#2015-43
Oak Hollow Subdivision – Preliminary/Final PUD, Final Plat
Project Review for Planning and Zoning Commission

Meeting Date:	September 16, 2015
Requests:	1. Preliminary/Final Planned Unit Development for a residential development. 2. Final Plat of Subdivision for a 59- lot single-family subdivision. 3. Variations from Article 4-100 Street Standards from the required 60-foot right-of-way and to install a 5-foot sidewalk on the east side of Oak Hollow Road.
Location:	South of Kent Avenue and John Street, east to Oak Hollow Road
Acreage:	Approximately 21 acres
Existing Zoning:	R-3A PUD Two-Family Residential Planned Unit Development
Surrounding Properties:	North: A-1 McHenry County and R-2 Single-Family Residential (Crystal Heights subdivision) South: R-3B Multi-Family (Ashton Pointe) and beyond the railroad tracks M Manufacturing (existing manufacturing building) East: E Estate (Hannah Beardsley middle school and Evangelical Free Church) West: R-2 Single-Family Residential (Crystal Heights subdivision) and beyond the railroad tracks M Manufacturing (existing manufacturing building) and E Estate (city owned vacant property)
Staff Contact:	Elizabeth Maxwell (815.356.3615)

Background:

- The petitioner received their annexation, zoning and preliminary development plan approval at the June 2, 2015 City Council meeting.
- At the City Council meeting, the Council voted to amend the zoning request to add the PUD overlay on this site. Since the original request did not notify for the preliminary PUD, the petitioners thought it prudent to notify as both a preliminary and final PUD for this request; though, this request is acting as their Final PUD and Final Plat of Subdivision approval.

Development Analysis:

Land Use/Zoning

- The site is to be rezoned to R-3A PUD upon the completion of the annexation. This is an acceptable zoning district for single-family residential.
- The land use map shows the area as Urban Residential. This is an appropriate land use designation for single-family residences.

Subdivision

- The Final Plat of Subdivision illustrates 59 single-family lots and five outlots, four for detention and one as the tot-lot park.
- The Final Plat is in substantial conformance with the approved preliminary development plans.

Landscape

- The petitioner has submitted a final landscape plan, which illustrates the required street trees, landscape screening areas, and park improvements.
- The final plan is in substantial conformance with the approved preliminary development plans.

Building Elevations

- The elevations have been revised to show the third-car garage bay option.
- The elevations were reviewed and approved with their previous submittal and met the City's architectural design standards and incorporated additional design elements that the adjacent Ashton Point homes do not have.
- The final elevations are in substantial conformance with the approved elevations.

Findings of fact:

FINAL PLANNED UNIT DEVELOPMENT

The petitioner is requesting approval of a Final Planned Unit Development to allow the construction of the Oak Hollow Subdivision. The Final PUD must be reviewed against the approved Preliminary PUD conditions. The Final PUD is in substantial compliance with the approved Preliminary PUD.

FINAL PLAT OF SUBDIVISION

The petitioner is requesting Final Plat approval for the 59-lot single-family subdivision. Kent Avenue would be extended through to the new extension of Oak Hollow Road from the north. Oak Hollow is being extended from the District 47 property to the south property line of this development. One outlot is being created and granted to the Park District for the tot lot. A 10-foot landscape easement has been put on Lots 9, 10, 11, 12, 14, and 15 to provide a permanent buffer from the railroad tracks. The Final Plat is in substantial compliance with the approved Preliminary Plat.

ZONING ORDINANCE VARIATION

The petitioner is requesting two variations from Section 4-100 Street Standards. The first is the requirement to provide a 60-foot right-of-way for Oak Hollow Road and the second is the requirement for a 5-foot sidewalk on both sides of the roadway. Where Oak Hollow Road enters the property from the north, then curves into this site, the right-of-way narrows to avoid the church's property. This section of reduced right-of-way width would not affect the pavement width, only the parkway width. If this variation is not granted, right-of-way would need to be dedicated by the church. Also, due to the reduce parkway width on the east side there is insufficient space for the sidewalk. A sidewalk does not exist on the east side of the street along the Evangelical Free Church property.

The Unified Development Ordinance lists specific standards for the review and approval of a variation. The granting of a variation rests upon the applicant proving practical difficulty or hardship caused by the Ordinance requirements as they relate to the property. To be considered a zoning hardship, the specific zoning requirements; setbacks, lot width and lot area must create a unique situation on this property. It is the responsibility of the petitioner to prove hardship at the Planning and Zoning Commission public hearing.

Standards

When evidence in a specific case shows conclusively that literal enforcement of any provision of this Ordinance would result in a practical difficulty or particular hardship because:

a. The plight of the property owner is due to unique circumstances, such as, unusual surroundings or conditions of the property involved, or by reason of exceptional narrowness, shallowness or shape of a zoning lot, or because of unique topography, or underground conditions.
☐ *Meets* ☐ *Does not meet*

b. Also, that the variation, if granted, will not alter the essential character of the locality.
☐ *Meets* ☐ *Does not meet*

For the purposes of supplementing the above standards, the Commission may take into consideration the extent to which the following facts favorable to the application have been established by the evidence presented at the public hearing:

a. That the conditions upon which the application for variation is based would not be applicable generally to other property within the same zoning classification;
☐ *Meets* ☐ *Does not meet*

b. That the alleged difficulty or hardship has not been created by any person presently having interest in the property;
☐ *Meets* ☐ *Does not meet*

c. That the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; or

☐ *Meets* ☐ *Does not meet*

d. That the proposed variation will not impair an adequate supply of light or air to adjacent property, will not unreasonably diminish or impair the property values of adjacent property, will not unreasonably increase congestion in the public streets, substantially increase the danger of fire or otherwise endanger public safety.

☐ *Meets* ☐ *Does not meet*

Where the evidence is not found to justify such conditions, that fact shall be reported to the City Council with a recommendation that the variation be denied.

Comprehensive Land Use Plan 2020 Vision Summary Review:
The Comprehensive Plan designates the subject property as Urban Residential, which allows for existing and future homes. The following goals are applicable to this request:

Land Use - Residential
Goal: Encourage a diversity of high quality housing in appropriate locations throughout the city that supports a variety of lifestyles and invigorates community character.

This can be accomplished with the following supporting action:
Supporting Action: Encourage a diversity of housing types throughout the city, which satisfy wide-range needs for all persons regardless of age, race, religion, national origin, physical ability and economic level for existing and future city residents.
Success Indicator: Approval of single-family residential developments.

Housing – Single-Family Housing
Goal: Promote strong neighborhoods by preserving their character and historical significance and ensuring that they are well served by a variety of community facilities and services.

This can be accomplished with the following supporting action:
Supporting Action: Encourage the development of single family neighborhoods.
Success Indicator: Number of new single family permits.

Recommended Conditions:
If a motion to recommend approval of the petitioner's request is made, the following conditions are recommended:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (DRH Cambridge Homes, Inc., received 07/09/15)
   B. Final Plat (R E Allen and Assoc. Ltd. dated 08/19/15, received 08/24/15)

C. Final Site Plan (Pearson Brown, dated 08/07/15, received 08/10/15)
D. House Elevations (Premier Architecture, Inc. dated 06/04/15, received 07/09/15)
E. Final Landscape Plan (Dickson Design, dated 08/07/15, received 08/10/15/15)
F. Final Engineering Plans (Pearson Brown, dated 08/25/15, received 08/25/15)

2. The development shall comply with the previously approved Ordinances #7136, #7137, and #7138.

3. Final Plat of Subdivision:
   a. The petitioner shall make the changes to the Stormwater Detention and Drainage Easement language per the engineering division's comments.
   b. The petitioner shall work with staff to amend the CC&Rs, which are to be recorded at the time the final plat is recorded.
   c. The petitioner shall work with staff to complete and execute a Development Agreement, which is to be recorded at the time the final plat is recorded.

4. The petitioner shall address all of the review comments and requirements of the Community Development, Fire Rescue, Police, and Public Works Departments, of the City's Stormwater Consultant.

City of Crystal Lake
Development Application

Office Use Only
File # 2015 43

Project Title: Oak Hollow Subdivision

RECEIVED
JUL 09 2015
BY:

Action Requested

- ___ Annexation
- ___ Comprehensive Plan Amendment
- ___ Conceptual PUD Review
- X Final PUD
- ___ Final PUD Amendment
- X Final Plat of Subdivision
- X Preliminary PUD
- ___ Preliminary Plat of Subdivision
- ___ Rezoning
- ___ Special Use Permit
- ___ Variation
- ___ Other

Petitioner Information

Name: James Truesdell, DRH Cambridge Homes Inc.
Address: 800 S. Milwaukee Ave. #250
Libertyville, IL 60048
Phone: 847-984-4418
Fax: 800-436-1077
E-mail: jetruesdell@DRHorton.com

Owner Information (if different)

Name: Please see signature page
Address:
Phone:
Fax:
E-mail:

Property Information

Project Description: Preliminary and Final PUD and Plat of Subdivision approval for the Oak Hollow Subdivision

Project Address/Location: 64 Kent Ave. Crystal Lake, IL 60014

PIN Number(s): See attached

Development Team

Please include address, phone, fax and e-mail

Developer: See attached

Architect: _____

Attorney: See attached

Engineer: " "

Landscape Architect: " "

Planner: " "

Surveyor: " "

Other: " "

Signatures

James Truesdell James Truesdell

PETITIONER: Print and Sign name (*if different from owner*) **Date**

As owner of the property in question, I hereby authorize the seeking of the above requested action.

See following page

OWNER: Print and Sign name **Date**

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

Jeffrey Schroeder and Adrian Schroeder, as Co-Trustees of the Evelyn P. Schroeder Declaration of Trust Dated April 20, 1992

By: _____

_____

Date: _____

Chicago Title and Trust as Successor Trustee to North Star Trust Company, as Trustee of Trust Number 02-5614

By: _____

Name: _____

Its:

_____

Date: _____

Schroeder Property PIN Numbers

19-04-202-021

19-04-202-022

19-04-202-023

19-04-203-001

19-04-203-002

19-04-203-003

19-04-203-004

19-04-203-005

DEVELOPMENT TEAM INFORMATION

Developer:

James Truesdell
DRH Cambridge Homes, Inc.
800 S. Milwaukee Ave., Suite 250
Libertyville, IL 60048
Phone: (847) 984-4418
Fax: (800) 436-1077
E-mail: jetruesdell@drhorton.com

Attorney:

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Meltzer, Purtill & Stelle LLC
1515 E. Woodfield Rd. Second Floor
Schaumburg, IL 60606-6704
Phone: (847) 330-6068
Fax: (847) 330-1231
E-Mail: hfrancke@mpslaw.com

Engineer:

Ronald Adams
Pearson Brown & Associates
1850 W. Winchester Road, Suite 205
Libertyville, Illinois 60048
Phone: (847) 367-6707
Fax: (847) 367-2567
E-mail: radams@pearsonbrown.com

Landscape Architect:

Sharon Dickson
Dickson Design Studio
Phone: 847-878-4019
E-mail: www.dicksondesignstudio.com

Planner:

Ronald Adams
Pearson Brown & Associates
1850 W. Winchester Road, Suite 205
Libertyville, Illinois 60048
Phone: (847) 367-6707
Fax: (847) 367-2567
E-mail: radams@pearsonbrown.com

Surveyor:

R.E. Allen & Assoc.
1015 N. Corporate Circle, Suite C
Grayslake, IL 60030
Phone: (847) 223-0914
Fax: (847) 223-0980

Tree Survey:

Todd Sinn
Urban Forest Management, Inc.
960 Route 22, Suite 207
Fox River Grove, IL 60021
Phone: (847) 516-9708
E-mail: ufminc@sbcglobal.net

PUBLIC NOTICE

BEFORE THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS

IN THE MATTER OF THE PETITION OF
DR Cambridge Homes, Inc.

LEGAL NOTICE

Notice is hereby given in compliance with the Unified Development Ordinance of the City of Crystal Lake, Illinois that a public hearing will be held before the Planning and Zoning Commission upon the application by James Truesdell with DR Cambridge Homes, for the Preliminary and Final Planned Unit Development, Final Plat of Subdivision and Variations, relating to the property at around 64 Kent, at the end of John Street and Kent Avenue and eastward to Oak Hollow Road in Crystal Lake, Illinois 60014. PINs: 19-04-202-021, -022, -023; 19-04-203-001, -002, -003, -004, -005.

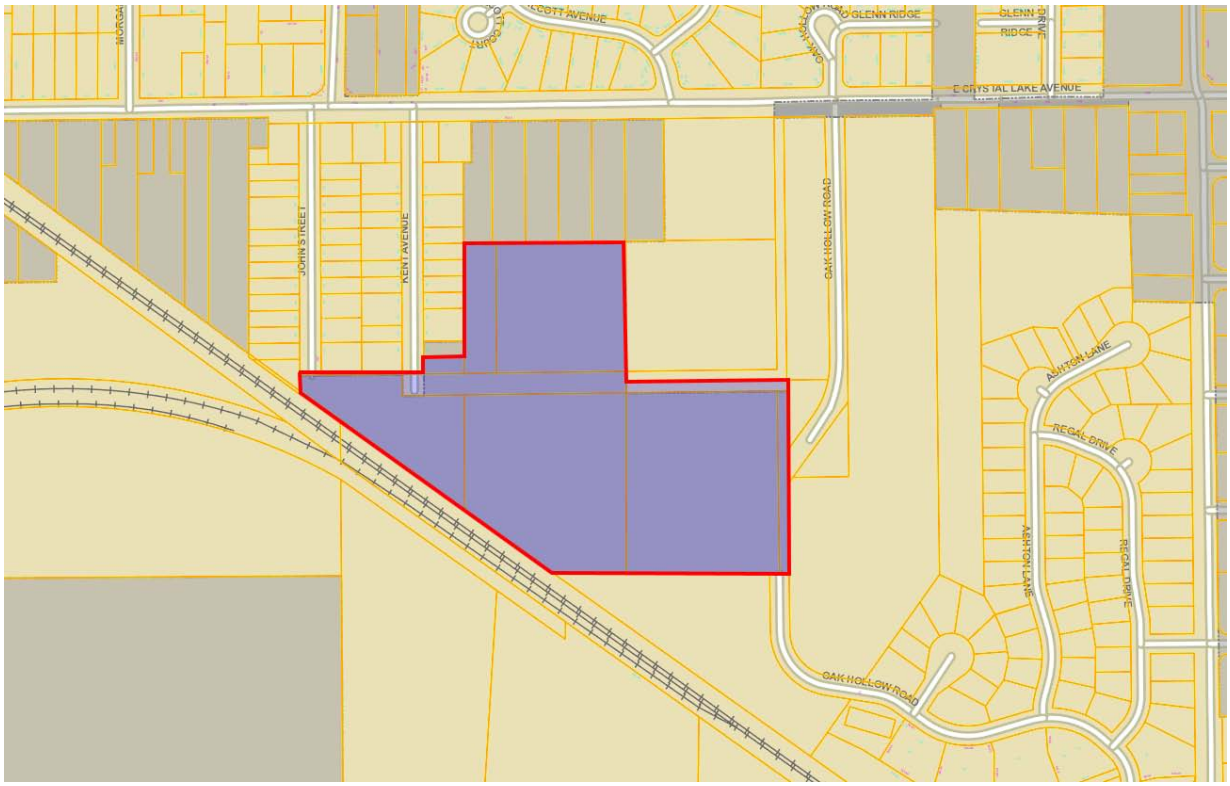
This application is filed for the purpose of seeking a Preliminary/Final Planned Unit Development; a Final Plat of Subdivision for a 59-lot single-family home subdivision and; variations from Article 4-100 Street Standards from the requirement to provide 60 feet of right-of-way for Oak Hollow Road and the requirement for a 5-foot sidewalk on both sides of the roadway; as well as any other variations as necessary to approve the plans as presented pursuant to, Article 4, Article 5, and Article 9. Plans for this project can be viewed at the Crystal Lake Community Development Department at City Hall.

A public hearing before the Planning and Zoning Commission for this request will be held at 7:30 p.m. on Wednesday August 19, 2015, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person determining to be heard may be present.

Tom Hayden, Chairperson
Planning and Zoning Commission
City of Crystal Lake

(Published in the Northwest Herald August 1, 2015.) NW 7119

PIQ Map


E CRYSTAL LAKE AVENUE
JOHN STREET
KENT AVENUE
OAK HOLLOW ROAD
ASHTON LANE
REGAL DRIVE
OAK HOLLOW ROAD

CRYSTAL LAKE PLANNING AND ZONING COMMISSION
WEDNESDAY, MAY 6, 2015
HELD AT THE CRYSTAL LAKE CITY COUNCIL CHAMBERS

The meeting was called to order by Chairman Hayden at 7:30 p.m. On roll call, members Batastini, Esposito, Goss, Greenman, Jouron, Skluzacek, and Hayden were present. Mr. Gavle had resigned.

James Richter II, Planning and Economic Development Manager, Kathryn Cowlin and Elizabeth Maxwell, both Planners, were present from Staff.

Mr. Hayden asked those in attendance to rise to say the Pledge of Allegiance. He led those in attendance in the Pledge.

Mr. Hayden stated that this meeting was being televised now as well as recorded for future playback on the City's cable station.

2015-20 OAK HOLLOW – S. Kent St.; N. RR Tracks; W. Thomas – PUBLIC HEARING
This petition was continued from the April 22, 2015 Special PZC meeting.
Rezoning, upon annexation, to R-3A Two-Family Residential; Preliminary Plat of Subdivision to create a 62- lot subdivision with outlots for detention; and Variations from: A. Section 3-200 5 from the required lot width for Lots 17, 18; lot area for Lot 53; and the combined side yard setbacks to allow 14 feet for ranch home lots; B. Section 4-100 D 2 from the required horizontal curve radius of 200 feet to allow 85 feet and 100 feet; and C. Section 5-200 G 2 b xxii from the growth management plan requirements.

Mr. Hayden stated that the sign had been posted. He said the surrounding property owners were notified and the Certificate of Publication was in the file. Mr. Hayden waived the reading of the legal notice without objection.

Harold Francke, attorney, Jim Truesdell with D R Horton Builder, Ron Adams, engineer, Sharon Dickson, landscape architect, and Chris Naatz were present to represent the petition. Mr. Francke said they have shortened the list of requested variations. There would also be another public hearing at the City Council for the annexation of the property. Mr. Francke said they have been working with staff for a while and they have been very helpful.

Mr. Truesdell showed a Power Point presentation. He showed an aerial photo and described the area. This is a central in-fill location and reviewed the Comprehensive Land Use Plan map, which calls for Urban Residential with density of 1 to 4 units per acre. The request complies with Comprehensive Plan. Mr. Truesdell reviewed the goals in the Comprehensive Plan text, which encourage a diversity of houses types in the City. He also showed the Zoning Map of the area and said the property is totally surrounded by Crystal Lake. They are asking for "R-3A" zoning. He added that many lot sizes on John and Kent Avenue are

smaller lots and this development will enhance the area. Mr. Truesdell said Kent Avenue would be continued through this site. He showed the site plan for the project and said the site is approximately 21 acres with 62 units. The minimum lot size is 7200 sq ft. He said they initially asked for two lot width variations but they determined that if some minor configuration changes were made they could meet the lot width. Therefore the lot width variation is withdrawn. All of the lots will meet requirements of "R-3A". Mr. Truesdell said they are requesting one minor variation. They have a ranch home that is slightly wider than the other homes which would require a variation from the combined side yard setback to a total of 14 feet. He said over half of the lots exceed the minimum lot size. They show two roadway curves on the site. Kent Avenue needs to connect into this site and with the railroad tracks there, they need to have that sharp of a curve.

Mr. Truesdell said they want fewer homes along the railroad tracks. This is a local street and won't generate significant amounts of traffic and when people travel on the tighter curve, they would have to slow down. This is a good way to plan the site and they have justifiable variations. Mr. Truesdell showed how the proposed footprints of the homes would fit on the minimum size lots. Also shown are the buildable areas of those lots which would allow for room additions and decks. The two-story homes would have a front porch and will fit behind the front setback line. Even the largest 2 story homes have 10 feet in allowable building area. He added that John Street would remain a dead end and they would work with the Fire Department regarding an emergency turn around for that street. He said they have kept the open space along the tracks and deeper lots back up to lots on Kent Avenue. Also open space/detention area backs up to the school property. Mr. Truesdell gave a summary of the request. There will be no more than 6 lots that would have the variation for the side yard requirement due to the larger ranch home footprint. They hope to sell more than 25 units a year. The housing market is picking up and the Grown Management requirement dates back to when the development was going quickly. They believe that 25 homes a year is a small amount and it would be hard to get financing with that restriction. Mr. Truesdell said they don't feel this is necessary at this time.

Mr. Adams said he worked on many other projects in Crystal Lake including Ashton Pointe. The sanitary sewer and water mains were stubbed to this property and they would also provide an additional connection to the water main on Kent Avenue so the water would circulate better. All pavement width, sidewalk width, etc. would meet the City's requirements. Mr. Adams said the detention areas shown on the plan are currently depressed areas. They would determine the percolation of the soil and design the areas to accommodate those calculations. There is currently no evidence that water would store in those areas. Mr. Adams said this property not in the City's watershed and they would design the site in accordance with both the City's and County's storm water requirements.

Ms. Dickson said the street trees are shown at 40 feet on center and would be move to accommodate the utilities and sight triangles as well as driveways. The detention basins would be grasses similar to Ashton Pointe. Ms. Dickson said they will plant 157 trees to replace the removed trees, which will be mostly around the detention area and planted in clusters.

Mr. Truesdell showed original elevations of the buildings. Staff reviewed them and gave recommendations

for meeting the architectural guidelines. All homes contain front porches and there are other character features that would be added such as shutters and molding over the garages. He added that there would be windows on every elevations – no blank walls. Mr. Truesdell said this would benefit the community. They hope the Commissioners can support this project.

Mr. Hayden asked if there were any issues with the conditions listed in the Staff Report. Mr. Truesdell said they don't have a problem with the conditions and stated that the variation needed to accommodate the larger ranch home will only be needed on 6 lots not 12.

Frank Shields, 40 Kent Avenue, asked if the landscaping would have a soil berm by the railroad tracks. Mr. Truesdell said there would be landscaping. Mr. Adams said there are issues with the grade along the railroad tracks and there are also fiber optic lines buried there. Mr. Shields said there would be a large increase in traffic especially school traffic unless it is somehow regulated by the City in the morning and afternoon. Parents will think that it is great to have a circle route. He also asked if the construction traffic would be limited. He would prefer using Oak Hollow not Kent.

Walter Wojack said he is not a resident of Crystal Lake, but does come to his son's home. He is concerned for the 30 children in the area that there is no place to play. Mr. Wojack is asking for a small play lot. He is not asking for something like Veteran's Acres. He added that there would be an increase in traffic and believes that speed bumps would be a good idea and keep the kids safer. He suggested that the two lots at the end of Kent Avenue that are vacant could be turned into the play park.

John Wojack lives on Kent Avenue. They paid for the sewer line and asked about recapture. Ms. Maxwell said there is recapture, but the connection to the sewer for this development would be from Ashton Pointe.

Mr. Shields said there is recapture for both water and sewer. Ms. Maxwell believes it is only sewer but she will check. Mr. Truesdell said they will connect to the water on Kent Avenue and believes there is also a connection at the school. Mr. Shields asked why not connect to Kent. Mr. Adams said the sewers are too shallow.

There was no one else in the public who wished to comment on this petition. The public portion was closed at this time.

Mr. Hayden asked about traffic issues at school time. Mr. Truesdell said Oak Hollow Road ends at the church's property and picks up again just east of the church's property. He understands the concern and it would help when road is connected to Pingree. There are no alternatives, but to connect to Kent and part of the City's plan is to connect the roadway. Mr. Goss said it is not the petitioner's intention to put Oak Hollow through to the southeast. Mr. Truesdell said there is a letter of credit by the church to complete road. He said they did not show a park area when the plan was originally presented to staff since at that time it had not been determined that a park would be required. Recently, they received a call from the Park District and they indicated a small tot lot in this area would be appropriate. They would work with the Park District on the location of the park. Mr. Hayden said he sees a safety issue with a park being along the tracks. Mr.

Truesdell said they would construct a fence and tot lot would be closer in. He said that speed bumps on Kent would be more a question for the City and believes the curves of the road would help the situation by causing the traffic to slow down. Mr. Esposito is concerned with cars speeding up on Kent after they get through the curves. Mr. Truesdell said that is not much different than any other subdivision in the City but it is something that would need to be addressed. He added that they are currently in discussions with the homeowners' association about purchasing the 50-foot lot and adding that to this project. Mr. Francke said they would work with staff on the construction traffic.

Mr. Batastini said he likes the single family units there but doesn't care for the zoning. He feels that the petitioner wants as many homes as can to be put on the property. They need to use Ashton Pointe as the example for the area and would prefer R-2 zoning. Mr. Batastini added that he doesn't care for the park to be next to the railroad tracks especially since they are very busy tracks with commuters and freight. The closest park to this property is not very close. He believes there would be a traffic increase because of the school and is not sure that is the developer's problem. Mr. Batastini said he went to the petitioner's website and saw very beautiful homes and feels that the homes presented here are very boxy. He understands the petitioner wants to blend in, but prefers to see differences in the homes and not barracks. He suggested there could be more creativity if the lots were larger.

Mr. Jouron asked about the ranch homes. Mr. Truesdell said they can be anywhere in the subdivision and would build the amount that is fueled by demand although the larger ranch homes would be limited. Mr. Jouron asked about basements. Mr. Truesdell said there would be walkouts as well as regular basements. Mr. Jour asked about the number of bedrooms. Mr. Truesdell said they will be 3 to 5 bedrooms. Mr. Jouron said the homes look like the old salt box designs and is concerned that the homes are very plain. He asked about the selling price. Mr. Truesdell said they anticipate starting in the upper $200,000 and $300,000. Mr. Batastini said with that price point it should open up for more designs. Mr. Truesdell said they need to factor in the cost of the land, etc. and they believe these homes are suitable for the market. Mr. Jouron asked how much space is between the rear of the homes and the lot line. Mr. Truesdell said it is between 26 feet to 42 feet for the minimum lot size. There are lots that are deeper than these. Mr. Jouron prefers the "R-2" zoning district with larger lots.

Mr. Greenman said he is generally supportive of the "R-3A" zoning because it backs up to the tracks. He is concerned with anti monotony code and that the homes will look cookie cutter style. This would be a challenge and would like something different. He is also concerned with traffic flow of area. Ms. Maxwell said she doesn't know of a mechanism to keep people from cutting through. Putting "local traffic only" signs are a possibility, but there is limited ways to enforce it. Mr. Greenman said speed bumps are a good concept, but difficult with snow plowing. This is great example of in-fill piece. He asked that the petitioner work with staff on the traffic and the architecture. He is confident that the elevations can be better both in quality and aesthetics. Mr. Greenman can support the density, but he is not in favor of the variation for the larger ranch foot print.

Mr. Skluzacek said the lots could be slightly bigger and eliminate some of the variations requested. He understands the need to have a certain number of homes to make the project work. The lots need to be

bigger and more comparable to Ashton Pointe.

Mr. Esposito agreed with the comments that have been made. His biggest issue is the requested zoning classification. These are single-family homes and should have single-family zoning. They show only 2 car garages and people will want a 3 car garage. An eight foot deck is small. People in the area have asked for variations because the lots are too small and there is not enough room for pools and decks. Mr. Esposito said there would be a large increase in traffic if Oak Hollow doesn't go through to the east. He also would prefer another location for park and not along the tracks.

Mr. Goss asked how many units they would want to build in a year. Mr. Truesdell said they don't believe they will build all of the units in one year, but 25 units per year limitation makes it difficult to obtain financing for. Mr. Francke said the growth management plan was put in place because communities didn't have the staff to keep up with the construction. These are different times now. It is in the neighbors' best interest to have construction completed quickly. Mr. Goss said the reason for the growth management plan was because the school districts were getting hammered. He wished this was a concept plan and prefers "R-2." This will look like a long row of homes and would prefer different setbacks so there won't be a long line of homes. Mr. Goss is also concerned with detention area next to school. Also Kent Avenue can't handle the construction traffic and it would not be good to have it go next to school. The road connection needs to be worked out with church before first building permit. He can't support the request. It should be "R-2."

Mr. Hayden agreed. On bright side, the limited build out was primarily for the school districts and allowing them enough time so they know what would be coming to them in future years so they can plan. At this point, he agrees that times have changed, school district enrollment is down, and that is not a major issue. The bad news is he sees this as a blank canvas. With that said, he can't see how there can be a hardship for the variations. Are the lots too small or are the homes too big. The petitioner can adjust either to make them fit with no variations. Mr. Hayden stated that profitability can't be taken into account by this Commission. He can't find a hardship and therefore he would not approve this plan with the variations. Even the curve radii could be designed differently. Mr. Truesdell feels the curves will slow down traffic. Mr. Hayden asked if the cul-de-sac has enough room for fire trucks to turn. Ms. Maxwell said that is the standard design. Mr. Hayden asked if it is possible to design the project without variations and use the proper zoning. Ms. Maxwell said there are very few curves in the City that meet the requirements.

Mr. Goss said the problem with Ashton Pointe was when it came before the Commission there were smaller homes and property owner had room to do something with their back yard. As other developers came in and built their homes, they became monstrous homes with 3 car garages. He is concerned with the size of the lots. If a 3,000 square foot home is build on a 7,200 square foot lot that's too much and either the current or future home owners can't do anything with the back yard. Mr. Hayden said if this were a senior community where the yard maintenance, etc. is taken care of he could see the lot size. When building homes over 3,000 square feet and using that size lot, the homes are too large.

Mr. Naatz appreciates the comments that have been made. They are thoughtful. While this is a blank canvas, there are tracks along the site. They did a complete analysis of the area and want to provide housing

where people can stay in the community they grow up in. This plan allows them to do that. People can find homes in $300,000 that need to be updated. That's what they are competing against. Mr. Naatz said they are not sure that 52 homes would be much different. The tracks at Ashton Point are buffered with townhouses and they are not selling. The alternative is single family homes that are attractive and would service the City. In Ashton Pointe, the back yards are smaller and prospective home buyers feel that it was ok with them. Not everyone wants a larger lot. He said smaller lots mean a better maintained a community. This is a beautiful community and it is adjacent to a school. Mr. Goss said the second or third owner comes in and they want a sun room or larger deck and it doesn't fit. That is what he sees with Ashton Pointe when they came through. Those homes should have been an "R-1"district which was a mistake and he doesn't want it to happen again. Mr. Hayden asked what type of materials would be used. Mr. Naatz said vinyl siding that is attractive and less maintenance. There would be some brick, stone, etc. on elevations. Mr. Hayden asked what the maximum square footage would be. Mr. Naatz said 3,018. He can't predict what people would do in future, and these homes are flexible for growing families. Mr. Hayden asked where the homeowner would store their boat and camper. Mr. Naatz said there would be covenants that won't allow that type of stuff to be parked there so neighborhood will look good. These are not semi custom homes. People will be looking at the tracks and they need to look at what is most compatible for that. Some things that Commissioners are proposing are not possible. People are looking for affordability. Mr. Truesdell said people want a good product and affordable prices. He said that some variations could be eliminated. Mr. Naatz said they included ranches because many residents want to stay in Crystal Lake but want ranch homes. He added that lookouts and walkout basement would be about 40% of the lots.

Mr. Greenman recapped the discussion. He said there is over 120 years of total experience on the Commission. The petitioners have a few options with moving forward. The Commission can vote on this petition as presented or it could be continue to next meeting since they have received fairly clear direction from the Commission. They want the petitioner to be successful, which is a success for the City. They are looking forward to the second and third purchasers of the homes. The petitioners took a few minutes to discuss it amongst themselves.

Mr. Truesdell thanked the Commission for their patients. There are things that can be addressed and things to work on to find solutions. They will try to eliminate the variations and can look at the possibility of increase the lot size. There is little they can do regarding the price point and can't afford to lose 8-10 lots. Mr. Truesdell said they could request to be continued to the May 20th meeting, but they aren't sure they can satisfy everything. Mr. Goss said staff would need time to review the changes and give the Commissioners the information they need. Mr. Truesdell said they are running out of time and there are contractual issues as well.

Mr. Goss moved to continue 2015-20 Oak Hollow to the May 20, 2015 Planning and Zoning Commission meeting. Mr. Esposito seconded the motion. On roll call, all members voted aye. Motion passed.

Mr. Hayden asked if there were any comments that are a deal breaker for the petitioners. Mr. Hayden any comments give to the petitioner that is a deal breaker. Mr. Batastini prefers "R-2" zoning and better architecture. Mr. Goss would like a more specific number of units for the Growth Management requirement.

Mr. Esposito agrees with "R-2" zoning. Mr. Skluzacek agreed. Mr. Naatz said if the majority of the Commissioners agree that there should be a different zoning, this project is not feasible. Mr. Hayden stated that the City Council has the final action. The Commission is only a recommending body. Mr. Naatz said this is an infill site that borders on railroad tracks. They are working within those constraints.

Mr. Greenman asked for a straw poll regarding the zoning. Mr. Hayden said if the homes fit on the lot size he is ok with it. Mr. Esposito agreed. Mr. Goss said the lots need to meet the minimum size lot for "R-3A." Mr. Jouron said the architecture needs to change. They are too plain. Mr. Naatz said that is helpful.

Mr. Goss said they need to look at the net density not the gross density.

Mr. Truesdell said they have heard some flexibility. They will work on the plans and come back on May 20th. They have heard the Commission.

CRYSTAL LAKE PLANNING AND ZONING COMMISSION
WEDNESDAY, MAY 20, 2015
HELD AT THE CRYSTAL LAKE CITY COUNCIL CHAMBERS

The meeting was called to order by Chairman Hayden at 7:30 p.m. On roll call, members Esposito, Goss, Jouron, Skluzacek, and Hayden were present. Members Batastini and Greenman were absent.

Michelle Rentzsch, Director of Community Development, Kathryn Cowlin and Elizabeth Maxwell, both Planners, were present from Staff.

Mr. Hayden asked those in attendance to rise to say the Pledge of Allegiance. He led those in attendance in the Pledge.

Mr. Hayden stated that this meeting was being televised now as well as recorded for future playback on the City's cable station.

2015-20 OAK HOLLOW – S. Ken St.; N. RR Tracks; W. Thomas – PUBLIC HEARING
This petition was continued from the May 6, 2015 PZC meeting.
Rezoning, upon annexation, to R-3A Two-Family Residential; Preliminary Plat of Subdivision to create a 59- lot subdivision with outlots for detention; and Variation from Section 5-200 G 2 b xxii from the growth management plan requirements.

Mr. Hayden stated that the request was continued from the previous meeting and they are still sworn in.

Mr. Hayden stated there have been some nice changes made to the plan.

Harold Francke, attorney, Jim Truesdell with D R Horton Builder, and Ron Adams, engineer, were present to represent the petition. Mr. Truesdell said they took large steps from the previous meeting. He reviewed the changes and would answer questions. Most of the lots are now 71 feet wide which decreased the density. Most lots can accommodate 3-car garages. The average lot size is 8,800 sq. ft., which exceeds the minimum lot size for the "R-2" district. He showed the original and revised plans. The revised plan shows seven lots at the minimum square footage and those lots back up to open space. He added that the lots abutting existing residential lots exceed 8,400 sq. ft. and are deeper lots as well as the lots that back up to the school property. The detention area is also a buffer. This creates a much more open streetscape. Mr. Truesdell showed the landscape plan. The park area – tot lot is shown away from the tracks and in a location so it is accessible to both this development as well as the existing neighborhood. He stated that all lots exceed the minimum lot width and all lots comply with the "R-3A" bulk standards.

Mr. Truesdell said the original variations were eliminated except for the growth management plan. They have softened the radii of the road curves. They are still requesting a waiver of the growth management plan. He showed how their building footprints fit on the various lots leaving area for future decks, sun

rooms, additions, etc. They feel this blends in well with the existing area. Mr. Truesdell said this development is close to the downtown and train station. He showed a 3-D rendering of a typical streetscape using a sampling of various home designs. The Design Guidelines have helped and will add to the community.

Mr. Truesdell reviewed the summary of changes from the prior plan including a decrease of three lots, the addition of a park site away from the tracks, etc. This will benefit the community. He added that this is an infill development and near the downtown area. They are requesting annexation, rezoning, Preliminary Plat of Subdivision and a waiver from the Growth Management requirements. They believe this is a small development and the waiver is a reasonable request.

Mr. Hayden asked if the petitioner had any concerns with conditions in report. Mr. Truesdell said they have no concerns with the recommended conditions.

Frank Shields, 40 Kent Avenue, likes the idea of the park being closer to the end of Kent Avenue. He is still concerned with construction traffic and what routes the trucks will take. It will probably take a number of years to complete. Mr. Shields asked who is responsible to extend Oak Hollow Road to Pingree. He added that Kent Avenue has no curbs and is a narrow roadway which will be dangerous. Mr. Shields feels it is safer for the trucks to use Oak Hollow with going out toward Pingree.

Joe Vazzano, 491 E. Crystal Lake Avenue, lives at the northeast corner of this project. He and his neighbors' lots are very low and back up to the proposed detention area. He asked if there will be a berm around the detention area. Mr. Vazzano said they prefer that this property not be annexed into the City. If it is they will be surrounded and could be forced annexed into the City. He added that if Oak Hollow connects the residents near Pingree Road won't want all that traffic. He said they can hear the trains from their home and these homes will be much closer. He feels that this won't be a quality subdivision since the homes will be so close to the tracks.

There was no one else in the public who wished to comment on this petition. The public portion was closed at this time.

Mr. Jouron through the size of the homes would be decreased. Mr. Truesdell said the lots were made wider and deeper. Also the lots now show extra room in rear to allow for decks, additions, etc. He reminded the Commissioners that over half of lots will have either look-out or walkout basements. Typically those types of homes don't need additions because they have a full basement. Mr. Jouron said there are no new house designs. Mr. Truesdell said the designs are the same and they worked hard to make the homes attractive. They wanted to de-emphasize the garages so they wouldn't be a dominating feature of the front elevation. Mr. Jouron said there is no view showing the 3-car garages. Mr. Truesdell said they will be a separate garage added to the side of the house. This will also add to the variety of the elevations.

Mr. Hayden reminded the Commissioners that this is not a PUD. This is only a matter of zoning.

Mr. Jouron asked if the adjacent homes are on well and septic. Mr. Vazzano said yes.

Mr. Esposito said he likes the revised site plan. He also appreciates the park site being moved away from the tracks. He has a problem with the product which is not what he would expect in an "R-3A" zoning district. He would prefer to see more old style City houses with front porches for this area and not a more suburban look.

Mr. Skluzacek said he likes the changes that were made. He asked that the construction traffic not use Kent Avenue. Mr. Truesdell said that will be worked out with staff for the least impact on the area. He can see the main entrance as Oak Hollow. Mr. Skluzacek likes the changes that were made.

Mr. Goss does not want the construction traffic to access this development past the school. He would want it to come off Pingree Road. He appreciates the changes that have been made to the plan but believes that there is still a problem with some of the lots being tight. Mr. Truesdell said the lots shown are buildable and there are some styles of homes that won't be allowed on certain lots. Mr. Goss said he wants something more creative to give the lots depth. He suggested staggering the front yard setback. Mr. Truesdell said they can do that. He added that the decks can be wider and if they are uncovered the deck can encroach into the rear setback by 4 feet. There are a lot of options and a lot of potential. Mr. Goss believes the petitioner will have problems fitting buildings on the lots that are on a curve. Mr. Adams said when they revamped the site plan, they used the models to be sure that 3 to 5 styles can fit on the lots. He added that there will be lots that will have restrictions as to what styles can be built on them. All homes except for the large ranch style will fit on most lots. Mr. Adams said this site plan has been redeveloped to meet the concerns of the Commission. Mr. Goss believes that the petitioners mistook the comment regarding the 3-car garages. He doesn't feel that this is a good area for 3-car garages and they don't fit in with the design standards. Mr. Goss felt this property sets itself up for townhouses and not single family. There would be more common areas with townhouses that can be controlled. He feels this property should be zoned "R-2" and there are not enough changes that were made for him to approve this request.

Mr. Hayden said this is an issue of zoning. When the Preliminary Plat is tied with the zoning presented, it creates a problem for some Commissioners. He added that if this development were townhouses, the zoning would be a better fit. He has no problem with the variation from the Growth Management requirement. It was put in place in the early 1990s to help our school districts keep pace with the residential growth.

Mr. Truesdell said he is not sure what the concern is. This is an infill piece and their design fits better with the surrounding area. Also the lots proposed are larger than what is around them. This is a classic - transitional zoning. From a planning standpoint, this plan makes more sense. They feel it is a good transition from existing townhouses. Mr. Truesdell respectfully disagrees with some of the comments that were made. Mr. Hayden appreciates what has been done. He does like the road radii better with the revised plan.

Mr. Goss asked if it is within the Commission's purview to comment on growth management. Ms. Rentzsch said it is a variation request and yes the PZC has purview. Mr. Goss said there is no room for future homeowners to make improvements they are entitled to and he has a problem with that.

Mr. Hayden asked the Commissioners what they feel is the appropriate zoning for this property. Mr. Jouron said "R-2." Mr. Hayden asked if they could only annex the property. Ms. Rentzsch said she is fairly certain that the PZC and City Council would not approve zoning for this parcel without a plan. Mr. Esposito would prefer a mixture of housing styles – townhouses and single family.

Mr. Truesdell said the homes proposed will fit on the lots proposed. Mr. Goss said the petitioner doesn't see that in 5 years from now, the new owners will want to add something to their lot and they will need to ask for variations. They have to deal with that now with the development to the east. They need to look at the lots into the future.

Mr. Francke said they can work with staff so the limitations of the lot can be a plat restriction. The majority of lots presented won't have a problem. This is an opportunity for the City to gain control of the property. They are requesting an accelerated building schedule and listed the possible allowances. This is a smaller development and it will provide a road connection.

Mr. Hayden asked if there will be a berm at the detention area. Mr. Adams said they will not be going onto other properties and if there would be a berm it would be on their property. He did not have the specifics in front of him. Mr. Goss asked if the area will be fenced from the school. Mr. Adams believes there is a detention area on the school's property along Crystal Lake Avenue. He added that usually these types of detention areas are dry with grass bottoms.

