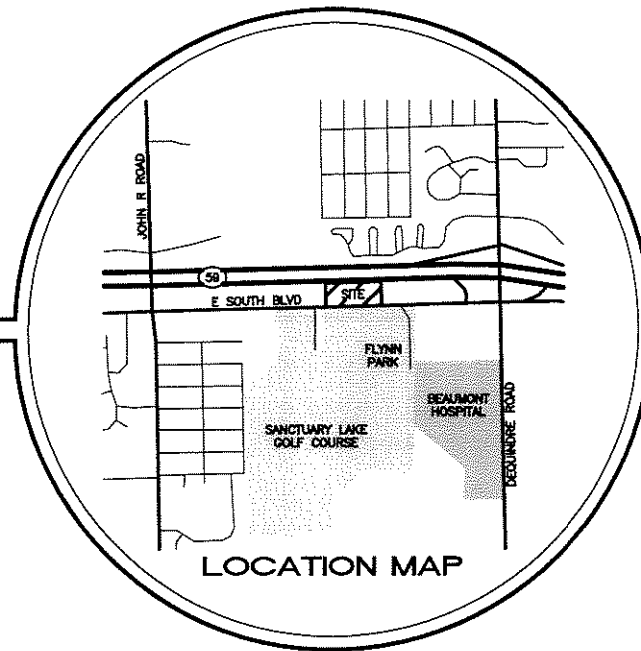


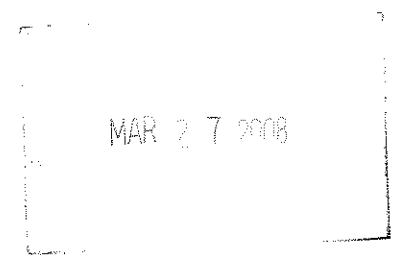
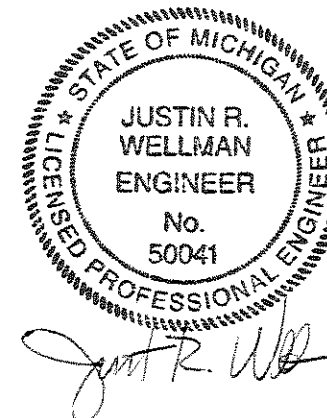
# CENTER FOR HEALTH IMPROVEMENT

PART OF THE SOUTHEAST 1/4 OF SECTION 36, T.3N., R.11E.,  
CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN



## INDEX OF SHEETS

S1	BOUNDARY, TREE AND TOPOGRAPHIC SURVEY
SP1	SITE PLAN
SP2	DIMENSIONAL LAYOUT PLAN
SP3	PAVING & GRADING PLAN
SP4	UTILITY PLAN
SP5	NOTES AND DETAILS
SP6	DETENTION SYSTEM PLAN & DETAILS
L1	TREE PRESERVATION PLAN
L2	LANDSCAPE PLAN
L3	LANDSCAPE NOTES AND DETAILS
E001	ELECTRICAL SITE PLAN
E002	ELECTRICAL PHOTOMETRIC SITE PLAN
SK-1	ARCHITECTURAL PROJECT DATA
SK-2	ARCHITECTURAL SITE PLAN, FLOOR PLANS
SK-3	EXTERIOR ELEVATIONS
SK-4	EXTERIOR RENDERING
SK-5	EXTERIOR RENDERING
SK-6	INTERIOR LOBBY RENDERING
SK-7	EXTERIOR RENDERING



**PROPRIETOR:**  
ROCHESTER HILLS HEALTH &  
WELLNESS BUILDING, LLC  
839 N. JEFFERSON STREET, SUITE 200  
MILWAUKEE, WI 53202

**CONTACT:**  
RAYMOND OCASIO  
PHONE: (414) 277-0500

**N&F NOWAK & FRAUS**

*Civil Engineering • Land Surveying • Land Planning*

46777 WOODWARD AVENUE  
PONTIAC, MICHIGAN 48342-5032

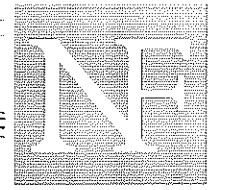
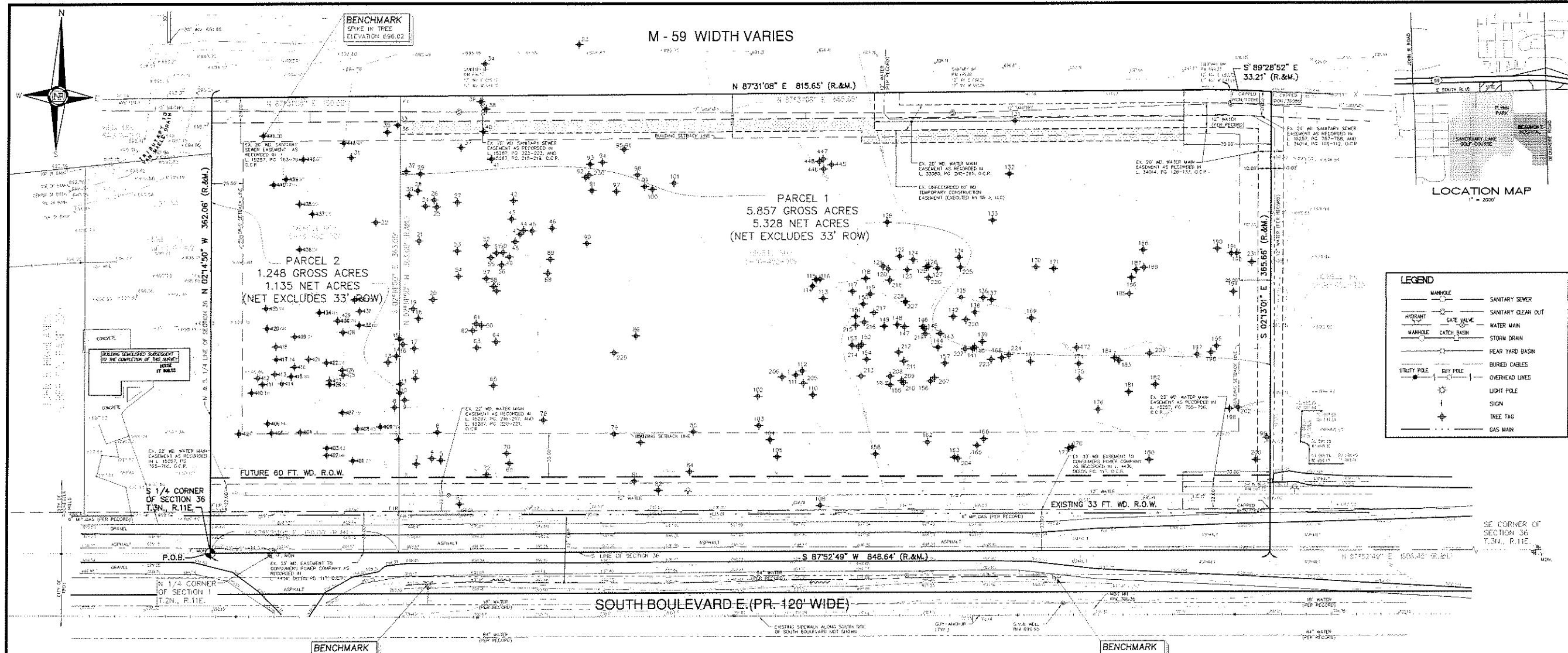
TEL. (248) 332-7931  
FAX. (248) 332-8257

1310 N. STEPHENSON HIGHWAY  
ROYAL OAK, MICHIGAN 48067-1508

TEL. (248) 399-0886  
FAX. (248) 399-0805

**N&F JOB No: C550-03**

CITY FILE No. 07-014 REVISED: APRIL 29, 2008



**NOWAK & FRAUS**

Consulting Engineers  
Land Surveyors  
Land Planners

46777 Woodward Avenue  
Pontiac, Michigan 48342  
Tel. (248) 332-7331  
Fax. (248) 332-6257

PROJECT  
Center for Health  
Improvement  
City File No. 07-014

CLIENT  
Hobbs + Black Associates  
100 N. State Street  
Ann Arbor, MI 48104

Contact: Michael Berlin  
(734)663-4189

PROJECT LOCATION  
Part of the SE 1/4 of  
Section 36, T.3N., R.11E.,  
City of Rochester Hills,  
Oakland Co., Michigan



72 HOURS BEFORE YOU DIG  
CALL MISS DIG  
1-800-422-7171

SEAL

DATE/REVISION  
02/05/08 Site Plan Submittal  
03/07/08 City Review  
04/29/08 City Review

SHEET  
Boundary, Tree and  
Topographic Survey

DRAWN BY:  
M. Kurmas

DESIGNED BY:  
J. Huhta

APPROVED BY:  
J. Huhta

DATE  
08/07/07

SCALE  
1" = 40'

N&P JOB NO.  
C550-03

SHEET NO.  
S1

LEGAL DESCRIPTION (PARCEL No. 15-36-452-011, FORMERLY -004 & -009)  
PART OF THE SOUTHEAST 1/4 OF SECTION 36, TOWNSHIP 3 NORTH, RANGE 11 EAST,  
CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, AND BEING MORE  
PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTH 1/4 CORNER OF  
SAID SECTION 36; THENCE N.02°14'50"W., 362.06 FEET TO A POINT ON THE  
SOUTHERLY RIGHT-OF-WAY LINE OF M-59 HIGHWAY; THENCE N.87°31'08"E., 815.65  
FEET; THENCE S.89°28'52"E., 33.21 FEET; THENCE S.02°13'01"E., 365.66 FEET;  
THENCE S.87°52'49"W., 848.64 FEET TO THE POINT OF BEGINNING. CONTAINING 6.463  
ACRES, EXCLUDING EXISTING RIGHT-OF-WAY.

Tree Survey Data (note: tree tag numbers skip from 231 to 401)

Tree #	Botanical Name	Common Name	Dia.	Tr. Condition	Tree elev.
1	Quercus coccinea	Scarlet Oak	10	Good	698.14
2	Ulmus americana	American Elm	5	Good	698.38
3	Ulmus pumila	Siberian Elm	5	Fair	698.28
4	Ulmus pumila	Siberian Elm	10	Good	698.40
5	Ulmus americana	American Elm	5	Fair	698.42
6	Ulmus pumila	Siberian Elm	5	Fair	698.43
7	Ulmus pumila	Siberian Elm	5	Fair	698.44
8	Ulmus pumila	Siberian Elm	5	Fair	698.45
9	Ulmus pumila	Siberian Elm	5	Fair	698.46
10	Ulmus pumila	Siberian Elm	5	Fair	698.47
11	Ulmus pumila	Siberian Elm	5	Fair	698.48
12	Ulmus pumila	Siberian Elm	5	Fair	698.49
13	Ulmus pumila	Siberian Elm	5	Fair	698.50
14	Ulmus pumila	Siberian Elm	5	Fair	698.51
15	Ulmus pumila	Siberian Elm	5	Fair	698.52
16	Ulmus pumila	Siberian Elm	5	Fair	698.53
17	Ulmus pumila	Siberian Elm	5	Fair	698.54
18	Ulmus pumila	Siberian Elm	5	Fair	698.55
19	Ulmus pumila	Siberian Elm	5	Fair	698.56
20	Ulmus pumila	Siberian Elm	5	Fair	698.57
21	Ulmus pumila	Siberian Elm	5	Fair	698.58
22	Ulmus pumila	Siberian Elm	5	Fair	698.59
23	Ulmus pumila	Siberian Elm	5	Fair	698.60
24	Ulmus pumila	Siberian Elm	5	Fair	698.61
25	Ulmus pumila	Siberian Elm	5	Fair	698.62
26	Ulmus pumila	Siberian Elm	5	Fair	698.63
27	Ulmus pumila	Siberian Elm	5	Fair	698.64
28	Ulmus pumila	Siberian Elm	5	Fair	698.65
29	Ulmus pumila	Siberian Elm	5	Fair	698.66
30	Ulmus pumila	Siberian Elm	5	Fair	698.67
31	Ulmus pumila	Siberian Elm	5	Fair	698.68
32	Ulmus pumila	Siberian Elm	5	Fair	698.69
33	Ulmus pumila	Siberian Elm	5	Fair	698.70
34	Ulmus pumila	Siberian Elm	5	Fair	698.71
35	Ulmus pumila	Siberian Elm	5	Fair	698.72
36	Ulmus pumila	Siberian Elm	5	Fair	698.73
37	Ulmus pumila	Siberian Elm	5	Fair	698.74
38	Ulmus pumila	Siberian Elm	5	Fair	698.75
39	Ulmus pumila	Siberian Elm	5	Fair	698.76
40	Ulmus pumila	Siberian Elm	5	Fair	698.77
41	Ulmus pumila	Siberian Elm	5	Fair	698.78
42	Ulmus pumila	Siberian Elm	5	Fair	698.79
43	Ulmus pumila	Siberian Elm	5	Fair	698.80
44	Ulmus pumila	Siberian Elm	5	Fair	698.81
45	Ulmus pumila	Siberian Elm	5	Fair	698.82
46	Ulmus pumila	Siberian Elm	5	Fair	698.83
47	Ulmus pumila	Siberian Elm	5	Fair	698.84

Tree #	Botanical Name	Common Name	Dia.	Tr. Condition	Tree elev.
48	Ulmus americana	American Elm	10	Good	697.48
49	Ulmus americana	American Elm	10	Good	697.50
50	Ulmus pumila	Siberian Elm	7	Fair	697.52
51	Ulmus americana	American Elm	7	Good	697.54
52	Ulmus americana	American Elm	8	Good	697.56
53	Ulmus americana	American Elm	8	Good	697.58
54	Ulmus americana	American Elm	8	Good	697.60
55	Ulmus americana	American Elm	8	Good	697.62
56	Ulmus americana	American Elm	8	Good	697.64
57	Ulmus americana	American Elm	8	Good	697.66
58	Ulmus americana	American Elm	8	Good	697.68
59	Ulmus americana	American Elm	8	Good	697.70
60	Ulmus americana	American Elm	8	Good	697.72
61	Ulmus americana	American Elm	8	Good	697.74
62	Ulmus americana	American Elm	8	Good	697.76
63	Ulmus americana	American Elm	8	Good	697.78
64	Ulmus americana	American Elm	8	Good	697.80
65	Ulmus americana	American Elm	8	Good	697.82
66	Ulmus americana	American Elm	8	Good	697.84
67	Ulmus americana	American Elm	8	Good	697.86
68	Ulmus americana	American Elm	8	Good	697.88
69	Ulmus americana	American Elm	8	Good	697.90
70	Ulmus americana	American Elm	8	Good	697.92
71	Ulmus americana	American Elm	8	Good	697.94
72	Ulmus americana	American Elm	8	Good	697.96
73	Ulmus americana	American Elm	8	Good	697.98
74	Ulmus americana	American Elm	8	Good	698.00
75	Ulmus americana	American Elm	8	Good	698.02
76	Ulmus americana	American Elm	8	Good	698.04
77	Ulmus americana	American Elm	8	Good	698.06
78	Ulmus americana	American Elm	8	Good	698.08
79	Ulmus americana	American Elm	8	Good	698.10
80	Ulmus americana	American Elm	8	Good	698.12
81	Ulmus americana	American Elm	8	Good	698.14
82	Ulmus americana	American Elm	8	Good	698.16
83	Ulmus americana	American Elm	8	Good	698.18
84	Ulmus americana	American Elm	8	Good	698.20
85	Ulmus americana	American Elm	8	Good	698.22
86	Ulmus americana	American Elm	8	Good	698.24
87	Ulmus americana	American Elm	8	Good	698.26
88	Ulmus americana	American Elm	8	Good	698.28
89	Ulmus americana	American Elm	8	Good	698.30
90	Ulmus americana	American Elm	8	Good	698.32
91	Ulmus americana	American Elm	8	Good	698.34
92	Ulmus americana	American Elm	8	Good	698.36
93	Ulmus americana	American Elm	8	Good	698.38
94	Ulmus americana	American Elm	8	Good	698.40
95	Ulmus americana	American Elm	8	Good	698.42
96	Ulmus americana	American Elm	8	Good	698.44
97	Ulmus americana	American Elm	8	Good	698.46
98	Ulmus americana	American Elm	8	Good	698.48
99	Ulmus americana	American Elm	8	Good	698.50
100	Ulmus americana	American Elm	8	Good	698.52
101	Ulmus americana	American Elm	8	Good	698.54
102	Ulmus americana	American Elm	8	Good	698.56

