City of West Branch
~A Heritage for Success~

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PLANNING AND ZONING COMMISSION MEETING
Tuesday, September 27, 2011 • 6:30 p.m.
West Branch City Council Chambers, 110 N. Poplar St.
Council Quorum May Be Present

1. Call to Order
2. Roll Call
3. Approve minutes from the May 5, 2011, August 2, 2011, and August 9, 2011 Planning & Zoning Commission Meetings.
4. Discussion of Site Plan Ordinance
5. Approve recommendation to Council for changes to Chapter 136: Sidewalk Regulations./Move to action.
6. Discussion of parking and lighting standards.
7. Old Business
   a. Comprehensive Plan Update
8. New Business
9. Adjourn

These minutes are not approved until the next Commission meeting.

City of West Branch Planning & Zoning Commission Meeting
May 5, 2011
West Branch Fire Station, 105 South 2nd Street

The West Branch Planning & Zoning Commission opened in regular session at 6:30 p.m. Commission members Roger Laughlin (Chair), Al Rozinek, Gary Slach, Dick Stoolman and Trent Hansen were in attendance. Commission members Virgil Gingerich and Mark Thomas were absent. Also in attendance were City Engineer Dave Schechinger, P.E., City Attorney Kevin Olson and City Administrator Matt Muckler.

Approve minutes from the February 17, 2011 Planning and Zoning Commission Meeting.
Motion by Rozinek and second by Stoolman to approve the minutes of the February 17, 2011, Planning & Zoning Commission Meeting. Roll call vote – Ayes: Laughlin, Rozinek, Slach, Stoolman, and Hansen. Gingerich and Thomas absent. Motion carried.

Discuss and approve preliminary plat of KLM Investments, Inc. /Move to action.
Craig and Angie Cochran, 801 W. Orange Street, asked about water run-off into Pedersen Valley. Dave Schechinger reported that the developer will be required to mitigate water run-off.

Motion by Stoolman and second by Rozinek to approve a recommendation to the City Council to approve preliminary plat of KLM Investments, Inc. Roll call vote – Ayes: Stoolman, Rozinek, Slach, Hansen and Laughlin. Gingerich and Thomas absent. Motion carried.

OLD BUSINESS

Site Plan Ordinance Update
City Administrator Matt Muckler reported that the proposed site plan ordinance, parking and lighting standards will be discussed at a future P & Z Commission Meeting after the Council has completed action on the Meadows Subdivision.

Lions Field Update
City Administrator Matt Muckler reported that parking area will be concrete at Lion's Field.

Comprehensive Plan Update
City Administrator Matt Muckler reported that the Council approved moving forward with the Comp Plan Update and that plans are currently being made with the East Central Intergovernmental Association.

NEW BUSINESS:
Commission members discussed progress on the I-80 bridge project.

Motion by Hansen and second by Stoolman to adjourn. Meeting adjourned at 7:43 p.m.

These minutes are not approved until the next Commission meeting.

City of West Branch Planning & Zoning Commission Meeting
August 2, 2011
West Branch City Council Chambers, 110 North Poplar Street

The West Branch Planning & Zoning Commission opened in regular session at 6:00 p.m. Commission members Roger Laughlin (Chair), Al Rozinek, Gary Slach, Dick Stoolman, John Fuller and Lauren Michael were in attendance. Commission member Trent Hansen was absent. Also in attendance were Mayor Don Kessler, Councilman Mark Worrell, City Administrator Matt Muckler, City Engineer Dave Schechinger and Chris Kofoed with KLM Investments, Inc.

Discuss and approve preliminary plat of the Meadows Subdivision Phase II, KLM Investments, Inc.
The Commission discussed Phase II of the Meadows Subdivision and the following potential recommendations to the City Council:

1) The crosswalk across Main Street should be located west of Dawson Drive and east of the High School entrance.
2) Change the subdivider's agreement (in Section 1) to show Orange Street as a 31'street instead of a 29' street.
3) Require a six-foot wide sidewalk located in front of lot 25 west to the westernmost edge of Outlot A.
4) Discussion of a traffic study.
5) Require a mid-block crosswalk on the north end of lot 24 across Dawson Drive that would run in between lots 31 and 32.
6) Require a sidewalk in between lots 31 and 32.
7) Six inch grass height might not be appropriate in section 9 of the subdivider's agreement.

Chris Kofoed was on hand representing KLM Investments, Inc. and mentioned that the language indicating that Outlot A was to be dedicated to the City would be removed from the preliminary plat. Phase II includes seventeen lots and connects to Main Street.

OLD BUISNESS

Site Plan Ordinance Update
Work on the site plan ordinance will resume after the Council has completed deliberations on the Meadows Subdivision Phase II.

Lions Field Update
The Commission requested a concrete surface on the Lion's Field Parking area. Public Works recently completed this work in-house.

NEW BUSINESS:
Comprehensive Plan Update
Work on the comprehensive plan will continue this fall. Public input meetings will take place in October. City staff will develop and administer a community-wide survey in October and November.

Motion by Rozinek and second by Stoolman to adjourn. Meeting adjourned at 7:35 p.m.

Detention Basin Update
by Paul Anderson, MMS
August 2, 2011

The detention basin will be a dry bottom basin with an athletic field incorporated. A low flow channel will be constructed to convey the base flow from the tributary stream and provide detention for small storms without affecting the athletic field. A sediment trap is to be included at the upstream end of the basin to capture sediments transported in the tributary stream. The detention basin is sized to provide storm water detention for up to a 100 year storm event. The volume of runoff stored during a 100 tear event is 11.2 Acre-Feet.

The drainage area tributary to the detention basin includes 63 Acres within the Meadows Subdivision development parcel and 66 Acres offsite. 13 Acres of this offsite area is currently residential development with no detention provided.

The detention basin is planned to reduce the peak flow tributary to Hoover Creek by 55% from the existing pre-development conditions and 67% from the flows generated following full development of the Meadows Subdivision during a 100 year storm event. The NRCS Urban Hydrology for Small Water Sheds (TR-55) methodology is being used for hydrologic analysis.

I am assembling additional information to send to you as requested by Brad Larson.

Attached are descriptive information about bio-swales and soil quality restoration. A wetlands investigation on the site prepared by MMS is also included.

I intend to send a hydrologic report, and a cost estimate for the basin promptly.

CITY OF WEST BRANCH, IOWA/SUBDIVIDER'S AGREEMENT

THE MEADOWS SUBDIVISION, PHASE TWO

This Agreement is made by and between KLM Investments, L.L.C., an Iowa limited liability company, hereinafter referred to as the "Subdivider", and the City of West Branch, Iowa, a Municipal corporation, hereinafter referred to as the "City".

WITNESSETH

SECTION 1. MUNICIPAL IMPROVEMENTS; CONSTRUCTION AND INSTALLATION OF MUNICIPAL IMPROVEMENTS.

In consideration of the city approving the plat and subdivision of real estate known and designated as The Meadows Subdivision, Phase Two, West Branch, Iowa, prior to Subdivider's installation and construction of the required municipal improvements, Subdivider shall make escrow provisions as provided herein. Municipal improvements shall include improvements a 31-foot PCC street known as Orange Street, a 31- foot PCC street known as Dawson Drive (south of Orange Street), and a 29-foot PCC street known as Dawson Drive (north of Orange Street), sanitary sewers, water mains, storm sewers, sump-pump line, street lighting, fire hydrants with appropriate STORZ connections as approved by the Fire Chief and a storm water detention facility as outlined in Paragraph 11 below to serve Part One of this subdivision and additional phases of The Meadows Subdivision. Said municipal improvements shall be constructed and installed in accordance with construction plans and specifications approved by the City Engineer of the City who shall have the right to make or authorize occasional inspections of the work in progress. Said inspections shall not relieve or release the Subdivider from the responsibility to construct the municipal improvements in accordance with the approved plans and specifications.

The sanitary sewer main to be installed by Subdivider on Outlot A shall connect to the existing sanitary sewer line at that certain manhole located to the northwest of Lot 32. The Subdivider is hereby required to remove the abandoned sanitary sewer line that will be located under the proposed storm water retention facility and is required to abandon the remaining sanitary sewer line located on Outlot A in place after placing flowable mortar in said sanitary sewer line.

SECTION 2. SIDEWALKS.

The Subdivider agrees that no later than three (3) years from the date of the City's Resolution approving the Final Plat of The Meadows Subdivision, Part Two, West Branch, Iowa, or upon seventy-five percent (75%) of the development of the lots therein, whichever

occurs first, to install sidewalks abutting each lot which shall be at least four (4) feet wide and constructed according to the plans and specifications as approved by the City Engineer. The escrow provision need not include the sidewalk installation, however, the same shall remain a lien against each lot until accepted and released by the City.

SECTION 3. ESCROW MONIES

The Subdivider shall deposit with the City Clerk in escrow an amount equal to the estimated cost of constructing the municipal improvements plus 10% thereof as determined by the City Engineer and said deposit shall be referred to as "Municipal Improvements Escrow". The escrow deposit shall be in the form of cash, bank check that will be cashed, bond or irrevocable letter of credit, all as approved by the City Attorney.

SECTION 4. USE OF ESCROW MONIES

If, after one year from the date of the City's resolution approving the preliminary plat of the subdivision, the municipal improvements have not been constructed and installed for the subdivision, then City may use and/or make demand upon the municipal improvements escrow to construct and install said municipal improvements. The City shall release any bond or letter of credit or refund to the Subdivider any portions of or any excess escrow monies not used by the City after construction, installation and acceptance of all of the municipal improvements. Any cash or check held in escrow shall be released as needed for payment of the costs of the improvements.

In addition, the City may make use of any of the proceeds of the security provided by Subdivider in order to enforce the erosion control requirements pursuant to Section 170.15(15) of the West Branch Code of Ordinances.

SECTION 5. WAIVER

In the event the Subdivider shall sell or convey or make application for a building permit on any lot or lots in the subdivision without having first constructed and installed all the municipal improvements for the subdivision, then the City shall have the right to proceed therewith as provided in Section 3 above.

SECTION 6. LIEN

The costs of the construction and installation of the municipal improvements shall be a lien and charged against all lots in said subdivision and need not meet the requirements of notice, benefit or value as provided for by the Code of Iowa for assessing said municipal improvements which may exceed the municipal improvements escrow.

SECTION 7. RELEASE

The City agrees that when all municipal improvements have been constructed and installed for the subdivision, to the satisfaction of the City and upon acceptance by resolution, to furnish the Subdivider a good and sufficient Release for filing in the office of the County Recorder so that this Agreement will not constitute a cloud upon the title.

SECTION 8. PUBLIC SERVICES.

Subdivider agrees that public services including, street maintenance, snow plowing, water and sanitary sewer service, will not be provided in said subdivision until the municipal improvements have been constructed, installed and accepted by the City.

SECTION 9. STORM WATER DETENTION OR MANAGEMENT FACILITIES

The Subdivider shall be required to install a storm water detention facility on Outlot A of said subdivision. In constructing said storm water detention facility, the Subdivider shall be required to detain the difference in volume of the five year undeveloped storm and the one hundred year developed storm events on the entire approximate 80 -acre tract owned by Subdivider. In doing so, the Subdivider is required to abandon and remove an existing sanitary sewer main in a manner acceptable to the City Engineer and enter into a Sanitary Sewer Easement Agreement in a form acceptable to the City Attorney. Thereafter, the maintenance of said storm water detention facilities and the entirety of Outlot A shall be the responsibility of Subdivider and the owners of the lots within the subdivision. Said storm water detention facility shall be mowed so that the vegetation in the storm water detention facility is no taller than six inches in height. In addition, the Subdivider shall repair/remove any sand or other siltation in said Storm Water Detention facility so that the facility functions to hold the amount of storm water for which it was designed.

Upon request of the City Engineer, the Subdivider shall provide appropriate data to the City Engineer for review to ensure that the storm water detention facility is capable of providing the design capacity of the facility. The City Engineer, in its sole discretion, may require appropriate measures be performed by the Subdivider if the capacity has been reduced by sand, siltation or any other similar problems.

In the event that the Subdivider, or its assigns, fail to maintain the Storm Water Detention facilities in accordance with the standards set above, then the City has the right to perform said maintenance and invoice Subdivider for said maintenance costs. In the event that the Subdivider does not reimburse the City for its costs within 30 days of the submission of an invoice, the City shall have the right to assess the costs equally to all of the lots of this Subdivision, and any other phases of The Meadows Subdivision. The assessment amount for each lot shall be calculated by dividing the entire costs incurred by

the City, including legal, engineering and administrative costs to perform said required maintenance, and divide that equally among the lots that have been final platted in all phases or parts of The Meadows Subdivision. Subdivider expressly waives all provisions of notice, benefit and value as it pertains to this special assessment.

SECTION 12. PEDESTRIAN STREET CROSSING ON MAIN STREET.

Subdivider shall construct a street crossing on Main Street, which shall include an appropriate crosswalk and traffic signal as approved by the City Engineer and the Manual on Uniform Traffic Control Devices. Subdivider shall work with the West Branch Community School District to connect said crossing to the school property located on the south side of Main Street. The City shall draft an ordinance designating an appropriate school speed zone on Main Street to enhance the safety of the new crossing.

SECTION 13. PARKS/TRAILS.

As required by the comprehensive plan, the Subdivider expressly agrees and acknowledges that future phases of The Meadows subdivisions shall include useable park and open space as required by the comprehensive plan.

SECTION 14. ASSIGNS AND SUCCESSORS

This agreement shall be binding upon the parties, their assigns or successors in interest and it is understood that the City, at its option, may contract for the construction and installation of the municipal improvements as provided above.

Dated this ___ day of _____, 2011.

KLM Investments, LLC:

By:_____
, Manager

City of West Branch:

_____
Don Kessler, Mayor

ATTEST:

_____

Matt Muckler, City Administrator/Clerk

STATE OF IOWA, COUNTY OF CEDAR, ss:

On this _____ day of _____, 2011, before me, the undersigned, a Notary Public in and for the State of Iowa, personally appeared Donald Kessler and Matt Muckler, to me personally known, who, being by me duly sworn, did say that they are the Mayor and City Clerk, respectively, of the City of West Branch, Iowa; a municipal corporation; that the seal affixed to the foregoing instrument is the corporate seal of the corporation, and that the instrument was signed and sealed on behalf of the corporation, by authority of its City Council, as passed by Resolution of the City Council; and Donald Kessler and Matt Muckler acknowledged the execution of the instrument to be their voluntary act and deed and the voluntary act and deed of the corporation, by it voluntarily executed.

_____
A Notary Public in and for the
State of Iowa

STATE OF IOWA, COUNTY OF CEDAR, ss:

This instrument was acknowledged before me on the ___ day of _____, 2011, by _____ as Manager of KLM Investments, L.L.C..