Mr. Goss said that even if the variation from Growth Management Plan was worded as a waiver, he would vote no. It is based on a certain number of units to be built in a calendar year and if the developer doesn't use that number, the remaining number are move forward to the next year.

Mr. Goss moved to approve the Rezoning, upon annexation, to R-3A Two-Family Residential; Preliminary Plat of Subdivision to create a 59- lot subdivision with outlots for detention and park site; and a Variation from Section 5-200 G 2 b xxii from the growth management plan requirements for Oak Hollow located south of Kent Street, north of the railroad tracks, and west of Thomas with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (DRH Cambridge Homes, Inc., received 03/16/15)
   B. ALTA / ASCM Land Title Survey (R.E. Allen and Associates, dated 01/29/15, received 03/16/15)
   C. Preliminary Plat / Site Plan (Pearson Brown, dated 05/08/15, received 05/14/15)
   D. Preliminary Engineering Plans (Pearson Brown, dated 03/09/15, received 03/16/15)
   E. Preliminary Landscape Plan (Dickson Design, dated 05/12/15, received 05/14/15)
   F. Tree Survey (R.E. Allen, dated 02/27/15, received 03/16/15)
   G. House Elevations (Premier Architecture, Inc. dated 04/28/15, received 04/29/15)

2. The petitioner shall prepare all final documents for review including, but not limited to; a Final Plat of Subdivision, Final Landscape Plan and Final Engineering Plans and Reports.

3. The final plat shall illustrate a landscape easement on Lots 9, 10, 11, 12, 14 and 15.

4. The development shall comply with the anti-monotony standards.

5. The petitioner shall address all of the review comments and requirements of the Community Development, Fire Rescue, Police, and Public Works Departments, of the City's Stormwater Consultant.

Mr. Skluzacek seconded the motion. On roll call, Mr. Skluzacek voted aye. Members Esposito, Goss, Jouron, and Hayden voted no. Motion did not pass.

Mr. Esposito believes this should be "R-2" zoning. Mr. Jouron agreed.

Councilwoman Ferguson moved to overturn the Planning and Zoning Commission recommendations and grant the Preliminary and Final PUD approval for a 6-unit apartment building conversion at 95 Grant Street, subject to all staff conditions and an additional condition that the owner shall maintain a lease for at least 6 additional off-street parking spaces for the residents at all times. Councilman Thorsen seconded the motion. On roll call, all voted yes, except Councilman Dawson voted no. Motion passed.

19. Oak Hollow Subdivision-Annexation agreement public hearing. Rezoning for A-1 County to R-3A Two-Family Residential. Preliminary Plat of Subdivision for 59 lots.

Mayor Shepley opened the Public Hearing and noted that the petitioner had received a negative 4 to 1 recommendation from the Planning and Zoning Commission.

Hal Francke, attorney and Jim Truesdell of Cambridge Homes were present. Mr. Francke stated that they were looking for approval of the proposed annexation agreement and would seek annexation and zoning of the property at a later date.

Mr. Truesdell presented an overview of the proposed development, stating that they had been working closely with City staff to ensure their plans were in harmony with the City. He stated that the proposal would be in compliance with Urban Residential zoning, which is the designation for the area on the City's Comprehensive Plan. He showed the surrounding R-1, R-3 and R3-PUD zoning and stated that their petition, at R3 zoning, would make perfect sense and good transitional zoning. He stated that the Planning and Zoning Commission preferred R2 zoning.

Mr. Truesdell compared their original plan to their revised plan, showing the changes that had been made after working with the staff and the Planning and Zoning Commission. He noted that the number of smaller lots had been greatly reduced and the remaining ones backed to open space. He stated that they had increased the width of the other lots to be consistent with R-2 zoning, noting that 40% of the lots conform to R-2 size. He noted that they had softened roadway curves and were no longer requesting any variations. He stated that the lot sizes would allow for plenty of room for additions such as decks. He showed a streetscape illustration and noted the various home elevations.

Mayor Shepley stated that if the Council were to approve the proposal as presented, the City would have no control over what is actually built once the property is annexed and zoned. Mr. Truesdell stated that if they wish to have different elevations, they would need to be approved by the City. Mayor Shepley stated that the Planning and Zoning Commission had expressed concern that this was not PUD zoning, which would alleviate those concerns, and asked if the petitioner would be amenable to PUD zoning. Mr. Truesdell stated that they would be fine with R3-PUD zoning. Community Development Director Michelle Rentzsch added that PUD zoning would also address the provisions of the proposed annexation agreement. Mr. Francke stated that this

petitioner was unique because the City could provide as many protections as it wished in the annexation agreement. Mayor Shepley stated that he would prefer PUD zoning. Mr. Francke stated that they did not have a problem with that, but did not wish to start the process over again and go back to the Planning and Zoning Commission. Ms. Rentzsch stated that a PUD could be requested as part of Final Plat approval.

Mr. Truesdell presented information about green space and park areas, noting that a planned green space along Kent Avenue would not only serve their subdivision but for Crystal Heights as well. He noted that they would also help develop a currently unimproved site into a park.

Mr. Truesdell stated that they had taken giant steps in the direction the Planning and Zoning Commission had requested and he asked for the City Council's support.

Councilman Dawson asked if the Planning and Zoning Commission had reviewed the revised plan as presented and Ms. Rentzsch advised that they had.

Mayor Shepley asked if anyone in the audience wished to speak on the matter. No one wished to speak.

Mayor Shepley closed the Annexation Public Hearing.

Ms. Rentzsch stated that the petitioner had worked with staff and been at two Planning and Zoning Commission meetings and had revised their site plan so that the majority of the lots do meet R-2 zoning, they moved the park to a more desirable location, and had demonstrated that homeowners would be able to add decks.

Councilman Hopkins asked if the Planning and Zoning Commission had been pleased with the proposed architecture. Ms. Rentzsch stated that they did not discuss it much, but noted that the proposed plans exceed what had been approved for Ashton Pointe to the east. Councilman Hopkins stated that this was a difficult infill area and he thought the plan was good. Councilmembers Thorsen and Ferguson agreed. Councilwoman Ferguson stated that she was glad they had addressed the ability to have additions in the future. Councilman Dawson stated that he was happy they had reworked the plan from what had been proposed originally.

Mayor Shepley asked if the Council was in favor of having PUD zoning and the consensus was that they were.

Councilwoman Brady moved to adopt Ordinances authorizing execution of the Annexation Agreement and annexation of the property. Councilwoman Ferguson seconded the motion. On roll call, all voted yes. Motion passed.

Councilwoman Brady moved to adopt an Ordinance rezoning the property upon annexation to R-3A-PUD, which would not be effective until the sale of the property goes through to the petitioner from the current owner and to approve the Annexation Agreement as provided for the property located at Kent Avenue and Oak Hollow Road. Councilman Hubbard seconded the motion.

In response to a question from Mr. Francke, Mayor Shepley explained that the zoning would not become effective until the sale of the property was completed, as provided in the annexation agreement. Attorney Lisa Waggoner, representing the property seller, stated that their agreement with the purchaser specifically provided that no ordinances would be in effect until purchase of the property. After a brief further discussion, Mr. Francke advised that he concurred with the Council's action to make the ordinances conditional upon the sale of the property.

On roll call, all voted yes. Motion passed.

- **21. Roadway lighting at the intersection of Route 176 and Haligus/Mt. Thabor Road - Discussion Only.**

The City Engineer advised that IDOT was proposing to install a traffic signal and realign the roadway at this dangerous intersection. She stated that IDOT would not install the street lighting because the intersection does not meet their crash data, and they were asking if the City wished to pay to have street lighting installed at the same time they were installing the traffic signal, and also maintain the street lighting, which she stated would have an estimated cost of $250,000 for installation and $2,000 per year for maintenance.

Mayor Shepley stated that the traffic signal would most likely be all that is needed and the intersection was barely in Crystal Lake corporate limits. Councilman Hubbard asked if it would cost more if the City decided to install lighting at a later date. Ms. Wilgreen stated that it would probably not cost more because of the rural nature of the area.

The consensus of the Council was to decline roadway intersection lighting at the intersection of Route 176 and Haligus/Mt. Thabor Road as the criteria for lighting has not been met.

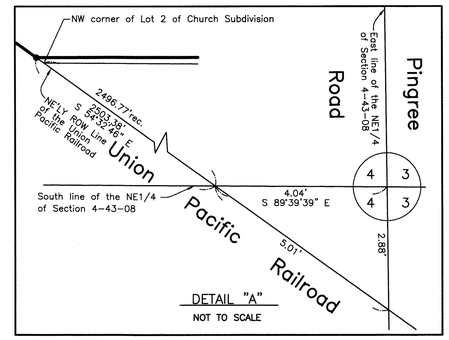
22.Resolution to execute an intergovernmental agreement with the McHenry County Major Investigation Assistance Team.

Councilman Hopkins moved to adopt a Resolution authorizing the City Manager to execute n Intergovernmental Agreement with the McHenry County Major Investigation Assistance Team. Councilman Thorsen seconded the motion. On roll call, all voted yes. Motion passed.

FINAL PLAT OF OAK HOLLOW

BEING A SUBDIVISION OF

PART OF THE NORTHWEST QUARTER AND OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN MCHENRY COUNTY, ILLINOIS.



DETAIL "A"
NOT TO SCALE

Found 3/4" Iron Pipe
Found 1" Iron Pipe at corner
Found 1/2" Iron Rod
Found 1/2" Iron Rod
Found 7/8" Iron Rod
Set Concrete Monument Found 1" Iron Pipe
Set 1/2" Iron Rod
Set "P.K." Spike
Set 1/2" Iron Rod
Set 1/2" Iron Rod
Set 1/2" Iron Rod
Set 1/2" Iron Rod
Set 1/2" Iron Rod
Set Concrete Monument Found 1-1/2" Iron Pipe
Found 3/4" Iron Pipe

John Street 66'
Kent Avenue 66'
Jenna Court
Thomas Street 33'
Oak Hollow Road 60'
Kent Avenue
Jenna Street
Union Pacific Railroad (Formerly Chicago and Northwestern Railroad)

CRYSTAL HEIGHTS SUBDIVISION BY DOC. 91577

Lot 5 CRYSTAL HEIGHTS FARM SUBDIVISION BY DOC. 90936

Lot 1 CHURCH SUBDIVISION BY DOC. 2004R0085425

Lot 2 CHURCH SUBDIVISION BY DOC. 2004R0085425

Lot 8 Lot 9 Lot 10 Lot 11 Lot 12 Lot 13 Lot 14 Lot 15 Lot 16 Lot 17 Lot 18 Lot 19 Lot 20 Lot 21 Lot 22 Lot 23 Lot 24 Lot 25 Lot 26 Lot 27 Lot 28 Lot 29 Lot 30 Lot 31 Lot 32 Lot 33 Lot 34 Lot 35 Lot 36 Lot 37 Lot 38 Lot 39 Lot 40 Lot 41 Lot 42 Lot 43 Lot 44 Lot 45 Lot 46 Lot 47 Lot 48 Lot 49 Lot 50 Lot 51 Lot 52 Lot 53 Lot 54 Lot 55 Lot 56 Lot 57 Lot 58 Lot 59

Outlot A 29,392 S.F. STORMWATER DETENTION AND DRAINAGE EASEMENT HEREBY DEDICATED TO THE OAK HOLLOW HOMEOWNERS ASSOCIATION

Outlot B 13,877 S.F. STORMWATER DETENTION AND DRAINAGE EASEMENT HEREBY DEDICATED TO THE OAK HOLLOW HOMEOWNERS ASSOCIATION

Outlot C 57,826 S.F. STORMWATER DETENTION AND DRAINAGE EASEMENT HEREBY DEDICATED TO THE OAK HOLLOW HOMEOWNERS ASSOCIATION

Outlot D 13,272 S.F. HEREBY DEDICATED TO THE CRYSTAL LAKE PARK DISTRICT

Outlot E 75,596 S.F. STORMWATER DETENTION AND DRAINAGE EASEMENT HEREBY DEDICATED TO THE OAK HOLLOW HOMEOWNERS ASSOCIATION

HEREBY DEDICATION TO THE CITY OF CRYSTAL LAKE

Private Drainage Easement
Private Drainage Easement
Private Drainage Easement

FINAL PLAT of OAK HOLLOW

BEING A SUBDIVISION OF

PARCEL 1: LOT 4, EXCEPT THE WESTERLY 100 FEET THEREOF, IN CRYSTAL HEIGHTS FARM SUBDIVISION, BEING A SUBDIVISION OF PART OF LOT NUMBER TWO OF THE NORTHWEST QUARTER AND PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 20, 1929 IN BOOK 8 OF PLATS, PAGE 4, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 2: THE WESTERLY 100 FEET OF LOT 4 IN CRYSTAL HEIGHTS FARM SUBDIVISION, BEING A SUBDIVISION OF PART OF LOT NUMBER TWO OF THE NORTHWEST QUARTER AND PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 20, 1929 IN BOOK 8 OF PLATS, PAGE 4, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 3: LOT 16 IN BLOCK 3 IN CRYSTAL HEIGHTS SUBDIVISION, A SUBDIVISION OF PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4 AND PART OF LOT 2 OF THE NORTHWEST QUARTER OF SECTION 4, ALL IN TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 16, 1928 AS DOCUMENT 91577 IN BOOK 6 OF PLATS, PAGE 14, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 5: LOTS 6 AND 7, (EXCEPTING THEREFROM THAT PART THEREOF CONVEYED BY RUTH KENT TO THE CHICAGO AND NORTHWESTERN RAILROAD COMPANY BY QUIT CLAIM DEED DATED SEPTEMBER 17, 1931 AND RECORDED IN BOOK 196 OF DEEDS, PAGE 436) AND LOT 8 IN CRYSTAL HEIGHTS FARM SUBDIVISION, BEING A SUBDIVISION OF PART OF LOT 2 OF THE NORTHWEST QUARTER AND PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 20, 1929 AS DOCUMENT 90936, IN BOOK 8 OF PLATS, PAGE 4, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 4: A PRIVATE ROAD KNOWN AS KENT AVENUE IN CRYSTAL HEIGHTS SUBDIVISION AND CRYSTAL HEIGHTS FARM SUBDIVISION, FURTHER DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF LOT 18 IN BLOCK 2 OF SAID CRYSTAL HEIGHTS SUBDIVISION; THENCE EAST A DISTANCE OF 191 FEET TO THE SOUTHEAST CORNER OF LOT 16 IN BLOCK 3 IN SAID SUBDIVISION; THENCE EAST A DISTANCE OF 499.18 FEET TO THE SOUTHEAST CORNER OF LOT 4 IN CRYSTAL HEIGHTS FARM SUBDIVISION; THENCE SOUTH A DISTANCE OF 66 FEET; THENCE WEST TO A POINT SAID POINT BEING 66 FEET SOUTH OF THE POINT OF BEGINNING; THENCE NORTH A DISTANCE OF 66 FEET TO THE POINT OF BEGINNING, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 16, 1928 PLAT BOOK 6 PAGE 14 FOR CRYSTAL HEIGHTS SUBDIVISION AND ACCORDING TO THE PLAT THEREOF RECORDED NOVEMBER 20, 1929 IN PLAT BOOK 8, PAGE 4 OF CRYSTAL HEIGHTS FARM SUBDIVISION. ALSO
A PRIVATE ROAD KNOWN AS THOMAS STREET, IN CRYSTAL HEIGHTS FARM SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED NOVEMBER 20, 1929 IN PLAT BOOK 8, PAGE 4, FURTHER DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF LOT 8 IN SAID CRYSTAL HEIGHTS FARM SUBDIVISION; THENCE NORTH ALONG THE EAST LINE THEREOF TO THE NORTHEAST CORNER OF SAID LOT 8; THENCE EAST A DISTANCE OF 33 FEET; THENCE SOUTH A DISTANCE OF 556.6 FEET MORE OR LESS; THENCE WEST A DISTANCE OF 33 FEET TO THE POINT OF BEGINNING. AND ALSO THE SOUTH 33 FEET OF A PRIVATE ROAD KNOWN AS KENT AVENUE AND ALSO PART OF THOMAS STREET IN CRYSTAL HEIGHTS FARM SUBDIVISION, FURTHER DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 8 IN SAID SUBDIVISION; THENCE EAST ALONG THE NORTH LINE OF SAID LOT 8 AND IT'S PROLONGATION THEREOF, A DISTANCE OF 486.58 FEET TO THE EAST RIGHT OF WAY LINE OF THOMAS STREET; THENCE NORTH ALONG SAID EAST LINE OF THOMAS STREET, A DISTANCE OF 33 FEET; THENCE WEST A DISTANCE OF 486.58 FEET TO A POINT; SAID POINT BEING 33 FEET NORTH OF THE WEST CORNER OF SAID LOT 8; THENCE SOUTH A DISTANCE OF 33 FEET TO THE POINT OF BEGINNING, ACCORDING TO PLAT THEREOF RECORDED NOVEMBER 20, 1929 IN PLAT BOOK 8 PAGE 4, TOWNSHIP OF ALGONQUIN, COUNTY OF MCHENRY, STATE OF ILLINOIS.

OWNERS CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY) S.S.

_____, ARE THE LEGAL OWNERS OF A PORTION OF LAND DESCRIBED ON THE PLAT HEREON DRAWN AND SHOWN HEREON AS SUBDIVIDED; THAT THEY HAVE CAUSED SAID LAND TO BE SURVEYED, SUBDIVIDED, STAKED AND PLATTED AS SHOWN HEREON, FOR THE PURPOSE OF HAVING THIS PLAT RECORDED PROVIDED BY LAW, AND AS THE OWNERS, DO HEREBY STATE THAT TO THE BEST OF OUR KNOWLEDGE, ALL OF THE LOTS IN THIS SUBDIVISION LIE WITHIN:

CRYSTAL LAKE COMMUNITY CONSOLIDATED SCHOOL DISTRCT 47,
CRYSTAL LAKE HIGH SCHOOL DISTICT 155 .

SEAL(S) THIS_____ DAY OF _____, A.D. 20_____.

_____SEAL

_____SEAL

NOTARY CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY)

I,_____, NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT _____ OF _____, PERSONALLY KNOWN TO ME TO BE THE SAME PERSON OR PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS_____, RESPECTIVELY APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AS THEIR OWN FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET FORTH. GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS DAY OF_____, A.D. 20_____ .

NOTARY PUBLIC: _____
MY COMMISSION EXPIRES: _____

MORTGAGEE'S CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY) S.S.

I,_____, HEREBY CERTIFIES THAT AS MORTGAGEE OF THE PROPERTY DESCRIBED HEREON UNDER MORTGAGE DATED_____AND RECORDED IN THE RECORDER'S OFFICE OF _____COUNTY, ILLINOIS ON _____ AS DOCUMENT NO._____, IT CONSENTS TO THE DEDICATION AND SUBDIVISION AS HEREON DRAWN.
DATED AT_____, ILLINOIS, THIS _____DAY OF_____A.D. 20_____.

BY:_____ TITLE: _____

ATTEST: _____TITLE: _____

NOTARY CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY) S.S.

I,_____, NOTARY PUBLIC IN AND FOR THE SAID COUNTY IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT_____ AND _____ OF _____ PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBE TO THE FOREGOING INSTRUMENT AS_____ AND_____, BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AS THEIR FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET FORTH, GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS_____DAY OF _____, A.D. 20_____.

NOTARY PUBLIC: _____
MY COMMISSION EXPIRES:_____

SURVEYORS DESIGNATION OF RECORDING
I, BRYAN J. LEE, AN ILLINOIS PROFESSIONAL LAND SURVEYOR IN THE STATE OF ILLINOIS, HEREBY DESIGNATE_____ OF_____IN_____TO RECORD THIS SUBDIVISION PLAT WITH THE MCHENRY COUNTY RECORDER OF DEEDS. THIS DEDICATION IS GRANTED UNDER THE RIGHT TO DESIGNATE SUCH RECORDING UNDER CHAPTER 109, SECTION 2 OF THE ILLINOIS REVISED STATUTES. AS A CONDITION OF THIS GRANT SAID DESIGNEE IS HEREBY REQUIRED TO PROVIDE TO THIS SURVEYOR, A CERTIFIED COPY OF SAID PLAT, IMMEDIATELY UPON RECORDING OF SAME. RECEIPT OF SAID CERTIFIED COPY WILL SERVE AS NOTICE TO THE SURVEYOR THAT THE PLAT HEREON DRAWN HAS BEEN RECORDED. DATED THIS_____DAY OF_____, A.D. 20_____.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3616
LICENSE EXPIRES NOVEMBER 30, 2016

SURVEYOR CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF LAKE) S.S.

THIS IS TO CERTIFY THAT I, BRYAN J. LEE, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED AND SUBDIVIDED THE PROPERTY AS DESCRIBED AND SHOWN BY THE PLAT, WHICH IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF. DIMENSIONS SHOWN ALONG CURVES ARE ARC DISTANCES UNLESS OTHERWISE NOTED.

PARCEL 1: LOT 4, EXCEPT THE WESTERLY 100 FEET THEREOF, IN CRYSTAL HEIGHTS FARM SUBDIVISION, BEING A SUBDIVISION OF PART OF LOT NUMBER TWO OF THE NORTHWEST QUARTER AND PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 20, 1929 IN BOOK 8 OF PLATS, PAGE 4, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 2: THE WESTERLY 100 FEET OF LOT 4 IN CRYSTAL HEIGHTS FARM SUBDIVISION, BEING A SUBDIVISION OF PART OF LOT NUMBER TWO OF THE NORTHWEST QUARTER AND PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 20, 1929 IN BOOK 8 OF PLATS, PAGE 4, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 3: LOT 16 IN BLOCK 3 IN CRYSTAL HEIGHTS SUBDIVISION, A SUBDIVISION OF PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4 AND PART OF LOT 2 OF THE NORTHWEST QUARTER OF SECTION 4, ALL IN TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 16, 1928 AS DOCUMENT 91577 IN BOOK 6 OF PLATS, PAGE 14, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 4: A PRIVATE ROAD KNOWN AS KENT AVENUE IN CRYSTAL HEIGHTS SUBDIVISION AND CRYSTAL HEIGHTS FARM SUBDIVISION, FURTHER DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF LOT 18 IN BLOCK 2 OF SAID CRYSTAL HEIGHTS SUBDIVISION; THENCE EAST A DISTANCE OF 191 FEET TO THE SOUTHEAST CORNER OF LOT 16 IN BLOCK 3 IN SAID SUBDIVISION; THENCE EAST A DISTANCE OF 499.18 FEET TO THE SOUTHEAST CORNER OF LOT 4 IN CRYSTAL HEIGHTS FARM SUBDIVISION; THENCE SOUTH A DISTANCE OF 66 FEET; THENCE WEST TO A POINT SAID POINT BEING 66 FEET SOUTH OF THE POINT OF BEGINNING; THENCE NORTH A DISTANCE OF 66 FEET TO THE POINT OF BEGINNING, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 16, 1928 PLAT BOOK 6 PAGE 14 FOR CRYSTAL HEIGHTS SUBDIVISION AND ACCORDING TO THE PLAT THEREOF RECORDED NOVEMBER 20, 1929 IN PLAT BOOK 8, PAGE 4 OF CRYSTAL HEIGHTS FARM SUBDIVISION. ALSO
A PRIVATE ROAD KNOWN AS THOMAS STREET, IN CRYSTAL HEIGHTS FARM SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED NOVEMBER 20, 1929 IN PLAT BOOK 8, PAGE 4, FURTHER DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF LOT 8 IN SAID CRYSTAL HEIGHTS FARM SUBDIVISION; THENCE NORTH ALONG THE EAST LINE THEREOF TO THE NORTHEAST CORNER OF SAID LOT 8; THENCE EAST A DISTANCE OF 33 FEET; THENCE SOUTH A DISTANCE OF 556.6 FEET MORE OR LESS; THENCE WEST A DISTANCE OF 33 FEET TO THE POINT OF BEGINNING. AND ALSO
THE SOUTH 33 FEET OF A PRIVATE ROAD KNOWN AS KENT AVENUE AND ALSO PART OF THOMAS STREET IN CRYSTAL HEIGHTS FARM SUBDIVISION, FURTHER DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 8 IN SAID SUBDIVISION; THENCE EAST ALONG THE NORTH LINE OF SAID LOT 8 AND IT'S PROLONGATION THEREOF, A DISTANCE OF 486.58 FEET TO THE EAST RIGHT OF WAY LINE OF THOMAS STREET; THENCE NORTH ALONG SAID EAST LINE OF THOMAS STREET, A DISTANCE OF 33 FEET; THENCE WEST A DISTANCE OF 486.58 FEET TO A POINT; SAID POINT BEING 33 FEET NORTH OF THE WEST CORNER OF SAID LOT 8; THENCE SOUTH A DISTANCE OF 33 FEET TO THE POINT OF BEGINNING, ACCORDING TO PLAT THEREOF RECORDED NOVEMBER 20, 1929 IN PLAT BOOK 8 PAGE 4, TOWNSHIP OF ALGONQUIN, COUNTY OF MCHENRY, STATE OF ILLINOIS.

PARCEL 5: LOTS 6 AND 7, (EXCEPTING THEREFROM THAT PART THEREOF CONVEYED BY RUTH KENT TO THE CHICAGO AND NORTHWESTERN RAILROAD COMPANY BY QUIT CLAIM DEED DATED SEPTEMBER 17, 1931 AND RECORDED IN BOOK 196 OF DEEDS, PAGE 436) AND LOT 8 IN CRYSTAL HEIGHTS FARM SUBDIVISION, BEING A SUBDIVISION OF PART OF LOT 2 OF THE NORTHWEST QUARTER AND PART OF LOT 2 OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 20, 1929 AS DOCUMENT 90936, IN BOOK 8 OF PLATS, PAGE 4, IN MCHENRY COUNTY, ILLINOIS.

I FURTHER CERTIFY THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY, AND THAT CONCRETE MONUMENTS AT OPPOSING SUBDIVISION CORNER AND 5/8 INCH IRON BARS AT ALL LOT CORNERS AND POINT OF CHANGE IN ALIGNMENT WILL BE SET AS REQUIRED BY THE PLAT ACT (ILLINOIS REVISED STATUTES 2005, 765ILCS 205/1)

I FURTHER CERTIFY THAT THE ABOVE DESCRIBED PROPERTY IS LOCATED IN ZONE "X" – AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN, AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER: 17111C0335SJ , EFFECTIVE DATE: NOVEMBER 16, 2008

I FURTHER CERTIFY THAT THIS SUBDIVISION LIES WITHIN THE CORPORATE LIMITS OF THE CITY OF CRYSTAL LAKE, ILLINOIS.

GIVEN UNDER MY HAND AND SEAL THIS_____DAY OF_____A.D. 20_____.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR 35-3616
LICENSE EXPIRES NOVEMBER 30, 2016

LANDSCAPE EASEMENT PROVISIONS
A NON-EXCLUSIVE LANDSCAPE EASEMENT ON THE REAR OF LOTS 9-12, 14 AND 15 ARE HEREBY RESERVED FOR THE BENEFIT OF AND GRANTED TO THE OWNERS OF LOTS 9-12, 14 AND 15, THEIR RESPECTIVE SUCCESSORS AND ASSIGNS OVER ALL THE AREAS MARKED "LANDSCAPE EASEMENT" OR "LE" ON THE PLAT TO PLANT TREES, SHRUBS, BUSHES AND OTHER FORMS OF VEGETATION. THE LOT OWNERS MUST MAINTAIN THE LANDSCAPING IN THE EASEMENT AND REPLACE WITH LIKE MATERIALS.

NOTE: LANDSCAPING AND GROUND COVER IN THE CUL-DE-SAC ISLANDS WILL BE PRIVATELY MAINTAINED BY THE OAK HOLLOW HOME OWNER'S ASSOCIATION.

STORMWATER DETENTION & DRAINAGE EASEMENT PROVISIONS
A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE OAK HOLLOW HOME OWNER'S ASSOCIATION (HEREINAFTER THE "GRANTEE"), THEIR RESPECTIVE SUCCESSORS AND ASSIGNS IN, UPON, ACROSS, OVER, UNDER AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "STORMWATER DETENTION AND DRAINAGE EASEMENT" ON THIS PLAT OF SUBDIVISION FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, INSPECTING, OPERATING, REPLACING, RENEWING, ALTERING, ENLARGING, REMOVING, REPAIRING, CLEANING AND MAINTAINING STORM SEWERS, DRAINAGE WAYS, STORMWATER DETENTION AND RETENTION FACILITIES, SUBSURFACE DRAINAGE SYSTEMS AND APPURTENANCES AND ANY AND ALL MANHOLES, PIPES, CONNECTIONS, CATCH BASINS, AND WITHOUT LIMITATIONS, SUCH OTHER INSTALLATIONS AS THE GRANTEE MAY DEEM NECESSARY, TOGETHER WITH THE RIGHT OF ACCESS ACROSS THE REAL ESTATE PLATTED HEREON FOR THE NECESSARY PERSONNEL AND EQUIPMENT TO DO ANY OR ALL OF THE ABOVE WORK.

IN FURTHERANCE OF THE FORGOING AFFIRMATIVE RIGHTS, THE FOLLOWING COVENANTS SHALL RUN WITH SAID LAND IN PERPETUITY:

NO BUILDINGS, STRUCTURES OR IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, WALLS, PATIOS, SHEDS OR POSTS SHALL BE INSTALLED, CONSTRUCTED, ERECTED OR PLACED IN SAID DRAINAGE EASEMENT;

NO VEGETATION (OTHER THAN GRASS) OR TREES SHALL BE PLANTED ON SAID DRAINAGE EASEMENT WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEE;

THERE SHALL BE NO DREDGED OR FILL MATERIAL PLACED UPON SAID DRAINAGE EASEMENT; AND; THE RIGHT IS ALSO HEREBY GRANTED TO THE GRANTEE TO REMOVE ANY BUILDINGS, STRUCTURES OR IMPROVEMENTS, TO CUT DOWN, TRIM OR REMOVE ANY TREES, FENCES, SHRUBS, OR OTHER PLANTS THAT INTERFERE WITH THE OPERATION OF OR ACCESS TO SUCH DRAINAGE FACILITIES IN, ON, UPON, ACROSS, UNDER OR THROUGH SAID DRAINAGE EASEMENT.

THE GRANTEE SHALL NOT BE RESPONSIBLE FOR REPLACEMENT OF ANY SUCH BUILDINGS, STRUCTURES, IMPROVEMENTS, TREES, FENCES, SHRUBS OR OTHER PLANTS REMOVED DURING EXERCISE OF THE HEREIN GIVEN RIGHTS. REPLACEMENT OF ITEMS SO REMOVED SHALL BE THE RESPONSIBILITY OF THE THEN LOT OWNER.

THE TOPOGRAPHY OR ELEVATIONS OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED, MODIFIED OR CHANGED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

WHERE DRAINAGE EASEMENT AREAS ARE ALSO USED FOR ELECTRIC, TELEPHONE, CABLE TELEVISION OR GAS DISTRIBUTION SYSTEMS OR COMPONENTS, SUCH OTHER UTILITY INSTALLATIONS SHALL BE SUBJECT TO THE PRIOR APPROVAL OF THE CITY OF CRYSTAL LAKE SO AS NOT TO INTERFERE WITH THE MAINTENANCE OF GRAVITY OR SUBSURFACE FLOW AND STABILIZATION OF VEGETATIVE GROUND COVER ON THE ABOVE MENTIONED DRAINAGE FACILITIES.

PUBLIC UTILITY EASEMENT PROVISIONS
AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC AND

COMMUNICATIONS SERVICE IS HEREBY RESERVED FOR AND GRANTED TO
COMMONWEALTH EDISON COMPANY
COMCAST
NI-COR
AND
SBC, (HEREINAFTER THE "GRANTEES"),

THEIR RESPECTIVE SUCCESSORS AND ASSIGNS JOINTLY AND SEVERALLY, TO INSTALL, OPERATE, MAINTAIN AND REMOVE, FROM TIME TO TIME, FACILITES USED IN CONNECTION WITH OVERHEAD AND UNDERGROUND TRANSMISSION AND DISTRIBUTION OF ELECTRICITY AND SOUNDS AND SIGNALS IN, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN WITHIN THE DOTTED LINES ON THE PLAT AND MARKED "PUBLIC UTILITY EASEMENT" OR "PUE", AND THE PROPERTY DESIGNATED ON THE PLAT AS A "COMMON AREA OR AREAS", AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS AND ALLEYS, WHETHER PUBLIC OR PRIVATE, TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER THE SURFACE OF EACH LOT AND COMMON AREA OR AREAS TO SERVE IMPROVEMENTS THEREON, OR ON ADJACENT LOTS, AND COMMON AREA OR AREAS TO SERVE IMPROVEMENTS THEREON, OR ON ADJACENT LOTS, AND COMMON AREA OR AREAS, THE RIGHT TO CUT, TRIM OR REMOVE TRESS, BUSHES AND ROOTS AS MAY BY REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. NO BUILDINGS, STRUCTURES OR IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO WALLS, PATIOS, SHEDS OR POSTS SHALL BE INSTALLED, CONSTRUCTED, ERECTED, PLACED OR PLANTED IN SAID PUBLIC UTILITY EASEMENT WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. THE RIGHT IS ALSO HEREBY GRANTED TO THE GRANTEE TO REMOVE ANY BUILDINGS, STRUCTURES, IMPROVEMENTS OR FENCES, TO CUT DOWN, TRIM OR REMOVE ANY TREES, SHRUBS, OR OTHER PLANTS THAT INTERFERE WITH THE OPERATION OF OR ACCESS TO SUCH PUBLIC UTILITES IN, ON, UPON, ACROSS, UNDER OR THROUGH SAID PUBLIC UTILITY EASEMENT. THE GRANTEE SHALL NOT BE RESPONSIBLE FOR REPLACEMENT OF ANY SUCH BUILDINGS STRUCTURES, IMPROVEMENTS, TREES, SHRUBS OR OTHER PLANTS REMOVED DURING EXERCISE OF THE HEREIN GIVEN RIGHTS. REPLACEMENT OF ITEMS SO REMOVED SHALL BE THE RESPONSIBILITY OF THE THEN LOT OWNER. AFTER INSTALLATION OF ANY SUCH FACILITES, THE TOPOGRAPHY OR ELEVATIONS OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED, MODIFIED OR CHANGED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF. THE TERM "COMMON AREA OR AREAS" IS DEFINED AS A LOT, PARCEL, OR AREA OF REAL PROPERTY, THE BENEFICIAL USE AND ENJOYMENT OF WHICH IS RESERVED IN WHOLE AS AN APPURTENANCE TO THE SEPARATELY OWNED LOTS, PARCEL OR AREAS WITHIN THE SUBDIVISION, EVEN THOUGH SUCH BE OTHERWISE DESIGNATED ON THE PLAT BY TERMS SUCH AS "CUTLOTS", "OPEN SPACE", "OPEN AREA", "COMMON GROUND", "PARKING AND COMMON AREA". THE TERMS "COMMON AREA OR AREAS" INCLUDES REAL PROPERTY SURFACED WITH INTERIOR DRIVEWAYS AND WALKWAYS, BUT EXCLUDES REAL PROPERTY PHYSICALLY OCCUPIED BY A BUILDING, SERVICE BUSINESS DISTRICT OR STRUCTURES SUCH AS A POOL OR RETENTION POND, OR MECHANICAL EQUIPMENT. RELOCATION OF FACILITIES WILL BE DONE BY GRANTEES AT A COST OF GRANTOR/LOT OWNER, WITH THE EXCEPTION OF OUTLOT D AND OUTLOT E, UPON WRITTEN REQUEST.

PRIVATE DRAINAGE EASEMENT PROVISIONS
A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE OAK HOLLOW HOME OWNER'S ASSOCIATION (HEREINAFTER THE "GRANTEE"), THEIR RESPECTIVE SUCCESSORS AND ASSIGNS IN, UPON, ACROSS, OVER, UNDER AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "PRIVATE DRAINAGE EASEMENT" OR "PDE" ON THIS PLAT OF SUBDIVISION FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, INSPECTING, OPERATING, REPLACING, RENEWING, ALTERING, ENLARGING, REMOVING, REPAIRING, CLEANING AND MAINTAINING DRAINAGE WAYS, SUBSURFACE DRAINAGE SYSTEMS AND APPURTENANCES AND ANY AND ALL PIPES, CONNECTIONS, CATCH BASINS, INCLUDING, BUT NOT LIMITED TO, SUCH OTHER INSTALLATIONS AS THE GRANTEE MAY DEEM NECESSARY, TOGETHER WITH THE RIGHT OF ACCESS ACROSS THE REAL ESTATE PLATTED HEREON FOR THE NECESSARY PERSONNEL AND EQUIPMENT TO DO ANY OR ALL OF THE ABOVE WORK.

IN FURTHERANCE OF THE FOREGOING AFFIRMATIVE RIGHTS, THE FOLLOWING COVENANTS SHALL RUN WITH SAID LAND IN PERPETUITY:

NO BUILDINGS, STRUCTURES, IMPROVEMENTS OR VEGETATION (OTHER THAN GRASS), INCLUDING BUT NOT LIMITED TO WALLS, PATIOS, SHEDS, POSTS, TREES, PLANTS OR SHRUBBERY SHALL BE INSTALLED, CONSTRUCTED, ERECTED, PLACED OR PLANTED IN SAID PRIVATE DRAINAGE EASEMENT;

THE RIGHT IS ALSO HEREBY GRANTED TO THE GRANTEE TO REMOVE ANY BUILDINGS, STRUCTURES OR IMPROVEMENTS, TO CUT DOWN, TRIM OR REMOVE ANY TREES, SHRUBS, OR OTHER PLANTS THAT INTERFERE WITH THE OPERATION OF OR ACCESS TO SUCH DRAINAGE FACILITIES IN, ON, UPON, ACROSS, UNDER OR THROUGH SAID PRIVATE DRAINAGE EASEMENT;

THE GRANTEE SHALL NOT BE RESPONSIBLE FOR REPLACEMENT OF ANY SUCH BUILDINGS, STRUCTURES, IMPROVEMENTS, TREES, SHRUBS OR OTHER PLANTS REMOVER DURING EXERCISE OF THE HEREIN GIVEN RIGHTS. REPLACEMENT OF ITEMS SO REMOVED SHALL BE THE RESPONSIBILITY OF THE THEN LOT OWNER;

FENCES ARE ALLOWED WITHIN THE SAID PRIVATE DRAINAGE EASEMENT SUBJECT TO THE ORDINANCES OF THE CITY OF CRYSTAL LAKE AND APPROVAL OF GRANTEE;

THERE SHALL BE NO DREDGED OR FILL MATERIAL PLACED UPON SAID PRIVATE DRAINAGE EASEMENT;

THE TOPOGRAPHY OR ELEVATIONS OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED, MODIFIED OR CHANGED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF, AND THE ESTABLISHED DRAINAGE PATTERN FROM OR OVER THE PRIVATE DRAINAGE EASEMENT SHALL NOT BE OBSTRUCTED, ALTERED OR MODIFIED, AND;

IN THE EVENT OF MULTIPLE OVERLAPPING EASEMENTS, THE MOST RESTRICTIVE EASEMENT PROVISIONS SHALL APPLY.

PLANNING AND ZONING COMMISSION CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY) S.S.

I,_____, CHAIRMAN OF THE CRYSTAL LAKE PLANNING AND ZONING COMMISSION, DO HEREBY CERTIFY THAT ON THIS_____DAY OF_____, A.D. 20_____, THIS PLAT OF SUBDIVISION WAS DULY APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE.

CHAIRMAN:_____

COUNTY RECORDER CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY) S.S.

THIS INSTRUMENT FILED FOR RECORD IN THE RECORDER'S OFFICE OF MCHENRY COUNTY, ILLINOIS, ON THIS_____DAY OF _____ 20_____, AT _____O'CLOCK_____M. AND RECORDED AS DOCUMENT NUMBER:_____

_____
MCHENRY COUNTY RECORDER:

THIS PLAT PRESENTED FOR RECORDING BY:_____

COUNTY CLERK CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY) S.S.

I,_____, COUNTY CLERK IN MCHENRY COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID CURRENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT.
GIVEN UNDER MY HAND AND SEAL OF THE COUNTY AT WOODSTOCK, ILLINOIS, DATED THIS_____DAY OF _____ A.D. 20_____.

COUNTY CLERK:_____

CITY COUNCIL CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF MCHENRY) S.S.

APPRVED BY THE CITY COUNCIL OF CRYSTAL LAKE, ILLINOIS THIS _____ DAY OF_____A.D. 20_____.

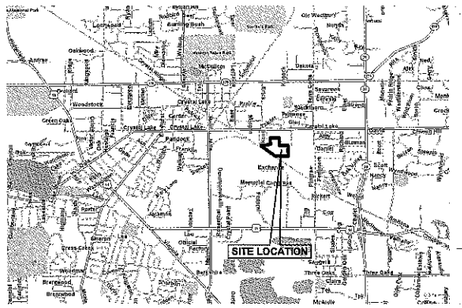
_____ _____
MAYOR CITY CLERK

SURFACE WATER DRAINAGE CERTIFICATE
I,_____, OWNER(S) AND I,_____, PROFESSIONAL ENGINEER OF THE STATE OF ILLINOIS, DO HEREBY CERTIFY THAT TO THE BEST OF OUR KNOWLEDGE AND BELIEF THAT THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS SUBDIVISION OR ANY PART THEREOF, OR, IF SUCH CHANGES OCCUR, ADEQUATE PROVISIONS HAVE BEEN MADE COT THE COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL NOT BE DEPOSITED ON ADJOINING LAND OWNERS IN SUCH CONCENTRATION AS MAY CAUSE DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THIS SUBDIVISION.

