, relevant DFIRMs are revised.

F. In a 2011 preliminary DFIRM, FEMA categorized areas landward of the Green River Levee System as SFHAs. The City desires to construct new levee projects and submit applications for a CLOMR, and ultimately a LOMR, to accredit the segments of the Green River Levee System as meeting NFIP criteria and to revise the DFIRMs so that the levee-impacted areas will be designated as low-risk or moderate-risk flood areas.

G. Based on a collaborative effort, presentation and request to the State Legislature in the 2011 Legislative Session, the Legislature passed ESHB 2020 relating to the 2011-2013 State Capital Budget. This law appropriated \$2,070,000 for improvement of the Boeing levee and \$900,000 for improvement of the Hawley Road levee on the Green River. These amounts were based on the City’s estimated cost to construct repairs to these levees in order to achieve levee certification, and on the City’s representation that it would begin constructing these repairs in the 2011-2013 biennium. Pursuant to ESHB 2020, the State will provide these funds to the District, and construction on these levee projects must be commenced during the 2011-2013 biennium. Using the State funds, the City desires to construct these levee projects as soon as possible to provide for the safety of the residents and businesses that will be protected by these levee projects.

H. By Motion FCD11-02.1, adopted on July 6, 2011, the District Board of Supervisors declared its intent to continue to work in collaboration with Green River cities to complete levee setback projects and to maintain and repair Green River levee projects in a way that can meet certification requirements and provide a higher level of protection, as long as such projects are designed and constructed consistent with flood risk policies of the District’s Flood Hazard Management Plan.

I. District Motion FCD11-02.1 states that the District will address countywide flood protection levels, levee certification (including operation and maintenance plans), and levee accreditation as part of the 2012 update of the District’s Flood Hazard Management Plan. According to the Motion, this review of issues must balance the process and costs of certification and accreditation with long-term solutions that increase public safety and reduce flood risks throughout the County. The Motion further states that the District will assume maintenance and repair responsibilities that support certification of individual levee segments, as long as such segments are designed and constructed consistent with Policy PROJ-6, Flood Protection Facility Design and Maintenance Objectives, of the District’s Flood Hazard Management Plan, and are based on the flood risk policies in such Plan. The Motion also states that levee maintenance shall be based on a risk-based analysis approach, and that if such approach is not certifiable by FEMA, then the District’s assumption of maintenance and repair responsibilities will not apply and the District shall reconsider such assumption.

J. Because the Green River Levee System is an integrated system, with actions on one segment or reach having potential impacts on other segments or reaches, the District and the City understand the need to coordinate the levee segment's design, construction, operation and maintenance with other segments and reaches of the Green River Levee System. Accordingly, the District and the City will make efforts to integrate the levee work provided for herein with the levees in other segments or reaches of the Green River Levee System.

AGREEMENT

Based upon the foregoing, the Parties agree as follows:

1. Incorporation of Recitals. All recitals are hereby ratified as part of this Agreement.
2. Definition of District. Unless provided otherwise in this Agreement, the term "District" hereinafter shall include WLRD, in its capacity as service provider to the District.
3. Levee Design and Construction Standards.
 - a. At its own cost and expense, the City shall design and construct improvements to the levee segments described and depicted on **Exhibit A**, attached hereto and incorporated herein by reference, known as the "Boeing Levee" and the "Hawley Road Levee" ("Levees"), in accordance with the terms and conditions of this Agreement and the applicable agreement between the State of Washington Department of Ecology and the District. The City's cost and expense shall be subject to reimbursement from State of Washington funding for the Levees in accordance with paragraph 12 below. Except as provided in subparagraph 3.b below, in designing and constructing the improvements to the Levees, the City shall meet or exceed the minimum standards and requirements set forth in Part I of **Exhibit B**, attached hereto and incorporated herein by reference ("Levee Standards").
 - b. During the term of this Agreement, if the City designs and constructs improvements that do not meet or exceed the Levee Standards, the Parties understand and agree that the Levee is interim only and that the Levee should be improved and upgraded to meet the Levee Standards. The Parties further understand and agree that the cost of improving and upgrading a Levee may require the acquisition of real property rights, such as easements and rights-of-way. Until a Levee is improved and upgraded to meet the Levee Standards, the District shall operate, maintain and repair the Levee in accordance with paragraph 14 below and the parties shall undertake the additional activities under paragraph 6 below.
4. Levee Maintenance, Operation and Repair Standards.
 - a. Except as provided in subparagraph 4.b below, the operation plan and manual for a Levee shall meet or exceed the minimum standards and requirements of Part II of **Exhibit B** ("Levee O & M Standards").

