

# HENRY FORD PHARMACY ADVANTAGE

## PRELIMINARY SITE PLAN

### ROCHESTER HILLS, OAKLAND COUNTY

M-59 (VARIABLE WIDTH)

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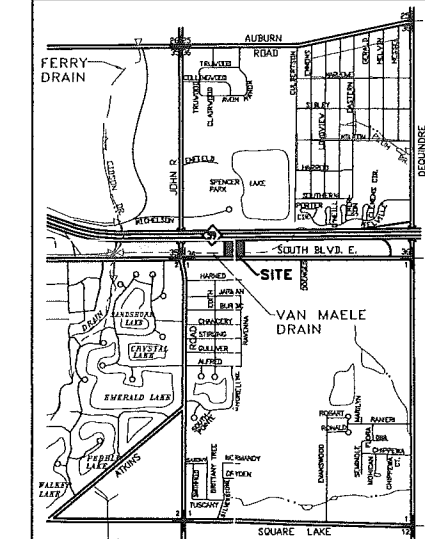
- MAENGINEERING SITE LIGHTING PLAN

- FAUDIE ARCHITECTURE PRELIMINARY FLOOR PLAN
- PE-2 BUILDING ELEVATIONS

**R.C.O.C. NOTES:**

SOUTH BOULEVARD IS UNDER JURISDICTION OF R.C.O.C.

1. CALL INSPECTOR OF PERMIT SUPERVISOR BEFORE BEGINNING ANY WORK IN R.O.W.
2. "PROPER SIGNING" IS REQUIRED BEFORE ANY WORK IN R.O.W. IS STARTED.
3. LANE CLOSURES RESTRICTED TO 9-3 MON-FRI
4. MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES.
5. FLAG PERSON REQUIRED FOR TEMPORARY ONE LANE ROADS.
6. A SEPARATE PERMIT IS REQUIRED FOR ALL UNDERGROUND UTILITIES WITHIN THE EXISTING R.O.W.
7. GRAVEL SHOULDERS SHALL CONSIST OF 8 INCHES OF M.D.O.T. 23A COMPACTED AGGREGATE.
8. SUITABLE BASE TO BE DETERMINED BY R.C.O.C. INSPECTOR IN THE FIELD.
9. UNDERCUTS PER R.C.O.C. INSPECTOR.
10. WITHIN THE INFLUENCE OF THE ROADBED MDT CLASS II, SAND, COMPACTED TO 95% MAX. UNIT DENSITY IS REQUIRED.
11. FULL DEPTH SAWCUT AND/OR MILL A BUTT JOINT, WITH LOCATION/WIDTH AS DIRECTED BY R.C.O.C. INSPECTOR.
12. OVERHEAD LINES TO BE A MINIMUM 14'6" ABOVE PROPOSED TOP OF PAVEMENT.
13. MAINTAIN A MINIMUM 3 FOOT FLAT AREA BACK OF CURB AND A MAXIMUM 1 ON 3 SLOPE TO EXISTING.



LOCATION MAP  
1" = 2000'

**APPLICANT/DEVELOPER:**  
DEMBS DEVELOPMENT, INC.  
27750 STANSBURY, SUITE 200  
FARMINGTON HILLS, MI 48334  
PHONE: (248) 380-7100  
FAX: (248) 560-3030

**ARCHITECT:**  
FAUDIE ARCHITECTURE  
26261 EVERGREEN ROAD, SUITE 123  
SOUTHFIELD, MI 48076  
PHONE: (248) 619-2354

**SURVEYOR/ENGINEER:**  
ALPINE ENGINEERING, INC.  
46892 WEST ROAD, SUITE 109  
NOV, MI 48377  
PHONE: 248-926-3701  
FAX: 248-926-3765

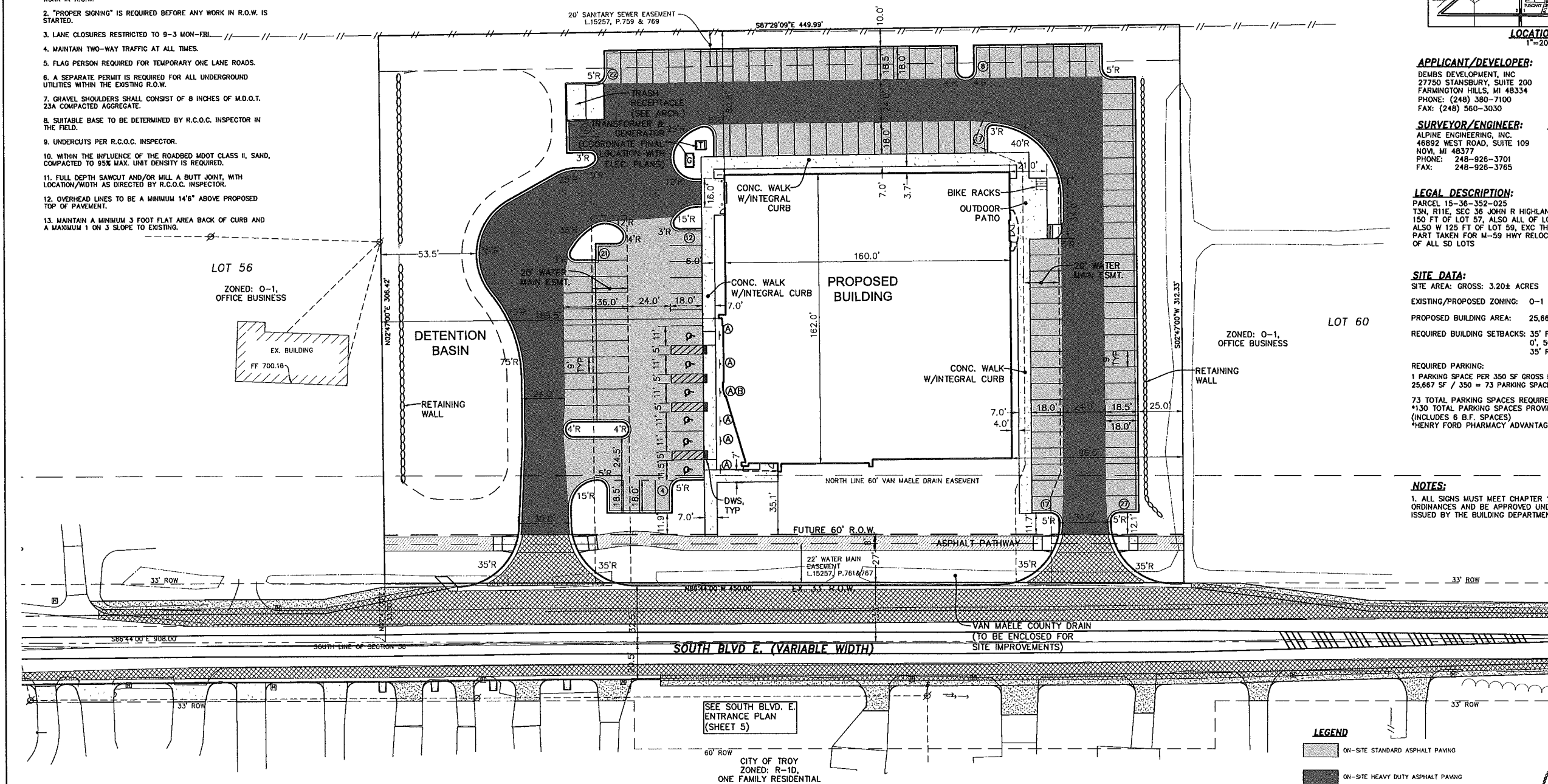
**LANDSCAPE ARCHITECT:**  
ALLEN DESIGN  
557 CARPENTER  
NORTHVILLE, MI 48167  
PHONE: (248) 467-4668

**LEGAL DESCRIPTION:**  
PARCEL 15-36-352-025  
T3N, R11E, SEC 36 JOHN R HIGHLANDS E,  
150 FT OF LOT 57, ALSO ALL OF LOT 58,  
ALSO W 125 FT OF LOT 59, EXC THAT  
PART TAKEN FOR M-59 HWY RELOCATION  
OF ALL SD LOTS

**SITE DATA:**  
SITE AREA: GROSS: 3.20± ACRES  
EXISTING/PROPOSED ZONING: O-1 (OFFICE BUSINESS)  
PROPOSED BUILDING AREA: 25,667 SF GROSS FLOOR AREA  
REQUIRED BUILDING SETBACKS: 35' FRONT MINIMUM  
0', 50' TOTAL SIDE MINIMUM  
35' REAR MINIMUM

**REQUIRED PARKING:**  
1 PARKING SPACE PER 350 SF GROSS FLOOR AREA (GFA):  
25,667 SF / 350 = 73 PARKING SPACES REQUIRED  
73 TOTAL PARKING SPACES REQUIRED  
\*130 TOTAL PARKING SPACES PROVIDED  
(INCLUDES 6 B.F. SPACES)  
\*HENRY FORD PHARMACY ADVANTAGE PARKING REQUIREMENT

**NOTES:**  
1. ALL SIGNS MUST MEET CHAPTER 134 OF THE CITY CODE OF ORDINANCES AND BE APPROVED UNDER A SEPARATE PERMIT ISSUED BY THE BUILDING DEPARTMENT.



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**NOTICE:**  
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

**TRAFFIC SIGNING REQUIREMENTS**

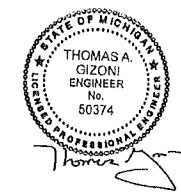
ITEM	MMUTCD CODE	QUANTITY	SIZE	DESCRIPTION
(A)	R7-B	6	12"x18"	RESERVED PARKING ONLY
(B)	R7-BP	1	12"x6"	VAN ACCESSIBLE

NOTE: "NO STOPPING STANDING PARKING FIRE LANE" SIGNAGE SHALL BE PROVIDED AT THE DISCRETION OF THE FIRE MARSHALL.

**TRAFFIC SIGNING AND STRIPING REQUIREMENTS**

1. ALL PERMANENT AND TEMPORARY TRAFFIC SIGNAGE & STRIPING SHALL COMPLY WITH THE 2011 MMUTCD.
2. SIGNS SHALL BE MOUNTED ON 1 1/2" SQUARE GALVANIZED STEEL POST, WALL OR FENCE MOUNTED AS INDICATED ON THE PLANS, LOCATE AND INSTALL IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND REGULATIONS.
3. SEE SHEET 6 FOR BARRIER FREE PARKING SIGNAGE DETAILS.

- LEGEND**
- ON-SITE STANDARD ASPHALT PAVING
  - ON-SITE HEAVY DUTY ASPHALT PAVING
  - ROW ASPHALT PATHWAY PAVING
  - CONCRETE
  - SOUTH BOULEVARD ROW PAVING
  - SOUTH BOULEVARD GRAVEL SHOULDER OR DRIVEWAY



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CIVIL ENGINEERS & LAND SURVEYORS

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BOUNDARY SURVEYS  
TOPOGRAPHIC SURVEYS  
PARCEL SPLITS

RESIDENTIAL ENGINEERING  
SITE ENGINEERING  
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CONSTRUCTION LAYOUT

46892 WEST ROAD  
NOV, MICHIGAN 48377  
(248) 926-3701 (BUS)  
(248) 926-3765 (FAX)  
WWW.ALPIENGINEERING.COM



CLIENT: DEMBS DEVELOPMENT, INC.

PRELIMINARY SITE PLAN

HENRY FORD PHARMACY ADVANTAGE - 1191 SOUTH BLVD. E.  
TOWNSHIP: 36N  
ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN  
SECTION: 36 RANGE: 11E

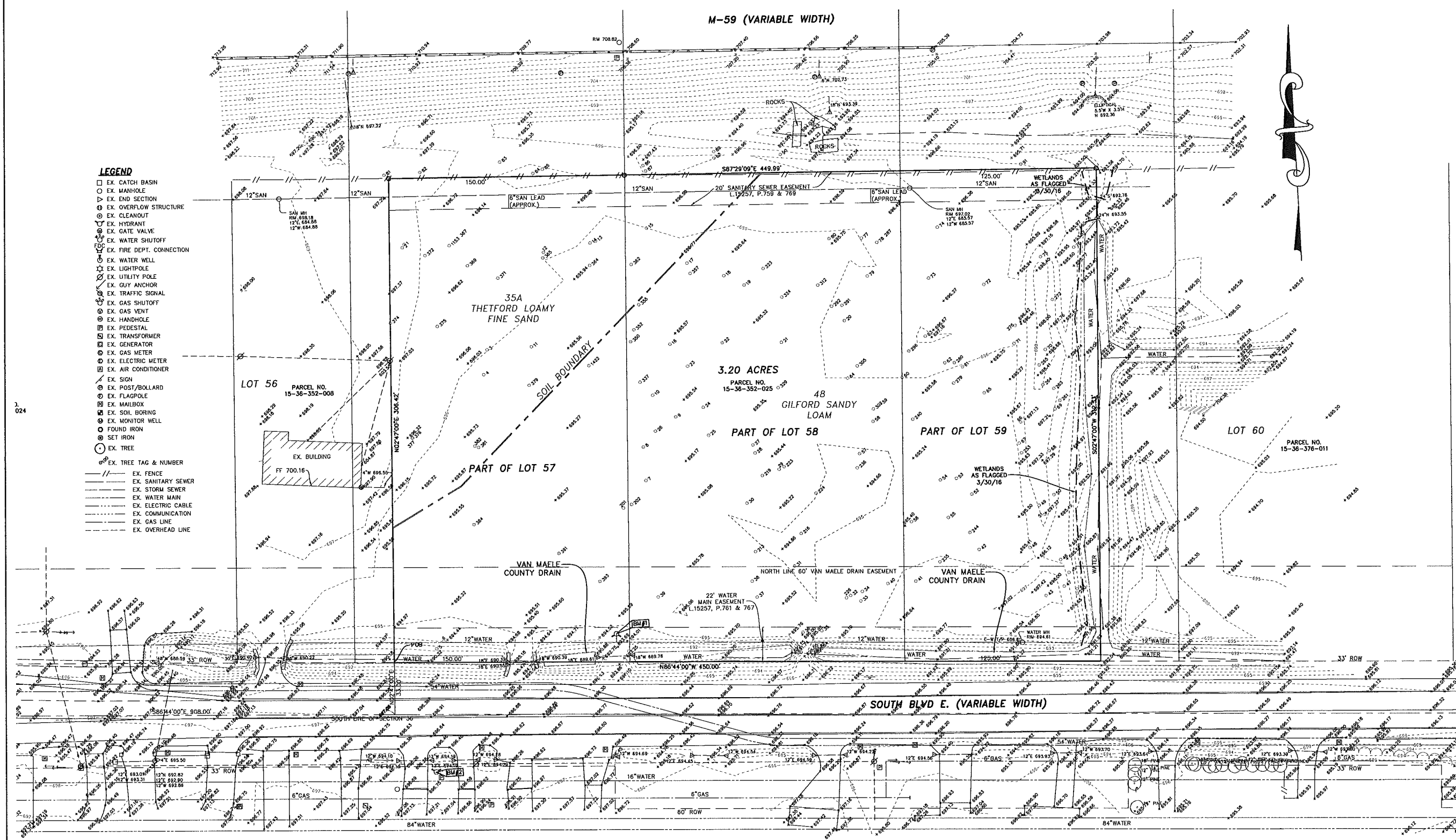
REVISED

2016-04-25 PSP SUBMITTAL
2016-06-30 PSP SUBMITTAL
2016-07-21 PSP SUBMITTAL

DATE: 2016-04-25  
DRAWN BY: TG  
CHECKED BY: SD/TG

SCALE: HOR 1" = 30' FT.  
VER 1" = 10' FT.

