

City of West Branch

~A Heritage for Success~

110 N. Poplar Street • PO Box 218 • West Branch, Iowa 52358
(319) 643-5888 • Fax (319) 643-2305 • www.westbranchiowa.org • city@westbranchiowa.org

PLANNING AND ZONING COMMISSION MEETING

Wednesday, March 4, 2015 • 6:30 p.m.

West Branch City Council Chambers, 110 N. Poplar St.

Council Quorum May Be Present

1. Call to Order
2. Roll Call
3. Approve minutes from the January 27, 2015 Planning and Zoning Commission Meeting/Move to action.
4. Approve the Meadows Subdivision – Phase 2 Preliminary Plat./Move to action.
5. Approve recommendation to City Council to investigate various options and costs and consider a timeline for the construction of an extension of Green View Drive from Sullivan Street to Greenview Circle, connecting the Greenview and Pedersen Valley subdivisions./Move to action.
6. Old Business
 - a. Deputy City Clerk Leslie Brick – Reminder on April 6, 2015 Introduction to Planning and Zoning for Local Officials Training in Davenport.
 - b. Zoning Administrator Paul Stagg – Reminder to review sections 165.1 through 165.19 of the City Code prior to the March 24, 2015 Planning & Zoning Commission Meeting.
 - c. Zoning Administrator Paul Stagg – Casey's Update.
7. New Business
8. Adjourn

Planning & Zoning Commission Members: Chair Roger Laughlin, Vice Chair John Fuller, LeeAnn Aspelmeier, Ryan Bowers, Clara Oleson, Sally Peck, Gary Slach • **Zoning Administrator:** Paul Stagg • **Deputy City Clerk:** Leslie Brick
Mayor: Mark Worrell • **Council Members:** Jordan Ellyson, Colton Miller, Brian Pierce, Tim Shields, Mary Beth Stevenson
City Administrator/Clerk: Matt Muckler • **Fire Chief:** Kevin Stoolman • **Library Director:** Nick Shimmin
Parks & Rec Director: Melissa Russell • **Police Chief:** Mike Horihan • **Public Works Director:** Matt Goodale

(These minutes are not approved until the next Commission meeting.)

City of West Branch
Planning & Zoning Commission Meeting
January 27, 2015
West Branch City Council Chambers, 110 North Poplar Street

Chairman Roger Laughlin opened the regular meeting of the Planning & Zoning Commission at 6:30 p.m. welcoming the audience and Mayor Mark Worrell, City Administrator Matt Muckler, Zoning Administrator Paul Stagg, Deputy City Clerk Leslie Brick, City Engineer Dave Schechinger, Commission Members, LeeAnn Aspelmeier, Ryan Bowers, John Fuller, Clara Oleson and Sally Peck were present. Absent: Gary Slach.

Approve minutes from the December 16, 201 Planning & Zoning Commission Meeting.

Motion by Oleson, second by Fuller. AYES: Oleson, Fuller, Aspelmeier, Bowers, Laughlin and Peck. NAYS: None. Absent: Slach. Motion carried.

Approve _____ as the Chairperson of the Planning & Zoning Commission. /Move to action.

Fuller nominated Roger Laughlin to continue to Chair the Planning & Zoning Commission.

Motion by Fuller, second by Oleson. AYES: Fuller, Oleson, Aspelmeier, Bowers, Laughlin and Peck. NAYS: None. Absent: Slach. Motion carried.

Approve _____ as the Vice Chairperson of the Planning & Zoning Commission. /Move to action.

Chairperson Laughlin nominated Fuller as Vice Chairperson of the Planning & Zoning Commission.

Motion by Laughlin, second by Aspelmeier. AYES: Laughlin, Aspelmeier, Bowers, Fuller, Oleson and Peck. NAYS: None. Absent: Slach. Motion carried.

Public Hearing on Proposed Amendment to Sections 165.22(7) and 170.15(5) of the West Branch Zoning Ordinance.

Chairperson Laughlin opened the public hearing on the Proposed Amendment to Sections 165.22(7) and 170.15(5) of the West Branch Zoning Ordinance. Board of Adjustment Chairperson Craig Walker addressed the Commission with a proposal for amending the language in Chapter 165 in order to be consistent with the Iowa Code which allows for the BOA to attach conditions and safe guards to Special Exceptions. This language is already in place for Zoning Variances so this would make the language consistent for both zoning requests. Walker also noted that the Iowa Code already has this language so this would allow the City Code to mirror the Iowa Code. Muckler addressed the Commission for the proposed language change in

Chapter 170 regarding sidewalk width for new subdivisions changing it from 4 to 5 feet in width. Peck questioned if the width requirements included repairs made to existing sidewalks or just the installation of the new sidewalks. Muckler responded that this change only affected new sidewalks. There were no comments from the public. Public Hearing was closed at 6:45 p.m.

Zoning Board of Adjustment Chair Craig Walker-Proposed Special Exception Form.

Board of Adjustment Chairperson Craig Walker addressed the Commission on the creation of a form for residents to use when submitting Special Exceptions. The form is in its early stages of being created and is seeking for approval of content only.

Approve recommendation to the City Council for the passage of Ordinance 725, amending Chapter 165 “Zoning Regulations.” /Move to action.

Motion by Oleson, second by Fuller. AYES: Oleson, Fuller, Aspelmeier, Bowers, Laughlin and Peck. NAYS: None. Absent: Slach. Motion carried.

Approve recommendation to the City Council for the passage of Ordinance 72, amending Chapter 170 “Subdivision Regulations.” /Move to action.

Motion by Oleson, second by Peck. AYES: Oleson, Peck, Aspelmeier, Bowers, Fuller and Laughlin. NAYS: None. Absent: Slach. Motion carried.

Approve the Meadows Subdivision – Phase 2 Preliminary Plat. /Move to action.

Brad Larsen of KLM Investments addressed the Commission to request to table the approval on the Meadows Subdivision –Phase 2 Preliminary Plat. His group has looked at estimates on creating a wet bottom basin but has found that it is not financially feasible. They are now looking into a dry bottom basin instead. Fuller asked for Larsen to provide a cost difference between a wet vs. dry bottom basin for Commission review, Larsen agreed to provide. Oleson questioned on whether or not decisions have been made on the crosswalk at Dawson and Main Streets. Larsen responded that estimates were still being obtained. Larsen then requested a meeting in February to come back to the Commission for the preliminary plat approval. The Commission set a February 18, 2015 meeting date. Peck indicated that she may not be able to attend on that date due to a prior commitment and asked if she could provide her position in writing. Mayor Worrell responded that it would be acceptable.

Based on the above discussion items, Fuller made a motion to defer this agenda item to the February 18, 2015 Special Planning & Zoning Commission meeting.

Motion to defer vote by Fuller, second by Laughlin. AYES: Fuller, Laughlin, Aspelmeier, Bowers, Oleson, and Peck. NAYS: None. Absent: Slach. Motion carried.

City Engineer Dave Schechinger – Update on Future Land Use Plan.

Schechinger reviewed the current City of West Branch Future Land Use map with the proposed future zoning changes of areas within and around West Branch. Schechinger explained that the current map is ‘proposed’ and currently has no timeline attached to it. Updates will be made based on Commission member’s feedback and will be adopted at a later date.

Discussion on connection between Greenview and Pedersen Valley.

Laughlin opened the discussion on the connection of Greenview and Pedersen Valley and noted that Gary Slach (absent) was the commission member who requested this item to be added to the agenda. Laughlin commented that the purpose for this discussion was to determine a way for the residents of Greenview and Bickford Drive an alternate way into West Branch before the re-grading of Cedar/Johnson Road began. Work is not currently scheduled but this discussion is an effort to be proactive to a matter that will affect many residents. Resident Alice Scott was in attendance and offered that when this discussion took place several years ago, there was opposition on developing a permanent connection between the two subdivisions so a trail was left in its place instead. Mayor Worrell added that since there was so much opposition on the connection at that time, the developers (PV Properties) decided to walk away from the issue. Commission member Peck commented that a connection would benefit both parts of the City to provide an alternate route as well as improve safety for those residents. Peck feels that providing a connection is a ‘community’ issue, not a developer issue as it has been in the past. Oleson agreed and asked if the City was budgeting for this project. Oleson also suggested that this item be added to the next regular meeting agenda with a proposal of a connection layout and make it a move to action item.

Old Business

None to report.

New Business

Zoning Administrator Paul Stagg reminded the Commission members to review Chapter 165 through 165.19. This was discussed and agreed upon at the September 23, 2014 P&Z meeting at the recommendation of the City Council from their goal setting session. This will be a discussion item at the next regular Planning & Zoning Commission Meeting.

Adjourn

Motion to adjourn meeting by Oleson, second by Fuller. Motion carried on a voice vote. Planning & Zoning meeting adjourned at 7:33 p.m.

(The following is a synopsis of the minutes of the West Branch City Council meeting. The full text of the minutes is available for inspection at the City Clerk's office. The minutes are not approved until the next regularly scheduled City Council meeting.)

**West Branch, Iowa
Council Chambers**

**Planning & Zoning and Board of Adjustment
Joint Work Session**

**January 27, 2015
6:30 p.m.**

Chairperson Craig Walker opened the Joint Work Session of the Planning & Zoning Commission and Board of Adjustment Meeting 6:30 p.m. welcoming the audience and Mayor Mark Worrell, City Administrator Matt Muckler, Zoning Administrator Paul Stagg, Deputy City Clerk Leslie Brick, City Engineer Dave Schechinger. Board of Adjustment Commission Members, Wayne Frauenholtz, Frank Frostestad, and Kami Poppen. Planning & Zoning Commission Chairperson Roger Laughlin, Commission Members LeeAnn Aspelmeier, Ryan Bowers, John Fuller, Clara Oleson and Sally Peck were present. Absent: Gary Slach and Jennie Embree.

Zoning Administrator Paul Stagg – Zoning Duties and Responsibilities within the City of West Branch.

BOA Chairperson introduced Zoning Administrator Paul Stagg. Stagg presented a 'Zoning 101' presentation to the commission members. The presentation provided information on the structure and powers of each commission along with meeting protocols, roles and responsibilities of each commission.

Potential Board and Commission Rules of Procedure.

Stagg asked all commission members to review the Procedural Rules of the West Branch City Council. Stagg commented that the City Council has adopted and follows the Procedural Rules and would like each commission to review and adopt them for each commission. Stagg noted that since there are new members to the boards and commission that special attention should be paid to Section IV.

February 24, 2015 – U of I Institute of Public Affairs Board & Commission Training, Brick Arch Winery.

Muckler invited all commission members to a Board & Commission training event at the Brick Arch Winery on February 24, 2015. The City Council has declared this a public purpose and funds have been made available so all members are encouraged to attend.

April 6, 2015 – ISU Extension Introduction to Planning & Zoning for Local Officials Workshop, Davenport Public Library.

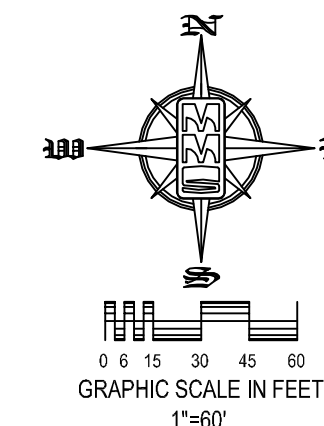
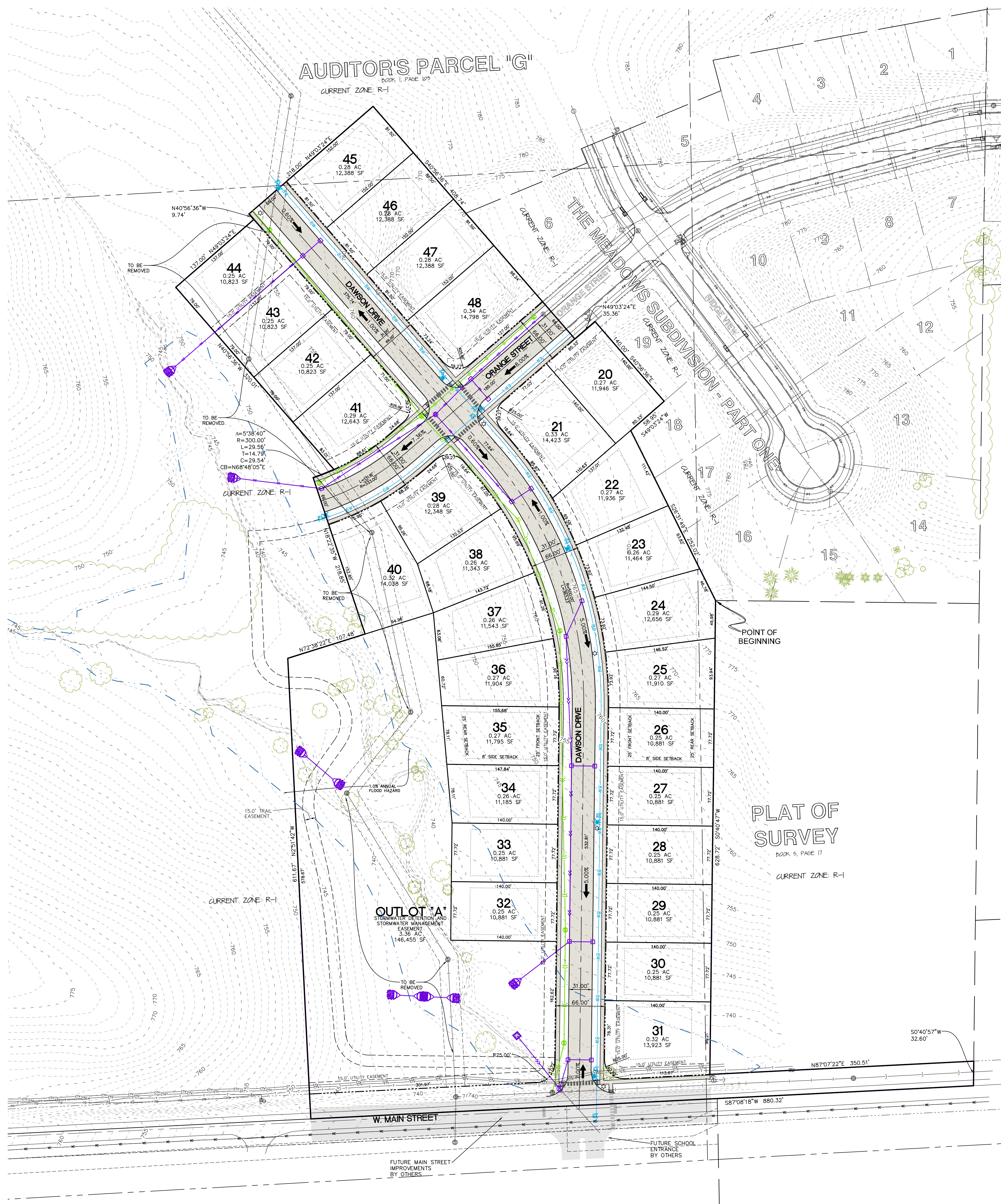
Muckler invited all interested commission members to attend a Planning & Zoning Training to be held in Davenport. Muckler noted that while it is more specific to Planning & Zoning, others could attend. He also noted that this training is on a regularly scheduled City Council night so the meeting may be cancelled or rescheduled.