b. During the term of this Agreement, if the City prepares an operation plan and manual for a Levee that does not meet or exceed the Levee O & M Standards, the Parties understand and agree that the Levee operation plan is interim only and that such plan should be changed to meet the Levee O & M Standards. Until a Levee operation plan is changed to meet the Levee O & M Standards, the District shall operate, maintain and repair the Levee in accordance with paragraph 14 below and the parties shall undertake the additional activities under paragraph 6 below.

5. District Review of Levee Plans and CLOMR applications. The City shall provide to the District a schedule of the material and significant events and actions for design and bidding of the Levee, which events and actions shall include, but not be limited to, three design stages and the invitation to bid. The City shall submit plans and specifications for each of these three design stages to the District for review and comment. At least thirty (30) days before advertising an invitation to bid, the City shall submit to the District for review and comment the plans, specifications and requirements of the invitation to bid and the application (with attachments and exhibits) for a FEMA CLOMR. The District shall submit any comments within thirty (30) days of receipt of the documents.

6. Additional Activities for Interim Levees. If a Levee does not meet or exceed the Levee Standards or the operation and maintenance plan does not meet or exceed the Levee O & M Standards, then until the Levee and plan meet or exceed such Standards:

a. The District will provide enhanced monitoring of the Levee through slope stability instrumentation, and the District may seek reimbursement of the cost of such monitoring from the State of Washington funding for the Levees;

b. The District will provide emergency response and emergency repair of the Levee, consistent with paragraph 14 below;

c. The City will develop an emergency action plan for flood fighting, and procure an on-call contractor to perform necessary emergency repairs to the Levee, as requested by the District;

d. The parties will cooperate to develop and pay for a joint outreach program to communicate with other persons and entities in the Levee protected area, informing them of risks associated with being located in such area, regardless of accreditation or certification; and

e. The District's costs related to the City's CLOMR applications and to negotiation and preparation of this Agreement shall be considered District costs and expenses for which the City is responsible under paragraph 11 below.

7. District Inspections. The District shall have the right to inspect the City's construction of a Levee.

8. Contracts for Levee Work. Upon execution of a contract for construction of a Levee, the City shall send a copy of the contract to the District.

9. Record Drawings; Retention and Review of Documents. The City shall submit to the District record drawings for each Levee, in a form and with detail required by the District. The City agrees to maintain documentation of all planning, design, construction and inspection of each Levee sufficient to meet state audit standards for a capital project, recognizing that the costs of the Levee work are paid for in whole or in part by State of Washington funding sources, and that the City, the District and/or King County may seek recovery of costs expended from other governmental funding sources. The City agrees to maintain any additional documentation that is requested by the District. City contracts and internal documents shall be made available to the District for review and/or independent audit upon request.

10. Access; Special Use Permit. To the extent that the District's or King County's property interests require and allow, the City shall follow the District and/or King County processes for obtaining, as applicable, special use permits, consistent with King County special use permit procedures and standards, and shall obtain such permits for any City access to and construction and inspection work on a Levee. The District shall waive any applicable bond requirements. If Levee work involves access to and use of real property for which neither the District nor King County has real property interests or rights, the City shall be responsible for obtaining real property rights sufficient for City access to and construction and inspection of such Levee work, and District and WLRD access to and maintenance and operation of the Levee.