Tree #	Botanical Name	Common Name	Dia.	Tr. Condition	Tree elev.
103	Ulmus pumila	Siberian Elm	9	Fair	697.20
104	Acer saccharinum	Silver Maple	9	Fair	697.13
105	Ulmus pumila	Siberian Elm	9	Fair	697.27
106	Acer saccharinum	Silver Maple	9	Fair	697.20
107	Acer saccharinum	Silver Maple	9	Fair	697.20
108	Acer saccharinum	Silver Maple	9	Fair	697.20
109	Acer saccharinum	Silver Maple	9	Fair	697.20
110	Acer saccharinum	Silver Maple	9	Fair	697.20
111	Ulmus pumila	Siberian Elm	9	Fair	697.20
112	Ulmus pumila	Siberian Elm	9	Fair	697.20
113	Ulmus pumila	Siberian Elm	9	Fair	697.20
114	Ulmus pumila	Siberian Elm	9	Fair	697.20
115	Ulmus pumila	Siberian Elm	9	Fair	697.20
116	Ulmus pumila	Siberian Elm	9	Fair	697.20
117	Ulmus pumila	Siberian Elm	9	Fair	697.20
118	Ulmus pumila	Siberian Elm	9	Fair	697.20
119	Ulmus pumila	Siberian Elm	9	Fair	697.20
120	Ulmus pumila	Siberian Elm	9	Fair	697.20
121	Ulmus pumila	Siberian Elm	9	Fair	697.20
122	Ulmus pumila	Siberian Elm	9	Fair	697.20
123	Ulmus pumila	Siberian Elm	9	Fair	697.20
124	Ulmus pumila	Siberian Elm	9	Fair	697.20
125	Ulmus pumila	Siberian Elm	9	Fair	697.20
126	Ulmus pumila	Siberian Elm	9	Fair	697.20
127	Ulmus pumila	Siberian Elm	9	Fair	697.20
128	Ulmus pumila	Siberian Elm	9	Fair	697.20
129	Ulmus pumila	Siberian Elm	9	Fair	697.20
130	Ulmus pumila	Siberian Elm	9	Fair	697.20
131	Ulmus pumila	Siberian Elm	9	Fair	697.20
132	Ulmus pumila	Siberian Elm	9	Fair	697.20
133	Ulmus pumila	Siberian Elm	9	Fair	697.20
134	Ulmus pumila	Siberian Elm	9	Fair	697.20
135	Ulmus pumila	Siberian Elm	9	Fair	697.20
136	Ulmus pumila	Siberian Elm	9	Fair	697.20
137	Ulmus pumila	Siberian Elm	9	Fair	697.20
138	Ulmus pumila	Siberian Elm	9	Fair	697.20
139	Ulmus pumila	Siberian Elm	9	Fair	697.20
140	Ulmus pumila	Siberian Elm	9	Fair	697.20
141	Ulmus pumila	Siberian Elm	9	Fair	697.20
142	Ulmus pumila	Siberian Elm	9	Fair	697.20
143	Ulmus pumila	Siberian Elm	9	Fair	697.20
144	Ulmus pumila	Siberian Elm	9	Fair	697.20
145	Ulmus pumila	Siberian Elm	9	Fair	697.20
146	Ulmus pumila	Siberian Elm	9	Fair	697.20
147	Ulmus pumila	Siberian Elm	9	Fair	697.20
148	Ulmus pumila	Siberian Elm	9	Fair	697.20
149	Ulmus pumila	Siberian Elm	9	Fair	697.20
150	Ulmus pumila	Siberian Elm	9	Fair	697.20

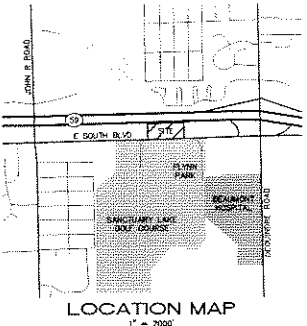
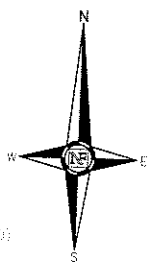
Tree #	Botanical Name	Common Name	Dia.	Tr. Condition	Tree elev.
217	Acer saccharinum	Silver Maple	8	Good	694.58
218	Acer saccharinum	Silver Maple	8	Good	694.58
219	Ulmus pumila	Siberian Elm	8	Good	694.58
220	Acer saccharinum	Silver Maple	8	Good	694.58
221	Acer saccharinum	Silver Maple	8	Good	694.58
222	Acer saccharinum	Silver Maple	8	Good	694.58
223	Acer saccharinum	Silver Maple	8	Good	694.58
224	Acer saccharinum	Silver Maple	8	Good	694.58
225	Acer saccharinum	Silver Maple	8	Good	694.58
226	Acer saccharinum	Silver Maple	8	Good	694.58
227	Acer saccharinum	Silver Maple	8	Good	694.58
228	Acer saccharinum	Silver Maple	8	Good	694.58
229	Acer saccharinum	Silver Maple	8	Good	694.58
230	Acer saccharinum	Silver Maple	8	Good	694.58
231	Ulmus pumila	Siberian Elm	10	Good	695.05
232	Ulmus pumila	Siberian Elm	10	Good	695.05
233	Ulmus pumila	Siberian Elm	10	Good	695.05
234	Ulmus pumila	Siberian Elm	10	Good	695.05
235	Ulmus pumila	Siberian Elm	10	Good	695.05
236	Ulmus pumila	Siberian Elm	10	Good	695.05
237	Ulmus pumila	Siberian Elm	10	Good	695.05
238	Ulmus pumila	Siberian Elm	10	Good	695.05
239	Ulmus pumila	Siberian Elm	10	Good	695.05
240	Ulmus pumila	Siberian Elm	10	Good	695.05
241	Ulmus pumila	Siberian Elm	10	Good	695.05
242	Ulmus pumila	Siberian Elm	10	Good	695.05
243	Ulmus pumila	Siberian Elm	10	Good	695.05
244	Ulmus pumila	Siberian Elm	10	Good	695.05
245	Ulmus pumila	Siberian Elm	10	Good	695.05
246	Ulmus pumila	Siberian Elm	10	Good	695.05
247	Ulmus pumila	Siberian Elm	10	Good	695.05
248	Ulmus pumila	Siberian Elm	10	Good	695.05
249	Ulmus pumila	Siberian Elm	10	Good	695.05
250	Ulmus pumila	Siberian Elm	10	Good	695.05
251	Ulmus pumila	Siberian Elm	10	Good	695.05
252	Ulmus pumila	Siberian Elm	10	Good	695.05
253	Ulmus pumila	Siberian Elm	10	Good	695.05
254	Ulmus pumila	Siberian Elm	10	Good	695.05
255	Ulmus pumila	Siberian Elm	10	Good	695.05
256	Ulmus pumila	Siberian Elm	10	Good	695.05
257	Ulmus pumila	Siberian Elm	10	Good	695.05
258	Ulmus pumila	Siberian Elm	10	Good	695.05
259	Ulmus pumila	Siberian Elm			



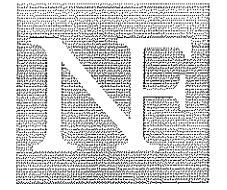
TYPICAL CITY OF ROCHESTER HILLS HANDICAP SIGN DETAIL

M - 59 WIDTH VARIES

BUILDING INFORMATION  
BUILDING AREA: 38,022 SQ. FT.  
AREA MODIFICATIONS: NONE PER TABLE 503 OF MBO, 2003  
MAX. HEIGHT (EXCLUDING PARAPET): 42 FEET  
CONSTRUCTION TYPE: IEL, NONCOMBUSTIBLE PROTECTED  
OCCUPANCY CLASSIFICATION: BUSINESS w/ ASSEMBLY A-3 (SEPARATED)



LOCATION MAP  
1" = 2000'



**NOWAK & FRAUS**

Consulting Engineers  
Land Surveyors  
Land Planners

4677 Woodward Avenue  
Pontiac, Michigan 48342  
Tel. (248) 332-7931  
Fax. (248) 332-8257

PROJECT  
Center for Health Improvement  
City File No. 07-014

CLIENT  
Hobbs+Black Associates  
100 N. State Street  
Ann Arbor, MI 48104

Contact: Michael Berlin  
(734)663-4189

PROJECT LOCATION  
Part of the SE 1/4 of  
Section 36, T.3N., R.11E.,  
City of Rochester Hills,  
Oakland Co., Michigan

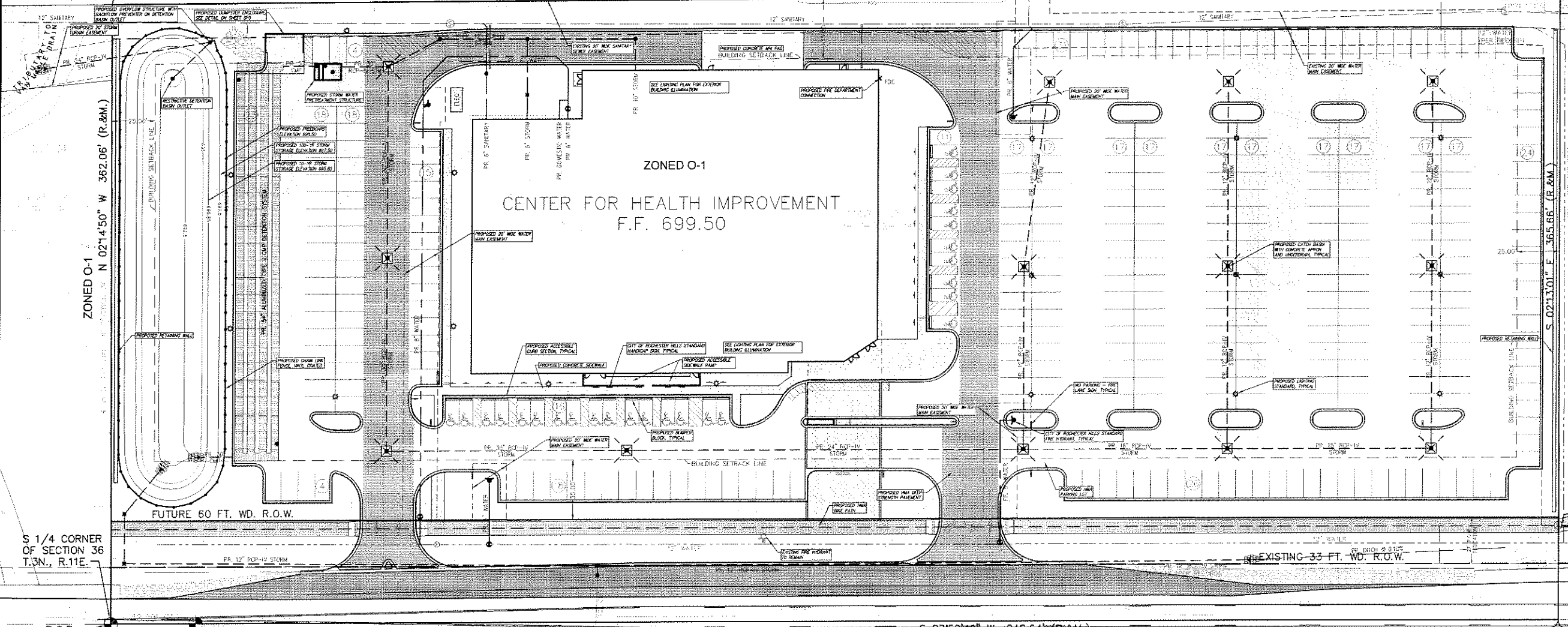


SEAL

DATE REVISION  
02/05/08 Site Plan Submittal  
03/07/08 City Review  
04/29/08 City Review

SHEET  
Site Plan

DRAWN BY:  
J. Wellman  
DESIGNED BY:  
J. Wellman  
APPROVED BY:  
R. Layole  
DATE:  
12/21/07  
SCALE:  
1" = 30'  
N&F JOB NO.  
C550-03  
SHEET NO.  
SP1



SOUTH BOULEVARD E. (PR. 120' WIDE)

**PARKING INFORMATION**  
PARKING VARIANCE REQUESTED:  
REQ. PLOTS: 180  
SPACES: 135  
BASEL. UN. CRITICAL SPACE: 21' (SMALLER DEPARTMENT FACILITY)  
USABLE AREA: 38,022 SF x .509 = 19,476 SF  
PARKING PROVIDED: 135 (7.6 SF / 1 SPACE) (115 - 185 SPACES)  
PARKING PROVIDED: 26 BARRIER FREE & 304 STANDARD SPACES  
VAN ACCESSIBLE PARKING PROVIDED: 4 SPACES

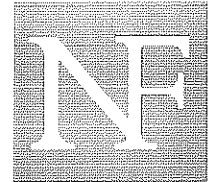
**SCHEDULE OF REGULATIONS REQUIREMENTS PER ZONING ORDINANCE**  
PARCEL CONTAINS: 0-1 (OFFICE BUSINESS)  
FRONT YARD BUILDING SETBACK: 15 FEET  
SIDE YARD BUILDING SETBACK: 10 FEET  
REAR YARD BUILDING SETBACK: 25 FEET  
MINIMUM HEIGHT OF STRUCTURE: 3 STORIES OR 40 FEET  
\* DETERMINATION OF STRUCTURE HEIGHT IN DISTRICT MAY BE DELEGATED TO THE SAME DISTRICT AND MAINTAIN RESPONSIBILITY FOR THE DISTRICT TO VERIFY THAT THE HEIGHT OF THE BUILDING ORDINANCE

**LEGAL DESCRIPTION (PARCEL No. 15-36-452-011, FORMERLY -004 & -009)**  
PART OF THE SOUTHWEST 1/4 OF SECTION 36, TOWNSHIP 3 NORTH, RANGE 11 EAST, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, AND BEING MORE PARTS ARE DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF 1/4 SECTION 36, THENCE NORTH 45° 00' 00" WEST 250.00 FEET TO POINT OF BEGINNING; THENCE S 89° 28' 52" E 33.21 FEET, THENCE S 89° 28' 52" E 815.65 FEET, THENCE S 89° 28' 52" E 815.65 FEET TO THE POINT OF BEGINNING, CONTAINING 6.82 ACRES, INCLUDING 6.82 ACRES OF RIGHT-OF-WAY.

Proprietor  
Rochester Hills Health & Wellness  
Building, LLC  
839 N. Jefferson Street, Suite 200  
Milwaukee, WI 53202

**UTILITY INFORMATION**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SITE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

LEGEND table with symbols for manhole, hydrant, gate valve, etc.



**NOWAK & FRAUS**

Consulting Engineers  
Land Surveyors  
Land Planners

46777 Woodward Avenue  
Pontiac, Michigan 48342  
Tel. (248) 332-7931  
Fax. (248) 332-8257

PROJECT  
Center for Health  
Improvement  
City File No. 07-014

CLIENT  
Hobbs+Black Associates  
100 N. State Street  
Ann Arbor, MI 48104

Contact: Michael Berlin  
(734)663-4189

PROJECT LOCATION  
Part of the SE 1/4 of  
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SEAL

DATE/REVISION  
02/05/08 Site Plan Submittal  
03/07/08 City Review  
04/29/08 City Review

SHEET  
Dimensional Layout  
Plan

DRAWN BY:  
J. Wellman  
DESIGNED BY:  
J. Wellman  
APPROVED BY:  
R. Lavoie  
DATE:  
12/21/07  
SCALE:  
1" = 30'  
N&F JOB NO.

C550-03

SHEET NO.

SP2

NOT TO BE USED FOR CONSTRUCTION DRAWINGS



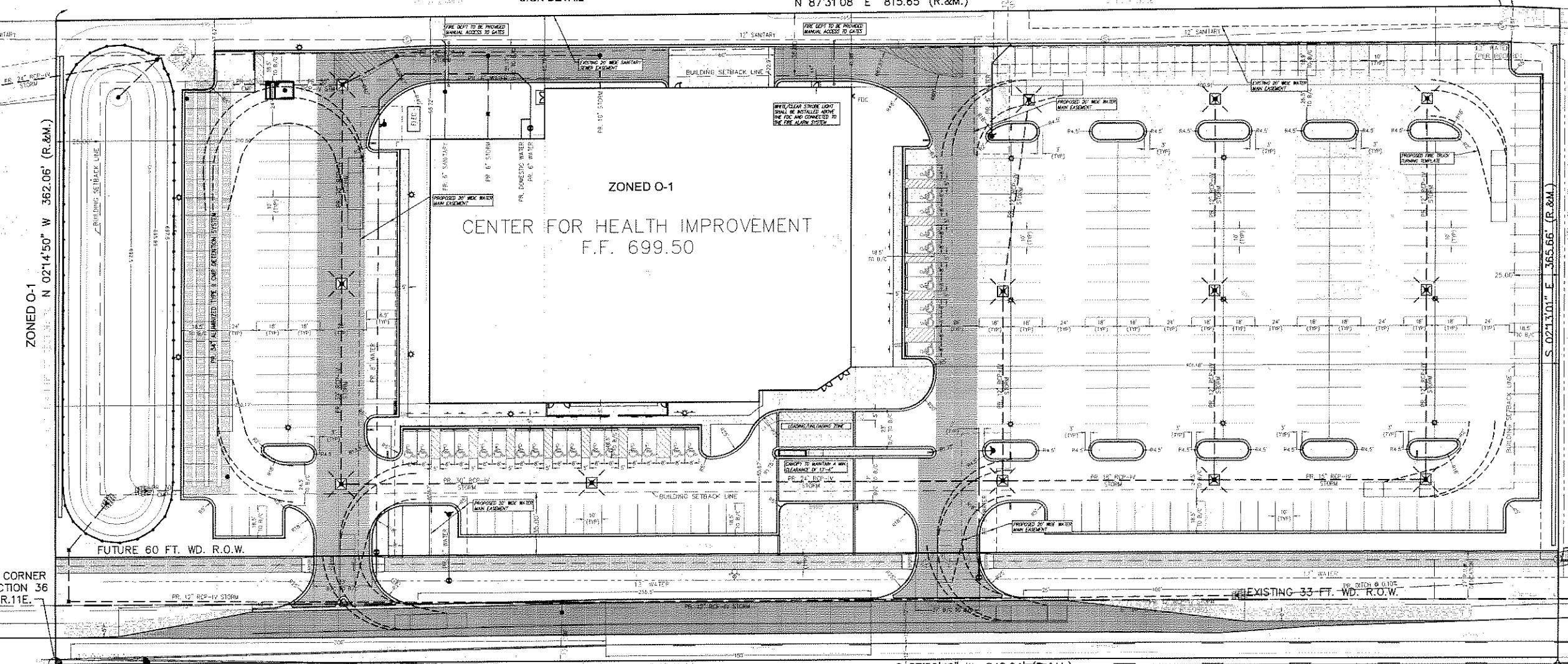
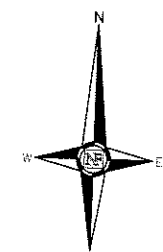
M - 59 WIDTH VARIES

NO PARKING - FIRE LANE  
SIGN DETAIL

N 87°31'08" E 815.65' (R.&M.)