_____
Notary Public

PRELIMINARY PLAT

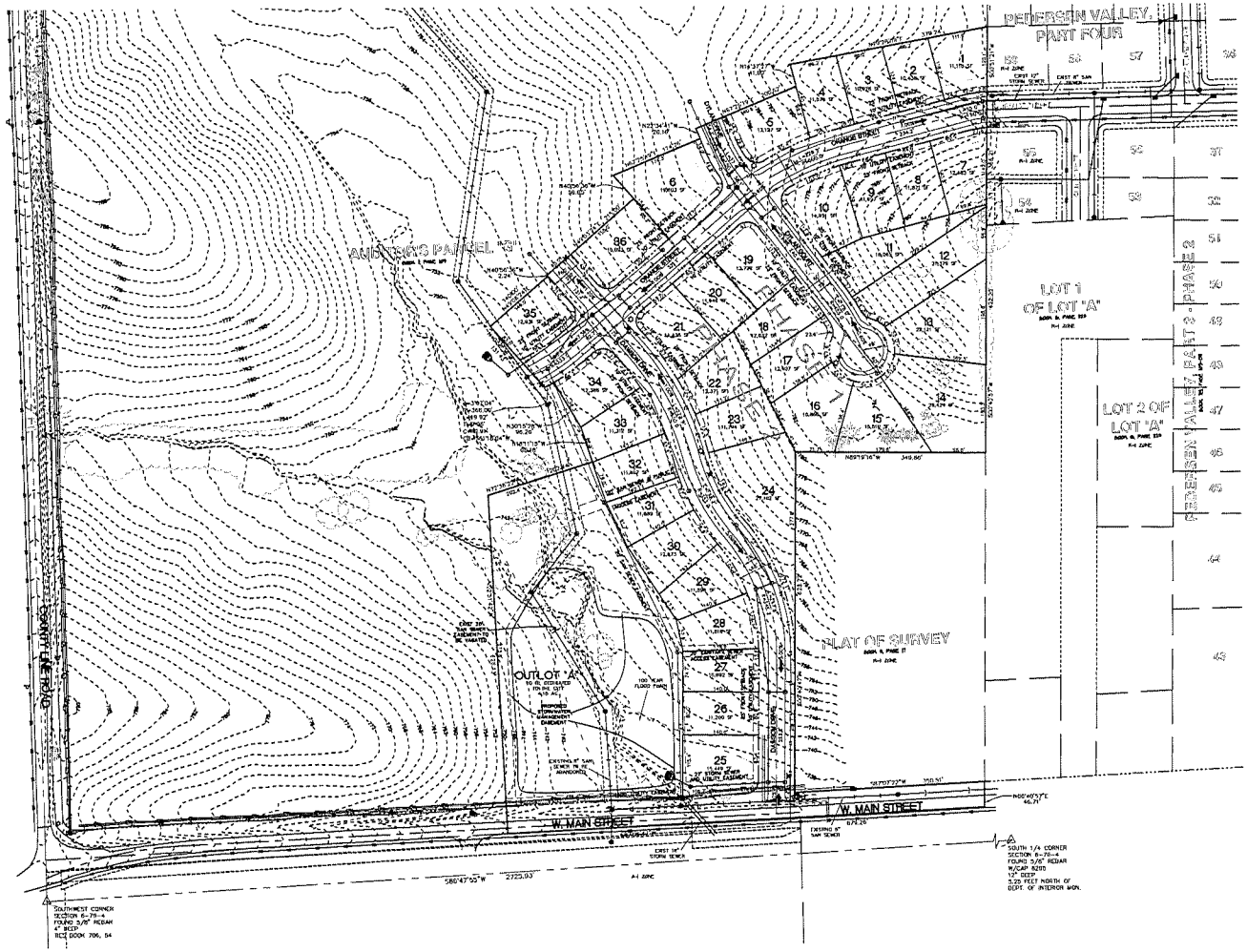
THE MEADOWS SUBDIVISION

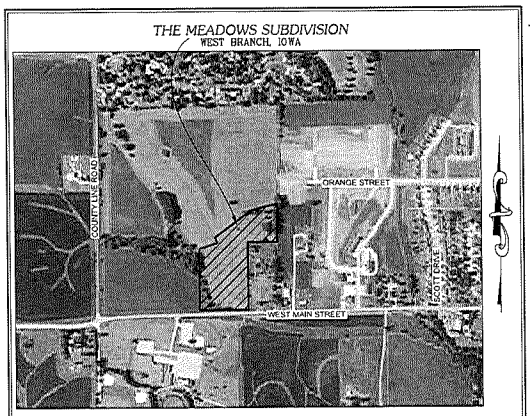
WEST BRANCH, IOWA

PLAT PREPARED BY:	OWNER/SUBDIVIDER:	SUBDIVIDER'S ATTORNEY:
MMS CONSULTANTS INC. 1917 S. GILBERT STREET IOWA CITY, IOWA 52240	KLM INVESTMENTS, INC. 25 EASTVIEW PLACE NE IOWA CITY, IOWA 52240	MICHAEL W. KENNEDY 620 S. DUBUQUE STREET IOWA CITY, IOWA 52240

LEGAL DESCRIPTION

Phase One and Phase Two of Auditor's Parcel G, West Branch, Cedar County, Iowa, in accordance with the Plat thereof recorded in Plat Book I, at Page 103, in the Records of the Cedar County Recorder's Office, containing 13.76 acres, and subject to easements and restrictions of record.





LOCATION MAP
NOT TO SCALE

STANDARD LEGEND AND NOTES

- PROPERTY &/or BOUNDARY LINES
- CONGRESSIONAL SECTION LINES
- RIGHT-OF-WAY LINES
- EXISTING RIGHT-OF-WAY LINES
- CENTER LINES
- EXISTING CENTER LINES
- LOT LINES, INTERNAL
- LOT LINES ELIMINATED BY DEED
- PROPOSED EASEMENT LINES
- EXISTING EASEMENT LINES
- BENCHMARK
- RECORDED DIMENSIONS
- CURVE SEGMENT NUMBER
- POWER POLE
- POWER POLE W/DRIP
- POWER POLE W/TRANS
- POWER POLE W/LIGHT
- GUY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE MANHOLE
- CURB INLET
- FENCE LINE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- WATER LINES
- ELECTRICAL LINES
- TELEPHONE LINES
- GAS LINES
- CONTOUR LINES (2' INTERVAL)
- PROPOSED GROUND
- EXISTING GROUND
- EXISTING TREE LINE
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREES

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

DEVELOPMENT CHARACTERISTICS

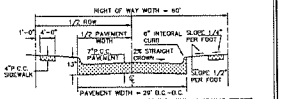
CURRENT ZONING IS R-1 RESIDENTIAL

R-1 RESIDENTIAL
R-1 RESIDENTIAL REQUIREMENTS

MINIMUM LOT AREA	7,700 SF
MINIMUM SETBACK FRONTAGE	70 FEET
FRONT YARD SETBACK	25 FEET
SIDE YARD SETBACK	8 FEET
REAR YARD SETBACK	25 FEET

TYPICAL STREET SECTION

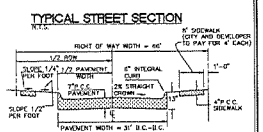
N.T.S.



DYLAN COURT, DYLAN DRIVE AND DAWSON DRIVE (NORTH OF ORANGE STREET)

TYPICAL STREET SECTION

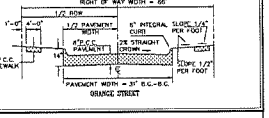
N.T.S.



DAWSON DRIVE (SOUTH OF ORANGE STREET)

TYPICAL STREET SECTION

N.T.S.



ORANGE STREET

CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS

1917 S. GILBERT ST.
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3741 C ST., SW SUITE C
CEDAR RAPIDS, IOWA 52404
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Date	Revision
02/21/11	MJM CITY COMMENTS -KDM
02/16/11	PER CITY STAFF COMMENTS -KDM
02/15/11	ZONING INFORMATION -CJN
02/11/11	MJMSE DAWSON STREET -KDM
04/29/11	REVISED LOTS PER CLIENT -KDM

PRELIMINARY PLAT

THE MEADOWS SUBDIVISION

WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date	01-28-11
Designed by: DAM	Field Book No:
Drawn by: JDW	Scale: 1"=100'
Checked by: DAM	Sheet No: 1
Project No: IOWA CITY 8815001	of 1

These minutes are not approved until the next Commission meeting.

City of West Branch Planning & Zoning Commission Meeting
August 9, 2011
West Branch City Council Chambers, 110 North Poplar Street

The West Branch Planning & Zoning Commission opened in regular session at 6:33 p.m. Commission members Roger Laughlin (Chair), Al Rozinek, Gary Slach, Dick Stoolman, John Fuller, Lauren Michael and Trent Hansen were in attendance. Also in attendance were Councilman Mark Worrell, Superintendent Kevin Hatfield, Chris Kofoed, Brad Larson and City Administrator Matt Muckler.

Approve minutes from the August 2, 2011 Planning and Zoning Commission Meeting. Minutes were not available for review by Commission Members. They will be placed on a future meeting agenda.

Approve preliminary plat of the Meadows Subdivision Phase II, KLM Investments, Inc./Move to action.

The Commission discussed Phase II of the Meadows Subdivision and the following potential recommendations to the City Council:

1) The crosswalk across Main Street should be located west of Dawson Drive and east of the High School entrance.
2) Change the subdivider's agreement (in Section 1) to show Orange Street as a 31'street instead of a 29' street.
3) Require a six-foot wide sidewalk located in front of lot 25 west to the westernmost edge of Outlot A.
4) Discussion of a traffic study.
5) Require a mid-block crosswalk on the north end of lot 24 across Dawson Drive that would run in between lots 31 and 32.
6) Require a sidewalk in between lots 31 and 32.
7) Six inch grass height might not be appropriate in section 9 of the subdivider's agreement.

Discussion on the location of the Main Street crosswalk was held. Most members felt that the crossing should be located to the west of Dawson Drive, just east of the current high school entrance. They felt that a traffic study was not warranted at this time but would be necessary prior to the approval of the next Meadows Subdivision preliminary plat. Commission Member Fuller felt that a traffic study was necessary and may be helpful in determining the location of the crosswalk and appropriate signage and/or signalization. Superintendent Hatfield asked the Commission to establish a school zone in this area for the safety of students and community members travelling in this area. Members agreed that a school zone should be established and that the city engineer should work with Johnson County to discuss potential speed reductions on Herbert Hoover Highway just west of the West Branch City Limits.

The Commission was unanimous in support of a six-foot sidewalk to be located on Main Street from Dawson drive to the crosswalk. A mid-block crosswalk on Dawson Drive was also recommended. Members felt that a sidewalk located between lots 31 and 32 was unnecessary at this time. Commission Member Fuller suggested that the six-inch grass height requirement, currently in the subdivider's agreement, is not appropriate as prairie grass or other native plantings might be more appropriate in the detention basin area. He suggested the Council consider adopting a more flexible statement in the subdivider's agreement.

The Commission had a discussion on the appropriate width of sidewalks for new residential developments in West Branch. Commission Member Fuller suggested that the Commission review Chapter 136.07.5.A which currently requires residential sidewalks to be at least four feet wide.

KLM Investments, Inc. has provided a general drawing for the regional detention basin in the Meadows. City Administrator Matt Muckler discussed the Watershed Improvement Review Board Grant Request that was recently submitted to the Iowa Department of Agriculture and Land Stewardship. The grant application includes a request for funding for the regional detention basin.

The Commission is not recommending that a sidewalk go between lots 31 and 32 to access the regional detention basin because at this time the basin will not be accessible by the public. KLM may approach the City at a future time with a proposal to dedicate this area to the City and the sidewalk may be addressed at that time.

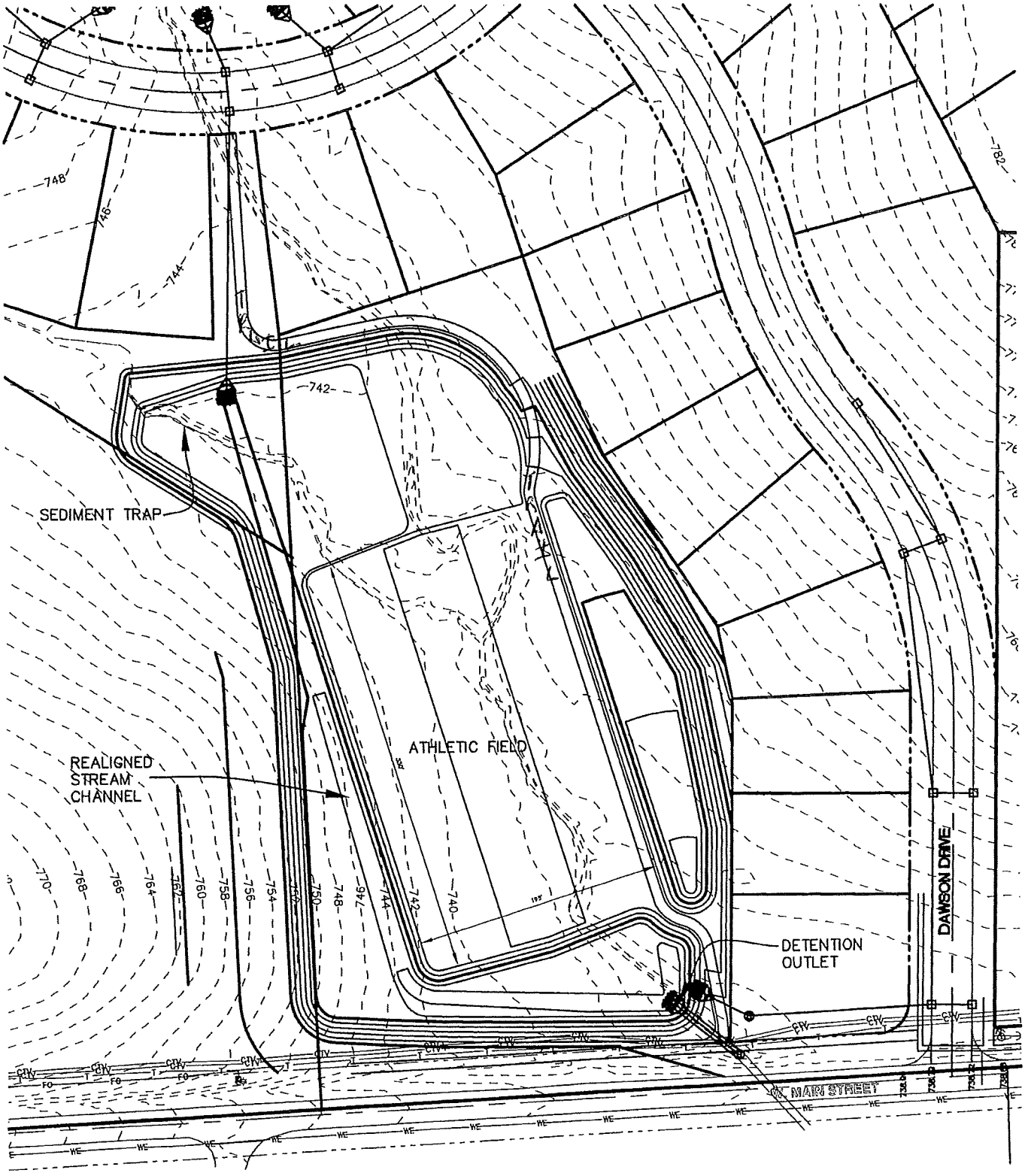
Commission Member John Fuller provided a two-page document, *Recommendations to West Branch Planning & Zoning Commission, For the preliminary plat of the Meadows Subdivision,* Phase II, to commission members. The document included recommendations on sidewalks, a traffic study for the Main Street Crosswalk and environmental issues.

Motion by Stoolman and second by Rozinek to approve a recommendation to approve preliminary plat of the Meadows Subdivision Phase II, KLM Investments, Inc. with three proposed changes to the subdivider's agreement: 1) Require a six-foot wide sidewalk on Main Street located in front of lot 25 west to the westernmost edge of Outlot A., 2) Require a mid-block crosswalk on the north end of lot 24 across Dawson Drive that would run in between lots 31 and 32., and 3) Six inch grass height might not be appropriate in section 9 of the subdivider's agreement. Roll call vote – Ayes: Stoolman, Rozinek, Hansen, Slach, Fuller, Michael and Laughlin. Motion carried.

OLD BUISNESS
None.

NEW BUSINESS:
None.

Motion by Fuller and second by Hansen to adjourn. Meeting adjourned at 7:45 p.m.



Designed by: PVA	Scale: 1"=100'
Drawn by: CJS	Date: 08-03-11
Checked by: PVA	Project No: IC 8815001

REGIONAL DETENTION BASIN

THE MEADOWS

WEST BRANCH
CEDAR COUNTY, IOWA

MMS CONSULTANTS, INC.
IOWA CITY, IOWA 52240
(319) 351-8262
CEDAR RAPIDS, IOWA 52404
(319) 841-5188
www.mmsconsultants.net

Date	Revision

Recommendations to West Branch Planning & Zoning Commission
For the preliminary plat of the Meadows Subdivision, Phase II

By John Fuller, August 9, 2011

Sidewalks

At the Commission's August 2 meeting one topic of discussion was appropriate sidewalks for the development (for the proposed Orange St. extension, Dylan Court, and Dawson Dr.) and for frontage on Main Street from Dawson Dr. to the end of Outlot A. Desired sidewalk width was discussed.

I have researched the following sources: the Iowa DOT Design Manual, Safe Routes to School Guidelines, ADA-ABA Accessibility Guidelines, FHWA's Designing Sidewalks and Trails for Access, and AASHTO's Guide for the Planning, Design, and Operation of Pedestrian Facilities. From reviewing all of these sources, while 8-foot widths are most desirable, I find a reasonably economical, up-to-date standard for residential street sidewalk width, with no sidewalk buffer, is **6 feet,** which I recommend to the Commission members and the City Council. (If a buffer were to be present a 5-foot minimum width would be suitable, but I do not believe the preliminary plat shows a buffer to be proposed.)[i] For the sidewalk on Main Street I recommend a buffer zone between the 6-foot sidewalk and Main Street of 8 to 10 feet.

A related topic discussed was the need for a mid-block crossing on Dawson Drive to access the easement between lots 31 and 32 (the access path to Outlot A). We did not take up the topic of **curb ramps** or curb cuts, but such treatment would be necessary at the mid-block crossing, and at Orange Street intersections in the subdivision, and we should recommend their inclusion on the preliminary plat.[ii]

Traffic Study for Main Street Crosswalk

The Commission discussed the need for an engineering study of Main Street traffic in conjunction with designing and placing an appropriate crosswalk west of Dawson Drive for access from the Meadows to the High School. The question of timing arose: should a traffic study take place before a crosswalk is put in place, but also before build-out of The Meadows occurs, or should a study be done later, once full land-use/traffic effects are felt from the new development. My preference is **for a traffic study soon,** before decisions are made about the crosswalk, so a temporary crosswalk solution can be in place once construction on Phase II lots is underway. In my opinion the study can always be updated, at low cost, as more information about changed land-use impact becomes available, and a permanent crossing solution can then be devised. Waiting for build-out may also mean missing the opportunity for traffic safety improvements when Johnson County undertakes the next resurfacing of Hoover Highway/Main Street.

