

# **Lincoln City - Lancaster County**

## **PLANNING COMMISSION AGENDA**

### **PLANNING COMMISSION**

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Cindy Ryman Yost: Vice Chair  
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### **PLANNING STAFF**

David R. Cary: Director  
Shelli Reid: Administrative Officer  
Jennifer McDonald: Administrative Aide  
Alexis Longstreet: Office Specialist

## **November 16, 2022**

**NOTICE:** The Lincoln/Lancaster County Planning Commission will hold a public hearing on Wednesday, November 16, 2022, at 1:00 p.m. in Hearing Room 112 on the first floor of the County-City Building, 555 S. 10<sup>th</sup> St., Lincoln, Nebraska. For more information, call the Planning Department, (402) 441-7491.

**\*\*PLEASE NOTE:** The Planning Commission action is final action on any item with a notation of \*FINAL ACTION\*. Any aggrieved person may appeal Final Action of the Planning Commission to the City Council or County Board by filing a Notice of Appeal with the City Clerk or County Clerk within 14 days following the action of the Planning Commission.

The Planning Commission action on all other items is a recommendation to the City Council or County Board.

The Planning Commission will be allowing testimony on agenda items by videoconferencing. For those who wish to testify by video, you must register with the Planning Department Office to participate by calling 402-441-7491 or emailing [Plan@lincoln.ne.gov](mailto:Plan@lincoln.ne.gov) by 10:00 a.m. the day of the meeting. You will be asked to provide your name, address, phone number and the agenda item(s) you wish to speak on, and your position on this item. On the day of the hearing, you will receive a link via email, which will be needed to join the hearing to provide your testimony.

## AGENDA

WEDNESDAY, NOVEMBER 16, 2022

Approval of minutes of the regular meeting held November 2, 2022.

### 1. CONSENT AGENDA (Public Hearing and Administrative Action)

#### COMPREHENSIVE PLAN CONFORMANCE:

- 1.1 COMPREHENSIVE PLAN CONFORMANCE 22023, to review as to conformance with the 2050 Lincoln-Lancaster County Comprehensive Plan, a proposed amendment to the Lincoln Center Redevelopment Plan to revise the "North Haymarket Arts and Humanities Center Redevelopment Project", on property generally between 8th to 9th and R to S Streets.

Page 1

**Staff recommendation: In Conformance with the Comprehensive Plan**  
**Staff Planner: Andrew Thierolf, 402-441-6371, [athierolf@lincoln.ne.gov](mailto:athierolf@lincoln.ne.gov)**

#### TEXT AMENDMENT:

- 1.2 TEXT AMENDMENT 22009, to amend Chapter 27 of the Lincoln Municipal Code, Section 27.63.530, amending the special permit requirements for residential health care facilities by removing the text that all facilities may have up to four individuals 60 years of age or older and one family acting as the residential caretaker: and repealing Section 27.63.530 as hitherto existing.

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**Staff recommendation: Approval**  
**Staff Planner: George Wesselhoft, 402-441-6366, [gwesselhoft@lincoln.ne.gov](mailto:gwesselhoft@lincoln.ne.gov)**

## **CHANGE OF ZONE:**

- 1.3 CHANGE OF ZONE 08057D, to allow for an indoor theater within the existing University Place PUD (Planned Unit Development), on property generally located at 2626 North 48th Street.  
*Page 23*  
**Staff recommendation: Conditional Approval**  
**Staff Planner: Emma Martin, 402-441-6369, [emartin@lincoln.ne.gov](mailto:emartin@lincoln.ne.gov)**

## **MISCELLANEOUS:**

- 1.4 MISCELLANEOUS 22013, to review the proposed determination that the Van Dorn Redevelopment area #2 be declared blighted and substandard as defined in the Nebraska Community Development Law, is in conformance with the Comprehensive Plan, on property generally located at 10th Street, Van Dorn to Calvert, and High Street 10th to west of 13th Streets.  
*Page 37*  
**Staff recommendation: Finding of Substandard and Blighted Conditions**  
**Staff Planner: Andrew Thierolf, 402-441-6371, [athierolf@lincoln.ne.gov](mailto:athierolf@lincoln.ne.gov)**
- 1.5 MISCELLANEOUS 22012, Revising the Long-Range Transportation Plan to include N. 14th Street from Alvo Road to Ashland Road.  
*Page 55*  
**Staff recommendation: Approval**  
**Staff Planner: Rachel Christopher, 402-441-7603, [rchristopher@lincoln.ne.gov](mailto:rchristopher@lincoln.ne.gov)**

## **SPECIAL PERMIT:**

- 1.6 SPECIAL PERMIT 1573B, to amend an existing Special Permit, to allow for a Residential Healthcare Facility, on property generally located at 1740 Superior Street. The Planning Commission action is final, unless appealed to the Lincoln City Council.  
*Page 63*  
**\*\*\*FINAL ACTION\*\*\***  
**Staff recommendation: Conditional Approval**  
**Staff Planner: Emma Martin, 402-441-6369, [emartin@lincoln.ne.gov](mailto:emartin@lincoln.ne.gov)**

## **2. REQUESTS FOR DEFERRAL**

## **3. ITEMS REMOVED FROM CONSENT AGENDA**

## **4. PUBLIC HEARING AND ADMINISTRATIVE ACTION**

### **TEXT AMENDMENTS:**

- 4.1 TEXT AMENDMENT 22012, amending City of Lincoln Design Standards, for various revisions to Titles 2 and 3 of the Design Standards for flood and water quality protection measures.  
*Page 71*  
**Staff recommendation: Approval**  
**Staff Planner: Brian Will, 402-441-6362, [bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)**

4.2 TEXT AMENDMENT 22010, amending the Lincoln Municipal Code Title 26 Land Subdivision, for revisions to various sections for flood and water quality protection measures.

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**Staff recommendation: Approval**

**Staff Planner: Brian Will, 402-441-6362, [bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)**

4.3 TEXT AMENDMENT 22011, amending the Lincoln Municipal Code Title 27 Zoning, for revisions to various sections for flood and water quality protection measures.

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**Staff recommendation: Approval**

**Staff Planner: Brian Will, 402-441-6362, [bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)**

**SPECIAL PERMIT:**

4.4 SPECIAL PERMIT 22035, to allow for the construction of a large Solar Energy Conversion System, in compliance with Section 13.051 of the Lancaster County Zoning Regulations, on property generally located at 162nd and Holdrege Streets. The Planning Commission action is final, unless appealed to the Lancaster County Board. **\*\*\*FINAL ACTION\*\*\***

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**Staff recommendation: Conditional Approval**

**Staff Planner: Tom Cajka, 402-441-5662, [tcajka@lincoln.ne.gov](mailto:tcajka@lincoln.ne.gov)**

**5. CONTINUED PUBLIC HEARING AND ADMINISTRATIVE ACTION**

5.1 SPECIAL PERMIT 21037, to allow for the West Van Dorn Ridge CUP (Community Unit Plan), for up to 12 dwelling units with associated waivers, on property generally located at SW 70th and W Van Dorn Streets. The Planning Commission action is final, unless appealed to the Lincoln City Council. **\*\*\*FINAL ACTION\*\*\***

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**Staff recommendation: Conditional Approval**

**Staff Planner: Tom Cajka, 402-441-5662, [tcajka@lincoln.ne.gov](mailto:tcajka@lincoln.ne.gov)**

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**AT THIS TIME, ANYONE WISHING TO SPEAK ON AN ITEM NOT ON THE AGENDA, MAY DO SO.**

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**Adjournment**

**PENDING LIST:** *PRELIMINARY PLAT 04011A, for a preliminary plat amendment to show a revised street layout, with associated waiver, on property generally located at Waterford Estates Drive and Linwood Lane.*

**Planning Department Staff Contacts:**

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**The Planning Commission meeting which is broadcast live at 1:00 p.m. every other Wednesday will be available for viewing on LNK City TV at**

**<https://lnktv.lincoln.ne.gov/CablecastPublicSite/watch/3?channel=1>**

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**The Planning Commission agenda may be accessed on the Internet at**

**<https://app.lincoln.ne.gov/city/plan/boards/pc/pc.htm>**

***ACCOMMODATION NOTICE:** The City of Lincoln complies with Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973 guidelines. Ensuring the public's access to and participating in public meetings is a priority for the City of Lincoln. In the event you are in need of a reasonable accommodation in order to attend or participate in a public meeting conducted by the City of Lincoln, please contact the Lincoln Commission on Human Rights at 402-441-7624, or the City Ombudsman at 402-441-7511, as soon as possible before the scheduled meeting date in order to make your request.*

**LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT**

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER Comprehensive Plan Conformance 22023 <i>North Haymarket Arts and Humanities Center Redevelopment Project Amendment</i>	FINAL ACTION? No	OWNER University of Nebraska Board of Regents
PLANNING COMMISSION HEARING DATE November 16, 2022	RELATED APPLICATIONS None	PROPERTY ADDRESS/LOCATION 401 N 9 <sup>th</sup> Street

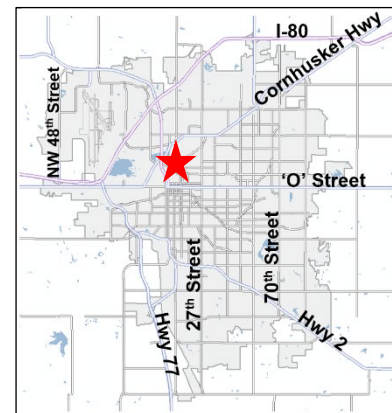
**RECOMMENDATION: IN CONFORMANCE WITH THE COMPREHENSIVE PLAN**

**BRIEF SUMMARY OF REQUEST**

Review as to conformance with the 2050 Lincoln-Lancaster County Comprehensive Plan, a proposed amendment to the North Haymarket Arts and Humanities Center Redevelopment Project within the Lincoln Center Redevelopment Plan.

The primary purpose of this amendment is to create a new Phase III to the North Haymarket Arts and Humanities Project that adds a North Haymarket Hotel project. The amendment includes additional changes to the project boundary and Phase II of the existing project.

The Redevelopment Project Amendment is on file with the Urban Development Department and the Planning Department. It can also be found online at the Planning Application Tracking System under the project number [CPC22023](#).



**JUSTIFICATION FOR RECOMMENDATION**

The Project is consistent with the Comprehensive Plan, Downtown Master Plan, and the Lincoln Center Redevelopment Plan. It will utilize existing infrastructure and meet the desire for a mix of uses in the downtown area. The Downtown Master Plan states that Downtown is the premier location in the region for visitors to stay, shop, dine, and enjoy entertainment. A significant hotel project helps support that vision.

**APPLICATION/STAFF CONTACT**

Hallie Salem  
City of Lincoln Urban Development Dept  
(402) 441-7866  
[hsalem@lincoln.ne.gov](mailto:hsalem@lincoln.ne.gov)

**COMPATIBILITY WITH THE COMPREHENSIVE PLAN**

In addition to the specific elements listed above, this project contributes to the continued strengthening of the downtown core, which is a guiding principle reflected throughout the Comprehensive Plan, Downtown Master Plan, and Lincoln Center Redevelopment Plan.

## COMPREHENSIVE PLAN SPECIFICATIONS:

### Introduction Section: Growth Framework

#### **Fundamentals of Growth in Lancaster County**

The City of Lincoln's present infrastructure investment should be maximized by planning for well-designed and appropriately-placed residential and commercial development in existing areas of the city with available capacity.

Downtown Lincoln is the heart of our community, a unique common ground for all Lincoln and Lancaster County residents. It is also emerging as an attractive place to live, becoming an increasingly vibrant mixed-use neighborhood.

New commercial and industrial development should be located in Lincoln and other incorporated communities. Lincoln has ample land area and infrastructure availability for commercial and industrial development.

#### **Land Use Plan**

[Figure GF.b: 2050](#) - This site is shown as Commercial on the 2050 Future Land Use Plan.

### Goals Section

G4: Economic Opportunity - Lincoln and Lancaster County will have high-quality jobs in an economic environment that supports business creation, innovation, and expansion.

### Elements Section

E2: Infill and Redevelopment

#### **Greater Downtown**

This area is the main hub of employment, entertainment, and higher education. Over the years, there have been significant public and private investments in new building construction, renovations, and infrastructure. In order to capitalize on these collective investments, further development in the Greater Downtown should be realized.

E3: Business, Economy, and Workforce

#### **Downtown**

Downtown Lincoln stands as a unique community resource. Downtown is the County's most intensive center of activity, offering a broad mix of retail, office, industrial, residential, and governmental uses.

PlanForward supports implementation of the Downtown Master Plan to preserve and enhance Downtown's role as...the principal cultural, entertainment, and tourism center...the center for hotels and conventions.

## Policies Section

P5: Downtown - Continue to make Greater Downtown a major focus for mixed-use reuse, infill and redevelopment.

### Action Steps

4. Encourage higher density development with parking areas at the rear of buildings, below grade, or on upper floors of multi-use parking structures.
6. Continue to support Downtown as the entertainment center of the community through development of the Music District proposed in the Downtown Master Plan, continued enhancements and programming for public spaces such as the Railyard, Tower Square, Union Plaza and the future South Haymarket Park, along with maintaining Lincoln's successful Theater Policy.

P8: Infill and Redevelopment - Encourage infill and redevelopment in appropriate locations throughout the community in order to meet the assumption for 25% of all new dwelling units being infill.

Increased infill allows the community to grow our population and tax base while focusing public dollars on maintaining what we already have, rather than spending money constructing and maintaining new facilities. Infill projects should target existing underdeveloped or redeveloping areas in order to remove blighted conditions and more efficiently utilize existing infrastructure.

### **DOWNTOWN MASTER PLAN SPECIFICATIONS:**

- p. 2.12 Overall, the hotel market in Downtown is soft, with occupancies averaging 66%. Anecdotal evidence indicates that Downtown's hospitality market has been soft for the last five to ten years, with mostly flat occupancy and daily rates. In addition, analysis of peer cities found that Lincoln already has a higher than average number of Downtown hotel rooms. Downtown's short-term opportunity (0-5 years) is to attract small, boutique additions to the market...Downtown Lincoln's mid-term hotel and convention opportunities (6-10 years) are dependent on the growth of Downtown employees and residents. Hospitality is likely to be a byproduct of these other sectors, and growth in residential and office sectors will elevate the demand in hospitality over time.
- p. 4.4.7 Reuse or redevelop vacant or underutilized spaces as opportunities arise.
- p. 4.4.8 Downtown is the premier location in the region for visitors to stay, shop, dine, and enjoy entertainment, and should be marketed as such.
- p. 4.4.9 When additional hotels are proposed and request TIF assistance, the City should require a market study as part of the application from the developer.
- p. 4.4.9 Continue and expand marketing Downtown as the premier location in the region for visitors to stay, shop, dine, and enjoy entertainment.

### **LINCOLN CENTER REDEVELOPMENT PLAN SPECIFICATIONS:**

- p. III-8 Intensify and strengthen Lincoln's central business district as a focal point for regional development;
- p. III-8 Provide for compact and interrelated development in order to increase the amount and variety of activity in the core while increasing pedestrian convenience and visual interest;
- p. III-8 Encourage rehabilitation/renovation of existing structures throughout the Community Redevelopment Area;
- p. III-9 Encourage the development of mixed use projects that attract and maintain commercial activity and residential developments in the Downtown and Haymarket areas;

- p. III-9 Encourage development that is consistent and complementary to existing land uses, architectural systems, and building materials found Downtown and in the Haymarket;
- p. III-9 Encourage expanded housing opportunities and types to foster 24-hour activity and a lively street;
- p. III-9 Encourage the development of a vibrant retail presence.

## ANALYSIS

1. This is an amendment to the North Haymarket Arts and Humanities Center Redevelopment Project within the Lincoln Center Redevelopment Plan. Elements of this amendment include:
  - a. Adjusting the North Haymarket Arts and Humanities Center Redevelopment Project Area to include additional rights-of-way,
  - b. Removing Lot 2 (401 N 9<sup>th</sup> Street) from Phase II - North Haymarket Mixed-Use Redevelopment Project,
  - c. Creating Phase III - North Haymarket Hotel Redevelopment Project, and
  - d. Replacing the original project proposed description for Lot 2 with Phase III.
2. The original Phase II Project envisioned the development of a mixed-use commercial building with hotel and retail on Lot 1 (southwest corner of block) of the Arts and Humanities Block and a “a public- private center for the promotion of modern arts and humanities assembly” on Lot 2 (southeast corner of block) of the Arts and Humanities Block. While the mixed-use commercial hotel project was constructed on Lot 1, the public-private center was not constructed on Lot 2. Lot 2 has remained vacant for over 10 years, operating as an underused gravel parking lot.
3. The new Phase III Project involves the construction of a six-story, 122-room, extended-stay hotel building on the Project Site. The new structure will meet the desire for density and provide a new entrance off I-180 into the Historic Haymarket District.
4. The Project is intended to enhance Downtown Lincoln as a dynamic, regional, mixed-use center. The Project abuts the Historic Haymarket District and is located along the R Street entryway into the District. The Project will extend the existing R Street streetscape and canopy structure to 9th and wrap around the building extending streetscape improvements to S Street.
5. The Project Site is adjacent to the Marriott Courtyard Hotel and proposes a shared and/or complementary courtyard area. Other uses on the block include commercial hotel, retail, office, and parking. The Haymarket Parking Garage is located to the south. Uses in the area, including other hotels, restaurants and Pinnacle Bank Arena, as well as other commercial and high density residential uses, are consistent with the proposed hotel use.
6. This amendment also revises the overall project boundary to include additional rights-of-way to allow for potential streetscape enhancements associated with the Project. In addition, the boundary description clarifies that the northeast corner of the block is not included in the Project. Markups to the boundary description are shown in red on the attached Redevelopment Project Amendment.
7. The Project may include the enhancement of adjacent rights of way, including the removal of the S Street slip road and reconfiguration of S Street. The existing R Street hotel loading zone will be extended to the east.

8. The Project is consistent with PlanForward, the Lincoln-Lancaster County 2050 Comprehensive Plan. In particular, the Project supports PlanForward Element 2: Infill and Redevelopment (and associated Policy 8) by utilizing an unimproved lot in Downtown and providing the opportunity for high-density development, and Policy 5: Downtown which calls for continuing to make Greater Downtown a major focus for mixed-use, reuse, infill, and redevelopment.
9. The Project is consistent with the 2018 Lincoln Downtown Master Plan as well which encourages the reuse or redevelopment of vacant or underutilized spaces as opportunities arise. The Project also supports the goal of bridging the connection between Haymarket and Central Downtown through enhancements at priority intersections and further supporting pedestrian travel through the entryways improvements to minimize the impact on and define spaces for pedestrians.
10. The market assessment associated with the Downtown Master Plan states that the Downtown hotel market is soft, and that Downtown already has a higher than average number of hotel rooms as compared to other peer cities. The Downtown Master Plan recommends that the City should require a market study whenever additional hotels are proposed and request TIF assistance.

The extended stay concept for this hotel is unique within Downtown and is a different market opportunity than traditional hotels. The potential developer has completed their due diligence to determine the market would support an extended stay hotel on this site.

11. The Project is consistent with the Lincoln Center Redevelopment Plan, which encourages development of projects that support Downtown and the Haymarket Districts as the employment, cultural, and entertainment core of our City, and a regional destination. Additionally, the project utilizes an underdeveloped, vacant lot. The project also supports integrating streetscape and landscape improvements in the project area with existing public and private amenities.
12. The Project was reviewed by Historic Preservation Commission (HPC) and Urban Design Committee (UDC). HPC members provided overall positive comments that were sent to UDC. UDC voted 5-0 to recommend approval of the project pending review of a site plan that is still under development.  
[September 22, 2022 Historic Preservation Commission Minutes](#), [Agenda Drawings](#)  
[October 4, 2022 Urban Design Committee Minutes](#)
13. The Project represents a significant private investment in the Lincoln Center Redevelopment Area. Publicly funded redevelopment activities may include: a lease buy-down, site preparation and grading, demolition, environmental remediation, streetscape and public area improvements, utility improvements, energy efficiency enhancements,
14. The public investment is expected to be roughly \$4 to \$5.5 million depending on valuations over time and interest rates. The source of public funds will be the tax increment generated from the private developments on the Project Site. The public investment will leverage a private investment of approximately \$24.5 million. More details can be found in the Cost Benefit Analysis section of the redevelopment plan amendment.

**EXISTING ZONING:** B-4 Lincoln Center Business District

**EXISTING LAND USES:** Vacant/Parking

**SURROUNDING LAND USE AND ZONING:**

North: Commercial	B-4 Lincoln Center Business District
South: R Street, Commercial	B-4
East: 9 <sup>th</sup> Street, Parking	B-4
West: Hotel, Commercial	B-4

**APPROXIMATE LAND AREA:** 0.4 acres (main project site)

Prepared by

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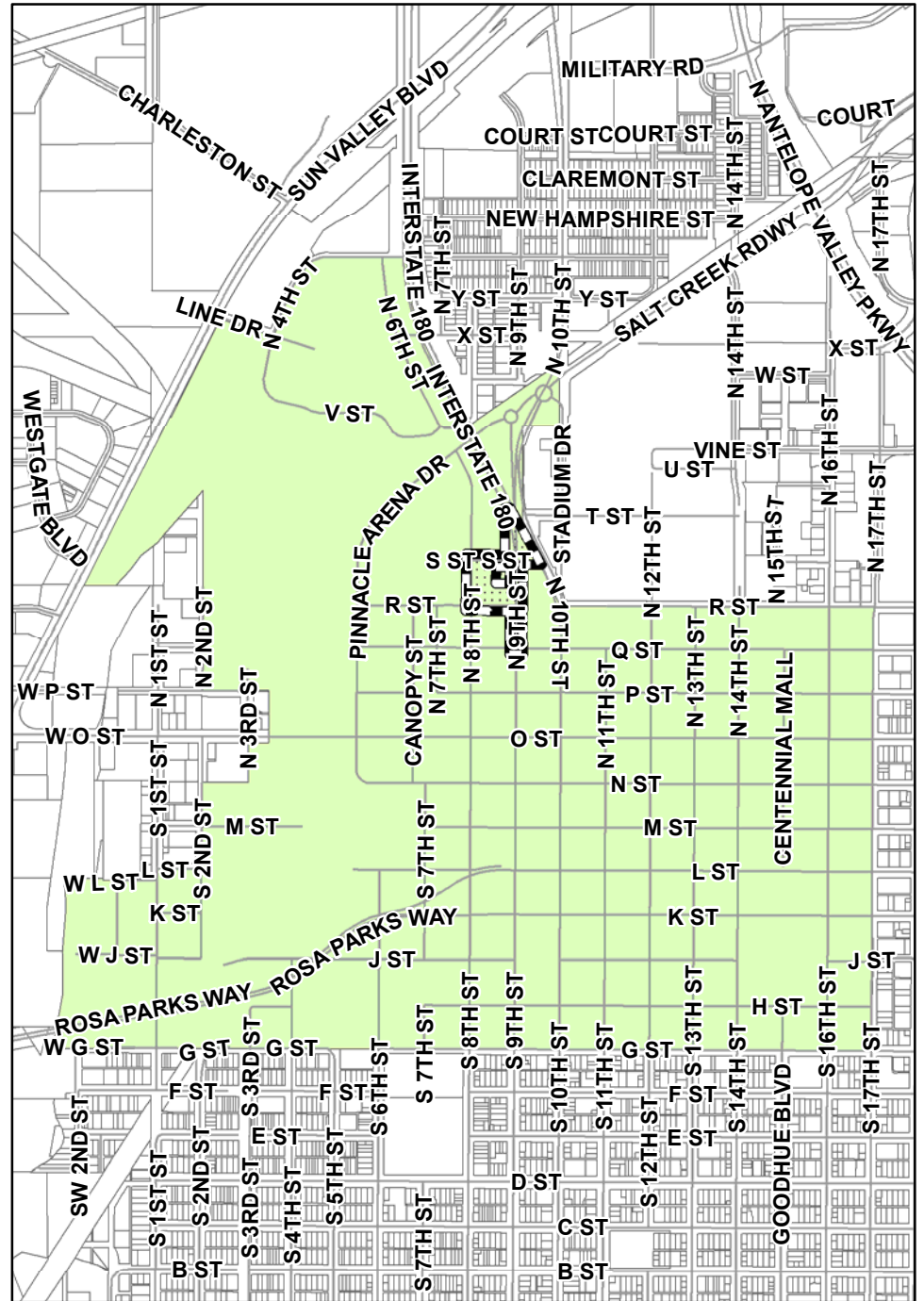
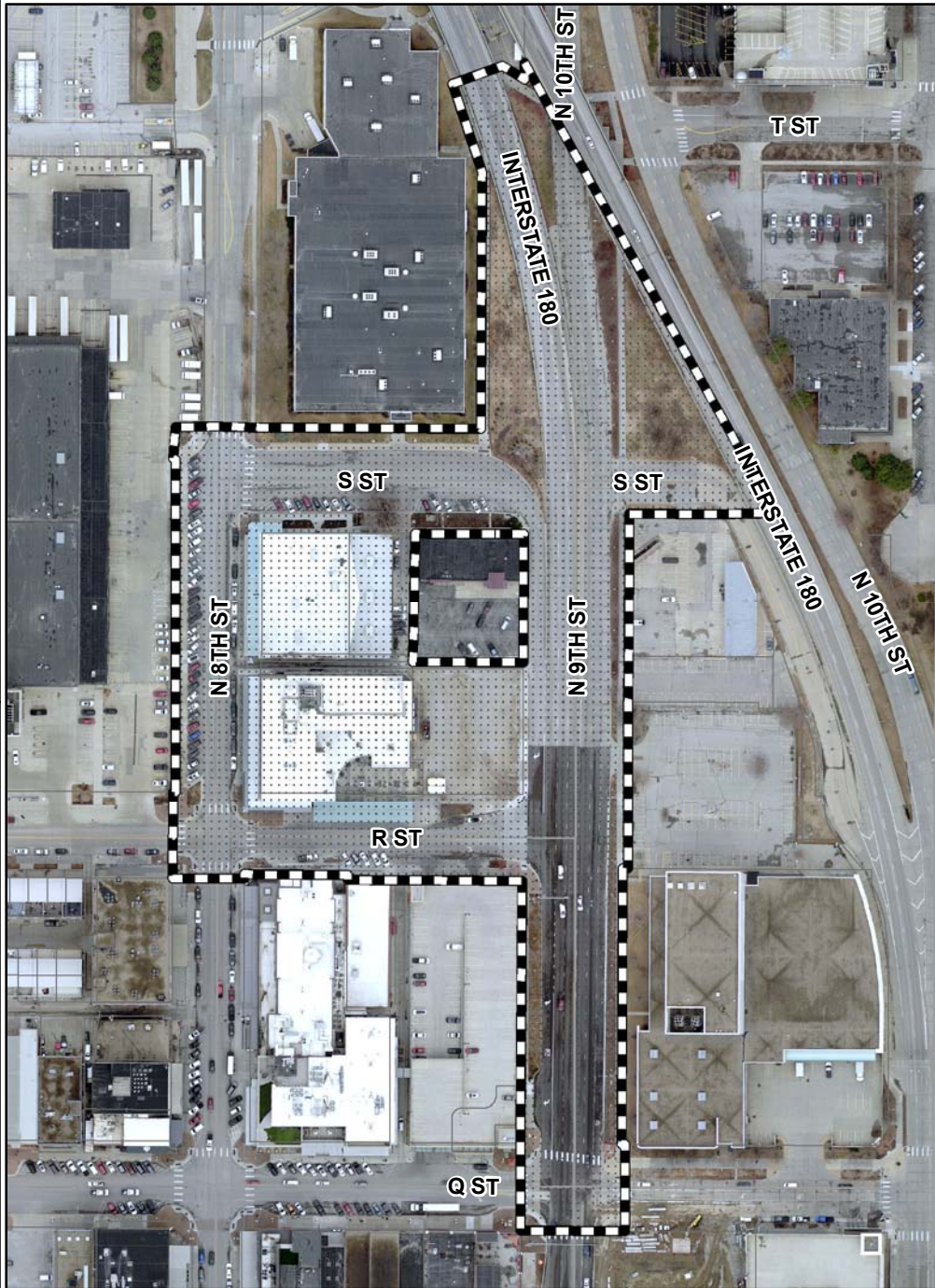
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November 2, 2022

Applicant: Urban Development Department, City of Lincoln  
555 S. 10<sup>th</sup> Street, Suite 205  
Lincoln, NE 68508

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<https://linclanc.sharepoint.com/sites/PlanningDept-DevReview/Shared Documents/DevReview/CPC/22000/CPC22023 North Haymarket Arts and Humanities Project.adt.docx>



**Comprehensive Plan Conformance #22023**  
**North Haymarket Arts and Humanities Center Project**  
**Lincoln Center Redevelopment Area**



**AMENDMENT TO THE  
LINCOLN CENTER REDEVELOPMENT PLAN  
NORTH HAYMARKET ARTS AND HUMANITIES CENTER  
REDEVELOPMENT PROJECT**

**Amendment to the  
North Haymarket Arts and Humanities Center Project Area and  
Phase II - North Haymarket Mixed-Use Redevelopment Project  
and  
Addition of the  
Phase III - North Haymarket Hotel Redevelopment Project**

This Amendment proposes to amend the North Haymarket Arts and Humanities Center Redevelopment Project of the Lincoln Center Redevelopment Plan to:

- adjust the North Haymarket Arts and Humanities Center Redevelopment Project Area to include additional rights of way,
- remove Lot 2 from Phase II – North Haymarket Mixed-Use Redevelopment Project,
- create the Phase III – North Haymarket Hotel Redevelopment Project, and
- replace the original project proposed description for Lot 2 with Phase III.

The original Phase II project envisioned the development of a mixed-use commercial building with hotel and retail on Lot 1 of the Arts and Humanities Block and a “a public-private center for the promotion of modern arts and humanities assembly” on Lot 2 of the Arts and Humanities Block. While the mixed-use commercial hotel project was constructed on Lot 1, the public-private center was not constructed on Lot 2. Lot 2 has remained vacant for over 10 years, operating as an underused gravel parking lot.

This amendment to the North Haymarket Arts and Humanities Center Redevelopment Project proposes the changes in red below to both the existing project and Phase II, as well as the addition of the Phase III, below.

**North Haymarket Arts and Humanities Center Redevelopment Project**

The North Haymarket Arts and Humanities Center Redevelopment Project area incorporates all of the block located between 8th and 9th Streets and R and S Streets in Downtown Lincoln (except for the northeast parcels at 421 N. 9<sup>th</sup> Street and vacated quarter alley) and adjacent right-of-way, including S Street north to the property line, 8th Street west to the curb property line, R Street south to the curb property line, and 9th Street east to the curb property line from north side of T Street to south side of Q Street, as shown on the map below. The goals of this project are to strengthen and extend the Haymarket district by removal of blighted structures; redevelopment of an existing building into a modern, mixed-use office/retail building; ~~construction of a public-private center for the promotion of modern arts and humanities assembly;~~ and, the construction of a mixed-use commercial building; **and, the construction of an extended-stay hotel in place**

of the originally proposed public-private center for the promotion of modern arts and humanities assembly.

## Phase II - North Haymarket Mixed-Use Redevelopment Project

### Revitalization Project Description

The North Haymarket Mixed-Use Redevelopment Project Area, Phase Two of the North Haymarket Arts and Humanities Center Block, is comprised of the Arts and Humanities Block Addition, Lots 1 and 2, (southwest quarter half of block previously named Block 21), located between 8th and 9th Streets and R and S Streets in Downtown Lincoln, and adjacent alley, including surrounding right-of-way, including S Street north to the property line, 8th Street west to the curb line, R Street south to the curb line, and 9th Street east to the curb line, and east-west alley.



North Haymarket Arts and Humanities Center Redevelopment Project Area with Three Phases

North Haymarket - Project Area PHASE I PHASE II PHASE III N/A



## Phase III - North Haymarket Hotel Redevelopment Project

### Project Description

The North Haymarket Hotel Redevelopment Project (the “Project”) proposes the redevelopment of the gravel parking lot (northwest corner of N. 9<sup>th</sup> and R Streets) in Downtown Lincoln and more particularly described as follows: The Arts and Humanities Block Addition, Lot 2, the City of Lincoln, Lancaster County, Nebraska (the “Project Site”). The Project Site is depicted on the map, below.

The project was the site of the previously proposed public-private center for the promotion of modern arts and humanities assembly. However, since the demolition of the University-owned building over ten years ago, the lot has not been improved.

The new Phase III Project involves the construction of a new six-story, 122-room, extended-stay hotel building on the Project Site. The new structure will meet the desire for density and provide a new entrance off I-180 into the Historic Haymarket District.

The Project is intended to enhance Downtown Lincoln as a dynamic, regional, mixed-use center. The Project abuts the Historic Haymarket District and is located along the R Street entryway into the District. The Project will extend the existing R Street streetscape and canopy structure to 9<sup>th</sup> and wrap around the building extending streetscape improvements to S Street.

The Project Site is adjacent to the Marriott Courtyard Hotel and proposes a shared and/or complementary courtyard area. Other uses on the block include commercial hotel, retail, office, and parking. The Haymarket Parking Garage is located to the south. Uses in the area, including other hotels and entertainment uses, such as restaurants and Pinnacle Bank Arena, as well as other commercial and high density residential are consistent with the proposed use. See the current land use and future land use maps, below.



Phase III – North Haymarket Hotel Redevelopment Project with Phase III Site

PHASE III Project Site



Phase III – Current Land Use

PHASE III Project Site  
 Apartments Commercial Educational Parking Lot  
 Commercial w/Res Light Industrial Public Parking Garage



Phase III – Future Land Use

PHASE III Project Site  
 Apartments Commercial Educational Parking Lot  
 Commercial w/Res Light Industrial Public Parking Garage



The Project Site is located in the “B-4” - Lincoln Center Business zoning district. The B-4 Lincoln Center Business District provides for business, retail, and other uses, and is designed to encourage the Lincoln Center Business District to remain the dominant multi-use center and key focal point of business, social, and cultural activity in the City of Lincoln. The land surrounding the Project Site is exclusively zoned B-4 Lincoln Center Business District as well, except for “P” zoned land for the post office and Pinnacle Bank Arena to the west and University to the east.

The Project is consistent with the Lincoln Center Redevelopment Plan, which encourages development of projects that support Downtown and the Haymarket Districts as the employment, cultural, and entertainment core of our City, and a regional destination. Additionally, the project utilizes an underdeveloped, vacant lot. The project also supports integrating streetscape and landscape improvements in the project area with existing public and private amenities.

The Project is also consistent with PlanForward, the Lincoln-Lancaster County 2050 Comprehensive Plan. In particular, the Project supports PlanForward Element 2: Infill and Redevelopment by utilizing an unimproved lot in Downtown and providing the opportunity for high-density development, and Policy 5: Downtown which calls for continuing to make Greater Downtown a major focus for mixed-use, reuse, infill, and redevelopment.

The Project is consistent with the 2018 Lincoln Downtown Master Plan as well which encourages the reuse or redevelopment of vacant or underutilized spaces as opportunities arise. The Project also supports the goal of bridging the connection between Haymarket and Central Downtown through enhancements at priority intersections and further supporting pedestrian travel through the entryways improvements to minimize the impact on and define spaces for pedestrians.

Redevelopment of the Project Site into a commercial hotel is also consistent with adjacent uses and the 2050 Lincoln Area Future Land Use Plan. Future land use is shown on the map below.



The Project represents a significant private investment in the Lincoln Center Redevelopment Area. Publicly funded redevelopment activities may include: a lease buy-down, site preparation and grading, demolition, environmental remediation, streetscape and public area improvements, utility improvements, energy efficiency enhancements, façade enhancements, and other public improvements in the Lincoln Center Redevelopment Area.

## **Statutory Elements**

***Property Acquisition, Demolition, and Disposal:*** The City does not intend to acquire property, nor would the City use eminent domain if the City did acquire property for this project. The proposed redeveloper currently controls the Project Site. There is not relocation assistance necessary, as there are no structures on the site.

***Population Density:*** The Project will not increase population on the project site. The will not materially change population density in the Lincoln Center Redevelopment Area, except that employees of the hotel may choose to live Downtown.

***Land Coverage:*** The Project will increase land coverage on the Project Site as the building will be built to three of the four existing property lines, with some exterior courtyard space. Improvements will be made to the streetscape that will include amenities, including extending the existing canopy structure. The Project will comply with the applicable land-coverage ratios and zoning requirements of the City of Lincoln.

***Traffic Flow, Street Layouts, and Street Grades:*** The Project is expected to increase traffic flow from the current site utilization. Project traffic will be generated by hotel guests and employees, travelling to and from the Project Site and parking facilities. The alleys within and adjacent to the site are already vacated.

Changes to the right of way will result from this project. The Project may include the enhancement of adjacent rights of way, including the removal of the S Street slip road and reconfiguration of S Street. The existing R Street hotel loading zone will be extended to the east.

***Parking:*** There are no parking requirements in the B-4 District. The redeveloper intends to enter into an agreement with the City of Lincoln permitting use of parking in the City's parking facilities.

***Zoning, Building Code, and Ordinances:*** The Project Site is currently zoned B-4 Lincoln Center Business District, and the Project is a permitted use in such district. No rezoning of the Project Site will be required as part of the Project. All applicable building code requirements and ordinances will be satisfied.

## Proposed Cost and Financing

The estimated total cost to implement the Project is approximately \$29,000,000, which includes up to an estimated \$4,550,000 in public financing. The project cost will be finalized as construction costs are determined. The source of the public funds for these improvements will be the tax increment generated from the private developments on the Project Site. Funding sources and uses will be negotiated and identified in the redevelopment agreement, subject to approval by the Mayor and City Council.

### Cost Benefit Analysis

As required by Nebraska Community Development Law (Neb. Rev. Stat. §18-2113), the City has analyzed the costs and benefits of the proposed Project including:

#### Public Tax Revenues

At current estimates of a final assessed value of approximately \$19 million and a five percent interest rate, the Project is expected to generate up to approximately \$4.55 million in TIF revenue for the construction of public improvements and enhancements related to the Project. Depending on valuation over time and interest rate, the estimated TIF could range from \$4 to \$5.5 million.

Tax Increment Financing Analysis		Amount
Base Value	= Current Assessed Value	\$734,500
New Assessed Value	= New Assessed Valuation	\$19,000,000
Increment Value	= New Assessed Value - Base Assessed Value	\$18,265,500
Annual TIF Generated	= Increment x 0.02	\$365,310
Bond Note Issue	= Annual TIF x 20 years @ 5%	\$4,552,570

Upon completion of the Project, the assessed value of the Project Site will increase by an estimated \$18.3 million as a result of the private investment for the Project. This will result in an increase in estimated annual property tax collections during the 20-year TIF period of approximately \$365,000 per year which will be available to finance the costs of construction of the public improvements and enhancements related to the Project. The public investment of an estimated \$29 million will leverage approximately \$24.5 million in private sector financing, or nearly \$5.50 for every TIF dollar spent. The TIF funds shall be subject to further adjustment as project costs are defined.

The City will forgo approximately 15.95 percent of these annual collections or approximately \$58,000 per year up to 20 years to support the Project. The tax increment gained from this Project Area would not be available for use as City general tax revenues over that time, but be used toward bond repayment. After the 20-year period or the debt has been retired, the increase in annual taxes paid will be split among the taxing jurisdictions according to the tax levy.

### ***Public Infrastructure and Community Public Service Needs Impacts***

It is not anticipated that the Project will have an adverse impact on existing public infrastructure. In fact, the Project involves the capture of the incremental tax revenues for streetscape and public area enhancements, among other public infrastructure improvements in the Lincoln Center Redevelopment Area. The Project is not expected to have an adverse impact on City services, but instead will generate additional revenue providing support for those services.

### ***Employment within the Redevelopment Project Area***

The Project is anticipated to bring approximately 50 FTE employees to the Project Site. Further, the project construction will create expanded housing opportunities for employers and employees of firms locating or expanding within the Lincoln Center Redevelopment Area. Due to the proximity of the Project Site to the West Haymarket, the Project is expected to create new housing opportunities for young professionals, business executives and established business owners.

### ***Employment in the City outside the Redevelopment Project Area***

The Project is not expected to adversely affect employment in the City outside the Lincoln Center Redevelopment Area. Instead, the removal of blight and substandard conditions from the Project Site and the Lincoln Center Redevelopment Area is anticipated to enhance downtown Lincoln as a dynamic, regional, mixed-use center. Additionally, the hotel will further support the entertainment sector. As a result, it is anticipated that the Project will attract further commercial and retail development, which will both create and support additional jobs in the Lincoln Center Redevelopment Area, on the University of Nebraska campus, and in the City of Lincoln as a whole. The Project should increase the need for services and products and related employment from existing businesses in and around the Lincoln Center Redevelopment Area.

### ***Impacts on the Student Populations of School Districts within the City***

The Project is not expected to have an impact on student populations of school districts within the City of Lincoln. To the extent that this project will increase employment within the City and new opportunities for people to live within the City, as a result, this project may have an indirect impact on a general increase in population, potentially including children.

### ***Other Impacts***

While the use of tax increment financing will defer receipt of a majority of the incremental ad valorem real property taxes generated by the Project for up to 20 years, there will be additional revenue generated by the Project from, for example, sales taxes generated by the visitors of the Project, who will purchase goods and services in downtown Lincoln. Upon completion of the 20-year TIF period, the Project will benefit the community through higher property tax revenue.

### ***Finding of Need for TIF:***

Section 18-2116 of the Act requires the City Council to make the following findings before authorizing the use of TIF:

- the Project and plan as proposed would not be economically feasible without the use of TIF; and,
- the Project as proposed would not occur in the Redevelopment Area without the use of TIF.

Redeveloper believes that the private and public improvements proposed in this plan amendment would not occur “but for” the utilization of TIF in the Redevelopment Area. It would not be economically feasible for Redeveloper to construct the Project improvements without TIF. The existing site conditions constitute a barrier to development that Redeveloper cannot adequately remedy without the use of TIF.

### **Project Schedule and Implementation**

Following the approval of the Plan Amendment, the following steps will occur in the implementation of the project:

- The City will negotiate a redevelopment agreement with Redeveloper and submit said redevelopment agreement to City Council for approval.
- Following agreement approval, the City may issue and sell Community Improvement Financing bonds or notes to fund the public improvements related to the project.
- The City will review construction drawings of public and private improvements for conformance with the Redevelopment Agreement.
- Redeveloper will competitively bid TIF-funded public improvements according to City standards, as needed and with assistance from the City’s Purchasing Department.
- Redeveloper will construct the private and public improvements and enhancements.
- City will reimburse Redeveloper for eligible public improvements and enhancements, as described in the Redevelopment Agreement, after it receives required documentation from Redeveloper and the City receives the increment.

October 19, 2022

Andrew Thierolf, AICP  
Lincoln Lancaster County Planning Department  
City / County Building  
555 S 10th Street  
Lincoln, NE 68508

Dear Andrew:

Please find the amendment to the North Haymarket Arts and Humanities Center Project in the Lincoln Redevelopment Plan attached. This Amendment proposes to amend the North Haymarket Arts and Humanities Center Redevelopment Project of the Lincoln Center Redevelopment Plan to:

- adjust the North Haymarket Arts and Humanities Center Redevelopment Project Area to include additional rights of way,
- remove Lot 2 from Phase II – North Haymarket Mixed-Use Redevelopment Project,
- create the Phase III – North Haymarket Hotel Redevelopment Project, and
- replace the original project proposed description for Lot 2 with Phase III.

Once submitted through Project Dox, please forward the proposed amendment to the Planning Commission for their consideration of its consistency with the Comprehensive Plan at the November 16, 2022 public hearing. We request that the amendment also be scheduled at City Council for introduction on December 5, 2022 and public hearing on December 12, 2022.

If you have any questions about the plan amendment or schedule, please contact me at 402.441.7866 or [hsalem@lincoln.ne.gov](mailto:hsalem@lincoln.ne.gov).

Best Regards,



Hallie Salem  
Redevelopment Manager



## LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER Text Amendment #22009	FINAL ACTION? No
PLANNING COMMISSION HEARING DATE November 16, 2022	RELATED APPLICATIONS SP1573B

**RECOMMENDATION: APPROVAL**

### BRIEF SUMMARY OF REQUEST

The proposed text amendment was submitted by Mark Hunzeker to amend Lincoln Municipal Code (LMC) 27.63.530 Healthcare Facilities, Residential. The proposed amendment is to remove text provisions pertaining to having up to four individuals sixty years of age or older and one family acting as the residential caretaker.

### JUSTIFICATION FOR RECOMMENDATION

The proposed text amendment is to remove provisions that date back to older Zoning Ordinance text that is not necessary for a residential health care facility today.

### APPLICATION CONTACT

Mark A. Hunzeker  
402-432-2987 or  
[mhunzeker@remboltlawfirm.com](mailto:mhunzeker@remboltlawfirm.com)

### STAFF CONTACT

George Wesselhoft, Planner  
402-441-6366 or  
[gwesselhoft@lincoln.ne.gov](mailto:gwesselhoft@lincoln.ne.gov)

### COMPATIBILITY WITH THE COMPREHENSIVE PLAN

The proposed text is in conformance with the Comprehensive Plan by allowing flexibility for growth and health care access.

### KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN

#### Policies Section

P12: Economic Growth - Promote and foster appropriate, balanced, and focused future economic growth that maintains the quality of life of the community.

#### Action Steps

6. Explore additional opportunities for streamlining the zoning and building permitting processes.

P43: Health Care Access - Encourage health care service facilities to meet the demand of the community's growth and need based on changing demographics.

#### Action Steps

2. Encourage medical services, including physical and mental health care services, to be integrated and accessible throughout the community.

### ANALYSIS

1. This text amendment is to amend LMC 27.63.530 Healthcare Facilities, Residential to remove the text that all facilities may have up to four individuals sixty years of age or older and one family acting as the residential

caretaker.

The specific text is found in paragraph c. of 27.63.530 as follows:

- c. The total number of client or employee residents shall not exceed the lot area ratio below except as provided for in this section, and provided that all facilities may have up to four individuals sixty years of age or older and one family acting as the residential caretaker:
  - i. AG zoning district: One person for 5,000 square feet of lot area;
  - ii. R-1 zoning district: One person per 3,000 square feet of lot area;
  - iii. R-2 and R-3 zoning districts: One person per 2,000 square feet of lot area;
  - iv. R-4 zoning district: One person per 1,000 square feet of lot area;
  - v. R-5 through R-8 zoning districts: One person per 750 square feet of lot area.
2. The provisions in question, having up to four individuals sixty years of age or older and one family acting as the residential caretaker is a holdover from an older Zoning Ordinance that pertained to domiciliary care facilities.
3. The Planning Department had previously identified the provisions in question as obsolete and needing to be removed through a text amendment. Residential health care facilities do not need any age restrictions either for residents or staff. These types of facilities generally include residents and employees. The employees may reside on the premises but generally they do not.
4. The related Special Permit 1573B is to allow for a residential health care facility with the same number of residents/patients as currently allowed for the property at 1740 Superior Street. This location presently has a Special Permit for domiciliary care facilities. The original SP1573 was approved in August 1995 and was to operate a domiciliary care facility for elderly residents suffering from the early stages of dementia.
5. The proposed text amendment aligns with the Comprehensive Plan by providing flexibility for growth and health care access without negatively impacting residential neighborhoods.

Prepared by

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George Wesselhoft, Planner

Date: November 3, 2022

Applicant: Mark A. Hunzeker  
3 Landmark Centre  
1128 Lincoln Mall, Suite 300  
Lincoln, NE 68508  
402-432-2987  
[mhunzeker@remboltlawfirm.com](mailto:mhunzeker@remboltlawfirm.com)

Contact: Mark A. Hunzeker  
3 Landmark Centre  
1128 Lincoln Mall, Suite 300  
Lincoln, NE 68508  
402-432-2987  
[mhunzeker@remboltlawfirm.com](mailto:mhunzeker@remboltlawfirm.com)

<https://linclanc.sharepoint.com/sites/PlanningDept-DevReview/Shared Documents/DevReview/TX/22000/TX22009 residential health care facilities.gjw.docx>

## George J. Wesselhoft

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**From:** Emma D. Martin  
**Sent:** Wednesday, October 19, 2022 10:03 AM  
**To:** George J. Wesselhoft  
**Subject:** FW: Special Permit #1573  
**Attachments:** Scanner\_20221019\_094036.pdf

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**From:** Mark A. Hunzeker <mhunzeker@remboltlawfirm.com>  
**Sent:** Wednesday, October 19, 2022 9:45 AM  
**To:** Emma D. Martin <EMartin@lincoln.ne.gov>  
**Subject:** Special Permit #1573

Ms. Martin:

Attached is a letter of explanation regarding my application to amend SP 1573. I am now in receipt of your email this morning informing me that I also need to send you a letter for my self-explanatory application for amendment to the text of the zoning ordinance to eliminate language limiting occupants of Residential Healthcare Facilities to age 60 or older. Please accept this email in lieu of yet another letter for that purpose. Thank you.

**Mark A. Hunzeker** - ATTORNEY  
[mhunzeker@remboltlawfirm.com](mailto:mhunzeker@remboltlawfirm.com)

**Rembolt | Ludtke**

Rembolt Ludtke LLP  
3 Landmark Centre  
1128 Lincoln Mall, Suite 300  
Lincoln, NE 68508  
P 402.475.5100 | C 402.432.2987  
[www.remboltlawfirm.com](http://www.remboltlawfirm.com)

ORDINANCE NO. \_\_\_\_\_

1 AN ORDINANCE amending Lincoln Municipal Code Section 27.63.530 Healthcare  
2 Facilities, Residential to remove the condition that residential healthcare facilities may only have  
3 up to four individuals sixty years of age or older and one family acting as the residential caretaker;  
4 and repealing Sections 27.63.530 as hitherto existing.

5 BE IT ORDAINED by the City Council of the City of Lincoln, Nebraska:

6 Section 1. That Section 27.63.530 of the Lincoln Municipal Code be amended to read  
7 as follows:

8 **27.63.530 Healthcare Facilities, Residential.**

9 Residential health-care facilities may be allowed by special permit in the AG, R-1, R-2, R-3, R-4,  
10 R-5, R-6, R-7, R-8, O-1, O-2, R-T, B-1, B-2, B-3, B-4, and B-5 zoning districts under the following  
11 conditions:

12 a. Parking shall be in conformance with [Chapter 27.67](#) unless modified under the condition of  
13 the special permit, provided that no parking shall be permitted in the required front or side  
14 yards.

15 b. Residential healthcare facilities shall be licensed to comply with all state requirements.

16 c. The total number of client or employee residents shall not exceed the lot area ratio below  
17 except as provided for in this section, ~~and provided that all facilities may have up to four~~  
18 ~~individuals sixty years of age or older and one family acting as the residential caretaker:~~

19 i. AG zoning district: One person for 5,000 square feet of lot area;

20 ii. R-1 zoning district: One person per 3,000 square feet of lot area;

- 1       iii.    R-2 and R-3 zoning districts: One person per 2,000 square feet of lot area;
- 2       iv.    R-4 zoning district: One person per 1,000 square feet of lot area;
- 3       v.    R-5 through R-8 zoning districts: One person per 750 square feet of lot area.

4       d.    Depending on the character of the development and impacts on adjacent land uses, the  
5       Planning Commission may grant an increase in the number of residents allowed in (d) above  
6       where the site plan and building plans comply with the [barrier-free standards in the design](#)  
7       [standards as adopted by the City Council](#). Such increase shall not exceed fifty percent.

8       e.    The height and lot requirements of the district in which the proposed use is located shall  
9       apply provided, however, that if the area of the lot is one acre or more, the height  
10      requirement of the district may be adjusted to provide flexibility in the design of buildings  
11      and to provide compatibility with surrounding uses except that solar access to adjacent  
12      buildings or potential buildings on land under other ownership shall not be reduced by such  
13      adjustment. In the AG zoning district, residential healthcare facilities shall be located on a  
14      lot having a minimum of five acres.

15      f.    The sale of alcohol for consumption on and/or off the premises is allowed as a permitted  
16      accessory use as part of a residential health-care facility otherwise approved according to  
17      this Section.

18      Section 2.    That Sections 27.63.530 of the Lincoln Municipal Code as hitherto existing  
19      be and the same is hereby repealed.

20      Section 3.    This ordinance shall be published, within fifteen days after the passage  
21      hereof, in one issue of a daily or weekly newspaper of general circulation in the City, or posted on  
22      the official bulletin board of the City, located on the wall across from the City Clerk's office at  
23      555 S. 10<sup>th</sup> Street, in lieu and in place of the foregoing newspaper publication with notice of

1 passage and such posting to be given by publication one time in the official newspaper by the City  
2 Clerk. This ordinance shall take effect and be in force from and after its passage and publication  
3 or after its posting and notice of such posting given by publication as herein and in the City Charter  
4 provided.

Introduced by:

\_\_\_\_\_

Approved as to Form & Legality:

\_\_\_\_\_  
City Attorney

Approved this \_\_\_ day of \_\_\_\_\_, 2022:

\_\_\_\_\_  
Mayor

**LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT**

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER  
Change of Zone #08057D

FINAL ACTION?  
No

DEVELOPER/OWNER  
Nebraska Wesleyan University

PLANNING COMMISSION HEARING DATE  
Nov. 16, 2022

RELATED APPLICATIONS  
None

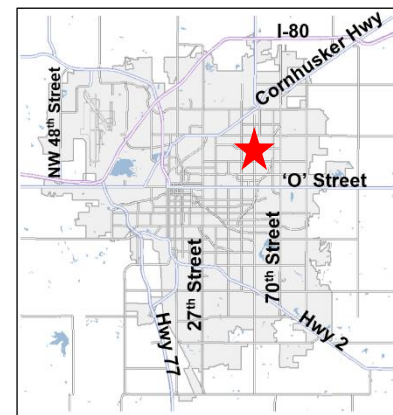
PROPERTY ADDRESS/LOCATION  
2626 North 48<sup>th</sup> Street, Lincoln, NE

**RECOMMENDATION: CONDITIONAL APPROVAL**

**BRIEF SUMMARY OF REQUEST**

This is a request to amend the University Place Planned Unit Development (PUD) to allow an indoor theater at 2626 N. 48<sup>th</sup> Street, Lincoln, NE.

The amendment is request by the applicant in order to allow indoor theater use within the PUD. Indoor theaters require a Special Permit in all B-3 zoning districts but are not called out in the University Place PUD, so require an amendment to the PUD.



**JUSTIFICATION FOR RECOMMENDATION**

The University Place PUD was originally developed to support a mix of land uses and flexibility with regard to adjusting certain requirements, such as for parking and signs.

This application seeks to allow indoor theater as a special use at 2626 N. 48<sup>th</sup> Street, provided it meets all the requirements for a special permit for an indoor theater in a B-3 district with one exception, that being parking.

The required parking for an indoor theater at 2626 N. 48<sup>th</sup> Street is 3 parking stalls due to the small floor area of the building and the reduced parking requirements of the University PUD. And due to the publicly-owned off-street parking, there will 3 parking stalls within 600 feet of the proposed use.

**APPLICATION CONTACT**

Petra Wahlqvist, (402)-817-8176 or  
petra@blix.info

**STAFF CONTACT**

Emma Martin, (402) 441-6369 or  
emartin@lincoln.ne.gov

**COMPATIBILITY WITH THE COMPREHENSIVE PLAN**

The Comprehensive Plan supports a mix of uses and infill commercial development that is compatible with existing neighborhoods and supports the retention and expansion of existing businesses.

**WAIVERS**

1. To modify the parking requirement of LMC 27.67.040(i) (as previously modified by the PUD) from one parking space per every 50 square feet of seating area so no additional parking is required. (Recommend Approval)

## KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN

### Goals Section

G2: Complete Neighborhoods. Lincoln and Lancaster County will support complete neighborhoods within both developing and redeveloping areas of Lincoln. A complete neighborhood is one where residents are able to get the goods and services to meet daily needs within 15 minutes of their residence including a variety of housing options, grocery stores and other commercial services, quality public schools, public open spaces and recreational facilities, affordable active transportation options, and civic amenities. Housing variety should include townhomes, senior living facilities, low/no maintenance condominiums, accessory dwelling units, multi-family development, and even small lot single-family.

G4: Economic Opportunity. Lincoln and Lancaster County will have high-quality jobs in an economic environment that supports business creation, innovation, and expansion. Quality-of-life attributes, such as diverse and accessible housing, good shopping, restaurants and entertainment, quality schools and healthcare, a sense of safety, and amenities such as parks and trails are important to ensuring that skilled individuals want to remain or relocate to our community.

### Policies Section

P12: Economic Growth - Promote and foster appropriate, balanced, and focused future economic growth that maintains the quality of life of the community.

#### Action Steps

7. Focus primarily on retention and expansion of existing businesses; attracting new businesses should also be encouraged.

P17: Predictability - Strive for predictability for neighborhoods and developers.

#### Action Steps

1. Continue to make updates as needed to zoning and subdivision ordinances, along with design standards, to support economic development, complete neighborhoods, and other PlanForward initiatives.

## ANALYSIS

1. This is a request to amend the University Place Planned Unit Development (PUD) to allow for an indoor theater at 2626 N 48<sup>th</sup> Street, which is currently an unoccupied building, previously classified for Grocery use by Lincoln Building & Safety. The application came with a request to waive the 3 required parking stalls to 0 parking stalls.
2. The University Place PUD, which includes 2626 N 48<sup>th</sup> Street, was approved in 2009 with the understanding that any number of dwelling units and square footage of other uses will be permitted in the PUD subject to the requirements of the PUD and zoning ordinance.
3. In August of 2022, BLIXT Locally Grown and Nebraska Wesleyan University submitted an application to Building & Safety change the use of 2626 N 48<sup>th</sup> Street from Retail use to Small Performances and Educational Classes. Building & Safety noted that the applicants would need to have an approved amendment to the PUD to allow for an indoor theater.
4. Indoor theaters, as a use, are only allowed by Special Permit in B-3 districts. In this case, due to the existence of the PUD, the applicant was required to apply for an amendment to the Planned Unit Development to allow for indoor theaters as a use.
5. The applicant is requesting a waiver to reduce the parking requirement from 3 stalls to 0 stalls due to their inability to create new parking stalls because of lack of space and their inability to create a joint parking agreement with nearby businesses. The City previously granted a similar waiver within this PUD to MoJava (2649 North 48<sup>th</sup> Street) and reduced the required parking from 4 stalls to 0 stalls due to similar circumstances.
6. The proposed amendment is appropriate for the University Place PUD. It maintains the criteria for a special permit and makes an accommodation for the unique development and land use pattern in University Place with regard to

parking. This amendment works toward the Comprehensive Plan’s goal of revitalizing and sustaining older commercial districts located in Lincoln.

**CONDITIONS OF APPROVAL:** See attached.

**EXISTING LAND USE & ZONING:** Commercial; B-3 PUD (Planned Unit Development)

**SURROUNDING LAND USE & ZONING**

North: Commercial; B-3  
South: Commercial; B-3  
East: Commercial; B-3  
West: Commercial; B-3

**APPLICATION HISTORY**

- Oct. 2022 Change of Zone #08057C was approved by the Planning Commission to allow the use of pole signs south of Leighton Avenue. The City Council had its first reading of Change of Zone #08057C on Oct. 31, 2022.
- Jan. 2020 Change of Zone #08057B was approved by the City Council to allow for an existing motorized vehicle sales use to continue at 2928 N. 48<sup>th</sup> Street, with conditions and waivers for such use added in conjunction with existing use.
- Mar. 2014 Administrative Amendment #14007 to Change of Zone #08057A was approved by the Planning Director to not provide additional parking stalls associated with expansion of the MoJava restaurant.
- Jun. 2011 Change of Zone #08057A was approved by the City Council to allow the sale of alcohol for consumption on the premises as a conditional use, with a waiver to required parking for such use added in conjunction with an existing use.
- Jan. 2009 The University Place PUD was approved under Change of Zone #08057 adjusting allowed land uses, parking regulations, and sign regulations.

**APPROXIMATE LAND AREA (AREA OF AMENDMENT):** 0.05 acres

**LEGAL DESCRIPTION:** Lot 6, Ellinwood and Shanks Subdivision, located in the NE 1/4 of Section 17-10-7, generally located at 2626 North 48th Street.

Prepared by

\_\_\_\_\_  
Emma Martin, Planner

Date: Nov. 3, 2022

**Applicant:** BLIXT Locally Grown  
PO Box 22152  
Lincoln, NE 68542

**Contact:** Petra Wahlqvist  
2620 Everett Street  
Lincoln, NE 68502

(402)-817-8176 or [petra@blixr.info](mailto:petra@blixr.info)

Owner: Tish Gade-Jones, Nebraska Wesleyan University  
5000 Saint Paul Avenue  
Lincoln, NE 68504  
(402)-465-7513 or [tgadejon@NebrWesleyan.edu](mailto:tgadejon@NebrWesleyan.edu)

<https://linclanc.sharepoint.com/sites/PlanningDept-DevReview/Shared Documents/DevReview/CZ/08000/CZ08057D University Place PUD.edm.docx>

## CONDITIONS OF APPROVAL - CHANGE OF ZONE #08057D

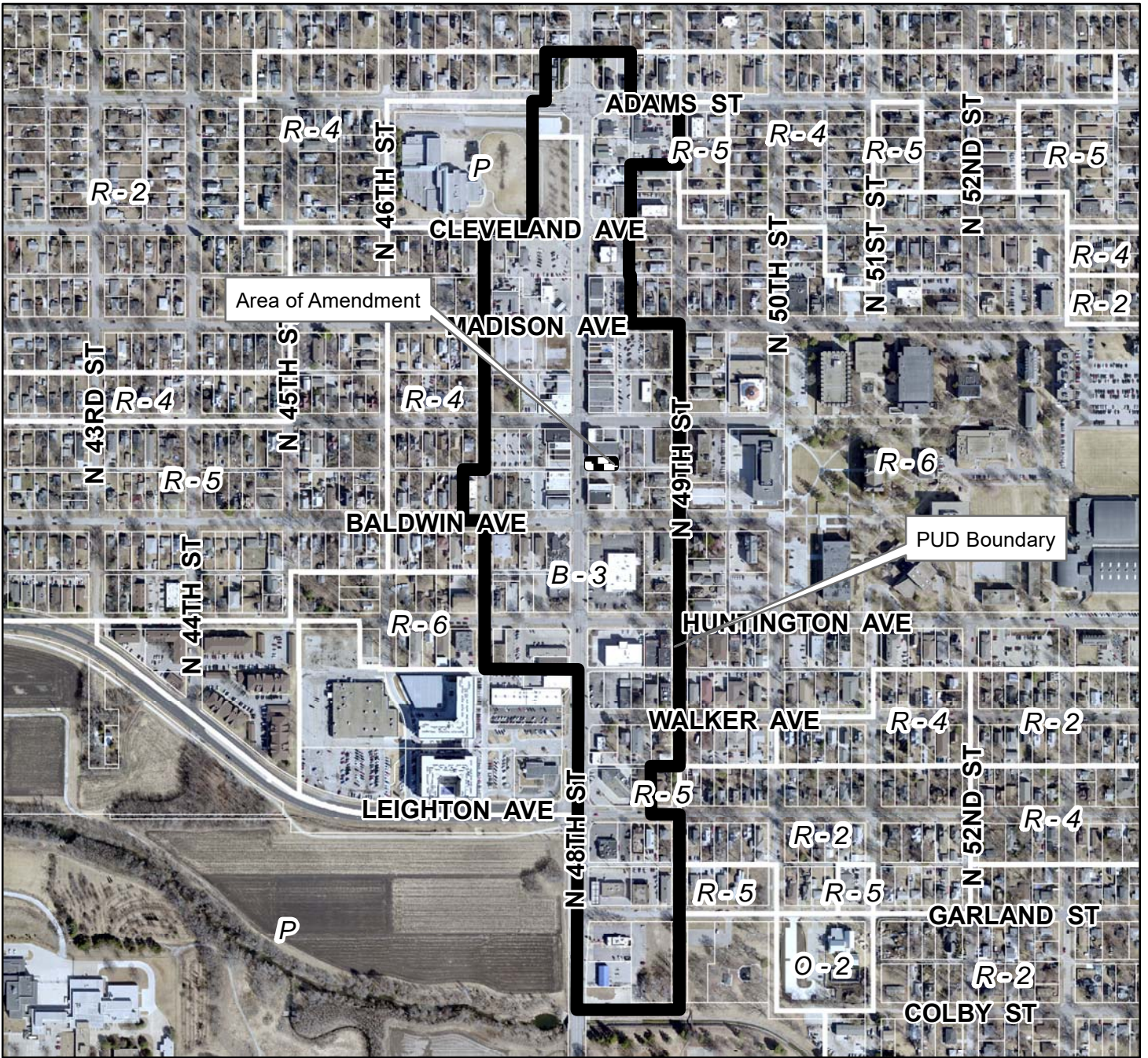
This approval authorizes an amendment to the University Place Planned Unit Development Plan to allow an indoor theater at 2626 N. 48<sup>th</sup> Street.

### Site Specific Conditions:

1. The permittee shall cause to be prepared and submitted to the Planning Department two copies of a revised and reproducible Final Development Plan with all required revisions and documents (See attached Draft Text Change).

### Standard Conditions:

2. The following conditions are applicable to all requests:
  - 2.1 Before occupying the building all development and construction shall substantially comply with the approved plans.
  - 2.2 All privately-owned improvements shall be permanently maintained by the owner or an appropriately established homeowners association approved by the City Attorney.
  - 2.3 The physical location of all setbacks and yards, buildings, parking and circulation elements, and similar matters must be in substantial compliance with the location of said items as shown on the approved site plan.
  - 2.4 The terms, conditions, and requirements of the ordinance shall run with the land and be binding upon the developer, its successors and assigns.
  - 2.5 The applicant shall sign and return the letter of acceptance to the City Clerk. This step should be completed within 60 days following the approval of the special permit. The City Clerk shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds, filing fees therefore to be paid in advance by the applicant. Building permits will not be issued unless the letter of acceptance has been filed.
  - 2.6 The Developer shall after constructing the private roadways furnish the Lincoln Transportation and Utilities Department an accurate survey of the centerline. **NOTE- use this if the development will not be included in a final plat.**
  - 2.7 The site plan as approved with this ordinance voids and supersedes all previously approved site plans, however all ordinances approving previous permits remain in full force and effect unless specifically amended by this ordinance.

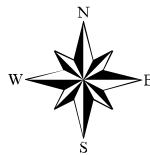


2022 aerial

**Change of Zone #: CZ08057D**  
**University Place PUD**  
**N 48th St & St Paul Ave**

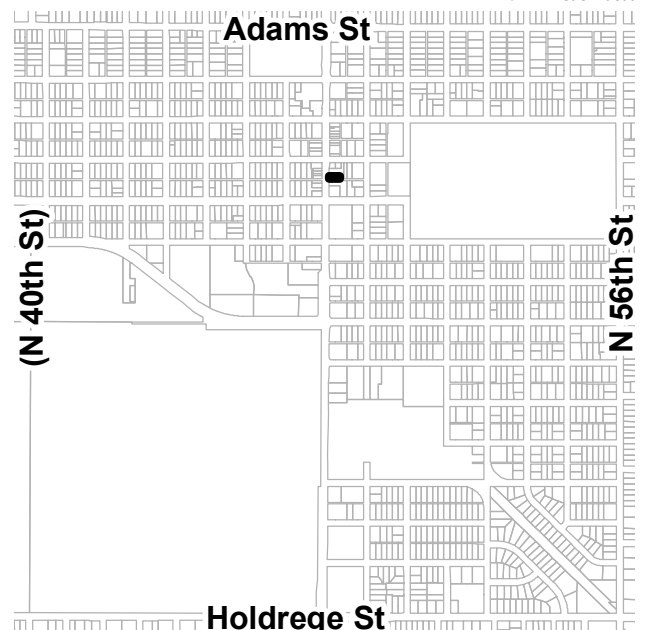
**Zoning:**

- R-1 to R-8 Residential District
- AG Agricultural District
- AGR Agricultural Residential District
- O-1 Office District
- O-2 Suburban Office District
- O-3 Office Park District
- R-T Residential Transition District
- B-1 Local Business District
- B-2 Planned Neighborhood Business District
- B-3 Commercial District
- B-4 Lincoln Center Business District
- B-5 Planned Regional Business District
- H-1 Interstate Commercial District
- H-2 Highway Business District
- H-3 Highway Commercial District
- H-4 General Commercial District
- I-1 Industrial District
- I-2 Industrial Park District
- I-3 Employment Center District
- P Public Use District



One Square Mile:  
 Sec.17 T10N R07E

	Area of Application
	Zoning Jurisdiction Lines
	Lancaster County Jurisdiction





**BLIXT**

David R. Cary, Director  
Lincoln-Lancaster County Planning Department  
555 South 10th Street, Suite 213  
Lincoln, NE 68508

**President**

DeWayne Taylor

**Vice President**

Rachel McConnell

**Secretary**

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Carly Woythaler-Runestad

Dr. Deepak Keshwani, Ph.D

**Executive Director**

Becky Boesen

**Managing Director**

Petra Wahlqvist

October 28, 2022

Dear David,

We are writing from BLIXT Locally Grown, a Lincoln nonprofit organization that recently took over the tenancy at 2626 N 48th Street (landlord: Nebraska Wesleyan University).

We are applying to amend the PUD to allow indoor theater to be a use in the PUD.

We are also asking for a waiver to reduce our required parking spots from 3 to 0. We are not able to use the joint parking agreement as we have not been able to find other businesses with extra parking that we can utilize..

We are happy to answer any questions you may have about this application.

Yours Sincerely,

Becky Boesen  
Co-Founder and Executive Director

Petra Wahlqvist  
Co-Founder and Managing Director

Cc: James Michael Bowers

---

**Blixt Locally Grown**  
P.O. Box 22152 Lincoln, NE 68542  
402-817-8176  
info@blixt.space  
www.blixt.info

# University Place Planned Unit Development Plan

CZ#08057D

## General Notes

All new construction or changes in use within the boundaries of the PUD shall adhere to B-3 zoning except where modified by the PUD as follows:

### 1. Land Uses:

- (a) Dwellings are permitted on the first floor except within 50' of the right of way of N. 48<sup>th</sup> Street.
- (b) Alcohol for sale for consumption on the premises is permitted as a conditional use provided:
  - i. It meets all the requirements of LMC 27.63.680, except for parking. With regard to parking, the parking requirements of the PUD apply, and the inclusion of the sale of alcohol for consumption on the premises in conjunction with an existing use is not considered a change in use.
  - ii. The hours for the sale of alcohol shall not commence prior to 8:00 a.m. and shall end no later than 11:00 p.m.
  - iii. The hours of outdoor operation (beer garden, etc) shall not commence prior to 8:00 a.m. and shall end no later than 10:00 p.m.
- (c) Motorized vehicle sales and/or repair facilities are permitted as a conditional use on 2928 N. 48<sup>th</sup> Street within 100 feet of the adjacent residential use and district provided:
  - i. The streetscape along N. 48<sup>th</sup> Street is improved by (i) establishing a front yard from the face of the house to the property line, (ii) removing all pavement and gravel from the front yard and installing a landscape screen to the parking area south of the house that meets the design standards for parking lot screening; and (iii) installing parking barriers along the parking area south of the house to keep cars properly parked in the future.
  - ii. The driveway onto N. 48<sup>th</sup> Street from the north side of the house is removed to improve traffic safety.

- iii. A 6 feet high opaque fence is installed along the southern 20-22 feet of the site on the east property line to improve screening for neighbors to the east.
- iv. The permitted dwelling units in the house are reduced from six to one.
- v. The use complies with the approved Site Plan.
- vi. Any demolition and new buildings involving this use on the property shall be in full conformance with Title 27 except as otherwise modified by the PUD. Notwithstanding the above, existing buildings involving this use may be repaired, restored or reconstructed according to the approved Site Plan.

(d) An indoor theater is allowed as a permitted use at 2626 N. 48<sup>th</sup> Street with seating for up to 40.

## 2. Parking:

- (a) Parking requirement may be met within 600' of the property line.
- (b) Due to the availability of on-street parking and City-owned off-street parking lots, an overall ratio reduction of 50% shall apply to all nonresidential uses within the PUD, including all nonresidential uses with special parking requirements listed under 27.67.040. Additional minor amendments in the ratio may be approved administratively by the Planning Director, based on changes in land use and parking within and near to the PUD.
- (c) Residential uses with special parking requirements listed under 27.67.040 shall adhere to the parking requirements of the ordinance. The 50% ratio reduction does not apply.
- (d) Residential parking requirement is 1 space per dwelling unit if part of a mixed-use development on a single premises. The 50% ratio reduction does not apply.
- (e) Residential uses not part of a mixed-use development shall have a parking requirement of 1.75 spaces per dwelling unit. The 50% ratio reduction does not apply.

- (f) If the ratio reduction for a use still results in inadequate parking, an additional option is a joint parking agreement. Joint parking is currently permitted in the B-3 district by 27.67.040(dd). The PUD makes the following modifications to the joint parking ordinance:
- i. A premises which does not have nonconcurrent parking demand which is determined to have a parking surplus based on the PUD parking requirements may enter into a joint parking agreement with their additional stalls.
  - ii. In addition to churches and chapels, university land may also be used for joint parking agreements.
  - iii. The parties involved in a joint parking agreement are not required to reserve adequate land to supply parking in the event the nonconcurrent parking demand changes due to a change in use.
- (g) March 19, 2014 AA#14007 MoJava, 2649 North 48th Street An adjustment to the parking requirement for an approximate 700 square foot expansion into adjacent retail space was approved. The restaurant expansion required four additional parking spaces based upon the floor area, but credit for one parking space for the prior commercial use of the area of expansion was allowed, resulting in three additional required spaces. This amendment adjusted the required parking spaces from three to 0.
- (h) For 2626 North 48<sup>th</sup> Street the required parking is adjusted from 3 parking stalls to 0 for an indoor theater with seating for up to 40.

3. **Height and Area Regulations:**

- (a) B-3 height and area regulations shall apply unless and until the PUD is amended.

4. **Signs:**

- (a) Pole signs are prohibited, except for the area south of Leighton Avenue where pole

signs are allowed provided they meet the requirements of the B-3 zoning district (CZ08057C, City Council decision pending).

- (b) Off-premises signs are prohibited.
- (c) Permitted ground signs not to exceed 10' in height or 50 square feet in total area.
- (d) Signs need not be shown on this site plan, but need to be in compliance with Chapter 27.69 of the Lincoln Zoning Ordinance (except as modified by this PUD), and must be approved by Building and Safety Department prior to installation.