CITY FILE NO. 16-010  
NOT TO BE USED AS CONSTRUCTION DRAWINGS



- LEGEND**
- EX. CATCH BASIN
  - EX. MANHOLE
  - ▷ EX. END SECTION
  - ⊕ EX. OVERFLOW STRUCTURE
  - ⊕ EX. CLEANOUT
  - ⊕ EX. HYDRANT
  - ⊕ EX. GATE VALVE
  - ⊕ EX. WATER SHUTOFF
  - ⊕ EX. FIRE DEPT. CONNECTION
  - ⊕ EX. WATER WELL
  - ⊕ EX. LIGHTPOLE
  - ⊕ EX. UTILITY POLE
  - ⊕ EX. GUY ANCHOR
  - ⊕ EX. TRAFFIC SIGNAL
  - ⊕ EX. GAS SHUTOFF
  - ⊕ EX. GAS VENT
  - ⊕ EX. HANDHOLE
  - ⊕ EX. PEDESTAL
  - ⊕ EX. TRANSFORMER
  - ⊕ EX. GENERATOR
  - ⊕ EX. GAS METER
  - ⊕ EX. ELECTRIC METER
  - ⊕ EX. AIR CONDITIONER
  - ⊕ EX. SIGN
  - ⊕ EX. POST/BOLLARD
  - ⊕ EX. FLAGPOLE
  - ⊕ EX. MAILBOX
  - ⊕ EX. SOIL BORING
  - ⊕ EX. MONITOR WELL
  - ⊕ FOUND IRON
  - ⊕ SET IRON
  - ⊕ EX. TREE
  - ⊕ EX. TREE TAG & NUMBER
  - EX. FENCE
  - EX. SANITARY SEWER
  - EX. STORM SEWER
  - EX. WATER MAIN
  - EX. ELECTRIC CABLE
  - EX. COMMUNICATION
  - EX. GAS LINE
  - EX. OVERHEAD LINE

1.024

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**BENCHMARKS:**  
BM#1 - ARROW ON HYDRANT, NORTH SIDE OF SOUTH BLVD, 4216 EAST OF #1158 SOUTH BLVD DRIVEWAY. ELEVATION 696.98 NAVD88  
BM#2 - ARROW ON HYDRANT, SOUTH SIDE OF SOUTH BLVD, SOUTH OF SOUTHWEST CORNER OF SUBJECT PROPERTY. ELEVATION 698.05 NAVD88  
\*ADD 0.40 TO ALL ELEVATIONS TO CONVERT THEM TO THE NAVD89 DATUM  
\*BENCHMARK ELEVATIONS WERE ESTABLISHED BY DIFFERENTIAL GPS METHODS, BASED ON NGS POINT 06127

**LEGAL DESCRIPTION:**  
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CITY FILE NO. 16-010  
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**DEMBS DEVELOPMENT, INC.**  
CLIENT:

**EXISTING CONDITIONS PLAN**  
HENRY FORD PHARMACY ADVANTAGE - 1191 SOUTH BLVD. E.  
SECTION: 36 TOWNSHIP: 3N RANGE: 11E  
ROCHESTER HILLS OKLAHOMA COUNTY MICHIGAN

**ALPINE ENGINEERING, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS  
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REVISIONS:  
2016-04-25 PSP SUBMITTAL  
2016-06-30 PSP SUBMITTAL  
2016-07-21 PSP SUBMITTAL

DATE: 2016-04-25  
DRAWN BY: JV  
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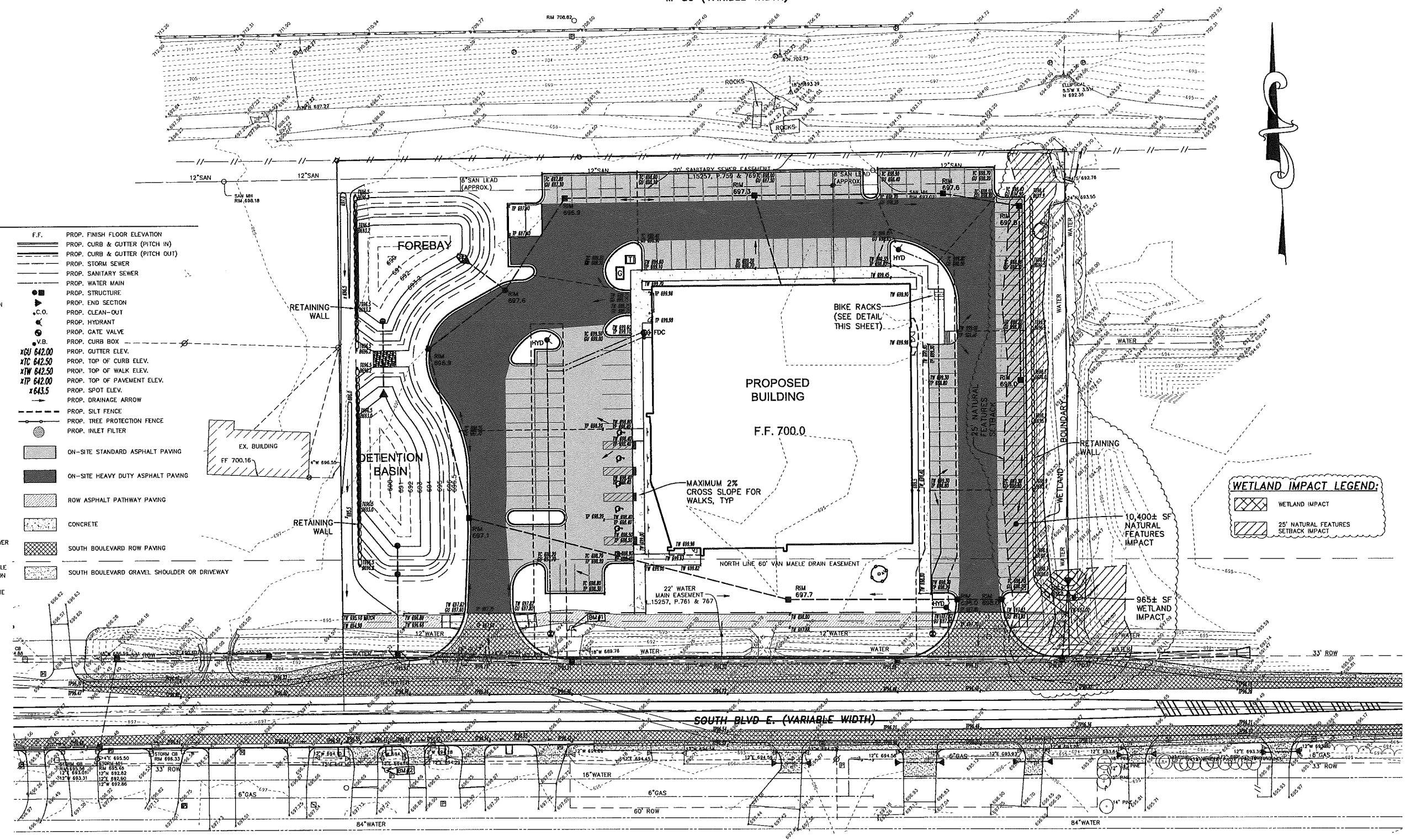
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16-127

M-59 (VARIABLE WIDTH)

**LEGEND:**

□ EX. CATCH BASIN	F.F.	PROP. FINISH FLOOR ELEVATION
○ EX. MANHOLE	—	PROP. CURB & GUTTER (PITCH IN)
▷ EX. END SECTION	—	PROP. CURB & GUTTER (PITCH OUT)
⊕ EX. OVERFLOW STRUCTURE	—	PROP. STORM SEWER
⊙ EX. CLEANOUT	—	PROP. SANITARY SEWER
⊕ EX. HYDRANT	—	PROP. WATER MAIN
⊙ EX. GATE VALVE	—	PROP. STRUCTURE
⊕ EX. WATER SHUTOFF	—	PROP. END SECTION
⊕ EX. FIRE DEPT. CONNECTION	—	PROP. CLEAN-OUT
⊕ EX. WATER WELL	—	PROP. HYDRANT
⊕ EX. LIGHTPOLE	—	PROP. GATE VALVE
⊕ EX. UTILITY POLE	—	PROP. CURB BOX
⊕ EX. GUY ANCHOR	—	PROP. GUTTER ELEV.
⊕ EX. TRAFFIC SIGNAL	—	PROP. TOP OF CURB ELEV.
⊕ EX. GAS SHUTOFF	—	PROP. TOP OF WALK ELEV.
⊕ EX. GAS VENT	—	PROP. TOP OF PAYMENT ELEV.
⊕ EX. HANDHOLE	—	PROP. SPOT ELEV.
⊕ EX. PEDESTAL	—	PROP. DRAINAGE ARROW
⊕ EX. TRANSFORMER	—	PROP. SILT FENCE
⊕ EX. GENERATOR	—	PROP. TREE PROTECTION FENCE
⊕ EX. GAS METER	—	PROP. INLET FILTER
⊕ EX. ELECTRIC METER	—	ON-SITE STANDARD ASPHALT PAVING
⊕ EX. AIR CONDITIONER	—	ON-SITE HEAVY DUTY ASPHALT PAVING
⊕ EX. SIGN	—	ROW ASPHALT PATHWAY PAVING
⊕ EX. POST/BOLLARD	—	CONCRETE
⊕ EX. FLAGPOLE	—	SOUTH BOULEVARD ROW PAVING
⊕ EX. MAILBOX	—	SOUTH BOULEVARD GRAVEL SHOULDER OR DRIVEWAY
⊕ EX. SOIL BORING	—	
⊕ EX. MONITOR WELL	—	
⊕ FOUND IRON	—	
⊕ SET IRON	—	
⊕ EX. TREE	—	
⊕ EX. TREE TAG & NUMBER	—	
—	—	EX. FENCE
—	—	EX. SANITARY SEWER
—	—	EX. STORM SEWER
—	—	EX. WATER MAIN
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—	—	EX. COMMUNICATION
—	—	EX. GAS LINE
—	—	EX. OVERHEAD LINE



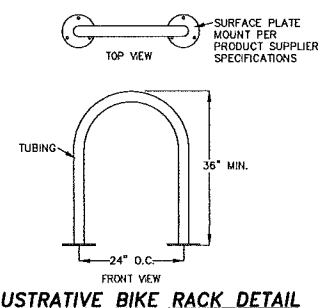
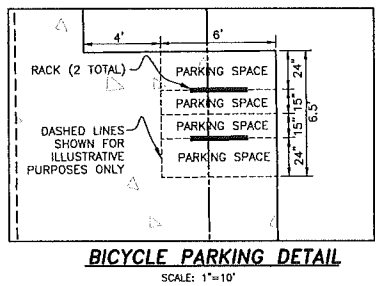
**WETLAND IMPACT LEGEND:**

⊘	WETLAND IMPACT
⊘	25' NATURAL FEATURES SETBACK IMPACT

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BM#2 - ARROW ON HYDRANT, SOUTH SIDE OF SOUTH BLVD, SOUTH OF SOUTHWEST CORNER OF SUBJECT PROPERTY. ELEVATION 698.05 NAVD88  
\*ADD 0.40 TO ALL ELEVATIONS TO CONVERT THEM TO THE NGVD29 DATUM  
\*BENCHMARK ELEVATIONS WERE ESTABLISHED BY DIFFERENTIAL GPS METHODS, BASED ON NGS POINT 016127



**NOTES:**  
1. OWNER TO OBTAIN PERMISSION AND/OR EASEMENTS FROM ADJACENT PROPERTY FOR OFF-SITE WORK PRIOR TO CONSTRUCTION.

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INDUSTRIAL & MULTI-UNIT  
CONSTRUCTION LAYOUT

**RESIDENTIAL**  
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CONSTRUCTION LAYOUT

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CLIENT: DEMBS DEVELOPMENT, INC.

**PRELIMINARY GRADING PLAN**

HENRY FORD PHARMACY ADVANTAGE - 1191 SOUTH BLVD. E.  
TOWNSHIP: 3N  
ROCHESTER HILLS  
OKLAHOMA COUNTY  
SECTION: 36  
RANGE: 11E

REVISED	2016-04-25 PSP SUBMITTAL
	2016-06-30 PSP SUBMITTAL
	2016-07-21 PSP SUBMITTAL
DATE:	2016-04-25
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CHECKED BY:	SD/TG
FBK:	
CHF:	
SCALE	HOR 1"=30 FT. VER 1"=10 FT.
	3
	16-127

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M-59 (VARIABLE WIDTH)

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  - EX. AIR CONDITIONER
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  - EX. FLAGPOLE
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  - PROP. DRAINAGE ARROW
  - PROP. SILT FENCE
  - PROP. TREE PROTECTION FENCE
  - PROP. INLET FILTER
- ON-SITE STANDARD ASPHALT PAVING**
- ON-SITE HEAVY DUTY ASPHALT PAVING**
- ROW ASPHALT PATHWAY PAVING**
- CONCRETE**
- SOUTH BOULEVARD ROW PAVING**
- SOUTH BOULEVARD GRAVEL SHOULDER OR DRIVEWAY**

**BENCHMARKS:**

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**Sanitary Sewer Basis of Design**

Usage	Unit	Factor	Units (sf)	Residential Equivalent Unit (REU)	Population (3.5 People Per Unit)
Office	0.40	per 1000 sf	25,667	10.3	36
				<b>TOTAL POPULATION:</b>	<b>36</b>
<b>AVERAGE FLOW:</b>					
Total Population:	36	people			
Average Daily Flow:	100	gallons/person/day			
Average Flow:	3,593	gallons/day		0.006	cfs
<b>PEAK FLOW:</b>					
Peaking Factor:	4.00				
Peak Flow:	14,374	gallons/day		0.022	cfs
<b>ESTIMATED CAPACITY OF THE EXISTING 6" SANITARY SEWER</b>					
Pipe Size:	6	inch			
Minimum Slope:	1.00	%			
Area:	0.20	s.f.			
Capacity:	0.013	cfs			
	0.563	cfs			

**FIRE FLOW NOTES:**

BUILDING S.F. = 25,667

CONSTRUCTION CLASSIFICATION = TYPE IIB

PER FIRE DEPARTMENT REQUIRED FIRE FLOW= 3250 GPM

BUILDING IS FULLY SPRINKLED

**FIRE DEPARTMENT NOTES:**

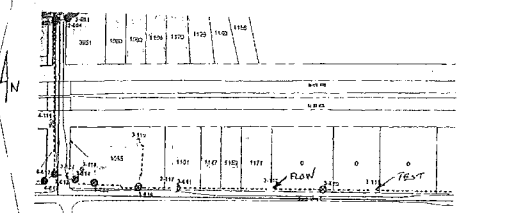
- A KNOX KEY SYSTEM SHALL BE INSTALLED, IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE FROM THE KNOX COMPANY AT KNOXBOX.COM.
- FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDE OF THE FIRE LANE, WITH FIRE LANE SIGNS, SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE", AND SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2006 CHAPTER 14.
- OPEN BURNING IS NOT PERMITTED INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES.
- "NO STOPPING STANDING PARKING FIRE LANE" SIGNAGE SHALL BE PROVIDED AT THE DISCRETION OF THE FIRE MARSHALL.
- EXIT DOORS SHALL REMAIN FREE OF OBSTRUCTION AT ALL TIMES. PROVIDE GUARD POSTS OR OTHER ACCEPTABLE MEANS OF PROTECTING EXIT DOORS OPENING ONTO DRIVES AND PARKING AREAS.
- WHERE FIRE HYDRANTS ARE SUBJECT TO IMPACT BY A MOTOR VEHICLE, GUARD POST SHALL BE PROVIDED.

**CITY OF ROCHESTER HILLS  
HYDRANT FLOW TEST**

Date: June 6, 2016 Time: 10:15 AM  
Location: 1171 S BLVD EAST  
Test Performed By: W. P. K. For  
Calculations Performed By: Wayne R. J. K.

Number of Hydrants Flowing:	1	
Number of Outlets Open:	2	
Size of Outlet, D (inches):	2 1/2	
Friction Loss Coefficient, K:	9	
Static Pressure, P <sub>s</sub> (psf):	92	
Residual Pressure, P <sub>r</sub> (psf):	86	
Pipe Pressure, P <sub>p</sub> (psf):	60	
Residual Flow, Q <sub>r</sub> (GPM):	2600	Q <sub>r</sub> = 29.83 * D <sup>2.63</sup> * P <sub>r</sub> <sup>0.848</sup>
Fire Flow at 20 psi, Q <sub>f</sub> (GPM):	1940	Q <sub>f</sub> = Q <sub>r</sub> * (P <sub>r</sub> + 20) / (P <sub>r</sub> - P <sub>r</sub> ) <sup>0.848</sup>
Supply Main Size (to hydrant):	12"	
Supply Main Size (to test hydrant):	12"	

Drawing of Flow Test Site (include location of flow & test hydrant):



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TOPOGRAPHIC SURVEYS  
PARCEL SPLITS  
CONSTRUCTION LAYOUT

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SUBDIVISIONS  
MULTI-FAMILY  
PLOT PLANS  
CONSTRUCTION LAYOUT

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CIVIL ENGINEERS & LAND SURVEYORS

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CLIENT: DEMBS DEVELOPMENT, INC.