Environmental Issues

On August 2 the Commission considered grass height limits in the proposed sub-divider's agreement for the Meadows, and agreed that a maximum height of 6 inches might not be appropriate for native vegetation or other suitable vegetation on Outlot A. (A watershed improvement grant has been submitted which needs to be taken into account when making decisions about vegetation and other water-related aspects of full build-out of the Meadows.)

Not discussed by the Commission to any extent was the amount of impermeable surface area that will take the place of what to now has been 80 acres of meadow, wetland, and trees. Native vegetation with its deep root systems can help the situation. However, the development and implementation of permeable street and driveway surfaces has advanced greatly in the past few years, and I recommend that we see consideration given to mitigating water runoff and allowing better water infiltration in the Meadows development through seeking and possibly requiring permeable pavement solutions.[iii]

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[i] "The six-foot width allows for two people to walk comfortably side-by-side and provides sufficient space for pedestrians crossing in the opposite direction. If a sidewalk buffer does not exist, an effort should be made to provide a wider sidewalk. A wider sidewalk allows a pedestrian to avoid the splash zone (area adjacent to a motor vehicle travel lane into which water spray created by a motor vehicle traveling through water on the roadway enters) and provides a snow storage area and a more comfortable separation between moving vehicles and pedestrians." Guidelines for sidewalk buffers are available in the FHWA's Designing Sidewalks and Trails for Access (Section 4.1.2) and AASHTO's Guide for the Planning, Design, and Operation of Pedestrian Facilities (Section 3.2.4)

[ii] ADA guidelines recommend two curb ramps at every intersection, one for each roadway to be crossed, rather than one curb ramp in the center. Two ramps guide pedestrians into the crosswalk rather than into the middle of the intersection. Two ramps which end at the crosswalk also provide directional guidance to pedestrians with vision impairments

[iii] See Iowa Stormwater Management Manual at
http://www.intrans.iastate.edu/pubs/stormwater/Design/2J/2J-2%20Pervious%20Concrete%20Pavement.pdf
One national collection of recent research and findings is at:
http://www.nebrconcagg.com/assets/PromotionPages/Pervious%20Concrete/RMC/4.pdf
ISU research to 2010 on a pervious installation put in place in 2006 is reported at:
http://www.inside.iastate.edu/2010/0429/concrete.php

CHAPTER 173

SITE PLAN REQUIREMENTS

173.01 TITLE. This chapter shall be known, cited and referred to as "Site Plan Regulations of the City of Solon, Iowa."

173.02 PURPOSE AND APPLICATION. It is the intent and purpose of this chapter to establish a procedure which will enable the City to review certain proposed improvements to property within specified zoning districts of the City to insure compliance with all applicable zoning, subdivision and building regulations. Site plans shall only be required whenever any person proposes to place any structure for which a building permit is required under any other section of this Code, on any tract or parcel of and within any district of the Solon Zoning Ordinance, and for any use, except one and two family dwellings.

173.03 DESIGN STANDARDS. The standards of design provided herein are necessary to insure the orderly and harmonious development of property in such manner as will safeguard the public's health, safety and general welfare.

1. The design of the proposed improvements shall make adequate provisions for surface and subsurface drainage, for connections to water and sanitary sewer lines, each so designed as to neither overload existing public utility lines nor increase the danger of erosion, flooding, landslide, or other endangerment of adjoining or surrounding property.

2. The proposed improvements shall be designed and located within the property in such manner as not to unduly diminish or impair the use and enjoyment of adjoining property, and to this end shall minimize the adverse effects on such adjoining property from automobile headlights, illumination of required perimeter yards, refuse containers, and impairment of light and air. For the purpose of this section, the term "use and enjoyment of adjoining property" shall mean the use and enjoyment presently being made of such adjoining property, unless such property is vacant. If vacant, the term "use and

enjoyment of adjoining property" shall mean those uses permitted under the zoning districts in which such adjoining property is located.

3. The proposed development shall have such entrances and exits upon adjacent streets and such internal traffic circulation pattern as will not unduly increase congestion on adjacent or surrounding public streets.

4. To such end as may be necessary and proper to accomplish the standards in subsections 1, 2, and 3 above, the proposed development shall provide fences, walls, screening, landscaping, erosion control or other improvements.

5. The proposed development shall conform to all applicable provisions of the Code of Iowa, as amended, and all applicable provisions of the Code of Ordinances of the City of Solon, as amended.

173.04 REQUIRED INFORMATION. All site plans required under Section 173.02, unless waived by the City Council, shall include as a minimum the following information:

1. Date of preparation, north point and scale.

2. Legal description and address of the property to be developed

3. Name and address of the record property owner, the applicant, and the person or firm preparing the site plan.

4. The existing and proposed zoning.

5. The existing topography with a maximum of two (2) foot contour intervals. Where existing ground is on a slope of less than two percent (2%), either one (1) foot contours or spot elevations where necessary but not more than fifty (50) feet apart in both directions, shall be indicated on site plan.

6. Existing and proposed utility lines and easements in accordance with City of Solon Standard Specifications and Subdivision Regulations.

7. Total number and type of dwelling units proposed; proposed uses for all buildings; total floor area of each building; estimated number of employees for each proposed use where applicable; and any other information which may be necessary to determine the number of off-street parking spaces and loading spaces required by the zoning ordinance.

8. Location, shape, and all exterior elevation views of all proposed buildings, for the purpose of understanding the structures and building materials to be used, the location of windows, doors, overhangs, projection height, etc. and the grade relationship to floor elevation, and the number of stories of each existing building to be retained and of

each proposed building.

9. All required yard setbacks.

10. Location, grade and dimensions of all existing and proposed paved surfaces and all abutting streets.

11. Complete traffic circulation and parking plan, showing the location and dimensions of all existing and proposed parking stalls, loading areas, entrance and exit drives, sidewalks, dividers, planters, and other similar permanent improvements.

12. Location and type of existing or proposed signs and of any existing or proposed lighting on the property which illuminates any part of any required yard.

13. Location of existing trees six (6) inches or larger in diameter, landslide areas, springs and streams and other bodies of water, and any area subject to flooding by a one hundred (100) year storm on site and downstream off site.

14. Location, amount and type of any proposed landscaping. Location of proposed plantings, fences, walls, or other screening as required by the zoning regulations and the design standards set forth in Section 173.03.

15. A vicinity map at a scale of 1" = 500' or larger, showing the general location of the property, and the adjoining land uses and zoning.

16. Soil tests and similar information, if deemed necessary by the City Engineer, to determine the feasibility of the proposed development in relation to the design standards set forth in Section 173.03.

17. Where possible ownership or boundary problems exist, as determined by the Zoning Administrator, a property survey by a licensed land surveyor may be required.

173.05 OPEN SPACE, LANDSCAPING, PARKING AND ARCHITECTURAL REQUIREMENTS. The requirements set forth in this section for open spaces, landscaping, parking and architectural standards shall apply to any development or redevelopment except one and two family dwellings.

1. Open Space Required. On each lot, except for one and two family dwellings, there shall be provided open space in accordance with the following schedule:

Zoning District	Percent of Open Space
A-1*	30
R-1**	30
R-2**	30
R-3**	25
R-4**	30
C-R	25
C-G	25
C-H	25
I-L	25

*Non-agricultural uses.

**Uses other than single-family dwellings and duplexes.

A. Said open space shall be unencumbered with any structure, or off-street parking or roadways and drives, and shall be landscaped and maintained with grass, trees and shrubbery. When the entire lot is not developed, the open space requirement shall be based in proportion to the area of the improved portion of the lot.

B. Each principal structure of an apartment or office complex on same site shall be separated from any other principal structure in the complex by an open space of not less than sixteen (16) feet.

2. Landscaping Required. Any development, except one and two family dwellings, shall provide the following minimum number and size of landscape plantings based on the minimum required open space for the development. The following is the minimum requirement of trees and shrubs, by number and size, and type of ground cover. Street trees planted in public street right-of-way subject to approval by the City shall not be counted toward fulfillment of the minimum site requirements set forth below. Plant species to be used for landscaping shall be acceptable to the City that are not considered a nuisance or undesirable species, such as trees with thorns, cottonwood or cotton-bearing poplars, elm trees prone to Dutch Elm Disease, box elder, and silver maple. Existing trees and shrubs to be retained on site may be counted toward fulfillment of the landscaping requirements.

A. Minimum requirements at the time of planting - Two (2) trees minimum or one (1) tree of the following size per 1,500 square feet of open space, whichever is greater:

40 Percent	1½" - 2" caliper diameter

Balance 1" - 1½" caliper diameter

(Evergreen trees shall not be less than six (6) feet in height.)

B. Minimum requirements at the time of planting - 6 shrubs, or 1 shrub per 1,000 square feet of open space, whichever is greater.

C. To reduce erosion all disturbed open space areas shall have ground cover of grass or native vegetation which is installed as sod, or seeded, fertilized and mulched.

3. Buffer Required. The following conditions shall require a buffer which shall be a landscaped area, wall, or other structure intended to separate and obstruct the view between two adjacent zoning districts, land uses or properties:

A. Any Commercial "C" and Industrial "M" District that abuts any Residential "R" District shall require a buffer as described in this section. The buffer shall be provided by the Commercial or Industrial uses when adjoining an "R" District.

B. All Industrial Districts that abut any "R" and "C" District shall provide a buffer as required by this section.

C. Any storage area, garbage storage, junk storage or loading docks, and loading areas, in any District shall be screened from public street view by a buffer.

4. Buffers. Buffers required under the provisions of this section or elsewhere in the zoning ordinance shall be accomplished by any one or approved combination of the following methods:

A. Buffer Wall: A buffer wall shall not be less than six (6) feet in height; constructed of a permanent low maintenance material such as concrete block, cinder block, brick, concrete, precast concrete or tile block; the permanent low-maintenance wall shall be designed by an architect or engineer for both structural adequacy and aesthetic quality; weather resistant wood may be used as a substitute material if designed with adequate structural integrity and permanency and approved by the Planning and Zoning Commission and City Council.

B. Landscape Buffer: A landscape buffer shall not be less than twenty-five (25) feet in width, designed and landscaped with earth berm and predominant plantings of evergreen type trees, shrubs and plants so as to assure year around effectiveness; height of berm and density and height of plantings shall be adequate to serve as a solid and impenetrable screen.

A chain link fence may exist for security purposes, but is not considered a part of the landscape screening to satisfy the intent of this requirement.

5. Burden of Provision of Buffer. The burden of provision and selection of the buffer shall be as follows:

A. Where two different zoning districts, requiring a buffer between them, are developed, the above requirement is not retroactive and a buffer is not required. If a buffer is desired, it shall be provided by mutual agreement between adjacent property owners. However, in the event of any or all of the improved property is abandoned, destroyed, or demolished, for the purpose of renewal or redevelopment, that portion of such property being renewed or redeveloped, shall be considered vacant and subject to the requirements herein.

B. Where one of two different zoning districts requiring a buffer between them is partly developed, the developer of the vacant land shall assume the burden, unless otherwise specified herein.

C. Where both zoning districts, requiring a buffer between them, are vacant or undeveloped, the burden shall be assumed by the developer of the land that is improved or developed, except for agricultural uses and unless otherwise specified herein.

6. Waiver of Buffer Requirements. Where the line between two districts, requiring a buffer, follows a street, right-of-way, railroad, stream, or other similar barrier, the requirement for a buffer may be waived by the City Council provided such waiver does not permit the exposure of undesirable characteristics of land use to public view.

7. Surfacing Requirements. All off-street parking and loading areas and access roadways shall have a durable and dustless surface paved with asphaltic or Portland cement concrete pavement in accordance with the requirements as herein set forth. Off-street parking of automobiles, vans, campers, trucks, trailers, tractors, recreational vehicles, boats, construction equipment, and any other mobile vehicles equipped for street and highway travel shall be on an asphaltic or Portland cement concrete paved off-street parking area as required herein and not parked or stored within the landscaped open space area of the front yard between the building and public street right-of-way, except, however, the storage of a recreational vehicle, a camper, and boat within the side or rear yard upon an unpaved area shall be permitted.

All off-street parking areas and associated driveways, access roadways and frontage roads, except driveways for single family residences, shall be constructed with permanent, integrally attached 6" high curbing or curbing of alternate height acceptable to the City (prefabricated portable curb stops shall not be considered an acceptable alternate), and shall be so graded and drained as to dispose of all surface water accumulation within the area; and shall be so arranged and marked as to provide for orderly and safe loading or unloading and parking and storage of self-propelled vehicles. The curbing requirements may be waived if it is determined that surface drainage can be adequately handled by other means.

The minimum thickness of pavement of the parking area shall be as follows:

A. Portland Cement Concrete shall have a minimum thickness of five (5) inches.

B. Asphaltic Cement Concrete shall have a minimum thickness of six (6) inches.

C. Material utilized in the subgrade shall be well drained and not susceptible to frost boils. The part of the parking utilized for driveways and access roadways shall be specifically designed to accommodate the type and load bearing capacity of traffic anticipated.

Driveways for attached townhouse style residences on private property shall be Portland cement concrete or asphaltic concrete with minimum thickness of five (5) inches and six (6) inches, respectively, with a sufficiently compacted and well-drained subgrade base and not greater than eighteen (18) feet in width.

8. Landscaping, Screening and Open Space Requirements. It is desired that all parking areas be aesthetically improved to reduce obtrusive characteristics that are inherent to their use. Therefore, wherever practical and except for single and two family detached and townhouse style residential parking in driveways, parking areas shall be effectively screened from general public view and contain shade trees within parking islands where multiple aisles of parking exist. Not less than five (5) percent of the interior parking area shall be landscaped within parking islands.

9. Off-Street Parking Access to Public Streets and Internal Traffic Circulation. Off-street parking or loading facilities shall be designed so as to permit entrance and exit by forward movement of the vehicle for all uses, except single-family detached or row dwellings which shall permit backward movement from a driveway. The backing or

backward movement of vehicles from a driveway, off-street parking or loading area onto an arterial street or highway shall be prohibited for all uses. Driveway approach returns shall not extend beyond the side lot line as extended, unless such driveway is of joint usage by the adjoining lots, and driveway approaches at roadway not greater than established in the Solon Municipal Design Standards.

The number of ingress/egress access points to public streets from off-street parking areas approved by the City and located to limit vehicular conflicts, provide acceptable location of driveway accesses to public streets, preserve proper traffic safety and, as possible, not impair movement of vehicular traffic on public streets. The permitted number of ingress/egress driveway approaches to public streets for an off-street parking lot shall be dependent upon the projected future average daily traffic (ADT) for the public street and, as possible, public street accesses shall be located in alignment with driveway approaches gaining access to the same public street from property on approaches gaining access to the same public street from property on the opposite side of the street. The design of off-street parking and loading facilities shall provide traffic circulation for the internal forward movement of traffic within the parking lot, so designed, as not to impair vehicular movement on public streets, or backing of vehicles from an off-street parking or loading area to a public street.

10. Handicap Accessible Parking Requirements. Provision of handicapped parking spaces within off-street parking areas shall be in accordance with applicable Federal, State and local regulations, properly identified with signage and provided with accessible ramps and walks in accordance with Federal and State regulations, and comply with the following parking space minimum requirements:

TOTAL PARKING IN LOT	REQUIRED MINIMUM NUMBER OF HANDICAPPED SPACES
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	†
1001 and over	‡
† Two percent (2%) of total ‡ Twenty (20) spaces plus one for each 100 over 1000	

Access space or aisle adjacent to handicap accessible parking space shall be a minimum five (5) feet wide. One in every eight handicap accessible spaces, but not less than one shall be served by an access space or aisle eight (8) feet wide minimum and shall be designated "van accessible."

11. Traffic Analysis Requirements. Any project which contains 100 dwelling units or 1,000 average day trips as listed for uses in the Trip Generation Handbook; Institute of Transportation Engineers, current edition, shall submit a traffic analysis which provides necessary information to determine the affect that the project will have upon the surrounding traffic. At a minimum the traffic analysis shall contain project trip generation directional distribution of project trips, traffic assignment, and capacity analysis, including identification of congestion and turning-movement conflicts.

12. Waiver of Requirements. The City Council reserves the right to waive or modify to a lesser requirement any provision or requirement of off-street parking and loading areas contained in this chapter, provided a report on such change is received from the Planning and Zoning Commission and City Administrator, provided adequate area exists for texture expansion, and further provided said waiver or modification does not adversely affect the intent of these regulations to adequately safeguard the general public and surrounding property. Exceptions will only be considered for those uses where special circumstances warrant a change and whereby the modification or waiver is determined to be in the best interest of the general public.