11. District Costs and Expenses. The District shall seek reimbursement from the State of Washington funding for the Levees for all actual costs and expenses incurred by the District after the effective date of this Agreement to review Levee design and construction documents and to inspect the Levee work. For King County employees providing services, the actual costs shall include salaries, employment benefits and administrative overhead. District requests for reimbursement shall have priority over City requests for reimbursement pursuant to Paragraph 11 below. The City shall reimburse the District for any such District costs and expenses that are not reimbursed from State of Washington funding for the Levees.

12. Reimbursement of City Expenditures.

a. No more than once a month, the City shall submit requests for reimbursement of City costs and expenses incurred after July 1, 2011 for design, construction, inspection, certification and accreditation of the improvements to the Levees and preparation of operation and maintenance plans for the improvements to the Levees. The requests shall be in a form and shall contain information and data as is required by the District. The District shall review the requests to confirm that they are reimbursable and payable under applicable terms and conditions of State of Washington funding for the Levees and the terms and conditions of this Agreement. The District shall endeavor to complete such review within thirty (30) days of receipt of a

request. For reimbursement amounts approved by the District, the District shall send a request for such reimbursable amounts to the appropriate State Department for review and approval, up to a maximum of \$2,070,000 for the Boeing Levee and of \$900,000 for the Hawley Road Levee. Within forty-five (45) days of receipt of State funds, the District shall forward the State funds to the City.

b. The District may postpone review of a City request for reimbursement where all or any part of the request is inaccurate or incomplete. The District shall notify the City of any inaccuracies or incompleteness within thirty (30) days of receipt of the request. The City shall provide the requested information or data within thirty (30) days of the request for such information or data. If the request is still inaccurate or incomplete in the opinion of the District, the dispute shall be resolved in accordance with paragraph 22 below. After resolution of the dispute, the District shall send a request for reimbursement to the appropriate State Department.

c. The District shall reimburse the City for its costs and expenses only from State of Washington funds for the Levees (ESHB 2020 relating to the 2011-2013 State Capital Budget). The Parties understand and agree that the City shall pay for all costs and expenses of the improvements to the Levees that are in excess of the State of Washington funding for the Levees.

13. Levee Warranty. The City shall require its contractor(s) to warrant the materials, work and function of a Levee for five years after the City's acceptance of construction of the Levee.

14. Levee Operation, Maintenance and Repair. The District shall operate, maintain and repair the Levees in accordance with the terms and conditions of this Agreement and with District general standards, requirements and policies for operation, maintenance and repair of Green River levees, as these are determined and applied by the District; however:

a. The District shall not be obligated to operate, maintain and repair a Levee if FEMA does not approve a risk-based approach to operation, maintenance and repair of the improvements to the Levee to be constructed pursuant to this Agreement; and

b. If the City designs and constructs a Levee that does not meet or exceed the Levee Standards or adopts an operation and maintenance plan that does not meet or exceed the Levee O & M Standards, then until the Levee Standards and the Levee O & M Standards are met, the parties shall share the cost and expense of all repairs of damage to the levee system within the limits of reconstruction as shown on **Exhibit A** (1) equally or (2) in a percentage that is agreed to by the designated representatives of the parties in paragraph 25 below, or the designees of such representatives, within forty-five (45) days of the date of written notice by the District of the cost and expense of the repair, unless the parties mutually agree to extend that forty-five (45) day period. The parties shall negotiate a fair apportionment of cost sharing in good faith during that forty-five (45) day time period (as may be extended), but if no agreement is reached, then the parties shall share equally the cost and expense.

15. Compliance with Laws and Regulations. The City shall be responsible for complying with all applicable laws and regulations, and obtaining all required permits, approvals and licenses in connection with Levee work.

16. Impact on Other Reaches or Segments. The District and the City agree that the improvements to the Levees under this Agreement should not have a detrimental effect on other segments or reaches of the Green River Levee System. The improvements to the Levees shall be deemed not to have such a detrimental effect where the improvements fully protect the conveyance capacity and storage volume of the floodplain during base flood (100-year flood) conditions, as demonstrated by compliance with King County flood hazard regulations, which are Sections 21A.24.230 through 21A.24.260 of the King County Code.