ADJOURNMENT

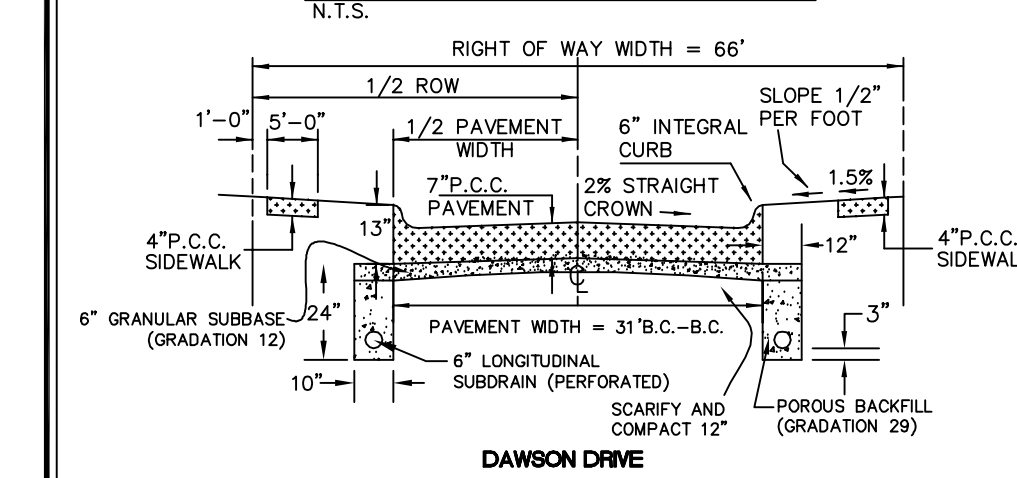
Motion by Oleson to adjourn the work session, second by Laughlin. Motion carried on a voice vote. Planning & Zoning and Board of Adjustment joint work session adjourned at 6:26.m.

PRELIMINARY PLAT
VS SUBDIVISION
WEST BRANCH, IOWA

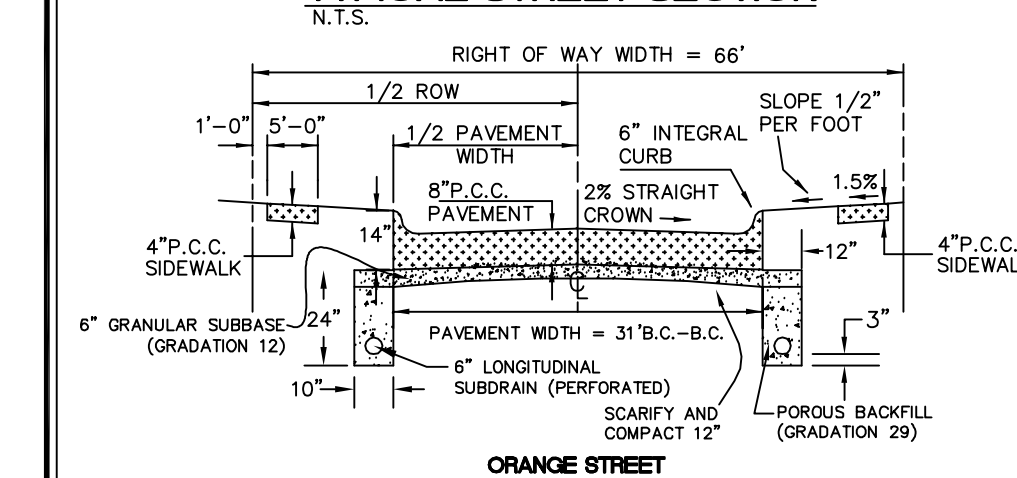
<u>PLAT PREPARED BY:</u>	<u>OWNER/SUBDIVIDER:</u>	<u>SUBDIVIDER'S ATTORNEY:</u>
MMS CONSULTANTS INC.	KLM INVESTMENTS, INC.	MICHAEL W. KENNEDY
1917 S. GILBERT STREET	25 EASTVIEW PLACE NE	920 S. DUBUQUE STREET
IOWA CITY, IOWA 52240	IOWA CITY, IOWA 52240	IOWA CITY, IOWA 52240

[illegible]

TYPICAL STREET SECTION



TYPICAL STREET SECTION



STANDARD LEGEND AND NOTES

- | | | |
|---------|--------|------------------------------------|
| | | PROPERTY &/or BOUNDARY LINE |
| | | CONGRESSIONAL SECTOR LINES |
| | | RIGHT-OF-WAY LINES |
| | | EXISTING RIGHT-OF-WAY LINES |
| | | CENTER LINES |
| | | EXISTING CENTER LINES |
| | | LOT LINES, INTERNAL |
| | | LOT LINES, PLATTED OR BY DEED |
| | | UNRECORDED EASEMENT LINES |
| | | EXISTING EASEMENT LINES |
| | | BENCHMARK |
| | | RECORDED DIMENSIONS |
| | | CURVE SEGMENT NUMBER |
| 22-1 | | |
| -EXIST- | -PROP- | |
| | | POWER POLE |
| | | POWER POLE W/DRANS |
| | | POWER POLE W/LIGHT |
| | | GUY POLE |
| | | LIGHT POLE |
| | | SANITARY MANHOLE |
| | | FIRE HYDRANT |
| | | DRAINAGE VALVE |
| | | GUARD INLET |
| | | FENCE LINE |
| | | EXISTING SANITARY SEWER |
| | | PROPOSED SANITARY SEWER |
| | | EXISTING STORM SEWER |
| | | PROPOSED STORM SEWER |
| | | WATER LINES |
| | | ELECTRICAL LINES |
| | | TELEPHONE LINES |
| | | GAS LINES |
| | | CONTOUR LINES (1' INTERVAL) |
| | | |
| | | - EXISTING TREE LINE |
| | | - EXISTING EVERGREEN TREES & SHRUB |
- THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBJECTIVE TO THE APPROVAL OF THIS DOCUMENT.

DEVELOPMENT CHARACTERISTICS

CURRENT ZONING IS R-1 RESIDENTIAL
LOTS 20-48
R-1 RESIDENTIAL
R-1 RESIDENTIAL REQUIREMENTS

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

THE MEADOWS SUBDIVISION - PHASE 2
WEST BRANCH, IOWA



LOCATION MAP
NOT TO SCALE

THE MEADOWS
SUBDIVISION -
PHASE 2
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS IN

Date: 12.05.1

Designed by:	Field Book No:
--------------	----------------

Drawn by:	Scale:
U.S.	1"=0

Checked by:	Sheet No:
PVA	

Project No:

IOWA CITY	
8815002	



CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS

1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
(319) 351-6282
www.mmsconsultants.net

Date Revision
12-16-14 PER CITY ENGINEER REVIEW -JDM
02-05-15 REVISED CONCEPT PER CLIENT -JDM
02-16-15 REVISED PER CLIENT -JDM

CONCEPT GRADING PLAN

THE MEADOWS
SUBDIVISION -
PHASE 2
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date: 12-05-14

Designed by: PVA Field Book No:

Drawn by: LLS Scale: 1"=60'

Checked by: PVA Sheet No:

Project No: 1

IOWA CITY

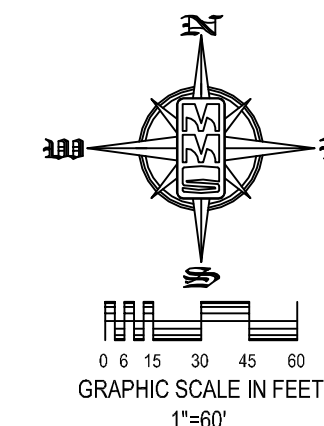
8815002 of: 1

CONCEPT GRADING PLAN THE MEADOWS SUBDIVISION - PHASE 2 WEST BRANCH, IOWA

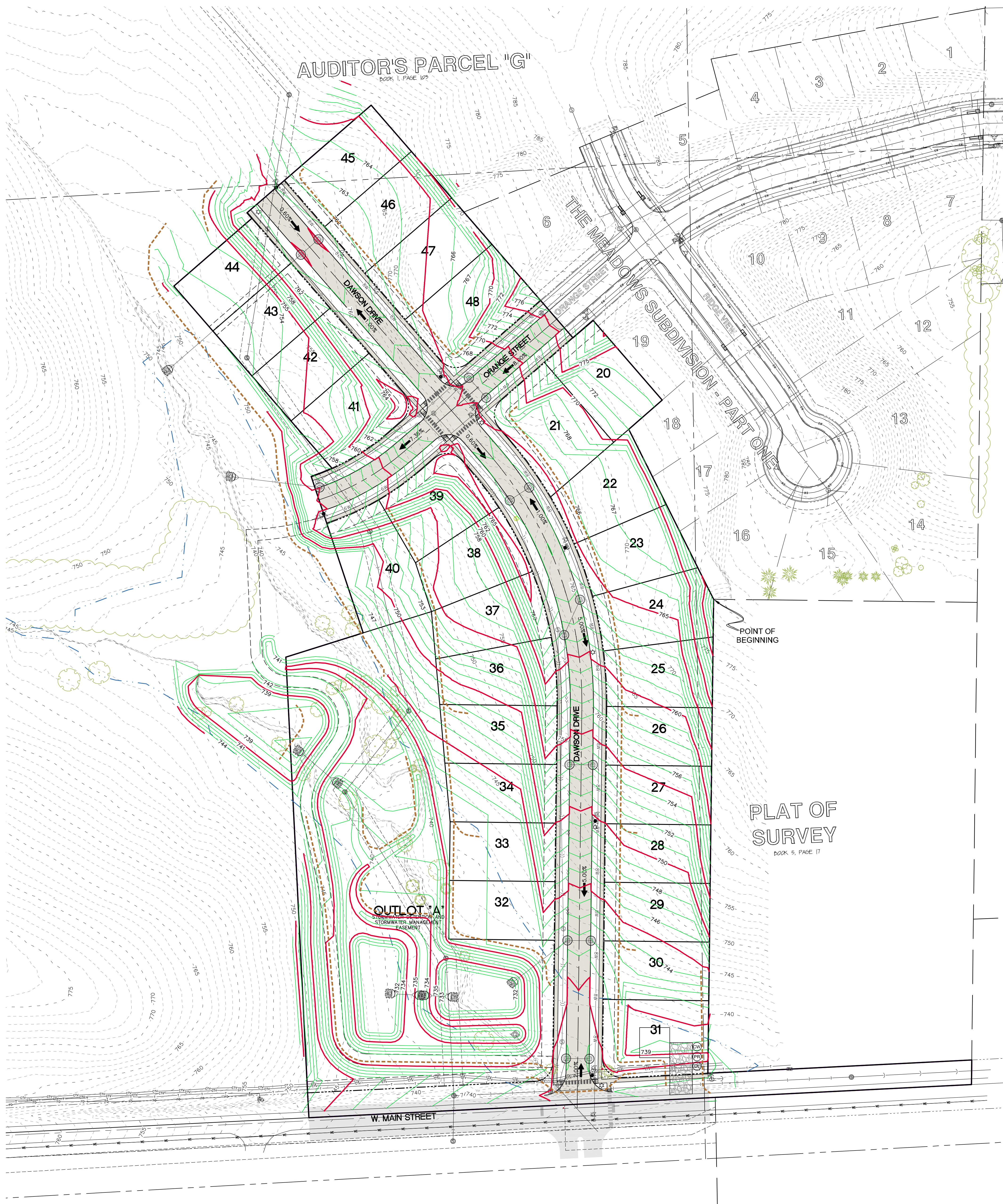
PLAT PREPARED BY:
MMS CONSULTANTS, INC.
1917 S. GILBERT STREET
IOWA CITY, IOWA 52240

OWNER/SUBDIVIDER:
KIM INVESTMENTS, INC.
25 EASTVIEW PLACE NW
IOWA CITY, IOWA 52240

SUBDIVIDER'S ATTORNEY:
MICHAEL W. KENNEDY
950 S. DUBOQUE STREET
IOWA CITY, IOWA 52240



AUDITOR'S PARCEL "G"
BOOK 1, PAGE 102



EROSION CONTROL LEGEND	
----- SILT FENCE/FILTER SOCK	----- PERIMETER SILT FENCE
TEMPORARY ROCK CONSTRUCTION ENTRANCE/EXIT	TEMPORARY SOIL STOCKPILE AREA
TEMPORARY PARKING AND STORAGE	DIRECTION OF OVERLAND FLOW
CONCRETE TRUCK/EQUIPMENT WASHOUT	DUMPSTER FOR CONSTRUCTION WASTE
PORTABLE RESTROOM	RIP RAP OUTLET PROTECTION
DOCUMENT LOCATION (PERMITS, SWPPP, INSPECTION FORMS, ETC.)	OTHER MEASURE:
FILTER SOCK INLET PROTECTION	OTHER MEASURE:
FILTER SOCK BEHIND CURB AT CURB RAMP	

THE ABOVE LISTED ITEMS ARE SHOWN IN THEIR RECOMMENDED LOCATIONS. IF A CONTROL MEASURE IS ADDED OR MOVED TO A MORE SUITABLE LOCATION, INDICATE THE REVISION ON THIS SHEET. THE BLANKS LEFT FOR OTHER MEASURES SHOULD BE USED IF AN ITEM NOT SHOWN ABOVE IS IMPLEMENTED ON SITE. ADDITIONAL PRACTICES FOR EROSION PREVENTION AND SEDIMENT CONTROL CAN BE FOUND IN APPENDIX D OF THE SWPPP.

GRADING AND EROSION CONTROL NOTES

TOTAL SITE AREA: 14.47 ACRES
TOTAL AREA TO BE DISTURBED: 15.20 ACRES

EROSION CONTROL MEASURES SHOWN SHALL BE USED DURING FILL ACTIVITIES. EROSION CONTROL MEASURES SHALL BE REEVALUATED AND MODIFIED, IF NECESSARY, AT THE TIME OF SITE DEVELOPMENT.

ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES THAT COULD BE USED ON SITE, IF NEEDED, CAN BE FOUND IN APPENDIX D OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BINDER PREPARED FOR THE SITE. IF ADDITIONAL MEASURES ARE USED, INDICATE THE TYPE AND LOCATION OF SAID MEASURE ON THIS PLAN.