13. Architectural Standards. As part of the submittal of a site plan for development within any of the zoning districts and for any of the

uses except one and two family dwellings, architectural plans for buildings shall be submitted for review and approval by the City Council after recommendation from the Planning and Zoning Commission. Documentation to be submitted shall include building elevations showing the building's design and a description of structural and exterior materials to be used. The following standards shall be considered by the City to review architectural plans:

A. Multiple-Family Dwellings in All Districts. The architecture of multiple-family buildings shall be designed in a manner compatible with adjoining residential uses in the neighborhood. Architectural design for multiple-family buildings shall include exterior building materials, exterior details and texture, treatment of windows and doors, and a variety in the wall and roof design to lessen the plainness of appearance that can be characteristic of large residential buildings. Multiple-family buildings with single plane walls and boxy in appearance shall not be considered acceptable unless the use of exterior materials such as brick provides the elements necessary to enhance the building's physical appearance and eliminate its plainness of appearance.

Adequate treatment or screening of negative aspects of buildings (loading docks, loading areas, outside storage areas, garbage dumpsters and HVAC mechanical units) from any public street and adjoining properties shall be required. Buildings shall be designed or oriented not to expose loading docks, or loading areas to the public.

B. Non-Residential Uses in the "R" Districts. Any building used for a permitted non-residential use in "R" Districts shall be designed and constructed with architecture and use of materials compatible with the residential uses within the neighborhood. Buildings located on a residential street in an "R" District shall be residential in character, and exterior materials shah be wood, brick, and/or brick veneer. The architectural design shall be approved by the City.

C. All Uses Within the Commercial Districts. Architectural design and use of materials for the construction of any building shall be approved by the City. Buildings within the Commercial Districts shall have as a primary element of the building exterior fascia glass, brick, concrete panels, textured concrete block, architectural steel or stone panels, or cement fiber composite siding, with all sides of any building built consistent in design and use of materials. No wood, masonite, visible asphaltic exterior wall or roof material, aluminum or steel siding, non-

architectural sheet metal non-textured concrete block, stucco, E.I.F.S. (Exterior Insulation and Finish System) or other similar materials shall constitute a portion of any building except as a trim material, unless the City Council after receiving a recommendation from the Planning and Zoning Commission, shall determine said material when used as a primary element, does not distract from the physical appearance of the building.

Adequate treatment or screening of negative aspects of buildings (loading docks, loading areas, outside storage areas, garbage dumpsters and HVAC mechanical units) from any public street and adjoining properties shall be required. Building shall not be designed or oriented to expose loading docks, non-residential use overhead doors or loading areas to the public.

D. All Uses Within Industrial Districts. Architectural design and use of materials for construction of any building in the Industrial Districts shall be reviewed as part of the site plan proposal and shall be approved by the City. While it is not the purpose of this section to dictate, specify, or restrict the use of building materials and structural elements, the use of appropriate exterior materials to enhance the appearance of a building is encouraged by the City. The exclusive use of sheet metal as an exterior building material shall not be considered acceptable for buildings facing public streets. The exterior material of the building's front elevation shall be comprised of brick, concrete panels, textured concrete block, architectural steel or stone panels, or cement fiber composite siding, or other similar material. Loading areas, loading docks, storage areas, and garbage dumpsters shall be located, screened or oriented to minimize their exposure to view from public streets.

173.06 ZONING PERMITS. No zoning compliance permit or building permit shall be issued for the construction of any structure that is subject to the provisions of this chapter, until a site plan has been submitted for review covering the land upon which said structure is to be erected, and further, approved by City Council for such development in accordance with this chapter.

173.07 PROCEDURE.

1. Pre-Application Conference. Whenever any person proposes to place any structure for which a building permit is required under any other section of this Code, on any tract or parcel of land within any district of the Solon Zoning Ordinance, and any use, except one and two family dwellings, the person shall submit to the City Administrator a request for a Pre-Application Conference.

The Conference shall include the applicant or his/her representative and the Zoning Administrator. The purpose of the Conference shall be to acquaint the City staff with the proposed construction and to acquaint the applicant or his/her representative with the procedures and with any special problems that might relate to such construction.

The applicant shall furnish a legal description of the subject real estate at the time of requesting a Pre-Application Conference, and the Conference shall be held within seven (7) days of such request.

2. Continuous Site Plan Review. After completion of the Pre-Application Conference as required by subsection 1 of this section, and in the event the applicant wishes to proceed with the construction as discussed at said Conference, he/she shall cause to be prepared a site plan of such proposed construction, and shall submit five (5) copies of the same to the Zoning Administrator and one (1) copy to the City Engineer. The site plan shall be accompanied by a cover letter requesting review and approval of said plan.

The site plan shall contain all the information required by Sections 173.05 and 173.06 of this chapter unless otherwise waived by the Zoning Administrator.

The Zoning Administrator shall retain one (1) copy for his/her review and comment. The remaining copies shall be retained by the City Clerk for review and distribution. The Zoning Administrator and City Engineer shall review the plan for conformance of the design to the standards and required data set forth in Sections 173.04 and 173.05 of this chapter.

3. Action.

A. The Zoning Administrator shall promptly notify the applicant in writing of any revisions or additional information needed as required by Sections 173.04 and 173.05. If necessary, the applicant shall make revisions and resubmit the revised plan(s) to the Zoning Administrator for compliance. If the site plan complies with requirements set forth in this chapter, the applicant shall submit ten (10) copies of the plan to

the Planning and Zoning Commission for approval, disapproval or approval subject to conditions.

B. The Commission shall in its regularly scheduled meeting, act upon the site plan and accompanying material. The City Engineer, City staff and other departments shall submit to the Commission their recommendation. Applicant or a representative shall be present at the meeting. Action of the Commission shall be approval subject to conditions, or denial.

C. Approval by Commission. In the case of approval by the Commission, the approval shall be documented on seven (7) copies of the site plan. One (1) copy shall be returned to the applicant, one (1) copy retained by the Commission and five (5) copies shall be forwarded to the City Council.

D. Conditional Approval by Commission. In the case of approval subject to conditions by the Commission, the approval shall be documented on seven (7) copies of the site plan and the conditions determined attached thereto. One (1) copy shall be returned to the builder, one (1) copy shall be retained by the Commission, and five (5) copies shall be forwarded to the City Council. The applicant shall provide revised copies of the site plan in accordance with the Commission action and submit ten (10) copies to the City Clerk prior to Council action. The City Clerk shall forward one (1) copy to the City Engineer, five (5) copies to the City Council and one (1) copy for the Commission files.

E. Disapproval by Commission. In the case of disapproval by the Commission, the disapproval shall be documented on three (3) copies of the site plan. One (1) copy shall be returned to the applicant, one (1) copy shall be retained by the Commission, and one copy shall be retained by the City Clerk.

F. Council Action. At the next regularly scheduled Council meeting following Commission action, the Council shall act on the site plan and accompanying material. Applicant or a representative shall be present at the meeting. Action of the Council shall be approval or denial.

G. Approval by Council. In the case of approval by the Council, the approval shall be documented on three (3) copies of the site plan. One (1) copy shall be returned to the applicant, one (1) copy shall be forwarded to the Commission, and one (1) copy shall be retained by the City Clerk. Applicant may then proceed with approval of building permit and accompanying material

H. Denial by Council. In the case of denial by the Council, the denial shall be documented on three (3) copies of the site plan. One (1) copy shall be returned to the applicant, one (1) to the Commission, and one (1) copy shall be retained by the City Clerk.

I. Resubmittal of Site Plan Denied by Council. A site plan that has been approved by the Commission and denied by the Council may be revised by the applicant in accordance with the Council Action and ten (10) copies resubmitted to the Commission for approval as before.

J. Resubmittal of Site Plan Denied by Council and Commission. A site plan that has been denied by both the Commission and the Council may be resubmitted to the City by the applicant for Commission and Council approval with respect to the original terms of these procedures, which includes ten (10) copies of the preliminary plat and filing fees. Resubmittal under these terms shall be considered a new site plan subject to fees and procedures outlined in Section 173.07.

173.08 FEES. The City Council shall establish a schedule of fees, charges, and expenses and a collection procedure for site plan approval and other matters pertaining to this chapter. The schedule of fees shall be posted in the office of the City Clerk, and may be altered or amended only by the City Council. Until all applicable fees, charges, and expenses have been paid in full, no action shall be taken on any application or appeal.

1. Applicant shall be responsible for just and reasonable costs incurred by the City for review of preliminary and final site plans deemed necessary by the City to insure proper conformance with City ordinances and site plan regulations.

173.09 VALIDITY OF APPROVAL.

1. A site plan shall become effective upon certification of approval by the City Council.

2. The City Council approval of any site plan required by this chapter shall remain valid for one (1) year allowing one (1) year extension with approval of City Council upon recommendation of the Commission after the date of approval, after which time the site plan shall be deemed null and void if the development has not been established or actual construction commenced. For the purpose of this chapter "actual construction" shall mean that the permanent placement of construction materials has started and is proceeding without undue delay. Preparation of plans, securing financial arrangements, issuance of building permits, letting of contracts, grading of property, or

stockpiling of materials on the site shall not constitute actual construction.

173.10 SITE PLAN AMENDMENT. Any site plan may be amended in accordance with the standards and procedures established herein, including payment of fees, provided that the Zoning Administrator may waive such procedures for those minor changes hereinafter listed. Such minor changes shall not be made unless the prior written approval for such changes is obtained from the Zoning Administrator. No fees shall be required for such minor changes.

1. Moving building walls within the confines of the smallest rectangle that would have enclosed each original approved building(s). Relocation of building entrances or exits, shortening of building canopies.

2. Changing to a more restrictive commercial or industrial use, provided the number of off-street parking spaces meets the requirement of the Solon zoning ordinance. This does not apply to residential uses.

3. Changing angle of parking or aisle provided there is no reduction in the amount of off-street parking as originally approved.

4. Substituting plant species provided a landscape architect, engineer or architect certifies the substituted species is similar in nature and screening effect.

5. Changing type and design of lighting fixtures provided an engineer or architect certifies there will be no change in the intensity of light at property boundary.

6. Increasing peripheral yards.

173.11 APPLICABILITY TO EXISTING DEVELOPMENT. The requirements of this chapter shall not apply to the placement of any structure for which building permits have been issued as of the date of the adoption of this ordinance codified by this chapter (June 7, 2001), provided that if such building permit shall expire, then a new building permit shall not be issued until the requirements of this chapter have been met. Provided further, that if an existing structure is to be reconstructed, enlarged, expanded, or otherwise increased:

1. In the case of building uses, in an amount 50% or greater of its existing ground coverage and/or total floor space; or

2. In the case of non-building uses or non-building portion of uses, in the amount 50% or greater of the existing developed non-building site area, then the provisions of this chapter shall apply.

173.12 ENFORCEMENT. No zoning ordinance certification, occupancy permit or building permit shall be issued by the City or have any validity until the site plan has been approved in the manner prescribed herein.

173.13 CHANGES AND AMENDMENTS. Any provision of this chapter may be changed and amended from time to time by the Council; provided, however, such changes and amendments shall not become effective until after study and report by the Commission and until after a public hearing has been held, public notice of which shall be given in a newspaper of general circulation at least fifteen (15) days prior to the hearing.

173.14 MAINTENANCE BONDS. Maintenance bonds shall be posted with the City by the developer at the developer's cost for improvements required under this chapter for the following time periods and improvements:

Streets and alleys	5 years
Storm sewer, drainage and detention	5 years
Concrete payment	5 years
Asphalt overlays	2 years
Sidewalks	2 years
Curb and gutter	2 years
Water facilities	2 years
Sanitary sewer facilities	2 years
All other underground utilities	2 years

[The next page is 971]

CHAPTER 136

SIDEWALK REGULATIONS

136.01 PURPOSE. The purpose of this chapter is to enhance safe passage by citizens on sidewalks, to place the responsibility for the maintenance, repair, replacement or reconstruction of sidewalks upon the abutting property owner and to minimize the liability of the City.

136.02 DEFINITIONS. For use in this chapter the following terms are defined:

1. "Broom finish" means a sidewalk finish that is made by sweeping the sidewalk when it is hardening.

2. "Established grade" means that grade established by the City for the particular area in which a sidewalk is to be constructed.

3. "One-course construction" means that the full thickness of the concrete is placed at one time, using the same mixture throughout.

4. "Owner" means the person owning the fee title to property abutting any sidewalk and includes any contract purchaser for purposes of notification required herein. For all other purposes, "owner" includes the lessee, if any.

5. "Portland cement" means any type of cement except bituminous cement.

6. "Sidewalk" means all permanent public walks in business, residential or suburban areas.

7. "Sidewalk improvements" means the construction, reconstruction, repair, replacement or removal, of a public sidewalk and/or the excavating, filling or depositing of material in the public right-of-way in connection therewith.

8. "Wood float finish" means a sidewalk finish that is made by smoothing the surface of the sidewalk with a wooden trowel.

136.03 REMOVAL OF SNOW, ICE AND ACCUMULATIONS. It is the responsibility of the abutting property owners to remove snow, ice and accumulations promptly from sidewalks. If a property owner does not remove snow, ice or accumulations within twenty-four (24) hours, the City may do so and assess the costs against the property owner for collection in the same manner as a property tax.

(Code of Iowa, Sec. 364.12[2b & e])

136.04 RESPONSIBILITY FOR MAINTENANCE. It is the responsibility of the abutting property owners to maintain in a safe and hazard-free condition any sidewalk outside the lot and property lines and inside the curb lines or traveled portion of the public street.

(Code of Iowa, Sec. 364.12 [2c])

136.05 CITY MAY ORDER REPAIRS. If the abutting property owner does not maintain sidewalks as required, the Council may serve notice on such owner, by certified mail, requiring the owner to repair, replace or reconstruct sidewalks within a reasonable time and if such action is not completed within the time stated in the notice, the Council may require the work to be done and assess the costs against the abutting property for collection in the same manner as a property tax. The City Council shall set by resolution specific guidelines as to what constitutes a hazard that may cause the City Council to order sidewalk repairs. A property owner who has received notice from the City that a sidewalk needs to be repaired or replaced may, within 10 days of the mailing of the notice to repair or replace, make a written request for a hearing before the City Administrator. The City Administrator shall conduct an informal hearing within 10 days of receipt of the written request for hearing and shall make a determination as to whether the repair/replacement should be made. The property owner has the right to file a written notice of appeal from the City Administrator's decision to the Council within 10 days of the decision of the City Administrator. ***(Ords. 571 and 576 – Sep. 04 Supp.)***

(Code of Iowa, Sec. 364.12[2d & e])

136.06 SIDEWALK CONSTRUCTION ORDERED. The Council may order the construction of permanent sidewalks upon any street or court in the City and may specially assess the cost of such improvement to abutting property owners in accordance with the provisions of Chapter 384 of the Code of Iowa.

(Code of Iowa, Sec. 384.38)

136.07 SIDEWALK STANDARDS. Sidewalks repaired, replaced or constructed under the provisions of this chapter shall be of the following construction and meet the following standards:

1. Cement. Portland cement shall be the only cement used in the construction and repair of sidewalks.

2. Construction. Sidewalks shall be of one-course construction.

3. Sidewalk Base. Concrete may be placed directly on compact and well-drained soil. Where soil is not well drained, a three (3) inch sub-base of compact, clean, coarse gravel or sand shall be laid. The adequacy of the soil drainage is to be determined by the City.

4. Sidewalk Bed. The sidewalk bed shall be so graded that the constructed sidewalk will be at established grade.

5. Length, Width and Depth. Length, width and depth requirements are as follows:

A. Residential sidewalks shall be at least four (4) feet wide and four (4) inches thick, and each section shall be no more than four (4) feet in length.

B. Business District sidewalks shall extend from the property line to the curb. Each section shall be four (4) inches thick and no more than six (6) feet in length.

C. Driveway areas shall be not less than six (6) inches in thickness.

6. Location. Residential sidewalks shall be located with the inner edge (edge nearest the abutting private property) on/at the property line, unless the Council establishes a different distance due to special circumstances.

7. Grade. Curb tops shall be on level with the centerline of the street which shall be the established grade.

8. Elevations. The street edge of a sidewalk shall be at an elevation even with the curb at the curb or not less than one (1) inch above the curb for each foot between the curb and the sidewalk, unless otherwise specified by the City.

9. Slope. All sidewalks shall slope one-quarter (¼) inch per foot toward the curb.

10. Finish. All sidewalks shall be finished with a "broom" or "wood float" finish.

11. Ramps for Persons with Disabilities. There shall be not less than two (2) curb cuts or ramps per lineal block which shall be located on or near the crosswalks at intersections. Each curb cut or ramp shall be at least the width of the abutting sidewalk, shall be sloped at not greater

than one inch of rise per twelve (12) inches lineal distance, except that a slope no greater than one inch of rise per eight (8) inches lineal distance may be used where necessary, shall have a nonskid surface, and shall otherwise be so constructed as to allow reasonable access to the crosswalk for persons with disabilities using the sidewalk.

(Code of Iowa, Sec. 216C.9)

136.08 BARRICADES AND WARNING LIGHTS. Whenever any material of any kind is deposited on any street, avenue, highway, passageway or alley when sidewalk improvements are being made or when any sidewalk is in a dangerous condition, it shall be the duty of all persons having an interest therein, either as the contractor or the owner, agent, or lessee of the property in front of or along which such material may be deposited, or such dangerous condition exists, to put in conspicuous places at each end of such sidewalk and at each end of any pile of material deposited in the street, a sufficient number of approved warning lights or flares, and to keep them lighted during the entire night and to erect sufficient barricades both at night and in the daytime to secure the same. The party or parties using the street for any of the purposes specified in this chapter shall be liable for all injuries or damage to persons or property arising from any wrongful act or negligence of the party or parties, or their agents or employees or for any misuse of the privileges conferred by this chapter or of any failure to comply with provisions hereof.