N. 48th ST.

2626

Parcel ID  
17-17-216-010-000

REVISED

SFP 20 2022

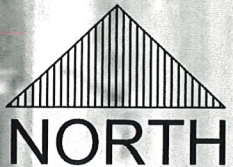
*entire set*

BUILDING & SAFETY

50' 20' 10' 5' 1'

Scale: 1/16" = 1'

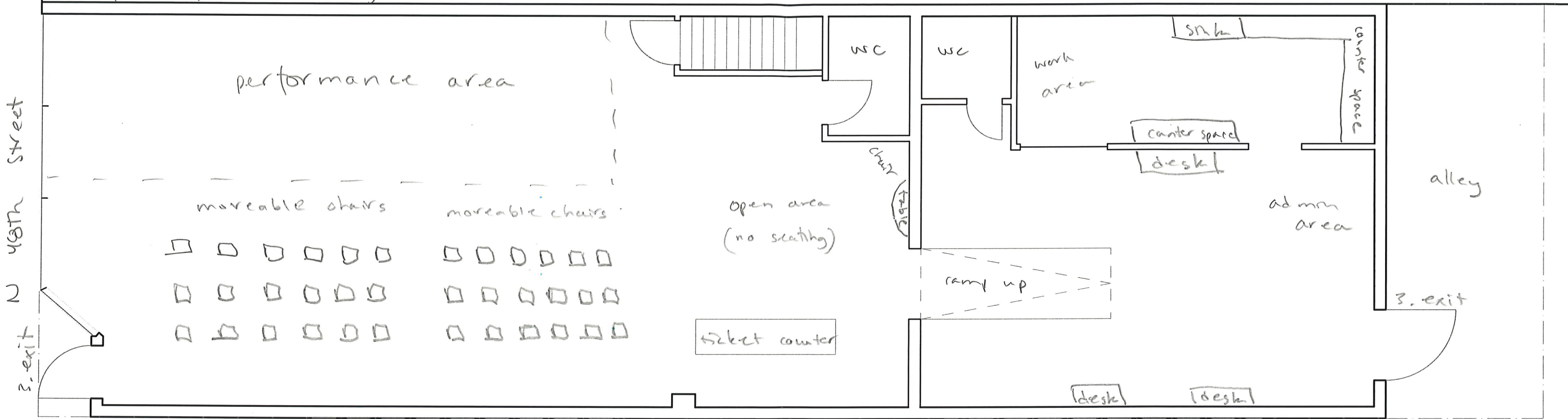
2626 N 48TH ST  
LINCOLN, NE 68504



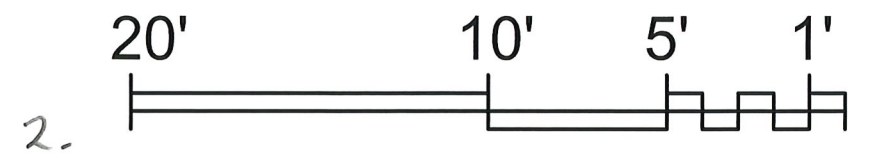
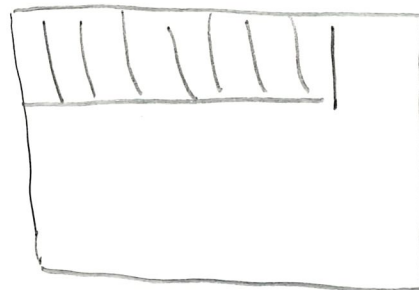
4. There is no kitchen

7. fire separation rathg wall

6. stairs to unused basement\*



\* basement not used



Scale: 3/16" = 1'



2626 N 48TH ST  
LINCOLN, NE 68504



**LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT**

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER  
Miscellaneous 22013  
*Van Dorn Redevelopment Area #2, Blight & Substandard Determination Study*

FINAL ACTION?  
No

PLANNING COMMISSION HEARING DATE  
November 16, 2022

RELATED APPLICATIONS  
None

LOCATION  
Generally 10<sup>th</sup> & High St

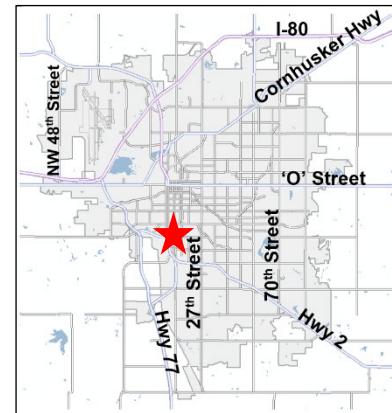
**RECOMMENDATION: FINDING OF SUBSTANDARD AND BLIGHTED CONDITIONS**

**BRIEF SUMMARY OF REQUEST**

The Van Dorn Redevelopment Area #2 includes 10<sup>th</sup> Street and High Street rights-of-way with a few adjacent properties, generally bounded by Van Dorn Street on the north, Calvert Street on the south, and 12<sup>th</sup> Street on the east.

This request is to determine whether the area qualifies as substandard and blighted within the definition set forth in the Nebraska Community Development Law, NEB REV STAT '18-2103.

The complete Blight & Substandard Study is on file with the Urban Development Department and the Planning Department. The Study can also be found online on the Planning Application Tracking System (PATS): [MISC22013](#).



**JUSTIFICATION FOR RECOMMENDATION**

The Van Dorn Redevelopment Area #2 qualifies as substandard and blighted within the definition set forth in the Nebraska Community Development Law, NEB REV STAT '18-2103, as determined by the Van Dorn Redevelopment Area #2 Blight & Substandard Determination Study.

Nebraska Community Development Law, NEB REV STAT '18-2109 requires the Planning Commission to review whether an area is substandard and blighted. A recommendation of the Planning Commission is required to be provided to the City Council prior to an area being declared blighted and substandard.

**COMPATIBILITY WITH THE COMPREHENSIVE PLAN**

The Comprehensive Plan identifies blight designations as part of the strategy to facilitate infill development and revitalization.

**APPLICATION/STAFF CONTACT**

Hallie Salem  
City of Lincoln Urban Development Dept  
(402) 441-7866  
[hsalem@lincoln.ne.gov](mailto:hsalem@lincoln.ne.gov)

## KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN

### Elements Section

#### E2: Infill and Redevelopment

##### **Redevelopment Incentives**

Facilitating infill and redevelopment in the existing city requires both a nuanced understanding of the challenges associated with redevelopment projects and a well-thought out set of strategies to overcome them. Commonly cited challenges to infill and redevelopment include land cost and assembly, access to financing, and zoning requirements.

Tax Increment Financing (TIF), facilitated by redevelopment plans in blighted areas, has been the city's most common tool for incentivizing infill redevelopment. TIF is authorized by Nebraska Community Development Law and has been utilized by the City of Lincoln since 1982. TIF uses the added tax revenue created by the redevelopment to finance project-related costs such as land acquisition, core and shell rehabilitation, and public improvements. Traditionally, the developer takes on the debt of the project, pays their full tax burden, and then is allocated back the increment to pay down the debt on the pre-identified project-related costs.

In 2019 the State legislature revised Nebraska Community Development Law to include an "extremely blighted" designation. Areas meeting the criteria of being extremely blighted are eligible for additional Housing Trust Fund dollars and state tax credits for owner-occupied home purchases.

There are many existing and potential redevelopment incentives beyond blighting and TIF (i.e. tax abatement, land value tax, impact fee exclusions).

### Policies Section

#### P8: Infill and Redevelopment

Infill projects should target existing underdeveloped or redeveloping areas in order to remove blighted conditions and more efficiently utilize existing infrastructure

## ANALYSIS

1. This is a request to determine whether the Van Dorn Redevelopment Area #2 should be declared substandard and blighted per '18-2103 (11) Nebraska Revised Statutes. After an area is declared substandard and blighted, the City has the option to proceed with the preparation and approval of a Redevelopment Plan.
2. Potential redevelopment activities associated with this area include utilizing Tax Increment Financing (TIF) to create improved pedestrian access to Van Dorn Park. Prior to utilization of TIF, a Redevelopment Plan would need to be submitted to the Planning Commission and City Council for review and finding of Comprehensive Plan Conformance.
3. The Urban Development Department hired a consultant who conducted the study to determine whether there was a presence of substandard or blighting conditions in the study area per '18-2103 (11) Nebraska Revised Statutes.
4. The Van Dorn Redevelopment Area #2 includes approximately nine acres. According to the land use categories identified in the Blight Study, approximately 76.6% of the land (6.9 acres) is Street/Right-of-Way, 10.0% (0.9 acres) is Undeveloped, 7.8% (0.7 acres) is Residential, and 5.6% (0.5 acres) is Commercial. The entire study area is within the City of Lincoln corporate limits.

5. The Urban Development Department requests the determination study be reviewed by the Planning Commission for conformance with the Comprehensive Plan.
  
6. A **substandard** area is defined in the Nebraska Revised Statutes as containing a predominance of buildings or improvements with at least one of four conditions present:
  1. Dilapidation/deterioration
  2. Age or obsolescence
  3. Inadequate provision for ventilation, light, air, sanitation or open spaces
  4.
    - a) High density of population and overcrowding; or
    - b) The existence of conditions which endanger life or property by fire and other causes; or
    - c) Any combination of such factors, is conducive to ill health, transmission of disease, infant mortality, juvenile delinquency, and crime, and is detrimental to the public health, safety, morals or welfare.
  
7. The area qualifies as **substandard** because according to the Blight study **three substandard** factors were found to have a strong presence in the study area. One factor was found to have a reasonable presence. The strong factors are summarized below.
  - A) Based on field evaluation three of the four structures are over 40 years of age. The average age of residential structures in the study area is 86 years (Page 20).
  - B) The inadequate provision for ventilation, light, air, sanitation, or open spaces is a strong presence. The three deteriorating buildings can pose health, safety, and sanitary problems. Water and sanitary mains are aging and described in condition from “good” to “fair” (Page 21).
  - C) The combination of deteriorating or dilapidated buildings, advanced age of structures, lack of adequate and/or modern utilities, and overall site conditions combine to have a detrimental impact to the public health, safety, morals or welfare of the area (Page 22).
  
8. A **blighted** area is defined in the Nebraska Revised Statutes as having the presence of one or more of the twelve following conditions:
  1. A substantial number of deteriorated or deteriorating structures;
  2. Existence of defective or inadequate street layout;
  3. Faulty lot layout in relation to size, adequacy, accessibility or usefulness;
  4. Insanitary or unsafe conditions;
  5. Deterioration of site or other improvements;
  6. Diversity of ownership;
  7. Tax or special assessment delinquency exceeding the fair value of the land;
  8. Defective or unusual conditions of title;
  9. Improper subdivision or obsolete platting;
  10. The existence of conditions which endanger life or property by fire or other causes;
  11. Any combination of such factors, substantially impairs or arrests the sound growth of the community, retards the provision of housing accommodations or constitutes an economic or social liability;
  12. Is detrimental to the public health, safety, morals, or welfare in its present condition and use; and in which there is at least one of the following conditions:
    - a) Unemployment in the designated blighted area is at least one hundred twenty percent of the state or national average;
    - b) The average age of the residential or commercial units in the area is at least 40 years;
    - c) More than half of the platted and subdivided property in the area is unimproved land that has been within the City for 40 years and has remained unimproved during that time;
    - d) The per capita income of the designated blighted area is lower than the average per capita income of the city or City in which the area is designated; or
    - e) The area has had either stable or decreasing population based on the last two decennial censuses.

9. The study found **six blighting** factors to be present to a strong extent in the study area. Four factors were demonstrated to have a reasonable presence, one little to no presence, and one factor was not reviewed. The strong factors are listed below:
- A) Faulty Lot Layout - the parcels within the redevelopment area are irregularly shaped due to being subdivided over the years on an as-needed basis (Page 27).
  - B) Insanitary or Unsafe Conditions - Three of the four existing structures are in deteriorating condition and the area lacks a complete sidewalk system and signaled pedestrian crossings. Segments of both water and sanitary sewer mains in the area are aging (Page 28).
  - C) Improper Subdivision or Obsolete Platting - Primarily due to irregular tracts (parcels) of land (Page 30).
  - D) Existing of Conditions Which Endanger Life or Property - Three of the four structures in the area are in a state of deterioration and 40+ years old. Water and sanitary mains in the area are aging, with some constructed of outmoded material (Page 30).
  - E) Other Environmental and Blighting Factors - Overall, the area contains aging structures and buildings that are deteriorating with minor and major defects. Outmoded utility systems are also prevalent in the area. Additionally, one parcel maintained “fair” overall site conditions (Page 31).
  - F) One of the Required Five Additional Blight Factors - Estimated average age of structures in the area is 86 years, exceeding the blight criteria of 40+ years of age (Page 32).
10. The study finds there are three strong factors that constitute an area as substandard within the study area, and out of 12 possible factors that constitute an area blighted, six are strongly present in the area. Therefore it is the conclusion of the study that sufficient conditions and factors meet the criteria of substandard and blight as evidenced in the Blight Study. These factors present a serious barrier to the planned and coordinated development of the area, have created an environment that negatively impacts private sector investment in the area, and serve as a detriment to the overall healthy economic growth and physical development of the community.

**EXISTING LAND USE:** Public, Residential, Commercial, Public (page 13)

**EXISTING ZONING:** Eight zoning districts including a mix of residential, commercial, and public (page 14)

**APPROXIMATE LAND AREA:** 9 acres

Prepared by

---

Andrew Thierolf, AICP  
November 1, 2022

Applicant: Dan Marvin, Director  
Urban Development Department  
555 S. 10<sup>th</sup> Street  
Lincoln, NE 68508  
(402) 441-7126  
[dmarvin@lincoln.ne.gov](mailto:dmarvin@lincoln.ne.gov)

Contact: Hallie Salem  
City of Lincoln Urban Development Dept  
(402) 441-7866  
[hsalem@lincoln.ne.gov](mailto:hsalem@lincoln.ne.gov)

<https://linclanc.sharepoint.com/sites/PlanningDept-DevReview/Shared Documents/DevReview/MISC/22000/MISC22013 Van Dorn Redevelopment Area 2 Blight & Substandard Determination Study.docx>



2022 aerial



**Miscellaneous #22013  
Van Dorn Redevelopment Area 2  
Blight and Substandard Determination Study**

m:\planarcview\AgendaDrawingBlight OrRedevelopmentArea.mxd  
(MISC22013)

# BLIGHT & SUBSTANDARD DETERMINATION STUDY

## *EXECUTIVE SUMMARY*

### Purpose of Study

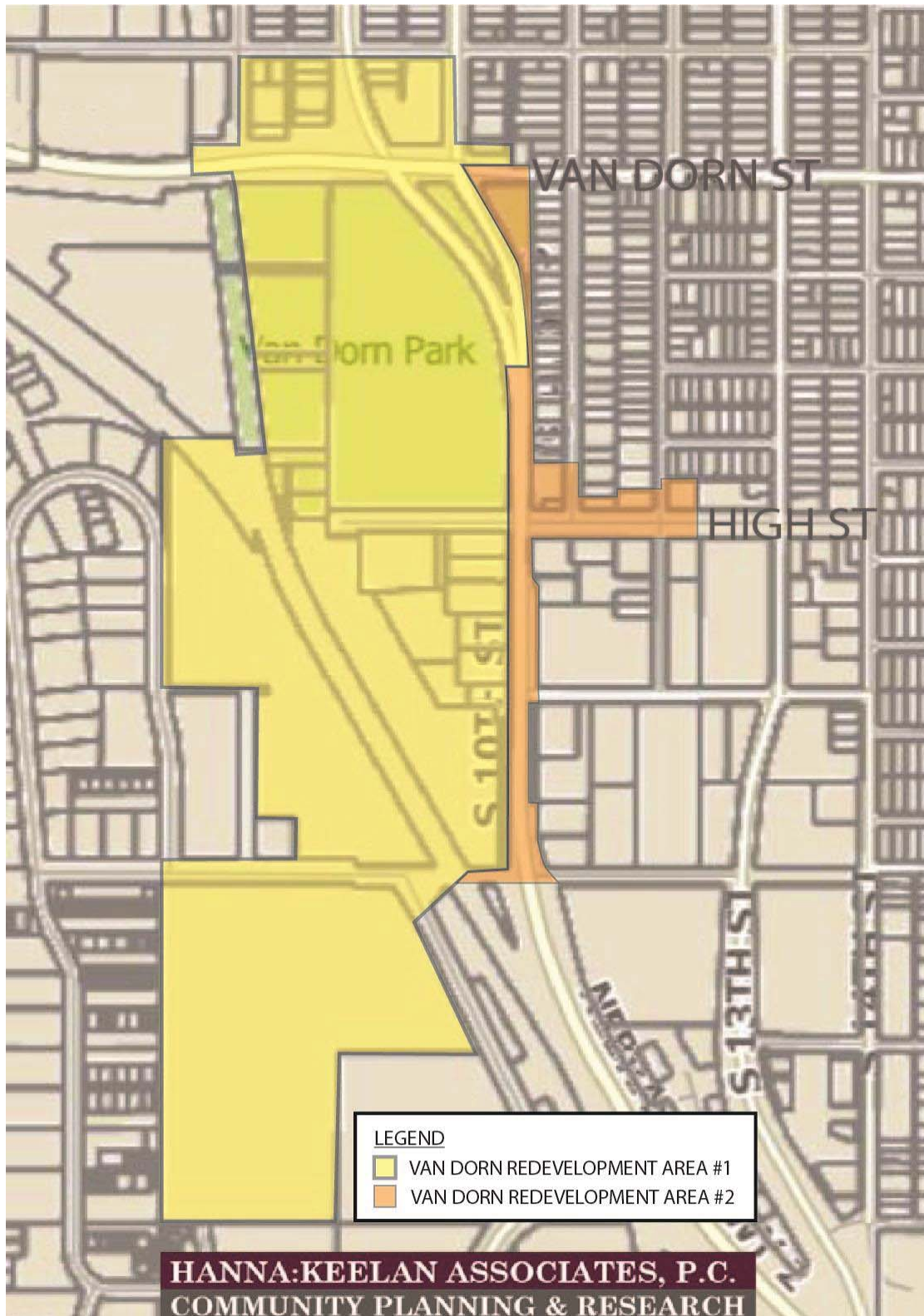
The purpose of this **Blight and Substandard Determination Study** is to apply the criteria set forth in the **Nebraska Community Development Law, Section 18-2103**, to a designated **Redevelopment Area** in the City of Lincoln, Nebraska. The results of this **Study** will assist the City in declaring the **Van Dorn Redevelopment Area #2** as both **blighted and substandard**.

### Location

**Van Dorn Redevelopment Area #2** is located entirely within the current Corporate Limits of the City of Lincoln, as identified in **Illustration 1, Context Map, Page 2**. **Van Dorn Redevelopment Area #2**, located along 10<sup>th</sup> Street, is comprised of an estimated **nine acres** and contains both commercial, residential and undeveloped land uses. The majority of the **Area** includes land along and east of 10<sup>th</sup> street and associated right-of-ways. The **Redevelopment Area** includes the parcels of record on file with the Lancaster County Assessor's Office as presented in the **Appendix**.



**ILLUSTRATION 1  
CONTEXT MAP  
VAN DORN REDEVELOPMENT AREA #2  
LINCOLN, NEBRASKA**



This **blight and substandard evaluation** included an **exterior structural assessment of four structures, field inventory of six parcels**, conversations with both City of Lincoln and staff and a review of available reports and documents containing information which could substantiate the existence of **blight and substandard conditions**.

### ***SUBSTANDARD AREA***

As set forth in the Nebraska legislation, a **substandard area** shall mean one in which there is a predominance of buildings or improvements, whether nonresidential or residential in character, which by reason of the presence of the following factors:

1. Dilapidated/deterioration;
2. Age or obsolescence;
3. Inadequate provision for ventilation, light, air, sanitation or open spaces;
4.
  - (a) High density of population and overcrowding; or
  - (b) The existence of conditions which endanger life or property by fire and other causes; or
  - (c) Any combination of such factors, is conducive to ill health, transmission of disease, infant mortality, juvenile delinquency, and crime, and is detrimental to the public health, safety, morals or welfare.

### ***BLIGHTED AREA***

As set forth in the Section 18-2103 Nebraska Revised Statutes (Cumulative Supplement 2012), a **blighted area** shall mean "an area, which by reason of the presence of the following factors:

1. A substantial number of deteriorated or deteriorating structures;
2. The advanced age and associated condition of structures;
3. Faulty lot layout in relation to size, adequacy, accessibility, or usefulness;
4. Insanitary or unsafe conditions due to the age, condition or small diameter of water mains;
5. Deterioration of site or other improvements;
6. Diversity of ownership;
7. Tax or special assessment delinquency exceeding the fair value of the land;
8. Defective or unusual conditions of title;
9. Improper subdivision or obsolete platting;

10. The existence of conditions which endanger life or property by fire or other causes;
11. Any combination of such factors, substantially impairs or arrests the sound growth of the community, retards the provision of housing accommodations or constitutes an economic or social liability; and
12. Is detrimental to the public health, safety, morals or welfare in its present condition and use; and in which there is at least one or more of the following conditions exists;
  1. Unemployment in the study or designated blighted area is at least one hundred twenty percent of the state or national average;
  2. The average age of the residential or commercial units in the area is at least 40 years;
  3. More than half of the plotted and subdivided property in an area is unimproved land that has been within the City for 40 years and has remained unimproved during that time;
  4. The per capita income of the study or designated blighted area is lower than the average per capita income of the City or Village in which the area is designated; or
  5. The area has had either stable or decreasing population based on the last two decennial censuses.

While it may be concluded the mere presence of a majority of the stated **Factors** may be sufficient to make a finding of **blight and substandard**, this evaluation was made on the basis that existing **Blight and Substandard Factors** must be present to an extent which would lead reasonable persons to conclude public intervention is appropriate or necessary to assist with any development or redevelopment activities. Secondly, the distribution of **Blight and Substandard Factors** throughout **Van Dorn Redevelopment Area #2** must be reasonably distributed so basically good areas are not arbitrarily found to be blighted simply because of proximity to areas which are **blighted and substandard**.

**On the basis of this approach, Van Dorn Redevelopment Area #2 is found to be eligible as "blighted" and "substandard" within the definition set forth in the legislation.**

***SUBSTANDARD FACTORS***

Three Substandard Factors set forth in the Nebraska Community Development Law have a “strong” presence and one Factor has a “reasonable” presence within Van Dorn Redevelopment Area #2. The Substandard Factors are described in detail, below.

**TABLE 1  
SUBSTANDARD FACTORS  
VAN DORN REDEVELOPMENT AREA #2  
LINCOLN, NEBRASKA**

- |    |   |   |
|----|---|---|
| 1. | Dilapidated/deterioration.  | ■ |
| 2. | Age or obsolescence.  | ⊗ |
| 3. | Inadequate provision for ventilation, light, air, sanitation or open spaces.                      | ⊗ |
| 4. | Any combination of factors that are detrimental to the public health, safety, morals, or welfare. | ⊗ |

**Strong Presence of Factor**            ⊗  
**Reasonable Presence of Factor**    ■  
**No Presence of Factor**             ○

Source: Hanna:Keelan Associates, P.C., 2022.



### **Strong Presence of Factor -**

As per information obtained from the Lincoln/Lancaster County Assessor's Office and the results of the **Survey** analysis, three structures in the **Redevelopment Area** are **40+ years of age** (built during or prior to 1982). The **average age** of structures in the **Redevelopment Area** is an estimated **86 years**. The **Factor of Age or Obsolescence** is a **strong presence** throughout the **Area**.

The conditions which result in the ***Inadequate Provision for Ventilation, Light, Air, Sanitation or Open Space*** are a **strong presence** throughout **Van Dorn Redevelopment Area #2**. Water and sanitary sewer mains within the **Area** are aging, with portions constructed of outmoded material. All water mains in the **Redevelopment Area** were described by City staff as being in "good" condition. All sewer mains in the **Area** were described by City staff as being in "fair" condition. The **Area** consists of a variety of water and sewer main materials, conditions and ages. The oldest segment of water main, located along High Street between 11<sup>th</sup> and 13<sup>th</sup> Streets, was installed in 1919 utilizing six-inch Cast-Iron Pipe. In the same general location, two Vitrified Clay sewer pipes were installed in 1927.

The field analysis determined that the **Substandard Factor, *Any Combination of Factors that are Detrimental to the Public Health, Safety, Morals, or Welfare***, is a **strong presence** throughout the **Redevelopment Area**. The primary contributing elements include deteriorating buildings needing remodeling or rehabilitation, as well as the age of structures and lack sidewalks and pedestrian crossing signals.

### **Reasonable Presence of Factor -**

The results of the **Structural/Site Conditions Survey** identified **two structures** in **Van Dorn Redevelopment Area #2** as being in a **deteriorating** condition with **minor defects**, **one structure** as being in a **deteriorating** condition with **major defects** and **one structure** in **sound** condition. This results in three of the four structures (75%) being in a deteriorating condition. This **Factor** is a **reasonable presence** throughout the **Area**.

***The prevailing substandard conditions, evident in buildings and the public infrastructure, as determined by the field survey, in the Redevelopment Area include:***

1. **Functionally and economically obsolete deteriorating structures** in the **Area**;
2. **Advanced age of structures**, with an **average age of 86 years**;
3. The **Area** is serviced by **aging utility systems**, with some constructed of outmoded materials;
4. A **lack of sidewalks** throughout the **Area**.

**BLIGHT FACTORS**

Of the **12 Blight Factors** set forth in the **Nebraska Community Development Law**, throughout **Van Dorn Redevelopment Area #2**, **six** represent a **strong presence**, **four** were present to a **reasonable extent** and **one** was present to **little or no extent**. The Factor, “defective or unusual condition of title,” was not reviewed. All **Blight Factors** are reasonably distributed throughout **Redevelopment Area**.

**TABLE 2  
BLIGHT FACTORS  
VAN DORN REDEVELOPMENT AREA #2  
LINCOLN, NEBRASKA**

- |     |  |    |
|-----|--|----|
| 1.  | A substantial number of deteriorated or dilapidated structures.                      | ■  |
| 2.  | Existence of defective or inadequate street layout.                                  | ■  |
| 3.  | Faulty lot layout in relation to size, adequacy, accessibility or usefulness.        | ⊗  |
| 4.  | Insanitary or unsafe conditions.   | ⊗  |
| 5.  | Deterioration of site or other improvements.   | ■  |
| 6.  | Diversity of Ownership.  | ■  |
| 7.  | Tax or special assessment delinquency exceeding the fair value of land.              | ○  |
| 8.  | Defective or unusual condition of title.   | NR |
| 9.  | Improper subdivision or obsolete platting.   | ⊗  |
| 10. | The existence of conditions which endanger life or property by fire or other causes. | ⊗  |
| 11. | Other environmental and blighting factors.   | ⊗  |
| 12. | One of the other five conditions.  | ⊗  |

<b>Strong Presence of Factor</b>	⊗
<b>Reasonable Presence of Factor</b>	■
<b>Little or No Presence of Factor</b>	○
<b>NR = Not Reviewed</b>	NR

Source: Hanna:Keelan Associates, P.C., 2022.

## **Strong Presence of Factor –**

***Faulty Lot Layout*** is a **strong presence** throughout **Van Dorn Redevelopment Area #2**. The parcels within the **Redevelopment Area** are irregularly shaped (lack uniform width and/or depth), primarily due to parcels being subdivided on an as needed basis.

***Insanitary or Unsafe Conditions*** are a **strong presence** throughout the entire **Redevelopment Area**. Conditions contributing to this **Factor** include three of the four existing structures being in a **deteriorating condition** and being 40+ years of age. The **Area**, also, lacks a complete sidewalk system and signaled pedestrian crossings. Segments of both water and sanitary sewer mains in the **Area** are aging, with some constructed of outmoded materials.

***Improper Subdivision or Obsolete Platting*** is a **strong presence** throughout the **Redevelopment Area**, primarily due to irregular tracts (parcels) of land.

The ***Existence of Conditions Which Endanger Life or Property by Fire or Other Causes*** is a **strong presence** throughout the **Redevelopment Area**. Three of the four structures in the **Area** are in a state of deterioration as well as being 40+ years of age.

Water and sanitary sewer mains within the **Area** are aging, with some constructed of outmoded material. All water mains in the **Redevelopment Area** were described by City staff as being in “good” condition. All sewer mains in the **Area** were described by City staff as being in “fair” condition. The **Area** consists of a variety of water and sewer main materials, conditions and ages. The oldest segment of water main, located along High Street between 11<sup>th</sup> and 13<sup>th</sup> Streets was installed in 1919 utilizing six-inch Cast-Iron pipe. In the same general location, two Vitrified Clay sewer pipes were installed in 1927.

***Other Environmental and Blighting Factors*** are a **strong presence** throughout the **Redevelopment Area**. Overall, the **Area** contains aging structures and buildings that are **deteriorating** with **minor and major defects**. Outmoded utility systems are also prevalent in the **Area**. Additionally, one parcel maintained “fair” overall site conditions.

***One of the Required Five Additional Blight Factors*** has a **strong presence** throughout the **Redevelopment Area**. Based on the **Survey** analysis and records of the Lancaster County Assessor’s Office, the estimated average age of all commercial structures is 86 years, exceeding the blight criteria of 40+ years of age.

## **Reasonable Presence of Factor –**

***Deteriorated or Dilapidated Structures*** are a **reasonable presence** throughout the **Redevelopment Area**. **Two** structures in **Van Dorn Redevelopment Area #2** as being in a **deteriorating** condition with **minor defects**, **one** structure as being in a **deteriorating** condition with **major defects** and **one** structure in **sound** condition. This results in three of the four structures (75%) being in a deteriorating condition. This **Factor** is a **reasonable presence** throughout the **Area**.

*Existence of Defective or Inadequate Street Layout* has a **reasonable presence** throughout the **Redevelopment Area**. Existing public streets in the **Redevelopment Area** are in “good” to “excellent” condition, but most of the **Area** lacks a complete sidewalk system and pedestrian crossing signals.

*Deterioration of Site or Other Improvements* is a **reasonable presence** throughout **Van Dorn Redevelopment Area #2**. One parcel was observed to have “**fair**” overall site conditions. Additionally, three of the four structures, or 75 percent, were identified as **deteriorating** with either **minor or major defects**.

*Diversity of Ownership* is a **reasonable presence** throughout **Van Dorn Redevelopment Area #2**. Research of public records from the Lincoln/Lancaster County Assessor’s Office indicates that **four distinct ownership groups** own property within the **Redevelopment Area**.

**Little or No Presence of Factor –**

*Tax or Special Assessment Delinquency Exceeding the Fair Value of Land* has little or no presence throughout the **Redevelopment Area**. Research of public records from the Lincoln/Lancaster County Assessor’s Office concluded that of the six parcels within the **Area**, **one** was recorded as property tax exempt. No parcels were recorded as property tax delinquent.

The Factor *Defective or Unusual Condition of Title* was not reviewed.

**Conclusion.**

It is the conclusion of the Consultant that the number, degree and distribution of **Blight and Substandard Factors**, as documented in this **Executive Summary**, are beyond remedy and control solely by regulatory processes in the exercise of the police power and cannot be dealt with effectively by the ordinary operations of private enterprise without the aids provided in the **Nebraska Community Development Law**. It is also the opinion of the Consultant that findings in this **Blight and Substandard Determination Study** warrant designating **Van Dorn Redevelopment Area #2** as “**substandard**” and “**blighted**.”

The conclusions presented in this **Study** are those of the Consultant engaged to examine whether conditions of **blight and substandard** exist. The Lincoln/Lancaster County Planning Commission and Lincoln City Council should review this **Study** and, if satisfied with the summary of findings contained herein, may adopt a resolution making a **finding of blight and substandard** and this **Study** a part of the public record.

## **Van Dorn Redevelopment Area #2, Blight & Substandard Determination Study**

### **Attachment A**

#### **Legal Description**

FAIRMONT, BLOCK 5, THAT PT LYING NE OF S 10 ST & COOLEYS SUB BLOCK 2 THAT PT LYING NE OF S 10 ST; ENGLEWOOD, BLOCK 4, Lot 4 - 5, & W26' LOT 6; ENGLEWOOD, BLOCK 5, Lot 28 – 29; BARNES ADDITION TO LINCOLN, BLOCK 1, Lot 24, S50'; BARNES ADDITION TO LINCOLN, BLOCK 2, Lot 22 – 24, and the adjacent Rights of Way including Van Dorn 200 feet north of 10<sup>th</sup> Street, 10<sup>th</sup> Street from the north side of Van Dorn to south side of Calvert Streets, High Street from 10<sup>th</sup> to 112 feet east of 12<sup>th</sup> Street, and 11<sup>th</sup> Street 184 feet north of High Street, and 12<sup>th</sup> Street 113 feet north of High Street.

October 19, 2022

Andrew Thierolf, AICP  
Lincoln Lancaster County Planning Department  
City / County Building  
555 S 10th Street  
Lincoln, NE 68508

Dear Andrew:

Please find the Van Dorn Redevelopment Area #2 Blight & Substandard Determination Study application attached.

Once submitted through Project Dox, please forward the blight study to the Planning Commission for their consideration of its consistency with the Comprehensive Plan at the November 16, 2022 public hearing. We request that the amendment also be scheduled at City Council for introduction on December 5, 2022 and public hearing on December 12, 2022.

If you have any questions about the blight study or schedule, please contact me at 402.441.7866 or [hsalem@lincoln.ne.gov](mailto:hsalem@lincoln.ne.gov).

Best Regards,



Hallie Salem  
Redevelopment Manager



**LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT**

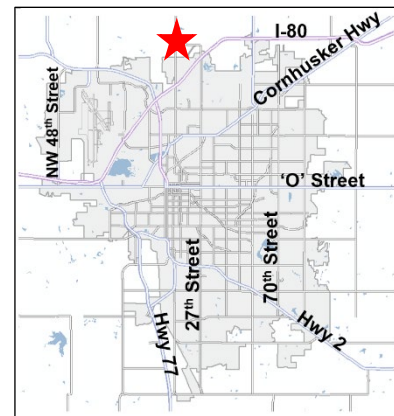
FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER Miscellaneous #22012	FINAL ACTION? No	DEVELOPER/OWNER N/A
PLANNING COMMISSION HEARING DATE November 16, 2022	RELATED APPLICATIONS None	PROPERTY ADDRESS/LOCATION N. 14 <sup>th</sup> Street, Alvo to Ashland

**RECOMMENDATION: APPROVAL**

**BRIEF SUMMARY OF REQUEST**

The Lancaster County Engineer’s Office, in coordination with the Lincoln-Lancaster County Planning Department, is requesting an amendment to the Lincoln Metropolitan Planning Organization (MPO) 2050 Long Range Transportation Plan to add the N. 14<sup>th</sup> Street project from Alvo Road to Ashland Road to the Lancaster County fiscally constrained plan and expand the project limits.



**JUSTIFICATION FOR RECOMMENDATION**

The proposed amendment moves several N. 14<sup>th</sup> Street project segments from the illustrative project list to the fiscally constrained project list, combines them as a single project, and expands the project limits. This section of N. 14<sup>th</sup> Street has been identified for improvements in several Lancaster County studies.

**APPLICATION CONTACT**

David Cary, Planning Director  
402-441-7491  
[dcary@lincoln.ne.gov](mailto:dcary@lincoln.ne.gov)

Pam Dingman, County Engineer  
402-441-7681  
[pdingman@lancaster.ne.gov](mailto:pdingman@lancaster.ne.gov)

**STAFF CONTACT**

Paul Barnes, Long Range Planning Manager  
402-441-6372  
[pbarnes@lincoln.ne.gov](mailto:pbarnes@lincoln.ne.gov)

**COMPATIBILITY WITH THE LONG RANGE TRANSPORTATION PLAN**

The N. 14<sup>th</sup> Street project from Alvo Road to Ashland Road aligns with goals and policies in the 2050 LRTP (see below).

Page 2-8: Mobility and System Reliability Goal - An efficient, reliable, and well-connected transportation system that leverages innovation and technology for moving people and freight.

Page 2-10: Safety and Security Goal - A safe and secure transportation system.

Page 2-13: Funding and Cost Effectiveness Goal - Collaboration in funding transportation projects that maximizes user benefits.

Page 5-15: Capital Projects - Rural road capital projects include paving projects, intersection improvements, major bridge rehabilitation, road rehabilitation, and two-lane widening projects to repair or rebuild currently paved roadways. In some cases, projects involve widening these roads to include wider lanes and paved shoulders.

Page 5-17: Rural Road Capital Projects Needs List - Projects 97,99, and 192 for N. 14<sup>th</sup> Street - Waverly Road to Raymond Road, Arbor Road to Waverly Road, and Agnew Road to Ashland Road - two lane widening.

Page 6-2: Highway Safety Improvement Program - The HSIP is a core federal-aid program with the purpose of reducing traffic fatalities and serious injuries on public roads, including non-State-owned roads.

Page 8-35: Amendment Process - Between the five-year updates, there is an amendment process through which the LRTP can be modified. Changes to the Fiscally Constrained Plan are to be made by a formal plan amendment through the MPO planning process. All amendments to the Fiscally Constrained Plan will need to be reviewed and approved by the MPO Technical Committee, which includes local, state, and federal representation; the Lincoln-Lancaster County Planning Commission; and the MPO Officials Committee.

## ANALYSIS

### 1. Federal Transportation Planning Process

Federal regulations require that the region's metropolitan transportation planning process include the cooperative development of the Long Range Transportation Plan (LRTP). This transportation plan must cover no less than a 20-year planning horizon, will include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand, and must be updated, at a minimum, every five years.

### 2. Lincoln Metropolitan Planning Organization (MPO)

The City of Lincoln, as the designated MPO, is responsible for conducting the metropolitan transportation planning process pursuant to federal requirements and assigning work as necessary to carry out this process. There are five primary participant groups in the MPO planning and decision-making process. These include: 1) the MPO Officials Committee comprised of the Mayor and the chairs and vice chairs of the City Council and County Board, plus the Nebraska Department of Transportation Director, 2) MPO Technical Advisory Committee, 3) Lincoln-Lancaster County Planning Commission, 4) various Citizen Task Forces and Advisory Committees, and 5) MPO staff.

### 3. Long Range Transportation Plan (LRTP)

In December 2021, the Lincoln MPO Officials Committee adopted the current Lincoln MPO LRTP, 2050 Long Range Transportation Plan. The development of the LRTP was a collaborative effort using input provided from state and local governments, agencies, citizens, committees, and staff that focuses on promoting an integrated multi-modal transportation network. The LRTP guides investment in the Lincoln metropolitan area's transportation system for the next 20+ years based upon the region's future transportation goals and objectives and allocates projected revenue to transportation programs and projects consistent with the Lincoln MPO's goals. The LRTP also is the basis for the development of the short-range Transportation Improvement Program (TIP) – a set of transportation improvement projects that the MPO expects to implement during the next four years. The 2050 LRTP was developed in coordination with PlanForward, the Lincoln-Lancaster County Comprehensive Plan. The LRTP is embedded into the Comprehensive Plan as the Transportation Element.

### 4. Long Range Transportation Plan (LRTP) Amendment

In accordance with the amendment process outlined in the 2050 LRTP, page 8-35, "Changes to the Fiscally Constrained Plan are to be made by a formal plan amendment through the MPO planning process". The request to move the N. 14<sup>th</sup> Street project from the Illustrative Plan to the Fiscally Constrained Plan therefore requires review by the MPO Technical Committee and the Planning Commission. Formal approval of the amendment will be requested of the MPO Officials Committee on November 29, 2022.

### 5. Applicant Request

This application is to amend the 2050 LRTP to add the N. 14<sup>th</sup> Street project from Alvo Road to Ashland Road to Lancaster County's Fiscally Constrained Plan. The details of the proposed amendment appear below.

### Add Rural Road Project

- **Project ID:** 235
- **Street:** N. 14<sup>th</sup> Street
- **Location:** Alvo Road to Ashland Road
- **Length:** 10.5 miles
- **Project Type:** County Project
- **Actions:**
  1. Move the N. 14<sup>th</sup> Street project from Alvo Road to Ashland Road from the Illustrative Plan to the Fiscally Constrained Plan and expand the project limits.
- **Other information:** The Lancaster County Engineer provided the below information with the LRTP Amendment request:
  - “Nebraska Department of Transportation (NDOT) has identified Federal HSIP Safety Funds for adding a 2' surface shoulders to a rural two-lane road with no existing surface shoulders. The eligibility criteria consist of the road having an ADT of at least 1,000 vehicles per day in the design year, rural two-lane undivided roadway with two-way traffic and designated as a federal aid eligible road.”
  - A completed NDOT 530 Form for the N. 14<sup>th</sup> Street project.

The proposed amendment would add a new paving/widening project on the list of Lancaster County Rural Roads Projects. An LRTP amendment is necessary when adding a regionally significant project which requires FHWA or FTA funding or approval.

This segment of N. 14<sup>th</sup> Street was identified for funding based on new Nebraska Department of Transportation criteria for rural roads for Federal Highway Safety Improvement Program (HSIP) funding. This safety funding is available as a systemic safety program to reduce roadway departure crashes on rural local roads.

Three corresponding segments of N. 14<sup>th</sup> Street will be removed from the Lancaster County Illustrative (Unfunded) list: Waverly Road to Raymond Road, Arbor Road to Waverly Road, and Agnew Road to Ashland Road. This project also includes two additional segments on N. 14<sup>th</sup> Street that would be included in the project limits in the Fiscally Constrained Plan: Alvo Road to Arbor Road and Raymond Road to Agnew Road.

### 6. LRTP Revisions for the Proposed Amendment

The proposed amendment requires the below modifications to the 2050 LRTP:

- A. Add Project 235 (N. 14<sup>th</sup> Street, Alvo Road to Ashland Road), to Figure 7.1 (Fiscally Constrained Rural Road & Bridge Capital Projects) on page 7-10.
- B. Add Project 235 (N. 14<sup>th</sup> Street, Alvo Road to Ashland Road) to Table 7.5 (Fiscally Constrained Rural Road & Bridge Capital Projects) on page 7-8.
- C. Revise Table 7.5 (Fiscally Constrained Rural Road & Bridge Capital Projects) on page 7-8 Revise Project 102 (N. 98th Street, Holdrege Street to US-6) to reduce project costs.
- D. Revise Figure 7.10 (Illustrative Plan (Unfunded) Rural Road & Bridge Capital Projects) on page 7-39 and Table 7.14 (Illustrative Plan (Unfunded) Rural Road & Bridge Capital Projects) on page 7-37 to remove the following:
  - a. Project 97 (N. 14<sup>th</sup> Street, Waverly Road to Raymond Road)
  - b. Project 99 (N. 14<sup>th</sup> Street, Arbor Road to Waverly Road)
  - c. Project 192 (N. 14<sup>th</sup> Street, Agnew Road to Ashland Road)

This amendment will update the associated tables and figures that are linked to the 2050 Comprehensive Plan.

7. This request has been documented and completed through the amendment process outlined in the 2050 Long Range Transportation Plan and is recommended for approval to include N. 14<sup>th</sup> Street in the Lancaster County Fiscally Constrained list of projects.

### PROJECT REVIEW AND COMMENTS:

In accordance with the NDOT Operating Manual for Metropolitan Planning Organization Transportation Planning, the public involvement procedure and reviewing body necessary for an LRTP amendment and an LRTP administrative

modification should be determined at the MPO level. The MPO may set multiple thresholds as long as the first level meets the minimum threshold outlined above. If the MPO chooses to have multiple thresholds/levels of public involvement for an LRTP amendment, then the procedure must be clearly outlined in the MPO Public Involvement Plan and the MPO LRTP. Amendment procedures must be documented in the LRTP, TIP, and Public Participation Plan.

The Lincoln MPO Public Participation Plan indicates that the Lincoln MPO will strive to provide a public comment period of at least 30 calendar days prior to adoption of an LRTP amendment. The comment period begins upon the posting of an LRTP amendment under consideration, at least 7 days prior to MPO Technical Committee review and continues through the MPO Officials Committee review and adoption.

The schedule for review and action by the MPO Technical Committee and MPO Officials Committee on the proposed amendment to the 2050 LRTP is as follows:

- November 10, 2022 at 1:00 p.m. MPO Technical Committee meeting
- November 29, 2022 at 3:00 p.m. MPO Officials Committee meeting

These MPO meetings are open meetings and will include time for public comment. The MPO Officials Committee will consider all comments received at its November 29, 2022 meeting.

#### **APPLICATION HISTORY**

December 15, 2021                      The Lincoln MPO adopted the 2050 LRTP.

Prepared by

---

Rachel Christopher, Transportation Planner

Date: November 7, 2022

Applicant:     David Cary, 402-441-7491, [dcary@lincoln.ne.gov](mailto:dcary@lincoln.ne.gov)  
                    Pam Dingman, 402-441-7681, [pdingman@lancaster.ne.gov](mailto:pdingman@lancaster.ne.gov)

Contact:        Paul Barnes, 402-441-6372, [pbarnes@lincoln.ne.gov](mailto:pbarnes@lincoln.ne.gov)

<https://linclanc.sharepoint.com/sites/PlanningDept-DevReview/Shared Documents/DevReview/MISC/22000/MISC22012 LRTP Amendment N. 14th Street.rkc.docx>



**Pamela L. Dingman, P.E.**  
County Engineer

**John V. Berry, P.L.S.**  
Deputy County Surveyor

444 Cherry Creek Road, Bldg. C  
Lincoln, Nebraska 68528  
Phone: 402-441-7681 Fax: 402-441-8692

October 18, 2022

Mr. David Cary  
Lincoln-Lancaster County Planning Director  
555 S. 10<sup>th</sup> Street, Suite 213  
Lincoln, NE 68508

RE: Request to list N. 14<sup>th</sup> Street from Alvo Rd to Ashland Rd to the LRTP

Dear Mr. Cary,

Please consider this my formal request as the Lancaster County Engineer to place the engineering and construction, which includes grading, widening, and surfacing on the list of Lancaster County projects in the Long-Range Transportation Plan (LRTP). I hereby request that this item be placed on the November 16, 2022, Planning Commission agenda as an amendment to the Comprehensive Plan.

Nebraska Department of Transportation (NDOT) has identified Federal HSIP Safety Funds for adding a 2' surface shoulders to a rural two-lane road with no existing surface shoulders. The eligibility criteria consist of the road having and ADT of at least 1,000 vehicles per day in the design year, rural two-lane undivided roadway with two-way traffic and designated as a federal aid eligible road.

This section of N. 14<sup>th</sup> has been approved to use HSIP funding. The estimated funding split for the proposed improvements would be as follows: 50% HSIP funds, 30% STPG funds and 20% local match.

Sincerely,

Pamela L. Dingman, P.E.  
Lancaster County Engineering  
402-441-8332 (Direct)

For more information on completing this form, refer to [NDOT 530 I](#).

1.  New  Revised  
 State of Nebraska Department of Transportation  
**Local Public Agency (LPA)**  
**Project Programming Request**

For:  City  County  Other

2. LPA Name (and County): Lancaster

3. Responsible Charge/Project Liaison: Larry L Legg

TO BE COMPLETED BY NDOT	
Control No.:	
Project No.:	
Project Name:	
Project Coordinator:	
Target Letting Date:	TBD

**4. PURPOSE AND NEED/PROJECT DESCRIPTION**

Purpose and Need of Proposed Project (What is the problem to be resolved?):  
 Reduce Run off Road and lane departure crashes and maintain existing road surfacing.

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  New/Reconstruction  Maintenance  Other

Road, Street, Trail, Historical Renovation, Other	From	To	Length	National Functional Classification	National Highway System (Yes or No)
North 14th	Alvo Road	Ashland Road	10.5 miles	Major Collector	No

Detailed Project Description (Location of Proposed Project, Logical Termini Justification, Location Map, Typical Cross Sections, etc.; attach any additional sheets necessary):

Overlay existing pavement, Trench widening to 14', Shoulder widening and construction of a Safety section. Centerline Rumble strips with VRAM and Edgeline rumble strips.

5. FUNDING TYPE:  STP  BR  HSIP  TA  Other is MPO STBG

**6. ESTIMATED PROJECT FUNDING (Attach supporting documentation for estimates)**

	FFY of TIP/STIP	Federal	Local Match	Nonparticipating	Other	Total
<b>7. PE Phase</b>	23					
a. PE			60,000.00		240,000.00	300,000.00
b. NEPA			40,000.00		160,000.00	200,000.00
c. Final Design			0.00		0.00	0.00
d. RC			10,000.00		40,000.00	50,000.00
e. NDOT			2,000.00		8,000.00	10,000.00
<b>PE Subtotal</b>		<b>\$0.00</b>	<b>\$112,000.00</b>	<b>\$0.00</b>	<b>\$448,000.00</b>	<b>\$560,000.00</b>
<b>8. ROW</b>	24	240,000.00	60,000.00			300,000.00
<b>9. Utilities</b>	24	40,000.00	10,000.00			50,000.00
<b>10. Construction</b>	TBD	4,801,600.00	1,941,200.00		2,963,000.00	9,705,800.00
<b>11. CE Phase</b>						
a. CE		576,192.00	232,944.00		355,584.00	1,164,720.00
b. RC		96,032.00	38,824.00		59,264.00	194,120.00
c. NDOT		50,016.00	19,912.00		31,632.00	101,560.00
<b>CE Total</b>		<b>\$722,240.00</b>	<b>\$291,680.00</b>	<b>\$0.00</b>	<b>\$446,480.00</b>	<b>\$1,460,400.00</b>
<b>12. TOTAL</b>		<b>\$5,803,840.00</b>	<b>\$2,414,880.00</b>	<b>\$0.00</b>	<b>\$3,857,480.00</b>	<b>\$12,076,200.00</b>

**13. OTHER CONSIDERATIONS**

- a. Will special assessments district(s) be used to collect a portion of the required local funding match?  Yes  No
- b. Project on One- & Six-Year Plan?  Yes  No Attach One- and Six-Year Plan Revision or New Plan Documentation.
- c. Does your LPA have a signed ADA Policy and a signed Title VI Nondiscrimination Agreement?  
 Yes  No (Attach if not previously submitted.)

**14. DESIGN DETAILS**

	Existing	Proposed	Remarks/Existing Condition
a. Surface Width	22 to 24	24	2-12' lanes with 2' surfaced shoulder
b. Surface Type	ACSC	ACSC	
c. Shoulder Width	4-6	6	
d. Shoulder Type	Turf	2'ACSC/4'turf	

**15. EXISTING STRUCTURES**

Structure No.	Feature Crossed	Type of Structure	Length	Width	Sufficiency Rating	Proposed Treatment
ALL						UIP

**16. SCHEDULE CONSIDERATIONS (Attach explanations and supporting documentation to this form)**

**Is there an expectation that the proposed project will involve any of the following:**

	Yes	No	
a. ROW Acquisition (including Easements)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Estimated No. of Tracts: TBD
b. Relocation of Residences or Businesses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residences      Businesses
c. Utility Relocation or Adjustment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Gas <input type="checkbox"/> Water <input type="checkbox"/> Power <input type="checkbox"/> Phone <input type="checkbox"/> Other
d. Railroad Involvement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Crossing <input type="checkbox"/> Parallel <input type="checkbox"/> Within 50'
e. New Horizontal Alignment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f. Design Relaxation or Exception	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g. NDOT Permit to Occupy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
h. Has ROW already been acquired?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
i. PE Procurement <input type="checkbox"/> RFP <input type="checkbox"/> Locally Funded <input checked="" type="checkbox"/> LPA In-House <input type="checkbox"/> On-Call			
j. CE Procurement <input type="checkbox"/> RFP <input type="checkbox"/> NDOT <input type="checkbox"/> On-Call <input type="checkbox"/> LPA In-House <input type="checkbox"/> N/A			<b>17. TRAFFIC DATA</b>
k. Anticipated NEPA level <input type="checkbox"/> PA <input type="checkbox"/> PCE <input checked="" type="checkbox"/> CE <input type="checkbox"/> EA <input type="checkbox"/> EIS			Construction Year ADT
l. Project Scheduling Template:			Design Year ADT
			% Trucks

**18. ADDITIONAL REMARKS OR COMMENTS BY LPA**

(Attach as needed)

Will use HSIP for widening, ROW, VRAM and rumble strips

**19. SIGNATURES**

Requested by LPA Responsible Charge/Project Liaison:	Date:
Approved by MPO (if applicable):	Date:
Approved by NDOT Local Projects Unit Head:	Date:
Approved by NDOT Local Projects Engineer:	Date:
Approved by NDOT Local Assistance Division Manager:	Date:
Approved by NDOT Program Management Engineer:	Date:

*This is not a contractual agreement.*

Rank	Project ID	Project List	Status	Street Name	Limits	Description	Project Cost (2021\$)	YOE	YOE Cost	Cumulative Cost (YOE)	Refer to Notes Below Table
Committed	165	Lancaster County	Committed (HSIP)	N 148th Street	Holdrege Street	Intersection improvements	\$703,000				1
Committed	98	Lancaster County	Committed	S 98th Street	Old Cheney Road to US-34	Programmed Paving	\$12,592,700				1
Committed	92	Lancaster County	Committed (HSIP)	Saltillo Road	S 27th Street to S 68th Street	Two Lane Widening	\$87,74,400				1
	234			S. 68th Street	Firth Road to Stagecoach Road	Two Lane Widening with Shoulders	\$10,780,700	2025	\$10,780,700	\$10,780,700	3
	235	Lancaster County		N. 14th Street	Alvo Road to Ashland Road	Pavement and Two-Lane Widening with Shoulders	\$12,076,200	2025	\$12,076,200	\$22,856,900	4
1	104	Lancaster County		S 120th Street	Bennet Road North 0.5 Miles	Potential Paving	\$650,000	2026	\$1,046,832	\$23,903,732	
2	156	Lancaster County		NW 56th Street	W O to W Holdrege Street	Potential Paving	\$1,200,000	2026	\$1,932,612	\$25,836,344	
3	100	Lancaster County		SW 14th Street	NE-33 to W Bennet Road	Programmed Paving	\$1,300,000	2026	\$2,093,663	\$27,930,007	
4	103	Lancaster County		W Van Dorn Street	SW 112th Street to SW 84th Street	Programmed Paving	\$1,300,000	2027	\$2,240,219	\$30,170,226	
5	105	Lancaster County		Arbor Road	N 27th Street to US-77	Potential Paving	\$5,930,000	2028	\$11,699,558	\$41,869,784	
6	101	Lancaster County		Fletcher Avenue	N 84th Street to N 148th Street	Programmed Paving	\$5,000,000	2031	\$11,858,824	\$53,728,608	
7	95	Lancaster County		NW 27th Street	Hwy-34 to W Waverly Road	Potential Paving	\$4,550,000	2033	\$11,897,661	\$65,626,269	
8	93	Lancaster County		W A Street	SW 84th Street to SW 52nd Street	Programmed Paving	\$2,600,000	2034	\$7,138,597	\$72,764,866	
9	206	Lancaster County		SW 16th Street	Bridge O-1 near W Calvert Street	Replace CB	\$168,000	2034	\$461,263	\$73,226,129	
10	94	Lancaster County		Havelock Avenue	Stevens Creek to N 112th Street	Potential Paving	\$1,820,000	2035	\$5,246,869	\$78,472,998	
11	207	Lancaster County		SW 15th Street	Bridge O-140 near W Stockwell Street	Replace CB	\$168,000	2035	\$484,326	\$78,957,324	
12	201	Lancaster County		S 120th Street	Bridge J-138 near A Street	Replace with CBC	\$612,000	2036	\$1,852,548	\$80,809,873	
13	111	Lancaster County		N 1st Street	Alvo Road to McKelvie Road	Potential Paving	\$1,300,000	2036	\$3,935,152	\$84,745,024	
14	181	Lancaster County		Saltillo Road	S 68th Street to S 120th Street	Two Lane Widening	\$2,450,000	2037	\$7,787,059	\$92,532,084	
15	171	Lancaster County		N 162nd Street	US-6 to Ashland Road	Potential Paving	\$5,530,000	2040	\$20,347,002	\$112,879,086	
16	200	Lancaster County		S 112th Street	Bridge J-135 near A Street	Replace with CBC	\$612,000	2041	\$2,364,373	\$115,243,459	
17	114	Lancaster County		W Adams Street	NW 84th Street to NW 56th Street	Potential Paving	\$2,600,000	2042	\$10,546,959	\$125,790,418	
18	91	Lancaster County		S 68th Street	Hickman to Roca Road	Two Lane Widening with Shoulders	\$2,000,000	2043	\$8,518,698	\$134,309,116	
19	115	Lancaster County		Van Dorn Street	S 120th Street to S 148th Street	Potential Paving	\$2,600,000	2045	\$12,209,423	\$146,518,539	
20	215	Lancaster County		Pine Lake Road	S 112th Street to S 134th Street	Grading and Pavement; bridge Q-110 near S 134th St	\$3,188,000	2047	\$16,505,121	\$163,023,660	
21	102	Lancaster County		N 98th Street	Holdrege Street to US-6	Potential Paving	\$4,516,647	2050	\$25,780,728	\$188,804,388	2

<sup>1</sup> Committed projects are included in the 2022-2025 Transportation Improvement Program and are assumed to be fully funded and constructed prior to allocation of resources to other Rural Road & Bridge Capital Projects.

<sup>2</sup> Project ID 102 is partially funded (approximately 28.34%) within the Fiscally Constrained Plan.

<sup>3</sup> Project 234 added to the Fiscally Constrained Plan via MISC22002.

<sup>4</sup> Project 235 added to the Fiscally Constrained Plan via MISC22012.

**LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT**

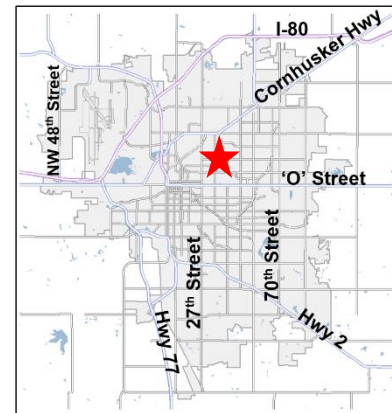
FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER Special Permit #1573B	FINAL ACTION? Yes	DEVELOPER/OWNER Emerald CareCo
PLANNING COMMISSION HEARING DATE Nov. 16, 2022	RELATED APPLICATIONS Text Amendment #22009	PROPERTY ADDRESS/LOCATION 1740 Superior Street, Lincoln, NE

**RECOMMENDATION: CONDITIONAL APPROVAL**

**BRIEF SUMMARY OF REQUEST**

This application would amend Special Permit #1573A to replace the Domiciliary Care use with a Residential Healthcare Facility. In addition, it will remove the minimum age requirement that is noted in the current permit and by the definition of Domiciliary Care.



**JUSTIFICATION FOR RECOMMENDATION**

The proposal for an amendment to the existing special permit is appropriate. The language in existing special permit resolution note the use as a Domiciliary Care Facility, a use no longer found in the Lincoln Municipal Code. The amendment will replace that use with the term Residential Healthcare Facility. The new use will operate in a very similar manner to the previously approved use.

**APPLICATION CONTACT**

Mark Hunzeker, (402) 432-2987 or  
mhunzeker@rembolttlawfirm.com

**STAFF CONTACT**

Emma Martin, (402) 441-6369 or  
emartin@lincoln.ne.gov

The amendment will also allow the existing facility to care for residents of any age if Text Amendment 22009 is approved. Text Amendment 22009 will remove the line “and provided that all facilities may have up to four individuals sixty years of age or older and one family acting as the residential caretaker” from LMC 27.63.530(c). This eliminates any age restriction from the Special Permit.

**COMPATIBILITY WITH THE COMPREHENSIVE PLAN**

The special permit for a Residential Healthcare Facility is in conformance with the 2050 Comprehensive Plan The Comprehensive Plan encourages a mix of housing types, and this use is in a large former single-family house. The building is compatible with the neighborhood and has existed on the site for decades. There are not exterior changes proposed, and the proposed use should not have a significant impact on the adjacent neighbors, and the facility has been in use since 1995.

## KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN

### Introduction Section: Growth Framework

[Figure GF.b: 2050](#) - This site is shown as future low density residential on the 2050 Future Land Use Plan.

[Land Use Plan](#) - Low density residential. Residential areas, often referred to as acreages, having densities ranging from 1 to 5 acres per dwelling unit, with a typical density of 3 acres per dwelling unit. Existing Low Density Residential areas within the Future Service Limit with urban utilities available may also be appropriate for future Urban Residential development.

## ANALYSIS

1. SP1573 was issued in September of 1995 to permit the operation of domiciliary care facility for 15 elderly residents suffering from dementia. SP1573A was issued in April of 2004 and permitted the addition of 1 patient; In 2004, Domiciliary Facility was still the classification used for what in the current Municipal Code is considered a Residential Healthcare Facility.
2. This is a proposed amendment to Special Permit #1573A, which itself is an amendment of Special Permit #1573. The proposal will change the use of the facility from Residential Healthcare Facility, where before it was classified as a Domiciliary Care Facility.
3. Domiciliary Care was defined in the 2010 Municipal Code as a facility that provided care for four or more persons sixty years of age or older (LMC 27.03.175). In 2011, the Municipal Code was updated, and Domiciliary Care was replaced with Residential Healthcare, though the definitions largely remain the same, including the minimum age of sixty years for residents/patients.
4. Text Amendment #22009, a related application submitted by the same applicant, will remove the text specifying the age of residents from the definition of Residential Healthcare Facility in the current Municipal Code (LMC 27.63.530).
5. The number of allowed patients will remain at 16, and no other updates or amendments have been requested in this application. This use is appropriate for this area; the use is housed in a large former single-family house, which has existed on the site for decades and matches the neighborhood. There are no exterior changes proposed, and the proposed use should have no significant impact on the adjacent neighbors.

**CONDITIONS OF APPROVAL:** See attached.

**EXISTING LAND USE & ZONING:** Residential; R-3

### **SURROUNDING LAND USE & ZONING**

North: Residential; R-3

South: Residential; R-2

East: Residential; R-3

West: Residential; R-3

## APPLICATION HISTORY

- September 1995 Special Permit #1573 was approved by the Planning Commission to allow a domiciliary care facility for 15 residents, 60 years old or older, suffering from the early stages of dementia, with conditions.
- April 2000 Special Permit #1573A was approved by the Planning Commission to increase the number of residents in the domiciliary care facility from 15 residents to 16 residents.

**APPROXIMATE LAND AREA:** 1.17 acres

**LEGAL DESCRIPTION:** Lots 1 and 2, Block 1, Cedar Crest 1st Addition, located in the SW 1/4 of Section 1-10-6, Lincoln, Lancaster County, Nebraska, generally located at 1740 Superior Street.

Prepared by

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Emma Martin, Planner

Date: November 3, 2022

Applicant: Mark A. Hunzeker  
1128 Lincoln Mall, Suite 300  
Lincoln, NE 68508  
(402) 432-2987  
[mhunzeker@remboltlawfirm.com](mailto:mhunzeker@remboltlawfirm.com)

Contact: Mark A. Hunzeker  
1128 Lincoln Mall, Suite 300  
Lincoln, NE 68508  
(402) 432-2987  
[mhunzeker@remboltlawfirm.com](mailto:mhunzeker@remboltlawfirm.com)

Owner: Emerald CareCo  
1609 N Street  
Lincoln, NE 68508

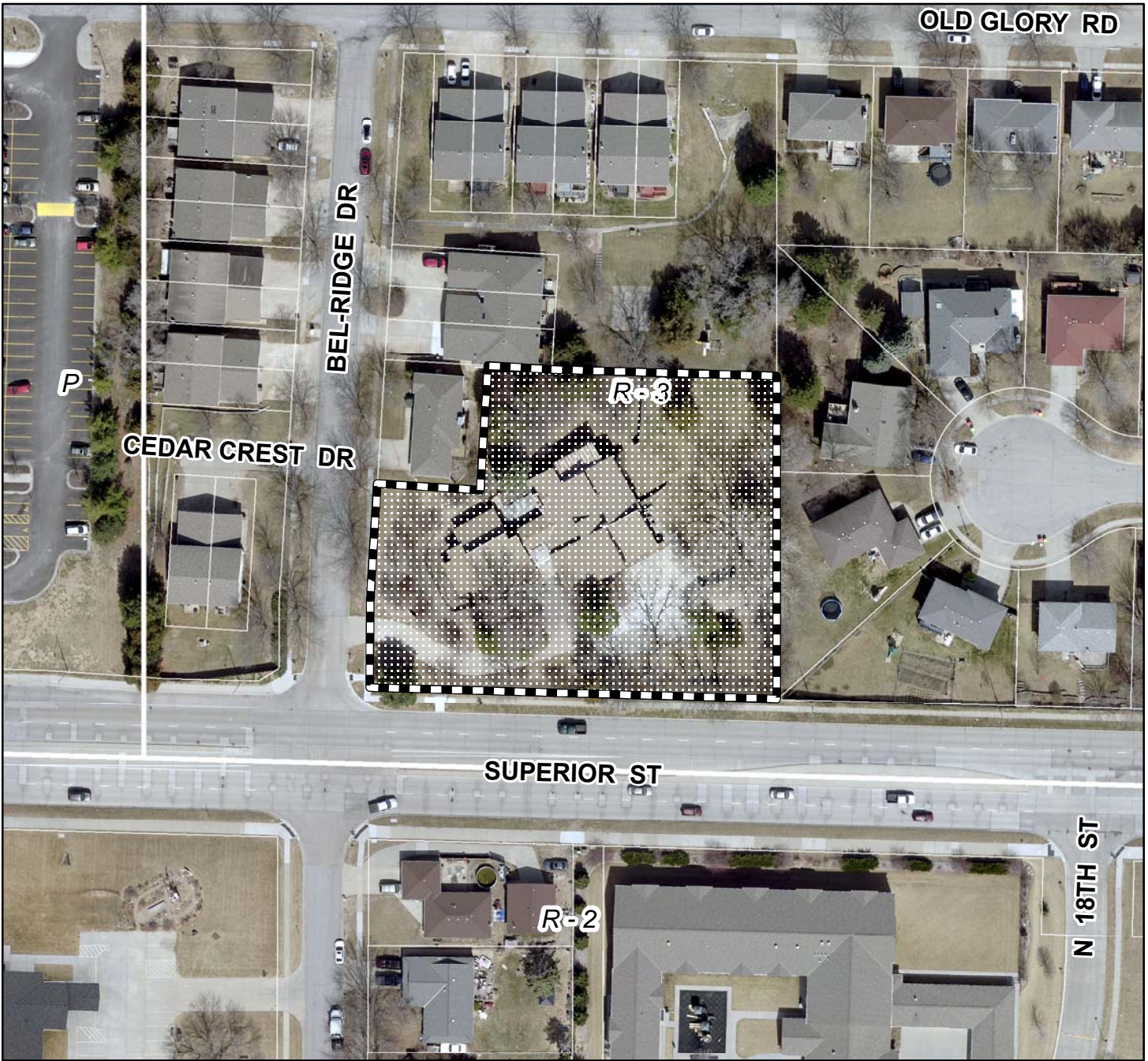
<https://linclanc.sharepoint.com/sites/PlanningDept-DevReview/Shared Documents/DevReview/SP/1500/SP1573B 1740 Superior St. Residential Healthcare Facility.edm.docx>

## CONDITIONS OF APPROVAL - SPECIAL PERMIT #1573B

Per Section 27.63.530 this approval permits a residential healthcare facility for 16 residents.

### Standard Conditions:

1. The following conditions are applicable to all requests:
  - 1.1. Before occupying the dwelling units or starting the operation all development and construction shall substantially comply with the approved plans.
  - 1.2. All privately-owned improvements, including landscaping and recreational facilities, shall be permanently maintained by the Permittee or an appropriately established homeowners association approved by the City.
  - 1.3. The physical location of all setbacks and yards, buildings, parking and circulation elements, and similar matters be in substantial compliance with the location of said items as shown on the approved site plan.
  - 1.4. The terms, conditions, and requirements of this resolution shall run with the land and be binding upon the Permittee, its successors and assigns.
  - 1.5. The applicant shall sign and return the letter of acceptance to the City Clerk. This step should be completed within 60 days following the approval of the special permit. The City Clerk shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds, filing fees therefor to be paid in advance by the applicant. Building permits will not be issued unless the letter of acceptance has been filed.
  - 1.6. The site plan as approved with this resolution voids and supersedes all previously approved site plans, however all prior resolutions approving this permit remain in full force and effect as specifically amended by this resolution.

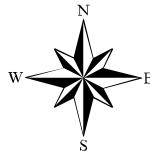


2022 aerial

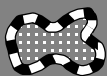


**Special Permit #: SP1573B  
Bel-Ridge St & Superior St**

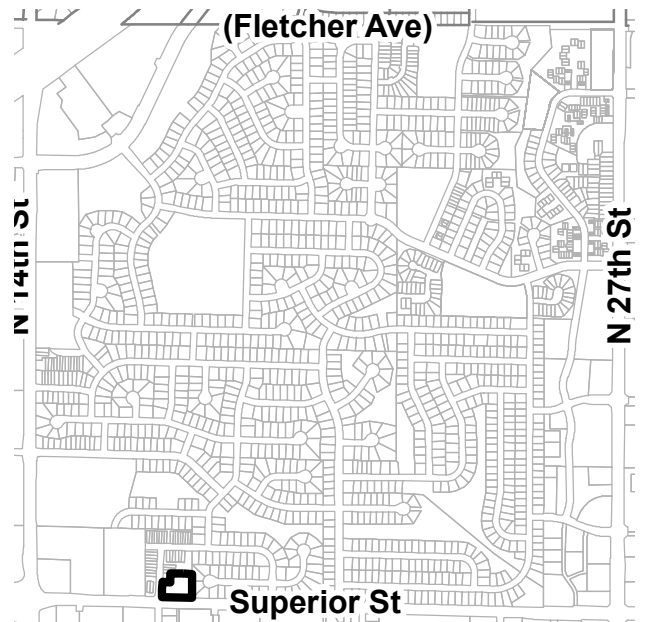
**Zoning:**

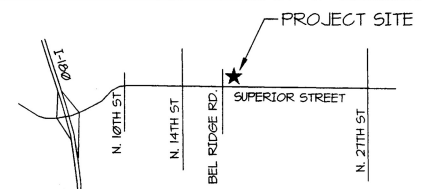
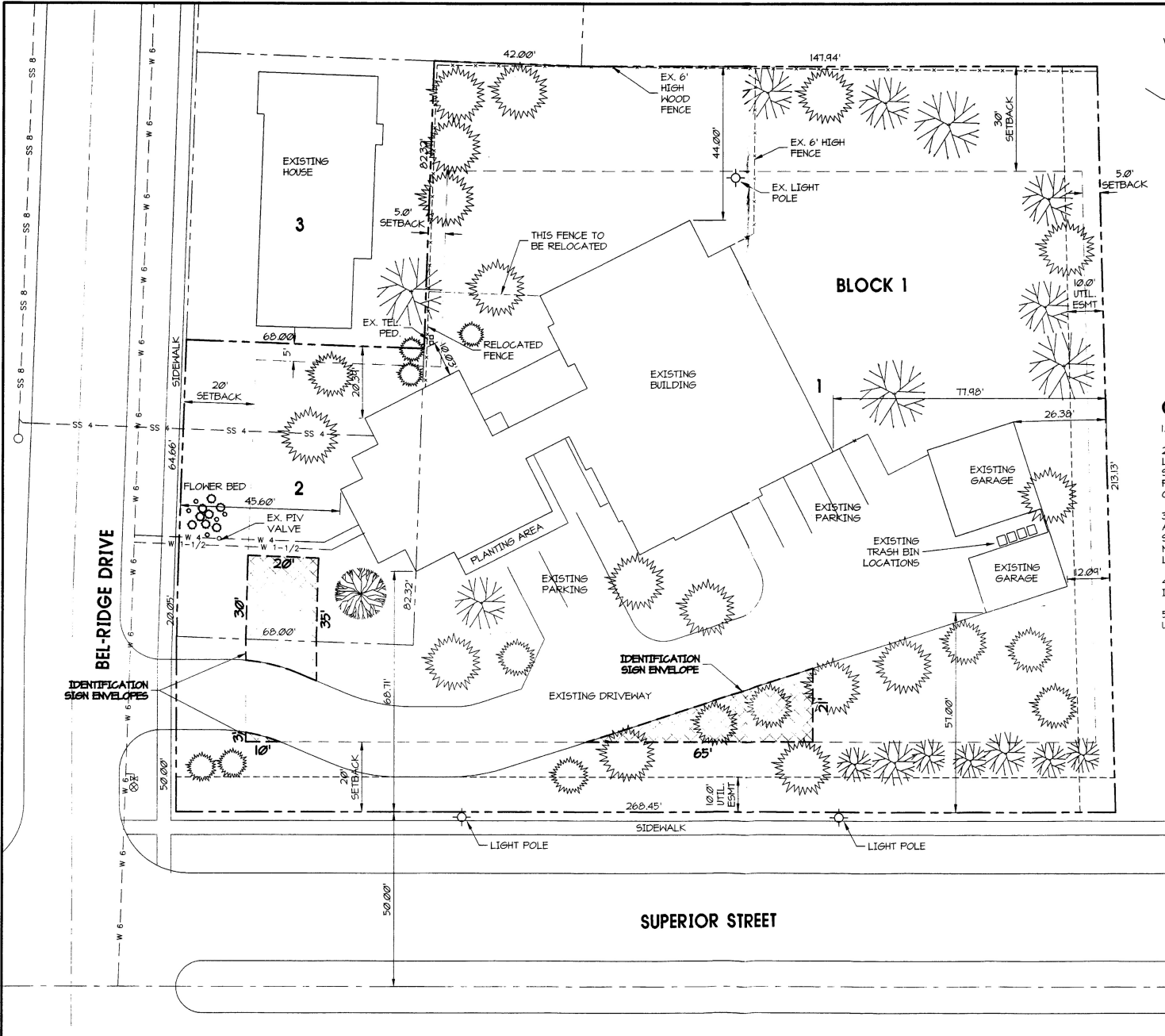
- R-1 to R-8 Residential District
- AG Agricultural District
- AGR Agricultural Residential District
- O-1 Office District
- O-2 Suburban Office District
- O-3 Office Park District
- R-T Residential Transition District
- B-1 Local Business District
- B-2 Planned Neighborhood Business District
- B-3 Commercial District
- B-4 Lincoln Center Business District
- B-5 Planned Regional Business District
- H-1 Interstate Commercial District
- H-2 Highway Business District
- H-3 Highway Commercial District
- H-4 General Commercial District
- I-1 Industrial District
- I-2 Industrial Park District
- I-3 Employment Center District
- P Public Use District



**One Square Mile:  
Sec.01 T10N R06E**

	Area of Application
	Zoning Jurisdiction Lines
	Lancaster County Jurisdiction





**VICINITY MAP**  
NO SCALE

**SITE ADDRESS**  
1740 SUPERIOR STREET

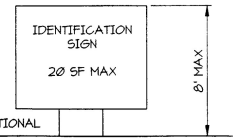
**LEGAL DESCRIPTION**  
LOT 1 & LOT 2, BLOCK 1, CEDAR CREST 1ST ADDITION, LINCOLN, LANCASTER COUNTY, NEBRASKA

ZONING: R-3

**GENERAL NOTES:**

- TREES SHOWN ARE EXISTING, AND WILL REMAIN.
- DETAILS OF ALL SIGNS, INCLUDING TYPE, LOCATION, HEIGHT AND SIZE WILL BE SUBMITTED SEPARATELY FOR REVIEW WITH BUILDING AND SIGN PERMITS. ALL SIGNS ARE TO BE LOCATED OUTSIDE OF ALL APPLICABLE CRITICAL SIGHT TRIANGLES.
- SIGNAGE TO BE ALLOWED IN COMPLIANCE WITH ALL APPLICABLE ORDINANCES, REGULATIONS AND STANDARDS OF CHAPTER 27.69 OF THE LINCOLN MUNICIPAL CODE. IDENTIFICATION SIGNS TO BE LOCATED WITHIN SIGN ENVELOPES SHOWN.
- ANY LANDSCAPING REMOVED AS PART OF SIGN INSTALLATION TO BE REPLACED WITH LIKE KIND.
- LOWER LEVEL OF EXISTING BUILDING WILL NOT BE USED FOR RESIDENTIAL PURPOSE.

IDENTIFICATION SIGN ENVELOPES



- LANDSCAPE LEGEND**
- EXISTING EVERGREEN INC. NORWAY SPRUCE
  - EXISTING DECIDUOUS INC. PIN OAK

**SITE PLAN**  
SCALE: 1" = 20'

THE PLANNING DIRECTOR APPROVES THIS  
AA# 03058 to SF# 1573A

*[Signature]* 9/23/03  
PLANNING DIRECTOR.....DATE

**EMERALD CARE - INDEPENDENCE HOUSE**  
ADMINISTRATIVE AMENDMENT TO SPECIAL PERMIT #03058  
LINCOLN, NEBRASKA

PROJECT NO. \_\_\_\_\_  
DATE \_\_\_\_\_  
SITE PLAN

PERSHING SQUARE  
LINCOLN, NEBRASKA  
PHONE: 402/774-3000  
FAX: 402/774-4045  
design@emeraldcare.com

**DESIGN ASSOCIATES OF LINCOLN, INC.**

lofi

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Benjamin E. Moore  
Kurth A. Brashear ♦  
Mark A. Hunzeker  
Adam J. Prochaska

\* also admitted in Colorado  
± also admitted in Iowa  
♦ also admitted in South Dakota

October 19, 2022

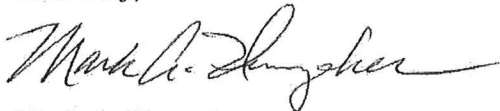
Emma D. Martin  
Planner  
Lincoln-Lancaster County Planning Dept.  
555 S 10<sup>th</sup> Street  
Lincoln, NE 68508

***RE: Amendment to SP#1573A***

Dear Ms. Martin:

Per your email of October 18, 2022, this letter is to request amendment of Special Permit #1573A to allow for a Residential Healthcare Facility with the same number of residents/patients allowed currently, but without the minimum age requirement of the current permit. Please contact me asap if there is any additional information required.