OWNER(S):_____

_____
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

CITY OF CRYSTAL LAKE
RESTRICTED PUBLIC UTILITY EASEMENT (RPUE) PROVISIONS
RESTRICTED PUBLIC UTILITY EASEMENT (RPUE): EACH INDIVIDUAL ENTITY OR OTHER PARTY AC



LOCATION MAP NORTH

LEGEND

EXISTING	PROPOSED		EXISTING	PROPOSED	
		SANITARY SEWER			CENTER LINE
		FORCE MAIN			EASEMENT
		STORM SEWER			BUILDING SETBACK
		P.V.C. STORM SEWER			CURB & GUTTER
		COMBINED SEWER			CURB & REVERSE GUTTER PITCH
		DRAIN TILE			DEPRESSED CURB & GUTTER
		WATER MAIN			GUARD RAIL
		TRENCH BACKFILL			FENCE
		MANHOLE			RETAINING WALL
		CATCH BASIN			CURB RAMP
		INLET			DRIVEWAY HAND
		2' STORM MANHOLE			SIGN
		INLET MANHOLE			MAIL BOX
		FLARED END SECTION			SOIL BORING
		HEAD WALL			DECIDUOUS TREE, DIAMETER
		LIFT STATION			EVERGREEN TREE, HEIGHT
		CLEAN-OUT	T/F 600.00	T/F 600.00	TOP OF FOUNDATION
		METER VAULT	F/G 600.00	F/G 600.00	FINISHED GRADE
		VALVE VAULT	+600.00	+600.00	SPOT ELEVATION
		VALVE BOX	T/C 600.00	T/C 600.00	TOP OF CURB ELEVATION
		BUFFALO BOX	F/L 600.00	F/L 600.00	FLOW LINE OF GUTTER
		FIRE HYDRANT	600	600	CONTOUR
		CONFLICT			DITCH
		CROSSING			DRAINAGE FLOW
		TRIPLE BASIN			OVERLAND FLOW
		GREASE BASIN	R-600.00	R-600.00	RIM ELEVATION
		GAS MAIN	I-600.00	I-600.00	INVERT ELEVATION
		ELECTRIC CABLE			WETLAND LIMIT
		TELEPHONE CABLE			WETLAND BUFFER LINE
		FIBER OPTIC CABLE			RIDGE LINE
		CABLE			BASE FLOOD ELEVATION LINE
		STREET LIGHT			F.E.M.A. FLOODPLAIN LINE
		UTILITY POLE			
		PEDESTAL			
		TRANSFORMER			
		GAS VALVE			
		ELECTRIC BOX			
		TELEPHONE MANHOLE			
		FIBER OPTIC MANHOLE			
		TRAFFIC SIGNAL BOX			
		TRAFFIC SIGNAL			

NORTH

SCALE: 1" = 60'

60' 30' 0 60'

SITE DATA

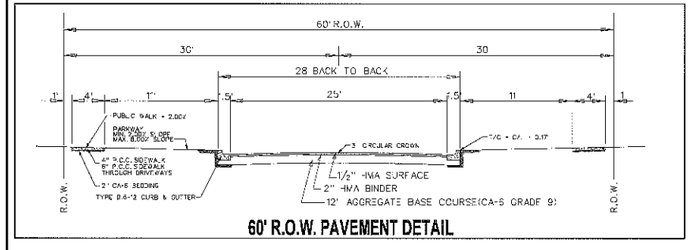
	ACRES	PERCENT
TOTAL SITE AREA	20.69	100.00
AREA IN RIGHT OF WAY	4.31	20.83
AREA IN OPEN SPACE	4.05	19.58
AREA IN PARK SITE	0.30	1.45
AREA IN LOTS	12.03	58.14

TOTAL NUMBER OF LOTS = 59
GROSS SITE DENSITY = 2.85 D.U./AC. (59 D.U. / 20.69 AC.)

MINIMUM LOT SIZE = 7,200 SQ.FT.
AVERAGE LOT SIZE = 8,800 SQ.FT.
MINIMUM LOT WIDTH = 65 FT.
MINIMUM LOT DEPTH = 105 FT.

MINIMUM BUILDING SETBACKS:
FRONT YARD = 30 FT.
SIDE YARD CORNER = 30 FT.
SIDE YARD INTERIOR = 7 FT. / 18 FT. TOTAL
REAR YARD = 20 FT.

PROPOSED ZONING = R-3A PUD



60' R.O.W. PAVEMENT DETAIL

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2015 43

CRYSTAL LAKE, ILLINOIS

OAK HOLLOW

PEARSON, BROWN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1650 W. WINCHESTER ROAD - SUITE 205
LIBERTYVILLE, IL 60048
PHONE: (847) 367-6707
FAX: (847) 367-6708
E-MAIL ADDRESS: pba@pearsonbrown.com

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DESIGNED BY: A.K.Z.
DRAWN BY: D.S.H.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 07/08/15

DATE BY	DESCRIPTION
08/07/15 AKZ	REVISED PER CITY REVIEW COMMENTS

REVISIONS

DEVELOPER: D.R. HORTON
800 MILWAUKEE AVENUE
LIBERTYVILLE, IL 60048
PHONE: (847) 362-9100

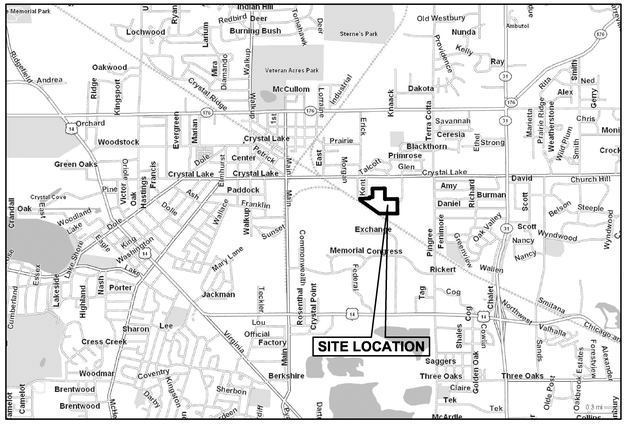
SITE PLAN

SHEET NUMBER 1 OF 1 SHEETS

JOB No. 1551

OAK HOLLOW

CITY OF CRYSTAL LAKE, IL



LOCATION MAP NORTH

INDEX

1. COVER SHEET
2. SPECIFICATIONS & NOTES
3. GENERAL LAYOUT
4. GEOMETRICS - SOUTH
5. GEOMETRICS - NORTH
6. GRADING - SOUTH
7. GRADING - NORTH
8. EROSION CONTROL
9. EROSION CONTROL NOTES & DETAILS
10. UTILITY SOUTH
11. UTILITY NORTH
12. PLAN & PROFILE - KENT AVENUE
13. PLAN & PROFILE - JENNA COURT
14. PLAN & PROFILE - JENNA STREET
15. PLAN & PROFILE - OAK HOLLOW ROAD & OFF-SITE SANITARY
16. DETAILS
17. DETAILS
18. DETAILS
19. DETAILS
20. EXISTING CONDITIONS

LEGEND

EXISTING	PROPOSED		EXISTING	PROPOSED	
		SANITARY SEWER			CENTER LINE
		FORCE MAIN			EASEMENT
		STORM SEWER			BUILDING SETBACK
		P.V.C. STORM SEWER			CURB & GUTTER
		COMBINED SEWER			CURB & REVERSE GUTTER PITCH
		DRAIN TILE			DEPRESSED CURB & GUTTER
		WATER MAIN			GUARD RAIL
		TRENCH BACKFILL			FENCE
		MANHOLE			RETAINING WALL
		CATCH BASIN			CURB RAMP
		INLET			DRIVEWAY HAND
		2' STORM MANHOLE			SIGN
		INLET MANHOLE	MB	MB	MAIL BOX
		FLARED END SECTION			SOIL BORING
		HEAD WALL			DECIDIOUS TREE, DIAMETER
LS	LS	LIFT STATION			EVERGREEN TREE, HEIGHT
		CLEAN-OUT	T/F 600.00	T/F 600.00	TOP OF FOUNDATION
M	M	METER VAULT	F/G 600.00	F/G 600.00	FINISHED GRADE
		VALVE VAULT	600.00	600.00	SPOT ELEVATION
		VALVE BOX	T/C 600.00	T/C 600.00	TOP OF CURB ELEVATION
		BUFFALO BOX	F/L 600.00	F/L 600.00	FLOW LINE OF GUTTER
		FIRE HYDRANT	600	600	CONTOUR
		CONFLICT			DITCH
		CROSSING			DRAINAGE FLOW
		TRIPLE BASIN			OVERLAND FLOW
GB	GB	GREASE BASIN	R-600.00	R-600.00	RIM ELEVATION
G	G	GAS MAIN	I-600.00	I-600.00	INVERT ELEVATION
E	E	ELECTRIC CABLE			WETLAND LIMIT
T	T	TELEPHONE CABLE			WETLAND BUFFER LINE
F	F	FIBER OPTIC CABLE			RIDGE LINE
C	C	CABLE			BASE FLOOD ELEVATION LINE
		STREET LIGHT			F.E.M.A. FLOODPLAIN LINE
		UTILITY POLE			
		PEDESTAL			
		TRANSFORMER			
G	G	GAS VALVE			
E	E	ELECTRIC BOX			
T	T	TELEPHONE MANHOLE			
F	F	FIBER OPTIC MANHOLE			
T	T	TRAFFIC SIGNAL BOX			
		TRAFFIC SIGNAL			

BENCHMARKS:

SOURCE BENCHMARK:
MCHENRY COUNTY GEODETIC CONTROL
STATION MCHENRY-2B AT FRONT ROYAL DRIVE, SOUTH OF ILLINOIS ROUTE 120
ELEVATION= 758.27 NAVD88

SITE BENCHMARK:
SOUTHEAST HEAD BOLT OF FIRE HYDRANT AT THE END OF KENT STREET.
ELEVATION= 940.25 NAVD88

CONTACT INFORMATION:

CITY OF CRYSTAL LAKE
100 W. WOODSTOCK STREET
CRYSTAL LAKE, IL. 60014
1-815-459-2020

COMED
1500 FRANKLIN BOULEVARD
LIBERTYVILLE, IL. 60048
1-847-816-5434

AT&T
255 EAST CHICAGO ST.
ELGIN, IL. 60120
1-847-888-6838

NICOR GAS
300 WEST TERRA COTTA
CRYSTAL LAKE, IL. 60014
1-815-261-9432

COMCAST COMMUNICATIONS
1575 ROHLWING RD.
ROLLING MEADOWS, IL. 60008
1-847-725-6752

DRAINAGE CERTIFICATE

TO THE BEST OF OUR KNOWLEDGE AND BELIEF THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS DEVELOPMENT OR ANY PART THEREOF, OR, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE DEVELOPER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THIS DEVELOPMENT.

REGISTERED PROFESSIONAL ENGINEER DATE

OWNER OR OWNER'S DULY AUTHORIZED AGENT DATE

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DEVELOPER:

D.R. HORTON
800 MILWAUKEE AVENUE, LIBERTYVILLE, IL 60048 (847) 362-9100

CONSULTING ENGINEERS:

PEARSON, BROWN & ASSOCIATES, INC.
A PROFESSIONAL DESIGN FIRM - ILLINOIS PROFESSIONAL ENGINEERING CORPORATION - LICENSE NUMBER 184-001058 EXPIRES 04/30/17
1850 W. WINCHESTER ROAD - SUITE 205 LIBERTYVILLE, IL. 60048 (847) 367-6707

NOT FOR CONSTRUCTION

CONTACT JULIE AT 8-1-1 OR 800-892-0123
With the following:
County McHenry
City/Twnship Crystal Lake / Algonquin - 43N
Sec 1/4 Sec No. Sec 4, NW 1/4
Call 2 working days BEFORE YOU DIG.
illinois1call.com

PERMIT	NUMBER	DATE ISSUED
IEPA - SANITARY		
IEPA - WATER		
IEPA - NOI	ILR10V397	07/10/15
VILLAGE		

	REVISIONS	
1	08/07/15	PER CITY REVIEW COMMENTS
2	08/25/15	PER CITY REVIEW COMMENTS
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

ENGINEER'S SEAL & SIGNATURE

ORIGINAL ISSUE DATE: 07/08/15

SHEET NUMBER 1 OF 20 SHEETS

JOB No. 1551

OAK HOLLOW

SPECIAL PROVISIONS

THE FOLLOWING SPECIAL PROVISIONS ASSUME A TYPICAL OWNER/DEVELOPER AND FOUR PRIME CONTRACTORS (EXCAVATION, UNDERGROUND, PAVING, AND LIGHTING). IF A GENERAL CONTRACTOR IS INVOLVED, REQUIREMENTS AND RESPONSIBILITIES SHALL APPLY ACCORDINGLY BASED ON CONTRACT RELATIONSHIPS BETWEEN THE GENERAL CONTRACTOR, RELEVANT SUBCONTRACTORS AND THE OWNER/DEVELOPER.

I. GENERAL NOTES

1. THE CONSTRUCTION OF ALL IMPROVEMENTS OF THE PROJECT SHALL BE GOVERNED BY THE LATEST CODES AND ORDINANCES OF THE MUNICIPALITY.

   THE CONSTRUCTION OF ALL SEWER AND WATER MAIN IMPROVEMENTS ON THIS PROJECT SHALL BE GOVERNED BY THE FOLLOWING:
   - A. THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS", LATEST REVISION, EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS
   - B. THE "ILLINOIS ADMINISTRATIVE CODE, TITLE 77, PART 890" THE "ILLINOIS PLUMBING CODE", LATEST REVISION
   - C. THE "ILLINOIS ADMINISTRATIVE CODE, TITLE 35, SUBTITLE C, PART 370" THE "ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS", LATEST REVISION
   - D. THE "ILLINOIS ADMINISTRATIVE CODE, TITLE 35, SUBTITLE F" "PUBLIC WATER SUPPLIES", LATEST REVISION

   THE CONSTRUCTION OF ALL PAVING AND GRADING IMPROVEMENTS SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" (SPECIAL PROVISIONS), LATEST REVISIONS, PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT). IN CASE OF CONFLICT THE "SPECIAL PROVISIONS" SHALL TAKE PRECEDENCE AND GOVERN, WITH THE IDOT STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS SHALL HEREINAFTER BE REFERRED TO AS THE "IDOT STANDARD SPECIFICATIONS".

   SOIL EROSION AND SEDIMENT CONTROL ON THIS PROJECT SHALL BE GOVERNED BY THE "ILLINOIS URBAN MANUAL", LATEST REVISION.

2. **OWNER AND MUNICIPALITY**
   THE WORD "OWNER" AS USED IN THE SPECIAL PROVISIONS SHALL, WHERE APPLICABLE. INCLUDE THE LOCAL MUNICIPALITY OR GOVERNING AUTHORITY.

3. **GUARANTEE PERIOD**
   ALL CONSTRUCTION PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF TWELVE MONTHS FROM THE DATE OF FINAL ACCEPTANCE BY THE LOCAL MUNICIPALITY, GOVERNING AUTHORITY, OR PRIVATE OWNER OF THE WORK AGAINST DEFECTS IN WORKMANSHIP AND FAULTY OR IMPROPER MATERIALS.

4. **N/A**

5. **INDEMNIFICATION**
   CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE MUNICIPALITY, OWNER AND CONSULTANT, AND THEIR AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING ATTORNEYS' FEES ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE WORK, PROVIDED THAT ANY SUCH CLAIM, DAMAGE, LOSS OR EXPENSE (A) IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE OR DEATH, OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE WORK ITSELF) INCLUDING THE LOSS OF USE RESULTING THEREFROM, AND (B) IS CAUSED IN WHOLE OR IN PART BY ANY NEGLIGENT ACT OR OMISSION OF CONTRACTOR, ANY SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, REGARDLESS OF WHETHER OR NOT IT IS CAUSED IN PART BY A PARTY INDEMNIFIED HEREUNDER. IN ANY AND ALL CLAIMS AGAINST OWNER OR CONSULTANT OR ANY OF THEIR AGENTS OR EMPLOYEES BY ANY EMPLOYEE OF CONTRACTOR, ANY SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, THE INDEMNIFICATION OBLIGATION SHALL NOT BE LIMITED IN ANY WAY BY ANY LIMITATION ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS PAYABLE BY OR FOR CONTRACTOR OR ANY SUBCONTRACTOR UNDER WORKMEN'S COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFIT ACTS.

6. **LIABILITY LIMITATIONS**
   THE CONTRACTOR AND HIS SUBCONTRACTORS ARE SKILLED AND EXPERIENCED IN THE USE AND INTERPRETATIONS OF PLANS AND SPECIFICATIONS SUCH AS THOSE INCLUDED IN THE BID DOCUMENTS FOR THIS CONTRACT. THEY HAVE CAREFULLY REVIEWED THE PLANS AND SPECIFICATIONS, AND HAVE FOUND THEM FREE OF AMBIGUITIES AND SUFFICIENT FOR BID PURPOSES. FURTHER, THEY HAVE BASED THEIR BID SOLELY ON THESE DOCUMENTS, NOT RELYING IN ANY WAY ON ANY EXPLANATION OR INTERPRETATION, ORAL OR WRITTEN, FROM ANY OTHER SOURCE. HAVING ASSURED HIMSELF OF THE ADEQUACY OF THE DOCUMENTS AND THE ACCURACY OF HIS BID, THE CONTRACTOR AGREES AND SHALL REQUIRE HIS SUBCONTRACTORS TO AGREE TO LIMIT THE LIABILITY OF THE OWNER AND OF THE CONSULTANT TO A TOTAL AGGREGATE LIABILITY TO THE CONTRACTOR OF THE AMOUNT OF THE CONSULTANT'S TOTAL FEE FOR SERVICES RENDERED ON THIS PROJECT. NEITHER THE CONTRACTOR NOR ANY OF HIS SUBCONTRACTORS ASSUME ANY LIABILITY FOR THE ERRORS, OMISSIONS OR NEGLIGENT ACTS OF THE CONSULTANT.

7. **SAFETY AND PROTECTION**
   CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. HE SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE THE NECESSARY PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO:
   - A. ALL EMPLOYEES ON THE WORK AND OTHER PERSONS WHO MAY BE AFFECTED THEREBY;
   - B. ALL THE WORK AND ALL MATERIALS OR EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE.
   - C. OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAYS, STRUCTURES AND UTILITIES NOT DESIGNATED FOR REMOVAL, RELOCATION OR REPLACEMENT IN COURSE OF CONSTRUCTION.

   CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR TO PROTECT THEM FROM DAMAGE, INJURY OR LOSS. HE SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR ITS SAFETY AND PROTECTION. HE SHALL NOTIFY OWNERS OF ADJACENT UTILITIES WHEN PROSECUTION OF THE WORK MAY AFFECT THEM. ALL DAMAGE, INJURY OR LOSS TO ANY PROPERTY REFERRED TO CAUSE, DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART, BY CONTRACTOR, ANY SUBCONTRACTOR OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, SHALL BE REMEDIED BY CONTRACTOR. CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR THE SAFETY AND PROTECTION OF THE WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL THE WORK IS COMPLETED AND CONSULTANT HAS ISSUED A NOTICE TO OWNER AND CONTRACTOR THAT WORK IS ACCEPTABLE. CONTRACTOR SHALL DESIGNATE A RESPONSIBLE MEMBER OF HIS ORGANIZATION AT THE SITE WHOSE DUTY SHALL BE THE PREVENTION OF ACCIDENTS. THIS PERSON SHALL BE THE CONTRACTOR'S SUPERINTENDENT UNLESS OTHERWISE DESIGNATED IN WRITING BY CONTRACTOR TO OWNER. IN EMERGENCIES AFFECTING THE SAFETY OF PERSONS OR THE WORK OR PROPERTY AT THE SITE OR ADJACENT THERETO, CONTRACTOR, WITHOUT SPECIAL INSTRUCTION OR AUTHORIZATION FROM CONSULTANT OR OWNER, IS OBLIGATED TO ACT, AT HIS DISCRETION, TO PREVENT THREATENED DAMAGE, INJURY OR LOSS.

8. **SUPERVISION AND SUPERINTENDENCE**
   CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK EFFICIENTLY AND WITH HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION, BUT HE SHALL NOT BE SOLELY RESPONSIBLE FOR THE NEGLIGENCE OF OTHERS IN THE DESIGN OR SELECTION OF A SPECIFIC MEANS, METHOD, TECHNIQUE, SEQUENCE OR PROCEDURE OF CONSTRUCTION WHICH IS INDICATED IN AND REQUIRED BY THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO SEE THAT THE FINISHED WORK COMPLIES ACCURATELY WITH THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL KEEP ON THE WORK AT ALL TIMES DURING ITS PROGRESS A COMPETENT RESIDENT SUPERINTENDENT, WHO SHALL NOT BE REPLACED WITHOUT WRITTEN NOTICE TO OWNER AND CONSULTANT, EXCEPT UNDER EXTRAORDINARY CIRCUMSTANCES. THE SUPERINTENDENT WILL BE CONTRACTOR'S REPRESENTATIVE AT THE SITE AND SHALL HAVE AUTHORITY TO ACT ON BEHALF OF CONTRACTOR. ALL COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING AS IF GIVEN TO CONTRACTOR.

9. **SUBSTITUTE MATERIAL OR EQUIPMENT**
   IF THE GENERAL REQUIREMENTS, LAWS, ORDINANCES OR APPLICABLE RULES OR REGULATIONS PERMIT CONTRACTOR TO FURNISH OR USE A SUBSTITUTE THAT IS EQUAL TO ANY MATERIAL OR EQUIPMENT SPECIFIED, AND IF ANY CONTRACTOR WISHES TO FURNISH OR USE A PROPOSED SUBSTITUTE, HE SHALL MAKE WRITTEN APPLICATION TO CONSULTANT, OWNER AND VILLAGE FOR APPROVAL OF SUCH A SUBSTITUTE CERTIFYING IN WRITING THAT THE PROPOSED SUBSTITUTE WILL PERFORM ADEQUATELY THE FUNCTION CALLED FOR BY THE GENERAL DESIGN, BE SIMILAR AND OF EQUAL SUBSTANCE TO THAT SPECIFIED AND BE SUITED TO THE SAME USE AND CAPABLE OF PERFORMING THE SAME FUNCTION AS THAT SPECIFIED; STATING WHETHER OR NOT ITS INCORPORATION IN OR USE IN CONNECTION WITH THE PROJECT IS SUBJECT TO THE PAYMENT OF ANY LICENSE FEE OR ROYALTY; AND IDENTIFYING ALL VARIATIONS OF THE PROPOSED SUBSTITUTE FROM THAT SPECIFIED AND INDICATING AVAILABLE MAINTENANCE SERVICE. NO SUBSTITUTE SHALL BE ORDERED OR INSTALLED WITHOUT THE WRITTEN APPROVAL OF CONSULTANT WHO WILL BE THE JUDGE OF EQUALITY AND MAY REQUIRE CONTRACTOR TO FURNISH SUCH OTHER DATA ABOUT THE PROPOSED SUBSTITUTE AS HE CONSIDERS PERTINENT. NO SUBSTITUTE SHALL BE ORDERED OR INSTALLED WITHOUT SUCH PERFORMANCE GUARANTEE AND BONDS AS OWNER MAY REQUIRE WHICH SHALL BE FURNISHED AT CONTRACTOR'S EXPENSE.

10. **RECORD DRAWINGS**
    CONTRACTOR SHALL KEEP ONE RECORD COPY OF ALL SPECIFICATIONS, DRAWINGS, ADDENDA, MODIFICATIONS, AND SHOP DRAWINGS AT THE SITE IN GOOD ORDER AND ANNOTATED TO SHOW ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. THESE SHALL BE AVAILABLE TO CONSULTANT AND SHALL BE DELIVERED TO HIM OR OWNER UPON COMPLETION OF THE PROJECT. CONSULTANT OR OWNER SHALL SUPPLY RECORD DRAWINGS TO THE LOCAL MUNICIPALITY.

11. **INSTRUCTIONS TO CONTRACTORS FROM CONSULTANT**
    THE CONTRACTOR SHALL ONLY ACCEPT INSTRUCTIONS, EITHER VERBAL OR WRITTEN, FROM AUTHORIZED PERSONNEL OF PEARSON, BROWN & ASSOCIATES, INC. THE PERSONNEL SO AUTHORIZED TO ISSUE INSTRUCTIONS TO CONTRACTORS ARE EXCLUSIVELY
    RONALD ADAMS, GUS ZOGRAFOS AND JOHN CERBUS, NOT WITHOUT OWNERS PERMISSION.

12. **APPLICATION FOR PAYMENT**
    IF APPROVAL BY THE CONSULTANT AND THE MUNICIPALITY IS REQUIRED FOR THE PROCESSING OF THE APPLICATION FOR PAYMENT, THEN CONTRACTOR SHALL SUBMIT TO CONSULTANT AN APPLICATION FOR PAYMENT ACCEPTABLE TO CONSULTANT AND SHALL PROVIDE TO THE CONSULTANT ANY AND ALL INFORMATION PERTINENT TO SAID APPLICATION WHETHER REQUESTED SPECIFICALLY OR NOT. CONSULTANT'S APPROVAL IS BASED ON WORK COMPLETED TO DATE OF APPLICATION SUBMITTAL. IF CONTRACTOR HAS AGREED BY CONTRACT AGREEMENT OR IN THE SCOPE OF WORK TO A QUANTITY OF EQUIPMENT WITH OPERATORS OR TO A NUMBER OF CREWS TO START WORK ON A SPECIFIC DATE AND PROCEED AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE, AND CONTRACTOR DOES NOT PROVIDE THE EQUIPMENT WITH OPERATORS OR THE NUMBER OF CREWS AS DIRECTED BY OWNER OR HIS REPRESENTATIVE, AND, AS A RESULT, CAUSES DELAYS TO THE PROJECT, THE OWNER OR HIS REPRESENTATIVE RESERVES THE RIGHT TO WITHHOLD APPROVAL FOR PAYMENT UNTIL SUCH TIME AS CONTRACTOR HAS COMPLIED WITH SAID CONTRACT AGREEMENT OR SCOPE OF WORK.

13. **RETENTION**
    ANY AND ALL APPLICATIONS FOR PAYMENT SUBMITTED TO CONSULTANT SHALL HAVE A TEN PERCENT (10%) RETAINER UNTIL SUCH TIME AS ONE HUNDRED PERCENT (100%) OF THE WORK REQUESTED OF SAID CONTRACTOR HAS BEEN COMPLETED. UPON COMPLETION OF ONE HUNDRED (100%) PERCENT OF THE WORK, THE RETENTION SHALL BE REDUCED TO FIVE (5%) UNTIL SUCH TIME AS CONTRACTOR HAS APPLIED FOR AND OBTAINED TESTING AND OBTAINED IN WRITING FINAL ACCEPTANCE FOR MAINTENANCE OF THIS WORK BY SAID GOVERNING AUTHORITIES. UPON TESTING, APPROVAL AND ACCEPTANCE OF THE WORK, THE RETENTION SHALL BE REDUCED TO TWO PERCENT (2%) UNTIL ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AT WHICH TIME ALL MONIES DUE CONTRACTOR SHALL BE APPROVED FOR PAYMENT UNLESS CONTRACTOR HAD FAILED TO PERFORM IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND/OR WRITTEN OR VERBAL INSTRUCTIONS FROM ENGINEER REGARDING FAULTY MATERIAL AND/OR WORKMANSHIP.

14. **CONFLICT BETWEEN COMPONENT PARTS OR SPECIFICATIONS**
    IN THE EVENT THAT ANY PROVISION IN ANY OF THE FOLLOWING COMPONENT PARTS OF THESE SPECIFICATIONS CONFLICT WITH ANY PROVISION IN ANY OTHER OF THE COMPONENT PARTS, THE PROVISION IN THE COMPONENT PART FIRST LISTED BELOW SHALL GOVERN OVER ANY OTHER COMPONENT PART WHICH FOLLOWS IT, EXCEPT AS MAY OTHERWISE SPECIFICALLY BE STATED. SAID COMPONENT PARTS ARE THE FOLLOWING:
    - A. SPECIAL PROVISIONS
    - B. PLANS
    - C. RECURRING SPECIAL PROVISIONS
    - D. SUPPLEMENTAL SPECIFICATIONS
    - E. STANDARD SPECIFICATIONS

15. **PERMITS**
    THE OWNER OR CONSULTANT SHALL MAKE APPLICATION FOR THE FOLLOWING PERMITS:
    MUNICIPALITY: WATERSHED DEVELOPMENT PERMIT
    IEPA: NOI, SANITARY SEWER, AND WATER SUPPLY

II. GENERAL NOTES

1. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED FOR CONSTRUCTION. PRIOR TO COMMENCEMENT OF CONSTRUCTION,THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE CONSULTANT BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE CONSULTANT PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE CONSULTANT SHALL BE FINAL AND CONCLUSIVE.

2. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. HE SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE CONSULTANT.

3. IF LINE AND GRADE STAKES ARE PROVIDED BY CONSULTANT, STAKES WILL BE SET AT THE OWNER'S EXPENSE ONE TIME AND ONE TIME ONLY. CONTRACTORS SHALL NOTIFY THE CONSULTANT THAT STAKES WILL BE NEEDED AT LEAST 3 WORKING DAYS IN ADVANCE OF STARTING THEIR WORK. (ADDITIONAL NOTIFICATION SHALL BE PROVIDED PRIOR TO THE START OF INITIAL PROJECT CONSTRUCTION OPERATIONS.) ANY AND ALL REQUIRED RESTAKING WILL BE PERFORMED BY THE CONSULTANT AT THE EXPENSE OF THAT CONTRACTOR REQUIRING THE RESTAKING. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO PROTECT STAKES PROVIDED FOR HIS USE AND TO REPORT TO THE OWNER'S SUPERINTENDENT ANY INDIRECTLY EMPLOYED BY ANY CONTRACTOR AND/OR MONUMENTS PROVIDED. LOT CORNER IRONS ARE TO BE CONSIDERED AS CONTROL.

   OFTEN TIMES, CURB GRADE STAKES ARE PLACED AT A 4' OFFSET TO BACK OF CURB AT THE REQUEST OF THE CONTRACTOR. IN MOST INSTANCES, THIS AREA IS LOCATED OVER THE WATERMAIN, SANITARY SEWER,OR STORM SEWER TRENCH, AND NOT SOLID GROUND. CURB GRADE STAKES MAY LOSE THEIR INTEGRITY DUE TO A RAIN EVENT, HEAVY MACHINERY TRAFFIC, AND THE LIKE; THEREFORE, THE CURB CONTRACTOR SHALL CHECK THE CURB GRADE STAKES DURING THE SETTING OF THE STRING LINE AND REPORT ANY IRREGULARITIES TO THE CONSULTANT. THE CURB CONTRACTOR SHALL ALSO VERIFY THAT ALL STAKES FOR CURB INLETS, CATCHBASINS, DRIVEWAYS, BIKE PATHS, EMERGENCY ACCESSES, ETC.) ARE IN PLACE PRIOR TO POURING OF ANY CURB.

4. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CONSULTANT IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.

5. WHENEVER THE PERFORMANCE OF WORK IS INDICATED ON THE PLANS, AND NO ITEM IS INCLUDED IN THE CONTRACT FOR PAYMENT, THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION. BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH THE I.D.O.T. STANDARD SPECIFICATIONS. ADEQUATE LIGHTING SHALL BE MAINTAINED FROM DUSK TO DAWN AT ALL LOCATIONS WHERE CONSTRUCTION OPERATIONS WARRANT, OR AS DESIGNATED BY THE CONSULTANT, MUNICIPALITY OR GOVERNING AGENCY. ALL TRAFFIC CONTROL WORK SHALL BE DONE IN ACCORDANCE WITH THE I.D.O.T. HIGHWAY STANDARDS, AND THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

7. CONTRACTORS SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS ON A DAILY BASIS.

8. PRIOR TO COMMENCEMENT OF UNDERGROUND CONSTRUCTION, THE GRADING CONTRACTOR SHALL OBTAIN FROM THE OWNER AND/OR CONSULTANT VERIFICATION OF ELEVATIONS TO PLUS OR MINUS ONE TENTH OF A FOOT (0.10') OF PROPOSED SUB-GRADE AND APPROVALS OF COMPACTION.

9. DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER ACCEPTABLE METHOD. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.

10. IT SHALL BE THE RESPONSIBILITY OF EACH RESPECTIVE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

11. THE CONSULTANT, MUNICIPALITY AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

12. ELECTRIC,TELEPHONE, NATURAL GAS, AND OTHER UTILITY COMPANIES HAVE UNDERGROUND AND/OR OVERHEAD SERVICE FACILITIES IN THE VICINITY OF THE PROPOSED WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E AT (800)892-0123 AND THE MUNICIPALITY FOR UTILITY LOCATIONS.

13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR THE RELOCATION OR BRACING OF EXISTING UTILITY POLES THAT MAY BE WITHIN THE WORKING LIMITS OF THE CONTRACT. IT IS EXPRESSLY UNDERSTOOD THAT ALL WORK AND COSTS CONNECTED WITH THESE UTILITY POLES, THEIR TEMPORARY RELOCATIONS, ETC., SHALL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER OR RELEVANT CONTRACTOR.

14. ALL PAVEMENT, CURB AND GUTTER, DRIVEWAYS, SIDEWALKS, TREES, SHRUBS, BUSHES, LAWNS, FENCES, AND ALL OTHER STRUCTURES REQUIRED TO BE REMOVED, SHALL BE REPLACED AND/OR RESTORED AS DIRECTED BY THE OWNER TO ORIGINAL CONDITION. ALL RESTORATION NOT COVERED IN THE CONTRACT QUANTITIES OR SPECIFICATIONS SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.

15. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS (SERIES 1926) AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)STANDARDS OF THE WILLIAMS STELGER OCCUPATIONAL HEALTH STATE SAFETY ACT OF 1970(REVISED). THE CONTRACTOR, CONSULTANT AND OWNER SHALL EACH BE RESPONSIBLE FOR HIS OWN RESPECTIVE AGENTS AND EMPLOYEES.

16. CHANGES IN THE CONSULTANT'S ENGINEERING PLANS MUST BE APPROVED BY BOTH THE DESIGN CONSULTANT AND THE MUNICIPAL ENGINEER. A WRITTEN REQUEST, ACCOMPANIED BY REVISED ENGINEERING PLANS, IS TO BE SUBMITTED TO BOTH AND APPROVED BY BOTH BEFORE CHANGES ARE STARTED.

17. DRAIN TILES MAY EXIST ON THE SUBJECT PROPERTY; THEIR LOCATIONS MAY BE KNOWN AND/OR UNKNOWN AND MAY EXTEND OFFSITE EITHER UPSTREAM OR DOWNSTREAM. ALL EXISTING ONSITE MAINLINE DRAIN TILES SHALL BE ABANDONED BY TRENCH REMOVAL PRIOR TO OTHER DEVELOPMENT ACTIVITIES. IF ANY EXISTING DRAIN TILE (MAINLINE, SUB-MAIN OR LATERAL) CONTINUE OFFSITE TO UPLAND WATERSHEDS,THE CONTRACTOR (GRADING AND/OR UNDERGROUND) SHALL NOTIFY CONSULTANT FOR DIRECTION AND MUST MAINTAIN DRAINAGE SERVICE DURING CONSTRUCTION UNTIL NEW STORM SEWER CAN BE INSTALLED FOR A PERMANENT CONNECTION OR BE REROUTED WITH NEW PIPE OF SIMILAR SIZE, MATERIAL, CAPACITY AND GRADIENT AND PUT INTO ACCEPTABLE OPERATION. SUCH CONNECTION OR RELOCATION SHALL BE RECORDED ON "RECORD DRAWINGS". NORMAL CONSTRUCTION ACTIVITY INCLUDING GRADING, UNDERGROUND PIPING AND BUILDING EXCAVATION SHOULD ADEQUATELY REMOVE OR TAKE OUT OF SERVICE ONSITE SUB-MAINS AND LATERALS. THE COST OF THE ABOVE WORK NOT INCLUDED IN THE SCHEDULE OF QUANTITIES SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

III. EARTHWORK

1. WORK UNDER THIS SECTION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   - A. CLEARING AND REMOVAL OF ALL UNDESIRABLE TREES AND OTHER VEGETATIVE GROWTH WITHIN THE CONSTRUCTION AREA. TREE REMOVAL SHALL BE AS DESIGNATED BY THE OWNER AND SHALL BE KEPT TO A MINIMUM.
   - B. STRIPPING OF TOPSOIL FROM AS STREET, DRIVEWAY, PARKING LOT, RIGHT-OF-WAY, BUILDING PAD, AND OTHER DESIGNATED STRUCTURAL AREAS.
   - C. STOCKPILING OF TOPSOIL AT LOCATIONS AS DIRECTED BY THE OWNER AND APPROVED BY MUNICIPALITY. TOPSOIL STOCKPILED FOR FUTURE USE SHALL BE RELATIVELY FREE FROM LARGE ROOTS, STICKS, WEEDS, BRUSH, STONES LARGER THAN ONE (1) INCH DIAMETER, OR OTHER LITTER AND WASTE PRODUCTS INCLUDING EXTRANEOUS MATERIALS NOT CONDUCTIVE TO PLANT GROWTH.
   - D. REMOVING UNSUITABLE MATERIALS AS SPECIFIED FROM ROADWAY,DRIVEWAY/PARKING, BUILDING PAD,AND OTHER DESIGNATED AREAS.
   - E. DEMOLITION AND REMOVAL OF EXISTING BUILDINGS AND/OR PAVEMENTS INCLUDING OFFSITE DISPOSAL OF SAME,AT A DUMP SITE AS SELECTED BY THE CONTRACTOR.
   - F. CLAY CUT AND CLAY FILL WITH COMPACTION WITHIN ROADWAY,DRIVEWAY/PARKING, BUILDING PAD, AND OTHER DESIGNATED AREAS.
   - G. EXCAVATION AND GRADING OF THE OPEN SPACE AND/OR YARD AREAS PER PLAN INCLUDING DETENTION FACILITIES, BERMS, ETC.
   - H. PLACEMENT AND COMPACTION OF CLAY TO THE DESIGN SUBGRADE ELEVATIONS AS REQUIRED BY THE STANDARDS AND DETAILS ON THE CONSTRUCTION PLANS.
   - I. PLACEMENT AND COMPACTION OF NON-STRUCTURAL FILLS.
   - J. IF REQUIRED, REMOVAL FROM SITE AND DISPOSAL OF ANY EXCESS OR UNSUITABLE MATERIAL UPON COMPLETION OF MASS GRADING.
   - K. SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS.
   - L. EXISTING WELLS ENCOUNTERED SHALL BE EXPOSED AND SEALED 3-FEET BELOW PROPOSED FINISH GRADE BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 920.120 OF THE ILLINOIS WATER CONSTRUCTION CODE, DEPARTMENT OF PUBLIC HEALTH, LATEST EDITION, AND ALL APPLICABLE LOCAL RULES AND REGULATIONS
   - M. ANY EXISTING SEPTIC TANKS AND GREASE TRAPS ENCOUNTERED SHALL HAVE ALL LIQUIDS AND SOLIDS REMOVED AND DISPOSED OF BY A LICENSED COMMERCIAL HAULER IN ACCORDANCE WITH GOVERNMENTAL JURISDICTIONAL ENTITIY REGULATIONS, AND THE TANK AND GREASE TRAPS SHALL THEN BE FILLED WITH SUITABLE MATERIALS OR REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR.

2. THE QUANTITIES GIVEN IN THE CONSULTANT'S SUMMARY FOR EARTHWORK ARE INTENDED AS A GUIDE FOR THE CONTRACTOR IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND SATISFY HIMSELF OF ALL SITE CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS LUMP SUM FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED UNLESS ORDERED I

NORTH

SCALE: 1" = 60'

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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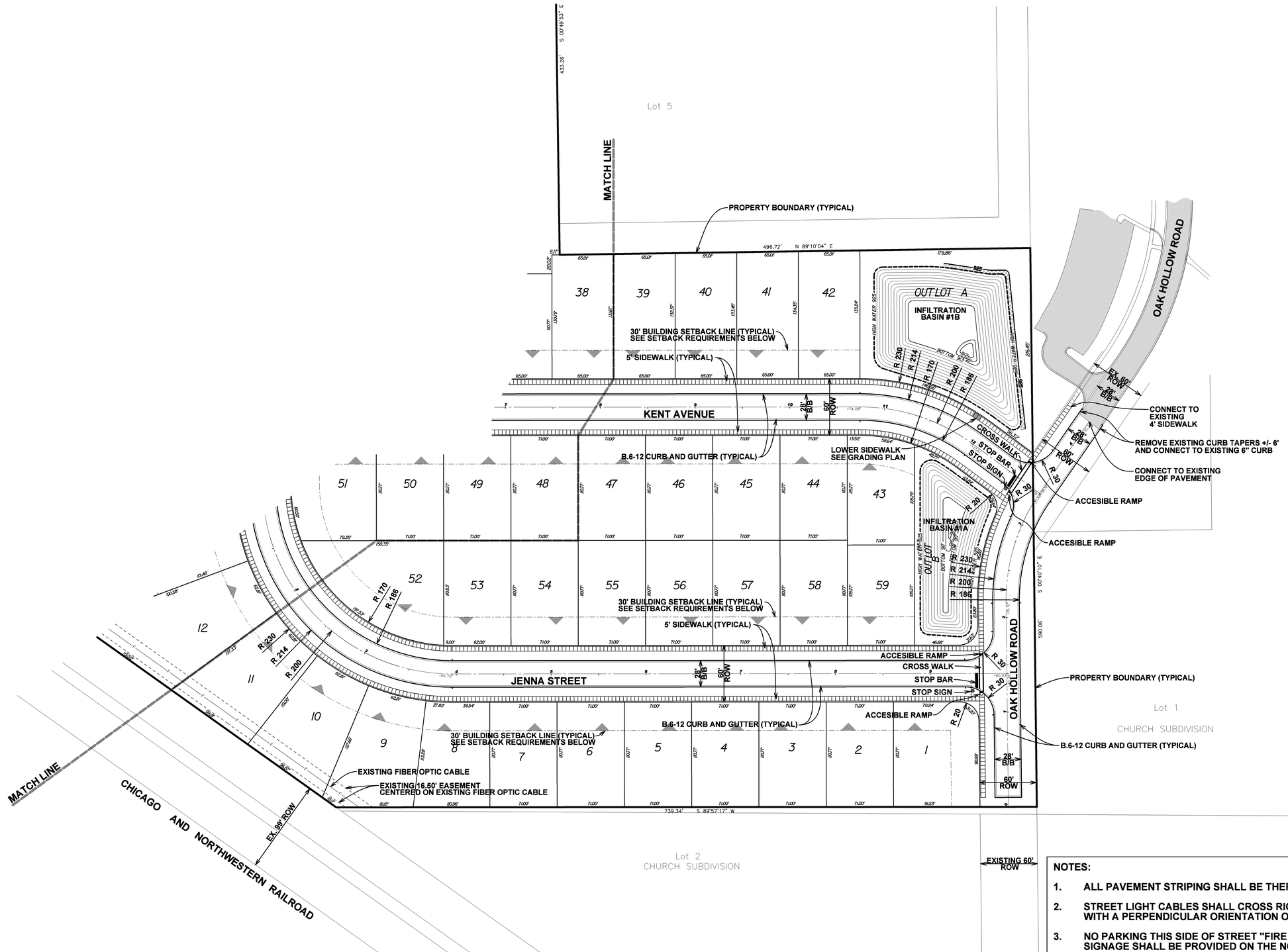
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REVISIONS

GENERAL LAYOUT

SHEET NUMBER 3 OF 20 SHEETS

JOB No. 1551



NOTES:

1. ALL PAVEMENT STRIPING SHALL BE THERMOPLASTIC.
2. STREET LIGHT CABLES SHALL CROSS RIGHT OF WAY WITH A PERPENDICULAR ORIENTATION ONLY.
3. NO PARKING THIS SIDE OF STREET "FIRE LANE" SIGNAGE SHALL BE PROVIDED ON THE NORTH AND EAST SIDE OF ALL ROADWAYS

BUILDING SETBACK REQUIREMENTS

MINIMUM BUILDING SETBACKS:	
FRONT YARD	= 30 FT.
SIDE YARD CORNER	= 30 FT.
SIDE YARD INTERIOR	= 7 FT. / 18 FT. TOTAL
REAR YARD	= 20 FT.