**PRELIMINARY UTILITY PLAN**

HENRY FORD PHARMACY ADVANTAGE - 1191 SOUTH BLVD. E.  
TOWNSHIP: 3N  
ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN  
SECTION: 36  
RANGE: 11E

REVISED

2016-04-25 PSP SUBMITTAL  
2016-06-30 PSP SUBMITTAL  
2016-07-21 PSP SUBMITTAL

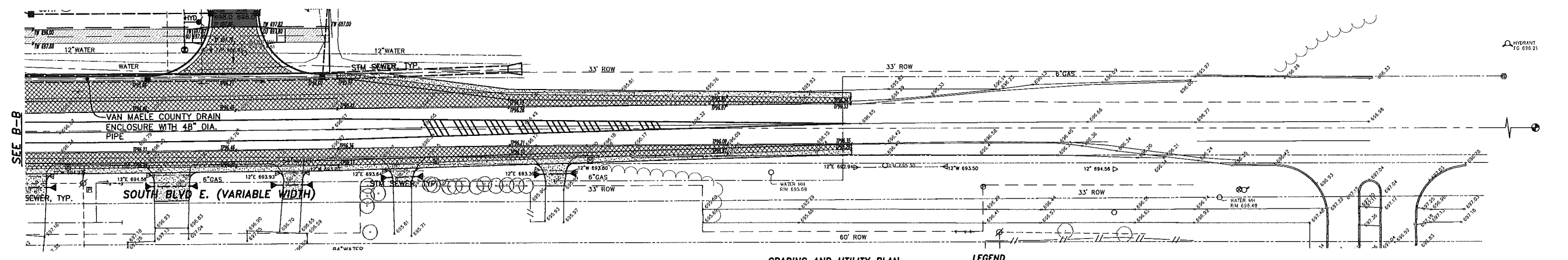
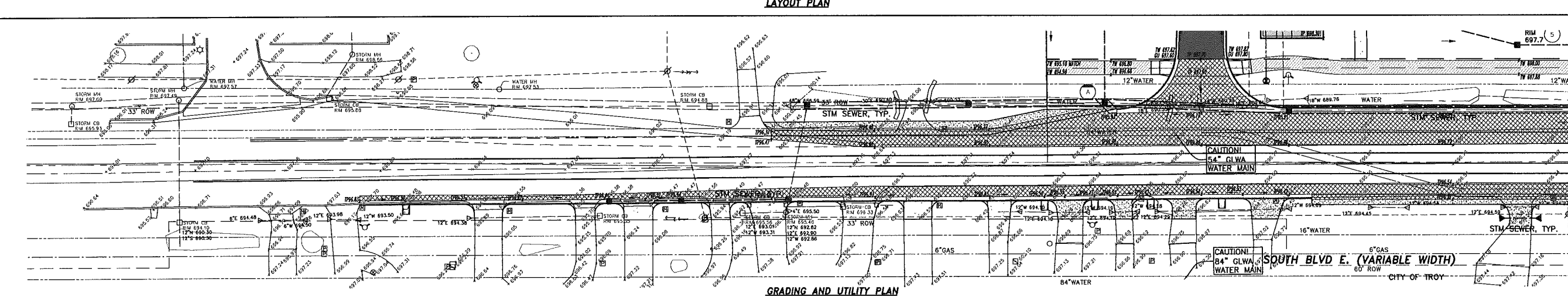
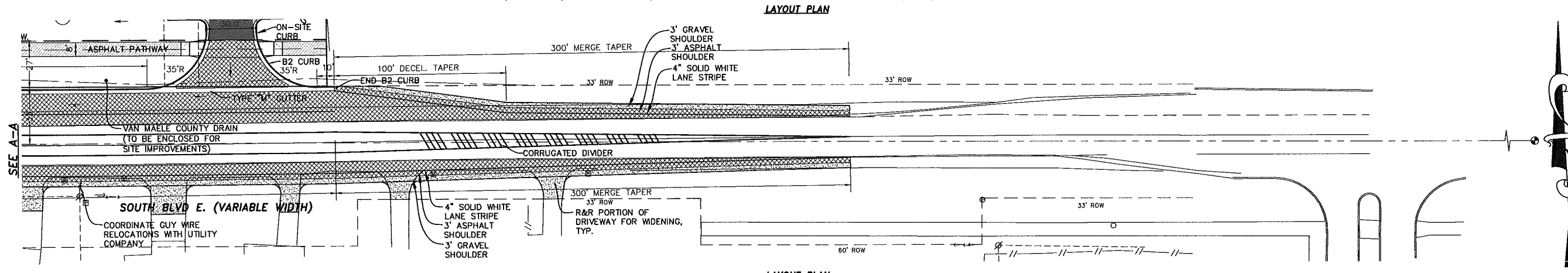
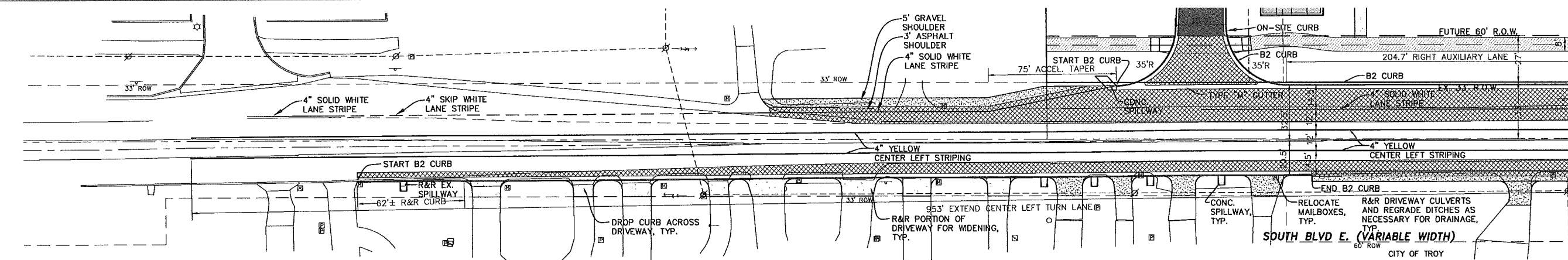
DATE: 2016-04-25  
DRAWN BY: TG  
CHECKED BY: SD/TG

SCALE: HOR 1"=30 FT.  
VER 1"=3 FT.

CITY FILE NO. 16-010  
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**NOTE:**  
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**NOTICE:**  
 CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

**LEGEND**

	ON-SITE STANDARD ASPHALT PAVING		CONCRETE
	ON-SITE HEAVY DUTY ASPHALT PAVING		SOUTH BOULEVARD ROW PAVING
	ROW ASPHALT PATHWAY PAVING		SOUTH BOULEVARD GRAVEL SHOULDER OR DRIVEWAY

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 SUITE 109  
 NOV. MICHIGAN 48377

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**DEMB'S DEVELOPMENT, INC.**

**PRELIMINARY ENTRANCE PLAN**

HENRY FORD PHARMACY ADVANTAGE - 1191 SOUTH BLVD. E.  
 TOWNSHIP: 3N  
 SECTION: 36  
 RANGE: 11E  
 ROCKLAND HILLS  
 OAKLAND COUNTY  
 MICHIGAN

CLIENT: DEMB'S DEVELOPMENT, INC.

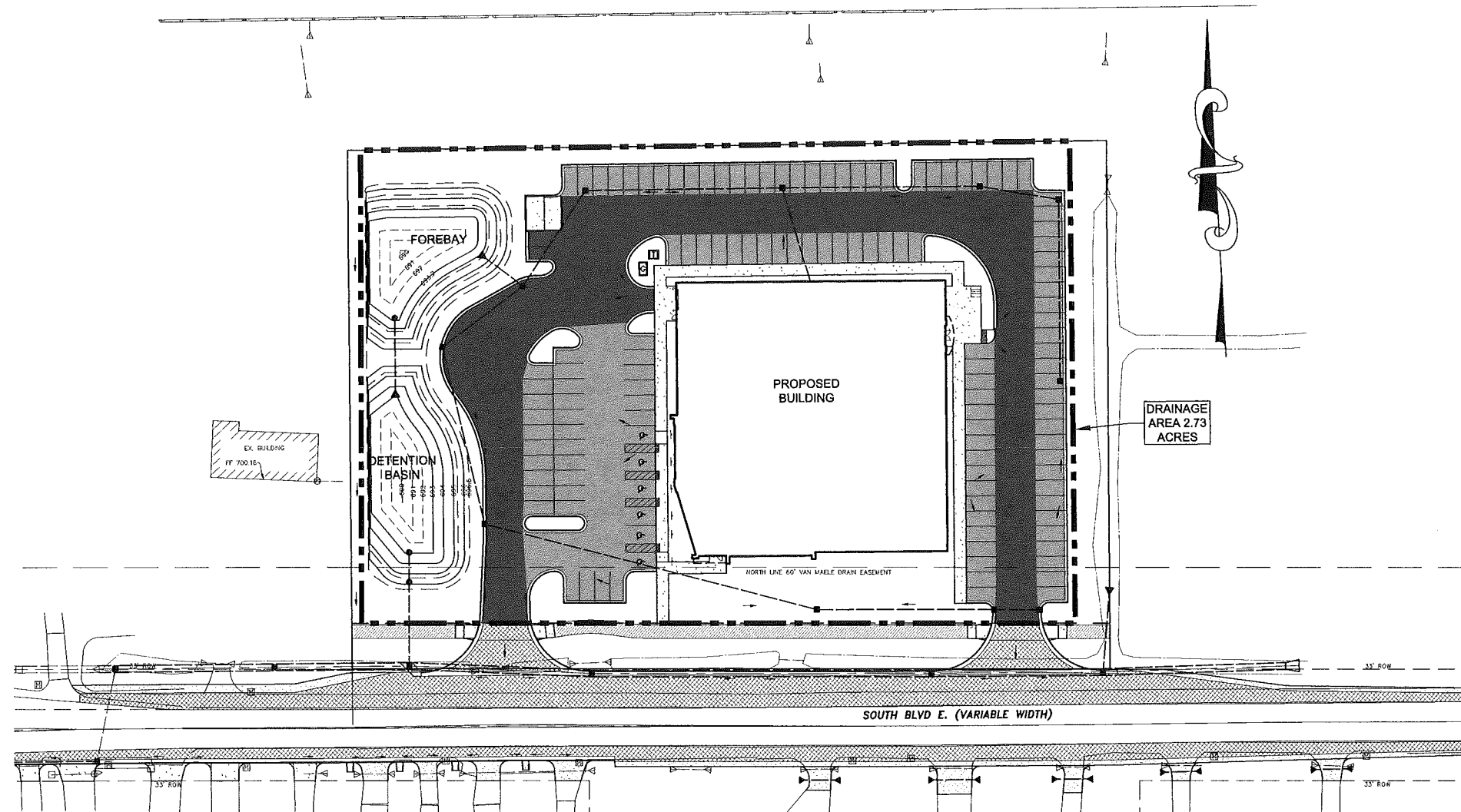
REVISED  
 2016-06-30 PSP SUBMITTAL  
 2016-07-21 PSP SUBMITTAL

DATE: 2016-04-25  
 DRAWN BY: TG  
 CHECKED BY: SD/TD

SCALE: HOR 1"=30 FT.  
 VER 1"=5 FT.

CITY FILE NO. 16-010  
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**BASIN ESTIMATED RUNOFF COEFFICIENT CALCULATION**

LAND USE	AREA (A) (acres)	RUNOFF COEFFICIENT (C)
Building / Pavement	1.80	0.95
Grass	0.88	0.25
Basin Permanent Water	0.05	1.00
<b>TOTAL AREA</b>	<b>2.73</b>	

**CALCULATE THE WEIGHTED RUNOFF COEFFICIENT:**

$$C = \frac{\sum(A_i \times C_i)}{A} = \frac{(1.80 \times 0.95) + (0.88 \times 0.25) + (0.05 \times 1.00)}{2.73} = 0.73$$

**OAKLAND COUNTY STORM WATER DETENTION BASIN DESIGN**

DESIGN VARIABLES: Tributary Area (A) = 2.73 acres  
Run-Off Coefficient (C) = 0.73

**100-YEAR STORAGE VOLUME REQUIRED**

- ALLOWABLE DISCHARGE ( $Q_d$ ):  
 $Q_d = 0.20 \text{ cfs/acre} \cdot A = 0.55 \text{ cfs}$
- ALLOWABLE DISCHARGE PER ACRE IMPERVIOUS ( $Q_{d,i}$ ):  
 $Q_{d,i} = Q_d / (A \cdot C) = 0.27 \text{ cfs/acre impervious}$
- MAXIMUM STORAGE TIME (T):  
 $T_{100} = 25 + \text{SQRT}(10,312.5 / Q_d) = 169.01 \text{ minutes}$
- MAXIMUM STORAGE VOLUME PER ACRE IMPERVIOUS ( $V_{s,100}$ ):  
 $V_{s,100} = (16,500 \cdot T / (T + 25)) \cdot (40 \cdot Q_{d,i} \cdot T) = 12,922 \text{ cfs/acre impervious}$
- STORAGE VOLUME REQUIRED ( $V_s$ ):  
 $V_s = V_{s,100} \cdot A \cdot C = 24,954 \text{ cf}$

**Pre-Development 100 Year Runoff Calculations ( $V_{s,100,pre}$ ) (using Oakland County 100-year method)**  
DESIGN VARIABLES: Tributary Area (A) = 2.73 acres  
Run-Off Coefficient (C) = 0.25

**100-YEAR STORAGE VOLUME REQUIRED**

- ALLOWABLE DISCHARGE ( $Q_d$ ):  
 $Q_d = 0.20 \text{ cfs/acre} \cdot A = 0.55 \text{ cfs}$
- ALLOWABLE DISCHARGE PER ACRE IMPERVIOUS ( $Q_{d,i}$ ):  
 $Q_{d,i} = Q_d / (A \cdot C) = 0.80 \text{ cfs/acre impervious}$
- MAXIMUM STORAGE TIME (T):  
 $T_{100} = 25 + \text{SQRT}(10,312.5 / Q_d) = 88.54 \text{ minutes}$
- MAXIMUM STORAGE VOLUME PER ACRE IMPERVIOUS ( $V_{s,100}$ ):  
 $V_{s,100} = (16,500 \cdot T / (T + 25)) \cdot (40 \cdot Q_{d,i} \cdot T) = 10,034 \text{ cfs/acre impervious}$
- STORAGE VOLUME REQUIRED ( $V_s$ ):  
 $V_s = V_{s,100} \cdot A \cdot C = 6,848 \text{ cf}$

**TOTAL STORAGE VOLUME REQUIRED**

TOTAL =  $V_{s,100}(\text{PROPOSED}) + V_{s,100}(\text{EXISTING}) = 24,954 \text{ cf} + 6,848 \text{ cf} = 31,802 \text{ cf}$

PER WRC PRE-DEVELOPMENT RUNOFF VOLUME CAN BE DEDUCTED FROM REQUIRED 100-YEAR VOLUME

**FIRST FLUSH VOLUME ( $V_{ff}$ )**  
 $V_{ff} = 1.819 \cdot A \cdot C = 3,617 \text{ cf}$

**BANKFULL VOLUME ( $V_{bf}$ )**  
 $V_{bf} = 6,788 \cdot A \cdot C = 13,528 \text{ cf}$

**BASIN VOLUME PROVIDED**

**STORAGE PROVIDED IN FOREBAY**

ELEVATION (FT.)	AREA (S.F.)	AVG. AREA (S.F.)	HEIGHT (FT.)	CUMULATIVE VOLUME (C.F.)
696.0	5,995	5,320	1.0	11,743
695.0	4,645	4,035	1.0	6,423
694.0	3,425	2,985	0.8	2,388
693.2	2,545			

**STORAGE ELEVATIONS**

$V_{ff} = 3,617 \text{ cf provided at } Z_{ff} = 693.2$   
 $Z_{ff} = 694.3$

**STORAGE PROVIDED IN DETENTION BASIN AND FOREBAY IN ADDITION TO FIRST FLUSH STORAGE VOLUME**

ELEVATION (FT.)	AREA (S.F.)	INCREMENTAL VOLUME (C.F.)	CUMULATIVE VOLUME (C.F.)
696.0	6,370	5,998	5,320
695.0	5,025	4,645	3,215
694.3	4,160	3,775	1,195
694.0	3,805	0	3,243
693.0	2,680	0	0