S 89°28'52" E  
33.21' (R.&M.)

LOCATION MAP  
1" = 2000'



ZONED O-1  
CENTER FOR HEALTH IMPROVEMENT  
F.F. 699.50

ZONED O-1  
N 02°14'50" W 362.06' (R.&M.)

ZONED O-1  
S 02°13'01" E 365.66' (R.&M.)

S 187°52'49" W 848.64' (R.&M.)

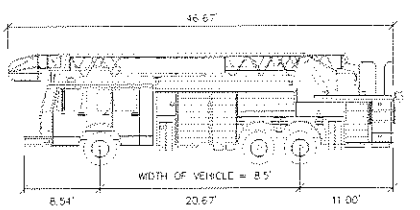
SOUTH BOULEVARD E. (PR. 120' WIDE)

S 1/4 CORNER  
OF SECTION 36  
T.3N., R.11E.

N 1/4 CORNER  
OF SECTION 1  
T.2N., R.11E.

**FIRE DEPARTMENT NOTES**  
A TYPICAL SYSTEM SHALL BE INSTALLED IN A LOCATION APPROVED BY THE FIRE DEPT. (FOR ADDITIONAL PROCEEDING INFORMATION IS AVAILABLE FROM THE FIRE DEPARTMENT)  
FIRE LANE SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE WITH FIRE LANE SIGNS, SPACED NOT MORE THAN 100 FEET APART AND IN CONFORMANCE WITH THE MINIMUM MAINTENANCE OF UNIFORM TRAFFIC CONTROL DEVICES - FIRE PREVENTION ORDINANCE, CHAPTER 28, SECTION 109.004.  
CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH THE 2006, CHAPTER 14

**FIRE DEPARTMENT NOTES (CONT'D)**  
OPEN BURNING, INCLUDING THE BURNING OF TRASH, DEBRIS OR LAND CLEARING MATERIAL, IS NOT PERMITTED. OPEN BURNING FOR WARMING OF SANS AND OR WATER FOR THE PREPARATION OF VEGAN SHALL BE WITHIN THE CITY OF ROCHESTER HILLS RUMP PERMIT GUIDELINES - FIRE PREVENTION ORDINANCE, CHAPTER 28, SECTION 109.6.2 AND 109.6.3.  
EXIT DOORS SHALL REMAIN FREE OF OBSTRUCTIONS AT ALL TIMES. PROVIDE SLATE POSTS OR OTHER ACCEPTABLE MEANS OF PROTECTING EXIT DOORS OPENING ONTO DRIVES AND PARKING AREAS. H.C. 2006, SECTION 1008.2.  
THE BUILDING WILL BE PROVIDED WITH A FULLY AUTOMATIC SPRINKLER SYSTEM, AS WELL AS AN AUTOMATIC WET CLASS I STANDPIPE SYSTEM.

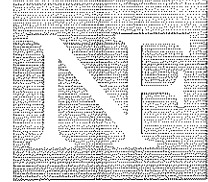


ROCHESTER HILLS TRUCK 1 DIMENSIONS

**LEGEND**

MANHOLE	EXISTING SANITARY SEWER
HYDRANT	EXISTING WATER MAIN
GATE VALVE	EXISTING STORM DRAIN
C.B.	EXISTING REAR YARD BASIN
MANHOLE	EXISTING BURIED CABLES
R.Y.C.B.	OVERHEAD LINES
U.P.	EXISTING SIGN
SUY POLE	EXISTING GAS MAIN
MANHOLE	PROPOSED SANITARY SEWER
HYDRANT	PROPOSED WATER MAIN
GATE VALVE	PROPOSED STORM DRAIN
C.B.	PROPOSED CONCRETE PAVEMENT
MANHOLE	PROPOSED CONCRETE SIDEWALK
	PROPOSED HMA PAVEMENT
	PROPOSED HMA BIKE PATH
	PROPOSED HMA DEEP STRENGTH
	PROPOSED HMA SOUTH BOULEVARD

**NOT TO BE USED FOR CONSTRUCTION DRAWINGS**



**NOWAK & FRAUS**

Consulting Engineers  
Land Surveyors  
Land Planners

4677 Woodward Avenue  
Pontiac, Michigan 48342  
Tel. (248) 332-7931  
Fax. (248) 332-8257

PROJECT  
Center for Health  
Improvement  
City File No. 07-014

CLIENT  
Hobbs+Black Associates  
100 N. State Street  
Ann Arbor, MI 48104

Contact: Michael Berlin  
(734)663-4189

PROJECT LOCATION  
Part of the SE 1/4 of  
Section 36, T.3N., R.11E.,  
City of Rochester Hills,  
Oakland Co., Michigan



SEAL

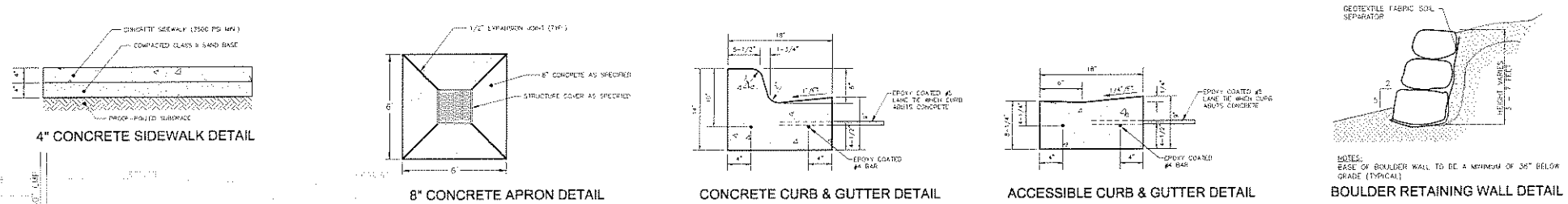
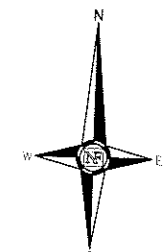
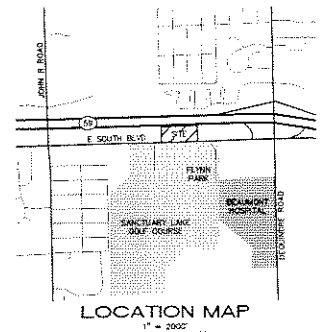
DATE: REVISION  
02/05/08 Site Plan Submittal  
03/07/08 City Review  
04/29/08 City Review

SHEET  
Paving & Grading  
Plan

DRAWN BY:  
J. Wellman  
DESIGNED BY:  
J. Wellman  
APPROVED BY:  
R. Lavoie  
DATE:  
12/21/07  
SCALE:  
1" = 30'  
N&F JOB NO.:

C550-03

SHEET NO. SP3

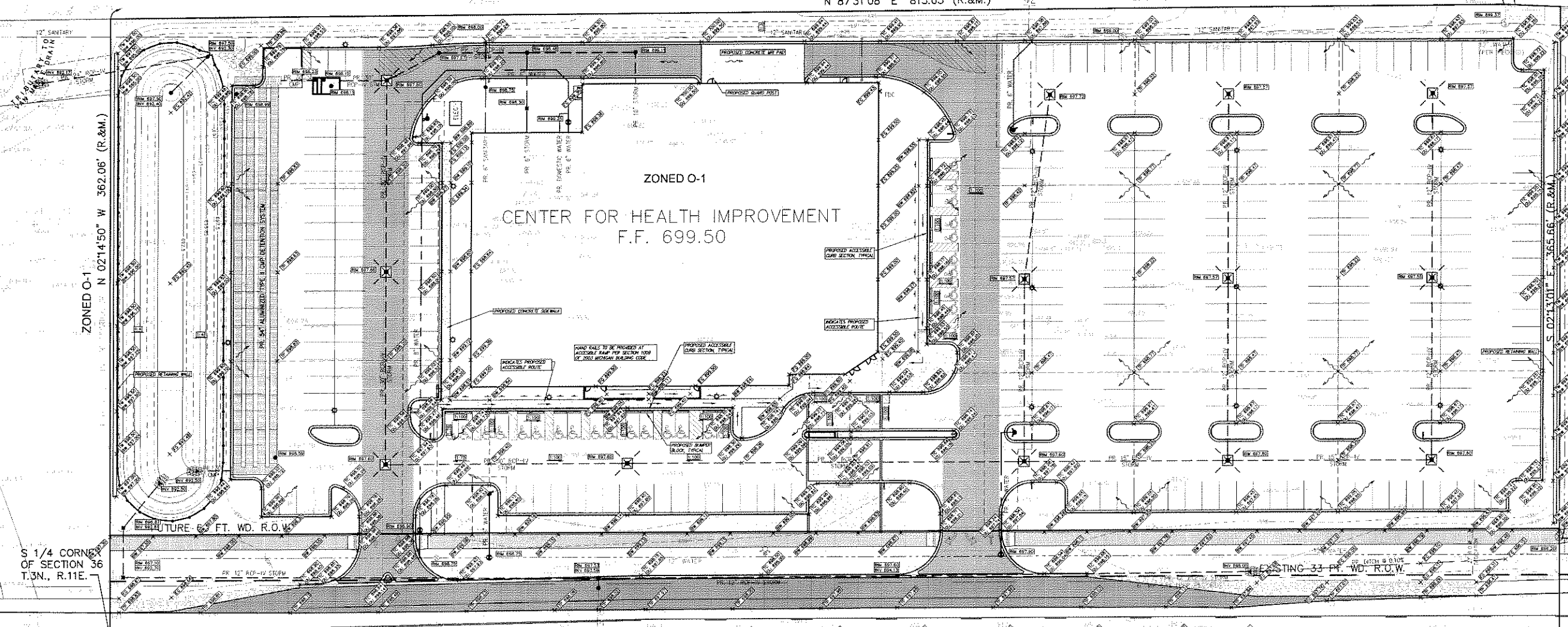


M - 59 WIDTH VARIES

N 87°31'08\"/>

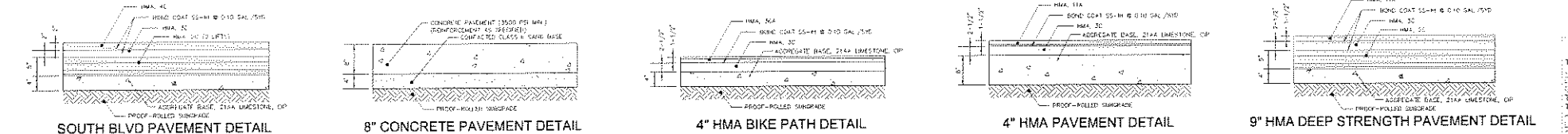
S 89°28'52\"/>

ZONED O-1  
CENTER FOR HEALTH IMPROVEMENT  
F.F. 699.50

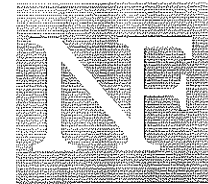


**LEGEND**

	MANHOLE	EXISTING SANITARY SEWER
	HYDRANT	EXISTING WATER MAIN
	C.B. MANHOLE	EXISTING STORM DRAIN
	R.T.C.B. MANHOLE	EXISTING REAR YARD BASIN
	U.P. GUY POLE	EXISTING BURIED CABLES
	OVERHEAD LINES	EXISTING SIGN
	LIGHT POLE	EXISTING GAS MAIN
	PROPOSED MANHOLE	PROPOSED SANITARY SEWER
	PROPOSED HYDRANT	PROPOSED WATER MAIN
	PROPOSED C.B. MANHOLE	PROPOSED STORM DRAIN
	PROPOSED CONCRETE PAVEMENT	PROPOSED CONCRETE SIDEWALK
	PROPOSED HMA PAVEMENT	PROPOSED HMA BIKE PATH
	PROPOSED HMA DEEP STRENGTH	PROPOSED HMA SOUTH BOULEVARD



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Fax. (248) 332-8257

PROJECT  
Center for Health Improvement  
City File No. 07-014

CLIENT  
Hobbs+Black Associates  
100 N. State Street  
Ann Arbor, MI 48104

Contact: Michael Berlin  
(734)663-4189

PROJECT LOCATION  
Part of the SE 1/4 of  
Section 36, T.3N., R.11E.,  
City of Rochester Hills,  
Oakland Co., Michigan

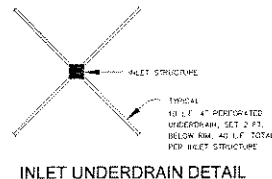
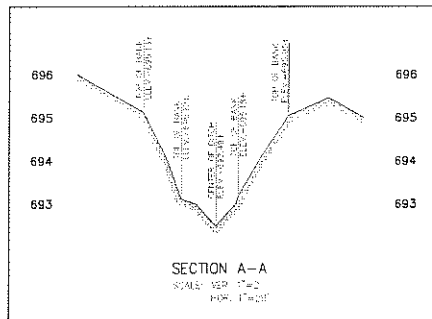


SEAL

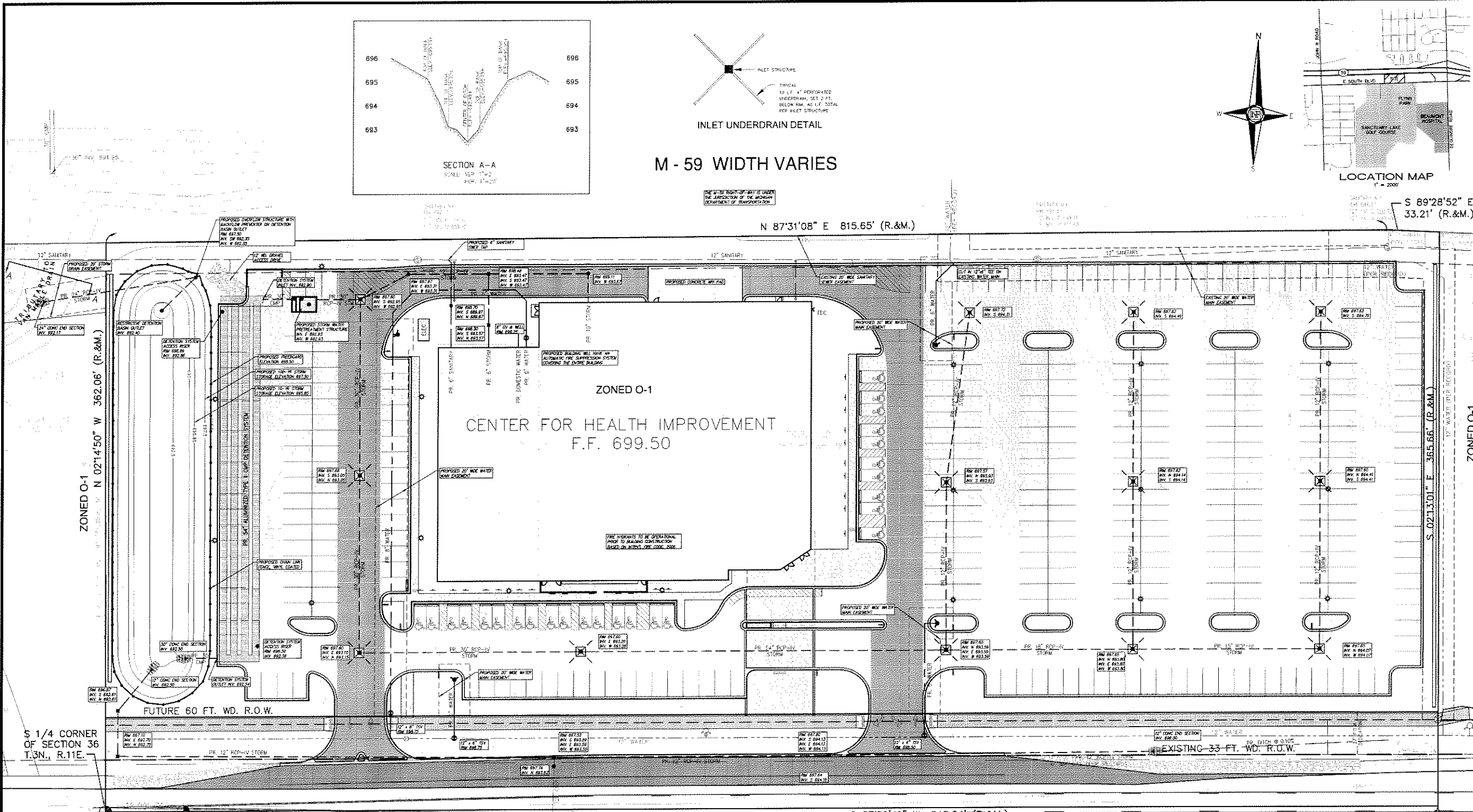
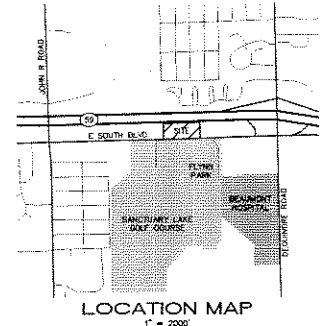
DATE: REVISION  
02/05/08 Site Plan Submittal  
03/07/08 City Review  
04/29/08 City Review