NORTH

SCALE: 1" = 50'

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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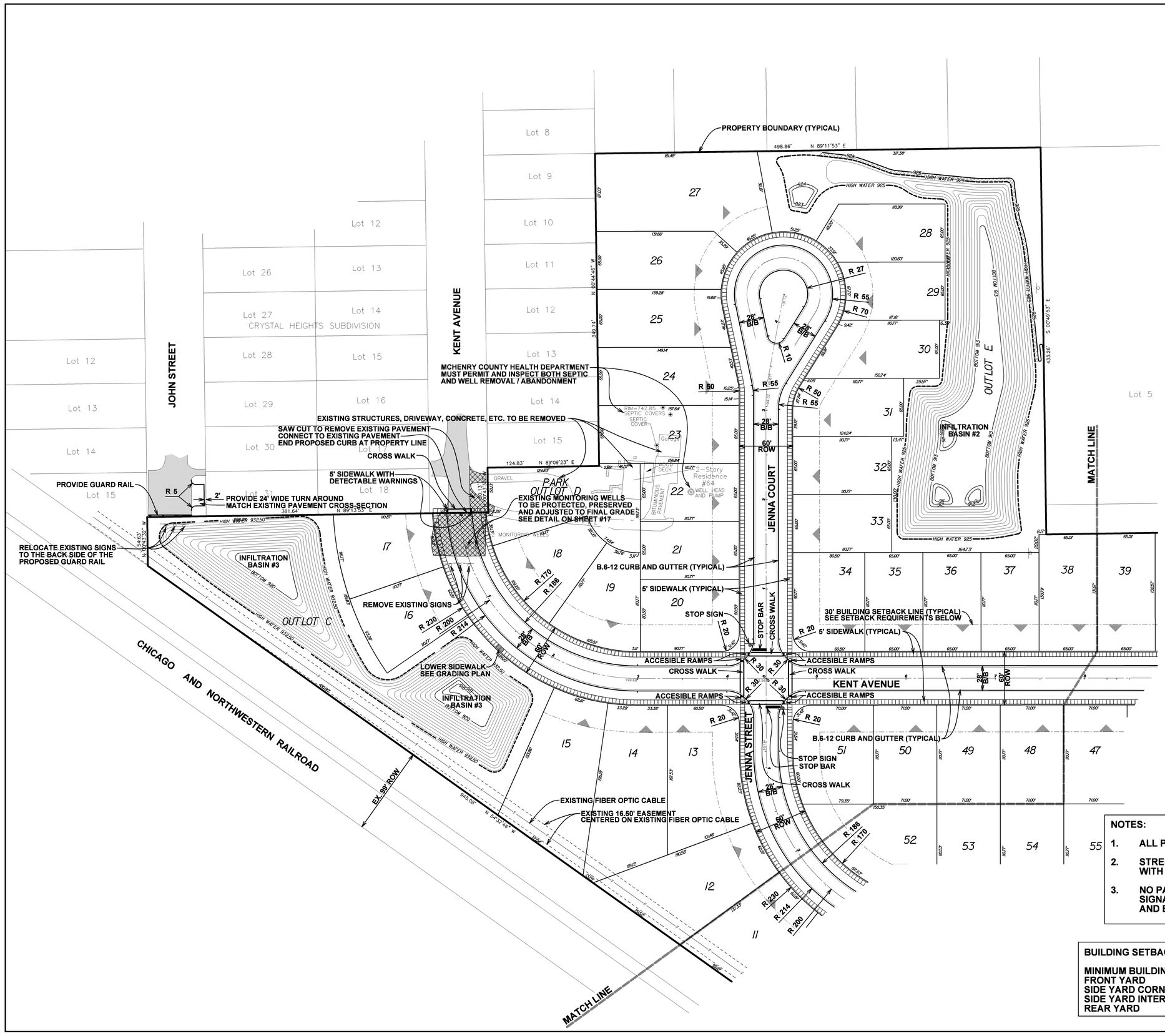
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GEOMETRICS PLAN - SOUTH

SHEET NUMBER 4 OF 20 SHEETS

JOB No. 1551



NOTES:

1. ALL PAVEMENT STRIPING SHALL BE THERMOPLASTIC.
2. STREET LIGHT CABLES SHALL CROSS RIGHT OF WAY WITH A PERPENDICULAR ORIENTATION ONLY.
3. NO PARKING THIS SIDE OF STREET "FIRE LANE" SIGNAGE SHALL BE PROVIDED ON THE NORTH AND EAST SIDE OF ALL ROADWAYS

BUILDING SETBACK REQUIREMENTS

MINIMUM BUILDING SETBACKS:

FRONT YARD	= 30 FT.
SIDE YARD CORNER	= 30 FT.
SIDE YARD INTERIOR	= 7 FT. / 18 FT. TOTAL
REAR YARD	= 20 FT.

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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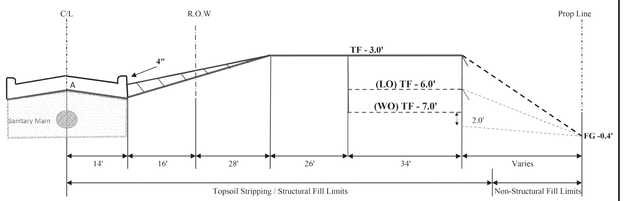
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GEOMETRICS PLAN - NORTH

SHEET NUMBER **5** OF 20 SHEETS

JOB No. 1551

TYPICAL SECTION - MASS EARTHWORK



LEGEND:

- Non-Structural Fill
- Mass Grading Line and Structural Fill / Topsoil Stripping Limit
- Sewer Spoil / If Utilities are installed
- A Roadway Section = **16.0" (SEE PAVEMENT DETAIL FOR CROSS-SECTION)**
- Uncontaminated Native Sand - No Clay

BASIN 1A/1B & 2 SYSTEM DATA:	
HIGH WATER ELEVATION	925
BASIN BOTTOM (1A)	917
BASIN BOTTOM (1B)	913
BASIN BOTTOM (2)	913
INFILTRATION RATE USED FOR DETENTION DESIGN (BASINS 1A/1B & 2 COMBINED)	0.73 CFS
CALCULATED STORED VOLUME FROM 100YR, 24 EVENT	4.37 AC-FT
150% OF 4.37 AC-FT	6.56 AC-FT
COMPENSATORY STORAGE REQUIRED	2.89 AC-FT
TOTAL REQUIRED VOLUME	9.45 AC-FT
VOLUME PROVIDED (1A/1B)	3.895 AC-FT
VOLUME PROVIDED (2)	7.345 AC-FT
TOTAL PROVIDED	11.24 AC-FT
ADDITIONAL STORAGE PROVIDED	1.79 AC-FT

BASIN 2

MATCH LINE

EXISTING CONTOUR (TYPICAL)

PROPOSED CONTOUR (TYPICAL)

MATCH EXISTING GRADE AT PROPERTY LINE

POSITIVE DRAINAGE VIA 100 YEAR STORM SEWER

BASIN SPILLWAY AT ELEVATION 925 (CROSS HATCHED AREA)

DRIVEWAY SLOPE AT BUILDING LINE (TYPICAL)

EXISTING BFE 928.29

DRIVEWAY DESIGNATION (TYPICAL)

KENT AVENUE

INFILTRATION BASIN #1B

LOWER SIDEWALK 10'

OAK HOLLOW ROAD

SEDIMENT FORE-BAY ZONE (TYPICAL)

POSITIVE DRAINAGE VIA 100 YEAR STORM SEWER

INFILTRATION BASIN #1A

MATCH EXISTING GRADE AT PROPERTY LINE

EXISTING BFE 932.63

POSITIVE DRAINAGE VIA 100 YEAR STORM SEWER

POSITIVE DRAINAGE VIA 100 YEAR STORM SEWER

SECONDARY POSITIVE DRAINAGE

JENNA STREET

OAK HOLLOW ROAD

MATCH LINE

MATCH EXISTING GRADE AT EXISTING FIBER OPTIC CABLE EASEMENT

MATCH EXISTING GRADE AT PROPERTY LINE

EXISTING BFE 927.68

EXISTING BFE 922.95

CHICAGO AND NORTHWESTERN RAILROAD

Lot 1 CHURCH SUBDIVISION

Lot 2 CHURCH SUBDIVISION

Lot 5

STORM MH. RIM=923.56 N.INV=918.86 S.INV=919.36 BOT=911.1

CATCH-BASIN RIM=922.64 INV=914.82

NOTE:
CARE SHOULD BE TAKEN NOT TO OVERCOMPACT PROPOSED BASIN BOTTOM AREAS DURING CONSTRUCTION. PER GEO-TECH CONSULTANT ORDINARY SCRAPER USE IS ACCEPTABLE BUT NO COMPACTOR USE OF ANY KIND SHOULD BE PERFORMED. IT IS RECOMMENDED CONSTRUCTION OF THE BASIN BOTTOM AREAS OCCUR DURING PERIODS OF DRY WEATHER.

NOTE:
ALL STORM SEWER HAS BEEN DESIGNED TO CONVEY THE 100 YEAR STORM EVENT WITH THE EXCEPTION OF STORM LINES LEADING TO FES #46 AND FES #50 LOCATED ALONG JENNA COURT

NORTH

SCALE: 1" = 50'

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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GRADING PLAN - SOUTH

SHEET NUMBER 6 OF 20 SHEETS

JOB No. 1551

NOTE:
CARE SHOULD BE TAKEN NOT TO OVERCOMPACT PROPOSED BASIN BOTTOM AREAS DURING CONSTRUCTION. PER GEO-TECH CONSULTANT ORDINARY SCRAPER USE IS ACCEPTABLE BUT NO COMPACTOR USE OF ANY KIND SHOULD BE PERFORMED. IT IS RECOMMENDED CONSTRUCTION OF THE BASIN BOTTOM AREAS OCCUR DURING PERIODS OF DRY WEATHER.

EXISTING CONTOUR (TYPICAL)
EXISTING BFE 917.11
MATCH EXISTING GRADE AT PROPERTY LINE
PROPOSED CONTOUR (TYPICAL)
POSITIVE DRAINAGE
BASIN SPILLWAY AT ELEVATION 925 (CROSS HATCHED AREA)
MATCH EXISTING GRADE AT PROPERTY LINE
EXISTING BFE 923.41
SECONDARY POSITIVE DRAINAGE
SEDIMENT FORE-BAY ZONE (TYPICAL)
MATCH EXISTING GRADE AT PROPERTY LINE
INFILTRATION BASIN #2
MATCH EXISTING GRADE AT PROPERTY LINE
DRIVEWAY SLOPE AT BUILDING LINE (TYPICAL)
EXISTING BFE 934.20
DRIVEWAY DESIGNATION (TYPICAL)
POSITIVE DRAINAGE VIA 100 YEAR STORM SEWER
INFILTRATION BASIN #3
MATCH EXISTING GRADE AT EXISTING FIBER OPTIC CABLE EASEMENT
LOWER SIDEWALK
INFILTRATION BASIN #3
POSITIVE DRAINAGE VIA STORM SEWER
EXISTING BFE 928.29
POSITIVE DRAINAGE VIA 100 YEAR STORM SEWER
MATCH EXISTING GRADE AT EXISTING FIBER OPTIC CABLE EASEMENT
MATCH LINE
MATCH LINE

JOHN STREET
KENT AVENUE
JENNA COURT
JENNA STREET
CHICAGO AND NORTHWESTERN RAILROAD
CRYSTAL HEIGHTS SUBDIVISION
OUTLOT D
OUTLOT E
PARK

BASIN 3 SYSTEM DATA:

HIGH WATER ELEVATION	932.50	
BASIN BOTTOM	920	
INFILTRATION RATE USED FOR DETENTION DESIGN		0.48 CFS
CALCULATED STORED VOLUME FROM 100YR, 24 EVENT		3.16 AC-FT
150% OF 3.16 AC-FT		4.41 AC-FT
TOTAL REQUIRED VOLUME		4.74 AC-FT
TOTAL PROVIDED		4.85 AC-FT

NOTE:
ALL STORM SEWER HAS BEEN DESIGNED TO CONVEY THE 100 YEAR STORM EVENT WITH THE EXCEPTION OF STORM LINES LEADING TO FES #46 AND FES #50 LOCATED ALONG JENNA COURT

BASIN 1A/1B & 2 SYSTEM DATA:

HIGH WATER ELEVATION	925	
BASIN BOTTOM (1A)	917	
BASIN BOTTOM (1B)	913	
BASIN BOTTOM (2)	913	
INFILTRATION RATE USED FOR DETENTION DESIGN (BASINS 1A/1B & 2 COMBINED)		0.73 CFS
CALCULATED STORED VOLUME FROM 100YR, 24 EVENT		4.37 AC-FT
150% OF 4.37 AC-FT		6.56 AC-FT
COMPENSATORY STORAGE REQUIRED		2.89 AC-FT
TOTAL REQUIRED VOLUME		9.45 AC-FT
VOLUME PROVIDED (1A/1B)		3.895 AC-FT
VOLUME PROVIDED (2)		7.345 AC-FT
TOTAL PROVIDED		11.24 AC-FT
ADDITIONAL STORAGE PROVIDED		1.79 AC-FT

NORTH
SCALE: 1" = 50'

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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GRADING PLAN - NORTH

SHEET NUMBER
7
OF 20 SHEETS

JOB No. 1551

PROVIDE SEDIMENT BAG TO ALL OPEN DRAINAGE CURB STUCTURES PER INLET SEDIMENT CONTROL DEVICE DETAIL (TYPICAL)

PROVIDE SILT FENCE 1' INSIDE PROPERTY PRIOR TO THE START OF CONSTRUCTION

PROVIDE SILT FENCE AFTER CONSTRUCTION OF BASIN

PROVIDE STORM DRAIN PROTECTION WITH INLET BASKET (TYPICAL)

PROVIDE NAG S75BN OR APPROVED EQUAL (CROSS HATCHED AREA)

PROVIDE SILT FENCE 1' INSIDE PROPERTY PRIOR TO THE START OF CONSTRUCTION

NOTE:
BASINS SHALL BE SEEDED WITH NO-MOW FESCUE FROM HIGH WATER DOWN TO AND INCLUDING THE BOTTOM OF BASINS.
(SEE SHEET #19 FOR SEED LIST)

PROVIDE SILT FENCE 1' INSIDE PROPERTY PRIOR TO THE START OF CONSTRUCTION

PROVIDE NAG S75BN OR APPROVED EQUAL (CROSS HATCHED AREA)

PROVIDE NAG S75BN OR APPROVED EQUAL (CROSS HATCHED AREA)

PROVIDE SILT FENCE AFTER CONSTRUCTION OF BASIN

PROPOSED STOCK PILE LOCATION TO BE DETERMINED IN FIELD PROVIDE SILT FENCE AROUND THE PERIMETER

PROVIDE SILT FENCE 1' INSIDE PROPERTY PRIOR TO THE START OF CONSTRUCTION

PROVIDE "NO CONSTRUCTION TRAFFIC" SIGN

PROVIDE SILT FENCE 1' INSIDE PROPERTY PRIOR TO THE START OF CONSTRUCTION

PROVIDE SILT FENCE ALONG EXISTING FIBER OPTIC EASEMENT PRIOR TO THE START OF CONSTRUCTION

PROVIDE NAG S75BN OR APPROVED EQUAL (CROSS HATCHED AREA)

PROVIDE SILT FENCE AFTER CONSTRUCTION OF BASIN

PROVIDE SILT FENCE ALONG EXISTING FIBER OPTIC EASEMENT PRIOR TO THE START OF CONSTRUCTION

PROVIDE STORM DRAIN PROTECTION WITH INLET BASKET (TYPICAL)

PROVIDE NAG S75BN OR APPROVED EQUAL (CROSS HATCHED AREA)

PROVIDE SILT FENCE 1' INSIDE PROPERTY PRIOR TO THE START OF CONSTRUCTION

PROVIDE GEORIDGE OR EQUAL (TYPICAL)

SEE UTILITY SHEET #10 FOR OFF-SITE EROSION CONTROL AND RESTORATION DURING SANITARY SEWER INSTALLATION

SEDIMENT FORE-BAY ZONE (TYPICAL)

PROVIDE SILT FENCE ALONG RIGHT OF WAY

PROVIDE 30' x 100' STABILIZED CONSTRUCTION ENTRANCE

NOTE:
PROVIDE CONCRETE WASHOUT OR DUMPSTERS (LOCATION TO BE DETERMINED IN FIELD)

PROVIDE SILT FENCE AFTER CONSTRUCTION OF BASIN

PROVIDE NAG S75BN OR APPROVED EQUAL (CROSS HATCHED AREA)

PROVIDE SEDIMENT BAG TO ALL OPEN DRAINAGE CURB STUCTURES PER INLET SEDIMENT CONTROL DEVICE DETAIL (TYPICAL)

PROVIDE SILT FENCE 1' INSIDE PROPERTY PRIOR TO THE START OF CONSTRUCTION

INFILTRATION BASIN #1A

INFILTRATION BASIN #1B

INFILTRATION BASIN #2

INFILTRATION BASIN #3

JOHN STREET

KENT AVENUE

JENNA COURT

OAK HOLLOW ROAD

CHICAGO AND NORTHWESTERN RAILROAD

CRYSTAL HEIGHTS SUBDIVISION

CHURCH SUBDIVISION

NORTH

SCALE: 1" = 60'

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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REVISED PER CITY REVIEW COMMENTS	08/07/15	AKZ
REVISED PER CITY REVIEW COMMENTS	08/25/15	AKZ

REVISIONS

EROSION CONTROL PLAN

SHEET NUMBER
8
OF 20 SHEETS

JOB No. 1551

TYPICAL CONSTRUCTION SEQUENCING

1. INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL SE/SC MEASURES
   A. SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
   B. SILT FENCE INSTALLATION
   C. CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
   D. STABILIZED CONSTRUCTION ENTRANCE
2. TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB)
3. CONSTRUCT SEDIMENT TRAPPING DEVICES (SEDIMENT TRAPS, BASINS...)
4. CONSTRUCT DETENTION FACILITIES AND OUTLET CONTROL STRUCTURE WITH RESTRICTOR & TEMPORARY PERFORATED RISER
5. STRIP TOPSOIL, STOCKPILE TOPSOIL AND GRADE SITE
6. TEMPORARILY STABILIZE TOPSOIL STOCKPILES (SEED AND SILT FENCE AROUND TOE OF SLOPE)
7. INSTALL STORM SEWER, SANITARY SEWER, WATER AND ASSOCIATED INLET & OUTLET PROTECTION
8. PERMANENTLY STABILIZE DETENTION BASINS WITH SEED AND EROSION CONTROL BLANKET
9. TEMPORARILY STABILIZE ALL AREAS INCLUDING LOTS THAT HAVE REACHED TEMPORARY GRADE
10. INSTALL ROADWAYS
11. PERMANENTLY STABILIZE ALL OUTLOT AREAS
12. INSTALL STRUCTURES AND GRADE INDIVIDUAL LOTS
13. PERMANENTLY STABILIZE LOTS
14. REMOVE ALL TEMPORARY SE/SC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION

* SOIL EROSION AND SEDIMENT CONTROL MAINTENANCE MUST OCCUR WEEKLY AND AFTER EVERY ONE-HALF INCH (1/2") OR GREATER RAINFALL EVENT

SEDIMENTATION AND EROSION CONTROL NOTES

A. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.

B. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.

C. EXCEPT AS PROVIDED BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
   - WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
   - WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITATED ON THAT PORTION OF SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.

D. AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V SHALL BE STABILIZED WITH SOD, MAT, OR BLANKET IN COMBINATION WITH SEEDING.

E. EROSION CONTROL BLANKET SHALL BE REQUIRED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THE NORMAL WATER LEVEL AND HIGH WATER LEVEL.

F. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.

G. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

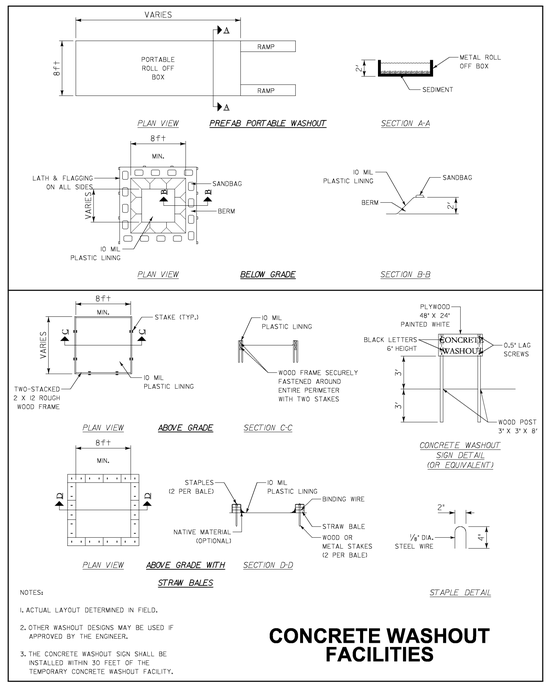
H. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.

I. A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE FROM A PUBLIC RIGHT-OF-WAY, STREET ALLEY OR PARKING AREA. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

J. SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD-PRONE AREA OR A DESIGNATED WETLAND BUFFER.

K. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (e.g. SEDIMENT TRAP,SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE).

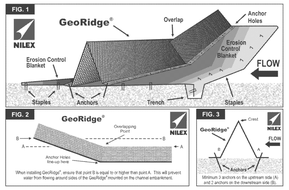
L. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.



NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. OTHER WASHOUT DESIGNS MAY BE USED IF APPROVED BY THE ENGINEER.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

CONCRETE WASHOUT FACILITIES

PROVIDE GEORIDGE OR EQUAL



GEORIDGE

INSTALLATION INSTRUCTIONS

Select an erosion control blanket (ECB) grade based on the channel geometry and flow conditions. Follow manufacturer's recommended installation procedures.

Refer to the diagram for steps 1-4

Step 1: A section of ECB shall be placed across the flowline direction of the channel prior to the installation of the GeoRidge®. The ECB bottom must span the entire width of the channel, while the width of the blanket must be at least one inch wider on no less than 1.22m (4 ft.).

Step 2: The upstream edge of the ECB must be secured in a 152mm (6") deep x 102mm (4") wide trench. Backfill and compact the 152mm (6 inch) trench with staples placed at 305mm (1 ft.) intervals along the edge. Backfill and re-compact the soil in the upstream edge trench.

Step 3: Secure the downstream edge of the blanket with 152mm or 6 inch minimum staples placed at 305mm (1 ft.) intervals along the edge

Step 4: Place the GeoRidge® loom in the middle of the ECB and anchor with staples. Staples shall be placed down the center of the GeoRidge® loom (see diagram). Minimum recommendation is 2 anchors on the upstream side and 2 anchors on the downstream side. The anchors will prevent water from going around or under the GeoRidge®. (See figure 3.)

ensure that the anchor holes lines-up when you overlay each panel. (See figure 2.)

SPACING: When positioning GeoRidge® panels in a channel, the gradient (grade) a key role in the distance between panels as follows:

GRADIENT	SPACING
1%	23.0 m
2%	11.5 m
3%	7.7 m
4%	5.8 m
5%	4.6 m
6%	3.8 m
7%	3.3 m
8%	2.9 m
9%	2.6 m
10%	2.3 m

Spacing is based on calculating the height of GeoRidge® divided by the gradient.

Example: On a 2% gradient...
0.25m in (height of GeoRidge®) / 0.02
Gradient = 11.5 m spacing.

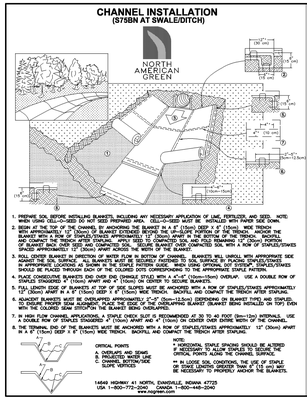
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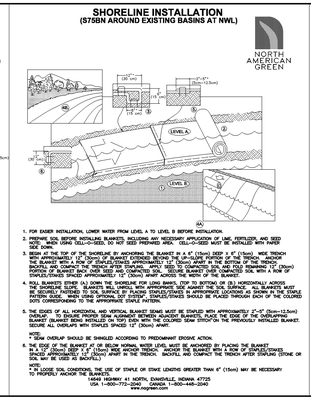
NOTE: If multiple GeoRidge® panels are required to span a channel.

BLANKETING SHALL BE NORTH AMERICAN GREEN OR EQUAL

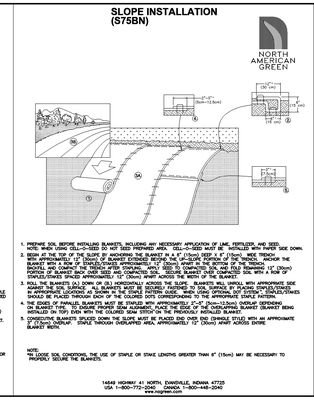
CHANNEL INSTALLATION (S7SBN AT SWALE/DITCH)



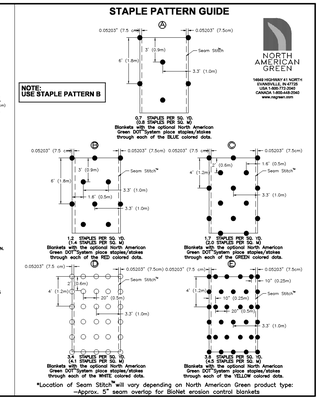
SHORELINE INSTALLATION (S75BN AROUND EXISTING BASINS AT NWL)



SLOPE INSTALLATION (S75BN)



STAPLE PATTERN GUIDE

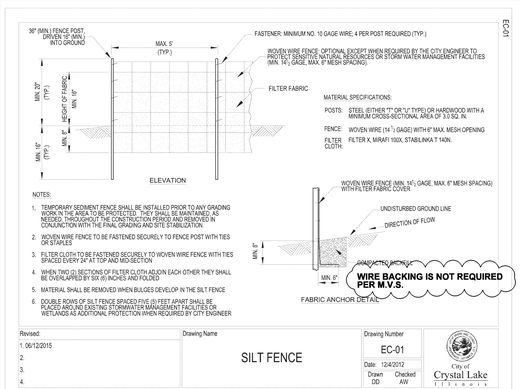


NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. OTHER WASHOUT DESIGNS MAY BE USED IF APPROVED BY THE ENGINEER.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

CONCRETE WASHOUT FACILITIES

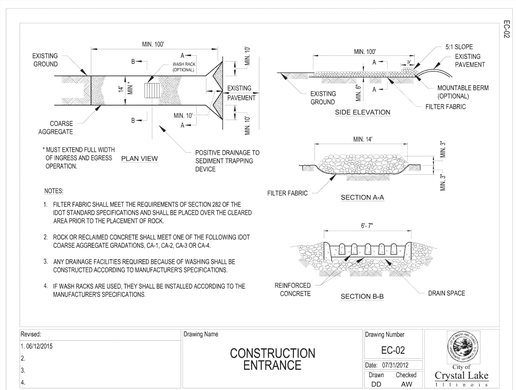
F.E.S No.	Pipe Dia.	CFS	Do	La	W	Volume C.Y.
1	12''	5.78	1.0'	10'	11'	3.90
6	24''	16.72	2.0'	13'	15'	7.60
20	24''	4.72	2.0'	13'	15'	7.60
29	24''	16.50	2.0'	13'	15'	7.60
41	24''	3.17	2.0'	13'	15'	7.60
46	12''	5.92	1.0'	10'	11'	3.90
50	12''	3.00	1.0'	6'	7'	1.70
54	15''	1.30	1.25'	8'	9.25'	2.90

RIP-RAP DETAIL



Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	SILT FENCE	EC-01	City of Crystal Lake Illinois
2.		Date: 12/4/2012	
3.		Drawn: DD Checked: AW	
4.			

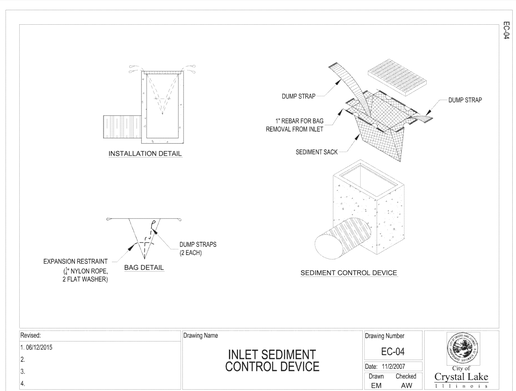
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NOTES:
1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 282 OF THE IDOT STANDARD SPECIFICATIONS AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACEMENT OF ROCK.
2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4.
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
4. IF WASH RACKS ARE USED, THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

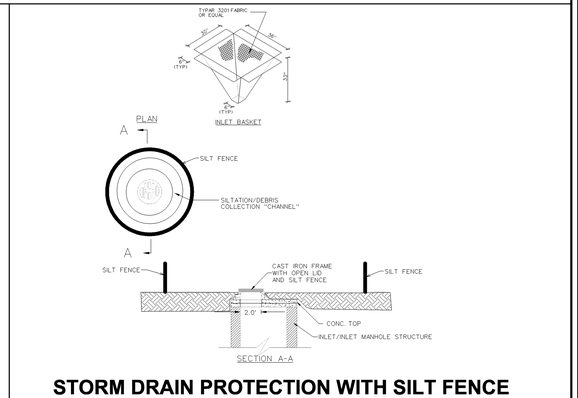
Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	CONSTRUCTION ENTRANCE	EC-02	City of Crystal Lake Illinois
2.		Date: 07/31/2012	
3.		Drawn: DD Checked: AW	
4.			

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Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	INLET SEDIMENT CONTROL DEVICE	EC-04	City of Crystal Lake Illinois
2.		Date: 11/2/2007	
3.		Drawn: EM Checked: AW	
4.			

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STORM DRAIN PROTECTION WITH SILT FENCE FOR YARD AREA STRUCTURES

EROSION CONTROL NOTES & DETAILS

DESCRIPTION	DATE BY
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REVISED PER CITY REVIEW COMMENTS	08/25/15 AKZ

REVISIONS

SHEET NUMBER 9 OF 20 SHEETS

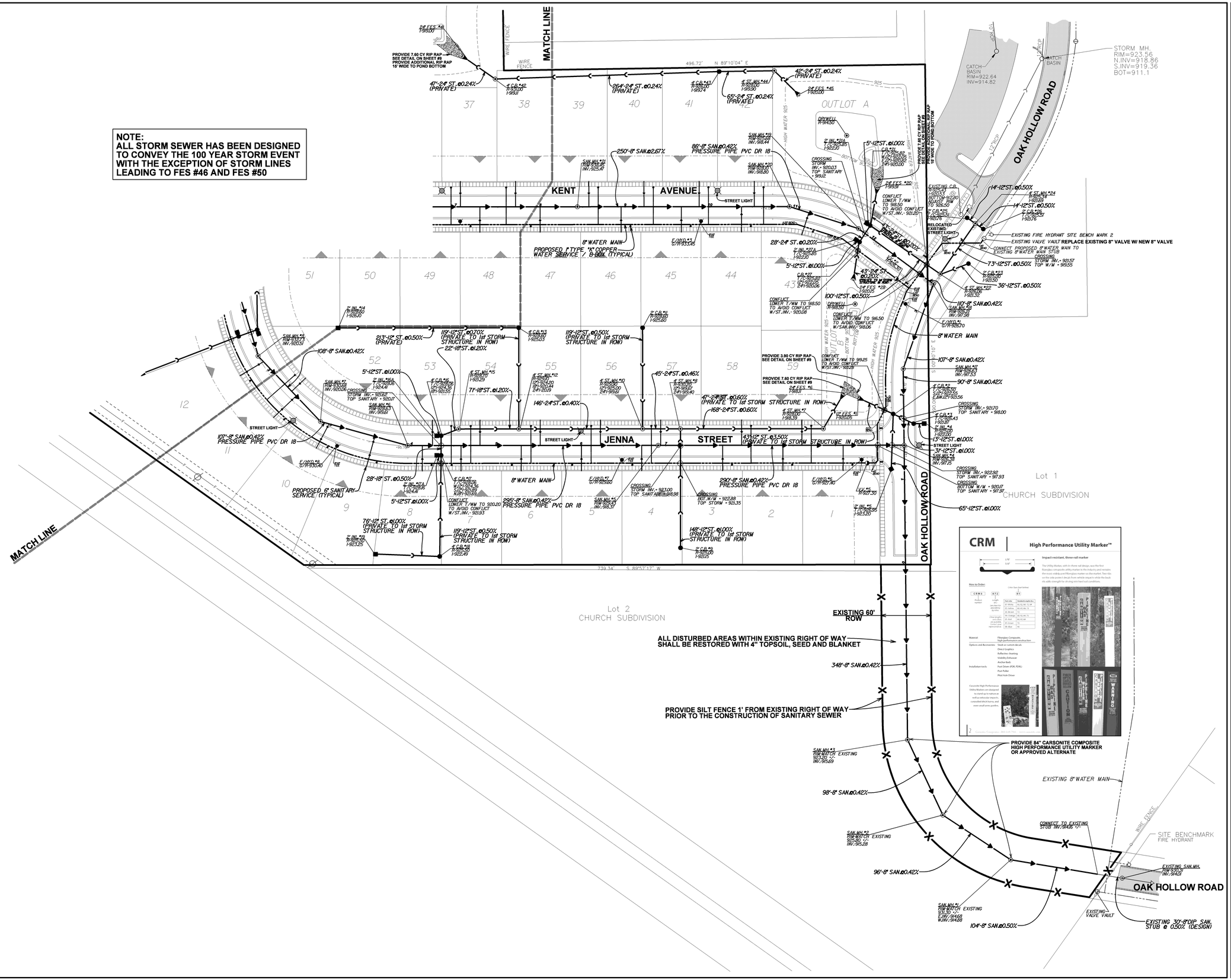
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NORTH

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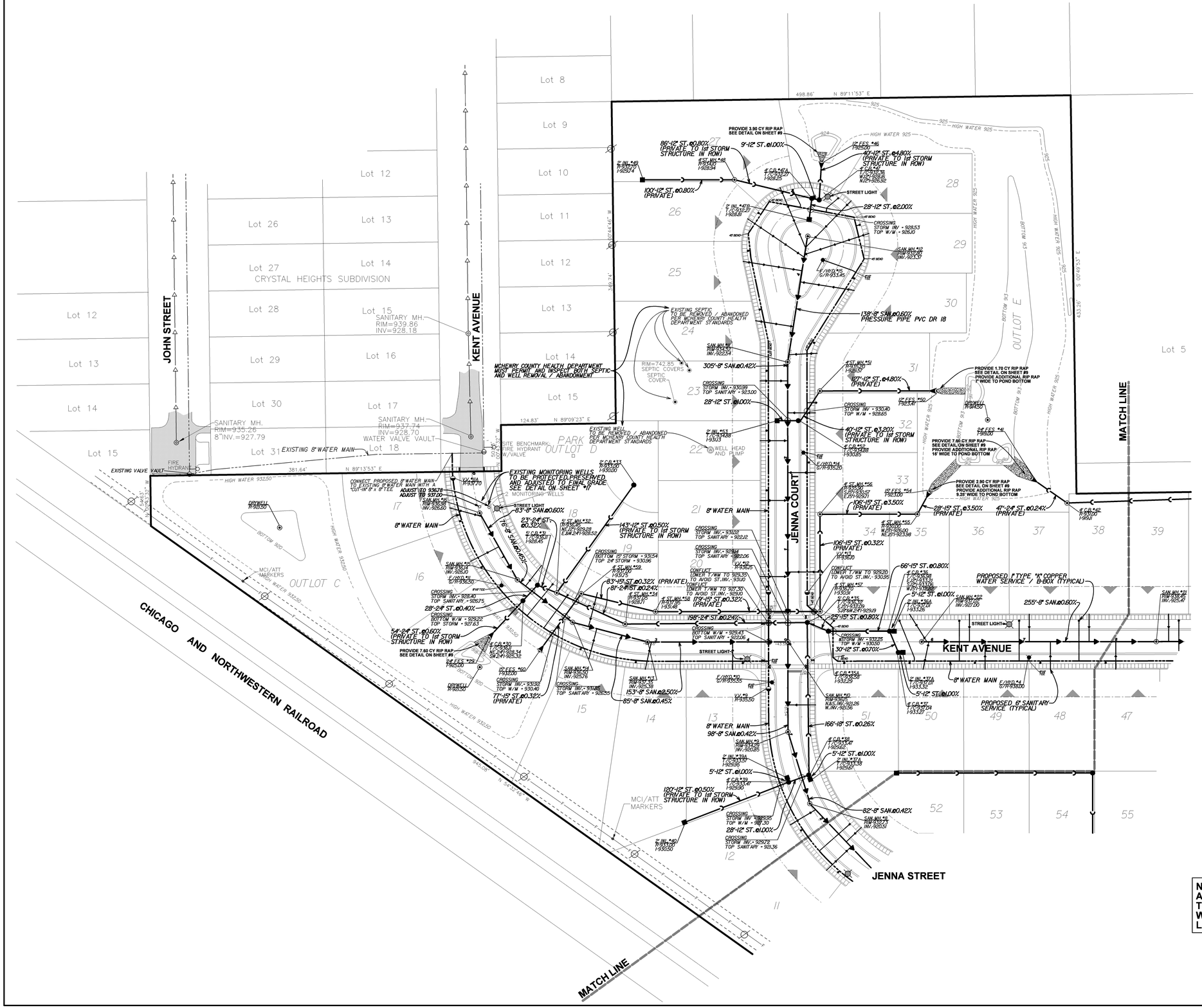
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UTILITY PLAN - SOUTH

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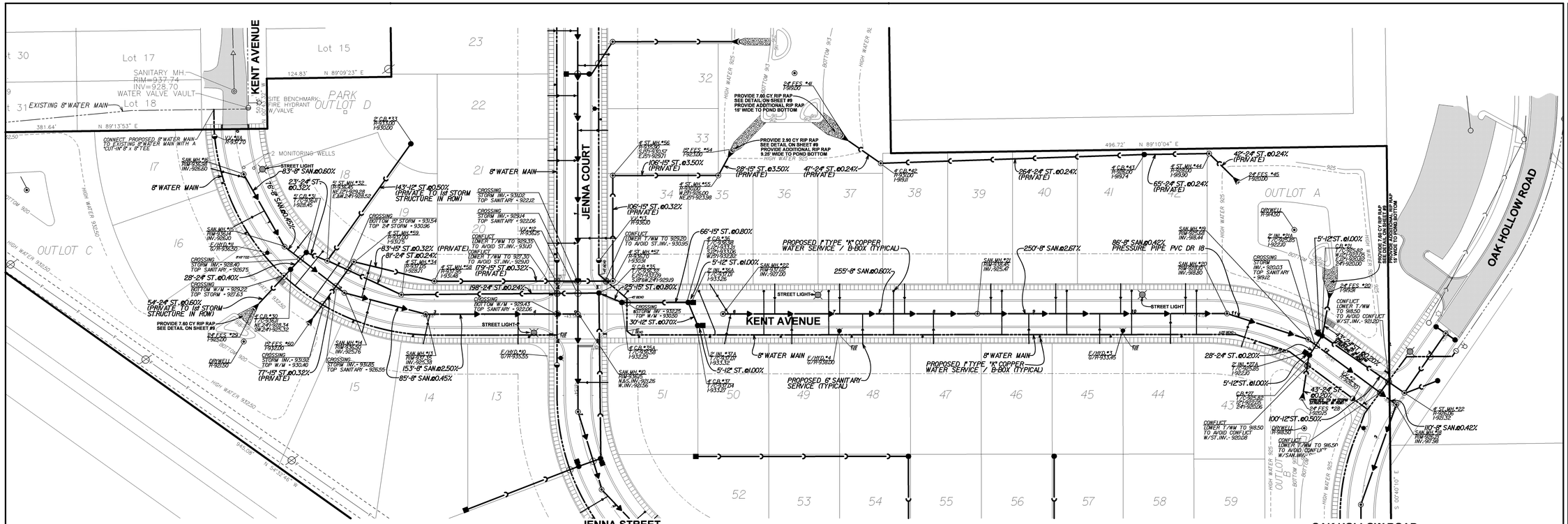
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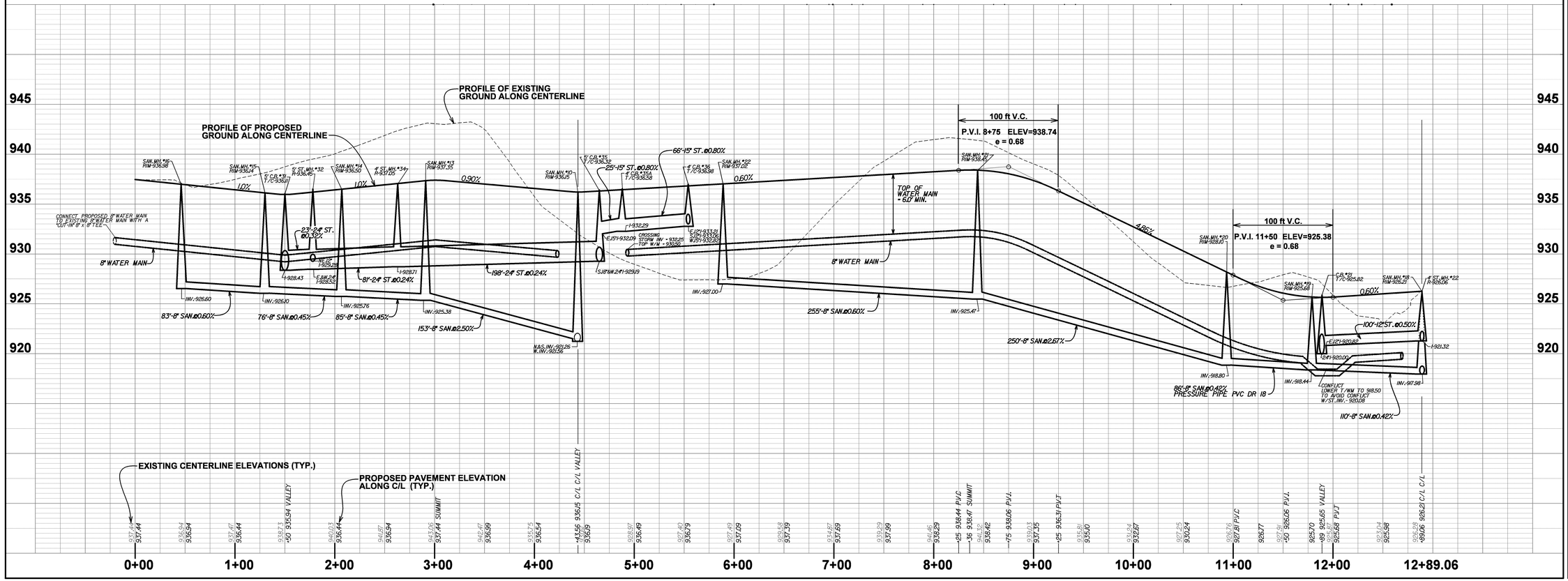
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UTILITY PLAN - NORTH