CONTRACTOR SHALL INSTALL A ROCK ENTRANCE AND PERFORM REGULAR CLEANING OF VEHICLES THAT LEAVE THE SITE.

FOLLOWING INSTALLATION OF PERIMETER SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE, THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR TO SCHEDULE A SITE INSPECTION PRIOR TO ANY SOIL DISTURBING ACTIVITIES.

THE CONTRACTOR SHALL FOLLOW THE NPDES PERMIT, SWPPP, AND THE CITY CSR REGULATIONS.

THE EROSION CONTROL CONTRACTOR SHALL INSTALL FILTER SOCKS OR OTHER APPROVED FORM OF INLET PROTECTION AT EACH STREET INTAKE ADJACENT TO THE SITE.

STABILIZATION SEEDING

STABILIZATION SEEDING SHALL BE IN ACCORDANCE WITH I.D.O.T. STANDARD SPECIFICATION SECTION 2601.03 STABILIZING CROP SEEDING AND FERTILIZING.

SEED MIXTURES SHALL BE ONE OF THE FOLLOWING:

SPRING - MARCH 1 TO MAY 20

OAT
GRASS RYE
RED CLOVER
TIMOTHY

SUMMER - MAY 21 TO JULY 20

OAT
GRASS RYE
RED CLOVER
TIMOTHY

FALL - JULY 21 TO SEPTEMBER 30

OAT
GRASS RYE
RED CLOVER
TIMOTHY

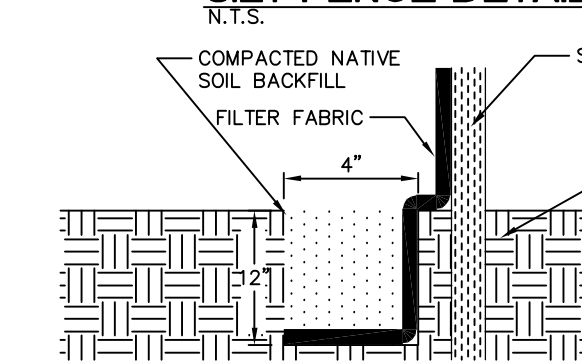
2 BUSHES PER ACRE
25 LBS. PER ACRE
5 LBS. PER ACRE
5 LBS. PER ACRE

3 BUSHES PER ACRE
35 LBS. PER ACRE
5 LBS. PER ACRE
5 LBS. PER ACRE

2 BUSHES PER ACRE
35 LBS. PER ACRE
5 LBS. PER ACRE
5 LBS. PER ACRE

FERTILIZER SHALL BE APPLIED AT A RATE OF 450 LBS PER ACRE USING CHEMICALLY COMBINED COMMERCIAL 13-15-15 FERTILIZER.

SILT FENCE DETAIL



- POSTS SHALL BE 1.33 POUNDS PER LINEAL FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTION OF 1/2" FOR FASTENING WIRE TO 8 FEET APART.
- SILT FENCE FABRIC SHALL CONFORM TO I.D.O.T. STANDARD SPECIFICATION SECTION 4186.01.A. SILT FENCING SHALL BE A MINIMUM OF 24" AND A MAXIMUM OF 36" HIGH WHEN COMPLETE.
- THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE FENCE TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, THE FILTER CLOTH SHALL BE SPICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP, AND SECURELY SEALED.
- POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART AND DRIVEN SECURELY INTO THE GROUND ALONG THE FENCE ALIGNMENT. POSTS SHALL BE DRIVEN INTO THE GROUND A MINIMUM OF 28".
- A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE BY 12" DEEP ALONG THE UPSLOPE SIDE OF THE POSTS.
- FILTER FABRIC SHALL BE STAPLED OR WIED TO THE POSTS SUCH THAT THE FABRIC EXTENDS INTO THE TRENCH AS SHOWN ABOVE. THE FABRIC SHALL BE FASTENED A MINIMUM OF THREE PLACES ON EACH POST.
- THE TRENCH SHALL BE BACK FILLED WITH EXCAVATED MATERIAL AND THOROUGHLY COMPACTED.

MAINTENANCE

- SILT FENCES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAIN - FALL EVENT OF 0.5 INCHES OR MORE. DURING PERIODS OF PROLONGED RAIN INSPECTIONS SHALL BE AT LEAST DAILY. ANY REPAIRS NEEDED TO MAINTAIN THE SILT FENCE'S EFFECTIVENESS SHALL BE MADE IMMEDIATELY.
- SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO STABILIZING THE UPSLOPE AREAS THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE. SILTS REMOVED SHALL BE PLACED IN A PROTECTED PLACE THAT WILL PREVENT THEIR ESCAPE FROM THE CONSTRUCTION SITE.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER NEEDED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND RESEED.
- SILT FENCE SHALL REMAIN IN PLACE UNTIL IT IS NO LONGER NEEDED AS DIRECTED BY THE POLLUTION PREVENTION PLAN. GENERALLY SILT FENCES SHALL REMAIN UNTIL THE UPSLOPE AREAS ARE STABILIZED WITH AN ESTABLISHED GRASS COVER AS A MINIMUM.

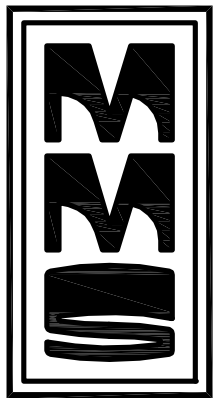
STANDARD LEGEND AND NOTES

- PROPERTY &/or BOUNDARY LINES
 - CONGRESSIONAL SECTION LINES
 - RIGHT-OF-WAY LINES
 - EXISTING RIGHT-OF-WAY LINES
 - CENTER LINES
 - EXISTING CENTER LINES
 - LOT LINES, INTERNAL
 - LOT LINES, PLATTED OR BY DEED
 - PROPOSED EASEMENT LINES
 - EXISTING EASEMENT LINES
 - BENCHMARK
 - RECORDED DIMENSIONS
 - CURVE SEGMENT NUMBER
 - EXISTING TREE LINE
 - EXISTING DECIDUOUS TREE & SHRUB
 - EXISTING EVERGREEN TREES & SHRUBS
- THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

THE MEADOWS SUBDIVISION - PHASE 2 WEST BRANCH, IOWA



LOCATION MAP NOT TO SCALE



CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS

1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
(319) 351-8282
www.mmsconsultants.net

Date	Revision
------	----------

DRAINAGE EXHIBIT

THE MEADOWS
SUBDIVISION PHASE 2
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

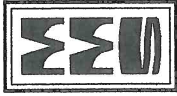
Date: 02-23-15

Designed by: PVA
Field Book No:

Drawn by: JDM
Scale: 1"=300'

Checked by: PVA
Sheet No: 1

Project No: IC 8815002
8 of 1



CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS
WEST BRANCH, IOWA 52240
WWW.THEMEADOWSSUBDIVISION.COM

Date	Revision

LOT LAYOUT
EXHIBIT

THE MEADOWS
SUBDIVISION
WEST BRANCH,
IOWA COUNTY

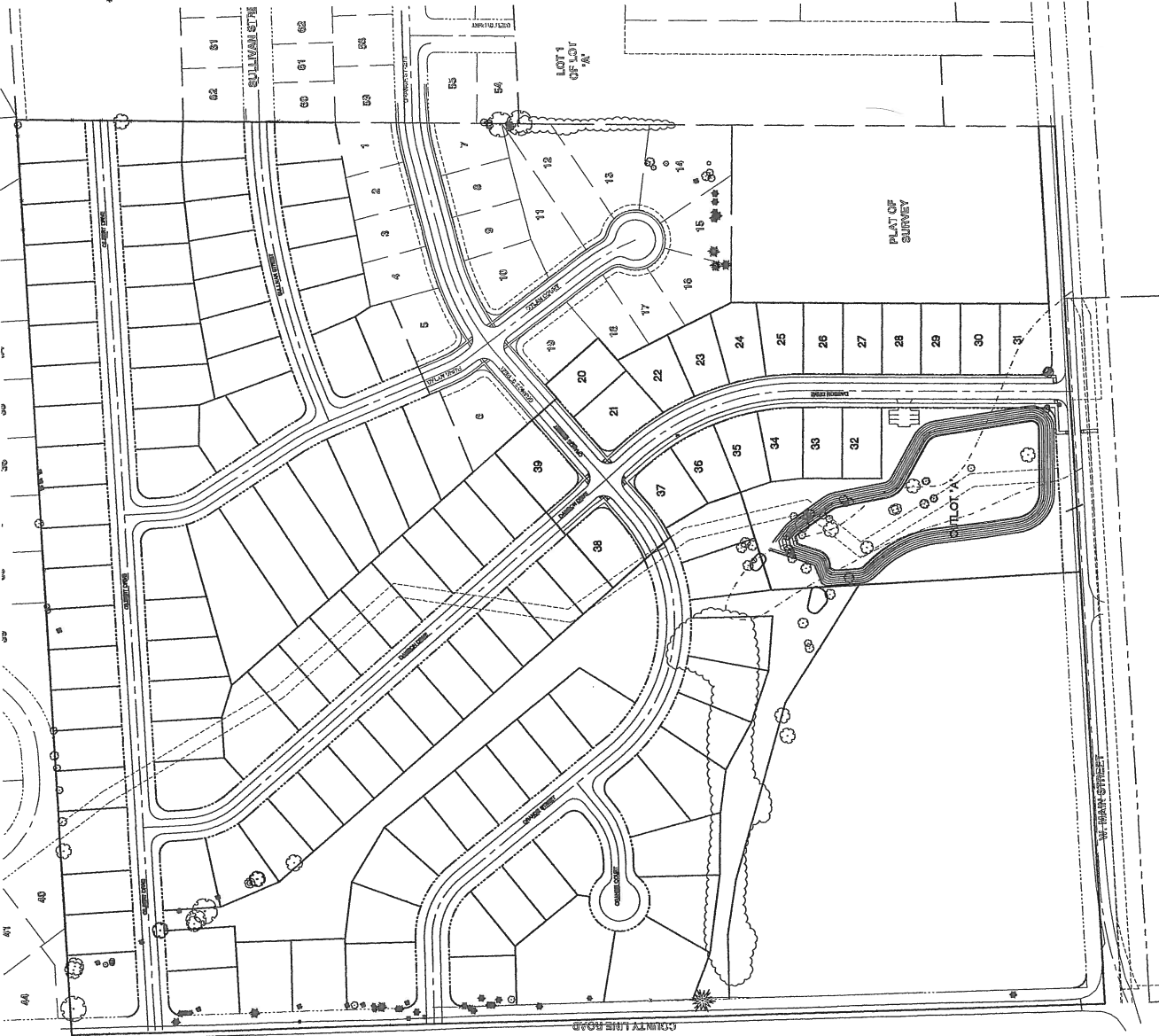
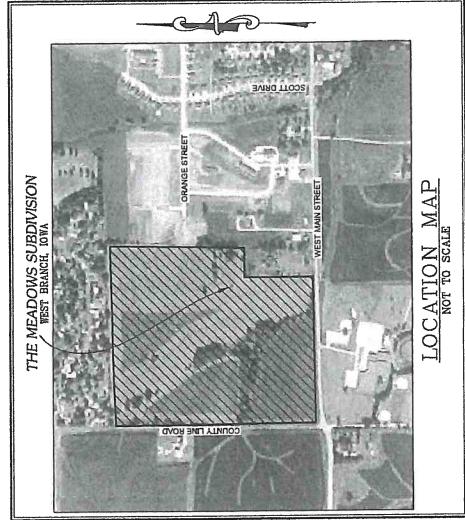
MMS CONSULTANTS, INC.
Date: 01-02-14
Designed by: JVA
Drawn by: JVA
Checked by: JVA
Project No: 8815002
Sheet No: 1
IOWA CITY 8815002

LOT LAYOUT EXHIBIT THE MEADOWS SUBDIVISION WEST BRANCH, IOWA

PLAT PREPARED BY:
SUBDIVISION ENGINEER
1817 S. GILBERT STREET
IOWA CITY, IOWA 52240



STANDARD LEGEND AND NOTES	
1	PROPOSED LOT LINES
2	EXISTING LOT LINES
3	EXISTING EASEMENTS
4	EXISTING EASEMENTS
5	EXISTING EASEMENTS
6	EXISTING EASEMENTS
7	EXISTING EASEMENTS
8	EXISTING EASEMENTS
9	EXISTING EASEMENTS
10	EXISTING EASEMENTS
11	EXISTING EASEMENTS
12	EXISTING EASEMENTS
13	EXISTING EASEMENTS
14	EXISTING EASEMENTS
15	EXISTING EASEMENTS
16	EXISTING EASEMENTS
17	EXISTING EASEMENTS
18	EXISTING EASEMENTS
19	EXISTING EASEMENTS
20	EXISTING EASEMENTS
21	EXISTING EASEMENTS
22	EXISTING EASEMENTS
23	EXISTING EASEMENTS
24	EXISTING EASEMENTS
25	EXISTING EASEMENTS
26	EXISTING EASEMENTS
27	EXISTING EASEMENTS
28	EXISTING EASEMENTS
29	EXISTING EASEMENTS
30	EXISTING EASEMENTS
31	EXISTING EASEMENTS
32	EXISTING EASEMENTS
33	EXISTING EASEMENTS
34	EXISTING EASEMENTS
35	EXISTING EASEMENTS
36	EXISTING EASEMENTS
37	EXISTING EASEMENTS
38	EXISTING EASEMENTS
39	EXISTING EASEMENTS
40	EXISTING EASEMENTS
41	EXISTING EASEMENTS
42	EXISTING EASEMENTS
43	EXISTING EASEMENTS
44	EXISTING EASEMENTS
45	EXISTING EASEMENTS
46	EXISTING EASEMENTS
47	EXISTING EASEMENTS
48	EXISTING EASEMENTS
49	EXISTING EASEMENTS
50	EXISTING EASEMENTS
51	EXISTING EASEMENTS
52	EXISTING EASEMENTS
53	EXISTING EASEMENTS
54	EXISTING EASEMENTS
55	EXISTING EASEMENTS
56	EXISTING EASEMENTS
57	EXISTING EASEMENTS
58	EXISTING EASEMENTS
59	EXISTING EASEMENTS
60	EXISTING EASEMENTS
61	EXISTING EASEMENTS
62	EXISTING EASEMENTS
63	EXISTING EASEMENTS
64	EXISTING EASEMENTS
65	EXISTING EASEMENTS
66	EXISTING EASEMENTS
67	EXISTING EASEMENTS
68	EXISTING EASEMENTS
69	EXISTING EASEMENTS
70	EXISTING EASEMENTS
71	EXISTING EASEMENTS
72	EXISTING EASEMENTS
73	EXISTING EASEMENTS
74	EXISTING EASEMENTS
75	EXISTING EASEMENTS
76	EXISTING EASEMENTS
77	EXISTING EASEMENTS
78	EXISTING EASEMENTS
79	EXISTING EASEMENTS
80	EXISTING EASEMENTS
81	EXISTING EASEMENTS
82	EXISTING EASEMENTS
83	EXISTING EASEMENTS
84	EXISTING EASEMENTS
85	EXISTING EASEMENTS
86	EXISTING EASEMENTS
87	EXISTING EASEMENTS
88	EXISTING EASEMENTS
89	EXISTING EASEMENTS
90	EXISTING EASEMENTS
91	EXISTING EASEMENTS
92	EXISTING EASEMENTS
93	EXISTING EASEMENTS
94	EXISTING EASEMENTS
95	EXISTING EASEMENTS
96	EXISTING EASEMENTS
97	EXISTING EASEMENTS
98	EXISTING EASEMENTS
99	EXISTING EASEMENTS
100	EXISTING EASEMENTS





MMS CONSULTANTS, INC.