SHEET  
Utility Plan

DRAWN BY:  
J. Wellman  
DESIGNED BY:  
J. Wellman  
APPROVED BY:  
R. Lavie  
DATE:  
12/21/07  
SCALE:  
1" = 30'  
S&F JOB NO.  
C550-03  
SHEET NO.  
SP4



M - 59 WIDTH VARIES



SOUTH BOULEVARD E. (PR. 120' WIDE)

OVERALL SITE RUNOFF COEFFICIENT (c) CALCULATION  
TOTAL DEVELOPED AREA (ADA) = 8,887 ACRES  
IMPERVIOUS SURFACE AREA (ISA) = 4,783 ACRES  
PERMEABLE SURFACE AREA (PSA) = 4,104 ACRES  
 $c = \frac{10 \times (4.783 + 0.9 \times 4.104)}{8.887} = 0.765$

ORIFICE SIZING CALCULATION  
DEPTH OF STORAGE (H) = 4.975 = 49.75"  
ORIFICE AREA (A) =  $0.02 \sqrt{0.02 \times 4.975} = 0.086$  SQ FT  
DIAMETER OF ORIFICE (d) = 0.331 = 3.98 INCHES

10-YR STORAGE ELEVATION: 697.60  
10-YR STORAGE ELEVATION: 690.80

STORM WATER DETENTION CALCULATION  
DETENTION PROVIDED:  
TOTAL DEVELOPED AREA (ADA) = 8,887 ACRES  
ALLOWABLE DISCHARGE (Q) = 0.7 CFS/AC/IN  
DISCHARGE CAPACITY (Q) = 6,221 CFS/AC  
10-YEAR STORM FREQUENCY PROVIDED BY 10-YR S.D.  
STORAGE TIME (T) =  $\frac{10 - 25 + \sqrt{10^2 + 25^2}}{25} = 1.73$  MIN  
STORAGE VOLUME (V) =  $1,126,001 \text{ (FT}^3\text{)} - 406,607 = 719,394 \text{ CF/AC}$   
STORAGE VOLUME PROVIDED (V) = (AW) = 57,875 CF  
10-YEAR STORM FREQUENCY (PROVIDED BY CITY OF ROCHESTER HILLS)  
STORAGE TIME (T) =  $\frac{10 - 25 + \sqrt{10^2 + 25^2}}{25} = 1.73$  MIN  
STORAGE VOLUME (V) =  $1,126,001 \text{ (FT}^3\text{)} - 406,607 = 719,394 \text{ CF/AC}$   
STORAGE VOLUME PROVIDED (V) = (AW) = 57,875 CF

STORM WATER DETENTION CALCULATIONS

ELEV.	AREA (SQ. FT)	DEPTH (FT)	VOLUME (CF)	CUM. VOL. (CF)
697.00	14,266.0	0.50	6,833.0	12,787.0
697.00	13,034.0	1.00	11,849.0	34,636.0
698.00	7,070.0	0.75	5,302.5	39,938.5
698.00	12,328.0	0.80	9,862.4	49,800.9
698.00	8,154.0	1.00	8,154.0	57,954.9
699.00	6,590.0	1.00	6,590.0	64,544.9
699.00	4,251.0	0.50	2,125.5	66,670.4
699.00	3,068.0	0.50	1,534.0	68,204.4
UNDERGROUND DETENTION PROVIDED: 945 FT OF 54" CMP = 15,025.5 CF				
TOTAL VOLUME PROVIDED = 57,875 CF				

FIRE HYDRANT REQUIREMENTS (PER I.F.C. 2006)  
BUILDING TYPE: IS  
GROSS BUILDING AREA = 44,970 SQ FT  
MINIMUM REQ. FLOW = 3,000 GPM  
MINIMUM NO. OF HYDRANTS = 4  
45% HYDRANT SPACING = 350 FT

LEGEND

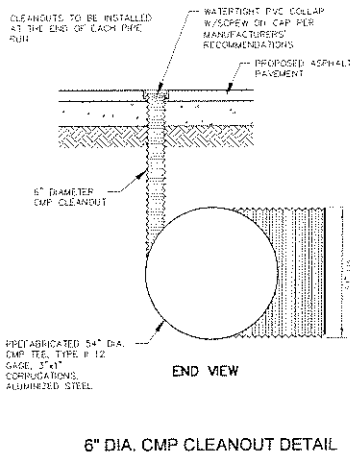
	MANHOLE	EXISTING SANITARY SEWER
	HYDRANT	EXISTING WATER MAIN
	C.B.	EXISTING STORM DRAIN
	R.V.C.B.	EXISTING REAR YARD BASIN
	U.P.	EXISTING BURIED CABLES
	OVERHEAD LINES	
	LIGHT POLE	
	EXISTING SIGN	
	EXISTING GAS MAIN	
	PROPOSED SANITARY SEWER	
	PROPOSED WATER MAIN	
	PROPOSED STORM DRAIN	
	PROPOSED CONCRETE PAVEMENT	
	PROPOSED HMA PAVEMENT	
	PROPOSED HMA DEEP STRENGTH	
	PROPOSED HMA SOUTH BOULEVARD	

THE LOCATIONS AND ELEVATIONS OF EXISTING SANITARY SEWERS AND WATER MAINS SHOWN ON THIS SITE PLAN ARE FOR INFORMATION ONLY. THE USER OF THIS PLAN ASSUMES ALL RESPONSIBILITY FOR THE COMPLETENESS OF ACCURACY THEREOF. THE CONSULTING ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING THE EXISTING UTILITIES AND ELEVATIONS AND FOR THE START OF CONSTRUCTION.

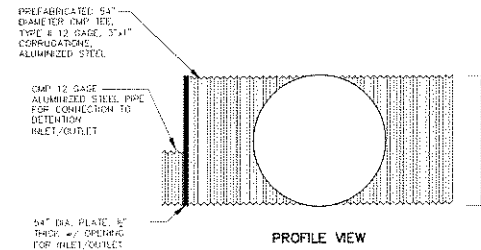


**UNDERGROUND DETENTION SYSTEM MAINTENANCE SCHEDULE**  
 THE UNDERGROUND DETENTION SYSTEM SHALL BE INSPECTED EVERY 6 MONTHS TO VERIFY PROPER OPERATION AND TO IDENTIFY AND PERFORM ANY NECESSARY MAINTENANCE.

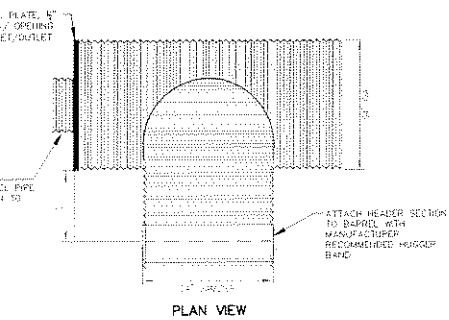
THE DETENTION SYSTEM SHALL BE CLEANED AT ANY TIME THAT ITS VOLUME IS REDUCED BY MORE THAN TEN (10) PERCENT DUE TO ACCUMULATION OF SILT AND SEDIMENT.



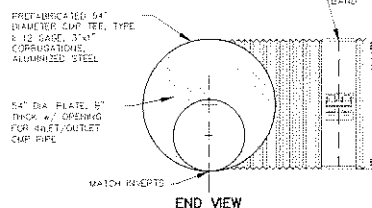
6" DIA. CMP CLEANOUT DETAIL



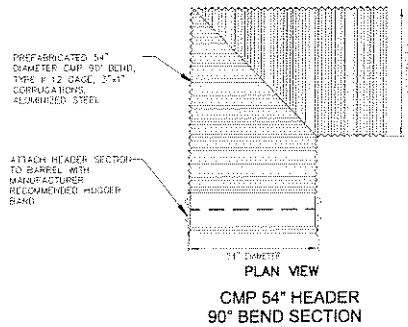
60" DIA. CMP HEADER TEE DETAIL AT DETENTION SYSTEM INLET/OUTLET



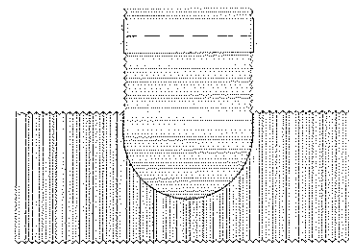
60" DIA. CMP HEADER TEE DETAIL AT DETENTION SYSTEM INLET/OUTLET



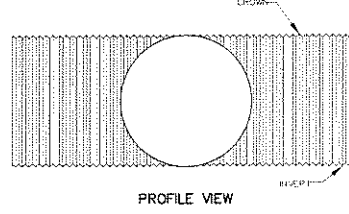
60" DIA. CMP HEADER TEE DETAIL AT DETENTION SYSTEM INLET/OUTLET



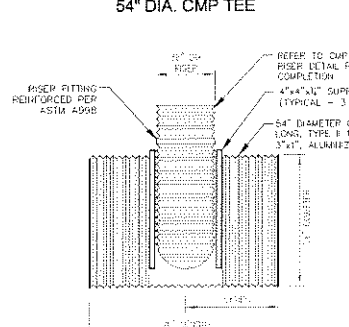
CMP 54" HEADER 90° BEND SECTION



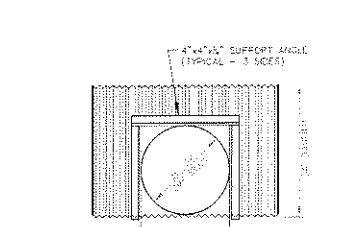
PLAN VIEW



PROFILE VIEW

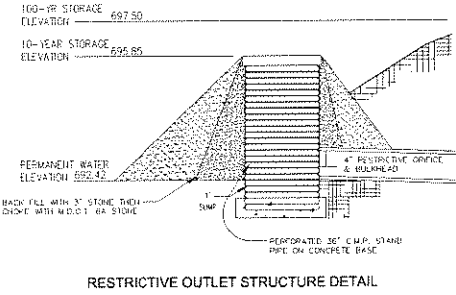


PROFILE VIEW

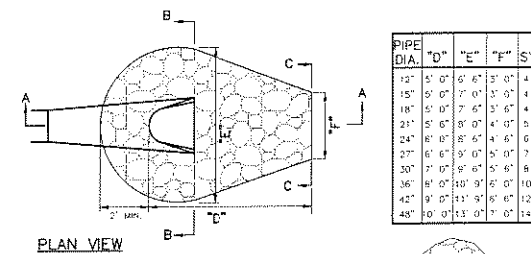


PLAN VIEW

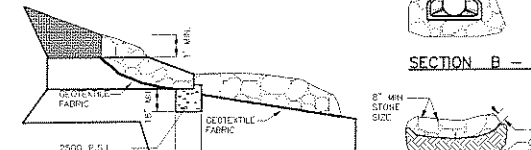
54" DIA. CMP BARREL DETAIL W/MANHOLE RISER



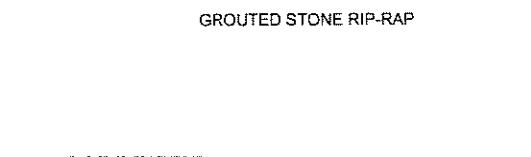
RESTRICTIVE OUTLET STRUCTURE DETAIL



PLAN VIEW

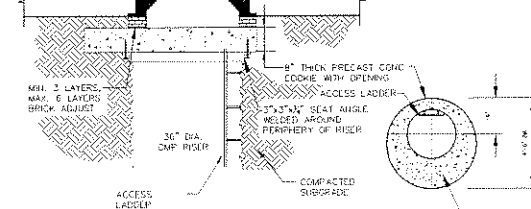


SECTION A - A

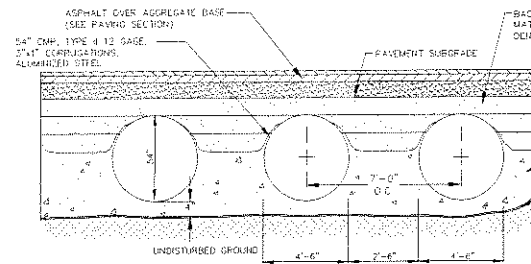


SECTION C - C

GRAOUTED STONE RIP-RAP



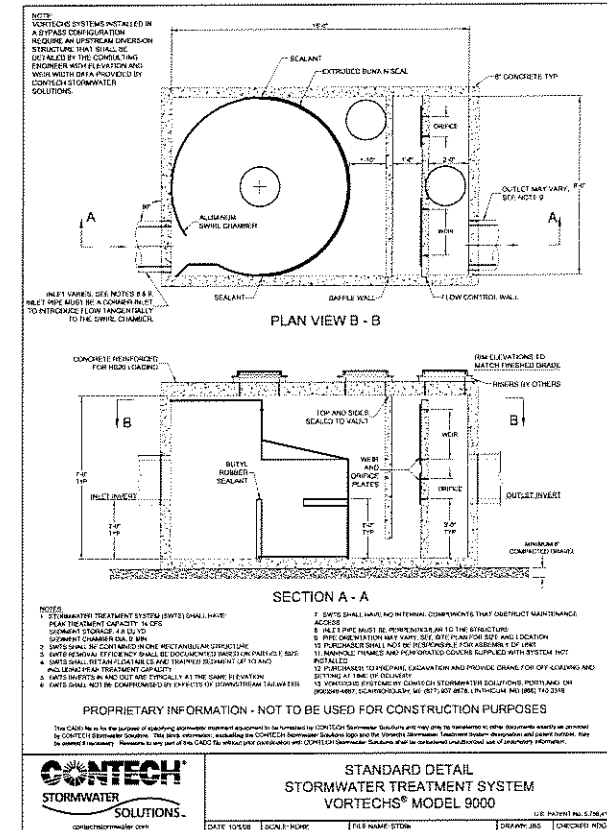
CMP MANHOLE RISER DETAIL



BACKFILL / BEDDING DETAIL FOR UNDERGROUND DETENTION PIPE SYSTEM

**SOUTH BOULEVARD DETENTION CALCULATIONS**  
 CONTRIBUTING R.O.W. AREA (A1) = 23.5 ACRES  
 ALLOWABLE DISCHARGE (Qa) = 0.2 CFS/ACRE = 0.700 CFS  
 ASSUMED RUNOFF COEFFICIENT = 0.50  
 DISCHARGE/IMPERVIOUS ACRE (Qa) = 0a/Qa = 0.400 CFS/AC  
 10-YEAR STORM FREQUENCY (REQUIRED BY CITY OF ROCHESTER HILLS)  
 STORAGE TIME (T) = 25-SORT(862.5/06) = 103.09 MIN  
 STORAGE VOLUME/IMP. ACRE (V) = [10500T/(T+25)] 400QT = 660'2.0 CF/AC  
 STORAGE VOLUME (V1) = (A1V) = 11,902'0 CF

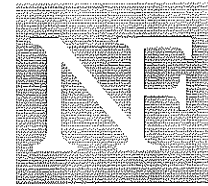
AVAILABLE STORAGE IN DETENTION SYSTEM = 23,875 CF x 11,902'0 CF  
 THEREFORE DETENTION SYSTEM HAS CAPACITY TO ACCOMMODATE FLOOD DRAINAGE FROM SOUTH BOULEVARD DURING A 10-YEAR STORM EVENT