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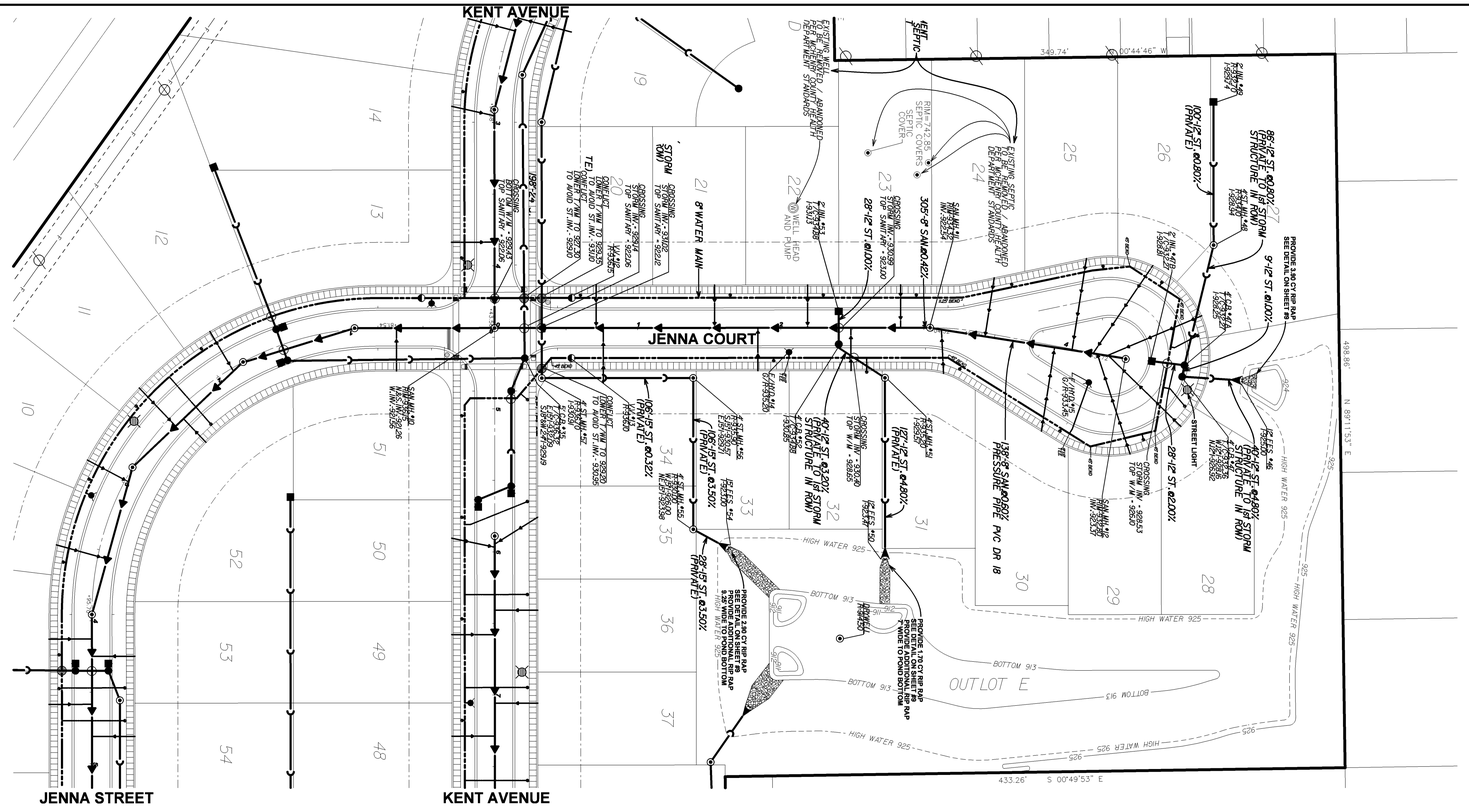
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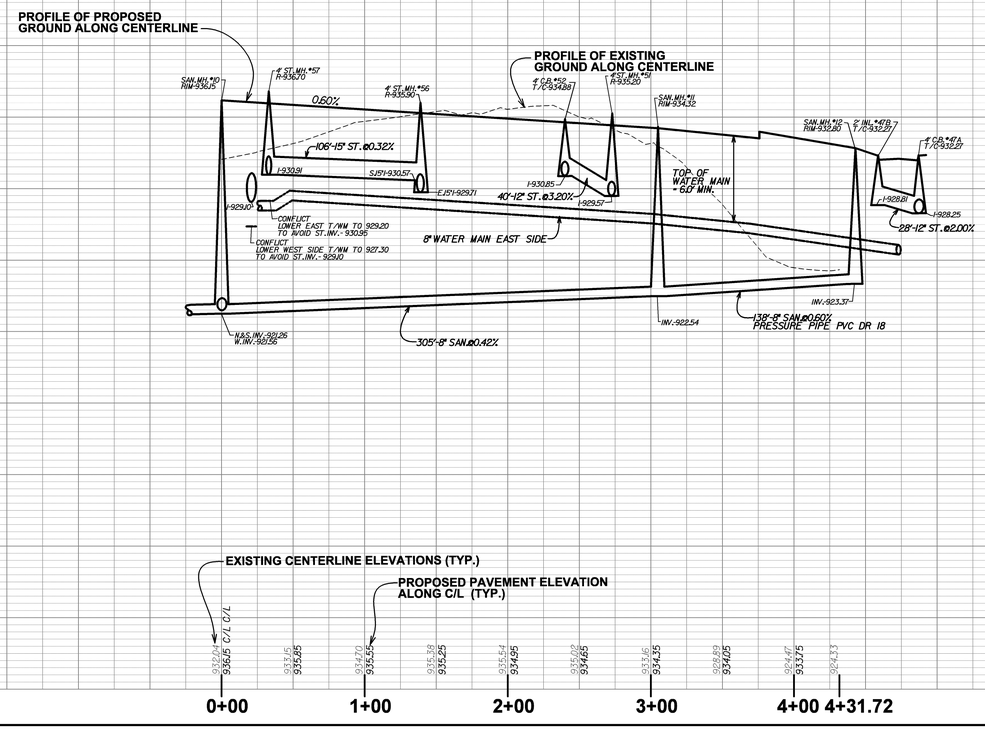
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PLAN & PROFILE KENT AVENUE

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NORTH

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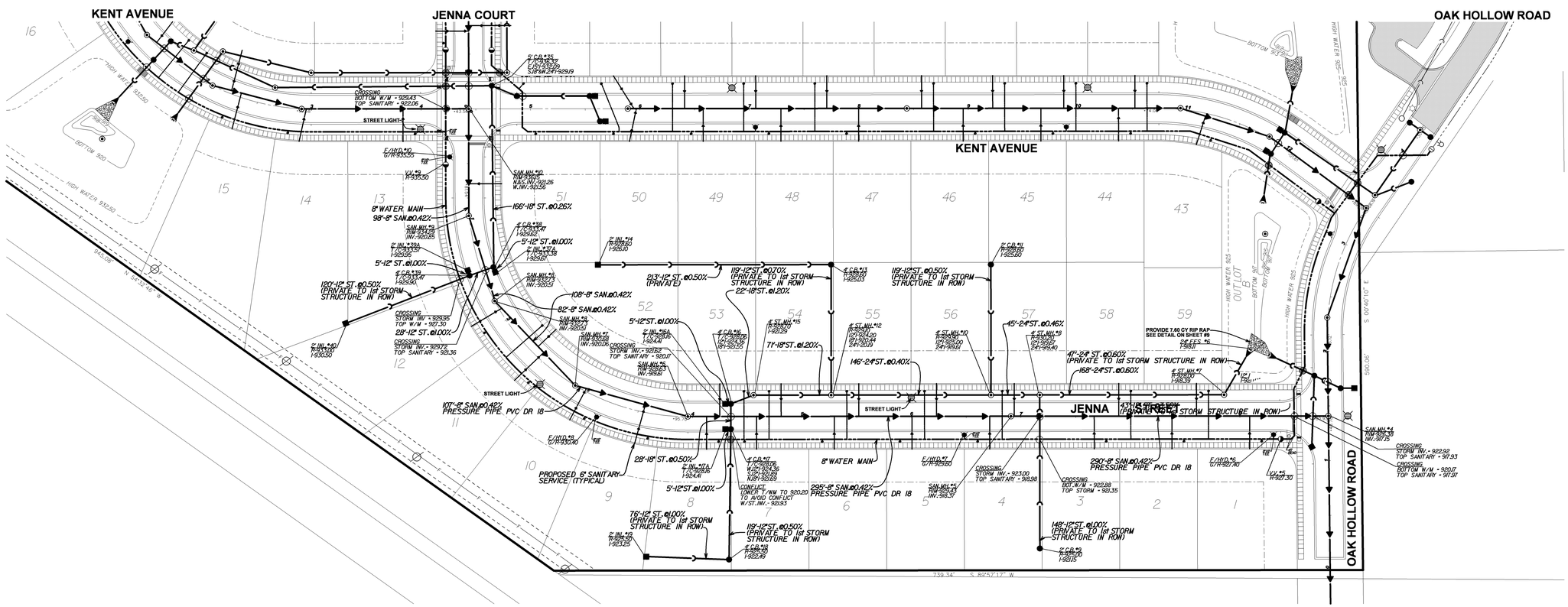
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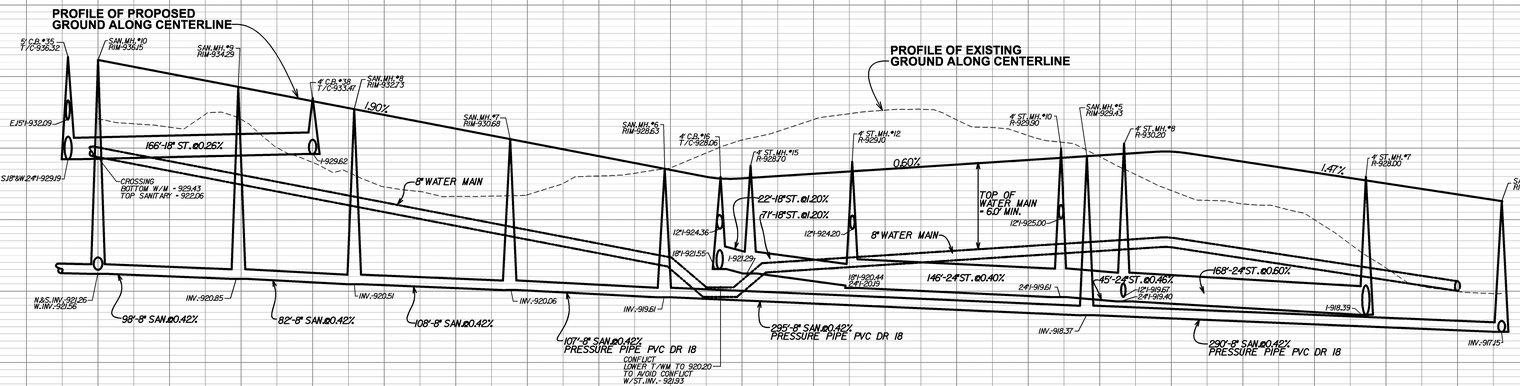
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JENNA COURT

SHEET NUMBER 13 OF 20 SHEETS

JOB No. 1551





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CRYSTAL LAKE, ILLINOIS

NORTH

SCALE: 1" = 50'

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DATE	BY	DESCRIPTION
08/07/15	AKZ	REVISED PER CITY REVIEW COMMENTS
08/25/15	AKZ	REVISED PER CITY REVIEW COMMENTS

PLAN & PROFILE

JENNA STREET

SHEET NUMBER 14 OF 20 SHEETS

JOB No. 1551

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

DESIGNED BY: A.K.Z.
DRAWN BY: D.S.H.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 07/08/15
FIELD BOOK No:

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NORTH

SCALE: 1" = 50'

DESCRIPTION	DATE	BY
REVISED PER CITY REVIEW COMMENTS	08/07/15	AKZ
REVISED PER CITY REVIEW COMMENTS	08/25/15	AKZ

REVISIONS

PLAN & PROFILE

OAK HOLLOW ROAD

SHEET NUMBER 15 OF 20 SHEETS

JOB No. 1551

GE-02a

GENERAL SITE-WORK:

1. Pre-Construction meeting shall be conducted with City Staff and all Contractors prior to commencing any grading or underground utility construction activities (schedule meeting with the Community Development Department at 815-356-3600).
2. 24-hour Emergency contact numbers shall be provided to City Staff at the Pre-Construction meeting.
3. Working hours shall be limited to the hours of 7:00 a.m. and 7:00 p.m. on weekdays only (except in cases of emergency). Non-emergency work on weekends or holidays is not permitted per City Code except under written permission from the City Engineer. The owner is responsible for the City Inspector cost of overtime inspection beyond the normal eight (8) hour day, including weekends and holidays.
4. Public/private streets shall be kept free of dirt and debris with regular cleaning, sweeping, and scraping conducted by the Contractor. Junk and debris shall not be allowed to accumulate, blow, or scatter onto streets or adjacent properties.
5. J.U.L.I.E. shall be contacted for utility locations on-site and in the adjacent rights-of-way.
6. Contractor shall provide and maintain fencing, barricades, traffic control signs, and other safeguarding measures during the course of all work to protect the public from the construction operations.
7. Maintain access to adjacent streets during construction. No closing of streets unless approval is first obtained from the agency with jurisdiction (City of Crystal Lake, McHenry County Department of Transportation, Illinois Department of Transportation, etc).
8. Any damage to public right-of-way, public utilities, streets, curb, etc. shall be repaired/replaced as soon as possible and as directed by the City Engineer.
9. The contractor shall give the City of Crystal Lake, Illinois Department of Transportation, and any other governmental agency having jurisdiction, at least two (2) working days notice excluding Saturday and Sunday prior to the initiation of any phase of construction. Contractor shall immediately notify if construction has ceased and renew the two (2) working day notification thereafter.
10. The Contractor shall be responsible for obtaining all required permits for construction prior to commencement along or across existing streets or highways. The Contractor shall make arrangements for the proper bracing, shoring and other protection of all roadways before construction begins.

GRADING:

1. The grading and construction of the site improvements shall not cause ponding of storm sewer water. All areas adjacent to these improvements shall be graded to allow positive drainage.
2. The proposed grading elevations shown on the plans are finished grade. A minimum of six (6) inches of topsoil is to be placed before finished grade elevations are achieved.
3. Embankment material within parkway and open space areas shall be compacted to a minimum of ninety percent (90%) of maximum density in accordance with ASTM Specification D-1557 (modified proctor method), or to such other density as may be determined appropriate by the soils engineer.
4. All subgrade material shall have a minimum CBR (California Bearing Ratio) of 3.0 as determined by the soils engineer, or base replacement and pavement design revisions shall be provided which are adequate to obtain equivalent pavement strength.
5. Proposed pavement areas, building pads, driveways and sidewalks and yard/open space areas shall be excavated or filled to plus or minus 0.1 foot of design subgrade elevations by the Contractor.
6. Any borrow pit locations shall be identified by the Contractor on a copy of the approved site plans and forwarded to the Engineering Division at least 24-hours prior to excavation. Provide backfill compaction reports from a geotechnical engineer and as-built plans to the Engineering Division for any borrow pit areas.
7. Backfill shall be monitored by a geotechnical engineer on-site with compaction reports forwarded to the Engineering Division for review.
8. Water truck shall be on-site at all times during mass-grading operations and be available as needed for the purposes of dust control or at the request of City Staff.
9. Use of City fire hydrants is not allowed unless approved (separate from this permit) by the Public Works Department and a hydrant meter and RPZ is obtained from the City of Crystal Lake Water Division (815-356-3614). Only the City of Crystal Lake Water Division may operate valves and hydrants.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	STANDARD NOTES AND SPECIFICATIONS	GE-02a Date: 01/30/15 Drawn: DD, Checked: AW	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

GE-02b

TOPSOIL STOCKPILING:

1. Location of any on-site topsoil stockpiles shall be identified on the approved plans with silt fence installed around the perimeter of the stockpile.
2. Topsoil stockpiled for future use shall be relatively free from large roots, sticks, weeds, brush, stones larger than one (1) inch diameter, or other litter and waste products including other extraneous materials not conducive to plant growth.
3. Topsoil shall be stockpiled in sequence to eliminate any re-handling or double movements by the Contractor. Failure to properly sequence the stockpiling operations shall not constitute a claim for additional compensation. No material shall be stockpiled in front yards, in utility easements, or in the right-of-way lines.
4. If a stockpile is to remain in place for more than (14) calendar days, it is required that the stockpile meet the requirements as outlined in section 505 of the City Code.

EROSION CONTROL:

1. All specified erosion control measures shall be installed and maintained per the requirements of the Crystal Lake Stormwater Ordinance in accordance with the active NPDES permit.
2. All slopes 4:1 or steeper shall be sodded or blanketed immediately after mass earthwork.
3. All overland flow routes to be stabilized by sod or blanket.
4. Erosion control measures to be inspected and approved by City Engineering Division prior to additional work on site.
5. Continuous monitoring of erosion control measures is required. Maintain records of weekly reports per the City of Crystal Lake Stormwater Ordinance.
6. The Contractor shall implement any additional erosion control measures deemed necessary by the City per the standards of the City Of Crystal Lake Stormwater Ordinance.
7. All storm sewer catch basins, sumps and/or retention basins provided are to be cleaned at the end of construction of the project prior to final acceptance. Cleaning may also be required during the course of the construction of the project if it is determined that the silt and debris traps are not properly functioning and their performance is impaired.
8. Rip-rap material RR 2 (6") - RR4 (16") shall be in accordance with Article 281 and grouted in place according to Article 601 of the IDOT Standard Specifications.
9. Projects of 1 Acre or greater must obtain an NPDES permit prior to commencement of any construction activity.

UNDERGROUND UTILITY:

1. The Contractor shall coordinate water main, water service, sanitary and storm sewer inspections and testing with the Community Development at least 24 hours in advance.
2. All main line sanitary shall be cleaned and televised (provide DVD to the City's Engineering Division).
3. All manhole or valve covers shall be imprinted "City of Crystal Lake Sanitary", or "City of Crystal Lake Storm", or "City of Crystal Lake Water" as directed by the City.
4. Reference the latest edition of the Standard Specifications for Water and Sewer Main Construction in Illinois.
5. Existing manholes to be circular cored and booted.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	STANDARD NOTES AND SPECIFICATIONS	GE-02b Date: 01/30/15 Drawn: DD, Checked: AW	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

GE-02c

SANITARY SEWER:

1. Non-shear stainless steel couplings shall be used when connecting sewer pipes of dissimilar materials and pipes with no hub joints. When connecting to an existing sanitary sewer by means other than an existing wye or manhole, contractor shall use a Sewer-Tap and hub-wye or hub-tee saddle.
2. Unless an alternate method is approved, water stop gaskets shall be provided at all sanitary sewer manhole connections. Type and manufacturer to be approved by the City.
3. PVC plastic sewer pipe and fittings of sizes 4-inch through 15-inch shall conform to the latest revised specification requirements of ASTM D3034 for type PSM polyvinyl chloride (PVC) sewer pipe and fittings of minimum wall thickness SDR 35.
4. Joints shall be either the solvent weld type conforming to the latest revised specification requirements of ASTM D2564 and ASTM D2855, or elastomeric gasket type conforming to the latest revised specification requirements of ASTM D1869 and ASTM D3212.
5. A thicker walled pipe such as SDR 26 may be specified by the engineer depending on design and/or field conditions.
6. PVC plastic sewer pipe and fittings of sizes 18-inch through 36-inch shall conform to the latest revised specification requirements of ASTM F679 or polyvinyl chloride (PVC) large diameter ribbed gravity sewer pipe and fittings, with integral bell gasketed joints and elastomeric gaskets to form a watertight seal conforming to the latest revised specification requirements of ASTM F477 or ASTM D3212.
7. Pipe and fittings shall be the products of one approved manufacturer only, and there shall not be any mixing of pipe and fittings of different manufacturers between manholes.
8. The handling and installation of pipe, assembly or joints, and manhole connections shall be in accordance with the manufacturer's recommendations.
9. Gasket-type watertstop collars consist of a neoprene collar and a stainless steel band or other approved manhole watertstop shall be installed wherever the pipe passes through the manhole walls to provide a watertight joint to prohibit infiltration into the sewer system.
10. PVC pipe shall be installed in accordance with the latest revised specification requirements of ASTM D2321 using either compacted class I or class II granular embedment materials for bedding, haunching and initial backfill of 12 inches over the top of pipe to provide the necessary support for the pipe so that the maximum deflection does not exceed five percent of the pipe's original internal diameter.
11. The Contractor shall provide the necessary tools and equipment and perform the work necessary to test the deflection in the initial 1,200 feet of installed sewer and not less than ten percent (10%) of the remainder of the sewer project at random locations selected by the engineers no sooner than 30 days after backfilling has been completed. In the event that deflection exceeds the maximum limit of five percent (5%), the Contractor shall test all other new flexible pipe for deflection. Deflection shall be tested by use of either a mandrel or rigid ball having a diameter equal to ninety-five percent (95%) of the inside diameter of the pipe, and the test shall be performed without using mechanical pulling devices. Wherever the deflection limitation is exceeded, the contractor shall uncover the pipe, carefully replace compacted embedment and backfill material, and retest for deflection.
12. The Contractor shall subject all sanitary sewers, including service lines, to an air test. Allowable infiltration shall not exceed 100 gallons per inch diameter of pipe per mile per day.

    The Contractor shall also televise all public sanitary sewers. Televising of sanitary sewer, cost for televising, and testing shall be the responsibility of the Contractor.
13. Cast Iron Soil Pipe: service weight cast iron soil pipe and fittings conforming C.I.S.P.I. Specification HS-67 with compression type rubber gasket joints conforming to ASTM specification C564, or other suitable materials approved by the City Engineer.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	STANDARD NOTES AND SPECIFICATIONS	GE-02c Date: 01/30/15 Drawn: DD, Checked: AW	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

GE-02d

WATER MAIN:

1. Water main shall be Ductile Iron or Molecularly Oriented Polyvinyl Chloride (PVCO).
   a) Ductile Iron water main shall be Class 52 conforming to ANSI/AWWA C151/A21.51-09.
   b) Gaskets and cast iron fittings shall conform to ANSI/AWWA C111/A21.11 and ANSI/AWWA C110/A21.10 respectively.
   c) PVCO - See City Detail UW-12 and UW-13.
2. Thrust blocking or Mega-Lug or pre-approved equal shall be installed on water mains at all bends, tees, elbows, etc. except as noted below.
3. Thrust blocks not permitted with 45 degree vertical bends in water main (these shall be restrained with Mega-Lug or pre-approved equal.
4. When specified, ductile iron pipe shall be encased in polyethylene and shall conform with ANSI/AWWA C105/A21.5 – 10 and ASTM A674-10.
5. Minimum cover from finished grade to top of water main shall be six (6) feet; Maximum cover shall be eight (8) feet.
6. Water Main Taps: An Illinois licensed plumber is required for any water main tap.
7. All water mains shall be subjected to a pressure test and a separate leakage test at system pressure for 24 hours by the Contractor. Hydrostatic pressure test and leakage test shall be based on 125 PSI for two (2) hours. Water mains shall be chlorinated in accordance with the Standard Specifications.
8. The Underground Contractor shall consider incidental to the contract any chlorination and testing of existing water main where connections to and conclusion of such mains is indicated on the drawing.

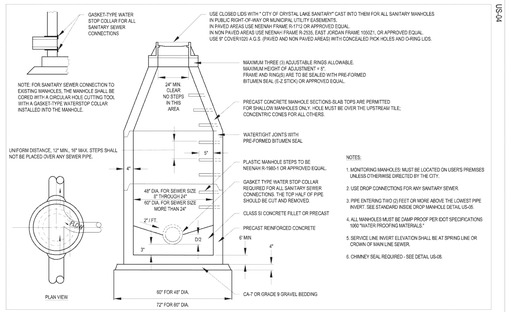
PAVING:

1. All subgrades and bases shall be proof-rolled and approved by the Engineering Division prior to base or binder installation.
2. Subgrade and proposed pavements shall be finished by the Excavation Contractor to within 0.1 foot plus or minus, of plan elevation.
3. The Paving Contractor shall ensure that the subgrade has been properly prepared and that the finished top of subgrade elevation has been graded within the tolerances allowed in these specifications. Unless the Paving Contractor advises the owner and engineer in writing prior to fine grading for base course construction, it is understood that the Contractor has approved and accepts responsibility for the subgrade.
4. For the purpose of providing handicap accessibility and complying with the American Disability Act and City Standards, curbs shall be depressed at locations where public walks or pedestrian paths intersect curb lines at street intersections and other locations as directed.
5. ½ inch thick premolded fiber expansion joints with two (2) No. 4 plain round steel dowel bars shall be installed at designated intervals and at all P.C., P.T., curb returns and at the end of each pour. Alternate ends of the dowel bars shall be greased and filled with metal expansion tubes.
6. ½ inch thick fiber expansion joints shall be used in every case where the sidewalk coincides with the curb and gutter. Contraction joints shall be saw cut at designated intervals in the curb. The cost of these joints shall be considered as incidental to the cost of the contract.
7. All poured in place concrete curb and gutter shall incorporate two (2) No. 4 reinforcing bars installed wherever the curb and gutter crosses utility service lines, the cost of which shall be considered incidental to the cost of concrete curb and gutter.
8. Sidewalks (where required) shall be of the thickness and dimensions as shown in the construction plans. All sidewalk concrete shall be a minimum of 6:1 bag mix (or IDOT class SI concrete) and shall develop a minimum of 3,500 psi compressive strength at fourteen (14) days. Contraction joints shall be set at five (5) foot centers, and one-half inch (½ inch) premolded fiber expansion joints at fifty (50) foot centers and where the sidewalk meets the curb or another sidewalk, or at the end of each pour. All sidewalks constructed over utility trenches and/or abutting driveway aprons shall be reinforced with three (3) No. 4 reinforcing bars (10 foot minimum length).

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	STANDARD NOTES AND SPECIFICATIONS	GE-02d Date: 01/30/15 Drawn: DD, Checked: AW	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

US-04



Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	STANDARD SANITARY AND MONITORING MANHOLE	US-04 Date: 06/12/2015 Drawn: JH, Checked: VR	City of Crystal Lake Illinois

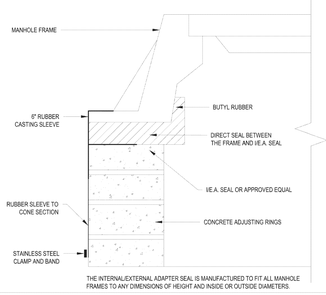
1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

US-06

INTERNAL / EXTERNAL CHIMNEY SEAL I/E A. SEAL

ALL SANITARY MANHOLES SHALL BE INSTALLED WITH AN INTERNAL / EXTERNAL CHIMNEY SEAL WITH A RUBBER SLEEVE TO SEAL THE OUTSIDE OF THE CHIMNEY FROM THE TOP OF THE CORBEL TO THE MANHOLE FRAME. THE SEAL SHALL BE INSTALLED PER THE INSTALLATION INSTRUCTIONS AND AS DIRECTED BY THE ENGINEER.

CHIMNEY SEAL TO BE ADAPTER INC. BRAND OR APPROVED EQUAL. THEY SHALL BE INSTALLED DURING CONSTRUCTION AND SET TO FINAL GRADE. ANY STRUCTURE THAT IS IN THE ROADWAY MUST BE RAMPED UNTIL FINAL SURFACE IS PLACED.



THE INTERNAL/EXTERNAL ADAPTER SEAL IS MANUFACTURED TO FIT ALL MANHOLE FRAMES TO ANY DIMENSIONS OF HEIGHT AND INSIDE OR OUTSIDE DIAMETERS.

NOTES:

1. MONITORING MANHOLES: MUST BE LOCATED ON USER'S PREMISES UNLESS OTHERWISE DIRECTED BY THE CITY.
2. USE DROP CONNECTIONS FOR ANY SANITARY SEWER.
3. PIPE ENTERING TWO (2) FEET OR MORE ABOVE THE LOWEST PIPE INVERT. SEE STANDARD INSIDE DROP MANHOLE DETAIL US-05.
4. ALL MANHOLES MUST BE CAMP PROOF PER IDOT SPECIFICATIONS 1080 "WATER PROOFING MATERIALS."
5. SERVICE LINE INVERT ELEVATION SHALL BE AT SPRING LINE OR CROWN OF MAIN LINE SEWER.
6. CHIMNEY SEAL REQUIRED - SEE DETAIL US-05.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	INTERNAL / EXTERNAL CHIMNEY SEAL	US-06 Date: 05/29/2015 Drawn: JH, Checked: VR	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

US-03

LEGEND:

1. TRENCH BACKFILL TO SUBGRADE AND WITHIN 2 FEET OF PROPOSED PAVEMENT, DRIVEWAY, CURB AND GUTTER OR SIDEWALK. TRENCH BACKFILL MATERIALS SHALL BE IDOT APPROVED GRADATION CA-6, GRADE 7, 8, OR 9 COMPACTED TO 90% OF MODIFIED PROCTOR DENSITY. IN NON-STRUCTURAL AREAS BACKFILL WITH APPROVED EXCAVATED MATERIALS.
2. INITIAL BACKFILL TO DEPTH AS INDICATED. MATERIAL SHALL BE IDOT APPROVED GRADATION CA-6, GRADE 7, 8, OR 9.
3. PIPE BEDDING SHALL BE FRACTURED GRANULAR MATERIAL IDOT GRADATION CA-7 OR CA-11 FROM 4 INCHES BELOW BOTTOM OF PIPE TO HORIZONTAL CENTER OF PIPE
4. UNSUITABLE MATERIAL TO BE REMOVED WHERE DIRECTED BY THE ENGINEER AND REPLACED WITH COMPACTED SUITABLE MATERIAL.
5. TRENCH WIDTH:
   PIPE O.D. + 12 INCHES MINIMUM
   PIPE I.D. + 18 INCHES MAXIMUM
6. CONTRACTORS SHALL COMPLY WITH ALL CURRENT OSHA STANDARDS.



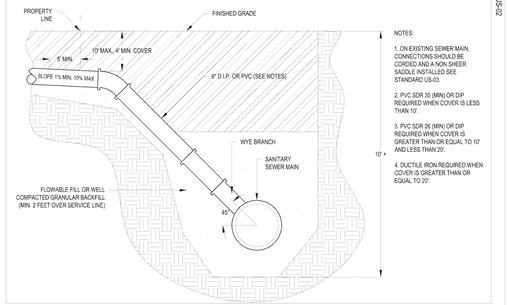
* NOTE: ALL DUCTILE IRON SHALL BE SUBJECT TO POLY WRAP PER CITY ENGINEER

NATIVE MATERIAL WILL BE PERMITTED AS TRENCH BACKFILL WITH "GEOTECH" INSPECTION

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	TYPICAL TRENCH CROSS SECTION	UG-03 Date: 05/29/2015 Drawn: JH, Checked: AW	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

US-02



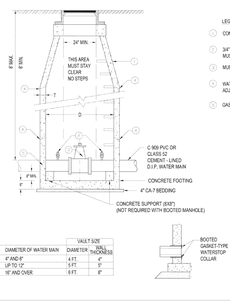
NOTES:

1. ON EXISTING SEWER MAIN, CONNECTIONS SHOULD BE CORDED AND A NON SHEER SADDLE INSTALLED SEE STANDARD US-03.
2. PVC SDR 35 (MIN) OR DIP REQUIRED WHEN COVER IS LESS THAN 10'.
3. PVC SDR 26 (MIN) OR DIP REQUIRED WHEN COVER IS GREATER THAN OR EQUAL TO 10' AND LESS THAN 20'.
4. DUCTILE IRON REQUIRED WHEN COVER IS GREATER THAN OR EQUAL TO 20'.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	SANITARY SERVICE RISER (DEPTH >= 10')	US-02 Date: 05/29/2015 Drawn: JH, Checked: VR	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

UW-01



DIAMETER OF WATER MAIN	VAULT SIZE DIAMETER	TILE THICKNESS
4" AND 6"	4 FT.	6"
UP TO 12"	5 FT.	8"
16" AND OVER	6 FT.	8"

LEGEND:

1. CONCENTRIC CONES REQUIRED
2. 3/4" (MIN) MUELLER, A.Y. MCDONALD, OR FORD NO LEAD CORPORATION STOP EACH SIDE OF VALVE MUST BE A COMPRESSION FITTING
3. MUELLER 2360-23-NGS OR AMERICAN FLOW CONTROL 2500-1 RESILIENT SEAT GATE VALVE
4. WATERTIGHT JOINTS USING EZ-STIK PREMIUM BUTYL SEALANT ASTM C990 OR EQUAL FOR FRAMES ADJUSTING RINGS AND BARREL SECTIONS
5. GASKET-TYPE WATERSTOP COLLAR FOR ALL WATER MAIN CONNECTIONS

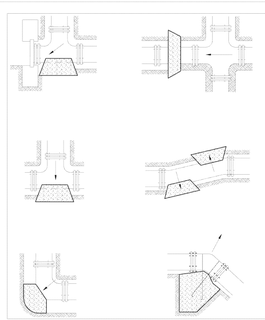
NOTES:

1. ALL MANHOLES MUST BE DAMP PROOF PER IDOT SPECIFICATIONS 1080.
2. DRAIN FOR VALVE VAULT SHALL BE CONSTRUCTED ONLY WHEN SHOWN ON THE PLANS.
3. CAST IRON MANHOLE FRAME & COVER SIMILAR TO NEENAH R-712, OR EQUAL WITH STANDARD DUTY NON-ROCKING TYPE LIDS WITH "CITY OF CRYSTAL LAKE WATER" CAST INTO LID. (NEENAH R-2530, OR EQUAL MAY BE USED IN GRAVEL AREAS)
4. HDPE PLASTIC MANHOLE ADJUSTING RINGS CONFORMING TO THE REQUIREMENTS OF HDS OF THE AASHTO STANDARD SPECIFICATIONS AND ASTM D1248-84. ALL ADJUSTING RINGS SHALL BE STABALIZED AGAINST ULTRA VIOLET LIGHT. ADJUSTING RING HEIGHT NOT TO EXCEED 9" WITH A MAXIMUM OF 3 RINGS. ADJUSTING RINGS SHALL BE INSTALLED BETWEEN THE FRAME AND CONE SLAB/A. THE RINGS AND THE RINGS COVER FRAME SHALL BE SEALED UTILIZING AN APPROVED BUTYL SEALANT. ALL ADJUSTMENT FOR MATCHING ROAD GRADE SHALL BE MADE UTILIZING A MOLDED AND RODDED SLOPE RING.
5. ALL UNDERGROUND NUTS, BOLTS & WASHERS MUST BE STAINLESS STEEL.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	STANDARD VALVE VAULT	UW-01 Date: 05/29/2015 Drawn: JH, Checked: VR	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

UW-03



BEARING AREA (SQ. FT.)

PIPE SIZE	TEE/PLUG	90°	45°	21 1/2°	11 1/4°
6	4	2	1	1	1
8	6	4	3	1	1
10	7	5	3	1	1
12	8	6	4	2	2
14	12	9	6	3	3
16	15	12	7	3	3
18	18	15	9	4	4
24	40	30	15	5	5

NOTES:

ALL BLOCKING SHALL BE POURED CLASS SI CONCRETE AGAINST UNDISTURBED EARTH.

ALL BENDS OR ELBOWS GREATER THAN OR EQUAL TO 11 1/4° SHALL HAVE THRUST BLOCKING. FORM AS TO NOT COVER BOLTS.

IN LIEU OF THRUST BLOCKING, "MEGA LUG" (EBAA) JOINT RESTRAINTS OR APPROVED EQUAL CAN BE USED AS APPROVED BY THE ENGINEER.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	THRUST BLOCK INSTALLATION	UW-03 Date: 05/29/2015 Drawn: JH, Checked: VR	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

UW-12

MOLECULARLY ORIENTED POLYVINYL CHLORIDE WATER MAIN (PVCO)

- Molecularly oriented polyvinyl chloride (PVCO) Class 150 water main shall have push-on joints, conform to the latest ANSI/AWWA C909-09 and ASTM F1483 and shall be constructed in accordance with the City of Crystal Lake Ordinances and the applicable portions of the Standard Specifications for Water and Sewer Main Construction in Illinois.
- Wherever water is encountered in the trench, it shall be removed during pipe laying and jointing operations. Provisions shall be made to prevent floating of the pipe. Any dewatering of the trenches shall be considered incidental. At no time shall trench water be allowed to enter the water main.
- All types of pipe shall be handled in such a manner as to prevent damage to the pipe. Damage to the pipe, as determined by the city, shall be removed from the job, and the methods of handling shall be corrected to prevent further damage.
- When requested by the City, the pipe shall be inspected by the City for defects while suspended above grade.
- All cutting of existing water main pipe for the insertion of valves, tees or other fittings shall be performed without damage to the pipe and so as to leave a smooth end at right angles to the axis of the pipe.
- A canvas strap shall be used to lower the PVCO water main into the trench to avoid damaging the pipe.
- A utility line marking tape shall install along the centerline of the entire pipeline. The tape shall be four to six inches below the base course in roadway areas, and shall be 18 to 24 inches below existing or proposed ground surface in other areas. The six-inch wide tape shall be aluminum foil encased in an impervious mylar plastic coating on both sides, resistant to acid, alkali and corrosion and detectable with radio-type locators to a buried depth of three feet. The words, "Caution - Water Main Buried Below" shall be continuously, reverse printed on the Safety Precaution blue tape with stripping. The tape shall be Lineguard, Inc., Type IIII SUPER TUFF, CAUTION STRIPED, Linetec, Inc. or an equal approved by the City Engineer.
- The first two joints beyond any valve, bend, cross, or tee shall be restrained with retainer glands. Also, any joint where the proposed PVCO water main ties into the existing water main shall be restrained with retainer glands. Retainer glands shall be C909 PVC Pipe Restraints Series 19MJOO or Series 2016PV or similar restrained harness as required for the PVCO water main diameter manufactured by EBAA Iron, or an equal approved by the ENGINEER. Also all bends, crosses, and tees shall be additionally restrained with thrust blocks as shown on the details in the plans.
- All taps shall require a saddle suitable for AWWA C909 PVCO water main (no direct taps are allowed).
- Only products specifically identified for use on PVCO should be used on PVCO.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	PVCO WATER MAIN GENERAL SPECIFICATIONS	UW-12 Date: 06/10/2015 Drawn: JH, Checked: VR	City of Crystal Lake Illinois

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

UW-13

TRACER WIRE

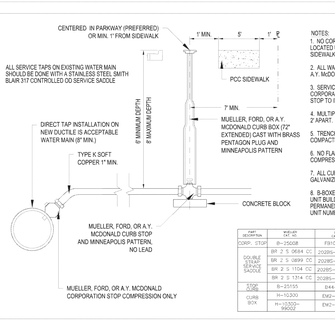
Reinforced tracer wire shall be required on all new PVCO water mains installed within the City.