Sincerely,



Mark A. Hunzeker  
[mhunzeker@remboltlawfirm.com](mailto:mhunzeker@remboltlawfirm.com)

4887-1620-7930, v. 1

**Rembolt Ludtke LLP**

3 Landmark Centre • 1128 Lincoln Mall, Suite 300 • Lincoln, NE 68508  
Phone: +1.402.475.5100 • Fax: +1.402.475.5087





## LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER  
Text Amendment #22012  
Design Standards Flood and Water Quality  
Amendments

FINAL ACTION?  
No

PLANNING COMMISSION HEARING DATE  
November 16, 2022

RELATED APPLICATIONS  
TX#22010, TX#22011

### RECOMMENDATION: APPROVAL

#### BRIEF SUMMARY OF REQUEST

This request amends various sections in Titles 2 and 3 of the City of Lincoln Design Standards to be consistent with the updates to the City of Lincoln Flood and Water Quality Protection Manual (FWQPM).

#### JUSTIFICATION FOR RECOMMENDATION

These changes are necessary to provide consistency between the FWQPM and the Design Standards. The Design Standards are one of the primary tools for implementing the FWQPM and so must be reflective of the requirements of the updated manual.

#### APPLICATION CONTACT

Elizabeth Elliott, 402-441-7548  
[ltu@lincoln.ne.gov](mailto:ltu@lincoln.ne.gov)

#### STAFF CONTACT

Brian Will, 402-441-6362  
[bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)

#### COMPATIBILITY WITH THE COMPREHENSIVE PLAN

These amendments update the City of Lincoln Design Standards to be consistent with the proposed changes to the City of Lincoln Flood and Water Quality Protection Manual. The changes are consistent with the Goals, Elements and Policies of the Comprehensive relating to preserving waterways, floodplains and floodways and riparian areas and protecting property and investments potentially impacted by those entities.

#### KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN

##### E4 - Environmental Resources Element

Floodplains - This feature refers to land that is susceptible to flooding or that has flood prone soils. Approximately 13.8% of Lancaster County is covered by floodplains. Floodplains provide multiple benefits to both the natural (flood storage, habitat, water quality) and built (recreation, public health and safety, economic) environments. The overriding policy for the floodplain is a "No Adverse Impact" policy for the City and County, which means that the community has a goal of insuring that the action of one property owner does not adversely impact the flooding risk for other properties. Further discussion of floodplain and stormwater management considerations and strategies can be found in the Watershed Management section of the Energy & Utilities element.

Riparian Areas - This feature refers to spaces immediately adjacent to water courses on each side of a stream. They are most often located in the floodplain. They frequently contain a large amount of woody vegetation. Riparian areas can serve as linear connections between natural and built areas, as well as boundaries and edges to a variety of adjacent land uses. They offer numerous benefits including flood storage, stormwater conveyance, wildlife habitat, recreation, visual appeal, and shaded areas.

## P18 - Conservation Design

Conservation design is a type of development where buildings are grouped together on part of the site while permanently protecting the remainder of the site from development. This type of development provides great flexibility of design to fit site-specific resource protection needs. Conservation design creates the same number of residences under current zoning and subdivision regulations or may offer incentives, such as a density bonus, to encourage this type of development. There is a savings in development and maintenance costs due to less road surface, shorter utility runs, less grading and other site preparation costs. The preserved land may be owned and managed by a homeowners association, a land trust, or the City.

Conservation-focused design can help to reduce the heat island effect, increase shade, protect habitat, slow stormwater runoff, and improve mental health. Site designs that are compatible with the natural characteristics of the site, conservation design for new subdivisions, clustering development, minimizing grading and impervious surfaces, and preserving site hydrology to the maximum extent possible are encouraged.

### Action Steps

1. Encourage conservation design principles as part of the development process. Developments that incorporate conservation design principles should be eligible for greater densities, height, lot, and area adjustments. Examples of conservation design best practices include:
2. Development setbacks beyond the minimum floodplain corridor in order to help preserve riparian habitat.
3. Land area within new developments that is designated specifically for trees and/or prairie.
4. Sustainable landscape design that includes native and drought-tolerant plantings, limited use of turf grass, rain gardens, bioswales, infiltration beds, and constructed wetlands.
5. Cluster subdivision design that protects flood-prone areas by grouping new development in less-sensitive areas within a subdivision while maintaining a high overall building density.
6. Dedication of a portion or all of a building's roof space as a green roof.
7. Minimizing disturbance of the natural topography on a development site.

## P21 - Floodplain and Riparian Areas

The overriding policy for the floodplain is a "No Adverse Impact" policy for the City and County, which means that the community has a goal of insuring that the action of one property owner does not adversely impact the flooding risk for other properties.

### Action Steps

1. Designate areas for future urban development outside of the floodplain and floodway to reduce flood risks and to preserve or create floodplain areas.
2. Develop and utilize watershed plans during the review and evaluation of proposed developments and as a guide in the preparation of future capital improvement projects.
3. Utilize stormwater as an asset, by directing it through natural waterways, wetlands, and drainage corridors to minimize flood damage and prevent Non-Point Source Pollution (NPS) from occurring when storm waters flow through impervious surfaces in urban areas and cultivated and grazing land in rural areas.
4. Implement a Rain to Recreation watershed approach that reduces storm water damage, aids in maintaining water quality and provides additional natural areas that can be used by the public for recreation and educational purposes.
5. Continue to expand and enhance the following stormwater run-off mitigation measures including:
6. Vegetative buffers along stream corridors.
7. Preservation of natural areas, actively preserving the natural functions of floodplains.
8. Developing and implementing a floodplain buyout program while minimizing impacts on existing neighborhoods, citizen needs, and historic districts.
9. Making comprehensive, watershed-based approaches to floodplain management a high priority with accurate mapping and public involvement.

10. Retain City or County property in the floodplain in public ownership whenever possible, including conservation easements to protect floodplain functions.
11. Continue to implement education efforts to promote environmental stewardship and to notify floodplain property owners and prospective buyers of flood risks.
12. Consider maintaining no net fill conditions for properties in the floodplain being developed or redeveloped. Maintain no net fill conditions for those properties seeking Special Permits through Planning, Tax Increment Financing, or on former City property.
13. Engage in a public engagement process to review and assess implementation of recommendations of the Salt Creek Resiliency Study, per the City of Lincoln Climate Action Plan.
14. Maintain the Community Rating System (CRS) rating that allows for a 25% reduction in flood insurance premiums for property owners in floodplains.
15. Prepare for federal adoption and make publicly available an updated floodplain map for Lincoln that reflects increased precipitation and streamflow projections based on precipitation data from NOAA Atlas 14 data.
16. Continue and enhance current outreach and education efforts with landowners and business owners located in the revised floodplain about their flood risk. Develop a comprehensive outreach and education strategy with residents in the revised floodplain about their flood risk.
17. In response to the findings of the Salt Creek Resiliency Study, assemble key partners and leaders in the City and County to develop comprehensive strategies that reduce flooding risks, improve soil health, sequester carbon, and maintain natural systems within the City and County, to include the Parks Foundation Land Trust initiative.

#### P24 - Environmental Resource Protection

Lancaster County boasts a diverse set of environmental resources and landscape types that should be respected and maintained. The Greenprint Challenge, developed by the City of Lincoln/Lancaster County Planning Department, Parks and Recreation, and the Lower Platte South NRD in 2001, provides an approach for sound and sensitive urban and rural development that is interwoven with the community's desire for maintaining and enhancing the ecological and economic benefits of our natural and cultural environment. Although 20 years old, the resources identified, and the recommended principles for their protection, in the Greenprint Challenge are still applicable today and will continue to be in the future.

#### Action Steps

1. Pursue a variety of funding and financing options on a continuing basis. These may include: enlisting a land trust to enable donations of land, capital improvements programming providing for further acquisition of park property and natural areas, and grant funding from such sources as the Land and Water Conservation Fund, various floodplain and water quality funding programs, and the Nebraska Environmental Trust.
2. Conduct outreach efforts bringing together private landowners, environmental interests, and the development community to seek a common understanding and approach regarding natural resource features and the vision described in this Plan.
3. Consider the relationship among environmental resources (i.e., prairies, riparian corridors, floodplains, freshwater and saline wetlands, and other natural areas), key corridors/linkages, and the adjacent land uses for appropriate management and resource protection.

#### P23: Salt Valley Greenway and Connecting Green Corridors Concept Implementation

Since the first City/County Comprehensive Plan in 1961, the Salt Creek watershed has influenced planning for open space, greenways, recreation, and environmental resources in Lincoln and Lancaster County. The Salt Valley Greenway wraps around the City of Lincoln and is fed by tributaries that radiate out into the surrounding rolling hills. The effect is that of a large loop, primarily made of Salt Creek and Stevens Creek, with connecting green corridors linking urban and rural areas. Corridors which generally follow Salt Creek and its tributaries provide multiple benefits; creating connections between urban and rural areas, providing connections to the County's Salt Valley Lakes, creating green partitions which help to prevent a "wall-to-wall" urban feel, connecting habitat for the movement of wildlife, protecting floodplain, and many others. Implementation of the Salt Valley Greenway and connecting corridor concept will provide an environmental framework upon which a thriving economy can be built.

## Action Steps

1. Develop a strategic plan for acquiring and conserving lands within the Salt Valley Greenway and Connecting Corridors through cooperative efforts of public agencies, private organizations, and individuals.
2. Encourage the development of a public-private partnership that will concentrate efforts on further planning, funding, land acquisition, and development of the Salt Valley Greenway and its connecting corridors. This should be viewed as a local natural resource as well as a major economic development program.
3. Identify and pursue funding sources for the acquisition of significant properties forming the Greenway.
4. Continue to use conservation easements to protect greenway areas where it may be desirable to allow compatible land uses such as row crop farming or pasturing.

## P24: Environmental Resource Protection

Lancaster County boasts a diverse set of environmental resources and landscape types that should be respected and maintained. The Greenprint Challenge, developed by the City of Lincoln/Lancaster County Planning Department, Parks and Recreation, and the Lower Platte South NRD in 2001, provides an approach for sound and sensitive urban and rural development that is interwoven with the community's desire for maintaining and enhancing the ecological and economic benefits of our natural and cultural environment. Although 20 years old, the resources identified, and the recommended principles for their protection, in the Greenprint Challenge are still applicable today and will continue to be in the future.

## Action Steps

1. Pursue a variety of funding and financing options on a continuing basis. These may include: enlisting a land trust to enable donations of land, capital improvements programming providing for further acquisition of park property and natural areas, and grant funding from such sources as the Land and Water Conservation Fund, various floodplain and water quality funding programs, and the Nebraska Environmental Trust.
2. Conduct outreach efforts bringing together private landowners, environmental interests, and the development community to seek a common understanding and approach regarding natural resource features and the vision described in this Plan.
3. Consider the relationship among environmental resources (i.e., prairies, riparian corridors, floodplains, freshwater and saline wetlands, and other natural areas), key corridors/linkages, and the adjacent land uses for appropriate management and resource protection.

## P25: Open Space with Development

While planning for future growth is integral to the Plan, it is equally important that environmental resource features be accorded similar attention. The community should invest planning resources into the early identification of those areas that are most valued as part of the *Greenprint Challenge*. This principle supports the notion of "getting ahead of the game" by knowing what resources are most valued, where they are located, and what actions should be made within the broader planning process to secure their future for the community.

## Action Steps

1. Acquisition and development of parks and open space areas should conserve and enhance signature landscapes and environmental resources, and provide opportunities for outdoor active and passive recreation.
2. Integrate the natural resource feature concepts into future planning activities such as zoning and subdivision review, watershed master planning, subarea planning, transportation and utility planning, and floodplain management studies.
3. Pursue stormwater management practices that consider both water quality and quantity approaches near freshwater wetlands. Buffer areas should be encouraged at their perimeters to decrease the effects of adjacent future uses.
4. Designate areas for future urban development outside of the floodplain and floodway in order to mitigate the impacts of flooding and preserve natural flood storage. Floodplain in public ownership should remain in public ownership. However, where it is determined that there is public benefit to releasing floodplain property to

private ownership, flood storage capacity should be maintained through easements, deed restrictions, or other tools.

#### P55: Watershed Planning

The City of Lincoln Watershed Management program combines previously separate floodplain and stormwater management initiatives. This approach recognizes that floodplains, tributaries, and upland areas are all part of a comprehensive, integrated watershed system. A comprehensive approach to watershed planning is crucial as development expands into new basins around the Lincoln city limits and as redevelopment occurs within the existing urban area. A comprehensive watershed management program needs to incorporate a range of strategies including land use planning, conservation design for new subdivisions, conservation efforts, appropriate standards for floodplains and stormwater, flood warning system development/expansion, stream stabilization, stormwater storage basins, and other structural flood control efforts.

#### Action Steps

1. Develop and utilize watershed plans during the review and evaluation of proposed developments and as a guide in the preparation of future capital improvement projects.
2. Unify individual plans into a Comprehensive Watershed Management Master Plan for Lincoln and future growth areas.
3. Seek broad public participation in the location and design of specific watershed management projects, and evaluate the relative benefits as they relate to flood hazard reduction, water quality, channel integrity, natural character, bridges, culverts, and existing public and private structures.
4. Consider the creation of a stormwater utility to provide for a steady revenue source to address the growing needs of the stormwater and watershed management system.
5. Continue to designate stormwater bond dollars to flood control, streambank stabilization, erosion, and sediment control projects, until a new funding source becomes available.
6. Continue implementing green infrastructure strategies such as rain gardens, bioswales and permeable pavement to reduce stormwater runoff. Expand guidance/resources, incentives, and implementation.

#### ANALYSIS

1. The City of Lincoln started the process in 2017 of updating the Flood and Water Quality Manual (formerly the Drainage Criteria Manual) to meet current standards and practices, primarily due to new rainfall data published in 2013 with NOAA Atlas 14. For the last five years, the City has finalized the revisions, gathering feedback from stakeholders and making changes based on the feedback received. The updated Manual includes changes to the floodplain regulations, minimum corridor criteria, design standards for storm drainage, detention, post construction best management practices, erosion and sediment control, and other minor changes.
2. The Salt Creek Floodplain Resiliency Study was completed by the City of Lincoln and Lower Platte South Natural Resources District in August 2020, and incorporated into the City's Climate Action Plan in March 2021. The Study shows that there is a higher risk of flooding in our community today than what is shown on the FEMA floodplain maps, on average about 0.8 ft higher on Salt Creek, and that there is a need for the City to strengthen existing non-structural and structural floodplain management measures to further reduce flooding impacts to existing infrastructure, local businesses, residences, and future developments and enhance the floodplain resiliency. With this proposal, the City is implementing additional floodplain management measures by increasing the floodplain requirements to protect development from the higher risk of flooding, which aligns with the City's goals, Comprehensive Plan, and watershed master planning efforts.
3. This proposal includes revisions to the floodplain regulations for both the Existing Urban Area and the New Growth Areas within Lincoln's jurisdiction.
4. These include revisions to multiple documents, including Lincoln Zoning and Subdivision Ordinances, Design Standards, and the Flood and Water Quality Manual.
5. The summary of the proposed text amendments to Titles 2 and 3 of the Design Standards is below:

## **Chapter 2.05 Stormwater Drainage Design Standards for Subdivision Regulations**

This proposal clarifies the requirements for building areas to be protected from flooding by specifying to what elevation the minimum opening elevation must be set to and the ground must be graded to for new development adjacent to the open drainage channels, overland flow routes, detention/retention facilities, and the floodplain.

This proposal requires that the precipitation data used to design storage facilities, culverts, and storm drainage systems to be based on NOAA Atlas 14 (2013).

This proposal simplifies the requirement for preservation of stream buffers called Minimum Flood Corridors, to be based on drainage area, instead of needing to determine where the 'defined bed and bank' starts. This provides a more consistent and equitable criteria. This proposal also adds additional mitigation allowances to provide flexibility for development.

This proposal updates the stormwater quantity and quality design standards to allow flexibility and ensure proper construction.

This proposal updates the erosion and sediment control requirements to be in compliance with the State of Nebraska's new Construction Stormwater Permit, while not increasing the reinspection fee.

This proposal updates the Design Standards based on revisions to the Flood and Water Quality Manual.

## **Chapter 2.15, Urban Public Street Design Standards for Subdivision Regulations**

This proposal makes minor updates to the minimum street grade by specifying that the grade is measured along the curb and gutter line.

## **Chapter 2.20, Rural Public and Intermediate BTA Public Street Design Standards for Subdivision Regulations**

This proposal makes minor updates to the minimum street grade by specifying that the grade is measured along the curb and gutter line.

6. This proposal includes revisions to other sections of the Design Standards to reflect the new department name of Lincoln Transportation and Utilities and the new manual name of Flood and Water Quality Protection Manual.
7. The goal of this proposal is to protect the safety of our community from the actual risk of flooding shown in the Salt Creek Floodplain Resiliency Study by ensuring that existing and new development is protected from the risk of flooding. The other changes with this proposal are to align with current standards and practices to continue to responsibly manage stormwater for flood and water quality protection.
8. These changes will update Titles 2 and 3 of the Design Standards so they are consistent with other documents in place or proposed for updating as well. These revisions are consistent with the Design Standards and the goals of the Comprehensive Plan.

Prepared by

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October 31, 2022

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## Chapter 2.05

### STORMWATER DRAINAGE DESIGN STANDARDS

*The Department of ~~Public Works~~Transportation and Utilities is assigned responsibility for administration of these design standards*

#### Section 1. DEFINITIONS

**Best Management Practices:** Practices that reduce pollutants in stormwater. Post Construction BMPs (or permanent BMPs) may include structural or non-structural solutions that are used to prevent or control pollutants in storm water and minimize runoff to streams and lakes. Examples of Structural BMPs include permanent features of the landscape such as bioretention, extended detention ponds, permeable pavement and retention ponds. Examples of Nonstructural BMPs include a schedule of activities, prohibition of practices and maintenance procedures.

**Conveyance structure:** A pipe, open channel, or other facility that transports runoff from one location to another.

**Drainage criteria:** Specific guidance provided to the engineer/designer to carry out drainage policies. An example might be the specification of local design hydrology (“design storm”).

**Drainage plan:** The plan that an engineer/designer formulates to manage urban stormwater runoff for a particular project or drainage area. It typically addresses such subjects as characterization of site development; grading plans; peak rates of runoff and volumes of various return frequencies; locations; criteria and sizes of detention ponds and conveyances; measures to enhance runoff quality; salient regulations and how the plan addresses them; and consistency with secondary objectives such as public recreation, aesthetics, protection of public safety, and groundwater recharge. It is usually submitted to regulatory officials for their review.

**Existing Urban Area:** Those areas inside the corporate limits of the City of Lincoln as well as those areas outside the corporate limits having a zoning designation other than AG Agriculture and AGR Agricultural Residential, as defined by the Lincoln Municipal Code.

**Flood Design Criteria:** Chapter 10 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual, adopted on ~~Month Day, 2022~~February 22, 2000 by Resolution No. A-~~XXXXX~~80038, as amended.

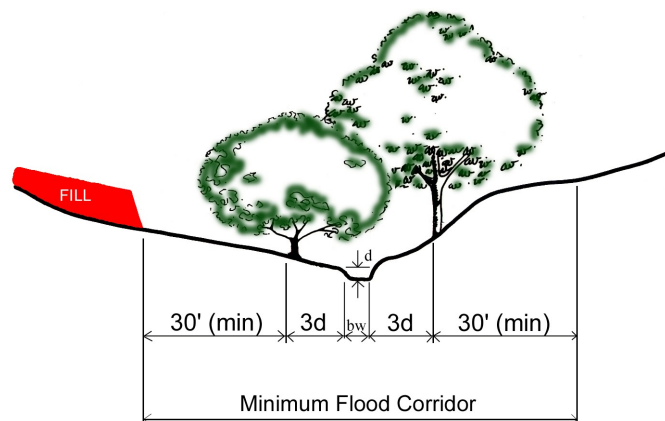
**Floodplain planning/floodplain management:** Technical and nontechnical studies, policies, management strategies, statutes and ordinances that collectively manage floodplains along rivers, streams, major drainageways, outfalls, or other conveyances. The federal government normally plays a major role in floodplain planning and management, whereas in urban stormwater management and design, local governments dominate the decision-making process.

**Major drainageway:** A readily recognizable natural or improved channel that conveys runoff that exceeds the capacity of the minor drainage system, including emergency overflow facilities.

**Major system:** The portion of the total drainage system that collects, stores, and conveys runoff that exceeds the capacity of the minor system. The major system is usually less controlled than the minor system, and will function regardless of whether or not it has been deliberately designed and/or protected against encroachment, including when the minor system is blocked or otherwise inoperable. It may be collinear with, or separate from, the minor system. It should be noted that there are those who object to the use of the terms “major” and “minor” to describe portions of the drainage system, perhaps because these terms imply that the minor system is less important. Other terms (primary system, convenience or basic system, overflow system, major/primary drainage ways, subordinate system, etc.), have been suggested. Major/minor are used in this Standard because they seem to be the most widely used terms.

**Minimum Flood Corridor:** Minimum flood corridor shall mean ~~the existing channel bottom width plus 60 feet plus six times the channel depth and the corridor will be the stream buffer area~~ centered on the channel, ~~as shown in Figure 1 below~~, or aligned such that the corridor follows the natural flow of flood waters. The width of said area shall be:

- a. 90 feet for drainage areas greater than 40 acres and less than or equal to 100 acres;
- b. 100 feet for drainage areas greater than 100 acres and less than or equal to 200 acres;
- c. 120 feet for drainage areas greater than 200 acres and less than or equal to 300 acres;
- d. Channel width plus six times the depth of channel plus 60 feet for drainage areas greater than 300 acres, as shown in Figure 1 below.
  1. At locations where the bank height is significantly different from side to side, the corridor width shall be determined for each side as half the channel width plus three times the depth of channel plus 30 feet measured from the center of the channel.



**Minor system:** The portion of the total drainage system that collects, stores and conveys frequently-occurring runoff, and provides relief from nuisance and inconvenience. This system has traditionally been carefully planned and constructed, and normally represents the principal portion of the urban drainage infrastructure investment. The degree of inconvenience the public is willing to accept, balanced against the price it is willing to pay, typically establishes the discharge capacity or design recurrence frequency of a minor system. Minor systems include roof gutters and on-site drainage swales, curbed or side-swaled streets, stormwater inlets, underground system sewers, open channels and street culverts.

**Multiple-purpose facility:** An urban stormwater facility that fulfills multiple functions such as enhancement of runoff quality, erosion control, wildlife habitat, or public recreation, in addition to its primary goal of conveying or controlling runoff.

**New Growth Areas:** Those areas outside the corporate limits of the City of Lincoln and zoned AG Agriculture and AGR Agricultural Residential as defined by the Lincoln Municipal Code.

**Outfall facility:** Any channel, storm drain, or other conveyance receiving water into which a storm drain or storm drainage system discharges.

**Post Construction Design Criteria:** Chapter 8 of the City of Lincoln ~~Drainage Criteria~~[Flood and Water Quality Protection](#) Manual, adopted on ~~Month Day, 2022~~[January 13, 2014](#) by Resolution No. A-~~XXXXX~~[88056](#), as amended.

**Post Construction Water Quality Rainfall Event:** The rainfall event that is equivalent to a depth of rainfall which is not exceeded in a set percentile of the historic runoff producing rainfall storm events. This percentile is provided in City of Lincoln Municipal Code Chapter 28.03. The rainfall depth related to the percentile is identified in Chapter 8 of the City of Lincoln ~~Drainage Criteria~~[Flood and Water Quality Protection](#) Manual. The depth of rainfall is used in hydrologic calculations to determine the volume of water to be detained.

**“Risk-based” design:** Design of urban stormwater management facilities not only on the basis of local standards, but also on the basis of the risk (cost) of the flow exceeding a selected design. Virtually all stormwater management projects have some component of risk which is inherent in selection of a design return frequency. Risk may also account for special upstream or downstream hazards that would be posed by adherence to some recommended standard. For example, the designer of culverts in a subdivision might choose to upsize particular storm drains from a 10-year to a 50-year basis to protect properties, or to make other provisions to secure emergency discharge capacity.

**Special structures:** Those components of urban drainage systems that can be thought of as “features” or “appurtenances” such as manholes, inlets, energy dissipators, transitions, channel slope protection, storage facilities, and outlet works.

**“Standard-based” design:** Design of urban stormwater management facilities based on some specified set of regulatory standards. An example is the stipulation in local drainage policies that culverts for a given subdivision are designed to pass the 50-year flood before road overtopping.

**Storm drain:** Often buried pipe or conduit, also referred to as storm sewer that conveys storm drainage, also includes, curb & gutter, grate & curb inlets, swales, open channels, and culverts.

**Stormwater detention:** The temporary storage of stormwater runoff in ponds, parking lots, depressed grassy areas, rooftops, buried underground tanks, etc., for future release. Used to delay and attenuate flow, normally drained between storms.

**Stormwater retention:** Similar to detention except the facility may have a permanent pool of water or wetland that does not drain between storms.

**Water Quality Control Volume (WQCV):** The storage volume required to treat runoff resulting from the post construction water quality rainfall event.

**Watershed Master Plan:** A plan generated by the City or by the City in cooperation with other agencies, which includes hydrologic and hydraulic modeling for the base flood event, including floodplain elevation and limits.

## **Section 2. GENERAL**

The following design standards have been prepared to provide guidance to the engineers and developers interested in stormwater runoff related design and construction and in the management of stormwater runoff. The following design standards are based on national engineering state-of-the-practice for stormwater management, modified to suit the needs of Lincoln. The City of Lincoln and the Lower Platte South Natural Resources District (LPSNRD) have also developed an extensive and detailed document entitled “City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual.” The City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual includes; various charts, tables, and a compilation of a large amount of technical information with illustrative examples to help users to design stormwater runoff related structures in a safe, practical and effective manner. The City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual, as amended, is hereby adopted by reference to and made part of the Stormwater Drainage Design Standards, and users shall refer to the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual in concurrence with the following standards. The City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual can be obtained by going to the City of Lincoln’s website or by contacting the Watershed Management Division of the ~~Public Works~~Transportation and Utilities Department contacting City’s clerk or Department of ~~Public Works~~Transportation and Utilities. Details of construction shall conform to the *City of Lincoln Standard Specifications for Municipal Construction and the Lincoln Standard Plans*.

## **Section 3. POLICY**

### **3.1 Major and Minor System**

Every urban area has two separate and distinct drainage systems, whether or not they are actually planned for and designed. One is the *minor* system and the other is the *major* system. The minor drainage system is typically thought of as storm drains and related appurtenances, such as inlets, curbs and gutters. The minor system is normally designed for floods with return frequencies of 2-years to 10-years, depending upon the kind of land use. For residential areas in Lincoln, the

drainage system shall be designed for the 5-year storm. For the downtown areas, industrial/commercial areas, and arterial roadways the drainage system shall be designed for the 10-year storm. ***During design, the hydraulic grade line for all enclosed systems shall be determined to ensure that inlets act as inlets, not outlets.***

The major drainage system is normally a flow path designed to convey runoff from large and infrequently occurring events. The 100-year return frequency storm shall be the major drainage system design storm for all new developments. Runoff from major storms should pass through a development without flooding buildings or homes. Overland flow routes can be provided using streets, swales, and open space.

Open channels for conveyance of major storm runoff are desirable in urban areas and use of such channels is encouraged. Optimum benefits from open channels can best be obtained by incorporating parks and greenbelts with the channel layout. To the extent practicable, open channels should follow the natural channels and should not be filled or straightened significantly. Effort must be made to reduce flood peaks and control erosion so that the natural channel regime is maintained. Channel improvement or stabilization projects are encouraged which minimize use of visible concrete, riprap, or other hard stabilization materials.

### **3.2 Stormwater Runoff Computation**

The calculation of the storm runoff peaks and volumes is important to the proper planning and design of drainage facilities. The calculation of runoff magnitude shall be by either the rational method, the Soil Conservation Service (SCS, now known as the Natural Resource Conservation Service) TR-55 method, or SCS method in the U.S. Army Corps of Engineers (USACE) HEC-HMS software. Refer to Chapter 2 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual for limits of applicability.

### **3.3 Detention and Retention Facilities**

Detention and retention facilities shall have release rates that do not exceed the predevelopment peak discharge rates for the 2-year, 10-year, and 100-year storms. Hydrologic conditions as of 1 August 1999 shall be used to determine peak release rates for predevelopment conditions. Submittal of hydraulic design calculations is required to document that major and minor design storm peak flows are attenuated. On-site and regional detention facilities shall be designed with adequate access and sediment storage right-of-way (including sediment forebays) to facilitate maintenance.

In addition to managing post development peak discharge rates, detention and retention facilities may be used to provide treatment for the post construction water quality rainfall event, if designed and constructed per the applicable provisions in Chapter 8 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual.

Detention and retention facilities must be maintained according to the guidelines as provided in Chapters 6 and 8 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#)

Manual. A maintenance plan for proposed facilities shall be submitted to the City of Lincoln in accordance with guidelines provided in Chapter 6 ~~Appendices~~.

### 3.4 Streets

The primary drainage functions of streets are to convey nuisance flows quickly and efficiently to the storm drain or open channel drainage with minimal interference to traffic movement and to provide an emergency passageway for the major flood flows with minimal damage to adjoining properties, while allowing for safe movement of emergency vehicles.

### 3.5 Flood Corridor Management

In the Existing Urban Area, the preservation of a ~~m~~Minimum ~~f~~Flood ~~c~~Corridor is required along all channels outside the Federal Emergency Management Agency mapped floodplain which drain greater than ~~40~~150 acres ~~or have a defined bed and bank~~. In New Growth Areas, the preservation of a ~~m~~Minimum ~~f~~Flood ~~c~~Corridor is required along all channels which drain greater than ~~40~~150 acres ~~or have a defined bed and bank~~, regardless of whether a floodplain or a floodprone area has been mapped along the corridor. For application of this standard to floodplains and floodprone areas in New Growth Areas see Section 10.3 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual.

The width of minimum flood corridors shall be ~~90 feet centered on the channel for drainage areas between greater than 40 acres and less than or equal to 100 acres, 100 feet centered on the channel for drainage areas between greater than 100 acres and less than or equal to 200 acres, 120 feet centered on the channel for drainage areas between greater than 200 acres and less than or equal to 300 acres, and for drainage areas greater than 300 acres the width shall be~~ equal to the channel bottom width, plus 60 feet, plus six times the channel depth, and the corridor shall be centered on the channel or aligned such that the corridor follows the natural flow of flood waters.

Riparian vegetation and the existing grade within the identified flood corridors shall be preserved or enhanced to the maximum extent practicable, or mitigated during the development planning and construction processes when impacted by allowable encroachments. Individual areas of encroachments into the riparian vegetation and encroachments of fill into the existing grade will be permitted for operation, maintenance and repair, channel improvements, stormwater storage facilities, and utility crossings. Individual areas of encroachments may also be permitted for parks, pedestrian/bike trails, recreational uses, and public purposes, provided the encroachments are minimal and the uses are generally consistent with the purpose of the corridor. Prior to allowing vegetative encroachments or fill for permitted purposes into the minimum flood corridor, a sequencing process will be required which first seeks to avoid, then to minimize, then mitigate for impacts to the minimum flood corridor.

Documentation must be submitted to the City for review showing the steps taken using the sequencing approach, and the selected alternative. The sequencing process shall include an evaluation of alternative approaches in the order listed below:

1. Avoidance. Encroachment of riparian vegetation and the existing grade should be avoided if there is a practicable alternative that does not cause encroachment.
2. Minimization. If it is determined that avoidance is not practicable then steps must be taken to minimize impacts to the riparian vegetation and/or the existing grade.
3. Mitigation. Impacts to the riparian vegetation or to the existing grade must be mitigated after an appropriate and feasible alternative has been chosen through minimization.

Mitigation for loss of riparian vegetation in impacted areas shall occur at a 1.5 to 1 ratio. Mitigation shall occur as close as possible to the area of encroachment and disturbance. Where land uses prior to development have an impact on the buffer, the area should be replanted with vegetation compatible with the minimum flood corridor and water quality benefits.

Mitigation for fill in impacted areas shall occur at a 1.5 to 1 ratio and shall follow the standards that are applicable to compensatory storage requirements described in Chapter 10 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual.

Mitigation for channel realignment shall occur at a 1 to 1 ratio for channels determined to be non-jurisdictional by the US Army Corps of Engineers and shall follow the mitigation requirements described in Chapter 10 of the City of Lincoln Flood and Water Quality Protection Manual.

Mitigation for channel realignment shall occur at a 1.5 to 1 ratio for channels determined to be jurisdictional by the US Army Corps of Engineers and shall follow the mitigation requirements described in Chapter 10 of the City of Lincoln Flood and Water Quality Protection Manual.

Through the watershed master planning process, develop approximate 100-year projected future condition flood profiles for mainstem and tributary channel corridors that are between the limits of detailed study by Flood Insurance Study and the boundary of the uppermost 150-acre sub-basin(s). Once the master plan flood profiles have been accepted by the City, regulate new development along the channel areas so the lowest opening in new buildings is protected from the flood profile.

In watersheds where Flood Insurance Study floodplains have not been delineated and where flood prone areas have not yet been determined through the watershed master planning process, regulate new development so the lowest opening of adjacent new buildings is protected to one foot above the calculated 100-year flood profile. Flood corridors delineated during development of land shall be legally described and recorded.

### **3.6 Erosion and Sediment Control from Construction Site Activities**

A NPDES Notice of Intent and a Stormwater Pollution Prevention Plan (SWPPP) shall be required before land disturbance or vegetation removal activities occur on any site equal to or greater than one acre in size. Contractors and developers shall contact the City on the business day prior to performing land disturbance or vegetation removal on any site equal to or greater than one acre in size. Construction sites will be inspected periodically for compliance with submitted SWPPPs.

The structural and non-structural best management practices (BMPs) are recommended to address stormwater quality enhancement.

### **3.7 Stormwater Best Management Practices**

Best Management Practices shall be required for new developments and redevelopment projects per Chapter 8 of the ~~Drainage Criteria~~Flood and Water Quality Protection Manual.

The purpose is to reduce the concentrations and quantities of pollutants reaching receiving waters. BMPs are defined in Section 1 as measures that function to either keep pollutants from entering stormwater or remove pollutants from stormwater. BMPs prevent and manage stormwater pollution and diminish adverse impacts to health, safety, property and the general welfare of the citizens of the City of Lincoln.

## **Section 4. HYDROLOGY**

The Rational Method shall be used for estimating peak flows and the design of small subdivision-type storm drain systems for developments with watershed areas from 0 to 150 acres. The Rational Method shall not be used for design of storage facilities. The SCS Method may be used for the design of all drainage structures and shall be used for design of any storage facility or any other facility with a drainage basin greater than 150 acres. Other methods may be used if they received prior approval from the Director of ~~Lincoln Public Works~~Transportation and Utilities and if they are calibrated to local conditions and tested for accuracy and reliability. In addition, complete source documentation must be submitted for approval.

### **4.1 Design Frequency**

Cross drainage facilities transport storm runoff under roadways. The cross drainage facilities shall be designed to convey (at a minimum) the 50-year runoff event with one foot of freeboard from ~~without~~ overtopping the roadway. The flow rate shall be based on upstream ultimate buildout land-use conditions. In addition, the 100-year frequency storm shall be routed through all culverts to be sure structures are not flooded or increased damage does not occur to the roadway or adjacent property for this design event.

Storm drains and inlets (Minor Systems) shall be designed to accommodate a 5-year storm in residential areas and a 10-year storm in commercial developments, downtown areas and in industrial developments, and arterial streets.

Overland flow routes (Major Systems) shall be designed to accommodate a 100-year storm without flooding buildings in all developments.

All storage facilities shall be designed to provide sufficient storage and release rates to accommodate the 2-, 10-, and 100-year design storm events such that the post development peak discharges do not exceed the predevelopment rates.

Facilities must also be designed to accommodate the post construction water quality rainfall event as required per City of Lincoln Municipal Code and per the provisions in Chapter 8 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual.

## 4.2 Rational Method

The rational formula is expressed as  $Q = CIA$  where; Q = peak rate of runoff (cfs), C = runoff coefficient representing a ratio of runoff to rainfall, I = average rainfall intensity (in/hr) for a duration equal to the time of concentration for a selected return period, and A = drainage area tributary to the design location, acres.

For inlet design the minimum time of concentration ( $t_c$ ) recommended shall not be less than 8 minutes. The value of rainfall intensity (I) can be obtained from IDF curve for the City of Lincoln are given in [Chapter 2 Figure 2-3](#) of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual. The value of C shall be representative of the subarea land use.

The method for determining the runoff coefficient (C) is based on land use, soil groups and land slope. [Table 2-4 Chapter 2](#) in the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual gives the recommended coefficient C of runoff for pervious surfaces by selected hydrologic soil groupings and slope ranges. *The value of C shall be based on fully built-out land use conditions. The minimum runoff coefficient shall be 0.4, unless the developer can clearly demonstrate a value less than 0.4 is appropriate.*

## 4.3 SCS Unit Hydrograph Method

Techniques developed by the U. S. Soil Conservation Service for calculating rates of runoff require the same basic data as the rational method, drainage area, runoff factor, time of concentration, and rainfall. Two types of hydrographs are used in the SCS procedure, unit hydrographs and dimensionless hydrographs. The SCS 24-hr, Type II storm hydrographs shall be used for modeling rainfall in Lincoln. Refer to Chapter 2-6 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual for the detailed information on SCS design procedures.

The method for determining the runoff coefficient (C) is based on land use, soil groups, and land slope. Table 2-4 in the City of Lincoln Flood and Water Quality Protection Manual gives the recommended coefficient C of runoff for pervious surfaces by selected hydrologic soil groupings and slope ranges. The value of C shall be based on fully built-out land use conditions. The minimum runoff coefficient shall be 0.4, unless the developer can clearly demonstrate a value less than 0.4 is appropriate.

*(Amended 12-14-15; Resolution No. 89425).*

## 4.4 Hydrologic Computer Modeling

HEC-HMS (a nonproprietary model written by the U.S. Army Corps of Engineers) has been selected for use in Lincoln by the [Public Works Transportation](#) and Utilities Department and the Lower Platte South NRD.

## Section 5. STORM DRAINAGE

### 5.1 Pavement Drainage

The design storm for pavement period for pavement period shall be consistent with the frequency

selected for other components of the drainage systems. Allowable maximum encroachment is provided in the following table:

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<b>Allowable Maximum Encroachment for Minor Storms</b>	
<b>Street Classification</b>	<b>Maximum Encroachment</b>
Local	No curb overtopping.
Collector	No curb overtopping.
Arterial	No curb overtopping. Flow spread must leave at least one lane free of water in each direction.
Freeway	Refer to Nebraska Department of Roads design criteria.

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The storm drainage system will start at a minimum where these encroachments are met.

For the major storm runoff, the following street inundation is allowable:

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<b>Allowable Maximum Encroachment for Major Storms</b>	
<b>Street Classification</b>	<b>Maximum Encroachment</b>
Local and Collector	The depth of water over the gutter flowline but shall not exceed the right-of-way width.
Arterial	The depth of water at the street crown shall not exceed 6 inches.
Freeway	Refer to Nebraska Department of Roads design criteria.

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The following table provides recommendation for allowable cross street flow.

<b>Allowable Cross Street Flow</b>		
<b>Street Classification</b>	<b>Minor Storm Design Runoff</b>	<b>Major Storm Design Runoff</b>
Local	Flow equivalent to not greater than 5" allowable depth in upstream curb and gutter.	The depth of water over the gutter flowline but shall not exceed the right-of-way width.
Collector and Arterial	None	The depth of water over the gutter flowline but shall not exceed the right-of-way width.
Arterial	None	6 inches or less over crown.
Freeway	Refer to Nebraska Department of Roads design criteria.	Refer to Nebraska Department of Roads design criteria.

**5.2 Storm Water Inlets Design**

The following criteria shall be used for inlet design:

Land Use	Average Return Frequency (years)
Residential Areas	5
Commercial, Industrial, and Arterial Roads	10

Inlets

- 72-inch straight and canted curb inlets shall be used in the public street system
- Grate inlets may be used for parking lot drains, area drains, etc.
- Flow in the gutter shall not exceed five (5) inches.
- Inlets shall be placed at the low points in the street grade.

Design charts for standard City of Lincoln inlets are provided in Chapter 3 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual.

The first inlet shall be placed at a point where the maximum depth of flow in the gutter is five inches. Subsequent inlets downstream from the initial inlets shall be located at or before points where the depth of flow in the gutter is five inches. Usually inlets shall be placed at the ends of radii and/or before crosswalks at intersections. Inlets that the study shows are needed at locations other than at intersections shall generally be centered between lot lines. Inlets shall be installed at the upper end of all storm drain lines and at low points in the street grades. It may be necessary at some locations to use more than one inlet to pick up the contributing flow. Canted inlets shall not be placed along intersection radii, unless approved by the Director of [Public Works Lincoln Transportation](#) and Utilities.

Concrete valley gutters may be used across roadways at T-intersections of local roadways, if the calculated depth of flow for the minor system design flow in the curb and gutter section immediately upstream is less than 5 inches and if there is no existing or proposed storm drain conduit extended to the intersection. The pavement cross-slope on the “uphill” lane of the minor approach shall be reduced at a gradual rate from 3% to 1% to allow drainage of the “uphill” gutter flow line through the return. No valley gutters shall be used across collector or arterial roadways.

Curb and gutter grades that are equal to pavement slopes shall not exceed 8 percent or fall below [10.5](#) percent without approval from the Director of [Public Works Lincoln Transportation](#) and Utilities.

The detailed procedures and necessary charts to design inlets are described in Chapter 3 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual. Curb and gutter installation shall be designed in accordance with the most current City Standard Drawings and Specifications.

### **5.3 Manholes**

Manholes shall be installed at the upper end of all storm drain lines and at all changes in grade, size, or alignment. The recommended maximum spacing is 600 feet for storm drain lines, 36 inches and less in diameter. Greater spacings than this will require approval by the Director of [Public Works Lincoln Transportation](#) and Utilities. The crowns of all storm drain pipes entering and leaving a junction shall be at the same elevation. Laterals from a storm drain inlet to the main storm drain line may be tapped directly into the main storm drain line if the diameter of the lateral does not exceed one-half the diameter of the pipe being tapped. If the diameter of the lateral does exceed one-half the diameter of the pipe being tapped, a storm drain manhole or inlet will be required. The crown of the lateral pipe shall match the crown of the main storm drain pipe. Storm drain manholes shall be constructed in accordance with the most current City Standard Drawings and Specifications.

#### 5.4 Storm Drains

For ordinary conditions, drain pipes should be sized on the assumption that they will flow full or practically full under the design discharge but will not be placed under pressure head. The Manning Formula is recommended for capacity calculations. The beginning point at which a storm drain shall be required in a street is where the depth of flow in one or both gutters requires inlets to be built. Easements for storm drain pipe and surface water flow shall be used where a drainage way must be maintained to carry stormwater flow in excess of the storm drain pipe capacity. The easement cross-section shall accommodate the depth and width of flow from the higher intensity storms. The minimum size of the storm drain pipe shall be 15" in diameter.

Street right-of-ways convey the portion of runoff in excess of pipe capacity, whether planned or not. Street right-of-way capacity is determined using Manning's equation for open channel flow conditions. In order to determine if design flows can be accommodated by the storm drains system without causing flooding, or causing flows to exit the system at unacceptable locations, the designer shall determine *the hydraulic gradient*. The following design criteria shall be followed when determining the elevation at the HGL:

- The hydraulic grade line shall be 0.75 feet below the intake lip of any affected inlet, any manhole cover, or any entering nonpressurized system.
- The energy grade line shall not rise above the intake lip of any affected inlet, any manhole cover or any entering nonpressurized system.
- If an urban stormwater pipe drainage system is being designed to connect to an existing stormwater pipe drainage system, both systems must be evaluated to determine any pipe deficiencies. The starting hydraulic grade line for the new system must be determined from a downstream analysis of the existing pipe system.

Refer to Chapter 3 of the City of Lincoln ~~Drainage Criteria~~[Flood and Water Quality Protection Manual](#) for detailed storm drain design procedures, charts and tables.

#### 5.5 Slope

The standard recommended maximum and minimum slopes for storm drains shall conform to the following criteria:

- 5.5.1. The maximum hydraulic gradient shall not produce a velocity that exceeds ~~1520~~ feet per second.
- 5.5.2. The minimum desirable physical slope shall be 0.5 percent or the slope that will produce a velocity of 3.0 feet per second when the storm drain is flowing full, whichever is greater.

Systems should generally be designed for non pressure conditions. For very flat flow lines the general practice is to design components so that flow velocities will increase progressively throughout the length of the pipe system.

## 5.6 Location and Alignment

In new subdivisions the center of the street is reserved for storm drain system. When construction of a storm drain system is necessary in the older parts of the City of Lincoln, the location will be determined by the City. Permanent easements are required for public storm drains located on private property. No structures may be placed over a public storm drain system. All easements for storm drain pipe should be a minimum of 30 feet wide. In situations where it can clearly be demonstrated that an easement less than 30 feet is adequate, the City may consider such a request. Easements for storm drain pipe and surface water flowage shall be used where a drainageway must be maintained to carry stormwater flow in excess of the storm drain pipe capacity. The easement cross-section shall accommodate the depth and width of flow from the 100-year storm. The width must also be designed to allow for access of maintenance equipment during the major storm. The developer shall obtain required permits prior to final approval of plans for proposed improvements located in railroad or highway right-of-ways.

## 5.7 Depth of Cover

The desired depth of cover above a storm drain pipe shall be 2 to 3 feet, with 1.5 feet being the absolute minimum at an inlet location. For new construction, the minimum depth of cover above a storm drain pipe shall be equal to the pavement thickness plus the depth of subgrade preparation, but under no circumstances shall such depth be less than 1.5 feet. Depth of cover greater than 3 feet shall be avoided due to the possibility of the storm drain blocking access of sanitary sewer service lines to the main sanitary sewer lines.

## 5.8 Material and Joints

Only reinforced concrete storm drain pipe shall be used for public storm drain systems within the City limits, unless other materials are approved by the Director of ~~Public Works~~Lincoln Transportation and Utilities. Construction of pipe and joint shall conform to the City of Lincoln Standard Specification.

## 5.9 Bar Grates on End Sections

An open pipe inlet from an open channel (similar to a culvert inlet) into a closed pipe storm drain shall be designed and constructed with flared end sections with a bar grate. No bar grate is required on the end section of a pipe outlet into an open channel unless directed by the Director of ~~Public Works~~Lincoln Transportation and Utilities.

## 5.10 Outlets

The outlet of a pipe system must be placed at a location where the downstream area or receiving stream is capable of accepting the design flow. Downstream erosion, stream degradation and flooding impacts must be considered. Impacts to property or channels downstream must be mitigated (e.g. energy dissipation structure, downstream channel improvement).

On all urban stormwater system plans, the flow path from an outlet of a drainage system should be clearly shown on plans relative to the property lines for a minimum of 100 feet downstream or the nearest defined channel, whichever is greater.

## Section 6. DESIGN OF CULVERTS

Culverts shall be designed to convey (at a minimum) the 50-year runoff event with one foot of freeboard from-without overtopping the roadway. The flow rate shall be based on upstream full-buildout land-use conditions from the City of Lincoln/Lancaster County Comprehensive Plan. Where roadside ditches convey the minor storm drainage in lieu of storm sewers, appurtenant culverts shall be designed to convey the 10-year storm event, but in no case shall be less than the minimum sizes specified in Section 4.5.156 of the City of Lincoln Drainage-Criteria Flood and Water Quality Protection Manual. In addition, the 100-year frequency storm shall be routed through all culverts to be sure structures are not flooded or increased damage does not occur to the roadway or adjacent property for this design event.

If a culvert is being replaced and the proposed culvert size is different than the existing culvert size, a downstream analysis must be completed to evaluate flooding and stream stability impacts. If it is shown that impacts will occur downstream, mitigation for the impacts will be required (e.g. channel improvements, flowage easements). Any channel improvements must comply with current floodplain regulations and minimum flood corridor standards.

An economic analysis may justify a design to pass floods greater than those noted above where potential damage to adjacent property, to human life, or heavy financial loss due to flooding is significant.

Also, in compliance with the National Flood Insurance Program, it is necessary to consider the 100-year frequency flood at locations identified as being special flood hazard areas. This does not necessitate that the culvert be sized to pass the 100-year flood, provided the capacity of the culvert plus flow bypassing the culvert, is sufficient to accommodate the 100-year flood without raising the associated water surface elevation more than floodplain regulations or adjacent property elevations allow for that location. In addition, stormwater management facilities cannot be installed which would result in a major lowering of the associated water surface elevation without a downstream evaluation. The design engineer should review the City floodway regulations for more information related to floodplain regulations.

Two procedures for designing culverts are described in the City of Lincoln Drainage-Criteria Flood and Water Quality Protection Manual: (1) manual use of inlet and outlet control nomographs and (2) use of an acceptable computer system for culvert design. It is recommended that an acceptable computer system culvert design model be used for culvert design since it will allow the engineer to easily develop performance curves to examine more than one design situation.

### **6.1 Loading Requirements**

Reinforced concrete box culvert, reinforced concrete pipe culverts and corrugated metal pipe culverts shall be designed for an ~~HL93HS20~~ live load, with the appropriate impact factor, and dead load. Dead load (fill) shall be based on the depth of earth cover, plus the pavement, above the top of the culvert.

### **6.2 Headwalls**

Culvert or storm drain headwalls constructed in or adjacent to public right-of-way shall be designed to protect pedestrians. This protection shall include a pipe railing fence on the headwall and any wingwalls, unless the grading and size of the pipe precludes the need for the fence, as approved by the Director of ~~Public Works~~Lincoln Transportation and Utilities.

### **6.3 Minimum Culvert Size**

The minimum culvert size shall be 18 inches for roadways and 15 inches for driveways.

### **6.4 Debris Control**

In general, bar grates shall not be used on flared end sections of culverts.

### **6.5 Driveway culverts**

Driveway culverts are permissible along unpaved city streets. The Maintenance Division of the ~~Public Works~~Lincoln Transportation and Utilities Department shall determine culvert size and grade and install the culvert. The owner shall purchase the corrugated metal pipe culvert complete with flared end sections and have it delivered to the site.

## **Section 7. OPEN CHANNELS**

For any open channel conveyance, channel stability must be evaluated to determine what measures are needed to avoid bottom scour and bank cutting. Channels shall be designed for long term stability, but be left in as near a natural condition as possible. The use of open, natural channels is especially encouraged in the major drainage system and can have advantages in terms of cost, capacity, multiple use (i.e., recreation, wildlife habitat, etc.) and flow routing storage. It shall be demonstrated that the natural condition or an alternative channel design will provide stable stream bed and bank conditions (Refer to Chapter 5 in the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual). Where this cannot be demonstrated, a concrete low flow liner with a nonerosive cross section may be required by the Director of ~~Public Works~~Lincoln Transportation and Utilities. Even where streams retain a relatively natural state, streambanks may need to be stabilized while vegetation recovers. To preserve riparian characteristics of channels, channel improvement or stabilization projects should minimize the use of visible concrete, riprap or other hard stabilization materials. The main classifications of open channel types are natural, bio-technical vegetated grass-lined, rock-lined, and concrete. Grass-lined channels include grass with mulch and/or sod, reinforced turf, and wetland bottom. Rock-lined channels include riprap,

grouted riprap, and wire-enclosed rock. See Chapter 5 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual for more discussion of channel types and design procedures.

In open channels for which the City has developed a watershed master plan hydraulic model, hydraulic calculations submitted for open channels in a development may be used to update the watershed master plan hydraulic model. Those submitting hydraulic calculations are encouraged to use the most current watershed master plan model.

### **7.1 Return Period Design Criteria**

Open channels shall be sized to convey the 100-year storm.

### **7.2 Approximate Flood Limits Determination**

Flood corridors delineated during development of land shall be legally described and recorded.

In developments for which the City has not developed a watershed master plan, open channel hydraulic calculations submitted for the developments will be done using a backwater analysis for streams draining more than ~~100~~150 acres.

~~For open channels not located in the mapped floodplain, adjacent buildings must have a minimum opening elevation of 1 foot above the calculated 100-year flood event elevation.~~

~~For open channels located in the mapped floodplain, adjacent buildable lots must a minimum of 1 foot above the calculated 100 year flood event elevation if based upon NOAA Atlas 14 precipitation, or 2 feet above the calculated 100-year flood event if not based upon NOAA Atlas 14 precipitation; and adjacent buildings must have a minimum opening elevation 1 foot above the calculated 100-year flood event elevation if based upon NOAA Atlas 14 precipitation, or 2 feet above the calculated 100-year flood event if not based upon NOAA Atlas 14 precipitation.~~

At a minimum, buildings adjacent to open drainage channels, overland flow routes, or detention/retention facilities must be protected by setting a minimum opening elevation no lower than 1 foot above the 100-year flood elevation if based upon NOAA Atlas 14 precipitation or 2 feet above the 100-year flood elevation if not based upon NOAA Atlas 14 precipitation, whether located in the floodplain or not.

Buildable lots adjacent to open drainage channels, overland flow routes, or detention/facilities not located in the floodplain must have a lowest ground elevation grade above the 100-year flood elevation.

Buildable lots adjacent to the floodplain must have a lowest ground elevation grade no lower than 1 foot above the 100-year flood elevation if based upon NOAA Atlas 14 precipitation or 2 feet above the 100-year flood elevation if not based upon NOAA Atlas 14 precipitation.

### **7.3 Velocity Limitations**

Sediment transport must be considered for conditions of flow below the design frequency. Minimum channel flow velocity for the 2-year storm shall be 2.0 feet per second. A low flow

channel component within a larger channel can reduce maintenance by improving sediment transport in the channel. Channel flow velocities shall be non-erosive for the 2-, 10- and 100-year storms. Trickle channel design flow rates shall be 1% of the major storm flow rates and shall be non-erosive. Grade control structures, streambank protection, and construction and maintenance considerations shall be determined during design.

Hydraulic analysis shall be performed during the planning and design phase to address the potential for erosion, and the need for stabilization measures. The following criteria and analysis techniques are recommended for natural channel evaluation and stabilization:

- The channel and overbank areas shall have adequate capacity for the 100-year post development storm runoff.
- The water surface profiles shall be defined and delineated so that the 100-year floodplain can be identified and managed. Plan and profile drawings shall be prepared of the floodplain, and allowances should be made for future bridges or culverts.
- Any fill material or structures placed in the floodplain are subject to the restriction of local, state and Federal Emergency Management Agency floodplain regulations.
- Manning's  $n$  roughness factors representative of maintained channel conditions should be used.
- Erosion control structures such as drop structures and grade control checks should be provided as necessary to control flow velocities and channel erosion.

Natural channels should be left in as near a natural condition as feasible. However, with most natural channels, grade control structures will need to be constructed at regular intervals to limit channel degradation and to maintain what is expected to be the final stable longitudinal slope after full urbanization of the watershed. In addition, the owner is reminded that modification of the channel may require a US Army Corps of Engineers Section 404 permit

Grass-lined channels are encouraged when designing artificial channels. Advantages include: channel storage, lower velocities, provision of wildlife habitat, and aesthetic and recreational values. Design considerations include velocity, longitudinal slopes, roughness coefficients, depth, freeboard, curvature, cross-section shape, and channel lining material (vegetation and trickle channel considerations). Channel shape may be almost any type suitable to the site-specific conditions, and can be designed to meet multipurpose uses, such as recreational needs and wildlife habitat. However, limitations to the design include the following:

- Side slopes shall be 4 (horizontal) to 1 (vertical) or flatter. Slopes as steep as 3H:1V may be considered in areas where development already exists and there are right-of-way limitations.

- The bottom width shall be designed to accommodate the hydraulic capacity of the cross-section, recognizing the limitations on velocity and depth. Width shall be adequate to allow necessary maintenance.
- Maintenance/access routes shall be provided for along all major drainageways.
- Trickle channels or underdrain pipes should be provided on grass-lined channels to minimize erosion. As an alternative, low flow channels can be provided (low flow channels are particularly applicable for larger conveyances). Trickle channels should be designed to carry base flow originating from lawn watering, low intensity rainfall events, and snow melt.
- Channel improvement or stabilization projects shall minimize use of visible concrete, riprap, or other hard stabilization materials in order to preserve riparian characteristics of channels.

#### 7.4 **Maintenance**

Open channels shall be maintained by the developer or a property-owners' association unless an alternative ownership/maintenance arrangement has been approved by the Director of [Public WorksLincoln Transportation](#) and Utilities, Planning Commission and the City Council. [Natural channels may require a maintenance plan. Constructed channels require cityLincoln Transportation and Utilities approval, maintenance plans, 404 permits as appropriate, floodplain permits and/or sureties.](#)

### **Section 8. STORAGE FACILITIES**

On-site storage facilities are required unless the master planning process or regional analysis has shown that the detention requirements can be transferred to a regional facility, which is determined to be of regional benefit to the drainage system by the City and LPSNRD. On-site facilities may still be necessary to provide for receiving stream channel stability, maintenance and water quality. All storage facilities shall be designed and analyzed using reservoir routing calculations. Watershed routing for storage facilities shall be performed using the procedures outlined in Chapter 6 of the City of Lincoln [Drainage-CriteriaFlood and Water Quality Protection](#) Manual or using HEC-HMS.

#### **8.1 Plan Review**

- 8.1.1 Detention or retention storage construction plans shall be submitted by the owner to the Nebraska Department of Natural Resources for approval, or shall be certified by the owner that Nebraska Department of Natural Resources approval is not required.
- 8.1.2 Supporting calculations for hydrologic and hydraulic analysis and design shall be submitted by the owner to the [Public WorksLincoln Transportation](#) and Utilities Department for review and approval. As a minimum, supporting calculations shall

include; design storm inflow and outflow hydrographs, stage-storage-discharge curves, and cumulative inflow-outflow elevation curves for the design storms.

- 8.1.3 Appropriate soil investigation (i.e., suitability for water storage, settlement potential, slope stability, and influence of groundwater) shall be completed for the structure hazard classification.
- 8.1.4 Construction plans for detention or retention storage, including the outlet structure, shall be submitted by the owner to the [Public WorksLincoln Transportation](#) and Utilities Department for review and approval.
- 8.1.5 The owner shall provide, at the end of construction, a separate written statement prepared by a licensed surveyor or engineer to the Director of [Public WorksLincoln Transportation](#) and Utilities that grading and construction of the storage facility have been completed in conformance with the approved construction plans.

## **8.2 Ownership and Maintenance of Storage Facilities**

Storage facilities proposed in a development, along with all inlet and outlet structures and/or channels, are to be owned and maintained by the developer or a property-owners' association unless a different ownership/maintenance arrangement has been approved by the Director of [Public WorksLincoln Transportation](#) and Utilities. Because the downstream storm drainage system will be designed assuming detention storage upstream, a storage facility in the storm drainage system shall remain functional as a storage facility site permanently. Provisions shall be made in the approval of development by the Planning Commission and City Council for the permanence of the storage facilities and ongoing maintenance of the storage facilities.

Detention and retention facilities must be maintained according to the guidelines as provided in Chapter 6 of the City of Lincoln [Drainage CriteriaFlood and Water Quality Protection](#) Manual. A maintenance plan for proposed facilities shall be submitted to the City of Lincoln in accordance with guidelines provided in Chapter 6 Appendices.

## **8.3 General Criteria**

Storage may be concentrated in large basin-wide (or regional) facilities or distributed throughout an urban drainage system. Storage may be developed in depressed areas in parking lots, behind road embankments, freeway interchanges, parks and other recreation areas, and small lakes, ponds and depressions within urban developments. The utility of any storage facility depends on the amount of storage, its location within the system and its operational characteristics. An analysis of such storage facilities shall consist of comparing the design flow at a point or points downstream of the proposed storage site with and without storage. In addition to the design flow, other flows in excess of the design flow that might be expected to pass through the storage facility shall be included in the analysis. Compute inflow hydrograph for runoff from the 2-, 10- and 100-year design storms using the procedures outlined in Urban Hydrology for Small watersheds TR-55 or other appropriate models. Both predevelopment and post development hydrographs are required. The design criteria for storage facilities shall include the following list.

- a. release rates,
- b. storage volume,
- c. grading and depth requirements,
- d. safety considerations and landscaping,
- e. outlet works and location, and
- f. efficiency of maintenance.

If a detention or retention pond for managing post development peak discharge rates is also being used to provide treatment for the post construction water quality rainfall event, it must be designed and constructed per the applicable provisions in Chapter 8 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual. A maintenance plan for proposed facilities shall be submitted to the City of Lincoln in accordance with requirements as provided in Chapters 6 and 8 and associated Appendices.

#### **8.4 Release Rate**

Control structure release rates shall be such that peak discharge rates for post development conditions do not exceed predevelopment peak runoff rates for the 2-year, 10-year and 100-year discharges at the project property line and in accordance with paragraph 6.4.6 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual, unless waived by the Director of ~~Public Works~~Lincoln Transportation and Utilities. Parameters for predevelopment conditions shall be determined for actual site conditions existing on the site as of 1 August 1999. In addition, structures must provide the necessary detention of the water quality control volume per Chapter 8 of the City of Lincoln ~~Drainage Criteria~~Flood and Water Quality Protection Manual if the facility will also be used for water quality purposes. Storage volume shall be adequate to attenuate the post development peak discharge rates to predevelopment discharge rates for the 2-year, 10-year and 100-year storms, depending on the downstream system design capacity. Storage volume shall allow for the sediment load anticipated from the contributing watershed. If sedimentation during construction causes loss of detention volume, design dimensions shall be restored before completion of the project. For storage facilities, all temporarily stored runoff shall be drained within 72-hours.

Dams shall be designed as per the applicable Department of Natural Resources requirements. For storage facilities, vegetated embankment slopes and slopes adjacent to the Right-of-Way shall have side slopes be no steeper than 4:1 (horizontal to vertical), and all other slopes shall be no steeper than 3:1 (horizontal to vertical) the top width of any embankment shall be no narrower than 14 feet for embankments greater than 6 feet high and 8 feet for embankments less than or equal to 6 feet high, and traversable vehicular access for maintenance purposes shall be provided from public right-of-way. New development shall be designed so the lowest opening of adjacent new buildings is a minimum of one foot above the calculated 100-year flood elevation.

Areas above the normal high-water elevations of storage facilities shall slope at a minimum of 2% toward the facilities to allow drainage and to prevent standing water. The bottom area of storage facilities shall be graded toward the outlet to prevent standing water conditions. A minimum 2% lateral and longitudinal bottom slope is required on unpaved areas. A low flow or pilot channel constructed across the facility bottom from the inlet to the outlet is required to convey low flows, and prevent standing water conditions. If the detention area is constructed in the location of a natural drainageway, the bottom slope of the natural drainageway will be used as the minimum longitudinal slope required for the detention pond.

Where wetland habitat is desired, vegetative and geometric conditions shall be provided to minimize the propagation of undesired vegetation. If the facility provides open water conditions, a depth sufficient to discourage growth of vegetation, except along the shoreline, (without creating undue potential for anaerobic bottom conditions) shall be provided. Aeration may be required in permanent pools to prevent anaerobic conditions.

Design of storage facilities must allow for performance of maintenance activities. The owner's capability for performing required maintenance shall be considered. Provisions for weed control and aeration for prevention of anaerobic conditions shall be considered. Water budget calculations are required for all permanent pool facilities and shall consider performance for average annual conditions to demonstrate that adequate runoff is available for maintenance of a permanent pool. The water budget shall consider all significant inflows and outflows including, but not limited to, rainfall, runoff, infiltration, exfiltration, evaporation and outflow.

Outlet works selected for storage facilities shall include a principal spillway and an emergency overflow, and must be able to accomplish the design functions of the facility unless adequate supporting documentation is provided to the satisfaction of the [Public Works Lincoln Transportation](#) and Utilities Department. Principal spillway discharge must be released in a non-erosive manner. Storage facilities shall pass the 2-year, 10-year and 100-year design storms for post development conditions without allowing flow to enter an emergency outlet through a combination of available storage and outlet works capacity. Outlet works must operate without requiring attendance or operation. The emergency spillway crest elevation shall be set at the maximum water surface elevation for the 100-year design storm. Minimum freeboard of three feet above the emergency spillway crest elevation will be necessary for embankment structures which are large enough to require review and permitting by Nebraska Department of Natural Resources. For large storage facilities, selecting a flood magnitude for sizing the emergency outlet shall be consistent with the potential threat to downstream life and property if the basin embankment were to fail. The sizing of a particular outlet works shall be based on results of hydrologic routing calculations.

A maintenance plan for proposed facilities shall be submitted to the City of Lincoln in accordance with requirements as provided in Chapters 6 and 8 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual and associated Appendices.

## **8.5 Location and Downstream Analysis**

If the storage facility being designed is located in a drainage basin that has a master plan, the discharge hydrographs from the outlet works shall be routed down stream to the bottom of the master plan subbasin. The resulting 2-, 10-, and 100-year peak flows with the proposed facility in place shall be compared to the master plan peak flows to verify the development drainage and storage facility plan is acceptable. If the resulting peak flows exceed the master plan flows, the designs shall be improved to be consistent with the master plan.

#### **8.6 Safe Dams Act**

An owner proposing a detention or retention embankment shall submit to [Public Works](#) [Transportation](#) and Utilities Department, documentation of compliance with Nebraska Department of Natural Resources review and permitting requirements, or documentation supporting why the embankment does not fall under Nebraska Department of Natural Resources jurisdiction.

#### **8.7 Construction and Maintenance Considerations**

Facilities shall be designed to minimize maintenance problems typical of urban detention facilities such as; weed growth, grass and vegetation maintenance, sedimentation control, bank deterioration, standing water or soggy surfaces, mosquito control, blockage of outlet structures, litter accumulation, and maintenance of fences and perimeter plantings. Proper design focuses on elimination or reduction of maintenance requirements by addressing the potential for problems to develop. A maintenance plan for proposed facilities shall be submitted to the City of Lincoln in accordance with requirements as provided in Chapters 6 and 8 of the City of Lincoln [Drainage Criteria](#) [Flood and Water Quality Protection](#) Manual and associated Appendices.

Sedimentation shall be controlled by constructing traps to contain sediment for easy removal or low-flow channels to reduce erosion and sediment transport. Bank deterioration shall be controlled with protective lining or by limiting bank slopes. Access easements shall be provided for heavy equipment when facilities do not abut public right-of-way. Access for vehicular maintenance shall be provided to the control structure, along side(s) of the storage pond as necessary (15-foot minimum width), and to the basin bottom for facilities with bottom widths greater than 15 feet. When a facility abuts a City right-of-way such as a local or arterial street, maintenance access from the abutting City right-of-way is an option which may be acceptable if it will not result in an unsafe or otherwise unworkable condition. Retention storage, which proposes a permanent pool in addition to flood storage, shall be constructed to facilitate silt removal and disposal. An outlet shall be provided that will allow the retention facilities to be completely drained when required for silt removal, maintenance, or inspection. Provisions shall be made for the deposit of silt removed from the stilling basin and/or the main pool.

Principal spillway openings shall be protected by trash racks. Trash racks at entrances to pipes and conduits should slope at about 3:1 to 5:1 to allow trash to slide up the rack with flow pressure and rising water level, the slower the approach flow, the flatter the angle. The bar opening space for small pipes shall be less than the pipe diameter. The control for the outlet shall not shift to the grate, nor shall the grate cause the headwater to rise above planned levels.

## Section 9. ENERGY DISSIPATORS

### 9.1 Design Criteria

#### 9.1.1 Overview

Energy dissipators shall be employed whenever the velocity of flow leaving a stormwater management facility exceeds the velocity that will cause erosion of the downstream channel system. Several standard energy Dissipator designs have been documented by the U.S. Department of Transportation including hydraulic jump, forced hydraulic jump, impact basins, drop structures, stilling wells, and riprap. The detailed design procedures of the energy dissipators are given in Chapter 7 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual.

#### 9.1.2 Design Limitations

If ice buildup is a factor, it shall be mitigated by sizing the structure to not obstruct the winter low flow and by using external dissipators. Debris control facilities shall be designed using Hydraulic Engineering Circular No. 9, "Debris-Control Structures" and shall be considered where clean-out access is limited and if the dissipator type selected cannot pass debris. The flood frequency used in the design of the energy dissipator device shall be the same flood frequency used for the culvert design. The use of a greater frequency is permitted, if justified by low risk of failure of the crossing, substantial cost savings, limited or no adverse effect on the downstream channel, and limited or no adverse effect on downstream development. The culvert exit velocity shall be consistent with the maximum velocity in the natural channel or shall be mitigated by using channel stabilization and energy dissipation. The hydraulic conditions downstream shall be evaluated to determine a tailwater depth and the maximum velocity for a range of discharges. Lake, pond, or large water body shall be evaluated using the high water elevation that has the same frequency as the design flood for the culvert. (See Lincoln Flood Insurance Study for the appurtenant stream information.)

#### 9.1.3 Design Options

The material selected for the dissipator shall be based on a comparison of the total cost over the design life of alternate materials and shall not be made using first cost as the only criteria. This comparison shall consider replacement cost and the difficulty of construction as well as traffic delay. Traffic shall be protected from external energy dissipators by locating them outside the appropriate "clear zone" distance per the AASHTO Roadside Design Guide or shielding them with a traffic barrier. If weep holes are used to relieve uplift pressure, they shall be designed in a manner similar to underdrain systems.

## **Section 10. STORMWATER BEST MANAGEMENT PRACTICES**

To comply with federal law, the City of Lincoln has adopted a program to require the use of water quality Best Management Practices (BMPs) for new developments and redevelopment efforts that are one acre or greater.

### **10.1 Overview**

To reduce the concentrations and the loads of pollutants reaching receiving waters, a system of stormwater BMPs must be implemented. The selection of the most appropriate BMPs for a given site or basin is largely dependent on whether development is in place or has yet to occur. In areas with existing development, Nonstructural BMPs are the most cost-effective because retrofitting structural controls in a developed area can be expensive. Structural controls are more appropriate for new development and significant redevelopment, where they have been integrated into the planning of the infrastructure. Because non point source pollution is varied in nature and impact, no individual BMP may fit all situations. It must be tailored to fit the needs of particular sources and circumstances. An effective strategy for minimizing stormwater pollution is to use multiple BMPs (structural, nonstructural, and source controls). Multiple BMPs and combining BMPs in series can provide complementary water quality enhancement that minimizes pollutants being transported to the receiving waters. General planning and design guidelines are provided in Chapter 8 of the ~~Drainage Criteria~~[City of Lincoln Flood and Water Quality Protection](#) Manual.

### **10.2 Ownership and Maintenance of Best Management Practices**

Structural BMP facilities proposed in a development or redevelopment, along with all inlet and outlet structures and/or channels, are to be owned and maintained by the developer or a property-owners' association unless a different ownership/maintenance arrangement has been approved by the Director of ~~Public Works~~[Lincoln Transportation](#) and Utilities. Structural BMPs are a critical part of the storm drainage system and shall remain functional as Structural BMP facilities permanently. Provisions shall be made in the approval of developments or redevelopments by the Planning Commission and City Council for the permanence of the Structural BMP facilities and ongoing maintenance of Structural BMP facilities.

### **10.3 General Criteria**

Management of frequent rainfall events for water quality may be concentrated in a single facility or distributed throughout an entire development or redevelopment project. However flows must be managed at every discharge point from a development or redevelopment project. The usefulness and effectiveness of any water quality facility depend on the amount of storage provided, its location within the system and its operational characteristics. An analysis of such water quality facilities shall include designing the facilities to manage the Water Quality Control Volume at each discharge point from the contributing drainage area. Flows greater than the Water Quality Control Volume, that might be expected to pass through the water quality facility shall be included in the analysis. The design criteria for water quality facilities shall include the following list:

- Water Quality Control Volume
- Release rate
- Storage volume
- Infiltration
- Grading and depth requirements
- Safety considerations and landscaping
- Outlet works and location
- Downstream impact
- Operations and maintenance guidelines

#### **10.4 Water Quality Control Volume**

At a minimum, the Water Quality Control Volume shall be based on a set percentile rainfall event at every discharge point within new development sites that are one acre or greater. For redevelopment sites that are one acre or greater, at a minimum, the Water Quality Control Volume shall also be based on a set percentile rainfall event measured at every discharge point within the development. These percentiles are provided in City of Lincoln Municipal Code Chapter 28.03.

#### **10.5 Release Rate**

The Water Quality Control Volume is to be temporarily held and then released over a 24 to 40 hour period. For facilities that combine water quality control with flood control, the runoff from the design storms for the flood control criteria shall be 'stacked' on top of the Water Quality Control Volume. These types of facilities may be required to have multi-stage outlet control structures to control the release of the Water Quality Control Volume as well as the water detained for flood control.

For Structural BMPs that are designed for subsurface storage (e.g. pervious pavements, bioretention, rain gardens, etc) the subsurface storage must hold the Water Quality Control Volume and infiltrate into the underlying soil as is practical.

#### **10.6 Storage Volume**

Storage volume of Structural BMP facilities shall be adequate to hold the Water Quality Control Volume. Proper implementation of site erosion and sediment measures is necessary to prevent clogging and failure of Structural BMPs. Phasing is also critical as Structural BMPs should typically be the last infrastructure constructed. For facilities that combine water quality control with flood control or that are not subsurface, both the flood control volume and water quality volume shall all be drained from the facility within 72 hours. For facilities that function just for water quality control and are not subsurface the Water Quality Control Volume will be stored for a

duration between 24 and 40 hours (for retention ponds and subsurface facilities the Water Quality Control Volume will be stored for a duration between 12 and 40 hours).

#### **10.7 Infiltration**

The construction of Structural BMP facilities that require infiltration will have adequate infiltration to drain the Structural BMP within the specified time periods (e.g. 12 to 24 hours for subsurface type Structural BMPs). Most soils in the City of Lincoln consist of 'D' soils that are clayey and have relative low infiltration rates in the order of less than 0.6 inches/hour. Also in the City of Lincoln there are some more silty loam type 'B' soils that have higher infiltration rates in the order of 0.6 to 2.0 inches/hour. Infiltration tests shall be run to determine the local infiltration rates if infiltration is a critical part of the Structural BMP facility. An underdrain is needed for subsurface type Structural BMPs if the infiltration rate is inadequate or if infiltration is not desired.

#### **10.8 Grading and Depth Requirements**

The construction of Structural BMP facilities can require excavation to obtain sufficient storage volume. It is required for non subsurface storage that embankments be vegetated and shall have side slopes no steeper than 4:1 (horizontal to vertical), that the top width of any embankment shall be no narrower than 14 feet, and traversable vehicular access for maintenance purposes shall be provided from public right-of-way.

Non subsurface Structural BMP facilities shall slope at a minimum of 2% everywhere towards the outlet to allow drainage and to prevent standing water. Careful finish grading is required to avoid creation of upland surface depressions that may retain runoff. The bottom area of storage facilities shall be graded toward the outlet to prevent standing water conditions. A minimum 2% bottom slope is required.

#### **10.9 Outlet Works**

Outlet works selected for Structural BMP facilities must be able to accomplish the design functions of the facility unless adequate supporting documentation is provided to the satisfaction of the [Public Works Lincoln Transportation](#) and Utilities Department. Discharge must be released in a non-erosive manner. Outlet works can be combinations of drop inlets, pipes, weirs, orifices, chutes, and channels. Slotted riser pipes are discouraged because of clogging problems. Outlet works must function without requiring attendance or operation.

#### **10.10 Downstream Impacts**

Structural BMP facilities shall be located and designed to not cause flooding and nuisance impacts to downstream properties. An analysis is required for the downstream receiving stream or waterbody to ensure that there is a proper outlet from the Structural BMP.

#### **10.11 Operations and Maintenance Considerations**

Facilities shall be designed to minimize maintenance problems that can be typical of Best Management Practices. Proper design focuses on elimination or reduction of maintenance

requirements by addressing the potential for problems to develop. In order for stormwater Structural BMPs to be effective, proper maintenance is essential.