**STORAGE ELEVATIONS**

BOTTOM ELEVATION ( $Z_b$ ) = 693.0

THE PORTION OF THE BANK FULL FLOOD TO BE CAPTURED IN THE DETENTION BASIN IS DETERMINED BY SUBTRACTING THE FIRST FLUSH STORAGE VOLUME PROVIDED IN THE FOREBAY:

$$V_{bf, \text{basin}} = 13,528 - 3,617 = 9,911$$

THE PORTION OF THE 100 YEAR FLOOD STORAGE VOLUME TO BE CAPTURED IN THE DETENTION BASIN IS ALSO DETERMINED BY SUBTRACTING THE FIRST FLUSH STORAGE VOLUME PROVIDED IN THE FOREBAY:

$$V_{s, \text{basin}} = 18,106 - 3,617 = 14,489$$

$$V_{s, \text{basin}} = 18,106 \text{ cf provided at } Z_{s, \text{basin}} = 695.4$$

**ORIFICE OUTLET SIZING**

**OUTLET SIZING FOR FIRST FLUSH**  
RELEASE FIRST FLUSH VOLUME FROM DETENTION BASIN OVER A PERIOD OF AT LEAST 24 HOURS

CALCULATE AVERAGE RELEASE RATE WHICH WILL SATISFY THIS REQUIREMENT:  
 $Q_{avg} = V_{ff} / 86,400 \text{ sec} = 0.04 \text{ cfs}$

CALCULATE AVERAGE HEAD:  
 $h_{avg} = 0.667 \cdot (Z_{ff} - Z_b) = 0.73 \text{ ft}$

DETERMINE ORIFICE AREA NEEDED BASED ON THE ORIFICE EQUATION:  
 $A = Q_{avg} / (0.62 \cdot \text{sqft} \cdot \text{sqrt}(2 \cdot g \cdot h_{avg})) = 0.010 \text{ ft}^2$   
Diameter = 1.34

DETERMINE # OF ORFI REQUIRED BASED ON AN ORIFICE DIAMETER OF:  
REQUIRED # OF ORFI = 2

REQUIRED # OF ORFI:  
CALCULATE ACTUAL AVERAGE RELEASE RATE:  
 $Q_{avg} = 0.62 \cdot (n \cdot \text{orfi} \cdot A) \cdot \text{sqrt}(2 \cdot g \cdot h_{avg}) = 0.04 \text{ cfs}$

CALCULATE ACTUAL HOLDING TIME:  
 $T = V_{ff} / (Q_{avg} \cdot 3,600) = 24 \text{ hours}$

**FOREBAY OVERLAND OVERFLOW SPILLWAY**

SIZE FOREBAY OVERLAND OVERFLOW TO ACCOMMODATE 10 YR STORM FLOW  
10 YEAR FLOW FROM STORM CALC.:  
Estimated = 8.0 cfs

CALCULATE FOREBAY OUTLET WEIR LENGTH TO ACCOMMODATE 10 YEAR FLOW USING THE FOLLOWING WEIR EQUATION:  
 $Q = C \cdot B \cdot h^3$

C (WEIR COEFFICIENT) = 3.4  
B (WEIR WIDTH) = 6.0 ft  
ASSUMED H (HEAD) = 0.5 ft  
Q = 9.6 cfs

**OUTLET SIZING FOR BANKFULL FLOOD**  
RELEASE BANKFULL FLOOD VOLUME OVER A PERIOD NO MORE THAN 48 HOURS.

CALCULATE AVERAGE HEAD:  
 $h_{avg} = 0.667 \cdot (Z_{ff} - Z_b) = 1.27 \text{ ft}$

DETERMINE THE ORIFICE AREA NEEDED BASED ON THE ORIFICE EQUATION:  
 $A = (Q_{avg} \cdot 3,600) / (0.62 \cdot \text{sqrt}(2 \cdot g \cdot h_{avg})) = 0.014 \text{ ft}^2$   
Diameter = 1.60 inch

DETERMINE # OF ORFI REQUIRED BASED ON AN ORIFICE DIAMETER OF:  
REQUIRED # OF ORFI = 3

REQUIRED # OF ORFI:  
CALCULATE ACTUAL AVERAGE RELEASE RATE THROUGH THE ORFI:  
 $Q_{avg} = 0.62 \cdot (n \cdot \text{orfi} \cdot A) \cdot \text{sqrt}(2 \cdot g \cdot h_{avg}) = 0.092 \text{ cfs}$

CALCULATE THE ACTUAL HOLDING TIME FOR THE BANKFULL VOLUME FOR THE ASSUMED CONDITION:  
 $T = V_{bf} / (Q_{avg} \cdot 3,600) = 41.0 \text{ hours}$

**OUTLET SIZING FOR 100 YEAR FLOOD**

PER THE DETENTION BASIN VOLUME CALCULATIONS, THE MAXIMUM ALLOWABLE RELEASE RATE AT THE DESIGN WATER LEVEL OF  $Z_{100}$  IS:  
Estimated = 0.55 cfs

CALCULATE THE MAXIMUM HEAD ON THE OUTLET FOR A 100 YR EVENT:  
 $Z_b = 693.00 \text{ ft}$   
 $Z_{100} = 695.40 \text{ ft}$   
 $h_{max} = (Z_{100} - Z_b) = 2.40 \text{ ft}$

DETERMINE OUTLET PIPE SIZE NEEDED BASED ON THE ORIFICE EQUATION:  
 $A = Q / (0.62 \cdot \text{sqrt}(2 \cdot g \cdot h)) = 0.071 \text{ ft}^2$   
Diameter = 3.60 inch  
USE 4" DIAMETER OUTLET RESTRICTOR FOR MAINTENANCE PURPOSES

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CLIENT: **DEMPS DEVELOPMENT, INC.**  
**PRELIMINARY STORM WATER MANAGEMENT PLAN**  
HENRY FORD PHARMACY ADVANTAGE - 1191 SOUTH BLVD. E.  
TOWNSHIP: 3N  
RANGE: 11E  
SECTION: 36  
ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN

REVISIONS

NO.	DATE	DESCRIPTION
2016-04-25	PSP SUBMITTAL	
2016-06-30	PSP SUBMITTAL	
2016-07-21	PSP SUBMITTAL	

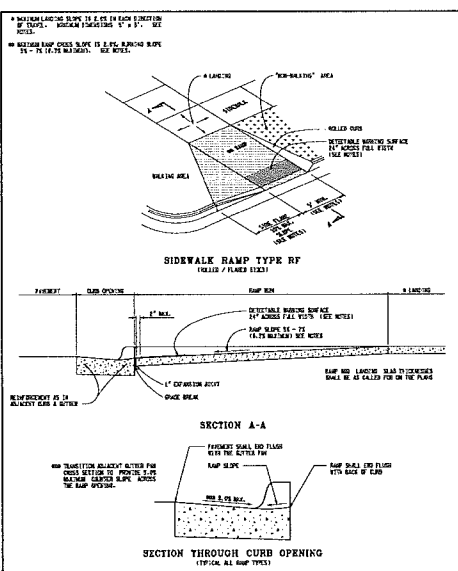
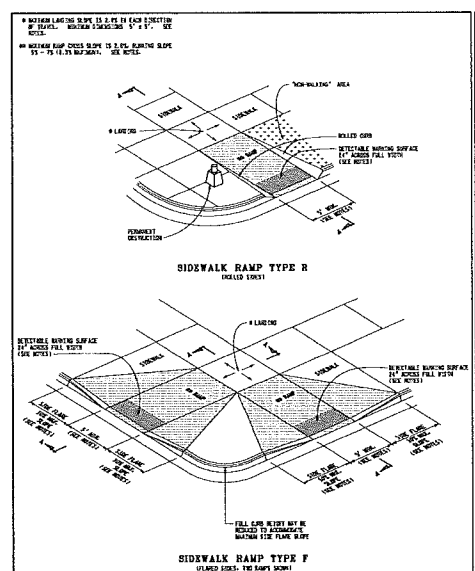
DATE: 2016-04-25  
DRAWN BY: TG  
CHECKED BY: SD/TG

SCALE: HORIZONTAL 1" = 40 FT. VERTICAL 1" = 4 FT.

FBK: \_\_\_\_\_  
CHF: \_\_\_\_\_

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MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT ENGINEER PLAN FOR

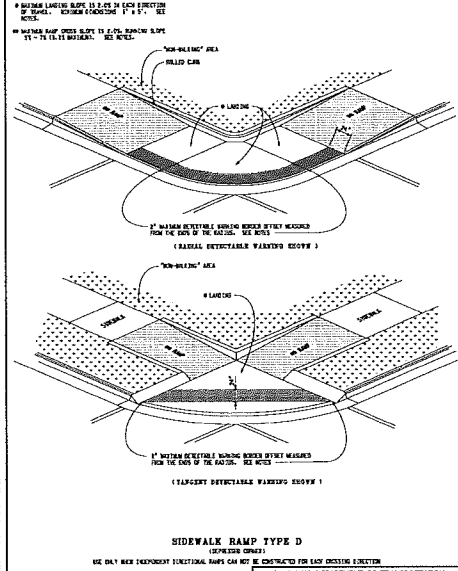
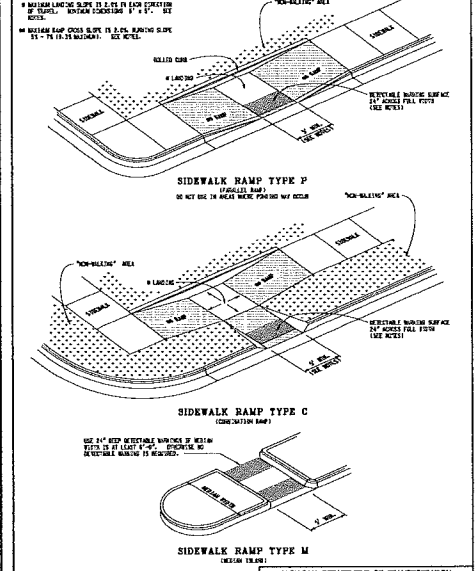
**SIDEWALK RAMP AND DETECTABLE WARNING DETAILS**

PROJECT: [ ] SHEET: R-20-J 1 OF 1

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT ENGINEER PLAN FOR

**SIDEWALK RAMP AND DETECTABLE WARNING DETAILS**

PROJECT: [ ] SHEET: R-20-J 1 OF 1



MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT ENGINEER PLAN FOR

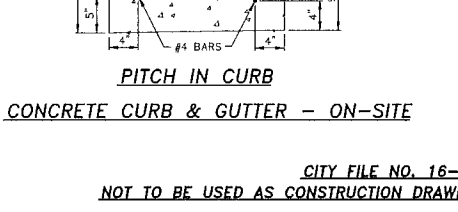
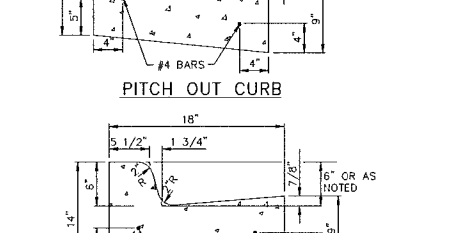
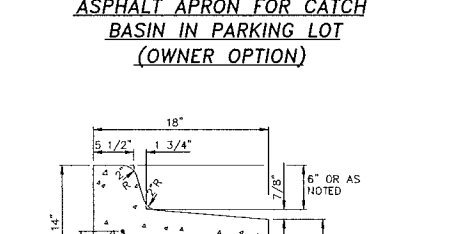
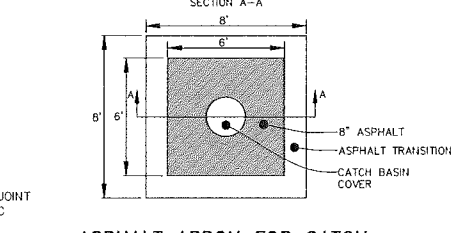
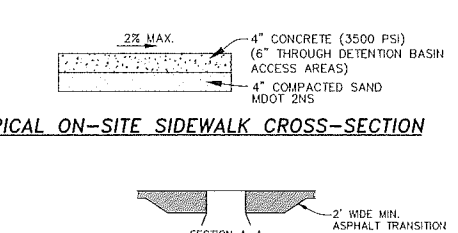
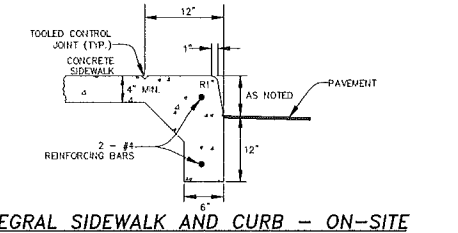
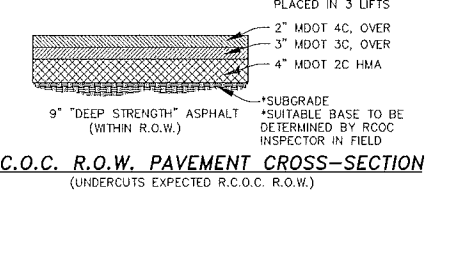
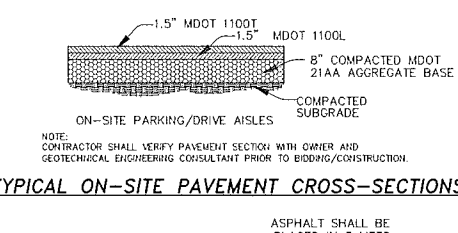
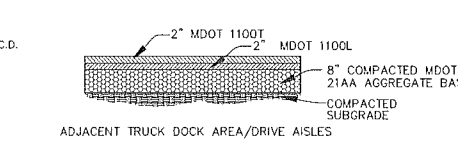
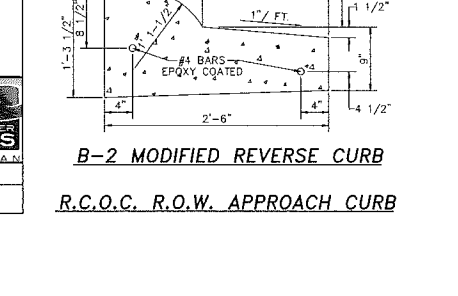
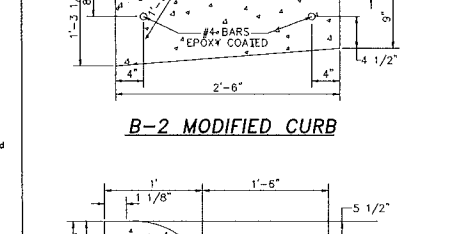
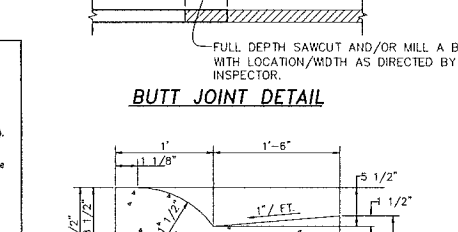
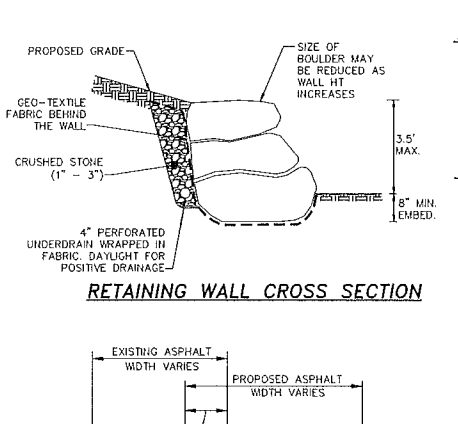
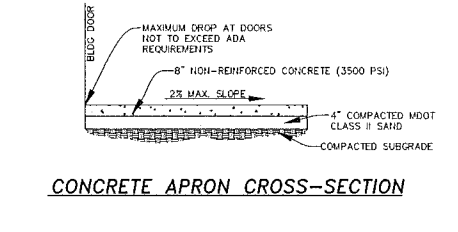
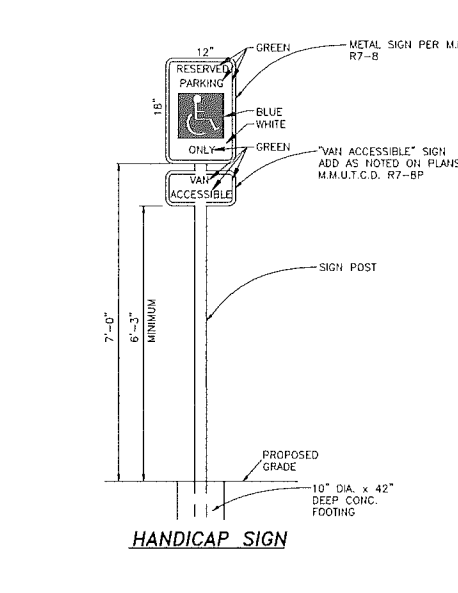
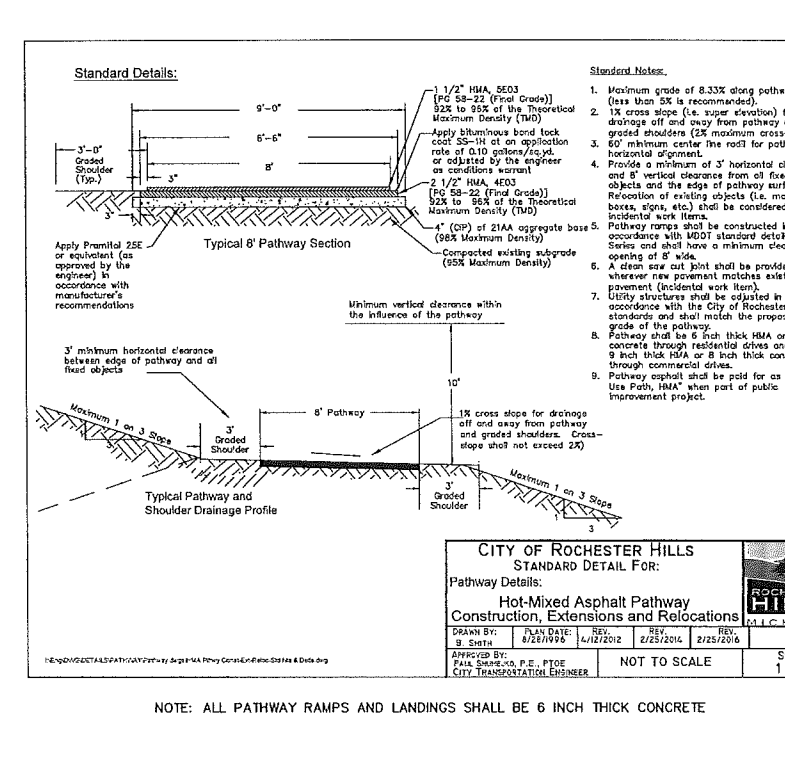
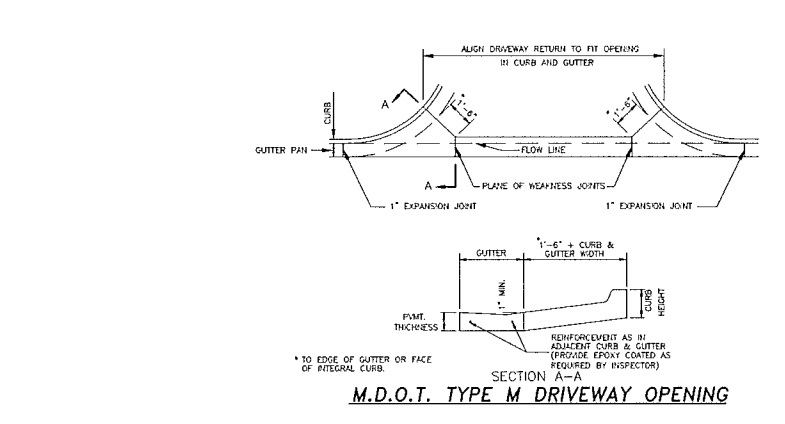
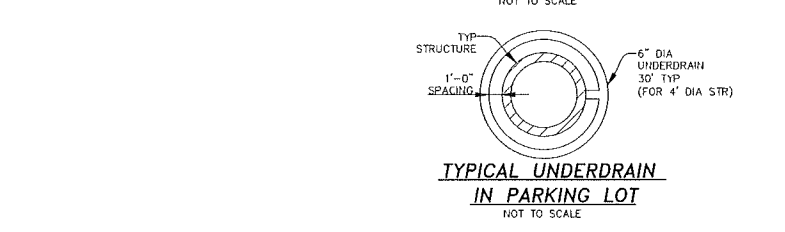
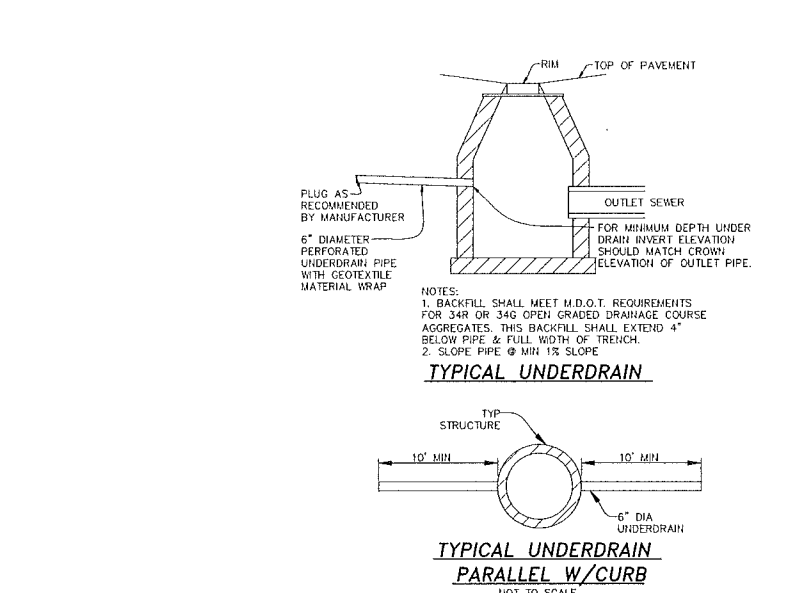
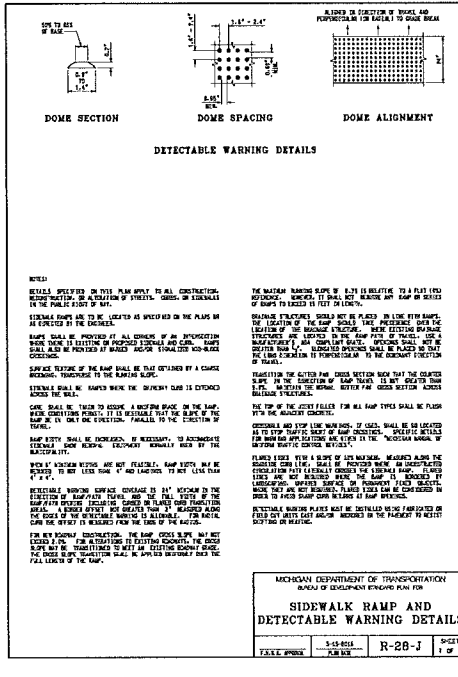
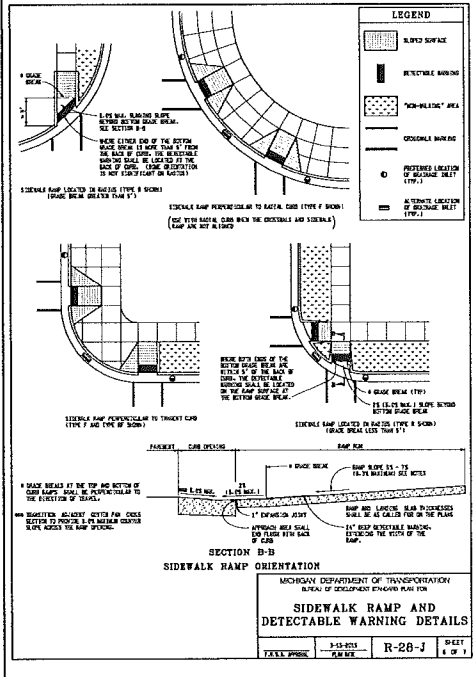
**SIDEWALK RAMP AND DETECTABLE WARNING DETAILS**

PROJECT: [ ] SHEET: R-20-J 1 OF 1

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT ENGINEER PLAN FOR

**SIDEWALK RAMP AND DETECTABLE WARNING DETAILS**

PROJECT: [ ] SHEET: R-20-J 1 OF 1



**ALPINE ENGINEERING, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS

46892 WEST ROAD  
SUITE 109  
NOVI, MICHIGAN 48377

(248) 926-3701 (BUS)  
(248) 926-3765 (FAX)  
WWW.ALPINE-INC.NET

**COMMERCIAL**  
SITE PLANNING  
SITE ENGINEERING  
INDUSTRIAL & MULTI-UNIT  
LAND SURVEYING  
CONSTRUCTION LAYOUT

**SURVEYING**  
ALTA SURVEYS  
BOUNDARY SURVEYS  
TOPOGRAPHIC SURVEYS  
PARCEL SPLITS  
CONSTRUCTION LAYOUT

**RESIDENTIAL**  
SUBDIVISIONS  
SITE ENGINEERING  
MULTI-FAMILY  
PLOT PLANS  
CONSTRUCTION LAYOUT

**811**  
Know what's below  
Call before you dig.

**DEMBS DEVELOPMENT, INC.**

**SITE DETAILS**

CLIENT: DEMBS DEVELOPMENT, INC.

PROJECT: HENRY FORD PHARMACY ADVANTAGE - 1191 SOUTH BLVD. E.  
TOWNSHIP: J.L.  
ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN

SECTION: 35  
RANGE: 11E

**REVISIONS**

2016-04-25 PSP SUBMITTAL

2016-06-30 PSP SUBMITTAL

2016-07-21 PSP SUBMITTAL

DATE: 2016-04-25

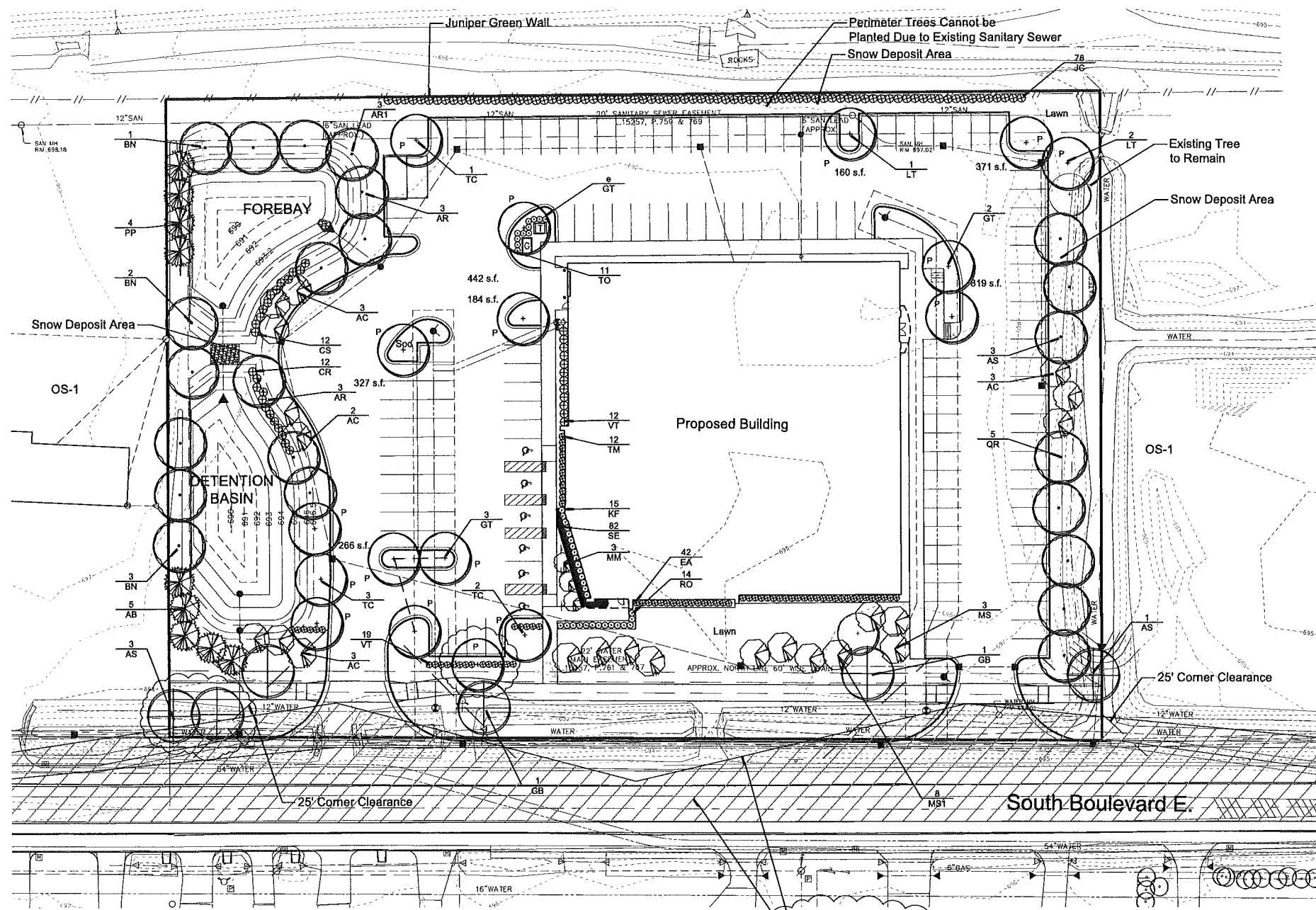
DRAWN BY: TG

CHECKED BY: SD/TG

SCALE: HORIZ 1" = 10'  
VERT 1" = 10'

SHEET: 1 OF 1

**7**



**Landscape Summary**

<b>Parking Lot Landscaping</b>	
Vehicular Use Area	50,082 s.f.
Landscape Area Required	2,504 s.f. (50,082 x 5%)
Landscape Area Provided	2,569 s.f.*
Trees Required	17 Trees (2,504 / 150)
Trees Provided	17 Trees
<b>Parking Lot Perimeter</b>	
Frontage	116 l.f.
Trees Required	4 Trees (1 per 25')
Trees Provided	4 Trees
Ornamental Trees Required	3 Trees (1 per 35')
Ornamental Trees Provided	3 Trees
<b>Right of Way Landscaping**</b>	
South Boulevard	
Frontage	450 l.f.
Trees Required	13 Trees (1 per 35')
Trees Provided	13 Trees
Ornamental Trees Required	8 Trees (1 per 60')
Ornamental Trees Provided	8 Trees
<b>M-59</b>	
Frontage	450 l.f.
Trees Required	11 Trees (2.5 per 100')
Trees Provided	11 Trees
Ornamental Trees Required	7 Trees (1.5 per 100')
Ornamental Trees Provided	8 Trees
<b>Detention Pond</b>	
Freeboard Length	593 l.f.
Trees Required	9 Trees (1.5 per 100')
Trees Provided	9 Trees
Evergreens Required	6 Trees (1.0 per 100')
Evergreens Provided	9 Trees
Shrubs Required	24 Shrubs (4 per 100')
Shrubs Provided	24 Shrubs

\* As measured from the back of curb and Excluding Sidewalks.  
\*\* ROW Plantings will Require a RCOC Permit. If the Permit is Not Granted, the Value of Required Trees Shall be Placed in the City Tree Fund.

**Utility Maintenance Statement:**  
If, in the event, Utility Maintenance Results in the Removal of Landscaping, as Shown on this Plan, It Will be the Owner's Responsibility to Repair and Replace Shrubs and Trees that are Located within the Utility Easements.