- Tracer wire for open cut installation shall be a #12 AWG HS-CCS high-strength copper clad steel conductor (HS-CCS), insulated with a 30 mil, high-density, high molecular weight polyethylene (HDPE) insulation, and rated for direct burial use at 30 volts. HS-CCS conductor must be at 21% conductivity for locating purposes; break load 380 lbs. minimum. HDPE insulation shall be RoHS compliant and utilize virgin grade material. Insulation color shall blue. Tracer wire shall be Copperhead™ HS-CCS HDPE 30 mil or pre-approved equal.
- Tracer wire for directional drilling/boring shall be SoloShot™ (12 AWG) extra-high strength copper-clad steel conductor (EHS-CCS), insulated with a 45 mil, high density, high molecular weight polyethylene (HDPE) insulation, and rated for direct burial use at 30 volts. EHS-CCS conductor must be at 21% conductivity for locating purposes; break load will be 1150 lbs. minimum. HDPE insulation shall be RoHS compliant and utilize virgin grade material. Tracer wire shall be Copperhead™ SoloShot™ EHS-CCS HDPE 45 mil or pre-approved equal.
- Two separate conductors shall be run along the side (at the nine or three o'clock position) of all new mains and hydrant leads, taped to the pipe a minimum of every 5 feet.
- The wire shall be brought to grade in a tracer box at each hydrant.
  - A magnetized tracer box shall be installed at each new fire hydrant.
  - Locate the magnetized tracer box adjacent to the auxiliary valve, with two feet of the hydrant barrel.
  - The box shall be tamper-proof, with cast or ductile iron blue lid with a brass wire harness and external brass connection screw, (Copperhead Industries, LDXL36BTP in unpaved areas, CO148TP for concrete applications and RB148TP in roadways or approved equal.
  - Magnetized tracer boxes maybe required at locations to be determined by the City Engineer.
- The wire shall also be secured to the top (inside) of each valve vault leaving enough slack in the wire so that it may be pulled out of the valve vault with an excess of 6 foot.
- All splices in the wire to connect main line tracer wire shall use Copperhead Snakelite Part #SCB_01-SR or approved equal.
  - For lateral runs or hydrant leads, connections shall be made with a 3 - way enclosed lug direct bury connector with internal silicone sealant, Copperhead Industries "DryConn" Direct Bury Lug, # 3WB-01 or approved equal.
  - In directional bore operations; splices shall be at valve and fitting locations where excavation is required. If a splice must be done in an unexcavated location, use a wire nut twist connector with restraining cap and internal silicone sealant Copperhead Industries #SCB – 01SR or approved equal. Connections should be wrapped with heavy-duty electrical tape (minimum three (3) inches each side of connection).
  - The contractor is responsible for testing and ensuring the continuity of the tracer wire during installation, the City will test the integrity of the tracing wire at the end of construction.
- Grounding the tracer wire system at all dead end points completed the needed electrical circuit for accurate locates.
  - Contractor to include a Copperhead TM Anode Part #Anci-1005), 1# x 1.315"D x 18.5"L, Magnesium Drive in Anode which includes an HDPE cap and 10' of density high molecular weight polyethylene (HDPE) insulation.
  - Installation of one Copperhead Snake BiteTM connector, part # SCB-01-SR, shall be installed at a location to be determined by the Engineer.
  - The connector is provided to splice the factory installed anode tracer wire to the mainline tracer wire. The CopperheadTM Anode described above must be used or a pre-approved equal

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015 2. 3. 4.	PVCO WATER MAIN TRACER WIRE GENERAL SPECIFICATIONS	UW-13 Date: 06/10/2015 Drawn: JH, Checked: VR	City of Crystal Lake Illinois

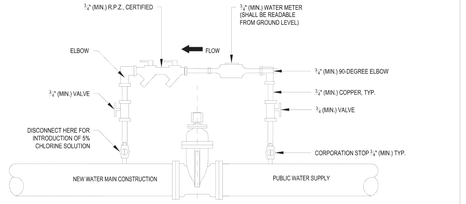
1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS.

UW-04



PART DESCRIPTION	MUELLER CATALOG NO.	CUPRO ALLOY	A.Y. MCDONALD CATALOG NO.	SERVICE SIZE
CORP. STOP	B–25008	FB1000–Q	4701BQ	
SERVICE SADDLE	BR 2 S. 0684 CC	202BS–750–CC	3855. B	TYPE TO BE APPROVED BY CITY ENGINEER
	BR 2 S. 0899 CC	202BS–963–CC	3855. B	
	BR 2 S. 1104 CC	202BS–1212–CC	3855. 10	
	BR 2 S.1154 CC	202BS–1416–CC	3855.12	
ZONE VALVE	B–25155	B44–W

UW-05



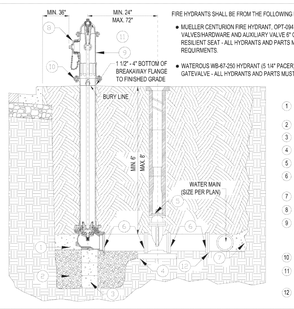
NOTE:

1. VALVE JUMPER MUST BE ABOVE MANHOLE LID.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	WATER VALVE JUMPER	UW-05
2.		Date: 06/01/2015
3.		Drawn: JH / Checked: VR
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UW-06



FIRE HYDRANTS SHALL BE FROM THE FOLLOWING LIST, AS APPROVED BY THE CITY:

- MUELLER CENTURION FIRE HYDRANT, DPT (SIX 5¼" BARREL) WITH MUELLER VALVES/HARDWARE AND AUXILIARY VALVE 6" GATE VALVE NO. 2360-23-6020 MODIFIED WEDGE RESILIENT SEAT - ALL HYDRANTS AND PARTS MUST BE OEM AND COMPLY WITH NO LEAD REQUIREMENTS.
- WATEROUS WB-67-250 HYDRANT (5 1/4" PACER) WITH SERIES 2500-1 RESILIENT WEDGE GATEVALVE - ALL HYDRANTS AND PARTS MUST COMPLY WITH NO LEAD REQUIRMENTS

LEGEND:

1. PROVIDE CLASS SI CONCRETE BASE AND BLOCKING AGAINST UNDISTURBED EARTH
2. DRAIN SUMP TO BE ¾" CA-7 CUBIC YARD OF ¾" WASHED STONE
3. CONCRETE SUPPORT
4. CONCRETE BLOCK OR BRICK SUPPORT
5. RUBBER VALVE BOX STABILIZER
6. USE MEGALUG RESTRAINTS WITH STAINLESS STEEL NUTS AND BOLTS AT ALL MECHANICAL JOINTS.
7. CONCRETE BLOCKING
8. 4 ½" PORT TO FACE PAVEMENT OR AS DIRECTED BY CITY ENGINEER
9. ALL NEWLY INSTALLED HYDRANTS MUST HAVE 2.4 MILS AMERICO AT PRIMER OR EQUAL AND FINISH COAT SHERWIN WILLIAMS POLANE B MIN 4.1 MILS = 6.5 MILS TOTAL DRY FILM THICKNESS. COLOR (SAFETY RED)
10. MIN. 48" BETWEEN HYDRANT AND ANY VERTICAL OBSTRUCTIONS.
11. MIN. 72" BETWEEN HYDRANT AND ANY LANDSCAPING WITH A MATURE HEIGHT GREATER THAN 12"
12. ALL UNDERGROUND MUST BE STAINLESS STEEL INCLUDING NUTS, BOLTS, AND WASHERS.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	FIRE HYDRANT	UW-06
2.		Date: 06/01/2015
3.		Drawn: JH / Checked: VR
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UW-08

CITY OF CRYSTAL LAKE WATER MAIN CHLORINATION SPECIFICATIONS:

1. DISINFECTION OF WATER MAINS SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION, CURRENT EDITION
2. THE CITY ENGINEERING DIVISION AND WATER DIVISION SHALL BE NOTIFIED 48 HOURS IN ADVANCE FOR SCHEDULING OF ANY TESTING CHLORINATING, FLUSHING, OR SAMPLING.
3. ONLY CITY WATER DIVISION PERSONNEL MAY OPERATE WATER VALVES ON LIVE MAINS.
4. A WATER VALVE JUMPER IS REQUIRED TO MAINTAIN PRESSURE ON THE CHLORINATED LINES DURING THE SAMPLING PROCEDURE FOR PROPER INSTALLATION AND REQUIREMENTS SEE THE STANDARD WATER VALVE JUMPER DETAIL.
5. WATER MAINS SHALL BE FLUSHED WITH A MINIMUM VELOCITY OF 2.5 FPS.
6. THE INITIAL CHLORINE CONCENTRATION SHALL BE 50 mg/L WITH A MINIMUM 24 HOUR RESIDUAL OF 25 mg/L.
7. THE METHOD OF CHLORINE APPLICATION SHALL BE APPROVED BY THE CITY:
   a. LIQUID CHLORINE W/CHLORINATING DEVICE WITH BACKFLOW PREVENTER.
   b. CHLORINE BEARING COMPOUNDS IN WATER.
   c. TABLET DISINFECTION.
8. ALL NEW VALVES AND HYDRANTS SHALL BE OPERATED WHILE LINE IS BEING CHLORINATED.
9. THE CITY ENGINEERING DIVISION SHALL DETERMINE LOCATION AND QUANTITY OF CORPORATION STOPS FOR FLUSHING AND CHLORINATING.
10. THE FINAL FLUSHING RESIDUAL IN THE NEW CHLORINATED LINES SHALL BE BETWEEN 0.2 AND 2.0 mg/L.
11. ALL WATER SAMPLES SHALL BE COLLECTED ON TWO (2) CONSECUTIVE DAYS AND PASS BACTERIOLOGICAL TEST RESULTS. IN THE EVENT THAT THE FIRST SET OF SAMPLES TAKEN TWO (2) CONSECUTIVE DAYS APART FAIL TO PASS BACTERIOLOGICAL TEST RESULTS, THE CHLORINATION PROCEDURE (OR AS PER STATE SPECS). IF THE SECOND SET FAILS TO PASS TESTS, THE CHLORINATION PROCEDURE MUST BE REPEATED WITH THE MAIN BEING RECHLORINATED, REFLUSHED, AND RESAMPLED
12. STATE CERTIFIED LAB MUST BE USED FOR SAMPLES.

CHLORINE REQUIREMENTS TO PRODUCE 50 mg/L CONCENTRATION IN 100 FEET OF PIPE-BY DIAMETER

PIPE SIZE IN INCHES	100 FOOT CALCIUM HYPOCHLORITE LB	CHLORINE SOLUTION GALLONS
4	0.027	0.53
6	0.061	0.73
8	0.108	1.30
10	0.170	2.04
12	0.243	2.99

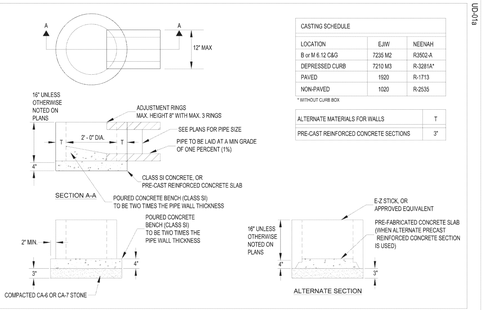
NUMBER OF 5-GRAIN HYPOCHLORITE TABLETS REQUIRED FOR A DOSAGE OF 50mg/L PER LENGTH OF PIPE SECTION

PIPE SIZE IN INCHES	LENGTH OF PIPE SECTION IN FEET				
	UP TO 13	18	20	30	40
4	1	1	1	1	1
6	1	1	2	2	2
8	2	2	3	3	4
10	2	3	5	5	6
12	3	5	7	7	9
16	5	9	11	11	14

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	CHLORINATION SPECIFICATIONS	UW-08
2.		Date: 09/20/2012
3.		Drawn: DD / Checked: VR
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UD-01a



CASTING SCHEDULE

LOCATION	EJIW	NEENAH
B or M 6.12 C&G	7235 M2	R3502-A
DEPRESSED CURB	7210 M3	R-3281A*
PAVED	1020	R-1713
NON-PAVED	1020	R-2535

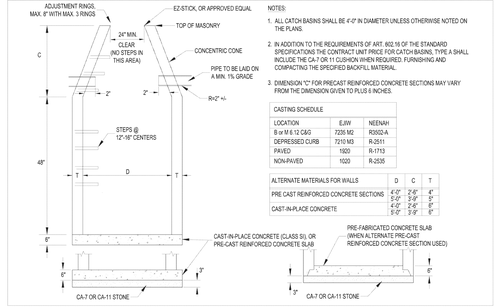
* WITHOUT CURB BOX

ALTERNATE MATERIALS FOR WALLS	T
PRE-CAST REINFORCED CONCRETE SECTIONS	3"

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	DRAINAGE STRUCTURES: INLET, TYPE A	UD-01a
2.		Date: 05/28/2015
3.		Drawn: JH / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UD-01b



NOTES:

1. ALL CATCH BASINS SHALL BE 4'-0" IN DIAMETER UNLESS OTHERWISE NOTED ON THE PLANS.
2. IN ADDITION TO THE REQUIREMENTS OF ART. 602.16 OF THE STANDARD SPECIFICATIONS THE CONTRACT UNIT PRICE FOR CATCH BASINS, TYPE A SHALL INCLUDE THE CA-7 OR 11 CUSHION WHEN REQUIRED. FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL.
3. DIMENSION "C" FOR PRECAST REINFORCED CONCRETE SECTIONS MAY VARY FROM THE DIMENSION GIVEN TO PLUS 6 INCHES.

CASTING SCHEDULE

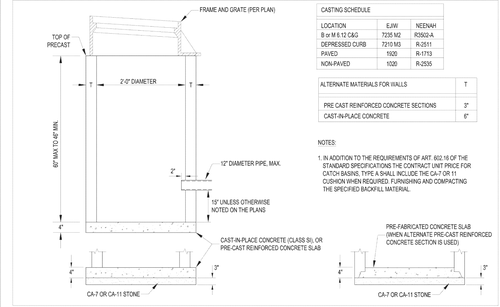
LOCATION	EJIW	NEENAH
B or M 6.12 C&G	7235 M2	R3502-A
DEPRESSED CURB	7210 M3	R-2511
PAVED	1020	R-1713
NON-PAVED	1020	R-2535

ALTERNATE MATERIALS FOR WALLS	D	C	T
PRE CAST REINFORCED CONCRETE SECTIONS	4'-0"	2'-6"	4"
	5'-0"	3'-0"	5"
CAST-IN-PLACE CONCRETE	4'-0"	2'-6"	6"
	5'-0"	3'-0"	6"

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	CATCH BASIN TYPE A	UD-01b
2.		Date: 09/18/2012
3.		Drawn: DD / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UD-01c



CASTING SCHEDULE

LOCATION	EJIW	NEENAH
B or M 6.12 C&G	7235 M2	R3502-A
DEPRESSED CURB	7210 M3	R-2511
PAVED	1020	R-1713
NON-PAVED	1020	R-2535

ALTERNATE MATERIALS FOR WALLS	T
PRE CAST REINFORCED CONCRETE SECTIONS	3"
CAST-IN-PLACE CONCRETE	6"

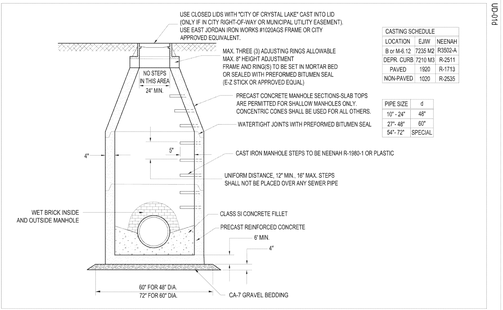
NOTES:

1. IN ADDITION TO THE REQUIREMENTS OF ART. 602.16 OF THE STANDARD SPECIFICATIONS THE CONTRACT UNIT PRICE FOR CATCH BASINS, TYPE A SHALL INCLUDE THE CA-7 OR 11 CUSHION WHEN REQUIRED. FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	CATCH BASIN TYPE C	UD-01c
2.		Date: 05/19/2015
3.		Drawn: JH / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UD-01d



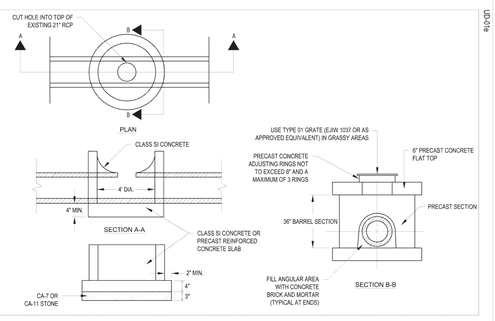
CASTING SCHEDULE		
LOCATION	EJIW	NEENAH
B or M-6.12	7235 M2	R3502-A
DEPR. CURB	7210 M3	R-2511
PAVED	1020	R-1713
NON-PAVED	1020	R-2535

PIPE SIZE	d
15" - 24"	48"
27"- 48"	60"
54" -72"	SPECIAL

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	STORM MANHOLE TYPE A	UD-01d
2.		Date: 05/19/2015
3.		Drawn: JH / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

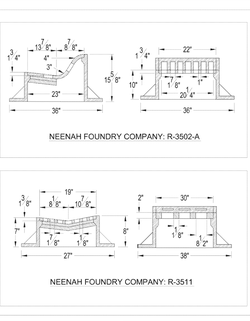
UD-01e



Revised:	Drawing Name	Drawing Number
1. 06/12/2015	4-FOOT INLET WITH CONCRETE FLAT TOP	UD-01e
2.		Date: 05/29/2015
3.		Drawn: JH / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UD-02a



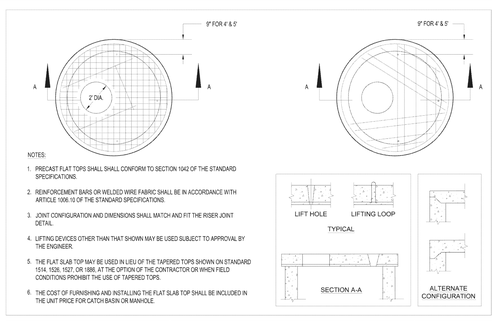
CITY REQUIREMENTS

1. BARRIER CURB: USE NEENAH R-3502-A, EJIW 7235 / TYPE M2 GRATE, OR APPROVED EQUAL
2. MOUNTABLE CURB OR DRIVEWAYS: USE NEENAH R-3281A (WITHOUT CURB BOX) EJIW 7210 / TYPE M3 GRATE OR APPROVED EQUAL
3. CONCRETE MUST BE POURED A MINIMUM OF 6" AROUND THE CIRCUMFERENCE OF THE FRAME AND AT LEAST 8" BELOW THE FRAME TO ENSURE THAT THERE WILL BE NO INFILTRATION BETWEEN THE FRAME AND STRUCTURE.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	CURB INLET FRAME AND GRATE	UD-02a
2.		Date: 5/28/2015
3.		Drawn: JH / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UD-02b



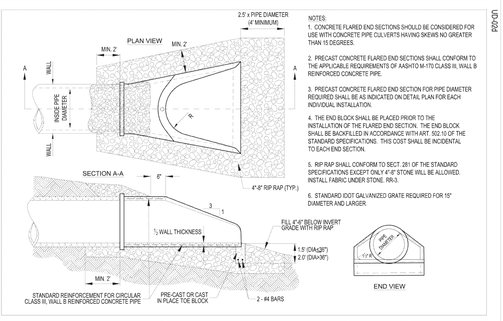
NOTES:

1. PRECAST FLAT TOPS SHALL SHALL CONFORM TO SECTION 1042 OF THE STANDARD SPECIFICATIONS.
2. REINFORCEMENT BARS OR WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ARTICLE 1006.10 OF THE STANDARD SPECIFICATIONS.
3. JOINT CONFIGURATION AND DIMENSIONS SHALL MATCH AND FIT THE RISER JOINT DETAIL.
4. LIFTING DEVICES OTHER THAN THAT SHOWN MAY BE USED SUBJECT TO APPROVAL BY THE ENGINEER.
5. THE FLAT SLAB TOP MAY BE USED IN LIEU OF THE TAPERED TOPS SHOWN ON STANDARD 1514, 1526, 1527, OR 1886, AT THE OPTION OF THE CONTRACTOR OR WHEN FIELD CONDITIONS PROHIBIT THE USE OF TAPERED TOPS.
6. THE COST OF FURNISHING AND INSTALLING THE FLAT SLAB TOP SHALL BE INCLUDED IN THE UNIT PRICE FOR CATCH BASIN OR MANHOLE.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	ECCENTRIC FLAT TOPS FOR CURB INLET STORM MANHOLES	UD-02b
2.		Date: 01/30/15
3.		Drawn: DD / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UD-02d



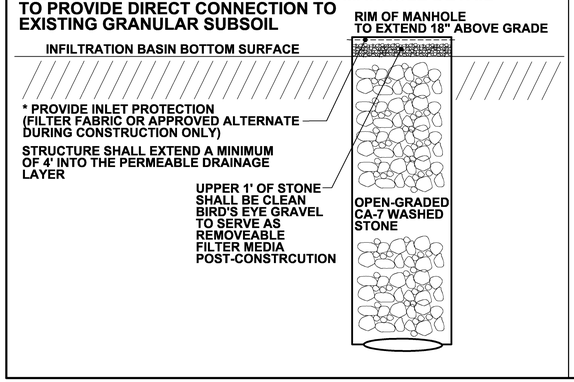
NOTES:

1. CONCRETE FLARED END SECTIONS SHOULD BE CONSIDERED FOR USE WITH CONCRETE PIPE CULVERTS HAVING SKEWS NO GREATER THAN 15 DEGREES.
2. PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-170 CLASS III, WALL B REINFORCED CONCRETE PIPE.
3. PRECAST CONCRETE FLARED END SECTION FOR PIPE DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.
4. THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ART. 502.10 OF THE STANDARD SPECIFICATIONS. THIS COST SHALL BE INCIDENTAL TO EACH END SECTION.
5. RIP RAP SHALL CONFORM TO SECT. 281 OF THE STANDARD SPECIFICATIONS EXCEPT ONLY 4"-8" STONE WILL BE ALLOWED. INSTALL FABRIC UNDER STONE, RR-3.
6. STANDARD IDOT GALVANIZED GRATE REQUIRED FOR 15" DIAMETER AND LARGER.

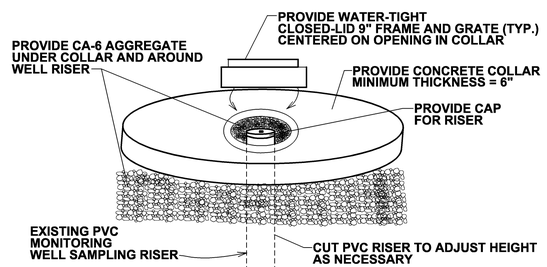
Revised:	Drawing Name	Drawing Number
1. 06/12/2015	FLARED END SECTION (PRECAST CONCRETE PIPE)	UD-02d
2.		Date: 04/15/2007
3.		Drawn: EM / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

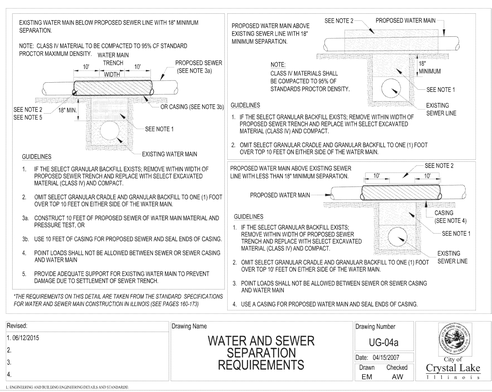
4' DIAMETER BOTTOMLESS PRE-CAST MANHOLE DETAIL TO PROVIDE DIRECT CONNECTION TO EXISTING GRANULAR SUBSOIL



MONITORING WELL COVER DETAIL



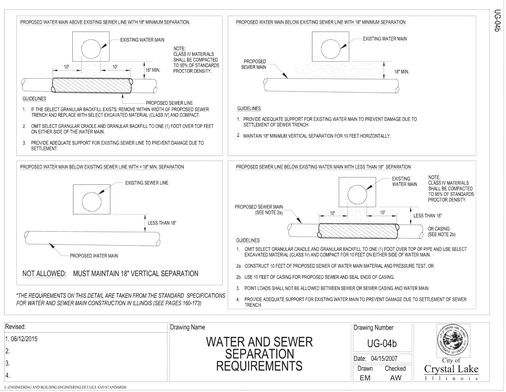
UG-04a



Revised:	Drawing Name	Drawing Number
1. 06/12/2015	WATER AND SEWER SEPARATION REQUIREMENTS	UG-04a
2.		Date: 04/15/2007
3.		Drawn: EM / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UG-04b



*THE REQUIREMENTS ON THIS DETAIL ARE TAKEN FROM THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (SEE PAGES 160-173)

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	WATER AND SEWER SEPARATION REQUIREMENTS	UG-04b
2.		Date: 04/15/2007
3.		Drawn: EM / Checked: AW
4.		

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

PEARSON,BROWN & ASSOCIATES,INC.
CONSULTING ENGINEERS
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LIBERTYVILLE, IL. 60048
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E-MAIL ADDRESS: pba@pbaengineers.com

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DESIGNED BY: A.K.Z.
DRAWN BY: D.S.H.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 07/08/15

REVISIONS

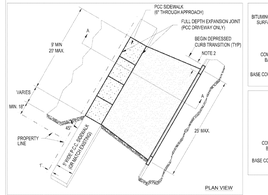
DATE	BY	DESCRIPTION
08/07/15	AKZ	REVISED PER CITY REVIEW COMMENTS
08/25/15	AKZ	REVISED PER CITY REVIEW COMMENTS

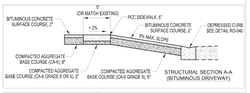
DETAILS

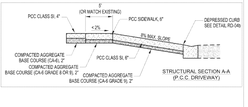
SHEET NUMBER 17 OF 20 SHEETS

JOB No. 1551

RD-01b







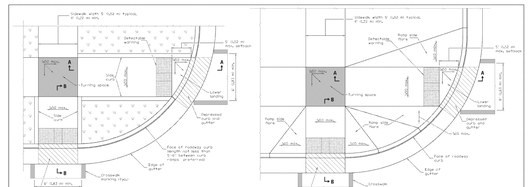
NOTES:

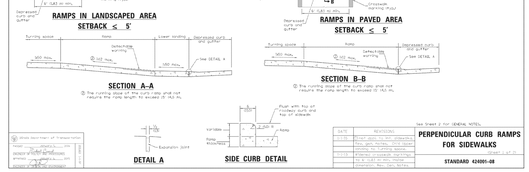
1. FOR THICKNESS OF PAVEMENT "T", VERTICAL THICKNESS OF THE GUTTER FLAG SHALL BE A MINIMUM OF 9 INCHES. FOR HMA BASE COURSE PAVEMENT SECTIONS THE GUTTER FLAG SHALL BE SAME THICKNESS AS PAVEMENT STRUCTURE.
2. TRANSITION FROM FULL CURB TO DEPRESSED CURB IN 1 TO 1.5 LINEAL FEET. ALSO, THE DRIVEWAY SHALL BE NO LESS THAN 3/4 OF THE DEPRESSION.
3. DRIVEWAY APPROACH SHALL MEET CURB AND GUTTER AT A POINT BETWEEN FLUX CURB AND ONE-HALF CURB HEIGHT.
4. DRIVEWAY FLARE SHALL BE SYMMETRIC ABOUT THE DRIVEWAY CENTERLINE, AS MEASURED AT THE PROPERTY LINE, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	DRIVEWAY: RESIDENTIAL APPROACH	RD-01b	City of Crystal Lake Illinois
2.		Date: 01/30/15	
3.		Drawn DD / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

RD-02a





① The running slope of the curb ramp shall not require the ramp length to exceed (5 / %S) ft.

② The running slope of the curb ramp shall not require the ramp length to exceed (5 / %S) ft.

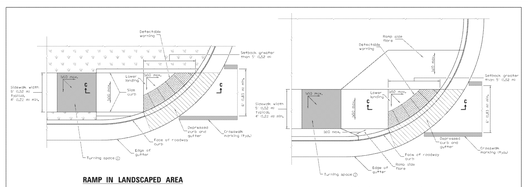
See Sheet 2 for GENERAL NOTES

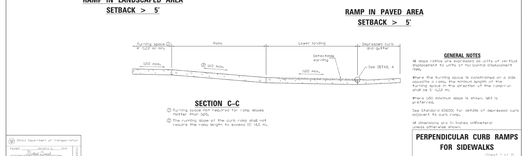
DATE	REVISIONS
	Revised "Lower landing" to "Turning space"
	Revised "Turning space" to "Lower landing"
	Added "Decreased curb and gutter"
	Added "Detectable warning"
	Revised Section A-A

PERPENDICULAR CURB RAMPS FOR SIDEWALKS

STANDARD 424001-08

RD-02b





① Turning space not required for ramp slopes flatter than 48:1.

② The running slope of the curb ramp shall not require the ramp length to exceed (5 / %S) ft.

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (rise).

Where the running space is constrained on a side opposite to ramp, the minimum length of the turning space in the direction of the ramp run shall be 5' (120 in.).

Where 5% maximum slope is shown, set to practicable.

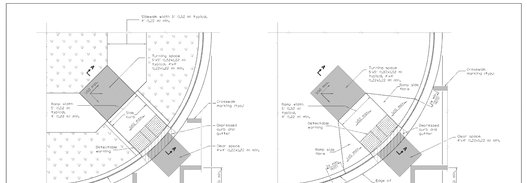
See Standard 630001 for details of depressed curb adjacent to curb ramp.

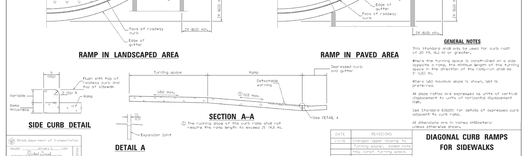
All dimensions are in inches (millimeters) unless otherwise shown.

PERPENDICULAR CURB RAMPS FOR SIDEWALKS

STANDARD 424001-08

RD-02c





GENERAL NOTES

This standard shall only be used for curb radii of 20' ft, (6.2 m) or greater.

Where the turning space is constrained on a side opposite to ramp, the minimum length of the turning space in the direction of the ramp run shall be 5' (120 in.).

Where 5% maximum slope is shown, set to practicable.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (rise).

See Standard 630001 for details of depressed curb adjacent to curb ramp.

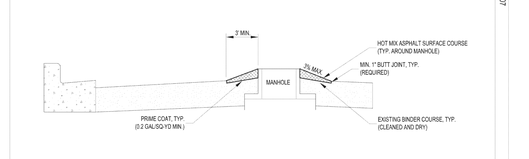
All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
	Revised "Lower landing" to "Turning space"
	Revised "Turning space" to "Lower landing"
	Added "Decreased curb and gutter"
	Added "Detectable warning"
	Revised Section A-A

DIAGONAL CURB RAMPS FOR SIDEWALKS

STANDARD 424006-02

RD-02d





① Upper landing not required for ramp slopes flatter than 48:1.

② The running slope of the curb ramp shall not require the ramp length to exceed (5 / %S) ft.

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (rise).

Where the running space is constrained on a side opposite to ramp, the minimum length of the turning space in the direction of the roadway shall be 5' (120 in.).

Where 5% maximum slope is shown, set to practicable.

See Standard 630001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

CORNER PARALLEL CURB RAMPS FOR SIDEWALKS

STANDARD 424011-02

RD-02e





① Upper landing not required for ramp slopes flatter than 48:1.

② The running slope of the curb ramp shall not require the ramp length to exceed (5 / %S) ft.

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (rise).

Where the running space is constrained on a side opposite to ramp, the minimum length of the turning space in the direction of the ramp run shall be 5' (120 in.).

Where 5% maximum slope is shown, set to practicable.

See Standard 630001 for details of depressed curb adjacent to curb ramp.

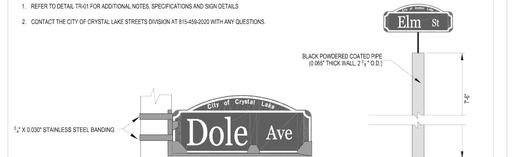
All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
	Revised "Lower landing" to "Turning space"
	Revised "Turning space" to "Lower landing"
	Added "Decreased curb and gutter"
	Added "Detectable warning"
	Revised Section A-A

MID-BLOCK CURB RAMPS FOR SIDEWALKS

STANDARD 424016-02

RD-02f



GENERAL NOTES

This standard shall only be used for curb radii of 5' ft, (1.5 m) or greater.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (rise).

Where 5% maximum slope is shown, set to practicable.

See Standard 630001 for details of depressed curb adjacent to curb ramp.

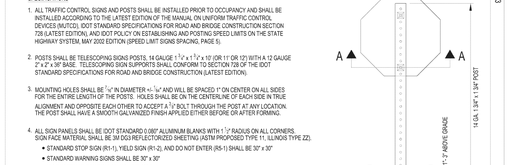
All dimensions are in inches (millimeters) unless otherwise shown.

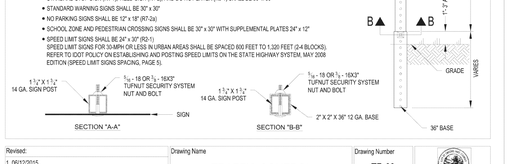
DATE	REVISIONS
	Revised "Lower landing" to "Turning space"
	Revised "Turning space" to "Lower landing"
	Added "Decreased curb and gutter"
	Added "Detectable warning"
	Revised Section A-A

DEPRESSED CORNER FOR SIDEWALKS

STANDARD 424021-03

RD-02g





GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (rise).

Where 5% maximum slope is shown, set to practicable.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
	Revised "Lower landing" to "Turning space"
	Revised "Turning space" to "Lower landing"
	Added "Decreased curb and gutter"
	Added "Detectable warning"
	Revised Section A-A

ENTRANCE / ALLEY PEDESTRIAN CROSSINGS

STANDARD 420026-01

RD-04a

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	DEPRESSED CURB: ENTRANCE BY SAWING	RD-04a	City of Crystal Lake Illinois
2.		Date: 01/30/15	
3.		Drawn DD / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

RD-04b

NOTES:

1. THE TOP OF CURB SHALL BE DEPRESSED WHERE THE CURB AND GUTTER IS CONSTRUCTED ACROSS ALLEYS AND FOR PRIVATE DRIVES OR WHERE DIRECTED BY THE ENGINEER.
2. THICKNESS OF PAVEMENT "T". WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, THE VERTICAL THICKNESS OF THE GUTTER FLAG SHALL BE 9 INCHES. FOR BAM PAVEMENT SECTIONS THE FLAG SHALL BE THE SAME THICKNESS AS THE PAVEMENT.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	DEPRESSED CURB: DETAIL	RD-04b	City of Crystal Lake Illinois
2.		Date: 01/30/15	
3.		Drawn DD / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

UW-03

BEARING AREA (SQ. FT.)					
PIPE SIZE	TEE/PLUG	90°	45°	21 1/2°	11 1/4°
6	4	2	1	1	1
8	6	4	3	1	1
10	7	5	3	1	1
12	8	6	4	2	2
14	12	9	6	3	3
16	15	12	7	3	3
18	18	15	9	4	4
24	40	30	15	5	5

NOTES:

ALL BLOCKING SHALL BE POURED CLASS SI CONCRETE AGAINST UNDISTURBED EARTH.

ALL BENDS OR ELBOWS GREATER THAN OR EQUAL TO 11 1/4° SHALL HAVE THRUST BLOCKING. FORM AS TO NOT COVER BOLTS.

IN LIEU OF THRUST BLOCKING, "MEGA LUG" (EBAA) JOINT RESTRAINTS OR APPROVED EQUAL CAN BE USED AS APPROVED BY THE ENGINEER.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	THRUST BLOCK INSTALLATION	UW-03	City of Crystal Lake Illinois
2.		Date: 05/29/2015	
3.		Drawn JH / Checked VR	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

RD-06

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	PAVEMENT CUT AND REPLACEMENT	RD-06	City of Crystal Lake Illinois
2.		Date: 05/19/2015	
3.		Drawn JH / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

RD-07

NOTES

1. RAMPING TO BE USED AFTER BINDER IS CONSTRUCTED AND UNTIL FINAL SURFACE COURSE IS PLACED.
2. MANHOLES TO BE RAMPED NO LATER THAN NOVEMBER 1ST.
3. RAMPS TO BE MAINTAINED THROUGHOUT THE WINTER BY DEVELOPER.
4. RAMP MATERIAL TO BE REMOVED BY MILLING OR OTHERWISE REMOVED BEFORE PLACEMENT OF FINAL SURFACE COURSE.

MIX DESIGN FOR EMERGENCY RAMP PATCHING COMPOUND

MIX:
40% QUICKCRETE HYDRAULIC CEMENT
60% MORTAR MIX
ENOUGH WATER TO MAKE IT WORKABLE
(TOO MUCH WATER WILL GREATLY LENGTHEN SET TIME)

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	TEMPORARY MANHOLE AND CURB RAMPING	RD-07	City of Crystal Lake Illinois
2.		Date: 05/19/2015	
3.		Drawn JH / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

TR-01

NOTES:

1. ALL SIGNS AND POSTS ARE TO BE FURNISHED BY THE DEVELOPER. THE DEVELOPER SHALL INSTALL ALL TRAFFIC CONTROL SIGNS, INCLUDING STREET NAME SIGNS, AND PROVIDE THE CITY WITH TWO (2) SPARE PLATES PER STREET NAME PER INTERSECTION.
2. STREET NAME SIGNS
   FOR MOUNTING ON ORNAMENTAL OR DECORATIVE STREET LIGHT POLES:
   - JUMBO WING BRACKETS OR EQUIVALENT SHALL BE USED, WITH EXTENSIONS IF NEEDED, FOR FLAT ALUMINUM SIGN BLANKS, TO ACCOMMODATE STREET NAME SIGNS FROM 30" TO 54" IN LENGTH
   - 3/4" x 0.030" STAINLESS STEEL BANDING, BAND-IT-3/4" STAINLESS STEEL "VALUE CLIPS", BAND-IT BRACKET 0004 STAINLESS STEEL 3/4" BAND SEATS, TWO (2) 3/8"x3/4" - 16 SIGN BOLTS, AND STREET NAME PLATES.
   - SINGLE STREET NAME SIGNS INSTALLATION USING THE JUMBO WING BRACKETS SHALL HAVE SIGN WITH BONNET.
3. SIGNS AND POSTS SHALL BE INSTALLED PRIOR TO OCCUPANCY AND SHALL BE INSTALLED ACCORDING TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
   A. SIGN PANELS (4 PER POST) SHALL BE IDOT STANDARD 0.080" ALUMINUM BLANKS, 9" HIGH BY 30", 36", 42", 48" OR 54" IN LENGTH WITH A 1" RADIUS ON ALL CORNERS.
   B. SIGN FACE MATERIAL SHALL BE 3M DG3 REFLECTORIZED SHEETING (ASTM PROPOSED TYPE 11, ILLINOIS TYPE ZZ) WITH WHITE LETTERING ON A GREEN BACKFIELD.
   C. A 1/2" GREEN BORDER SHALL ENCOMPASS THE FRAME OF THE SIGN WITH A 1/2" WHITE BORDER ENCOMPASSING THE MAIN SIGN (MUTCD, 2003 EDITION, SECTION 2A-15, PAGE 2A-8 "SIGN BORDERS").
   D. FONT STYLE IS GEORGIA REGULAR.
   E. MAIN LETTERING SHALL BE 6" HIGH AND ALL ABBREVIATIONS (STREET , AVENUE, ROAD, ETC.) SHALL BE 3" HIGH (MUTCD, 2003 EDITION, SECTION 2D-38, PAGE 2D-17 "STREET NAME SIGN"). LETTERING SHALL UTILIZE BOTH UPPER AND LOWER CASE LETTERS.
   F. THE TOP SIGN SHALL HAVE A BONNET THAT IS 24" LONG x 4" HIGH INCORPORATED WITH THE WORDING "CITY OF CRYSTAL LAKE" USING 2" HIGH LETTERING ARCHED IN THE BONNET AREA.
4. REFER TO DETAIL TR-01 FOR POST SPECIFICATIONS.
5. FOR MOUNTING ON A 2 1/2" X 10' O.D. BLACK POWDERED COATED PIPE:
   A. POSTS SHALL BE 2 1/2" X 10' 0.095" THICK WALL; HEAVY DUTY GALVANIZED PRIME COAT AND A SURFACE COAT OF HIGH GLOSS BLACK POWDER COAT.
   B. HARDWARE SHALL INCLUDE THE EA90 BRACKET FOR SIGN INSTALLATION ON 2 1/2" O.D. PIPE TO ACCOMMODATE TWO (2) 9" AND TWO (2) 12" STREET SIGN BLANKS.
   C. STREET SIGNS INSTALLED ON THE 2 1/2" O.D ROUND POST SHALL BE A FOUR (4) SIGN INSTALLATION. THE PRIMARY STREET SHALL BE THE TOP SIGN AND INCLUDE THE BONNET AND THE SECONDARY STREET SHALL BE LOWER SIGN WITHOUT THE BONNET.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	STREET NAME SIGNS	TR-01	City of Crystal Lake Illinois
2.		Date: 04/15/2008	
3.		Drawn EM / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

TR-02

NOTES:

1. REFER TO DETAIL TR-01 FOR ADDITIONAL NOTES, SPECIFICATIONS AND SIGN DETAILS
2. CONTACT THE CITY OF CRYSTAL LAKE STREETS DIVISION AT 815-459-2005 WITH ANY QUESTIONS.

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	SIGN POST AND BRACKET	TR-02	City of Crystal Lake Illinois
2.		Date: 04/15/2008	
3.		Drawn JH / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

TR-03

SPECIFICATIONS

1. ALL TRAFFIC CONTROL SIGNS AND POSTS SHALL BE INSTALLED PRIOR TO OCCUPANCY AND SHALL BE INSTALLED ACCORDING TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 728 (LATEST EDITION), AND IDOT POLICY ON ESTABLISHING AND POSTING SPEED LIMITS ON THE STATE HIGHWAY SYSTEM, MAY 2002 EDITION (SPEED LIMIT SIGNS SPACING, PAGE 5).
2. POSTS SHALL BE TELESCOPING SIGNS POSTS, 14 GAUGE 1 3/4" x 1 3/4" x 10' (OR 11' OR 12') WITH A 12 GAUGE 2" x 2" x 36" BASE. TELESCOPING SIGN SUPPORTS SHALL CONFORM TO SECTION 729 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).
3. MOUNTING HOLES SHALL BE 7/16" IN DIAMETER +/- 1/64" AND WILL BE SPACED 1" ON CENTER ON ALL SIDES FOR THE ENTIRE LENGTH OF THE POSTS. HOLES SHALL BE ON THE CENTERLINE OF EACH SIDE IN TRUE ALIGNMENT AND OPPOSITE EACH OTHER TO ACCEPT A 5/16" BOLT THROUGH THE POST AT ANY LOCATION. THE POST SHALL HAVE A SMOOTH GALVANIZED FINISH APPLIED EITHER BEFORE OR AFTER FORMING.
4. ALL SIGN PANELS SHALL BE IDOT STANDARD 0.080" ALUMINUM BLANKS WITH 1 1/2" RADIUS ON ALL CORNERS. SIGN FACE MATERIAL SHALL BE 3M DG3 REFLECTORIZED SHEETING (ASTM PROPOSED TYPE 11, ILLINOIS TYPE ZZ).
   - STANDARD STOP SIGN (R1-1), YIELD SIGN (R1-2), AND DO NOT ENTER (R5-1) SHALL BE 30" x 30"
   - STANDARD WARNING SIGNS SHALL BE 30" x 30".
   - NO PARKING SIGNS SHALL BE 12" x 18" (R7-2a)
   - SCHOOL ZONE AND PEDESTRIAN CROSSING SIGNS SHALL BE 30" x 30" WITH SUPPLEMENTAL PLATES 24" x 12"
   - SPEED LIMIT SIGNS SHALL BE 24" x 30" (R2-1)
     SPEED LIMIT SIGNS FOR 30-MPH OR LESS IN URBAN AREAS SHALL BE SPACED 600 FEET TO 1,320 FEET (2-4 BLOCKS). REFER TO IDOT POLICY ON ESTABLISHING AND POSTING SPEED LIMITS ON THE STATE HIGHWAY SYSTEM, MAY 2008 EDITION (SPEED LIMIT SIGNS SPACING, PAGE 5).

Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	TRAFFIC CONTROL SIGN AND POST	TR-03	City of Crystal Lake Illinois
2.		Date: 04/15/2007	
3.		Drawn EM / Checked AW	
4.			

1. ENGINEERING AND BUILDING ENGINEERING DETAILS AND STANDARDS

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

PEARSON,BROWN & ASSOCIATES,INC.
CONSULTING ENGINEERS
1850 W. WINCHESTER ROAD - SUITE 205
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DESIGNED BY: A.K.Z.
DRAWN BY: D.S.H.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 07/08/15

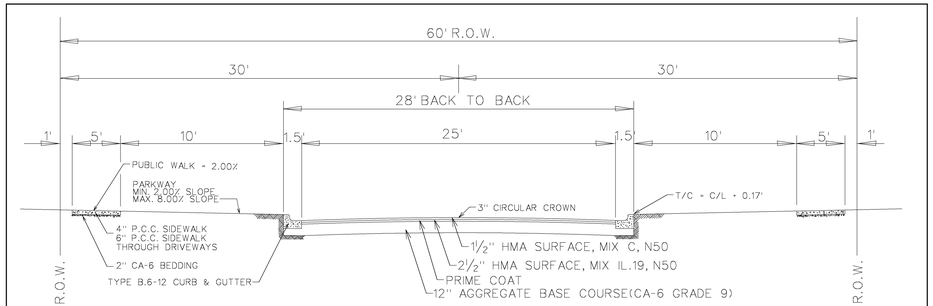
REVISIONS

DATE	BY	DESCRIPTION
08/07/15	AKZ	REVISED PER CITY REVIEW COMMENTS
08/25/15	AKZ	REVISED PER CITY REVIEW COMMENTS

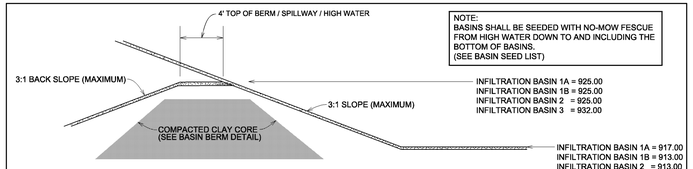
DETAILS

SHEET NUMBER 18 OF 20 SHEETS

JOB No. 1551



60' R.O.W. PAVEMENT DETAIL



NOTE:
BASINS SHALL BE SEEDED WITH NO-MOW FESCUE FROM HIGH WATER DOWN TO AND INCLUDING THE BOTTOM OF BASINS.
(SEE BASIN SEED LIST)

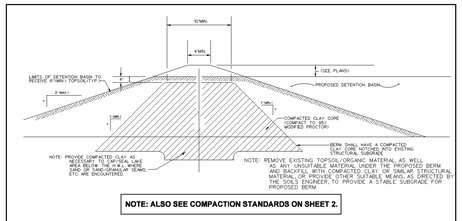
INFILTRATION BASIN DETAIL

NO-MOW FESCUE

PLANT SPECIES:
FESTUCA BREVIPILA / HARD FESCUE
FESTUCA OVINA / SHEEP FESCUE
FESTUCA RUBRA SUBS. FALLAX / CHEWINGS FESCUE
FESTUCA RUBRA / RED FESCUE
FESTUCA RUBRA VAR. RUBRA / CREEPING RED FESCUE

SEEDING RATES:
2 ½POUNDS PER 1,000 SQUARE FEET
100 POUNDS PER ACRE

BASIN SEED LIST



NOTE: ALSO SEE COMPACTION STANDARDS ON SHEET 2.

BASIN BERM DETAIL

NO-MOW FESCUE

PLANT SPECIES:
FESTUCA BREVIPILA / HARD FESCUE
FESTUCA OVINA / SHEEP FESCUE
FESTUCA RUBRA SUBS. FALLAX / CHEWINGS FESCUE
FESTUCA RUBRA / RED FESCUE
FESTUCA RUBRA VAR. RUBRA / CREEPING RED FESCUE

SEEDING RATES:
2 ½POUNDS PER 1,000 SQUARE FEET
100 POUNDS PER ACRE

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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DESIGNED BY: A.K.Z.
DRAWN BY: D.S.H.
CHECKED BY: J.F.C.
ORIGINAL ISSUE: 07/08/15

DESCRIPTION	DATE	BY
REVISED PER CITY REVIEW COMMENTS	08/07/15	AKZ
REVISED PER CITY REVIEW COMMENTS	08/25/15	AKZ

REVISIONS

DETAILS

SHEET NUMBER
19
OF 20 SHEETS

JOB No. 1551

NORTH

SCALE: 1" = 60'

OAK HOLLOW

CRYSTAL LAKE, ILLINOIS

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REVISIONS

DATE	BY	DESCRIPTION
08/07/15	AKZ	REVISED PER CITY REVIEW COMMENTS
08/25/15	AKZ	REVISED PER CITY REVIEW COMMENTS

EXISTING CONDITIONS

SHEET NUMBER
20
OF 20 SHEETS

JOB No. 1551

PEAK STORED VOLUME = 0.59 AC-FT ELEV. 916.77 — G

PEAK STORED VOLUME = 0.66 AC-FT ELEV. 923.41 — C

PEAK STORED VOLUME = 0.68 AC-FT ELEV. 933.80 — D

PEAK STORED VOLUME = 0.68 AC-FT ELEV. 928.08 — B

PEAK STORED VOLUME = 0.72 AC-FT ELEV. 922.35 — A

PEAK STORED VOLUME = 0.88 AC-FT ELEV. 927.55 — E

PEAK STORED VOLUME = 0.30 AC-FT ELEV. 922.61 — F

JOHN STREET

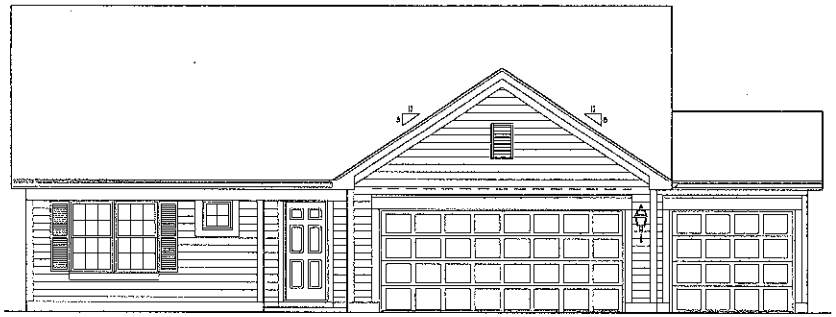
KENT AVENUE

Oak Hollow Road

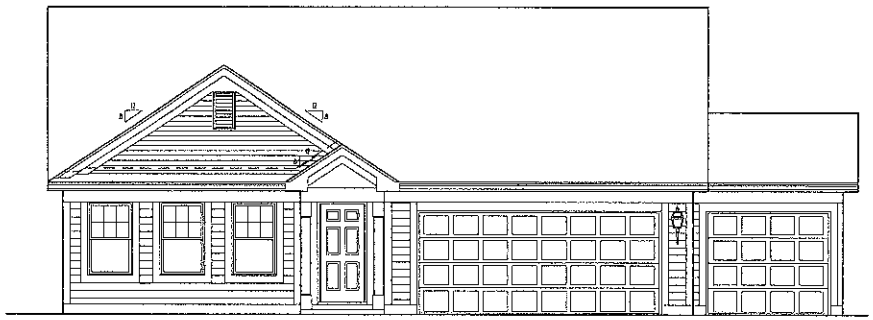
Union Pacific Railroad (formerly Chicago and Northwestern Railroad)

CRYSTAL HEIGHTS SUBDIVISION

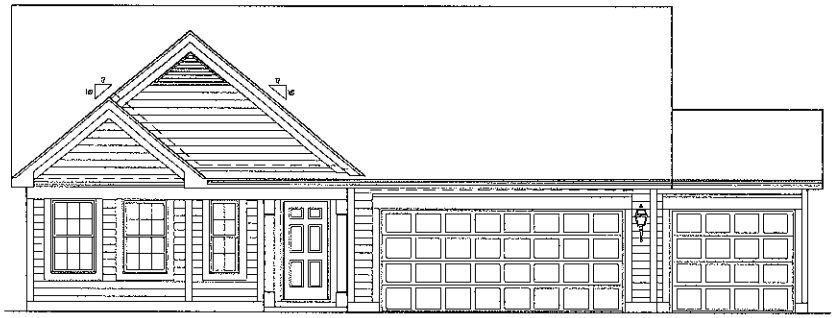
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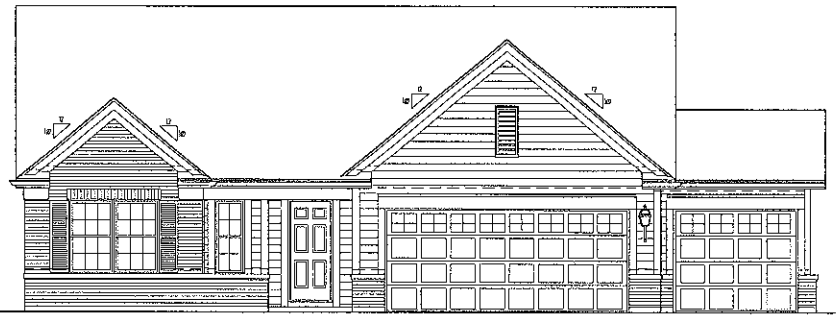
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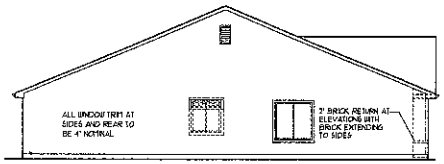


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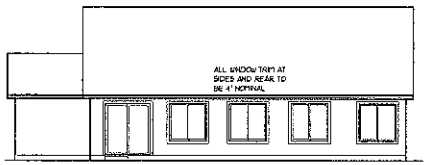


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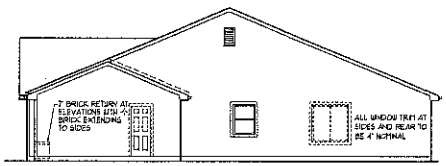
1805



TYPICAL LEFT ELEVATION



TYPICAL REAR ELEVATION



TYPICAL RIGHT ELEVATION

HORIZON SERIES

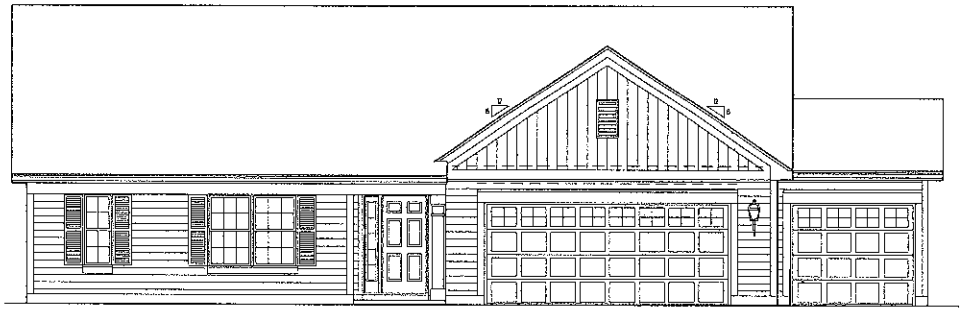
Crystal Lake, IL

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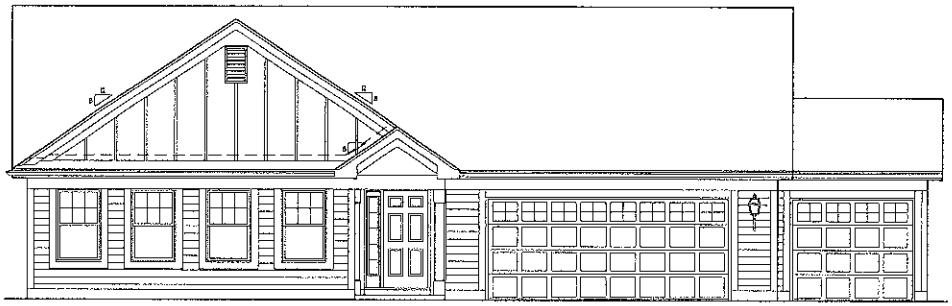
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06-04-15

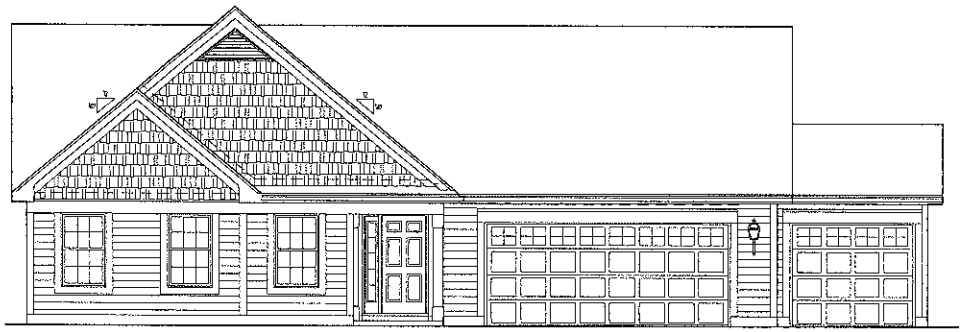
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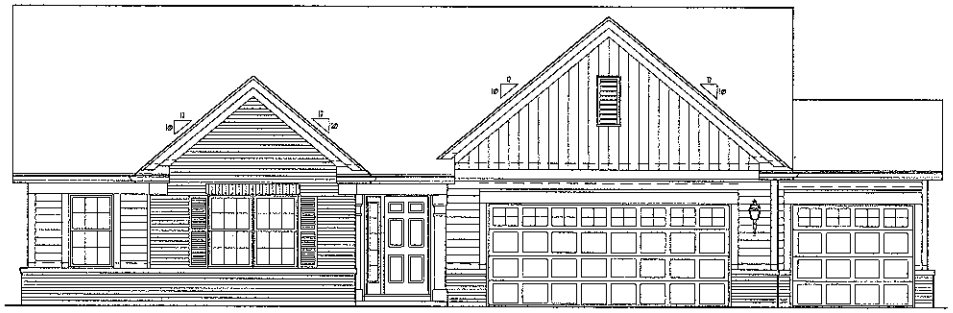
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ELEVATION "B"

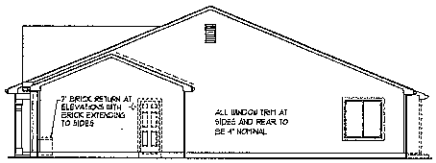


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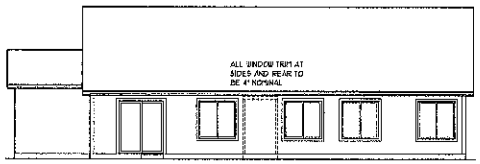


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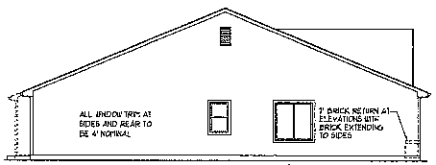
2045



TYPICAL RIGHT ELEVATION



TYPICAL REAR ELEVATION



TYPICAL LEFT ELEVATION

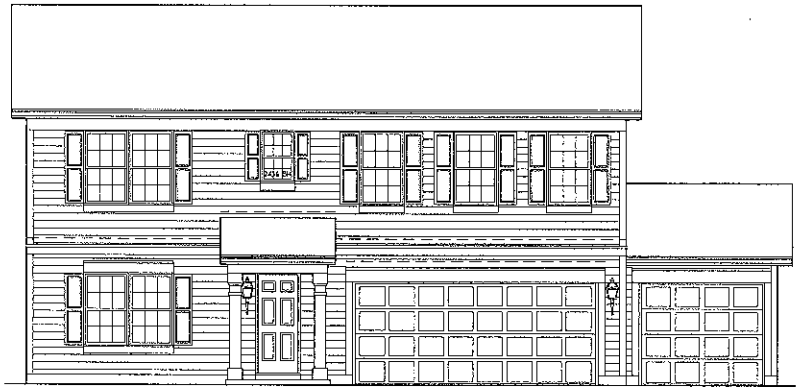
HORIZON SERIES

Crystal Lake, IL

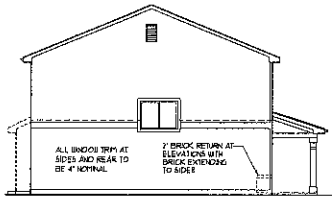
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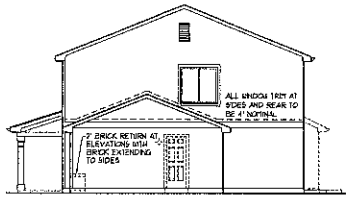
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ELEVATION "A"



TYPICAL LEFT ELEVATION



TYPICAL RIGHT ELEVATION

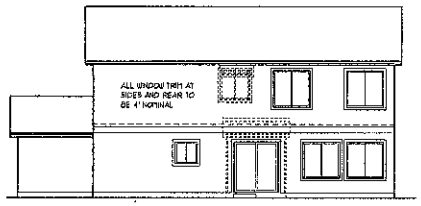


ELEVATION "B"



ELEVATION "C"

2117



TYPICAL REAR ELEVATION



ELEVATION "D"

HORIZON SERIES

Crystal Lake, IL

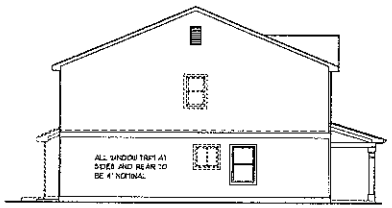
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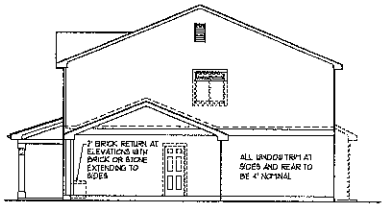
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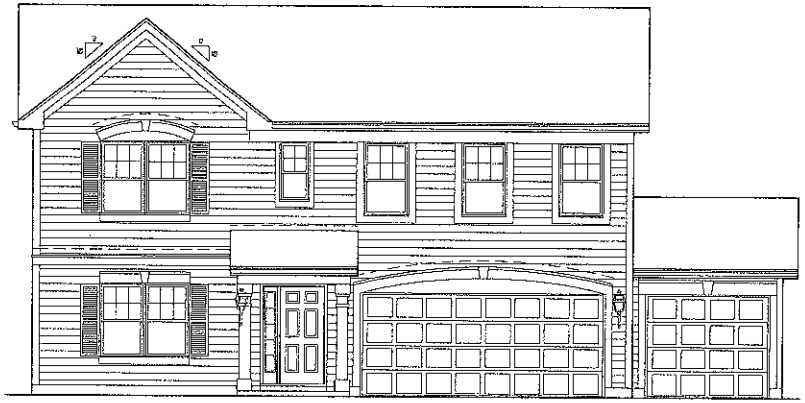
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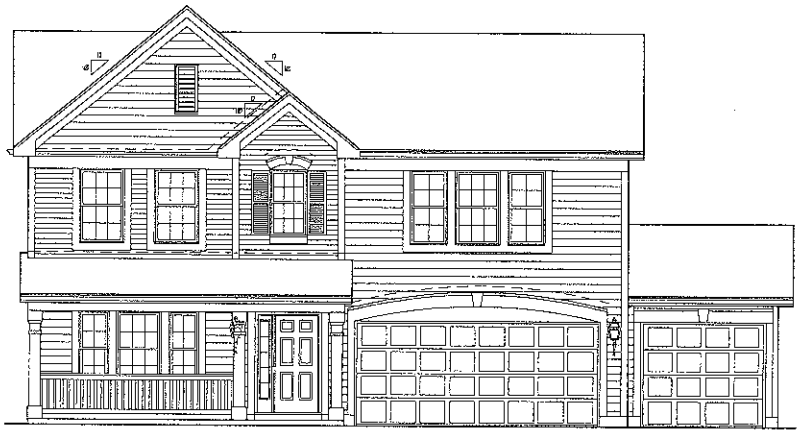
TYPICAL LEFT ELEVATION



TYPICAL RIGHT ELEVATION

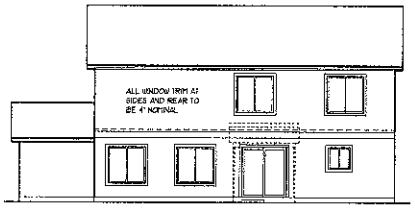


ELEVATION "B"



ELEVATION "C"

2428



TYPICAL REAR ELEVATION



ELEVATION "D"

HORIZON SERIES

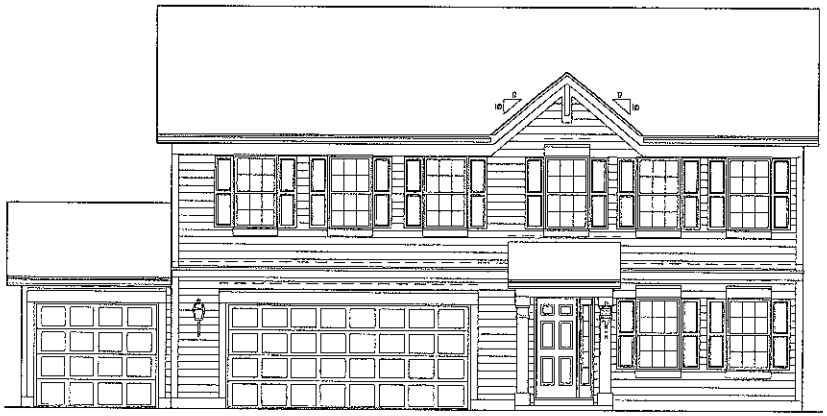
Crystal Lake, IL

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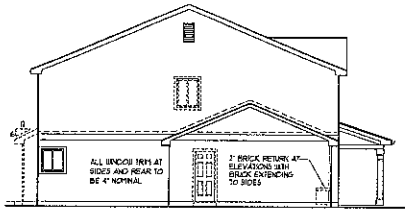
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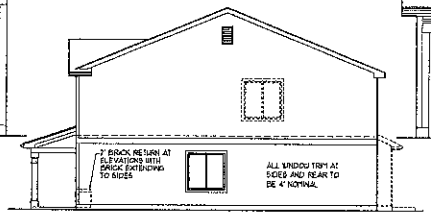
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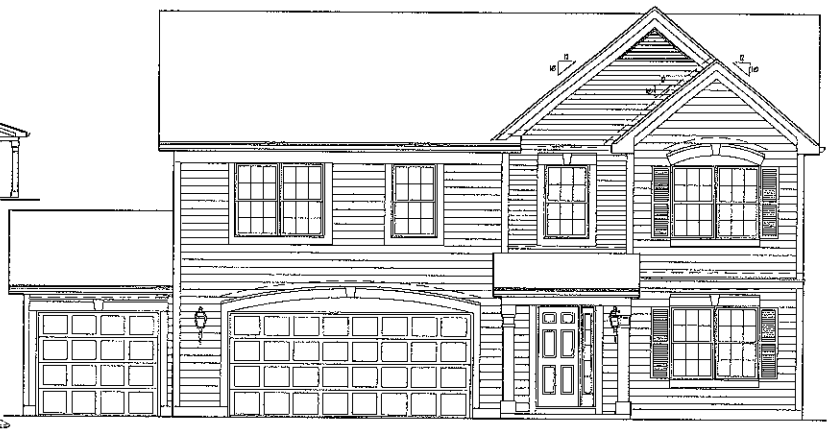
ELEVATION "A"



TYPICAL LEFT ELEVATION



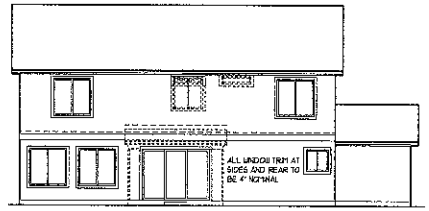
TYPICAL RIGHT ELEVATION



ELEVATION "B"



ELEVATION "C"



TYPICAL REAR ELEVATION



ELEVATION "D"

2799

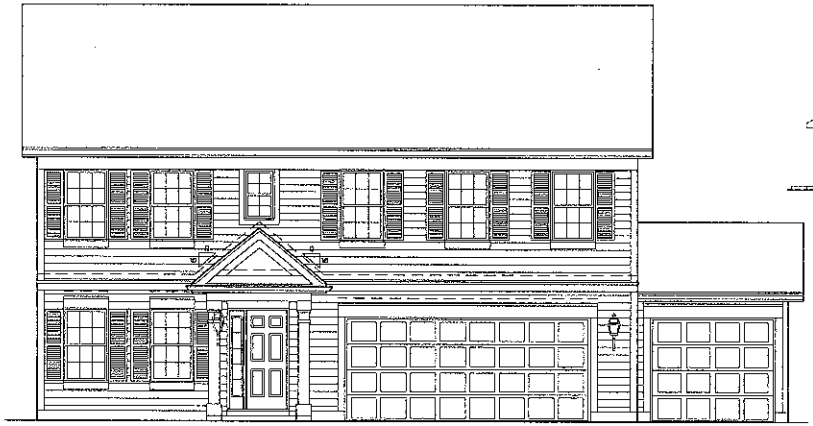
HORIZON SERIES

Crystal Lake, IL

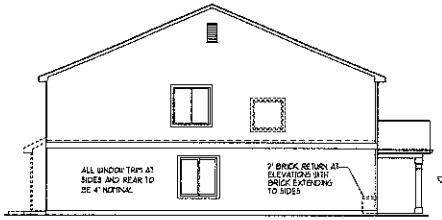
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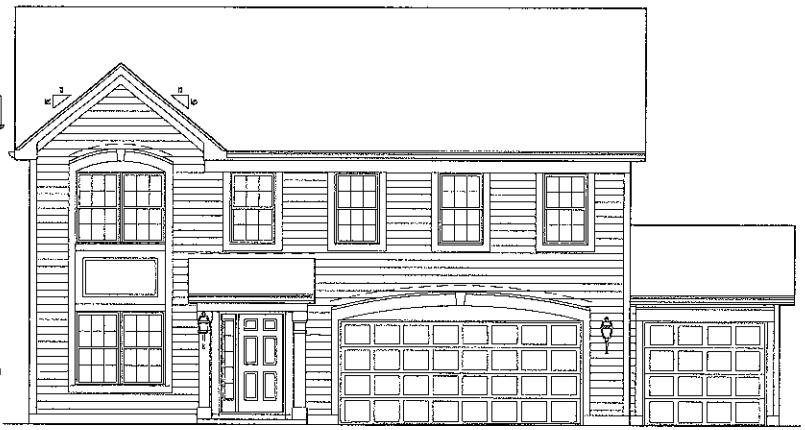
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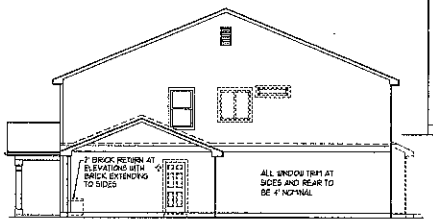
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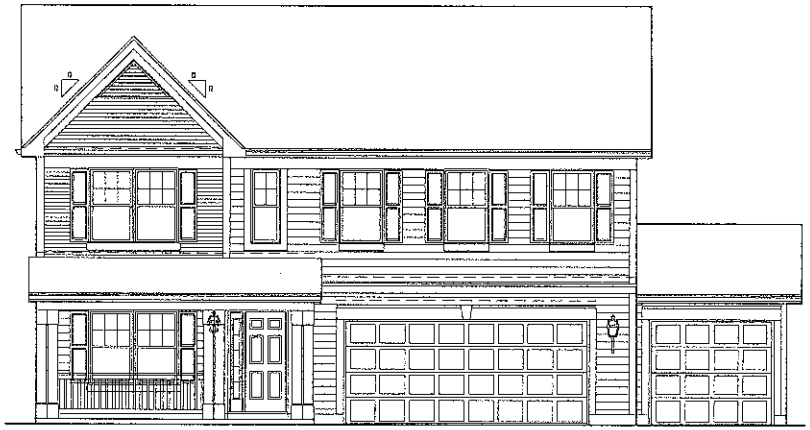
TYPICAL LEFT ELEVATION



ELEVATION "B"

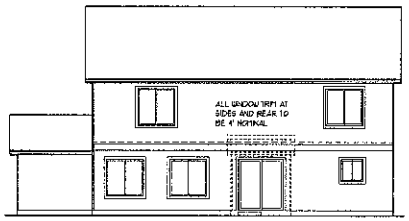


TYPICAL RIGHT ELEVATION



ELEVATION "C"

3018



TYPICAL REAR ELEVATION



ELEVATION "D"

HORIZON SERIES

Crystal Lake, IL

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INFILTRATION BASIN PLANT LIST & PLANTING / CARE NOTES

NO MOW FESCUE

PLANT SPECIES:

- *FESTUCA BREVIPILA* / HARD FESCUE
- *FESTUCA OVINA* / SHEEP FESCUE
- *FESTUCA RUBRA SUBS. FALLAX* / CHEWINGS FESCUE
- *FESTUCA RUBRA* / RED FESCUE
- *FESTUCA RUBRA VAR. RUBRA* / CREEPING RED FESCUE

SEEDING RATES:

2 1/2 POUNDS PER 1,000 SQUARE FEET / 100 POUNDS PER ACRE

Site Preparation

Prior to seeding, all the existing vegetation must be completely eliminated. If renovating or converting an existing lawn, the grasses and weeds on the site must be killed or removed before planting. This can be accomplished by a variety of methods:

- Spraying with a glyphosate herbicide (such as "Roundup")
- Smothering with black plastic, newspapers, cardboard, old cardboard, etc
- Repeated cultivation over a multi-month period (not recommended for erodible sites)
- Removing the turf with a sod cutter (this method will not kill top-rooted weeds) Areas such as abandoned fields that occupied by perennial weeds will require one to two years of site preparation in order to completely kill the existing weeds and reduce the weed seeds that are harvested in the soil. The most effective method to accomplish this is repeated applications of glyphosate herbicide every six to eight weeks during the growing season (three to four time per year). This will eventually kill the existing vegetation, as well as many of the weed seeds in the soil after they germinate.

An alternative to herbicides is smothering the soil or repeatedly tilling the soil for one to two years. However these two methods do not reduce the weed seed populations in the soil. Cutting the sod and removing it is not recommended for abandoned fields , since this does not remove deep-rooted or rhizomatous perennial weeds. They will likely re-sprout and re-infest the newly seeded No Mow planting.

For more information on site preparation and other planting information, please refer to our publication entitled No Mow Seeding Instructions.

Seeding Dates

The optimal window for seeding No Mow is between August 20 and September 30. Cool season grasses germinate well during the cooler weather of late summer and early fall, while most weeds germinate in spring and early summer. By the following spring the fescue grasses are in control, and leave little room for the germination of weed seeds in the soil. Cool season lawns that are seeded in fall experiences markedly less weed competition than spring seedings, mature faster, and should form a sod by the end of the following spring.

No Mow can also be seeded in early to mid-spring, between March 15 and May 15, but these seedings will experience greater weed competition and usually require more watering as the temperatures rise going into summer. Development of the turf is slower than with fall seedings due to increased competition from weeds and slower growth during the heat of summer.

Seeding Methods

No Mow can be seeded by various equipment, including:

- Hand seeding (for small areas only)
- Push-type grass and fertilizer spreader
- Over the shoulder hand-cranked whirlybird type seeder
- Turf slit-seeder
- Tractor-mounted broadcast seeder, such as a "Brillion" seeder
- Tractor-mounted slit seeder
- Hydro-seeder

When seeding by hand, with a push type spreader, or whirlybird seeder, the seed should be raked into the soil lightly and then rolled with a roller to ensure firm seed to soil contact. Covering with clean, weed-free straw (such as winter wheat, oat, or rye straw) will help retain soil moisture and improve germination. Erodible slopes should be covered with a light straw or excelsior erosion blanket and staked into the ground to hold it in place.

No Till Seeding Tip for Fall Plantings

No Mow can be seeded in the fall without tilling the soil, provided that the seedbed is smooth and level. The No Mow seed can be spread using hand equipment or mechanical seeder directly into dead sod in the fall that has been completely killed using glyphosate herbicides.

The seeded area must be kept watered regularly, usually every morning for about 15 to 20 minutes. Regular watering is required to maintain soil moisture at the soil surface where the seed is germinating.

The area should green up in about two weeks as the fescue seedlings begin to appear, at which point watering can be reduced to once every three days (provided cool fall weather prevails and the soil does not dry out rapidly). This simple method typically yields an excellent stand of No Mow turf with a minimum of work. It is particularly well suited to seeding on slopes where soil tillage can lead to erosion. If seeding into a thick, dead sod on a slope, there is no need to apply an erosion blanket, since the roots of the dead plants will hold the soil in place while the new No Mow seedlings develop and stabilize the soil.

Watering

Newly seeded No Mow plantings that have been mulched with straw or protected with an erosion blanket should be watered every two to three days for two weeks to encourage germination. Plantings that are not covered with straw mulch or an erosion blanket should be watered every one to two days (or whenever the soil dries out). Fescue grasses generally germinate in ten days under good growing conditions, and new plantings usually "green up" in about two weeks as the new seedlings become visible. Once the seedlings are evident, watering can reduced to twice a week, unless the weather is hot and dry and necessitates more frequent watering. Once the new grass seedlings are one half inch to one inch tall, watering can be discontinued, except under hot dry conditions.

An established No Mow lawn requires no additional watering, except during extended dry periods in summer. Occasional, deep watering once a week or so provides moisture to the lower roots, and is far superior to frequent, shallow watering. Water before the grass begins to turn brown. Once it turns brown it has entered dormancy, and all the water in the world will not green it up. Non-irrigated No Mow lawns that turn brown during summer drought will typically green up when cool, moist weather returns in late summer and early fall.

Fertilization

Fertilization is generally not needed to support growth of a healthy No Mow turf, except in extreme cases where soil nutrition is notably lacking. Phosphorous (P) and Potassium (K) may be in short supply in certain soils, and can be added using slow release fertilizers that contain little or no Nitrogen. On extremely poor soils, such as sand dunes and gravel pits, the addition of a balanced, slow-release fertilizer that contain equal parts Nitrogen (N), Phosphorous (P) and Potassium (K) is recommended to assist during establishment. If further follow-up fertilizer applications are necessary, they should be done in early spring just as new grass growth is beginning, or in early September as fall growth is initiated. Nitrogen fertilizer should not be applied in summer, as cool season grasses typically enter a dormant period and do not take up nutrients efficiently. Application of excessive nitrogen at any time of year can actually damage fine fescue turf, and is strongly discouraged.

Mowing

No Mow lawns may require occasional mowing during the first two years of establishment to control weeds, especially with lawns that are seeded in spring. Most annual weeds can be controlled by mowing at a height of four inches in the first growing season. If biennial weeds such as sweet clover, Queen Anne's Lace, burdock, etc. are a problem in the second year, they should be mowed at four inches just as they begin to flower, usually around mid-June. This carefully timed mowing will kill most biennials. A few may survive the mowing, and should be mowed at four inches a second time when they re-bloom later in the season.

Once the No Mow lawn is established, there are four basic mowing options:

No Mowing: This will result in a turf whose leaves grow to about six inches in height that will drape over one another to create a low-growing meadow effect. Seedhead about two feet tall will appear in early to mid June, creating a nice meadow effect. The seed falls will typically fall to the ground by late summer, and the lawn will revert to its normal height of about five to six inches.

Late Spring Mowing: Many people mow their No Mow lawn once a year in June when the seedheads appear. Mowing at four to five inches in height removes the seedheads and the turf will re-grow to its typical six inch height.

Fall Mowing: This is a good option for seedings under trees or in open woodlands. The fescue grasses usually will not form seedheads when grown in the shade, so June mowing is not required to maintain a six inch height. However, leaves from deciduous trees must either be raked up and removed, or chopped up with a mulching mower in order to prevent smothering of the turf over winter. To encourage denser turf growth, No Mow lawns should be mowed to a height of one to two inches in late fall, usually around Thanksgiving. This removes dense leaf growth to expose the soil, thus encouraging higher stem density and a thicker turf the next year.

Regular Mowing: For those who prefer a more manicured, traditional lawn look, regular mowing can be done every three to four weeks, or when the grass reaches a height of five to six inches. Most fine fescues do not tolerate close mowing, and should be mowed no lower than 3.5 inches. Never remove more than one third of the total leaf material when mowing, or the turf will be damaged. Always cut grass with a sharp mower blade to minimize tearing of the leaves, which causes additional stress to the grass plants.

De-Thatching

Fine fescues tend to develop a thatch layer near the soil surface over time. Thatch is composed of dead grass that does not completely decompose. It can smother the growth of new grass shoots, reducing the density of the lawn and creating "dead" spots. The thatch layer also tends to retain moisture at the ground level, which can encourage the growth of fungal diseases. Thatch development is encouraged by high levels of soil Nitrogen, and is more common in rich soils and lawns that are regularly fertilized. If thatch builds up to the point where dead grass is visible and the grass begins to thin out, the lawn should be de-thatched.

De-thatching can be accomplished using a mechanical de-thatcher or power rake, or by hand using a de-thatching rake. Set mechanical de-thatchers to a depth where they lift the thatch without digging up the soil. If the thatch is particularly thick, the de-thatcher will need to be set deeper, and some soil disturbance will likely occur. The thatch should be raked out of the lawn and removed. It makes excellent mulch for gardens, flower beds, etc). If open soil is visible following de-thatching, the affected areas should then be over-seeded with No Mow lawn mix.

Timing of de-thatching is very important. Cool season fescue lawns should be de-thatched in mid-spring after the grass has greened up and begun active growth. De-thatching in early spring before the lawn begins to grow tends to encourage weeds.