17. Duration. This Agreement shall take effect on the date on which the second party signs this Agreement, and shall remain in effect through December 31, 2023.

18. Third Parties. This Agreement and any activities authorized hereunder shall not be construed as granting any rights or privileges to any third person or entity, or as a guarantee or warranty of protection from flooding or flood damage to any person, entity or property, and nothing contained herein shall be construed as waiving any immunity to liability to the City, the District and/or King County, granted under state statute, including Chapters 86.12 and 86.15 RCW, or as otherwise granted or provided for by law.

19. Liens and Encumbrances. The City acknowledges and agrees that it will not cause or allow any lien or encumbrance arising from or related to the Levee work authorized by this Agreement to be placed upon the real property interests of King County and the District. If such lien or encumbrance is so placed, King County and the District shall have the right to remove such lien and charge back the costs of such removal to the City.

20. Indemnification. To the maximum extent permitted by law, the City shall defend, indemnify and hold harmless the District and King County, and all of their officials, employees, principals and agents, from any and all claims, demands, suits, actions, fines, penalties and liability of any kind, including injuries to persons or damages to property, arising out of, or as a consequence of, the design and construction of the improvements to the Levees under this Agreement. As to all other obligations under this Agreement, to the maximum extent permitted by law, each Party shall defend, indemnify and hold harmless the other Party, and all of its officials, employees, principals and agents, from any and all claims, demands, suits, actions, fines, penalties and liability of any kind, including injuries to persons or damages to property, arising out of or relating to any negligent acts, errors or omissions of the indemnifying Party and its contractors, agents, employees and representatives in performing these obligations under this Agreement. However, if any such damages and injuries to persons or property are caused by or result from the concurrent negligence of the District or its contractors, employees, agents, or representatives, and the City or its contractor or employees, agents, or representatives, each

Party's obligation hereunder applies only to the extent of the negligence of such Party or its contractor or employees, agents, or representatives. This indemnification provision shall not be construed as waiving any immunity granted to the City, the District, or King County, under state statute, including chapters 86.12 and 86.15 RCW, as to any other entity.

The foregoing indemnity is specifically and expressly intended to constitute a waiver of each Party's immunity under industrial insurance, Title 51 RCW, as respects the other Party only, and only to the extent necessary to provide the indemnified Party with a full and complete indemnity of claims made by the indemnitor's employees. This waiver has been mutually negotiated.

21. Insurance. Each Party recognizes that the other is self-insured and accepts such coverage for liability arising under this Agreement. Should any Party choose not to self-insure, that Party shall maintain and keep in full force and effect a policy of general liability insurance in an amount not less than One Million Dollars (\$1,000,000) per occurrence with an additional excess liability policy of not less than Ten Million Dollars (\$10,000,000) and will provide the other Party with a certificate of insurance and additional insured endorsement that will name the other Party as an additional insured.

22. Dispute Resolution. The Parties will seek to resolve any disputes under this Agreement as follows:

a. For disputes involving cost reimbursements or payments, the process in paragraphs 11 and 12 above, and thereafter submittal of all relevant information and data to an independent Certified Public Accountant and/or a Construction Claims Consultant, if agreed upon by the Parties, for a non-binding opinion as to the responsibility.

b. If the foregoing does not result in resolution and for all other disputes, the Parties may mutually select any informal means of resolution and resort will otherwise be had to the Superior Court for King County, Washington.

c. Each Party will be responsible for its own costs and attorney's fees in connection with the dispute resolution provisions of this paragraph 22.

23. Entire Agreement; Amendment. This Agreement, together with its Exhibits A and B, represents a full recitation of the rights and responsibilities of the Parties and may be modified only in writing and upon the consent of both Parties. Should any conflict exist between the terms of this Agreement and the terms of either exhibit, this Agreement shall control.

24. Binding Nature. The rights and duties contained in this Agreement shall inure to the benefit of and are binding upon the Parties and their respective successors in interest and assigns.

