



CITY of NOVI CITY COUNCIL

**Agenda Item K
April 13, 2015**

SUBJECT: Approval of a Storm Drainage Facility Maintenance Easement Agreement from Shastco, LLC, for the project located on Roethel Drive south of Nine Mile Road (parcel 22-35-127-018).

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BTC RJA*

CITY MANAGER APPROVAL: *[Signature]*

BACKGROUND INFORMATION: *RA*

Shastco, LLC requests approval of the Storm Drainage Facility Maintenance Easement Agreement for the new truck well, located on Roethel Drive south of Nine Mile Road (parcel 22-35-127-018), as shown on the attached map.

The Storm Drainage Facility Maintenance Easement Agreement is a subsequent requirement of the variance granted by City Council on June 16, 2014 to allow a pumped storm water discharge for the newly constructed truck well (see attached motion sheet for additional information). The agreement details the responsibilities of the property owner to properly maintain their privately owned storm drainage facilities (pumped outlet, redundant pump, and backup generator). The agreement also contains a provision that permits the City to perform maintenance on the privately owned storm drainage facilities should the property owner fail to do so at the expense of the property owner.

The enclosed agreement has been favorably reviewed by City Staff and the City Attorney (Beth Saarela's January 12, 2015 letter, attached) and is recommended for approval.

RECOMMENDED ACTION: Approval of a Storm Drainage Facility Maintenance Easement Agreement from Shastco, LLC, for the Shastco Truck Well located on Roethel Drive south of Nine Mile Road (parcel 22-35-127-018).

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Markham				

	1	2	Y	N
Council Member Mutch				
Council Member Poupard				
Council Member Wrobel				

Shastco Truck Well

Location Map



Truck Well

Roethel Dr

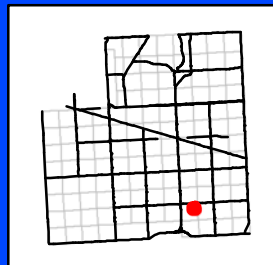
Ashbury Dr

Map Author: A. Wayne
Date: April 1, 2015
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

0 12.5 25 50 75
Feet

1 inch = 67 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.jrsjlaw.com

March 24, 2015

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

RE: Shastco Truck Well – Storm Drainage Maintenance Agreement

Dear Mr. Hayes:

We have received and reviewed the final executed Storm Drainage Facilities Maintenance Agreement submitted by Shastco regarding ongoing operation and maintenance of the pumped outlet that was approved pursuant to variance granted by City Council on June 16, 2014. In order to obtain a variance to install a pumped outlet, the City's Engineering Design Manual required the applicant to provide a redundant pump, a backup generator, a maintenance plan and a maintenance agreement.

The Agreement is now in an approvable format, has been executed by the property owner, and the City's Consulting Engineer has approved the Storm Drainage Facility Maintenance Easement Agreement exhibits. The Agreement is in order and may be placed on an upcoming City Council Agenda for approval. We will forward the original to the City Clerk's Office upon receipt. 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,

JOHNSON, ROSATI, SCHULTZ & JOPPICH, P.C.

Elizabeth K. Saarela

EKS/sls

Rob Hayes, Public Services Director

March 23, 2015

Page 2

Enclosures

- C: Maryanne Cornelius, City Clerk (w/ Enclosures)
- Charles Boulard, Community Development Director (w/Enclosures)
- Barb McBeth, Deputy Community Development Director (w/Enclosures)
- Sheila Weber and Kristin Pace, Treasurer's Office (w/Enclosures)
- Aaron Staup, Construction Engineering Coordinator (w/Enclosures)
- Adam Wayne, Construction Engineer (w/Enclosures)
- Kristin Pace, Treasurer's Office (w/Enclosures)
- Sarah Marchioni, Building Permit Coordinator (w/Enclosures)
- Brittany Allen and Ted Meadows, Spalding DeDecker (w/Enclosures)
- Sue Troutman, City Clerk's Office (w/Enclosures)
- Uldis G. Vitins, P.E., Vitins Engineering (w/Enclosures)
- Thomas R. Schultz, Esq. (w/Enclosures)

**STORM DRAINAGE FACILITY
MAINTENANCE AGREEMENT**

THIS EASEMENT AGREEMENT is made this 26 day of February 2015 by and between Shastco, LLC, a Michigan limited liability company whose address is 25225 Regency Drive, Novi, Michigan 48375 (hereinafter the "Owner"), and the City of Novi, its successors, assigns, or transferees, whose address is 45175 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 __ 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 reconstruction of an existing truck dock to accommodate a recessed truck well abutting the existing building envelope on the Property.
- B. The truck well elevation prohibits drainage by gravity and shall require storm drainage facilities, consisting of a pumped outlet from the truck well, with a redundant pump and a backup generator (the "Storm Drainage Facilities") to discharge of storm water in accordance with all approved plans, and all applicable ordinances, laws and regulations.
- C. Owner obtained a variance to operate and maintain the pumped out within the truck well in accordance with the terms and conditions of the City's Engineering Design Manual, as amended from time to time.

NOW, THEREFORE, the Owner hereby covenants and agrees that the Owner shall, at its own expense, perpetually preserve, maintain, and repair the Storm Drainage Facilities 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 "Maintenance Plan") 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 Maintenance Plan is described in the attached and incorporated 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 Drainage 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 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 Storm Drainage Facilities 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 Owner shall defend, indemnify and hold the City harmless from and against any claims, demands, actions, damages, injuries, costs or expenses of any nature whatsoever, fixed or contingent, known or unknown, including costs, expenses and attorneys' fees incurred by the City arising out of or in any way connected with the design, construction, use, maintenance, repair or operation of the Storm Drainage Facilities described in Exhibit D.

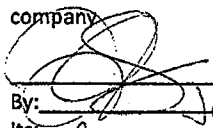
The parties hereto make this Agreement on behalf of themselves, their heirs, successors, assigns and transferees, and hereby warrant that they have the authority and capacity to execute this Agreement and bind the property as described in the terms and conditions of this agreement.

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
SHASTCO, LLC, a Michigan limited liability
company


By: Jerry Chapman
Its: Managing Member

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

The foregoing instrument was acknowledged before me this 26 day of February 2015
by Jerry Chapman, as the Managing Member of Shastco.

JACALYNN KNEESHAW
Notary Public, State of Michigan
County of Wayne
My Commission Expires Feb. 10, 2019
Acting in the County of Wayne

Jacalynn Kneeshaw
Notary Public
Acting in Oakland County, Michigan
My Commission Expires: Feb. 10, 2019

<p>Drafted by: Elizabeth Kudla Saarela Johnson, Rosati, Schultz & Joppich, P.C. 27555 W. Twelve Mile Road, Suite 250 Farmington Hills, MI 48331</p>	<p>And when recorded return to: Maryanne Cornelius, City Clerk City of Novi 45175 W. Ten Mile Rd Novi, MI 48375</p>
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STORM DRAINAGE FACILITY
MAINTENANCE EASEMENT AGREEMENT

LEGAL DESCRIPTION

LOTS 3, 4 AND 5 OF NOVI INDUSTRIAL SUBDIVISION,
ACCORDING TO THE PLAT THEREOF RECORDED IN
LIBER 203 OF PLATS, PAGES 5 AND 6, OAKLAND
COUNTY RECORDS.

TAX ITEM NO. 22-35-127-018

Revised - 15 January, 2015

EXHIBIT A

SHASTCO LLC TRUCKWELL
PART OF THE NW 1/4 OF SECTION 35, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

PREPARED FOR: SHASTCO, LLC



VITINS ENGINEERING

VITINS ENGINEERING
44275 BRANDYWYNE
CANTON, MICHIGAN 48187
TELEPHONE: (734) 453-3460
FACSIMILE: (734) 453-5812

DATE
9 JULY 14

JOB NO.
14040

SCALE
N.A.

DRAWN
UGV

CHECKED
UGV


SHEET
1 OF 1

STORM DRAINAGE FACILITY
MAINTENANCE EASEMENT AGREEMENT

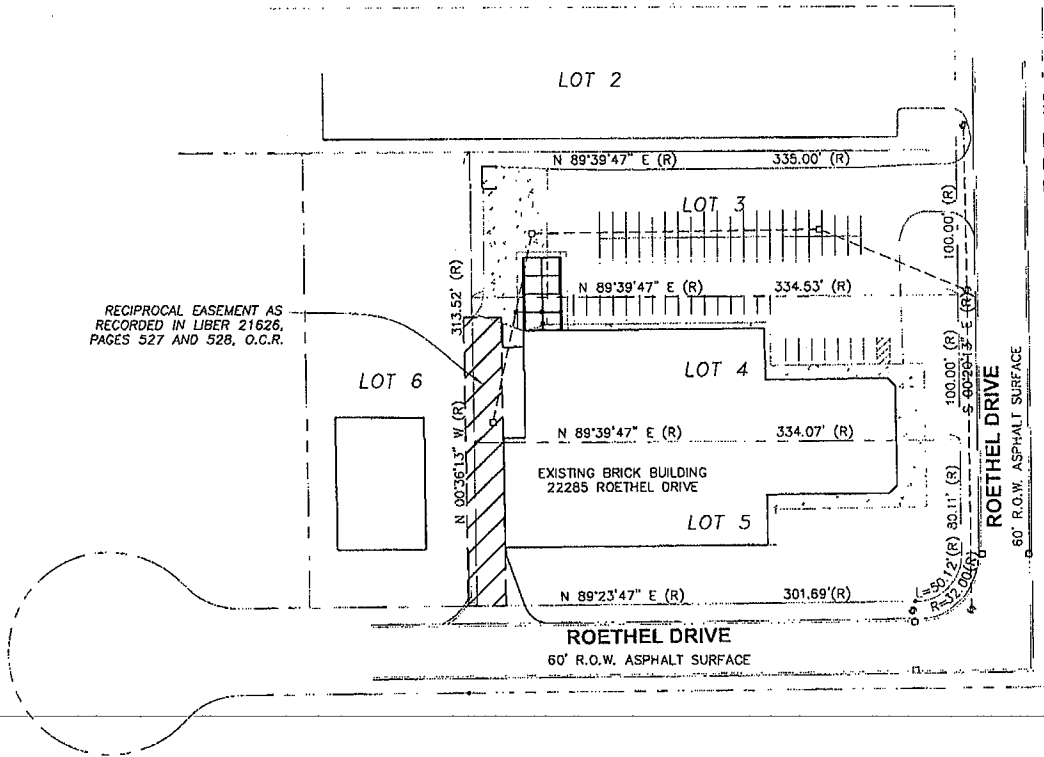
SCHEDULE OF MAINTENANCE

MAINTENANCE ACTIVITIES				PARKING AREAS, DRIVES AND TRUCKWELL	STORM SEWER SYSTEM, DRAINAGE STRUCTURES, CATCH BASIN SUMPS	PUMP STATION	COMPONENTS:	FREQUENCY:
MONITORING/INSPECTION								
Inspect for sediment accumulation/clogging					X	X		Annually
Inspect for floatables, dead vegetation, and debris				X	X	X		Annually and after major events
Inspect all components during wet weather and compare to record plans						X		Annually
Verify that access for maintenance remains clear				X	X	X		Annually
PREVENTATIVE MAINTENANCE								
Remove accumulated sediment					X	X		As needed
Remove floatables, dead vegetation, and debris				X	X	X		As needed
Clean parking areas and access drives				X				Semi-annually
REMEDIAL ACTION								
Make adjustment/repairs to ensure proper functioning						X		As needed
Clean out oil and gasoline spills				X	X	X		Immediately

Engineer's opinion of annual maintenance and repair costs for the first three years of operation would be approximately \$500.00 dollars per year. Removal of accumulated sediment and debris from the storm drainage facility and cleaning parking areas and access drives would be included in the annual cost.