STANDARD DETAIL STORMWATER TREATMENT SYSTEM VORTECHS® MODEL 9000

DATE: 03/08/08  
 REVISION: 02/05/08 Site Plan Submittal  
 03/07/08 City Review  
 04/29/08 City Review

DATE: 12/21/07  
 SCALE: None  
 N&F JOB NO.: C550-03  
 SHEET NO.: SP6



**NOWAK & FRAUS**

Consulting Engineers  
 Land Surveyors  
 Land Planners

46777 Woodward Avenue  
 Pontiac, Michigan 48342  
 Tel: (248) 332-7931  
 Fax: (248) 332-8257

PROJECT  
 Center for Health Improvement  
 City File No. 07-014

CLIENT  
 Hobbs + Black Associates  
 100 N. State Street  
 Ann Arbor, MI 48104

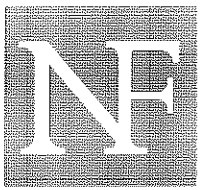
Contact: Michael Berlin  
 (734)663-4189

PROJECT LOCATION  
 Part of the SE 1/4 of  
 Section 36, T.3N., R.11E.,  
 City of Rochester Hills,  
 Oakland Co., Michigan



SEAL





# NOWAK & FRAUS

Consulting Engineers  
Land Surveyors  
Land Planners

46777 Woodward Avenue  
Pontiac, Michigan 48342  
Tel. (248) 332-7931  
Fax. (248) 332-8267

PROJECT  
Center for Health Improvement

CLIENT  
Hobbs+Black Associates  
100 N. State Street  
Ann Arbor, MI 48104  
Contact: Michael Berlin  
(734)663-4189  
PROPRIETOR  
Rochester Hills Health & Wellness Building, LLC  
839 N. Jefferson Street, Ste 200  
Milwaukee, WI 53202

PROJECT LOCATION  
Part of the SE 1/4  
of Section 36  
T. 3 North, R. 11 East  
City of Rochester Hills,  
Oakland County, Michigan

SEAL



DATE/REVISION  
02-05-08 SITE PLAN SUBMISSION  
02-07-08 REVISED FOR CITY REVIEW  
04-24-08 REVISED FOR CITY REVIEW

SHEET  
Tree Preservation Plan



DRAWN BY:  
G. Ostrowski  
DESIGNED BY:  
G. Ostrowski  
APPROVED BY:  
G. Ostrowski  
DATE:  
09/14/07  
SCALE:  
1" = 40'  
N&F JOB NO.  
C550-03  
SHEET NO.  
L1

### GENERAL TREE PROTECTION NOTES

- APPROVED TREE PROTECTION SHALL BE CREATED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL THE IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
- ALL UNDERSTORY VEGETATION WITHIN THE LIMITS OF PROTECTIVE FENCING SHALL BE PRESERVED.
- NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING BUT NOT LIMITED TO, PLACING SOLVENTS, BUILDING MATERIALS, CONSTRUCTION EQUIPMENT OR SOIL DEPOSITS WITHIN THE DRIP LINE.
- WHERE GROUPINGS OF TREES ARE TO REMAIN, TREE FENCING SHALL BE PLACED AT THE LIMITS OF GRADING LINE.
- DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR HIRE TO ANY TREE SCHEDULED TO REMAIN.
- ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
- SHALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIP LINES OF PROTECTED TREES.
- TREES LOCATED ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
- ROOT ZONES OF PROTECTED TREES SHOULD BE SURROUNDED WITH RIGIDLY STAKED FENCING.
- THE PARKING OF IDLE AND RUNNING EQUIPMENT SHALL BE PROHIBITED UNDER THE DRIP LINE OF PROTECTED TREES.
- THE STRIPPING OF TOPSOIL FROM AROUND PROTECTED TREES SHALL BE PROHIBITED.
- ALL TREES TO BE REMOVED SHALL BE CUT AWAY FROM TREES TO REMAIN.
- THE GRUBBING OF JACOBSTORY VEGETATION WITHIN CONSTRUCTION AREAS SHOULD BE CLEARED BY CUTTING VEGETATION AT THE GROUND WITH A CHAIN SAW OR MINIMALLY WITH A HYDRO-AXE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT PER ORDINANCE GUIDELINES, FOR THE DAMAGE OR REMOVAL OF ANY TREE DESIGNATED TO REMAIN.
- TREES TO BE REMOVED SHALL BE FIELD VERIFIED, EVALUATED AND FLAGGED FOR REMOVAL BY THE LANDSCAPE ARCHITECT OR FORESTER, ONLY AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.

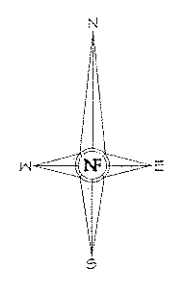


NOTE:  
SEE SHEET L2, LANDSCAPE PLAN FOR PROPOSED TREE REPLACEMENT LOCATIONS

NOTE:  
NO DIGGING, GRADING (CUT OR FILL), TRENCHING OR ANY OTHER CONSTRUCTION OPERATION IS PERMITTED WITHIN THE DRIPLINE OF ANY TREE DESIGNATED FOR PRESERVATION.

### TREE PROTECTION LEGEND

- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED
- PROPOSED TREE PROTECTION FENCING



EXISTING TREES TO REMAIN, TYPICAL

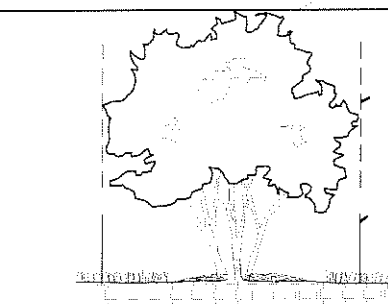
EXISTING TREE TO BE REMOVED, TYPICAL

M - 59 WIDTH VARIES

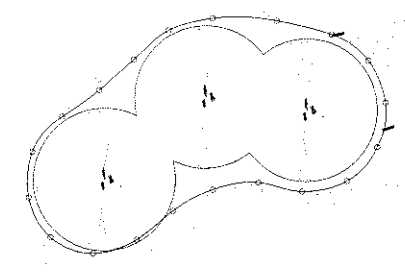
CENTER FOR HEALTH IMPROVEMENT  
F.F. 699.50

PROPOSED 4' HT BLACK VINYL COATED CHAIN LINK FENCE

SOUTH BOULEVARD (WIDTH VARIES)



TREE PROTECTION DETAIL-SECTION



TREE PROTECTION DETAIL-PLAN

5/8" X 6/8" RE-ROD, OR EQUAL, SUPPORT POSTS EVERY 10' O.C. INSTALL POSTS A MIN. 24" INTO GROUND, TYPICAL

4' HIGH FENCING AS SPECIFIED TO BE PLACED AT DRIP LINE OR LIMITS OF GRADING, AS INDICATED ON PLAN, TYPICAL

NOTE:  
PROTECTION FENCING TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD

### TREE PRESERVATION SUMMARY

TREES 16" DBH SHALL BE REPLACED AT 1:1

2' CAL. DECIDUOUS	= 1 CREDIT
25' CAL. DECIDUOUS	= 15 CREDIT
3' CAL. DECIDUOUS	= 2 CREDITS
8' HT. EVERGREEN	= 1 CREDIT
10' HT. EVERGREEN	= 2 CREDITS

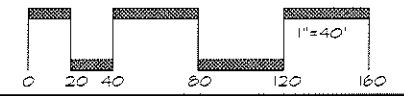
  

TOTAL TREES SURVEYED:	256
TOTAL DEAD TREES ON-SITE:	28
TOTAL ASH TREES ON-SITE:	19
TOTAL OFF-SITE TREES:	6
TOTAL NET REGULATED TREES:	203
TOTAL TREES TO BE SAVED:	203
TOTAL TREES TO BE REMOVED:	203
TOTAL REPLACEMENT CREDITS REQUIRED:	203
TOTAL REPLACEMENT CREDITS PROVIDED:	845

\*MONEY WILL BE PAID INTO THE CITY TREE FUND FOR 118.5 REPLACEMENTS  
118.5 CREDITS AT \$171.00 PER CREDIT = \$20,269.50

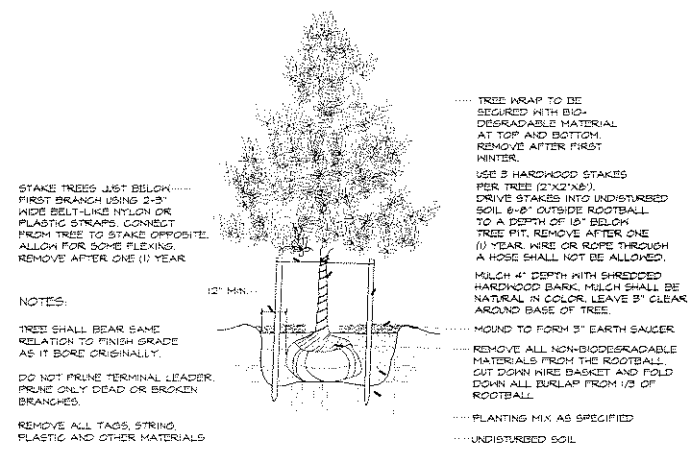
NOTE:  
SEE TOPOGRAPHIC SURVEY FOR TREE INVENTORY, INCLUDING SIZE, SPECIES AND CONDITION

NOT TO BE USED FOR CONSTRUCTION  
CITY FILE NO. 07-014

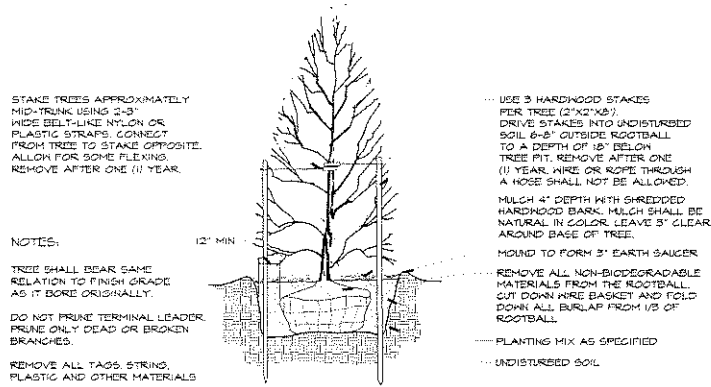


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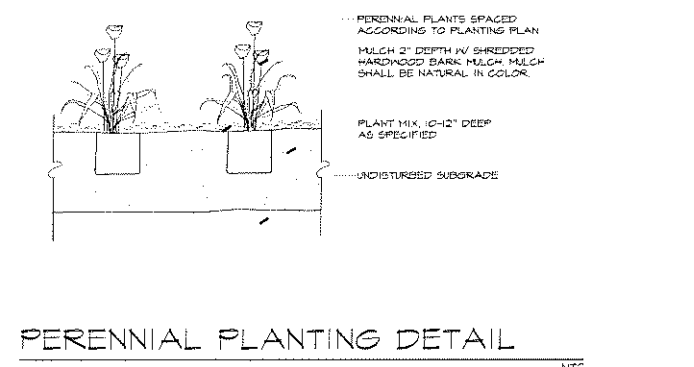




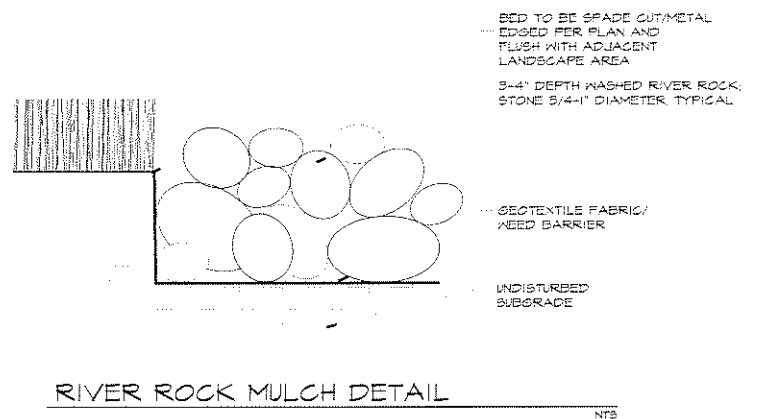
DECIDUOUS TREE PLANTING DETAIL NTS



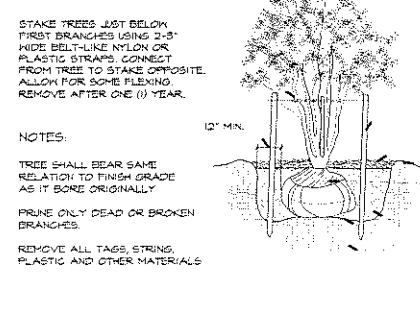
EVERGREEN TREE PLANTING DETAIL NTS



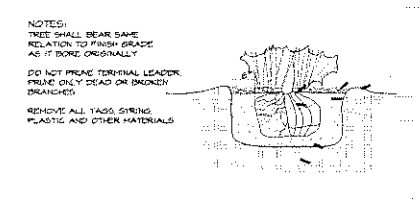
PERENNIAL PLANTING DETAIL NTS



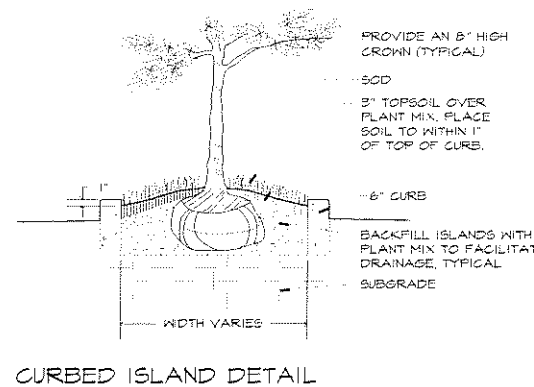
RIVER ROCK MULCH DETAIL NTS



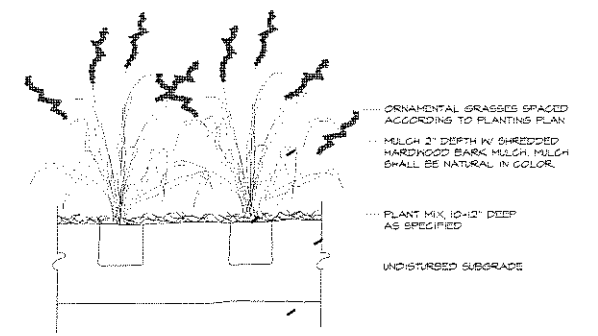
MULTI-STEM TREE PLANTING DETAIL NTS



HEDGE PLANTING DETAIL NTS



CURBED ISLAND DETAIL NTS



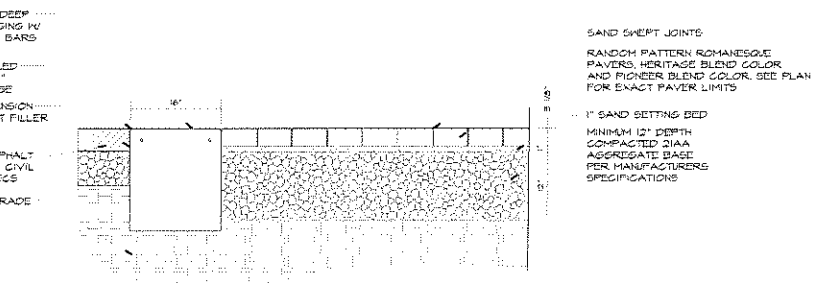
ORNAMENTAL GRASS PLANTING DETAIL NTS

DETENTION BASIN SEED MIX  
 \*CONTAINS AT LEAST 12 WILDFLOWERS AND 3 GRASSES

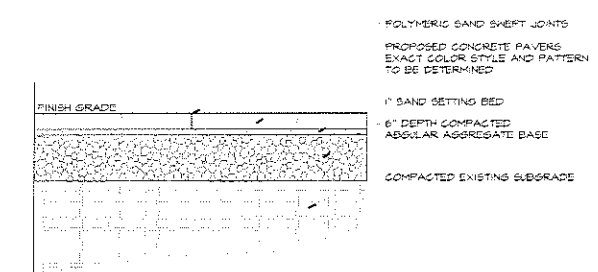
- | WILDFLOWERS             | GRASSES            |
|-------------------------|--------------------|
| NEW ENGLAND ASTER       | BIG BLUESTEM       |
| PALE INDIAN PLANTAIN    | CANADA WILD RYE    |
| BONESET                 | DARK GREEN BULRUSH |
| OX EYE SUNFLOWER        | INDIAN GRASS       |
| DENSE BLAZINGSTAR       | PRAIRIE CORD GRASS |
| GREAT BLUE LOBELIA      |                    |
| CARDINAL FLOWER         |                    |
| BERGAMOT (BEEBALM)      |                    |
| YELLOW CONEFLOWER       |                    |
| GREEN-HEADED CONEFLOWER |                    |
| BLACK-EYED SUSAN        |                    |
| CUPPLANT                |                    |
| OHIO GOLDENROD          |                    |
| BLUE VERVAIN            |                    |
| CULVERS ROOT            |                    |
| IRONWEED                |                    |
- RECOMMENDED SEEDING RATE: 25 LBS/ACRE  
 SEED MIX AVAILABLE:  
 NATIVESCAPE, LLC  
 PO BOX 122  
 MANCHESTER, MI 48158  
 T 313.456.9696