25. Notices, Communications and Documents. All communications and documents regarding this Agreement shall be sent to the Parties at the addresses listed below unless a Party gives notice of a change of address. Any written notice hereunder shall become effective three (3) business days after the date of mailing by registered or certified mail, and shall be deemed sufficiently given if sent to the address state below or such other addresses as may be hereinafter specified in writing.

If to City:

Tim LaPorte, Director
City of Kent
Public Works Department
220-4th Avenue South
Kent, WA 98032

If to District and/or WLRD:

Mark Isaacson, Director
King County WLRD
201 South Jackson St, Ste. 600
Seattle, WA 98104-3855

26. Authority. The undersigned warrant that they have the authority duly granted by their respective legislative bodies to make and execute this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement, which shall become effective on the last date signed below.

CITY OF KENT

**KING COUNTY FLOOD CONTROL
ZONE DISTRICT**

By: _____

Suzette Cooke

Its: Mayor

By: _____

Its: Board Chair

DATE: _____

DATE: _____

APPROVED AS TO FORM:

APPROVED AS TO FORM:

By: _____

Assistant City Attorney

By: _____

Legal Counsel

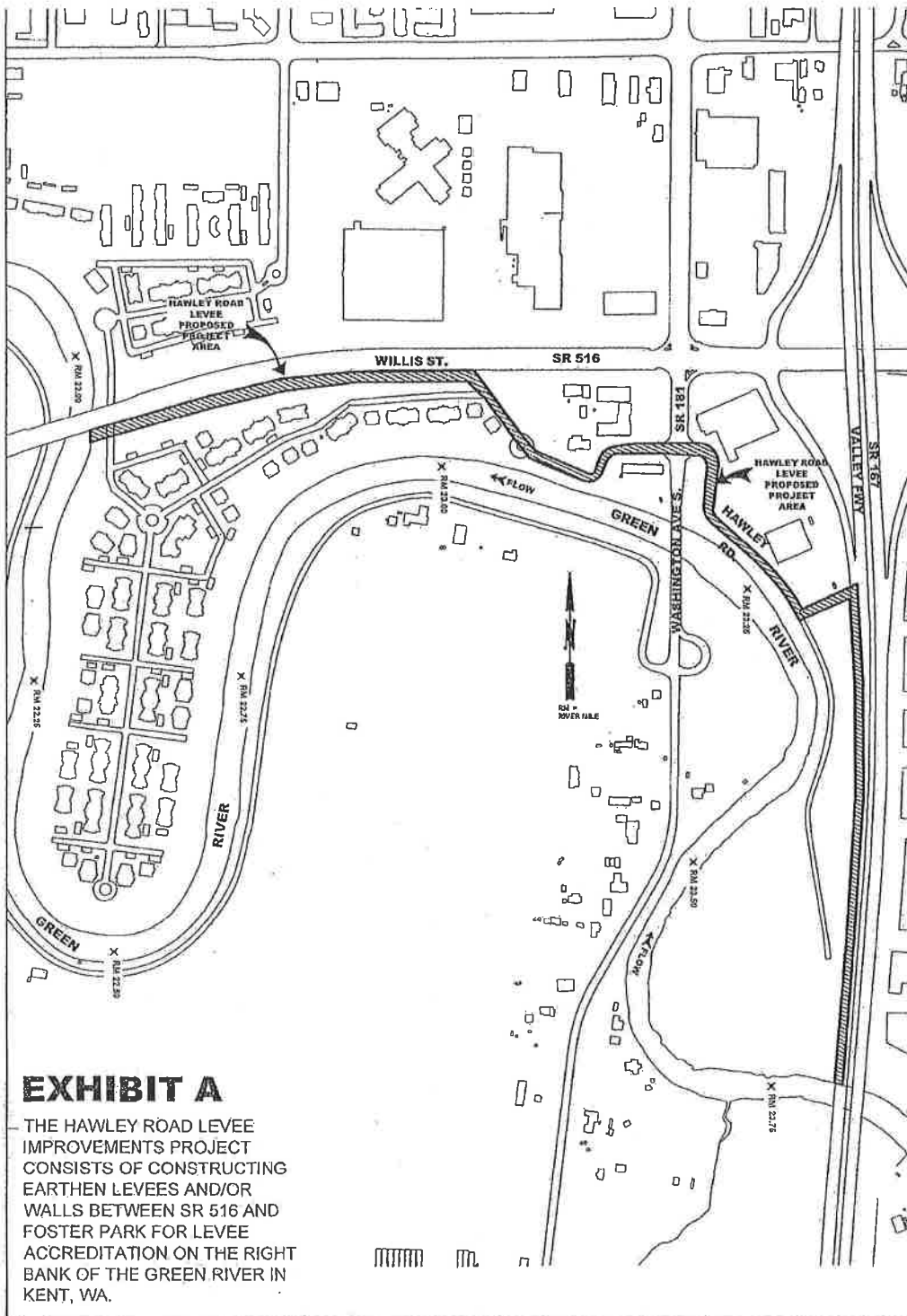


EXHIBIT A

THE HAWLEY ROAD LEVEE IMPROVEMENTS PROJECT CONSISTS OF CONSTRUCTING EARTHEN LEVEES AND/OR WALLS BETWEEN SR 516 AND FOSTER PARK FOR LEVEE ACCREDITATION ON THE RIGHT BANK OF THE GREEN RIVER IN KENT, WA.

EXHIBIT A

THE BOEING LEVEE IMPROVEMENTS PROJECT CONSISTS OF CONSTRUCTION OF LEVEES, WALLS AND OTHER FLOOD PROTECTION MEASURES BETWEEN S 200TH STREET AND S 212TH STREET FOR IMPROVED FLOOD PROTECTION, CERTIFICATION AND ACCREDITATION ON THE RIGHT BANK OF THE GREEN RIVER IN KENT, WA.