Revised - 15 January, 2015	EXHIBIT B	DATE 9 JULY 14
	SHASTCO LLC TRUCKWELL PART OF THE NW 1/4 OF SECTION 35, T.1N., R.8E. CITY OF NOVI, OAKLAND COUNTY, MICHIGAN	JOB NO. 14040
	PREPARED FOR: SHASTCO, LLC	SCALE N.A.
 VITINS ENGINEERING	VITINS ENGINEERING 44275 BRANDYWYNE CANTON, MICHIGAN 48187 TELEPHONE: (734) 453-3460 FACSIMILE: (734) 453-5812	DRAWN UGV
		CHECKED UGV
		SHEET 1 OF 1

STORM WATER MANAGEMENT SYSTEM
 LONG-TERM MAINTENANCE PLAN
 INGRESS/EGRESS EASEMENT AREA



Revised - 15 January, 2015

EXHIBIT C

SHASTCO LLC TRUCKWELL
 PART OF THE NW 1/4 OF SECTION 35, T.1N., R.8E.
 CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

PREPARED FOR: SHASTCO, LLC



VITINS ENGINEERING

VITINS ENGINEERING
 44275 BRANDYWYNE
 CANTON, MICHIGAN 48187
 TELEPHONE: (734) 453-3460
 FACSIMILE: (734) 453-5812

DATE
 9 JULY 14

JOB NO.
 14040

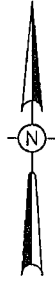
SCALE
 1" = 100'

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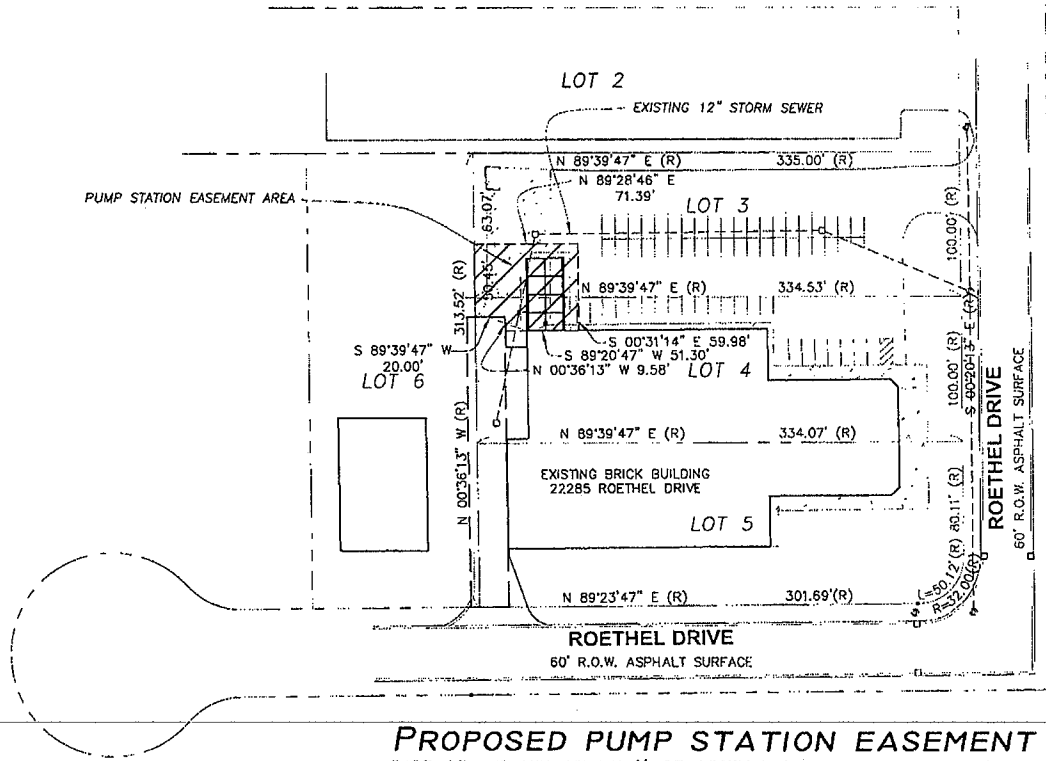
SHEET
 1 OF 1

STORM WATER MANAGEMENT SYSTEM
LONG-TERM MAINTENANCE PLAN
PUMP STATION EASEMENT AREA



LEGEND:

- OWNER'S MAINTENANCE RESPONSIBILITY
- STORM SEWERS



PROPOSED PUMP STATION EASEMENT

PART OF THE NORTHWEST ¼ OF SECTION 35, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: COMMENCING AT THE NORTHWEST CORNER OF LOT 3 OF NOVI INDUSTRIAL SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 203 OF PLATS, PAGES 5 AND 6, OAKLAND COUNTY RECORDS; THENCE ALONG THE WEST LINE OF LOT 3, SOUTH 00°36'13" EAST 63.07 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89°28'46" EAST 71.39 FEET; THENCE SOUTH 00°31'14" EAST 59.98 FEET; THENCE SOUTH 89°20'47" WEST 51.30 FEET; THENCE NORTH 00°36'13" WEST 9.58 FEET; THENCE SOUTH 89°39'47" WEST 20.00 FEET; THENCE NORTH 00°36'13" WEST 50.45 FEET ALONG THE WEST LINE OF LOT 4 AND LOT 3 TO THE POINT OF BEGINNING.

Revised - 15 January, 2015

EXHIBIT D

SHASTCO LLC TRUCKWELL
PART OF THE NW 1/4 OF SECTION 35, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

PREPARED FOR: SHASTCO, LLC



VITINS ENGINEERING

VITINS ENGINEERING
44275 BRANDYWYNE
CANTON, MICHIGAN 48187
TELEPHONE: (734) 453-3460
FACSIMILE: (734) 453-5812

DATE
9 JULY 14

JOB NO.
14040

SCALE
1" = 100'

DRAWN
UGV

CHECKED
UGV

SHEET
1 OF 1



REFERENCE ONLY

CITY of NOVI CITY COUNCIL

Agenda Item P
June 16, 2014

SUBJECT: Approval of a request from Shastco, LLC for a variance from Chapter 5, Section 2.2.4 (B)(7) of the Engineering Design Manual to allow the construction of a permanent storm water pump station to service a limited amount of drainage in the immediate area of the truck dock/service area of 22285 Roethel Drive, subject to the applicant meeting all requirements of said section of the Engineering Design Manual.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division ^{BA} _{BT}

CITY MANAGER APPROVAL: 

BACKGROUND INFORMATION:

The applicant, Shastco LLC, is requesting a variance from Chapter 5, Section 2.2.4 (B)(7) of the Engineering Design Manual (which is adopted by reference in Section 11-93(a) of the Novi Code of Ordinances) to allow a pumped outlet for storm water for a 0.03 acre drainage area near the existing truck dock/service area of 22285 Roethel Drive. The applicant has submitted a site plan which proposes to retrofit the facility with a three foot deep truck well abutting the existing building envelope. The building and storm sewer system on this site were not originally designed to accommodate a recessed truck well, and the existing truck dock is not deep enough to allow storm water to flow by gravity. The applicant is looking to relocate from an existing facility on Regency Drive in Novi.

The Engineering Design Manual states that pumped outlets are not permitted absent a variance from City Council, which shall require demonstration that it is in the public interest and no feasible alternative exists. The applicant has demonstrated in their variance request that draining the proposed truck well via gravity is not feasible because the nearest storm sewer structure is not deep enough to serve the proposed drain. The bottom elevation of the proposed truck well is shown at 826.4 feet due to the grading requirements set by the existing building's first floor elevation (830.41 feet). The invert of the adjacent storm sewer set at 825.73 feet. Even if the minimum pipe were used at the minimum slope, the top of pipe at the proposed truck well drainage structure would be at approximately 826.92 feet, which is above the proposed elevation at the bottom of the truck well. As a safety measure, the applicant has proposed an overflow to the existing site storm sewer system at an elevation one foot below the finish grade of the existing building in addition to a forty-two inch high guardrail around the perimeter of the truck well.

There are several other requirements in the Engineering Design Manual that the applicant has agreed to provide as part of the variance application (see attached excerpt of the manual for the requirements). Among those requirements are a redundant pump, a back-up generator, a maintenance plan, and a maintenance agreement with the City that will be recorded.

The variance requests were reviewed by Community Development, the Landscape Architect, DPS Field Operations, DPS Engineering, City Attorney and Fire using the criteria stated for this section of the Engineering Design Manual and Section 11-10 of the ordinance (attached). Staff takes no exception to this request because the applicant has demonstrated that no feasible alternative exists for the conveyance of storm water from the proposed truck well. Given the small drainage area, Engineering is willing to support the request as long as the applicant meets all the requirements under this section of the Engineering Design Manual to protect the public should the system fail to function.

RECOMMENDED ACTION: Approval of a request from Shastco, LLC for a variance from Chapter 5, Section 2.2.4 (B)(7) of the Engineering Design Manual to allow the construction of a permanent storm water pump station to service a limited amount of drainage in the immediate area of the truck dock/service area of 22285 Roethel Drive, subject to the applicant meeting all requirements of said section of the Engineering Design Manual.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Fischer				

	1	2	Y	N
Council Member Markham				
Council Member Mutch				
Council Member Wrobel				

DCS Variance Location Map

Shastco LLC Truck Well

Proposed Truck Well and Pump Station

50-22-35-127-018

Roethel Dr

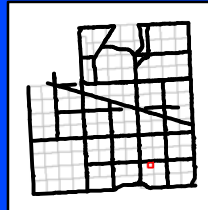
Ashbury Dr

Map Author: A. Wayne
Date: June 6, 2014
Project:
Version #:

Amended By:
Date:
Department:

MAP INTERPRETATION NOTICE

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Map Legend

 Proposed Development



City of Novi

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



1 inch = 121 feet

2. V-notch weirs, dual outlets, riser pipe or other designs shall be utilized to assure an appropriate detention time and maximum outlet rate for the 100-year flood and bankfull flood volumes as required above. Where orifice holes or restrictor pipes are provided to restrict the flow and the required size is less than 4-inches, maintenance provisions for preventing clogging of the restrictor hole should be provided.
3. The outlet will be well protected from clogging.
4. All outlets will be designed to be easily accessible for heavy equipment required for maintenance purposes.
5. Riser pipe designs shall meet the following requirements:
 - a. Flow restrictive devices shall be located inside a standpipe. One (1) inch holes, spaced a minimum of 4-inches apart shall be provided around the perimeter of the riser between the elevation of the permanent water and the 100-year storm event. The riser will not function to restrict flow but will prevent clogging of the internal restrictive device.
 - b. Hoods or trash racks shall be installed on the riser to prevent clogging.
 - c. The riser shall be placed near or within the embankment, to provide for ready maintenance access. Where the outlet structure is not located near enough to the bank to facilitate visual inspection of the structure, a stone bridge with a minimum top width of five (5) feet shall be provided.
 - d. The riser pipe shall be a minimum of three (3) feet in diameter and constructed of materials that will reduce future maintenance requirements.
 - e. Where feasible, a drain for completely de-watering the pond shall be installed for maintenance purposes.
6. Backwater on the outlet structure from the downstream drainage system will be evaluated when designing the outlet.
7. Pumped outlets are not permitted absent a variance from City Council, which shall require demonstration that it is in the public interest and no feasible alternative exists. IF City Council grants a variance to allow a pumped outlet, the following documentation shall be standards shall apply:
 - a. The pump(s) shall be designed to meet the maximum discharge rate and time requirements for the 100-year and bankfull flood events. Minimum and maximum system head curves and pump curves shall be provided to verify the operating duty points of the pump(s).
 - b. Pumps shall be of appropriate construction for conveying storm water.
 - c. A redundant pump shall be provided.
 - d. A generator shall be provided for the pump station. A permanent on-site generator shall be provided or a generator receptacle in combination with a portable generator shall be provided.

- e. A mechanism for determining failure of the pumps (alarm lights, water depth indicator, etc.) shall be provided. The mechanism shall be of a nature that ensures the ultimate property owner (filed with the Register of Deeds) will easily be able to identify a pump failure.
- f. An operation and maintenance plan shall be provided and a maintenance agreement shall be in place with the ultimate property owner (filed with the Register of Deeds).

D. Overflow

1. An emergency spillway with a defined downstream drainage path must be provided to allow discharge from the basin when the flows exceed the capacity of the outlet structure. Provisions for preventing erosion of the spillway shall be provided. The emergency spillway shall have sufficient capacity to convey the peak flow associated with a 100-year design storm. Methods for determining the 100-year storm peak flows are outlined in Section 2.1.1.

2.2.5 Additional Requirements

- A. Fencing around detention basins shall not be permitted to allow for steeper side slopes unless specifically approved by the City Engineer.
- B. A permanent buffer strip of natural vegetation with a minimum width of 25 feet shall be provided and maintained for the following and preferably around the entire perimeter of the basin. The buffer strip should be planted with native vegetation. Chemical lawn care applications and mowing are prohibited in the buffer. Buffers shall be provided as follows:
 - a. In residential developments, buffers should be provided around the perimeter of the basin.
 - b. In commercial and industrial developments, buffers shall be provided in areas where impervious surface is directed to the basin via surface flow.
 - c. Where elevations allow, a buffer shall be provided at the outlets to the detention basin.
- C. All detention basins must be permanently stabilized to prevent erosion. Basins must be stabilized prior to directing stormwater flow to them.
- D. Construction of pretreatment systems is required prior to commencement of any construction activities on site except clearing and grubbing operations. Sump manhole construction must be completed as soon as is practicable during construction of the storm sewer system. Removal of collected sediment from the pretreatment systems is required at regular intervals during the construction process or at the direction of the City such that the basins are maintained in working order at all times.
- E. Landscaping shall be provided as required by the City's Landscape Design manual and as directed by the City's Landscape Architect.