**Overhead Line Statement:**  
No Overhead Lines Exist

**Loading Area Statement:**  
Proposed Landscaping and/or Walk Shall Adequately Screen Loading Areas from Public R.O.W.

**Plant List**

sym.	qty.	botanical name	common name	caliper	spacing	root	height	price	total	sym.	qty.	botanical name	common name	caliper	spacing	root	height	price	total
<b>Parking Lot Island Trees</b>																			
GT	8	Gleditsia triacanthos var. inermis	Honey Locust	3.0"	as shown	B&B		\$ 425.00	\$ 3,400.00	AB	5	Abies concolor	Concolor Fir		as shown	B&B	10'	\$ 300.00	\$ 1,500.00
LT	3	Liriodendron tulipifera	Tulip Tree	3.0"	as shown	B&B		\$ 425.00	\$ 1,275.00	AR1	3	Acer rubrum	Red Maple	3.0"	as shown	B&B		\$ 425.00	\$ 1,275.00
TC	6	Tilia tomentosa	Silver Linden	3.0"	as shown	B&B		\$ 425.00	\$ 2,550.00	BN	6	Betula nigra	River Birch, Multi-Stem		as shown	B&B	15'	\$ 425.00	\$ 2,550.00
<b>Parking Lot Perimeter</b>																			
AC	11	Ameiurachier canadensis	Santiberry	2.0"	as shown	B&B		\$ 200.00	\$ 2,200.00	CR	12	Cornus racemosa	Gray Dogwood		as shown		30"	\$ 50.00	\$ 600.00
AR	6	Acer rubrum 'October Glory'	Red Maple	3.0"	as shown	B&B		\$ 425.00	\$ 2,550.00	CS	12	Cornus sericea	Red Osier Dogwood		as shown		30"	\$ 50.00	\$ 600.00
AS	3	Acer saccharum	Sugar Maple	3.0"	as shown	B&B		\$ 425.00	\$ 1,275.00	EA	42	Euroymnus alata 'Compacta'	Burning Bush		as shown		30"	\$ 50.00	\$ 2,100.00
MS	3	Malus 'Spring Snow'	Spring Snow Crab	2.0"	as shown	B&B		\$ 200.00	\$ 600.00	JC	78	Juniperus ch. 'Keteleeri'	Keteleer Juniper		as shown	B&B	5'	\$ 50.00	\$ 3,900.00
QR	5	Quercus rubra	Red Oak	3.0"	as shown	B&B		\$ 425.00	\$ 2,125.00	KF	15	Calamagrostis x acutiflora 'Karl Forester'	Karl Forester's Feather Reed Grass		Full, well rooted	1 gal.	\$ 15.00	\$ 225.00	
<b>Right of Way Trees</b>																			
AS	4	Acer saccharum	Sugar Maple	3.0"	as shown	B&B		\$ 425.00	\$ 1,700.00	MM	3	Malus sargentii	Sargent Crab	2.0"	as shown	B&B		\$ 200.00	\$ 600.00
GB	2	Ginkgo biloba	Ginkgo	3.0"	as shown	B&B		\$ 425.00	\$ 850.00	RO	14	Rosa 'Coral Drift'	Coral Drift Rose		as shown	No. 2 Cor	\$ 15.00	\$ 210.00	
MS1	6	Malus sargentii	Sargent Crab	2.0"	as shown	B&B		\$ 200.00	\$ 1,600.00	SE	82	Sedum 'Autumn Joy'	Autumn Joy Sedum		as shown	No. 2 Cor	\$ 15.00	\$ 1,230.00	
	7	Right of Way Trees to be Paid into the Tree Fund						\$ 425.00	\$ 2,975.00	TM	12	Taxus x. media 'Densaformis'	Dense Yew		as shown	30"-36"	\$ 50.00	\$ 600.00	
										TO	11	Thuja occidentalis 'Techny'	Techny Arborvitae		as shown	B&B	6'	\$ 50.00	\$ 550.00
										PP	4	Picea pungens	Colorado Spruce		as shown	B&B	10'	\$ 300.00	\$ 1,200.00
										VT	31	Viburnum trilobum	American Cranberry Bush		as shown	30"-36"	\$ 50.00	\$ 1,550.00	
												3,545 Kentucky Blue Grass, (S.Y.)						\$ 4.00	\$ 14,180.00
												Irrigation System							\$ 15,000.00
																			\$ 70,970.00

Seal: \_\_\_\_\_



Title: \_\_\_\_\_  
**Landscape Plan**

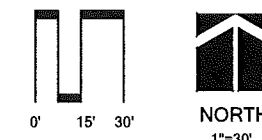
Project: \_\_\_\_\_  
**Henry Ford - Pharmacy Advantage**  
Rochester Hills, Michigan

Prepared for: \_\_\_\_\_  
Alpine Engineering  
46893 West Road, Suite 109  
Novi, Michigan 48377  
248.926.3701

<b>Revision:</b>	<b>Issued:</b>
Submission	April 25, 2016
Revised	June 15, 2016
Revised	June 30, 2016
Revised	July 21, 2016

Job Number: \_\_\_\_\_  
16-025

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_  
jca jca



Sheet No. \_\_\_\_\_

Not to be Used as Construction Drawings

L-1  
City File #16-010



NOTE:  
GUY DECIDUOUS TREES ABOVE 3" CAL. STAKE DECIDUOUS TREES BELOW 3" CAL.

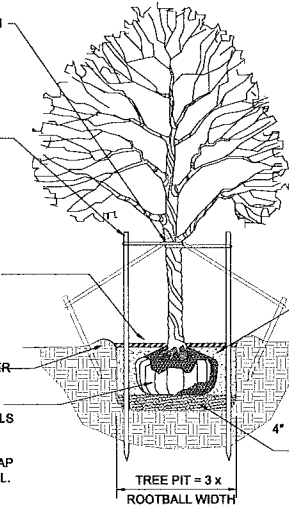
STAKE TREES AT FIRST BRANCH USING 2"-3" WIDE BELT-LIKE NYLON OR PLASTIC STRAPS. ALLOW FOR SOME MINIMAL FLEXING OF THE TREE. REMOVE AFTER ONE YEAR.

2" X 2" HARDWOOD STAKES, MIN. 36" ABOVE GROUND FOR UPRIGHT, 18" IF ANGLED. DRIVE STAKES A MIN. 18" INTO UNDISTURBED GROUND OUTSIDE ROOTBALL. REMOVE AFTER ONE YEAR.

MULCH 4" DEPTH WITH SHREDDED HARDWOOD BARK, NATURAL IN COLOR. LEAVE 3" CIRCLE OF BARE SOIL AT BASE OF TREE TRUNK.

MOUND EARTH TO FORM SAUCER

REMOVE ALL NON-BIODEGRADABLE MATERIALS COMPLETELY FROM THE ROOTBALL. CUT DOWN WIRE BASKET AND FOLD DOWN BURLAP FROM TOP 1/2 OF THE ROOTBALL.



NOTE:  
TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.

DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY OR COULD CAUSE GIRDLING.

PLANTING MIXTURE: AMEND SOILS PER SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL.

SCARIFY SUBGRADE AND PLANTING PIT SIDES. RECOMPACT BASE OF TO 4" DEPTH.

### DECIDUOUS TREE PLANTING DETAIL

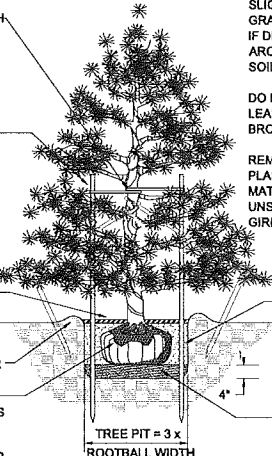
NOTE:  
GUY EVERGREEN TREES ABOVE 12' HEIGHT. STAKE EVERGREEN TREE BELOW 12' HEIGHT.

STAKE TREES AT FIRST BRANCH USING 2"-3" WIDE BELT-LIKE NYLON OR PLASTIC STRAPS. ALLOW FOR SOME MINIMAL FLEXING OF THE TREE. REMOVE AFTER ONE YEAR.

2" X 2" HARDWOOD STAKES, MIN. 36" ABOVE GROUND FOR UPRIGHT, 18" IF ANGLED. DRIVE STAKES A MIN. 18" INTO UNDISTURBED GROUND OUTSIDE ROOTBALL. REMOVE AFTER ONE YEAR.

MULCH 4" DEPTH WITH SHREDDED HARDWOOD BARK, NATURAL IN COLOR. LEAVE 3" CIRCLE OF BARE SOIL AT BASE OF TREE TRUNK.

REMOVE ALL NON-BIODEGRADABLE MATERIALS COMPLETELY FROM THE ROOTBALL. CUT DOWN WIRE BASKET AND FOLD DOWN BURLAP FROM TOP 1/2 OF THE ROOTBALL.



NOTE:  
TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.

DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY OR COULD CAUSE GIRDLING.

PLANTING MIXTURE: AMEND SOILS PER SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL.

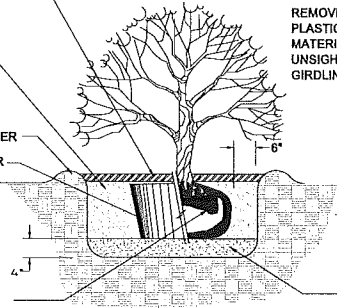
SCARIFY SUBGRADE AND PLANTING PIT SIDES. RECOMPACT BASE OF TO 4" DEPTH.

### EVERGREEN TREE PLANTING DETAIL

MULCH 3" DEPTH WITH SHREDDED HARDWOOD BARK, NATURAL IN COLOR.

PLANTING MIXTURE: AMEND SOILS PER SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL. MOUND EARTH TO FORM SAUCER

REMOVE ALL NON-BIODEGRADABLE MATERIALS COMPLETELY FROM THE ROOTBALL. FOLD DOWN BURLAP FROM TOP 1/2 OF THE ROOTBALL.



NOTE:  
TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 4" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.

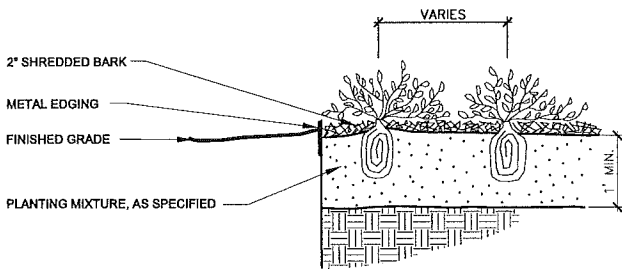
PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY OR COULD CAUSE GIRDLING.

SCARIFY SUBGRADE AND PLANTING PIT SIDES. RECOMPACT BASE OF TO 4" DEPTH.

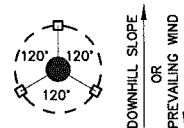
### SHRUB PLANTING DETAIL

NOT TO SCALE



### PERENNIAL PLANTING DETAIL

Not to scale



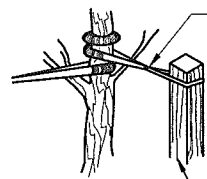
STAKING/GUYING LOCATION

NOTE:  
ORIENT STAKING/GUYING TO PREVAILING WINDS, EXCEPT ON SLOPES GREATER THAN 3:1 ORIENT TO SLOPE.  
USE SAME STAKING/GUYING ORIENTATION FOR ALL PLANTS WITHIN EACH GROUPING OR AREA

2"-3" WIDE BELT-LIKE NYLON OR PLASTIC STRAPS.



GUYING DETAIL



STAKING DETAIL

### TREE STAKING DETAIL

Not to scale

STAKES AS SPECIFIED 3 PER TREE

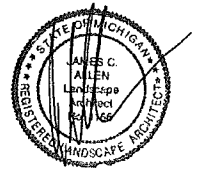
### LANDSCAPE NOTES

- All plants shall be north Midwest American region grown, No. 1 grade plant materials, and shall be true to name, free from physical damage and wind burn.
- Plants shall be full, well-branched, and in healthy vigorous growing condition.
- Plants shall be watered before and after planting is complete.
- All trees must be staked, fertilized and mulched and shall be guaranteed to exhibit a normal growth cycle for at least two (2) full years following City approval.
- All material shall conform to the guidelines established in the most recent edition of the American Standard for Nursery Stock.
- Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, and stone.
- "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
- Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand and 1/3 peat, mixed well and spread to the depth as indicated in planting details.
- All plantings shall be mulched per planting details located on this sheet.
- The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
- No substitutions or changes of location, or plant types shall be made without the approval of the Landscape Architect.
- The City of Novi's Landscape Architect shall be notified of any discrepancies between the plans and field conditions prior to installation.
- The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
- The Landscape Architect shall have the right, at any stage of the installation, to reject any work or material that does not meet the requirements of the plans and specifications, if requested by owner.
- Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a discrepancy, the quantities on the plans shall prevail.
- The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
- A pre-emergent weed control agent, "Preen" or equal, shall be applied uniformly on top of all mulching in all planting beds.
- All landscape areas shall be provided with an underground automatic sprinkler system.
- Sod shall be two year old "Baron/Cheridephi" Kentucky Blue Grass grown in a sod nursery on loam soil.

### ADDITIONAL NOTES

- All Landscaped Areas Shall be Irrigated with an Automatic, Underground System.
- Islands Shall be Sod.
- Owner Shall be Responsible for Replacing Damaged Plant Material Due to Utility Maintenance.
- Prior to the release of the Performance Bond, the City of Rochester Hills Forestry Division needs to inspect all trees, existing or planted, to identify any that pose a hazard to the safe use of the public right-of-way. Forestry may require the developer to remove and possibly replace, any such trees.
- These requirements are incorporated into the plan.
- Prior approval is required to plant any tree or shrub on the public right-of-way. All trees and shrubs must be planted 10' from the edge of the public road. (Trees must be planted at least 15' away from the curb or road edge where the speed limit is more than 35 mph). Shade trees and shrubs must be planted at least 5' from the edge of the public walkway. Evergreen and ornamental trees must be planted at least 10' from the edge of the public walkway. No trees or shrubs may be planted within the triangular area formed at the intersection of any street right-of-way at a distance along each line of 25' from their point of intersection. No trees or shrubs may be planted within the triangular area formed at the intersection of any driveway with a public walkway at a distance along each line of 15' from their point of intersection. All trees and shrubs must be planted at least 10' from any fire hydrant. Shade and evergreen trees must be at least 15' away from the nearest overhead wire. Trees must be planted a minimum of 5' from an underground utility, unless the City's Landscape Architect requires a greater distance.
- No substitutions or changes of location or plant types shall be made without the approval of the developer and the City of Rochester Hills Landscape Architect. City's Landscape Architect has Final Right of Approval for the Release of the Performance and Maintenance Bonds.
- The developer and/or the City of Rochester Hills Landscape Architect shall have the right, at any stage of the installation, to reject any work or material that does not meet the requirements of the plans or specifications.
- Replacement trees may not be planted within the drip line of existing trees.
- Trees may not be planted within 4' of any property line.
- Irrigation Shall Only Occur Between the Hours of 12am and 5 am in Accordance with the City's Watering Ordinances.

Seal:



Title:

### Landscape Details

Project:

Henry Ford - Pharmacy Advantage  
Rochester Hills, Michigan

Prepared for:

Alpine Engineering  
46893 West Road, Suite 109  
Novi, Michigan 48377  
248.926.3701

Revision: Issued:

Submission	April 25, 2016
Revised	June 15, 2016
Revised	June 30, 2016
Revised	July 21, 2016

Job Number:

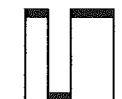
16-025

Drawn By:

jca

Checked By:

jca



NORTH



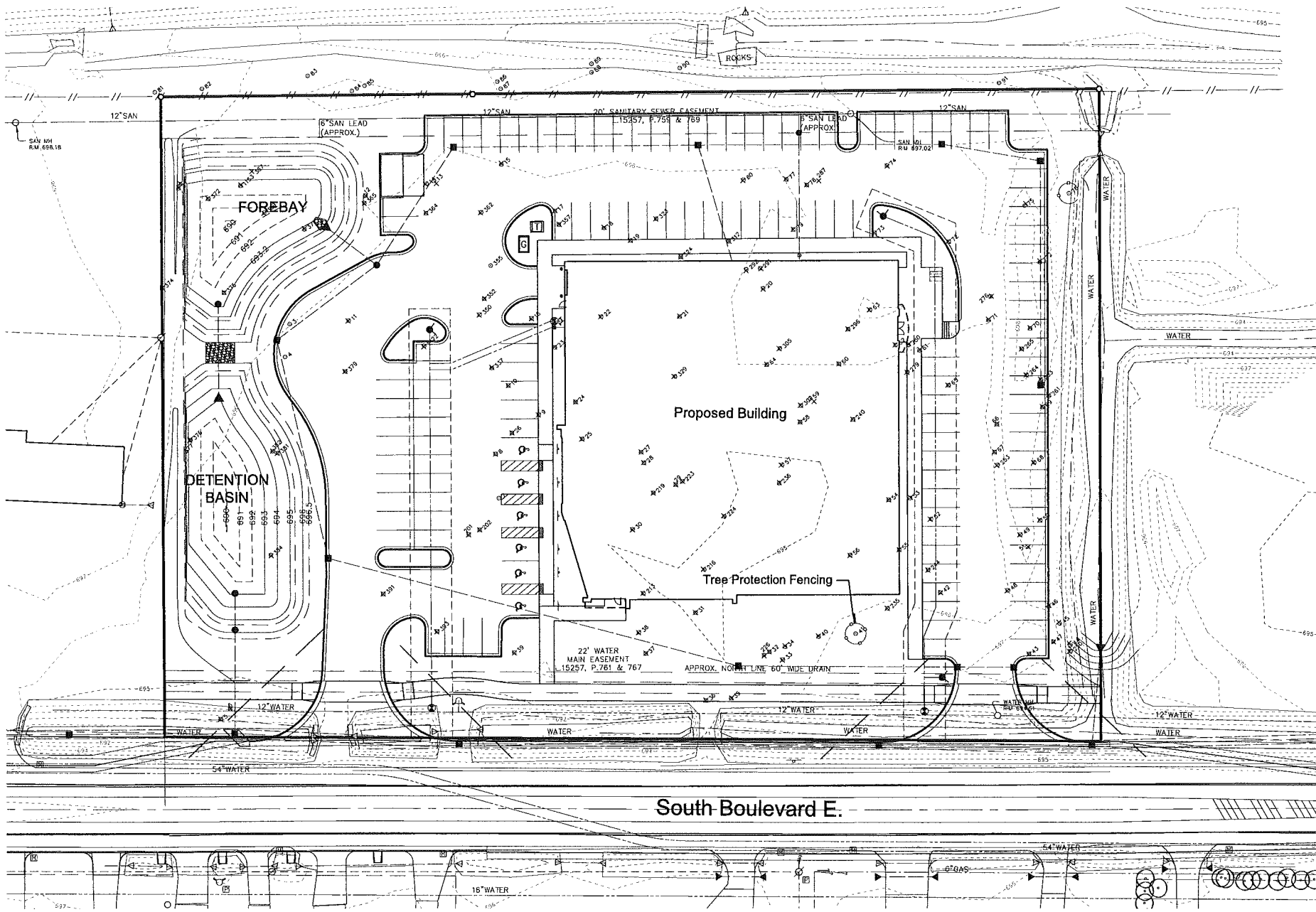
Know what's below.  
Call before you dig.