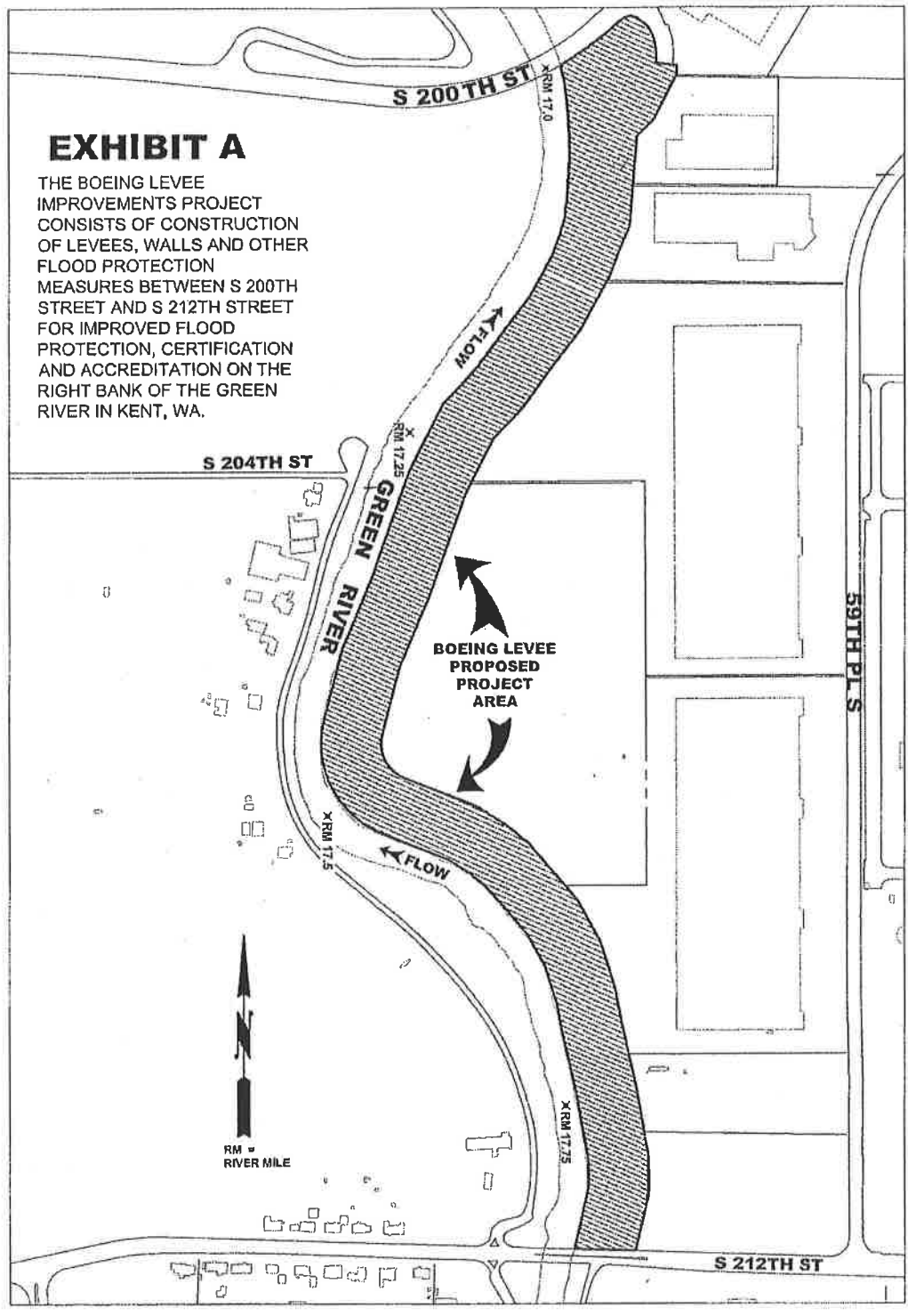


EXHIBIT B

I. Levee Design Criteria and Performance Standards

1. The Levee shall be designed and constructed consistent with the District's Flood Hazard Management Plan Policy PROJ-6, Flood Protection Facility Design and Maintenance Objectives, which states as follows:
 - a. "[The District] should construct new flood protection facilities and maintain, repair or replace existing flood protection facilities in such a way as to:
 - i. Require minimal maintenance over the long term,
 - ii. Ensure that flood or channel migration risks are not transferred to other sites,
 - iii. Protect or enhance aquatic, riparian and other critical habitats, and
 - iv. Protect or enhance multiple beneficial uses of flood hazard area."
2. The Levee shall demonstrate structural attributes substantially compliant with or exceeding the following minimum standards:
 - a. The Levee flood containment design shall be based on containment of total river flow with an annual exceedance probability of 0.2 percent (i.e., 500-year conditions) using the best available hydrologic information.
 - b. The Levee crest elevation shall be designed to provide a minimum of three feet of freeboard above the water surface elevation for the design flood thus determined.
 - c. The design elevation for the Levee toe shall be established with a consideration of the potential for flood scour associated with the design flood, based on channel surveys, computed changes in channel geometry over time, and engineering models for determination of flood scour under these design conditions; provided, that under no circumstances shall the design elevation for the Levee toe be less than ten feet below the elevation of the Ordinary High Water Mark ("OHWM") of the Green River, determined as the lowest elevation at which the stems of mature woody vegetation can be observed.
 - d. Measures shall be provided to secure the Levee toe at its design location against scour damage, undermining, or erosion, for a design lifetime of 50 years. Such measures may include a reasonable program and schedule of periodic inspections, with maintenance and repair of incremental scour or erosion damages over the Levee lifetime, but shall not unreasonably encumber a chronic and recurring reliance on continual repair and replacement for their efficacy and performance.