RECEIVED

MAY 20 2014

CITY OF NOVI
COMMUNITY DEVELOPMENT

City of Novi
45175 W. Ten Mile Road
Novi, Michigan 48375
RE: TRUCKWELL (22285 ROETHEL DRIVE), JSP14-26

May 19, 2014

To whom it may concern,

Shastco, LLC is asking for a city council variance per chapter 5 section 2.2.4 (b) (7) for proposed *Truckwell* at 22285 Roethel Drive. Due to the proposed Truckwell and the depth of adjacent storm system, no feasible alternative exists to convey storm water by gravity flow. We are requesting the use of pumps in accordance with city standards.

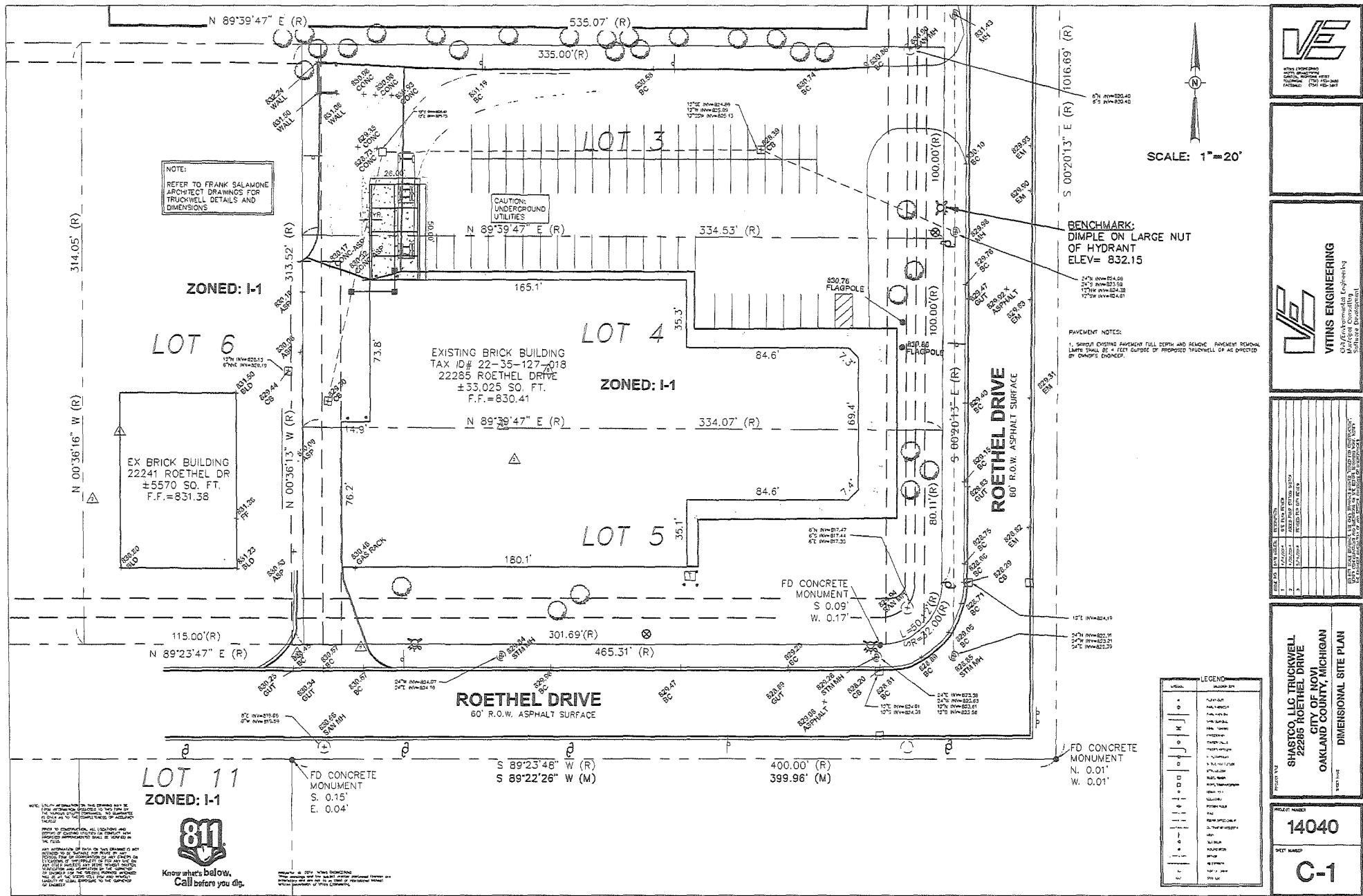
Shastco, LLC, (Signal Group) is currently located at 25225 Regency Drive, Novi will be requiring a larger facility. Our goal has always been to remain in Novi. The property at 22285 Roethel Drive meets our growing needs. Truckwell 's are a *MUST for us to purchase this property.*

We must vacate current location by November 14, 2014 and request approval as soon as possible, so as to purchase property and proceed with necessary upgrades. Again, our goal has always been to stay in Novi, purchasing this property would insure our success and growth in Novi.

Thank you in advance for your expedited consideration,



Mr. Tim McPherson
Shastco, LLC
1-248-505-0636



VITINS ENGINEERING
Civil, Mechanical, Electrical, Surveying, and Construction Management
11000 E. 15th Avenue, Suite 100, Denver, CO 80231
Phone: (303) 751-1100
Fax: (303) 751-1101
www.vitins.com



NO.	DATE	DESCRIPTION
1	10/15/2014	ISSUED FOR PERMIT
2	11/10/2014	ISSUED FOR PERMIT
3	12/10/2014	ISSUED FOR PERMIT

**SHASTOO, LLC TRUCKWELL
22285 ROETHEL DRIVE
CITY OF NOVI
OKLAHOMA COUNTY, MICHIGAN
DIMENSIONAL SITE PLAN**

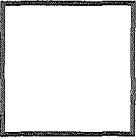
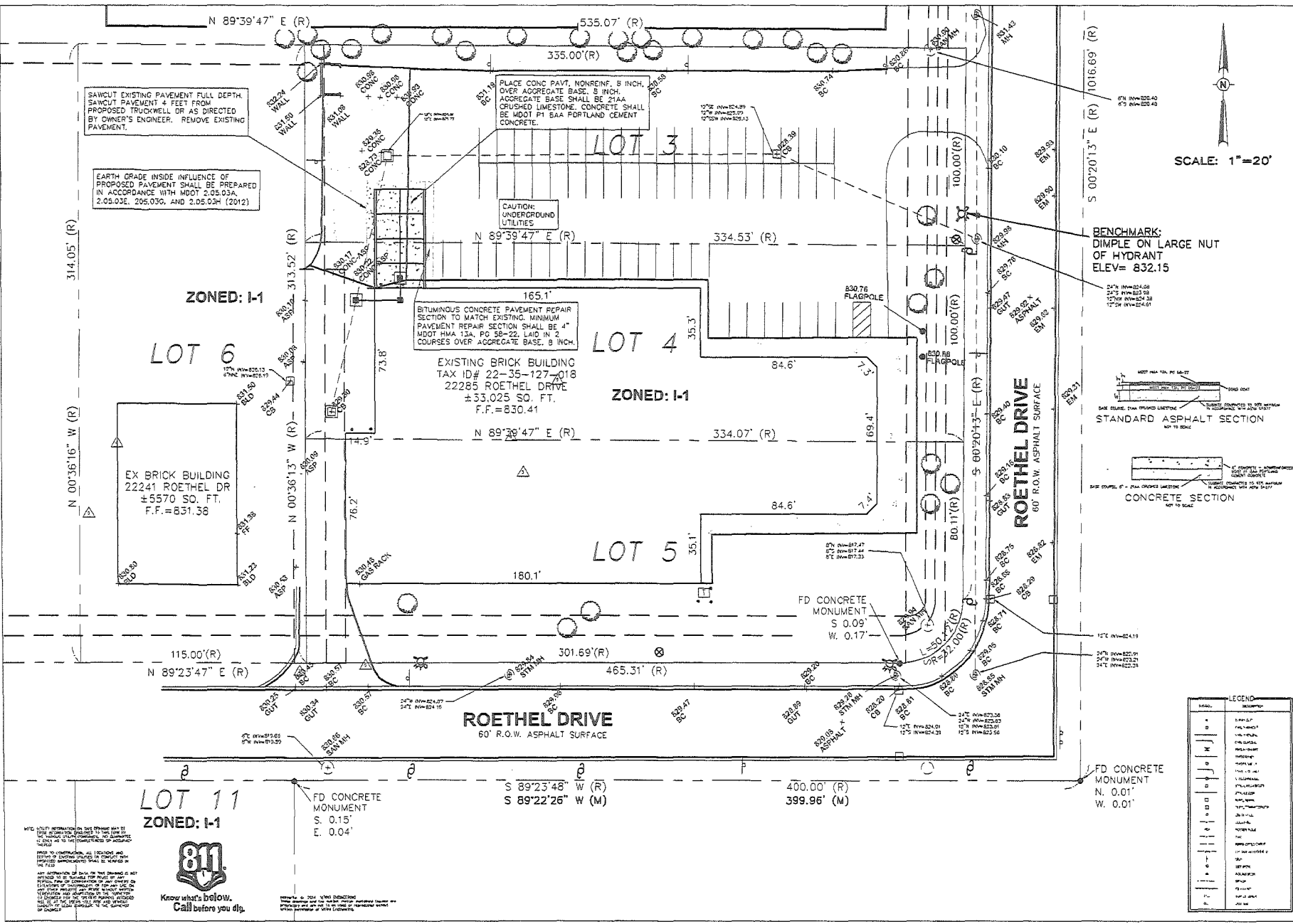
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Know what's below,
Call before you dig.

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Civil/Environmental Engineering
Michigan Consulting
Software Development

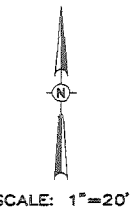
NO.	DESCRIPTION
1	EXISTING
2	PROPOSED
3	ASPHALT
4	CONCRETE
5	UTILITY
6	MONUMENT
7	TRUCKWELL
8	WALL
9	FLAGPOLE
10	STANDARD ASPHALT SECTION
11	CONCRETE SECTION