Maintenance includes both routinely scheduled activities, as well as non-routine repairs that may be required after large storms, or as a result of other unforeseen problems. Structural BMP maintenance is the responsibility of the entity owning the Structural BMP. The City of Lincoln per the National Pollutant Discharge Elimination System Permit (i.e. stormwater permit) is required to maintain an inventory of BMPS as well as conduct periodic inspections of all Structural BMPs.

Structural BMPs should be designed with maintenance as one of the key design considerations. Planning-level design guidance pertaining to maintenance is included in the individual Structural BMP information contained within Chapter 8 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual. Chapter 8 focuses on maintenance of Structural BMPs and provides recommendations for private Structural BMP owners, as well as City responsibilities for ensuring proper maintenance for both public and private facilities.

#### **10.12 Structural Best Management Practices Selection**

When selecting the appropriate BMPS for a given site, it is important to consider the advantages and disadvantages of each BMP. This involves looking at the applicability, pollutant removal efficiencies, benefits, limitations, maintenance considerations, and design considerations. The following is a list of Structural BMPs that can be used in the City's jurisdiction. Other Structural BMPs not listed may be applicable for use also in the City's jurisdiction. See Section 8.3 in the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual for more information on these Structural BMPs.

- Bioretention (rain garden, biocell, bioswale, etc)
- Constructed Wetland
- Extended Detention Basin
- Green Roof
- Permeable Pavement (Permeable Interlocking Concrete Pavement, Concrete Grid Pavement, Porous Concrete, Pervious Gravel, Reinforced Grass Pavement).
- Retention Pond
- Underground BMP

## **Section 11. EROSION AND SEDIMENT CONTROL**

### **11.1 Purpose and Scope**

The purpose of the design standards for erosion and sediment control is to set forth standards for construction site stormwater discharges to meet the requirements of the Federal Clean Water Act, the Nebraska Environmental Protection Act, and the City of Lincoln Municipal Code adopted to meet State and Federal requirements. Chapter 9 of the City's [of Lincoln Drainage Criteria Flood and Water Quality Protection](#) Manual, which is adopted by reference in the Stormwater Drainage Design Standards, provides more detailed criteria and should be used as a reference to meet the standards of this section.

### **11.2 Construction Activity**

Construction Activity is defined in Lincoln Municipal Code Section 28.01.030 Regulations for Construction Site Discharges. Prior to any land disturbance associated with construction activity, a permit application must be submitted in the form of a Notice of Intent (NOI) to the City of Lincoln [Public Works Transportation](#) and Utilities Department. The forms are to be submitted to the City of Lincoln for authorization, and to the Nebraska Department of Environmental Quality for approval. The NOI must include a Construction Activity Stormwater Pollution Prevention Plan (SWPPP) with the information identified in Section 28.01.060 of the Lincoln Municipal Code and the [Drainage Criteria City of Lincoln Flood and Water Quality Protection](#) Manual. The SWPPP must identify Best Management Practices (BMPs) to be implemented to control erosion, sedimentation, and pollutants. Chapter 9 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual describes requirements for SWPPPs and provides specifications for a range of BMPs.

The Construction Activity SWPPP must be prepared and signed by a qualified individual such as a Professional Engineer, Landscape Architect, and/or Certified Professional in Erosion and Sediment Control (CPESC). If review comments are not received by the permittee within seven (7) business days after receipt of application by the City of Lincoln, the application shall be deemed authorized. Once the construction is complete in accordance with the design standards, the applicant shall submit to the City of Lincoln a Notice of Termination.

The building phase of development for a common plan of development or sale may be covered under one SWPPP that is submitted by and under the control of the permittee. Any person engaging in construction activity under a Construction Activity SWPPP must meet the requirements of Section 28.01 of the Lincoln Municipal Code.

### **11.3 Criteria for Erosion and Sediment Control**

More specific criteria for meeting the Design Standards for Erosion and Sediment Control can be found in Chapter 9 of the City of Lincoln [Drainage Criteria Flood and Water Quality Protection](#) Manual which, as amended, is adopted by reference and made a part of the Design Standards for Erosion and Sediment Control.

## Chapter 2.07

### FLOOD DESIGN STANDARDS FOR NEW GROWTH AREAS

The Department of ~~Transportation~~Public Works and Utilities is assigned responsibility for administration of these design standards.

For Flood Design Standards for New Growth Areas applicable to Subdivision Regulations, refer to the ~~Drainage Criteria~~City of Lincoln Flood and Water Quality Protection Manual, Chapter Ten - Floodplain Management~~Design Criteria for New Growth Areas~~.

## Chapter 2.15

### URBAN PUBLIC STREET DESIGN STANDARDS

The Department of ~~Public Works~~Transportation and Utilities is assigned responsibility for administration of these design standards.

#### Section 1. GENERAL

This standard shall apply to all public streets located within the City or located within an area to be annexed upon subdivision approval.

The design of public streets in the City of Lincoln generally conforms to the *Minimum Design Standards* of the State of Nebraska Board of Public Roads Classifications & Standards, *A Policy on Geometric Design of Highways and Streets* of the American Association of State Highway and Transportation Officials (AASHTO) and the ~~Drainage Criteria~~ City of Lincoln Flood and Water Quality Protection Manual ~~of the City of Lincoln, Nebraska~~. Details of street construction shall conform to the *City of Lincoln Standard Specifications for Municipal Construction* and the *Lincoln Standard Plans*.

#### Section 2. POLICIES

##### 2.1 General

The City of Lincoln street system is designed to promote the safe and efficient movement of vehicular and pedestrian traffic from point of origin to point of destination and to provide an infrastructure element which can be readily maintained.

## 2.2 Intersections with Major Streets

Where control of access permits, the intersections of collector streets with major streets shall be spaced approximately one half mile (0.8 km) apart, with the intersection location ~~dependent~~dependant upon maintaining the required sight distances. Intersections of local streets with major streets, where permitted, shall be approximately one quarter mile (0.4 km) apart, with the intersection location ~~dependent~~dependant upon maintaining the required sight distances.

## 2.3 Provisions for Future Extensions

In new developments, streets which are intended to be extended beyond the limits of the development shall be paved to those limits and shall be designed to provide for the proper handling of surface drainage, storm runoff and the future projection of the street and utilities into the adjacent property. The developer shall be responsible for obtaining and paying the costs for any easements required to permit grading or construction of approved temporary drainage measures beyond the limits of the development.

## 2.4 Reviewing Agencies

All plans for construction of public street improvements shall be reviewed and approved by the ~~Public Works~~Lincoln Transportation and Utilities Department.

# Section 3. DESIGN AND CONSTRUCTION

## 3.1 Design Speed

The following design speeds shall be applied for the design of public streets:

Street Classification	Design Speed
Local Streets	25 mph (40 km/h)
Collector Streets	30 mph (50 km/h)
Major Streets	Determined by <del>Public Works</del> <u>Lincoln Transportation</u> and Utilities Department

### 3.2 Sight Distances

Unobstructed sight distances as set forth in *Figures SD-1, SD-2, SD-3 and SD-4 of APPENDIX A*, shall be provided at all street intersections and alley accesses for vehicular and pedestrian traffic safety. Fences, walls, signs or other obstructions shall not be placed in the public street and shall not be placed in the sight triangles as set forth in *Figures SD-1, SD-2, SD-3 and SD-4* except that chain-link fences free from shrubbery and vines may be placed on private property within the sight triangles at uncontrolled or yield controlled intersections.

### 3.3 Horizontal Street Alignment

#### 3.3.1. Intersections

##### a. Angle of Intersection

Streets shall intersect as near as possible at right angles. In no case shall the angle of intersection vary more than 10 degrees from a right angle.

##### b. Intersection Separation

Where the streets do not continue through the intersection (T-Type) a minimum separation of at least 120 feet (36.58 m), as measured between the centerlines, shall be maintained.

##### c. Intersections on Curvilinear Streets

Where a curvilinear street intersects another, a straight tangent section shall be required at the approach to the intersection. The length required for this tangent is dependent upon the radius of the approaching curve. The minimum length of this tangent, as measured from the right-of-way of the intersected street to the point of curvature, shall be as shown in the following table:

<b>Centerline Radius</b>	<b>Minimum Tangent Length</b>
150 ft. (45.7 m)	100 ft. (30.5 m)
175 ft. (53.3 m)	90 ft. (27.4 m)
200 ft. (61.0 m)	80 ft. (24.4 m)
225 ft. (68.6 m)	75 ft. (22.9 m)

250 ft. (76.2 m)	70 ft. (21.3 m)
275 ft. (83.8 m)	65 ft. (19.8 m)
300 ft. (91.4 m)	60 ft. (18.3 m)
350 ft. (106.7 m)	50 ft. (15.2 m)
400 ft. (121.9 m)	20 ft. (6.1 m)
450 ft. (137.2 m) and over	No Tangent Required

d. T-Type intersections on Horizontal Curves

T-Type intersections may be permitted along the outside of any horizontal curve provided the minimum sight distances are provided, based on the design speed of the intersected curved street, and that the minimum approach tangent length is provided in the case of a curvilinear approaching street.

T-Type intersections may be permitted along the inside of a horizontal curve provided that the centerline radius of the curve is 525 feet (160 m) or greater, and that the minimum sight distances, based on the design speed of the intersected curved street, and the minimum approach tangent length, in the case of a curvilinear approaching street, are provided.

3.3.2. Curvilinear Alignment

a. Horizontal Curves

All changes of horizontal alignment between intersections shall be connected by circular curves. The minimum centerline radius for curves on local streets shall be 150 feet (45.7 m). The minimum centerline radius for collector streets shall be 385 feet (117.3 m). The minimum centerline radii for curves on major streets shall be determined by the [Public Works Lincoln Transportation](#) and Utilities Department.

b. Tangents Between Horizontal Curves

A straight tangent having a minimum length of at least 100 feet (30.5 m) shall be provided between adjacent non-compound horizontal curves where the sum of the radii of the curves is less than 600 feet (182.9 m).

### 3.3.3. Cul-de-Sacs

Geometry and details of standard symmetrical and offset type cul-de-sacs for the various property line radii are shown on *Figures S-1, S-2 and S-3*.

#### a. Center Island

A curbed center island having a diameter of 30 feet (9.1 m) may be placed at the center of the cul-de-sac. The center island shall be landscaped using approved plant materials not exceeding a maximum mature height of 24 inches and certain designated street trees conforming to the requirements of the *Design Standards for Street Trees*. Trees placed in the center island shall be trimmed up to 6 feet (1.8 m) above the ground and maintained for traffic sight clearance. Landscape maintenance including replacement and the maintenance of the center island curb, by written agreement between the City and the appropriate parties, shall be the responsibility of the abutting property owners, a homeowners association, or other private entity. Landscaping plans shall include a program for maintenance and replacement of trees and plant material and shall be approved by the Department of ~~Public Works~~Transportation and Utilities and the City Parks and Recreation Department. All landscaping shall be installed within two planting seasons following the paving construction.

## 3.4 Vertical Street Alignment

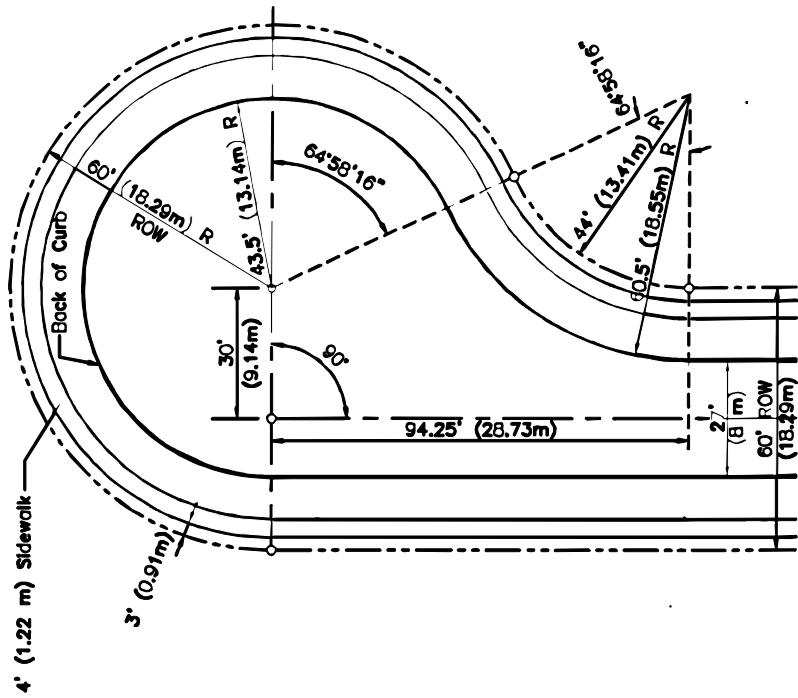
### 3.4.1. Longitudinal Grades

#### a. Minimum

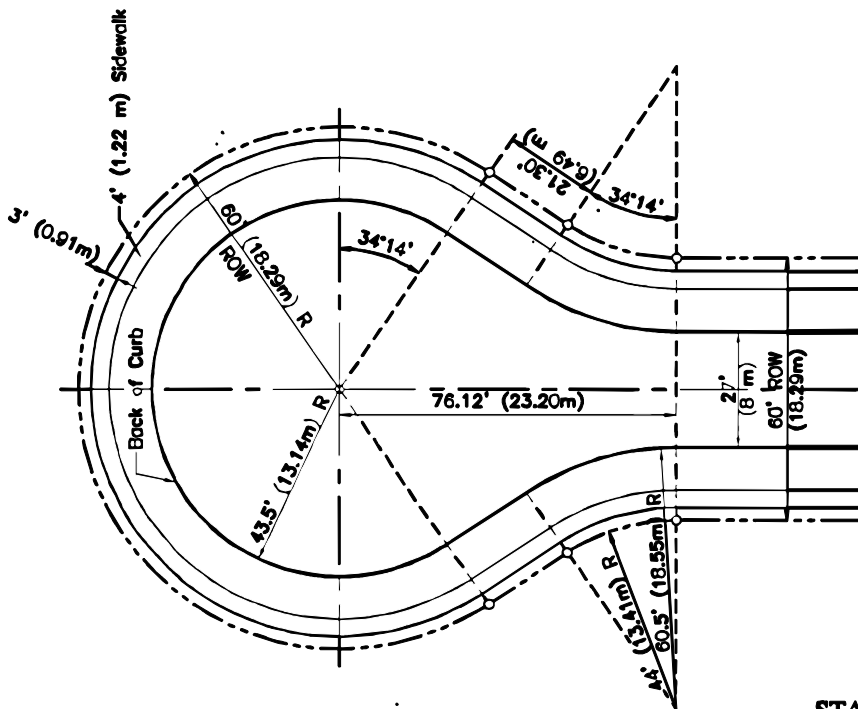
The minimum longitudinal grade for all public streets shall be 0.5% to provide for adequate surface drainage. The minimum longitudinal grade shall be measured along the curb and gutter line.

#### b. Maximum

The maximum longitudinal grade shall be 8.0% for local streets and 7.0% for collector streets. Maximum grades for major streets shall be determined by the ~~Department of Public Works~~Lincoln Transportation and Utilities Department.



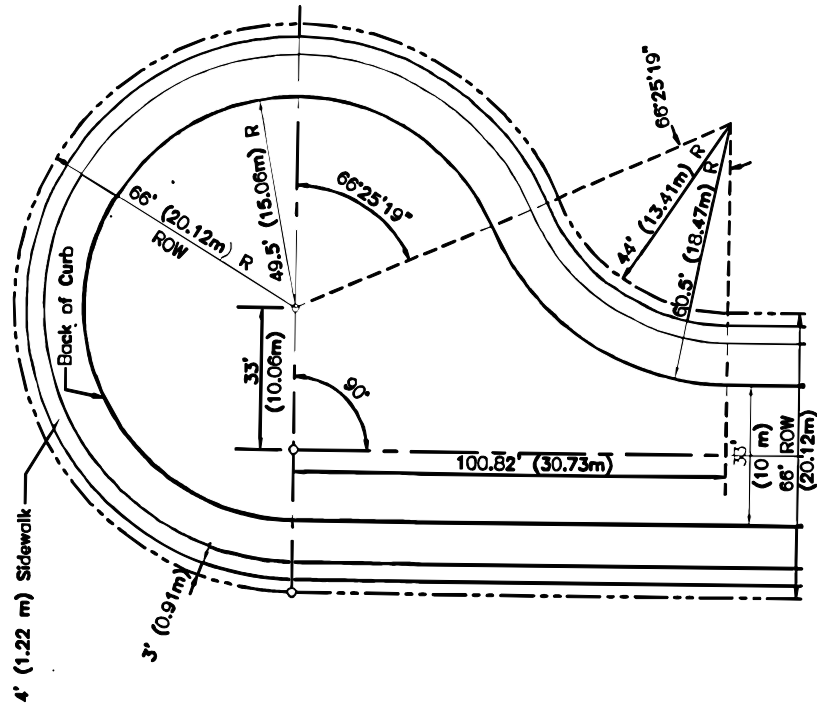
OFFSET TYPE



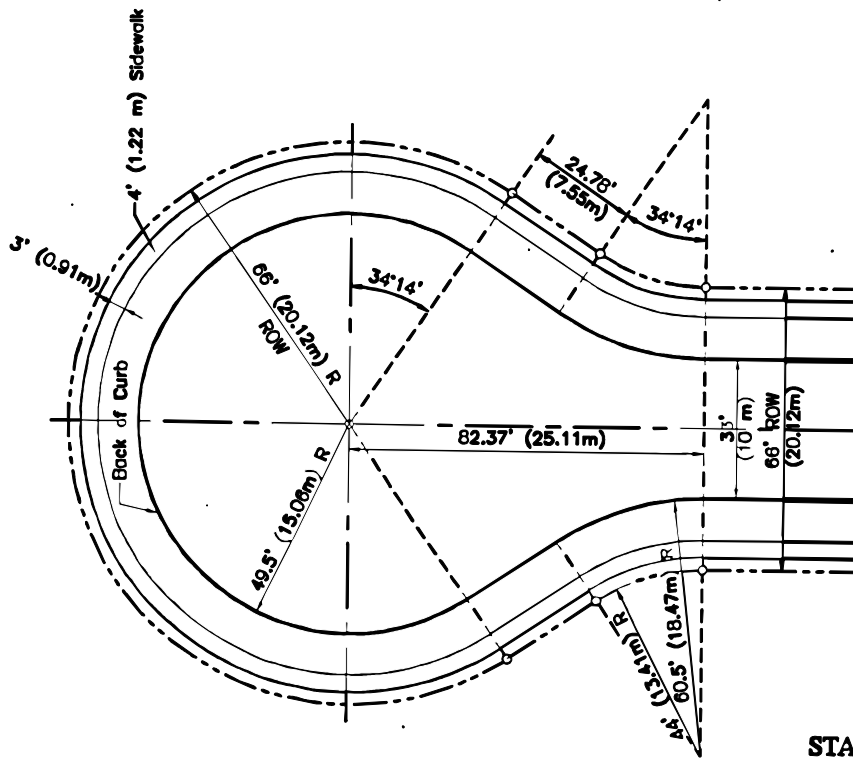
SYMMETRICAL TYPE

STANDARD CUL-DE-SAC  
60' (18.29 m) RADIUS

FIGURE S-1

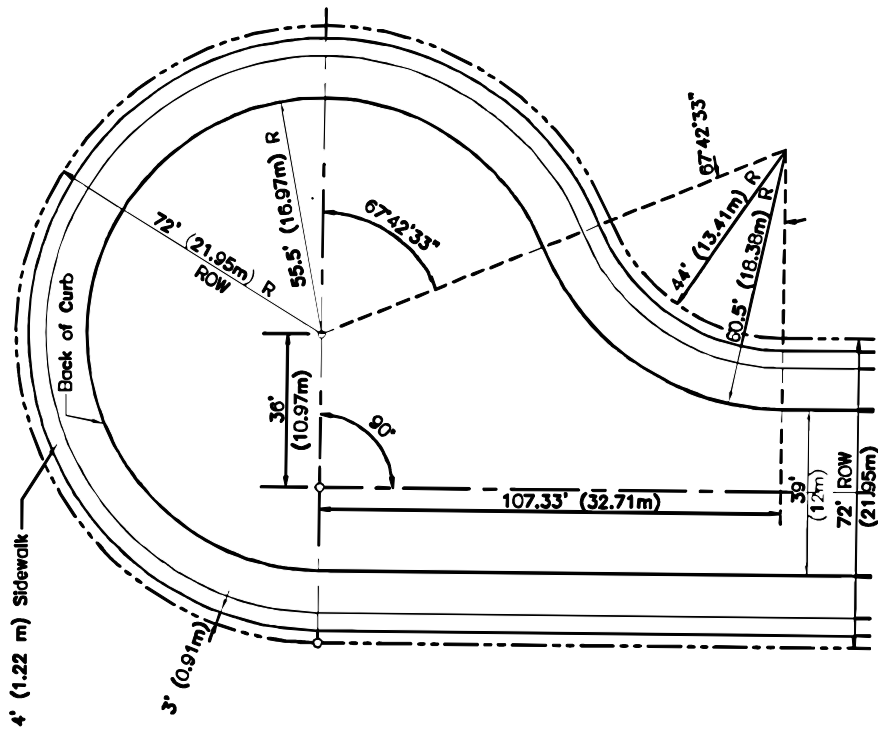


OFFSET TYPE

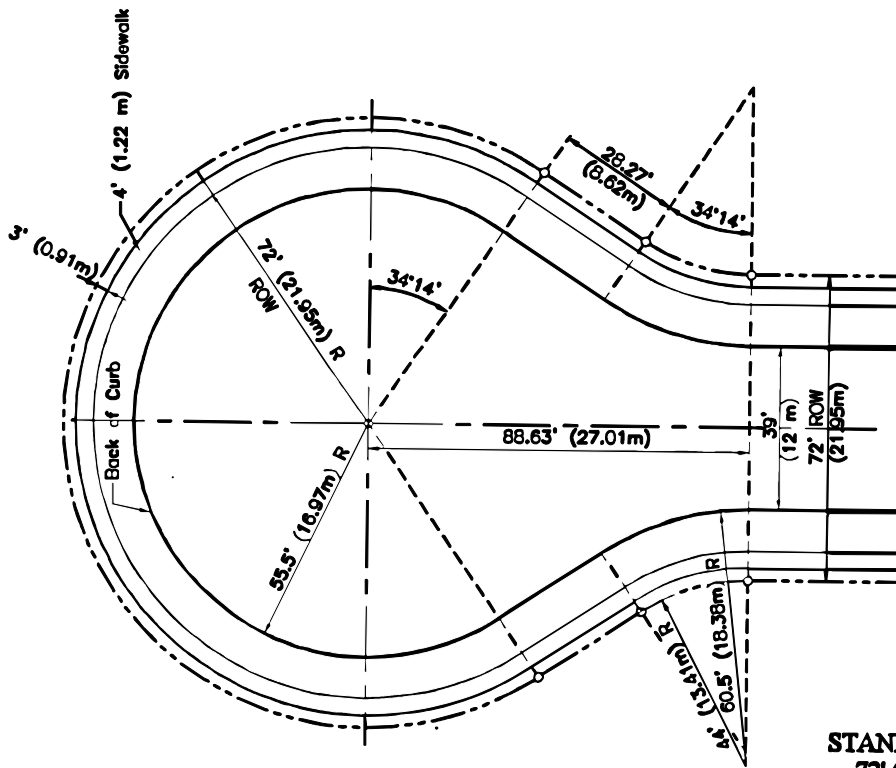


SYMMETRICAL TYPE

**STANDARD CUL-DE-SAC  
66' (20.12 m) RADIUS**



OFFSET TYPE



SYMMETRICAL TYPE

STANDARD CUL-DE-SAC  
72' (21.95 m) RADIUS

FIGURE S-3

**3.4.2. Vertical Curves**

Changes in longitudinal grades shall be designed using parabolic vertical curves. Where the algebraic difference between the two grades expressed in percent is 1.0 or less, no curve is required. The minimum length of vertical curves necessary to provide adequate safe stopping sight distance shall be determined using the following formula:

$$L = K A$$

*Where:* L = Minimum length of curve as measured in a horizontal plane.

K = A measure of curvature, values of which are set forth in the following table.

A = The algebraic difference between the grades of the tangents to the curve expressed in percent.

Design Speed  mph (km/h)	K- Value Crest Curves feet (meter)	K-Value Sag Curves feet (meter)
	25 (40)	20 (5)
30 (50)	30 (9)	35 (11)
35 (55)	40 (11)	45 (13)
40 (65)	60 (18)	55 (17)
45 (70)	80 (22)	68 (20)
50 (80)	110 (32)	80 (25)
55 (90)	150 (43)	103 (30)

For vertical curves connecting flatter grades, care shall be taken to provide adequate slope for drainage. Generally, K < 165 (50 metric) for both sag and crest curves. The length of the vertical curve shall be kept as close as practicable to the minimum length as determined by the above procedure.

### 3.4.3. Intersection Approaches

a. Major Streets

The grade of any street approaching a major street shall not exceed 3.0% within 130 feet (39.6 m) of the closest curb line of the intersected roadway.

b. Collector Streets

The grade of a local street approaching a collector street shall not exceed 3.0% within 70 feet (21.3 m) of the closest curb line of the intersected roadway.

c. Local Streets

The approach grades of all intersecting local streets which continue through the intersection shall not exceed 3.0% within 70 feet (21.3 m) of the closest curb line of the intersected roadway. At T-type intersections, the grades of the through street may exceed 3.0%.

d. Unimproved Major Streets

Where new developments abut major streets which are not yet improved to major street standards, approach grades, intersections and abutting property grading should be designed to accommodate the future grades of the major street. The grades and alignment of the major street shall be approved by the [Public WorksLincoln Transportation](#) and Utilities Department.

### 3.5 Roadway Width

The following table sets forth standard roadway widths, as measured to the back of the curbs, for streets located within residential and commercial/industrial zoning districts:

<b>Street Classification</b>	<b>Zoning</b>	<b>Roadway Width</b>
Local	Residential	27 ft. (8 m)
Local	Commercial/Industrial	33 ft. (10 m) No Parking
Local	Commercial/Industrial	39 ft. (12 m) With Parking

Collector	Residential	39 ft. (12 m) No Median
Collector	Residential	2 - 21 ft. (6.4 m) Roadways with Median
Local - Permanent Turnaround (cul-de-sac)	Residential	43.1 ft. (13.14 m) Outside Radius
Local - Permanent Turnaround (cul-de-sac)	Commercial Industrial Office	No Parking - 49.5' (15.06 m) Outside Radius With Parking - 55.5 ft. (16.97 m) Outside Radius
Major Street	All	Determined by <u>Transportation and</u> <u>Utilities</u> <del>Public</del> <del>Works</del> Department

In locations where the roadway width changes, those changes shall be accomplished using a tapered section. The minimum length of that taper shall be determined by multiplying the offset of the roadway edge by the design speed. Tapers shall not extend through intersections.

### 3.6 Street Grading Cross-Section

Generally, streets shall be graded to provide slope to the roadway from the building lines on either side of the street. This section will provide capacity in the street to carry excess runoff from major storms. Slopes from the top of curb to one foot (0.3m) back of the sidewalk line shall be 2.0%, except at those locations where it is necessary to allow for storm drainage overflow away from the roadway. In such case the area may be sloped away from the top of curb at a grade not exceeding 2.0%. The slope from the sidewalk to the building line should be not less than 2.0%. In areas where existing conditions might require that the sideslope to back of the sidewalk exceed 2% in order to achieve uniformity, the ~~Public Works~~Lincoln Transportation and Utilities Department may approve a steeper slope not to exceed 8%.

Excavation for streets, construction of embankments and roadway subgrade preparation and compaction shall conform to the requirements of the *City of Lincoln Standard Specifications for Municipal Construction*.

### **3.7 Roadway Cross-section**

#### **3.7.1. Pavement Crown**

Except at intersections, roadway paving shall be designed with the top of the curbs level from one side to the other. On local and collector street roadways with no medians, the roadway surface shall have a transverse slope (crown) of 3.0% from the gutter line to the roadway centerline. Where medians are present, the roadway surface shall have a transverse slope as shown on the current edition of the Lincoln Standard Plans 640.

Pavement slopes and details for major streets shall be determined by the [Public WorksLincoln Transportation](#) and Utilities Department, generally conforming to the current edition of the Lincoln Standard Plans 640.

#### **3.7.2. Curbs**

Concrete curbs shall be placed on both sides of all roadways. Curbs on local and collector streets may be either combined curb and gutter or integral curb and shall conform to the requirements of the *City of Lincoln Standard Specifications for Municipal Construction* and the details shown on the *Lincoln Standard Plans*. Curb type and details for major streets shall be determined by the [Public WorksLincoln Transportation](#) and Utilities Department. As recommended in the Mayor's Road Design Standards Technical Report, roadways that are a part of a phased construction, the curb may be omitted to facilitate future reconstruction efforts.

#### **3.7.3. Roadway Paving**

Roadways shall be surfaced with either portland cement concrete pavement, a 2 ½" (65 mm) thick asphaltic concrete surface on a portland cement concrete base or a 2 ½" (65 mm) thick asphaltic concrete surface on an asphaltic concrete base. Minimum roadway pavement or base thickness for the various street classifications is shown in the following tables for the various pavement types. If the anticipated average daily truck traffic exceeds the limits set forth in the tables, the [Public WorksLincoln Transportation](#) and Utilities Department may require greater surfacing thickness.

**3.7.3.1. Portland Cement Concrete Pavement**

Street Classification	Zoning	Thickness
Local	Residential ADTT* < 50	6" (155 mm)
Local	Commercial/Industrial ADTT* < 300	8" (205 mm)
Collector	Residential ADTT* < 50	6" (155 mm)
Collector	Commercial/Industrial ADTT * > 300 but < 800	9" (230 mm)
Major Street	All	Determined By <del>Public Works</del> <u>Transportation and Utilities</u> Department

**3.7.3.2. Asphaltic Concrete Pavement, Class 1**

**2 ½" (65 mm) Surface Course on Portland Cement Concrete Base**

Street Classification	Zoning	Base Thickness
Local	Residential ADTT* < 50	5" (125 mm)
Local	Commercial/Industrial ADTT* < 300	7 ½" (190 mm)
Collector	Residential ADTT* < 50	6" (155 mm)

Collector	Commercial/Industrial ADTT* > 300 but < 800	8 ½" (215 mm)
Major Street	All	Determined By <del>Public</del> <u>Works Transportation</u> <u>and Utilities</u> Department

**3.7.3.3. Asphaltic Concrete Pavement, Class 2**

**2 ½" (65 mm) Surface Course on Asphaltic Concrete Base**

Street Classification	Zoning	Base Thickness
Local	Residential	6" (155 mm)
Major Street	All	Determined by <del>Public</del> <u>Works Transportation</u> <u>and Utilities</u> Department**

\* ADTT = Average Daily Truck Traffic  
(excluding two axle trucks with four wheels)

\*\* For roadways in the Mayor’s Road Design Standards Technical Report that are identified as Type “D”, full-depth asphalt (8" minimum) may be used to facilitate future reconstruction with an engineer’s recommendation regarding road base, soil type and pavement design considerations documented.

**3.8 Alley Pavement**

Where permitted, the entire width of the alley shall be paved with portland cement concrete pavement of the same minimum thickness as set forth in Table 1 above and without curbs. Design and construction shall conform to the requirements of the *City of Lincoln Standard Specifications for Municipal Construction* and the details shown on the *Lincoln Standard Plans*.

### 3.9 Intersection Geometry

At intersections, the curbs of intersecting roadways shall be connected by circular curves having radii as shown in the following table (as measured to back of curb):

Street Classification	Zoning	Radius
Local	Residential	20 ft. (6 m)
Local	Commercial/Industrial	30 ft. (9 m)
Collector	Residential	20 ft. (6 m)
Collector	Commercial/Industrial	30 ft. (9 m)
Major Street	All	Determined by <del>Public Works</del> <u>Lincoln Transportation</u> and Utilities Department

At intersections of local or collector streets with major streets, additional right or left turning lanes, medians, tapered roadway sections or other special features may be required to accommodate anticipated traffic. At the intersection of two major streets, additional lanes, larger radii, three centered curves or other special features may be required. The ~~Public Works~~Lincoln Transportation and Utilities Department will provide the specific design requirements at these locations on an individual basis.

### 3.10 Lateral Obstacle Clearance

Minimum obstacle clearance for curbed sections shall be 2 feet (0.6 m) as measured from the back of curb to the face of the obstacle. Minimum obstacle clearance for non-curbed sections shall be 8 feet (2.4 m) as measured from the edge of the driving lane to the face of the obstacle. Traffic control devices conforming to the standards of the *Manual on Uniform Traffic Control Devices* will be allowed in the obstacle clearance zone.

### 3.11 Temporary Turnarounds

Where required, temporary turnarounds shall be constructed in conformance with the details shown on the *Lincoln Standard Plans*. Direct access to the temporary turnaround from abutting properties will not be permitted.

### **3.12 Sidewalks**

Sidewalks through open spaces and pedestrian walk easements, which are required by subdivision approval or special permits, shall be constructed as a part of the roadway paving project. Sidewalks in the public streets shall be constructed as required by subdivision approval.

#### **3.12.1. Alignment**

Where the sidewalk is located in the public street, the sidewalk shall generally be aligned parallel to the right-of-way line with the edge of the sidewalk located 3 ft. (0.91 m) from that line. The longitudinal sidewalk grade shall generally be parallel to the roadway curb grade. Sidewalks located in pedestrian easements shall be centered in that easement.

Sidewalks not located in the public street shall be constructed with smooth and aesthetically appropriate horizontal and vertical alignments which are free of abrupt changes and which generally blend with finish grading contours for the surrounding area. Normally, longitudinal grades for these sidewalks should not exceed 5%. Longitudinal grades not exceeding 8% may be used for short distances to overcome greater elevation differentials.

#### **3.12.2. Cross-Section**

Sidewalks shall be at least 4 ft. (1.22 m) wide and shall have a transverse slope of 2% in the direction of the natural surface drainage. Sidewalks shall be constructed of portland cement concrete and shall have a minimum thickness of 4 inches (100 mm).

Sidewalk construction shall conform to the requirements of the *City of Lincoln Standard Specifications for Municipal Construction*.

### **3.13 Drainage Facilities**

Storm sewers, open channels, culverts, inlets and other drainage facilities and appurtenances shall conform to the requirements of the *[Drainage Criteria City of Lincoln Flood and Water Quality Protection Manual](#)* of the City of Lincoln, Nebraska.

### **3.14 Roundabouts**

#### **3.14.1 General**

Roundabout intersections as set forth herein are generally to be used in residential and commercial-industrial districts as traffic calming devices or for aesthetic

purposes. They may be used for intersections having three to five approaching streets. Use of roundabouts on major streets shall be subject to special considerations and will require specific approval and be subject to specific design considerations determined by the Department of ~~Public Works~~Transportation and Utilities.

3.14.2 Access Not Permitted.

Access directly to the roundabout from abutting properties shall not be permitted.

3.14.3 Roundabout Spacing

Roundabouts shall be spaced at least 900 feet (183 m) apart as measured from center to center.

3.14.4 Angle Between Approaching Streets

The angle between the centerlines of any two streets approaching the roundabout shall not be less than 70 .

3.14.5 Roundabouts on Curvilinear Streets

Where a roundabout is located on curvilinear streets, a straight tangent section shall be required at the approach to the roundabout. The minimum length of this tangent, as measured from the outside curb radius of the roundabout to the point of curvature on the approaching street, shall be as shown in the following table:

<b>Centerline Radius</b>	<b>Minimum Tangent Length</b>
150 ft. (45.7 m)	100 ft. (30.5 m)
175 ft. (53.3 m)	90 ft. (27.4 m)
200 ft. (61.0 m)	80 ft. (24.4 m)
225 ft. (68.6 m)	75 ft. (22.9 m)
250 ft. (76.2 m)	70 ft. (21.3 m)
275 ft. (83.8 m)	65 ft. (19.8 m)

300 ft. (91.4 m)	60 ft. (18.3 m)
350 ft. (106.7 m)	50 ft. (15.2 m)
400 ft. (121.9 m)	20 ft. (6.1 m)
450 ft. (137.2 m) and over	No Tangent Required

Roundabouts may be placed along a horizontal curve provided that the centerline radius of the curve is 525 feet (160 m) or greater, and that the minimum sight distances, based on the design speed of the approaching streets, are provided.

#### 3.14.6 Grades

The grade of any roadway approaching a roundabout shall not exceed 3.0% within 70 feet (21.3 m) of the outside curb radius of the roundabout. The grades across the roundabout shall not exceed 3.0%.

#### 3.14.7 Geometry

In general, roundabouts in residential districts shall be designed to accommodate the turning radius of a standard AASHTO BUS design vehicle and roundabouts in commercial industrial districts shall accommodate a standard AASHTO WB-50 design vehicle.

#### 3.14.8 Right-of-Way

The right-of-way for the roundabout shall have a minimum radius equal to the radius of the outside curb line of the roundabout plus 16.5 feet (5.0 m).

#### 3.14.9 Splitter Islands

Splitter islands shall have a minimum area of 80 square feet (7.43 m<sup>2</sup>).

#### 3.14.10 Curbs

Concrete curbs shall be placed on both sides of the rotary roadway and around the splitter islands. Curbs may be either combined curb and gutter or integral curb and shall conform to the requirements of the *City of Lincoln Standard Specifications for Municipal Construction* and the details shown on the *Lincoln Standard Plans*.

#### 3.14.11 Roadway Cross-slope

The transverse slope of the rotary roadway paving shall not exceed 3.0%.

#### 3.14.12 Landscaping

The center island of the roundabout may be landscaped using approved plant materials not exceeding maximum mature height of 24 inches and certain designated street trees conforming to the requirements of the *Design Standards for Street Trees*. Trees placed in the center island shall be trimmed up to 6 ft. (1.8 m) above the ground and maintained for traffic sight clearance. Notwithstanding the above, no plant material, having a maximum mature height in excess of 6 inches shall be placed within 4 ft. (1.2 m) from the back of the curb. Landscape maintenance and replacement, by written agreement between the City and the appropriate parties, shall be the responsibility of the abutting property owners, a homeowners association or other private entity. Landscaping plans shall include a program for maintenance and replacement of trees and plant material and shall be approved by the Department of [Public Works Transportation](#) and Utilities and the City Parks and Recreation Department. All landscaping shall be installed within two planting seasons following the paving construction.

#### 3.14.13 Sidewalks

Pedestrian traffic across the rotary roadway and center island is to be discouraged. Crosswalks on the approach roadways shall be located at least 25 feet (7.6 m) back from the yield line or outside radius of roundabout.

#### 3.14.14 Signs

The roundabout shall have the required traffic control signs, as determined by the Department of [Public Works Transportation](#) and Utilities, in place prior to opening to traffic.

**Chapter 2.20**  
**RURAL PUBLIC AND**  
**INTERMEDIATE BTA PUBLIC STREET**  
**DESIGN STANDARDS**

*The Department of ~~Public Works~~Transportation and Utilities is assigned  
responsibility for administration of these design standards.*

**Section 1. GENERAL**

This standard shall apply to the paving of all public streets located outside of the City limits but within the zoning jurisdiction of the City and in an area subject to application of BTA Build Through Acreage standards. These development areas include both an Acreage Component and an Urban Reserve Component. The Acreage Component may be subdivided according to the requirements of Chapter 27.83 of the Zoning Ordinance. These subdivisions will not be annexed upon subdivision approval, but will be annexed at a time when municipal utilities are available to the area. At that time, the initial acreage development will transition to urban standards and higher residential density; and the Urban Reserve Component may become subject to development that generally follows the concepts of an approved Urban Framework Plan.

The design of rural streets includes elements of the City's design standards for both Urban and Rural Public Streets and proposes standards that encourage ultimate transition to an acceptable urban street section. These standards generally conform to the *Minimum Design Standards for Municipal Streets and Minimum Design Standards for Rural Roads* of the State of Nebraska Board of Public Roads Classifications & Standards, *A Policy on Geometric Design of Highways and Streets* of the American Association of State Highway and Transportation Officials (AASHTO) and the ~~*Drainage Criteria*~~*City of Lincoln Flood and Water Quality Protection Manual* ~~of the City of Lincoln, Nebraska~~. Details of street construction shall conform to the *City of Lincoln Standard Specifications for Municipal Construction* and the *Lincoln Standard Plans*.

**Section 2. POLICIES**

**2.1 General**

The street system is designed to promote the safe and efficient movement of vehicular and pedestrian traffic from point of origin to point of destination and to provide an infrastructure element which can be readily maintained.

## **2.2 Intersections with Major Streets**

Where control of access permits, the intersections of collector streets with major streets shall be spaced approximately one half mile (0.8 km) apart, with the intersection location ~~dependent~~dependant upon maintaining the required sight distances. Intersections of local streets with major streets, where permitted, shall be approximately one quarter mile (0.4 km) apart, with the intersection location ~~dependent~~dependant upon maintaining the required sight distances.

## **2.3 Provisions for Future Extensions**

In new developments, streets which are intended to be extended beyond the limits of the development shall be improved to those limits and shall be designed to provide for the adequate and proper handling of surface drainage, storm runoff and the future projection of the street into the adjacent property. The developer shall be responsible for obtaining and paying the costs for any easements required to permit grading or construction of approved temporary drainage measures beyond the limits of the development. Street alignments shown as being extended in the transitional plat shall be graded in such a way as to encourage the eventual extension of the street. No grading, structure, or other modifications of the land shall be completed that would prevent or discourage the eventual extension of these streets.

## **2.4 Reviewing Agencies**

All plans for public street improvements shall be reviewed and approved by the Department of ~~Public Works~~Transportation and Utilities and the Lancaster County Engineer.

### Section 3. DESIGN AND CONSTRUCTION

#### 3.1 Design Speed

The following design speeds shall be applied for the design of public streets:

Street Classification	Minimum Design Speed
Local Streets	25 mph (40 km/h)
Collector Streets	40 mph (65 km/h)
Major Streets	Determined by <del>Public Works</del> <u>Transportation</u> and Utilities Department

#### 3.2 Sight Distances

Unobstructed sight distances as set forth in *Figures SD-1, SD-2, SD-3 and SD-4* of *APPENDIX A*, shall be provided at all street intersections and alley accesses for vehicular and pedestrian traffic safety. Fences, walls signs or other obstructions shall not be placed in the public street right-of-way and shall not be placed in the sight triangles as set forth in *Figures SD-1, SD-2, SD-3 and SD-4* except that chain-link fences free from shrubbery and vines may be placed on private property within the sight triangles at uncontrolled or yield controlled intersections.

#### 3.3 Horizontal Street Alignment

##### 3.3.1. Intersections

##### a. Angle of Intersection

Streets shall intersect as near as possible at right angles. In no case shall the angle of intersection vary more than 10 degrees from that right angle.

##### b. Intersection Separation

Where the streets do not continue through the intersection (T-Type) a minimum separation of at least 120 feet (36.58 m), as measured between the centerlines, shall be maintained.

c. Intersections on Curvilinear Streets

Where a curvilinear street intersects another, a straight tangent section shall be required at the approach to the intersection. The length required for this tangent is dependent upon the radius of the approaching curve. The minimum length of this tangent, as measured from the right-of-way of the intersected street to the point of curvature, shall be as shown in the following table:

<b>Centerline Radius</b>	<b>Minimum Tangent Length</b>
150 ft. (45.7 m)	100 ft. (30.5 m)
175 ft. (53.3 m)	90 ft. (27.4 m)
200 ft. (61.0 m)	80 ft. (24.4 m)
225 ft. (68.6 m)	75 ft. (22.9 m)
250 ft. (76.2 m)	70 ft. (21.3 m)
275 ft. (83.8 m)	65 ft. (19.8 m)
300 ft. (91.4 m)	60 ft. (18.3 m)
350 ft. (106.7 m)	50 ft. (15.2 m)
400 ft. (121.9 m)	20 ft. (6.1 m)
450 ft. (137.2 m) and over	No Tangent Required

d. T-Type intersections on Horizontal Curves

T-Type intersections may be permitted along the *outside* of any horizontal curve provided the minimum sight distances are provided, based on the design speed of the intersected curved street, and that the minimum approach tangent length is provided in the case of a curvilinear approaching street.

T-Type intersections may be permitted along the *inside* of a horizontal curve provided that the centerline radius of the curve is 525 feet (160 m) or greater, and that the minimum sight distances, based on the design speed of the intersected curved street, and the minimum approach tangent length, in the case of a curvilinear approaching street, are provided.

### 3.3.2. Curvilinear Alignment

#### a. Horizontal Curves

All changes of horizontal alignment between intersections shall be connected by circular curves. The minimum centerline radius of all curves shall be dependent upon the design speed. The roadway shall be designed with either a reversal of the crown on the outside edge of the roadway or for a maximum rate of superelevation of 6.0%. The minimum runoff lengths for the roadway superelevation or crown reversal shall be as shown. The following table sets forth the minimum radii for the various design speeds:

<b>Design Speed</b>	<b>Minimum Radius (No Superelevation)</b>	<b>Minimum Radius (6.0% Superelevation)</b>	<b>Min. Runoff Length</b>
25 mph (40 km/h)	150 ft. (45.7 m)	0	
40 mph (65 km/h)	2290 ft. (698.0 m)	500 ft. (152.4 m)	130 ft. (39.6 m)
50 mph (80 km/h)	3820 ft. (1164.3 m)	820 ft. (249.9 m)	150 ft. (45.7 m)
55 mph (90 km/h)	4775 ft. (1544.4 m)	995 ft. (303.3 m)	175 ft. (53.3 m)

\* No superelevation required.

### 3.3.3. Cul-de-Sacs

Geometry and details of standard symmetrical and offset type cul-de-sacs for the various property line radii are shown on *Figures S-1, S-2 and S-3* of the standards for *Urban Public Street Design and Construction*.

### 3.4 Vertical Street Alignment

#### 3.4.1. Longitudinal Grades

##### a. Minimum

The minimum longitudinal grade for all public streets shall be 0.5% to provide for adequate surface drainage. The minimum longitudinal grade shall be measured along the curb and gutter line.

##### b. Maximum

The maximum longitudinal grade shall be 7.0% for local and collector streets. The maximum longitudinal grade for major streets will be determined by the ~~Public Works~~Lincoln Transportation and Utilities Department. The drainage runoff carried by the roadside ditches must be determined and if the velocity of flow in the ditches from the required design storm exceeds 5 feet per second (1.52 mps), special treatment of the ditches shall be required to control erosion. Runoff determination and erosion control methods shall conform to the requirements of the ~~Drainage Criteria~~City of Lincoln Flood and Water Quality Protection Manual ~~of the City of Lincoln.~~

#### 3.4.2. Vertical Curves

Changes in longitudinal grades shall be designed using parabolic vertical curves. Where the algebraic difference between the two grades expressed in percent is 1.0 or less, no curve is required. The minimum length of vertical curves necessary to provide adequate safe stopping sight distance shall be determined using the following formula:

$$L = K A$$

- Where:*
- L = Minimum length of curve as measured in a horizontal plane.
  - K = A measure of curvature, values of which are set forth in the following table.
  - A = The algebraic difference between the grades of the tangents to the curve expressed in percent.

Design Speed mph (km/h)	K- Value Crest Curves feet (meter)	K-Value Sag Curves feet (meter)
	25 (40)	20 (5)
40 (70)	44 (17)	64 (23)
50 (80)	84 (39)	96 (38)
55 (90)	114 (52)	115 (45)

For vertical curves connecting flatter grades, care shall be taken to provide adequate slope for drainage. Generally,  $K < 165$  (50 metric) for both sag and crest curves. The length of the vertical curve shall be kept as close as practicable to the minimum length as determined by the above procedure.

### 3.4.3. Intersection Approaches

#### a. Major Streets

The grade of any street approaching a major street shall not exceed 3.0% within 130 feet (39.6 m) of the closest edge of the intersected roadway.

b. Collector Streets

The grade of a local street approaching a collector street shall not exceed 3.0% within 70 feet (21.3 m) of the closest edge of the intersected roadway.

c. Local Streets

The approach grades of all intersecting local streets which continue through the intersection shall not exceed 3.0% within 70 feet (21.3 m) of the closest edge of the intersected roadway. At T-type intersections, the grades of the through street may exceed 3.0%.

d. Unimproved Major Streets

Where new developments abut major streets which are not yet improved to major street standards, approach grades, intersections and abutting property grading should be designed to conform to the future grades of the major street. The grades and alignment of the major street shall be approved by the ~~Public Works~~Lincoln Transportation and Utilities Department and the Lancaster County Engineer.

### 3.5 Roadway Cross-Section

#### 3.5.1. Typical Cross-Section of Improvement

Rural public streets shall be improved with a paved roadway to conform at least to the typical cross-section shown in *Figure RS-1*. This section permits a rural section, designed for future conversion, to an urban section. An urban type section with a paved roadway and curbs, conforming to the requirements of the *Urban Public Streets Design and Construction Standards*, may be constructed at the option of the developer. All grading, embankment construction, compaction, subgrade preparation, and granular surfacing or paving construction shall conform to the requirements of the *City of Lincoln Standard Specifications for Municipal Construction*. The typical section grading must be provided whether or not the roadway paving is required. If granular surfacing is used, it shall conform to Lancaster County specifications.

### 3.5.2. Roadway Paving

If paved, roadways shall be surfaced with 6" (155 mm) portland cement concrete pavement.

### 3.6 Intersection Geometry

At intersections, the edge of the roadway or curbs of intersecting streets shall be connected by circular curves having a radius of at least 30 feet (9 m).

At intersections with major streets and county roads, additional right or left turning lanes, medians, tapered roadway sections or other special features may be required to accommodate anticipated traffic. The ~~Public Works~~[Lincoln Transportation and Utilities Department](#) and the Lancaster County Engineer will provide the specific design requirements at these locations on an individual basis. A permit from the Lancaster County Engineer will be required for any construction in County right-of-way.

### 3.7 Lateral Obstacle Clearance

Minimum obstacle clearance for curbed sections shall be 2 feet (0.6 m) as measured from the back of curb to the face of the obstacle. Minimum obstacle clearance for non-curbed sections shall be 8 feet (2.4 m) as measured from the edge of the driving lane to the face of the obstacle. Traffic control devices conforming to the standards of the *Manual on Uniform Traffic Control Devices* will be allowed in the obstacle clearance zone.

### 3.8 Temporary Turnarounds

Where required, temporary turnarounds shall be constructed in conformance with the details shown on the *Lincoln Standard Plans*. Direct access to the temporary turnaround from abutting properties will not be permitted.

### 3.9 Drainage Facilities

Storm sewers, open channels, culverts, inlets and other drainage facilities and appurtenances shall conform to the requirements of the ~~Drainage Criteria~~[City of Lincoln Flood and Water Quality Protection Manual](#) of the City of Lincoln, Nebraska.

The minimum size for driveway culverts shall be 18 inches (457 mm) diameter.

### **3.10 Sidewalks and Pedestrian Accommodations**

#### **3.10.1 Pedestrian Accommodations**

Sidewalks are not required in initial acreage subdivisions in BTA developments.

#### **3.10.2 Sidewalks**

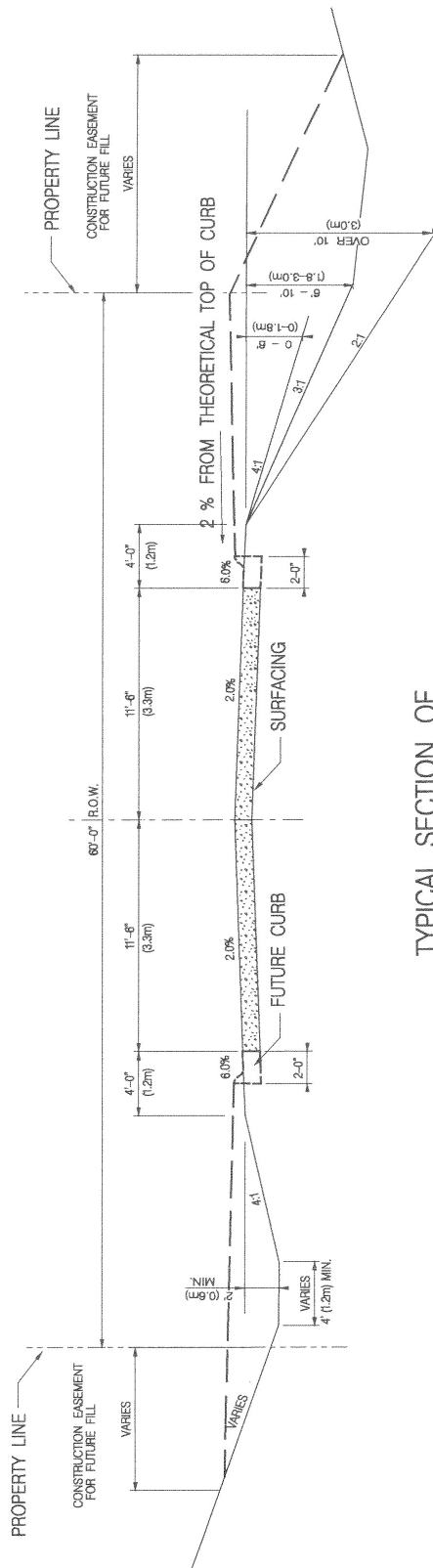
Sidewalks may be provided on one or both sides of the street at the discretion of the developer. If provided, sidewalks shall be located no closer than 2 feet (0.6 m) from the private property side of the drainage ditch. Longitudinal grades for sidewalks located in the right-of-way should parallel the grades of the abutting street. All sidewalks constructed in the right-of-way should be constructed to a top of sidewalk grade 2% above the abutting theoretical top of curb. Pedestrian easements shall be dedicated for any sidewalks located outside dedicated public right-of-way.

#### **3.10.3 Cross-Section**

Elective sidewalks shall be at least 4 feet (1.22 m) wide. Sidewalks shall be constructed of Portland cement with a minimum thickness of 4 inches. Sidewalk construction shall conform to the requirements of the City of Lincoln *Standard Specifications for Municipal Construction*.

#### **3.10.4 Transition**

With annexation of the subdivision and transition to incrementally higher densities, sidewalk construction shall be required in a manner consistent with the City of Lincoln's *Urban Public Streets Design and Construction Standards*. All sidewalks constructed shall be maintained by the developer or successors or assigns.



TYPICAL SECTION OF  
RURAL STREET IMPROVEMENT

FIGURE RS-1

## Chapter 2.25

### PRIVATE ROADWAY DESIGN STANDARDS

The Department of ~~Public Works~~Transportation and Utilities is assigned responsibility for administration of these design standards.

#### Section 1. GENERAL

This standard shall apply to all private roadways located within the City or within the zoning jurisdiction of the City of Lincoln.

#### Section 2. POLICIES

##### 2.1 Reviewing Agencies

All required permits for construction of private roadway improvements shall be obtained from the City of Lincoln Department of Building & Safety and all plans for that construction shall be reviewed and approved by the ~~Public Works~~Lincoln Transportation and Utilities Department.

#### Section 3. DESIGN AND CONSTRUCTION

##### 3.1 Design Speed

The following design speeds shall be applied for the design of private roadways:

Location	Design Speed
Private Roadway - Urban	25 mph (40 km/h)
Private Roadway - Rural	30 mph (50 km/h)

##### 3.2 Sight Distances

Unobstructed sight distances as set forth in *Figures SD-1, SD-2, SD-3 and SD-4* of APPENDIX A, shall be provided at all street intersections and alley accesses for vehicular and pedestrian traffic safety. Fences, walls signs or other obstructions shall not be placed in the public street and shall not be placed in the sight triangles as set forth in *Figures SD-1, SD-2, SD-3 and SD-4* except that chain-link fences free from shrubbery and vines may be placed on private property within the sight triangles at uncontrolled or yield controlled intersections.

### 3.3 Horizontal Roadway Alignment

#### 3.3.1. Intersections

a. Angle of Intersection

Roadways shall intersect as near as possible at right angles. In no case shall the angle of intersection vary more than 10 degrees from a right angle.

b. Intersection Separation

Where the roadways do not continue through the intersection (T-Type) a minimum separation of at least 120 feet (36.58 m), as measured between the centerlines, shall be maintained.

c. Intersections on Curvilinear Roadways

Where a curvilinear roadway intersects another, a straight tangent section shall be required at the approach to the intersection. The length required for this tangent is dependent upon the radius of the approaching curve. The minimum length of this tangent, as measured from the near edge of the pavement of the intersected roadway to the point of curvature, shall be as shown in the following table:

<b>Centerline Radius</b>	<b>Minimum Tangent Length</b>
150 ft. (45.7 m)	100 ft. (30.5 m)
175 ft. (53.3 m)	90 ft. (27.4 m)
200 ft. (61.0 m)	80 ft. (24.4 m)
225 ft. (68.6 m)	75 ft. (22.9 m)
250 ft. (76.2 m)	70 ft. (21.3 m)
275 ft. (83.8 m)	65 ft. (19.8 m)
300 ft. (91.4 m)	60 ft. (18.3 m)
350 ft. (106.7 m)	50 ft. (15.2 m)
400 ft. (121.9 m)	20 ft. (6.1 m)
450 ft. (137.2 m) and over	No Tangent Required

d. T-Type intersections on Horizontal Curves

T-Type intersections may be permitted along the outside of any horizontal curve provided the minimum sight distances are provided, based on the design speed of the intersected curved roadway, and that the minimum approach tangent length is provided in the case of a curvilinear approaching roadway.

T-Type intersections may be permitted along the inside of a horizontal curve provided that the centerline radius of the curve is 525 feet (160 m) or greater, and that the minimum sight distances, based on the design speed of the intersected curved roadway or street, and the minimum approach tangent length, in the case of a curvilinear approaching roadway, are provided.

3.3.2. Curvilinear Alignment

a. Horizontal Curves

All changes of horizontal alignment between intersections shall be connected by circular curves. The minimum centerline radius for curves on private roadways within the City (urban) shall be 150 feet (45.7 m). The minimum centerline radius for private roadways outside the City (rural) shall be 385 feet (117.3 m).

b. Tangents Between Horizontal Curves

A straight tangent having a minimum length of at least 100 feet (30.5 m) shall be provided between adjacent non-compound horizontal curves where the sum of the radii of the curves is less than 600 feet (182.9 m).

**3.4 Vertical Street Alignment**

3.4.1. Longitudinal Grades

a. Minimum

The minimum longitudinal grade for all private roadways shall be 0.5% to provide for adequate surface drainage.

b. Maximum

The maximum longitudinal grade shall be 8.0%.

### 3.4.2. Vertical Curves

Changes in longitudinal grades shall be designed using parabolic vertical curves. Where the algebraic difference between the two grades expressed in percent is 1.0 or less, no curve is required. The minimum length of vertical curves necessary to provide adequate safe stopping sight distance shall be determined using the following formula:

$$L = K A$$

Where: L = Minimum length of curve as measured in a horizontal plane.

K = A measure of curvature, values of which are set forth in the following table.

A = The algebraic difference between the grades of the tangents to the curve expressed in percent.

Design Speed mph (km/h)	K- Value Crest Curves feet (meter)	K-Value Sag Curves feet (meter)
	25 (40)	20 (5)
30 (50)	30 (9)	35 (11)

For vertical curves connecting flatter grades, care shall be taken to provide adequate slope for drainage. Generally,  $K < 165$  (50 metric) for both sag and crest curves. The length of the vertical curve shall be kept as close as practicable to the minimum length as determined by the above procedure.

### 3.4.3. Intersection Approaches

#### a. Public Streets

The grade of a private roadway approaching a public street shall not exceed 3.0% within 50 feet (15.2 m) of the closest right-of-way line of the intersected street. All vertical curves shall be located completely beyond this approach platform.

b. Private Roadways

The approach grades of all intersecting private roadways which continue through the intersection shall not exceed 3.0% within 60 feet (18.3 m) of the centerline of the intersected roadway. At T-type intersections, the grades of the through street may exceed 3.0%.

**3.5 Roadway Width**

The following table sets forth minimum widths, as measured to the back of the curbs, for private roadways:

<b>Roadway Use</b>	<b>Roadway Width</b>
General Access	27 ft. (8 m)
Access to Less than 30 Residential Parking Spaces	21 ft. (6.40 m)
Access to Residential Lots of One or more Acres	20 ft. (6.10 m) w/ 4 ft. (1.2 m) shoulders

In locations where the roadway width changes, those changes shall be accomplished using a tapered section. The minimum length of that taper shall be determined by multiplying the offset of the roadway edge by the design speed.

**3.6 Roadway Cross-Section**

3.6.1. Pavement Crown

Except at intersections, roadway paving should be designed with the top of the curbs level from one side to the other. On private roadways with no medians, the roadway surface should have a transverse slope (crown) of 3.0% from the gutter line to the roadway centerline. Where medians are present, the roadway surface shall have a transverse slope of 3.0% across the entire roadway on each side of the median. Roadways without curbs shall have a transverse paving slope (crown) of

2.0% from the edge of the paving to the roadway centerline and transverse shoulder slopes of 6.0%.

### 3.6.2. Curbs

Concrete curbs shall be placed on both sides of all roadways.

### 3.6.3. Roadway Paving

Roadways shall be surfaced with any of the following surface types:

- a. Portland Cement Concrete
- b. Asphaltic Concrete
- c. Brick Pavers
- d. Pervious Asphaltic Concrete with sub-drainage
- e. Open Concrete Paving Blocks

f. Other surfacing as approved by ~~Public Works~~[the Lincoln Transportation](#) and Utilities Department

## 3.7 Intersection Geometry

At intersections, the curbs of intersecting roadways shall be connected by circular curves having a minimum radius of 20 ft. (6 m) (as measured to back of curb).

At intersections of private roadways with major streets, the minimum radius shall be 30 ft. (9 m). Additional right or left turning lanes, medians, tapered roadway sections or other special features may be required to accommodate anticipated traffic. The ~~Public Works~~[Lincoln Transportation](#) and Utilities Department will provide the specific design requirements at these locations on an individual basis.

## 3.8 Drainage Facilities

Storm sewers, open channels, culverts, inlets and other drainage facilities and appurtenances shall conform to the requirements of the ~~Drainage Criteria~~[City of Lincoln Flood and Water Quality Protection Manual](#) ~~of the City of Lincoln, Nebraska.~~

## 3.9 Traffic Control Devices

Roadway signage, pavement markings and other traffic control devices for private roadways shall conform to the current version of the Federal Highway Administration's *Manual on Uniform Traffic Control Devices*.

## Chapter 3.07

### FLOOD DESIGN STANDARDS FOR NEW GROWTH AREAS

*The Department of ~~Public Works~~Transportation and Utilities is assigned responsibility for administration of these design standards.*

For Flood Design Standards for New Growth Areas applicable to Zoning Regulations, refer to the ~~Drainage Criteria~~City of Lincoln Flood and Water Quality Protection Manual, Chapter Ten - Floodplain Management ~~Design Criteria for New Growth Areas~~.

## Chapter 3.45

### DESIGN STANDARDS FOR PARKING LOTS

*The Department of ~~Public Works~~Transportation and Utilities is assigned responsibility for administration of these design standards.*

#### Section 1. GENERAL

This standard shall apply to all parking lots located within the zoning jurisdiction of the City of Lincoln.

*Title 28, Code of Federal Regulations, Part 36 (ADA Accessibility Guidelines), Title 156, Nebraska Administrative Code - Nebraska Accessibility Requirements; and the City of Lincoln, Nebraska Design Standards for Screening and Landscaping, ~~Drainage Criteria~~Flood and Water Quality Protection Manual and Design Standards for Driveway Design and Location, generally apply to the design of parking lots in the City of Lincoln.*

#### Section 2. POLICIES

##### 2.1 Reviewing Agencies

All plans for the construction of parking lots shall be reviewed and approved by the Department of ~~Public Works~~Transportation and Utilities, screening and landscape design shall be reviewed and approved by the Lincoln City-Lancaster County Planning Department and the lighting design, if required, shall be reviewed and approved by the Lincoln Electric System.

## **Section 3. DESIGN**

### **3.1 Layout**

The size, location and orientation of the parking spaces and aisles shall conform to the details shown in *Figure PL-1*. Barriers and islands should generally conform to the details shown on *Figure PL-2*.

Required accessible parking spaces, including van-accessible spaces, shall be located, designed, marked and signed in conformance with the requirements of *Title 28, Code of Federal Regulations, Part 36* (ADA Accessibility Guidelines) and *Title 156, Nebraska Administrative Code - Nebraska Accessibility Requirements*.

Upon completion of construction of the parking lot, the required parking spaces shall be marked on the parking lot surface with paint formulated for that purpose and in accordance with the approved layout. Parking spaces provided in excess of the number required under *Title 27, Lincoln Municipal Code* or as required by conditions of a special permit need not be marked, or they may be marked to lesser standards.

### **3.2 Driveway Approaches**

Driveway approaches shall conform to the requirements of the *Design Standards for Driveway Design and Location*.

### **3.3 Parking Barriers**

Parking barriers must be provided around parking lots to prevent the parked vehicles from overhanging the required yards where parking is prohibited, sidewalk space, public streets, public alleys, or other public or private property and to protect any required landscaping or landscape screen planting.

Approved barriers include the following types:

1. Poured concrete curb - nominal 6" x 6" (152 x 152 mm) exposed.
2. Fence - minimum 30" (762 mm) height - wire fabric, solid wood, post and rail, etc.
3. Masonry, modular segmental block or concrete wall - minimum 30" (762 mm) height.
4. Beam guardrail.
5. Post and cable guardrail.
6. Precast concrete wheel stop, firmly and permanently anchored.

Other barriers which fulfill the required function may be permitted, subject to approval by the [Public WorksLincoln Transportation](#) and Utilities Department.

Barriers must be located to contain the parking within the approved parking lot. When a concrete curb or precast wheel stop is used as a barrier for perpendicular or angle parking, it must be offset at least 2 feet (0.6 m) from the edge of the parking lot to allow for the front overhang of the vehicle.

### **3.4 Drainage**

Parking lots shall be designed to properly manage the surface drainage accumulating on and flowing onto the site.

For new parking lots containing 6,000 square feet (557 square meters) or more and which are located within 150 feet (45.7 m) of, or reasonably accessible to, an existing storm sewer or other drainageway, including open channels and creeks, but excluding roadway gutters, the parking lot must be graded and surfaced such that storm water runoff from the site is not allowed to discharge through the driveway approaches onto the public street or other property, but is collected on the site by an internal drainage system located on the site and carried to that existing storm sewer. Use of parking lot surfaces and surrounding landscaped areas to provide storm water detention is encouraged.

Parking lot drainage facilities and appurtenances shall be designed and constructed in conformance with the requirements of the ~~*Drainage Criteria*~~*City of Lincoln Flood and Water Quality Protection Manual* ~~of the City of Lincoln, Nebraska.~~

### **3.5 Surfacing**

All parking lots other than nonpermanent lots that are allowed for a maximum period of two years shall be surfaced with one of the following minimum cross sections:

1. Portland cement concrete pavement, 5 inches (125 mm) thick.
2. Asphaltic concrete pavement, 6 inches (155 mm) thick.
3. 3-inch (75 mm) asphaltic concrete surface on a 4-inch (100 mm) crushed rock or recycled concrete base course.
4. Modular pavers, open landscape paving blocks, pervious asphalt surfaces with subdrains or other permanent surfacing approved by the ~~Public Works~~Lincoln Transportation and Utilities Department.

It should be noted that the above surfacing sections are intended only to serve as minimum standards for primary use by automobile traffic. In parking lots and drive areas where moderate to heavy truck traffic is anticipated, the structural capacity of the surfacing should be analyzed and the pavement structure designed accordingly. Such instances may require thicker or reinforced sections and special subgrade treatments.

Nonpermanent parking lots may be graveled as approved by the City, and shall be maintained in a dust-free condition during the two-year period they are permitted.

### **3.6 Landscaping**

Interior landscape islands and shade trees shall be required for all parking lots, per the standards set forth in Section 7.1 of Chapter 3.50, *Design Standards for Screening and Landscaping*.

### **3.7 Perimeter Screening**

Parking lots shall be screened along the boundary of the parking lot on all sides as required by Chapter 3.50, *Design Standards for Screening and Landscaping*. The design and construction of any screen shall be in conformance with *Section 14.44.010, Lincoln Municipal Code* and the *Design Standards for Screening and Landscaping*.

### **3.8 Lighting** *(Repealed by Resolution No. A-85023, 9-15-08).*

### **3.9 Continuation of Nonconforming Lighting**

The lawful use of parking lot lighting existing immediately prior to the effective date of this resolution may be continued although such use does not conform to this design standard. When any fixture is replaced at its existing location, the design shall meet the standards set forth herein.

### **3.10 Sidewalks**

A pedestrian walkway may be required across or through parking lots by the ~~Public Works~~Lincoln Transportation and Utilities Department to provide for pedestrian circulation along a direct route to an adjacent sidewalk system. Barrier free access should also be provided across parking lots and between adjacent pedestrian generators such as commercial or public buildings. Barrier free access may include providing ramps at curbs, clear walkways between precast wheel stops, and clearly delineated walkways on the parking lot surface.

Where the most direct pedestrian route between two pedestrian traffic generators is parallel to an internal roadway having a projected average daily traffic volume (ADT) of more than 2,000 vehicles, a separate pedestrian walkway shall be required.

#### **Section 4. PARKING LOT PERMIT APPLICATION**

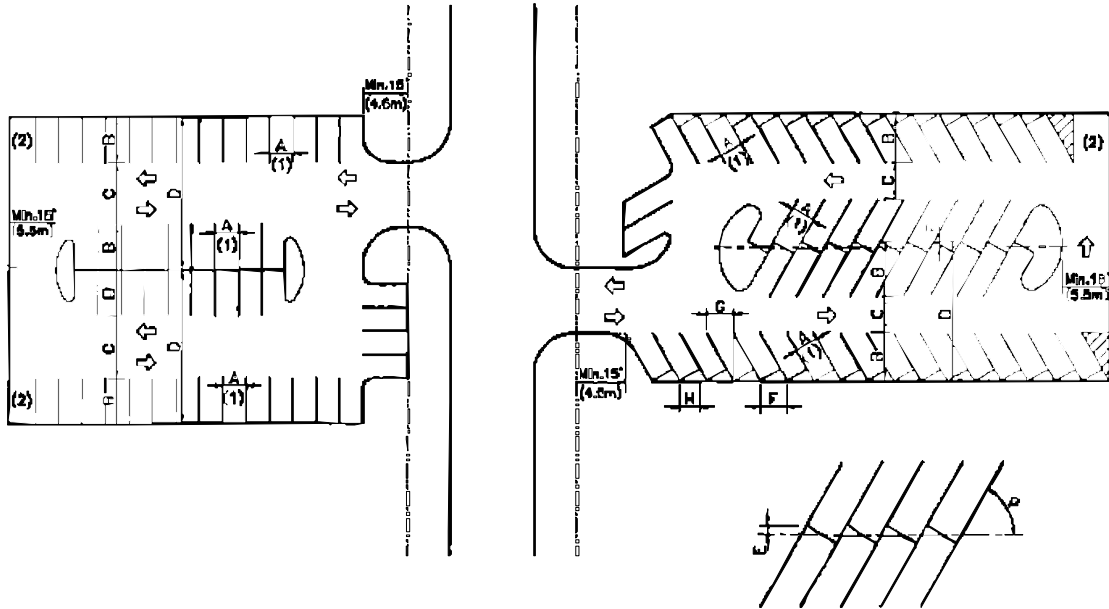
Three (3) copies of the drawings and required documentation containing the information described herein and in the appropriate design standards and all other applicable ordinances, resolutions and special permits shall be submitted with the permit application to the Department of Building and Safety for review and approval by the City. The Department of Building and Safety shall serve as the coordinating agency for the reviews and approvals required by the various departments hereunder.

Included in the submittal shall be a detailed scale drawing of the site showing the location, orientation, and dimensions of existing and proposed parking spaces, aisles, barriers, driveway approaches, buildings, property lines, adjacent streets and roadways, sidewalks, pedestrian ways and drainage facilities. A detailed landscape plan showing the required landscaping and screening and all information required in the *Design Standards for Screening and Landscaping*. If the parking lot is to be lighted, the following information shall be submitted:

##### Lighting Plan Review Information

- A. Include catalog cuts or data showing lamp characteristics:
  - 1. Type (incandescent, fluorescent, HID, etc.)
  - 2. Wattage
  - 3. Lumen output (initial)
  - 4. Lumen maintenance factor (mean or end-of-life)
- B. Include catalog cuts showing luminaire characteristics:
  - 1. Type (roadway, rectilinear, post top, floodlight, etc.)
  - 2. Isofootcandle diagram
  - 3. Utilization curve
  - 4. Isconcandela diagram
- C. Include details and information showing installation specifics:
  - 1. Mounting height
  - 2. Tilt angle (when other than 90 degrees to vertical)
- D. Include site plan information including:
  - 1. Location of parking area on site and site boundaries
  - 2. Location of lighting fixtures

3. Zoning and type of use on adjacent properties
  4. Location of buildings on site
- E. Documentation showing:
1. Calculation of initial average footcandle (fc) level - Formula:  
$$\text{Ave. initial fc} = (\text{lamp lumens} \times \text{coefficient of utilization}) \div \text{area in sq. ft.}$$
  2. Calculation of maintained average footcandle level - Formula:  
$$\text{Ave. initial fc} \times \text{lamp lumen depreciation} \times \text{luminaire dirt depreciation}$$
  3. Calculation of uniformity ratio - Formula:  
$$\text{Ratio} = \text{average initial level} \div \text{minimum initial level}$$
  4. Point-by-point footcandle levels plotted on parking lot site plan.
  5. Point-by-point footcandle levels at site perimeter plotted on parking lot site plan.