SHORT WILDFLOWER MIX  
 \*COMPRISED OF NATIVE WILDFLOWERS, NATIVE GRASSES, & TEMPORARY GRASSES

- 50% NATIVE WILDFLOWERS
- |                      |                      |
|----------------------|----------------------|
| COLUMBINE            | AGILEGIA CANADENSIS  |
| WORMWOOD             | ARTEMISIA CAMPESTRIS |
| BUTTERFLY WEED       | ASCLEPIAS TUBEROSA   |
| LANEALF COREOPSIS    | COREOPSIS LANCEOLATA |
| ROUNDHEAD BUSHCLOVER | LESPEDEZA CAPITATA   |
| ROUGH BLAZINGSTAR    | LIATRIS ASPERA       |
| WILD LUPINE          | LUPINUS PERENNIS     |
| BERGAMOT             | MONARDA FISTULOSA    |
| BLACK-EYED SUSAN     | RUDEBECKIA HIRTA     |
| STIFF GOLDENROD      | SOLIDAGO RIGIDA      |
- 20% NATIVE GRASSES
- |                     |                          |
|---------------------|--------------------------|
| BLENDER WHEAT GRASS | AGROPHYRON TRACHYGALUM   |
| SIDE-OATS GRAMA     | BOUTELOUA CURTIPENDULA   |
| JUNEGRASS           | KOeleria CHAGRANTHA      |
| DEERTONGUE          | PANICUM CLANDESTINUM     |
| LITTLE BLUESTEM     | SCHIZACHYRIUM SCOPARIUM  |
| SAND DROPSSEED      | SPOROBOOLIS CRYPATANDRUS |
| PRAIRIE DROPSSEED   | SPOROBOOLIS HETEROLEPIS  |
- 50% TEMPORARY GRASSES
- |                      |                    |
|----------------------|--------------------|
| ANNUAL RYE           | LOLIUM MULTIFLORUM |
| SEED OATS            | AVENA SATIVA       |
| SHORT FESCUE SPECIES | FESTUCA SPP.       |
- RECOMMENDED SEEDING RATES  
 60 LBS/ACRE  
 SEED MIX AVAILABLE  
 NATIVESCAPE, LLC  
 10550 CLINTON ROAD  
 MANCHESTER, MI 48158  
 T 313.456.9696

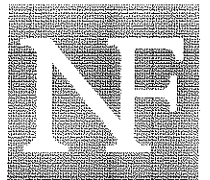


CONCRETE PAVER/ENTRY DRIVE SECTION NTS



CONCRETE PAVER WALK SECTION NTS

NOT TO BE USED FOR CONSTRUCTION  
 CITY FILE NO. 07-014



NOWAK & FRAUS

Consulting Engineers  
 Land Surveyors  
 Land Planners

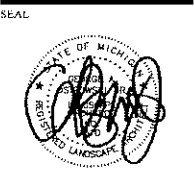
46777 Woodward Avenue  
 Pontiac, Michigan 48342  
 Tel. (248) 332-7931  
 Fax. (248) 332-8257

PROJECT  
 Center for Health Improvement

CLIENT  
 Hobbs + Black Associates  
 100 N. State Street  
 Ann Arbor, MI 48104  
 Contact: Michael Berlin  
 (734)663-4189

PROPRIETOR  
 Rochester Hills Health & Wellness Building, LLC  
 839 N. Jefferson Street, Ste 200  
 Milwaukie, WI 53202

PROJECT LOCATION  
 Part of the SE 1/4 of Section 36  
 T. 3 North, R. 11 East  
 City of Rochester Hills,  
 Oakland County, Michigan

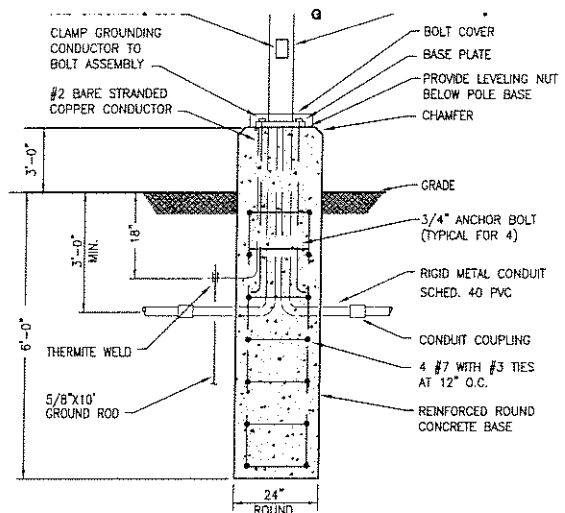


DATE/REVISION  
 02-09-08 SITE PLAN SUBMISSION  
 08-07-08 REVISED PER CITY REVIEW  
 04-24-09 REVISED PER CITY REVIEW

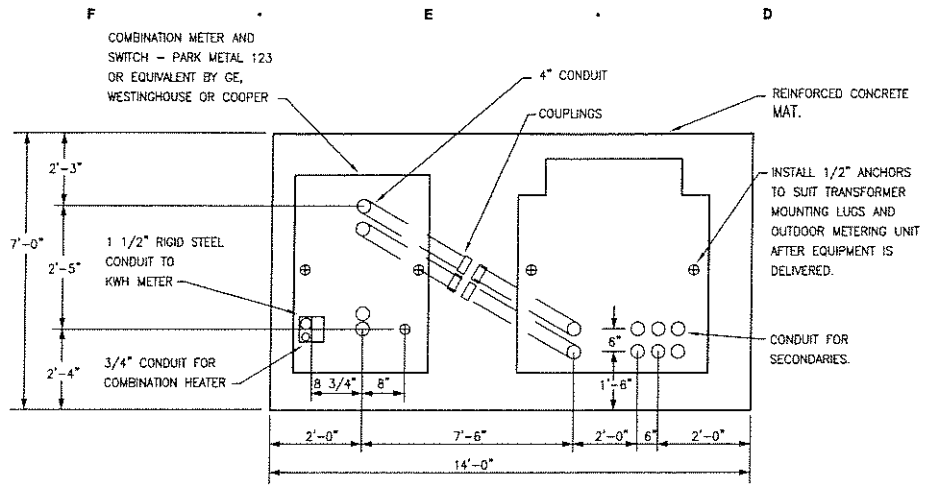
SHEET  
 Landscape Notes and Details



DRAWN BY:  
 G. Ostrowski  
 DESIGNED BY:  
 G. Ostrowski  
 APPROVED BY:  
 G. Ostrowski  
 DATE:  
 09/14/07  
 SCALE:  
 VARIES  
 N&F JOB NO.  
 C550-03  
 SHEET NO. L3



**LIGHTING POLE BASE DETAIL**  
NO SCALE



**METERING UNIT AND TRANSFORMER PAD DETAIL**  
NO SCALE

**LITHONIA LIGHTING**  
HAMB  
KSE2  
METAL HALIDE  
277V 250W 700MA 2500 HOURS  
27" x 48" x 10 1/2"

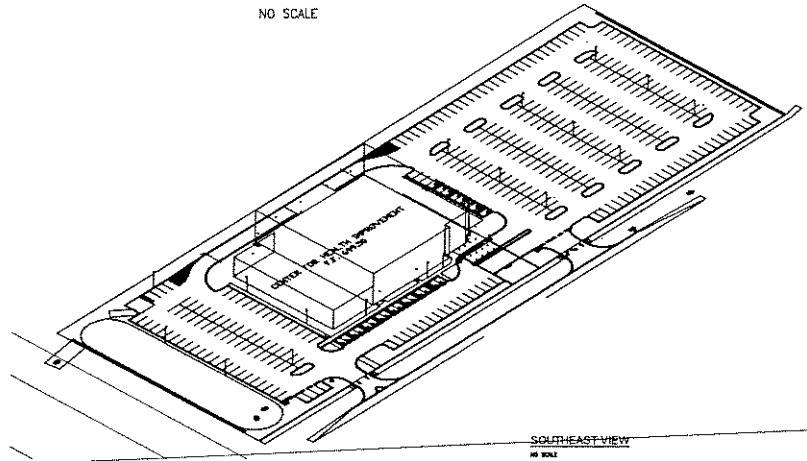
**FEATURES & SPECIFICATIONS**  
KSE2 is a high performance metal halide luminaire designed for use in a wide variety of applications. It features a rugged, weather-resistant, cast aluminum housing with a clear polycarbonate lens. The luminaire is available in a variety of mounting options and is suitable for use in both indoor and outdoor environments. It is designed to provide long life and low maintenance. For more information, visit our website at [www.lithonia.com](http://www.lithonia.com).

**ORDERING INFORMATION**  
KSE2-250-277-1000  
KSE2-250-277-2000  
KSE2-250-277-3000  
KSE2-250-277-4000  
KSE2-250-277-5000  
KSE2-250-277-6000  
KSE2-250-277-7000  
KSE2-250-277-8000  
KSE2-250-277-9000  
KSE2-250-277-10000

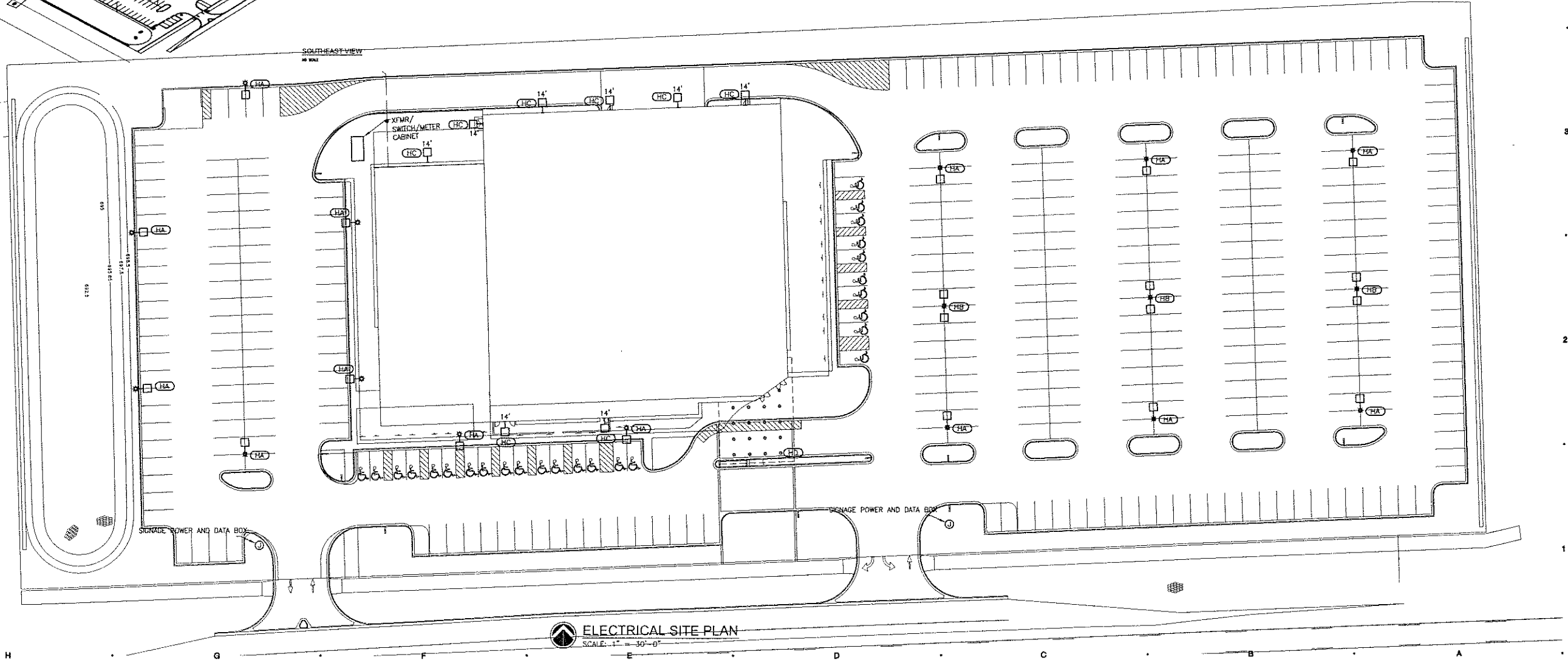
**LITHONIA LIGHTING**  
HAMB  
WSR  
RECESSED WALL MOUNTED LIGHTING  
METAL HALIDE  
100W/150W/200W/250W/300W/350W/400W/450W/500W/550W/600W/650W/700W/750W/800W/850W/900W/950W/1000W

**FEATURES & SPECIFICATIONS**  
WSR is a recessed wall mounted lighting fixture designed for use in a wide variety of applications. It features a rugged, weather-resistant, cast aluminum housing with a clear polycarbonate lens. The luminaire is available in a variety of mounting options and is suitable for use in both indoor and outdoor environments. It is designed to provide long life and low maintenance. For more information, visit our website at [www.lithonia.com](http://www.lithonia.com).

**ORDERING INFORMATION**  
WSR-100-277-1000  
WSR-150-277-1000  
WSR-200-277-1000  
WSR-250-277-1000  
WSR-300-277-1000  
WSR-350-277-1000  
WSR-400-277-1000  
WSR-450-277-1000  
WSR-500-277-1000  
WSR-550-277-1000  
WSR-600-277-1000  
WSR-650-277-1000  
WSR-700-277-1000  
WSR-750-277-1000  
WSR-800-277-1000  
WSR-850-277-1000  
WSR-900-277-1000  
WSR-950-277-1000  
WSR-1000-277-1000



LUMINAIRE SCHEDULE			
FIXTURE MARK	DESCRIPTION	MANUFACTURER(S)	LAMP DESCRIPTION
HA	EXTERIOR 20' POLE MOUNTED FIXTURE. 17" DARK BRONZE POLE ON A 3' CONCRETE BASE WITH A DARK BRONZE SQUARE SHAPE, SEAM WELDED LUMINAIRE. .125" THICK IMPACT RESISTANT TEMPERED GLASS LENS. 277V, SINGLE FUSE WITH LAMP INCLUDED.	1. LITHONIA KSE2 SERIES	(1) 250MH
HB	EXTERIOR 20' POLE MOUNTED FIXTURE. 17" DARK BRONZE POLE ON A 3' CONCRETE BASE WITH TWIN MOUNTED DARKBRONZE SQUARE SHAPE, SEAM WELDED LUMINAIRES. .125" THICK IMPACT RESISTANT TEMPERED GLASS LENS. 277V, SINGLE FUSE WITH LAMP INCLUDED.	1. LITHONIA KSE2 SERIES	(2) 250MH
HC	EXTERIOR WALLPACK, HALF CIRCLE DESIGN, TEXTURED DARK BRONZE FINISH, WIDE THROW DISTRIBUTION. 277V, SINGLE FUSE WITH LAMP INCLUDED.	1. LITHONIA WSR SERIES	(1) 100MH
HD	EXTERIOR 70W METAL HALIDE DOWNLIGHT. SPUN METAL REFLECTOR, FLAT GLASS PRISMATIC LENS. 277V, SINGLE FUSE WITH LAMP INCLUDED.	1. KIRLIN VRR 07045 SERIES	(1) 70MH



PER CITY REVIEW 04/29/08  
PER CITY REVIEW 03/27/08  
DATE ISSUED  
DAB  
DRAWN BY  
JTA  
CHECKED BY

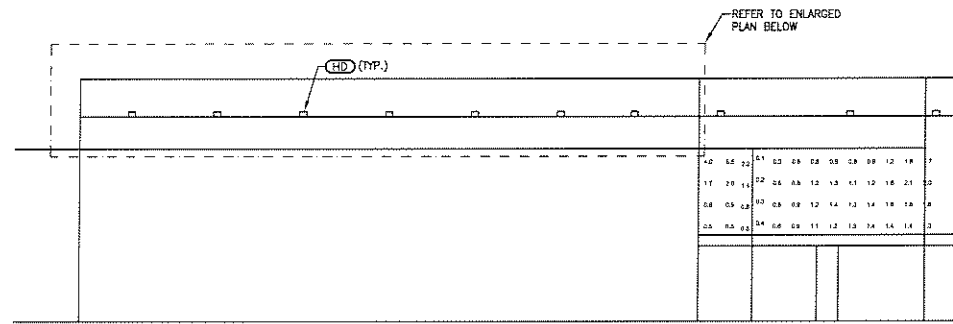
ROCHESTER HILLS HEALTH  
WELLNESS CENTER  
NEW CENTER FOR HEALTH  
IMPROVEMENTS

PROJECT  
**SES**  
Strategic Energy Solutions  
23237 Woodward Avenue Ferndale, MI 48220  
Phone 248.399.1900 Fax 248.399.1901  
www.sesnet.com