SHASTCO, LLC TRUCKWELL
22285 ROETHEL DRIVE
CITY OF CROVI
OAKLAND COUNTY, MICHIGAN

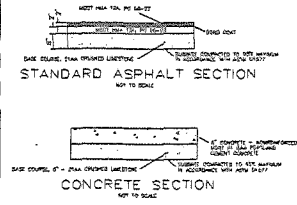
PAVING PLAN

14040

C-2



BENCHMARK:
DIMPLE ON LARGE NUT
OF HYDRANT
ELEV= 832.15



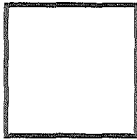
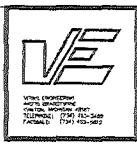
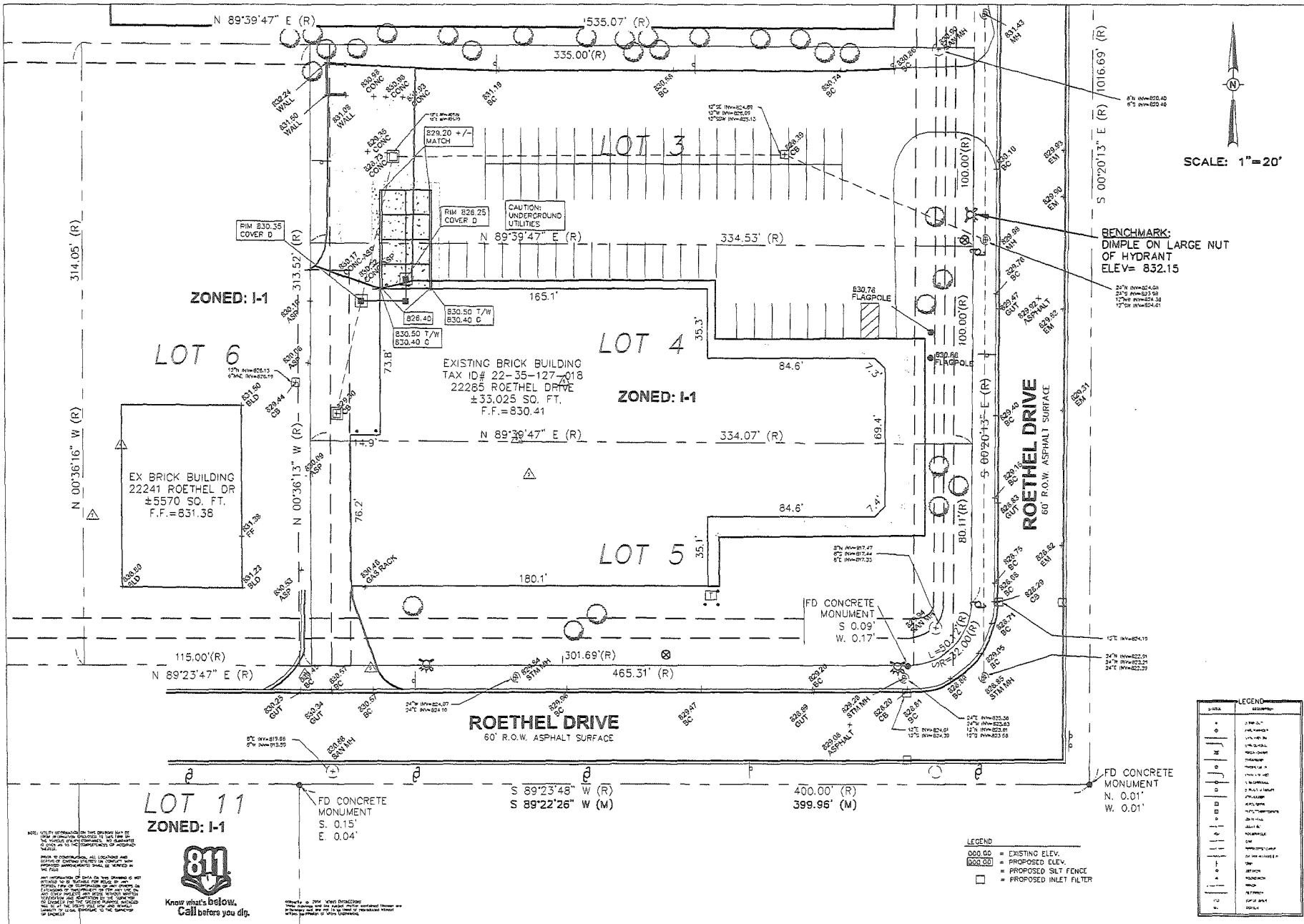
LEGEND

SYMBOL	DESCRIPTION
○	ASPHALT
□	CONCRETE
⊕	UTILITY
⊙	MONUMENT
⊗	TRUCKWELL
⊠	WALL
⊡	FLAGPOLE
⊢	STANDARD ASPHALT SECTION
⊣	CONCRETE SECTION



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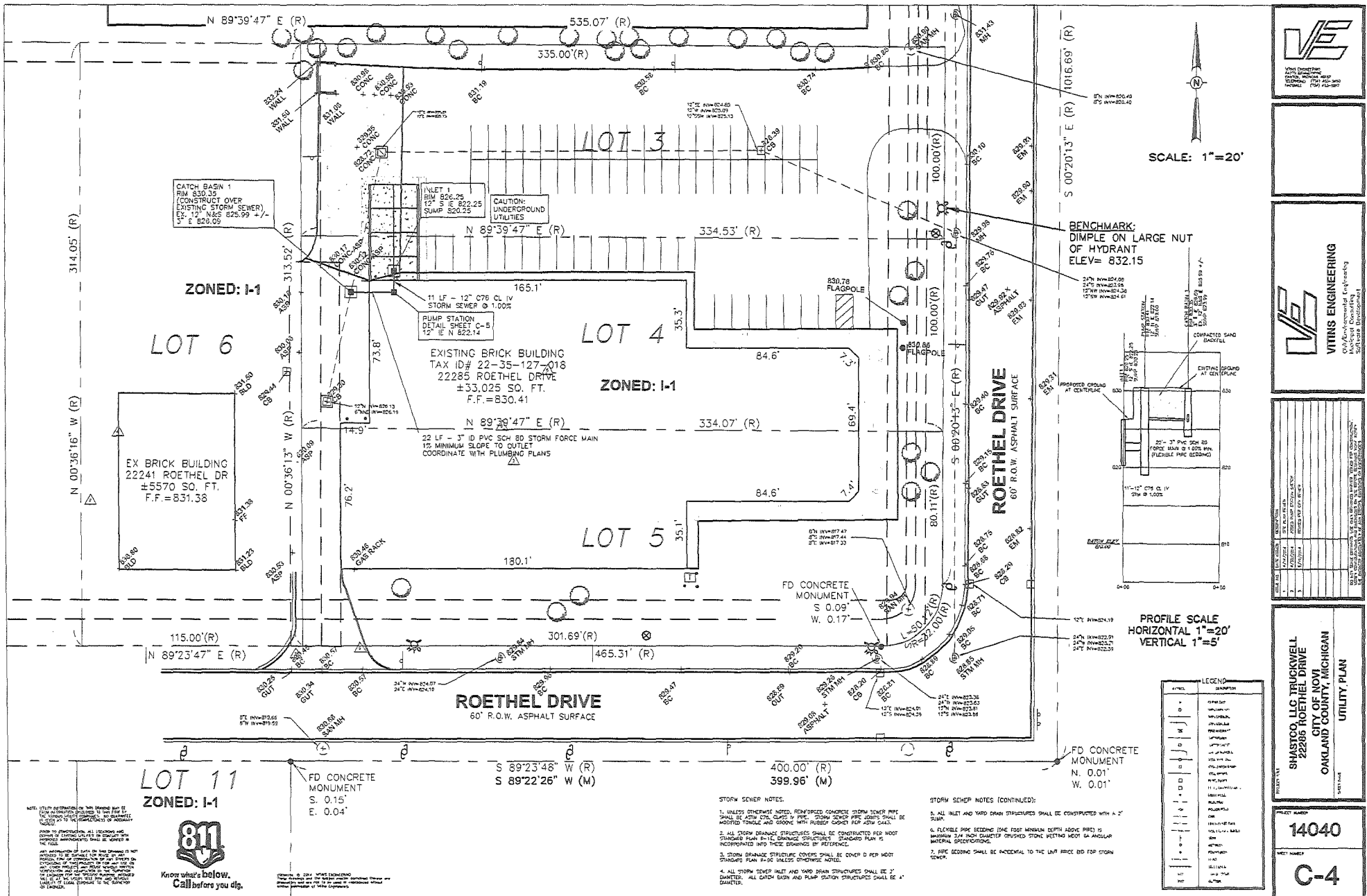


NO.	DATE	DESCRIPTION
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2	11/15/23	REVISED DESIGN
3	11/15/23	REVISED DESIGN
4	11/15/23	REVISED DESIGN
5	11/15/23	REVISED DESIGN
6	11/15/23	REVISED DESIGN
7	11/15/23	REVISED DESIGN
8	11/15/23	REVISED DESIGN
9	11/15/23	REVISED DESIGN
10	11/15/23	REVISED DESIGN

SHASTO, LLC TRUCKWELL
 22241 ROETHEL DRIVE
 CITY OF NOVI
 OAKLAND COUNTY, MICHIGAN
 GRADING & SOIL EROSION
 CONTROL PLAN

PROJECT NUMBER
14040

SHEET NUMBER
C-3



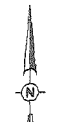
V.E. ENGINEERING
 1500 W. 10TH AVE.
 ANN ARBOR, MI 48106
 PHONE: 734-769-1100
 FAX: 734-769-1100

V.E. ENGINEERING
 Civil/Environmental Engineering
 1500 W. 10TH AVE.
 ANN ARBOR, MI 48106
 PHONE: 734-769-1100
 FAX: 734-769-1100

SYMBOL	DESCRIPTION
(Symbol)	12\"/>

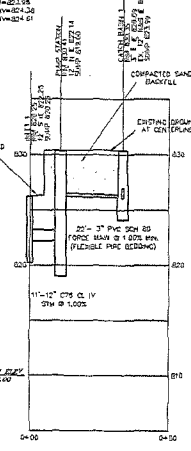
SHARPS, LLC TRUCKWELL
 22206 ROETHEL DRIVE
 OAKLAND COUNTY, MICHIGAN
 UTILITY PLAN

PROJECT NUMBER
14040
 SHEET NUMBER
C-4



SCALE: 1"=20'

BENCHMARK:
 DIMPLE ON LARGE NUT
 OF HYDRANT
 ELEV= 832.15



PROFILE SCALE
 HORIZONTAL 1"=20'
 VERTICAL 1"=5'

SYMBOL	DESCRIPTION
(Symbol)	12\"/>

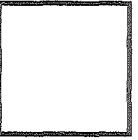
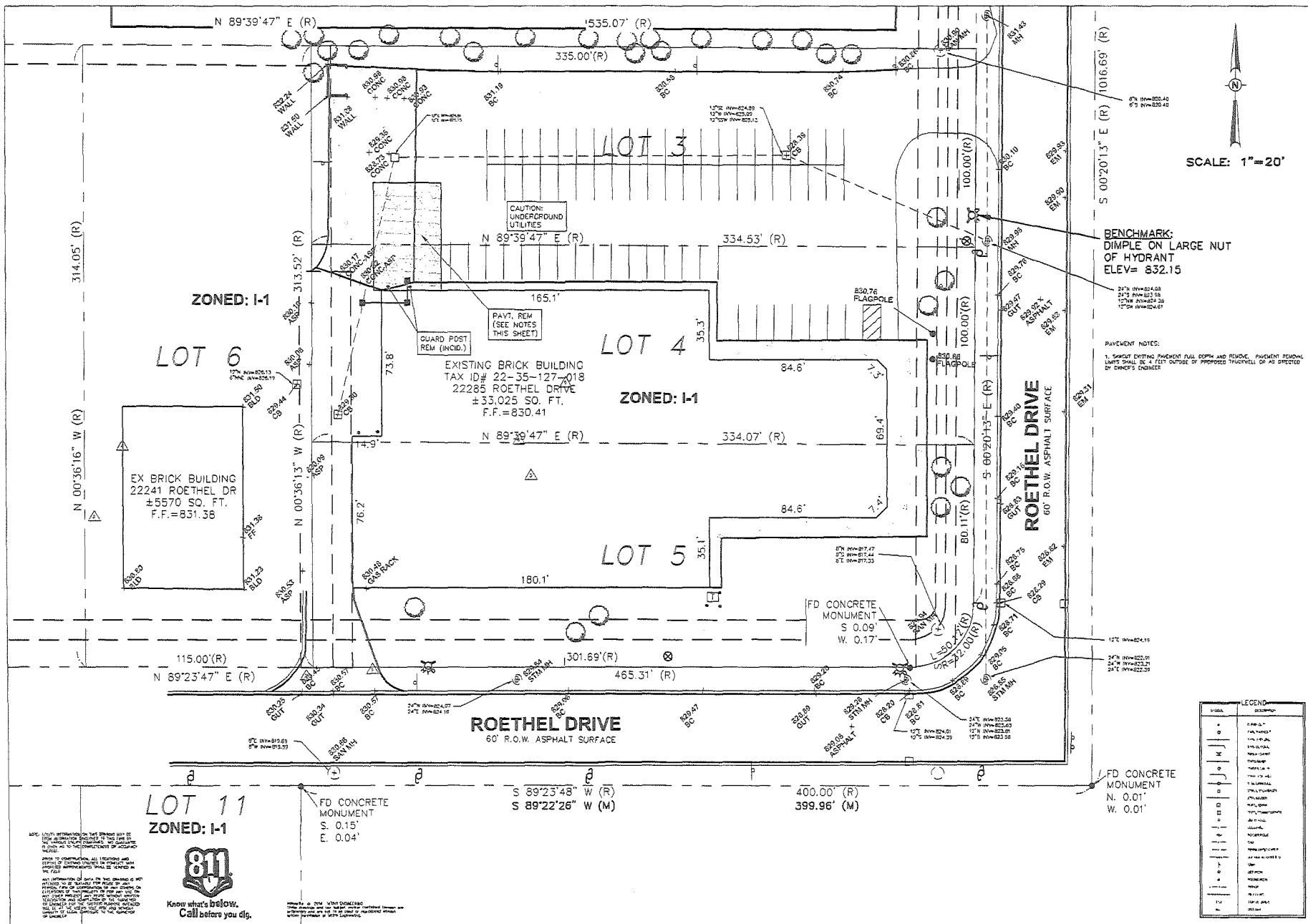
NOTE: UTILITY STRUCTURES ON THIS PLANNING MAP ARE FOR INFORMATION PURPOSES ONLY. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. ALL UTILITIES AND STRUCTURES SHOWN ON THIS MAP ARE BASED ON THE MOST RECENT AVAILABLE RECORDS AND FIELD SURVEYS. ANY DISCREPANCY BETWEEN THIS MAP AND FIELD SURVEYS SHALL BE THE RESPONSIBILITY OF THE USER. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION.