IOWA CITY IOWA
OFFICE: 319-351-8282

CEDAR RAPIDS IOWA
OFFICE: 319-841-5188

Your Vision + Our Innovation = Inspired Results

The Meadows Subdivision Phase 2, West Branch, Iowa

Storm water detention calculations

February 23, 2015

MMS # 8815-002

Detention requirements:

1. The 100 year runoff event from the development parcel is to be detained and released at the 5 year predevelopment runoff rate. The runoff from offsite areas may be conveyed through the parcel without attenuating the flows. The design criteria are based on SUDAS (2G-1.3.b) and City of West Branch criteria. The Iowa Storm water Management Manual is also referenced.
2. The Meadows Phase 2 includes a dry bottom detention basin in Outlot A. this detention basin along with a detention basin planned in a future phase north of Orange Street will provide detention facilities adequate to serve the onsite drainage area draining to an existing culvert at Main Street. This drainage area includes 59.0 acres within the development parcel owned by KLM and 66.55 acres of offsite land to the west and northwest. The dry bottom basin is oversized for Phase 2 and will serve for all or portions of future phases. When needed, the pond detention basin north of Orange will be constructed.
3. Allowable detention discharge release rates:

The peak release rate is the 100 year runoff from offsite drainage area added to the 5 year pre-development runoff rate from the onsite areas. This rate is tabulated as follows:

Tributary to the proposed north detention basin

Offsite drainage 30.25 acres of crop land and 2 existing residential developments
100 year runoff rate 80.6 CFS runoff volume 456,300 CF hydrograph #1

Onsite drainage: 21.2 acres of crop land

5 year runoff rate 27.6 CFS runoff volume 113,900 CF hydrograph #11

Tributary to the south detention basin

Offsite drainage 36.3 acres of crop land

100 year runoff rate 128.3 CFS runoff volume 554,400 CF hydrograph #6

Onsite drainage: 37.8 acres of crop land

5 year runoff rate 52.7 CFS runoff volume 199,900 CF hydrograph #12

Allowable release rate from south detention through existing culvert is the sum of the 100 year peak runoff rate for offsite areas and the 5 year peak runoff rate for onsite areas. The allowable peak discharge rate is 289.2 CFS during a 100 year event. The runoff volume from onsite drainage areas during a 5 year storm is 313,800 Cubic Feet.

CIVIL ENGINEERS

LAND SURVEYORS

LAND PLANNERS

LANDSCAPE ARCHITECTS

ENVIRONMENTAL SPECIALISTS

4. Storm water routing

Flows to and routing through the proposed north detention pond.

Offsite flows from 30.25 acres of crop land and existing subdivisions is depicted by hydrograph #1. The peak flow rate is 80.6 CFS.

This offsite runoff is routed through the existing stream from the northwest area of the development to the proposed north detention pond. This stream is intended to be preserved within land to be dedicated to the city. Hydrograph #2 depicts the peak flow rate following the stream routing is 80.2 CFS

On site runoff from the northwest portions of the development also drain to the proposed pond north of Orange Street. The 100 year post development runoff is depicted by hydrograph #3. The peak flow rate is 108.3 CFS.

The onsite and offsite runoff are combined in hydrograph #4 to depict the total runoff tributary to the north detention pond. The peak flow rate is 144.9 CFS.

The proposed north detention pond is to have a permanent pool of water at elevation 746 and the allowable high water level is defined by the sidewalk at Orange Street at an elevation of 752. The pond outlet consists of a 42" storm sewer under the street with a 42" circular riser to elevation 748. An 8 inch diameter low flow orifice on the riser is set at elevation 746 which will maintain the normal water level. The tributary runoff is routed through the pond as depicted by hydrograph #5. The peak discharge rate is 77.7 CFS at a maximum ponding elevation of 751.34. The discharge from this pond drains directly to the south detention basin in Outlot A.

Flows to and routing through the south detention basin in Outlot A.

An Offsite flow from 30.25 acres of crop land is depicted by hydrograph #6. The peak flow rate is 128.3 CFS.

On site runoff from Phase 2 and additional acres to be developed also drains to the south detention basin. Hydrograph #7 depict the runoff with a peak flow rate of 193.1 CFS

The offsite and onsite runoff as well as discharge from the north detention pond are combined in hydrograph #8. The peak flow rate tributary to the detention basin is 350.9 CFS.

The south detention basin is designed as a dry bottom basin with a well-defined channel through it. Three siltation traps are provided to contain sediment from the tributary areas. Two of these areas, at the southeast and southwest corners of the basin take the shape of small basins separated from the central drainage channel by berms. These are designed to be wetlands with a 1 foot deep permanent pool of water. These areas will serve as sediment traps as well as provide extended detention time for local runoff resulting from small storm events to capture and contain pollutants in the storm water. A sediment trap is positioned at the northwest portion of the basin to capture sediments from the existing surface drainage from the west.

The drainage channel has two purposes. It is intended to convey low flows through the detention basin in a controlled manner. It also is intended to be a reconfiguration of the existing stream through Outlot A which is a jurisdictional water of the U S. The stream meanders to provide a length similar to the existing stream. Appropriate permitting for this feature will be obtained through the Corps of Engineers and Iowa DNR .Provision is also made in the grading of the detention basin for a future trail traversing Outlot A. The location of a trail is shown on the south and west sides of the basin. Grading within the detention basin provides an alignment with appropriate slopes for a trail to be constructed in the future. In the northern area the trail forms a berm creating one of the sediment traps. The trail is aligned towards an open space connected to the future alignment of

Orange Street to allow continuation through the subdivision to the north. An easement is provided for the trail.

The runoff tributary to the south detention basin is routed as shown in hydrograph #9. The peak discharge rate is 222.7 CFS with a maximum ponding elevation of 739.8.

The maximum discharge of 222.7 CFS is significantly lower than the allowable discharge of 289.2 CFS. The runoff volume during a 100 year event from onsite drainage areas is:

The required storage volume in the two detention basins during a 100 year event is the difference between the post 100 year and pre 5 year runoff volumes

From hydrograph #3 depicting runoff to the north detention pond,	303,700 CF.
From hydrograph #7 depicting runoff to the north detention pond,	541,500 CF.
Total runoff volume	845,200 CF
Runoff volume from onsite area from a 5 year event in the pre-developed condition is	313,800 CF
The required storage in both basins during a 100 year event is the difference between the post and pre conditions or	531,400 CF
The volume stored during a 100 year event is	
North, hydrograph #5	182,500 CF
South, hydrograph #	305,300 CF
Total	487,800 CF

5. 100 year flood plain considerations

The Flood Boundary and Floodway Map for the City of West Branch, Panel #19031C0211C dated August 19, 2013 shows a portion of Phase 2 within the 100 year flood boundary. The location of this flood zone is transferred to the Preliminary Plat and grading plan and includes portions of Outlot A, Lots 31 and 32 and Dawson Drive. The elevation of flooding is not determined and no floodway is noted. The location of the mapped flood zone indicates the flood elevation is influence by lack of capacity in the existing 72" diameter culvert under Main Street and subsequent flows across the street.

By adding the south detention basin with the Phase 2 improvements sufficient attenuation of the runoff during a 100 year storm event is provided to convey all of the runoff through the culver and eliminate flooding of Main Street. The buildable portions of Lots 31 and 32 are elevated a minimum of 1 foot above the high water level within the detention basin to provide effective flood protection for up to a 100 year event. Portions of Main Street and Dawson Drive where it connects to Main Street will be at elevations below the maximum ponding in the detention basin. The grading around the basin will be of adequate height to prevent flooding of these streets.

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

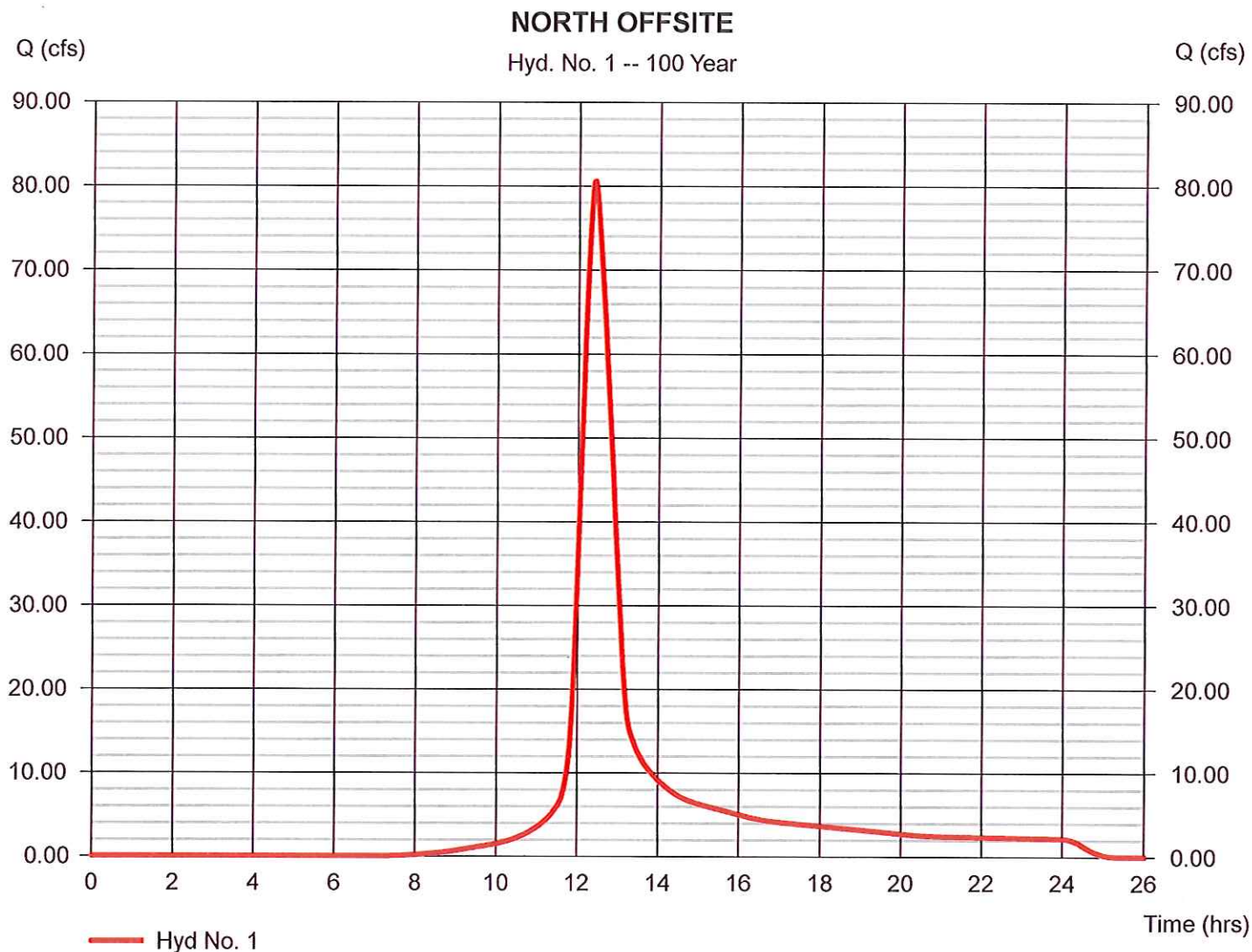
Hyd. No. 1

NORTH OFFSITE

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 30.250 ac
Basin Slope = 1.8 %
Tc method = LAG
Total precip. = 7.13 in
Storm duration = 24 hrs

Peak discharge = 80.57 cfs
Time to peak = 744 min
Hyd. volume = 456,317 cuft
Curve number = 74*
Hydraulic length = 2010 ft
Time of conc. (Tc) = 49.57 min
Distribution = Type II
Shape factor = 484

* Composite (Area/CN) = $[(17.440 \times 74) + (12.810 \times 75)] / 30.250$



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

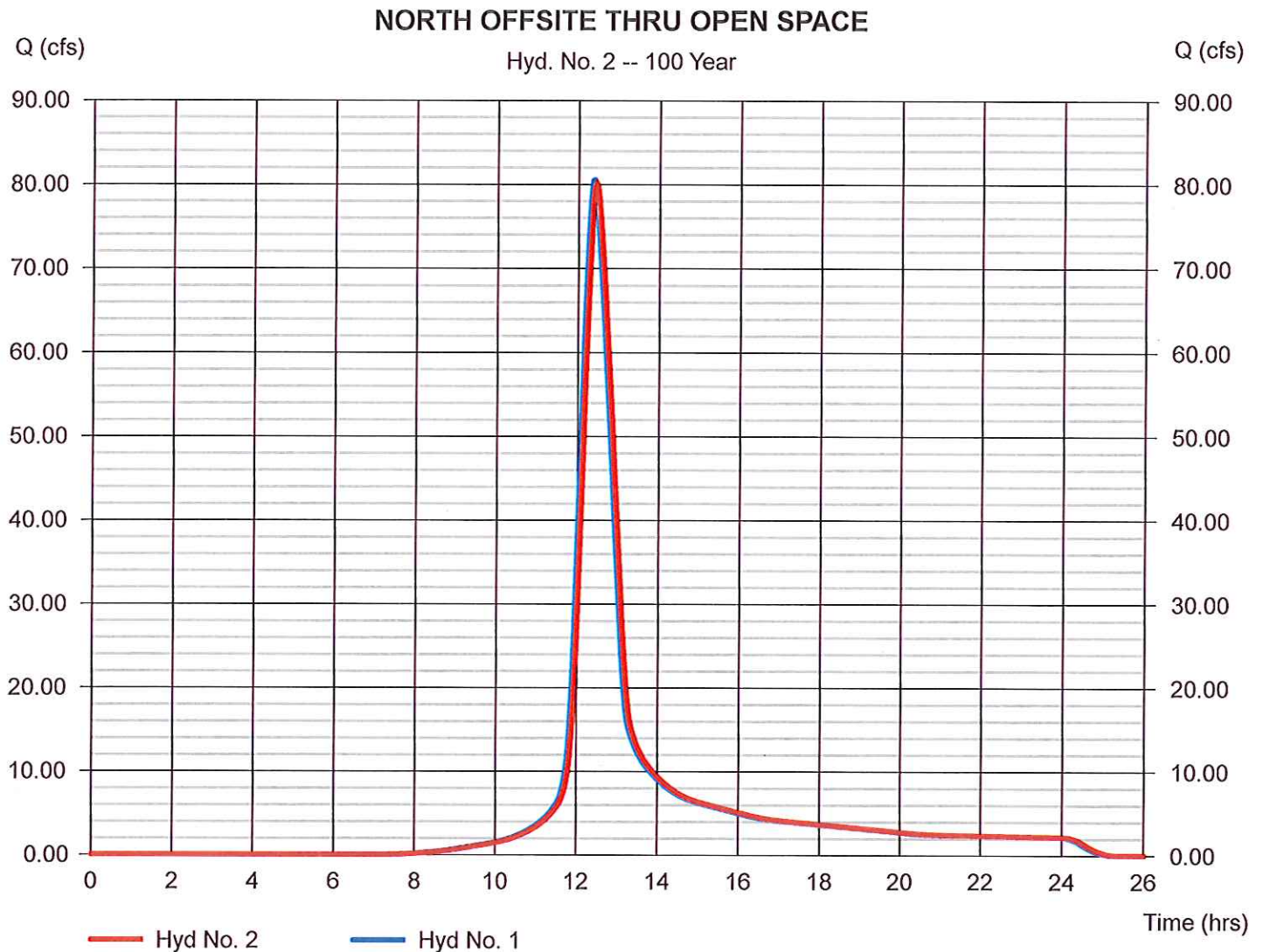
Hyd. No. 2

NORTH OFFSITE THRU OPEN SPACE

Hydrograph type = Reach
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyd. No. = 1 - NORTH OFFSITE
Reach length = 1160.0 ft
Manning's n = 0.030
Side slope = 2.0:1
Rating curve x = 2.630
Ave. velocity = 6.69

Peak discharge = 80.19 cfs
Time to peak = 746 min
Hyd. volume = 456,316 cuft
Section type = Trapezoidal
Channel slope = 2.4 %
Bottom width = 5.0 ft
Max. depth = 10.0 ft
Rating curve m = 1.375
Routing coeff. = 0.6451

Modified Att-Kin routing method used.



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

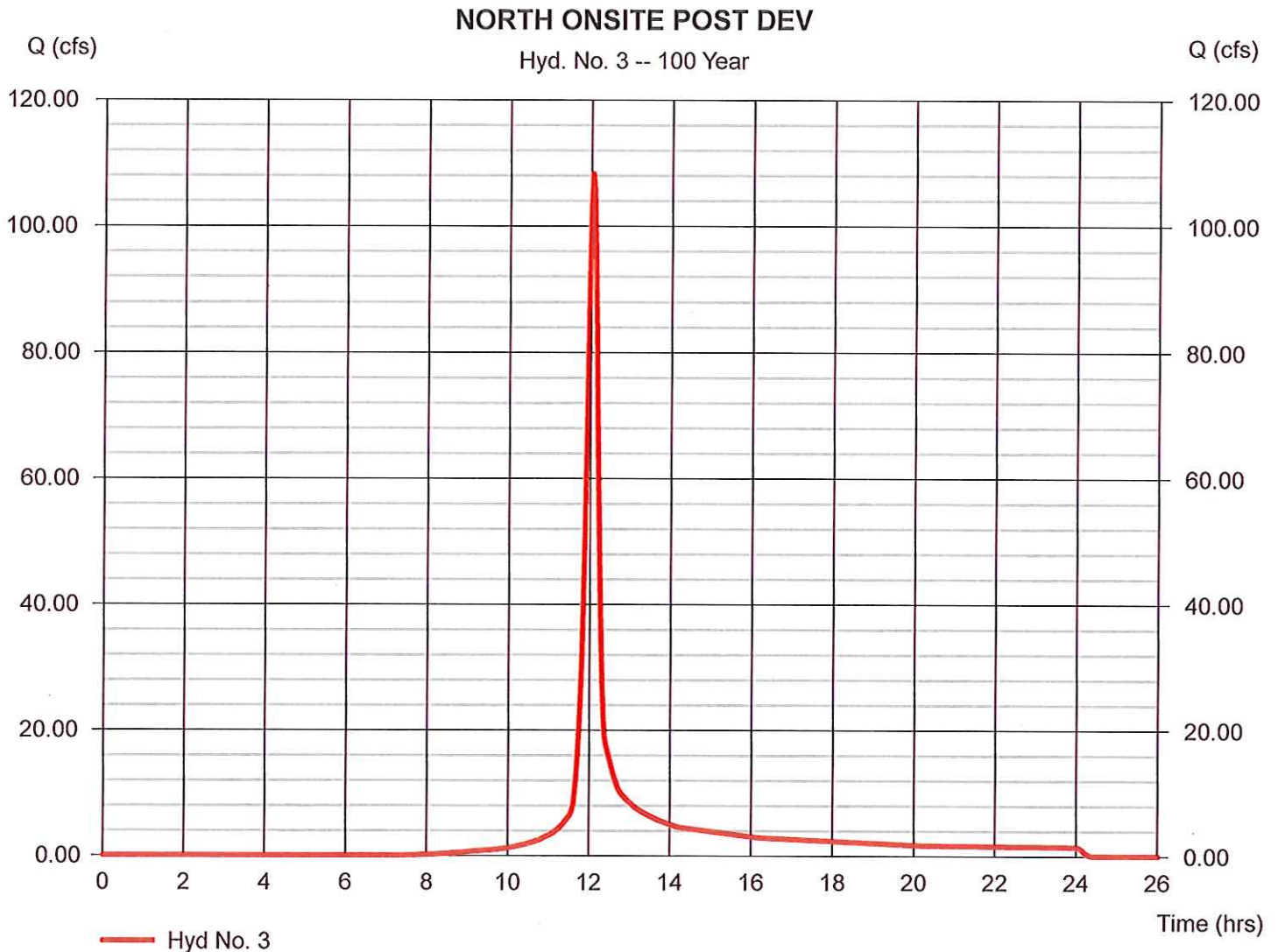
Tuesday, Feb 17, 2015

Hyd. No. 3

NORTH ONSITE POST DEV

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 21.200 ac
Basin Slope = 0.0 %
Tc method = USER
Total precip. = 7.13 in
Storm duration = 24 hrs

Peak discharge = 108.28 cfs
Time to peak = 722 min
Hyd. volume = 303,698 cuft
Curve number = 73
Hydraulic length = 0 ft
Time of conc. (Tc) = 15.00 min
Distribution = Type II
Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

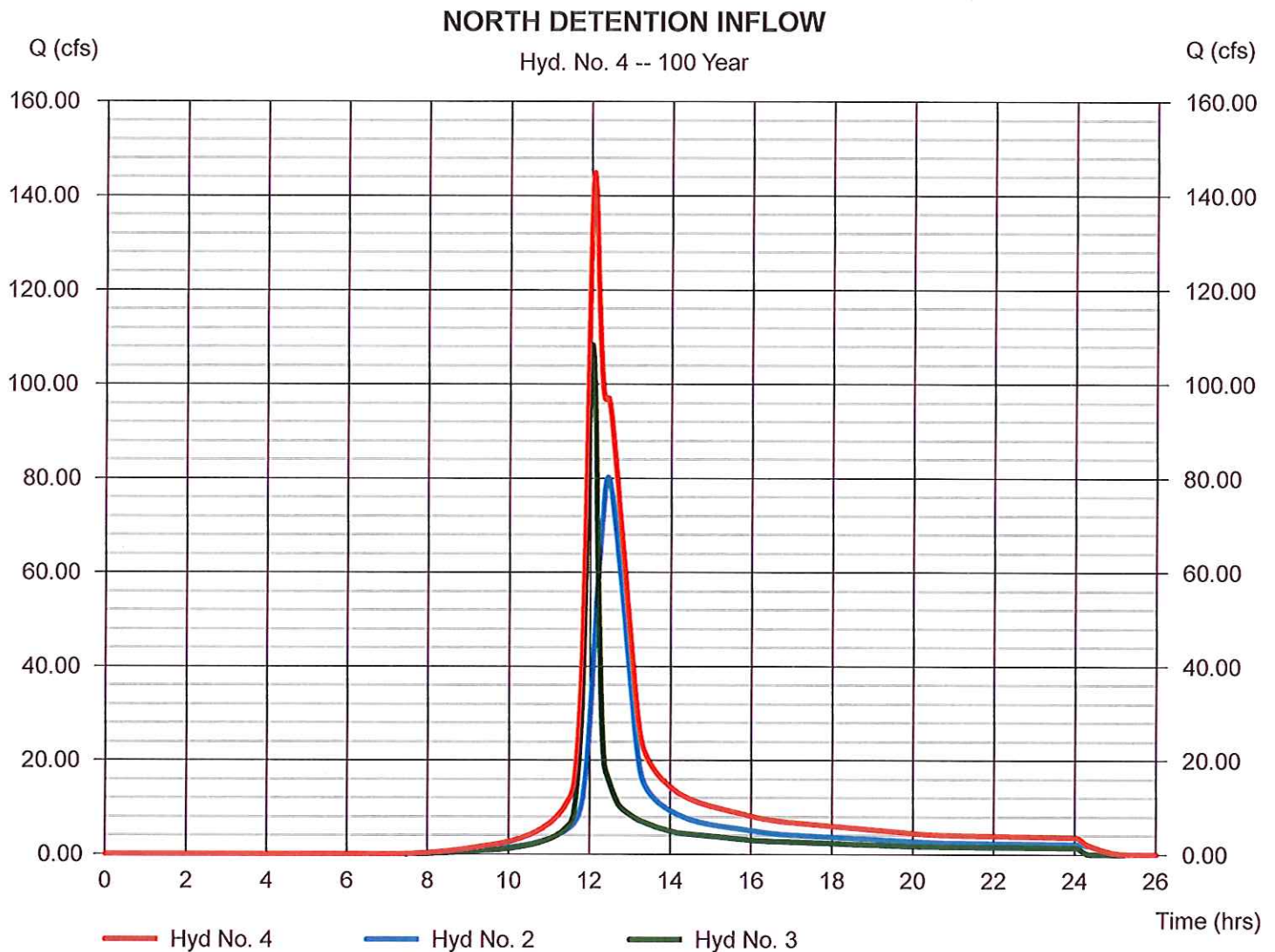
Tuesday, Feb 17, 2015

Hyd. No. 4

NORTH DETENTION INFLOW

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyds. = 2, 3

Peak discharge = 144.88 cfs
Time to peak = 724 min
Hyd. volume = 760,014 cuft
Contrib. drain. area = 21.200 ac



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

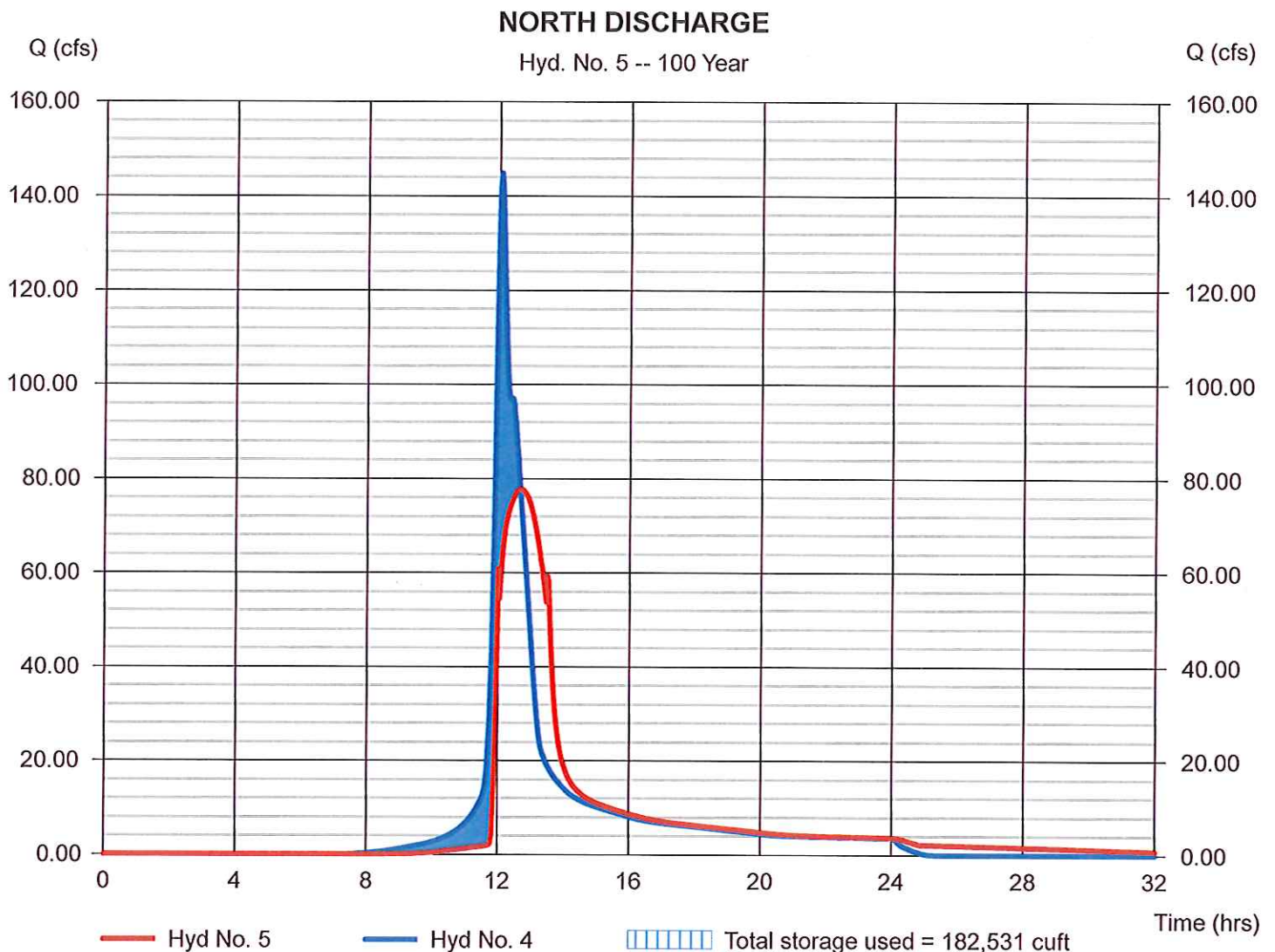
Hyd. No. 5

NORTH DISCHARGE

Hydrograph type = Reservoir
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyd. No. = 4 - NORTH DETENTION INFLOW
Reservoir name = NORTH POND

Peak discharge = 77.71 cfs
Time to peak = 760 min
Hyd. volume = 759,864 cuft
Max. Elevation = 751.34 ft
Max. Storage = 182,531 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

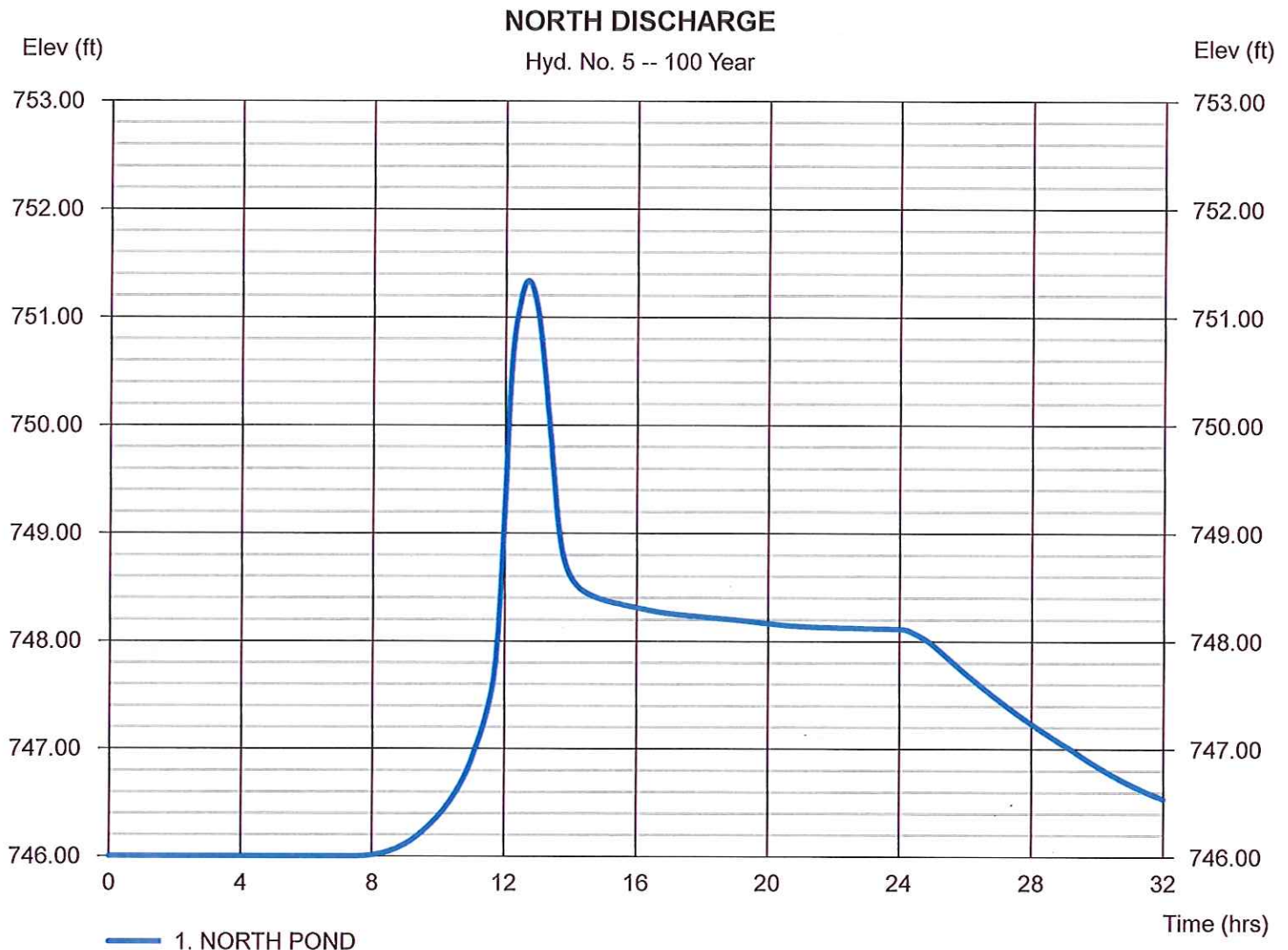
Hyd. No. 5

NORTH DISCHARGE

Hydrograph type = Reservoir
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyd. No. = 4 - NORTH DETENTION INFLOW
Reservoir name = NORTH POND

Peak discharge = 77.71 cfs
Time to peak = 760 min
Hyd. volume = 759,864 cuft
Max. Elevation = 751.34 ft
Max. Storage = 182,531 cuft

Storage Indication method used.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

Pond No. 1 - NORTH POND

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Beginning Elevation = 746.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	746.00	21,565	0	0
1.00	747.00	25,045	23,281	23,281
2.00	748.00	29,710	27,342	50,623
3.00	749.00	34,947	32,290	82,912
4.00	750.00	41,203	38,028	120,941
5.00	751.00	47,529	44,324	165,265
6.00	752.00	55,533	51,474	216,739

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 42.00	8.00	0.00	0.00
Span (in)	= 42.00	8.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 742.55	746.00	0.00	0.00
Length (ft)	= 255.00	0.00	0.00	0.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 11.00	0.00	0.00	0.00
Crest El. (ft)	= 748.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No
Exfil.(in/hr)	= 0.000 (by Contour)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	746.00	0.00	0.00	---	---	0.00	---	---	---	---	---	0.000
1.00	23,281	747.00	60.68 ic	1.37 ic	---	---	0.00	---	---	---	---	---	1.372
2.00	50,623	748.00	60.68 ic	2.17 ic	---	---	0.00	---	---	---	---	---	2.170
3.00	82,912	749.00	60.68 ic	2.74 ic	---	---	36.63	---	---	---	---	---	39.37
4.00	120,941	750.00	62.49 ic	3.22 ic	---	---	57.50 ic	---	---	---	---	---	60.72
5.00	165,265	751.00	73.86 ic	3.43 ic	---	---	70.43 ic	---	---	---	---	---	73.85
6.00	216,739	752.00	84.83 ic	3.50 ic	---	---	81.32 ic	---	---	---	---	---	84.83

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

Hyd. No. 6

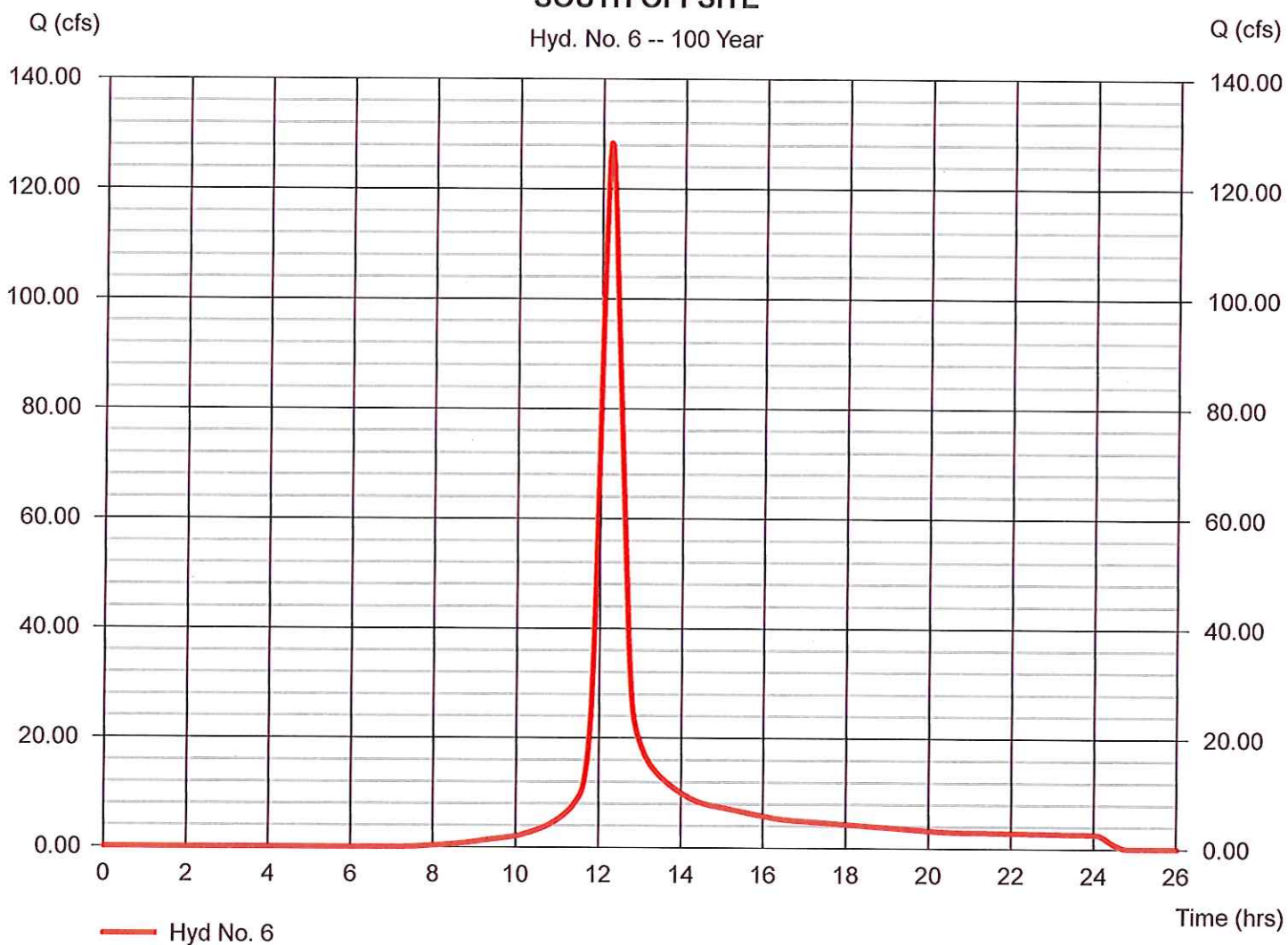
SOUTH OFFSITE

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 36.300 ac
Basin Slope = 2.8 %
Tc method = LAG
Total precip. = 7.13 in
Storm duration = 24 hrs

Peak discharge = 128.29 cfs
Time to peak = 732 min
Hyd. volume = 554,425 cuft
Curve number = 74
Hydraulic length = 1630 ft
Time of conc. (Tc) = 33.61 min
Distribution = Type II
Shape factor = 484

SOUTH OFFSITE

Hyd. No. 6 -- 100 Year



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

Hyd. No. 7

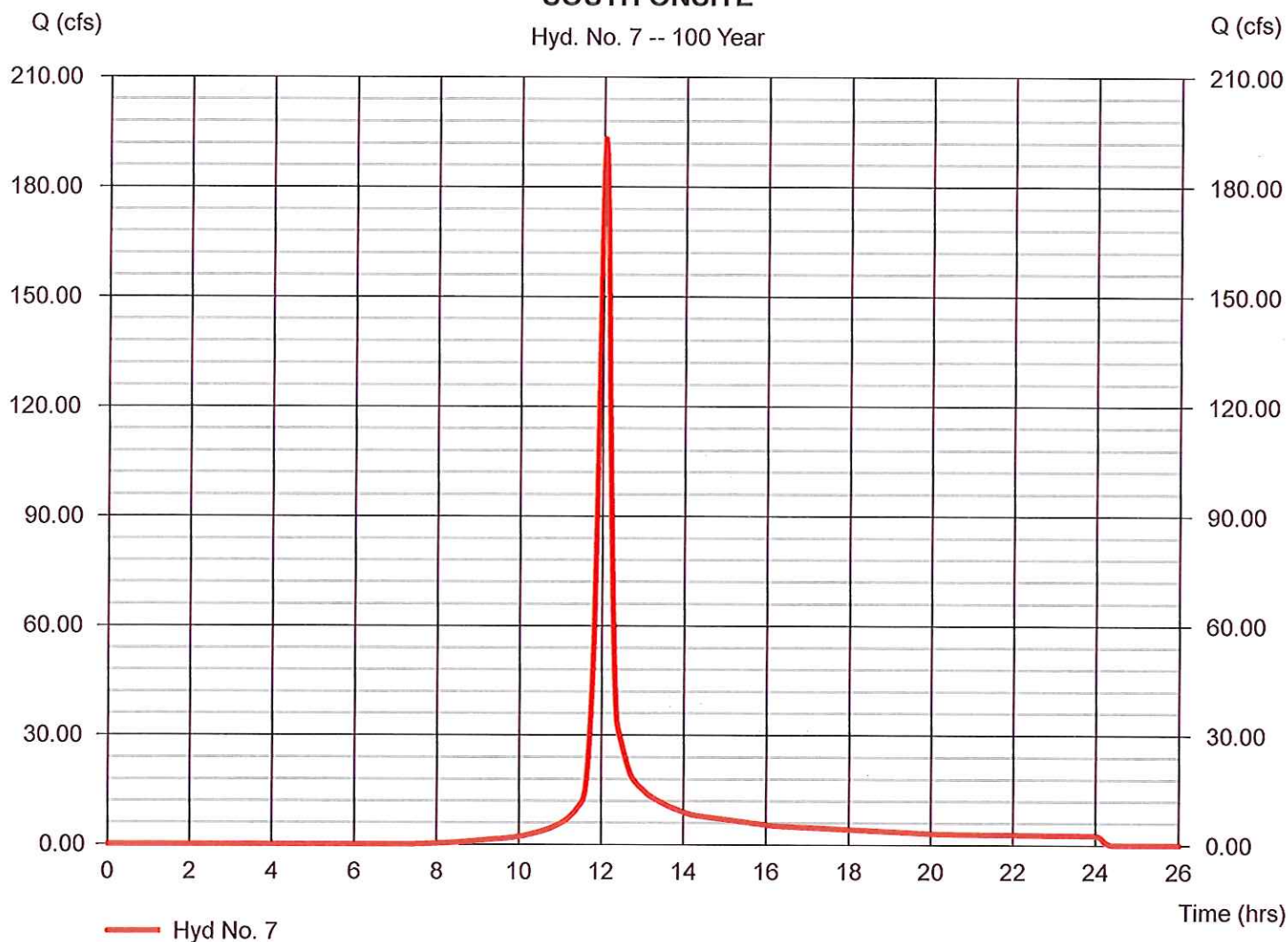
SOUTH ONSITE

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 37.800 ac
Basin Slope = 0.0 %
Tc method = TR55
Total precip. = 7.13 in
Storm duration = 24 hrs

Peak discharge = 193.06 cfs
Time to peak = 722 min
Hyd. volume = 541,499 cuft
Curve number = 73
Hydraulic length = 0 ft
Time of conc. (Tc) = 14.70 min
Distribution = Type II
Shape factor = 484

SOUTH ONSITE

Hyd. No. 7 -- 100 Year



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

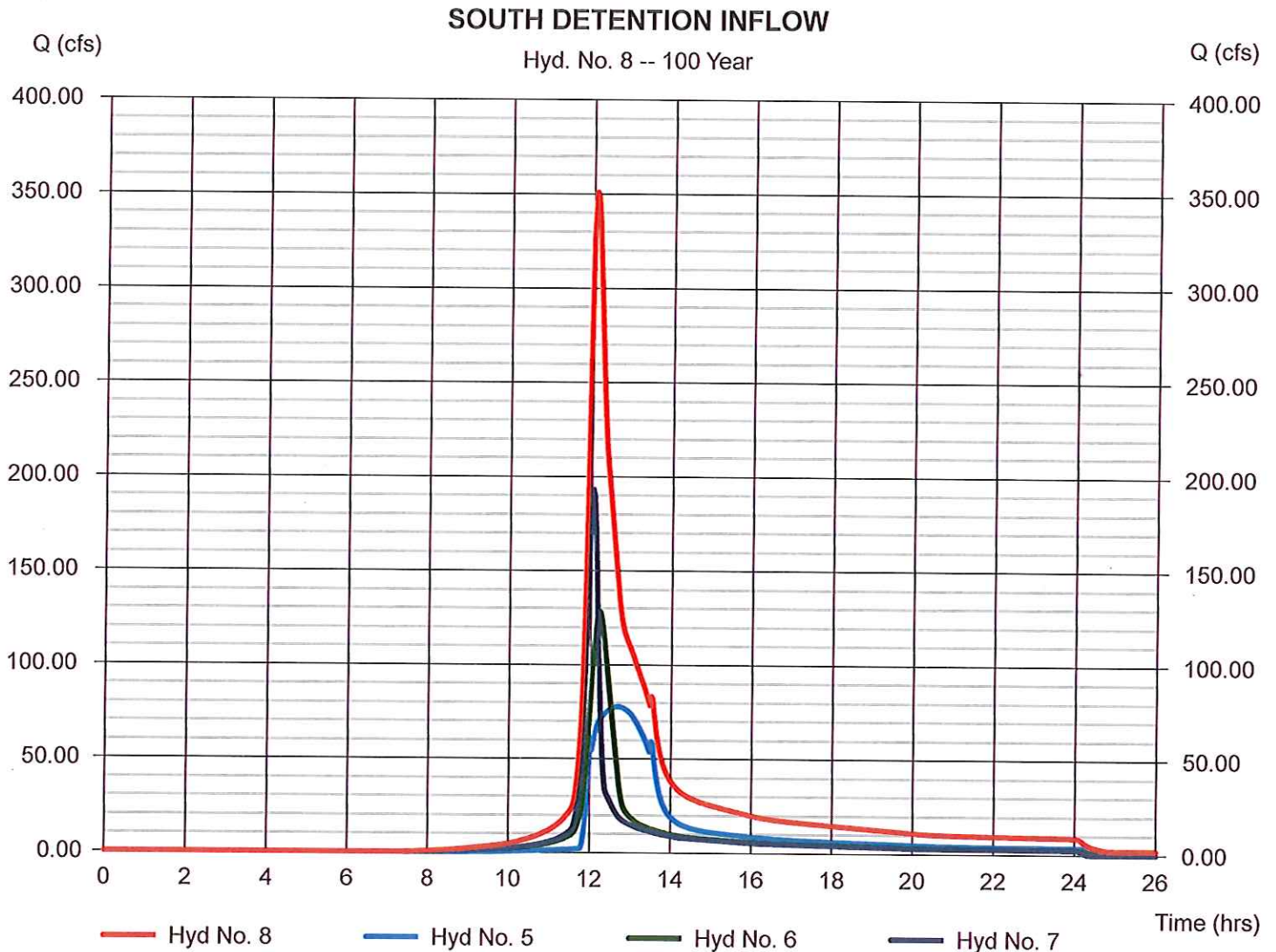
Tuesday, Feb 17, 2015

Hyd. No. 8

SOUTH DETENTION INFLOW

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyds. = 5, 6, 7

Peak discharge = 350.91 cfs
Time to peak = 724 min
Hyd. volume = 1,855,788 cuft
Contrib. drain. area = 74.100 ac



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

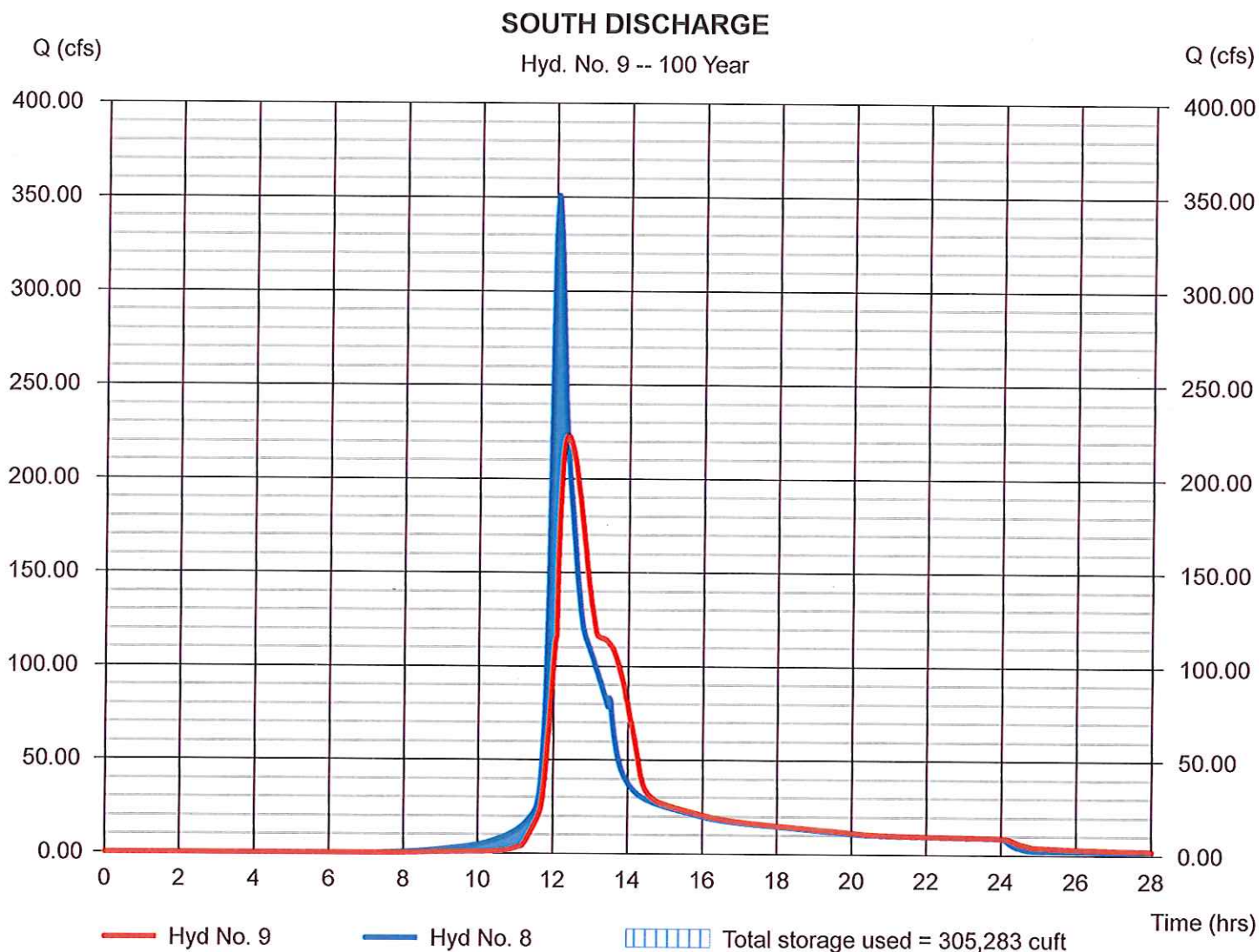
Hyd. No. 9

SOUTH DISCHARGE

Hydrograph type = Reservoir
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyd. No. = 8 - SOUTH DETENTION INFLOW
Reservoir name = SOUTH BASIN 2

Peak discharge = 222.71 cfs
Time to peak = 740 min
Hyd. volume = 1,855,706 cuft
Max. Elevation = 739.83 ft
Max. Storage = 305,283 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

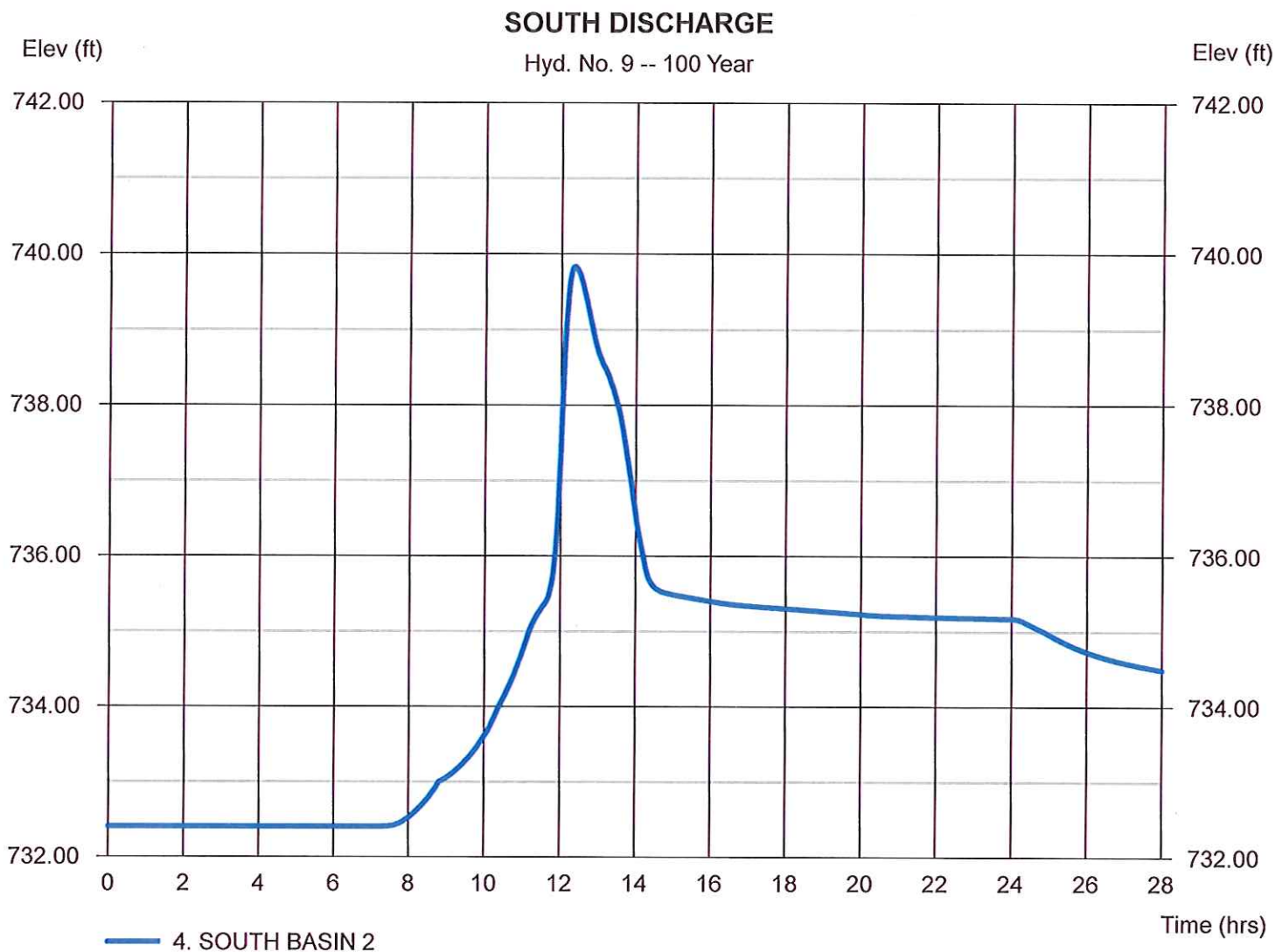
Hyd. No. 9

SOUTH DISCHARGE

Hydrograph type = Reservoir
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyd. No. = 8 - SOUTH DETENTION INFLOW
Reservoir name = SOUTH BASIN 2

Peak discharge = 222.71 cfs
Time to peak = 740 min
Hyd. volume = 1,855,706 cuft
Max. Elevation = 739.83 ft
Max. Storage = 305,283 cuft

Storage Indication method used.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.2

Tuesday, Feb 17, 2015

Pond No. 4 - SOUTH BASIN 2

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 732.40 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	732.40	08	0	0
0.60	733.00	13,417	2,750	2,750
1.60	734.00	18,968	16,111	18,861
2.60	735.00	25,653	22,224	41,086
3.60	736.00	38,864	32,027	73,113
4.60	737.00	50,445	44,524	117,637
5.60	738.00	61,287	55,773	173,410
6.60	739.00	71,755	66,446	239,856
7.60	740.00	86,356	78,935	318,791
8.60	741.00	92,000	89,154	407,945

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 72.00	6.00	12.00	0.00
Span (in)	= 72.00	6.00	12.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 732.40	732.40	734.00	0.00
Length (ft)	= 90.00	0.00	0.00	0.00
Slope (%)	= 0.50	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 18.85	0.00	0.00	0.00
Crest El. (ft)	= 735.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	Yes	No	No
Exfil.(in/hr)	= 0.000 (by Wet area)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	732.40	0.00	0.00	0.00	---	0.00	---	---	---	---	---	0.000
0.60	2,750	733.00	0.56 ic	0.56 ic	0.00	---	0.00	---	---	---	---	---	0.559
1.60	18,861	734.00	1.13 ic	1.08 ic	0.00	---	0.00	---	---	---	---	---	1.075
2.60	41,086	735.00	4.17 ic	1.34 ic	2.67 ic	---	0.00	---	---	---	---	---	4.010
3.60	73,113	736.00	58.62 oc	0.71 ic	2.84 ic	---	55.07 s	---	---	---	---	---	58.61
4.60	117,637	737.00	91.79 oc	0.46 ic	1.82 ic	---	89.51 s	---	---	---	---	---	91.79
5.60	173,410	738.00	111.64 oc	0.33 ic	1.31 ic	---	109.99 s	---	---	---	---	---	111.63
6.60	239,856	739.00	163.17 oc	0.35 ic	1.42 ic	---	161.37 s	---	---	---	---	---	163.14
7.60	318,791	740.00	233.50 oc	0.41 ic	1.64 ic	---	231.40 s	---	---	---	---	---	233.46
8.60	407,945	741.00	289.20 oc	0.42 ic	1.67 ic	---	287.12 s	---	---	---	---	---	289.20