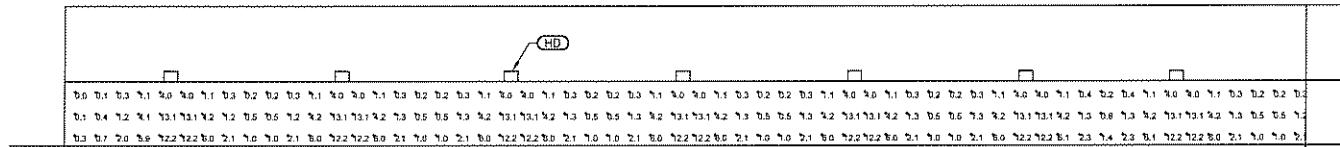
CONSULTANT  
ELECTRICAL  
SITE PLAN  
SHEET TITLE  
PROJECT NUMBER  
E001  
SHEET NUMBER

STATISTICS					
Description	Avg	Max	Min	Max/Min	Avg/Min
CANOPY	11.3 ft	15.2 ft	4.3 ft	3.5:1	2.6:1
EAST PARKING	1.3 ft	7.4 ft	0.1 ft	74.0:1	13.0:1
EAST WALKWAY	1.6 ft	8.7 ft	0.2 ft	43.5:1	5.0:1
NORTH PARKING	1.0 ft	3.6 ft	0.1 ft	36.0:1	10.0:1
NORTH WALKWAY	1.6 ft	2.8 ft	0.1 ft	29.0:1	10.0:1
Property Line	0.8 ft	1.3 ft	0.0 ft	N/A	N/A
SW WALKWAY	2.7 ft	8.5 ft	0.6 ft	14.2:1	4.5:1
SOUTH PARKING	0.8 ft	8.2 ft	0.1 ft	82.0:1	8.0:1
WEST PARKING	1.0 ft	3.6 ft	0.2 ft	19.0:1	5.0:1
Alum front	1.1 ft	2.1 ft	0.1 ft	21.0:1	11.0:1
Alum front North	1.7 ft	5.5 ft	0.5 ft	11.0:1	3.4:1
Upper Ledge	13.7 ft	34.3 ft	0.8 ft	42.9:1	17.1:1
Upper Ledge Back Wall	3.7 ft	13.1 ft	0.0 ft	N/A	N/A

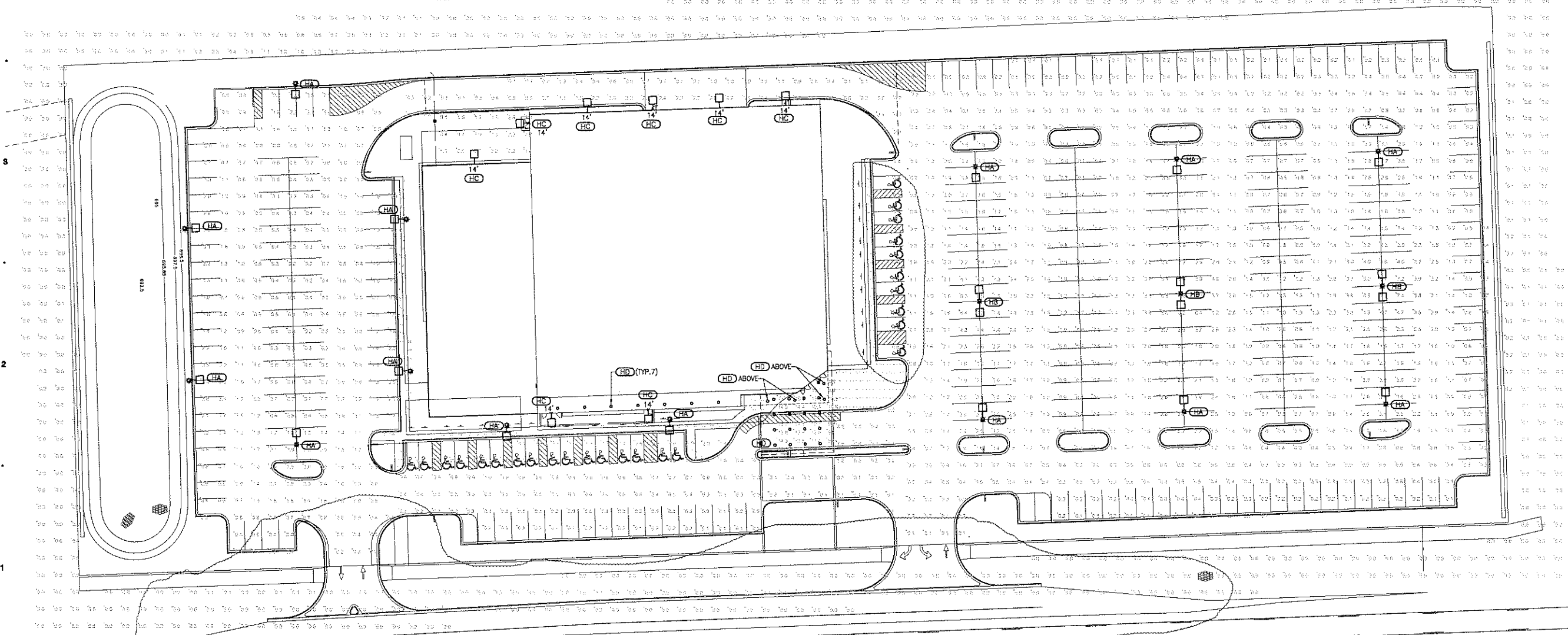
LUMINAIRE SCHEDULE									
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LF	Watts
	HA	14	KSE2 250M R59	TYPE 5, SHORT, CUTOFF, 20' AFF	250 WATT METAL HALIDE	95020530.IES	20000	0.65	295
	HC	9	WSR 100M WT	ARCHITECTURAL SCIENCE WITH WIDE THROW DISTRIBUTION WITH CLEAR, FLAT GLASS LENS. CLEAR LAMP. Meets the NIGHTTIME FRIENDLY Criteria, 14' AFF	ONE 100-WATT CLEAR ED-17 METAL HALIDE, HORIZONTAL POSITION.	L7L1955C.ies	8500	0.65	140
	HB	3	KSE2 250M R59	TYPE 5, SHORT, CUTOFF, 20' AFF	250 WATT METAL HALIDE	95020530.IES	20000	0.65	590
	HD	26	VRR-07045	FABRICATED METAL HICKING SPRUN SPECULAR METAL REFLECTOR, CLEAR FLAT GLASS PRISMATIC LENS IN FORMED WHITE PAINTED METAL SMOOTH FLARE TRIM, 14' AFF	ONE 75-WATT CLEAR ED-17 METAL HALIDE, HORIZONTAL POSITION.	VRR-07045.IES	3150	0.65	70



**SOUTH ELEVATION**  
SCALE: 1" = 16'



**SOUTH ELEVATION PHOTOMETRIC PLAN**  
SCALE: 1" = 8'



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

PER CITY REVIEW 04/29/08  
 PER CITY REVIEW 03/27/09  
 DATE ISSUED  
 DAB  
 DRAWN BY  
 JTA  
 CHECKED BY

ROCHESTER HILLS HEALTH  
 WELLNESS CENTER  
 NEW CENTER FOR HEALTH  
 IMPROVEMENTS  
 PROJECT

**SES**  
 Strategic Energy Solutions  
 23237 Woodward Avenue, Ferndale, MI 48220  
 Phone 248.389.1900 Fax 248.389.1901  
 www.sesnet.com

CONSULTANT

ELECTRICAL PHOTOMETRIC  
 SITE PLAN  
 SHEET TITLE

PROJECT NUMBER

E002  
 SHEET NUMBER



**Project Data**

**Location:** North side of South Blvd., west of Dequindre Road in the city of Rochester Hills, Oakland County, Michigan

**Legal Description:** (Parcel No. 15-36-452-011, formerly - 004-009) Part of the southeast 1/4 of section 36, township 3 north, range 11 east, Rochester Hills, Oakland County, Michigan

**Building Data:**

Size: 98,022 sf, 3 stories  
 1st Floor: 39,043 sf  
 2nd Floor: 29,472 sf  
 3rd Floor: 29,507 sf

Occupancy/Use Group: Business with A-3, Assembly  
 Construction Type: 1B, Non-combustible, fully sprinklered  
 =RQOJ 2 I;FH%&VACHW  
 Building Code: Michigan Building Code, 2003

**Parking Variance Requested**

5 HTXHWNG5 DNR VDFH VI XVDECHARRUDHD  
 \*Based on typical usage at similar Beaumont facilities

Parking formula - usable area: 98,022 sf x 80% = 78,418 /215 = 365 spaces required  
 Disabled access parking formula for 301-400 parking stalls, 8 accessible required.

Per section 1106.4 - 20% of visitor parking at rehabilitation/physical therapy facilities shall be accessible.

**Physical Therapy**

Suite - 9,807 Gross SF  
 Companion Lockers - 430 Gross SF  
 Therapy Pool and Deck - 864 Gross SF  
 Total : 11,101 Gross SF  
 11,101 SF x 80% = 8,881 Usable SF  
 8,881 x 20% = 18 Required Accessible Parking  
 18 + 8 = 26 Total Required Accessible Parking  
 26 Accessible + 351 Standard Spaces = 377 Total Parking Spaces Provided

**Sheet Index**

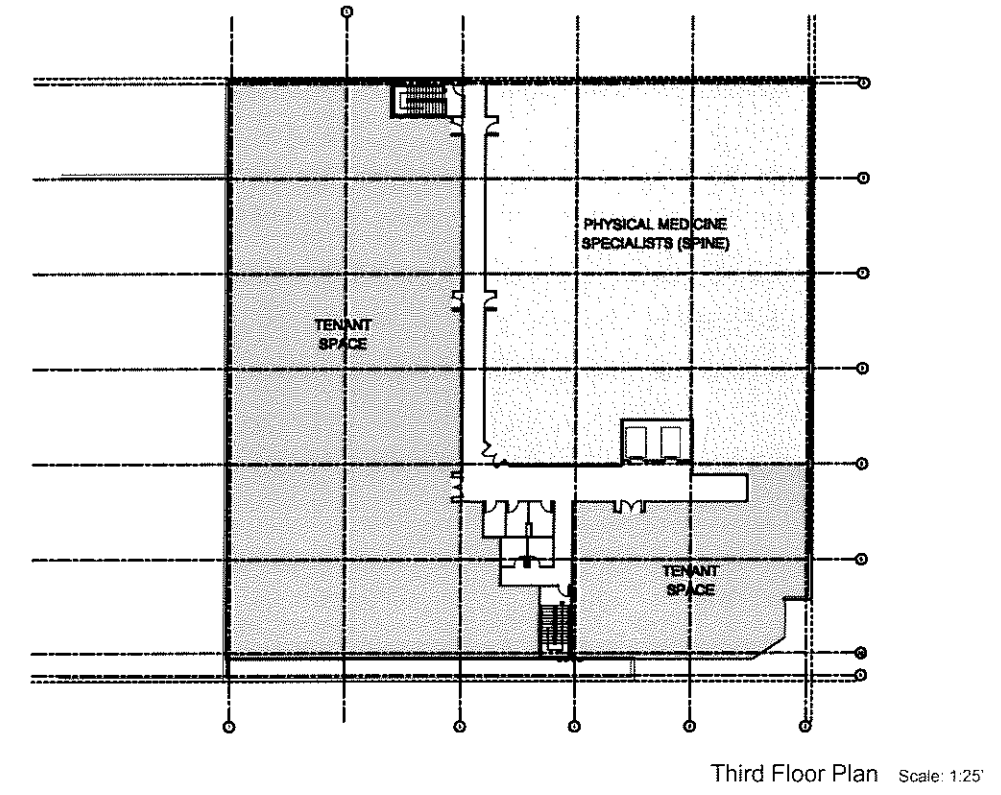
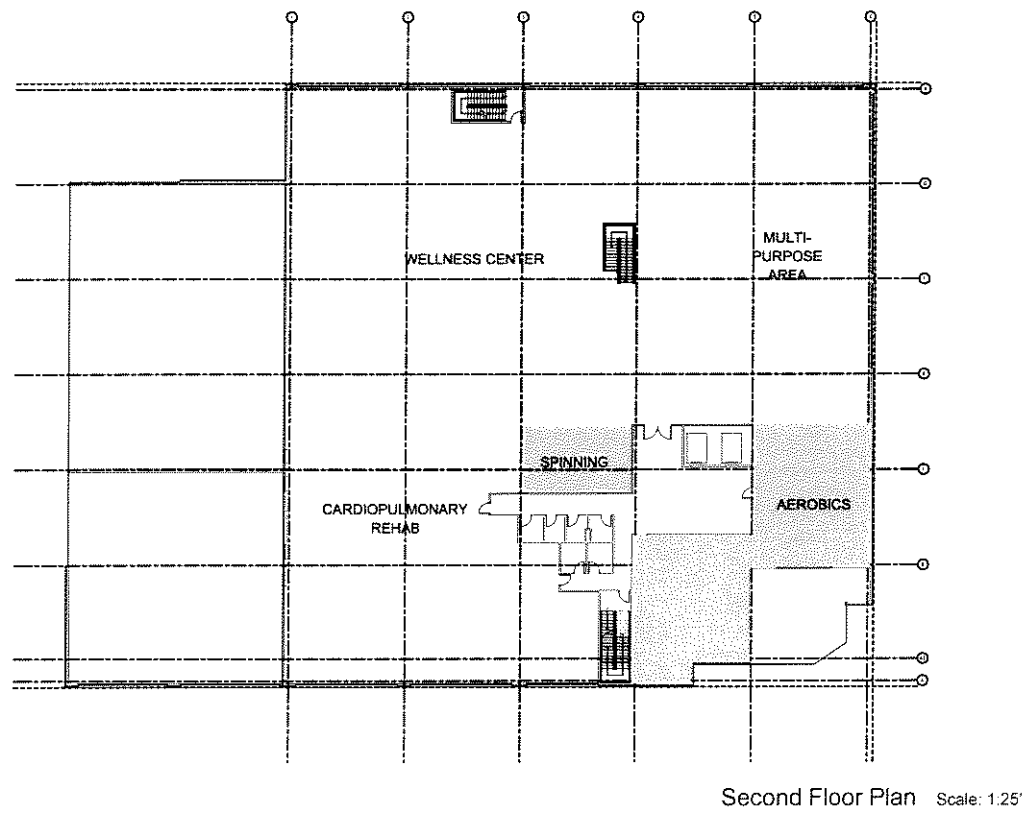
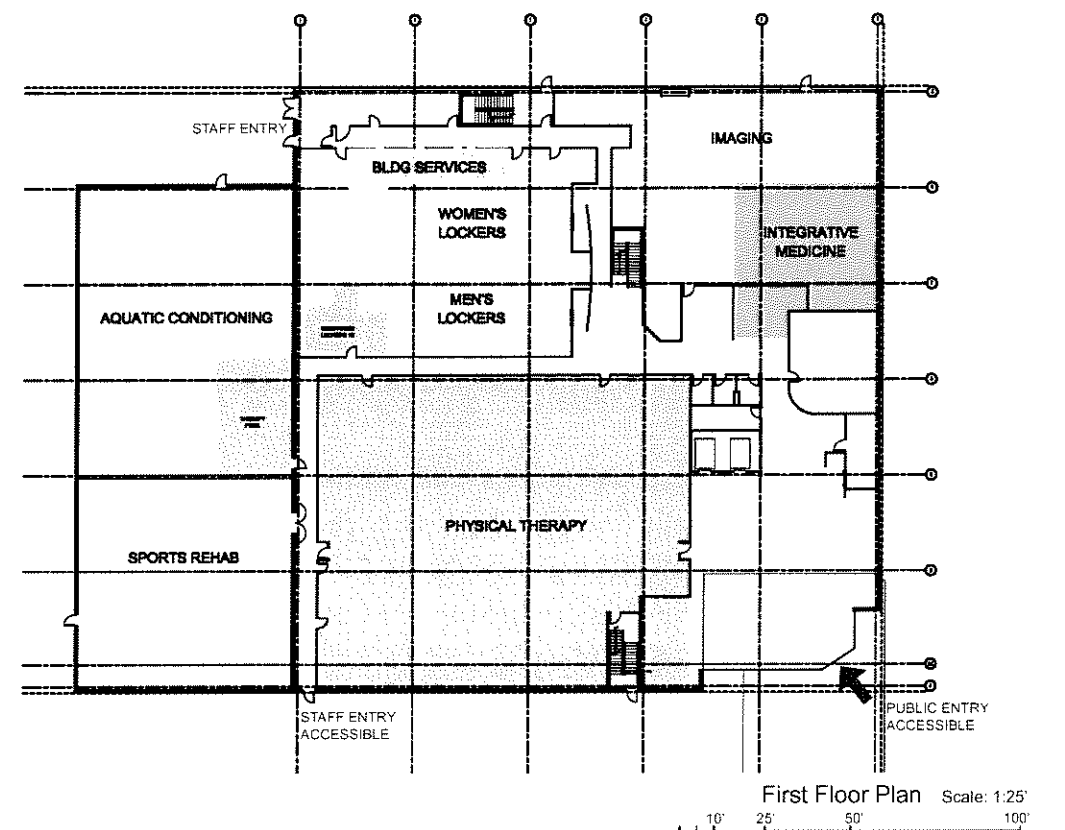
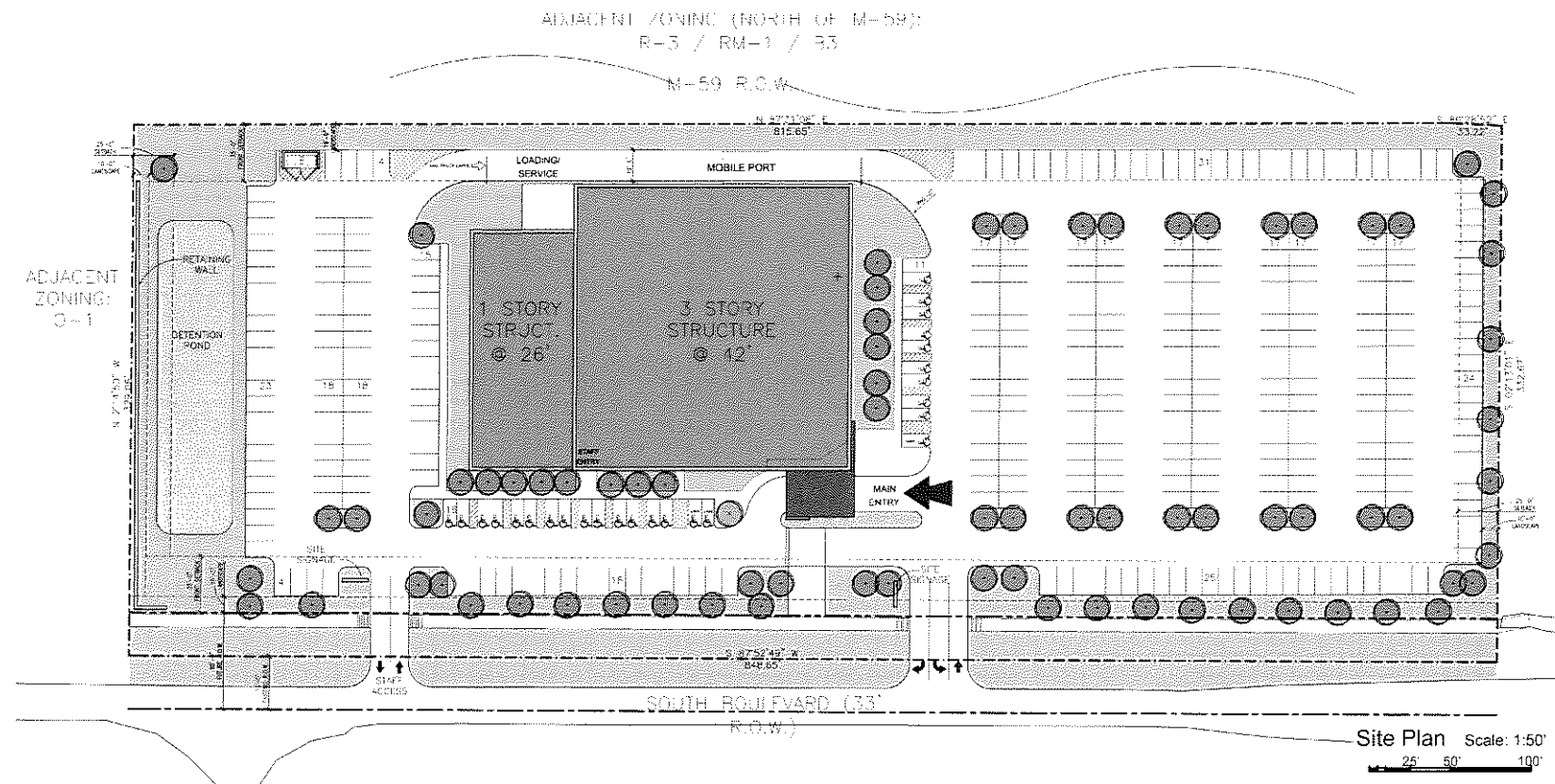
- Cover Sheet
- SK-2 Site Plan, Floor Plans
- SK-3 Exterior Elevations
- SK-4 Exterior Rendering
- SK-5 Exterior Rendering
- SK-6 Interior Lobby Rendering
- SK-7 Exterior Rendering