Know what's below.
 Call before you dig.

- STORM SEWER NOTES:
- UNLESS OTHERWISE NOTED, REINFORCED CONCRETE STORM SEWER PIPE SHALL BE ASTM A307 CLASS B PIPE. STORM SEWER PIPE JOINTS SHALL BE HOISTED TONGUE AND GROOVE WITH RUBBER GASKET PER AWWA C900.
 - ALL STORM DRAINAGE STRUCTURES SHALL BE CONSTRUCTED PER MOST STANDARD PLAN 15-10. STANDARD STRUCTURE STANDARD PLAN IS INCORPORATED INTO THESE DRAWINGS BY REFERENCE.
 - STORM DRAINAGE STRUCTURE COVERS SHALL BE COVER D PER MOST STANDARD PLAN 15-10 UNLESS OTHERWISE NOTED.
 - ALL STORM SEWER INLET AND MANHOLE STRUCTURES SHALL BE 24" DIAMETER. ALL CATCH BASIN AND PUMP STATION STRUCTURES SHALL BE 4' DIAMETER.

- STORM SEWER NOTES (CONTINUED):
- ALL INLET AND MANHOLE STRUCTURES SHALL BE CONSTRUCTED WITH A 2" SUMP.
 - FLEXIBLE PIPE BEDDING (ONE FOOT MINIMUM DEPTH ABOVE PIPE) IS MINIMUM 3/4" HIGH CHAMFER CRUSHED STONE MEETING MOST SO ANGLE PER MATERIAL SPECIFICATIONS.
 - PIPE BEDDING SHALL BE INCIDENTAL TO THE LOW PRICE BID FOR STORM SEWER.



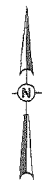
NO.	DATE	DESCRIPTION
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2	11/11/2011	ISSUED FOR PERMIT
3	11/11/2011	ISSUED FOR PERMIT

SHASTCO, LLC TRUCKWELL
 22265 ROETHEL DRIVE
 CITY OF NOVI
 OAKLAND COUNTY, MICHIGAN

DIMENSIONAL SITE PLAN

PROJECT NUMBER
 14040

SHEET NUMBER
 C-5



SCALE: 1" = 20'

SYMBOL	LEGEND
(Symbol)	1" R.O.W.
(Symbol)	60' R.O.W.
(Symbol)	ASPHALT
(Symbol)	CONCRETE
(Symbol)	PAV'T.
(Symbol)	CONCRETE MONUMENT
(Symbol)	HYDRANT
(Symbol)	FLAGPOLE
(Symbol)	STAKE
(Symbol)	SPOT ELEVATION
(Symbol)	BENCHMARK
(Symbol)	UNDERGROUND UTILITIES
(Symbol)	PAV'T. REM
(Symbol)	GUARD POST REM
(Symbol)	EXISTING BUILDING
(Symbol)	EX BUILDING
(Symbol)	LOT BOUNDARY
(Symbol)	PROPERTY LINE
(Symbol)	ADJACENT PROPERTY
(Symbol)	ADJACENT LOT
(Symbol)	ADJACENT STREET
(Symbol)	ADJACENT DRIVE
(Symbol)	ADJACENT ALLEY
(Symbol)	ADJACENT R.O.W.
(Symbol)	ADJACENT ASPHALT
(Symbol)	ADJACENT CONCRETE
(Symbol)	ADJACENT PAV'T.
(Symbol)	ADJACENT CONCRETE MONUMENT
(Symbol)	ADJACENT HYDRANT
(Symbol)	ADJACENT FLAGPOLE
(Symbol)	ADJACENT STAKE
(Symbol)	ADJACENT SPOT ELEVATION
(Symbol)	ADJACENT BENCHMARK
(Symbol)	ADJACENT UNDERGROUND UTILITIES
(Symbol)	ADJACENT PAV'T. REM
(Symbol)	ADJACENT GUARD POST REM
(Symbol)	ADJACENT EXISTING BUILDING
(Symbol)	ADJACENT EX BUILDING

NOTICE: ANY INFORMATION ON THIS SHEET WAS OBTAINED FROM THE RECORDS OF THE CITY OF NOVI, MICHIGAN. THE USER OF THIS SHEET SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION AND FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROFESSIONAL SERVICES PROVIDED HEREON. THE ENGINEER DOES NOT WARRANT THE ACCURACY OF THE INFORMATION OR THE RESULTS OF THE SERVICES PROVIDED HEREON. THE USER OF THIS SHEET SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROFESSIONAL SERVICES PROVIDED HEREON. THE ENGINEER DOES NOT WARRANT THE ACCURACY OF THE INFORMATION OR THE RESULTS OF THE SERVICES PROVIDED HEREON.



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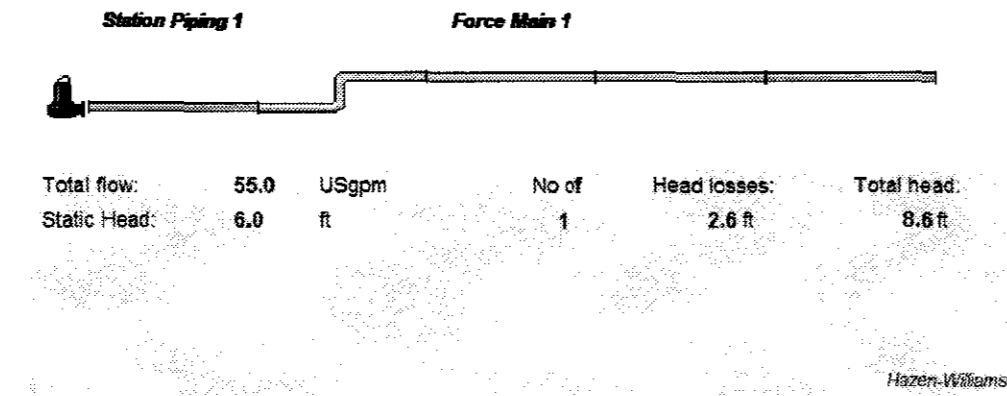
811 is the national number for reporting underground utility locations. For more information, visit www.811.org.

Design pipe system

Project: SHASTCO TRUCK WELL - Case1
 Customer: 10 YR STORM
 Date: 5/19/2014
 Microsoft

Station Piping 1			
Length	10.0 ft	Discharge conn.	0.50 1
Material	Plastic	90° elbow	0.30 2
Pressure class	SCH40	Valve	1.00 1
Dimension	2 inch	Tee	0.60 1
C-factor	150,000	Check valve	1.50 1
Inner diam.	2.1 inch	Outlet	1.00 0
		Own	0.00 0
		Total:	4.20
Water velocity:	5.3 ft/s	Loss in pipe section:	2.3 ft

Force Main 1			
Length	22.0 ft	Discharge conn.	0.50 0
Material	Plastic	90° elbow	0.30 0
Pressure class	SCH80	Valve	1.00 0
Dimension	3 inch	Tee	0.60 0
C-factor	150,000	Check valve	1.50 0
Inner diam.	2.9 inch	Outlet	1.00 1
		Own	0.00 0
		Total:	1.00
Water velocity:	2.7 ft/s	Loss in pipe section:	0.3 ft



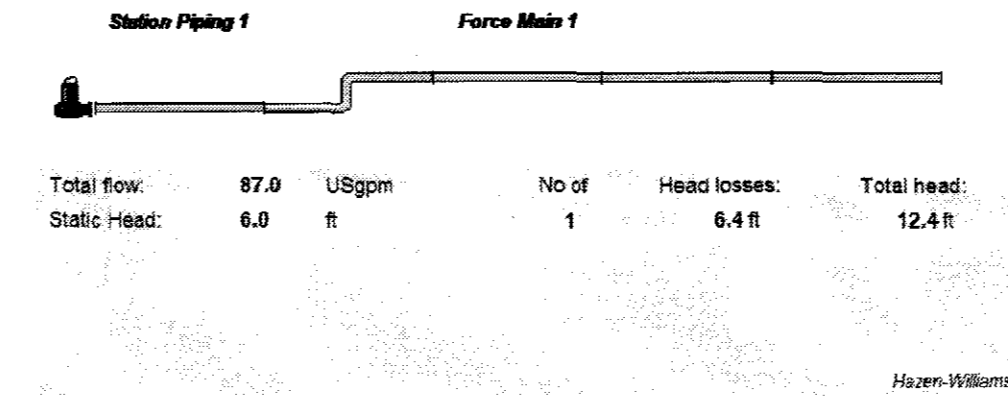
1(1)
 Flygt
 ITT Industries

Design pipe system

Project: SHASTCO TRUCK WELL - Case1
 Customer: 100 YR STORM
 Date: 5/19/2014

Station Piping 1			
Length	10.0 ft	Discharge conn.	0.50 1
Material	Plastic	90° elbow	0.30 2
Pressure class	SCH40	Valve	1.00 1
Dimension	2 inch	Tee	0.60 1
C-factor	150,000	Check valve	1.50 1
Inner diam.	2.1 inch	Outlet	1.00 0
		Own	0.00 0
		Total:	4.20
Water velocity:	8.3 ft/s	Loss in pipe section:	5.6 ft

Force Main 1			
Length	22.0 ft	Discharge conn.	0.50 0
Material	Plastic	90° elbow	0.30 0
Pressure class	SCH80	Valve	1.00 0
Dimension	3 inch	Tee	0.60 0
C-factor	150,000	Check valve	1.50 0
Inner diam.	2.9 inch	Outlet	1.00 1
		Own	0.00 0
		Total:	1.00
Water velocity:	4.2 ft/s	Loss in pipe section:	0.7 ft



1(1)
 Flygt
 ITT Industries

STORMWATER MANAGEMENT CALCULATIONS

Drainage Area = 0.30 acres
 Runoff Coefficient C = 0.95
 T = 15 minutes (Time of Concentration)
 $I = 175/(T + 25) = 4.375$ in/hr (10 Year Intensity Storm)
 $I = 275/(T + 25) = 6.875$ in/hr (100 Year Intensity Storm)
 $Q = CIA$ (Rational Method)
 $Q = (0.95)(4.375)(0.30) = 0.125$ cfs (55 gpm) (10 Year Storm)
 $Q = (0.95)(6.875)(0.30) = 0.196$ cfs (87 gpm) (100 Year Storm)