136.09 FAILURE TO REPAIR OR BARRICADE. It is the duty of the owner of the property abutting the sidewalk, or the owner's contractor or agent, to notify the City immediately in the event of failure or inability to make necessary sidewalk improvements or to install or erect necessary barricades as required by this chapter.

136.10 INTERFERENCE WITH SIDEWALK IMPROVEMENTS. No person shall knowingly or willfully drive any vehicle upon any portion of any sidewalk or approach thereto while in the process of being improved or upon any portion of any completed sidewalk or approach thereto, or shall remove or destroy any part or all of any sidewalk or approach thereto, or shall remove, destroy, mar or deface any sidewalk at any time or destroy, mar, remove or deface any notice provided by this chapter.

136.11 AWNINGS. It is unlawful for a person to erect or maintain any awning over any sidewalk unless all parts of the awning are elevated at least eight (8) feet above the surface of the sidewalk and the roof or covering is made of duck, canvas or other suitable material supported by iron frames or brackets securely fastened to the building, without any posts or other device that will obstruct the sidewalk or hinder or interfere with the free passage of pedestrians.

136.12 ENCROACHING STEPS. It is unlawful for a person to erect or maintain any stairs or steps to any building upon any part of any sidewalk without permission by resolution of the Council.

136.13 OPENINGS AND ENCLOSURES. It is unlawful for a person to:

1. Stairs and Railings. Construct or build a stairway or passageway to any cellar or basement by occupying any part of the sidewalk, or to enclose any portion of a sidewalk with a railing without permission by resolution of the Council.

2. Openings. Keep open any cellar door, grating or cover to any vault on any sidewalk except while in actual use with adequate guards to protect the public.

3. Protect Openings. Neglect to properly protect or barricade all openings on or within six (6) feet of any sidewalk.

136.14 FIRES OR FUELS ON SIDEWALKS. It is unlawful for a person to make a fire of any kind on any sidewalk or to place or allow any fuel to remain upon any sidewalk.

136.15 DEBRIS ON SIDEWALKS. It is unlawful for a person to throw or deposit on any sidewalk any glass, nails, glass bottle, tacks, wire, cans, trash, garbage, rubbish, litter, offal, or any other debris, or any substance likely to injure any person, animal or vehicle.

(Code of Iowa, Sec. 364.12 [2])

136.16 GUTTERS AND DOWNSPOUTS. All eaves, gutters and drains shall be so constructed and located as not to allow water to run from such eave or drain or to run off from roofs onto public sidewalks.

136.17 MERCHANDISE DISPLAY. It is unlawful for a person to place upon or above any sidewalk, any goods or merchandise for sale or for display in such a manner as to interfere with the free and uninterrupted passage of pedestrians on the sidewalk; in no case shall more than three (3) feet of the sidewalk next to the building be occupied for such purposes.

136.18 SALES STANDS. It is unlawful for a person to erect or keep any vending machine or stand for the sale of fruit, vegetables or other substances or commodities on any sidewalk without first obtaining a written permit from the Council.

CHAPTER 169

ZONING CODE – PARKING REGULATIONS

169.01 PURPOSE. The purpose of this chapter is to provide adequate parking for all uses in the Zoning Code, to reduce demand for parking by encouraging alternative means of transportation including rideshare and bicycles, and to increase pedestrian mobility in urban areas by:

1. Setting minimum off-street parking standards for different land uses that assure safe, convenient, and adequately sized parking facilities within activity centers.

2. Providing incentives to rideshare through preferred parking arrangements.

3. Providing parking for parking and storage of bicycles.

4. Providing safe direct pedestrian access from public rights-of-ways to structures and between developments.

169.02 AUTHORITY AND APPLICATION.

1. Before a certificate of occupancy may be granted for any new or enlarged building, for any new parking area, or for a change of use in any existing building, the use shall be required to meet the provisions of this chapter.

2. If this chapter does not specify a parking requirement for a land use, the Zoning Official shall establish the minimum requirement based on a study of anticipated parking demand. In the study, the applicant shall provide sufficient information to demonstrate that the parking demand for a specific land use will be satisfied. Parking studies shall be prepared by a professional engineer with expertise in traffic and parking analysis, unless an equally qualified individual is authorized by the Zoning Official.

169.03 OFF-STREET LOADING SPACE REQUIRED.

1. Number of Off-Street Loading Spaces Required. In any district every building or part thereof erected, having a gross floor area of ten thousand (10,000) square feet or more, which is to be occupied by

manufacturing, storage, warehouse, goods display, retail store, wholesale store, market, hotel, hospital, mortuary, office buildings, dry cleaning, or similar uses which require the receipt or distribution by vehicles of material or merchandise, there shall be provided and maintained on the same lot with such building at least one off-street loading space, and for multiple tenant commercial/retail shopping centers, one additional such loading space for each twenty thousand (20,000) square feet or fraction thereof gross floor area used in excess of ten thousand (10,000) square feet, provided that the total number of loading spaces is not required to be more than total number of occupying tenants.

2. Off-Street Loading Space Design Requirements:

A. Each loading space shall be not less than 10 feet in width and 20 feet in length for loading spaces not requiring loading dock access, and 50 feet in length for loading dock access for trucks, designed in a manner acceptable to the Zoning Official providing adequate space for loading access.

B. Such loading area may occupy part of a required yard or court space, except yard or court space required by bulk regulations specified in each zoning district, and provided the loading area and access roadways meet all setbacks required of off-street parking areas as set forth in Section 169.06 "Design for Parking Facilities."

C. Loading yards and loading docks shall be buffered, as approved by the Zoning Official, from the general public view, public street, public buildings, recreation facilities, parks, schools, places of assembly, residential zones and uses, and from all other adjoining properties where is determined said loading areas are considered offensive to more restrictive adjoining uses.

D. All loading yards and access to loading yards and loading docks shall be paved with asphalt or Portland cement concrete pavement in accordance with surfacing requirements set forth in the Municipal Design Standards.

169.04 PARKING SPACE REQUIREMENTS.

1. Required Number. The off-street parking spaces required for each use permitted by the Zoning Code shall not be less than that found in Table 169-A, provided that any fractional parking space is computed as a whole space. Notwithstanding the amount of off-street parking required by the Zoning Code, the Zoning Official may approve less off-street parking when the proponent of a use demonstrates that,

because of special circumstances involved with a particular use, it is obvious that the off-street parking required by this code exceeds any reasonable likely need.

Table 169-A

USE	NUMBER OF PARKING SPACES REQUIRED
One- and two-family dwellings	2 per dwelling unit
Multi-family dwellings	2.2 per dwelling unit
Elder multi-family units	1.2 per dwelling unit
Vehicle fueling and service station	1 per 300 gross square feet plus 1 per employee
Vehicle repair garage	1 per 300 gross square feet plus 1 per employee
Professional office	1 per 200 gross square fee
Retail businesses	1 per 200 gross square feet
Commercial equipment room	1 per 2,000 gross square feet
Restaurant	1 per 100 gross square feet
Restaurant delivery – no seating	1 per 500 gross square feet plus 1 per employee
Dance hall	1 per 100 gross square feet
Funeral homes, mortuaries	1 per 200 gross square feet
Warehouse	1 per 2,000 gross square feet plus 1 per employee
Assembly	1 per every 4 seats provided
Place of worship	1 per every 10 seats provided
Medical office	1 per 200 gross square feet
Schools	1 per 3.5 seats in assembly rooms plus 1 per faculty member
Radio or television station	1 per 400 gross square feet
Hospital	1 per bed plus 1 per employee
Hotel or motel	1 per guest room plus 1 per 500 gross square feet
Industry	1 per 500 gross square feet
Parks and recreation areas	8 per acre of developed park
Note: Gross square feet are measured for the portion of the site utilized for the use, including storage yards and outbuildings if applicable.	

2. Combination of Uses. Where there is a combination of uses on a lot, the required number of parking spaces shall be the sum of that found for each use.

3. Location of Parking Spaces. The parking spaces required by this code shall be provided on the same lot as the use or where the exclusive use of such is provided on another lot not more than 500 feet radially from the subject lot within the same or less restrictive zoning district. If the required amount of off-street parking has been proposed to be provided off-site, the applicant shall provide written contracts with affected landowners showing that required off-street parking shall be provided in a manner consistent with the provisions of this chapter. The contracts shall be reviewed by the Zoning Official for compliance

with this chapter, and if approved, the contracts shall be recorded with the Johnson County Recorder's Office as a deed restriction on the title to all applicable properties. These deed restrictions may not be revoked or modified without authorization by the Zoning Official.

169.05 PARKING STALL DIMENSIONS.

1. Width.

   A. A minimum width of 9 feet shall be provided for each parking stall.

   B. A minimum width of 8 feet shall be provided for each compact parking stall.

   C. A minimum width of 8 feet shall be provided for each parallel parking stall.

2. Length.

   A. A minimum length of 19 feet shall be provided for each parking stall.

   B. A minimum length of 15 feet shall be provided for each compact parking stall.

   C. A minimum length of 22 feet shall be provided for each parallel parking stall.

169.06 DESIGN FOR PARKING FACILITIES.

1. Driveway Design. All parking facility access drives located within the public right-of-way shall be installed in accordance with the Municipal Design Standards.

2. Driveway Width. Every parking facility shall be provided with one or more access driveways, the width of which shall be the following:

   A. Residential driveways at least 10 feet.

   B. All other driveways:

      (1) Twelve feet for one-way enter/exit.

      (2) Twenty-two feet for two-way enter/exit.

3. Driveway and Ramp Slopes. The maximum slope of any driveway or ramp shall not exceed twenty percent (20%). Transition slopes in driveways and ramps shall be provided in accordance with the Municipal Design Standards.

4. Stall Accessibility. Each required parking stall shall be individually and easily accessible based on good engineering practice.

No automobile shall be required to back onto any public street or sidewalk to leave any parking stall when such stall serves more than one and two family dwelling uses. All portions of a public lot or garage shall be accessible to other portions thereof without requiring the use of any public street.

5. Compact-to-Standard Stall Ratio. The maximum ratio of compact stalls to standard stalls in any parking area shall not exceed 1 to 3.

6. Screening. General Commercial, Highway Commercial and Industrial parking lots shall be screened from public streets utilizing plantings and berming to help maintain a visually attractive corridor. Larger parking lots exert a greater visual impact and therefore should have a higher percentage of their spaces devoted to landscaping islands. Landscaping islands are required per Chapter173 Site Plan Regulations..

7. Parking Facility and Loading Area Setback Requirements. Every public or private off-street parking area and loading area shall be developed and maintained in accordance with the following requirements:

8. Surface Materials.

A. All off-street parking, loading areas, and access drives shall have a durable and dust free surface paved with asphaltic or portland cement concrete pavement in accordance with the specifications as herein set forth. Off-street parking of automobiles, vans, campers, trucks, trailers, tractors, recreational mobile vehicles equipped for street and highway travel shall be on asphaltic or portland cement concrete paved off-street parking area as required herein and not parked or stored within the landscaped or open spaced area. Exception is in Residential zones a boat, RV, or camper less than 15,000 pounds may be stored in the side and rear yard landscaped or open spaced area.

B. All off-street parking areas and associated driveways, access roadways, and frontage roads, except driveways for single-family residences, shall be constructed with permanent, integrally attached, six inch high portland cement concrete curbing, or curbing of alternate height acceptable to the City (prefabricated portable curb stops shall not be considered an acceptable alternate), and shall be so graded and drained as to dispose of all surface water accumulation within the area; and shall be so arranged and marked as to provide for orderly and

safe loading or unloading and parking and storage of self-propelled vehicles.

C. The minimum thickness of pavement of the parking facilities shall be as follows:

(1) Portland cement concrete shall have a minimum thickness of four inches for residential uses and five inches for all other uses. The subgrade shall have a minimum subgrade modulus (K) of 150. Additional thickness of portland cement concrete may be utilized to create an equivalent subgrade modulus if the existing subgrade modulus is less than 150.

(2) Asphaltic concrete shall have a minimum thickness of 4½ inches for residential uses and 5½ inches for all other uses. The subgrade shall have a minimum CBR of 5. Additional thickness of asphaltic concrete may be utilized to create CBR if the existing CBR is less than 5. Pavement shall be designed in accordance with the Asphalt Institute "Thickness Design Manual."

9. Striping. All parking stalls shall be striped substantially. Exception is given for a private garage or parking area for the exclusive use by a single-family dwelling.

10. Lighting Illumination Requirements. Exterior lighting shall relate to the scale and location of the development in order to maintain adequate security while preventing nuisance or hardship to adjacent properties or streets. Except for lighting of loading areas, service areas, and for architectural emphasis, floodlighting is prohibited. Lighting shall comply with the following requirements.

A. Light fixtures 300 feet or less from a residential zone shall be mounted no higher than 25 feet from grade.

B. Light fixtures greater than 300 feet from a residential zone shall be mounted no higher than 35 feet from grade.

C. All lights greater than 2,000 lumens, both pole mounted and wall mounted, shall be equipped with cutoff shields so that no light shines above the horizontal, and no direct light falls beyond the property line. Light reflectors and refractors may be substituted for shields on ornamental and pedestrian light fixtures.

D. Light fixtures used to illuminate flags, statues, and objects mounted on a pole or pedestal shall use a narrow cone of light that does not extend beyond the illuminated object.

E. Outdoor recreational facilities permitted by conditional use may be exempt from the specific exterior lighting standards provided the City Council approves a lighting plan as part of the conditional use approval process.

F. Illumination shall not exceed 1 foot-candle at property boundaries of multi-family, commercial, and industrial uses abutting to or across the street from a residential zone, or a commercial zone in which residential uses are permitted.

11. Parking Area Lighting Fixture. The City before installation shall approve all exterior lighting fixtures. Wood utility pole shall not be used to support a parking light fixture.

169.07 STACKING SPACES FOR DRIVE-THROUGH FACILITIES.

1. A stacking space shall be an area measuring eight (8) feet by twenty (20) feet with direct forward access to a service window of a drive-through facility. A stacking space shall be located to prevent any vehicles from extending onto the public right-of-way, or interfering with any pedestrian circulation, traffic maneuvering, or other parking space areas. Stacking spaces for drive-through or drive-in uses may not be counted as required parking spaces.

2. Uses providing drive-up or drive-through services shall provide vehicle stacking spaces as follows:

A. For each drive-up window of a bank or financial institution, business service, or other drive-through not listed, a minimum of five stacking spaces shall be provided; and

B. For each service window of a drive-through restaurant, a minimum of seven stacking spaces shall be provided.

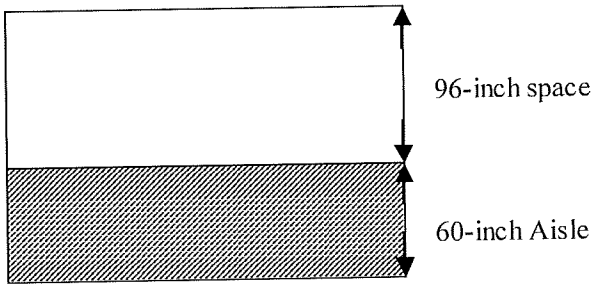
169.08 HANDICAPPED PARKING REQUIREMENTS. Provision of handicapped parking stalls within off-street parking and loading facilities shall be in accordance with the Code of Iowa, Chapter 104A and this code. These requirements shall apply to all public and private parking facilities, temporary or permanent, used by the general public.

1. Parking spaces designated for physically disabled persons and accessible passenger loading zones that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance of the building. In separate parking structures or lots that do not serve a particular building, parking spaces for physically disabled persons shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility. When handicapped parking spaces are required for buildings with more than one accessible entrance, the spaces shall be distributed so that

each accessible entrance shall have at least one parking space located on the shortest accessible route to that entrance. Exception is given if the required number of spaces is less than the number of accessible entrances, the spaces shall be distributed so that as many entrances as possible are served by at least one handicapped parking space located on the shortest accessible route to those entrances.

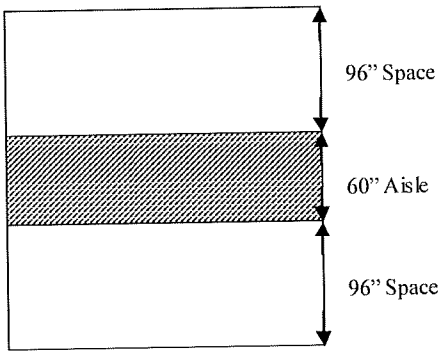
2. Single parking spaces designated for physically disabled people shall be at least 96 inches wide and shall have an abutting access aisle 60 inches wide (see Figure 169-1). Parking vehicle overhangs shall not reduce the clear width of an accessible circulation route. Parking spaces and access aisles shall be level with surface sloes not exceeding 1:50 in all directions.