- e. Adequate access for long-term maintenance of the riverward Levee toe shall be provided in the design and construction of the riverward Levee slopes; construction of a midslope bench within 5 vertical feet of the elevation of the OHWM is the preferred means of providing such access. Any such bench shall be a minimum of 20 feet in horizontal width.
- f. The Levee crest shall be set at a location determined by a line drawn from the design Levee toe location at a slope of 3 horizontal to 1 vertical feet, to the elevation of the design freeboard described above; provided, that steeper slope angles may be employed where Levee slope stability analyses show that an alternative slope inclination, or some combination of slopes and bench excavation, can meet all of following minimum Factors of Safety for potential slope failure mechanisms when determined by the methodologies described in USACE Publications EM-1110-2-1902 and EM-1110-2-1913:
 - o End of Construction FS=1.3
 - o Steady State at full stage: FS=1.2
 - o Steady State at intermediate stage: FS=1.2
 - o Seepage and Heaving: FS=1.2
 - o Rapid Drawdown from full stage: FS=1.4
 - o Seismic FS=1.0
- g. The width of the Levee crest shall be a minimum of 20 feet to allow for emergency repair response, flood patrols, recreational trail construction and placement of emergency flood raising measures such as “Supersack” and “Hesco-type” structures, while preserving access for flood patrols and construction equipment.
- h. The Levee backslope shall be constructed at a 3H:1V slope from its base to its crest.
- i. A minimum 15-foot-wide Levee inspection and repair access area shall be provided along the landward toe of the Levee.
- j. At a minimum, the lower 2/3 of the Levee slopes, as measured from the Levee crest to the elevation of the OHWM of the Green River and including any benches therein, shall be planted with a dense stand of native riparian woody vegetation, and maintained to maturity.
- k. Levee design shall not result in increased base flood elevation at other locations.

II. Levee Inspection, Maintenance, Operation and Repairs

1. The Levee shall be maintained and operated consistent with the District's Flood Hazard Management Plan Policy PROJ-6, Flood Protection Facility Design and Maintenance Objectives, which states as follows:
 - “[The District] should construct new flood protection facilities and maintain, repair or replace existing flood protection facilities in such a way as to:
 - Require minimal maintenance over the long term,
 - Ensure that flood or channel migration risks are not transferred to other sites,
 - Protect or enhance aquatic, riparian and other critical habitats, and
 - Protect or enhance multiple beneficial uses of flood hazard area.”
2. Levee maintenance and operation shall be based on a risk-based analysis approach. If a risk-based approach is not acceptable to FEMA, and as a result FEMA fails to issue a CLOMR or LOMR for the Levee, the District shall not be obligated to operate and maintain the Levee.
3. The upper 1/3 of the riverward slope above the OHWM may be mowed and maintained in grass cover.
4. The Levee crest shall be maintained to provide for unimpeded vehicular access at all times, including access by heavy construction equipment and earth-hauling machinery.
5. The landward Levee slope may be mowed and maintained in grass cover.
6. The 15-foot maintenance access and inspection area along the landward Levee toe may be mowed and maintained in grass cover.
7. All such mowed areas may alternatively be planted and maintained with native riparian woody vegetation.
8. Upon acceptance of completed Levee construction by the District, the Levee, as constructed to these standards, shall be inspected by the District prior to leaf emergence each spring, at low-flow conditions in the late Summer or early Fall, prior to the onset of fall rains and seasonal high flows, and during and immediately following flood events at Phase III (9,000 cfs) or greater.
9. All structural features of the Levee shall be inspected by the District for deterioration or damage, including the presence of any slope erosion, washouts, slumping, slides, or sloughing, and any conditions noted shall be included in prioritization of District and/or

King County maintenance and repair needs, and in performance of maintenance and repair actions at the earliest appropriate opportunity.

10. All vegetation on the levee slopes, benches, or along the lower embankment shall be inspected by the District for erosion of the riverward embankment in the root zone, and appropriate corrective action shall be taken where such conditions may be present.
11. The District and/or King County shall perform continuing levee patrols during all Phase III or greater flood events.
12. Damaged or impaired Levee conditions observed by the District during flood patrols shall be evaluated for emergency repair actions.
13. Any emergency repairs performed will be inspected by the District at the next low-water period for evaluation of permanent repair needs or additional measures required to restore the function and integrity of all affected locations.
14. The District and/or King County shall prioritize repairs consistent with the adopted policies of the District's Flood Hazard Management Plan, or its successor.
15. The City shall be responsible for all local drainage inspections and maintenance. The District and King County shall not assume any responsibility for stormwater management activities.