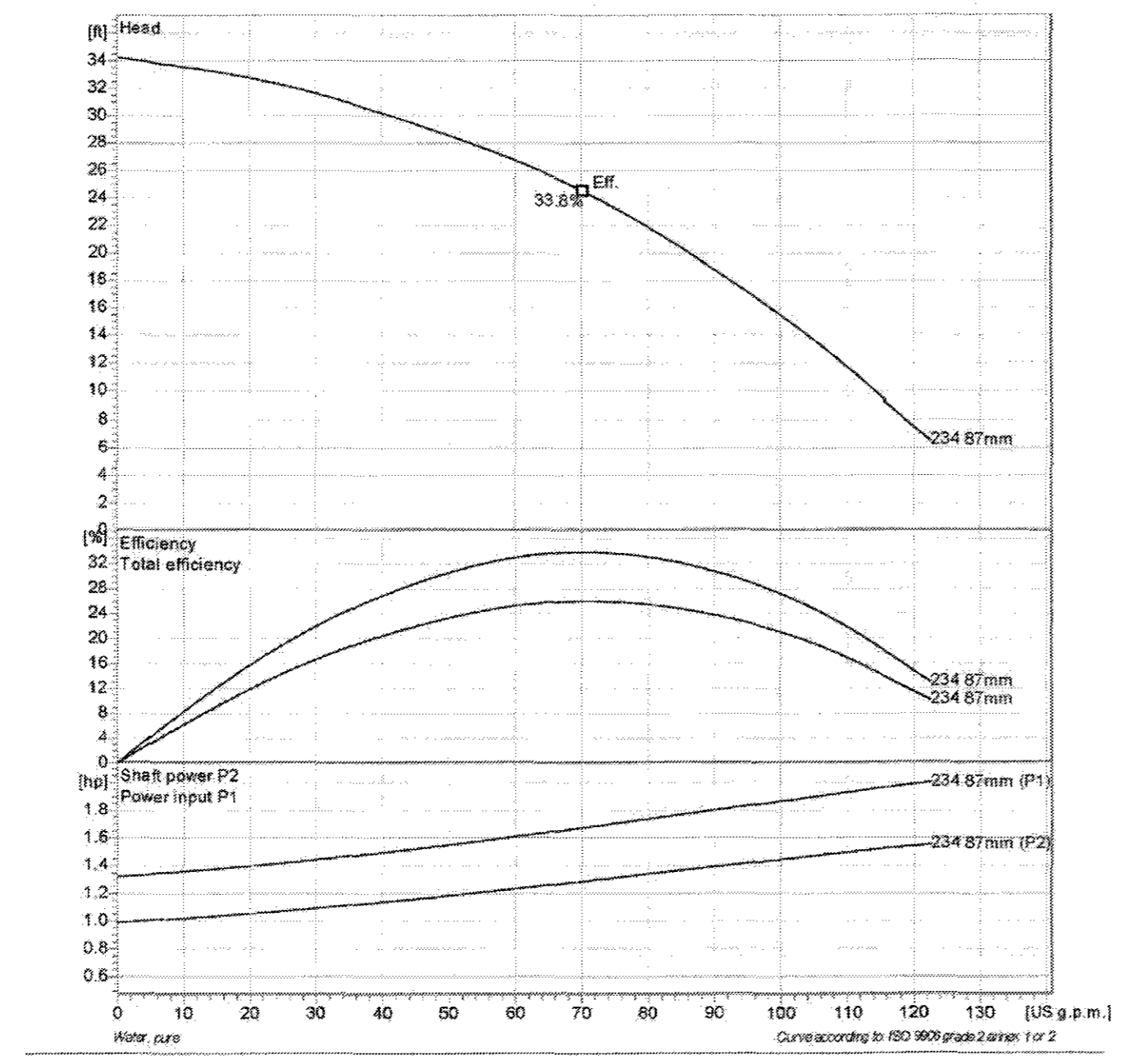
PUMP STATION NOTES:

- PUMPS (2) SHALL BE FLYGT SUBMERSIBLE EFFLUENT PUMP MODEL DP3045, 234 IMPELLER, 1.8 HP, 3 PHASE, 230V WITH 2" DISCHARGE, PUMP FEET AND 30" CABLE.
- EACH PUMP RATED 87 GPM AT 12.4 TDH (100 YEAR INTENSITY STORM).
- PUMP STATION SHALL BE PROVIDED WITH STAINLESS STEEL LIFTING CHAIN AND QUICK LINKS.
- PUMPS SHALL ALTERNATE BETWEEN PRIMARY PUMP AND LAG PUMP AFTER EACH PUMPING CYCLE.
- DUPLEX CONTROL PANEL SHALL BE IN NEMA 4X FIBERGLASS ENCLOSURE WITH MOTOR STARTERS, PUMP DISCONNECT, H-O-A SWITCHES, CONTROL CIRCUITS, ALARM LIGHT AND HORN, AND A GENERATOR RECEPTACLE.
- ALARM SHALL BE PROVIDED FOR HIGH WATER AND PUMP FAILURE.
- PUMP STATION SHALL HAVE LOT MERCURY TYPE FLOAT SWITCHES AND STAINLESS STEEL SUPPORT BRACKET.
- 24" X 30" ALUMINUM ACCESS HATCH SHALL BE PROVIDED.
- CONTRACTOR SHALL PROVIDE INSTALLATION, SITE WORK, CONCRETE MANHOLE, ANCHOR BOLTS, PIPING, VALVES, CONDUIT, WIRING, JUNCTION BOXES, PADLOCKS OR KEYS INCIDENTAL TO THE UNIT PRICE BID FOR THE PUMP STATION.
- START UP ASSISTANCE SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE PUMP STATION.

xylem
 Let's Solve Water

DF 3045 MT 3~ 234
 Performance curve

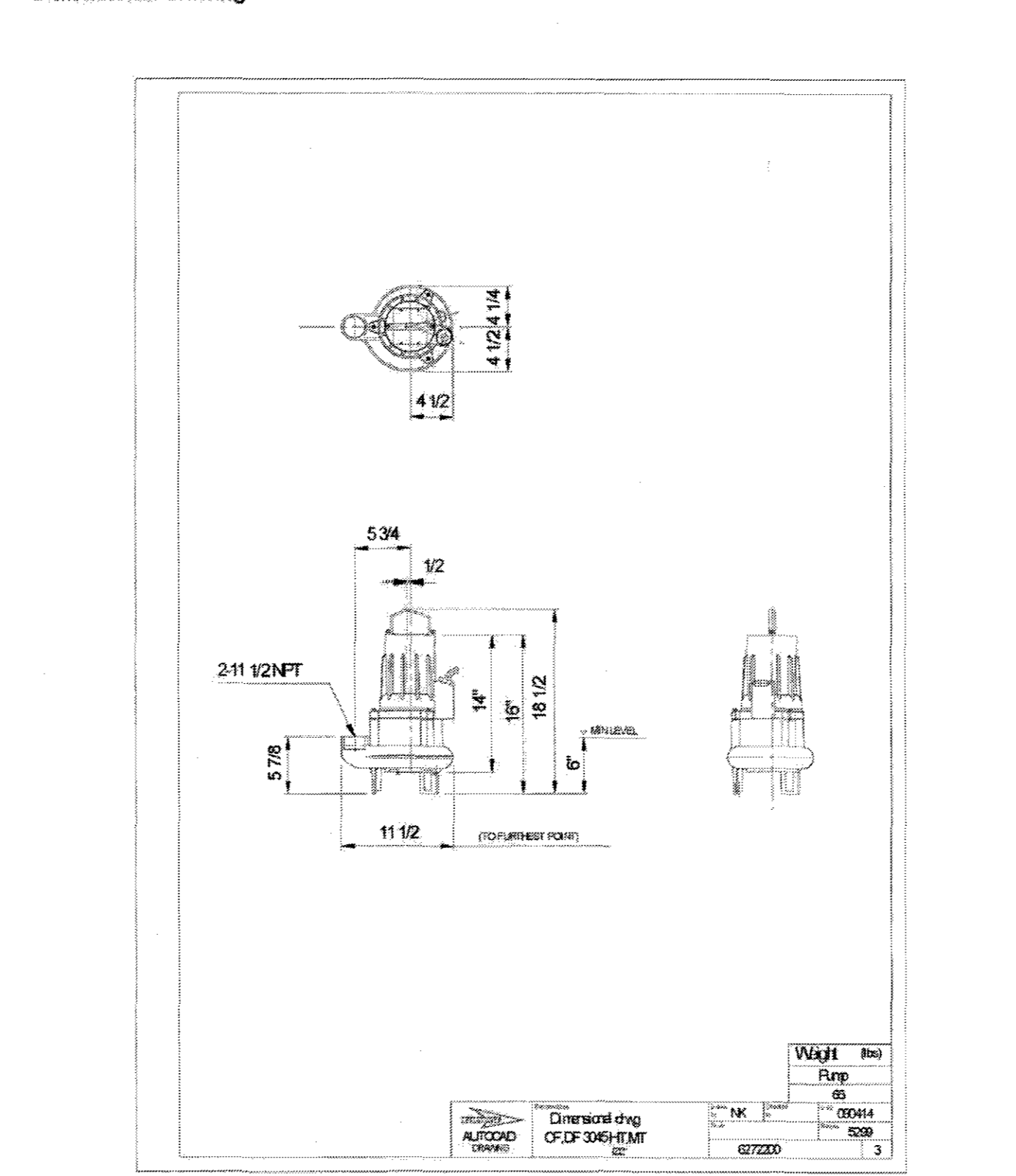
Pump		Motor		Efficiency	
Discharge Flange Diameter	1 15/16 inch	Motor #	D3045 1B1 12-08-20B-W1.8hp	Power factor	0.83
Suction Flange Diameter	50 mm	Stator variant	4	1/1 Load	0.83
Impeller diameter	3 1/2"	Frequency	60 Hz	3/4 Load	0.78
Number of blades	6	Rated voltage	230 V	1/2 Load	0.64
Throughlet diameter	1 7/8 inch	Number of poles	2	Efficiency	
		Phase	3	1/1 Load	77.0 %
		Rated power	1.8 hp	3/4 Load	77.0 %
		Rated current	5.2 A	1/2 Load	73.5 %
		Starting current	39 A		
		Rated speed	3390 rpm		



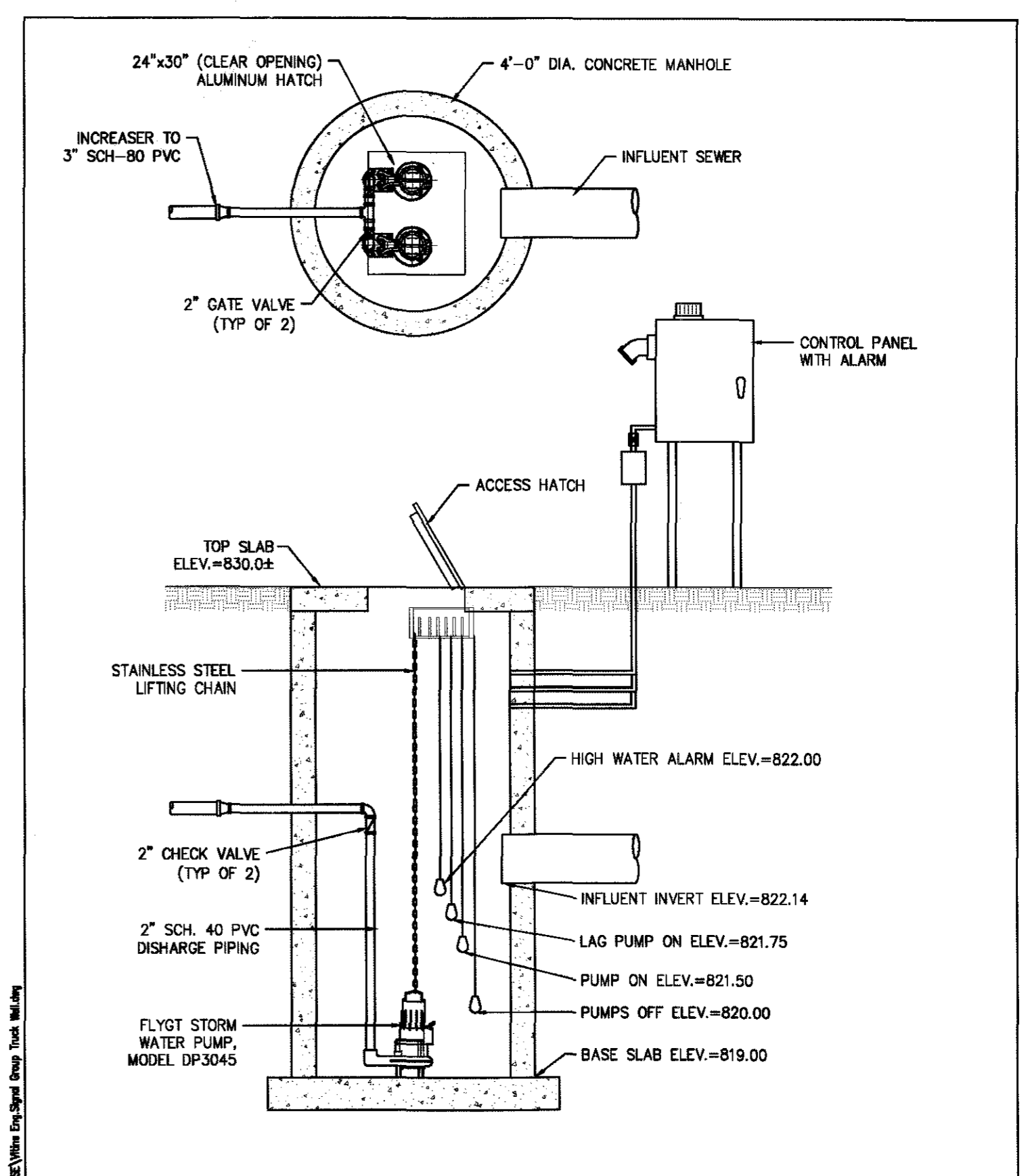
Project	Project ID	Created by	Created on	Last update
			2014-05-19	

xylem
 Let's Solve Water

DF 3045 MT 3~ 234
 Dimensional drawing



Project	Project ID	Created by	Created on	Last update
			2014-05-19	



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CLIENT: SHASTCO TRUCK WELL
 PROJECT: SHASTCO TRUCK WELL

SCALE: NONE
 DATE: 05/19/14
 BY: A.K.M. REV: 2
 JOB #: 54105 REM: 1
 DWG: 1 OF: 1

Kennedy Industries Inc.
 PUMPS • VALVES • CONTROLS
 4978 TECHNICAL DRIVE, P.O. BOX 809, MILFORD, MI 48061