Sheet No.

Not to be Used as Construction Drawings

L-2

City File #16-010

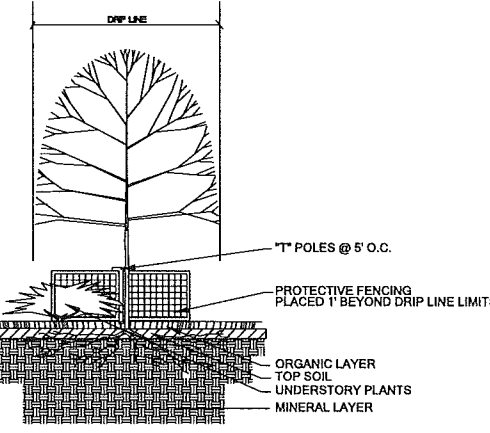


**Woodland Summary**

Total On-Site Trees	133 Trees
Regulated Trees Removed	131 Trees
Replacement Required	0 Trees

This Site is an Approved Plat (John R. Highlands) Prior to August 3, 1988. Per Section 126-264 (b), This Parcel is Exempt from the Tree Conservation Ordinance.

Key  
 x Removed Tree



1. Either Plastic or Wood Orange Snow if Fencing Shall be Installed at or Beyond the Drip Line, Unless More Substantial Fencing is Required.
2. Stakes Shall be Metal 1\"/>

**Tree List**

Tag No.	DBH	Common Name	Botanical Name	Condition	Status
1	6"	Cottonwood	Populus deltoides	Good	Remove
2	7"	Cottonwood	Populus deltoides	Good	Remove
3	7"	American Elm	Ulmus americana	Good	Remove
4	10', 7', 6", 7"	American Elm	Ulmus americana	Good	Remove
5	10'	Burr Oak	Quercus macrocarpa	Good	Remove
6	6"	American Elm	Ulmus americana	Fair	Remove
7	6"	Mulberry	Morus alba	Fair	Remove
8	7"	Mulberry	Morus alba	Fair	Remove
9	8"	Mulberry	Morus alba	Good	Remove
10	8"	American Elm	Ulmus americana	Fair	Remove
11	8"	American Elm	Ulmus americana	Good	Remove
12	8"	American Elm	Ulmus americana	Fair	Remove
13	13"	American Elm	Ulmus americana	Good	Remove
14	7"	Cottonwood	Populus deltoides	Good	Remove
15	8"	American Elm	Ulmus americana	Fair	Remove
16	8"	Mulberry	Morus alba	Good	Remove
17	18"	Black Cherry	Prunus serotina	Good	Remove
18	7"	Silver Maple	Acer saccharinum	Good	Remove
19	7"	American Elm	Ulmus americana	Good	Remove
20	10"	American Elm	Ulmus americana	Good	Remove
21	9', 8"	American Elm	Ulmus americana	Fair	Remove
22	10"	Cottonwood	Populus deltoides	Good	Remove
23	7"	Mulberry	Morus alba	Good	Remove
24	7"	Mulberry	Morus alba	Good	Remove
25	8"	Mulberry	Morus alba	Fair	Remove
26	6"	American Elm	Ulmus americana	Fair	Remove
27	7"	American Elm	Ulmus americana	Good	Remove
28	7"	American Elm	Ulmus americana	Good	Remove
29	7"	American Elm	Ulmus americana	Good	Remove
30	8"	Mulberry	Morus alba	Fair	Remove
31	8"	Mulberry	Morus alba	Fair	Remove
32	10"	American Elm	Ulmus americana	Good	Remove
33	7', 8"	American Elm	Ulmus americana	Good	Remove
34	8"	Mulberry	Morus alba	Fair	Remove
35	6"	Cottonwood	Populus deltoides	Good	Remove
36	7"	Cottonwood	Populus deltoides	Good	Remove
37	7"	American Elm	Ulmus americana	Fair	Remove
38	8"	Poplar	Populus deltoides	Good	Remove
39	12"	Mulberry	Morus alba	Fair	Remove
40	8', 13"	American Elm	Ulmus americana	Fair	Remove
41	10', 8"	American Elm	Ulmus americana	Fair	Remove
42	7"	Mulberry	Morus alba	Good	Remove
43	No Tag	American Elm	Ulmus americana	Poor	Remove
44	13"	American Elm	Ulmus americana	Good	Remove
45	7"	American Elm	Ulmus americana	Fair	Remove
46	6', 4"	American Elm	Ulmus americana	Fair	Remove
47	7"	American Elm	Ulmus americana	Fair	Remove
48	12"	Poplar	Populus deltoides	Good	Remove
49	7', 3"	Silver Maple	Acer saccharinum	Fair	Remove
50	7"	Cottonwood	Populus deltoides	Good	Remove
51	6', 4"	American Elm	Ulmus americana	Good	Remove
52	10"	Poplar	Populus deltoides	Good	Remove
53	9"	American Elm	Ulmus americana	Good	Remove
54	10"	Poplar	Populus deltoides	Good	Remove
55	8"	Poplar	Populus deltoides	Fair	Remove
56	9"	American Elm	Ulmus americana	Good	Remove
57	12"	American Elm	Ulmus americana	Poor	Remove
58	7"	Mulberry	Morus alba	Fair	Remove
59	10"	Cottonwood	Populus deltoides	Poor	Remove
60	15"	Cottonwood	Populus deltoides	Good	Remove
61	7"	American Elm	Ulmus americana	Good	Remove
62	7"	American Elm	Ulmus americana	Good	Remove
63	9"	American Elm	Ulmus americana	Poor	Remove
64	9"	Cottonwood	Populus deltoides	Good	Remove
65	11"	Cottonwood	Populus deltoides	Good	Remove
66	10"	American Elm	Ulmus americana	Fair	Remove
67	11"	Cottonwood	Populus deltoides	Good	Remove
68	7"	American Elm	Ulmus americana	Fair	Remove
69	8', 4"	American Elm	Ulmus americana	Fair	Remove
70	7"	American Elm	Ulmus americana	Good	Remove
71	7', 6"	American Elm	Ulmus americana	Good	Remove
72	8"	American Elm	Ulmus americana	Good	Remove
73	8"	Mulberry	Morus alba	Fair	Remove
74	10', 9"	Burr Oak	Quercus macrocarpa	Good	Remove
75	8"	American Elm	Ulmus americana	Poor	Remove
76	7"	Cottonwood	Populus deltoides	Fair	Save
77	8"	Mulberry	Morus alba	Fair	Remove
78	9"	Cottonwood	Populus deltoides	Good	Remove
79	5', 4"	American Elm	Ulmus americana	Good	Remove
80	8"	Silver Maple	Acer saccharinum	Good	Remove
81	7"	Silver Maple	Acer saccharinum	Off-Site	Remove
82	10"	Silver Maple	Acer saccharinum	Off-Site	Remove
83	8"	Silver Maple	Acer saccharinum	Off-Site	Remove
84	7"	Poplar	Populus deltoides	Off-Site	Remove
85	7"	Silver Maple	Acer saccharinum	Off-Site	Remove
86	24"	Cottonwood	Populus deltoides	Off-Site	Remove
87	11"	Silver Maple	Acer saccharinum	Good	Remove
88	8"	Silver Maple	Acer saccharinum	Good	Off-Site
89	7"	Silver Maple	Acer saccharinum	Good	Off-Site
90	9"	American Elm	Ulmus americana	Good	Off-Site
201	12', 18', 28"	Silver Maple	Acer saccharinum	Good	Remove
202	10"	White Oak	Quercus alba	Good	Remove
213	9"	Mulberry	Morus alba	Good	Remove
216	11', 9"	White Oak	Quercus alba	Good	Remove
219	9"	Silver Maple	Acer saccharinum	Good	Remove
223	8"	American Elm	Ulmus americana	Good	Remove
224	9"	Cottonwood	Populus deltoides	Good	Remove
228	10"	American Elm	Ulmus americana	Fair	Remove
235	9"	Cottonwood	Populus deltoides	Fair	Remove
236	12"	American Elm	Ulmus americana	Poor	Remove
240	11', 12"	Cottonwood	Populus deltoides	Poor	Remove
244	11"	Cottonwood	Populus deltoides	Good	Remove
250	11"	Mulberry	Morus alba	Fair	Remove
253	9"	Cottonwood	Populus deltoides	Good	Remove
261	7', 7"	American Elm	Ulmus americana	Poor	Remove
263	26"	Cottonwood	Populus deltoides	Good	Remove
264	12"	Cottonwood	Populus deltoides	Good	Remove
265	13"	Cottonwood	Populus deltoides	Good	Remove
272	16', 16', 9"	Cottonwood	Populus deltoides	Fair	Remove
276	13"	American Elm	Ulmus americana	Good	Remove
279	17"	Cottonwood	Populus deltoides	Good	Remove
280	11"	Cottonwood	Populus deltoides	Good	Remove
291	10"	American Elm	Ulmus americana	Fair	Remove
292	10"	American Elm	Ulmus americana	Good	Remove
296	10"	American Elm	Ulmus americana	Good	Remove
302	11"	American Elm	Ulmus americana	Good	Remove
305	20"	Cottonwood	Populus deltoides	Good	Remove
312	9', 5"	American Elm	Ulmus americana	Fair	Remove
324	9"	American Elm	Ulmus americana	Fair	Remove
327	10"	American Elm	Ulmus americana	Good	Remove
329	8"	American Elm	Ulmus americana	Good	Remove
337	20"	Cottonwood	Populus deltoides	Poor	Remove
350	11"	Cottonwood	Populus deltoides	Good	Remove
352	36"	Cottonwood	Populus deltoides	Good	Remove
355	10"	Cottonwood	Populus deltoides	Poor	Remove
357	21"	Silver Maple	Acer saccharinum	Good	Remove
362	27"	Silver Maple	Acer saccharinum	Good	Remove
364	11"	American Elm	Ulmus americana	Remove	Remove
365	11"	American Elm	Ulmus americana	Fair	Remove
367	17', 14"	Box Elder	Acer negundo	Fair	Remove
369	18"	Black Cherry	Prunus serotina	Good	Remove
371	15', 32', 13', 12"	Box Elder	Acer negundo	Good	Remove
372	7', 7"	Cottonwood	Populus deltoides	Poor	Remove
374	27"	Sugar Maple	Acer saccharum	Good	Remove
375	39"	Cottonwood	Populus deltoides	Good	Remove
376	16"	American Elm	Ulmus americana	Fair	Remove
377	10"	Cedar	Arborea	Fair	Remove
379	53"	Cottonwood	Populus deltoides	Good	Remove
381	13', 11"	Silver Maple	Acer saccharinum	Good	Remove
382	8"	Spruce	Picea	Good	Remove
384	21"	Burr Oak	Quercus macrocarpa	Good	Remove
391	17"	Burr Oak	Quercus macrocarpa	Good	Remove
393	21"	Cottonwood	Populus deltoides	Good	Remove
1422	10"	American Elm	Ulmus americana	Good	Remove

**ALLEN DESIGN**  
 LAND PLANNING / LANDSCAPE ARCHITECTURE  
 557 CARPENTER • NORTHVILLE, MI 48167  
 248.467.4668 • Fax 248.349.0559  
 Email: jca@widesopenwest.com

Seal:

Title:  
**Woodland Plan**

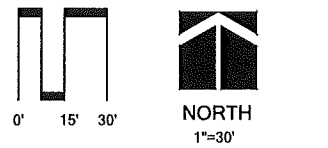
Project:  
**Henry Ford - Pharmacy Advantage  
 Rochester Hills, Michigan**

Prepared for:  
 Alpine Engineering  
 46893 West Road, Suite 109  
 Novi, Michigan 48377  
 248.926.3701

Revision:	Issued:
Submission	April 25, 2016
Revised	June 15, 2016
Revised	June 30, 2016
Revised	July 21, 2016

Job Number:  
 16-025

Drawn By: jca  
 Checked By: jca



Sheet No.

Not to be Used as Construction Drawings

**TREE PROTECTION DETAIL**  
 NO SCALE



**D-Series Size 0 LED Area Luminaire**

Specification	Value
EPA: 0.65 ft (20")	
Length: 26" (81cm)	
Width: 12" (38cm)	
Height: 7" (21cm)	
Weight (max): 16 lbs (7.3kg)	

**Introduction**  
The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

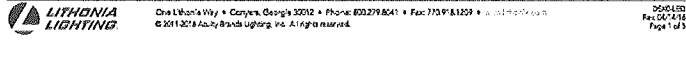
The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD

Series	LED	Optic	Power	Temp	Mount	Voltage	Notes
DSX0 LED	Forward optic	50	1000	40K	T3M	MVOLT	Skipped
		200	2000	40K	T3M	MVOLT	Skipped
	Recessed optic	50	1000	40K	T3M	MVOLT	Skipped
		200	2000	40K	T3M	MVOLT	Skipped

Label	Description	Notes
SKIPPED	Skipped	Skipped
SKIPPED	Skipped	Skipped

**Controls & Shields**  
DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD  
DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD  
DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD



**D-Series Size 1 LED Wall Luminaire**

Specification	Value
Width: 13-3/4" (34.9cm)	
Depth: 10" (25.4cm)	
Height: 6-3/8" (16.3cm)	

**Introduction**  
The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

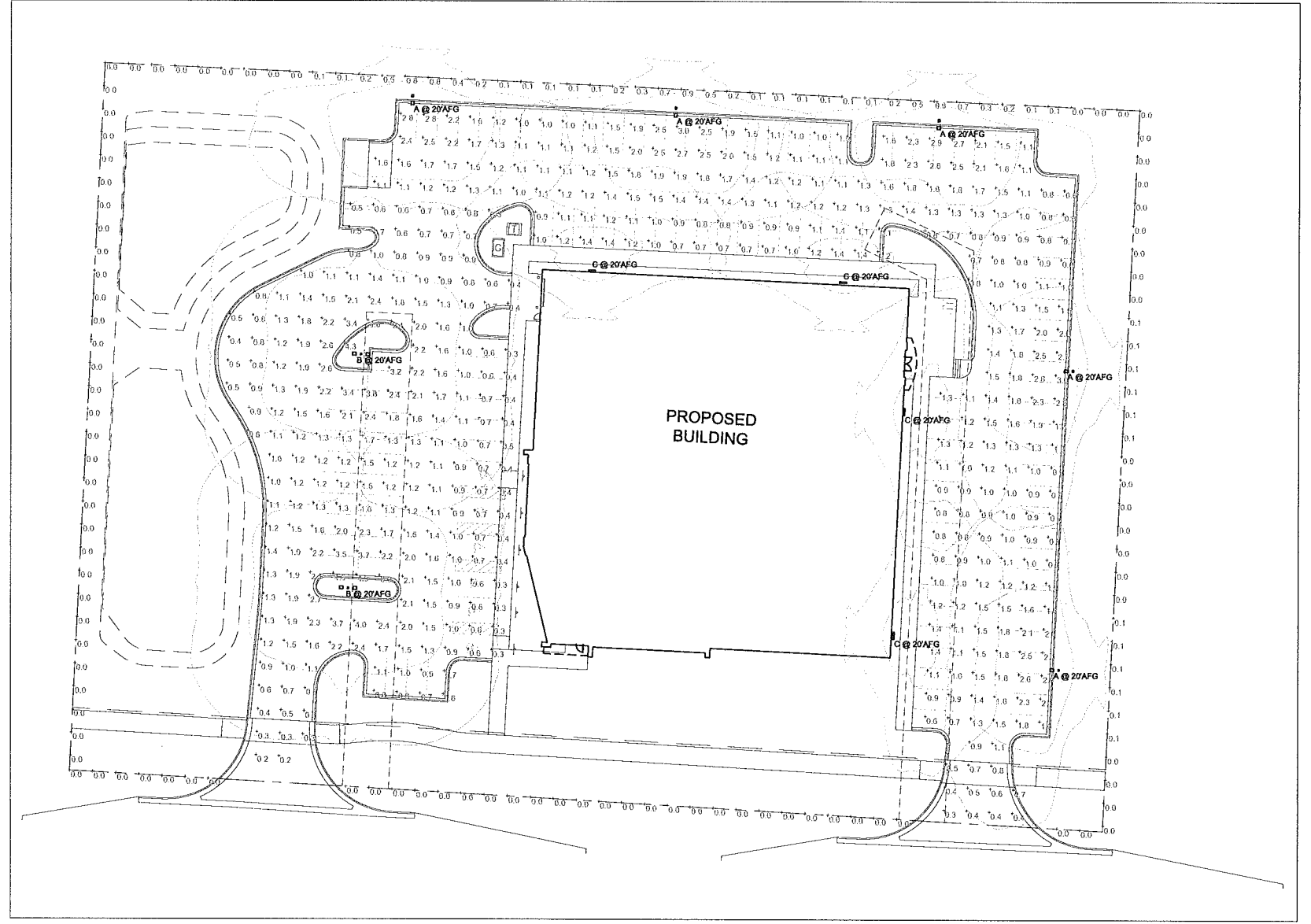
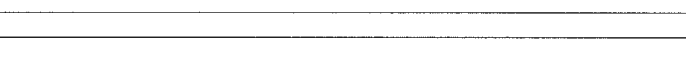
With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