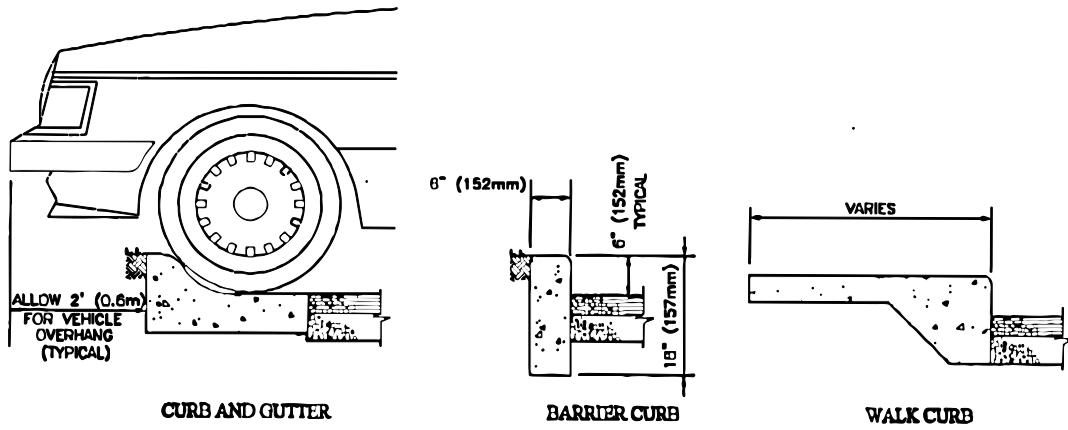
ANGLE (e)	STALL WIDTH (A)	STALL DEPTH (B)	AISLE WIDTH (C)		TYPICAL MODULE (D)		INTERLOCK REDUCTION (E)*	CURB LENGTH (F)*	REAR EXTENSION (G)*	FRONT EXTENSION (H)*
			LONG TERM	SHORT TERM	LONG TERM	SHORT TERM				
30°	6.5' (2.0m)	14.0' (4.3m)	10.0' (3.0m)	11.0' (3.4m)	40.0' (12.2m)	41.0' (12.5m)	3.7' (1.1m)	17.0' (5.2m)	15.2' (4.6m)	4.3' (1.3m)
	9.0' (2.7m)	15.0' (4.6m)	10.0' (3.0m)	10.0' (3.0m)	40.0' (12.2m)	40.0' (12.2m)	3.8' (1.2m)	19.0' (5.5m)	15.2' (4.6m)	
45°	6.5' (2.0m)	17.0' (5.2m)	11.0' (3.4m)	12.0' (3.7m)	45.0' (13.7m)	46.0' (14.0m)	3.0' (0.9m)	12.0' (3.6m)	12.4' (3.8m)	6.0' (1.8m)
	9.0' (2.7m)	17.0' (5.2m)	10.0' (3.0m)	11.0' (3.4m)	44.0' (13.4m)	45.0' (13.7m)	3.2' (1.0m)	12.7' (3.9m)	12.4' (3.8m)	6.4' (1.9m)
50°	6.5' (2.0m)	17.7' (5.4m)	12.0' (3.7m)	13.0' (4.0m)	47.4' (14.4m)	48.4' (14.6m)	2.7' (0.8m)	11.1' (3.4m)	11.3' (3.4m)	6.8' (2.0m)
	9.0' (2.7m)	17.7' (5.4m)	11.0' (3.4m)	12.0' (3.7m)	46.4' (14.1m)	47.4' (14.1m)	2.9' (0.9m)	11.7' (3.6m)	11.3' (3.4m)	6.9' (2.1m)
60°	6.5' (2.0m)	18.5' (5.6m)	14.0' (4.3m)	15.0' (4.6m)	51.0' (15.5m)	52.0' (15.8m)	2.1' (0.6m)	17.0' (5.2m)	8.8' (2.7m)	7.4' (2.3m)
	9.0' (2.7m)	18.5' (5.6m)	13.0' (4.0m)	14.0' (4.3m)	50.0' (15.2m)	51.0' (15.5m)	2.3' (0.7m)	16.0' (5.5m)	8.8' (2.7m)	7.5' (2.4m)
70°	6.5' (2.0m)	19.0' (5.7m)	19.0' (5.8m)	20.0' (6.1m)	56.6' (17.3m)	57.6' (17.6m)	1.5' (0.4m)	9.1' (2.8m)	6.0' (1.8m)	6.0' (2.4m)
	9.0' (2.7m)	19.0' (5.7m)	16.0' (5.5m)	16.0' (5.6m)	55.6' (16.9m)	56.6' (17.3m)	1.5' (0.5m)	9.6' (2.9m)	6.0' (1.8m)	6.5' (2.6m)
90°	6.5' (2.0m)	17.5' (5.3m)	23.0' (7.0m)	24.0' (7.3m)	56.0' (17.7m)	59.0' (18.0m)	0	6.5' (2.0m)	0	0
	9.0' (2.7m)	17.5' (5.3m)	22.0' (6.7m)	23.0' (7.0m)	57.0' (17.4m)	56.0' (17.7m)	0	6.0' (2.7m)	0	0

\* APPROXIMATE

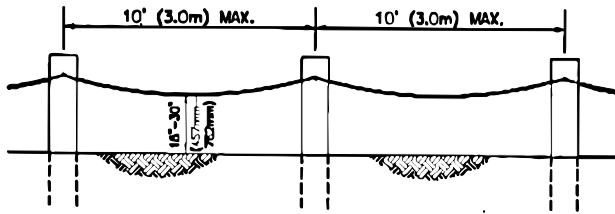
(1) THE MINIMUM STALL WIDTH FOR ALL LOTS SHALL BE 6.5 FEET (2.0 m).

(2) FOR PERPENDICULAR (90°) PARKING, STALL ADJACENT TO CLOSED END OF THE AISLE SHALL BE A MINIMUM OF 10 FEET (3.0m) WIDE.

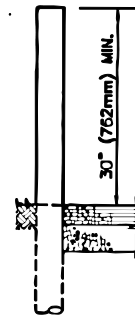
FIGURE PL-1



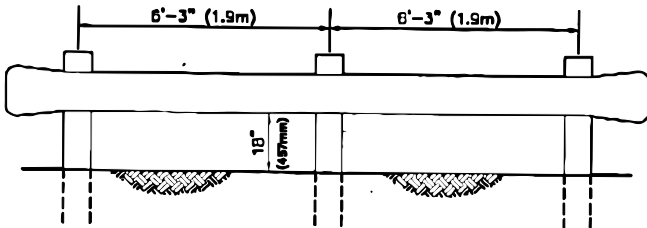
**POURED CONCRETE CURBS**



**POST AND CABLE**

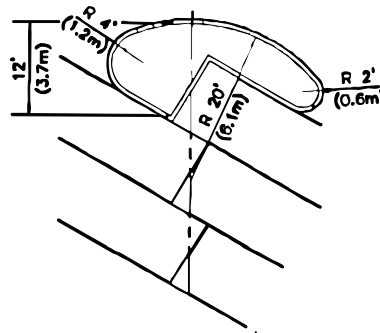
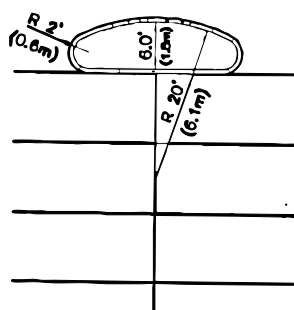


**FENCE OR WALL**



**BEAM GUARDRAIL**

**PARKING BARRIERS**



**TYPICAL ISLAND DESIGNS**

**FIGURE PL-2**



## LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER  
Text Amendment #22010  
Title 26 Flood and Water Quality  
Amendments

FINAL ACTION?  
No

PLANNING COMMISSION HEARING DATE  
November 16, 2022

RELATED APPLICATIONS  
TX#22011, TX#22012

**RECOMMENDATION: APPROVAL**

### BRIEF SUMMARY OF REQUEST

This request amends various sections in Title 26 Land Subdivision Ordinance to be consistent with the updates to the City of Lincoln Flood and Water Quality Protection Manual (FWQPM).

### JUSTIFICATION FOR RECOMMENDATION

These changes are necessary to provide consistency between the FWQPM and the Land Subdivision Ordinance. The Land Subdivision Ordinance is one of the primary tools for implementing the FWQPM and so must be reflective of the requirements of the updated manual.

### APPLICATION CONTACT

Elizabeth Elliot, 402-441-7548  
[ltu@lincoln.ne.gov](mailto:ltu@lincoln.ne.gov)

### STAFF CONTACT

Brian Will, 402-441-6362  
[bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)

### COMPATIBILITY WITH THE COMPREHENSIVE PLAN

These amendments update the Land Subdivision Ordinance to be consistent with the proposed changes to the City of Lincoln Flood and Water Quality Protection Manual. The changes are consistent with the Goals, Elements and Policies of the Comprehensive relating to preserving waterways, floodplains and floodways and riparian areas and protecting property and investments potentially impacted by those entities.

### KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN

E4 - Environmental Resources Element

Floodplains - This feature refers to land that is susceptible to flooding or that has flood prone soils. Approximately 13.8% of Lancaster County is covered by floodplains. Floodplains provide multiple benefits to both the natural (flood storage, habitat, water quality) and built (recreation, public health and safety, economic) environments. The overriding policy for the floodplain is a "No Adverse Impact" policy for the City and County, which means that the community has a goal of insuring that the action of one property owner does not adversely impact the flooding risk for other properties. Further discussion of floodplain and stormwater management considerations and strategies can be found in the Watershed Management section of the Energy & Utilities element.

Riparian Areas - This feature refers to spaces immediately adjacent to water courses on each side of a stream. They are most often located in the floodplain. They frequently contain a large amount of woody vegetation. Riparian areas can serve as linear connections between natural and built areas, as well as boundaries and edges to a variety of adjacent land uses. They offer numerous benefits including flood storage, stormwater conveyance, wildlife habitat, recreation, visual appeal, and shaded areas.

## P18 - Conservation Design

Conservation design is a type of development where buildings are grouped together on part of the site while permanently protecting the remainder of the site from development. This type of development provides great flexibility of design to fit site-specific resource protection needs. Conservation design creates the same number of residences under current zoning and subdivision regulations or may offer incentives, such as a density bonus, to encourage this type of development. There is a savings in development and maintenance costs due to less road surface, shorter utility runs, less grading and other site preparation costs. The preserved land may be owned and managed by a homeowners association, a land trust, or the City.

Conservation-focused design can help to reduce the heat island effect, increase shade, protect habitat, slow stormwater runoff, and improve mental health. Site designs that are compatible with the natural characteristics of the site, conservation design for new subdivisions, clustering development, minimizing grading and impervious surfaces, and preserving site hydrology to the maximum extent possible are encouraged.

### Action Steps

1. Encourage conservation design principles as part of the development process. Developments that incorporate conservation design principles should be eligible for greater densities, height, lot, and area adjustments. Examples of conservation design best practices include:
2. Development setbacks beyond the minimum floodplain corridor in order to help preserve riparian habitat.
3. Land area within new developments that is designated specifically for trees and/or prairie.
4. Sustainable landscape design that includes native and drought-tolerant plantings, limited use of turf grass, rain gardens, bioswales, infiltration beds, and constructed wetlands.
5. Cluster subdivision design that protects flood-prone areas by grouping new development in less-sensitive areas within a subdivision while maintaining a high overall building density.
6. Dedication of a portion or all of a building's roof space as a green roof.
7. Minimizing disturbance of the natural topography on a development site.

## P21 - Floodplain and Riparian Areas

The overriding policy for the floodplain is a "No Adverse Impact" policy for the City and County, which means that the community has a goal of insuring that the action of one property owner does not adversely impact the flooding risk for other properties.

### Action Steps

1. Designate areas for future urban development outside of the floodplain and floodway to reduce flood risks and to preserve or create floodplain areas.
2. Develop and utilize watershed plans during the review and evaluation of proposed developments and as a guide in the preparation of future capital improvement projects.
3. Utilize stormwater as an asset, by directing it through natural waterways, wetlands, and drainage corridors to minimize flood damage and prevent Non-Point Source Pollution (NPS) from occurring when storm waters flow through impervious surfaces in urban areas and cultivated and grazing land in rural areas.
4. Implement a Rain to Recreation watershed approach that reduces storm water damage, aids in maintaining water quality and provides additional natural areas that can be used by the public for recreation and educational purposes.
5. Continue to expand and enhance the following stormwater run-off mitigation measures including:
6. Vegetative buffers along stream corridors.
7. Preservation of natural areas, actively preserving the natural functions of floodplains.
8. Developing and implementing a floodplain buyout program while minimizing impacts on existing neighborhoods, citizen needs, and historic districts.
9. Making comprehensive, watershed-based approaches to floodplain management a high priority with accurate mapping and public involvement.

10. Retain City or County property in the floodplain in public ownership whenever possible, including conservation easements to protect floodplain functions.
11. Continue to implement education efforts to promote environmental stewardship and to notify floodplain property owners and prospective buyers of flood risks.
12. Consider maintaining no net fill conditions for properties in the floodplain being developed or redeveloped. Maintain no net fill conditions for those properties seeking Special Permits through Planning, Tax Increment Financing, or on former City property.
13. Engage in a public engagement process to review and assess implementation of recommendations of the Salt Creek Resiliency Study, per the City of Lincoln Climate Action Plan.
14. Maintain the Community Rating System (CRS) rating that allows for a 25% reduction in flood insurance premiums for property owners in floodplains.
15. Prepare for federal adoption and make publicly available an updated floodplain map for Lincoln that reflects increased precipitation and streamflow projections based on precipitation data from NOAA Atlas 14 data.
16. Continue and enhance current outreach and education efforts with landowners and business owners located in the revised floodplain about their flood risk. Develop a comprehensive outreach and education strategy with residents in the revised floodplain about their flood risk.
17. In response to the findings of the Salt Creek Resiliency Study, assemble key partners and leaders in the City and County to develop comprehensive strategies that reduce flooding risks, improve soil health, sequester carbon, and maintain natural systems within the City and County, to include the Parks Foundation Land Trust initiative.

#### P24 - Environmental Resource Protection

Lancaster County boasts a diverse set of environmental resources and landscape types that should be respected and maintained. The Greenprint Challenge, developed by the City of Lincoln/Lancaster County Planning Department, Parks and Recreation, and the Lower Platte South NRD in 2001, provides an approach for sound and sensitive urban and rural development that is interwoven with the community's desire for maintaining and enhancing the ecological and economic benefits of our natural and cultural environment. Although 20 years old, the resources identified, and the recommended principles for their protection, in the Greenprint Challenge are still applicable today and will continue to be in the future.

#### Action Steps

1. Pursue a variety of funding and financing options on a continuing basis. These may include: enlisting a land trust to enable donations of land, capital improvements programming providing for further acquisition of park property and natural areas, and grant funding from such sources as the Land and Water Conservation Fund, various floodplain and water quality funding programs, and the Nebraska Environmental Trust.
2. Conduct outreach efforts bringing together private landowners, environmental interests, and the development community to seek a common understanding and approach regarding natural resource features and the vision described in this Plan.
3. Consider the relationship among environmental resources (i.e., prairies, riparian corridors, floodplains, freshwater and saline wetlands, and other natural areas), key corridors/linkages, and the adjacent land uses for appropriate management and resource protection.

#### P23: Salt Valley Greenway and Connecting Green Corridors Concept Implementation

Since the first City/County Comprehensive Plan in 1961, the Salt Creek watershed has influenced planning for open space, greenways, recreation, and environmental resources in Lincoln and Lancaster County. The Salt Valley Greenway wraps around the City of Lincoln and is fed by tributaries that radiate out into the surrounding rolling hills. The effect is that of a large loop, primarily made of Salt Creek and Stevens Creek, with connecting green corridors linking urban and rural areas. Corridors which generally follow Salt Creek and its tributaries provide multiple benefits; creating connections between urban and rural areas, providing connections to the County's Salt Valley Lakes, creating green partitions which help to prevent a "wall-to-wall" urban feel, connecting habitat for the movement of wildlife, protecting floodplain, and many others. Implementation of the Salt Valley Greenway and connecting corridor concept will provide an environmental framework upon which a thriving economy can be built.

## Action Steps

1. Develop a strategic plan for acquiring and conserving lands within the Salt Valley Greenway and Connecting Corridors through cooperative efforts of public agencies, private organizations, and individuals.
2. Encourage the development of a public-private partnership that will concentrate efforts on further planning, funding, land acquisition, and development of the Salt Valley Greenway and its connecting corridors. This should be viewed as a local natural resource as well as a major economic development program.
3. Identify and pursue funding sources for the acquisition of significant properties forming the Greenway.
4. Continue to use conservation easements to protect greenway areas where it may be desirable to allow compatible land uses such as row crop farming or pasturing.

## P24: Environmental Resource Protection

Lancaster County boasts a diverse set of environmental resources and landscape types that should be respected and maintained. The Greenprint Challenge, developed by the City of Lincoln/Lancaster County Planning Department, Parks and Recreation, and the Lower Platte South NRD in 2001, provides an approach for sound and sensitive urban and rural development that is interwoven with the community's desire for maintaining and enhancing the ecological and economic benefits of our natural and cultural environment. Although 20 years old, the resources identified, and the recommended principles for their protection, in the Greenprint Challenge are still applicable today and will continue to be in the future.

## Action Steps

1. Pursue a variety of funding and financing options on a continuing basis. These may include: enlisting a land trust to enable donations of land, capital improvements programming providing for further acquisition of park property and natural areas, and grant funding from such sources as the Land and Water Conservation Fund, various floodplain and water quality funding programs, and the Nebraska Environmental Trust.
2. Conduct outreach efforts bringing together private landowners, environmental interests, and the development community to seek a common understanding and approach regarding natural resource features and the vision described in this Plan.
3. Consider the relationship among environmental resources (i.e., prairies, riparian corridors, floodplains, freshwater and saline wetlands, and other natural areas), key corridors/linkages, and the adjacent land uses for appropriate management and resource protection.

## P25: Open Space with Development

While planning for future growth is integral to the Plan, it is equally important that environmental resource features be accorded similar attention. The community should invest planning resources into the early identification of those areas that are most valued as part of the *Greenprint Challenge*. This principle supports the notion of "getting ahead of the game" by knowing what resources are most valued, where they are located, and what actions should be made within the broader planning process to secure their future for the community.

## Action Steps

1. Acquisition and development of parks and open space areas should conserve and enhance signature landscapes and environmental resources, and provide opportunities for outdoor active and passive recreation.
2. Integrate the natural resource feature concepts into future planning activities such as zoning and subdivision review, watershed master planning, subarea planning, transportation and utility planning, and floodplain management studies.
3. Pursue stormwater management practices that consider both water quality and quantity approaches near freshwater wetlands. Buffer areas should be encouraged at their perimeters to decrease the effects of adjacent future uses.
4. Designate areas for future urban development outside of the floodplain and floodway in order to mitigate the impacts of flooding and preserve natural flood storage. Floodplain in public ownership should remain in public ownership. However, where it is determined that there is public benefit to releasing floodplain property to

private ownership, flood storage capacity should be maintained through easements, deed restrictions, or other tools.

#### P55: Watershed Planning

The City of Lincoln Watershed Management program combines previously separate floodplain and stormwater management initiatives. This approach recognizes that floodplains, tributaries, and upland areas are all part of a comprehensive, integrated watershed system. A comprehensive approach to watershed planning is crucial as development expands into new basins around the Lincoln city limits and as redevelopment occurs within the existing urban area. A comprehensive watershed management program needs to incorporate a range of strategies including land use planning, conservation design for new subdivisions, conservation efforts, appropriate standards for floodplains and stormwater, flood warning system development/expansion, stream stabilization, stormwater storage basins, and other structural flood control efforts.

#### Action Steps

1. Develop and utilize watershed plans during the review and evaluation of proposed developments and as a guide in the preparation of future capital improvement projects.
2. Unify individual plans into a Comprehensive Watershed Management Master Plan for Lincoln and future growth areas.
3. Seek broad public participation in the location and design of specific watershed management projects, and evaluate the relative benefits as they relate to flood hazard reduction, water quality, channel integrity, natural character, bridges, culverts, and existing public and private structures.
4. Consider the creation of a stormwater utility to provide for a steady revenue source to address the growing needs of the stormwater and watershed management system.
5. Continue to designate stormwater bond dollars to flood control, streambank stabilization, erosion, and sediment control projects, until a new funding source becomes available.
6. Continue implementing green infrastructure strategies such as rain gardens, bioswales and permeable pavement to reduce stormwater runoff. Expand guidance/resources, incentives, and implementation.

#### ANALYSIS

1. The City of Lincoln started the process in 2017 of updating the Flood and Water Quality Manual (formerly the Drainage Criteria Manual) to meet current standards and practices, primarily due to new rainfall data published in 2013 with NOAA Atlas 14. For the last five years, the City has finalized the revisions, gathering feedback from stakeholders and making changes based on the feedback received. The updated Manual includes changes to the floodplain regulations, minimum corridor criteria, design standards for storm drainage, detention, post construction best management practices, erosion and sediment control, and other minor changes.
2. The Salt Creek Floodplain Resiliency Study was completed by the City of Lincoln and Lower Platte South Natural Resources District in August 2020, and incorporated into the City's Climate Action Plan in March 2021. The Study shows that there is a higher risk of flooding in our community today than what is shown on the FEMA floodplain maps, on average about 0.8 ft higher on Salt Creek, and that there is a need for the City to strengthen existing non-structural and structural floodplain management measures to further reduce flooding impacts to existing infrastructure, local businesses, residences, and future developments and enhance the floodplain resiliency. With this proposal, the City is implementing additional floodplain management measures by increasing the floodplain requirements to protect development from the higher risk of flooding, which aligns with the City's goals, Comprehensive Plan, and watershed master planning efforts.
3. This proposal includes revisions to the floodplain regulations for both the Existing Urban Area and the New Growth Areas within Lincoln's jurisdiction.
4. These include revisions to multiple documents, including Lincoln Zoning and Subdivision Ordinances, Design Standards, and the Flood and Water Quality Manual.
5. The summary of the main points of the proposed text amendments to Title 26 Land Subdivision is below:

### **26.07 Definitions**

This proposal establishes a definition for freeboard as “1 foot above the 100-year flood elevation where the floodplain or floodprone area is based upon NOAA Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where the floodplain or floodprone area is not based upon NOAA Atlas 14 precipitation”, and requires all development in the floodplain or floodprone areas to meet the new freeboard requirement, as opposed to the current 1 foot requirement. This increases the freeboard requirement to provide a temporary safety factor to development in the floodplain based on the understanding that the current FEMA floodplain maps do not accurately portraying the actual flood risk, until that time when the FEMA floodplain maps are updated to reflect current flood risk.

This proposal simplifies the requirement for preservation of stream buffers called Minimum Flood Corridors, to be based on drainage area, instead of needing to determine where the ‘defined bed and bank’ starts. This takes the subjectivity out of this process, and provides a more consistent and equitable criteria.

### **26.11 Procedure for Processing Subdivisions**

This proposal establishes standard certification requirements for approval of stormwater detention/retention facilities, constructed or modified channels, post construction best management practices, and erosion and sediment control measures to ensure proper construction of these improvements. The standard certification requirements include posting of sureties, and submission of as-built plans and maintenance plans.

### **26.23 Development Standards**

This proposal clarifies the requirements for building areas to be protected from flooding by specifying to what elevation the minimum opening elevation must be set to and the ground must be graded to for new development adjacent to the open drainage channels, overland flow routes, detention/retention facilities, and the floodplain.

This proposal establishes a standard exemption to block length requirement to include Minimum Flood Corridors that drain over 200 acres, reducing the need to construct expensive crossings over larger drainageways if the crossings are not needed for access to developments.

### **26.24 Flood Regulations for Existing Urban Area**

This proposal uses the new freeboard definition to inform the elevation to which new development must be protected above the 100-year flood elevation.

This proposal establishes a definition for residential development and residential structures/buildings to align with FEMA regulations and to clarify what standards apply to residential development and what standards apply to non-residential development.

This proposal clarifies the requirement to protect building sites for residential development by specifying that the entire lot must be removed from the FEMA floodplain by revising the FEMA flood maps prior to the platting of buildable residential lots, with the goal of ensuring new residential development is not constructed in the floodplain.

This proposal also clarifies that non-residential development is given the option to either be elevated or floodproofed.

### **26.25 Flood Regulations for New Growth Areas**

This proposal uses the new freeboard definition to inform the elevation to which new development must be protected above the 100-year flood elevation.

This proposal used the same definitions for residential development and residential structures/buildings that was established in Section 26.24.

This proposal clarifies the requirement to protect building sites for residential development by specifying that the entire lot must be removed from the FEMA floodplain by revising the FEMA flood maps prior to the platting of buildable residential lots, with the goal of ensuring new residential development is not constructed in the floodplain.

This proposal also clarifies that non-residential development is given the option to either be elevated or floodproofed, and that the FEMA flood maps may need to be revised if there is the potential for the development to cause adverse impacts to other property and/or structures.

6. The goal of this proposal is to protect the safety of our community from the actual risk of flooding shown in the Salt Creek Floodplain Resiliency Study by ensuring that existing and new development is protected from the risk of flooding. The other changes with this proposal are to align with current standards and practices to continue to responsibly manage stormwater for flood and water quality protection.
7. These changes will update Title 26 Land Subdivision so it is consistent with other documents in place or proposed for updating as well. These revisions are consistent with Title 26 Land Subdivision ordinance and the goals of the Comprehensive Plan.

Prepared by

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October 31, 2022

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ORDINANCE NO. \_\_\_\_\_

1 AN ORDINANCE amending Lincoln Municipal Code Sections 26.07.116, 26.07.120,  
 2 26.07.126, 26.11.037, 26.11.038, 26.11.040, 26.11.050, 26.15.015, 26.15.020, 26.19.031,  
 3 26.23.105, 26.23.120, 26.23.130, 26.24.010, 26.24.020, 26.24.030, 26.25.010, and 26.25.020 \_\_\_\_  
 4 \_\_\_\_\_  
 5 \_\_\_\_\_; and repealing  
 6 Sections 26.07.116, 26.07.120, 26.07.126, 26.11.037, 26.11.038, 26.11.040, 26.11.050, 26.15.015,  
 7 26.15.020, 26.19.031, 26.23.105, 26.23.120, 26.23.130, 26.24.010, 26.24.020, 26.24.030,  
 8 26.25.010, and 26.25.020 as hitherto existing.

9 BE IT ORDAINED by the City Council of the City of Lincoln, Nebraska:

10 Section 1. That Section 26.07.116 of the Lincoln Municipal Code be amended to read as  
 11 follows:

12 **26.07.116 Flood Design Criteria.**

13 Flood Design Criteria shall mean Chapter 10 of the City of Lincoln ~~Drainage Criteria~~Flood and  
 14 Water Quality Protection Manual, as adopted on Month Day, 2022~~February 22, 2000~~ by  
 15 Resolution No. A-~~XXXXXX 80038~~, as amended.

16 Section 2. That Section 26.07.120 of the Lincoln Municipal Code be amended to read as  
 17 follows:

18 **26.07.120 Freeboard.**

1 **Freeboard** shall mean a minimum height requirement above the 100-year flood elevation or Base  
2 Flood Elevation (BFE) that provides a margin of safety against extraordinary or unknown risks,  
3 and said minimum height elevation shall be 1 foot above the 100-year flood elevation where it is  
4 based upon NOAA Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where it is  
5 not based upon NOAA Atlas 14 precipitation.

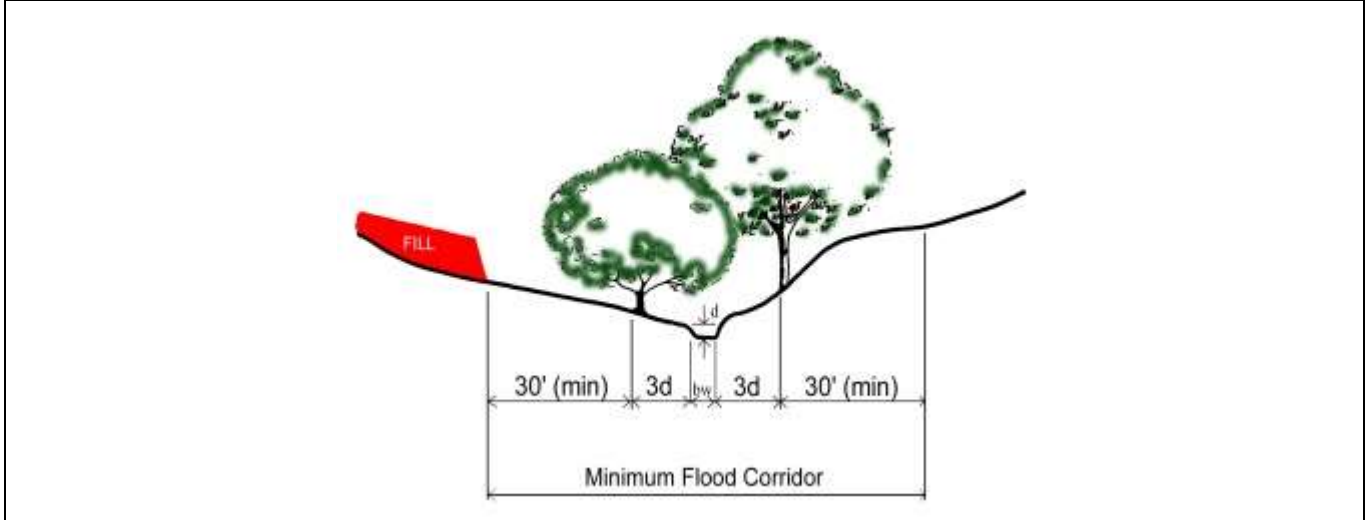
6 Section 3. That Section 26.07.126 of the Lincoln Municipal Code be amended to read as  
7 follows:

8 **26.07.126 Minimum Flood Corridor.**

9 **Minimum flood corridor** shall mean the ~~existing channel bottom width plus 60 feet plus six times~~  
10 ~~the channel depth and the corridor will be stream buffer area~~ centered on the channel, ~~as shown in~~  
11 ~~Figure 1 below~~, or aligned such that the ~~corridor area~~ follows the natural flow of flood waters. ~~The~~  
12 ~~width of said area shall be:~~

- 13 a. 90 feet for drainage areas greater than 40 acres and less than or equal to 100 acres;
- 14 b. 100 feet for drainage areas greater than 100 acres and less than or equal to 200 acres;
- 15 c. 120 feet for drainage areas greater than 200 acres and less than or equal to 300 acres;
- 16 d. Channel width plus six times the depth of channel plus 60 feet for drainage areas greater  
17 than 300 acres, as shown in Figure 1 below.

Figure 1  
Minimum Flood Corridor



1 Section 4. That Section 26.11.037 of the Lincoln Municipal Code be amended to read as  
2 follows:

3 **26.11.037 Commission Action on Preliminary Plat.**

4 If, after public hearing, the commission finds the proposed preliminary plat complies with the  
5 requirements of this title, it shall approve the preliminary plat. The approval of the preliminary  
6 plat shall not constitute authority for the subdivider to sell the individual lots.

7 If a governmental agency, other than the city, which is directly concerned with the proposed  
8 subdivision with respect to schools, parks, playgrounds, fire stations, libraries, and other common  
9 areas for public use, failed to file with the Planning Director its approval of or a report on the  
10 preliminary plat, the commission may withhold its approval or disapproval of the preliminary plat  
11 until such agency's approval or report is filed.

12 If, after public hearing, the commission finds that the proposed preliminary plat does not satisfy

1 the requirements of this title, it shall specify in writing in the minutes of the hearing the objections  
2 to the proposed preliminary plat. The commission may disapprove or approve the proposed  
3 preliminary plat upon the condition that the subdivider makes specific changes in the proposed  
4 preliminary plat which will remove the objections and bring the proposed preliminary plat into  
5 compliance with this title.

6 The action and findings of the commission on the preliminary plat after public hearing shall be  
7 filed with the Planning Director, and the person offering the proposed preliminary plat within  
8 seven days from the action by the Planning Commission. One copy of the proposed preliminary  
9 plat and findings shall be retained by the commission as part of its official records.

10 The subdivider, any council member, the Planning Director, the Transportation and Utilities  
11 Director, or any aggrieved person may appeal any action of the commission to the City Council as  
12 provided in Section 26.31.010.

13 If ~~any no~~ final plat on all or a portion of the approved preliminary plat is submitted within five  
14 years ~~or more after of~~ the effective date of the preliminary plat, or when more than five years have  
15 lapsed since the effective date of the most recent approval of a final plat within the preliminary  
16 plat, the city may require that a new preliminary plat be submitted, pursuant to all the provisions  
17 of this chapter. A new preliminary plat may be required if the subdivision ordinance, the design  
18 standards, or the required improvements have been amended by the city; and as a result, the  
19 preliminary plat as originally approved does not comply with the amended rules and regulations  
20 except in those instances when all or any portion of a preliminary plat has been final platted within  
21 the last five years. In such instances, the approved preliminary plat will govern, and the City shall  
22 not require a new preliminary plat that complies with current standards.

1 Section 5. That Section 26.11.038 of the Lincoln Municipal Code be amended to read as  
2 follows:

3 **26.11.038 Authority to Proceed With Improvements.**

4 Approval of the preliminary plat shall constitute authority for the subdivider to proceed with plans,  
5 profiles, and specifications for the grading and land preparation, submission of the final plat, and  
6 the installation of all required improvements. No person shall engage in construction activity  
7 without a permit in conformance with Chapter 28.01. Any person who engages in construction  
8 activity in violation of the provisions contained in this section or Chapter 28.01 shall be subject to  
9 a stop work order to cease and desist such activity. No utility or improvement shall be installed or  
10 constructed until the area to be developed has been graded, the erosion and sediment controls have  
11 been implemented in accordance with Chapter 28.01, and the subdivider's licensed surveyor or  
12 engineer has submitted a written statement, as-built grading plan with the seal of the professional,  
13 and a copy of the SWPPP with the seal of the professional to the Director of Transportation and  
14 Utilities indicating where the grading and erosion and sediment controls have been completed in  
15 conformance with the grading shown on the preliminary plat, the drainage study, and the final  
16 street grades. In addition, no utility or improvement shall be installed or constructed within the  
17 Acreage Development Component of a community unit plan located in the BTA (Build Through  
18 Acreage) Overlay District until the entire area of the Acreage Development Component has been  
19 graded and the subdivider's licensed surveyor or engineer has submitted a written statement with  
20 the seal of the professional to the Director of Transportation and Utilities that the grading and  
21 shaping of all the land within the Acreage Development Component has been completed in

1 conformance with the grading shown on the transitional preliminary plat, the drainage study and  
2 the final street grades. The Director of Transportation and Utilities may approve the grading,  
3 installation, and construction in phases. Also, no utility or improvement shall be installed or  
4 constructed until the plans, and if appropriate profiles and specifications, are prepared by the  
5 appropriate city department or submitted by the subdivider to the appropriate city department and  
6 other governmental agencies required by law, and approval is granted. Plans, and if appropriate  
7 profiles and specifications, for street surfacing, sidewalks, public water systems, public wastewater  
8 works, storm drains, and drainage systems, land preparation and grading, and temporary  
9 turnarounds not prepared by the City engineering staff shall be submitted to the Department of  
10 Transportation and Utilities for approval. Plans, profiles, and specifications for community water  
11 systems and community wastewater works shall be reviewed and approved pursuant to Section  
12 [26.11.040\(d\)](#) of this title. Individual water well systems and onsite wastewater treatment systems  
13 shall be submitted to the City-County Health Department for approval. Plans and specifications  
14 for landscape screens and trees shall be submitted to the Planning Director for approval. Plans and  
15 specifications for electrical distribution systems and street lighting shall be prepared by the Lincoln  
16 Electric System (LES) unless the subdivider requests and receives permission from LES to use a  
17 private consulting engineer, then the plans and specifications shall be submitted to LES for  
18 approval. The plans and specifications for street name signs shall be prepared by the Department  
19 of Transportation and Utilities. The plans and specifications for the grading and land preparation,  
20 paving, street surfacing, public water system, public wastewater works and storm drains shall be  
21 prepared by a professional engineer or architect registered in the State of Nebraska.

1 Installation of utilities and improvements may be allowed on all or a portion of the proposed  
2 subdivision prior to the approval of the final plat. Street surfacing, public water systems, public  
3 wastewater works, and public street lighting shall not be installed or constructed until authorized  
4 by executive order of the Mayor or ordered constructed by the city through an assessment district.  
5 Storm drainage systems shall not be installed or constructed until authorized by executive order of  
6 the Mayor.

7 The design and installation of each utility and other improvements shall be in strict accordance  
8 with the **design standards** for that utility or other improvement. Design standards for utilities and  
9 other improvements shall be on file with and available from the City Clerk.

10 Section 6. That Section 26.11.040 of the Lincoln Municipal Code be amended to read as  
11 follows:

12 **26.11.040 Installation of Improvements.**

13 Improvements shall be installed as follows:

- 14 a. Sidewalks along non-major streets abutting non-residential lots shall be installed prior to  
15 the City issuing an occupancy permit or within four years following final plat approval,  
16 whichever occurs first. Sidewalks along non-major streets abutting residential lots shall be  
17 installed prior to the City issuing an occupancy permit. Notwithstanding the above, if the  
18 Building and Safety Department or Transportation and Utilities Department determine  
19 weather conditions prevent the timely installation of the sidewalks, an occupancy permit  
20 may be issued prior to the installation of the sidewalks if the City is provided with  
21 satisfactory evidence that a bond, escrow, security agreement, or other arrangement has

1           been provided to guarantee installation of the sidewalks as soon as weather permits, but  
2           installation of the sidewalks shall occur not later than six months following issuance of the  
3           certificate of occupancy. The Planning Director may waive sidewalks along outlots reserved  
4           for future development.

5       b. Sidewalks within pedestrian ways shall be installed at the same time the adjacent streets in  
6           the final plat are surfaced.

7       c. Sidewalks along major streets that have not been improved to the urban cross section shall  
8           be installed prior to or as part of the improvement of the street to the urban cross section.

9       d. Sidewalks along major streets improved to urban cross section shall be installed within two  
10          years of final plat approval.

11      e. Sidewalks along outlots not reserved for future development shall be installed at the same  
12          time the adjacent streets in the final plat are surfaced.

13      f. Street trees along major streets shall be installed at the same time the adjacent street is  
14          improved to urban cross section. If the major street is built to urban cross section, the street  
15          trees shall be installed within two years of final plat approval. Street trees along non-major  
16          streets shall be installed within one year after the issuance of an occupancy permit or within  
17          six years of final plat approval, whichever occurs first. The Planning Director may waive  
18          street trees along outlots reserved for future development.

19      g. Street trees along outlots not reserved for future development shall be installed in  
20          conjunction with the sidewalk.

21      h. Street lights on the side of the streets and private roadways within and which abut the  
22          subdivision except along major streets, land preparation, and landscape screens shall be

1 installed within two years of final plat approval.

2 i. Stormwater detention/retention facilities shall be graded along with the overall site grading  
3 of the subdivision to limit the peak flow of stormwater discharge from the subdivision prior  
4 to the installation of the required water distribution, wastewater collection and street system  
5 minimum improvements. The surety to guarantee the construction of the detention/retention  
6 facilities shall be released upon certification of completion, submission of an as-built plan  
7 and maintenance plan, and termination of the Construction Stormwater Permit issued by the  
8 Lower Platte South Natural Resources District Transportation and Utilities Department, and  
9 acceptance of the completed work by the Director of Transportation and Utilities  
10 Department.

11 j. Any constructed or modified channels shall be properly permitted and graded along with  
12 the overall site grading of the subdivision prior to the installation of required water  
13 distribution, wastewater collection, and street system minimum improvements. The surety  
14 to guarantee the construction or modification of the channel shall be released upon  
15 certification of completion, submission of an as-built plans, and termination of the  
16 Construction Stormwater Permit issued by the Transportation and Utilities Department, and  
17 acceptance of the completed work by the Director of Transportation and Utilities  
18 Department.

19 k. Required Post Construction Best Management Practices for a subdivision shall be graded  
20 as needed along with the overall site grading of the subdivision prior to the installation of  
21 required water distribution, wastewater collection, and street system minimum  
22 improvements. The surety to guarantee the construction and completion of pPost

1 cConstruction bBest mManagement pPractices shall be released upon certification of  
2 completion, submission of an as-built plans and maintenance plan, ~~and~~ termination of the  
3 Construction Stormwater Permit issued by the Transportation and Utilities Department, and  
4 acceptance of the completed work by the Director of Transportation and Utilities  
5 Department.

6 1. A permit must be approved for Erosion and Sediment controls measures per Chapter 28.01  
7 shall be permitted prior to any grading and put in place prior to, with and after during, and  
8 after grading as appropriate for the overall site grading of the subdivision. The surety to  
9 guarantee the implementation, maintenance, and proper closure of the Erosion and Sediment  
10 Control Permit shall be released upon termination of the Construction Stormwater Permit  
11 issued by the Transportation and Utilities Department and acceptance of the completed  
12 work by the Director of Transportation and Utilities Department.

13 m. Community wastewater works and community water systems constructed and approved  
14 shall be installed as specified below prior to final plat approval. The wastewater treatment  
15 and discharge system and the water supply, collection, treatment, and storage shall be  
16 constructed to the satisfaction of the State of Nebraska. The wastewater collection system  
17 and the water distribution system shall be constructed to the satisfaction of the Director of  
18 Transportation and Utilities. The Director of Transportation and Utilities may as an option  
19 accept a certification from a registered professional engineer that the wastewater collection  
20 system and the water distribution system was completed in accordance with the City of  
21 Lincoln design standards.

22 n. On-site wastewater treatment systems and individual water well systems shall be completed

1 in accordance with the rules and regulations of the Health Department at the time  
2 improvements are constructed on the lot.

3 o. All other improvements listed in [Chapter 26.27](#) shall be installed within the period  
4 established by the city not exceeding two years from final plat approval.

5 Whenever twenty-five, fifty, or seventy-five percent or more of the value of any required  
6 improvement, except street trees and landscape screens, within the final plat has been completed,  
7 the penal amount of the original bond or other security required for said improvement may be  
8 reduced by twenty-five, fifty, and seventy-five percent, respectively; provided that such reduction  
9 does not reduce the penal amount of the bond or other security to an amount less than one hundred  
10 ten percent (110%) of the estimated cost of the work remaining to be completed.

11 Whenever fifty or seventy-five percent or more of the value of street trees within the final plat has  
12 been completed as required, the penal amount of the original bond or other security required for  
13 said improvement may be reduced by fifty or seventy-five percent, respectively, provided that such  
14 reduction does not reduce the penal amount of the bond or other security to an amount less than  
15 one hundred ten percent (110%) of the estimated cost of the work remaining to be completed.

16 Section 7. That Section 26.11.050 of the Lincoln Municipal Code be amended to read as  
17 follows:

18 **[26.11.050 Filing Final Plat.](#)**

19 a. A subdivider may file a final plat which conforms to a proposed preliminary plat or an  
20 approved preliminary plat which is still in effect as set out in Section [26.11.037](#). The final  
21 plat shall be drawn in accordance with an accurate survey of the subdivision, the approved  
22 preliminary plat, and the standards for development set out in [Chapter 26.23](#) hereof. The

1 subdivider shall file with the Planning Department the final plat and in addition thereto the  
2 number of copies required by the Planning Director, together with the following:

3 1. Prior to the approval of the final plat by the Planning Director, the subdivider shall  
4 provide a statement from the County Treasurer's office showing that, according to their  
5 records, there are no delinquent taxes against the land within the proposed subdivision  
6 or any part thereof, and there are no liens for taxes which have been levied but which  
7 are not yet delinquent upon any buildable lot, street, or other property to be dedicated  
8 for public use, or outlot which is not reserved for future development. The subdivider  
9 shall also provide a statement from the County Treasurer's office showing that all  
10 special assessment installment payments are current as applied to said proposed  
11 subdivision or any part thereof. The city shall assume no responsibility for any tax or  
12 special assessment liability on the property to be subdivided, and approval of said final  
13 plat shall not be construed as either an approval of or act as a waiver of the enforcement  
14 of all applicable statutes and ordinances with regard to the collection of taxes and  
15 special assessments on the proposed subdivided property or any part thereof. All taxes  
16 and special assessments must be paid in full on all real property dedicated in fee to a  
17 public use. The subdivider shall also obtain from the County Assessor's office a list of  
18 new account numbers for the purpose of assessment of taxes against all buildable lots  
19 and outlots not reserved for future development within the proposed subdivision.

20 2. In the event of any proposed dedication for public use, a certificate of title or a title  
21 opinion issued to or for the benefit and protection of the city, showing all parties whose  
22 consent is necessary to pass clear title for the land being subdivided and dedicated,

1 together with the nature of their interests therein, shall be furnished. Such proof of title  
2 shall be in a form acceptable to the City Attorney. Any subsequent change affecting  
3 ownership of the proposed subdivision or any part thereof shall be made only upon the  
4 prompt notification and certification to the city of said change in ownership. The city  
5 shall assume no responsibility for any title problem with said proposed subdivision or  
6 any part thereof, and approval of said final plat shall not be construed as approval of  
7 the title of the proposed subdivision or any part thereof.

8 3. Whenever property is subdivided with the intention that it will have a use other than  
9 permitted by the district in which such property is located as designated on the then  
10 existing Lincoln zoning district maps, such use shall be stated. No final plat shall be  
11 approved unless or until it complies with Title 27 of this code.

12 b. A subdivider may file a final plat without an approved preliminary plat and the Planning  
13 Director is hereby empowered to approve such a final plat under the following conditions:

14 1. No new street or private roadway is accepted or needed within the area of the new lots,  
15 except in the sole discretion of the Planning Director, private roadways which will serve  
16 only the proposed subdivision may be accepted within industrial or commercial districts  
17 when the Director is satisfied that public streets are not desirable or necessary, every  
18 lot fronts upon and takes access to the private roadway or public street, adequate  
19 internal circulation exists, City design standards for private roadways are met, and  
20 provisions have been made for the proper and continuous maintenance of the roadway  
21 in accordance with the provisions of this title.

- 1           2. Required easements for utilities, drainage, and any other improvement as found in this  
2           title shall be provided. If proper provisions for any required utility, drainage, and any  
3           other improvement as found in this title cannot be made, the plat shall be disapproved.
- 4           3. The Planning Director may require the posting of bonds or an escrow or security  
5           agreement approved by the City Attorney in an amount sufficient to guarantee the  
6           installation of required improvements as found in this title. Said improvements shall be  
7           completed within the same time limits as provided for in Section [26.11.040](#).
- 8           4. The subdivider shall submit such information as set forth in Sections [26.15.015](#),  
9           [26.15.020](#), [26.15.030](#), and [26.15.040](#) of this title as specified by the Planning Director.
- 10          5. Where individual water or wastewater systems are proposed to serve any of the  
11          proposed lots, the Health Department must approve the system, and all plans and  
12          information required by the Health Department shall be provided by the subdivider.
- 13          6. i. Prior to the approval of the plat, the subdivider shall provide a statement from the  
14          County Treasurer's office showing there are no tax liens against said land within the  
15          proposed subdivision or any part thereof. The subdivider shall also provide a statement  
16          from the City Treasurer's office showing that all special assessment installment  
17          payments are current as applied to said proposed subdivision or any part thereof. All  
18          taxes shall be paid in full on all real property dedicated to a public use.
- 19          ii. In the event of any proposed dedication for public use, a certificate of title or a title  
20          opinion issued to or for the benefit and protection of the city showing all parties  
21          whose consent is necessary to pass clear title for the land being subdivided and  
22          dedicated, together with the nature of their interests therein, shall be furnished.

1           Such proof of title shall be in a form acceptable to the City Attorney. Any  
2           subsequent change affecting ownership of the proposed subdivision or any part  
3           thereof shall be made only upon the prompt notification and certification to the city  
4           of said change in ownership. The City shall assume no responsibility for any title  
5           problem with said proposed subdivision or any part thereof, and approval of said  
6           subdivision shall not be construed as approval of the title of the proposed  
7           subdivision or any part thereof.

8           7. The plat shall be in accordance with the [comprehensive plan](#) except that there shall be  
9           no dedication of land required for street right-of-way purposes under the following  
10          conditions:

11          i. The land involved in the plat has previously been subdivided or platted in  
12          accordance with the then applicable subdivision ordinances and procedures of the  
13          City.

14          ii. The maximum lot size for any one lot created by the proposed plat does not exceed  
15          15,000 square feet.

16          8. The plat shall be in accordance with all the development standards of this title, except  
17          that a lot may have a maximum depth of five times its width under the following  
18          conditions:

19          i. The land involved in the plat is zoned O-1, O-2, O-3, B-1, B-2, B-3, B-4, B-5, H-  
20          1, H-2, H-3, H-4, I-1, I-2, or I-3 district;

21          ii. The minimum lot frontage of lots created by the proposed administrative plat is  
22          100 feet or more.

- 1           9. The subdivider shall submit an accurately drawn plat showing the proposed lots  
2           including the length of each lot line and its angle of deflection. Affixed to the plat shall  
3           be a certificate signed by a registered land surveyor certifying that each proposed lot  
4           has been accurately surveyed and that each lot corner has been well and accurately  
5           staked and marked.
- 6           10. The form of the plat shall be as provided in [Chapter 26.19](#) except the approval  
7           certificate will be signed by the Planning Director.
- 8           c. If the time period between the effective date of the approved preliminary plat, [or the most](#)  
9           [recent final plat within the preliminary plat](#), and the date the final plat is submitted exceeds  
10          five years and the required improvements have not been installed pursuant to a written  
11          authorization from the Mayor by executive order, the subdivider may, prior to preparing the  
12          final plat, request a written opinion from the Planning Director as to whether the conditions  
13          of approval and the approved preliminary plat are still in compliance with the subdivision  
14          ordinance, design standards, and required improvements. The Planning Director shall  
15          submit to the subdivider a written response indicating whether the conditions of approval  
16          and the approved preliminary plat are still in compliance with the current subdivision  
17          ordinance, design standards, and required improvements. If the preliminary plat is not in  
18          compliance, the Planning Director shall list the items of noncompliance and may require  
19          that a new preliminary plat be submitted by the subdivider pursuant to all of the provisions  
20          of this title [except in those instances when all or any portion of a preliminary plat has been](#)  
21          [final platted within the last five years. In such instances, the approved preliminary plat will](#)

1 govern, and the City shall not require a new preliminary plat that complies with current  
2 standards.

3 Section 8. That Section 26.15.015 of the Lincoln Municipal Code be amended to read as  
4 follows:

5 **26.15.015 Information on a Preliminary Plat.**

6 The preliminary plat shall be accurately and legibly drawn to a scale that clearly shows all pertinent  
7 information required in this chapter. The proposed layout and design of all the features of the  
8 subdivision shall conform to this title and to the **design standards** adopted by the city.

9 The following required information shall be identified and shown on the preliminary plat:

- 10 a. Name of the subdivision. The name of the subdivision shall not duplicate or approximate  
11 the name of an existing subdivision within Lancaster County unless the subdivision is  
12 adjacent to that existing subdivision and is an expansion thereof. The distinction shall be  
13 made by adding the suffix "1st addition" to the first duplication of the name, and then  
14 continuing in sequence.
- 15 b. North arrow, scale of drawing, date prepared, the sheet number and total number of sheets  
16 included within each set of the preliminary plat submittal.
- 17 c. Labelled Ccontour lines based on NAVD 1988 and at sufficient intervals, not to exceed  
18 fivetwo feet, to duplicate adequately the existing and proposed topography and land form  
19 within and adjacent to the subdivision. The scaled distance between contour lines shall not  
20 exceed 200 feet.
- 21 d. Existing and proposed streets and private roadways within and adjacent thereto. This shall  
22 include the right-of-way and pavement width, tangent length, the centerline radius of each

1 curve and its interior angle, the angle of intersection with all other streets and private  
2 roadways and the name or number of each.

3 Where the preliminary plat submitted covers only a portion of the subdivider's tract, a sketch  
4 of the prospective future street system of the unsubmitted part of the tract shall be furnished;  
5 and the street system of the part being platted shall be considered in connection with the  
6 proper projection of streets into the portion of the tract not being presently platted.

7 e. All lot lines and their dimensions. The dimensions along curvilinear lines shall be noted as  
8 being either chord or arc length.

9 f. Lot and block numbers and outlot letters with the total number of each. All lots shall be  
10 numbered in sequence beginning with the number one and continuing consecutively through  
11 each block with no omission or duplication. All blocks shall be numbered in the same  
12 manner. Outlots shall be assigned an alphabetical letter beginning with the letter "A" and  
13 continuing through the alphabet. The proposed use of the outlot shall be designated on the  
14 plat. Areas, except streets, to be dedicated or reserved for public or private parks or other  
15 public areas shall be outlots.

16 g. Areas for schools, parks, playgrounds, fire stations, libraries, and other common areas for  
17 public use, along with any requested consideration for such areas.

18 h. The proposed method of providing wastewater collector service to each lot:

19 1. If a public or community wastewater collector system is proposed, the size, direction  
20 of flow, location of the wastewater collectors, manholes, necessary extensions of the  
21 system within or beyond the limits of the subdivision to connect to the city's existing

- 1 wastewater collector system or to the community wastewater treatment facility, and the  
2 location of the community wastewater treatment facility.
- 3 2. If the use of individual wastewater systems is permitted, pursuant to Section 26.27.040  
4 of this title, and a septic tank system is proposed, soil and percolation data and plans  
5 which show the location of one main subsurface disposal field for each lot which is  
6 proposed to be served by a septic tank system, are required. Where the subdivider will  
7 permit individual sewage lagoons and the lot area is three acres or more, percolation  
8 tests and the location of the subsurface disposal field are not required.
- 9 i. The proposed method of providing water supply to each lot:
- 10 1. If a public or community water system or rural water district is proposed, the location  
11 and size of all water mains, hydrants, and necessary extensions of the system within or  
12 beyond the limits of the subdivision to connect to the existing water mains or to the  
13 community well.
- 14 2. If a community water system other than a rural water district is proposed, data on the  
15 quantity and quality of the water shall be obtained from one or more test wells within  
16 the immediate vicinity of the proposed water supply well.
- 17 3. If an individual water well system for each lot is proposed, data on the quantity and  
18 quality of the water shall be obtained from test wells which shall be drilled on the ratio  
19 of one to each ten acres on a grid system. Where geological and hydrological data and  
20 sodium and chloride tests are available and the results are satisfactory to the health  
21 department, the test wells may be waived.

- 1           4. The results of the preliminary tests required above shall in no way be construed to  
2           constitute a guarantee by the city of the quantity or quality of water to individual lots  
3           in the proposed subdivision, and the data obtained from these tests shall not be used to  
4           imply that an adequate quantity or acceptable quality of water is available in the  
5           proposed subdivision.
- 6           j. The location and size of all existing wastewater collectors and wastewater treatment  
7           facilities, storm drains, culverts, water mains and fire hydrants, power lines, cables, and  
8           other underground structures within or adjacent to the subdivision.
- 9           k. The location, width, and purpose of all existing and proposed easements within or adjacent  
10          to the subdivision.
- 11          l. The location of all existing and proposed sidewalks, pedestrian ways, and bikeways with  
12          required easements and setbacks.
- 13          m. The location of all existing structures and buildings within and adjacent to the subdivision,  
14          their existing and proposed use.
- 15          n. A certified accurate boundary survey showing sufficient linear, angular, and curve data to  
16          determine the bearing and length of all boundary lines of the subdivision, a legal description  
17          thereof, and the number of acres therein. (This survey shall be field measured and shall  
18          mathematically close with an error of not more than one in twenty-five thousand  
19          (1/25,000).) This survey shall also locate and identify all section corners and section lines.  
20          Where the subdivision abuts on an existing plat or other surveyed tracts, the distances,  
21          angles, and bearing of any common lines shall be shown; and any differences along common  
22          lines of the original survey and the survey of this subdivision shall be noted.

- 1 o. A certificate for the signature of the chairman of the Planning Commission in a form  
2 approved by the Planning Director.

3 Section 9. That Section 26.15.020 of the Lincoln Municipal Code be amended to read as  
4 follows:

5 **26.15.020 Information on or Accompanying a Preliminary Plat.**

6 The following required information shall be identified and shown on the preliminary plat or on  
7 accompanying sheets:

- 8 a. Centerline profiles in NAVD 1988 of all existing and proposed streets and private roadways  
9 within and adjacent to the subdivision. The profile shall show points of intersection with all  
10 other streets and private roadways, stationing, the existing ground surface elevations, the  
11 proposed street grades, the length of vertical curves between changes in grade, and the  
12 profiles and horizontal alignment of temporary dead-end streets extending 300 feet beyond  
13 the limits of the subdivision.

- 14 b. A drainage study in NAVD 1988 (when utilizing NGVD based flood elevations from FEMA  
15 floodplain maps, 0.50 feet shall be added to NGVD 1929 to obtain NAVD 1988, unless a  
16 more accurate conversion factor using an established conversion program is demonstrated  
17 to the satisfaction of the Director of Transportation and Utilities) shall include the following:

- 18 1. A topographic map showing the drainage area and resulting runoff from all land lying  
19 outside the limits of the preliminary plat which discharges storm water runoff into or  
20 through the plat.  
21 2. A topographic map showing proposed contour lines and all sub-drainage areas and  
22 resulting runoff within the limits of the preliminary plat.

- 1           3. Directional flow arrows for surface drainage along all lot lines where:
- 2           i. The flow from one acre or more discharges along a common lot line; and
- 3           ii. The finished grade of the lot is proposed to be two percent or less.
- 4           The drainage study map shall provide sufficiently detailed information to
- 5           determine the proposed slope along all lot lines.
- 6           4. The size and location of the pipes, ditch liners, and other drainage facilities required to
- 7           adequately drain the subdivision.
- 8           5. A copy of the drainage computations.
- 9           6. The elevation and limits of a flood from a 100-year storm along and adjacent to all open
- 10          drainage channels.
- 11          7. The elevation and limits of flow routes necessary to provide overland runoff capacity
- 12          through and along the storm drain system for the 100-year storm without flooding
- 13          building areas.
- 14          8. The elevations of any building or structure along flow routes indicating that no opening
- 15          in the building or structure is subject to flooding at the post development flow route
- 16          elevations.
- 17          9. The location of easements for minimum flood corridors in the Existing Urban Area
- 18          delineated along all channels which do not have a delineated floodplain and which drain
- 19          an area ~~equal to or~~ greater than 40150 acres ~~or have a defined bed and bank~~. Minimum
- 20          corridor preservation and mitigation for allowed encroachments shall be in
- 21          conformance with Chapter 2.05 (Stormwater Drainage Design Standards) of the City

1 of Lincoln Design Standards. Easements shall be in conformance with Section  
2 26.23.120, “Easements,” of the development standards for this title.

3 10. The location of easements for minimum flood corridors in New Growth Areas  
4 delineated along all channels which drain an area ~~equal to or~~ greater than 40150 acres  
5 ~~or have a defined bed and bank~~. Minimum corridor preservation and mitigation for  
6 allowed encroachments shall be in conformance with Chapter 2.05 (Stormwater  
7 Drainage Design Standards) of the City of Lincoln Design Standards. If the minimum  
8 flood corridor is in the floodplain or floodprone area, it shall be preserved in  
9 conformance with the Flood Design Criteria. Easements shall be in conformance with  
10 Section 26.23.120, “Easements,” of the development standards for this title. Minimum  
11 flood corridors centered on the channel and delineated along all channels which are  
12 outside the FEMA-delineated flood plain and drain an area ~~equal to or~~ greater than  
13 40150 acres.

14 11. The location of proposed stormwater detention/retention facilities, channels, and post  
15 construction best management practices.

16 12. A copy of the supporting calculations for the provision to demonstrating compliance  
17 with the applicable to limit to the peak rate of storm water discharged and for managing  
18 stormwater quality.

19 13. Maintenance plans for detention/retention ponds, constructed and modified channels,  
20 and post construction best management practices.

21 c. The location, size, and common name of all existing trees within and adjacent to the  
22 subdivision. The location of the trees may be shown on an aerial photograph with the

1 proposed streets and lots accurately shown thereon. All existing trees which measure three  
2 inches or more in caliper five feet above the ground shall be shown and each tree identified  
3 with its common name. However, if five or more trees are located so that each is within  
4 approximately ten feet of the edge of another tree, they may be considered a tree mass and  
5 the outline of the tree mass shall be shown, with a list of the common name of the trees  
6 which are within the tree mass and their general grouping. If this procedure is followed, the  
7 individual location of each tree within the tree mass is not necessary. An indication shall be  
8 made on the map showing which trees or tree masses are to remain and which trees or tree  
9 masses are to be removed. Trees, shrubs, and other vegetation within minimum flood  
10 corridors shall be preserved to the maximum extent possible. Those trees, shrubs, and other  
11 vegetation within minimum flood corridors which cannot be preserved shall be shown on  
12 the plans to be mitigated at a minimum 1.5-to-1 ratio in accordance with Chapter 2.05  
13 (Stormwater Drainage Design Standards) of the City of Lincoln Design Standards and Flood  
14 Design Criteria. Trees and shrubs utilized for mitigation purposes shall meet the standards  
15 for planting size and method listed in the City of Lincoln's Plant Material List of August,  
16 1986.

- 17 d. A vicinity sketch showing the general location of the preliminary plat in relation to existing  
18 streets, section lines, and city limits.

19 Section 10. That Section 26.19.031 of the Lincoln Municipal Code be amended to read as  
20 follows:

21 **26.19.031 Data Required on a Final Plat.**

- 22 a. The final plat shall be accurately and legibly drawn and shall show the following:

- 1           1. All survey and mathematical information with sufficient linear, angular, and curve data  
2           necessary to locate all existing and placed monuments and stakes, and to locate and  
3           retrace all lots, blocks, and parcels within the subdivision, and the boundary of the  
4           subdivision. Where the land being subdivided abuts on an existing plat, the distances,  
5           angles, and bearing of all common lines and the street centerline points shall be shown  
6           and any differences in measurements so noted.
- 7           2. All dimensions on the final plat shall be to the nearest one-hundredth (.01) of a foot  
8           with such other information necessary to reproduce the final plat on the ground.
- 9           3. Lot, outlot, and block lines. All such lines shall be shown and dimensioned.
  - 10          i. Where such lines are curved at street intersections, the length of tangents shall be  
11          shown.
  - 12          ii. Where such lines abut curvilinear streets, chord or arc distances shall be shown and  
13          noted.
  - 14          iii. All angles of deflection or bearings of such lines other than those which are at right  
15          angles to the centerline of a street or on a radial line of a curved street.
- 16          4. Lot, outlot, and block identity. Within each block all lots shall be numbered in  
17          sequence, beginning with the number one and continuing consecutively throughout  
18          each block with no omission or duplication. All blocks shall be numbered in the same  
19          manner. Outlots shall be assigned an alphabetical letter beginning with the letter "A"  
20          and continuing consecutively through the alphabet. The proposed use of the outlot shall  
21          be designated on the plat.

- 1           5. Areas to be dedicated or reserved for public use. For streets, private roadways, and  
2           other public ways within and adjacent to the subdivision, the location, name, centerline,  
3           centerline radius, length, and interior angle of horizontal curves, tangent length, and  
4           width. All areas shall be located and identified which are to be dedicated or reserved  
5           for public use, including park land and other public areas. All such parcels shall be  
6           outlots except streets dedicated to the public. A clear distinction shall be made as to  
7           which parcels are to be dedicated to the public from those parcels to be privately owned  
8           but reserved for public use.
- 9           6. Location, width, and purpose of all required easements for storm drains, overland  
10          stormwater flow routes, minimum flood corridors, detention/retention facilities, post  
11          construction best management practices, wastewater collectors, water mains, other  
12          public utilities, and other easements for public use.
- 13          7. The elevations of any building or structure along flow routes indicating that no opening  
14          in the building or structure is subject to flooding at the post development flow route  
15          elevations.
- 16          8. The location and identification of all section corners, section lines, monuments and  
17          stakes found and placed. The boundary lines shall be located in reference to existing  
18          official monuments. Describe the stakes, monuments, or other evidence used to  
19          determine the boundaries of the subdivision.
- 20          9. The number of acres, the total number of lots and outlots within the subdivision, and  
21          the lot area in square feet for each lot and outlot.
- 22          b. The following data shall be shown on each sheet of the final plat:

- 1           1. The name of the subdivision. The use of 1st, 2nd, 3rd, etc., for additions or subdivisions  
2           shall be made in sequence but only if the final plat is located adjacent to a plat with the  
3           same name. Only numerals 1st, 2nd, 3rd, etc. shall be used to designate subsequent  
4           additions. Spelled designations (i.e. First, Second, etc.) are not permitted.
- 5           2. Scale.
- 6           3. North arrow.
- 7           4. Sheet number and the total number of sheets comprising the final plat.
- 8           5. The name and number of the preliminary plat upon which the final plat is based. This  
9           information shall appear directly beneath the name of the final plat.
- 10          c. A blank space shall be left at the top of the first page which is at least two and one-half  
11          inches by six and one-half inches in size.
- 12          d. A Computer-Aided-Design (CAD) file representing all information being submitted that  
13          complies with the CAD Standards for Subdivision Submittals maintained by the  
14          Transportation and Utilities Department shall be submitted to the Planning Director along  
15          with the final plat.

16           Section 11. That Section 26.23.105 of the Lincoln Municipal Code be amended to read as  
17 follows:

18 **26.23.105 Drainage.**

19 The area to be subdivided shall be designed and laid out so as to provide proper and sufficient  
20 drainage. The storm drain system shall adequately drain the subdivision and shall be constructed  
21 to allow the storm water to flow by gravity from the subdivision to an adequate outlet.

1 Unless waived by the Director of Transportation and Utilities, provisions shall be made to limit  
2 the peak rate of storm water discharged from the subdivision in accordance with design standards.

3 Building areas shall be protected from storm water from a 100-year storm when such building area  
4 is adjacent to an open drainage channel, overland flow route, or detention/retention facility, or  
5 floodplain.

6 At a minimum, buildings adjacent to open drainage channels, overland flow routes, or  
7 detention/retention facilities must be protected by setting a minimum opening elevation no lower  
8 than the required freeboard above the 100-year flood elevation, whether they are located in the  
9 floodplain or not.

10 Buildable lots adjacent to open drainage channels, overland flow routes, or detention/facilities not  
11 located in the floodplain must have a lowest ground elevation grade above the 100-year flood  
12 elevation.

13 Buildable lots adjacent to the floodplain must have a lowest ground elevation grade no lower than  
14 the required freeboard above the 100-year flood elevation.

15 Buildings adjacent to an open drainage channel, overland flow route, or detention/retention facility  
16 shall be protected by setting a minimum opening elevation no lower than the required freeboard  
17 above the 100-year flood.

18 For open drainage channels, overland flow routes, or detention/retention facilities located in the  
19 floodplain or floodprone area, building areas shall be protected by raising of the ground elevation  
20 to no lower than the required freeboard above the 100-year flood and by setting a minimum  
21 opening elevation for adjacent buildings at least the required freeboard above the 100-year flood.

1 Section 12. That Section 26.23.120 of the Lincoln Municipal Code be amended to read as  
2 follows:

3 **26.23.120 Easements.**

4 Easements shall be provided and dedicated where necessary for wires, cables, conduits, fixtures  
5 and equipment for distribution of electric power, wastewater collectors, storm drains, overland  
6 stormwater flow routes, sidewalks, pedestrian ways, bikeways, private roadways, and water mains  
7 at such locations and widths as determined by the city. The width of easements required for public  
8 wastewater collectors, storm drains, and/or water mains shall be as specified in the design  
9 standards for the particular improvement adopted by the city. It is the policy of the city to locate  
10 all necessary utilities in the right-of-way or in easements abutting rear or side lot lines, except on  
11 double frontage lots. Deviations from this policy may be made when it is demonstrated that the  
12 utility is necessary and no practical alternative locations exist. Easements shall be provided along  
13 each side of a stream, watercourse, or river for the purpose of preserving area designated for  
14 compensatory storage where required in the floodplain or floodprone area, or for establishing a  
15 minimum flood corridor or a surface drainage course along that stream, watercourse, or river when  
16 the area adjacent thereto is being subdivided; such easements shall be of a width deemed necessary  
17 by the city. The easement is for the purpose of widening, deepening, sloping, improving, cleaning,  
18 or protecting the stream, watercourse, or river for drainage purposes. Said easement shall be  
19 provided in appropriate locations as determined by the city for the purpose of permitting the flow  
20 and storage of flood water. Minimum flood corridors shall be preserved and dedicated along  
21 drainage ways which ~~have a defined bed and bank or~~ drain an area ~~equal to or~~ greater than 40150  
22 acres, for purposes of preserving riparian vegetation and preventing encroachment within the

1 corridors by buildings, fill, or structures; provided, however, that encroachments within the  
2 corridors will be permitted in accordance with [Chapter 2.05 \(Stormwater Drainage Design](#)  
3 [Standards\)](#) of the City of Lincoln Design Standards and Flood Design Criteria. Within the Existing  
4 Urban Area, minimum flood corridors shall not be required within the FEMA-mapped floodplain.  
5 In any dedication of an easement, the city may prohibit or restrict buildings, fences, driveways and  
6 other improvements; may enter for construction, reconstruction, replacement, repair, operation,  
7 and maintenance purposes; and will be held harmless for the cost of replacement or damage to any  
8 improvement or vegetation within the easement and may make any other appropriate or necessary  
9 requirements.

10 Section 13. That Section 26.23.130 of the Lincoln Municipal Code be amended to read as  
11 follows:

12 **26.23.130 Block Sizes.**

13 a. Block lengths shall not exceed 1,320 feet except where a major street, school, park, or other  
14 man-made barrier, lake, or other natural barrier forms one boundary of a block, or if the  
15 block crosses a flow route which drains an area of more than 200 acres unless the street is  
16 needed to provide more than one access point to the development for emergency response.

17 Block lengths shall not exceed 1,000 feet in neighborhoods originally platted prior to  
18 December 31, 1949.

19 b. The block length shall be determined by measuring along the property line of any block and  
20 dividing by two. For blocks with a cul-de-sac street, the perimeter measurement may cross  
21 the street rather than proceedings along the property line of the cul-de-sac.

1           Section 14. That Section 26.24.010 of the Lincoln Municipal Code be amended to read as  
2 follows:

3 **26.24.010 Definitions.**

4 For the purpose of this chapter, certain terms and words are hereby defined:

5 **100-Year Flood** shall mean the flood having a one percent chance of being equaled or exceeded  
6 in any given year.

7 **Base Flood** shall mean the flood having a one percent chance of being equaled or exceeded in any  
8 given year.

9 **Basement** shall mean any enclosed area having its floor below grade level on all sides.

10 **Development** shall mean any man-made change to improved or unimproved real estate, including  
11 but not limited to, buildings or other structures, mining, dredging, filling, grading, paving,  
12 excavation or drilling operations, or storage of equipment or materials.

13 **Development Area shall mean the entire site of a proposed development or improvement.**

14 **Existing Urban Area** shall mean those areas inside the corporate limits of the City of Lincoln. as  
15 well as those areas outside the corporate limits having a zoning designation other than AG  
16 Agriculture and AGR Agricultural Residential, on the effective date of this ordinance.

17 **FEMA** shall mean the Federal Emergency Management Agency.

18 **Flood Insurance Rate Map (FIRM)** shall mean the Flood Insurance Rate Map for Lancaster  
19 County, Nebraska and Incorporated Areas Revised April 16, 2013 issued by FEMA and any  
20 revisions thereto, on which FEMA has delineated both the areas of special flood hazards and the  
21 risk premium zones applicable to the community.

22 **Flood Insurance Study** shall mean the Flood Insurance Study for Lancaster County, Nebraska

1 and Incorporated Areas Revised April 13, 2013 issued by FEMA in conjunction with the FIRM  
2 and containing background data such as base flood discharges and water surface elevations used  
3 to prepare the FIRM.

4 **Floodplain** shall mean those lands which are subject to a one percent or greater chance of flooding  
5 in any given year as shown on the Flood Insurance Rate Map issued by FEMA for Lancaster  
6 County, Nebraska and incorporated areas, as amended. Copies of the said maps shall be on file in  
7 the Department of Building and Safety.

8 **Floodprone area** shall mean those lands subject to a one percent or greater chance of flooding in  
9 any given year, as determined by hydrologic and hydraulic studies completed by the City or other  
10 government agency, or other acceptable source as approved by the City where this is the best  
11 available information.

12 **Floodproofing** shall mean any combination of structural and nonstructural additions, changes, or  
13 adjustments to structures which reduce or eliminate flood damage to real estate or improved real  
14 property, water and sanitary facilities, structures and their contents.

15 **Floodway** shall mean the channel of a river or other watercourses and the adjacent land areas that  
16 must be reserved in order to discharge the base flood without cumulatively increasing the water  
17 surface elevation more than one foot.

18 ~~**Freeboard** shall mean 1 foot above the 100-year flood elevation where it is based upon NOAA  
19 Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where it is not based upon  
20 NOAA Atlas 14 precipitation.~~

21 **Freeboard** shall mean a minimum height requirement above the 100-year flood elevation or Base  
22 Flood Elevation (BFE) that provides a margin of safety against extraordinary or unknown risks

1 and said minimum height elevation shall be 1 foot above the 100-year flood elevation where the  
2 floodplain or floodprone area is based upon NOAA Atlas 14 precipitation, or 2 feet above the 100-  
3 year flood elevation where the floodplain or floodprone area is not based upon NOAA Atlas 14  
4 precipitation.

5 **Letter of Map Change (LOMC)** shall mean a determination document issued by FEMA that  
6 officially revises the FIRM based on updated information, whether improved data or topography  
7 changes created by fill placement. Includes Letter of Map Amendment (LOMA), Letter of Map  
8 Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-f).

9 **Lowest floor** shall mean the lowest floor of the lowest enclosed area (including basement). An  
10 unfinished or flood-resistant enclosure, usable solely for parking of vehicles or building access, in  
11 an area other than a basement area is not considered a building's lowest floor; provided that such  
12 enclosure is not built so as to render the structure in violation of the applicable non-elevation design  
13 requirements of this ordinance.

14 **NAVD** shall mean the North American Vertical Datum of 1988.

15 **Non-substantial improvement** shall mean any improvement that does not meet the definition of  
16 substantial improvement, as defined in this section.

17 **Qualified engineer** shall mean a registered professional engineer who, by reason of training and  
18 experience, is considered knowledgeable in hydrology and hydraulics and their application to the  
19 flood insurance study and has demonstrated competence to the satisfaction of the Director of  
20 Transportation and Utilities.

21 **Residential Building** shall mean a dwelling, or non-commercial building or structure designed for  
22 habitation by one or more families; or a commercial or mixed-use building that contains one or

1 more dwellings units. Residential Building includes condominium and multifamily apartment  
2 buildings, dormitories and assisted living facilities, as well as hotels, motels, and rooming houses  
3 where the normal occupancy of a guest is 6 months or more.

4 **Residential Development** shall mean any portion of a development area allowing for residential  
5 buildings, residential structures, or residential uses unless residential use is prohibited by  
6 resolution or ordinance.

7 **Special Flood Hazard Area** shall mean the land in the floodplain subject to a one percent or  
8 greater chance of flooding in any given year.

9 **Start of construction** shall mean either the first placement of permanent construction of a  
10 structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction  
11 of columns, or any work beyond the stage of excavation, or the placement of a manufactured home  
12 on a foundation. Permanent construction does not include land preparation, such as clearing,  
13 grading, and filling; nor does it include the installation of streets and/or walkways; nor does it  
14 include excavation for a basement, footings, piers or foundations or the erection of temporary  
15 forms; nor does it include the installation on the property of accessory buildings, such as garages  
16 or sheds not occupied as dwelling units or not as part of the main structure. For a substantial  
17 improvement, the actual start of construction shall mean the first alteration of any wall, ceiling,  
18 floor, or other structural part of a building, whether or not that alteration affects the external  
19 dimension of the building.

20 **Substantial improvement** shall mean any reconstruction, rehabilitation, addition, or other  
21 improvement of a structure, the cost of which equals or exceeds fifty percent of the market value  
22 of the structure before the start of construction of the improvement. Substantial improvement shall

1 include structures which have incurred substantial damage, regardless of the actual repair work  
2 performed. The term shall not, however, include either (i) any project for improvement of a  
3 structure to correct existing violations of state or local health, sanitary, or safety code specifications  
4 which have been identified by the local code enforcement official and which are the minimum  
5 necessary to assure safe living conditions, or (ii) any alteration of a historic structure, provided  
6 that the alteration will not preclude the structure's continued designation of a historic structure.

7 **Variance** shall mean a grant of relief from the terms of a floodplain management regulation, this  
8 shall be done by Special Permit in accordance with Section 27.52.060 of the Zoning Code.

9 **Violation** shall mean the failure of a structure or other development to be fully compliant with the  
10 floodplain management regulations as set forth in this chapter. A structure or other development  
11 without the elevation certificate, other certifications, or other evidence of compliance as required  
12 is presumed to be in violation until such time as that documentation is provided.

13 Section 15. That Section 26.24.020 of the Lincoln Municipal Code be amended to read as  
14 follows:

15 **26.24.020 Development of Land Within Floodplain.**

16 There shall be no platting or subdivision of land allowed by the city within a floodplain or  
17 floodprone area unless the following conditions are met:

- 18 a. That the development of any land in the floodway as designated by the Federal Emergency  
19 Management Agency (FEMA) or as determined by hydrologic and hydraulic studies  
20 completed by the City or other government agency, or other acceptable source as approved  
21 by the City, shall cause no increase in the water surface elevation of the 100-year flood, in  
22 conformance with the provisions of Section 27.52.030(h).

1 b. That the development of any land in the floodplain or floodprone area where no floodway  
2 has been designated shall cause no increase in the water surface elevation of the 100-year  
3 flood more than one foot at any location.

4 c. That the development of any land located within the floodplain or floodprone area will be  
5 accomplished so as to protect building sites for residential development by raising ~~of~~ the  
6 ground elevation of the entire lot to at least ~~one-foot~~ the required freeboard above the 100-  
7 year flood, in accordance with Chapter 27.52, “Flood Regulations for Existing Urban Area,”  
8 of the Zoning Ordinance. The raising of the ground elevation shall be accomplished in such  
9 a manner that the general flow and storage of water is not unduly restricted or limited and  
10 will not cause flood hazards to other lands and developments, either within the proposed  
11 subdivision or otherwise, and that said protection shall be accomplished without creating  
12 the need for significant public expenditures for flood control.

13 Prior to approval of a final plat to subdivide land for residential development in the floodplain,  
14 the developer must submit an approved Letter of Map Change from FEMA to remove all  
15 buildable lots from the FEMA-mapped floodplain. Where buildable lots are outside the  
16 floodplain or floodprone area based upon a filed survey of the natural ground elevation, the  
17 developer must submit individual lot surveys documenting the elevation and filed surveys on  
18 individual lots with the Register of Deeds.