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

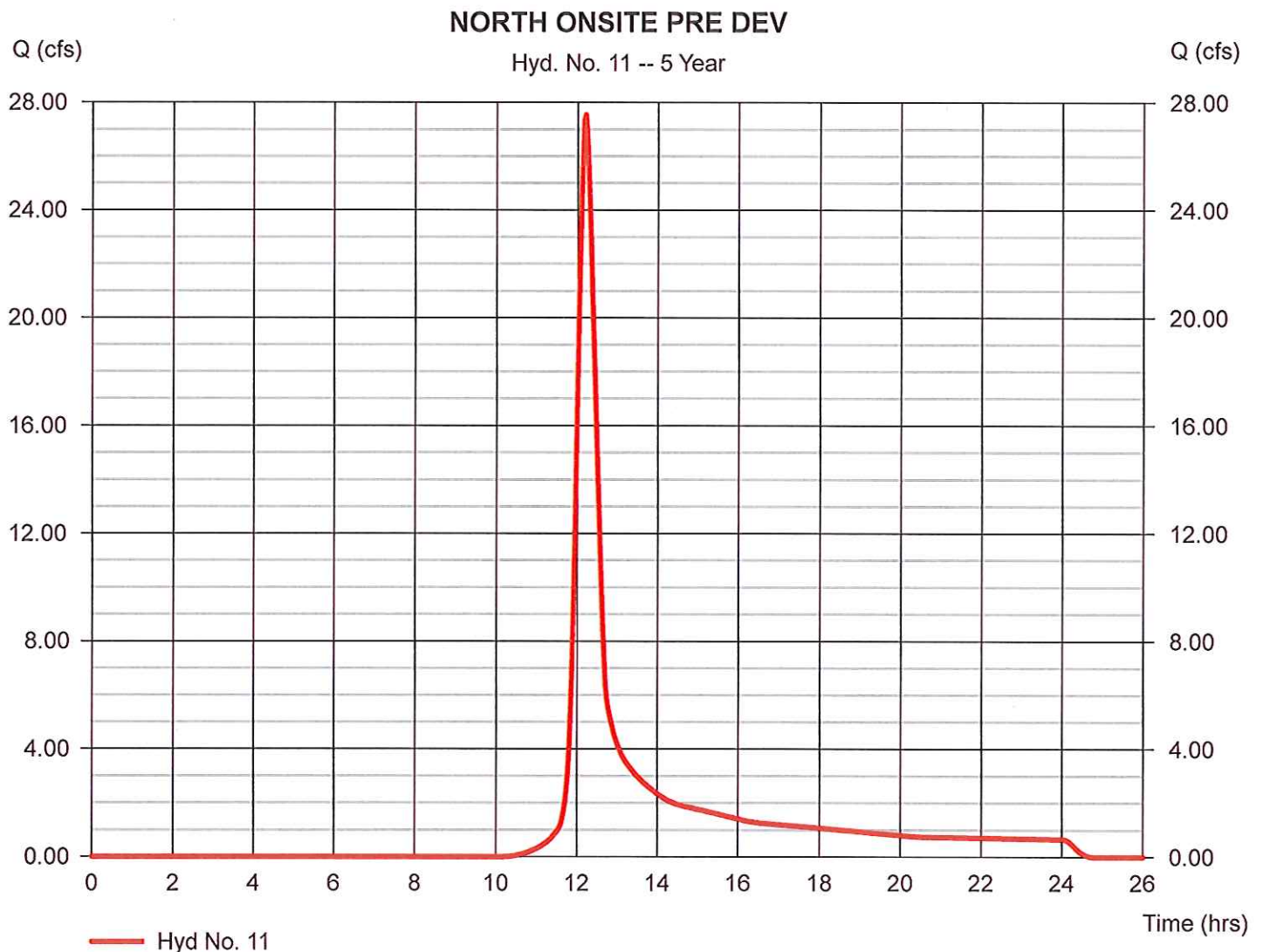
Tuesday, Feb 17, 2015

Hyd. No. 11

NORTH ONSITE PRE DEV

Hydrograph type = SCS Runoff
Storm frequency = 5 yrs
Time interval = 2 min
Drainage area = 21.200 ac
Basin Slope = 2.4 %
Tc method = LAG
Total precip. = 3.84 in
Storm duration = 24 hrs

Peak discharge = 27.55 cfs
Time to peak = 732 min
Hyd. volume = 113,888 cuft
Curve number = 74
Hydraulic length = 1160 ft
Time of conc. (Tc) = 27.65 min
Distribution = Type II
Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2

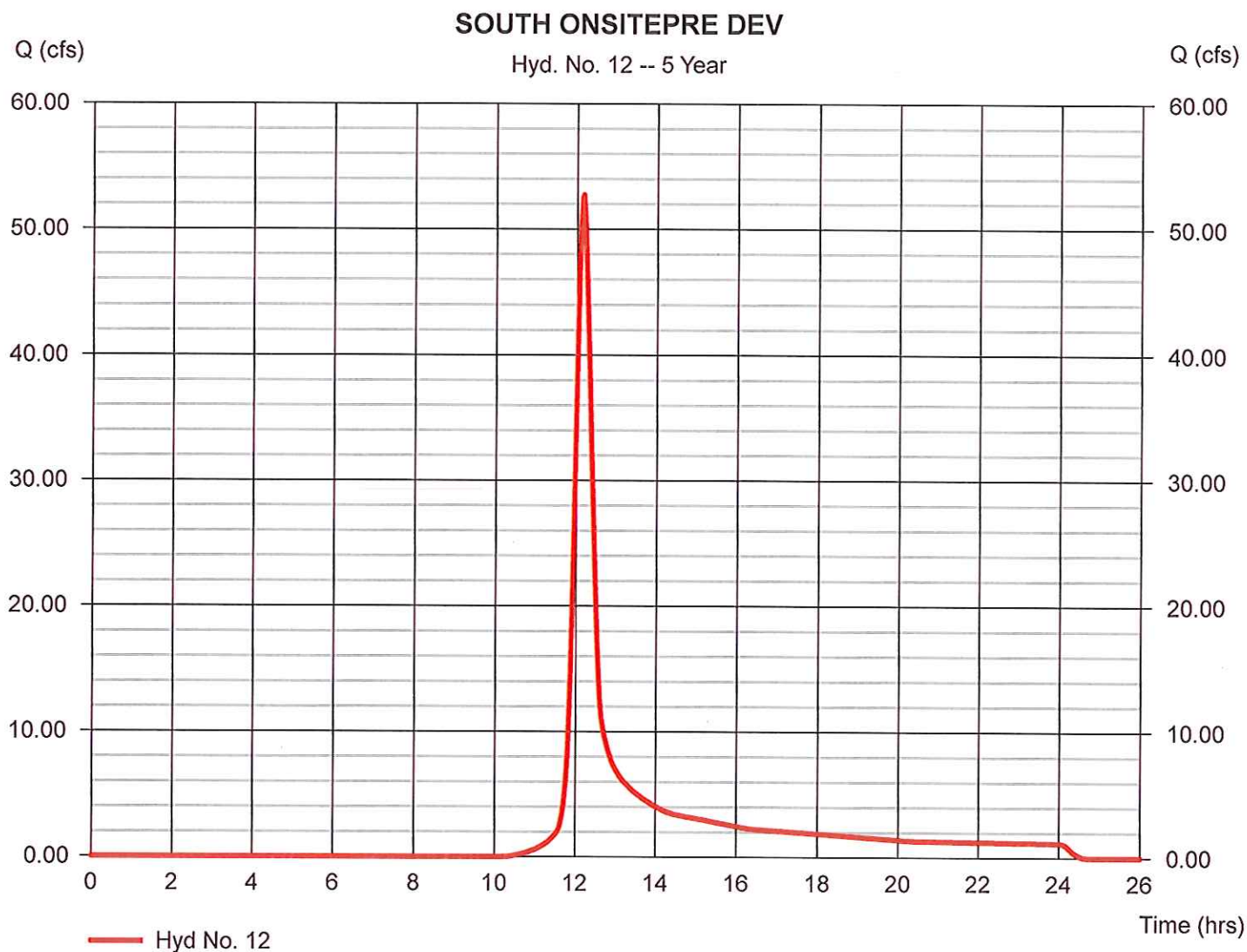
Tuesday, Feb 17, 2015

Hyd. No. 12

SOUTH ONSITEPRE DEV

Hydrograph type = SCS Runoff
Storm frequency = 5 yrs
Time interval = 2 min
Drainage area = 37.800 ac
Basin Slope = 3.8 %
Tc method = LAG
Total precip. = 3.84 in
Storm duration = 24 hrs

Peak discharge = 52.74 cfs
Time to peak = 730 min
Hyd. volume = 199,892 cuft
Curve number = 74
Hydraulic length = 1360 ft
Time of conc. (Tc) = 24.96 min
Distribution = Type II
Shape factor = 484



OVERVIEW

Greenview ♦ Golfview ♦ Fox Run Golf Club

88 Family Dwellings

Fox Run Golf Course

Member Golf

Boys & Girls HS Golf

Men's League Golf

Public Golf

Tournaments and Events

Leisure Activities

Safety and Emergency Concerns

Examined and discussed without action since the development of the golf course and Rummells Addition (now Greenview) in the 1960s. Hard-surfaced access to this area is limited to a two-lane, county road without shoulders or walkways. Persons on foot or bicycles, etc., are especially at risk on this heavily-traveled, service thoroughfare. Should this route be unavailable, a 3.4 mile asphalt-gravel detour to the west is the only improved alternative for resident, emergency, and service vehicles.

City of West Branch

~ A Heritage for Success ~

110 N. Poplar St. • P.O. Box 218 • West Branch, Iowa 52358
Ph. 319-643-5888 • Fax 319-643-2305 • www.westbranchiowa.org • wbcity@Lcom.net

CITY COUNCIL MEETING AGENDA Tuesday, February 19, 2013 • 6:30 p.m. City Council Chambers, 110 North Poplar Street *Action may be taken on any agenda item.*

1. Call to order
2. Roll call
3. Welcome
4. Approve Agenda/Consent Agenda/Move to action
 - a. Approve minutes from the February 4, 2013 City Council Meeting.
 - b. Approve claims.
 - c. Approve the Wellmark BlueCross BlueShield Flexible Spending Account Renewal for April 1, 2013-March 31, 2014 in the amount of \$630.40.
5. Communications/Open Forum
6. Public Hearing/Non-Consent Agenda
 - a. Nuisance Hearing for Dalton Gang at 315 E. Main Street, West Branch per Section 50.08 of the Code of Ordinances requested by Robert M. Champagne, Jr.
 - b. Approve an order for Dalton Gang to abate a nuisance at 315 E. Main Street no later than March 1, 2013./Move to action.
 - c. Approve Class C liquor license with Sunday Sales for Fiesta Riviera, Inc./Move to action.
 - d. First reading of Ordinance 706 amending Chapter 92 "WATER RATES"/Move to action.
 - e. Second reading of Ordinance 707 amending Chapter 45 "ALCOHOLIC CONSUMPTION AND INTOXICATION"/Move to action.
 - f. Resolution 1078, adopting final proposed fiscal year 2013-2014 budget and order notice of hearing for March 4, 2013./Move to action.
 - g. Resolution 1079, establishing the policy for consumption of alcohol upon public property within the City of West Branch, Iowa./Move to action.
 - h. Resolution 1081, authorizing the issuance of General Obligation Corporate Purpose and Refunding Bonds, Series 2013./Move to action.
 - i. Resolution 1082, authorizing the filing of an application for assistance from the Safe Routes to School Program, administered by the Iowa Department of Transportation./Move to action.
 - j. Resolution 1083, accepting the \$5,100 Alliant Energy *Branching Out* Grant and approving the 2013 *Branching Out* Program Agreement./Move to action.
 - k. Main Street West Branch Program Director Mackenzie Krob – Hoover's Hometown Days
7. City Staff Reports
 - a. Library Director Nick Shimmin – Cable Access Equipment Update
8. Comments from Mayor and Council Members
 - a. Councilman Mark Worrell - Greenvew/Pedersen Valley Connection
9. Adjournment

Mayor: Don Kessler • Council Members: Jordan M. Ellyson, Colton Miller, Jim Oaks, Dan O'Neil, Mark Worrell
City Administrator/Clerk: Matt Muckler • Fire Chief: Kevin Stoolman • Library Director: Nick Shimmin
Parks & Rec Director: Melissa Russell • Police Chief: Mike Horihan • Public Works Director: Matt Goodale

Don Kessler was not 291

at the time of the meeting at 6:30 p.m. - then he...

2-24-13, 6:25- we were in town hall

1996 PZ committee: Al Rozinek; Roger Laughlin; Dick Stoolman; Dave Clark; Mark Thomas; Hillary Maurer; Connie Van Ginkle; Buzz Albin.

Present committee includes many of above plus Gary Slach.

18 months, \$10K, 800-page comprehensive plan for police, fire, urban and industrial development. Many open meetings and community forums including engineers and professionals who submitted recommendations. This plan also showed L.C. Rummells' vision for the industrial park south of I80 to separate it from residential developments.

In the past five years there has been a review of this plan with no revisions.

General info:

Orange street west is to connect at Lehman's driveway.

Proposed soccer field behind Henderson Funeral Home using retention area.

Proposed community/rec center west of cemetery north of Crestview.

Existing stub is a plus because only a parking lot and building are needed.

Greenview and Golfview would benefit by having direct access to city facilities.

No parking signs on stub road would eliminate parking problems.

People at West entrance of GV have all the traffic and favor the extension.

Extensions of Orange and Scott did not solicit input from residents.

Walking trail: Where? Winter maintenance? Summer, too. Projected costs?

Current traffic volume on trunk road. Projected upgrade of that road? At what cost?

According to a realtor, all current plan information is made available to all owners and buyers either through their realtors or in a statement on property titles.

Last week, WB Times reported on sidewalk survey. Irrespective of extension approval, can GV residents expect a sidewalk and/or street upgrade in the next five years?

Health and safety concerns: Minutes make a difference. Fire next door nearly totaled their home.

Stulke proposal? Access via street construction between Chacom and Bridges properties.