**Ordering Information** EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBXD

Series	LED	Optic	Power	Temp	Mount	Voltage	Notes
DSXW1 LED	UC	50	1000	40K	T3M	MVOLT	Skipped
		200	2000	40K	T3M	MVOLT	Skipped
	RC	50	1000	40K	T3M	MVOLT	Skipped
		200	2000	40K	T3M	MVOLT	Skipped

Label	Description	Notes
SKIPPED	Skipped	Skipped
SKIPPED	Skipped	Skipped

**Accessories**  
DSXW1 LED 20C 1000 40K T3M MVOLT DDBXD  
DSXW1 LED 20C 1000 40K T3M MVOLT DDBXD  
DSXW1 LED 20C 1000 40K T3M MVOLT DDBXD

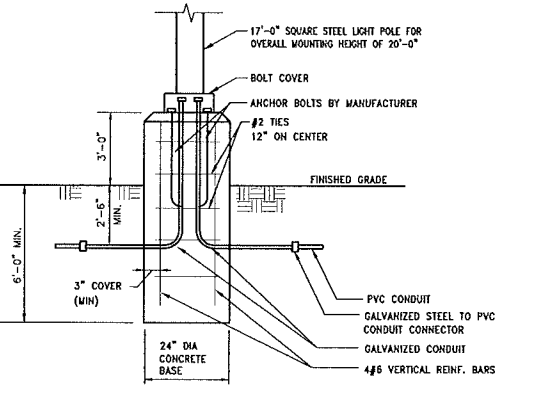


**SITE PLAN - ELECTRICAL**  
SCALE: 1" = 30'-0"

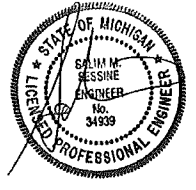
Label	Qty	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	LLF	Wattage
A	8	Lithonia Lighting	DSX0 LED 40C 700 40K T3M MVOLT HS	DSX0 LED with 40 LEDs @ 700 mA, 4000K, Type 3 Medium Optics with HOUSE-SIDE SHIELD	LED	8718	0.8	91
B	2	Lithonia Lighting	DSX0 LED 40C 700 40K T4M MVOLT	DSX0 LED with 40 LEDs @ 700 mA, 4000K, Type 4 Medium Optics	LED	11124	0.8	162
C	4	Lithonia Lighting	DSXW1 LED 20C 700 40K T3M MVOLT	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 700mA	LED	5454	0.8	45.7

**GENERAL NOTES:**  
1. ELECTRICAL SERVICE TO LIGHT FIXTURES SHALL BE PLACED UNDERGROUND.  
2. FLASHING LIGHT SHALL NOT BE PERMITTED.  
3. ONLY NECESSARY LIGHTING FOR SECURITY PURPOSES AND LIMITED OPERATIONS SHALL BE PERMITTED AFTER A SITE'S HOURS OF OPERATION.  
4. THE SITE'S HOURS OF OPERATION ARE 7:00AM TO 7:00PM MONDAY THRU FRIDAY.

Statistics	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING AREA		1.3	4.9	0.2	24.5:1	6.5:1
NORTH PROPERTY LINE (STREET R.O.W.)		0.2	0.9	0.0	N/A	N/A
SOUTH PROPERTY LINE (STREET R.O.W.)		0.0	0.0	0.0	N/A	N/A
EAST PROPERTY LINE		0.0	0.1	0.0	N/A	N/A
WEST PROPERTY LINE		0.0	0.0	0.0	N/A	N/A



**CONCRETE POLE BASE DETAIL**  
SCALE: NONE



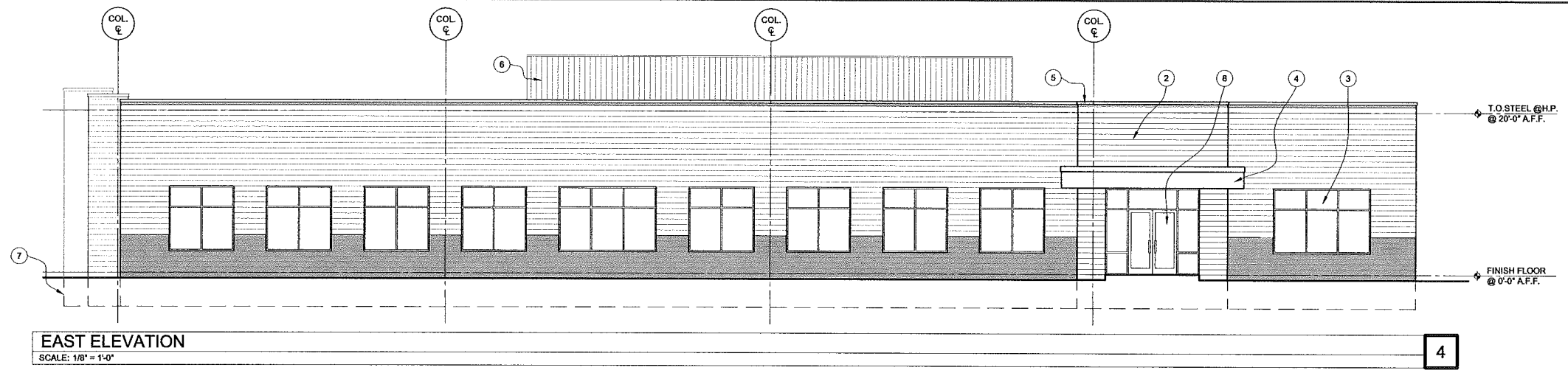
**FAUDIE ARCHITECTURE**  
26261 Evergreen Road  
Suite 123  
Southfield, Michigan 48076  
248.619.2354  
faudiearchitecture.com

**HENRY FORD - PHARMACY ADVANTAGE**  
SOUTH BOULEVARD, ROCHESTER HILLS, MI

ISSUED FOR: SITE PLAN APPROVAL  
DATE: 7-21-16  
DRAWING DATE: 4-25-16  
CITY FILE NO: 16-010  
PROJECT NUMBER: 15051  
SHEET NUMBER: ES-101



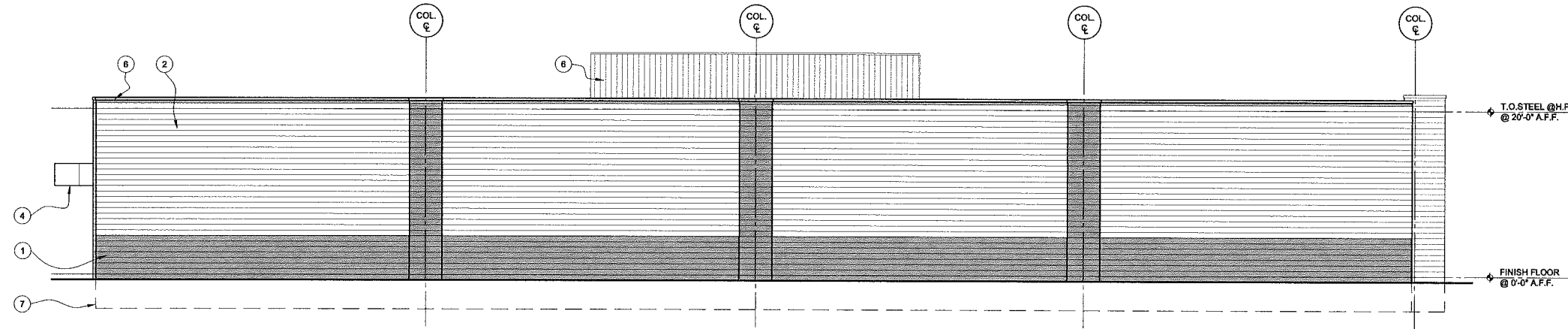
EXTERIOR MATERIAL SCHEDULE	
1	SPLITFACE CMU STAINED FINISH
2	SMOOTHFACE CMU STAINED FINISH
3	1" TINTED LOW 'E' INSUL. GLAZING IN CLEAR ANOD. ALUM. THERMAL BREAK FRAMES. SHADED AREAS DENOTE SPANDREL
4	ALUMINUM COMPOSITE METAL PANEL SYSTEM (ACM)
5	PREFINISHED METAL COPING
6	PREFINISHED METAL PANEL R.T.U. SCREEN
7	CONC. TRENCH FOOTING BELOW
8	3x7 H.M. DOOR AND FRAME
9	12x14' SECTIONAL INSULATED OVERHEAD GRADE DOOR W/ MOTOR OPERATED OPENER
10	6" DIA. CONC. FILLED STEEL GUARD POSTS



**EAST ELEVATION**

SCALE: 1/8" = 1'-0"

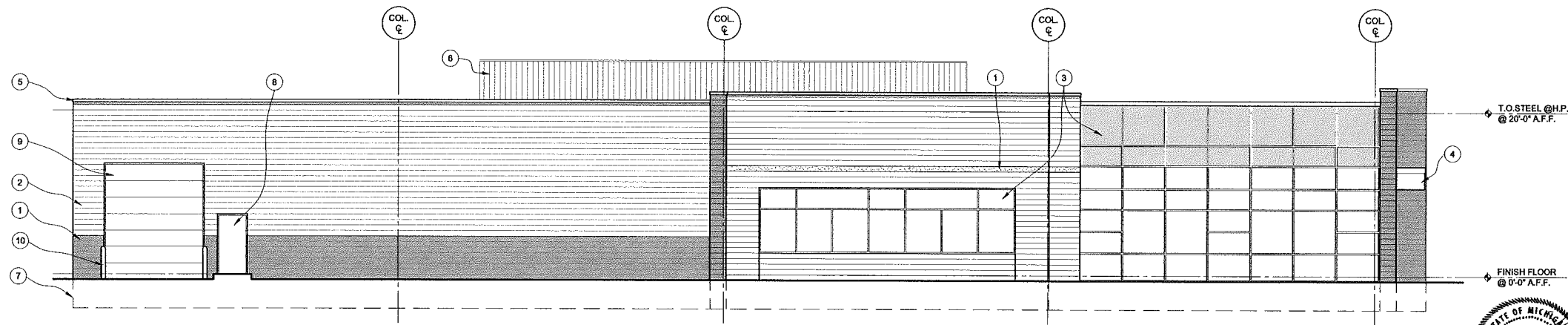
4



**NORTH ELEVATION**

SCALE: 1/8" = 1'-0"

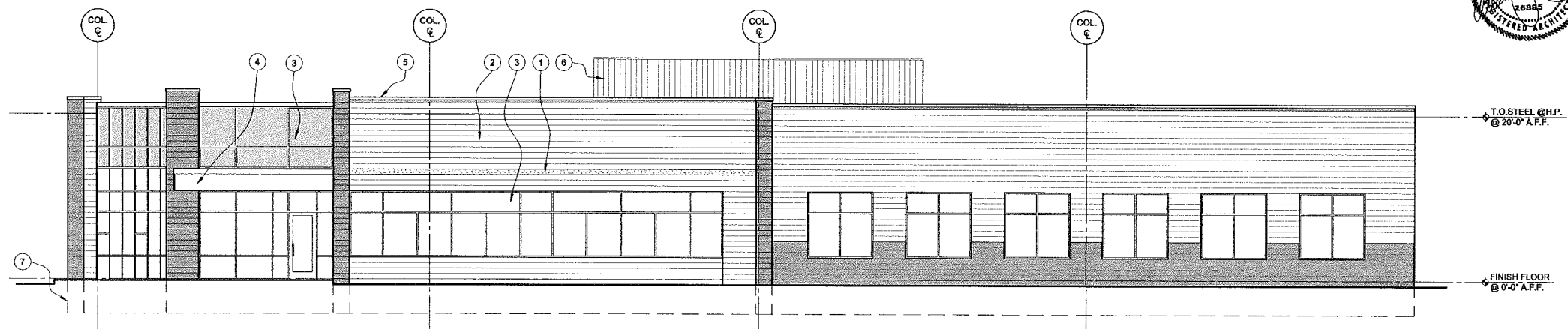
3



**WEST ELEVATION**

SCALE: 1/8" = 1'-0"

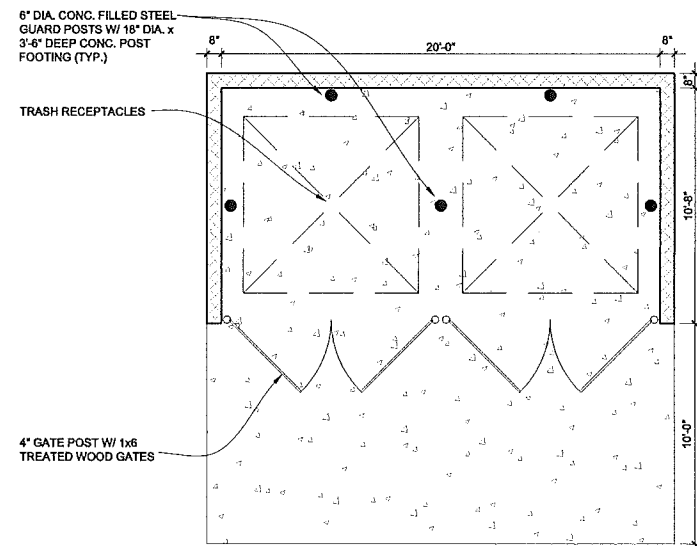
2



**SOUTH ELEVATION**

SCALE: 1/8" = 1'-0"

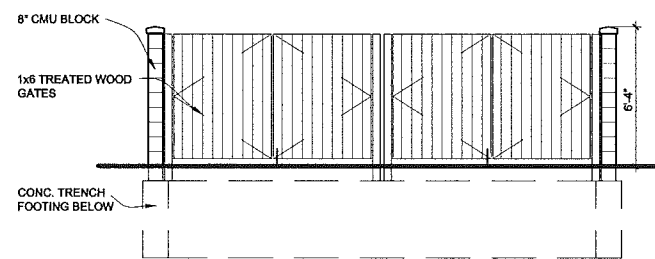
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**DUMPSTER ENCLOSURE PLAN**

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

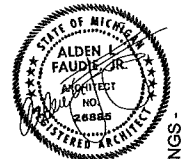
6



**DUMPSTER ENCLOSURE ELEVATION**

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

5



- NOT TO BE USED AS CONSTRUCTION DRAWINGS -

ISSUED FOR:  
SITE PLAN APPROVAL RESUB.  
DATE: 6-30-16  
7-21-16  
DRAWING DATE:  
7-21-16  
PROJECT NUMBER:  
**15051**  
SHEET NUMBER:  
**PE-2**

CITY FILE NO.  
16-010

**HENRY FORD - PHARMACY ADVANTAGE**  
SOUTH BOULEVARD, ROCHESTER HILLS, MI



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