VITINS ENGINEERING
 44275 BRANDYWINE
 CANTON, MICHIGAN 48187
 TELEPHONE: (734) 453-3460
 FACSIMILE: (734) 453-5812

VITINS ENGINEERING
 Civil/Environmental Engineering
 Municipal Consulting
 Software Development

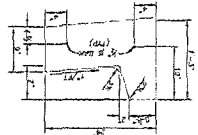
ISSUE NO.	DATE ISSUED	DESCRIPTION
1	4/17/2014	SITE PLAN REVIEW
2	4/20/2014	ADDED PUMP STATION SKETCH
3	5/19/2014	REVISED PER CITY REVIEW

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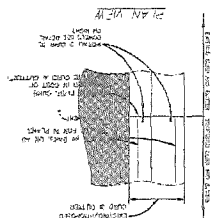
PROJECT TITLE
SHASTCO, LLC TRUCKWELL
22285 ROETHHEL DRIVE
CITY OF NOVI
OAKLAND COUNTY, MICHIGAN
 SHEET NAME
PUMP STATION CALCULATIONS,
NOTES AND DETAILS

PROJECT NUMBER
14040
 SHEET NUMBER
C-7
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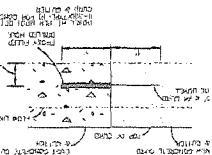
24" STRAIGHT FACED
CONCRETE CURB & GUTTER
(WOOD DETAIL, C.F. 4)



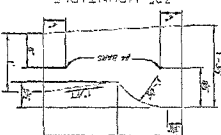
CURB TO DOWLS



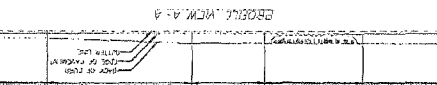
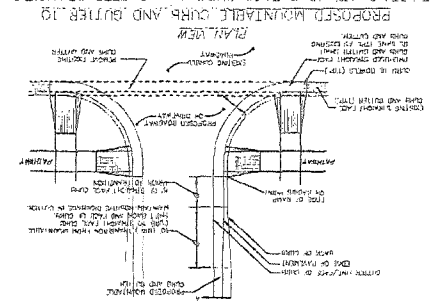
SECTION VIEW



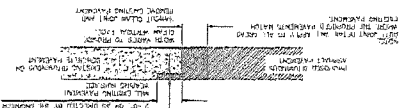
30" MOUNTABLE
CONCRETE CURB & GUTTER
(WOOD DETAIL, B. 2, MODIFIED)



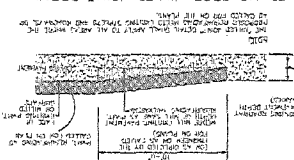
PROPOSED MOUNTABLE CURB AND GUTTER TRANSITION
CRISPER, STRAIGHT FACED CURB AND GUTTER TRANSITION



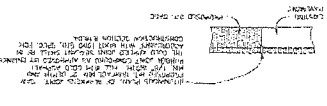
PAVEMENT SPLIT JOINT



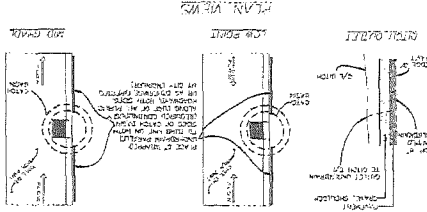
TRANSVERSE WELDED JOINT DETAIL



BIMONOLIC PLANE OF WEARERS JOINT

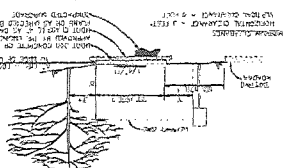


UNDERDRAIN DETAILS



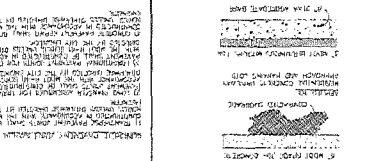
STANDARD PLAN FOR PATHWAYS

STANDARD PLAN FOR PATHWAYS
This plan shows the standard layout for pathways, including the curb, gutter, and sidewalk. It includes dimensions for the curb width, gutter depth, and sidewalk width. A note indicates 'CONCRETE CURB & GUTTER'.



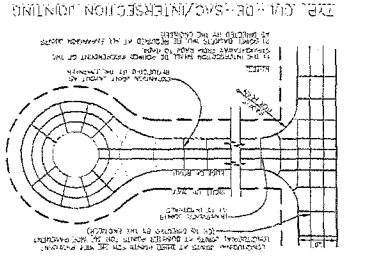
PAVEMENT THICKNESSES
AND DRIVEWAY OPENINGS

PAVEMENT THICKNESSES
AND DRIVEWAY OPENINGS
This section provides information on pavement thicknesses and driveway openings. It includes a table of pavement thicknesses for different types of pavement and a diagram of a driveway opening. A note indicates 'CONCRETE CURB & GUTTER'.

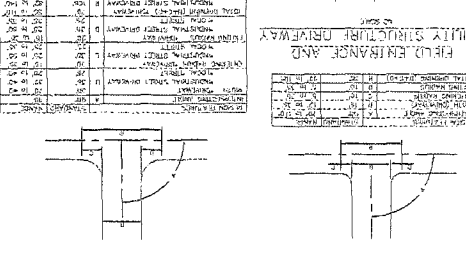
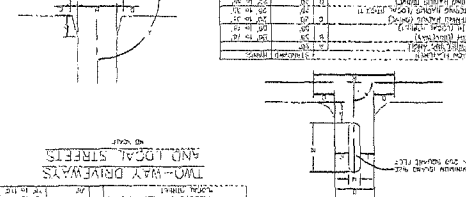
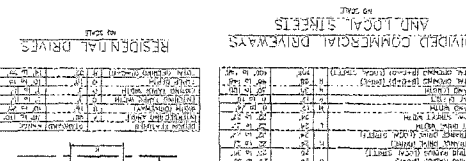
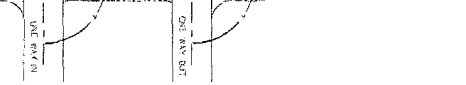
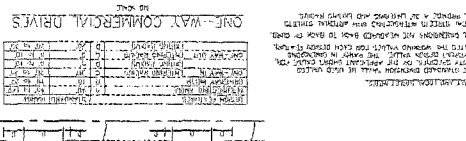
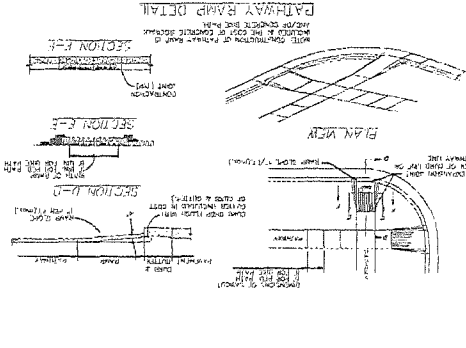


TR. CURB OR INTERSECTION JOINTING

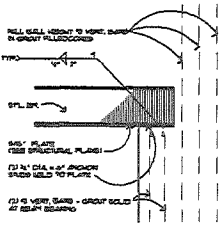
TR. CURB OR INTERSECTION JOINTING
This section provides information on curb or intersection jointing. It includes a diagram of a curb or intersection joint. A note indicates 'CONCRETE CURB & GUTTER'.



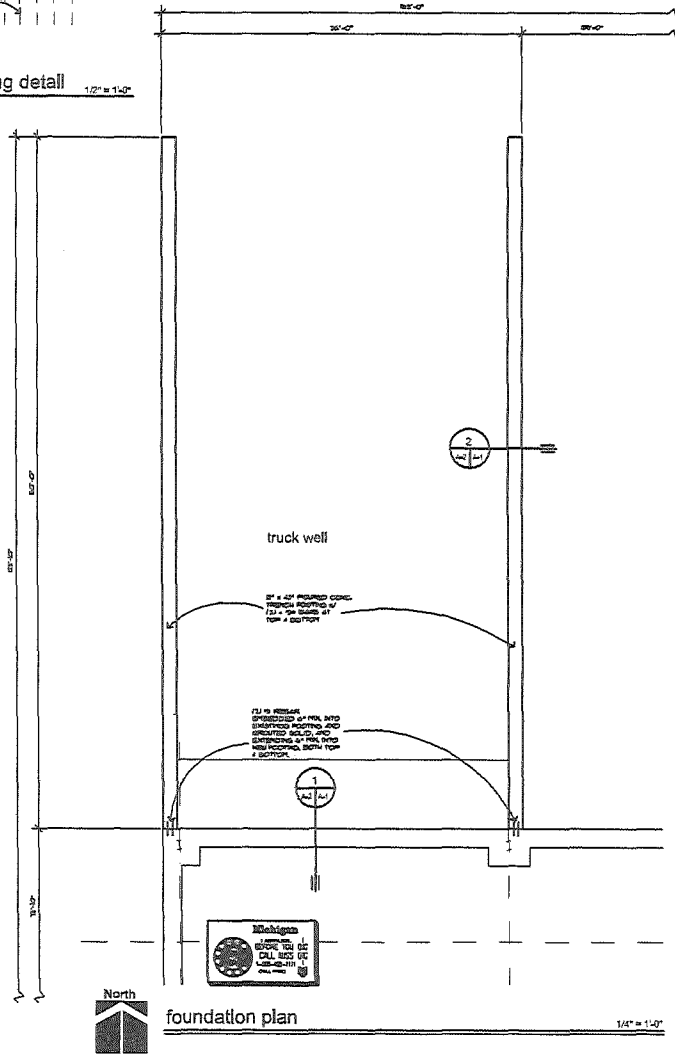
PAVEMENT RAMP DETAIL
(WOOD DETAIL, A)



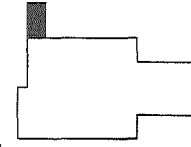
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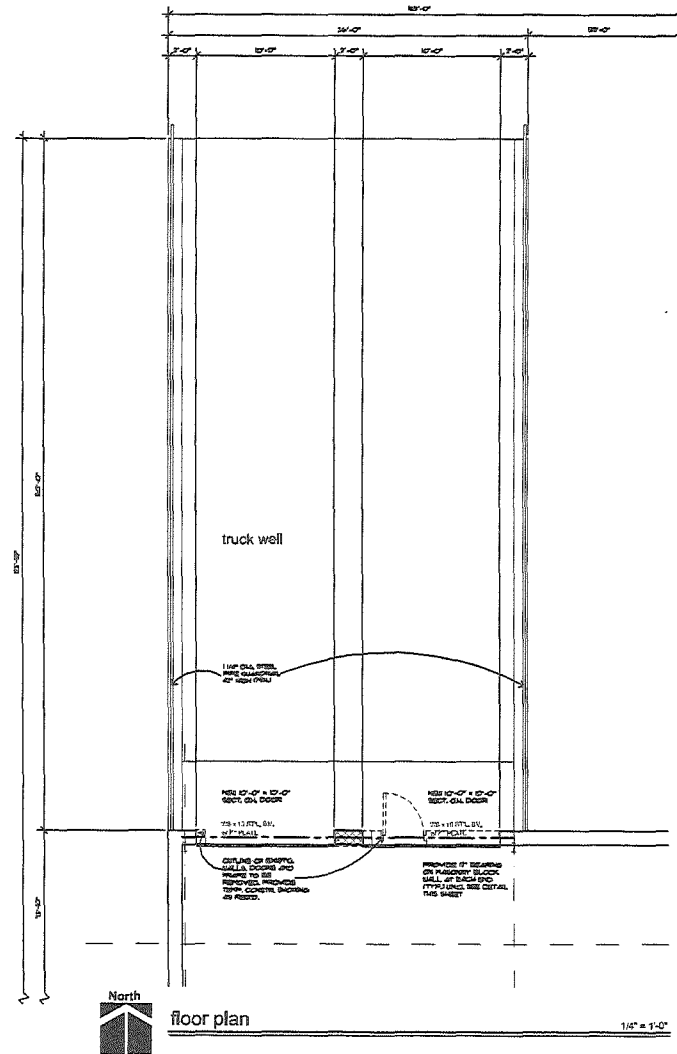
typ. beam bearing detail 1/2" = 1'-0"



foundation plan 1/4" = 1'-0"



key plan no scale



floor plan 1/4" = 1'-0"

Frank Salamone
 architects
 engineers
 planners

Architect

4870 Ingers Rd
 Novi, MI 48376
 248.337.2291

Date Issued: _____

 S.P.A. 04-105114

Project:
 Proposed Truckwell
 Addition for
**SHASTCO
 L.L.C.**
 23225 Reesdal Drive
 Novi, MI 48374

Client:
**SHASTCO
 L.L.C.**
 23225 Reesdal Dr.
 Novi, MI 48374
 (248) 476-2224

Sheet Title: _____
 PLANS
 Project Number: _____
 114-122
 Drawn By: _____
 JFN
 Checked By: _____
 F.S.