19 d. That the development of any land located within the floodplain or floodprone area will be  
20 accomplished so as to protect building sites for non-residential development by raising of  
21 the ground elevation to an elevation at least ~~one-foot~~ the required freeboard above the 100-  
22 year flood or by floodproofing the structure to an elevation at least ~~one-foot~~ the required

1        freeboard above the 100-year flood, in accordance with Chapter 27.52, “Flood Regulations  
2        for Existing Urban Area,” of the Zoning Ordinance.

3        e. That any proposed use which is located within a floodplain or floodprone area and is subject  
4        to flooding shall be limited to such uses as open space, streets, and parking areas on that  
5        portion of the land within the floodplain or floodprone area where significant damage to life  
6        and property from flooding is most likely to occur. Any use approved to be located on land  
7        which is a floodplain or floodprone area shall be approved only after the following factors  
8        have been considered and any adverse impacts are mitigated to the satisfaction of the City:

- 9        1. The danger to life and property by water which may be backed up or diverted by such  
10        obstruction or land use;
- 11        2. The danger that the obstruction or land use will be swept downstream to the injury of  
12        others;
- 13        3. The availability of alternate locations;
- 14        4. The ability to construct or alter the obstruction in such a manner as to lessen any danger;
- 15        5. The permanence of the obstruction or land use;
- 16        6. The anticipated development in the foreseeable future of the land in which the proposed  
17        subdivision is to be located which may be affected by the obstruction or land use;
- 18        7. The degree to which safe access can be provided through areas that are projected to be  
19        flooded during a 100-year flood event.
- 20        8. Any additional conditions adopted by the city to ensure proper use of land within the  
21        floodplains.

22        f. That any land within a floodplain or floodprone area from which fill is taken shall be

1 hydrologically designed and maintained to reduce the likelihood of becoming refilled by  
2 silt. The subdivider must make arrangements satisfactory to the city binding his successors  
3 and assigns, to regrade or remove such silt as is necessary to return any area to its approved  
4 design after flooding has occurred. Any land from which fill is taken within a floodplain or  
5 floodprone area shall be at a grade that will continue to permit adequate drainage into the  
6 stream or watercourse. If a water area is to be maintained within the floodplain or floodprone  
7 area, consideration shall be given to the effect the water area may have upon the flooding  
8 of both the land within the floodplain or floodprone area and other lands outside of the  
9 floodplain or floodprone area.

- 10 g. The location, grade, and flood-proofing of all proposed utilities which are to be extended  
11 into or through any portion of the floodplain or floodprone area to serve the proposed  
12 development shall first be approved by the city, prior to the extension of such utilities into  
13 the floodplain or floodprone area.

14 If the city, at the time of platting, agrees to create special assessment districts for the construction  
15 of utilities to serve the subdivision, the subdivider shall remain responsible to pay the entire cost  
16 of the necessary construction and necessary flood-proofing of such public utilities when said  
17 utilities traverse any land subject to being inundated by flood water in order to serve the land within  
18 the proposed subdivision. The subdivider shall also enter into an agreement with the City to  
19 prohibit future connections to water mains and wastewater collectors to serve any land still subject  
20 to being inundated by flood water.

21 The subdivider shall obtain the approval of the Director of Transportation and Utilities for any  
22 modifications in the location or design of the borrow area within the floodplain.

1           Section 16. That Section 26.24.030 of the Lincoln Municipal Code be amended to read as  
2 follows:

3 **26.24.030 Information on a Preliminary Plat.**

4 The following additional information shall be included with the preliminary if any part of the  
5 subdivision is within the floodplain or floodprone area:

- 6     a. All hydrological and grade information in NAVD 1988, including base flood elevation data  
7       within Zone A (no base flood elevations determined), which is necessary to determine the  
8       frequency and extent that the subdivision is subject to inundation by flood water, except  
9       that this shall not apply where the use of the property is not being changed and there are no  
10      physical changes on the site which have the potential to increase the flood hazard. When  
11      utilizing NGVD based flood elevations from FEMA floodplain maps, 0.50 feet shall be  
12      added to NGVD 1929 to obtain NAVD 1988, unless a more accurate conversion factor  
13      using an established conversion program is demonstrated to the satisfaction of the Director  
14      of Transportation and Utilities.
- 15    b. All grading and drainage information in conformance with Section 26.15.020(b) of this title.
- 16    c. In Zone A (no base flood elevations determined), for subdivisions greater than either five  
17      acres or fifty lots, detailed base flood elevation data based on an engineering study  
18      performed by a qualified engineer in accordance with FEMA approved methods for  
19      generating detailed base flood elevations. This provision shall not apply where the use of  
20      the property is not being changed and there are no physical changes on the site which have  
21      the potential to increase the flood hazard.
- 22    d. The type and extent of the proposed use or development of the land which is located within

1 the floodplain or floodprone area, along with such information as is necessary to determine  
2 the effect flood waters will have on such development and use and the effect such  
3 development and use may have upon the flood waters. All such information shall show the  
4 location of the proposed use, areas of habitation and employment, including the location,  
5 size, and floor elevation of any structures, the location and elevation of all parking areas,  
6 and the use, location, and elevations of all open land areas.

7 e. The proposed centerline grade of streets or private roadways located within the floodplain  
8 or floodprone area that are necessary to serve the proposed development. The proposed  
9 centerline grade shall not be more than one foot below the 50-year flood elevation.

10 f. The limits of the 100-year floodplain or floodprone area and floodway.

11 g. The amount of fill material to be brought into the floodplain or floodprone area from outside  
12 the floodplain or floodprone area.

13 h. Information, documentation and certification by a professional engineer or hydrologist  
14 demonstrating any grading within the floodway will not result in any increase in the flood  
15 level during the occurrence of the base flood discharge.

16 An exception to the above shall be permitted provided the applicant has acquired by land rights  
17 purchase, flowage easement, or other legal arrangement the right to increase the flood levels on all  
18 affected lands, and provided that before any permit is issued the applicant submits a Federal  
19 Emergency Management Agency (FEMA) approved Conditional Letter of Map Revision to the  
20 Director of Building and Safety. When such encroachment is completed, a FEMA approved Letter  
21 of Map Revision must also be provided by the applicant prior to approval of a final plat to  
22 subdivide any land located in the floodplain.

1           Section 17. That Section 26.25.010 of the Lincoln Municipal Code be amended to read as  
2 follows:

3 **26.25.010 Definitions.**

4 For the purpose of this chapter, certain terms and words are hereby defined:

5 **2-Year Flood** shall mean the flood having a fifty percent chance of being equaled or exceeded in  
6 any given year.

7 **10-Year Flood** shall mean the flood having a ten percent chance of being equaled or exceeded in  
8 any given year.

9 **100-Year Flood** shall mean the flood having a one percent chance of being equaled or exceeded  
10 in any given year.

11 **Base Flood** shall mean the flood having a one percent chance of being equaled or exceeded in  
12 any given year.

13 **Basement** shall mean any enclosed area having its floor below grade level on all sides.

14 **Compensatory Storage** shall mean replacement of storage volume that is hydrologically  
15 equivalent to lost storage when encroachment occurs in the floodplain or floodprone area.

16 **Development** shall mean any man-made change to improved or unimproved real estate, including  
17 but not limited to, buildings or other structures, mining, dredging, filling, grading, paving,  
18 excavation or drilling operations, or storage of equipment or materials.

19 **Development Area shall mean the entire site of a proposed development or improvement.**

20 **FEMA** shall mean the Federal Emergency Management Agency.

21 **Flood Design Criteria** shall mean Chapter 10 of the City of Lincoln ~~Drainage Criteria~~**Flood and**

22 **Water Quality Protection** Manual, adopted on ~~Month Day, 2022~~**February 22, 2000** by Resolution

1 No. A-~~XXXXX~~80038, as amended.

2 **Flood Fringe** shall mean that portion of the FEMA-mapped floodplain outside of the Floodway.

3 **Flood Insurance Rate Map (FIRM)** shall mean the Flood Insurance Rate Map for Lancaster  
4 County, Nebraska and Incorporated Areas Revised April 16, 2013 issued by FEMA and any  
5 revisions thereto, on which FEMA has delineated both the areas of special flood hazards and the  
6 risk premium zones applicable to the community.

7 **Flood Insurance Study** shall mean the Flood Insurance Study for Lancaster County, Nebraska  
8 and Incorporated Areas Revised April 16, 2013 issued by FEMA in conjunction with the FIRM  
9 and containing background data such as base flood discharges and water surface elevations used  
10 to prepare the FIRM.

11 **Floodplain** shall mean those lands which are subject to a one percent or greater chance of flooding  
12 in any given year as shown on the Flood Insurance Rate Map issued by FEMA for Lancaster  
13 County, Nebraska and incorporated areas, as amended. Copies of the said maps shall be on file in  
14 the Department of Building and Safety.

15 **Floodprone area** shall mean those lands subject to a one percent or greater chance of flooding in  
16 any given year, as determined by hydrologic and hydraulic studies completed by the City or other  
17 government agency, or other acceptable source as approved by the City where this is the best  
18 available information.

19 **Floodproofing** shall mean any combination of structural and nonstructural additions, changes, or  
20 adjustments to structures which reduce or eliminate flood damage to real estate or improved real  
21 property, water and sanitary facilities, structures and their contents.

22 **Floodway** shall mean the channel of a river or other watercourses and the adjacent land areas that

1 must be reserved in order to discharge the base flood without cumulatively increasing the water  
2 surface elevation more than one foot.

3 ~~**Freeboard** shall mean 1 foot above the 100-year flood elevation where it is based upon NOAA  
4 Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where it is not based upon  
5 NOAA Atlas 14 precipitation.~~

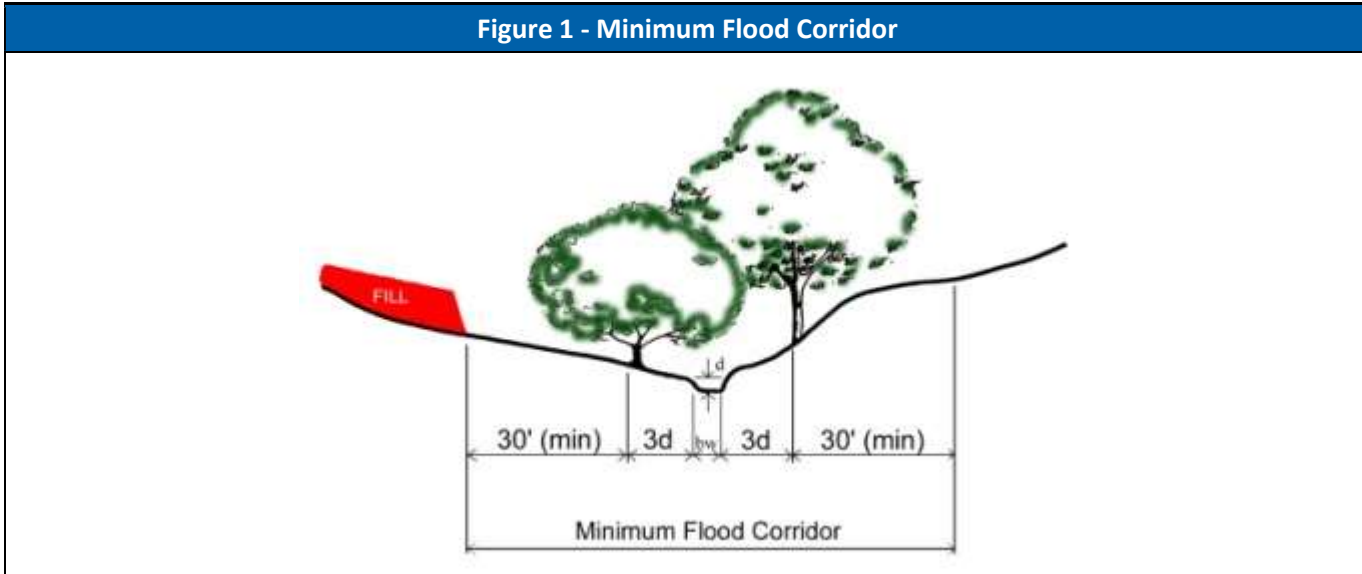
6 ~~**Freeboard** shall mean a minimum height requirement above the 100-year flood elevation or Base  
7 Flood Elevation (BFE) that provides a margin of safety against extraordinary or unknown risks  
8 and said minimum elevation shall be 1 foot above the 100-year flood elevation where the  
9 floodplain or floodprone area is based upon NOAA Atlas 14 precipitation, or 2 feet above the 100-  
10 year flood elevation where the floodplain or floodprone area is not based upon NOAA Atlas 14  
11 precipitation.~~

12 **Letter of Map Change (LOMC)** shall mean a determination document issued by FEMA that  
13 officially revises the FIRM based on updated information, whether improved data or topography  
14 changes created by fill placement. Includes Letter of Map Amendment (LOMA), Letter of Map  
15 Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-f).

16 **Lowest floor** shall mean the lowest floor of the lowest enclosed area (including basement). An  
17 unfinished or flood-resistant enclosure, usable solely for parking of vehicles or building access, in  
18 an area other than a basement area is not considered a building's lowest floor; provided that such  
19 enclosure is not built so as to render the structure in violation of the applicable non-elevation design  
20 requirements of this ordinance.

21 **Minimum Flood Corridor** shall mean the ~~flood-stream buffer area centered on the channel or  
22 aligned such that the corridor area follows the natural flow of flood waters. The width of such area~~

- 1 shall be:
- 2 a. 90 feet for drainage areas greater than 40 acres and less than or equal to 100 acres;
- 3 b. 100 feet for drainage areas greater than 100 acres and less than or equal to 200 acres;
- 4 c. 120 feet for drainage areas greater than 200 acres and less than or equal to 300 acres;
- 5 d. Channel width plus six times the depth of channel plus 50 feet for drainage areas greater
- 6 than 300 acres, as shown in Figure 1 below.
- 7 ~~existing channel bottom width plus 60 feet plus six times the channel depth and the corridor will~~
- 8 ~~be centered on the channel, as shown in Figure 1 below, or aligned such that the corridor follows~~
- 9 ~~the natural flow of flood waters.~~



- 10 **NAVD** shall mean the North American Vertical Datum of 1988.
- 11 **New Growth Areas** shall mean those areas outside the corporate limits of the City of Lincoln and
- 12 zoned AG Agriculture and AGR Agricultural Residential on the effective date of this ordinance.
- 13 **Non-substantial improvement** shall mean any improvement that does not meet the definition of

1 substantial improvement, as defined in this section.

2 **Qualified engineer** shall mean a registered professional engineer who, by reason of training and  
3 experience, is considered knowledgeable in hydrology and hydraulics and their application to the  
4 flood insurance study and has demonstrated competence to the satisfaction of the Director of  
5 Transportation and Utilities.

6 **Residential Building or Residential Structure** shall mean a dwelling, or non-commercial  
7 building or structure designed for habitation by one or more families, or a commercial or mixed-  
8 use building that contains one or more dwellings units. This includes condominium and apartment  
9 buildings, dormitories and assisted living facilities, as well as hotels, motels, and rooming houses  
10 where the normal occupancy of a guest is 6 months or more.

11 **Residential Development** shall mean any portion of any development area for residential  
12 buildings, residential structures, or residential uses unless residential use is prohibited by  
13 resolution or ordinance.

14 **Special Flood Hazard Area** shall mean the land in the floodplain subject to a one percent or  
15 greater chance of flooding in any given year.

16 **Start of construction** shall mean either the first placement of permanent construction of a  
17 structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction  
18 of columns, or any work beyond the stage of excavation, or the placement of a manufactured home  
19 on a foundation. Permanent construction does not include land preparation, such as clearing,  
20 grading, and filling; nor does it include the installation of streets and/or walkways; nor does it  
21 include excavation for a basement, footings, piers or foundations or the erection of temporary  
22 forms; nor does it include the installation on the property of accessory buildings, such as garages

1 or sheds not occupied as dwelling units or not as part of the main structure. For a substantial  
2 improvement, the actual start of construction shall mean the first alteration of any wall, ceiling,  
3 floor, or other structural part of a building, whether or not that alteration affects the external  
4 dimension of the building.

5 **Substantial improvement** shall mean any reconstruction, rehabilitation, addition, or other  
6 improvement of a structure, the cost of which equals or exceeds fifty percent of the market value  
7 of the structure before the start of construction of the improvement. Substantial improvement shall  
8 include structures which have incurred substantial damage, regardless of the actual repair work  
9 performed. The term shall not, however, include either (i) any project for improvement of a  
10 structure to correct existing violations of state or local health, sanitary, or safety code specifications  
11 which have been identified by the local code enforcement official and which are the minimum  
12 necessary to assure safe living conditions, or (ii) any alteration of a historic structure, provided  
13 that the alteration will not preclude the structure's continued designation of a historic structure.

14 **Variance** shall mean a grant of relief from the terms of a floodplain management regulation, this  
15 shall be done by Special Permit in accordance with Section [27.53.060](#) of the Zoning Code.

16 **Violation** shall mean the failure of a structure or other development to be fully compliant with  
17 the floodplain management regulations as set forth in this chapter. A structure or other  
18 development without the elevation certificate, other certifications, or other evidence of compliance  
19 as required is presumed to be in violation until such time as that documentation is provided.

20 **Watershed Master Plan** shall mean a plan generated by the City or by the City in cooperation  
21 with other agencies, which includes hydrologic and hydraulic modeling for the 100-year event,  
22 including 100-year floodplain elevation and limits.

1 Section 18. That Section 26.25.020 of the Lincoln Municipal Code be amended to read as  
2 follows:

3 **26.25.020 Flood Regulations for Development in New Growth Areas.**

4 There shall be no platting or subdivision of land allowed by the city within a floodplain or  
5 floodprone area unless the following conditions are met:

6 a. The development of any land located within the floodway as designated by the Federal  
7 Emergency Management Agency (FEMA) or as determined by hydrologic and hydraulic  
8 studies completed by the City or other government agency, or other acceptable source as  
9 approved by the City where this is the best available information, shall:

10 1. Be accomplished in conformance with the Flood Design Criteria.

11 2. Be accomplished in conformance with Section 27.53.030(h).

12 b. The development of any land located within the floodplain or floodprone area outside the  
13 floodway or where a floodway has not been designated, except as provided in Section 10.2  
14 of the Flood Design Criteria, shall:

15 1. Be accomplished in conformance with the Flood Design Criteria.

16 2. Cause no greater than two hundredths of a foot (0.02') for Salt Creek and five  
17 hundredths of a foot (0.05') of rise for all other streams in the 100-year flood elevation.

18 3. Cause no greater than two hundredths of a foot (0.02') for Salt Creek and five  
19 hundredths of a foot (0.05') of rise for all other streams in areas with a watershed master  
20 plan for the 2-, 10-, and 100-year flood elevations, as demonstrated using the hydraulic  
21 model from the watershed master plan.

22 4. Notwithstanding certain exceptions in the Flood Design Criteria allowing for greater

1 than five hundredths of a foot (0.05') of a rise in the flood elevation as noted above in  
2 subsections b.2. and b.3., the development shall not cause greater than one foot (1.0')  
3 of rise in the FEMA-mapped flood fringe where no floodway has been designated.

4 The developer must consult with the City prior to the start of work to determine if a  
5 Letter of Map Change (LOMC) is required. City will require an LOMC if there is a  
6 potential for adverse impact to structures and adjacent lots, increases to floodplain  
7 extents or increases to Base Flood Elevation; shifting or re-aligning the channel; and/or  
8 if the hydrology, hydraulics, or modeling data is updated and warrants map revision,  
9 and will specify with LOMCs must be submitted. All FEMA approved Letter of Map  
10 Revisions (LOMRs and LOMR-Fs) must be submitted to City by the applicant prior to  
11 approval of a final plat to subdivide any land located in the floodplain.

12 An exception to the above shall be permitted provided the applicant has acquired by  
13 land rights purchase, flowage easement, or other legal arrangement the right to increase  
14 the flood levels greater than one foot (1.0') on all affected lands, and provided that  
15 before any permit is issued the applicant submits a Federal Emergency Management  
16 Agency (FEMA) approved Conditional Letter of Map Revision to the Director of  
17 Building and Safety. When such encroachment is completed, a FEMA approved Letter  
18 of Map Revision must also be provided by the applicant prior to approval of a final plat  
19 to subdivide any land located in the floodplain.

20 c. The development of any land located within the floodplain or floodprone area except as  
21 provided in Section 10.2 of the Flood Design Criteria, shall:

22 1. Be accomplished in conformance with the Flood Design Criteria.

- 1           2.   Compensate for any flood storage lost by providing a hydrologically equivalent volume  
2           of storage adjacent to the area of the encroachment.
- 3           3.   Compensate for flood storage lost below the existing 10 year water surface elevation  
4           by providing storage below the proposed 10 year water surface elevation, and  
5           compensate for flood storage lost above the existing 10 year water surface elevation  
6           with flood storage above the proposed 10-year water surface elevation.
- 7           4.   Cause no increase in peak flow rates in areas with a watershed master plan for the 2-,  
8           10-, and 100-year flood events, as demonstrated using the hydrologic model from the  
9           watershed master plan.
- 10          5.   Dedicate easements over areas of compensatory storage in conformance with Section  
11          26.23.120.
- 12   d.   Along stream channels within a floodplain or floodprone area ~~which have a defined bed and~~  
13   ~~bank or~~ which have drainage areas ~~exceeding greater than~~ 40-50 acres, development shall  
14   preserve a Minimum Flood Corridor. Minimum corridor preservation and mitigation for  
15   allowed encroachments into the corridor shall be in conformance with Section 10.3 of the  
16   Flood Design Criteria. Easements shall be dedicated over minimum flood corridors in  
17   conformance with Section 26.23.120, “Easements,” of the development standards for this  
18   title.
- 19   e.   The development of any land located within a floodplain or floodprone area will be  
20   accomplished so as to protect building sites for residential development by raising of the  
21   ground elevation of the entire lot to at least ~~one-foot~~ the required freeboard above the 100-  
22   year flood. The raising of the ground elevation shall be accomplished in such a manner that

1 the general flow and storage of water is not unduly restricted or limited and will not cause  
2 flood hazards to other lands and developments, either within the proposed subdivision or  
3 otherwise, and that said protection shall be accomplished without creating the need for  
4 significant public expenditures for flood control.

5 Prior to ~~receiving building permits~~approval of a final plat to subdivide land for residential  
6 development in the floodplain, the developer must submit an approved Letter of Map  
7 ChangeLOMC from FEMA to remove ~~the building sites~~all buildable lots from the FEMA-  
8 mapped floodplain. Where ~~building sites~~buildable lots are outside the floodplain or  
9 floodprone area based upon a filed survey of the natural ground elevation, the developer  
10 must submit individual lot surveys documenting the elevation and filed surveys on  
11 individual lots with the register of deeds.

12 f. The development of any land located within a floodplain or floodprone area will be  
13 accomplished so as to protect building sites for non-residential development by raising of  
14 the ground elevation to an elevation at least ~~one foot~~the required freeboard above the 100-  
15 year flood or by floodproofing the structure to an elevation at least ~~one foot~~the required  
16 freeboard above the 100-year flood, in accordance with Chapter 27.53, “Flood Regulations  
17 for New Growth Areas,” of the Zoning Code.

18 g. Any proposed use which is located within a floodplain or floodprone area and is subject to  
19 flooding shall be limited to such uses as open space, streets, and parking areas on that  
20 portion of the land within the floodplain or floodprone area where significant damage to life  
21 and property from flooding is most likely to occur. Any use approved to be located on land  
22 which is included within a floodplain or floodprone area shall be approved only after the

1 following factors have been considered and any adverse impacts are mitigated to the  
2 satisfaction of the City.

- 3 1. The danger to life and property by water which may be backed up or diverted by such  
4 obstruction or land use;
- 5 2. The danger that the obstruction or land use will be swept downstream to the injury of  
6 others;
- 7 3. The availability of alternate locations;
- 8 4. The ability to construct or alter the obstruction in such a manner as to lessen any danger;
- 9 5. The permanence of the obstruction or land use;
- 10 6. The anticipated development in the foreseeable future of the area in which the proposed  
11 subdivision is to be located which may be affected by the obstruction or land use;
- 12 7. The degree to which safe access can be provided through areas that are projected to be  
13 flooded during a 100-year flood event.
- 14 8. Any additional conditions adopted by the city to ensure proper use of the areas within  
15 a floodplain or floodprone area.

16 h. Any area within a floodplain or floodprone area from which fill is taken shall be  
17 hydrologically designed and maintained to reduce the likelihood of becoming refilled by  
18 silt. The subdivider must make arrangements satisfactory to the city binding his successors  
19 and assigns, to regrade or remove such silt as is necessary to return any area to its approved  
20 design after flooding has occurred. Any area from which fill is taken within a floodplain or  
21 floodprone area shall be at a grade that will continue to permit adequate drainage into the  
22 stream or watercourse. If a water area is to be maintained within the floodplain or floodprone

1 area, consideration shall be given to the effect the water area may have upon the flooding  
2 of both the land within the floodplain or floodprone area and other lands outside of the  
3 floodplain or floodprone area.

4 i. The location, grade, and flood-proofing of all proposed utilities which are to be extended  
5 into or through any portion of the flood plain to serve the proposed development shall first  
6 be approved by the city, prior to the extension of such utilities into the floodplain or  
7 floodprone area.

8 If the city, at the time of platting, agrees to create special assessment districts for the construction  
9 of utilities to serve the subdivision, the subdivider shall remain responsible to pay the entire cost  
10 of the necessary construction and necessary flood-proofing of such public utilities when said  
11 utilities traverse any land subject to being inundated by flood water in order to serve the land within  
12 the proposed subdivision. The subdivider shall also enter into an agreement with the City to  
13 prohibit future connections to water mains and wastewater collectors to serve any land still subject  
14 to being inundated by flood water.

15 The subdivider shall obtain the approval of the Director of Transportation and Utilities for any  
16 modifications in the location or design of the borrow area within the floodplain or floodprone area.

17 Section 19. That Sections 26.07.116, 26.07.120, 26.07.126, 26.11.037, 26.11.038,  
18 26.11.040, 26.11.050, 26.15.015, 26.15.020, 26.19.031, 26.23.105, 26.23.120, 26.23.130,  
19 26.24.010, 26.24.020, 26.24.030, 26.25.010, and 26.25.020 of the Lincoln Municipal Code as  
20 hitherto existing be and the same are hereby repealed.

21 Section 20. This ordinance shall be published, within fifteen days after the passage  
22 hereof, in one issue of a daily or weekly newspaper of general circulation in the City, or posted on

1 the official bulletin board of the City, located on the wall across from the City Clerk's office at  
2 555 S. 10<sup>th</sup> Street, in lieu and in place of the foregoing newspaper publication with notice of  
3 passage and such posting to be given by publication one time in the official newspaper by the City  
4 Clerk. This ordinance shall take effect and be in force from sixty (60) days ~~and~~ after its passage  
5 and so long as publication ~~or after its~~, posting and notice of such posting given by publication as  
6 described herein has occurred and in as provided by the City Charter ~~provided~~.

Introduced by:

Approved as to Form & Legality:

\_\_\_\_\_

\_\_\_\_\_  
City Attorney

Approved this \_\_\_ day of \_\_\_\_\_, 2022:

\_\_\_\_\_  
Mayor



## LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER  
Text Amendment #22011  
Title 27 Flood and Water Quality  
Amendments

FINAL ACTION?  
No

PLANNING COMMISSION HEARING DATE  
November 16, 2022

RELATED APPLICATIONS  
TX#22010, TX#22012

### RECOMMENDATION: APPROVAL

#### BRIEF SUMMARY OF REQUEST

This request amends various sections in Title 27 Zoning to be consistent with the updates to the City of Lincoln Flood and Water Quality Protection Manual (FWQPM).

#### JUSTIFICATION FOR RECOMMENDATION

These changes are necessary to provide consistency between the FWQPM and the Zoning Ordinance. The Zoning Ordinance is one of the primary tools for implementing the FWQPM and so must be reflective of the requirements of the updated manual.

#### APPLICATION CONTACT

Elizabeth Elliott, 402-441-7548  
[ltu@lincoln.ne.gov](mailto:ltu@lincoln.ne.gov)

#### STAFF CONTACT

Brian Will, 402-441-6362  
[bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)

#### COMPATIBILITY WITH THE COMPREHENSIVE PLAN

These amendments update the Zoning Ordinance to be consistent with the proposed changes to the City of Lincoln Flood and Water Quality Protection Manual. The changes are consistent with the Goals, Elements and Policies of the Comprehensive relating to preserving waterways, floodplains and floodways and riparian areas and protecting property and investments potentially impacted by those entities.

#### KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN

##### E4 - Environmental Resources Element

Floodplains - This feature refers to land that is susceptible to flooding or that has flood prone soils. Approximately 13.8% of Lancaster County is covered by floodplains. Floodplains provide multiple benefits to both the natural (flood storage, habitat, water quality) and built (recreation, public health and safety, economic) environments. The overriding policy for the floodplain is a "No Adverse Impact" policy for the City and County, which means that the community has a goal of insuring that the action of one property owner does not adversely impact the flooding risk for other properties. Further discussion of floodplain and stormwater management considerations and strategies can be found in the Watershed Management section of the [Energy & Utilities element](#).

Riparian Areas - This feature refers to spaces immediately adjacent to water courses on each side of a stream. They are most often located in the floodplain. They frequently contain a large amount of woody vegetation. Riparian areas can serve as linear connections between natural and built areas, as well as boundaries and edges to a variety of

adjacent land uses. They offer numerous benefits including flood storage, stormwater conveyance, wildlife habitat, recreation, visual appeal, and shaded areas.

#### P18 - Conservation Design

Conservation design is a type of development where buildings are grouped together on part of the site while permanently protecting the remainder of the site from development. This type of development provides great flexibility of design to fit site-specific resource protection needs. Conservation design creates the same number of residences under current zoning and subdivision regulations or may offer incentives, such as a density bonus, to encourage this type of development. There is a savings in development and maintenance costs due to less road surface, shorter utility runs, less grading and other site preparation costs. The preserved land may be owned and managed by a homeowners association, a land trust, or the City.

Conservation-focused design can help to reduce the heat island effect, increase shade, protect habitat, slow stormwater runoff, and improve mental health. Site designs that are compatible with the natural characteristics of the site, conservation design for new subdivisions, clustering development, minimizing grading and impervious surfaces, and preserving site hydrology to the maximum extent possible are encouraged.

#### Action Steps

1. Encourage conservation design principles as part of the development process. Developments that incorporate conservation design principles should be eligible for greater densities, height, lot, and area adjustments. Examples of conservation design best practices include:
2. Development setbacks beyond the minimum floodplain corridor in order to help preserve riparian habitat.
3. Land area within new developments that is designated specifically for trees and/or prairie.
4. Sustainable landscape design that includes native and drought-tolerant plantings, limited use of turf grass, rain gardens, bioswales, infiltration beds, and constructed wetlands.
5. Cluster subdivision design that protects flood-prone areas by grouping new development in less-sensitive areas within a subdivision while maintaining a high overall building density.
6. Dedication of a portion or all of a building's roof space as a green roof.
7. Minimizing disturbance of the natural topography on a development site.

#### P21 - Floodplain and Riparian Areas

The overriding policy for the floodplain is a "No Adverse Impact" policy for the City and County, which means that the community has a goal of insuring that the action of one property owner does not adversely impact the flooding risk for other properties.

#### Action Steps

1. Designate areas for future urban development outside of the floodplain and floodway to reduce flood risks and to preserve or create floodplain areas.
2. Develop and utilize watershed plans during the review and evaluation of proposed developments and as a guide in the preparation of future capital improvement projects.
3. Utilize stormwater as an asset, by directing it through natural waterways, wetlands, and drainage corridors to minimize flood damage and prevent Non-Point Source Pollution (NPS) from occurring when storm waters flow through impervious surfaces in urban areas and cultivated and grazing land in rural areas.
4. Implement a Rain to Recreation watershed approach that reduces storm water damage, aids in maintaining water quality and provides additional natural areas that can be used by the public for recreation and educational purposes.
5. Continue to expand and enhance the following stormwater run-off mitigation measures including:
6. Vegetative buffers along stream corridors.
7. Preservation of natural areas, actively preserving the natural functions of floodplains.
8. Developing and implementing a floodplain buyout program while minimizing impacts on existing neighborhoods, citizen needs, and historic districts.

9. Making comprehensive, watershed-based approaches to floodplain management a high priority with accurate mapping and public involvement.
10. Retain City or County property in the floodplain in public ownership whenever possible, including conservation easements to protect floodplain functions.
11. Continue to implement education efforts to promote environmental stewardship and to notify floodplain property owners and prospective buyers of flood risks.
12. Consider maintaining no net fill conditions for properties in the floodplain being developed or redeveloped. Maintain no net fill conditions for those properties seeking Special Permits through Planning, Tax Increment Financing, or on former City property.
13. Engage in a public engagement process to review and assess implementation of recommendations of the Salt Creek Resiliency Study, per the City of Lincoln Climate Action Plan.
14. Maintain the Community Rating System (CRS) rating that allows for a 25% reduction in flood insurance premiums for property owners in floodplains.
15. Prepare for federal adoption and make publicly available an updated floodplain map for Lincoln that reflects increased precipitation and streamflow projections based on precipitation data from NOAA Atlas 14 data.
16. Continue and enhance current outreach and education efforts with landowners and business owners located in the revised floodplain about their flood risk. Develop a comprehensive outreach and education strategy with residents in the revised floodplain about their flood risk.
17. In response to the findings of the Salt Creek Resiliency Study, assemble key partners and leaders in the City and County to develop comprehensive strategies that reduce flooding risks, improve soil health, sequester carbon, and maintain natural systems within the City and County, to include the Parks Foundation Land Trust initiative.

#### P24 - Environmental Resource Protection

Lancaster County boasts a diverse set of environmental resources and landscape types that should be respected and maintained. The Greenprint Challenge, developed by the City of Lincoln/Lancaster County Planning Department, Parks and Recreation, and the Lower Platte South NRD in 2001, provides an approach for sound and sensitive urban and rural development that is interwoven with the community's desire for maintaining and enhancing the ecological and economic benefits of our natural and cultural environment. Although 20 years old, the resources identified, and the recommended principles for their protection, in the Greenprint Challenge are still applicable today and will continue to be in the future.

#### Action Steps

1. Pursue a variety of funding and financing options on a continuing basis. These may include: enlisting a land trust to enable donations of land, capital improvements programming providing for further acquisition of park property and natural areas, and grant funding from such sources as the Land and Water Conservation Fund, various floodplain and water quality funding programs, and the Nebraska Environmental Trust.
2. Conduct outreach efforts bringing together private landowners, environmental interests, and the development community to seek a common understanding and approach regarding natural resource features and the vision described in this Plan.
3. Consider the relationship among environmental resources (i.e., prairies, riparian corridors, floodplains, freshwater and saline wetlands, and other natural areas), key corridors/linkages, and the adjacent land uses for appropriate management and resource protection.

#### P23: Salt Valley Greenway and Connecting Green Corridors Concept Implementation

Since the first City/County Comprehensive Plan in 1961, the Salt Creek watershed has influenced planning for open space, greenways, recreation, and environmental resources in Lincoln and Lancaster County. The Salt Valley Greenway wraps around the City of Lincoln and is fed by tributaries that radiate out into the surrounding rolling hills. The effect is that of a large loop, primarily made of Salt Creek and Stevens Creek, with connecting green corridors linking urban and rural areas. Corridors which generally follow Salt Creek and its tributaries provide multiple benefits; creating connections between urban and rural areas, providing connections to the County's Salt Valley Lakes, creating green partitions which help to prevent a "wall-to-wall" urban feel, connecting habitat for the movement of wildlife,

protecting floodplain, and many others. Implementation of the Salt Valley Greenway and connecting corridor concept will provide an environmental framework upon which a thriving economy can be built.

#### Action Steps

1. Develop a strategic plan for acquiring and conserving lands within the Salt Valley Greenway and Connecting Corridors through cooperative efforts of public agencies, private organizations, and individuals.
2. Encourage the development of a public-private partnership that will concentrate efforts on further planning, funding, land acquisition, and development of the Salt Valley Greenway and its connecting corridors. This should be viewed as a local natural resource as well as a major economic development program.
3. Identify and pursue funding sources for the acquisition of significant properties forming the Greenway.
4. Continue to use conservation easements to protect greenway areas where it may be desirable to allow compatible land uses such as row crop farming or pasturing.

#### P24: Environmental Resource Protection

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#### Action Steps

1. Pursue a variety of funding and financing options on a continuing basis. These may include: enlisting a land trust to enable donations of land, capital improvements programming providing for further acquisition of park property and natural areas, and grant funding from such sources as the Land and Water Conservation Fund, various floodplain and water quality funding programs, and the Nebraska Environmental Trust.
2. Conduct outreach efforts bringing together private landowners, environmental interests, and the development community to seek a common understanding and approach regarding natural resource features and the vision described in this Plan.
3. Consider the relationship among environmental resources (i.e., prairies, riparian corridors, floodplains, freshwater and saline wetlands, and other natural areas), key corridors/linkages, and the adjacent land uses for appropriate management and resource protection.

#### P25: Open Space with Development

While planning for future growth is integral to the Plan, it is equally important that environmental resource features be accorded similar attention. The community should invest planning resources into the early identification of those areas that are most valued as part of the *Greenprint Challenge*. This principle supports the notion of "getting ahead of the game" by knowing what resources are most valued, where they are located, and what actions should be made within the broader planning process to secure their future for the community.

#### Action Steps

1. Acquisition and development of parks and open space areas should conserve and enhance signature landscapes and environmental resources, and provide opportunities for outdoor active and passive recreation.
2. Integrate the natural resource feature concepts into future planning activities such as zoning and subdivision review, watershed master planning, subarea planning, transportation and utility planning, and floodplain management studies.

3. Pursue stormwater management practices that consider both water quality and quantity approaches near freshwater wetlands. Buffer areas should be encouraged at their perimeters to decrease the effects of adjacent future uses.
4. Designate areas for future urban development outside of the floodplain and floodway in order to mitigate the impacts of flooding and preserve natural flood storage. Floodplain in public ownership should remain in public ownership. However, where it is determined that there is public benefit to releasing floodplain property to private ownership, flood storage capacity should be maintained through easements, deed restrictions, or other tools.

#### P55: Watershed Planning

The City of Lincoln Watershed Management program combines previously separate floodplain and stormwater management initiatives. This approach recognizes that floodplains, tributaries, and upland areas are all part of a comprehensive, integrated watershed system. A comprehensive approach to watershed planning is crucial as development expands into new basins around the Lincoln city limits and as redevelopment occurs within the existing urban area. A comprehensive watershed management program needs to incorporate a range of strategies including land use planning, conservation design for new subdivisions, conservation efforts, appropriate standards for floodplains and stormwater, flood warning system development/expansion, stream stabilization, stormwater storage basins, and other structural flood control efforts.

#### Action Steps

1. Develop and utilize watershed plans during the review and evaluation of proposed developments and as a guide in the preparation of future capital improvement projects.
2. Unify individual plans into a Comprehensive Watershed Management Master Plan for Lincoln and future growth areas.
3. Seek broad public participation in the location and design of specific watershed management projects, and evaluate the relative benefits as they relate to flood hazard reduction, water quality, channel integrity, natural character, bridges, culverts, and existing public and private structures.
4. Consider the creation of a stormwater utility to provide for a steady revenue source to address the growing needs of the stormwater and watershed management system.
5. Continue to designate stormwater bond dollars to flood control, streambank stabilization, erosion, and sediment control projects, until a new funding source becomes available.
6. Continue implementing green infrastructure strategies such as rain gardens, bioswales and permeable pavement to reduce stormwater runoff. Expand guidance/resources, incentives, and implementation.

#### ANALYSIS

1. The City of Lincoln started the process in 2017 of updating the Flood and Water Quality Manual (formerly the Drainage Criteria Manual) to meet current standards and practices, primarily due to new rainfall data published in 2013 with NOAA Atlas 14. For the last five years, the City has finalized the revisions, gathering feedback from stakeholders and making changes based on the feedback received. The updated Manual includes changes to the floodplain regulations, minimum corridor criteria, design standards for storm drainage, detention, post construction best management practices, erosion and sediment control, and other minor changes.
2. The Salt Creek Floodplain Resiliency Study was completed by the City of Lincoln and Lower Platte South Natural Resources District in August 2020, and incorporated into the City's Climate Action Plan in March 2021. The Study shows that there is a higher risk of flooding in our community today than what is shown on the FEMA floodplain maps, on average about 0.8 ft higher on Salt Creek, and that there is a need for the City to strengthen existing non-structural and structural floodplain management measures to further reduce flooding impacts to existing infrastructure, local businesses, residences, and future developments and enhance the floodplain resiliency. With this proposal, the City is implementing additional floodplain management measures by increasing the floodplain requirements to protect development from the higher risk of flooding, which aligns with the City's goals, Comprehensive Plan, and watershed master planning efforts.

3. This proposal includes revisions to the floodplain regulations for both the Existing Urban Area and the New Growth Areas within Lincoln’s jurisdiction.
4. These include revisions to multiple documents, including Lincoln Zoning and Subdivision Ordinances, Design Standards, and the Flood and Water Quality Manual.
5. The summary of the proposed text amendments to Title 27 Zoning is below:

**27.02 Definitions**

This proposal establishes a definition for freeboard as “1 foot above the 100-year flood elevation where the floodplain or floodprone area is based upon NOAA Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where the floodplain or floodprone area is not based upon NOAA Atlas 14 precipitation”, and requires all development in the floodplain or floodprone areas to meet the new freeboard requirement, as opposed to the current 1 foot requirement. This increases the freeboard requirement to provide a temporary safety factor to development in the floodplain based on the understanding that the current FEMA floodplain maps do not accurately portraying the actual flood risk, until that time when the FEMA floodplain maps are updated to reflect current flood risk.

This proposal simplifies the requirement for preservation of stream buffers called Minimum Flood Corridors, to be based on drainage area, instead of needing to determine where the ‘defined bed and bank’ starts. This takes the subjectivity out of this process, and provides a more consistent and equitable criteria.

**27.52 Flood Regulations for Existing Urban Area**

This proposal uses the new freeboard definition to inform the elevation to which new development must be protected above the 100-year flood elevation.

This proposal establishes a definition for residential development and residential structures/buildings to align with FEMA regulations and to clarify what standards apply to residential development and what standards apply to non-residential development.

**27.53 Flood Regulations for New Growth Areas**

This proposal uses the new freeboard definition to inform the elevation to which new development must be protected above the 100-year flood elevation.

This proposal used the same definitions for residential development and residential structures/buildings that was established in Section 27.52.

This proposal clarifies that the FEMA flood maps may need to be revised if there is the potential for the development to cause adverse impacts to other property and/or structures.

6. The goal of this proposal is to protect the safety of our community from the actual risk of flooding shown in the Salt Creek Floodplain Resiliency Study by ensuring that existing and new development is protected from the risk of flooding. The other changes with this proposal are to align with current standards and practices to continue to responsibly manage stormwater for flood and water quality protection.
7. These changes will update Title 27 Zoning so it is consistent with other documents in place or proposed for updating as well. These revisions are consistent with Title 27 Zoning and the goals of the Comprehensive Plan.

Prepared by

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October 31, 2022

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ORDINANCE NO. \_\_\_\_\_

1 AN ORDINANCE amending Lincoln Municipal Code Sections 27.02.070, 27.02.140,  
2 27.52.020, 27.52.030, 27.53.020, and 27.53.030 \_\_\_\_\_  
3 \_\_\_\_\_  
4 \_\_\_\_\_; and repealing Sections 27.02.070, 27.02.140, 27.52.020,  
5 27.52.030, 27.53.020, and 27.53.030 as hitherto existing.

6 BE IT ORDAINED by the City Council of the City of Lincoln, Nebraska:

7 Section 1. That Section 27.02.070 of the Lincoln Municipal Code be amended to read as  
8 follows:

9 **27.02.070 F.**

10 **Family** One or more persons immediately related by blood, marriage, or adoption and living as a  
11 single housekeeping unit in a dwelling shall constitute a family. A family may include, in addition,  
12 not more than two persons who are unrelated for the purpose of this title. The following persons  
13 shall be considered related for the purpose of this title:

- 14 a. A person residing with a family for the purpose of adoption;
- 15 b. Not more than six persons under nineteen years of age, residing in a foster home licensed  
16 or approved by the State of Nebraska;
- 17 c. Not more than four persons nineteen years of age or older residing with a family for the  
18 purpose of receiving foster care licensed or approved by the state or its delegate;
- 19 d. Any person who is living with a family at the direction of a court.

20 **Farm Winery** Farm winery shall mean any enterprise which produces and sells wines produced

1 from grapes, other fruit, or suitable agricultural products of which seventy-five percent (75%) is  
2 grown in the State of Nebraska, or which has received a waiver of the 75% requirement from the  
3 Nebraska Liquor Control Commission.

4 **Feedlot, Commercial** See Confined Feeding Facility.

5 **Flood Design Criteria** Flood Design Criteria shall mean Chapter 10 of the City of Lincoln **Flood**  
6 **and Water Quality Protection Drainage Criteria** Manual, as adopted on **Month Day, 2022** **February**  
7 **22, 2000** by Resolution No. A-**XXXXX80038**, as amended.

8 **Floodplain** Floodplain shall mean those lands which are subject to a one percent or greater chance  
9 of flooding in any given year, as shown on the Flood Insurance Rate Map issued by FEMA for  
10 Lancaster County, Nebraska and incorporated areas, as amended. Copies of said map shall be kept  
11 on file in the Department of Building and Safety. (See Chapters 27.52 and 27.53 for additional  
12 definitions.)

13 **Floor Area** Floor area shall mean the total number of square feet of floor space within the outside  
14 of the exterior walls of a building, not including storage space in cellars or basements and not  
15 including space used for the parking of automobiles, not including elevator shaft or stair and  
16 escalator enclosures, and not including space used for mechanical equipment used in connection  
17 with utilities, such as heating, air conditioning and ventilation equipment, electric switching gear,  
18 water pumps, utility meters, and auxiliary electric generators.

19 **Food or Drink Establishment** Food or drink establishment shall mean an operation that stores,  
20 prepares, packages, serves, vends or otherwise provides food or drinks for immediate human  
21 consumption.

22 **Fraternity or Sorority** Fraternity or sorority shall mean a type of congregate living facility  
23 containing sleeping rooms, bathrooms, common rooms, dining areas, and a central kitchen

1 maintained exclusively for members and their guests or visitors. The facility is affiliated with a  
2 college or university.

3 ~~**Freeboard** shall mean 1 foot above the 100-year flood elevation where it is based upon NOAA  
4 Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where it is not based upon  
5 NOAA Atlas 14 precipitation.~~

6 **Freeboard** shall mean a minimum height requirement above the 100-year flood elevation or Base  
7 Flood Elevation (BFE) that provides a margin of safety against extraordinary or unknown risks  
8 and said minimum elevation shall be 1 foot above the 100-year flood elevation where it is based  
9 upon NOAA Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where it is not  
10 based upon NOAA Atlas 14 precipitation.

11 **Frontage.** Frontage shall mean the length of the property on one side of a street between two street  
12 intersections (crossing or terminating) measured along the property line at the street, or if the street  
13 is dead-ended, the length of the property abutting on one side between an intersecting street and  
14 the dead end of the street.

15 Section 2. That Section 27.02.140 of the Lincoln Municipal Code be amended to read as  
16 follows:

17 **27.02.140 M.**

18 **Mail Order Catalog Sales** Mail order catalog sales shall mean an establishment primarily engaged  
19 in the retail sale of products by television, telemarketing, catalog, and mail order. Such a use may  
20 include warehousing, shipping, and receiving of merchandise intended for retail sale.

21 **Market Garden.** Market garden shall mean a relatively small scale farming operation (20 to 40  
22 acres in size) where the production of a diversity of fruits, vegetables, herbs and flowers is grown  
23 for sales primarily for direct human consumption rather than as feed for animals or for major

1 processing before consumption. Market gardens are distinguished from other types of farming by  
2 the inclusion of accessory uses not typically found on farms. These accessory uses may include  
3 restaurants, agricultural education and training centers, agricultural tourism, or sales of agricultural  
4 products not grown on site.

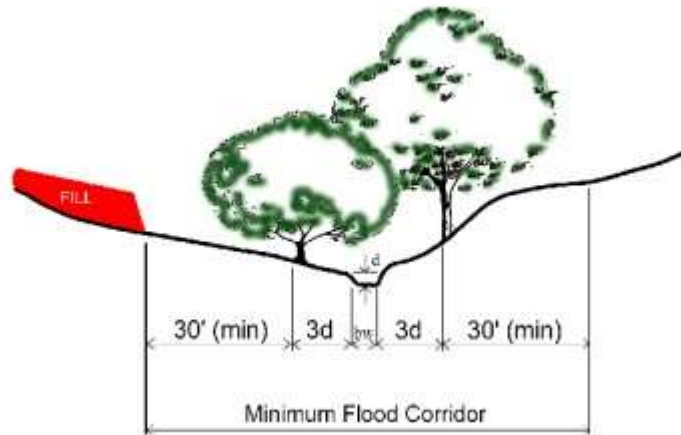
5 **Mental Health Center** Mental health center shall mean a facility where shelter, food, and  
6 counseling, diagnosis, treatment, care, or related services are provided for a period of more than  
7 twenty four consecutive hours to persons residing at such facility who have a mental disease,  
8 disorder, or disability.

9 **Minimum Flood Corridor** Minimum flood corridor shall mean the flood-stream buffer area  
10 centered on the channel or aligned such that the area follows the natural flow of flood waters. The  
11 width of said area shall be:

- 12 a. 90 feet for drainage areas greater than 40 acres and less than or equal to 100 acres;
- 13 b. 100 feet for drainage areas greater than 100 acres and less than or equal to 200 acres;
- 14 c. 120 feet for drainage areas greater than 200 acres and less than or equal to 300 acres;
- 15 d. Channel width plus six times the depth of channel plus 50 feet for drainage areas greater  
16 than 300 acres, as shown in Figure 1 below.

17 ~~the existing channel bottom width plus 60 feet plus six times the channel depth and the corridor~~  
18 ~~will be centered on the channel, as shown in Figure 1 below, or aligned such that the corridor~~  
19 ~~follows the natural flow of flood waters.~~

## Minimum Flood Corridor



1 **Mini-warehouse** Mini-warehouse shall mean a storage facility containing individual  
2 compartments or lockers designed to serve multiple persons and small businesses. Storage bays  
3 shall not be interconnected by interior doors or other interior means providing access from one  
4 storage bay to another.

5 **Mobile Home** Mobile home shall mean any single family or two-family permanent living quarters,  
6 designed and built to be towed on its own chassis. Each dwelling unit shall be at least eight feet in  
7 width and thirty-two feet in length, but two-family mobile homes may have less length than the  
8 required minimum if the required width is exceeded by an amount sufficient to provide an area of  
9 at least 512 square feet.

10 **Motor Fuel Sales Facility.** Motor Fuel Sales Facility shall mean any building or premises used  
11 for the retail dispensing or sale of motor fuels as defined in Neb. Rev. Stat. § 66-712 R.R.S. 1943  
12 as amended. Motor Fuel Sales Facilities are often commonly referred to as filling stations, gas  
13 stations, convenience stores or service stations.

14 **Motorized Vehicle.** Motorized vehicle shall mean automobiles including pick-up trucks,  
15 motorcycles, all terrain vehicles, recreational vehicles, snow mobiles, watercraft, farm machinery

1 or other motorized vehicles not elsewhere defined. Motorized wheel chairs for human mobility  
2 and toys, shall not be considered a motorized vehicle. Trucks as defined in Section 27.02.210 are  
3 also not considered a motorized vehicle.

4 **Multiple Dwelling Unit** Multiple dwelling unit shall mean a room or rooms in a multiple dwelling  
5 intended or designed for use as a residence by a single family, including kitchen facilities.

6 Section 3. That Section 27.52.020 of the Lincoln Municipal Code be amended to read as  
7 follows:

8 **27.52.020 Definitions.**

9 For the purpose of this chapter, certain terms and words are hereby defined:

10 **100-Year Flood** shall mean the flood having a one percent chance of being equaled or exceeded  
11 in any given year.

12 **100-Year Flood Elevation** shall mean the height of the flood water that would occur during a 100-  
13 year flood.

14 **Base Flood** shall mean the flood having a one percent chance of being equaled or exceeded in any  
15 given year.

16 **Basement** shall mean any enclosed area having its floor below grade level on all sides.

17 **Development** shall mean any man-made change to improved or unimproved real estate, including  
18 but not limited to, buildings or other structures, mining, dredging, filling, grading, paving,  
19 excavation or drilling operations, or storage of equipment or materials.

20 **Development area** shall mean the entire site of a proposed development or improvement.

21 **Existing manufactured home park or subdivision** shall mean a manufactured home park or  
22 subdivision for which the construction of facilities for servicing the lots on which the manufactured  
23 homes are to be affixed (including, at a minimum, the installation of utilities, the construction of

1 streets, and either final site grading or the pouring of concrete pads) is completed before the  
2 effective date of this ordinance.

3 **Existing Urban Area** shall mean those areas inside the corporate limits of the City of Lincoln as  
4 well as those areas outside the corporate limits having a zoning designation other than AG  
5 Agriculture and AGR Agricultural Residential, on the effective date of this ordinance.

6 **Expansion to an existing manufactured home park or subdivision** shall mean the preparation  
7 of additional sites by the construction of facilities for serving the lots on which the manufactured  
8 homes are to be affixed (including the installation of utilities, the construction of streets, and either  
9 final site grading or the pouring of concrete pads).

10 **FEMA** shall mean the Federal Emergency Management Agency.

11 **Fill** shall mean soil, buildings, or other material that eliminates flood storage volume in the  
12 floodplain.

13 **Flood Insurance Rate Map (FIRM)** shall mean the Flood Insurance Rate Map for Lancaster  
14 County, Nebraska and Incorporated Areas Revised April 16, 2013 issued by FEMA, and any  
15 revisions thereto, on which FEMA has delineated both the areas of special flood hazards and the  
16 risk premium zones applicable to the community.

17 **Flood Insurance Study (FIS)** shall mean the Flood Insurance Study for Lancaster County,  
18 Nebraska and Incorporated Areas Revised April 16, 2013 issued by FEMA in conjunction with  
19 the FIRM and containing background data such as base flood discharges and water surface  
20 elevations used to prepare the FIRM.

21 **Flood storage area or Salt Creek flood storage area** shall mean a portion of the Salt Creek  
22 floodprone area that stores floodwaters along the stream reach adjacent to the Salt Creek levee and  
23 is assigned a percentage of allowable fill, as shown on the Salt Creek Floodprone Area and Salt

1 Creek Flood Storage Area Detail Maps adopted by resolution of the City Council, copies of which  
2 are on file with the Department of Building and Safety.

3 **Floodplain** shall mean those lands which are subject to a one percent or greater chance of flooding  
4 in any given year, as shown on the Flood Insurance Rate Map issued by FEMA for Lancaster  
5 County, Nebraska and incorporated areas, as amended. Copies of the said maps shall be on file in  
6 the Department of Building and Safety.

7 **Floodprone area** shall mean those lands subject to a one percent or greater chance of flooding in  
8 any given year, as determined by hydrologic and hydraulic studies completed by the City or other  
9 government agency, or other acceptable source as approved by the City where this is the best  
10 available information.

11 **Floodproofing** shall mean any combination of structural and nonstructural additions, changes, or  
12 adjustments to structures which reduce or eliminate flood damage to real estate or improved real  
13 property, water and sanitary facilities, structures and their contents.

14 **Floodway** shall mean the channel of a river or other watercourses and the adjacent land areas that  
15 must be reserved in order to discharge the base flood without cumulatively increasing the water  
16 surface elevation more than one foot.

17 Freeboard shall mean a minimum height requirement above the 100-year flood elevation or Base  
18 Flood Elevation (BFE) that provides a margin of safety against extraordinary or unknown risks,  
19 and said minimum elevation shall be 1 foot above the 100-year flood elevation where ~~it~~ the  
20 floodplain or floodprone area is based upon NOAA Atlas 14 precipitation, or 2 feet above the 100-  
21 year flood elevation where ~~it~~ the floodplain or floodprone area is not based upon NOAA Atlas 14  
22 precipitation.

23 Freeboard shall mean 1 foot above the 100-year flood elevation where it is based upon NOAA

~~Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where it is not based upon NOAA Atlas 14 precipitation.~~

**Historic structure** shall mean any structure that is: (a) listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the City of Lincoln, a Certified Local Government (CLG), in consultation with the Nebraska State Historic Preservation Officer (SHPO), as contributing to the historical significance of a locally or nationally designated historic district; (c) individually designated as a Landmark by the City of Lincoln, a CLG, under the provisions of [Chapter 27.57](#) of the [Lincoln Municipal Code](#).

**Letter of Map Change (LOMC)** shall mean a determination document issued by FEMA that officially revises the FIRM based on updated information, whether improved data or topography changes created by fill placement. Includes Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-f).

**Lowest floor** shall mean the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles or building access, in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

**Manufactured home** shall mean, for purposes of this chapter, a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" shall not include a "recreational vehicle."

1 **Manufactured home park or subdivision** shall mean a parcel (or contiguous parcels) of land  
2 divided into two or more manufactured home lots for rent or sale.

3 **NAVD** shall mean the North American Vertical Datum of 1988.

4 **New construction** shall mean structures for which the start of construction commenced on or after  
5 the effective date of this ordinance and shall include any subsequent improvements to such  
6 structures.

7 **New manufactured home park or subdivision** shall mean a manufactured home park or  
8 subdivision for which the construction of facilities for servicing the lots on which the manufactured  
9 homes are to be affixed (including at a minimum, the installation of utilities, the construction of  
10 streets, and either final site grading or the pouring of concrete pads) is completed on or after the  
11 effective date of this ordinance.

12 **Non-substantial improvement** shall mean any improvement that does not meet the definition of  
13 substantial improvement, as defined in this section.

14 **Percentage of allowable fill** shall mean the percentage of the volume of flood storage in each  
15 flood storage area of Salt Creek that can be allowed to be eliminated without increasing the 100-  
16 year flood elevation of Salt Creek by more than one foot.

17 **Qualified engineer** shall mean a registered professional engineer who, by reason of training and  
18 experience, is considered knowledgeable in hydrology and hydraulics and their application to the  
19 flood insurance study and has demonstrated competence to the satisfaction of the Director of  
20 Building and Safety.

21 **Recreational vehicle** shall mean a vehicle which is:

- 22 a. built on a single chassis;
- 23 b. 400 square feet or less when measured at the largest horizontal projections;

- 1 c. designed to be self-propelled or permanently towable by a light duty truck; and
- 2 d. designed primarily not for use as a permanent dwelling but as temporary living quarters for
- 3 recreational, camping, travel, or seasonal use.

4 **Residential Building or Residential Structure** ~~Residential Building~~ shall mean a dwelling, or  
5 non-commercial building or structure designed for habitation by one or more families, or a  
6 commercial or mixed-use building that contains one or more dwellings units. This includes  
7 condominium and apartment buildings, dormitories and assisted living facilities, as well as hotels,  
8 motels, and rooming houses where the normal occupancy of a guest is 6 months or more.

9 **Residential Development** shall mean any portion of a development area allowing for residential  
10 buildings, residential structures or residential uses unless residential uses are prohibited by  
11 resolution or ordinance.

12 **Riverine** shall mean relating to, formed by, or resembling a river (including tributaries, streams,  
13 brooks, etc.).

14 **Special Flood Hazard Area** shall mean the land in the floodplain subject to a one percent or  
15 greater chance of flooding in any given year.

16 **Start of construction** shall mean either the first placement of permanent construction of a  
17 structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction  
18 of columns, or any work beyond the stage of excavation, or the placement of a manufactured home  
19 on a foundation. Permanent construction does not include land preparation, such as clearing,  
20 grading, and filling; nor does it include the installation of streets and/or walkways; nor does it  
21 include excavation for a basement, footings, piers or foundations or the erection of temporary  
22 forms; nor does it include the installation on the property of accessory buildings, such as garages  
23 or sheds not occupied as dwelling units or not as part of the main structure. For a substantial

1 improvement, the actual start of construction shall mean the first alteration of any wall, ceiling,  
2 floor, or other structural part of a building, whether or not that alteration affects the external  
3 dimension of the building.

4 **Structure** shall mean, for floodplain management purposes, a walled and roofed building,  
5 including a gas or liquid storage tank, that is principally above ground, as well as a manufactured  
6 home.

7 **Substantial damage** shall mean damage of any origin sustained by a structure whereby the cost  
8 of restoring the structure to its before damaged condition would equal to or exceed fifty percent of  
9 the market value of the structure before the damage occurred.

10 **Substantial improvement** shall mean any reconstruction, rehabilitation, addition, or other  
11 improvement of a structure, the cost of which equals or exceeds fifty percent of the market value  
12 of the structure before the start of construction of the improvement. Substantial improvement shall  
13 include structures which have incurred substantial damage, regardless of the actual repair work  
14 performed. The term shall not, however, include either (i) any project for improvement of a  
15 structure to correct existing violations of state or local health, sanitary, or safety code specifications  
16 which have been identified by the local code enforcement official and which are the minimum  
17 necessary to assure safe living conditions, or (ii) any alteration of a historic structure, provided  
18 that the alteration will not preclude the structure's continued designation of a historic structure.

19 **Variance** shall mean a grant of relief from the terms of a floodplain management regulation, this  
20 shall be done by Special Permit in accordance with Section [27.52.060](#) of this chapter.

21 **Violation** shall mean the failure of a structure or other development to be fully compliant with the  
22 floodplain management regulations as set forth in this chapter. A structure or other development  
23 without the elevation certificate, other certifications, or other evidence of compliance as required

1 is presumed to be in violation until such time as that documentation is provided.

2 **Watershed Master Plan** shall mean a plan generated by the City or by the City in cooperation  
3 with other agencies, which includes hydrologic and hydraulic modeling for the 100-year event,  
4 including 100-year floodplain elevation and limits.

5 Section 4. That Section 27.52.030 of the Lincoln Municipal Code be amended to read as  
6 follows:

7 **27.52.030 Standards.**

8 The following shall be the standards to be followed in connection with the Flood Regulations for  
9 the Existing Urban Area:

10 a. General Standards:

11 1. No development or substantial improvement shall be permitted within the floodway as  
12 designated by the Federal Emergency Management Agency (FEMA) or as determined  
13 by hydrologic and hydraulic studies completed by the City or other government agency,  
14 or other acceptable source as approved by the City, unless the applicant has  
15 demonstrated that the proposed development or substantial improvement is in  
16 conformance with the provisions of Section 27.52.030(h) below.

17 2. In those areas where a floodway has not been designated, no development or substantial  
18 improvement may be permitted within the floodplain or floodprone area unless the  
19 applicant has demonstrated that the proposed development or substantial improvement,  
20 when combined with all other existing and reasonably anticipated developments or  
21 substantial improvements, will not increase the water surface elevation of the 100-year  
22 flood more than one foot at any location.

23 An exception to the above shall be permitted provided the applicant has acquired by

1 land rights purchase, flowage easement, or other legal arrangement the right to increase  
2 the flood levels on all affected lands greater than one foot (1.0'), and provided that  
3 before any permit is issued the applicant submits a FEMA approved Conditional Letter  
4 of Map Revision to the Director of Building and Safety. When such encroachment is  
5 completed, a FEMA approved Letter of Map Revision must also be provided by the  
6 applicant prior to approval of any building permits on the land being removed from the  
7 floodplain by the Letter of Map Revision.

- 8 3. Roadway bridges, and other drainage facilities, may have their superstructure  
9 submerged or partially submerged below the base flood level, provided that the facility  
10 has been designed to resist the hydrostatic and hydrodynamic loads as well as the effects  
11 of the buoyancy as certified by a registered professional engineer.
- 12 4. Within the floodplain or floodprone area, all new construction and substantial  
13 improvements shall be anchored to prevent flotation, collapse, or lateral movement of  
14 the structure resulting from hydrodynamic and hydrostatic loads including the effects  
15 of buoyancy; constructed with materials and utility equipment resistant to flood  
16 damage; and constructed by methods and practices that minimize flood damage.  
17 Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other  
18 service facilities shall be elevated at least ~~one foot~~ the required freeboard above the  
19 base flood elevation or designed so as to prevent water from entering or accumulating  
20 within the components during conditions of flooding. A registered professional  
21 engineer or architect shall certify that these provisions are satisfied.
- 22 5. The location, grade, and floodproofing of all new and replacement water and sanitary  
23 sewer systems which are to be extended into or through any portion of the floodplain

1 or floodprone area to serve the proposed development shall first be approved by the  
2 city prior to the extension of such utilities into the floodplain.

3 6. New or replacement water supply systems and sanitary sewage systems shall be  
4 designed to minimize or eliminate infiltration of flood waters into said systems and  
5 discharges from said systems into flood waters. Individual disposal systems shall be  
6 designed in accordance with the standards set forth in [Chapter 24.38](#) of the [Lincoln](#)  
7 [Municipal Code](#) in order to minimize impairment to them or contamination from them  
8 during flooding.

9 7. On-site waste disposal systems shall be located to avoid impairment to the system or  
10 contamination from such systems during flooding.

11 8. The storage or processing of materials that are in time of flooding buoyant, flammable,  
12 explosive, or could be injurious to human, animal, or plant life is prohibited.

13 9. Storage of other material or equipment may be allowed if not subject to major damage  
14 by floods and firmly anchored to prevent flotation or if readily removable from the area  
15 within the time available after the issuance of flood warning by appropriate authorities.

16 10. Filling, grading, and excavation may be allowed in the floodplain or floodprone area  
17 under the following conditions:

18 i. Fill shall be protected against erosion and sediment by such measures as rip-rap,  
19 vegetative cover, bulkheading, or sedimentation basins as approved by the Director  
20 of Building and Safety.

21 ii. Any fill to be deposited in the floodplain or floodprone area must be shown by the  
22 applicant not to be a detriment to the general public as well as the surrounding land  
23 owners.

- 1           iii. Fill materials shall be of a selected type, preferably clean dirt, gravel, or rock no  
2           greater than two inches in diameter. The use of decomposing materials, such as  
3           wood and other degradables, shall be prohibited. Fill shall be placed in six inch  
4           compacted layers. Fill selection and placement shall recognize the effects of  
5           saturation from flood waters on slope stability, uniform and differential settlement,  
6           and scour potentials.
- 7           iv. Prior to placement of any fill or embankment materials, the land upon which fill is  
8           to be placed shall be cleared of debris, snags, stumps, brush, down timber, logs,  
9           and other objects. All materials and debris from this clearing shall be removed from  
10          the proposed fill and disposed of at approved locations outside the floodplain or  
11          floodprone area.
- 12          v. Fill slopes for granular materials shall be no steeper than one vertical on two  
13          horizontal unless substantiating data justifying steeper slopes are submitted to the  
14          Director of Building and Safety and approved.
- 15          vi. Excavation in the floodplain or floodprone area shall be done so that the land  
16          surface is maintained in such a manner that surface waters do not collect and pond  
17          unless specifically approved by the Director of Building and Safety.
- 18      b. Residential Construction. All new construction and substantial improvements of residential  
19      structures within the floodplain or floodprone area shall have the lowest floor, including  
20      basement, elevated at least ~~one foot~~ the required freeboard above the base flood level.  
21      Garages and storage buildings used exclusively for the storage of motor vehicles, and  
22      storage of other items readily removable in the event of a flood warning may have their  
23      lowest floor below flood elevation, provided the building structure is capable of

1 withstanding hydrostatic and hydrodynamic forces caused by the 100-year flood and,  
2 further, provided that no utilities are installed in the building except elevated or  
3 floodproofed electrical fixtures. If the building is converted to another use, it must be  
4 brought into full compliance with the requirements of this title governing such uses.

5 c. Nonresidential Construction. All new construction and substantial improvements of  
6 commercial, industrial, and other nonresidential structures within the floodplain or  
7 floodprone area shall either have the lowest floor, including basement, elevated at least ~~one~~  
8 feet the required freeboard above the base flood level or, together with attendant utility and  
9 sanitary facilities, be floodproofed so that below the base flood level plus ~~one foot~~ the  
10 required freeboard the structure is watertight in accordance with the performance standards  
11 set forth in the city's building code. A registered professional engineer or architect shall  
12 develop or review structural design, specifications, and plans for the construction, and shall  
13 certify that the design and methods of construction meet the watertight performance  
14 standards. The certification shall be provided to the city as set forth in Section 27.52.040 of  
15 this chapter.

16 d. For all new construction and substantial improvements, fully enclosed areas below the  
17 lowest floor that are usable solely for parking of vehicles, building access or storage in an  
18 area other than a basement and which are subject to flooding shall be designed to  
19 automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry  
20 and exit of floodwaters. Designs for meeting this requirement must either be certified by a  
21 registered professional engineer or architect or must meet or exceed the following minimum  
22 criteria:

23 1. A minimum of two openings having a total net area of not less than one square inch for

- 1 every square foot of enclosed area subject to flooding shall be provided;
- 2 2. The bottom of all openings shall be no higher than one foot above grade; and
- 3 3. Openings may be equipped with screens, louvers, or other coverings or devices;
- 4 provided, that they permit the automatic entry and exit of floodwaters.

5 e. **Manufactured Home Parks and Subdivisions.** All manufactured homes shall be located in a

6 manufactured home park or a manufactured home subdivision in accordance with Sections

7 [27.63.120](#) and [27.63.125](#) of this title. No manufactured home shall be located in a

8 manufactured home park or subdivision within the floodplain or floodprone area unless the

9 following conditions are met:

10 1. New manufactured home parks and subdivisions; expansions; substantial damage.

11 Manufactured homes placed (i) on individual lots within or outside of new

12 manufactured home parks or subdivisions, (ii) on individual lots within an expanded

13 area of an existing manufactured home park or subdivision, or (iii) in an existing

14 manufactured home park or subdivision in which a manufactured home has incurred

15 substantial damage as the result of a flood, shall be elevated on a permanent foundation

16 such that their lowest floor is at least ~~one foot~~ the required freeboard above the base

17 flood elevation and be securely anchored to an adequately anchored foundation system

18 in accordance with the standards to resist floatation, collapse, and lateral movement set

19 forth in subsection (f) below;

20 2. Existing manufactured home parks and subdivisions. Manufactured homes to be placed

21 or substantially improved on individual lots in existing manufactured home parks or

22 subdivisions, shall either (i) be elevated on a permanent foundation such that their

23 lowest floor is at least ~~one foot~~ the required freeboard above the base flood elevation or

1 (ii) be supported by reinforced piers or other foundation elements of at least equivalent  
2 strength that are no less than three feet in height above grade and be securely anchored  
3 to an adequately anchored foundation system in accordance with the standards to resist  
4 floatation, collapse, and lateral movement set forth in subsection (f) below.

5 If the option provided by (ii) above is exercised, the current owner and occupant, and  
6 any future buyer, renter, or occupier shall jointly acknowledge in writing that the option  
7 of piers as an alternative to placement of the manufactured home ~~one foot~~ the required  
8 freeboard above the base flood elevation has been exercised and, therefore, may be  
9 subject to flooding. Such acknowledgment shall be filed with the Director of Building  
10 and Safety prior to the issuance of hook-up permits to the subject home.

11 3. Adequate surface drainage and access for a hauler are provided;

12 4. Where manufactured homes are elevated on pilings, lots shall be large enough to permit  
13 steps, piling foundations shall be placed in stable soil no more than ten feet apart, and  
14 reinforcement shall be provided for pilings more than six feet above the ground level;  
15 and

16 5. The grade of land for manufactured home parks or subdivisions which are situated  
17 within the floodplain or floodprone area shall be raised at least ~~one foot~~ the required  
18 freeboard above the base flood elevation.

19 f. Manufactured Homes Located Outside of a Manufactured Home Park or Subdivision.

20 Manufactured homes located outside of a manufactured home park or subdivision shall be  
21 elevated at least ~~one foot~~ the required freeboard above the base flood elevation, whether  
22 constructed on a slab foundation or anchored to an elevated foundation to resist flotation,  
23 collapse, or lateral movement. Methods of anchoring may include, but are not limited to,

- 1 use of over-the-top and frame ties to ground anchors;
- 2 1. If over-the-top ties are used, such ties shall be provided at each of the four corners of
- 3 the manufactured home, with two additional ties per side at intermediate locations
- 4 except that manufactured homes less than fifty feet in length may provide only one
- 5 additional tie per side;
- 6 2. Frame ties shall be provided at each corner of the manufactured home with five
- 7 additional ties per side at intermediate points except that manufactured homes less than
- 8 fifty feet in length may provide only four additional ties per side;
- 9 3. All components of the anchoring system shall be capable of carrying a force of 4,800
- 10 pounds; and
- 11 4. Any additions to the manufactured home shall be similarly anchored.
- 12 g. Recreational Vehicles:
- 13 1. Shall be on the site for fewer than 180 consecutive days;
- 14 2. Shall be fully licensed and ready for highway use (on its wheels or jacking system, is
- 15 attached to the site only by quick disconnect type utilities and security devices, and has
- 16 no permanently attached additions); or
- 17 3. Meet the requirements for manufactured homes.
- 18 h. Floodways.
- 19 1. Encroachments into the floodway are prohibited, including fill, new construction,
- 20 substantial improvements, and other development within the floodway unless
- 21 certification by a qualified engineer is provided, demonstrating that the proposed
- 22 encroachment will not result in any increase in flood levels during occurrence of the
- 23 base flood discharge along the floodway profile.

1 An exception to the above shall be permitted provided the applicant has acquired by  
2 land rights purchase, flowage easement, or other legal arrangement the right to increase  
3 the flood levels on all affected lands, and provided that before any permit is issued the  
4 applicant submits a Federal Emergency Management Agency (FEMA) approved  
5 Conditional Letter of Map Revision to the Director of Building and Safety. When such  
6 encroachment is completed, a FEMA approved Letter of Map Revision must also be  
7 provided by the applicant prior to approval of any building permits on the land being  
8 removed from the floodplain by the Letter of Map Revision.

9 2. If the above provision is satisfied, all new construction and substantial improvements  
10 shall comply with all other applicable provisions contained in Section 27.52.030.

11 3. The placement of any manufactured home parks and manufactured home subdivisions  
12 and the construction of new structures for human habitation within the floodway is  
13 prohibited.

14 i. AO Zones. Designated AO zones within the floodplain have special flood hazards  
15 associated with base flood depths of one to three feet where a clearly defined channel does  
16 not exist and where the path of flooding is unpredictable and indeterminate; therefore, the  
17 following provisions apply within AO zones:

18 1. All new construction and substantial improvements of residential structures shall have  
19 the lowest floor (including basement) elevated above the highest adjacent grade at least  
20 as high as ~~one foot~~ the required freeboard above the depth number specified in feet on  
21 the FIRM (at least ~~two feet~~ the required freeboard plus one foot if no depth number is  
22 specified).

23 2. All new construction and substantial improvements of non-residential structures shall:

- 1           i. Have the lowest floor elevated above the highest adjacent grade at least as high as  
2           ~~one-foot~~ the required freeboard above the depth number specified in feet on the  
3           community's FIRM (at least ~~two-feet~~ the required freeboard plus one foot if no  
4           depth number is specified), or
- 5           ii. Together with attendant utility and sanitary facilities be completely floodproofed  
6           to or above that level so that any space below that level is watertight with walls  
7           substantially impermeable to the passage of water and with structural components  
8           having the capability of resisting hydrostatic and hydrodynamic loads and effects  
9           of buoyancy. Such certification shall be provided to the official as set forth in  
10          Section [27.52.040\(d\)](#).
- 11          3. Adequate drainage paths around structures on slopes shall be required in order to guide  
12          floodwaters around and away from proposed structures.

13          Section 5. That Section 27.53.020 of the Lincoln Municipal Code be amended to read as  
14 follows:

15 **27.53.020 Definitions.**

16 For the purpose of this chapter, certain terms and words are defined:

17 **2-Year Flood** shall mean the flood having a fifty percent chance of being equaled or exceeded in  
18 any given year.

19 **10-Year Flood** shall mean the flood having a ten percent chance of being equaled or exceeded in  
20 any given year.

21 **100-Year Flood** shall mean the flood having a one percent chance of being equaled or exceeded  
22 in any given year.

1 **Base Flood** shall mean the flood having a one percent chance of being equaled or exceeded in any  
2 given year.

3 **Basement** shall mean any enclosed area having its floor below grade level on all sides.

4 **Compensatory Storage** shall mean replacement of storage volume that is hydrologically  
5 equivalent to lost storage when encroachment occurs in the floodplain or floodprone area.

6 **Development** shall mean any man-made change to improved or unimproved real estate, including  
7 but not limited to, buildings or other structures, mining, dredging, filling, grading, paving,  
8 excavation or drilling operations, or storage of equipment or materials.

9 **Development Area shall mean the entire site of a proposed development or improvement.**

10 **Existing manufactured home park or subdivision** shall mean a manufactured home park or  
11 subdivision for which the construction of facilities for servicing the lots on which the manufactured  
12 homes are to be affixed (including, at a minimum, the installation of utilities, the construction of  
13 streets, and either final site grading or the pouring of concrete pads) is completed before the  
14 effective date of this ordinance.

15 **Expansion to an existing manufactured home park or subdivision** shall mean the preparation  
16 of additional sites by the construction of facilities for serving the lots on which the manufactured  
17 homes are to be affixed (including the installation of utilities, the construction of streets, and either  
18 final site grading or the pouring of concrete pads).

19 **FEMA** shall mean the Federal Emergency Management Agency.

20 **Flood Design Criteria** shall mean Chapter 10 of the City of Lincoln ~~Drainage Criteria~~Flood and  
21 Water Quality Protection Manual, adopted on (Month) (Day), 2022February 22, 2000 by  
22 Resolution No. A-(XXXXX)80038, as amended.

1 **Flood Insurance Rate Map (FIRM)** shall mean the Flood Insurance Rate Map for Lancaster  
2 County, Nebraska and Incorporated Areas Revised April 16, 2013 issued by FEMA and any  
3 revisions thereto, on which FEMA has delineated both the areas of special flood hazards and the  
4 risk premium zones applicable to the community.

5 **Flood Insurance Study (FIS)** shall mean the Flood Insurance Study for Lancaster County,  
6 Nebraska and Incorporated Areas Revised April 16, 2013 issued by FEMA in conjunction with  
7 the FIRM and containing background data such as base flood discharges and water surface  
8 elevations used to prepare the FIRM.

9 **Floodplain** shall mean those lands which are subject to a one percent or greater chance of flooding  
10 in any given year, as shown on the Flood Insurance Rate Map issued by FEMA for Lancaster  
11 County, Nebraska and incorporated areas, as amended.

12 **Floodprone area** shall mean those lands subject to a one percent or greater chance of flooding in  
13 any given year, as determined by hydrologic and hydraulic studies completed by the City or other  
14 government agency, or other acceptable source as approved by the City where this is the best  
15 available information.

16 **Floodproofing** shall mean any combination of structural and nonstructural additions, changes, or  
17 adjustments to structures which reduce or eliminate flood damage to real estate or improved real  
18 property, water and sanitary facilities, structures and their contents.

19 **Floodway** shall mean the channel of a river or other watercourses and the adjacent land areas that  
20 must be reserved in order to discharge the base flood without cumulatively increasing the water  
21 surface elevation more than one foot.

22 ~~**Freeboard** shall mean 1 foot above the 100-year flood elevation where it is based upon NOAA~~  
23 ~~Atlas 14 precipitation, or 2 feet above the 100-year flood elevation where it is not based upon~~

1 NOAA Atlas 14 precipitation.

2 **Freeboard** shall mean a height requirement above the 100-year flood elevation or Base Flood  
3 Elevation (BFE) that provides a margin of safety against extraordinary or unknown risks and said  
4 minimum elevation shall be 1 foot above the 100-year flood elevation where the floodplain or  
5 floodprone area is based upon NOAA Atlas 14 precipitation, or 2 feet above the 100-year flood  
6 elevation where the floodplain or floodprone area is not based upon NOAA Atlas 14 precipitation.

7 **Historic structure** shall mean any structure that is: (a) listed individually in the National Register  
8 of Historic Places (a listing maintained by the Department of the Interior) or preliminarily  
9 determined by the Secretary of the Interior as meeting the requirements for individual listing on  
10 the National Register; (b) certified or preliminarily determined by the City of Lincoln, a Certified  
11 Local Government (CLG), in consultation with the Nebraska State Historic Preservation Officer  
12 (SHPO), as contributing to the historical significance of a locally or nationally designated historic  
13 district; (c) individually designated as a Landmark by the City of Lincoln, a CLG, under the  
14 provisions of Chapter 27.57 of the Lincoln Municipal Code.

15 **Lateral Addition** shall mean an addition to a non-residential structure which expands the floor  
16 area of the first story. First story shall mean the lowest story in a building which qualifies as a  
17 story, as defined in Section 20.08 of the Lincoln Building Code.

18 **Letter of Map Change (LOMC)** shall mean a determination document issued by FEMA that  
19 officially revises the FIRM based on updated information, whether improved data or topography  
20 changes created by fill placement. Includes Letter of Map Amendment (LOMA), Letter of Map  
21 Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-f).

22 **Lowest floor** shall mean the lowest floor of the lowest enclosed area (including basement). An  
23 unfinished or flood-resistant enclosure, usable solely for parking of vehicles or building access, in

1 an area other than a basement area is not considered a building's lowest floor; provided that such  
2 enclosure is not built so as to render the structure in violation of the applicable non-elevation design  
3 requirements of this ordinance.

4 **Manufactured home** shall mean, for purposes of this chapter, a structure, transportable in one or  
5 more sections, which is built on a permanent chassis and is designed for use with or without a  
6 permanent foundation when attached to the required utilities. The term "manufactured home" shall  
7 not include a "recreational vehicle."

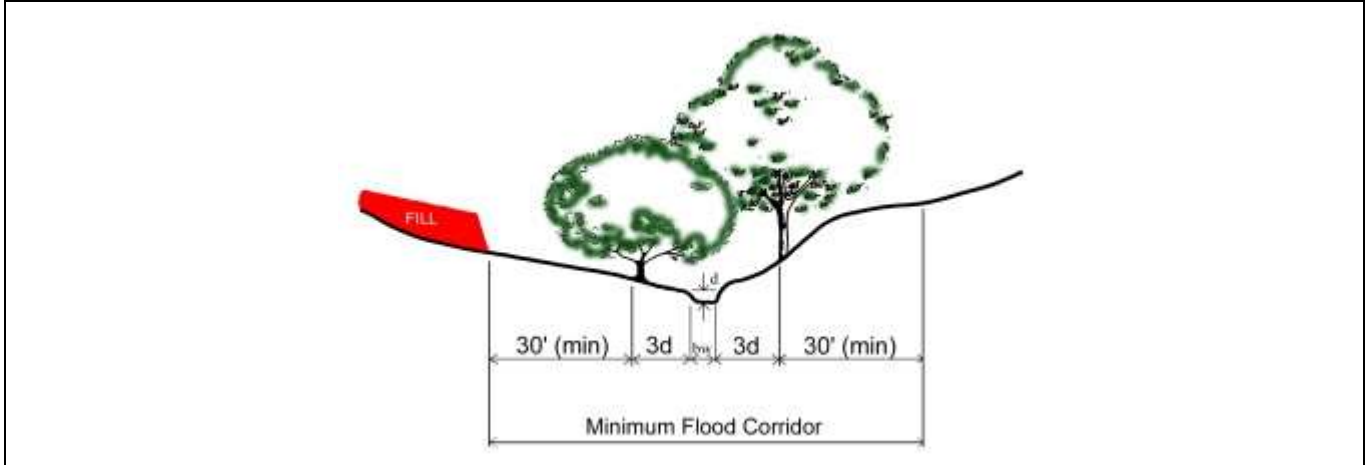
8 **Manufactured home park or subdivision** shall mean a parcel (or contiguous parcels) of land  
9 divided into two or more manufactured home lots for rent or sale.

10 **Minimum Flood Corridor** shall mean the flood-stream buffer area centered on the channel or  
11 aligned such that the area follows the natural flow of flood waters. The width of such area shall  
12 be:

- 13 a. 90 feet for drainage areas greater than 40 acres and less than or equal to 100 acres;
- 14 b. 100 feet for drainage areas greater than 100 acres and less than or equal to 200 acres;
- 15 c. 120 feet for drainage areas greater than 200 acres and less than or equal to 300 acres;
- 16 d. Channel width plus six times the depth of channel plus 50 feet for drainage areas greater  
17 than 300 acres, as shown in Figure 1 below.

18 ~~Existing channel bottom width plus 60 feet plus six times the channel depth and the corridor will~~  
19 ~~be centered on the channel, as shown in Figure 1 below, or aligned such that the corridor follows~~  
20 ~~the natural flow of flood waters.~~

**Figure 1 – Minimum Flood Corridor**



- 1 **NAVD** shall mean the North American Vertical Datum of 1988.
- 2 **New construction** shall mean structures for which the start of construction commenced on or
- 3 after the effective date of this ordinance and shall include any subsequent improvements to such
- 4 structures.
- 5 **New growth areas** shall mean those areas outside the corporate limits of the City of Lincoln and
- 6 zoned AG Agriculture and AGR Agricultural Residential on the effective date of this ordinance.
- 7 **New manufactured home park or subdivision** shall mean a manufactured home park or
- 8 subdivision for which the construction of facilities for servicing the lots on which the manufactured
- 9 homes are to be affixed (including at a minimum, the installation of utilities, the construction of
- 10 streets, and either final site grading or the pouring of concrete pads) is completed on or after the
- 11 effective date of this ordinance.
- 12 **Non-substantial improvement** shall mean any improvement that does not meet the definition of
- 13 substantial improvement, as defined in this section.
- 14 **Qualified engineer** shall mean a registered professional engineer who, by reason of training and
- 15 experience, is considered knowledgeable in hydrology and hydraulics and their application to the
- 16 flood insurance study and has demonstrated competence to the satisfaction of the Director of

1 Building and Safety.

2 **Recreational vehicle** shall mean a vehicle which is:

- 3 1. built on a single chassis;
- 4 2. 400 square feet or less when measured at the largest horizontal projections;
- 5 3. designed to be self-propelled or permanently towable by a light duty truck; and
- 6 4. designed primarily not for use as a permanent dwelling but as temporary living quarters for  
7 recreational, camping, travel, or seasonal use.

8 Residential Building or Residential Structure shall mean a dwelling, or non-commercial  
9 building or structure designed for habitation by one or more families, or a commercial or mixed-  
10 use building that contains one or more dwellings units. This includes condominium and apartment  
11 buildings, dormitories and assisted living facilities, as well as hotels, motels, and rooming houses  
12 where the normal occupancy of a guest is 6 months or more.

13 Residential Development shall mean any portion of a development area planned for or allowing  
14 for residential buildings, residential structures, or residential uses. unless residential use is  
15 prohibited by resolution or ordinance.

16 **Riverine** shall mean relating to, formed by, or resembling a river (including tributaries, streams,  
17 brooks, etc.).

18 **Special Flood Hazard Area** shall mean the land in the floodplain subject to a one percent or  
19 greater chance of flooding in any given year.

20 **Start of construction** shall mean either the first placement of permanent construction of a  
21 structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction  
22 of columns, or any work beyond the stage of excavation, or the placement of a manufactured home  
23 on a foundation. Permanent construction does not include land preparation, such as clearing,

1 grading, and filling; nor does it include the installation of streets and/or walkways; nor does it  
2 include excavation for a basement, footings, piers or foundations or the erection of temporary  
3 forms; nor does it include the installation on the property of accessory buildings, such as garages  
4 or sheds not occupied as dwelling units or not as part of the main structure. For a substantial  
5 improvement, the actual start of construction shall mean the first alteration of any wall, ceiling,  
6 floor, or other structural part of a building, whether or not that alteration affects the external  
7 dimension of the building.

8 **Structure** shall mean, for floodplain and floodprone area management purposes, a walled and  
9 roofed building, including a gas or liquid storage tank, that is principally above ground, as well as  
10 a manufactured home.

11 **Substantial damage** shall mean damage of any origin sustained by a structure whereby the cost  
12 of restoring the structure to its before damaged condition would equal to or exceed fifty percent of  
13 the market value of the structure before the damage occurred.

14 **Substantial improvement** shall mean any reconstruction, rehabilitation, addition, or other  
15 improvement of a structure, the cost of which equals or exceeds fifty percent of the market value  
16 of the structure before the start of construction of the improvement. Substantial improvement shall  
17 include structures which have incurred substantial damage, regardless of the actual repair work  
18 performed. The term shall not, however, include either (i) any project for improvement of a  
19 structure to correct existing violations of state or local health, sanitary, or safety code specifications  
20 which have been identified by the local code enforcement official and which are the minimum  
21 necessary to assure safe living conditions, or (ii) any alteration of a historic structure, provided  
22 that the alteration will not preclude the structure's continued designation of a historic structure.

23 **Variance** shall mean a grant of relief from the terms of a floodplain management regulation, this

1 shall be done by Special Permit in accordance with section 27.53.060 of the Zoning Code.

2 **Violation** shall mean the failure of a structure or other development to be fully compliant with  
3 the floodplain management regulations as set forth in this chapter. A structure or other  
4 development without the elevation certificate, other certifications, or other evidence of compliance  
5 as required is presumed to be in violation until such time as that documentation is provided.

6 **Watershed Master Plan** shall mean a plan generated by the City or by the City in cooperation  
7 with other agencies, which includes hydrologic and hydraulic modeling for the 100-year event,  
8 including 100-year floodplain elevation and limits.

9 Section 6. That Section 27.53.030 of the Lincoln Municipal Code be amended to read as  
10 follows:

11 **27.53.030 Standards.**

12 The following shall be the standards to be followed in connection with the Flood Regulations for  
13 New Growth Areas:

14 a. General Standards:

15 1. No development, substantial improvement or lateral addition may be permitted within  
16 the floodway as designated by the Federal Emergency Management Agency (FEMA)  
17 or as determined by hydrologic and hydraulic studies completed by the City or other  
18 government agency, or other acceptable source as approved by the City, unless the  
19 applicant has demonstrated that the proposed development or substantial improvement  
20 shall:

21 i. Be accomplished in conformance with the Flood Design Criteria.

22 ii. Be accomplished in conformance with Section 27.53.030(h) below.

23 2. No development, substantial improvement or lateral addition may be permitted within

1 the floodplain or floodprone area outside the floodway or where no floodway has been  
2 designated except as provided in Section 10.2 of the Flood Design Criteria unless the  
3 applicant has demonstrated that the proposed development or substantial improvement  
4 shall:

- 5 i. Be accomplished in conformance with the Flood Design Criteria.
- 6 ii. Cause no greater than two hundredths of a foot (0.02') for Salt Creek and five  
7 hundredths of a foot (0.05') of rise for all other streams in the 100-year flood  
8 elevation.
- 9 iii. Cause no greater than two hundredths of a foot (0.02') for Salt Creek and five  
10 hundredths of a foot (0.05') of rise for all other streams in areas with a watershed  
11 master plan for the 2-, 10-, and 100-year flood elevations, as demonstrated using  
12 the hydraulic model from the watershed master plan.
- 13 iv. Notwithstanding certain exceptions in the Flood Design Criteria allowing for  
14 greater than five hundredths of a foot (0.05') of a rise in the flood elevation as noted  
15 above in subsections a.2.ii. and a.2.iii., the development shall not cause greater than  
16 one foot (1.0') of rise in the FEMA-mapped flood fringe where no floodway has  
17 been designated.

18 The developer must consult with the City prior to the start of work to determine if  
19 a Letter of Map Change (LOMC) is required. The City will require LOMCs if there  
20 is potential for adverse impact to structures and adjacent lots; increases to  
21 floodplain extents or increases to Base Flood Elevation; shifting or re-aligning the  
22 channel; and/or if the hydrology, hydraulics, or modeling data is updated to the  
23 extent that it warrants a map revision, and specifies certain LMOCs depending on

1 the situation. All FEMA approved Letter of Map Revisions (LOMRs and LOMR-  
2 Fs) must be provided by the applicant prior to approval of any building permits on  
3 the land being removed from the floodplain.

4 An exception to the above shall be permitted provided the applicant has acquired  
5 by land rights purchase, flowage easement, or other legal arrangement the right to  
6 increase the flood levels greater than one foot (1.0') on all affected lands, and  
7 provided that before any permit is issued the applicant submits a FEMA approved  
8 Conditional Letter of Map Revision to the Director of Building and Safety. When  
9 such encroachment is completed, a FEMA approved Letter of Map Revision must  
10 also be provided by the applicant prior to approval of any building permits on the  
11 land being removed from the floodplain by the Letter of Map Revision.

- 12 3. No development, substantial improvement or lateral addition may be permitted within  
13 the floodplain or floodprone area except as provided in Section 10.2 of the Flood  
14 Design Criteria unless the applicant has demonstrated that the proposed development  
15 or substantial improvement shall:
- 16 i. Be accomplished in conformance with the Flood Design Criteria.
  - 17 ii. Compensate for any flood storage lost by providing a hydrologically equivalent  
18 volume of storage adjacent to the area of the encroachment.
  - 19 iii. Compensate for flood storage lost below the existing 10 year water surface  
20 elevation by providing storage below the proposed 10 year water surface elevation,  
21 and compensate for flood storage lost above the existing 10 year water surface  
22 elevation with flood storage above the proposed 10 year water surface elevation.
  - 23 iv. Cause no increase in peak flow rates in areas with a watershed master plan for the

1           2-, 10-, and 100-year flood events, as demonstrated using the hydrologic model  
2           from the watershed master plan.

- 3           4. Along stream channels within the floodplain or floodprone area which have ~~a defined~~  
4           ~~bed and bank or which have~~ drainage areas ~~exceeding~~ greater than 40-50 acres,  
5           development shall preserve a Minimum Flood Corridor. Minimum corridor  
6           preservation and mitigation for allowed encroachments shall be in conformance with  
7           Section 10.3 of the Flood Design Criteria.
- 8           5. Roadway bridges, and other drainage facilities, may have their superstructure  
9           submerged or partially submerged below the base flood level, provided that the facility  
10          has been designed to resist the hydrostatic and hydrodynamic loads as well as the effects  
11          of the buoyancy as certified by a registered professional engineer.
- 12          6. Within the floodplain or floodprone area, all new construction, substantial  
13          improvements, and any lateral addition shall be anchored to prevent flotation, collapse,  
14          or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads  
15          including the effects of buoyancy; constructed with materials and utility equipment  
16          resistant to flood damage; and constructed by methods and practices that minimize  
17          flood damage. Electrical, heating, ventilation, plumbing, and air-conditioning  
18          equipment and other service facilities for all new construction, substantial  
19          improvements, and any lateral addition, shall be elevated at least one foot above the  
20          base flood elevation or designed so as to prevent water from entering or accumulating  
21          within the components during conditions of flooding. A registered professional  
22          engineer or architect shall certify that these provisions are satisfied.
- 23          7. The location, grade, and floodproofing of all new and replacement water and sanitary

1 sewer systems which are to be extended into or through any portion of the floodplain  
2 or floodprone area to serve the proposed development shall first be approved by the  
3 city prior to the extension of such utilities into the floodplain or floodprone area.

- 4 8. New or replacement water supply systems and sanitary sewage systems shall be  
5 designed to minimize or eliminate infiltration of flood waters into the systems and  
6 discharges from the systems into flood waters. Individual disposal systems shall be  
7 designed in accordance with the standards set forth in [Chapter 24.38](#) of the [Lincoln](#)  
8 [Municipal Code](#) in order to minimize impairment to them or contamination from them  
9 during flooding.
- 10 9. On-site waste disposal systems shall be located to avoid impairment to the system or  
11 contamination from such systems during flooding.
- 12 10. The storage or processing of materials that are in time of flooding buoyant, flammable,  
13 explosive, or could be injurious to human, animal, or plant life is prohibited.
- 14 11. Storage of other material or equipment may be allowed if not subject to major damage  
15 by floods and firmly anchored to prevent flotation or if readily removable from the area  
16 within the time available after the issuance of flood warning by appropriate authorities.
- 17 12. Filling, grading, and excavation may be allowed in the designated floodplain or  
18 floodprone area under the following conditions:
  - 19 i. Fill shall be protected against erosion and sediment by such measures as rip-rap,  
20 vegetative cover, bulkheading, or sedimentation basins as approved by the Director  
21 of Building and Safety.
  - 22 ii. Any fill to be deposited in the floodplain or floodprone area must be shown by the  
23 applicant not to be a detriment to the general public as well as the surrounding land

1 owners.

2 iii. Fill materials shall be of a selected type, preferably clean dirt, gravel, or rock no  
3 greater than two inches in diameter. The use of decomposing materials, such as  
4 wood and other degradables, shall be prohibited. Fill shall be placed in six inch  
5 compacted layers. Fill selection and placement shall recognize the effects of  
6 saturation from flood waters on slope stability, uniform and differential settlement,  
7 and scour potentials.

8 iv. Prior to placement of any fill or embankment materials, the area upon which fill is  
9 to be placed shall be cleared of debris, snags, stumps, brush, down timber, logs,  
10 and other objects. All materials and debris from this clearing shall be removed from  
11 the proposed fill and disposed of at approved locations outside the floodplain or  
12 floodprone area.

13 v. Fill slopes for granular materials shall be no steeper than one vertical on two  
14 horizontal unless substantiating data justifying steeper slopes are submitted to the  
15 Director of Building and Safety and approved.

16 vi. Excavation in the floodplain or floodprone area shall be done so that the land  
17 surface is maintained in such a manner that surface waters do not collect and pond  
18 unless specifically approved by the Director of Building and Safety.

19 b. Residential Construction. All new construction and substantial improvements of residential  
20 structures within the designated floodplain or floodprone area shall have the lowest floor,  
21 including basement, elevated at least ~~one-foot~~ the required freeboard above the base flood  
22 level. Garages and storage buildings used exclusively for the storage of motor vehicles, and  
23 storage of other items readily removable in the event of a flood warning may have their

1 lowest floor below flood elevation, provided the building structure is capable of  
2 withstanding hydrostatic and hydrodynamic forces caused by the 100-year flood and,  
3 further, provided that no utilities are installed in the building except elevated or  
4 floodproofed electrical fixtures. If the building is converted to another use, it must be  
5 brought into full compliance with the requirements of this title governing such uses.

6 c. Nonresidential Construction. All new construction, substantial improvements, and any  
7 lateral addition to commercial, industrial, and other nonresidential structures within the  
8 floodplain or floodprone area shall either have the lowest floor, including basement,  
9 elevated at least ~~one-foot~~ the required freeboard above the base flood level or, together with  
10 attendant utility and sanitary facilities, be floodproofed so that below the base flood level  
11 plus ~~one-foot~~ the required freeboard the structure is watertight in accordance with the  
12 performance standards set forth in the city's building code. A registered professional  
13 engineer or architect shall develop or review structural design, specifications, and plans for  
14 the construction, and shall certify that the design and methods of construction meet the  
15 watertight performance standards. The certification shall be provided to the city as set forth  
16 in Section 27.53.040 of this chapter.

17 d. For all new construction and substantial improvements, fully enclosed areas below the  
18 lowest floor that are usable solely for parking of vehicles, building access or storage in an  
19 area other than a basement and which are subject to flooding shall be designed to  
20 automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry  
21 and exit of floodwaters. Designs for meeting this requirement must either be certified by a  
22 registered professional engineer or architect or must meet or exceed the following minimum  
23 criteria:

- 1 1. A minimum of two openings having a total net area of not less than one square inch for  
2 every square foot of enclosed area subject to flooding shall be provided;
- 3 2. The bottom of all openings shall be no higher than one foot above grade; and
- 4 3. Openings may be equipped with screens, louvers, or other coverings or devices;  
5 provided, that they permit the automatic entry and exit of floodwaters.
- 6 e. Manufactured Home Parks and Subdivisions. All manufactured homes shall be located in a  
7 manufactured home park or a manufactured home subdivision in accordance with Sections  
8 [27.63.120](#) and [27.63.125](#) of this title. No manufactured home shall be located in a  
9 manufactured home park or subdivision within the floodplain or floodprone area unless the  
10 following conditions are met:
  - 11 1. New manufactured home parks and subdivisions; expansions; substantial damage.  
12 Manufactured homes placed (i) on individual lots within or outside of new  
13 manufactured home parks or subdivisions, (ii) on individual lots within an expanded  
14 area of an existing manufactured home park or subdivision, or (iii) in an existing  
15 manufactured home park or subdivision in which a manufactured home has incurred  
16 substantial damage as the result of a flood, shall be elevated on a permanent foundation  
17 such that their lowest floor is at least ~~one foot~~ the required freeboard above the base  
18 flood elevation and be securely anchored to an adequately anchored foundation system  
19 in accordance with the standards to resist floatation, collapse, and lateral movement set  
20 forth in subsection (f) below;
  - 21 2. Existing manufactured home parks and subdivisions. Manufactured homes to be placed  
22 or substantially improved on individual lots in existing manufactured home parks or  
23 subdivisions, shall either (i) be elevated on a permanent foundation such that their

1 lowest floor is at least ~~one-foot~~ the required freeboard above the base flood elevation or  
2 (ii) be supported by reinforced piers or other foundation elements of at least equivalent  
3 strength that are no less than three feet in height above grade and be securely anchored  
4 to an adequately anchored foundation system in accordance with the standards to resist  
5 floatation, collapse, and lateral movement set forth in subsection (f) below.

6 If the option provided by (ii) above is exercised, the current owner and occupant, and  
7 any future buyer, renter, or occupier shall jointly acknowledge in writing that the option  
8 of piers as an alternative to placement of the manufactured home ~~one-foot~~ the required  
9 freeboard above the base flood elevation has been exercised and, therefore, may be  
10 subject to flooding. Such acknowledgment shall be filed with the Director of Building  
11 and Safety prior to the issuance of hook-up permits to the subject home.

12 3. Adequate surface drainage and access for a hauler are provided;

13 4. Where manufactured homes are elevated on pilings, lots shall be large enough to permit  
14 steps, piling foundations shall be placed in stable soil no more than ten feet apart, and  
15 reinforcement shall be provided for pilings more than six feet above the ground level;  
16 and

17 5. The grade of land for manufactured home parks or subdivisions which are situated  
18 within the floodplain or floodprone area shall be raised at least ~~one-foot~~ the required  
19 freeboard above the base flood elevation.

20 f. Manufactured Homes Located Outside of a Manufactured Home Park or Subdivision.  
21 Manufactured homes located outside of a manufactured home park or subdivision shall be  
22 elevated at least ~~one-foot~~ the required freeboard above the base flood elevation, whether  
23 constructed on a slab foundation or anchored to an elevated foundation to resist flotation,

1 collapse, or lateral movement. Methods of anchoring may include, but are not limited to,  
2 use of over-the-top and frame ties to ground anchors;

3 1. If over-the-top ties are used, such ties shall be provided at each of the four corners of  
4 the manufactured home, with two additional ties per side at intermediate locations  
5 except that manufactured homes less than fifty feet in length may provide only one  
6 additional tie per side;

7 2. Frame ties shall be provided at each corner of the manufactured home with five  
8 additional ties per side at intermediate points except that manufactured homes less than  
9 fifty feet in length may provide only four additional ties per side;

10 3. All components of the anchoring system shall be capable of carrying a force of 4,800  
11 pounds; and

12 4. Any additions to the manufactured home shall be similarly anchored.

13 g. Recreational Vehicles:

14 1. Shall be on the site for fewer than 180 consecutive days;

15 2. Shall be fully licensed and ready for highway use (on its wheels or jacking system, is  
16 attached to the site only by quick disconnect type utilities and security devices, and has  
17 no permanently attached additions); or

18 3. Meet the requirements for manufactured homes.

19 h. Floodways.

20 1. Encroachments into the floodway are prohibited, including fill, new construction,  
21 substantial improvements, and other development within the floodway unless  
22 certification by a qualified engineer is provided, demonstrating that the proposed  
23 encroachment will not result in any increase in flood levels during occurrence of the

1 base flood discharge along the floodway profile.

2 An exception to the above shall be permitted provided the applicant has acquired by  
3 land rights purchase, flowage easement, or other legal arrangement the right to increase  
4 the flood levels on all affected lands, and provided that before any permit is issued the  
5 applicant submits a Federal Emergency Management Agency (FEMA) approved  
6 Conditional Letter of Map Revision to the Director of Building and Safety. When such  
7 encroachment is completed, a FEMA approved Letter of Map Revision must also be  
8 provided by the applicant prior to approval of any building permits on the land being  
9 removed from the floodplain by the Letter of Map Revision.

10 2. If the above provision is satisfied, all new construction and substantial improvements  
11 shall comply with all other applicable provisions contained in Section 27.53.030.

12 3. The placement of any manufactured home parks and manufactured home subdivisions  
13 and the construction of new structures for human habitation within the floodway is  
14 prohibited.

15 i. AO Zones. Designated AO zones within the floodplain have special flood hazards  
16 associated with base flood depths of one to three feet where a clearly defined channel does  
17 not exist and where the path of flooding is unpredictable and indeterminate; therefore, the  
18 following provisions apply within AO zones:

19 1. All new construction and substantial improvements of residential structures shall have  
20 the lowest floor (including basement) elevated above the highest adjacent grade at least  
21 as high as one-foot the required freeboard above the depth number specified in feet on  
22 the FIRM (at least two-feet the required freeboard plus one foot if no depth number is  
23 specified).

1           2. All new construction, any lateral addition, and substantial improvements of non-  
2 residential structures shall:

3           i. Have the lowest floor elevated above the highest adjacent grade at least as high as  
4 ~~one-foot~~ the required freeboard above the depth number specified in feet on the  
5 community's FIRM (at least ~~two-feet~~ the required freeboard plus one foot if no  
6 depth number is specified), or

7           ii. Together with attendant utility and sanitary facilities be completely floodproofed  
8 to or above that level so that any space below that level is watertight with walls  
9 substantially impermeable to the passage of water and with structural components  
10 having the capability of resisting hydrostatic and hydrodynamic loads and effects  
11 of buoyancy. Such certification shall be provided to the official as set forth in  
12 Section 27.53.040(d).

13           3. Adequate drainage paths around structures on slopes shall be required in order to guide  
14 floodwaters around and away from proposed structures.

15           j. Letter of Map Changes. When a Letter of Map Changes has been approved by FEMA  
16 removing land from the floodplain, it shall be prohibited to grade any portion of the ground  
17 below the required freeboard above the 100-year flood elevation. This provision shall not  
18 apply in circumstances where the Letter of Map Amendments impact existing natural  
19 ground outside the floodplain.

20           Section 7. That Sections 27.02.070, 27.02.140, 27.52.020, 27.52.030, 27.53.020, and  
21 27.53.030 of the Lincoln Municipal Code as hitherto existing be and the same are hereby repealed.

22           Section 8. This ordinance shall be published, within fifteen days after the passage  
23 hereof, in one issue of a daily or weekly newspaper of general circulation in the City, or posted on

1 the official bulletin board of the City, located on the wall across from the City Clerk's office at  
2 555 S. 10<sup>th</sup> Street, in lieu and in place of the foregoing newspaper publication with notice of  
3 passage and such posting to be given by publication one time in the official newspaper by the City  
4 Clerk. This ordinance shall take effect and be in force from ~~and sixty (60) days~~ after its passage  
5 ~~and so long as~~ publication ~~or after its~~ posting and notice of such posting given by publication as  
6 ~~described~~ herein ~~has occurred~~ and ~~in the as provided by~~ City Charter ~~provided~~.

Introduced by:

\_\_\_\_\_

Approved as to Form & Legality:

\_\_\_\_\_  
City Attorney

Approved this \_\_\_ day of \_\_\_\_\_, 2022:

\_\_\_\_\_  
Mayor



**LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT**

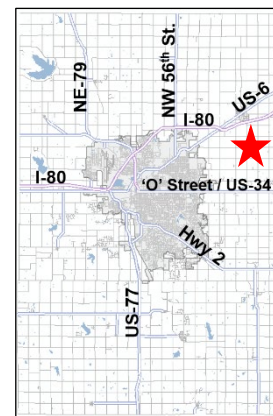
FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER Special Permit #22035	FINAL ACTION? Yes	DEVELOPER/OWNER Riverboat Desri NE Holdings LLC
PLANNING COMMISSION HEARING DATE November 16, 2022	RELATED APPLICATIONS None	PROPERTY ADDRESS/LOCATION Generally located at N. 162 <sup>nd</sup> St and Holdrege St.

**RECOMMENDATION: CONDITIONAL APPROVAL**

**BRIEF SUMMARY OF REQUEST**

This is a request for a Special Permit per Article 13.051 of the Lancaster County Zoning Regulations for a Large Solar Energy Conversion System (SECS) for up to 6.2 megawatts on approximately 75 acres.



**JUSTIFICATION FOR RECOMMENDATION**

The proposed Large Solar Energy Conversion System provides for alternative, renewable source of energy, which is supported and promoted by the 2050 Comprehensive Plan. The project meets all conditions of the special permit. The proposed vegetative buffer and setback from the property line to the solar panels should help mitigate any impact to non-participating properties.

**APPLICATION CONTACT**

David Levy, 402-213-9063  
[dlevy@bairdholm.com](mailto:dlevy@bairdholm.com)

**STAFF CONTACT**

Tom Cajka, (402) 441-5662 or  
[tcajka@lincoln.ne.gov](mailto:tcajka@lincoln.ne.gov)

**COMPATIBILITY WITH THE COMPREHENSIVE PLAN**

The proposed project meets the goals of the Comprehensive Plan to promote renewable energy sources. The project meets all requirements of Article 13.051.

**WAIVERS:**

None

**KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN**

Introduction Section: Growth Framework

FUNDAMENTALS OF GROWTH IN LANCASTER COUNTY

The Rural Environment

Focus on Agriculture. Rural areas should be preserved for agriculture, a limited supply of low density residential, and other compatible land uses.

Natural RESOURCE PRESERVATION. Ensure that acreage and rural developments preserve and protect environmentally sensitive areas, and maximize the preservation of out nonrenewable resources.

Figure GF.b:2050- This site is shown as future Agriculture on the 2050 Future Land Use Plan.

Land Use Plan - Agricultural. Land principally in use for agricultural production and compatible industries like solar and wind energy production. Agricultural land may be in transition to more diversified agribusiness ventures such as growing and marketing of products (e.g., horticulture, silviculture, aquaculture) on site. Some land in the Agricultural category may be enrolled in voluntary preservation programs such as the USDA Conservation Reserve Program (CRP).

## Goals Section

### G11: Rural Environment

An important relationship exists between the urban, rural, and natural landscapes. Urban and rural development must maximize the use of land in order to preserve agriculture and other compatible industries, natural resources, and the overall rural environment.

The rural areas in Lancaster County are also appropriate locations for emerging energy production facilities such as wind turbines and solar farms. These industries are compatible with agricultural uses, support the community's sustainability initiatives, and have the potential to be major contributors to the local economy. Both the City and County zoning ordinances have been recently updated to address these uses and ensure that their implementation is compatible with the surrounding areas.

## Policies Section

### P12: Economic Growth

Locate all new commercial and industrial development within Lincoln or within the smaller incorporated communities in Lancaster County. Certain commercial uses that are compatible with agriculture and the rural environment, such as commercial wind and solar energy facilities, are allowed in rural areas of the county.

### P16: Rural Economy

Action Steps:

#5: Support solar and wind energy conversion systems in agricultural areas of the county.

### P48: Renewable Energy

Action Steps:

#3. Support the development of commercial wind and solar energy facilities throughout the county.

#4 Continue to implement the actions needed to maintain SOLSMART "gold status", which indicates that City/County policy and processes are solar friendly.

## **ANALYSIS**

1. This application is for a Large Solar Energy Conversion System with a capacity of up to 6.2 megawatts alternating current (MWac). The panels will utilize photovoltaic technology to convert solar energy into electricity. The panels use anti-reflection materials to retain as much of the solar spectrum as possible. The panels use a single-axis tracking panel technology which allows the panels to follow the sun throughout the day.
2. The special permit area covers approximately 75 acres located at N. 162<sup>nd</sup> St. and one-half mile north of Holdrege St. The parcel is zoned AG-Agriculture.
3. This special permit is associated with Special Permit #21042 Salt Creek Solar that was approved by the Lancaster County Board of Commissioners on December 16, 2021. If approved, the two projects combined would power up to 125 megawatts. Per the applicant's letter 125 megawatts would power up to approximately 16,000 homes.

4. The project area mainly contains farm ground, but also contains tree masses and wetlands. The project will avoid these environmentally sensitive areas.
5. The applicant notes that they have engaged in community outreach through meetings with individuals and an open house. An open house on the overall project was held at Southeast Community College on June 3, 2021.
6. Pierce County and Madison County zoning regulations for commercial solar farms were reviewed. Pierce and Madison Counties had similar regulations. Both required that the solar projects use fixed panel photovoltaic that are ground mounted using rammed post construction technique. The panels must be located to support rainwater between each module and growth of vegetation beneath the arrays. They must also limit impact of storm water runoff. Setbacks are 30 feet side and rear measured from lot line abutting a residential use or district. Both counties require a decommissioning plan.
7. Clay County zoning regulations for commercial solar farm was reviewed. Clay County requires that no solar panels be within the flood plain, wetlands or scenic areas. A vegetation management plan is required. An emergency response plan that identifies all entry areas, shut offs, disconnects and valves is required. Setbacks are 300 feet to a dwelling and 500' from a dwelling to an inverter. A decommissioning plan is required. In addition, the applicant must meet with the local Natural Resource District.
8. A review of Saunders County and Cass County zoning regulations for commercial solar farms found that setbacks are the same as the district, but no less than 30 feet for a side or rear yard to a residential use or district. This is a smaller setback than the 100 foot setback to non-participating properties with a residence Lincoln required in the previous special permits.

Screening is required only if a dwelling is within 300 feet of a solar panel. The solar farm must be designed as to absorb or detain stormwater runoff. The project must conform with National and State fire code.

9. An increased risk of fire around the solar array has been a concern. The City of Lincoln fire department was asked to look at the risk of fire to a solar facility. The fire department found that the risk of fire is very low. A review found that most fires associated with solar panels are from roof mounted units.

A paper, "[Health and Safety Impacts of Solar Photovoltaics](#)", by North Carolina State University Clean Energy Technology Center May 2017 (Paper) ( to access full report ctrl + click on link and then enter SP19036A in application number box) addressed many concerns of Photovoltaic (PV) solar systems, including fire. The paper identified that only a small portion of materials in the panels are flammable and those components cannot self-support a significant fire. Flammable components include the thin layers of polymer encapsulates surrounding the PV cells, plastic junction boxes and insulation on wiring. The rest of the panel is composed of non-flammable components, mainly the protective glass.

Fire from solar panels is extremely rare. Installed properly, PV solar panels do not cause fires. Where fire has started from a solar panel it was in most cases electrical arcing due to improper installation, faulty wiring, or insufficient insulation. ([nachi.org/solar-panel-fire-electrical-hazards.htm](http://nachi.org/solar-panel-fire-electrical-hazards.htm))

10. Environmental impacts from solar systems are often a topic of concern. The [North Carolina State paper](#) also addressed environmental impacts. A PV solar system has small amounts of toxic materials. Solar PV panels consist of glass, polymer, aluminum, copper and semiconductor materials. Some panels contain a small amount of lead. The lead is being phased out. Lead was a component of solder. Testing to simulate the potential for leaching from broken panels did not find a potential toxicity threat from these trace elements.

The applicant has informed the Planning Department that the project will use crystalline silicon panels that contain no lead or cadmium. Cadmium is only found in thin film solar panels.

LLCHD did not find any unusual risk to air quality or soil/groundwater contamination of solar panels compared to any other type of man-made structure. As an example, solar panels provide no more risk to air quality of a fire or soil contamination after a storm than a large agricultural building filled with vehicles, agricultural farm products and chemicals.

No other use within the Lancaster County Zoning Regulations requires an Environmental Impact Study. These uses include, but not limited to, manufacturing and processing of chemicals and petroleum products, metal products, salvage yards, commercial feedlot, and commercial wind energy conversion system.

11. A study, “Analysis of the Potential for a Heat Island Effect in Large Solar Farms” conducted by the Center for Life Cycle Analysis, Department of Earth and Environmental Engineering, Columbia University found that an analysis of 18 months of detailed data showed that in most days, the solar array was completely cooled at night, and thus, it is unlikely that a heat island effect could occur.
12. The 2050 Comprehensive Plan supports renewable energy sources and alternative fuels. Renewable energy generally does not contribute to climate change or local air pollution and generally conserves nonrenewable natural resources. Solar has the potential to reduce energy consumption and greenhouse gas emissions by reducing the amount of fuel required to produce a unit of energy output.
13. Solar Energy Conversion System was added to the Lancaster County Zoning Regulations by Special Permit in July 2020. The Lancaster County Board approved the change unanimously. The special permit requires the following conditions be met.

- a. The Large Solar Facility shall use photovoltaic cells to convert solar energy into electricity.

***The applicant’s letter states that the panels will use photovoltaics technology to convert solar energy into electricity.***

- b. No electrical substation owned or operated by a private electric supplier, or any other facility owned or operated by a private electric supplier to support the generation, transmission or distribution of electricity for a Large Solar Facility, shall be located as to cause an exceedance of the following noise level standards.
  1. From the hours of 10 pm to 7 am: Fifty (50) dBA maximum 10-minute Laeq
  2. From the hours of 7 am to 10 pm: Sixty (60) dBA maximum 10-minute Laeq

For the purposes of determining compliance with these standards, noise levels shall be measured at the closest exterior wall of any dwelling unit located on the property that submitted the noise complaint. If an electrical substation(s) owned or operated by a private electric supplier violates a noise standard at a dwelling unit constructed after the electrical substation(s) is approved, then the electrical substation becomes a non-conforming use. Electrical substations owned by public electric suppliers shall not be subject to the noise level standards herein.

***The applicant’s letter states that there is no substation, but the inverters will meet the noise level requirements.***

- c. Obtain an approved erosion control plan from the Lower Platte South Natural Resource District or Nemaha Natural Resources District, depending on the location of the Large Solar Facility, before receiving building permits.

***The erosion control plan will be submitted prior to building permit.***

- d. The Large Solar Facility shall provide visual screening for adjacent non-participating residential uses, public park uses, and school uses, through setbacks as otherwise required in the Lancaster County Zoning Regulations and/or other techniques to address the site-related impacts of the Large Solar Facility on adjacent non-participating properties.
  1. The applicant shall use fences, walls, berming, vegetation, or some combination thereof to provide visual screening. Fencing, walls or berming may be used to supplement other screening methods, but shall not account for over fifty percent (50%) of the screening. Existing natural features, topography and vegetation may be used to achieve visual screening if provided in accordance to the visual screening requirements provided herein.
    - a. If the visual screening is for adjacent non-participating residential uses, it shall be provided as follows:

- i. The screen shall only be required if the closest exterior wall of the dwelling is within three hundred (300) feet of the property line adjacent to the Large Solar Facility.
    - ii. If the screen is required, the screen shall cover one hundred percent (100%) of the surface area of a vertical plane extending along the property line adjacent to the Large Solar Facility at an amount equal to or greater than the surface area of the dwelling to be visually screened, plus seventy five (75) feet in both directions or until it reaches a public road right-of-way, whichever comes first, and from the ground to a height of at least eight (8) feet above the adjacent ground.
  - b. If the visual screening is for adjacent non-participating public park or school uses, it shall be provided as follows:
    - i. The screen shall cover at least seventy percent (70%) of a vertical plane extending along the entire property line adjacent to the Large Solar Facility, from the ground to a height of at least eight (8) feet above the adjacent ground.
- 2. If the visual screening is achieved through a fence or wall, it shall be provided along the property line as follows:
  - a. Acceptable fence and wall materials for visual screening include masonry, stone, and wood, but exclude chain link fences (with or without slats). Alternative fence materials being used for screening must be approved by the Planning Director.
- 3. If the visual screening is achieved through berming, it shall be provided along the property line as follows:
  - a. The side slopes shall not exceed three to one (3 to 1), horizontal to vertical.
  - b. The mounded ground surface shall be protected to prevent erosion through the use of turf lawn or other alternative groundcovers.
- 4. If the visual screening is achieved through vegetation, it shall be provided along the property line as follows:
  - a. At a rate of at least four (4) trees every one hundred (100) linear feet. Of the four (4) trees every one hundred (100) linear feet, at least one (1) shall be a deciduous shade tree and three (3) shall be evergreen or ornamental trees. The trees shall be evenly distributed within each one hundred (100) linear feet section.
  - b. At least two-thirds (2/3), but no more than three-quarters (3/4) of the total ornamental/evergreen trees along the property line shall be made up of evergreen trees.
  - c. Each tree shall have a minimum mature height of fifteen (15) feet.
- 5. Visual screening is not required along the property line adjacent to a Participating Property.

***The project will meet the conditions for screening to non-participating properties. There is only one non-participating property adjacent the project parcel. There are no parks or schools in the project area. A combination of fence, vegetation and existing landscape features will provide screening.***

- iii. Each application shall have a decommissioning plan (removal of equipment/improvements and restoration of lands) that is reviewed and approved by the Planning Department prior to beginning operations. The decommissioning plan shall provide the following:

1. A plan outlining the means, procedure, and costs of removing the Large Solar Facility, including, but not limited to, the solar panels and collectors, electrical wiring/cabbling, fencing, and any related supporting infrastructure to a minimum depth of three (3) feet.
2. At the expense of the permittee, a cost estimate for the decommissioning of the Large Solar Facility and any estimated resale and salvage value shall be prepared by a professional engineer. The permittee shall provide to the Planning Department a revised and updated decommissioning cost estimate every five (5) years from the date of approval to cover the cost of meeting this obligation. The decommissioning cost estimate shall explicitly detail the cost, any estimated resale and salvage values, shall account for inflation, cost and value changes, and advances in decommissioning technologies and approaches.
3. The estimated decommissioning cost, less any resale and salvage value, shall be guaranteed in one of the following forms: (i) surety bond, (ii) cash to be held in escrow by the County Treasurer at a Bank, or (iii) a letter of credit from a financial institution reasonably acceptable to the County which shall be irrevocable unless replaced with cash or other form of security reasonably acceptable to County. The owner of the Large Solar Facility shall provide the decommissioning cost guaranty no later than the end of the fifteenth (15th) year of operation, and shall maintain the financial security thereafter for as long as the Large Solar Facility is in existence or upon discontinuance, decommissioning, or abandonment of the Large Solar Facility Such financial security shall be updated every five (5) years to cover the costs associated with the updated decommissioning cost estimates.
4. For purposes of this Section, discontinuance, decommissioning, or abandonment shall mean the Large Solar Facility has produced no energy for twelve (12) consecutive months. The owner or operator shall have twelve (12) months to complete decommissioning of the Large Solar Facility. If the owner or operator of the Large Solar Facility fails to remove the installation in accordance with the requirements of this permit or within twelve (12) months following discontinuance, decommissioning, or abandonment, the County may collect the bond or other financial security and the County or a hired third party may enter the property to physically remove the installation.

***A decommissioning plan was submitted with the application. All components including PV Modules, steel tracker system, support piles, and electrical equipment will be removed. Certain components such as PV Modules, steel support structures and other salvageable materials will be resold, recycled or disposed of. Any supporting structures will be broken up to a depth of 3 feet and the debris removed for site.***

***Per the decommissioning plan the site shall be restored to a clean, safe, and environmentally stable condition substantially the same physical conditions as existed prior to development of the Project.***

***Decommissioning cost in 15 years (estimated life of project) is estimated at \$773,000.00. With salvage value of \$242,000.00, the net cost is \$531,000.00.***

e. The Large Solar Facility shall meet the following setback requirements:

Non-Participating Property with a Dwelling	100 feet
Non-Participating Property without a Dwelling	50 feet
Participating Property with a Dwelling	0 feet
Participating Property without a Dwelling	0 feet
Public or Private Roadway	50 feet

*The project will meet the setback requirements. There is one non-participating property with a dwelling adjacent the project parcel. The site plan shows a 300 feet setback to the non-participating property. The applicant is proposing a larger setback than required.*

14. The proposed special permit request is supported by the Comprehensive Plan and meets the conditions of the special permit. The applicant is not requesting any waivers.

**CONDITIONS OF APPROVAL:** See attached.

**EXISTING LAND USE & ZONING:** AG-Agriculture      Farm ground and multiple acreage lots

**SURROUNDING LAND USE & ZONING**

North:	AG-Agriculture	Farm ground and acreages
South:	AG-Agriculture	Farm ground and acreages
East:	AG-Agriculture	Farm ground and acreages
West:	AG-Agriculture	Farm ground and acreages

**APPLICATION HISTORY**

**December 16, 2021:** Special Permit 21042 for a Large Solar Energy Conversion System was approved by Lancaster County Board of Commissioners

**APPROXIMATE LAND AREA:** 75.21 acres

**LEGAL DESCRIPTION:** Lot 2 I.T. in the SW1/4 of Section 14-10-08, Lancaster County, NE

Prepared by

---

Tom Cajka, Planner

**Date:** October 31, 2022

**Applicant:** Salt Creek Solar, LLC  
226 N. Morgan St.  
Chicago, IL 60607  
847-707-6019  
sean@rangerpower.com

**Contact:** David Levy  
1700 Farnam Street Suite 1500  
Omaha, NE 68102  
402-213-9063  
dlevy@bairdholm.com

**Owner:** Riverboat Desri NE Holdings LLC  
226 N. Morgan St. Suite 200  
Chicago, IL 60607

<https://linclanc.sharepoint.com/sites/PlanningDept-DevReview/Shared Documents/DevReview/SP/21000/SP21042 Salt Creek Solar.tjc.docx>

## CONDITIONS OF APPROVAL - SPECIAL PERMIT #21042

Per Article 13.051 this approval permits a Solar Energy Conversion System.

### Site Specific Conditions:

1. Before receiving building permits the permittee shall cause to be prepared and submitted to the Planning Department a revised and reproducible final plot plan including 2 copies with all required revisions and documents as listed below:
  - 1.1 Add a note that no solar panels are allowed where significant streams or wetlands are located within the property or within drainage easements.
  - 1.2 Add to the title Special Permit #22035
  - 1.3 Remove the setback along the north line. No setback is required between participating properties.
  - 1.4 Remove the screening along the south side of Lot 1. The lot to the south of Lot 1 is not part of this special permit and therefor no screening is required.
  - 1.5 Identify the legal of the adjacent parcels.
  - 1.6 Put a border around Lot 2 and identify it as boundary of special permit.
  - 1.7 Show drainage easements.
  - 1.8 Identify Lot 1 as a non-participating property.
  - 1.9 In the Key on the site plan add, "Solar panel inverters shall be located at least 300 feet from a non-participating property line." Note: For the purposes of this special permit, inverters shall mean the above ground equipment necessary to "invert" the direct current (DC) output into alternating current (AC).
  - 1.10 On the application document correct the legal on page 3 and change the acres to 75.21 on page 1 and 3.
2. Before receiving building permits provide the following documents meeting all the requirements to the Planning Department to the satisfaction of the Planning Director:
  - 2.1 An Erosion Control Plan
  - 2.2 A landscape plan.
  - 2.3 A road maintenance agreement between the County and the permittee, approved by the Lancaster County Engineer and the County Attorney.
  - 2.4 Developer shall provide the Eagle Rural Fire Department all pertinent information in case of a fire or other emergency on site, including but not limited to 24-hour contact information, access points, the location of shut offs and circulation patterns. Developer shall update the Eagle Rural Fire Department of any changes to such information. The developer shall provide, at the developer's sole cost, equipment necessary for the Eagle Rural Fire Department to gain entry to the site in the event of an emergency.

3. Within 15 years of approval of this special permit, upon abandonment or when the cost of decommissioning exceeds the salvage value, provide the City of Lincoln with a surety for Net Decommissioning Cost.

**Standard Conditions:**

3. The following conditions are applicable to all requests:
  - 3.1 Before starting the operation, all development and construction shall substantially comply with the approved plans.
  - 3.2 All privately-owned improvements, including landscaping and recreational facilities, shall be permanently maintained by the Permittee or an appropriately established homeowners association approved by the City.
  - 3.3 The physical location of all setbacks and yards, buildings, parking and circulation elements, and similar matters be in substantial compliance with the location of said items as shown on the approved site plan.
  - 3.4 The terms, conditions, and requirements of this resolution shall run with the land and be binding upon the Permittee, its successors and assigns.
  - 3.5 The applicant shall sign and return the letter of acceptance to the County Clerk. This step should be completed within 60 days following the approval of the special permit. The Permittee shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds. Building permits will not be issued unless the letter of acceptance has been filed.

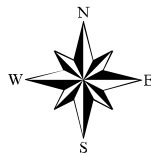


2022 aerial

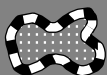


**Special Permit #: SP22035**  
**Salt CreekSolar**  
**N 162nd St & Holdrege St**

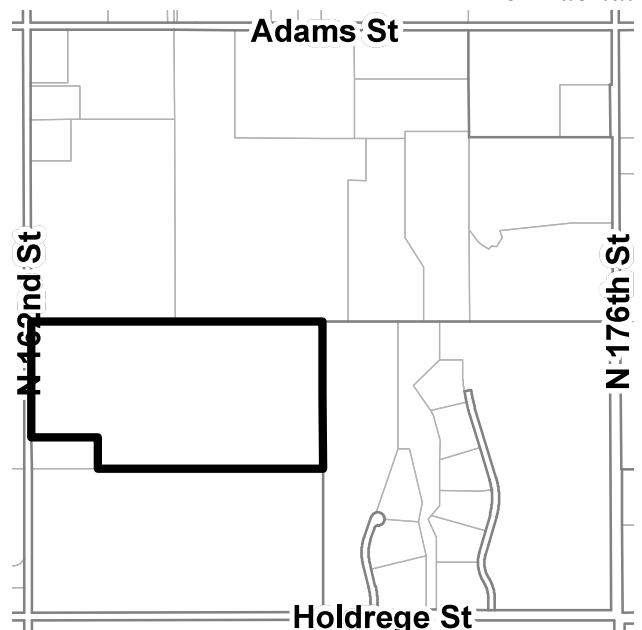
**Zoning:**

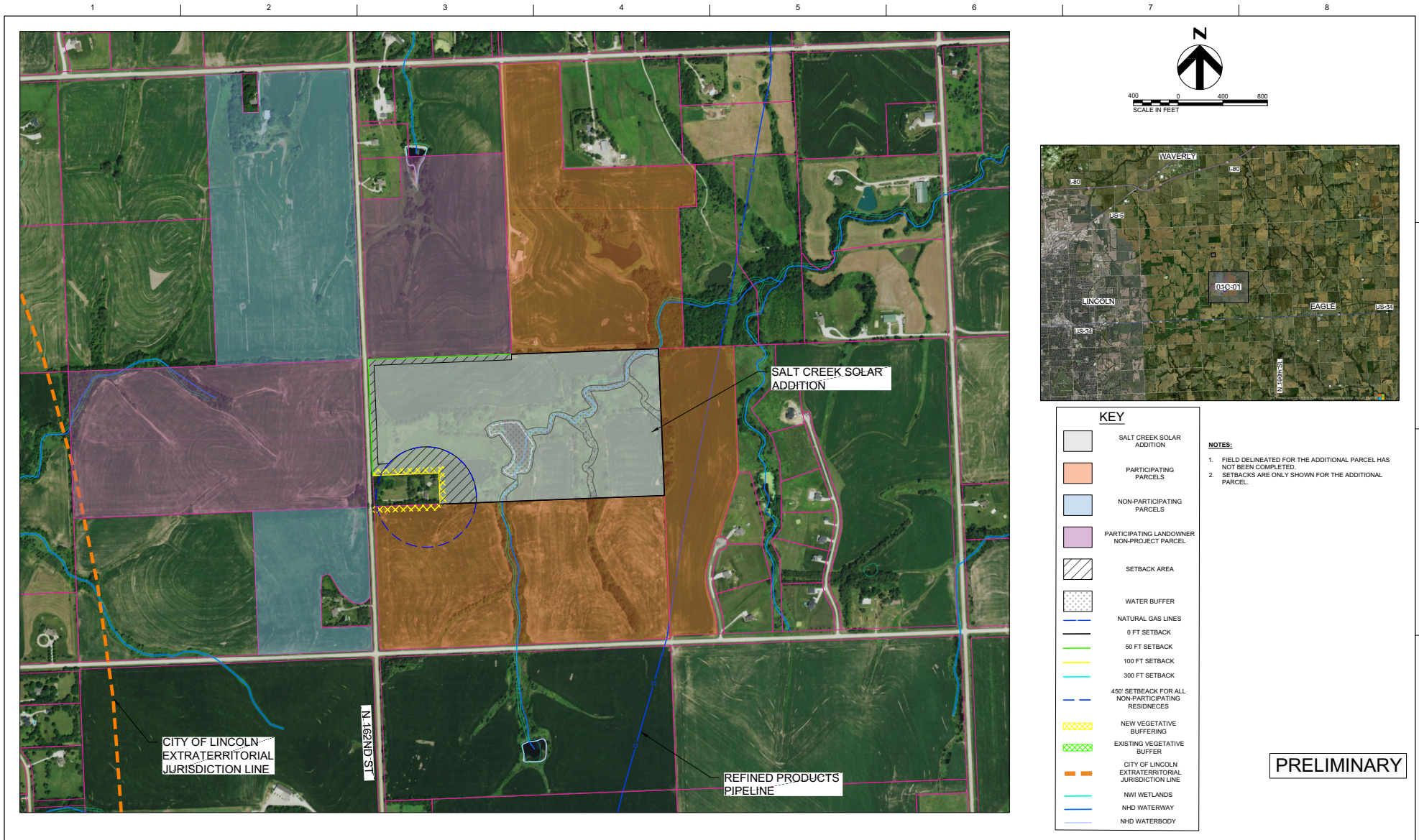
- R-1 to R-8 Residential District
- AG Agricultural District
- AGR Agricultural Residential District
- O-1 Office District
- O-2 Suburban Office District
- O-3 Office Park District
- R-T Residential Transition District
- B-1 Local Business District
- B-2 Planned Neighborhood Business District
- B-3 Commercial District
- B-4 Lincoln Center Business District
- B-5 Planned Regional Business District
- H-1 Interstate Commercial District
- H-2 Highway Business District
- H-3 Highway Commercial District
- H-4 General Commercial District
- I-1 Industrial District
- I-2 Industrial Park District
- I-3 Employment Center District
- P Public Use District



**One Square Mile:**  
**Sec.14 T10N R08E**

	Area of Application
	Zoning Jurisdiction Lines
	Lincoln City Limits





**KEY**

- SALT CREEK SOLAR ADDITION
- PARTICIPATING PARCELS
- NON-PARTICIPATING PARCELS
- PARTICIPATING LANDOWNER NON-PROJECT PARCEL
- SETBACK AREA
- WATER BUFFER
- NATURAL GAS LINES
- 0 FT SETBACK
- 50 FT SETBACK
- 100 FT SETBACK
- 300 FT SETBACK
- 450' SETBACK FOR ALL NON-PARTICIPATING RESIDENCES
- NEW VEGETATIVE BUFFERING
- EXISTING VEGETATIVE BUFFER
- CITY OF LINCOLN EXTRATERRITORIAL JURISDICTION LINE
- NWI WETLANDS
- NHD WATERWAY
- NHD WATERBODY

**NOTES:**  
 1. FIELD DELINEATED FOR THE ADDITIONAL PARCEL HAS NOT BEEN COMPLETED.  
 2. SETBACKS ARE ONLY SHOWN FOR THE ADDITIONAL PARCEL.

**PRELIMINARY**



ISSUE	DATE	DESCRIPTION
A	9-28-22	ISSUED FOR PERMIT

PROJECT MANAGER	W. KIRBY
DESIGNED BY	A. CALTON
DRAWN BY	A. CALTON
PROJECT NUMBER	10156414



SALT CREEK SOLAR ADDITION  
LANCASTER COUNTY

FILENAME	01C-01.dwg	SHEET	01C-01
SCALE	1" = 400'		

C:\working\10156414\01C-01\Addendum\Permit.dwg, 10/11/2022 4:51:11 PM, A.CALTON



1



**Salt Creek Solar, LLC**  
**Special Permit Application**  
*Salt Creek Solar Addition*  
*Lancaster County, NE*

Salt Creek Solar, LLC  
226 N Morgan Street #200  
Chicago, IL 60607  
Phone: (847) 707-6019  
Email: Sean@rangerpower.com

*Prepared By:*  
HDR Inc.  
1917 S 67th Street  
Omaha, NE  
68106-2973

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Appendix A: Site Plans

Appendix B: Letters of Support

Appendix C: Decommissioning Plan

# 1 Introduction

Salt Creek Solar, LLC (“Salt Creek Solar”) is pleased to submit this Large Solar Energy Conversion System Special Permit application for the Salt Creek Solar Addition (“Project”), Parcel ID number 2314300001000 (“Parcel”) within Lancaster County, Nebraska (“County”). Salt Creek Solar submits this application pursuant to, and in full compliance with, Section 13.051 of the Lancaster County Zoning Regulations. The Project is associated with previous permit approvals in the County (Permit No. 21042) and both City approvals (Permit No. 19036 and 2021 Permit No. 19036A). The Project will comply with all the conditions of approval of Special Permit #21042.

The Project will utilize photovoltaic technology to convert solar energy into electricity, producing approximately 6.2 Megawatts (MW) AC within the County on 78.97 acres of land in the agricultural (“AG”) zoned district located in unincorporated Lancaster County.

The developer for the Project, Ranger Power LLC (“Ranger Power”) is among the most experienced solar developers in the Midwest. Ranger Power has a 7 Gigawatt (GW) portfolio, which spans 10 states and is comprised of nearly 50 projects. These range in nameplate capacity from 74 MW – 400 MW.

Since 2017, Ranger Power has permitted more than 2,000 MW and executed nearly 1,200 MW of utility-scale Power Purchase and Build-Own-Transfer agreements throughout the Midwest. Over 500 MW of Ranger Power projects have been taken to construction, of which approximately 150 MW are generating power. By the end of 2021, Ranger Power anticipates that over 500 MW of projects developed by Ranger Power will be in generating power. This includes the 239 MW Assembly solar project in Shiawassee County, Michigan, and the Prairie State, Dressor Plains, and Big River Solar facilities, totaling 347 MW, in Illinois. These projects are among the first and largest utility-scale solar projects in their respective states.

This application letter describes the project and company, compliance with the Special Permit requirements, a site description and plan for the Parcel, the proposed built conditions, a decommissioning plan overview, and identifies the participating properties along with the County’s application form for the Special Permit.

# 2 Findings of Fact

The Project meets the standards set out in the Lancaster County Master Plan inviting renewable energy development in the following ways. Solar power is a renewable energy source with several attractive features, including utilizing the predictable, unlimited, and free energy from the sun, providing clean energy with no emissions, and producing power during the day when demand is high. According to the Solar Energy International Association website, 1 MW of energy provides power for approximately 130 homes in Nebraska. At this level of generation, the approximately 125 MW Project would power up to approximately 16,000 homes. In addition, a utility-scale solar development creates both temporary construction jobs and permanent maintenance and operations jobs. Solar development allows landowners to retain agricultural land within their families for future generations.

The Project will bring local tax benefits and near-term economic benefits of construction for the community and the region. These tax revenues can be used to invest in new roads, bridges, schools, or to offset existing tax rates. In addition to several hundred construction and development workers,

the Project would require a handful of local employees to support operations and maintenance throughout the lifetime of the project.

The proposed Project satisfies the following three findings:

(a) the community as a whole, the surrounding neighborhood, and the real property adjacent to the area included within the site plan for this Solar Energy Conversion System will not be adversely affected by granting such a permit;

(b) said site plan together with the terms and conditions hereinafter set forth are consistent with the 2040 Comprehensive Plan and with the intent and purpose of Title 13 of the Lancaster County Zoning Regulations to promote the public health, safety, and general welfare; and

(c) the Project is not seeking any waivers and the application fully complies with the Zoning Regulations as written.

### 3 Special Permit Compliance Overview

The Parcel under lease is part of the Project that will interconnect at the Lincoln Electric System ("LES") Wagener Substation at 128<sup>th</sup> Street and Adams Street.

Salt Creek Solar has designed a Project that complies with the Lancaster Zoning Regulation Section 13.051 Solar Energy Conversion System (SECS), as described in Table 1.

<b>Special Permits: Lancaster County Zoning Regulation Section 13.051</b>			
<b>No.</b>	<b>Conditions Summary*</b>	<b>Conditions Met</b>	<b>Addressed in Application Section(s):</b>
i.	Photovoltaic system to convert solar energy into electricity	Yes	Site Description and Location, Proposed Built Conditions
ii.	Noise level limits	Yes	Proposed Built Conditions
iii.	Erosion control plan approval	Yes	Proposed Built Conditions
iv.	Visual screening for site related impacts	Yes	Proposed Built Conditions
v.	Decommissioning Plan for end of life	Yes	Decommissioning Plan Overview
vi.	Setback requirements	Yes	Proposed Built Conditions, Appendix A
The height of the solar panels, solar collector, and any mounts shall not exceed twenty-five (25) feet when oriented at maximum tilt.			

\*See Lancaster County Ordinance 13.051.

*Table 1 – Lancaster County Solar Energy Conversion System Special Permit Conditions*

## 4 Site Description and Location

The Project Parcel is on the East side of 162<sup>nd</sup> St and between Adams and Holdredge St. The Parcel is on Lot 2 SW located in Section 14, Township 14, Township 10 North, Range 8, 6th Principal Meridian, of Lancaster County. The Parcel ID number is 2314300001000.

The Project Parcel is comprised of 78.97 acres and is located within the unincorporated Lancaster County, outside of the ETJ. Salt Creek Solar has acquired the rights necessary to develop, construct, and operate the approximately 6.2 MWac Project through the purchase of the property.

The Project Parcel is zoned Agriculture (“AG”). The Project Parcel primarily consists of cultivated agricultural land, but also contains a limited amount of wooded areas, wetlands, creek or streams. The Project is sited to avoid these constraints and set back as the ordinance requires. To the extent practicable, existing vegetation will remain in place and will be utilized as a natural buffer. Other areas will utilize new vegetative buffering. For a site overview and a detailed view, see Appendix A.

## 5 Proposed Built Conditions

The Project will consist of a self-powered single-axis tracking solar panel system on North-South oriented racking which is supported by steel piles driven into the ground. The Project Parcel in the AG district of Lancaster County will:

- Use PV cells to convert solar energy into electricity.
- Locate the Project inverters to strive to avoid causing an exceedance of the required noise level standards per Amendment 13.051 as follows:
  - From the hours of 10 pm to 7 am: Fifty (50) dBA maximum 10-minute Laeq as measured from adjacent dwellings.
  - From the hours of 7 am to 10 pm: Sixty (60) dBA maximum 10-minute Laeq as measured from adjacent dwellings.
- Obtain approval for erosion control and stormwater management from Nebraska Department of Environment and Energy before receiving building permits.
- Provide visual screening for adjacent non-participating residential uses, public park uses, and school uses, in accordance with the Lancaster County Zoning Regulations to address site-related impacts of the Project on adjacent non-participating properties, as shown in the Project Layout in Appendix A.
- Use a combination of fence, vegetation, and existing landscape features to provide visual screening.

- For non-participating residences whose closest exterior wall of the dwelling is within three hundred (300) feet of their own property line adjacent to the Project, the screening will meet the requirements in the Zoning Regulations. The project will meet property line setback requirements as set forth in Table 2.

Property Type	Distance (feet)
Non-Participating Property with a Dwelling	100
<ul style="list-style-type: none"> <li>• Distance from closest exterior wall of dwelling exterior wall</li> </ul>	450
Non-Participating Property without a Dwelling	50
Participating Property with a Dwelling	0
Participating Property without a Dwelling	0
Public or Private Roadway	50
Outlot Adjacent to Homes in a Community Unit Plan	300

*Table 2 – Property Line Setbacks to Solar Panels*

## 6 Decommissioning Plan

The Project’s decommissioning plan will comply with the decommissioning requirements set forth in the Lancaster County Zoning regulations. See the decommissioning plan in Appendix C.

## 7 Community Support

Ranger Power develops solar projects with a focus on working with the surrounding community, educating neighbors on Project details, soliciting comments, and adapting the final layout to incorporate feedback. The Project developer has engaged in substantial community outreach, including more than 60 meetings with neighbors, and a public open house on June 3<sup>rd</sup>, 2021. Feedback from this outreach will be incorporated into the final site design. As a means of continued engagement with surrounding landowners, Salt Creek Solar worked with the owner of this Parcel to identify an opportunity to include it in the project.

As a result of these conversations and frequent outreach to local stakeholders and community leaders, the Project has received letters of support, included in Appendix B.

As an additional measure of providing ongoing education and Project information to Lancaster County, there will be a kiosk located at an accessible location on the Project area available for public use throughout the lifetime of the Project.

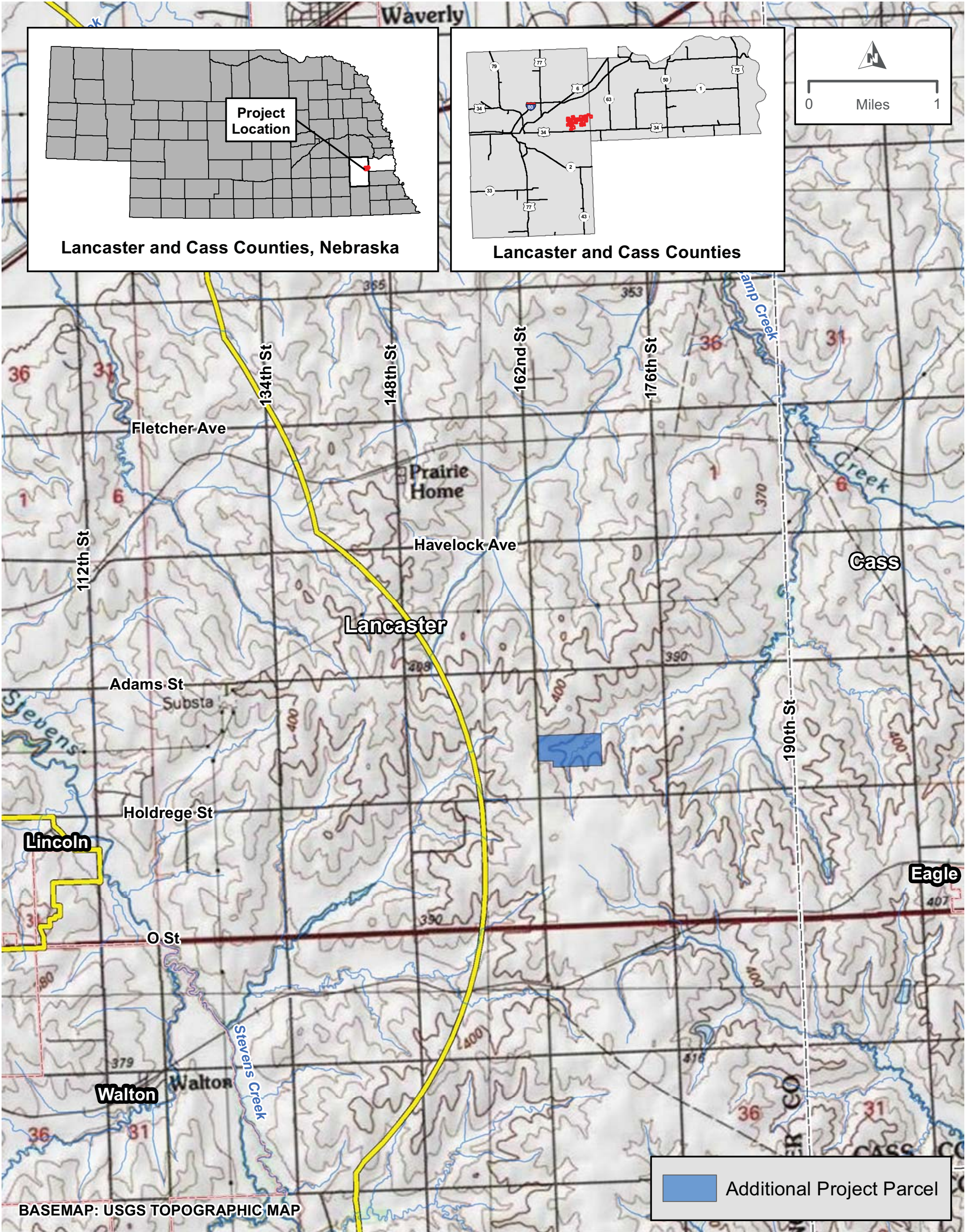
## 8 Conclusion

Please approve Salt Creek Solar's application or a Special Permit for a Solar Energy Conversion System due to:

- Its meeting the goals of the Master Plan regarding renewable energy development.
- Its compliance with all conditions established in Lancaster County Zoning Regulations Section 13.051. Again, Project will comply with all the conditions of approval of Special Permit #21042.
- Its satisfaction of the criteria for a Special Permit in Lancaster County Zoning Regulations section 13.002, specifically that it: is compatible with the character of the neighborhood, it will have a minimal effect on traffic conditions, it will greatly enhance public utility facilities, and it is consistent with and in furtherance of the Comprehensive Plan and other matters relating to the public health, safety and general welfare because it adds to the property tax base, allows private landowners to put their property to a productive legal use of their choosing, and adds a significant local source of economical, sustainable, reliable clean energy.
- Its support in the Lancaster County community and its resolve to continue to work with the surrounding community to be a good neighbor for the life of the project.

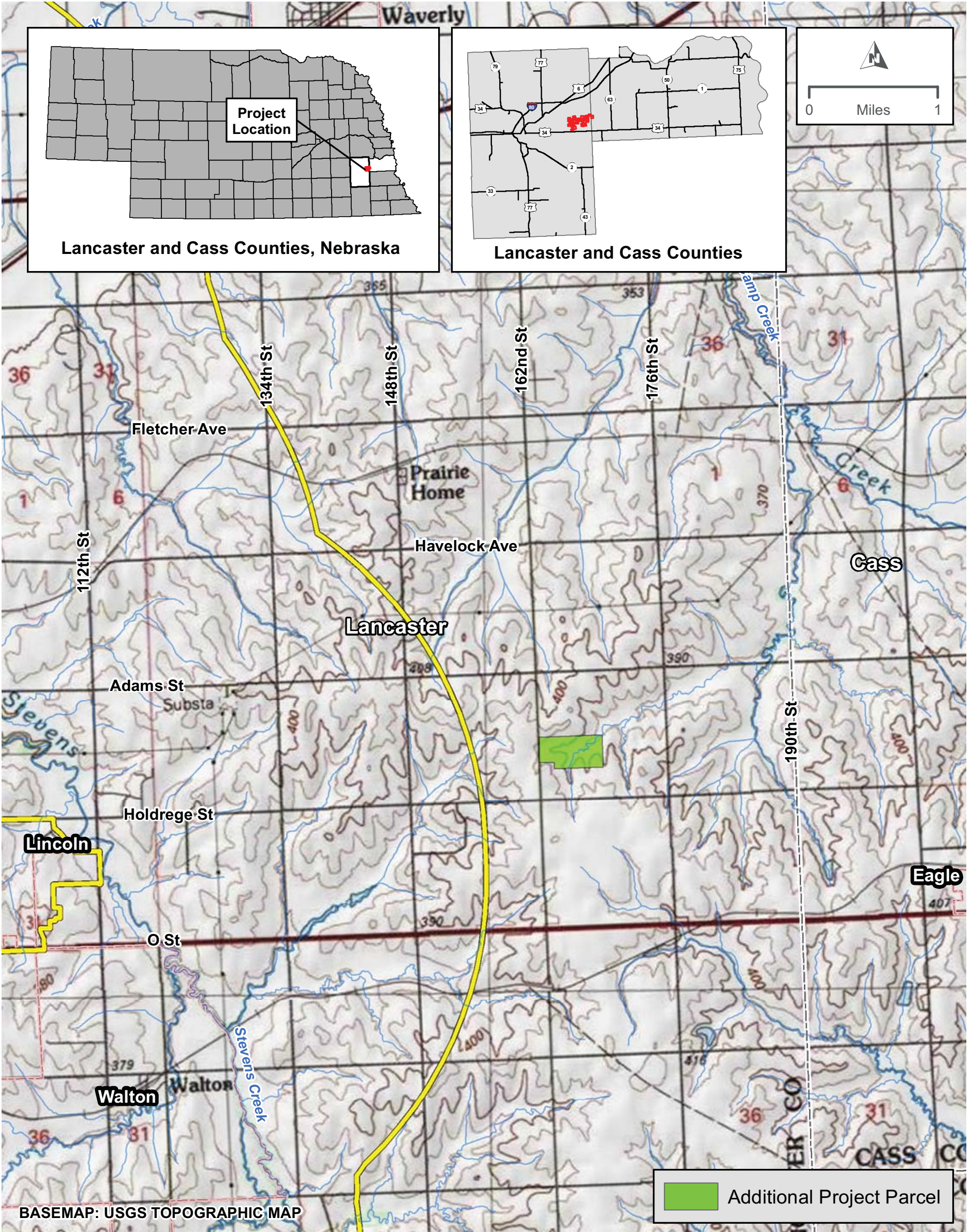
On behalf of the Salt Creek Solar Addition Project, Ranger Power would like to thank the Lancaster County Planning Commission and the Lancaster County Board of Commissioners for their consideration of this application and bringing responsible development and clean energy to Lancaster County.