Aerating

Aerating, or "core aerating" encourages the flow of air and water down to the roots of turf grasses in heavy soils, such as silt loams, clay loams, and silty clay loams. Wolf-eye Jr. not recommend planting No Mow on heavy soils, it can be successfully established in these conditions in shady locations, where heat and moisture stress are reduced by the shade of trees. The soil under a lawn that receives moderate to heavy foot traffic tends to become compacted over time, and aeration every few years can help mitigate that

GENERAL LANDSCAPE NOTES

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE STANDARDS AND CODES.
2. CALL J.U.L.I.E. UTILITY LOCATING SERVICE (TEL 800.892.0123), 48 HOURS PRIOR TO THE START OF ANY DIGGING.
3. GENERAL PLANT NOTES:
   A. ALL PLANT MATERIAL SHALL CONFORM IN SIZE AND GRADE IN ACCORDANCE WITH AMERICAN STANDARD FOR NURSERY STOCK.
   B. ALL PLANT MATERIAL SHALL BE MAINTAINED ALIVE, HEALTHY, AND FREE FROM DISEASE AND PESTS.
   C. ALL NEW PLANT MATERIAL SHALL BE FROM A LOCAL SOURCE WHENEVER POSSIBLE (LESS THAN 50 MILES).
   D. PLANTS SHALL BE ALLOWED TO GROW IN THEIR NATURAL FORM / HABIT. PLANTS SHALL NOT BE PRUNED/HEDGED UNLESS ABSOLUTELY NECESSARY (DUE TO VISIBILITY OR HAZARD OBSTRUCTION).
   E. ALL LANDSCAPED AREAS SHALL BE FREE OF WEEDS, LITTER, AND SIMILAR SIGNS OF DEFERRED MAINTENANCE.
   F. MAINTENANCE AND CARE OF PLANT MATERIAL SHALL INCLUDE, BUT NOT BE LIMITED TO, WATERING, FERTILIZING (IF NECESSARY), DEAD-HEADING, WEEDING, AND MULCHING.
4. LOCATIONS OF PROPOSED PLANT MATERIAL MAY BE ADJUSTED AT TIME OF INSTALLATION DUE TO FINAL ENGINEERING AND FINAL LOCATION OF SITE UTILITIES. **PER CITY, PLANT MATERIAL SHALL BE LOCATED 8 FEET FROM FIRE HYDRANTS, 25 FEET FROM LIGHT POLES, 6 FEET FROM DRIVEWAYS, 5 FEET FROM MANHOLES OR B-BOXES, & 15 FEET FROM STOP SIGNS.**
5. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND SPREADING TOPSOIL (6"-12" DEEP), FINE GRADING, AND PREPARATION OF ALL LAWN AND LANDSCAPE AREAS. ALL SOILS SHALL BE FREE OF CONSTRUCTION DEBRIS, PRIOR TO INSTALLING ANY PLANT MATERIAL.
6. PRIOR TO SPREADING TOPSOIL, THE LANDSCAPE CONTRACTOR SHALL INSPECT AND ACCEPT ALL BASE GRADES. ANY DEVIATION FROM GRADES INDICATED ON THE GRADING PLAN SHALL BE CORRECTED BEFORE PLACING ANY TOPSOIL.
7. ALL SHRUB, GROUNDCOVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE PREPARED WITH A SOIL AMENDMENT MIX - 1/3 TOPSOIL, 1/3 MUSHROOM COMPOST, AND 1/3 TORPEDO SAND. MATERIAL SHALL BE ROTO-TILLED JUST PRIOR TO THE INSTALLATION OF PLANT MATERIAL.
8. ALL PLANTING ISLANDS SHALL BE MOUNDED TO A CENTER HEIGHT OF TWELVE INCHES (12").
9. ALL PLANTING BEDS ADJACENT TO LAWN AREAS SHALL HAVE A SPADED EDGE BORDER, UNLESS METAL OR OTHER BORDER IS SPECIFIED.
10. ALL PLANTING BED AREAS SHALL MAINTAIN A MAX. 3" DEEP LAYER OF SHREDDED HARDWOOD MULCH (COLOR: NON-DYED, BROWN).
11. LANDSCAPE CONTRACTOR SHALL COORDINATE PLANTING SCHEDULE WITH LANDSCAPE MAINTENANCE CONTRACTOR, TO ENSURE PROPER WATERING OF PLANTED AND SODDED AREAS AFTER INITIAL INSTALLATION.
12. LANDSCAPE CONTRACTOR SHALL COORDINATE WORK WITH OTHER CONTRACTORS ON SITE TO MINIMIZE ANY REDO OF COMPLETED LANDSCAPE WORK AND DAMAGE TO PLANT MATERIAL.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN LAYOUT WORK. UPON REQUEST, LANDSCAPE ARCHITECT SHALL BE AVAILABLE TO ASSIST/APPROVE CONTRACTOR LAYOUT.
14. EVERY ATTEMPT HAS BEEN MADE TO DEPICT ALL EXISTING UTILITY LINES. CONTRACTOR SHALL USE PRECAUTION WHEN DIGGING. CONTRACTOR SHALL MAKE THEMSELVES THOROUGHLY FAMILIAR WITH ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY DIGGING, VERIFYING LOCATIONS AND DEPTHS OF ALL UTILITIES.
15. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BID SUBMITTAL, TO BECOME FAMILIAR WITH EXISTING CONDITIONS AT THE SITE.
16. PLANT LIST QUANTITIES PROVIDED AT TIME OF FINAL PLANS ARE APPROXIMATIONS. CONTRACTORS ARE RESPONSIBLE FOR COMPLETING THEIR OWN QUANTITY TAKE-OFFS. IF A DISCREPANCY IS FOUND BETWEEN THE PLAN AND THE PLANT LIST, THEN THE PLAN SHALL PREVAIL.
17. PLANT SUBSTITUTIONS ARE ALLOWED DUE TO PLANT AVAILABILITY OR PLANTING TIME OF YEAR, ONLY WITH THE PRIOR CONSENT OF THE LANDSCAPE ARCHITECT. IF SUBSTITUTIONS ARE MADE WITHOUT PRIOR CONSENT, THE LANDSCAPE ARCHITECT MAINTAINS THE RIGHT TO REJECT MATERIAL IN THE FIELD, AT THE COST TO THE CONTRACTOR.
18. CONTRACTOR TO PROVIDE TEST OF EXISTING AND IMPORTED SOILS PER SPECIFICATIONS. PLANTING SOIL SHALL BE AMENDED PER SPECIFICATIONS.
19. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AREAS OF POOR DRAINAGE OR OTHER UNUSUAL SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING EXCAVATION FOR PLANTING PITS.
20. ALL TURF SHALL SHALL BE KENTUCKY BLUEGRASS BLEND SOD (MINERAL, NOT PEAT), UNLESS OTHERWISE NOTED ON THE PLAN.
21. CONTRACTOR SHALL RESTORE LAWN AREAS THAT HAVE REMAINED PARTIALLY INTACT, TOP DRESSING WITH SOIL, SCARIFYING, AND SEEDING TO FORM A SMOOTH, FULL, EVEN LAWN, FREE OF BARE SPOTS, INDENTATIONS, AND WEEDS.
22. LANDSCAPE DETAILS SHOWN ARE FOR DESIGN INTENT ONLY. LANDSCAPE ARCHITECT ASSUMES NO LIABILITY. CONTRACTOR IS RESPONSIBLE FOR ERECTING AND INSTALLING PROPERLY BUILT AMENITIES PER CODE, PER SITE CONDITIONS (FINAL GRADING & UTILITY LOCATIONS), AND PER AREA CLIMATE CONDITIONS. ALL LANDSCAPE SITE DETAILS FOR STRUCTURES AND FOOTINGS SHALL BE REVIEWED & APPROVED BY A STRUCTURAL ENGINEER.
23. CONTRACTOR INSTALLATION BIDS SHALL INCLUDE A ONE-YEAR WARRANTY ON ALL PLANT MATERIAL.
24. (IF APPLICABLE) CONTRACTOR INSTALLATION BIDS SHALL INCLUDE A THREE-YEAR MONITORING AND MAINTENANCE PROGRAM ON ALL NATURALIZED DETENTION AREAS.

PROJECT TEAM

DEVELOPER:
D.R. HORTON / CAMBRIDGE HOMES
800 SOUTH MILWAUKEE AVENUE, SUITE 250
LIBERTYVILLE, IL

CONTACT: JIM TRUESDELL / KEITH BLAIS

SURVEYOR:
R.E. ALLEN AND ASSOCIATES, LTD.
1015 NORTH CORPORATE CIRCLE, SUITE C
GRAYSLAKE, IL 60030
(TEL) 847 223-0914

CONTACT: BRYAN J. LEE

ARBORIST:
URBAN FOREST MANAGEMENT

960 IL ROUTE 22, SUITE 207
FOX RIVER GROVE, IL 60021
TEL (847) 516-9708

CONTACT: TODD SINN

CIVIL ENGINEER:
PEARSON BROWN & ASSOCIATES
1650 W. WINCHESTER ROAD, SUITE 205
LIBERTYVILLE, IL 60048
TEL (847) 367-6707

CONTACT: RON ADAMS

LANDSCAPE ARCHITECT:
DICKSON DESIGN STUDIO, INC.
526 SKYLINE DRIVE
ALGONQUIN, IL 60102
TEL (847) 878-4019

CONTACT: SHARON DICKSON

SHEET KEY

L0.1 INFILTRATION BASIN PLANT LIST & PLANTING / CARE NOTES
GENERAL LANDSCAPE NOTES
PROJECT TEAM
L0.2 PLANT & MATERIALS LIST
PLANT SYMBOLS KEY
PLANT COUNT CALCULATIONS
PLANTING DETAILS
L1.0 OVERALL LAND DEVELOPMENT LANDSCAPE PLAN
SITE CONTEXT MAP
L1.1 LAND DEVELOPMENT LANDSCAPE PLAN
L1.2 LAND DEVELOPMENT LANDSCAPE PLAN
L1.3 LAND DEVELOPMENT LANDSCAPE PLAN (A & B)
L1.4 NEIGHBORHOOD TOT LOT LANDSCAPE PLAN
L2.0 NEIGHBORHOOD TOT LOT - DETAILS
L2.1 NEIGHBORHOOD TOT LOT - DETAILS

dickson design STUDIO

526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

D.R. HORTON / CAMBRIDGE HOMES
LIBERTYVILLE, IL

PLAN DATE

JULY 1, 2015

REVISIONS

1.	PER CITY COMMENTS 8/7/15
2.	
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PROJECT NAME AND SHEET TITLE

OAK HOLLOW
CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L0.1

PLANT & MATERIALS LIST

CODE	QTY	SIZE	BOTANIC NAME	COMMON NAME
PARKWAY TREES				
Shade Trees				
AAB	11	2.5"	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple
ACK	8	2.5"	Acer platanoides 'Crimson King'	Crimson King Norway Maple
CC	10	2.5"	Carpinus caroliniana	American Hornbeam
GTI	8	2.5"	Gleditsia triacanthos var. inermis	Thornless Common Honeylocust
LS	11	2.5"	Liquidambar styraciflua	Sweetgum
LT	7	2.5"	Liriodendron tulipifera	Tulip Tree
MG	5	2.5"	Metasequoia glyptostroboides	Dawn Redwood
OV	6	2.5"	Ostrya virginiana	Hophornbeam
PMC	9	2.5"	Platanus acerifolia 'Morton Circle'	Exclamation London Planetree
QB	7	2.5"	Quercus bicolor	Swamp White Oak
TC	7	2.5"	Tilia cordata	Littleleaf Linden
TSS	7	2.5"	Tilia tometosa 'Sterling Silver'	Sterling Silver Linden
UCA	7	2.5"	Ulmus carpinifolia 'Accolade'	Accolade Smoothleaf Elm
Materials				
-	12	C.Y.	-	Shredded Hardwood Mulch

CODE	QTY	SIZE	BOTANIC NAME	COMMON NAME
OPEN SPACE				
Shade Trees				
AS	5	2.5"	Acer saccharum	Sugar Maple
AFAB	1	2.5"	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple
CC	1	2.5"	Carpinus caroliniana	American Hornbeam
GTI	6	2.5"	Gleditsia triacanthos var. inermis	Thornless Common Honeylocust
JN	2	2.5"	Juglans nigra	Black Walnut
LS	1	2.5"	Liquidambar styraciflua	Sweetgum
LT	2	2.5"	Liriodendron tulipifera	Tulip Tree
MG	3	2.5"	Metasequoia glyptostroboides	Dawn Redwood
OV	2	2.5"	Ostrya virginiana	Hophornbeam
PMC	4	2.5"	Platanus acerifolia 'Morton Circle'	Exclamation London Planetree
QB	2	2.5"	Quercus bicolor	Swamp White Oak
TSS	2	2.5"	Tilia tometosa 'Sterling Silver'	Sterling Silver Linden
UCA	1	2.5"	Ulmus carpinifolia 'Accolade'	Accolade Smoothleaf Elm
Columnar Shade Trees				
LSS	1	2.5" caliper	Liquidambar styraciflua 'Slender Silhouette'	Slender Silhouette American Sweetgum
QRP	2	2.5" caliper	Quercus robur 'Regal Prince'	Regal Prince English Oak
Evergreen Trees				
AC12	4	12'	Abies concolor	White Fir
PA12	11	12'	Picea abies	Norway Spruce
PM10	7	10'	Pseudotsuga menziesii	Douglas Fir
PM8	9	8'	Pseudotsuga menziesii	Douglas Fir
PPG10	12	10'	Picea pungens 'Glauca'	Colorado Blue Spruce
PS9	7	9'	Pinus strobus	White Pine
Ornamental Trees				
AGAB10	3	10'	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
AGAB	15	6'	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry
AG	4	6'	Alnus glutinosa	European/Black Alder
BN10	3	10'	Betula nigra	River Birch
CWK	6	6'	Crataegus viridis 'Winter King'	Winter King Hawthorn
HV	7	6'	Hamamelis vernalis	Vernal Witchhazel
HVC	5	6'	Hamamelis virginiana	Common Witchhazel
MB10	3	10'	Malus x 'Beverly'	Beverly Flowering Crabapple
MRR	1	10'	Malus x 'Royal Raindrops'	Royal Raindrops Crabapple
MS	2	6'	Malus sargentii	Sargent Flowering Crabapple
SRI	6	6'	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac
VP	17	5'	Viburnum prunifolium	Blackhaw Viburnum
Evergreen Shrubs				
JCK	48	3 Gal./24"	Juniperus chinensis 'Kallay'	Kallay Compact Chinese Juniper
Large Deciduous Shrubs				
CSI	24	36"	Cornus sericea 'Isanti Redtwig'	Isanti Redtwig Dogwood
EAC	7	36"	Euonymus alatus 'Compactus'	Dwarf Burning Bush
HAA	28	5 Gal./36"	Hydrangea aborescens 'Annabelle'	Annabelle Hydrangea
HPL	8	5 Gal./36"	Hydrangea paniculata 'Limelight'	Limelight Hydrangea
Ornamental Grasses				
MSA3	33	3 Gal.	Miscanthus sinensis 'Adagio'	Adagio Dwarf Maiden Grass
PHM3	11	3 Gal.	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass
SH	98	1 Gal.	Sporobolus heterolepsis	Prairie Dropseed
Perennials				
NWL	79	1 Gal.	Nepeta faassenii 'Walker's Low'	Walker's Low Catmint
RG	30	1 Gal.	Rudbeckia fulgida 'Goldsturm'	Goldsturm Black-Eyed Susan
Materials				
-	12	C.Y.	-	Soil Amendments
-	36	C.Y.	-	Shredded Hardwood Mulch
-	14,070	S.Y.	-	No-Mow Fescue

CODE	QTY	SIZE	BOTANIC NAME	COMMON NAME
NEIGHBORHOOD TOT LOT				
Shade Trees				
AAB4	2	4"	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple
JN4	2	4"	Juglans nigra	Black Walnut
LT4	1	4"	Liriodendron tulipifera	Tulip Tree
MG4	1	4"	Metasequoia glyptostroboides	Dawn Redwood
PMC	1	2.5"	Platanus acerifolia 'Morton Circle'	Exclamation London Planetree
Evergreen Trees				
PA12	6	12'	Picea abies	Norway Spruce
PM10	1	10'	Pseudotsuga menziesii	Douglas Fir
PM8	2	8'	Pseudotsuga menziesii	Douglas Fir
PPG10	5	10'	Picea pungens 'Glauca'	Colorado Blue Spruce
PS9	2	9'	Pinus strobus	White Pine
Ornamental Trees				
MB10	2	10'	Malus x 'Beverly'	Beverly Flowering Crabapple
MB8	1	8'	Malus x 'Beverly'	Beverly Flowering Crabapple
SR9	1	9'	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac
Materials				
-	1	C.Y.	-	Soil Amendments
-	4	C.Y.	-	Shredded Hardwood Mulch
-	1330	Approx. S.F.	-	Concrete Sidewalk
-	2	EACH	-	Seating Bench
-	2	EACH	-	Litter Receptacle
-	1	EACH	-	Picnic Table, ADA
-	1	EACH	-	Picnic Table, Toddler
-	1	EACH	-	Play Structure, 2-5 year olds
-	1	EACH	-	Swing
-	1	EACH	-	Spring Rider
-	1	EACH	-	Climbing Structure
-	TBD	S.Y.	-	Turf Restoration

PLANT SYMBOLS KEY

NOTE!
NOT ALL PLANT SYMBOLS MAY BE DEPICTED ON PLANS.

EXISTING DECIDUOUS TREE

EXISTING EVERGREEN TREE

EXISTING SHRUBS & PERENNIALS

SHADE / CANOPY TREES, 2.5"+ CALIPER

ORNAMENTAL TREES, 8'-10'+ TALL

EVERGREEN TREES, 6'-10'+ TALL

LARGE, DECIDUOUS SHRUBS, 36"-48" TALL

SMALL, DECIDUOUS SHRUBS, 18"-24" TALL

SMALL, EVERGREEN SHRUBS, 24" TALL/WIDE

LARGE, ORNAMENTAL GRASS, 3 GALLON

SMALL ORNAMENTAL GRASS, 1 GALLON

PERENNIAL FLOWERS & GROUNDCOVER, 1 GALLON

PLANT COUNT CALCULATIONS

NOTES!
ALL EXISTING TREES ONSITE SHALL BE REMOVED.

PER VILLAGE ORDINANCE, PER TREE REPLACEMENT CALCULATIONS (SEE CALCULATIONS CHART ALSO PREPARED BY DICKSON DESIGN STUDIO, INC.), TOTAL REPLACEMENTS REQUIRED:

157 TREES

PRELIMINARY PLAN PROPOSES THE FOLLOWING TREE QUANTITIES (NOT INCLUDING PARKWAY TREES), THESE ARE BEING REQUESTED, TO BE APPLIED TOWARDS FULFILLING THE REQUIRED TREE REPLACEMENTS:

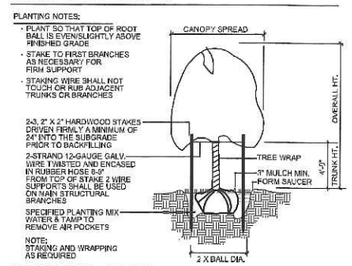
35 CANOPY TREES

72 UNDERSTORY / ORNAMENTAL TREES

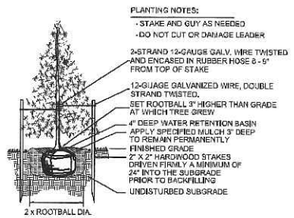
50 EVERGREEN TREES

157 TOTAL PROPOSED TREES

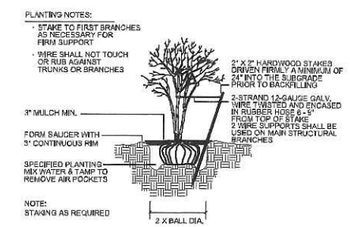
PLANTING DETAILS



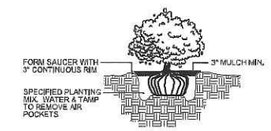
TREE PLANTING & STAKING
NOT TO SCALE



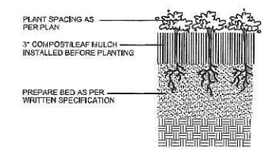
EVERGREEN TREE PLANTING
NOT TO SCALE



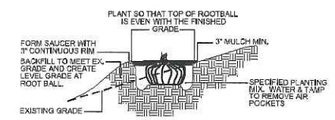
MULTI-TRUNK TREE STAKING
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE



PERENNIAL PLANTING
NOT TO SCALE



HILLSIDE PLANTING
NOT TO SCALE

dickson design STUDIO

526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

D.R. HORTON / CAMBRIDGE HOMES
LIBERTYVILLE, IL

PLAN DATE

JULY 1, 2015

REVISIONS

1.	PER CITY COMMENTS 8/7/15
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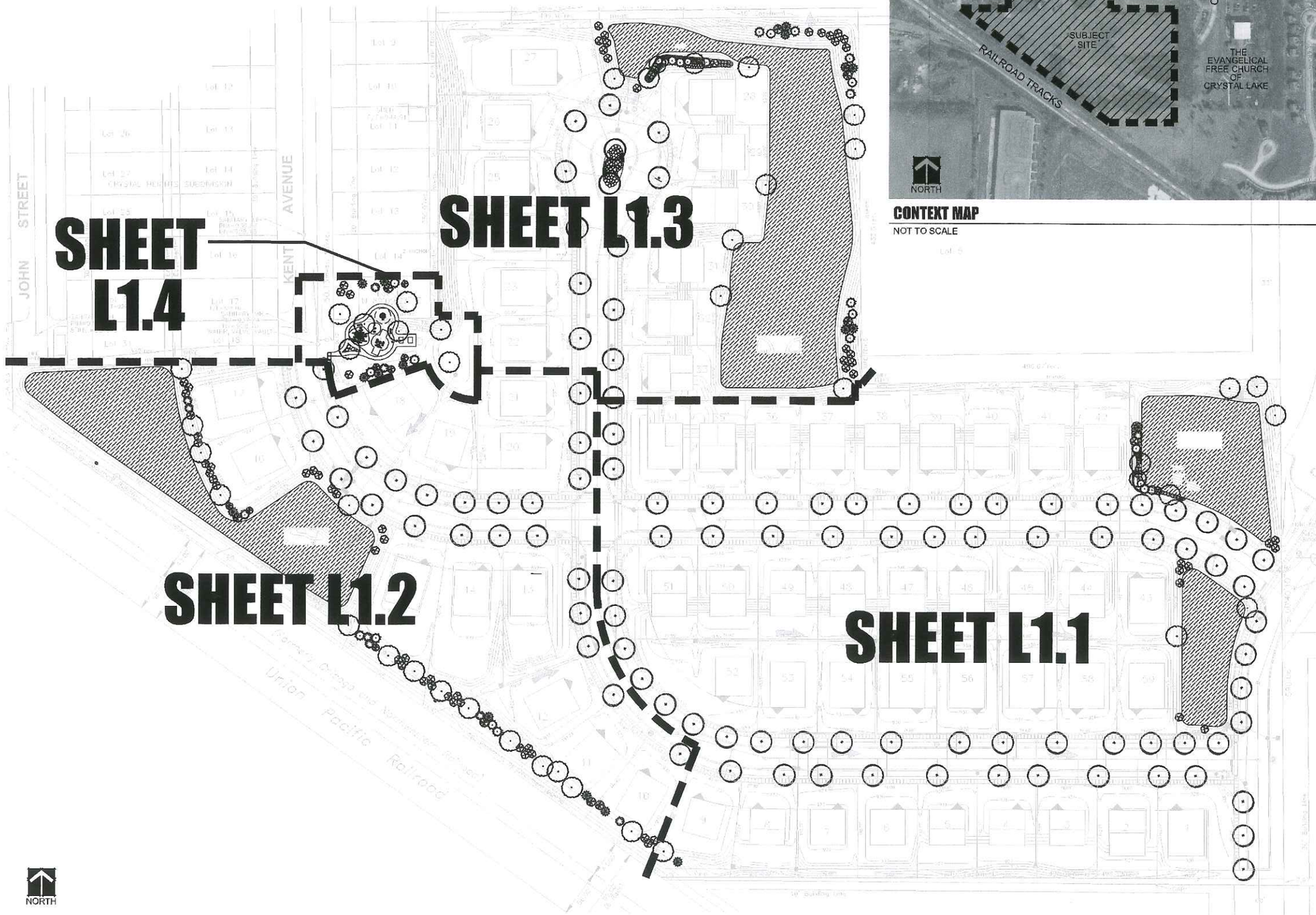
PROJECT NAME AND SHEET TITLE

OAK HOLLOW
CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L0.2



LAND DEVELOPMENT LANDSCAPE PLAN - SHEET KEY

SCALE: 1" = 60'-0"



CONTEXT MAP

NOT TO SCALE

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STUDIO

526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

D.R. HORTON / CAMBRIDGE HOMES

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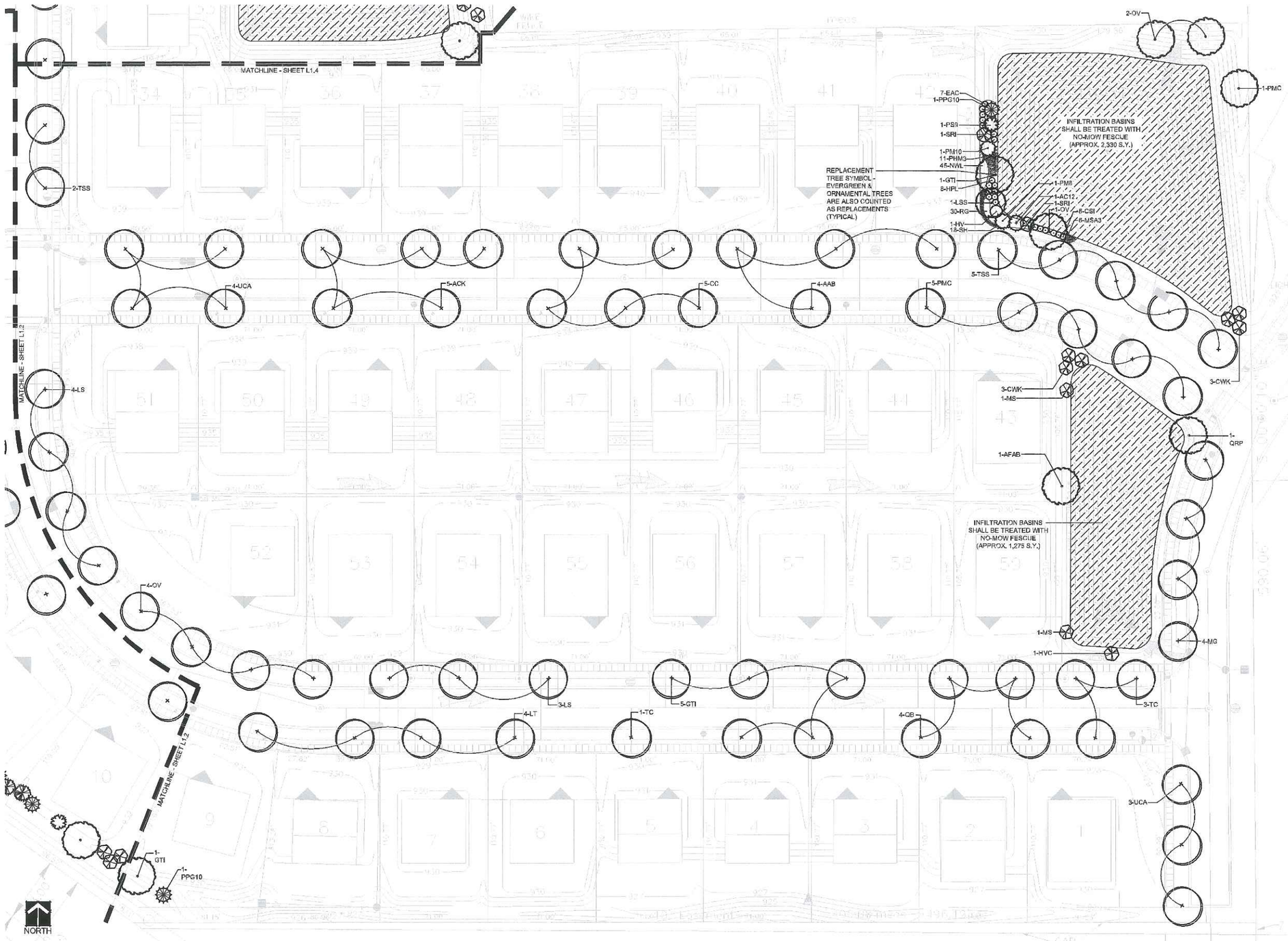
OAK HOLLOW

CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L1.0



LAND DEVELOPMENT LANDSCAPE PLAN

SCALE: 1" = 30'-0"

dickson design
STUDIO

526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

D.R. HORTON / CAMBRIDGE HOMES
LIBERTYVILLE, IL

PLAN DATE

JULY 1, 2015

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PROJECT NAME AND SHEET TITLE

OAK HOLLOW
CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L1.1



NORTH

LAND DEVELOPMENT LANDSCAPE PLAN

SCALE: 1" = 30'-0"

dickson design
STUDIO

526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

D.R. HORTON / CAMBRIDGE HOMES
LIBERTYVILLE, IL

PLAN DATE

JULY 1, 2015

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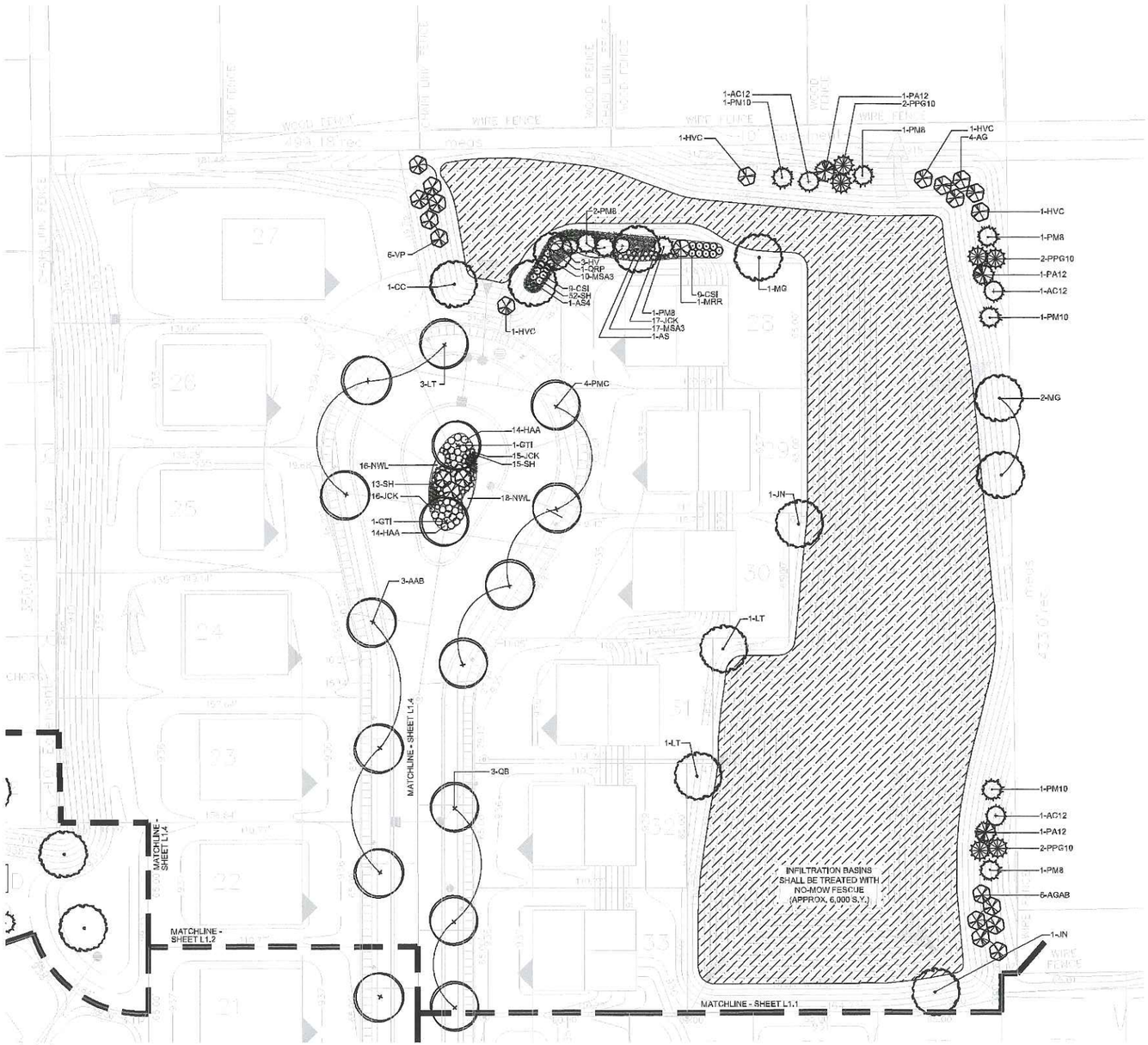
PROJECT NAME AND SHEET TITLE

OAK HOLLOW
CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L1.2



LAND DEVELOPMENT LANDSCAPE PLAN

SCALE: 1" = 30'-0"

dickson design
STUDIO

526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

D.R. HORTON / CAMBRIDGE HOMES
LIBERTYVILLE, IL

PLAN DATE

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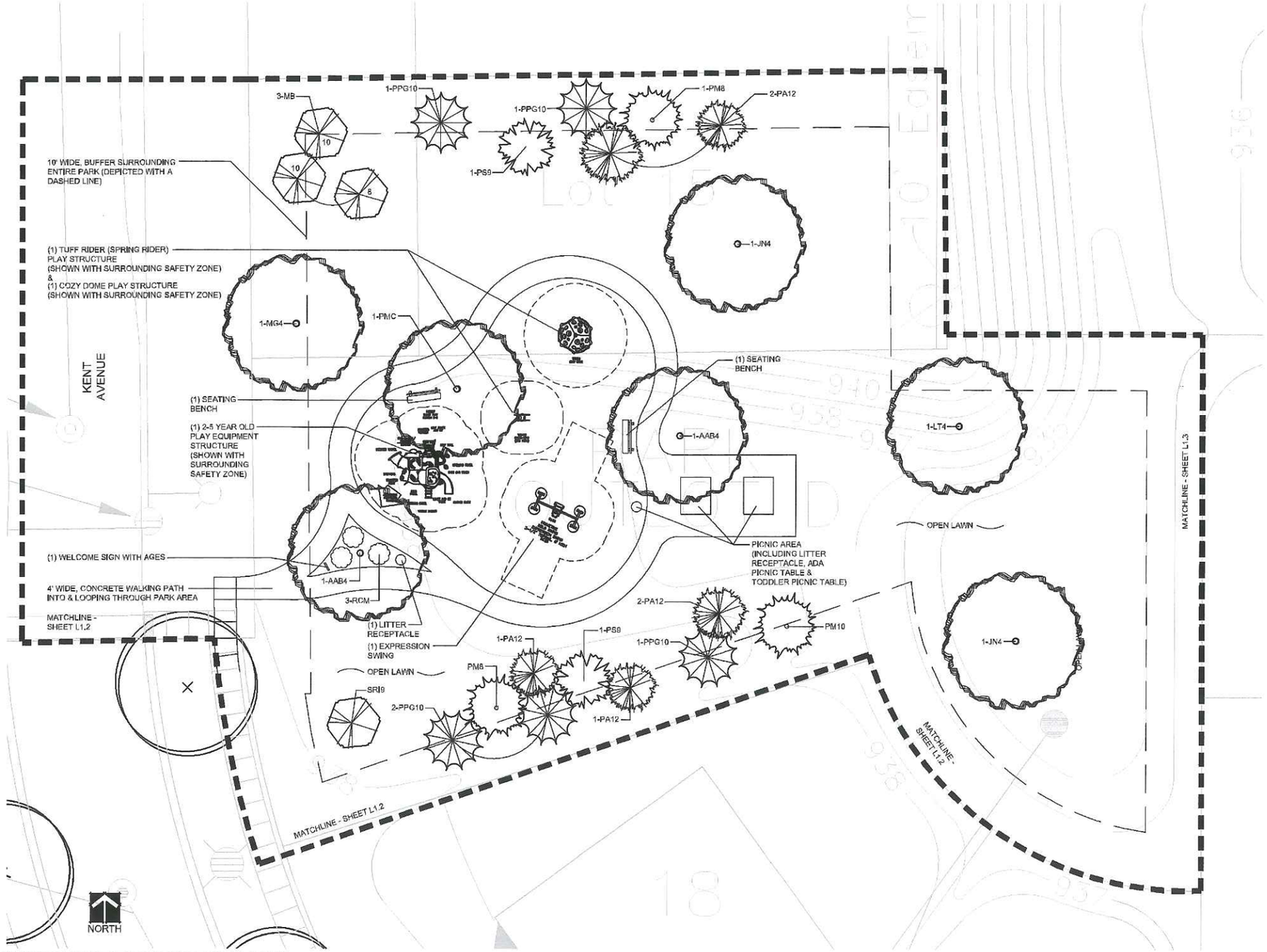
PROJECT NAME AND SHEET TITLE

OAK HOLLOW
CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L1.3



NEIGHBORHOOD TOT LOT LANDSCAPE PLAN

SCALE: 1" = 10'-0"

dickson design STUDIO

526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

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OAK HOLLOW
CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L1.4

NOTES!
PROPOSED COLOR PALETTE NOT DEPICTED.
PROPOSED AMENITY TO BE SURFACE MOUNTED.









NEIGHBORHOOD TOT LOT, SEATING BENCH & LITTER RECEPTACLE - ILLUSTRATIVE

SEATING BENCH: DUMOR, 190 SERIES (COLOR: BLACK)
LITTER RECEPTACLE: DUMOR, 429-32-S03 (COLOR: BLACK, WITH LID)
PICNIC TABLE, ADA: DUMOR, 76 SERIES-3 (3 SEATS - COLOR: WOOD-GRAIN, RECYCLED PLASTIC)
PICNIC TABLE, TODDLER: LANDSCAPE STRUCTURES, #175949 (COLOR: WOOD-GRAIN, RECYCLED PLASTIC)

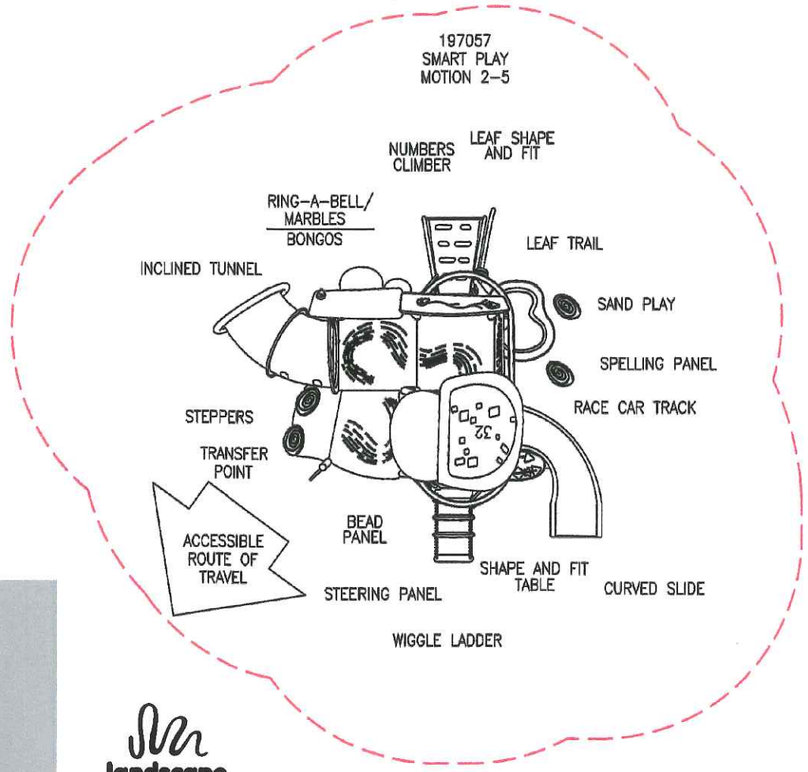


NEIGHBORHOOD TOT LOT, PLAY STRUCTURE - ILLUSTRATIVE

NOT TO SCALE

23'-7"

NOTES! FREE-STANDING PLAY, 2-5 YEARS.
MAXIMUM FALL HEIGHT OF THIS STRUCTURE IS 32".
DASHED LINE SURROUNDING STRUCTURE INDICATES SAFETY ZONE (TYPICAL).



22'-6"

landscape structures

NEIGHBORHOOD TOT LOT, PLAY STRUCTURE - PLAN VIEW

SCALE: 1/2" = 1'-0"

CARBON	SKY	BERRY	BUTTERCUP
LAGOON	PEACOCK	GRASS	DUNE

landscape structures

NEIGHBORHOOD TOT LOT, COLOR PALETTE - ILLUSTRATIVE

SUPPLIER CONTACT INFORMATION:

- ALL LANDSCAPE STRUCTURES & DUMOR SITE AMENITIES ARE AVAILABLE THROUGH NUTOYS LEISURE PRODUCTS (LAGRANGE, IL - TEL 708.579.9055) OR APPROVED EQUAL.
- ALL GAMETIME SITE AMENITIES ARE AVAILABLE THROUGH CUNNINGHAM RECREATION (CHARLOTTE, N.C. - TEL 800.438.2780) OR APPROVED EQUAL.

dickson design STUDIO
526 SKYLINE DRIVE
ALGONQUIN IL 60102
847 878 4019

CLIENT NAME AND ADDRESS

D.R. HORTON / CAMBRIDGE HOMES
LIBERTYVILLE, IL

PLAN DATE

JULY 1, 2015

REVISIONS

1.	PER CITY COMMENTS 8/7/15
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

PROJECT NAME AND SHEET TITLE

OAK HOLLOW
CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L2.0

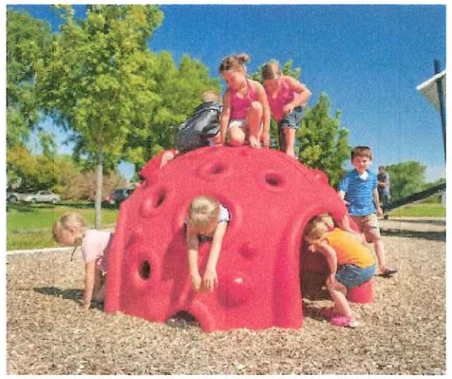
NOTES!
PROPOSED COLOR PALETTE NOT DEPICTED.
PROPOSED AMENITY TO BE DIRECT BURIED.



NEIGHBORHOOD TOT LOT, SPRING RIDER (TUFF RIDER, RHINO DINO) - ILLUSTRATIVE

NOT TO SCALE

NOTES!
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PROPOSED AMENITY TO BE DIRECT BURIED.



NEIGHBORHOOD TOT LOT, CLIMBING STRUCTURE (COZY DOME) - ILLUSTRATIVE

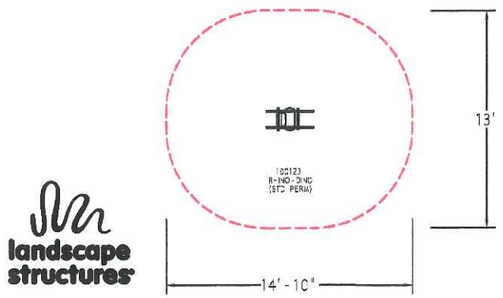
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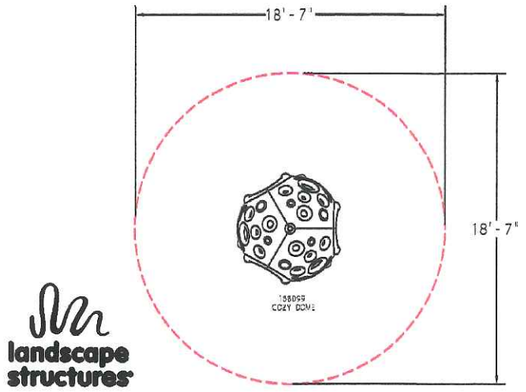
NEIGHBORHOOD TOT LOT, SWING (EXPRESSION SWING) - ILLUSTRATIVE

NOT TO SCALE



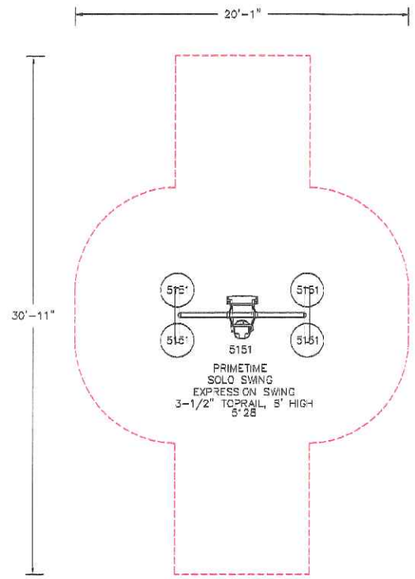
NEIGHBORHOOD TOT LOT, SPRING RIDER (TUFF RIDER, RHINO DINO) - PLAN VIEW

SCALE: 1/4" = 1'-0"



NEIGHBORHOOD TOT LOT, CLIMBING STRUCTURE (COZY DOME) - PLAN VIEW

SCALE: 1/4" = 1'-0"



NEIGHBORHOOD TOT LOT, SWING (EXPRESSION SWING) - PLAN VIEW

SCALE: 1/4" = 1'-0"

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PROJECT NAME AND SHEET TITLE

OAK HOLLOW

CRYSTAL LAKE, IL

FINAL LANDSCAPE PLAN

SHEET NUMBER

L2.1