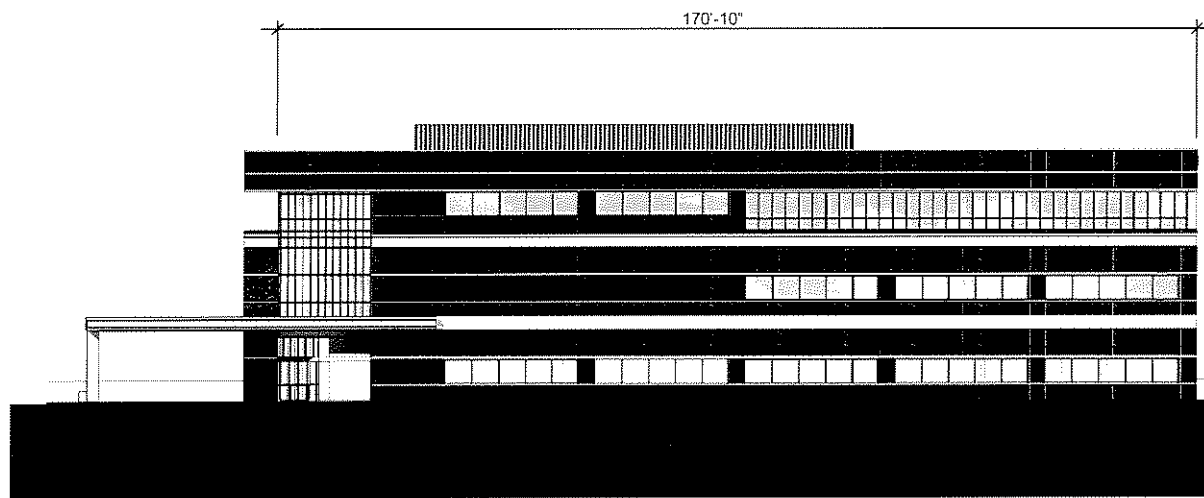
**Rochester Hills Health & Wellness Center**  
 New Center for Health Improvement

**LEO A DAILY**  
 550 South Hope Street  
 Los Angeles, CA 90071-2627  
 Telephone 213.629.0100

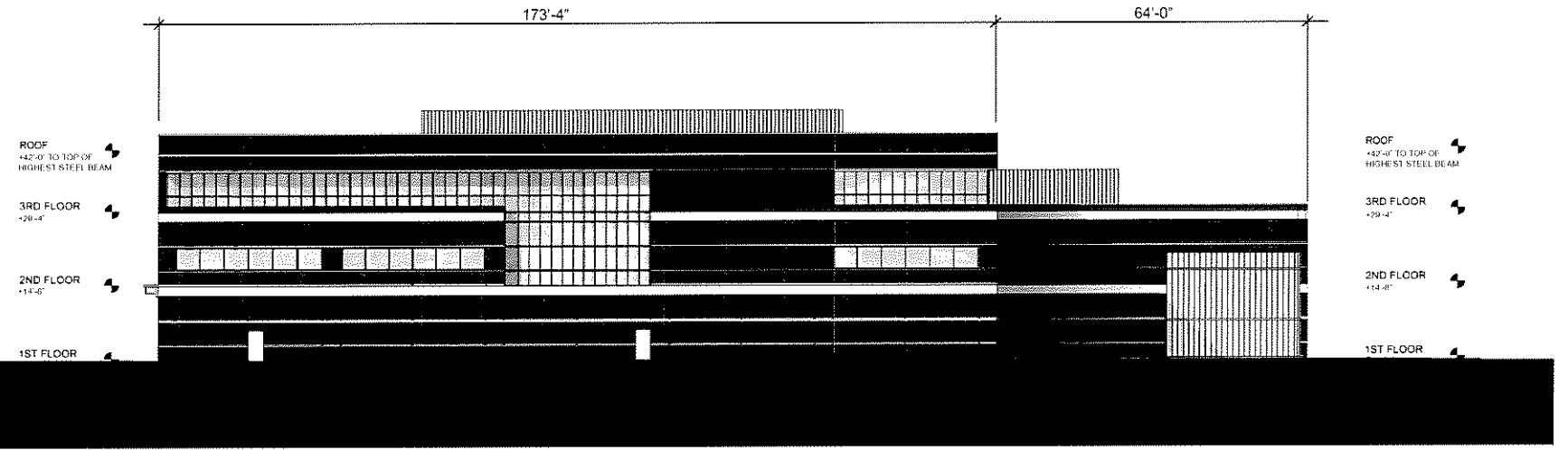
Landmark Healthcare Facilities, LLC

Date: 04-30-08

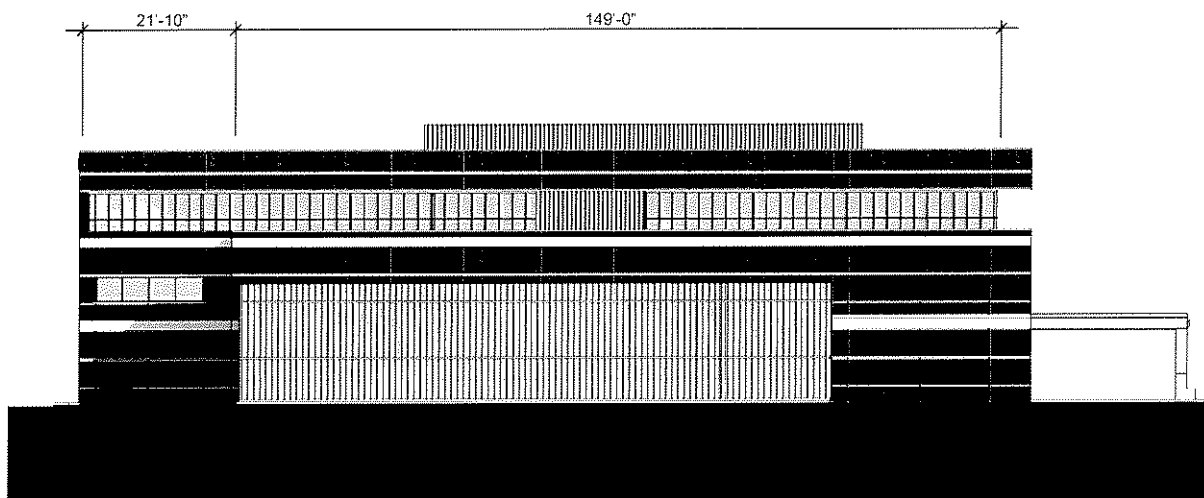




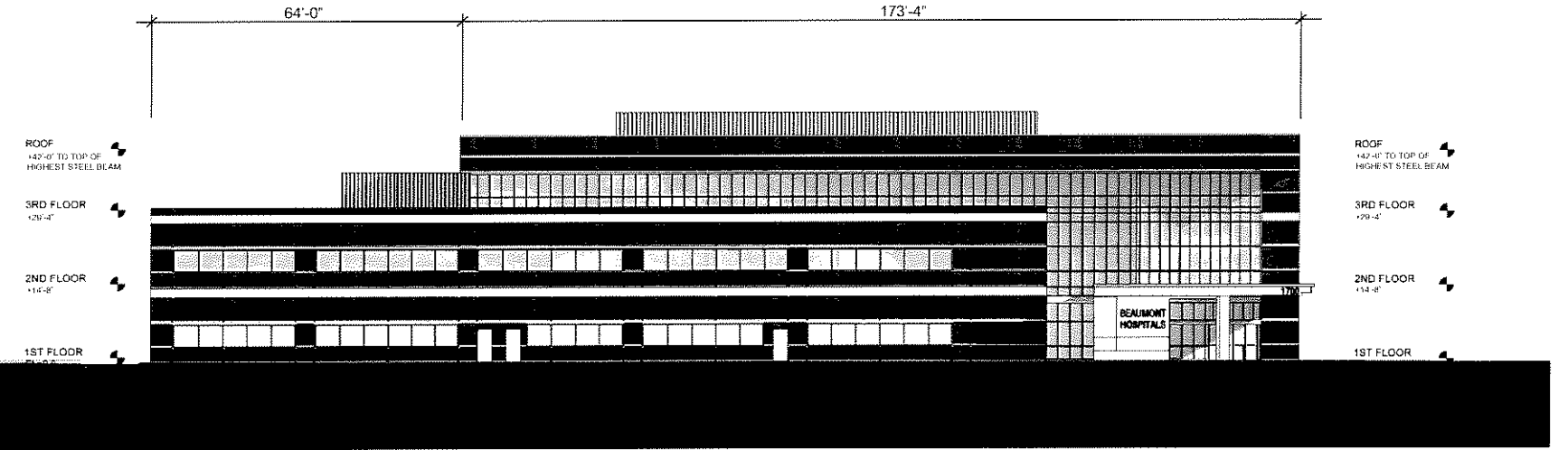
East Elevation



North Elevation



West Elevation



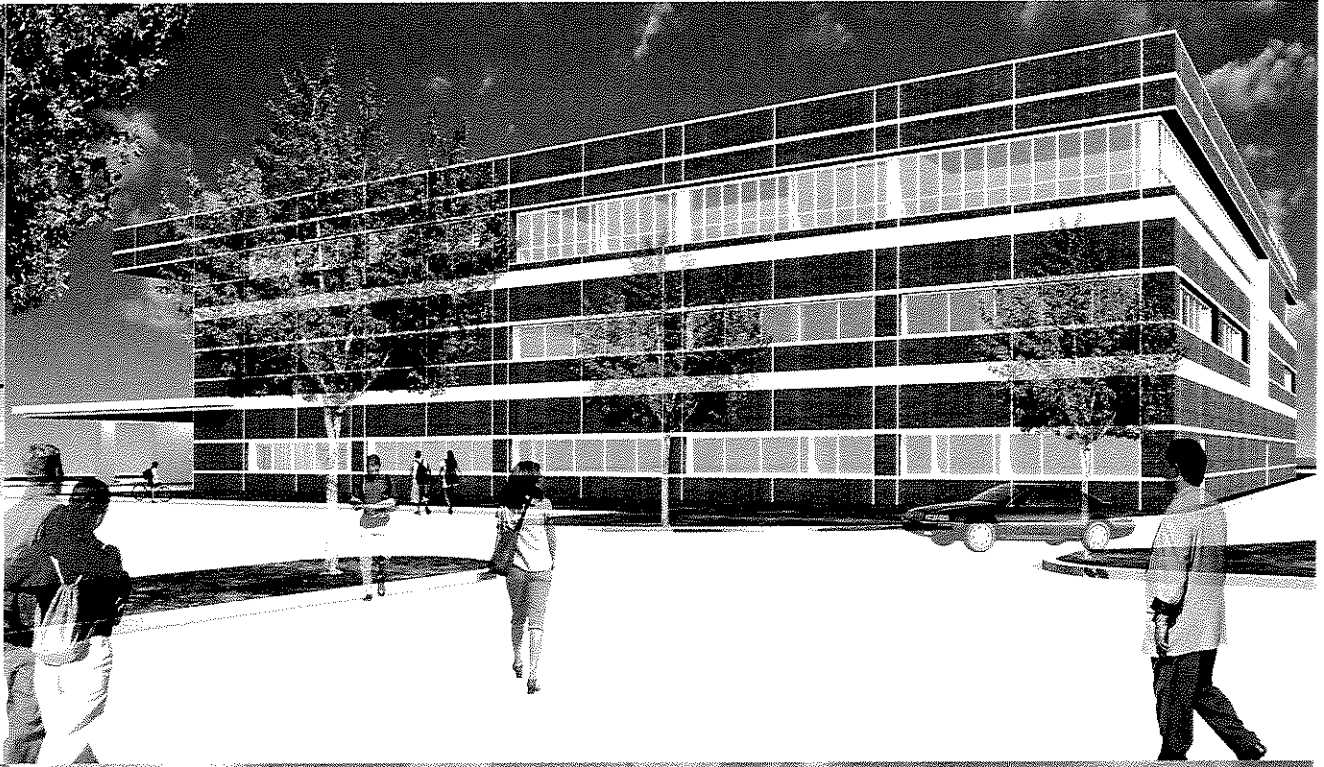
South Elevation



Exterior Materials:  
 Standard Brick Masonry  
 Off-White Precast Concrete Horizontal Bands  
 Aluminum and Glass Storefront and Curtainwall











**LEO A DALY** SK-7  
Rochester Hills Health & Wellness Center  
New Center for Health Improvement  
Landmark Healthcare Facilities, LLC  
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