Figure 169-1



3. Two accessible parking spaces may share a common access aisle (see Figure 169-2).

Figure 169-2



4. The first parking space provided in a parking lot or parking structure, and every eighth handicapped parking space provided thereafter, shall be a van-accessible space. A "van-accessible" space

shall be 96 inches wide with an abutting access aisle at least 96 inches wide (see Figure 169-3). Two abutting van-accessible spaces may share a common access aisle. Exception will be granted to entities providing handicapped parking spaces who are not required to provide can-accessible spaces if all of the handicapped parking spaces provided in a parking lot or structure are "universally accessible." A "universally accessible" space is at least 132 inches wide with an abutting 60 inches aide access aisle. Two abutting universally accessible spaces may share a common access aisle (see Figure 169-4).

Figure 169-3

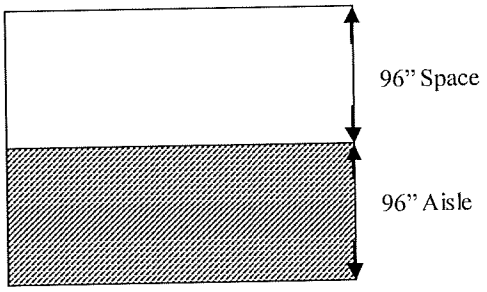
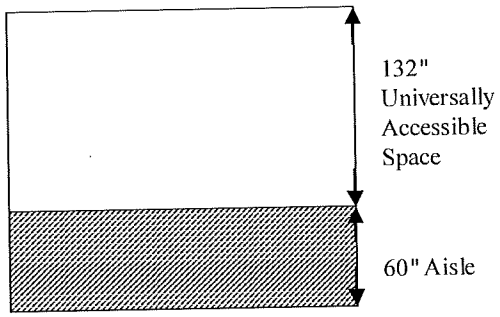
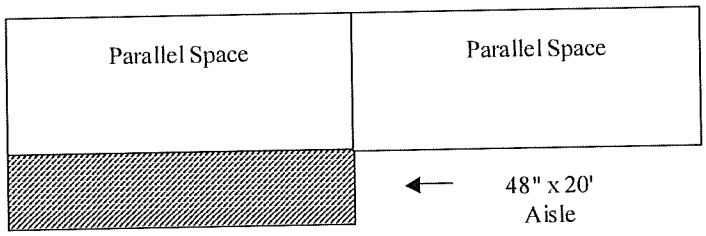


Figure 169-4



5. Passenger loading zones shall provide an access aisle at least 48 inches wide and 20 feet long abutting and parallel to the vehicle pull-up space (see Figure 169-5). Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1:50 in all directions. Note: projects which are required to comply with the Uniform Federal Accessibility Standards shall provide a width of 60 inches for the access aisle.

Figure 169-5



6. A minimum vertical clearance of 108 inches shall be provided at accessible passenger loading zones and along vehicle access routes to such areas from site entrances. Note: Uniform Federal Accessibility Standard requires 114 inches of vertical clearance.

7. If there are curbs between the access aisle and vehicle pull-up space, then a curb ramp complying with Code of Iowa Section 216C.9 shall be provided.

8. Accessible parking spaces shall be designated as reserved for physically handicapped people by a sign having a blue background and bearing the international symbol of accessibility in white. The handicapped parking sign shall be affixed vertically on another object so that it is readily visible to a driver of a motor vehicle approaching the handicapped parking space. Each handicapped parking sign shall include language stating the amount of fine for improperly using the handicapped parking space.

9. At least 2% of the total parking spaces in any off-street nonresidential parking facility available to the public shall be designated as handicapped spaces, rounded to the nearest whole number of handicapped parking spaces, in compliance with the provisions of this chapter. All off-street parking facilities which provide ten or more parking spaces shall designate handicapped parking spaces in accordance with Table 169-B.

10. All public and private buildings and facilities, temporary and permanent, which are residences and which provide ten or more tenant parking spaces, excluding extended health care facilities, shall designate at least one handicapped parking space as needed for each individual dwelling unit in which a handicapped person resides. Residential buildings and facilities that provide visitors' parking of ten or more spaces shall designate handicapped parking spaces in the visitors' parking area in accordance with Table 169-B.

Table 169-B

TOTAL PARKING SPACES IN LOT	REQUIRED MINIMUM NUMBER OF HANDICAPPED PARKING SPACES
10 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	†
1001 and over	‡

† Two percent (2%) of total
‡ Twenty (20) spaces plus one for each 100 over 1000
Note: Projects which are required to comply with the Uniform Federal Accessibility Standards shall provide a minimum of one handicapped parking space.

169.09 PEDESTRIAN CIRCULATION AND ACCESS.

1. All uses, except single-family detached homes, shall provide pedestrian access onto the site. Pedestrian access points shall be provided at all pedestrian arrival points to the development including the property edges, adjoining lots, abutting street intersections, crosswalks, and at transit stops. Pedestrian access shall be located as follows:

   A. Access points at property edges and to adjoining lots shall be coordinated with existing development to provide circulation patterns between developments; and

   B. Residential developments shall provide links between cul-de-sacs or groups of buildings to allow pedestrian access from within the development and from adjacent developments to activity centers, parks, common tracts, open spaces, schools or other public facilities, transit stops and public streets.

2. Pedestrian walkways shall form an on-site circulation system that minimizes the conflict between pedestrians and traffic at all points of pedestrian access to on-site parking and building entrances. Pedestrian walkways shall be provided when the pedestrian access point or any

parking space is more than 75 feet from the building entrance or principal on-site destination and as follows:

A. All developments which contain more than one building shall provide walkways between the principal entrances of the buildings.

B. All nonresidential buildings set back more than 100 feet from the public right-of-way shall provide for direct pedestrian access from the building to buildings on adjoining lots.

C. Pedestrian walkways across parking areas shall be located as follows:

(1) Walkways running parallel to the parking rows shall be provided for every four rows. Rows without walkways shall be landscaped or contain barriers or other means to encourage pedestrians to use the walkways.

(2) Walkways running perpendicular to the parking rows shall be no further than 20 parking spaces. Landscaping, barriers or other means shall be provided between the parking rows to encourage pedestrians to use the walkways.

3. Pedestrian access and walkways shall meet the following minimum design standards:

A. Access and walkways shall be well lit and physically separated from driveways and parking spaces by landscaping, berms, barriers, grade separation or other means to protect pedestrians from vehicular traffic.

B. Access and walkways shall be a minimum of 60 inches of unobstructed width and meet the surfacing standards of the City's Municipal Design Standards for walkways or sidewalks.

C. Access shall be usable by mobility impaired persons and shall be designed and constructed to be easily located by the sight impaired pedestrian by either grade change, texture or other equivalent means.

D. A crosswalk shall be required when a walkway crosses a driveway or a paved area accessible to vehicles.

E. Wherever walkways are provided, raised crosswalks or speed bumps shall be located at all points where a walkway crosses the lane of vehicle travel.

4. Blocks in excess of 900 feet shall be provided with a crosswalk at the approximate midpoint of the block.

Street Lights

In 1998,Transportation Engineering and Urban Development Department began a comprehensive reassessment of the street light section of the Subdivision Ordinance. This was undertaken as a result of direction from City Council in the form of the Urban Design Strategy adopted in 1994. Numerous requests from developers for more aesthetically appealing street light designs and issues brought forth by TU electric, the dominate energy provider for the area.

In the past, the city of Carrollton installed seventeen (17) foot poles in existing and new residential subdivisions. The street light section of the Subdivision Ordinance required a minimum spacing 250 feet and a maximum spacing of 500 feet, based on a seventeen (17) foot pole height. The new standards call for the installation of twelve (12) foot poles at a minimum spacing of 175 feet and a maximum spacing of 350 feet.

Installation of Additional Street Lights

On streets that have 17-foot height luminaires, requests for additional lighting are evaluated based on the old standards. This includes the spacing requirements of 250 feet and 500 feet as stated above. On streets that have the 12-foot height street lights, requests for additional lighting would are evaluated based on the revised standard. Mixing of old and new street light standards are be allowed.

Upgrading to the Newer Standard

Any subdivision that has the older street light standards will maintain those standards until such time as the city passes a bond referendum or other funding sources are identified to upgrade the luminaires. However, if a neighborhood association desires to upgrade to the newer standards, the city would allow it if the neighborhood association pays for the upgrade. Staff will determine the minimum area that would require upgrades. This area will be determined by definable neighborhood boundaries such as arterial streets, creeks, railroad tracks, etc.

Street Light Repair

The City of Carrollton does not repair street lights. To request a street light repair, contact the electricity company to whom you pay your electric bill.

If you pay your bill to TXU, call 1-888-313-6862. To report an outage directly to TXU:
http://www.txuelectricdelivery.com/community/streetlights/default.aspx.

ARTICLE G. OUTDOOR LIGHTING STANDARDS

14-5G-1: PURPOSE:

The outdoor lighting standards are intended to reduce the obtrusive aspects of outdoor light usage while preserving safety, security, and the nighttime use and enjoyment of property. These measures will encourage lighting practices that direct appropriate amounts of light where and when it is needed and decrease glare resulting from overlighting and poorly shielded or inappropriately directed lighting fixtures. (Ord. 05-4186, 12-15-2005)

14-5G-2: APPLICABILITY:

A. Application Of Provisions: The standards contained in this article apply to all uses in all zones, except for the exemptions listed in subsection B of this section.

B. Exemptions:

1. Single-family uses, two-family uses, and group households located within single-family or two-family dwellings are exempt from all provisions of this article, except for the provisions contained in section 14-5G-3 of this article.

2. Airport lighting for navigational purposes is exempt from the provisions of this article.

3. FAA required lighting on towers and buildings is exempt from the provisions of this article.

4. The temporary use of lighting for public festivals and celebrations and for temporary commercial activities such as carnivals and fairs may be exempted from the provisions of this article if the building official determines, through the temporary use permitting process, that the proposed lighting will not create a hazard or nuisance from glare, light trespass, or overlighting.

5. Lighting for outdoor recreational facilities that are accessory to community service uses, colleges and university uses, educational facility uses, parks and open space uses, and religious/private group assembly uses may be exempted from the minimum standards or exceed the maximum standards of this article; provided, that the provisions specified in section 14-5G-7, "Exemptions For Special Uses", of this article are met.

6. Lighting for outdoor display lots accessory to outdoor storage and display oriented retail uses may exceed the total outdoor light output standards specified in section 14-5G-5 of this article; provided, that the

provisions specified in section 14-5G-7, "Exemptions For Special Uses", of this article are met. (Ord. 05-4186, 12-15-2005)

14-5G-3: STANDARDS FOR SINGLE-FAMILY AND TWO-FAMILY USES:

The regulations of this section apply to all single-family uses, two-family uses, and any group household that is located within a single-family or two-family dwelling.

A. Height And Glare Control:

1. Light fixtures must be mounted no higher than fifteen feet (15') above grade.
2. All bulbs that exceed two thousand (2,000) lumens must be fully shielded as installed.
3. Bulbs used for floodlights must not exceed two thousand (2,000) lumens.

B. Light Trespass Standards:

1. Any floodlights that are visible from any neighboring residential property must be aimed downward at an angle no higher than forty five degrees (45°) from vertical.
2. Light fixtures used to illuminate flags, statues, or objects mounted on a pole or pedestal must use a narrow cone of light that does not extend beyond the illuminated object. Lights that are intended to architecturally highlight a building or its features must use a limited pattern of light that does not extend beyond the wall of the building. Bulbs must be shielded from view of abutting properties and the public right of way.

C. Lighting For Private Recreational Facilities: All floodlights used to illuminate outdoor private recreational facilities, such as swimming pools, tennis courts, and basketball courts, must be turned off by ten o'clock (10:00) P.M. Underwater lighting in swimming pools and hot tubs are exempt from this provision.

D. Prohibited Lighting: Laser lights, searchlights, mercury vapor bulbs, and any other type of lamp capable of producing comparable levels of ultraviolet radiation per watt are prohibited. (Ord.05-4186, 12-15-2005)

14-5G-4: PHYSICAL CONTROLS:

A. Height Limitations:

1. Light fixtures located within three hundred feet (300') of a residential zone must be mounted no higher than twenty five feet (25') above grade.
2. Light fixtures located further than three hundred feet (300') from a residential zone must be mounted no higher than thirty five feet (35') above grade.

B. Glare Control:

1. All bulbs that exceed two thousand (2,000) lumens must be fully shielded as installed.

2. Unshielded or partially shielded bulbs that are two thousand (2,000) lumens or less must be frosted glass or be installed behind a translucent cover.

3. All under-canopy lights or lights mounted in eaves must either be recessed into the canopy/eave and fully shielded or use flat lenses instead of drop lenses.

4. The city may permit the use of light reflectors, refractors or house shields as a substitute for fully shielded light fixtures on lower wattage or low voltage ornamental or pedestrian light fixtures. The shielding on such fixtures must control for uplighting. These substitute shielding options are not permitted for general illumination of large areas, such as parking, service, or outdoor product display areas. Fixtures used to illuminate such areas must be fully shielded.

C. Light Trespass: The trespass standards are intended to prevent light from one property extending beyond the property line onto adjacent properties. Compliance with this subsection is achieved with fixture shielding, directional control designed into the fixture, fixture location, fixture height, fixture aim, or a combination of these methods.

1. Except for lighting of loading areas, service areas, and for architectural emphasis, floodlighting is prohibited. Floodlights are not permitted for the illumination of parking or outdoor product display areas.

2. Floodlights, when permitted, are exempt from subsection B2 of this section, but must be aimed no higher than forty five degrees (45°) from vertical. Floodlights must also comply with subsections C3, C4 and C5 of this section.

3. Lighting fixtures must be located and shielded such that the bulb is not directly visible from any adjacent residentiallyzoned property or public right of way. The right of way trespass standard does not apply in the CB-2, CB-5 or CB-10 zones. (Ord. 05-4186, 12-15-2005)

4. Illumination must not exceed 0.5 initial horizontal foot-candle and 2.0 initial maximum foot-candles as measured at any point along a property boundary that is adjacent to or across the street from properties that are zoned residential, CN-1, or CO-1. The city may increase the maximum up to 1.0 horizontal foot-candle for building code required lighting on buildings located on or close to the property line. However, lighting must be located and shielded in a manner that will be least obtrusive to any abutting residential properties. (Ord. 06-4245, 12-12-2006)

5. On any property containing multi-family uses or group living uses, lighting fixtures must be located and shielded such that the bulbs are not visible from any residential window on the property.

6. Light fixtures used to illuminate flags, statues, or objects mounted on a pole or pedestal must use a narrow cone of light that does not extend beyond the illuminated object. Lights that are intended to architecturally highlight a building or its features must use a limited pattern of light that does not extend beyond the wall of the building. (Ord. 05-4186, 12-15-2005)

14-5G-5: TOTAL OUTDOOR LIGHT OUTPUT STANDARDS:

A. Maximum Outdoor Light Output:

1. Total Outdoor Light Output Defined: The "total outdoor light output" on a property is the total amount of light, measured in initial lumens, from all bulbs used in outdoor light fixtures. It includes all lights and luminous tubing used for display lighting, general illumination, architectural/accent lighting, and lights used for external illumination of signs, but does not include lights used to illuminate internally illuminated signs or luminous tubing used in neon signs. For bulb types that vary in their output as they age, such as high

pressure sodium, fluorescent and metal halide, the initial lumen output, as defined by the manufacturer, is the value to be considered when calculating total outdoor light output.

2. Applicability: The total outdoor light output on any property that is subject to the provisions of this article may not exceed the limits in table 5G-1, located at the end of this section, except for those that are exempted in subsection A3 of this section and in section 14-5G-7 of this article. The values in this table are upper limits and not design goals; design goals should be the lowest light levels that meet the requirements of the task.

3. Exemptions:

   a. Seasonal decorations, permitted between Thanksgiving and theend of January, are not counted toward the total outdoor light output.

   b. In the E2 and E3 districts, properties where the building coverage is eighty percent (80%) or greater are exempt from the maximum total outdoor light output standard, but are subject to the limitation on unshielded fixtures, as stated in table 5G-1 located at the end of this section.

B. Lighting Environment Districts: All residential, commercial, office, and industrial zones are grouped into three (3) lighting environment districts that control lighting output on applicable lots in each zone. Uses, for which the lighting standards are applicable, located within the public (P) zone must comply with the lighting requirements of the adjacent zone; those on the border between two (2) or more zones must comply with the standards of the strictest adjacent zone. Zones are grouped into the lighting environment districts as follows:

1. Low Illumination District, E1: Areas of low ambient lighting levels. This district includes single-family and low density multi-family residential zones. This district applies to the following zones: ID-RS, ID-RM, RR-1, RS-5, RS-8, RS-12, RM-12, and RNS-12.