Contact:
 per drawing
 call 483.337.2291
 email

Sheet Number: _____

Frank Salamone
 architects
 engineers
 planners

Architect

4010 Lakeside
 Detroit, MI 48226
 (313) 337-0329

SHASTCO L.L.C.
 23225 Research Drive
 Novi, MI 48375

Date Issued: _____

 S.P.A. 06/08/14

Project:
 Proposed Trickle
 Addition for
SHASTCO
 L.L.C.
 23225 Research Drive
 Novi, MI 48375

Client:
SHASTCO
 L.L.C.
 23225 Research Dr.
 Novi, MI 48375
 (248) 479-3224

Sheet Title:
 PLANS

Project Number:
 14-122

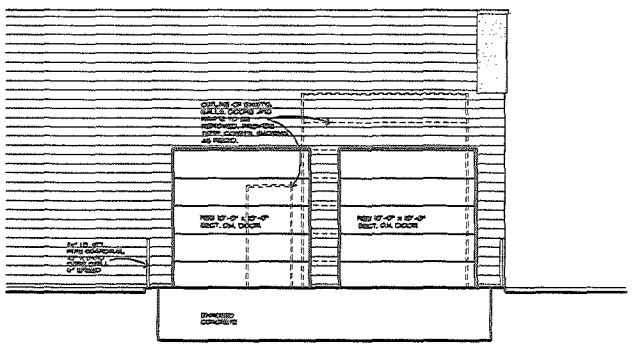
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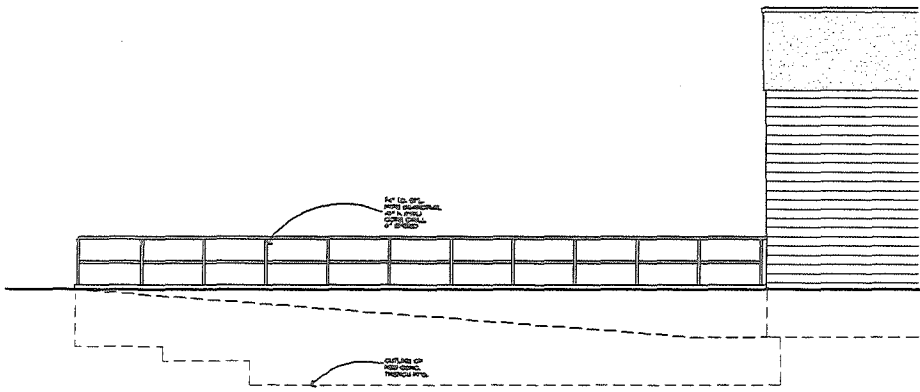
Issue:
 preliminary
 construction
 record

Sheet Number:

A-2



north (side) elevation 1/4" = 1'-0"



west (rear) elevation 1/4" = 1'-0"



VITINS ENGINEERING

May 20, 2014

Ms. Kristen Kapelanski, AICP, Planner
City of Novi
45175 W. Ten Mile Road
Novi, Michigan 48375

RE: **Truckwell (22285 Roethel Drive), JSP14-26**
City of Novi, Oakland County, Michigan

Dear Ms. Kapelanski:

Enclosed for your approval are the following:

Number	Description
6 sets	Site Plan dated May 19, 2014
1 copy	Contractor's Cost Estimate

Thank you for your review comments in your Plan Review Center report. The following responses are in the same sequence as they appeared in your report, the consultant's letters, and city staff reports and memorandums.

Plan Review Center Report, Planning Review (April 29, 2014)

1. Responses to other review letters are noted below. Pre-construction meeting will be scheduled prior to the start of any site work.

Plan Review Center Report, Engineering Review (May 12, 2014)

General

1. Demolition Plan has been provided, Sheet C-5, Demolition Plan.
2. City of Novi's standard paving detail sheet is included.
3. Based on the ALTA Survey prepared by Diffin-Umlor, the proposed concrete trench footing should not interfere with any existing underground utilities. The existing storm sewer downstream of Catch Basin 1 will run through the proposed concrete trench footing.



VITINS ENGINEERING

Truckwell (22285 Roethel Drive), JSP14-26

May 20, 2014

Page 2

4. Variance will be requested for a pumped outlet from the City Council per Chapter 5 Section 2.2.4 (B)(7). No feasible alternative exists since the adjacent storm sewers are not deep enough to convey stormwater from the truckwell by gravity flow.

Since the truckwell stormwater management system is part of the conveyance system it has been designed for a 10 year storm per Section 1.4 of the Engineering Design Manual. The pumps are capable of pumping the 100 year storm event of 0.196 cfs at a head of 12.4 feet. However, the downstream storm sewer has been designed to only convey a 10 year intensity storm.

If the truckwell pumps are not operating the truckwell will overflow in the adjacent parking lot. Overflow elevation will be about 829.20 feet. Building finish floor elevation is about 830.40 feet. Building finish floor is about 1.2 feet above the overflow elevation. At the deepest point, the truckwell will have about 3 feet of standing water if the pumps are out of service.

- ✓ 5. Pump station details are included on Sheet C-7.
- ✓ 6. Storm sewer profile is shown on Sheet C-4.
- ✓ 7. Upstream and downstream inverts are provided for Catch Basin 1.

Stormwater Management Plan

- ✓ 8. Each pump has been sized for the 10 year storm event but the pump is also capable of pumping the 100 year storm event.
 - ✓ A portable generator shall be provided along with a generator receptacle in the control panel.
 - ✓ A high water alarm and pump failure alarm will be provided at the control panel inside the building.

Paving & Grading

- ✓ 9. Extent of the proposed paving is shown on Sheet C-2, Paving Plan.
- ✓ 10. Cross-section of the proposed pavement section is included on Sheet C-2, Paving Plan.

Additional Items

11. To the best of the engineer's knowledge, information, and belief, all changes to the final site plan have been discussed in this response letter.
12. Contractor's cost estimate has been provided.



VITINS ENGINEERING

Truckwell (22285 Roethel Drive), JSP14-26

May 20, 2014

Page 3

13. The Pump Maintenance Plan and Agreement will be provided to the City of Novi for review.
14. A pre-construction meeting will be scheduled prior to the start of construction.
15. Grading permit will be obtained from the City of Novi.
16. Material certifications shall be submitted to Spaulding DeDecker by the underground contractor for review prior to construction of the truckwell storm water management system.
17. Inspection fees will be paid by the Owner prior to construction.
18. Soil Erosion Control Permit to be obtained by the Contractor. Financial guarantee and inspection fees to be paid by the Owner.
19. Performance guarantee to be provided by Owner prior to issuance of a Temporary Certificate of Occupancy per the City of Novi's Performance Guarantee Ordinance.
20. Pump Maintenance Plan and Agreement shall be notarized by the City Attorney and City Engineer.
21. Record drawings to be prepared by Spaulding, DeDecker and Associates, Inc.
22. An up-to-date Title Policy shall be provided to the City of Novi dated within 90 days of City Council consideration of acceptance verifying that the parties signing the documents have the legal authority to execute the documents.



VITINS ENGINEERING

Truckwell (22285 Roethel Drive), JSP14-26

May 20, 2014

Page 4

Thank you for your help on this project. If you have any questions or require additional information, please feel free to call.

Enclosures

Very truly yours,
VITINS ENGINEERING

A handwritten signature in black ink, appearing to read 'Uldis G. Vitins', written in a cursive style.

Uldis G. Vitins, P.E.
Principal

Copies: SHASTCO, LLC
ATC Building Services
Frank Salamone Architect
file



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

May 28, 2014

Adam Wayne, Construction Engineer
City of Novi
45175 Ten Mile Road
Novi, Michigan 48375

Re: **Shastco, LLC – Truck Well (22285 Roethel)**
Variance from Design and Construction Standards

Dear Mr. Wayne:

Our office has reviewed the proposed request for a variance from the City's Stormwater Management Design Standards as set forth in the Engineering Design Manual for the purpose of constructing a truck well with a pump outlet. The property owner has requested a waiver from Section 2.2.4.B.7 of the Engineering Design Manual, which states in relevant part:

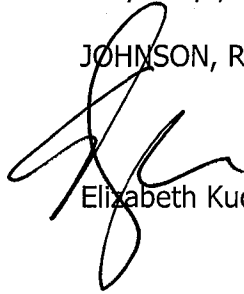
7. Pumped outlets are not permitted absent a variance from City Council, which shall require demonstration that it is in the public interest and no feasible alternative exists. IF City Council grants a variance to allow a pumped outlet, the following documentation shall be standards shall apply:
 - a. The pump(s) shall be designed to meet the maximum discharge rate and time requirements for the 100-year and bankfull flood events. Minimum and maximum system head curves and pump curves shall be provided to verify the operating duty points of the pump(s).
 - b. Pumps shall be of appropriate construction for conveying storm water.
 - c. A redundant pump shall be provided.
 - d. A generator shall be provided for the pump station. A permanent on-site generator shall be provided or a generator receptacle in combination with a portable generator shall be provided.

Adam Wayne, Construction Engineer
May 28, 2014
Page 3

If you have any questions regarding the above, please call me.

Very truly yours,

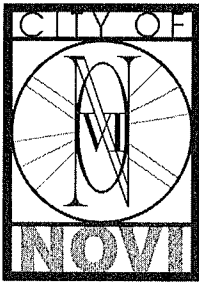
JOHNSON, ROSATI, SCHULTZ & JOPPICH, P.C.



Elizabeth Kudla Saarela

EKS
Enclosures

C: Maryanne Cornelius, Clerk (w/Enclosures)
Charles Boulard, Community Development Director (w/Enclosures)
Matt Wiktorowski, Field Operations (w/Enclosures)
Brian Coburn, Engineering Manager (w/Enclosures)
David Beschke, Landscape Architect (w/Enclosures)
Jeff Johnson, Fire Department (w/Enclosures)
Thomas R. Schultz, Esquire (w/Enclosures)



cityofnovi.org

CITY OF NOVI
Engineering Department

MEMORANDUM

To: Charles Boulard, Community Development
David Beschke, Landscape Architect
Beth Saarela, Attorney
Jeff Johnson, Fire Department
Matt Wiktorowski, Filed Ops

From: Adam Wayne, Engineering

Date: May 20, 2014

Re: Variance from Design & Construction Standards
Shastco, LLC.

Attached is a request for a Variance from the Chapter 5 Section 2.2.4 (B)(7) of the Engineering Design Manual for the City of Novi. Please review for a future City Council Agenda. In accordance with Section 11-10 of the Ordinance, the following three conditions **must be met** for a variance to be granted by Council:

- 1) A literal application of the substantive requirement would result in exceptional, practical difficulty to the applicant;
- 2) The alternative proposed by the applicant would be adequate for the intended use and would not substantially deviate from the performance that would be obtained by strict enforcement of the standards; and,
- 3) The granting of the variance would not be detrimental to the public health, safety or welfare, nor injurious to adjoining or neighboring property.

Following review of the variance, check the appropriate box below and provide your signature. If you have no basis for recommending either approval or denial, please check the "No Exceptions Taken" box. If you are recommending approval or denial of the request, **please also complete the matrix on the reverse of this form.** Please return to my attention by **Friday May 30th, 2014.**

ROUTING

Delivered To	Returned On	RECOMMENDED ACTION			Signature
		Approval*	Denial*	No Exceptions Taken	
Brian Coburn (Engineering)					
Charles Boulard (Comm Dev.)					
David Beschke (Landscape Arch)					
Beth Saarela (City Attorney)				✓	
Jeff Johnson (Fire Department)					
Matt Wiktorowski (Field Ops)					

* SEE REVERSE

If recommending approval or denial, please complete the following:

1. Would a literal application of the substantive requirement of the ordinance result in an exceptional, practical difficulty to the application? Yes No

Explain:

2. Would the alternative proposed by the applicant be adequate for the intended use and not deviate from the performance that would be obtained by strict enforcement of the standards? Yes No

Explain:

3. Would granting the variance not be detrimental to public health, safety, or welfare, and not injurious to adjoining or neighboring property? Yes No

Explain:
