



CITY of NOVI CITY COUNCIL

Agenda Item G
April 23, 2018

SUBJECT: Approval of a Storm Drainage Facility Maintenance Easement Agreement from Novi Partners of KY, LLC for the Trilogy project located south of Twelve Mile Road, west of Meadowbrook Road (parcel 22-14-200-031).

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division

CITY MANAGER APPROVAL: 

BACKGROUND INFORMATION:

Novi Partners of KY, LLC, the developer of Trilogy (currently Novi Lakes Health Campus), requests approval of the Storm Drainage Facility Maintenance Easement Agreement for the storm water management system associated with the project.

The Storm Drainage Facility Maintenance Easement Agreement (SDFMEA) is a requirement of the Storm Water Management Ordinance and details the responsibilities of the property owner to properly maintain their privately owned on-site storm water system. The agreement also contains a provision that permits the City to perform maintenance of the privately owned on-site storm water system should the property owner fail to do so at the expense of the property owner.

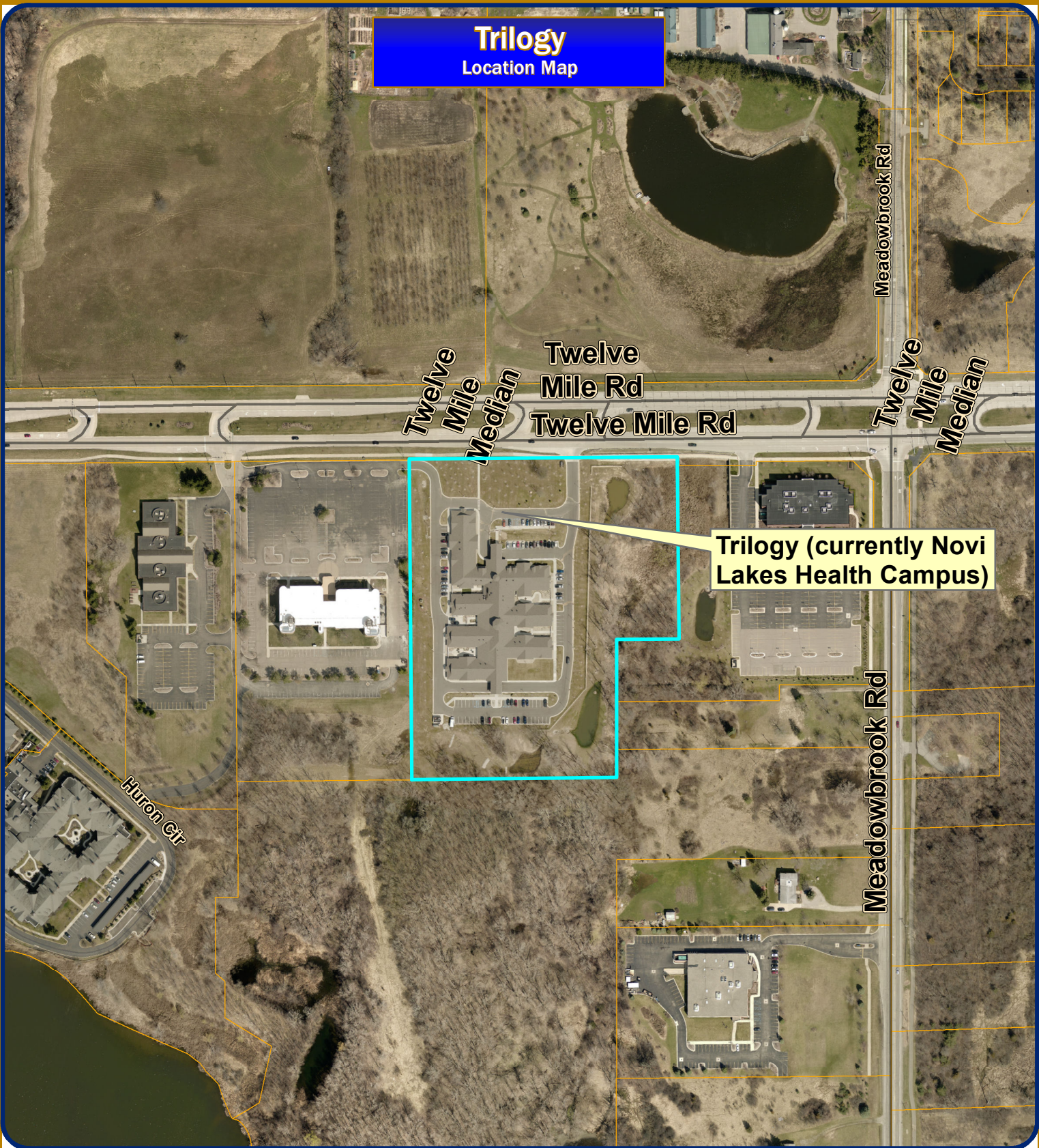
In this particular case, the property owner owns and agrees to maintain storm water detention areas and is providing an access easement to the detention basins and oil/gas separators. The owner is also responsible for maintaining the pipes, storm sewer structures, and open channels leading to and from the on-site sewer system.

The enclosed agreement has been favorably reviewed by the City Engineering Consultant (Spalding DeDecker, June 21, 2016) and the City Attorney (Beth Saarela, July 21, 2016) and is recommended for approval.

RECOMMENDED ACTION: Approval of a Storm Drainage Facility Maintenance Easement Agreement from Novi Partners of KY, LLC for the Trilogy project located south of Twelve Mile Road, west of Meadowbrook Road (parcel 22-14-200-031).

Trilogy

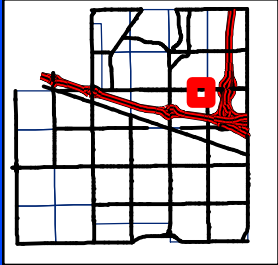
Location Map



Map Author: Theresa Bridges
 Date: April 23, 2018
 Project:
 Version #:

Amended By:
 Date:
 Department:

MAP INTERPRETATION NOTICE
 Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi.
 Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.



City of Novi
 Engineering Division
 Department of Public Services
 26300 Lee BeGole Drive
 Novi, MI 48375
cityofnovi.org

Feet
 0 65 130 260 390
 1 inch = 315 feet





JOHNSON ROSATI SCHULTZ JOPPICH PC

27555 Executive Drive Suite 250 ~ Farmington Hills, Michigan 48331

Phone: 248.489.4100 | Fax: 248.489.1726

Elizabeth Kudla Saarela
esaarela@jrsjlaw.com

www.johnsonrosati.com

July 21, 2016

Rob Hayes, Public Services Director
City of Novi, Department of Public Services
Field Services Complex
26300 Lee BeGole Drive
Novi, MI 48375

**Re: Trilogy - Novi JSP14-13
Storm Drainage Facility Maintenance Easement Agreement**

Dear Mr. Hayes:

We have received and reviewed, and enclosed please find the Storm Drainage Facility Maintenance Easement Agreement for storm water drainage and detention facilities serving the Trilogy - Novi Development. The Storm Drainage Facility Maintenance Easement Agreement is in the City's standard format and is acceptable as provided. The City's Consulting Engineer has reviewed and approved the attached Exhibits. The Agreement appears to be in order and may be placed on an upcoming City Council Agenda for approval. Once approved and executed by the City, the Agreement should be recorded with Oakland County Records by the City Clerk's Office.

Please feel free to contact me with any questions or concerns in regard to this matter.

Very truly yours,



ELIZABETH K. SAARELA

EKS

Enclosures

cC: Cortney Hanson, Clerk
Charles Boulard, Community Development Director
Barb McBeth, City Planner
Kristin Pace, Treasurer's Office
Aaron Staup, Construction Engineering Coordinator

Rob Hayes, Public Services Director
July 5, 2016
Page 2

Adam Wayne, Civil Engineer
Sarah Marchioni, Building Permit Coordinator
Brittany Allen and Ted Meadows, Spalding DeDecker
Sue Troutman, City Clerk's Office
Michael Kitchen & Jason Unger, DMK Development (junger@dmkdevelopment.com)
Paul Croce, Esquire
Patrick Hanes, Esquire
Thomas R. Schultz, Esquire

STORM DRAINAGE FACILITY
MAINTENANCE EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT is made this 30 day of April, 2016, by and between Novi Partners of KY, LLC, a Kentucky limited liability company, whose address is 9300 Shelbyville Road, Suite 800, Louisville, Kentucky 40222 (hereinafter the "Owner"), and the City of Novi, its successors, assigns, or transferees, whose address is 45175 W. Ten Mile Road, Novi, MI 48375 (hereinafter the "City").

RECITATIONS:

- A. Owner is the owner and developer of a certain parcel of land situated in Section 4 of the City of Novi, Oakland County, Michigan, described on the attached and incorporated **Exhibit A** (the "Property"). Owner has received final site plan approval for construction of a skilled nursing and assisted living facility (the "Development") on the Property.
- B. The Development, shall contain certain storm drainage, detention and/or retention facilities, including but not limited to, a detention/sedimentation basin, for the collection, conveyance, storage, treatment and/or discharge of storm water from the Property in accordance with all approved plans, and all applicable ordinances, laws and regulations.

NOW, THEREFORE, the Owner hereby covenants and agrees that the Owner shall, at its own expense, perpetually preserve, maintain, and repair all storm drainage, detention and retention facilities, including all wetlands which are part of the system, to insure that the same continue to function as intended. The Owner shall establish a regular and systematic program of maintenance (the "Schedule of Maintenance") for such facilities and areas to insure that the physical condition and intended function of such areas and facilities shall be preserved and maintained. The Schedule of Maintenance and the annual estimated costs for maintenance and repairs for the first three (3) years are described in the attached Exhibit B.

In the event that the Owner shall at any time fail to carry out the responsibilities specified within this agreement, and/or in the event of a failure to preserve and/or maintain the storm water drainage, detention and retention facilities in reasonable order and condition, the City may serve written notice upon the Owner setting forth the deficiencies in maintenance and/or preservation

along with a demand that the deficiencies be cured within a stated reasonable time period, and the date, time and place for a hearing before the City for the purpose of allowing Owner an opportunity to be heard as to why the City should not proceed with the correction of the deficiency or obligation which has not been undertaken or properly fulfilled. At any such hearing, the time for curing and the hearing itself may be extended and/or continued to a date certain. If, following such hearing, the person conducting the hearing shall reasonably determine that the obligation has not been fulfilled or failure corrected within the time specified in the notice, as determined by the City in its reasonable discretion, the City shall thereupon have the power and authority, but not the obligation, to enter upon the Property, or cause its agents or contractors to enter the Property through the Ingress/Egress Easement Area as described and depicted in **Exhibit C** and perform such obligation or take such corrective measures as reasonably found by the City to be appropriate or necessary with respect to the detention/sedimentation basin within the Detention/Sedimentation Basin Easement Area described and depicted in **Exhibit D**, for the purposes described above. The cost and expense of making and financing such actions by the City, including notices by the City and reasonable legal fees incurred by the City, plus an administrative fee in an amount equivalent to twenty-five (25%) percent of the total of all such costs and expenses incurred, shall be paid by Owner within thirty (30) days of a billing to the Owner. All unpaid amounts may be placed on the delinquent tax roll of the City as to the Property, and shall accrue interest and penalties, and shall be collected as, and deemed delinquent real property taxes, according to the laws made and provided for the collection of delinquent real property taxes. In the discretion of the City, such costs and expenses may be collected by suit initiated against the Owner, and, in such event, the Owner shall pay all court costs and reasonable attorney fees incurred by the City in connection with such suit.

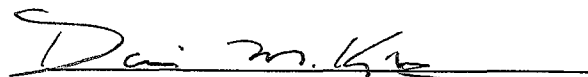
The parties hereto make this Agreement on behalf of themselves, their heirs, successors, assigns and transferees, and hereby warrant that they have the authority and capacity to execute this Agreement and bind the property as described in the terms and conditions of this agreement.

Invalidation of any of these covenants or conditions by Judgment or Court Order shall in no way affect the validity of any other provision which shall remain in full force and effect.

This agreement shall run with the land and be binding upon all owners, their agents, heirs, successors, assigns and transferees.


IN WITNESS WHEREOF, Owner has executed this Agreement as of the day and year first above set forth.

OWNER
NOVI PARTNERS OF KY, LLC


By: David M. Kitchen, Manager

STATE OF KENTUCKY)
) ss.
COUNTY OF JEFFERSON)

The foregoing instrument was acknowledged before me this 30 day of June, 2016, by David M. Kitchen, as the Manager of Novi Partners of KY, LLC.



Notary Public
Acting in Jefferson County, Kentucky
My Commission Expires: 8-5-2018

CITY OF NOVI
A Municipal Corporation

By:
Its:

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

The foregoing instrument was acknowledged before me on this ____ day of _____ 201____, by, _____, on behalf of the City of Novi, a Municipal Corporation.

Notary Public
Acting in Oakland County, Michigan
My Commission Expires: _____

Drafted by: Elizabeth Kudla Saarela Johnson, Rosati, Schultz & Joppich, P.C. 27555 Executive Drive, Suite 250 Farmington Hills, MI 48331	And when recorded return to: Maryanne Cornelius, City Clerk City of Novi 45175 W. Ten Mile Rd Novi, MI 48375
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EXHIBIT 'A'

LEGAL DESCRIPTION:

A parcel of land in the Northeast 1/4 of Section 14, T1N, R8E, City of Novi, Oakland County, Michigan, the surveyed boundary of said parcel described as:
Commencing at the North 1/4 corner of said Section 14; thence N89°24'35"E along the North line of said Section 14 a distance of 1486.73 feet; thence S00°35'25"E perpendicular to said North line 90.00 feet to the point of beginning of this description; thence N89°24'35"E parallel with said North line 645.33 feet; thence S00°35'25"E perpendicular to said North line 437.98 feet; thence S89°24'35"W parallel with said North line 150.00 feet; thence S00°01'05"E 332.04 feet; thence S89°24'35"W parallel with said North line 492.01 feet; thence N00°35'25"W perpendicular to said North line 770.00 feet to the point of beginning; said parcel containing 10.25 acres, more or less; said parcel subject to all easements and restrictions if any.

EXHIBIT "B"

**Stormwater Management Facility
Operation and Maintenance Plan**

Trilogy Health Services

Prepared for:

Trilogy Health Services
303 N. Hurstbourne Pkwy
Louisville, KY 40222

Prepared by:

KEBS Inc.
2116 Haslett Road
Haslett, MI 48843
(517) 339-1014

Project Number: 87486.eng
March 22, 2016

Stormwater Management Facility Operation and Maintenance (O&M) Plan

Table of Contents

An O&M Plan is required for this development project to provide guidance for the post construction stormwater best management practices (BMPs). The document should be used by the property owner to ensure adequate maintenance and function per design of the post construction BMPs on site.

- I. Stormwater Management Facilities Description
 - A. General Site Description
 - B. Stormwater Management Facilities
- II. Site Contacts & Change of Ownership
- III. Inspection Procedures
 - A. Safety
- IV. Maintenance Procedures
 - B. Routine Maintenance Activities
 - C. Non Maintenance Activities
 - D. Corrective Actions and Modifications
 - E. Maintenance Materials
 - F. Safety
- V. Annual Reporting, Record Keeping and Budgeting
- VI. BMP Waste Disposal
- VIII. Appendices
 - Appendix 1 - Site Plan with storm water facilities shown and labeled
 - Appendix 2 - Inspection Checklist
 - Appendix 3 – Maintenance Checklist
 - Appendix 4 – Annual Maintenance Report Form
 - Appendix 5– BMP Construction Details, Material Replacements

I. Stormwater Management Facilities Description

A. General Site Description

The site has been designed to meet storm water quality, channel protection and flood detention requirements for the City of Novi. There are (3) installed BMP's that have been utilized to provide water quality and channel protection requirements. These BMP's are bio-retention areas, catch basins and oil/gas separators. Channel protection and flood detention requirements have been provided via Detention ponds. There is a pond on the NE side of the site and another on the SE side of the site.

A stormwater management and facilities site plan has been attached as **Appendix 1**. This appendix shows and labels each BMP and Channel Protection/Flood Detention item.

B. Stormwater Management Facilities

I. Water Quality BMPs

- a. *Bio-Retention* areas (1) are located on the site to collect storm water runoff from the Northwest parking area. Bio-Retention areas allow storm water runoff to infiltrate through the ground and through a filtering media. At the bottom of the Bio-Retention areas, water can either infiltrate further into the ground or (if saturated) it is collected by an underdrain and transported through the storm sewer system.
- b. *Catch Basins/Lawn Basins* are located on the site to collect storm water from the parking areas. Catch Basins are storm sewer manholes that have a sump installed at the bottom of the structure. This sump helps to trap excess sediment/dirt and any trash or debris that may enter the storm water management system.
- c. *Snout and/or turn down pipes* are located in (2) storm water structures. These have been provided to help trap oil/gas in structures at the far downstream end of the system, prior to discharge to the detention basins.

II. Flood Detention/Channel Protection Storage Facilities

- a. *Sediment Forebays and Detention Ponds* have been designed to meet City Detention requirements and channel protection requirements.

II. Site Contacts & Change of Ownership Requirements

Current Owners Contact Information:

Trilogy Health Services, LLC
303 N. Hurstbourne Pkwy
Louisville, KY 40222
(502)-213-1873

Per the Maintenance Agreement, the owner or any successor in title to said property of specified development shall maintain the stormwater facilities, BMP, basins and drainage facilities, appurtenances and sewer lines. If the property owner changes, a Change of Ownership notification should be completed and submitted to the City of Novi's Engineering Department.

III. Inspection Procedures

Stormwater Management Facilities shall be inspected by a qualified individual familiar with the operation of the facilities. Inspections during the first year shall take place at a minimum of twice per year using the BMP inspection checklist in **Appendix 2**. At least one of the inspections *should* be performed after a storm exceeding 1 inch of rainfall in a 24 hour period, ideally approximately 24 to 48 hours after the storm to determine if the facility is draining properly. After the first year of operation, inspections should be provided as needed per the inspection checklist. An annual inspection report shall be provided to the City of Novi, as attached on **Appendix 4**.

A. Safety

Safety considerations should be taken when conducting inspection work. All work shall be done in accordance with OSHA regulations. Inspection personnel should utilize the proper safety equipment for the work being performed. Such safety equipment may include heavy duty gloves, steel toed boots, safety glasses, first aid kits and proper clothing. All potential hazards should be anticipated and avoided. The following is a list of safety precautions inspection personnel should be aware of before performing maintenance.

- Never enter a confined space unless you have proper OSHA training.
- Avoid entering pipes or conduits without another individual present.
- Check the ventilation in a storm water system before using any ignitable materials. Also, make sure to allow the storm water system to vent for a period of time if a peculiar odor is present.
- Wear gloves if any mechanical parts or structural components are going to be handled.
- Lift manhole covers or other structural covers carefully, preferably with a manhole lid remover tool. Learn to lift heavy items properly to avoid any back injuries.
- Always check the water depth of a system before you step in the water.
- Be aware that sharp objects such as nails, broken glass or other debris may be present in a storm water system and can cause injury.

IV. Maintenance Procedures

Following the maintenance procedures outlined in this plan for the stormwater facilities is imperative to ensure the proper function of the systems. The first year of operation of the system is especially critical for establishing benchmarks for the specific system onsite. See **Appendix 3** for maintenance procedures, below is a brief description.

A. Routine Maintenance Activities

The majority of this work consists of inspecting all storm sewer structures, including catch basins, lawn basins and storm manholes. Structures should be checked to ensure they are functioning properly without noticeable plugging or excess sediment buildup. Any sediment buildup or trash/debris buildup should be cleaned from casting or sump as needed. At the Bio-Retention facilities, routine maintenance shall be remove any trash/debris, excess sediment buildup, or any other blockages to the lawn basins and/or bio-retention areas. Lastly, at the sediment forebays and the detention ponds, routine maintenance would include checking the outlet for plugs and/or clogging, inspecting the outlet structure for excess trash and debris, inspecting the banks for excess erosion, inspecting the detention basin bottom for excess sediment buildup. If any of these items require maintenance they should be repaired using maintenance procedures described in **Appendix 3**. These activities can be completed without any prior correspondence from the City of Novi or an engineering consultant.

B. Non-Routine Maintenance Activities

Non-Routine items are activities that require additional maintenance and may require proper maintenance equipment and/or more qualified individuals. At catch basins, the sumps should be inspected for sediment buildup. If the bottom (sump) of any lawn basin or catch basin measures 6" or more of sediment, the structures should be vacuumed or cleaned by a qualified individual.

C. Corrective Actions and Modifications

Any corrective actions required that will modify the BMP(s) design components are considered design modifications and must be reviewed by the City of Novi. The owner must consult the City of Novi Engineering Department, and will likely need an approved plan from a professional engineering consultant.

D. Maintenance Materials

In the event that any of the media or other surface materials needed to be replaced during routine or non-routine maintenance, the following are the requirements for material replacement. See **Appendix 5** for BMP construction details and material requirements.

E. Safety

Safety considerations should be taken when conducting maintenance work. All maintenance work shall be done in accordance with OSHA regulations. Maintenance personnel should utilize the proper safety equipment for the work being performed. Such safety equipment may include heavy duty gloves, steel toed boots, safety glasses, first aid kits and proper clothing. All potential hazards should be anticipated and avoided. The following is a list of safety precautions maintenance personnel should be aware of before performing maintenance.

- Operate equipment safely and in accordance with manufacturers specifications.
- Contact Miss Dig to locate any underground utilities prior to any site excavation
- If removing excess sediment from the site facilities, use shovels or high-suction vacuums instead of your bare hands.

V. Annual Reporting Requirements, Record Keeping and Budgeting

To help ensure BMP maintenance, the City of Novi requires an Annual BMP Maintenance Report to be submitted, per **Appendix 4**. This Annual Report should provide documentation that maintenance was performed in accordance with the O&M Plan and individual BMP inspection requirements. The Annual Report should be submitted to the City of Novi no later than May 31st of the year following the previous calendar year ending December 31st, i.e. 2016 Annual Report is due May 31, 2017.

The Annual Report should be mailed to:
City of Novi Engineering Department
Attn: City Engineer
45175 W. Ten Mile Road
Novi, MI 48375

The property owner should also keep an inspection log detailing dates of inspection, findings, and corrective actions taken, including all routine and non-routine maintenance activities completed. The City of Novi may require submittal of additional reports and/or development of compliance schedules as deemed necessary to assure compliance with the Ordinance and/or storm water discharge standards.

The property owner shall be responsible for all necessary inspection and maintenance costs. The property owner shall provide the City of Novi a proposed budget for the first 3 years for inspection and maintenance costs of the Stormwater Management Plan. See below for recommended budget estimate:

Inspections – (2) per year - \$800
Maintenance – (2) per year - \$2,000 (Some maintenance work can be part of an annual lawn service/landscape contractor for mowing, weeding, etc.)
Proposed Yearly Budget = +/- \$3,000

VI. BMP Waste Disposal

Landfill and solid waste facility requirements shall be followed for all BMP waste. The owner is responsible for determining all State and/or local regulations for special waste that may be applicable. All sediment removed from the system shall be disposed according to current erosion and sediment control regulations. When cleaning, standing water, "clear and unpolluted", can be decanted and discharged to the storm system. Water that has become turbid during cleaning should be pumped and hauled to an acceptable wastewater disposal facility or treated by filtration, such as pumped through a filter bag or filtered through other media and then discharged.

The following definitions shall be used as reference:

Clear water: Water that has settled its solids for 24 hours and can be pumped out of the BMP without re-suspending the solids. Unpolluted water: Any water that may be discharged under NPDES regulations into waters of the State without having to be authorized by a NPDES permit and which will not cause any violations of State or Federal water quality standards

Appendices

- Appendix 1 - Site Plan with storm water facilities shown and labeled
- Appendix 2 - Inspection Checklist
- Appendix 3 – Maintenance Checklist
- Appendix 4 – Annual Maintenance Report Form
- Appendix 5– BMP Construction Details, Material Replacement

EASEMENT EXHIBIT "C"


PARCEL 50-22-14-200-031 DESCRIPTION (PER CITY OF NOVI RECORDS):

PART OF THE NE 1/4 BEG AT A PT DIST S 00-35-25 E 60.00 FT & N 89-24-35 E 1486.73 FT FROM N 1/4 COR, TH N 89-24-35 E 645.33 FT, TH S 00-35-25 E 467.98 FT, TH S 89-24-35 W 150.00 FT, TH S 00-01-05 E 332.04 FT, TH S 89-24-35 W 492.01 FT, TH N 00-35-25 W 800.00 FT TO BEG, EXC N 30 FT

PROPOSED 15' ACCESS EASEMENT:

An area of land in the Northeast 1/4 of Section 14, T1N, R8E, City of Novi, Oakland County, Michigan, the limits of said easement described as: Commencing at the North 1/4 corner of said Section 14; thence N89°24'35"E along the North line of said Section 14 a distance of 1486.73 feet; thence S00°35'25"E 90.00 feet; thence N89°24'35"E 375.28 feet to the point of beginning of this easement description; thence continuing N89°24'35"E 31.50 feet; thence S00°35'25"E 4.42 feet; thence S89°52'30"E 113.63 feet; thence S88°30'01"E 25.72 feet; thence S00°34'14"E 58.45 feet; thence S18°19'20"E 31.09 feet; thence S23°54'19"W 30.28 feet; thence S51°16'51"W 24.18 feet; thence S49°23'51"W 29.51 feet; thence S21°57'25"W 59.30 feet; thence S86°16'15"W 30.55 feet; thence S01°37'32"W 208.41 feet; thence S40°15'24"E 29.74 feet; thence S07°25'05"E 56.45 feet; thence S14°42'11"W 56.41 feet; thence N13°51'30"W 31.37 feet; thence N14°42'11"E 25.92 feet; thence N07°25'05"W 49.09 feet; thence N40°15'24"W 31.06 feet; thence N01°37'32"E 227.81 feet; thence N86°16'15"E 34.78 feet; thence N21°57'25"E 53.53 feet; thence N49°23'51"E 33.42 feet; thence N51°16'51"E 20.77 feet; thence N23°54'19"E 20.84 feet; thence N18°19'20"W 27.64 feet; thence N00°34'14"W 46.33 feet; thence N88°30'01"W 11.07 feet; thence N89°52'30"W 144.77 feet; thence N00°35'25"W 19.03 feet to the point of beginning; said easement containing 0.26 acre, more or less; said easement subject to all other easements and restrictions if any.

Erick R. Friestrom Date:
Professional Surveyor No. 53497

	KEBS, INC.	KYES ENGINEERING BRYAN LAND SURVEYS
	2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047 13432 PRESTON DRIVE, MARSHALL, MI 49068 PH. 269-781-9800 FAX. 269-781-9805	
DRAWN BY	SLH	SECTION 14, T1N, R8E
FIELD WORK BY	NAW	JOB NUMBER:
SHEET	2 OF 2	87486.ENG-ESMT-ACC

EASEMENT EXHIBIT "D"

FOR: DMK DEVELOPMENT GROUP, LLC

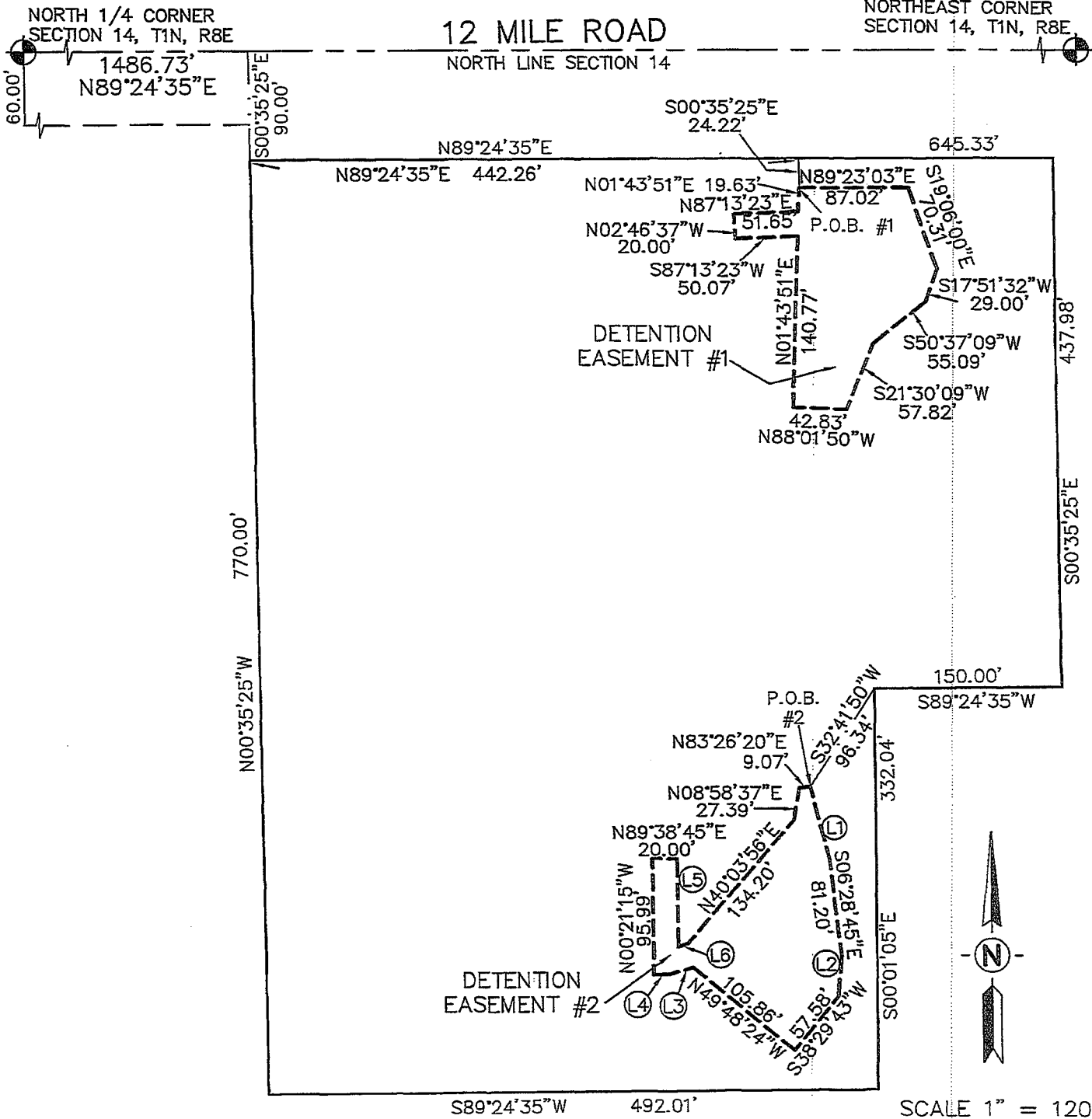
NOTES:

1. A CERTIFIED BOUNDARY SURVEY IS REQUIRED FOR THE EXACT LOCATION OF FENCE AND PROPERTY LINES.

2. ALL EASEMENTS MAY NOT BE SHOWN

SEE PAGE 2 OF 2 FOR EASEMENT DESCRIPTION

LINE TABLE		
LINE	LENGTH	BEARING
L1	61.04'	S13°51'30"E
L2	33.77'	S03°58'45"W
L3	20.02'	S72°27'20"W
L4	12.96'	S89°38'45"W
L5	72.88'	S00°21'15"E
L6	8.17'	N72°27'20"E



This plan was made at the direction of the parties hereon and intended solely for their immediate use and no survey has been made and no property lines were monumented, all easements recorded or unrecorded may not be shown, unless specifically noted, and no dimensions are intended for use in establishing property lines.

— = Deed Line
 - - - = Distance Not to Scale

ERK

ERICK R. FRIESTROM DATE 05/09/16
 PROFESSIONAL SURVEYOR NO. 53497

KEBS, INC. KYES ENGINEERING
 BRYAN LAND SURVEYS

2116 HASLETT ROAD, HASLETT, MI 48840
 PH. 517-339-1014 FAX. 517-339-8047

13432 PRESTON DRIVE, MARSHALL, MI 49068
 PH. 269-781-9800 FAX. 269-781-9805

DRAWN BY SLH	SECTION 14, T1N, R8E
FIELD WORK BY NAW	JOB NUMBER:
SHEET 1 OF 2	87486.ENG-ESMT-STM

EASEMENT EXHIBIT "D"

PARCEL 50-22-14-200-031 DESCRIPTION (PER CITY OF NOVI RECORDS):
 PART OF THE NE 1/4 BEG AT A PT DIST S 00-35-25 E 60.00 FT & N 89-24-35 E
 1486.73 FT FROM N 1/4 COR, TH N 89-24-35 E 645.33 FT, TH S 00-35-25 E 467.98
 FT, TH S 89-24-35 W 150.00 FT, TH S 00-01-05 E 332.04 FT, TH S 89-24-35 W
 492.01 FT, TH N 00-35-25 W 800.00 FT TO BEG, EXC N 30 FT


PROPOSED DETENTION EASEMENT NO. 1:

An area of land in the Northeast 1/4 of Section 14, T1N, R8E, City of Novi, Oakland County, Michigan, the limits of said easement described as: Commencing at the North 1/4 corner of said Section 14; thence N89°24'35"E along the North line of said Section 14 a distance of 1486.73 feet; thence S00°35'25"E 90.00 feet; thence N89°24'35"E 442.26 feet; thence S00°35'25"E 24.22 to the point of beginning of this easement description; thence N89°23'03"E 87.02 feet; thence S19°06'00"E 70.31 feet; thence S17°51'32"W 29.00 feet; thence S50°37'09"W 55.09 feet; thence S21°30'09"W 57.82 feet; thence N88°01'50"W 42.83 feet; thence N01°43'51"E 140.77 feet; thence S87°13'23"W 50.07 feet; thence N02°46'37"W 20.00 feet; thence N87°13'23"E 51.65 feet ;thence N01°43'51"E 19.63 feet to the point of beginning; said easement containing 0.37 acre, more or less; said easement subject to all other easements and restrictions if any.

PROPOSED DETENTION EASEMENT NO. 2:

An area of land in the Northeast 1/4 of Section 14, T1N, R8E, City of Novi, Oakland County, Michigan, the limits of said easement described as: Commencing at the North 1/4 corner of said Section 14; thence N89°24'35"E along the North line of said Section 14 a distance of 1486.73 feet; thence S00°35'25"E 90.00 feet; thence N89°24'35"E 645.33 feet; thence S00°35'25"E 437.98 feet; thence S89°24'35"W 150.00 feet; thence S32°41'50"W 96.34 feet to the point of beginning of this easement description; thence S13°51'30"E 61.04 feet; thence S06°28'45"E 81.20 feet; thence S03°58'45"W 33.77 feet; thence S38°29'43"W 57.58 feet; thence N49°48'24"W 105.86 feet; thence S72°27'20"W 20.02 feet; thence S89°38'45"W 12.96 feet; thence N00°21'15"W 95.99 feet; thence N89°38'45"E 20.00 feet; thence S00°21'15"E 72.88 feet; thence N72°27'20"E 8.17 feet; thence N40°03'56"E 134.20 feet; thence N08°58'37"E 27.39 feet; thence N83°26'20"E 9.07 feet to the point of beginning; said easement containing 0.38 acres, more or less; said easement subject to all other easements and restrictions if any.

Erick R. Friestrom Date:
 Professional Surveyor No. 53497

	KEBS, INC.	KYES ENGINEERING BRYAN LAND SURVEYS
	2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047 13432 PRESTON DRIVE, MARSHALL, MI 49068 PH. 269-781-9800 FAX. 269-781-9805	
DRAWN BY SLH	SECTION 14, T1N, R8E	
FIELD WORK BY NAW	JOB NUMBER:	
SHEET 2 OF 2	87486.ENG-ESMT-STM	

Appendix 2

Inspection Checklist

Stormwater Feature	Inspection Item	Frequency	Equipment Necessary	Safety Equipment Recommended
Catch Basins	Inspect the Cb's for trash and/or debris Inspect the Cb's sump for sediment buildup	Semi-Annually	None	Gloves Boots
Lawn Basins	Inspect the Lb's for trash and/or debris Inspect the Lb's sump for sediment buildup	Semi-Annually	None	Gloves Boots
Rip Rap Spillways	Inspect spillway for dirt/debris buildup Inspect rip rap for dirt/debris buildup Inspect rip rap for drainage blockages	Semi-Annually	None	Gloves Boots
Bio-Retention Areas	Inspect surface for sediment/debris buildup Inspect Lawn Basin outlet for blockages Inspect surface for trash/litter	Semi-Annually	None	Gloves Boots
Sediment Forebays	Inspect outlets for clogging, check stone around outlet Inspect for floatables and debris Inspect inlet/outlet pipes, animal grates and/or filters Inspect banks and bottom for excessive erosion	Semi-Annually	None	Gloves Boots
Detention Basins	Inspect outlets for clogging, check stone around outlet Inspect for floatables and debris Inspect inlet/outlet pipes, animal grates and/or filters Inspect banks and bottom for excessive erosion Inspect vegetation, plantings in and around perimeter	Semi-Annually	None	Gloves Boots

Appendix 3

Maintenance Checklist

Stormwater Feature/Item	Maintenance Item	Frequency	Equipment Necessary	Safety Equipment Recommended
Catch Basins	Remove trash and debris as necessary Remove sediment from sump when it is 6" thick or greater	When deemed necessary from inspection	Shovel, Hand tools. Vacuum truck may be necessary	Gloves Boots Safety Glasses
Lawn Basins	Remove trash and debris as necessary Remove sediment from sump when it is 6" thick or greater	When deemed necessary from inspection	Suction hose, shovel, hand tools	Gloves Boots Safety Glasses
Rip Rap Spillways	Remove dirt/debris/trash from spillway and rip rap areas Remove any blockages that are present with the rip rap channel	When deemed necessary from inspection	Hand tools	Gloves Boots
Bio-Retention Areas	Remove dirt/debris/trash from surface Remove any excess sediment that has deposited on surface and impeding drainage	When deemed necessary from inspection	Hand tools	Gloves Boots
Sediment Forebay	Remove debris/trash and sediment from outlets Re-seed banks as needed to help control erosion Remove sediment when 6"+ is observed at bottom	When deemed necessary from inspection	see Appendix 5 for inspection & maintenance guide	Gloves Boots Safety Glasses Helmet
Detention Ponds	Remove debris/trash and sediment from outlets Replace stone around outlet as needed Re-seed banks as needed to help control erosion Remove sediment when 6"+ is observed at bottom	When deemed necessary from inspection	see Appendix 5 for inspection & maintenance guide	Gloves Boots Safety Glasses Helmet

Appendix 4

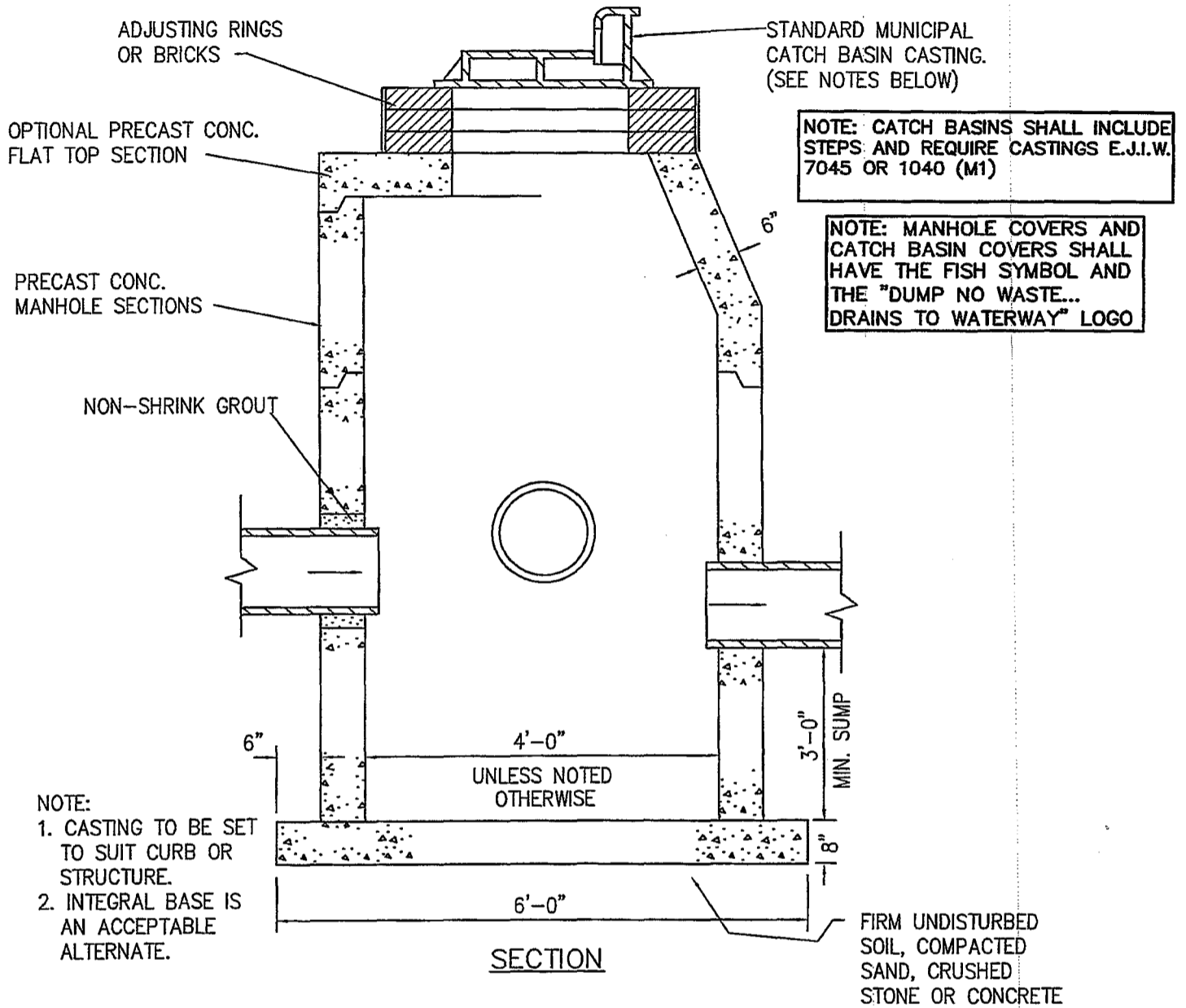
STORM WATER INSPECTION LOG

Inspected By (Name and Title):	
Inspection Date:	
Signature:	

Area to Inspect	Completed (check)	Comments or Corrective Actions
<i>Inspect in and around the Catch Basins on-site:</i> * Remove trash and debris as necessary * Clean areas around Catch Basin to prevent materials from entering basin * Clean out structure sumps if sediment has built up over 6"		
<i>Inspect in and around the Lawn Basins on-site:</i> * Remove trash and debris as necessary * Clean areas around Lawn Basin to prevent materials from entering basin * Clean out structure sumps if sediment has built up over 6"		
<i>Inspect in and around the rip rap spillways:</i> * Remove trash and debris as necessary * Remove any blockages built up in rip rap		
<i>Inspect in and around the (2) bio-retention areas:</i> * Remove trash and debris as necessary * Remove any excess sediment that is impeding infiltration into the bio-retention * Inspect outlet to ensure proper drainage		
<i>Inspect sediment forebays and detention:</i> * Remove excess dirt, sediment and debris from inlets/outlets using hand tools or using a landscape contractor * Replace stone around outlet(s) as necessary * Re-seed banks of basins as necessary to control erosion * Remove sediment when accumulations of 6"+ are found in the bottom of basin(s) * Remove any dead vegetation that obstructs flow		
(Keep Inspection forms for 5 years, or per City of Novi)		
Notes and/or Comments:		

APPENDIX 5

NOTE: ALL NEW STORM PENETRATIONS/HOLES WITHIN MANHOLES TO BE CORE DRILLED (EITHER USING A BOOT OR NON-SHRINK GROUT)

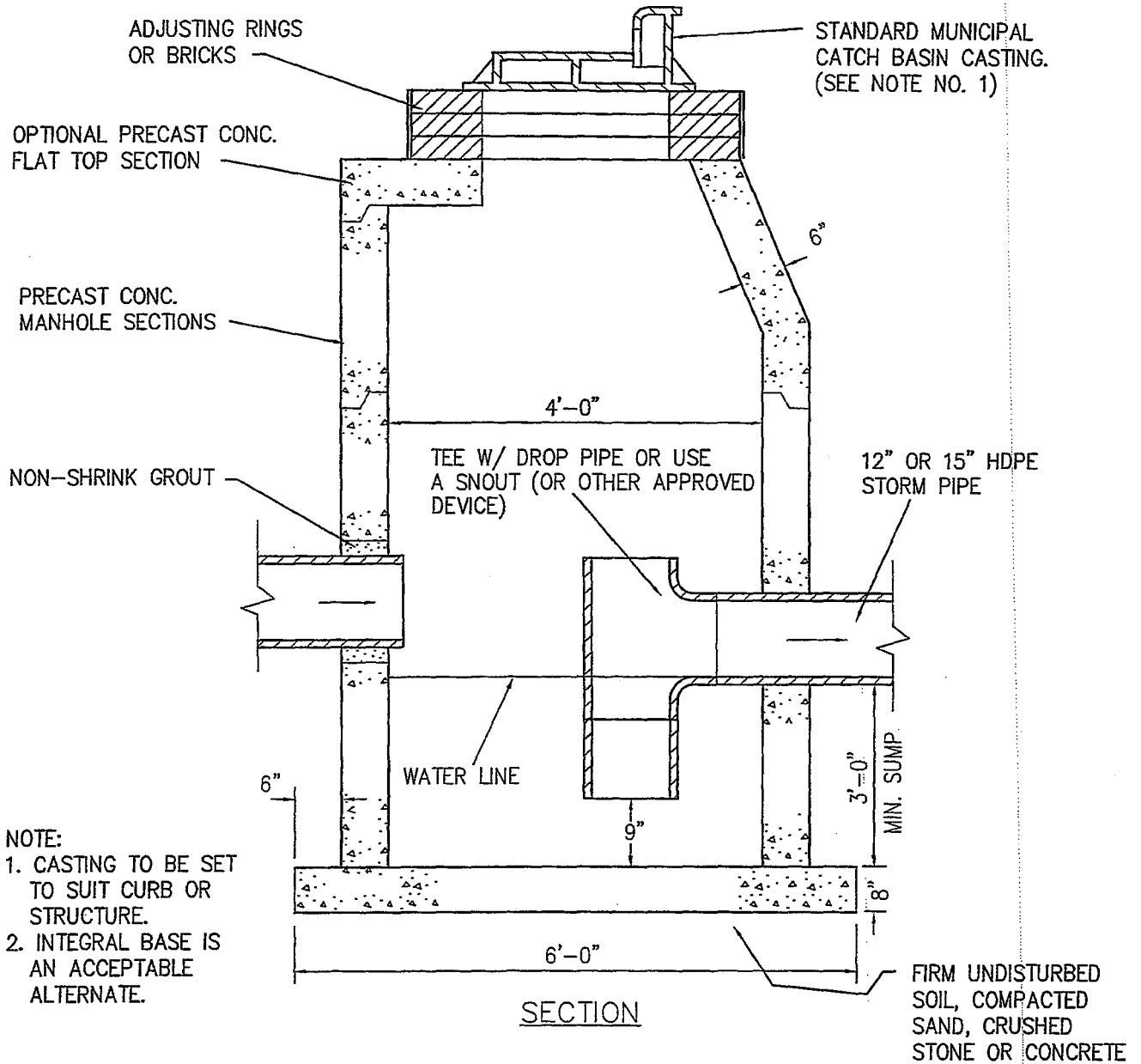


STANDARD CATCH BASIN

NO SCALE

TO BE USED ONLY WHERE SPECIFIED AS 4' OR 5' DIAM. CB)

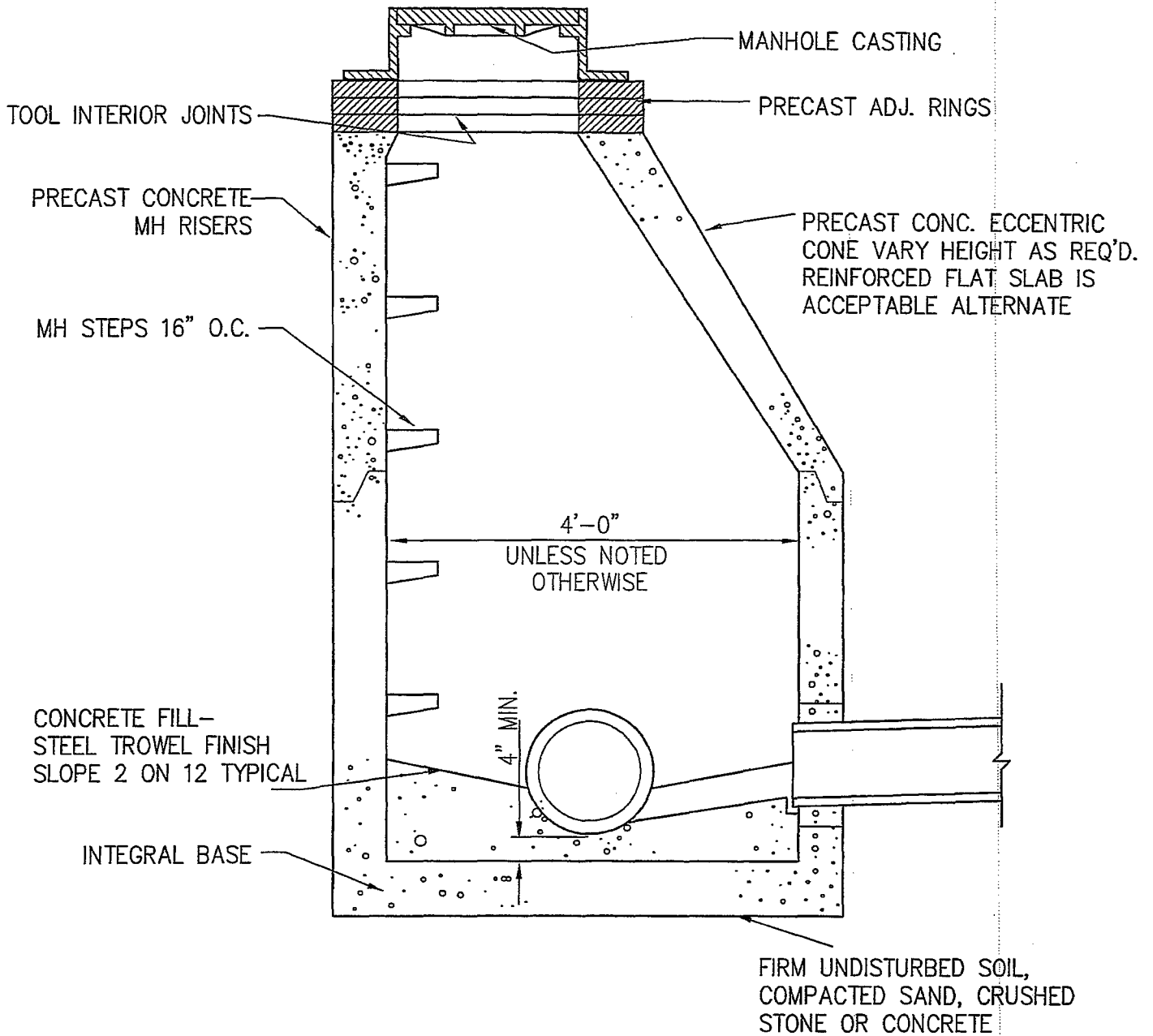
APPENDIX 5



**STANDARD CATCH BASIN
W/ OIL + GRIT SEPERATOR**

NO SCALE

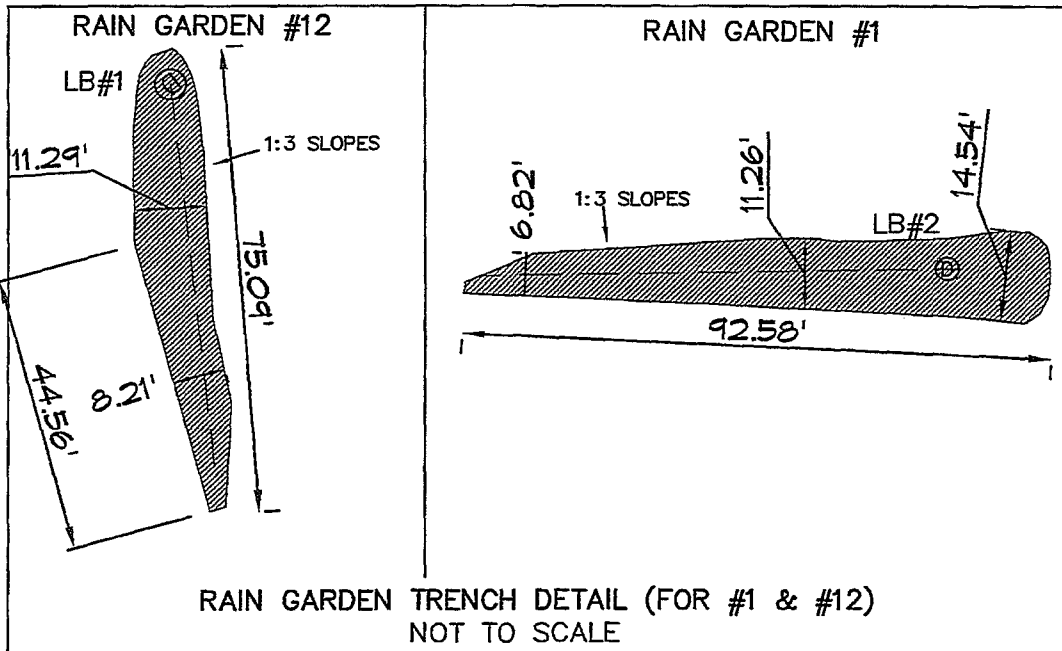
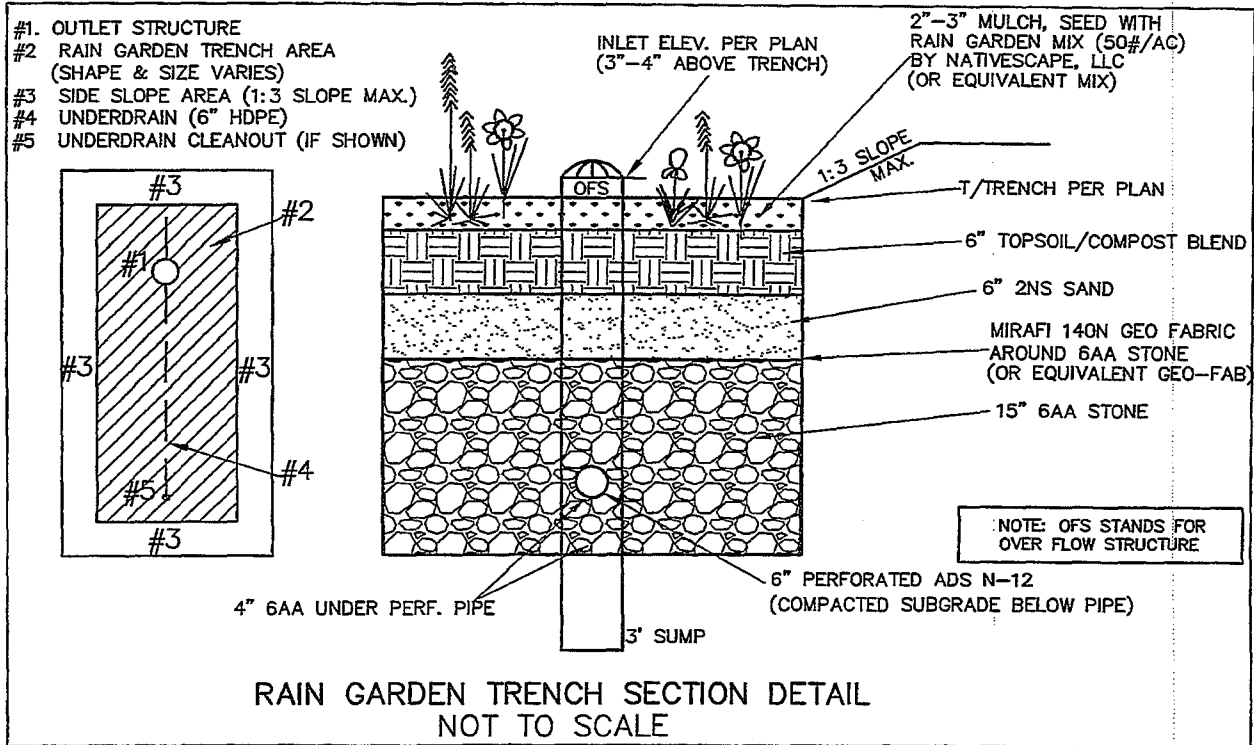
APPENDIX 5



STANDARD STORM MANHOLE

NO SCALE

APPENDIX 5

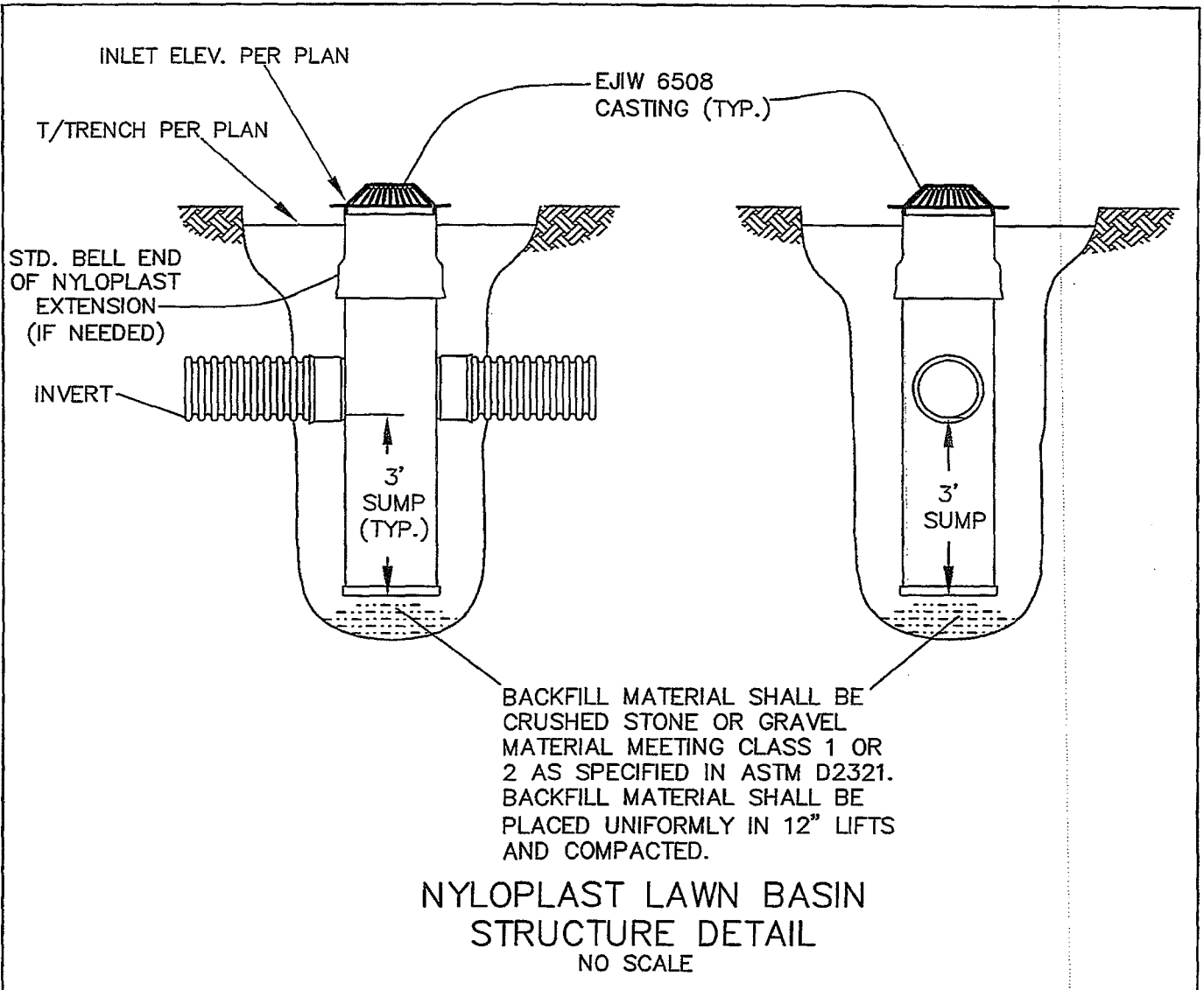


PROPOSED RAIN GARDEN INVENTORY:

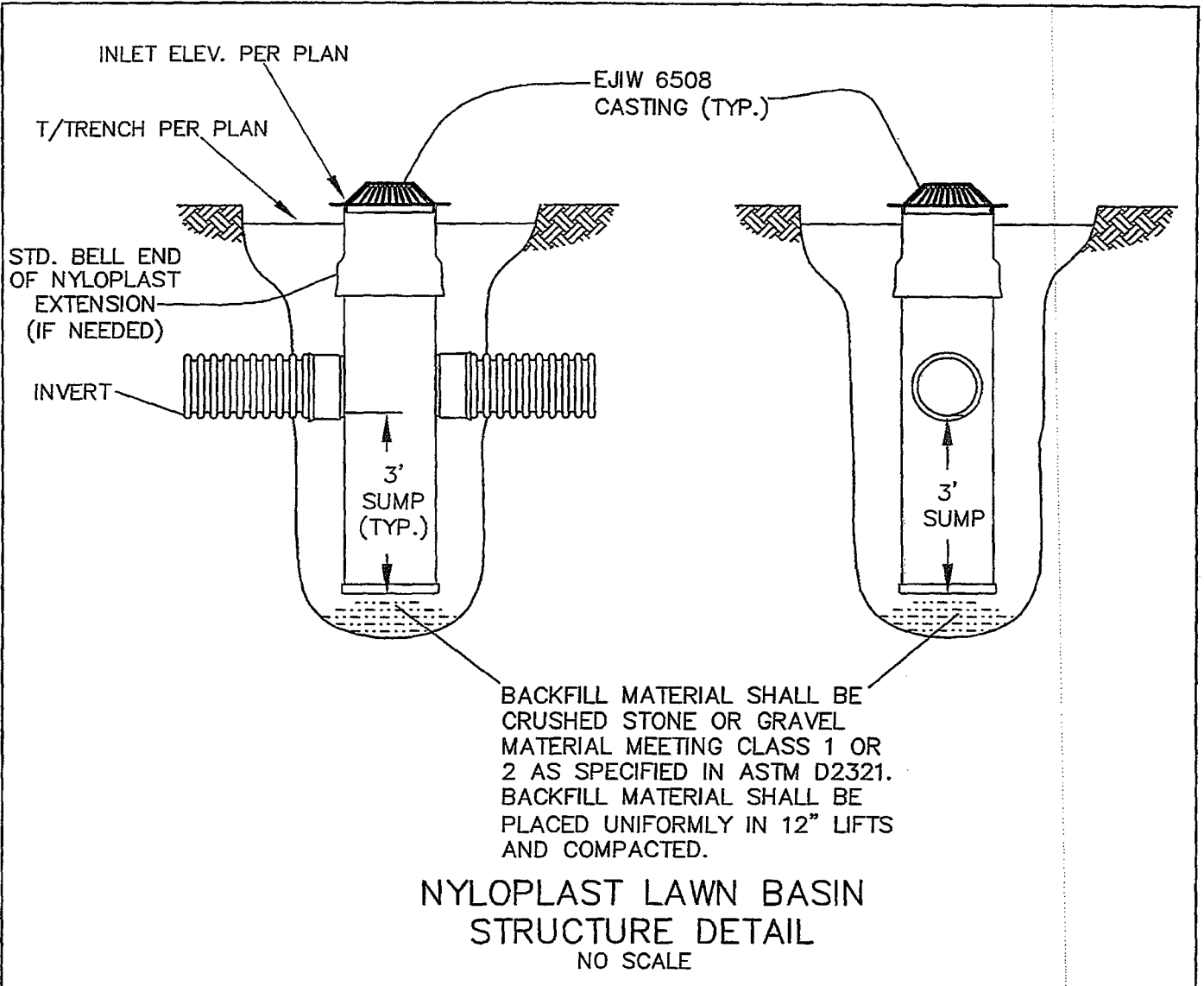
RAIN GARDEN #1
 T/TRENCH 929.60
 PROVIDE 915 SF
 PONDING ELEV. 929.85

RAIN GARDEN #12
 T/TRENCH 931.30
 PROVIDE 645 SF
 PONDING ELEV. 931.60

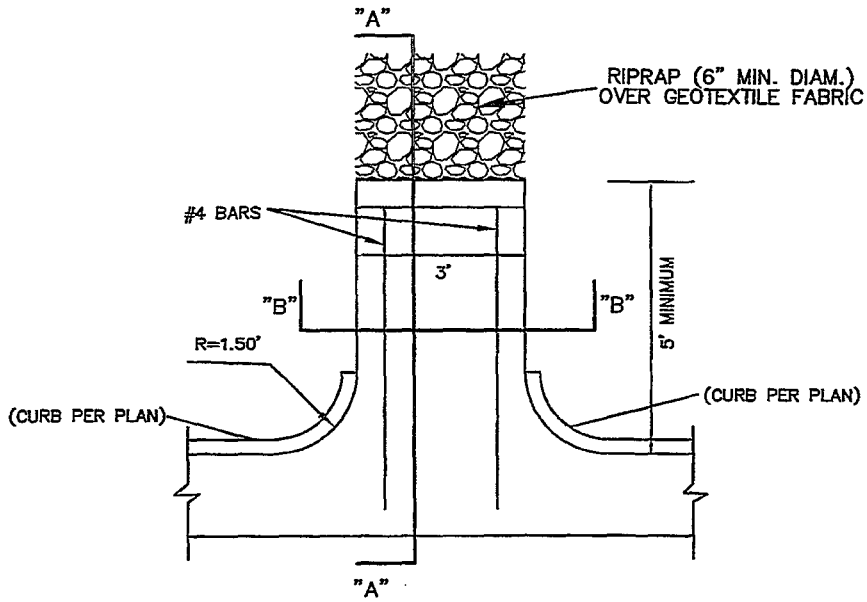
APPENDIX 5



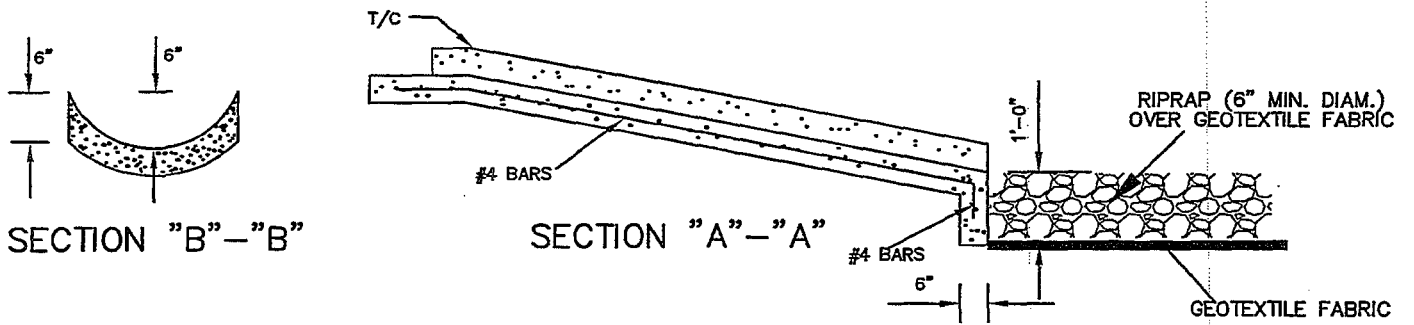
APPENDIX 5



APPENDIX 5

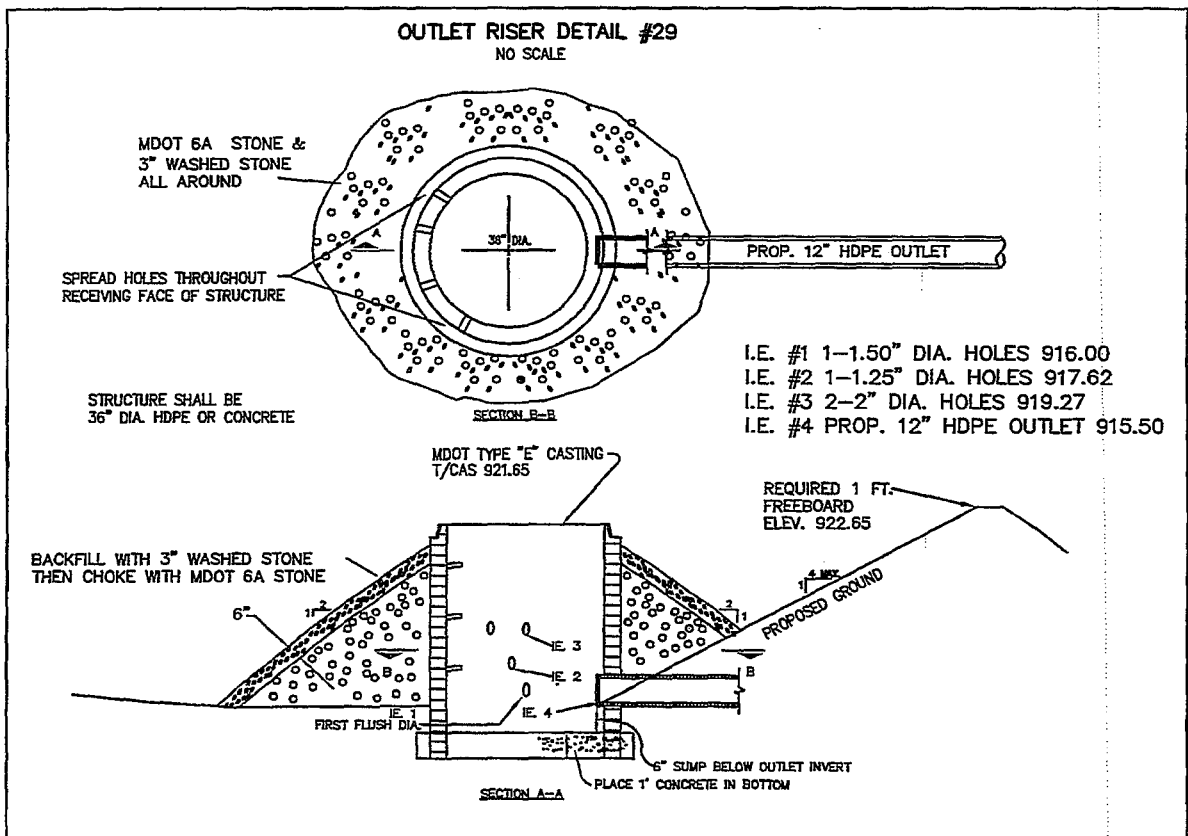
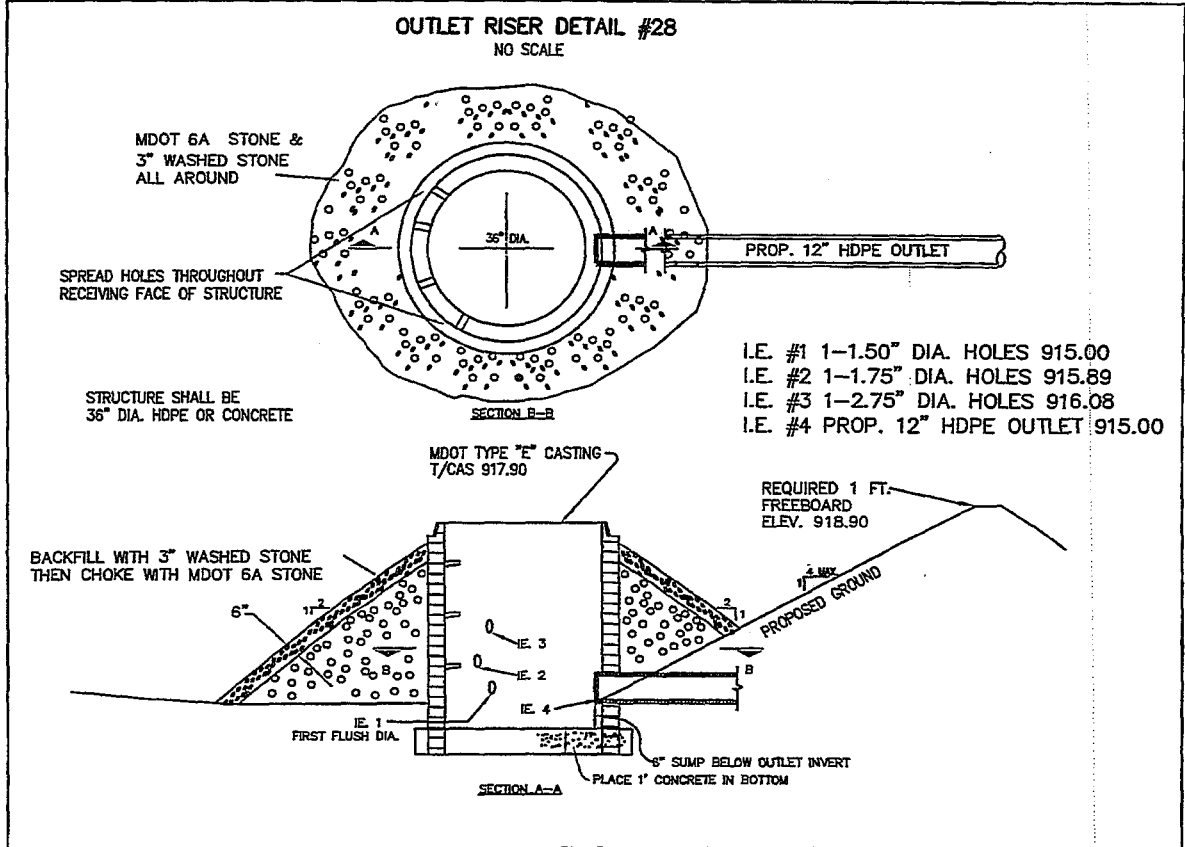


CONCRETE SPILLWAY DETAIL
(PLAN VIEW)
NO SCALE



SPILLWAY DETAIL
NO SCALE

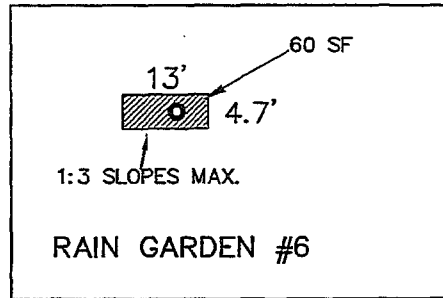
APPENDIX 5



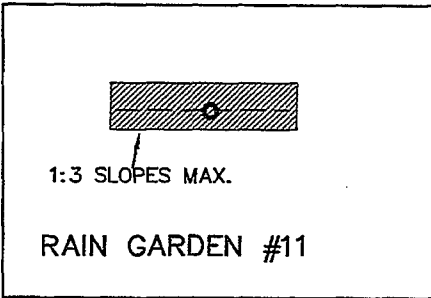
APPENDIX 5

PROPOSED RAIN GARDEN INVENTORY:

RAIN GARDEN #6
T/TRENCH 932.75
PROVIDE 60 SF
PONDING ELEV. 933.00



RAIN GARDEN #11
T/TRENCH 932.40
PROVIDE 195 SF
PONDING ELEV. 932.65



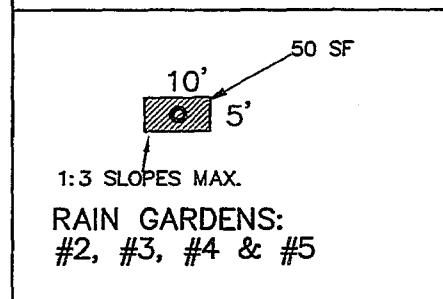
PROPOSED RAIN GARDEN INVENTORY:

RAIN GARDEN #2
T/TRENCH 933.00
PROVIDE 50 SF
PONDING ELEV. 933.25

RAIN GARDEN #3
T/TRENCH 933.00
PROVIDE 50 SF
PONDING ELEV. 933.25

RAIN GARDEN #4
T/TRENCH 932.50
PROVIDE 50 SF
PONDING ELEV. 932.75

RAIN GARDEN #5
T/TRENCH 932.50
PROVIDE 50 SF
PONDING ELEV. 932.75



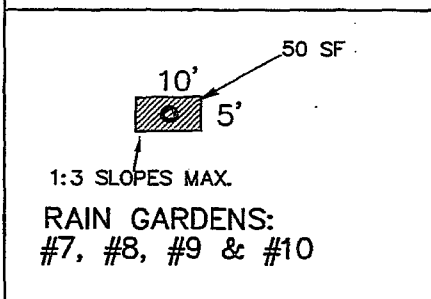
PROPOSED RAIN GARDEN INVENTORY:

RAIN GARDEN #7
T/TRENCH 932.40
PROVIDE 50 SF
PONDING ELEV. 932.65

RAIN GARDEN #8
T/TRENCH 932.40
PROVIDE 50 SF
PONDING ELEV. 932.65

RAIN GARDEN #9
T/TRENCH 932.75
PROVIDE 50 SF
PONDING ELEV. 933.00

RAIN GARDEN #10
T/TRENCH 932.75
PROVIDE 50 SF
PONDING ELEV. 933.00



June 21, 2016

Jason Unger
DMK Development Group, LLC
9200 Shelbyville Road, Suite 310
Louisville, Kentucky 40222

Re: Trilogy - Novi - Acceptance Documents Review
Novi # JSP14-0013
SDA Job No. NV14-231
APPROVED

Dear Mr. Unger:

We have reviewed the Acceptance Document Package received by our office on June 21, 2016 against the Final Site Plan (Stamping Set) approved on December 2, 2014 and the as-built records. We offer the following comments:

Final Acceptance Documents:

The following items must be provided prior to the issuance of a Temporary Certificate of Occupancy. All documents must be completed using black ink as the County will reject them otherwise.

1. On-Site Water System Easement – (unexecuted: exhibit dated 5-5-2016) – Exhibits Approved.
2. On-Site Sanitary Sewer Easement – (unexecuted: exhibit dated 10-27-2014) – Exhibits Approved.
3. Storm Drainage Facility / Maintenance Easement Agreement – (unexecuted: exhibit dated 05-09-2016) – Exhibits Approved. A reminder that the County will only accept sheets of paper that are 8.5" x 11" or 8.5" x 14" in size. The final originals must only be submitted to the City on one of these two sizes only.
4. Bills of Sale: Sanitary Sewer System and Water Supply System – SUPPLIED – Approved.
5. Full Unconditional Waivers of Lien from contractors installing public utilities – SUPPLIED – Approved.
6. Sworn Statement from contractors installing public utilities - SUPPLIED – Approved.
7. Maintenance and Guarantee Bond – (in the amount of \$43,768.00) – SUPPLIED – Approved.

Unless otherwise stated above, the documents as submitted were found to be acceptable by our office pending review by the City Attorney. Legal review will not occur until a current title policy is submitted to the City. For those documents which require revisions, please forward those revised documents to the City for further review and approval.

The City Attorney's Office will retain the original documents in their files until such time as they are approved and ready (notarized and executed properly) for the Mayor's signature.

It should be noted that the Plan Review Center Report dated October 24, 2014 contains all documentation requirements necessary prior to construction and occupancy of the facility.

If you have any questions regarding this matter, please contact this office at your convenience.

Sincerely,

SPALDING DEDECKER



Brittany Allen, EIT
Engineer

cc: Brian Coburn, Engineering Senior Manager (via E-mail)
Maryanne Cornelius, City Clerk (via E-mail)
Beth Saarela, Johnson Rosati, Schultz, Joppich PC (via E-mail)
Sarah Marchioni, Building Department (via E-mail)
Ted Meadows, Spalding DeDecker (via E-mail)
Taylor Reynolds, Spalding DeDecker (via E-mail)
Theresa Bridges, City Construction Engineer (via E-mail)
Cheryl McNamara, Treasurer's Office (via E-mail)
Nancy Todd, P.E., Giffels Webster. (via E-mail)