2. Medium Illumination District, E2: Areas of medium ambient lighting levels. This district includes higher density multi-family zones and lower intensity commercial and office zones. This district applies to the following zones: ID-C, ID-I, ID-RP, CN-1, CO-1, PRM, RM-20, RM-44, RNS-20, and MU.

3. High Illumination District, E3: Areas of high ambient lighting levels. This district includes higher intensity commercial, industrial, and research zones. This district applies to the following zones: CC-2, CH-1, CI-1, CB-2, CB-5, CB-10, I-1, I-2, RDP, and ORP.

C. Measuring Total Outdoor Light Output:

1. The maximums in table 5G-1, located at the end of this section, are based on a calculation of initial lumens per net acre. The lot size less the total building coverage of the lot determines the number of net acres used for this calculation.

2. Lumen output from an under canopy or under eave light fixture mounted fifteen (15) or more feet from any edge of the eave or canopy will be measured at 0.5 its full value.

Table 5G-1: Maximum Outdoor Light Output Standards

Shielding Combinations	Lighting Environment District		
	E1, Low Ambient Lighting (In Initial Lumens Per Acre)	E2, Medium Ambient Lighting (In Initial Lumens Per Acre)	E3, High Ambient Lighting (In Initial Lumens Per Acre)
Maximum total outdoor light output (including both fully shielded and unshielded fixtures)	50,000	100,000	200,000

Maximum outdoor light output from unshielded fixtures	4,000	10,000	10,000

(Ord. 06-4245, 12-12-2006)

14-5G-6: PROHIBITED LIGHTING AND BULBS:

The following types of lighting are prohibited:

A. Laser lights.

B. Searchlights.

C. Mercury vapor bulbs. (Ord. 05-4186, 12-15-2005)

14-5G-7: EXEMPTIONS FOR SPECIAL USES:

A. Outdoor Recreational Facilities: Lighting for outdoor recreational facilities that are accessory to community service uses, colleges and university uses, educational facility uses, parks and open space uses, and religious/private group assembly uses may be exempted from the minimum standards or exceed themaximum standards of this article; provided, that the following specific approval criteria are met. To apply for this exemption, a lighting plan must be submitted to the city and must be certified as conforming to the standards listed below by a registered engineer with lighting certified (LC) status according to the national council on qualifications for the lighting professions (NCQLP).

1. The facility must satisfy the requirements set forth in the most current editions of the Illuminating Engineering Society of North America (IESNA) RP-6 recommended practice for sports and recreational area lighting and the IESNA lighting handbook. Appropriate lighting criteria must be selected based on the class of play of the facility and participants as defined by the IESNA.

2. Fixtures must be located, aimed and shielded to the extent possible to prevent light trespass and glare onto adjacent properties according to the following standards:

   a. Luminaires must be aimed no greater than a distance two (2) mounting heights or less from the base of the pole (a maximum angle of 63 degrees up from nadir or a minimum of 27 degrees down from horizontal).

   b. Fixtures must be mounted so as to meet the criteria of a "cutoff fixture" as defined in chapter 9, article D, "Outdoor Lighting Definitions", of this title.

   c. Illumination must not exceed 0.5 initial horizontal foot-candles and 2.0 initial maximum foot-candles as measured at any point along a property boundary that is adjacent to or across the street from properties that are zoned residential.

3. Laser lights, searchlights, and mercury vapor bulbs are prohibited.

4. Use of such lighting is restricted to those hours when the recreational facility is in use. Lighting for recreational facilities must be turned off by one hour after conclusion of the recreational activity. For facilities located in or adjacent to residential zones, the curfew for recreational facility lighting is eleven o'clock (11:00) P.M. Illumination of such facilities shall be permitted after eleven o'clock (11:00) P.M. only to conclude a scheduled event that was unable to conclude before the curfew due to unusual circumstances.

B. Outdoor Display Lots: Lighting for outdoor display lots that are accessory to outdoor storage and display oriented uses may exceed the total outdoor light output standards specified in section 14-5G-5 of this article; provided, that the following specific approval criteria are met. To apply for this exemption, a lighting plan must be submitted to the city and must be certified as conforming to the standards listed below by a registered engineer with LC status according to the NCQLP.

1. The display lot must be designed to achieve no greater thanthe minimal illuminance levels for the activity as recommended by the Illuminating Engineering Society of North America (IESNA).

2. Display lot lighting that exceeds the total outdoor light output standards specified in section 14-5G-5 of this article must be turned off at eleven o'clock (11:00) P.M. or within thirty (30) minutes after close of business, whichever is later. After this time, lighting on the property must comply with the total outdoor light output standards specified in section 14-5G-5 of this article.

3. All other standards and requirements of this article must be met.

C. Other Lighting On Properties Containing Special Uses: All lighting not directly associated with the special use areas listed in subsections A and B of this section must conform to the lighting standards contained in this article. If recreational facilities or outdoor display lots take advantage of the exemptions allowed in this section, the net acreage for the determination of compliance with the total outdoor light output standards for other lighting on the property must not include the area of the recreational facility or outdoor display lot. (Ord. 05-4186, 12-15-2005)

14-5G-8: MEASUREMENT:

All measurements shall be made thirty six inches (36") above the ground. Horizontal foot-candle measurements shall be taken with the meter held parallel to the ground pointing up. Maximum foot-candle measurements shall be taken with the meter oriented towards the brightest light bank. Light levels are specified, calculated and measured in foot-candles. All foot-candle values are expressed in initial foot-candles. (Ord. 05-4186, 12-15-2005)

SECTION 4
STREET DESIGN

SECTION 4
STREET DESIGN

4.1 GENERAL DESIGN CRITERIA

This section of the Design Manual generally follows the guidelines as established by the Institute of Transportation Engineers (ITE), the Illinois Department of Transportation (IDOT) and the American Association of State Highway and Transportation Officials (AASHTO). The references used to establish this Design Manual include the following:

- *Guidelines for Major Street Design* (ITE Publication No. RP-010A)
- *Guidelines for Residential Subdivision Street Design* (ITE Publication No. RP-011C)
- *A Policy of Geometric Design of Highways and Streets* (AASHTO, 1994)
- *An Information Guide for Roadway Lighting* (AASHTO, 1994)
- *Traffic Calming – State of the Practice* (ITE Publication No. 1R-098)
- *Illinois Department of Transportation Bureau of Local Roads & Streets Administrative Policies Manual*
- *Illinois Department of Transportation Bureau of Design & Environment Manual*

This chapter presents modifications to these guidelines in accordance with the policies and procedures established by the City of Naperville.

4.2 ROADWAY GEOMETRICS

4.2.1 Functional Classifications

4.2.1.1 Major Arterial

These streets are used primarily to carry the heavier traffic pattern providing continuity throughout the contiguous urban area. Access control will be maintained towards limiting access to intersections with other roads.

4.2.1.2 Minor Arterial

A street used primarily for intersections of sections of the City and deemed desirable for construction of other public utilities within the street right of way.

4.2.1.3 Collector

A street used primarily to provide ready collection of traffic from residential areas and to convey this traffic to the major arterial and highway system. Even though this street may carry some through traffic, its primary function is to feed traffic to the arterial streets and to provide local access.

4.2.1.4 Neighborhood Connector

Connect residential and local streets within a neighborhood to Collector streets and to the Arterial street network. All neighborhoods have at least one neighborhood connector street, and many have two or more.

4.2.1.5 Local Streets

The primary function is to serve adjoining property. They shall be arranged to conform to the topography, to discourage use by through traffic and provide access to abutting property.

4.2.2 Minor Street Design Guidelines

A minor street is defined as any street classified below the functional classification of an arterial. The design guidelines to be used in developing the minor street system layout shall be in accordance with Appendix E *"Guidelines for Residential Subdivision Street Design"* prepared by the Institute of Transportation Engineers, except as otherwise noted in the following provisions:

4.2.2.1 Pavement Width

The minimum pavement width for all local streets and cul-de-sacs is 28 feet, measured from back of curb to back of curb. The minimum pavement width for collector streets is 37 feet, measured from back of curb to back of curb. Neighborhood connector streets shall either be 28 feet or 37 feet depending upon the discretion of the City Engineer. Neighborhood connectors shall be 37 feet adjacent to all school sites, park sites or other major facilities and on approaches to all collector and arterial roadways.

4.2.2.2 Maximum Cul-de-Sac Length

The length of a cul-de-sac should not exceed 1,000 feet, as measured from the centerline of the intersecting street, along the centerline to the center of the bulb of the cul-de-sac. For lengths in excess of 1,000 feet, a secondary point of access must be provided.

4.2.2.3 Curbs And Gutters

The standard curb and gutter section for all cul-de-sac and local roads is a type M 3.12 mountable rolled curb. The curb and gutter section for all collector streets shall be a barrier type B 6.12 curb and gutter. Neighborhood connector streets can be constructed with either M 3.12 or B 6.12 curb and gutter. In general the M 3.12 curb and gutter will be used in the 28-foot wide sections of neighborhood connector streets while the B 6.12 curb and gutter will be used on the 37-foot wide sections.

4.2.2.4 Sidewalks

A 5-foot sidewalk is required on both sides of all streets and cul-de-sacs. Pedestrian circulation is to be provided so as to separate vehicular traffic from pedestrians.

4.2.2.5 Street Lighting

Street lighting, including underground service cable, is required throughout all subdivisions for all public streets.

4.2.2.6 Street Name Signs

Street name signs are required at all street intersections.

4.2.2.7 Pavement Design

All streets within the subdivision shall be surfaced with either bituminous concrete or Portland cement concrete. The pavement structure shall be designed according to the Sections 402, 403, and 404 of the City of Naperville Standard Specifications.

4.2.3 Right-of-Way Requirements

Type of Roadway	Minimum ROW (FT)
Major Arterial	120
Minor Arterial	100
Collector	80
Neighborhood Connector	Varies from 66 to 80
Local Street	66
Cul-de-Sac Bulb	62
Alley	30

4.3 INTERSECTION DESIGN

The design guidelines follow the *"Guidelines for Residential Subdivision Street Design"* as published by the Institute of Transportation Engineers. Table 3: Intersection Design Guidelines denotes three classifications for the type of terrain. In the City of Naperville, the terrain is generally level (has a longitudinal slope of 0-8%). Therefore the guidelines under this classification should be followed.

Criteria	Requirement
Approach Speed (mph)	25
Clear Sight Distance (length along each approach leg)(feet)	90
Minimum Angle of Intersection	70° (90° Preferred)
Minimum Curb Radius (feet)	
a. Local-Local	20
b. Local-Neighborhood Collector	25
c. Local-Collector	25
d. Neighborhood Collector-Neighborhood Collector	30
e. Neighborhood Connector-Collector	30
f. Neighborhood Connector-Arterial	30
g. Collector-Collector	30
h. Collector-Arterial	30
Minimum Centerline Offset of Adjacent Intersection (feet)	
a. Local-Local	125
b. Local-Neighborhood Collector	150
c. Local-Collector	150
d. Neighborhood Collector-Neighborhood Connector	200
e. Neighborhood Connector-Collector	25
f. Collector-Collector	200
Minimum Tangent Length (feet)	
Approaching Intersection (each length)	50

4.4 SIDEWALKS

4.4.1 Minimum Width

The minimum width for sidewalks is 5 feet, except where the volume of pedestrian or bicycle traffic justifies a greater width, or where parked vehicles may overhang onto the sidewalk. The minimum sidewalk width in the Central Business District is 8 feet.

4.4.2 Location

All sidewalks are to be located such that the outside edge of the walk is 1-foot from the dedicated right-of-way line, and entirely within the dedicated right-of-way.

4.4.3 Lateral Separation

The minimum lateral separation between the edge of a sidewalk and any above ground obstruction (i.e. posts, poles, tree trunks, utility boxes, etc.) shall be 1-foot. When such conflicts require a lateral change in sidewalk alignment, a 10:1 transition shall be made.

4.4.4 Slope And Grade

Transverse Slope, minimum 2% (¼" per foot)
Transverse Slope, maximum 4% (½" per foot)

Longitudinal Slope, maximum 5% (20:1)
Longitudinal Slope, in excess of 5% shall meet the requirements of the Illinois Accessibility Code.

4.4.5 Intersections

When a sidewalk approaches an intersection with a street to provide a pedestrian crossing; the curb and adjacent sidewalk shall be depressed, meeting the requirements of the Illinois Accessibility Code. Refer to the City of Naperville Standard Detail PVMT 4.

Sidewalks are to be continuous through paved areas such as driveways and parking lots.

4.5 STREET LIGHTING

4.5.1 Performance Standards

Streetlights along all local, neighborhood connector and collector streets shall meet the following performance standards:

Item	Collector Streets	Neighborhood Connector Streets	Local Streets
Maximum FC	≤ 5.0	≤ 3.5	≤ 3.5
Minimum FC	≥ 0.3	N/A	N/A
Average FC	≥ 1.1	≥ 0.4	≥ 0.4
Ave./Min. Ratio	≤ 4.0	N/A	N/A
Max./Min. Ratio	N/A	N/A	N/A
Bulb Type	HPS	HPS	HPS
Wattage	250	150	100
Lens Type	Flat Glass		
IES Distribution Type	Medium Cutoff Type II or Type III		
Maintenance Factor	0.7		
Pole Location	5 feet From Back of Curb		
Pole Type	Aluminum		

Item	Collector Streets	Neighborhood Connector Streets	Local Streets
Mounting Height (ft.)	32	23	23
Mast Arm (ft.)	10	8	8
Mast Arm Type	Truss or davit arm	Single member taper elliptical type or davit "bent fishing pole" arm	

4.5.2 Approval

Catalog cuts for all components of street lights must be submitted for review and approved prior to installation. The components must meet the requirements set forth in Section 600 of the City of Naperville Standard Specifications. Submittals include, but are not limited to: Poles, mast arms, breakaway couplings, luminaires, photo-cells, conduit, cable, fuses, handholes, junction boxes, ground rods, and controllers.

4.5.3 Location

Street Light poles shall be placed at the following locations:

- At each intersection, in the "stop sign" position, oriented at an angle of 90 degrees to the alignment of the street.
- Inside of all horizontal curves.
- On each cul-de-sac, at the point where the tangent meets the circular outside of the cul-de-sac (throat).
- At mid-block locations such that the spacing identified in the following sections is not exceeded.
- At additional locations where conditions warrant additional lighting per the City Engineer.

4.5.4 Cul-de-Sac and Local Street Design Standards

4.5.4.1 Mounting Height

The mounting height shall be 23 feet.

4.5.4.2 Mast Arm

The mast arm shall be 8 feet long.

4.5.4.3 Street Lighting Controller and Power Source

Street lighting controllers are not required for local streets and cul-de-sacs. Each streetlight shall be individually fed from the nearest power source as indicated by the City of Naperville Department of Public Utilities/Electric. Each streetlight shall also be equipped with a photocell.

4.5.4.4 Spacing

For either staggered or single side layout, street light poles shall be located based on the following recommended spacing, and comply with the performance standards established in Section 4.5.1:

Luminaire	*GE M-C-II*	*GE M-C-III*
100 watt	100 feet	125 feet

4.5.5 Neighborhood Connector Street Design Standards

4.5.5.1 Mounting Height
The mounting height shall be 23 feet.

4.5.5.2 Mast Arm
The mast arm shall be 8 feet long.

4.5.5.3 Controller and Power Source
All streetlights on neighborhood connector streets shall be run from a street lighting controller meeting the specifications noted in the City Standards. In general, the controller shall be located in the mid-point of all of the streetlights run by the controller. The power source shall be determined by the City of Naperville Department of Public Utilities-Electric. A photocell shall be placed on the nearest streetlight and connected back to the controller.

4.5.5.4 Spacing
For either staggered or single side layout, street light poles shall be located based on the following recommended spacing, and comply with the performance standards established in Section 4.5.1:

Luminaire	*GE M-C-II*	*GE M-C-III*
150 watt	150 feet	150 feet

4.5.6 Collector Street Design Standards

4.5.6.1 Mounting Height
The standard mounting height is 32 feet.

4.5.6.2 Mast Arm
The mast arm shall be 10 feet long.

4.5.6.3 Controller and Power Source
All streetlights on collector streets shall be run from a street lighting controller meeting the specifications noted in the City Standards. In general, the controller shall be located in the mid-point of all of the streetlights run by the controller. The power source shall be determined by the City of Naperville Department of Public Utilities/Electric. A photocell shall be placed on the nearest streetlight and connected back to the controller.

4.5.6.4 Spacing
Street light poles shall be located based on the following recommended spacing, and comply with the performance standards established in Section 4.5.1:

Staggered Streetlight Layout

Luminaire	*GE M-C-II*	*GE M-C-III*
250 watt	170 feet	170 feet

Single Side Streetlight Layout

Luminaire	*GE M-C-II*	*GE M-C-III*
250 watt	150 feet	150 feet

GENERAL INFORMATION

1.1 CONCEPT

In recent years, probably no element of urban street design has changed more than street lighting and its related concepts. In the area of street design, a specific cautionary word is appropriate. The designer should make every attempt to review current literature and research results prior to embarking on any design work for conversion of old lighting systems or installations of new.

1.2 CONDITIONS

1. The design for street lighting is normally completed by the local utility company for Jurisdictional review. The Design Engineer may design lighting for IDOT projects on primary roads that are used for funding determination. The design, where practical, should locate lighting poles outside of the roadway clear zone. Where lighting poles are located within the clear zone, a suitable impact attenuation feature, normally a breakaway design, is used. Breakaway poles should not be used on streets in densely developed areas particularly with sidewalks. In general, the design of street lighting should be in conformance with the following:

   A. Urban Design Standards Manual.

   B. American National Standards Institute (ANSI) and the Illuminating Engineering Society of North America (IES) Standard Practice for Roadway Lighting.

   C. Iowa Department of Transportation/Federal Highway Administration.

   D. Recognized design books for Street Lighting.

   E. Conflict - In case of a conflict between the above design standard, the Jurisdictional Engineer should be contacted for clarification.

2. Construction Standards

   Construction Standards shall be the most recent revision of the Urban Standard Specifications for Public Improvement or Utility Accommodation Policies for construction of utilities within public right-of-ways.

3. Project Submittals

   If project submittals are required by the Jurisdiction, a street lighting plan showing location and type of lighting must be submitted for review. This plan must be approved by the Jurisdiction prior to the construction. In some cases a permit must be issued.

1.3 DEFINITIONS

1. Light Terms and Units - The following are the important terms currently in use to describe the physical properties of light and corresponding units of measurement.

   A. Lumen (lm) - A unit of measure of the quantity of light. One lumen is the amount of light which falls on an area of one square foot every point of which is one foot from the source of one candela (candle). A light source of one candela emits a total of 12.57 lumens.

   B. Foot-candle (fc) - The illumination on a surface one square foot in area on which there is uniformly distributed a light flux of one lumen. One foot-candle equals 10.76 lux.

   C. Lux (lx) - The International System (SI) unit of illumination. It is defined as the amount of light on a surface of one square metre all points of which are one metre from a uniform source of one candela. One lux equals .0929 foot-candle.

   D. Horizontal foot-candle - One lumen distributed uniformly over a horizontal surface 1 square foot in area. Thus, horizontal foot-candle is a measure of the light that strikes the pavement surface.

   E. Vertical foot-candle - One lumen distributed uniformly over a vertical surface 1 sq. ft. in area. Thus, vertical foot-candle is a measure of the light that strikes vertical surfaces such as curbs, piers, or retaining walls.

   F. Luminance (L) - The luminous intensity of a surface in a given direction per unit of projected area of the surface as viewed from that direction (measured in foot-lamberts).

   G. Foot-lambert (fl) - The unit of photometric brightness (luminance). It is equal to 1/pi candela per square foot. One foot-lambert equals 3.426 candela per square metre.

   H. Candela (cd) - The unit of luminous intensity. Formerly the term "candle" was used.

   I. Illuminance - The density of the luminous flux incident on a surface. It is the quotient of luminous flux by area of the surface when the latter is uniformly illuminated.

   J. Average Maintained Illuminance - The average level of horizontal illuminance on the roadway pavement when the output of the lamp and luminaire is diminished by the maintenance factors; expressed in average foot-candles (lux) for the pavement area.

1.3 DEFINITIONS (Continued)

2. Equipment Terms - Current terminology relating to hardware and its mounting include the following:

   A. Lamp - A generic term for a man-made source of light and which is produced either by incandescence or luminescence.

   B. Efficacy, Luminous Efficacy - The quotient of the total luminous flux delivered from a light source divided by the total power input to the light source. It is expressed in lumens per watt.

   C. Ballast - A device used with an electric-discharge lamp to obtain the necessary circuit conditions (voltage, current and wave form) for starting and operating.

   D. Luminaire - A complete lighting unit consisting of a lamp or lamps together with the parts designed to distribute the light, to position and protect the lamps and to connect the lamps to the power supply.

   E. Lighting Standard - The pole with or without bracket or mast arm used to support one or more luminaires.

   F. Bracket or Mastarm - An attachment to a lighting standard or other structure used for the support of a luminaire.

   G. Lighting Unit - The assembly of pole or standard with bracket and luminaire.

   H. Mounting Height (MH) - The vertical distance between the roadway surface and the center of the apparent light source of the luminaire (fixture position relative to the edge of the roadway).

   I. Spacing - The distance between successive lighting units measured along the centerline of the roadway.

3. Luminaire and Light Distribution Terms - Terms relating to data on luminaires and on light distributions include the following:

   A. Isofootcandle Diagram - This diagram is available from the manufacturer of the light source and shows the horizontal foot-candles on the pavement surface at various points away from the source. Mounting height must be known to properly use the diagram.

   B. Coefficient of Utilization Curve (CU) - This curve shows that percentage of the total light output which will fall on the roadway. Mounting height (fixture position relative to the edge of roadway)and width of roadway must be known to apply the curve.

1.3 DEFINITIONS (Continued)

C. Lump Lumen Depreciation Curve (LLD) - This curve gives information on the relationship between length of service and light output. All lamps deteriorate with time, and total light output becomes less.

D. Luminaire Dirt Depreciation (LDD) - These curves assist in planning maintenance so that depreciation due to accumulated dirt does not become excessive.

E. Equipment Factor (EF) - Relates the actual field performance of a new luminaire to laboratory performance data. Generally, an EF of 0.90 to 0.95 is used for roadway lighting computations.

F. Maintenance Factor - A depreciation factor which is the product of the Lamp Lumen Depreciation Factor (LLD) and the Luminaire Dirt Depreciation Factor (LDD). This factor is applied to the initial average foot-candles to account for dirt accumulation and lamp depreciation at some predetermined point after installation.

G. Transverse Roadway Lines (TRL) - One set of lines which establish a coordinate system for roadway lighting analysis. This set runs perpendicular to the curbline or edge of pavement.

H. Longitudinal Roadway Lines (LRL) - Another set of lines used in the coordinate system. This set runs parallel to the curbline of the roadway.

I. Isocandela Diagram - A series of lines plotted in appropriate coordinates to show directions in space at which the candlepower is the same.

J. Roadway Width - The curb to curb width for urban section and edge to edge pavement width for rural sections.

1.4 ROADWAY LIGHTING LAMPS - The general types of lamps presently in use for roadway lighting are shown in Table 1.1.1

TABLE 1.1 ROADWAY LIGHTING LAMP CHARACTERISTICS

Type of Lamp	Initial Light Output lumes x 10^3	Approximate Efficacy lumes/Watt	Approximate Lamp Life* hour x 10^3
Incandescent	0.6 - 15	9.7 - 17.4	2 - 6
Clear Mercury	3.7 - 57	37 - 57**	18 - 28
Phosphor-coated Mercury	4.0 - 63	40 - 63**	18 - 28
Metal Halide	34 - 100	85 - 100**	10 - 15
High Pressure Sodium	9.5 - 140	95 - 140**	15 - 28
Low Pressure Sodium	1.8 - 33	100 - 183**	10 - 18

* Number of hours for a group of lamps at which 50% will remain in operation; based on 10 hours of operation per start (except 3 hours per start for fluorescent lamps).

** These values exclude wattage losses due to ballast.

1. The incandescent or filament lamp was for many years the most commonly used. However, its low efficacy and short rated life have made it undesirable for new installations.

2. The mercury lamp replaced the incandescent lamp in popularity. The initial cost is higher and it requires a ballast, but its high efficacy and long life make it considerably more attractive than the incandescent lamp. The blue-white color of the clear lamp is generally acceptable, and the arc tube size provides a light source that is small enough to permit good light control. A phosphor-coated outer bulb, featuring both higher output and more pleasing color rendition, is also available. However, the light source is the size of the outer bulb, presenting a problem in light control.

3. The metal halide lamp is a type of mercury lamp in which the arc tube contains, in addition to mercury, certain metal halides which improve both the efficacy and the color rendition without the use of a phosphor-coated bulb. The light source size is that of the arc tube, permitting good light control in the same fixture used for clear mercury lamps.

4. The high pressure sodium (HPS) lamp is presently replacing the mercury lamp. It is characterized by a golden-white color light output. HPS lamps are normally operated with special ballasts that provide the necessary high voltage to start the lamp. However, lamps are available that can be operated from certain types of mercury lamp ballasts, but with poorer lumen maintenance and shorter life. There are also HPS lamps available that provide improved color rendition or almost instant restart after a power interruption; either feature results in a reduction in rated life.

1.4 ROADWAY LIGHTING LAMPS (Continued)

5. The low pressure sodium (LPS) lamp is characterized by a monochromatic bright yellow color light output. These lamps require special ballasts and increase materially in size as the wattage increases; the 185-watt lamp is 44 in. long. This large size makes it difficult to obtain good light control in a reasonably sized fixture. For a long time the poor color rendition of the LPS lamp made it unpopular for use in other than industrial or security applications. However, the current trend toward energy conservation coupled with the high efficacy of the lamp has resulted in an increasing acceptance of LPS lamps for lighting both commercial and residential areas. Presently available LPS lamps also have outstanding lumen maintenance, having no drop in light output over life, however, the wattage (energy used) increases as time passes.

All roadway lighting lamps, with the exception of the series-circuit incandescent lamp and certain LPS lamps, suffer the common problem of lumen depreciation - the reduction in light output over the lamp's life. The lumen depreciation varies with the type and operating condition of the lamp (See Section 2).

In addition, the lumen output of a mercury or metal halide lamp varies with its operating position, the normal horizontal position resulting in a lower value than the vertical operating position. Both of these reducing factors must be considered when calculating the average maintained illumination.

Public Input Meeting for Comprehensive Plan Update - October 12th at 6:30 p.m.

Submitted by admin on Tue, 08/30/2011 - 2:14pm

A Public Input Meeting for the Comprehensive Plan Update will be held from 6:30 p.m. until 8:00 p.m. on Wednesday October 12th in the City Council Chambers, located at 110 N. Poplar Street. The purpose of the meeting is to receive public input on long and short-term goals and objectives for West Branch. This input will be incorporated into the Comprehensive Plan Update, which is an important tool that also lays out a vision for the future of our City. The meeting format will be an open house where residents may come and go as they please. For more information, please contact Ashley Borland-Kaalberg at the City Office at (319) 643-5888.

City of West Branch Comprehensive Plan Scope of Services

East Central Intergovernmental Association (ECIA) will update the City of West Branch's existing Comprehensive Plan. ECIA staff anticipates working in conjunction with the City's Planning and Zoning Commission, City Administrator, City Staff and the City Council.

Scope of Services:

Phase 1: Initial Meeting: Meet with the City of West Branch Planning and Zoning Commission to confirm scope of services and timeline. Set tentative meeting public meeting dates and locations. At this meeting the comprehensive plan update will begin by reviewing the existing conditions of the City. The Planning and Zoning Commission will be asked to review previous and existing plans to determine what is still relevant for the City of West Branch.

ECIA staff plan to attend the Planning and Zoning Commission meetings quarterly to provide updates, answer questions and to provide face to face accessibility to the ECIA staff.

Phase 2, Data Gathering: During this phase, ECIA staff will gather and compose demographic data including but not limited to:

-Population
-Employment
-Income
-Economic
-Education
-Housing
-Natural/Cultural Resources

Data will be presented in a visual format for easy reference. Data such as population will be projected using several methods to determine a more accurate picture of the future growth with the City. A windshield survey of the existing land use within the City will be completed if needed. This phase will also include the completion of the existing land use map for the City.

Phase 3, Public Input Meeting: This meeting will be planning work sessions with the public to determine both long term and short term goals, objectives and vision for the future of the City of West Branch.

Phase 4, Develop and Administer Community Wide Survey: Based on the information gathered in Phases 3 and 4 a community wide survey will be given to gain buy-in as well as determine the priority of the goals and objectives. The Planning and Zoning Commission will be asked to review a draft of the survey to ensure all necessary questions are asked. The Planning and

Zoning Commission will also be asked to provide input into how the surveys should be distributed to the public (web based, pick-up points, etc).

Phase 5, Tabulate Community Wide Survey & Prepare Preliminary Future Land Use Map: The survey results will be tabulated. A preliminary future land use map will be developed from information gathered in phases 1-5. This information will be presented to the Planning and Zoning Commission for review. This information may be displayed for public viewing. This phase also includes developing other useful maps for the comprehensive plan.

Phase 6, Draft Comprehensive Plan: ECIA staff will create a draft City of West Branch Comprehensive Plan. The City of West Branch Comprehensive Plan will include the following chapters:

Chapter 1: Introduction

a. Purpose of the Plan
b. Comprehensive Planning
c. Elements of the Comprehensive Plan
d. Public Involvement

Chapter 2: Vision: State Goals & Objectives and Policy Statements

Chapter 3: Sustainability Principals

Chapter 4: Community Profile/Character

a. Population
b. Employment
c. Income
d. Economy
e. Education
f. Housing
g. Natural/Cultural Resources
h. Geography
i. Hazards
j. History
k. Issues and Opportunities

Chapter 5: Land Use

a. Existing Uses
    i. Agricultural
    ii. Residential
    iii. Commercial
    iv. Industrial
    v. Institutional

vi. Recreation/Conservation

b. Proposed Future Uses
   i. Agricultural
   ii. Residential
   iii. Industrial
   iv. Institutional
   v. Recreation/Conservation

Chapter 6: Housing
- a. Existing
- b. Needed

Chapter 7: Economic Development

Chapter 8: City Districts
- a. Existing
- b. Envisioned

Chapter 9: Public Infrastructure and Utilities
- a. Water System
- b. Sewer System
- c. Telecommunications
- d. Other Utilities

Chapter 10: Transportation System
- a. Existing System
- b. Proposed System

Chapter 11: Hazards

Chapter 12: Recreational Facilities/Programs and Agricultural and Natural Resources

Chapter 13: City Facilities/Services and Finance

Chapter 14: Intergovernmental Relations/Collaboration and Image

Chapter 15: Strategies and mechanisms for Plan Implementation
- a. On-Going
- b. Short-Term
- c. Long-Term
- d. Use of the Comprehensive Plan
- e. Coordinated Use of Development Controls
- f. Programming of Capital Improvements

g. Cooperation and Assistance of Other Governmental Agencies

Phase 7, Presentation of Draft City of West Branch Comprehensive Plan: The Draft City of West Branch Comprehensive Plan will be presented to the Planning and Zoning Commission. Discussion and any suggestions for refinements and clarifications will be included in this phase. Completion of any requested refinements in preparation of the formal public hearing, review and final approval process will conclude this phase for which one to two meetings are envisioned.

Phase 8, Public Hearings: ECIA staff will schedule a least two public hearings (one public hearing for the Planning and Zoning Commission and one public hearing for the City Council).

Phase 9, Final Plan Adoption: The final City of West Branch Comprehensive Plan will be presented to the Planning and Zoning Commission for approval and recommendation to the City Council for adoption. Then the final City of West Branch Comprehensive Plan will be presented to the City Council for adoption.

Project Products:

1. ECIA will provide necessary draft copies of working documents and maps for planning sessions.
2. ECIA will provide 20 copies of the final Comprehensive Plan document. Any additional copies requested by the City in the future will be provided by ECIA at the appropriate cost of publication.
3. ECIA will provide two color wall size Future Land Use Maps.
4. ECIA will provide the Comprehensive Plan document and map in a digital format acceptable to the City.

Timeline:

Task	Timeframe
Phase 1: Initial Meeting	July 18, 2011
Phase 2: Data Gathering	July 2011 – September 2011
Phase 3: Public Input Meetings	September 2011 – October 2011
Phase 4: Develop and Administer Community Wide Survey	October 2011 – November 2011
Phase 5: Tabulate Community Wide Survey & Prepare Preliminary Future Land Use Map	December 2011 – March 2012
Phase 6: Draft Comprehensive Plan	March 2012 – May 2012
Phase 7: Presentation of Draft City of West Branch Comprehensive Plan	June 2012
Phase 8: Public Hearings	July 2012 – August 2012
Phase 9: Final Plan Adoption	September 2012

Budget:

Task	Timeframe
Phase 1: Initial Meeting a. Including attendance quarterly at Planning and Zoning Commission Meetings	$750
Phase 2: Data Gathering a. Windshield survey b. Data tabulation (Charts, Graphs, Maps, etc.) c. Existing Land Use Map	Without windshield survey: $3,500 *City Staff will complete windshield survey
Phase 3: Public Meeting	$750
Phase 4: Develop and Administer Community Wide Survey a. Develop survey b. Distribute survey	$1,000
Phase 5: Tabulate Community Wide Survey & Prepare Preliminary Future Land Use Map a. Survey tabulation b. Maps including future land use and other necessary maps	$1,500
Phase 6: Draft Comprehensive Plan	$5,000
Phase 7: Presentation of Draft City of West Branch Comprehensive Plan a. Work session with the Planning and Zoning Commission to refine the comprehensive plan	$750
Phase 8: Public Hearings a. Planning and Zoning Commission b. City of West Branch City Council	$400
Phase 9: Final Plan Adoption a. Planning and Zoning Commission b. City of West Branch City Council	$400
Total:	Without windshield survey: $14,050