# Appendix A: Site Plan



**APPENDIX A.1 - LANCASTER COUNTY PROJECT OVERVIEW**  
**SALT CREEK SOLAR ADDITION**





BASEMAP: USGS TOPOGRAPHIC MAP

Additional Project Parcel

APPENDIX A.3 - PROJECT NEIGHBORS: PARTICIPATING LANDOWNERS  
SALT CREEK SOLAR ADDITION



# Appendix B: Letters of Support

Dear Commissioners,

I'm writing as a business owner and resident of Lincoln. I support the Salt Creek Solar Project being proposed in East Lincoln. The Salt Creek Solar Project will promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers. I urge you to approve the Salt Creek Solar Project to bring clean, renewable energy to Lancaster County, and the City of Lincoln. This is an important step toward dealing with climate change, a serious issue in front of us that demands attention and action. Thank you for your consideration.

Drew Ulmer

[drew.ulmer@gmail.com](mailto:drew.ulmer@gmail.com)

Lincoln, NE

Dear Commissioners,

I'm writing in support of the Salt Creek Solar Project being proposed in East Lincoln. It is important for the Lincoln community to make significant steps at reducing our greenhouse gas emissions, protecting ourselves from climate change impacts (one of which may be energy availability), and making the transition to a clean energy economy. I hope you will support this project. Thank you.

Kim Morrow

[kim@verdisgroup.com](mailto:kim@verdisgroup.com)

Lincoln, NE

Dear Commissioners,

I'm writing in support of the Salt Creek Solar Project being proposed in East Lincoln. The Salt Creek Solar Project will promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers. I urge you to approve the Salt Creek Solar Project to bring clean, renewable energy to Lancaster County, and the City of Lincoln. Thank you for your consideration.

Sen. Mark Kolterman

[mkolterman@windstream.net](mailto:mkolterman@windstream.net)

Seward, NE

David Svik

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Lincoln, NE

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Natalie Turcios	

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Barb Ramsey	
Janice Wright	
Dianne Keefover-Pinkerton	
Anita Johnson	
Rae Catlin	
Dixie Ruthann	
Janine Cople	
Kelly Bartzatt	
Walter Dondlinger	
Olivia Harrison	
Rebecca Gregory Dawson	
Heather Klein	
Chris Duncan	
Neal Mattox	
Linda Bryant	
Cheryl Moshiri	
Jessica Conrad	
Mary Rogge	
John Jorgensen	
Tony Curtis	
Connie B. Parrish	
David Queen	
Chey Vazquez	
Chris Krivda	
Marina Fabrikant	
Karen Studier-Billings	
Stephany Madsen Martinez	
Patricia Owen	



## Community Supporters

“Lincoln has a historic opportunity to become a regional leader in solar power and as a result, continue attracting world-class businesses and workers to our city. This proposed solar project will increase household earnings through the creation of hundreds of jobs during construction and millions in construction dollars being spent in Lancaster County. The project will also generate significant tax revenue that will help fund local schools, public safety and other Lincoln and Lancaster County services and infrastructure.”

**Pat Haverty, Vice President**

Lincoln Partnership for Economic Development

“Solar energy development can provide landowners with a new source of value added income that also provides good construction jobs, uses no water, and emits no carbon. For landowners, renewable energy is an environmentally responsible way to gain additional value added income from the natural resources we already own.”

**John Hansen, President**

Nebraska Farmers Union

“I’m writing in support of the Salt Creek Solar Project being proposed in East Lincoln. The Salt Creek Solar Project will promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers. Thank you for your consideration.”

**Mark Kolterman, Nebraska State Senator**

District 24, Seward

“I’m writing in support of the Salt Creek Solar Project being proposed in East Lincoln. The Salt Creek Solar Project will promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers. Thank you for your consideration.”

**Matthew Schulte, former Lincoln Public School Board member**

“I am writing in support of the Salt Creek Solar Project, a utility scale solar farm that has been approved unanimously by the Lincoln/Lancaster County Planning Commission and the Lincoln City Council. The project is being developed by Ranger Power and will be located just east of Lincoln, Nebraska. Nebraska has a great solar resource, and this \$230 million project will help our region play a bigger role in advanced clean energy generation. It will also promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers.”

**Kim Morrow, Verdis Group, Lincoln**

# Nebraska State Legislature

SENATOR ADAM MORFELD

District 46  
State Capitol  
PO Box 94604  
Lincoln, Nebraska 68509-4604  
(402) 471-2720  
amorfeld@leg.ne.gov



## COMMITTEES

Vice Chairperson - Committee on Committees  
Education  
Judiciary  
Education Commission of the States

January 27, 2020

To Whom It May Concern:  
Subject: Salt Creek Solar Project

I am writing in support of the **Salt Creek Solar Project**, a utility scale solar farm that has been approved unanimously by the Lincoln/Lancaster County Planning Commission and the Lincoln City Council. The project is being developed by Ranger Power and will be located just east of Lincoln, Nebraska.

Nebraska has a great solar resource, and this \$230 million project will help our region play a bigger role in advanced clean energy generation. It will also promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers.

The location of the project near existing infrastructure owned by Lincoln Electric System (LES) and additional connectivity opportunities with Omaha Public Power District (OPPD) and Nebraska Public Power District (NPPD), make this project the most significant currently permitted in Nebraska.

The landowners who are participating in the Salt Creek Solar project will benefit from a new and steady source of income that will complement their farming revenues. The project will also generate significant tax revenue that will help fund local schools, public safety like police and fire, as well as other Lincoln and Lancaster County services and infrastructure.

I appreciate Ranger Power's continued commitment to share updates and communication with Lincoln and Lancaster County landowners, neighbors, local residents, community leaders and other public officials as the project moves forward.

Sincerely,

A handwritten signature in black ink, appearing to read 'AM', written over the word 'Sincerely'.

Adam Morfeld  
District 46



June 21, 2019

Dear Honorable Planning Commissioners:

I am writing in support of the **Salt Creek Solar Project**, a utility scale solar farm proposed by Ranger Power within the city limits of Lincoln.

This \$230 million project will promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers.

The landowners who are participating in the Salt Creek Solar project will benefit from a new and steady source of income that will complement their farming revenues. The project will also generate significant tax revenue that will help fund local schools, public safety like police and fire, as well as other Lincoln and Lancaster County services and infrastructure.

Nebraska has a great solar resource, and this project will help our region play a bigger role in advanced clean energy generation.

Ranger Power has an extensive track record developing successful solar projects. They are well known for utilizing a community-first approach by engaging residents through face-to-face neighborhood outreach, community meetings, and forums. Ranger Power is working closely with Lincoln and Lancaster County landowners, neighbors and local residents, regularly meeting with stakeholders to hear their thoughts and answer questions.

I urge the Planning Commission to support the Salt Creek Solar Project to bring clean, renewable energy to Lancaster County, and the City of Lincoln. Please feel free to contact me with any concerns or questions.

Sincerely,

A handwritten signature in purple ink that reads "Pat Haverty". The signature is cursive and stylized.

Pat Haverty  
Vice President  
Lincoln Partnership for Economic Development

# Nebraska State Legislature

**SENATOR ANNA WISHART**

District 27  
911 E Street  
Lincoln, Nebraska 68508

Legislative Address:  
State Capitol  
PO Box 94604  
Lincoln, Nebraska 68509-4604  
(402) 471-2632  
awishart@leg.ne.gov



## COMMITTEES

Vice Chairperson - State-Tribal Relations  
Appropriations

Dear Honorable Planning Commissioners:

It is with utmost enthusiasm that I write this letter in support of Ranger Power's Salt Creek Solar Project. As an elected official that prioritizes initiatives which bolster the economic vitality of our state, I am excited at the prospect of Ranger Power's proposed utility-scale solar installation program expanding to east Lincoln, Lancaster County.

Quite notably, this large-scale project will not only create construction jobs, but also long-term maintenance and operations careers – this influx of workers will in return enhance consumer demand for our local goods and services, thus creating the potential for expanded enterprise opportunities for Lancaster County's business community. As a result of its firm placement within Lancaster County, Ranger Power's Salt Creek Solar project will also provide decades of steady tax revenues for Lincoln/Lancaster County and other taxing bodies. It is worth mentioning that the Salt Creek Solar Project would bring significant benefit to Lancaster County's landowners as well, as those who participate in said project will accrue a new and steady source of income that will complement their farming revenues – at a time when Lancaster County's farming community has been hit hard with many conditions outside of their control, I am particularly pleased see potential relief in this form.

As renewable energy initiatives continually restructure the global marketplace toward sustainability, efficiency, and cost-effectiveness, I believe that Nebraska must take part in this movement and play a bigger role in advanced energy generation. Ranger Power's operations should be welcomed in our state for this reason, as the firm has an extensive track record in developing successful solar projects; all the while, Ranger Power is consistently known for taking a respectful and transparent approach in working with local communities and responding to their unique questions and concerns – Ranger Power's work on the Salt Creek Project thus far is a testament to their sterling reputation.

For these reasons, I support the Salt Creek Solar Project. Please feel free to contact me with any concerns or questions that you may have.

Sincerely,

A handwritten signature in black ink that reads "Anna Wishart". The signature is written in a cursive style with a large initial 'A'.

State Senator Anna Wishart  
District 27



January 6, 2020

To Whom It May Concern:

Subject: Salt Creek Solar Project

I am writing in support of the **Salt Creek Solar Project**, a utility scale solar farm that has been approved unanimously by the Lincoln/Lancaster County Planning Commission and the Lincoln City Council. The project is being developed by Ranger Power and will be located just east of Lincoln, Nebraska.

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Ranger Power has an extensive track record of developing successful solar projects. They are well known for utilizing a community-first approach by engaging residents through face-to-face neighborhood outreach, community meetings, and forums.

We appreciate Ranger Power's continued commitment to share updates and communication with Lincoln and Lancaster County landowners, neighbors, local residents, community leaders and other public officials as the project moves forward.

Sincerely,

A handwritten signature in purple ink that reads "Pat Haverty". The signature is written in a cursive, flowing style.

Pat Haverty  
Vice President  
Lincoln Partnership for Economic Development



# CITY COUNCIL OF LINCOLN NEBRASKA

555 South 10th Street • Lincoln, NE 68508 • 402-441-7515

FAX: 402-441-6533 • E-MAIL: [council@ci.lincoln.ne.us](mailto:council@ci.lincoln.ne.us)

January 6, 2020

To Whom It May Concern:  
Subject: Salt Creek Solar Project

We are writing in support of the **Salt Creek Solar Project**, a utility scale solar farm that has been approved unanimously by the Lincoln/Lancaster County Planning Commission and the Lincoln City Council. The project is being developed by Ranger Power and will be located just east of Lincoln, Nebraska.

Nebraska has a great solar resource, and this \$230 million project will help our region play a bigger role in advanced clean energy generation. It will also promote cleaner air and water while boosting local tax revenue, creating hundreds of construction jobs and providing income for local farmers.

The location of the project near existing infrastructure owned by Lincoln Electric System (LES) and additional connectivity opportunities with Omaha Public Power District (OPPD) and Nebraska Public Power District (NPPD), make this project the most significant currently permitted in Nebraska.

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Ranger Power has an extensive track record of developing successful solar projects. They are well known for utilizing a community-first approach by engaging residents through face-to-face neighborhood outreach, community meetings, and forums.

We appreciate Ranger Power's continued commitment to share updates and communication with Lincoln and Lancaster County landowners, neighbors, local residents, community leaders and other public officials as the project moves forward.

Sincerely,

Jane Raybould  
Chair, Lincoln City Council

Richard Meginnis  
Vice-Chair Lincoln City Council

James Michael Bowers  
Lincoln City Council

Bennie Shobe  
Lincoln City Council

Roy Christensen  
Lincoln City Council

Sandra Washington  
Lincoln City Council



## Editorial, 8/31: Solar farm proposal great for Lancaster County

*Journal Star editorial board*

As demand for renewable energy increases and the cost of generating it decreases, the playing field in Nebraska is evolving.

Omaha Public Power District shut down its nuclear plant, the nation's smallest, near Fort Calhoun in October 2016, citing its operating costs. Just a few months later, LES formally ended its agreement to purchase 30% of the power generated by a coal-fired Nebraska Public Power District plant near Hallam.

Meanwhile, more companies than ever pledge to use 100% of their power from renewable sources, as Facebook has done with wind energy at its new Papillion data center, and energy providers increasingly diversify for more environmentally friendly offerings.

Amid this confluence of trends has come a massive, 230-megawatt solar farm proposed for more than 1,000 acres north and east of Lincoln. The plan goes before the Lincoln-Lancaster County Planning Commission on Sept. 4, where New York-based Ranger Power's application for a special-use permit should be met with open arms – and an approval.

A handful of solar operations are scattered across the state, including the community solar panels installed by Lincoln Electric System starting in 2016. But this particular proposal would dwarf the present capacity of all such installations in the state – by a factor of five – and, when fully operational, could power up to 35,000 homes.

Obviously, commitments from Nebraska's public power providers to purchase the electricity generated will be instrumental in fueling the economic viability of this project.

Since the sun shines during times of peak power usage, the added energy produced by a local solar farm would provide a great complement to existing sources – without emitting more carbon. The technology planned for this development would also collect sunlight from both the sky and reflecting off snow in the winter.

Beyond the benefits of solar power, though, this project's approach merits praise, too.

Of the more than 1,000 acres scattered between O Street and Havelock Avenue on which Ranger Power wants to install solar panels, the company did so entirely by working with willing landowners rather than deploying eminent domain. Furthermore, it's seeking no tax abatement, and company officials estimate it will pay some \$800,000 a year in taxes to Lancaster County entities.

Lastly, the company has a decommissioning plan in place in 40 years. Should the land use or need for solar panels in that area change once the contracts are completed, little work is required beyond removing the poles on which the panels are mounted. They're designed to be temporary.

Accordingly, its long-term impact on the environment of Lancaster County is expected to be minimal. Despite the amount of energy this solar farm should produce when up and running in a few years, it could play a significant role in reducing the area's carbon footprint.



*A rendering shows a series of solar panels planned as part of a project east of Lincoln.*

# Appendix C: Decommissioning Plan



# Salt Creek Solar, LLC Decommissioning Plan

*Salt Creek Solar Addition*

*Lancaster County, NE*

**October 5, 2022**

*Prepared for:*  
Salt Creek Solar, LLC  
226 N Morgan Street, #200  
Chicago, IL 60622  
Phone: (847) 707-6019  
Email: Sean@rangerpower.com

*Prepared By:*  
HDR Inc.  
1917 S 67th Street  
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68106-2973



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Appendix A: Decommissioning Cost and Salvage Value Breakdown

# 1 Introduction

Salt Creek Solar, LLC (“Salt Creek Solar”) engaged HDR Engineering, Inc. (HDR) to provide a plan regarding the decommissioning of the planned Salt Creek Solar Addition (“Project”) in Lancaster County, Nebraska, and an estimation of the subsequent net decommissioning cost (i.e., the decommissioning cost less salvage value) as required by Lancaster County Zoning Regulations section 13.051.<sup>1</sup> This decommissioning plan (Plan) for the project located describes the general measures and procedures that should be developed and implemented to decommission the Project and restore the site, and safely dispose of or recycle recovered project materials.

## 1.1 Decommissioning Requirements

The Salt Creek Solar Addition Decommissioning Plan (Plan) outlines a typical program for decommissioning the Project at the end of the project life cycle. This Plan describes the general measures and procedures for Salt Creek Solar to fully decommission the site, including dismantling equipment, recycling, disposing and salvaging project materials (where applicable) and restoring the site. Salt Creek Solar will obtain approval of this Plan and the associated cost estimates from Lancaster County prior to beginning operation of the Project, and will update this Plan and the associated cost estimates on five-year intervals following the commercial operation date of the Facility.

Section 13.051 of the Lancaster County Zoning Regulations require that:

*“Each application shall have a decommissioning plan (removal of equipment/improvements and restoration of lands” that is reviewed and approved by the Planning Department prior to beginning operations. The decommissioning plan shall provide the following:*

- 1. A plan outlining the means, procedure, and costs of removing the Large Solar Facility, including, but not limited to, the solar panels and collectors, electrical wiring/cabbling, fencing, and any related supporting infrastructure to a minimum depth of three (3) feet.*
- 2. At the expense of the permittee, a cost estimate for the decommissioning of the Large Solar Facility and any estimated resale and salvage value shall be prepared by a professional engineer. The permittee shall provide to the Planning Department a revised and updated decommissioning cost estimate every five (5) years from the date of approval to cover the cost of meeting this obligation. The decommissioning cost estimate shall explicitly detail the cost, any estimated resale and salvage values, shall account for inflation, cost and value changes, and advances in decommissioning technologies and approaches.*
- 3. The estimated decommissioning cost, less any resale and salvage value, shall be guaranteed in one of the following forms: (i) surety bond, (ii) cash to be held in escrow by the County Treasurer at a Bank, or (iii) a letter of credit from a financial institution reasonably acceptable to the County which shall be irrevocable unless replaced with cash or other form of security reasonably acceptable to County. The owner of the Large Solar Facility shall provide the decommissioning cost guaranty no later than the end of the fifteenth (15th) year of operation and shall maintain the financial security thereafter for as long as the Large Solar Facility is in existence or upon discontinuance, decommissioning, or abandonment of the Large Solar*

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<sup>1</sup> 13.051 Solar Energy Conversion System, Lancaster County Zoning Regulations, <http://online.encodeplus.com/regslincoln-ne-lcz/doc-viewer.aspx?secid=489#secid-489>

*Facility Such financial security shall be updated every five (5) years to cover the costs associated with the updated decommissioning cost estimates.*

4. *For purposes of this Section, discontinuance, decommissioning, or abandonment shall mean the Large Solar Facility has produced no energy for twelve (12) consecutive months. The owner or operator shall have twelve (12) months to complete decommissioning of the Large Solar Facility. If the owner or operator of the Large Solar Facility fails to remove the installation in accordance with the requirements of this permit or within twelve (12) months following discontinuance, decommissioning, or abandonment, the County may collect the bond or other financial security and the County or a hired third party may enter the property to physically remove the installation.”*

## 1.2 Project Description

The Project is located within Lancaster County, Nebraska, on 78.97 acres of land in the agricultural zoning district within the County. The Project will consist of the self-powered single-axis solar panel system on North-South oriented racking which is supported by steel piles driven into the ground.

Major features of the overall Project are outlined below:

- The Project is an approximately 6.2 MWac solar electricity generation facility;
- Single-axis steel trackers and racks to support the PV panels, allowing for east-west rotation;
- Steel piles to support panels/racks and miscellaneous equipment
- DC electrical combiner boxes and cable management system;
- Underground electrical conduit and cabling collection system (consistent with the Ordinance’s requirements);
- Skids or concrete foundation pads each supporting an inverter, a medium voltage transformer, and associated data collection equipment for metering and monitoring;
- On-site interior and perimeter access roads;
- Interconnection substation and high voltage generation tie line to the LES Wagener Substation (not included in this County specific plan).

## 1.3 Decommissioning Plan Description

This Plan has been developed to outline typical procedures and considerations for decommissioning the Project in accordance with Section 13.051 of the Lancaster County Zoning Regulations. Decommissioning may occur because the project has fulfilled its intended purpose and term, or because it has been abandoned. The current, estimated costs for eventual removal of project infrastructure (including any estimated resale and salvage values) and site restoration are included in this report.

## 2 Decommissioning Procedures

### 2.1 Overview

The Project area will be restored upon project decommissioning. All site activities described below shall commence after the site has been de-energized and secured, either at the end of the project life or if the project has produced no energy for twelve (12) consecutive months. The Owner will have twelve (12) months to complete decommissioning. Because decommissioning activities are not expected to occur for many years, and regulatory requirements may change, any applicable permitting or regulatory requirements would be reviewed with appropriate agencies prior to decommissioning activities to ensure compliance.

### 2.2 General Environmental Protections

During decommissioning activities, general environmental protection measures and all applicable site safety procedures would be implemented as required. Many activities during decommissioning would be comparable to the construction phase, including the use of heavy equipment on site, preparing staging areas, and restoring disturbed areas around all project infrastructure. The project decommissioning activities shall meet all environmental, stormwater, erosion control and permitting requirements applicable regulations.

### 2.3 Pre-decommissioning Activities

Prior to engaging in decommissioning activities, Salt Creek Solar will update this decommissioning plan in accordance with appropriate requirements at the time of decommissioning. Requirements will depend on project location and specific design. Decommissioning and restoration activities will be performed in accordance with all relevant statutes in place at the time of decommissioning and in accordance with the Project's other environmental permits. At the end of the Project's useful life, it will first be de-energized and isolated from all external electrical lines prior to initiating dismantling or ground-disturbing decommissioning work.

### 2.4 Decommissioning and Restoration Activities

The major components of the Project are PV modules, steel tracker system and support piles, electrical cabling, and transformer and inverter skids/pad. Electrical equipment (except when left in place at a depth of three feet below grade as noted herein), will be removed from the project property upon decommissioning.

#### **PV Module and Tracking System Removal and Recycling**

All modules will be disconnected, removed from the trackers, packaged, and transported to a designated location for resale, recycling, or disposal. Any disposal or recycling will be done in accordance with applicable laws and requirements. The connecting cables and the combiner boxes will be de-energized, disconnected, and removed. The steel racking system supporting the PV modules will be unbolted and disassembled by laborers using standard hand tools, possibly assisted by a small portable crane. All steel support structures will be completely removed by mechanical equipment and transported off site for salvage or reuse. Any demolition debris that is not salvageable will be transported to an approved disposal area. Other salvageable equipment and/or material will be

removed from the site for resale, scrap value or disposal. The modules, tracking systems and select equipment will be supported via driven steel piles. All piles shall be removed and salvaged.

### **Electrical Equipment Removal**

All decommissioning of electrical devices, equipment, and wiring/cabling will be in accordance with applicable law. Any electrical decommissioning will include obtaining required permits, and following applicable safety procedures before de-energizing, isolating, and disconnecting electrical devices, equipment, and cabling. The decommissioning contractor (Contractor) is responsible for complying with all applicable site safety and procedures. All electrical equipment will be removed from the Project property upon decommissioning. The equipment will be disconnected and transported off site using a sequence generally as follows:

- De-energize inverters, transformers, and other energized equipment and disconnect from the project substation by means of irreversible isolation
- De-energize each DC collection circuit by means of irreversible isolation
- Disconnect DC and AC collection circuits
- Dismantle and removal of inverters, transformers, and combiner boxes
- Remove and recover aboveground cables. Underground cables will be removed and recovered to 3 foot below grade.

Concrete inverter foundations and support pads, if required, will be broken up by mechanical equipment (backhoe-hydraulic hammer/shovel, jackhammer), loaded on to dump trucks and removed from the site. Smaller pre-cast concrete support pads, if required, will be removed intact by cranes, and loaded onto trucks for reuse, or will be broken up and hauled away by dump trucks. Prior to removal of the inverter transformers, any oil will be pumped out into a separate industry approved disposal container and sealed to prevent any spillage during storage and/or transportation. Salvaged oil from transformers will be transported to the nearest oil recycling or disposal center. Equipment and material are expected to be salvaged for resale or scrap value depending on the market conditions.

### **Road Rehabilitation and Removal**

The site roads will consist of exterior perimeter roads (including access points) or interior roads depending on their location within the site. At the time of decommissioning, it will be necessary to coordinate with property owners to determine if the main access and perimeter roads should remain. If any of the interior roads serve no future purpose, they will be decommissioned and restored to preconstruction conditions. The decommissioning will involve the removal of the aggregate and filling the remaining voids with on-site surface materials by grading. Where on-site surface materials are not sufficiently available for filling the remaining voids, suitable earthen fill will be provided from an off-site source. Removed materials will be taken to an appropriate recycling area (possibly on site) where the gravel or aggregate materials can be processed for salvage value or future use. Remaining ground surfaces will be rough graded, if necessary, to merge with the surrounding elevations and returned to near preconstruction conditions by means of grading and discing, using a tractor and disc attachment to restore the soil structure and to aerate the soil.

Additionally, if any of the existing roads (previous to project development) are damaged during decommissioning, they shall be repaired back to the same condition they were previous to decommissioning consistent with applicable law and regulation, and the Road Use and Maintenance Agreement between Salt Creek Solar and Lancaster County.

### **Site Restoration**

Following decommissioning, the Project shall be stabilized to prevent adverse environmental effects. The site shall be restored to a clean, safe, and environmentally stable condition substantially the same physical condition as existed prior to the development of the Project. Site restoration will commence once all above ground and below ground structures and materials have been removed and disposed of appropriately. The site is to be restored to preconstruction conditions as directed by applicable law or regulations at the time of decommissioning as appropriate. Sites shall be re-seeded with native vegetation if required and coordinated with property owners.

### **Fences and Gates**

The perimeter fences will be dismantled, removed, and recycled or disposed of offsite only after all other ground-disturbing decommissioning and site restoration work has been completed. The fencing protecting the perimeter of the site will consist of steel wire mesh game fence on wooden posts. Posts will extend to a depth below the frost level, several feet below grade, and will be directly embedded. Most line posts will be direct embedded and shall therefore be removed. The Project will be accessed through gates located at multiple permanent access points. It is anticipated that the fence, gates, wire, and hardware will be removed and recycled at decommissioning.

## **2.5 Waste Management Procedures**

During decommissioning, debris and waste generated will be recycled to the extent feasible and as required applicable regulations. A waste management plan coordinator shall be designated by the project operator to facilitate recycling of all construction waste through coordination with licensed contractors, local waste haulers, and/or other facilities that recycle construction and demolition wastes. The on-site recycling coordinator shall also be responsible for ensuring that wastes requiring special disposal (e.g., PV panels) are handled according to regulations that are in effect at the time of disposal. Although hazardous waste is not anticipated on the site, any hazardous waste would be removed and disposed of in accordance with applicable regulations. The name and phone number of the coordinator shall be provided to the local waste management department prior to issuance of building permits.

## **2.6 Emergency Response and Communications Plans**

During decommissioning, coordination with local authorities, the public, and other stakeholders will be required to provide information about the ongoing activities. Besides regular direct/indirect communication, signs will be posted at the Project facility to inform the local public. Contact information will be made available for those seeking more information about the decommissioning activities and/or for reporting emergencies and complaints. All inquiries will be directed to the project representative.

In the event of an emergency, the Owner will mobilize its resources to the site to respond to the event. Personnel involved in decommissioning will be trained in the emergency response and communications procedures. Emergency response procedures will be prepared prior to decommissioning.

## **3 Material and Salvage Plan**

This section identifies major material and equipment quantities on the Project along with the associated estimated decommissioning costs and salvage values. Any bids from decommissioning

contractors will be responsible for verification of quantities (per record drawings), construction costs and salvage rates.

Salvage values are derived from the makeup of the materials of the tracking system, piles, inverters, transformers, and power cabling material to be removed and the corresponding steel, aluminum, copper, etc. Copper/Aluminum salvage quantity estimates were derived from cable quantities, lengths, and approximate weights.

The following notes and assumptions are applicable regarding salvage recovery rates and values:

- Depending on the component, equipment, and anticipated decommissioning activity, various material recovery percentages ranging from 75% to 100% were assumed. Salvage rate accounts for imperfect removal or intentional partial removal of salvageable material.
- The market regarding the usability and value of recently deployed solar panels in this plan will be re-evaluated by Salt Creek Solar prior to project completion and at the required intervals for updates.
  - Solar panels may currently be disposed of at certain landfills at a cost of approximately \$5 per panel (about \$0.08/lb). Certain portions of the panel such as glass and the aluminum frames can readily be recycled for salvage value which may cover minimal disassembly. Salt Creek Solar has selected this approach for the time being.
  - Solar panel salvage, recycling and reuse is likely to remain dynamic; alternatives should be evaluated for and reassessed periodically. This Plan assumes that the panels will be recycled at the cost described above.
- Unit values of metallic salvage value are gathered from recent United States Geological Survey Mineral Surveys<sup>2</sup> and U.S. scrap material websites<sup>3,4</sup>. Other non-metallic salvage values (such as processed aggregate value) were determined from RSMMeans<sup>5</sup>, a construction cost estimating database. Where available, metallic salvage values were averaged over the last 12 months of available pricing data.
- All excess material that is not salvageable is anticipated to be removed off-site and transported to approved landfill locations.

### 3.1 Material Quantities

Major materials on the Project are listed in the table below based on conceptual design documents and other design information provided by Salt Creek Solar. Quantities listed below may not reflect final installed quantities and should be updated to reflect final designs. Detailed material breakdowns will be listed in Appendix A.

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<sup>2</sup> USGS Mineral Industry Surveys; Iron and Steel Scrap, March 2022; [minerals.usgs.gov/minerals](https://minerals.usgs.gov/minerals)

<sup>3</sup> Scrap Register; United States Scrap Metal prices from March 2022. [www.scrapregister.com](https://www.scrapregister.com); accessed March 2022.

<sup>4</sup> Scrap Monster; Scrap Metal Prices North America. <https://www.scrapmonster.com/north-american-scrap-prices>; accessed March 2022.

<sup>5</sup> RSMMeans Data Online from Gordian®. [www.rsmeans.com/online](https://www.rsmeans.com/online). Accessed March 2022.

Solar Material Quantity Summary				
Item	Description/Details	Unit	Estimated Quantity	Notes/Assumptions
PV Modules/Panels	Longi 545W 72HBD	Each	14,898	71.06 lbs each
Inverters/MV Transformers	Sungrow SG3600UD-MV 125 kVA*	Each	2	39,700 lbs
Tracker Assembly	NEXTracker*	Each	257	2000 lbs each
Tracker Motors	NEXTracker Motors*	Each	257	50 lbs each
Steel Piles	Various 'W' Pile Sizes and Lengths*	Each	2,910	
LV Cable/Wiring	Various Copper and Aluminum wire* (above grade)	LF	17,300	2kV, #10 AWG Copper 2kV, 750 kcmil Aluminum
MV Cable/Wiring	Various Aluminum wire* (below grade)	LF	10,600	35kV, Aluminum
CAB Messenger Wire	1/4" EHS Steel Wire* (above grade)	LF	6,300	Steel
Interior Roads	20 ft width	LF	3,900	Gravel roads
Fencing	7 ft game fence	LF	6,500	Wire Mesh/Wood Posts

\*Assumed for estimating purposes

## 4 Decommissioning Cost Estimates

It is anticipated that there will be costs and credits (salvage) associated with the decommissioning of the Project. These current estimates of costs and credits for the Project presented in this plan are based on design quantities and are to be updated as the Zoning Regulations require. Table 1 shows the summary of the estimated net decommissioning costs for the Project. The majority of costs will be for a contractor to remove and restore the site. Certain project materials are expected to have a salvage value that will offset the cost of decommissioning. Other materials will have costs in association with disposal or recycling. The total decommissioning cost will be assured by Salt Creek Solar via a Surety Bond or similar financial assurance as the Lancaster County Zoning Regulations require.

### Decommissioning Cost

The estimated decommissioning costs are associated with construction costs of a contractor decommissioning the site. This includes but is not limited to activities listed in Section 2 and it includes all items listed in Section 13.051(a)(5) of the Lancaster County Zoning Regulations. Decommissioning costs consisting of labor, equipment, and materials are based on labor activities from RSMeans, a construction cost estimating database. Labor activities most closely associated with each step in the decommissioning process were selected to build up the decommissioning cost estimate. Further breakdown of these costs can be found in Appendix A.

### Net Salvage Value

The estimated Net Salvage Value is associated with the salvage value or recycling/disposal costs of significant project materials and equipment as described in Section 13.051(a)(5) of the Lancaster County Zoning Regulations. Because the PV module salvage value is assumed to be a cost based on the disposal (and partial recycling) fee, the value is shown as a cost to the Project. Salvage values are based on an estimated salvage recovery rate of raw material and current estimated unit value. Further details regarding these values can be found in the Appendix A. It should be noted that salvage values

and recycling markets can fluctuate greatly, and the Owner will update these costs every 5 years per the Regulations.

**Table 1. Summary of Estimated Net Decommissioning Costs in Today's Dollars**

Decommissioning Activity/Cost	Amount (USD)
<b>PV Decommissioning Costs</b>	<b>\$574,000</b>
<b>Net Salvage (Value*) or Cost</b>	<b>(\$179,800)</b>
Solar Array (less PV modules) Salvage Value	(\$259,900)
PV Module Recycle/Disposal Fees Cost	\$80,100
<b>Estimated Net Decommissioning Cost</b>	<b>\$394,200</b>

\*Salvage value is displayed in the table as a negative cost (or a benefit) whereas salvage cost is displayed as a positive cost (or an expense).

**Table 2. Summary of Estimated Net Decommissioning Costs at Year 15**

Decommissioning Activity/Cost	Amount (USD)
<b>PV Decommissioning Costs</b>	<b>\$773,000</b>
<b>Net Salvage (Value*) or Cost</b>	<b>(\$242,000)</b>
Solar Array (less PV modules) Salvage Value	(\$350,000)
PV Module Recycle/Disposal Fees Cost	\$108,000
<b>Estimated Net Decommissioning Cost</b>	<b>\$531,000</b>

\*Salvage value is displayed in the table as a negative cost (or a benefit) whereas salvage cost is displayed as a positive cost (or an expense).

The following assumptions apply to the tabulation of quantities and costs associated with this decommissioning.

- All decommissioning costs are calculated in 2021 dollars and salvage/recycling values per current market rates and adjusted via the inflation rate as noted for the end of Project life cost.
- The labor costs are based on a typical set of regional labor costs for 2021.
- All material quantities are tabulated via available conceptual design information and may not reflect final installed quantities.
- Cost estimates and salvage values are for budgetary purposes only and do not represent guaranteed costs.
- PV panels and other major equipment may have resale value on a secondary market depending on the market and the condition of the equipment. This value depends on such market at the time of decommissioning.
- No biological, environmental monitoring or testing is included or anticipated per current requirements.
- This cost estimate does not include contingency.

## 5 Decommissioning Security

The estimated decommissioning cost, less any resale and salvage value, will be guaranteed in one of the following forms: (i) surety bond, (ii) cash to be held in escrow by the County Treasurer at a Bank, or (iii) a letter of credit from a financial institution reasonably acceptable to the County which shall be irrevocable unless replaced with cash or other form of security reasonably acceptable to County. Salt Creek Solar shall provide the decommissioning cost guaranty to the County no later than the end of the fifteenth (15th) year of operation and shall maintain the financial security thereafter for as long as the Project is in existence or upon discontinuance, decommissioning, or abandonment of the Project. Such financial security shall be updated every five (5) years to cover the costs associated with the updated decommissioning cost estimates.

## 6 Timing of Decommissioning

For purposes of this Plan, discontinuance, decommissioning, or abandonment shall mean the Project has produced no energy for twelve (12) consecutive months. Salt Creek Solar shall have twelve (12) months to complete decommissioning of the Project. If the owner or operator of the Large Solar Facility fails to remove the installation in accordance with the requirements of this permit or within twelve (12) months following discontinuance, decommissioning, or abandonment, the County may collect the bond or other financial security and the County or a hired third party may enter the property to physically remove the Project.

\* \* \*

This plan and cost estimate are an accurate representation of the estimated decommissioning costs (or salvage value) at this time, and they were prepared in accordance with industry standards of care for engineering evaluations of this type and contains no intentional false statements or misrepresentations. The costs presented in this report are estimated based on current knowledge and prices quoted or developed from construction estimating guides and pricing references. The estimates are anticipated to be subject to adjustment at the time decommissioning is initiated. This plan and cost estimate was prepared by HDR and Will Kirby, PE, ([will.kirby@hdrinc.com](mailto:will.kirby@hdrinc.com)).

# APPENDIX A: DECOMMISSIONING COST AND SALVAGE VALUE BREAKDOWN



## Decommissioning Cost

### Solar Array Decommissioning Costs

<u>Decommissioning</u>	<u>Estimated Quantity</u>	<u>Unit</u>	<u>Estimated Unit Cost (\$/Unit)</u>	<u>Total Cost (\$)</u>	<u>Remarks / Assumptions</u>
Mobilization / Demobilization / Management	1	project	\$24,705.00	\$25,000	Single mobilization and establishment of necessary services, labor & material. Percent of decommissioning total.
PV Module removal	14,898	module	\$9.19	\$137,000	Dismantle, palletize and load on flatbed truck for disposal/recycling.
Racking/Tracking Assembly Removal	264	ton	\$322.00	\$85,000	Dismantle, load on flatbed truck for disposal or sale; assume removed to average 30 lb sizes
Tracker Motor/Drive Removal	257	each	\$53.06	\$14,000	Disconnect, electrical demolition, remove, incl accessories
Steel Pile Removal	51,526	LF	\$3.07	\$158,000	Remove all and load on flatbed, assume less unit cost due to smaller crew size and smaller pile size/length
Above ground Cable Removal	17,283	LF	\$0.37	\$6,000	Disconnect, remove all above ground DC cabling (total DC cable quantity less DC trenching length)
Underground Cable Removal and Excavating	3,136	BCY	\$7.95	\$25,000	Excavate, remove all cable, and backfill; assume all of UG cable is recovered due to ordinance.
Central Inverter Removal	2	each	\$4,150.05	\$8,000	Disconnect, electrical demolition, remove, load on truck for disposal
Combiner Box Removal	36	each	\$210.94	\$8,000	Disconnect, electrical demolition, remove, load on truck for disposal
Road and Aggregate Removal	3,101	CY	\$8.03	\$25,000	Excavation, 50' haul to dump truck, gravel removed to local storage at 4 mile haul
Fence Removal	6,410	LF	\$3.48	\$22,000	8' height; 10' wood post spacing, includes gate and direct embedded posts
Corner Fence Post Removal	616	each	\$19.39	\$12,000	Selective demolition, chain link fences & gates, fence, posts, steel in concrete
Rough Grade Site (as required by disturbance)	2	acre	\$1,996.30	\$4,000	Return to smooth contours where needed; not all acres will need to be graded.
Site restoration / Seeding	31	acre	\$880.74	\$27,000	Assume seeding only disturbed areas as percentage of developed site; Native seed mix/species and no fertilizer.
Salvaged Material Hauling	1,141	CY	\$15.60	\$18,000	Assume 20 mile haul for all steel, recovered cable, fencing, and electrical equipment are hauled to material handling location for purchase
<b>Total Decommissioning Cost</b>				<b>\$574,000</b>	



**Salvage (Value) / Cost**

**Solar Array Salvage Values**

Salvage Value	Potential Salvage Quantity	Unit	Estimated Unit Value/(Cost) (\$/Unit)	Total Value (\$)	Total Cost (\$)	Remarks
PV Module Recycling / Disposal	1,143,868	lbs	(\$0.07)		(\$80,100)	Due to uncertainty in future recycling and reuse market, assumed disposal cost only with only partial recycling
Central Inverters	74,957	lbs	\$0.26	\$19,500		Assume scrap value in line with electronic scrap
Combiner Boxes	3,600	lbs	\$0.26	\$900		Assume scrap value in line with electronic scrap
Fence and Fence Posts	27	ton	\$394.74	\$2,200		Assume steel scrap value for fence, but minimal for wood posts
Steel Tracker & Inverter support piles	232	ton	\$394.74	\$91,500		Assume steel scrap value; Pile weights and lengths vary - tonnage estimated on full removal
Tracker Motors	12,850	lbs	\$0.23	\$2,900		Assume electric motors scrap value
Tracker Assembly	257	ton	\$394.74	\$101,500		Assume steel scrap value
DC Grounding	392	lbs	\$2.69	\$1,000		Assume copper scrap value; Salvage rate, some damaged or not recovered.
LV Wire and Cabling, copper	695	lbs	\$2.69	\$1,800		Copper DC feeder Cable.
LV Wire and Cabling, aluminum	3,333	lbs	\$0.55	\$1,700		Aluminum DC feeder Cable.
MV Wire and Cabling, copper	4,954	lbs	\$2.69	\$12,700		Copper AC feeder Cable. Assume some damaged or not recovered.
MV Wire and Cabling, aluminum	6,901	lbs	\$0.55	\$3,600		Aluminum AC feeder Cable. Assume some damaged or not recovered.
Aggregate Recovery	3,101	CY	\$13.17	\$20,400		Aggregate, crushed bank gravel, per C.Y., includes material only (assume partial value; 50% of new gravel)
Fiber Optic Cable Recovery	87	lbs	\$0.00	\$0		Includes PV array and Tracker communications cabling

**Total Salvage (less PV Module)**

**\$259,900**

**Total PV Module Fee (Cost)**

**(\$80,100)**



REVISED REPORT

LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT

FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

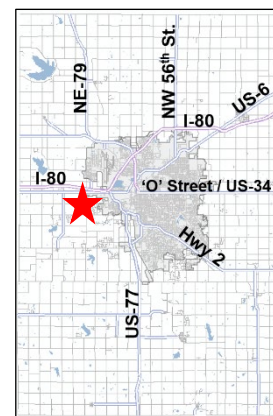
APPLICATION NUMBER Special Permit #21037	FINAL ACTION? Yes	DEVELOPER/OWNER Bob Benes
PLANNING COMMISSION HEARING DATE <del>August 24, 2022</del> <u>November 16, 2022</u>	RELATED APPLICATIONS None	PROPERTY ADDRESS/LOCATION SW 70 <sup>th</sup> and West Van Dorn St.

**RECOMMENDATION: CONDITIONAL APPROVAL**

**BRIEF SUMMARY OF REQUEST**

This staff report has been revised from the original of August 24, 2002. The original staff report was attached to the Planning Commission agenda of August 24, 2022. The applicant requested the special permit be placed on pending while working out details of the site plan. Text no longer relevant has been crossed out and new text is underlined.

This is a request for a Community Unit Plan with build through to develop ~~40~~ 12 dwelling units on approximately 154 acres with associated waivers. All lots are approximately one acre in size. Build through shows how ~~lots and~~ the outlot can be developed in the future ~~into smaller lots.~~ The lots will have individual ~~wastewater systems and wells.~~ A community sewer system is proposed. ~~All the lots are 3 acres.~~ The streets will be public streets.



**JUSTIFICATION FOR RECOMMENDATION**

The proposal meets the intent of a rural cluster subdivision under the AG zoning. The preservation of open space and clustering of lots meet the goals of development in the agricultural area of the County.

**APPLICATION CONTACT:**

Bob Benes, 402-423-6811 or [bob@aspbuildersinc.com](mailto:bob@aspbuildersinc.com)

**STAFF CONTACT**

Tom Cajka, (402) 441-5662 or [tcajka@lincoln.ne.gov](mailto:tcajka@lincoln.ne.gov)

**COMPATIBILITY WITH THE COMPREHENSIVE PLAN**

The special permit for a Community Unit Plan is in conformance with the 2050 Comprehensive Plan. The clustering of lots to preserve open space and provide land for future urban development is a goal of the Comprehensive Plan.

**WAIVERS**

1. Section 27.65.075 (b)(3) to show easement locations for future utilities and stormwater drainage for the Acreage Development Component. (Recommend Approval)
2. Section 27.65.075 C to provide a master plan for an urban framework for future development of the Urban Reserve Component that includes stormwater plan, infrastructure lines, easements, and street profile. (Recommend Approval)
3. Section 26.23.130 of Land Subdivision for Block length to exceed 1,320 feet. (Recommend Approval)
4. Section 26.23.125 of Land Subdivision for a pedestrian way. (Recommend Approval)

- 5. Stormwater Detention (Recommend Approval)
- 6. Right-of-Way on W. Van Dorn at 50 feet instead of 60 feet (Recommend Approval)

**KEY QUOTES FROM THE 2050 COMPREHENSIVE PLAN**

**Introduction Section:** Growth Framework

Figure GF.b: 2050 - This site is shown as future Agricultural on the 2050 Future Land Use Plan.

Figure GF.c” 2050 - This site is in Tier III.

Tier III provides an approximately 129.6 square mile area for Lincoln’s longer term growth potential, beyond 50 years.

**Fundamentals of Growth in Lancaster County**

**The Rural Environment**

Focus on Agriculture. Rural areas should be preserved for agriculture, a limited supply of low density residential, and other compatible land uses. Acknowledge the fundamental “right to farm” in agriculture districts.

**The Community in 2050**

The following assumptions provide the framework for growth in the 2050 plan.

Lancaster County is projected to add approximately 53,000 households by 2050, with 48,000 of those new households in Lincoln (roughly 1,600 new households per year).

**Goals Section**

G1: Safe, Affordable, and Accessible Housing. Lincoln and Lancaster County will support the development of safe, affordable, and accessible quality housing that meets the diverse needs of the community. PlanForward understands the ongoing need for affordable housing and supports development of 5,000 affordable units by the year 2030.

G11: Rural Environment

Demand remains for additional acreage development in rural areas. The Future Land Use Plan currently includes area for about 23 years of additional acreage development in rural areas. Acreages must be located in appropriate locations in order to reserve land resources for efficient future urban development, agriculture, and the natural environment, while preserving the rural quality of life for existing and future residents.

**Elements Section**

E1: Complete Neighborhoods and Housing-Rural Housing. New acreage development is not encouraged in any of the Growth Tiers except for areas already platted, zoned, or designated for low density residential development. All proposals for acreages, whether designated on the future land use map for low density residential or not, should be evaluated based on factors such as paved roads, adequate water quality and quantity, soil conditions for on-site wastewater management, availability of emergency services, agricultural productivity, land parcelization, the pattern of existing acreages, and plans for future urban development. Applications for acreage designation on the future land use map or rezoning to AGR, if planned for on-site wells, should be accompanied by information on water quality and quantity.

**Policies Section**

P4: Rural Housing. Allow for acreage development in appropriate areas of Lancaster County while preserving land resources for efficient future urban development, continued agricultural uses, and natural open spaces.

## Action Steps

Support acreage development within areas with development approvals, on areas designated as low-density residential in the County and on areas designated as low-density residential in the village and smaller city

## ANALYSIS

1. This is a request for a special permit for a Community Unit Plan with Build-Through (BTA) for ~~40~~ 12 lots on approximately 154 acres. The site is located at SW 70<sup>th</sup> St. and West Van Dorn St. The lots are proposed in the northwest portion of the lot.
2. ~~Build-Through requires the applicant to show how the acreage lots can be converted into smaller urban lots after annexation by the City. The site plan is required to show building envelopes for the acreage lots. A house must be placed within one of the building envelopes. Build-through is not required on lots of approximately one acre in size.~~ The site plan also has an "urban reserve" area. The urban reserve component can be further subdivided at such time as the property is annexed and can be served by the full range of City services.  
~~The building envelopes show the potential future lots. These building envelopes need to provide for satisfactory and desirable building sites. Some of the building envelopes shown do not meet this requirement.~~
3. This area is shown in Tier III in the 2050 Comprehensive Plan. Tier III is for Lincoln's longer term growth potential, beyond 44 years. Little active planning of utilities or service delivery is likely to occur in the near term in Tier III.
4. Each lot will have its own well. The applicant submitted well information on 14 existing wells in the immediate area and one new test well drilled on site. Seven of the wells are in Ridge Park development to the west and 7 in West Van Dorn Heights development to the north. The test well has an estimated capacity of 50 gallons per minute. Lincoln-Lancaster County Health Department (LLCHD) has reviewed the well information submitted by the applicant. Their conclusion is that it appears that there is adequate quantity of groundwater for this development. With treatment technologies available today, water quality should not be an issue.
5. Density Calculation:  
 $154.64 \text{ acres} \times 0.055 = 8.50 \text{ dwelling units}$   
With the 20% density bonus for open space and an additional 20% bonus for a community waste-water system the density is  $8.5 \times 1.2 = 10.2 \times 1.2 = 12.24$  dwelling units.  
Open space required:  $154.64 \text{ acres} \times 75\% = 115.987 \text{ acres}$  required for bonus. There are ~~420.13~~ 138.8 acres shown for open space and future urban development.
6. A waiver to block length is requested. Section 26.23.130 Land Subdivision Regulations states that no block shall be longer than 1,320 feet between cross streets. This is mainly for urban type subdivisions and is not practical for acreage developments with lots 3 acres in size. Larger block lengths are typical in rural acreage developments, but in the Build Thru Acreage subdivisions, provisions need to be made to meet block length in future urbanization.
7. A waiver to Section 26.15.070(c) to show easement locations for future utilities on the Transitional Preliminary Plat is requested. Due to the uncertainty of the placement of a house, often the building envelopes are modified later through administrative amendments. Not showing utility easements will alleviate the need for having to release the easement in the future.
8. The urban reserve area, Outlot A on the site plan, is for future development. The waivers related to the urban reserve area are acceptable as this land is in Tier III and detailed plans would be submitted with a future development once the area can be annexed. A new CUP or preliminary plat would be required prior to any development of the urban reserve area. Although a detailed layout of the urban reserve is not necessary, some thought should be given to a street, lot and block layout. This will help ensure that the future build out of Outlot A will work with the proposed lots.
9. The applicant has requested a waiver to detention. Due to the size of the lots detention is not needed. Lincoln Transportation and Utilities Watershed Management (LTUWSM) supports the waiver for detention.
10. The applicant has requested a waiver to reduce the required right-of-way on W. Van Dorn St from 60 feet to 50 feet from centerline. The development to the west was required to dedicate 50' of right-of-way from centerline of road. A recent final plat, West Van Dorn Ridge Addition, required additional right-of-way so that there is 50' from

centerline. The right-of-way on the north side is 75 feet. With 50' of right-of-way on the south, the overall right-of-way will be 125 feet. The waiver is acceptable.

- 11. The applicant is requesting an alternative to water quality. The applicant is proposing a minimum flood corridor for water quality along the west side of Blocks 1 and 2. The area shown for water quality is not sufficient per LTUWSM. An additional area to the east of Lots 4-5, Block 3 must be analyzed to provide additional area for water quality.
- 12. ~~Each lot will have individual wastewater treatment systems. The proposed lots meet LLCHD requirements for the installation of either a standard septic system if percolation test results are acceptable or onsite wastewater lagoons.~~ The development will be served by a community lagoon for wastewater. The community lagoon must be approved by Nebraska Department of Environment and Energy.

**CONDITIONS OF APPROVAL:** See attached.

**EXISTING LAND USE & ZONING:** AG-Agriculture                      Farm ground

**SURROUNDING LAND USE & ZONING**

North:	AG-Agriculture	Farm ground and acreage development
South:	AG-Agriculture	Farm ground
East:	AG-Agriculture	Farm ground
West:	AGR-Agriculture Residential	Acreage development

**APPROXIMATE LAND AREA:**    154.64 acres, more or less

**LEGAL DESCRIPTION:**    Lot 2 West Van Dorn Ridge Addition located in the NW quarter of Section 1-9-5, Lancaster County, NE.

Prepared by

\_\_\_\_\_  
Tom Cajka, Planner

Date:                      Updated November 2, 2022

Applicant:              Bob Benes  
                               1640 Normandy Court, Suite A  
                               Lincoln, NE 68512  
                               402-423-6811  
                               bob@aspbuildersinc.com

Contact:                Brandon Bartek  
                               Olsson  
                               601 P St. Suite 200  
                               Lincoln, NE 68508  
                               402-474-6311  
                               bbartek@olsson.com

Owner:                    Michelle Benes  
                               1640 Normandy Court, Suite A  
                               Lincoln, NE 68512  
                               402-423-6811  
                               michelle@recne.net

## CONDITIONS OF APPROVAL - SPECIAL PERMIT #21037

Per Section 27.63.320 this approval permits for a Community Unit Plan for 12 dwelling units with associated waivers.

### Site Specific Conditions:

1. Prior conditions 1.1 through 1.16 from the August 24, 2022 staff report have been replaced with the following conditions.

Before a final plat is approved the permittee shall cause to be prepared and submitted to the Planning Department a revised and reproducible final plot plan including 2 copies with all required revisions and documents as listed below:

- 1.1 Add a note addressing who is responsible for paying the cost of removing the existing drive on to W. Van Dorn St.
- 1.2 At the end of each street add a note, "Temporary turn around until street is extended."
- 1.3 Change SW 68<sup>th</sup> St. to a named street.
- 1.4 Delete Note 21.
- 1.5 In Note 7 change "plat" to "plan" and delete "subdivision."
- 1.6 Change all private roadways to public streets.
- 1.7 Remove all setback lines. Add a note that setbacks shall be per AGR District.
- 1.8 Show existing right-of-way width north and south of centerline of W. Van Dorn St.
- 1.9 Show temporary turn around at the end of each street.
- 1.10 Make corrections to the drainage report per Lincoln Transportation and Utilities Watershed Management.
- 1.11 Define "WSE" by the minimum flood corridor.
- 1.12 Provide estimates of the demand for water.
- 1.13 On the grading/drainage plan, on the typical roadway section, add 4 flat bottom ditch to the drawing.
- 1.14 Show a minimum flood corridor on the east side of Lots 4 and 5, Block 3.
- 1.15 Add a note: "At the time of final plat, provide drainage easements for the two drainage structures in W. Van Dorn St. if required by Lancaster County Engineer."

2. Final plat(s) is/are approved by the City.

If any final plat on all or a portion of the approved community unit plan is submitted five (5) years or more after the approval of the community unit plan, the city may require that a new community unit plan be submitted, pursuant to all the provisions of section 26.31.015. A new community unit plan may be required if the subdivision ordinance, the design standards, or the required improvements have been amended by the city; and as a result, the community unit plan as originally approved does not comply with the amended rules and regulations.

No final plat shall be approved until the Permittee, as subdivider, enters into an agreement with the City whereby Permittee agrees:

to complete the street paving of public streets, **and temporary turnarounds and barricades located at the temporary dead-end of the streets** shown on the final plat within two (2) years following the approval of the final plat.

to complete the installation of the street name signs within two (2) years following the approval of the final plat.

to complete the installation of the permanent markers prior to construction on or conveyance of any lot in the plat.

to complete any other public or private improvement or facility required by Chapter 26.23 (Development Standards) of the Land Subdivision Ordinance in a timely manner which inadvertently may have been omitted from the above list of required improvements.

to submit to the Director of Public Works a plan showing proposed measures to control sedimentation and erosion and the proposed method to temporarily stabilize all graded land for approval.

to comply with the provisions of the Land Preparation and Grading requirements of the Land Subdivision Ordinance.

to complete the public and private improvements shown on the **Community Unit Plan**.

to keep taxes and special assessments on the outlots from becoming delinquent.

to maintain the outlots on a permanent and continuous basis.

to maintain County roads in good order and condition, including repair and replacement of paving as reasonably necessary, until the County Board specifically accepts the maintenance.

to submit to all potential purchasers of lots, a copy of the ground water report.

to install water mains to serve lots at Permittees own cost and expense within twelve (12) months following annexation of said Lots into the City of Lincoln, unless a water district is created by the City Council for the water mains and water mains are finally ordered constructed within six (6) months following said annexation

to install all other infrastructure for conversion of the Lots and Outlot A at Permittee's own cost and expense when said Lots are replatted as buildable lots unless a special improvement district is created by the City Council for the installation of infrastructure improvements and the improvements are finally ordered constructed. Permittee understands that a special assessment district for the installation of a local public street and for the installation of public ornamental lights may not be finally ordered constructed by the City Council until a petition signed by the owners of record title, representing a majority of feet frontage of property directly abutting upon the street or streets to be improved shall be presented and filed with the City Clerk petitioning therefor. Permittee agrees that in the event a street or streets within the final plat are embraced within a street paving district, and/or ornamental lighting district, Permittee shall, within thirty (30) days following creation of the district, petition the City Council to order the final construction of said street paving and/or ornamental lighting.

in the event any infrastructure improvements including but not limited to water mains, street paving, sidewalks, street trees, stormwater and ornamental street lights are ordered constructed pursuant to a special assessment district Permittee (1) agrees and consents that the cost thereof shall be assessed and levied together with assessment and equalization costs, against the benefitted properties in West Van Dorn Ridge, waiving all objections to the sufficiency of the petitions therefor, to the proceedings creating said districts, to

the making of the assessments and to the equalization thereof; and (2) agrees to pay to the City of Lincoln said costs as thus assessed and levied against said property.

to and hereby waives, as against the City of Lincoln, any and all damages and any claim or right of action for any and all damages, of every nature, which may accrue to Permittee, or which may result to Permittee's property or interest therein, by reason of said infrastructure improvements or the construction thereof.

not to protest annexation of the property within West Van Dorn Ridge into the City of Lincoln.

that the obligations of Permittee as subdivider under a BTA Subdivision Agreement shall constitute a covenant running with the land and shall be binding on Permittee and Permittees, administrators, successors and assigns.

**Standard Conditions:**

3. The following conditions are applicable to all requests:

- 3.1 Before occupying the dwelling units all development and construction shall substantially comply with the approved plans.
- 3.2 All privately-owned improvements, including landscaping and recreational facilities, shall be permanently maintained by the Permittee or an appropriately established homeowners association approved by the City.
- 3.3 The physical location of all setbacks and yards, buildings, parking and circulation elements, and similar matters be in substantial compliance with the location of said items as shown on the approved site plan.
- 3.4 The terms, conditions, and requirements of this resolution shall run with the land and be binding upon the Permittee, its successors and assigns.
- 3.5 The applicant shall sign and return the letter of acceptance to the City Clerk. This step should be completed within 60 days following the approval of the special permit. The City Clerk shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds, filing fees therefor to be paid in advance by the applicant. Building permits will not be issued unless the letter of acceptance has been filed.

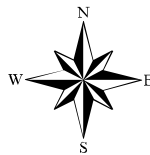


2022 aerial

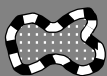


**Special Permit #: SP21037**  
**West Van Dorn Ridge CUP**  
**SW 70th St & W Van Dorn St**

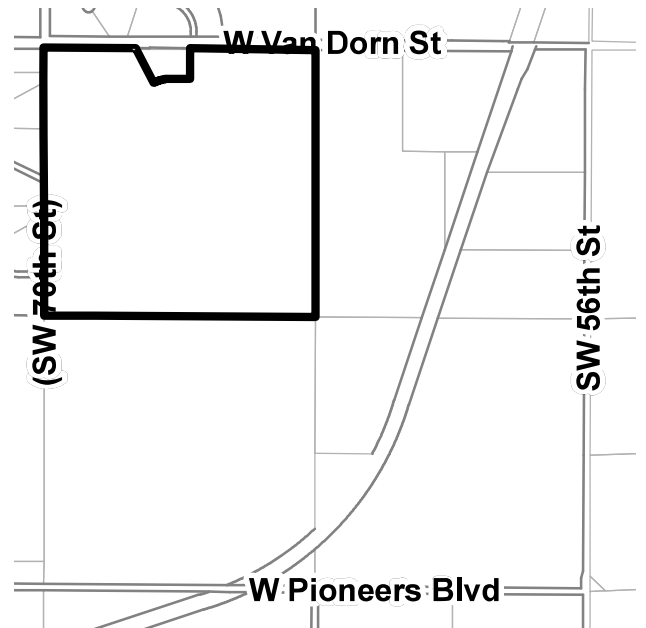
**Zoning:**

- R-1 to R-8 Residential District
- AG Agricultural District
- AGR Agricultural Residential District
- O-1 Office District
- O-2 Suburban Office District
- O-3 Office Park District
- R-T Residential Transition District
- B-1 Local Business District
- B-2 Planned Neighborhood Business District
- B-3 Commercial District
- B-4 Lincoln Center Business District
- B-5 Planned Regional Business District
- H-1 Interstate Commercial District
- H-2 Highway Business District
- H-3 Highway Commercial District
- H-4 General Commercial District
- I-1 Industrial District
- I-2 Industrial Park District
- I-3 Employment Center District
- P Public Use District

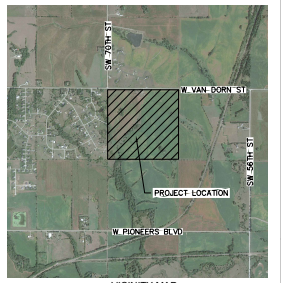


**One Square Mile:**  
**Sec.01 T09N R05E**

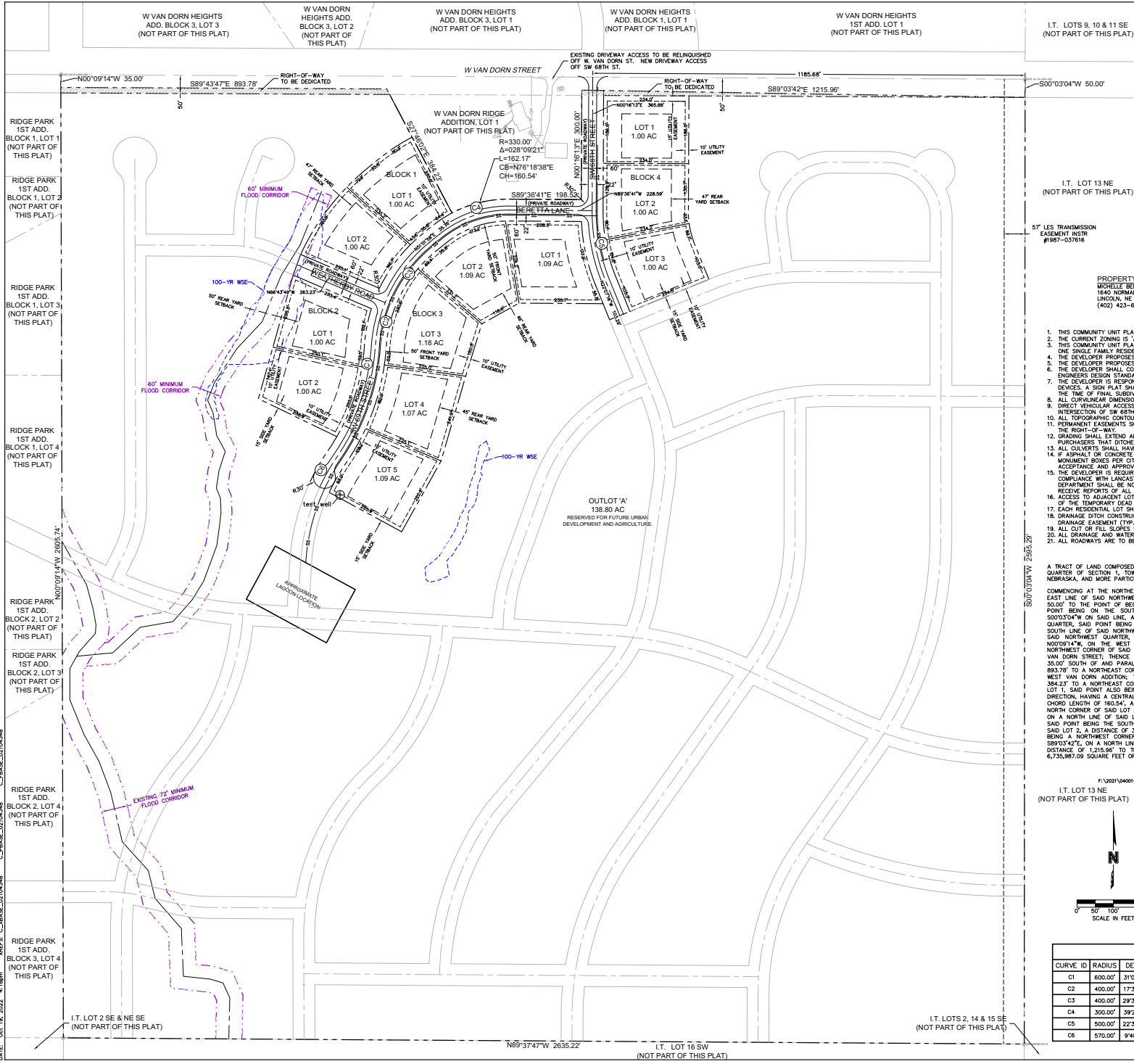
	Area of Application
	Zoning Jurisdiction Lines
	Lancaster County Jurisdiction



**WEST VAN DORN RIDGE  
SITE PLAN**



**olsson**  
601 P Street, Suite 200  
Lincoln, NE 68502  
TEL: 402.438.6311 www.olson.com



**PROPERTY OWNER/DEVELOPER**  
SCOTTIE BENE  
1640 NORMANDY COURT, SUITE A  
LINCOLN, NE 68502  
(402) 423-6811

**ENGINEER**  
MARK PALMER, PE  
601 P STREET, SUITE 200  
LINCOLN, NE 68502  
(402) 458-5632

- GENERAL NOTES**
1. THIS COMMUNITY UNIT PLAN CONTAINS 154.64 ACRES MORE OR LESS.
  2. THE CURRENT ZONING IS 'AC'.
  3. THIS COMMUNITY UNIT PLAN PERMITS 12 SINGLE FAMILY LOTS. EACH LOT SHALL CONTAIN MAXIMUM OF ONE SINGLE FAMILY RESIDENCE.
  4. THE DEVELOPER PROPOSES THE USE OF INDIVIDUAL WELLS.
  5. THE DEVELOPER PROPOSES THE USE OF A COMMUNITY WASTE WATER SYSTEM.
  6. THE DEVELOPER SHALL CONTRACT AND SURFACE ALL STREETS TO MEET THE LANCASTER COUNTY ENGINEERS DESIGN STANDARDS.
  7. THE DEVELOPER IS RESPONSIBLE FOR THE PURCHASE AND PLACEMENT OF ALL TRAFFIC CONTROL DEVICES. A SIGN PLAT SHALL BE PROVIDED AND APPROVED BY LANCASTER COUNTY ENGINEERING AT THE TIME OF FINAL SUBDIVISION PLATTING.
  8. ALL CURVILINEAR DIMENSIONS ARE CHORD LENGTHS.
  9. DIRECT VEHICULAR ACCESS TO VAN DORN STREET IS HEREBY RELINQUISHED EXCEPT AT THE INTERSECTION OF SW 68TH STREET.
  10. ALL TOPOGRAPHIC CONTOURS ARE AT NAVD 88 DATUM.
  11. PERMANENT EASEMENTS SHALL BE SHOWN ON FINAL PLATS FOR CULVERT PIPES THAT EXTEND PAST THE RIGHT-OF-WAY.
  12. DRAINAGE SHALL EXTEND AROUND ALL TEMPORARY CUL-DE-SACS. THE DEVELOPER SHALL NOTIFY ALL PURCHASERS THAT DITCHES MAY NOT BE FILLED IN.
  13. ALL CULVERTS SHALL HAVE A FLARED-END SECTION OR CONCRETE HEADWALL ON THE INLET END.
  14. IF ASPHALT OR CONCRETE PAVEMENT IS USED, THE DEVELOPER SHALL INSTALL SURVEY CONTROL MONUMENT BOXES PER CITY OF LINCOLN STANDARDS AT ALL CENTERLINE CONTROL POINTS AFTER ACCEPTANCE AND APPROVAL OF THE PAVEMENT.
  15. THE DEVELOPER IS REQUIRED TO PROVIDE ALL TESTING RELATED TO IMPROVEMENT INSTALLATION IN COMPLIANCE WITH LANCASTER COUNTY DESIGN STANDARDS AND LANCASTER COUNTY ENGINEERING DEPARTMENT SHALL BE NOTIFIED PRIOR TO IMPROVEMENT INSTALLATION FOR INSPECTION AND SHALL RECEIVE REPORTS OF ALL TESTING RESULTS.
  16. ACCESS TO ADJACENT LOTS OUTSIDE SUBDIVISION BOUNDARY SHALL NOT BE PERMITTED FROM THE END OF THE TEMPORARY ROAD END STREETS.
  17. EACH RESIDENTIAL LOT SHALL HAVE NO MORE THAN TWO ACCESSES TO THE ROADWAY.
  18. DRAINAGE DITCH CONSTRUCTION AND MAINTENANCE IS ALLOWED WITHIN THE 10' WIDE UTILITY AND DRAINAGE EASEMENT (TYP.).
  19. ALL DITCH CONSTRUCTION SHALL BE 3:1 OR FLATTER.
  20. ALL DRAINAGE AND WATER QUALITY EASEMENTS SHALL BE FINALIZED AT THE TIME OF FINAL PLAT.
  21. ALL ROADWAYS ARE TO BE PRIVATE AND MAINTAINED BY THE HOA.

**LEGAL DESCRIPTION**

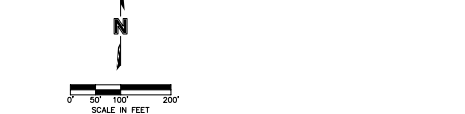
A TRACT OF LAND COMPOSED OF LOT 2, WEST VAN DORN RIDGE ADDITION, LOCATED IN THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 9 NORTH, RANGE 5 EAST OF THE 6TH P.M., LANCASTER COUNTY, NEBRASKA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID THE NORTHWEST QUARTER; THENCE SOUTH, ON THE EAST LINE OF SAID NORTHWEST QUARTER, ON AN ASSUMED BEARING OF 500°03'04"W, A DISTANCE OF 50.00' TO THE POINT OF BEGINNING; SAID POINT BEING THE NORTHEAST CORNER OF SAID LOT 2; SAID POINT BEING ON THE SOUTH RIGHT OF WAY OF WEST VAN DORN STREET; THENCE, CONTINUING S001°04'00"W ON SAID LINE, A DISTANCE OF 2,295.29' TO THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER, SAID POINT BEING THE SOUTHWEST CORNER OF SAID LOT 2; THENCE N89°37'47"W, ON THE SOUTH LINE OF SAID NORTHWEST QUARTER, A DISTANCE OF 2,635.22' TO THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER, SAID POINT BEING THE SOUTHWEST CORNER OF SAID LOT 2; THENCE N07°14'14"W, ON THE WEST LINE OF SAID NORTHWEST QUARTER, A DISTANCE OF 2,600.74' TO THE NORTHEAST CORNER OF SAID LOT 2; SAID POINT BEING THE SOUTH RIGHT OF WAY LINE OF SAID WEST VAN DORN STREET; THENCE S89°43'47"E, ON A SOUTH LINE OF SAID RIGHT OF WAY, SAID LINE BEING 35.00' SOUTH OF AND PARALLEL WITH THE NORTH LINE OF SAID NORTHWEST QUARTER, A DISTANCE OF 893.78' TO A NORTHEAST CORNER OF SAID LOT 2; SAID POINT BEING THE NORTHEAST CORNER OF LOT 1, WEST VAN DORN ADDITION; THENCE S27°40'02"E, ON AN EAST LINE OF SAID LOT 2; A DISTANCE OF 384.23' TO A NORTHEAST CORNER OF SAID LOT 2; SAID POINT BEING THE SOUTHWEST CORNER OF SAID LOT 1; SAID POINT ALSO BEING A POINT OF CURVATURE FOR A NON-TANGENT CURVE IN A CLOCKWISE DIRECTION, HAVING A CENTRAL ANGLE OF 28°09'21", A RADIUS OF 330.00', AN ARC LENGTH OF 162.17', A CHORD LENGTH OF 160.54', A TANGENT LENGTH OF 82.76', AND A CHORD BEARING OF N78°18'38"E TO A NORTH CORNER OF SAID LOT 2; SAID POINT BEING A SOUTH CORNER OF SAID LOT 1; THENCE S89°36'41"E, ON A NORTH LINE OF SAID LOT 2; A DISTANCE OF 198.52' TO A NORTHWEST CORNER OF SAID LOT 2; SAID POINT BEING THE SOUTHWEST CORNER OF SAID LOT 1; THENCE S00°18'18"E, ON A WEST LINE OF SAID LOT 2; A DISTANCE OF 300.00' TO A POINT ON THE SOUTH LINE OF SAID RIGHT OF WAY, SAID POINT BEING A NORTHEAST CORNER OF SAID LOT 2 AND A NORTHEAST CORNER OF SAID LOT 1; THENCE S89°32'42"E, ON A NORTH LINE OF SAID LOT 2; SAID LINE BEING A SOUTH LINE OF SAID RIGHT OF WAY, A DISTANCE OF 1,215.90' TO THE POINT OF BEGINNING; SAID TRACT CONTAINS A CALCULATED AREA OF 6,735,987.09 SQUARE FEET OR 154.64 ACRES, MORE OR LESS.

February 5, 2022  
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**DENSITY CALCULATIONS**

TOTAL AREA	154.64 AC
DWELLING UNITS (0.055 PER ACRE)	8,500 DWELLINGS
CLUSTERING (20% BONUS)	10,206 DWELLINGS
COMMUNITY SEWER (20% BONUS)	12,247 DWELLINGS
TOTAL DWELLING UNITS PERMITTED	12 DWELLINGS



**CURVE TABLE**

CURVE ID	RADIUS	DELTA	LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD BEARING
C1	600.00'	31°03'14"	325.20'	321.23'	166.70'	N19°04'05.03"E
C2	400.00'	17°30'21"	122.21'	121.74'	61.09'	N12°42'04.24"E
C3	400.00'	29°34'43"	206.50'	204.21'	105.60'	N36°14'36.40"E
C4	300.00'	39°21'21"	206.07'	202.04'	107.29'	N7°42'38.40"E
C5	500.00'	22°34'09"	196.95'	195.68'	99.77'	N10°50'11.49"W
C6	570.00'	9°40'50"	96.32'	96.20'	48.27'	N29°41'14.80"E

DATE: 02/15/2022 4:10pm  
USER: mofar  
F:\2021\04001-04500\021-04348\0-Design\Survey\RVV\Final Plat\Documents\Legal DESCRIPTION PL0.docx

**REVISIONS**

NO.	DATE	DESCRIPTION

**SITE PLAN**  
WEST VAN DORN RIDGE  
LINCOLN, NEBRASKA

Checked by:   
Approved by:   
DASG by:   
Printed on:   
Drawing no.:   
Date:

**SHEET**  
1 of 6



October 31, 2022

Tom Cajka  
Lincoln Lancaster Planning Department  
County-City Building  
555 South 10th Street, Suite 213  
Lincoln, NE 68508

Re: West Van Dorn Ridge  
SP21037  
Olsson Project Number: 021-04348

Dear Mr. Cajka

On behalf of the owner, Michelle Benes, we are resubmitting the plans for an AG Community Unit Plan for 12 acreage lots on 154.64 acres. The property located in the southeast corner of SW. 70<sup>th</sup> & West Van Dorn St, or Lot 4 I.T. located in the Northwest Quarter of Section 1, Township 9 North, Range 5 East of the 6<sup>th</sup> PM, Lancaster County.

The CUP creates lots that are about 1 acre in size. Each lot will utilize individual wells and a proposed community sewer lagoon.

A proposed alternative for water quality and waivers to block length, pedestrian easements, and detention are being requested at this time, along with sections 27.65.075b(3) and 27.65.075c. The waiver for section 27.65.075b(3) is for easement locations for future utilities and stormwater drainage, and the waiver for section 27.65.075c is for a master plan providing an urban framework for future development of the Urban Reserve Component of the community unit plan.

We are also requesting that the dedicated ROW for W Van Dorn Street remains 50' to match into the existing properties on the east and west property lines. The City has about 75' of ROW on the opposite side of the section line, so 60' seems unnecessary.

Please let me know if you have any questions or comments.

Sincerely,

A handwritten signature in blue ink that reads "Brandon P. Bartek".

Brandon Bartek