



**PLANNING COMMISSION
MEETING AGENDA
REGULAR MEETING**

500 W. Big Beaver
Troy, MI 48084
(248) 524-3364
www.troymi.gov
planning@troymi.gov

Michael W. Hutson, Chair, and Mark Maxwell, Vice Chair
Donald Edmunds, Tom Krent, Philip Sanzica, Robert Schultz
Thomas, Strat, John J. Tagle and Lon M. Ullmann

September 13, 2011

7:30 P.M.

Council Chambers

1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES – August 23, 2011
4. PUBLIC COMMENTS – For Items Not on the Agenda

SPECIAL USE REQUEST

5. PUBLIC HEARING – SPECIAL USE REQUEST (File Number SU 388 A) – Expansion of an existing Adult Foster Care Small Group Home, From nine (9) residents to ten (10) residents, North Side of Square Lake, East of Beach (2420 W. Square Lake), Section 6, Currently Zoned R-1A (One Family Residential) District

OTHER BUSINESS

6. SUSTAINABLE DEVELOPMENT CHECKLIST
7. PUBLIC COMMENTS – Items on Current Agenda
8. PLANNING COMMISSION COMMENTS

ADJOURN

NOTICE: People with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk by e-mail at clerk@troymi.gov or by calling (248) 524-3317 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.

The Special/Study Meeting of the Troy City Planning Commission was called to order by Vice Chair Maxwell at 7:30 p.m. on August 23, 2011 in the Council Board Room of the Troy City Hall.

1. ROLL CALL

Present:

Donald Edmunds
Tom Krent
Mark Maxwell
Philip Sanzica
Robert M. Schultz
Thomas Strat
John J. Tagle

Absent:

Michael W. Hutson
Lon M. Ullmann

Also Present:

R. Brent Savidant, Planning Director
Allan Motzny, Assistant City Attorney
Zachary Branigan, Carlisle/Wortman Associates, Inc.
Paul Evans, Zoning & Compliance Specialist

2. APPROVAL OF AGENDA

Resolution # PC-2011-08-052

Moved by: Sanzica
Seconded by: Edmunds

RESOLVED, To approve the Agenda as prepared.

Yes: All (7)
Absent: Hutson, Ullmann

MOTION CARRIED

3. APPROVAL OF MINUTES

Resolution # PC-2011-08-053

Moved by: Edmunds
Seconded by: Sanzica

RESOLVED, To approve the minutes of the August 9, 2011 Regular meeting as prepared.

Yes: All (7)
Absent: Hutson, Ullmann

MOTION CARRIED

4. PUBLIC COMMENT

There was no one present who wished to speak.

5. ZONING BOARD OF APPEALS (ZBA) REPORT

Mr. Strat presented the ZBA report.

6. DOWNTOWN DEVELOPMENT AUTHORITY (DDA) REPORT

Mr. Savidant presented the DDA report.

7. PLANNING AND ZONING REPORT

Mr. Savidant presented the Planning and Zoning report.

OTHER ITEMS

8. REVISIONS TO CHAPTER 85 – SIGNS

There was general discussion on this item.

9. PUBLIC COMMENT – Items on Current Agenda

There was no one present who wished to speak.

10. PLANNING COMMISSION COMMENT

There was general Planning Commission discussion.

ADJOURN

The Special/Study Meeting of the Planning Commission adjourned at 9:05 p.m.

Respectfully submitted,

Mark Maxwell, Vice Chair

R. Brent Savidant, Planning Director

DATE: September 7, 2011

TO: Planning Commission

FROM: R. Brent Savidant, Planning Director

SUBJECT: PUBLIC HEARING – SPECIAL USE REQUEST (File Number SU 388 A) – Expansion of an existing Adult Foster Care Small Group Home, From nine (9) residents to ten (10) residents, North Side of Square Lake, East of Beach (2420 W. Square Lake), Section 6, Currently Zoned R-1A (One Family Residential) District

The applicant, Besnik and Angelina Gojka, received Special Use Approval for nine (9) adult foster care (AFC) residents on June 14, 2011. The applicant wishes to expand by one resident, for a total of ten (10) AFC residents.

Section 6.02 of the Zoning Ordinance requires that an AFC small group home (between 7 and 12 persons) shall be on a parcel that provides a minimum site area of four thousand (4,000) square feet per adult, excluding employees and/or caregivers. The applicant seeks ten AFC residents but the property is only 39,973 square feet in area, therefore is 27 square feet short of meeting the requirement. The applicant received a variance from this requirement from the Zoning Board of Appeals on August 16, 2011 (minutes attached).

The applicant seeks Special Use Approval for a total of ten (10) adult foster care residents. As per the Zoning Ordinance, the item was presented to the Planning Commission for discussion on August 9, 2011, prior to ZBA consideration, and no action was taken at the meeting.

The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City's Planning Consultant, summarizes the project. CWA prepared the report with input from various City departments including Planning, Engineering, Public Works and Fire. City Management supports the findings of fact contained in the report and recommends approval of the project, as noted.

Attachments:

1. Maps.
2. Application, submitted by Horizon Engineering.
3. Report prepared by Carlisle/Wortman Associates, Inc.
4. Minutes from June 14, 2011, Planning Commission meeting (excerpt).
5. Minutes from August 9, 2011 Planning Commission meeting (excerpt).
6. Minutes from August 16, 2011 ZBA meeting (excerpt).

cc: Applicant
File/ SU 388 A

SPECIAL USE APPROVAL

PUBLIC HEARING – SPECIAL USE REQUEST (File Number SU 388 A) – Expansion of an existing Adult Foster Care Small Group Home, From nine (9) residents to ten (10) residents, North Side of Square Lake, East of Beach (2420 W. Square Lake), Section 6, Currently Zoned R-1A (One Family Residential) District

Proposed Resolution # PC-2011-09-

Moved by:

Seconded by:

RESOLVED, That Special Use Approval for ten (10) residents in the Adult Foster Care Small Group Home, located on the north side of Square Lake and east of Beach Road, at 2420 W. Square Lake, Section 6, within the R-1A zoning district, be granted, subject to the following:

_____) or

(denied, for the following reasons: _____) or

(postponed, for the following reasons: _____)

Yes:

No:

Absent:

MOTION CARRIED / DENIED



Legend

-  I-75
- Road Centerline**
 -  Major Road
 -  Industrial Road
 -  Local Road
-  Ponds and Basins
-  Streams and Creeks
-  Parcels
- Aerial Photos - 2010**
 -  Red:Band_1
 -  Green:Band_2
 -  Blue:Band_3

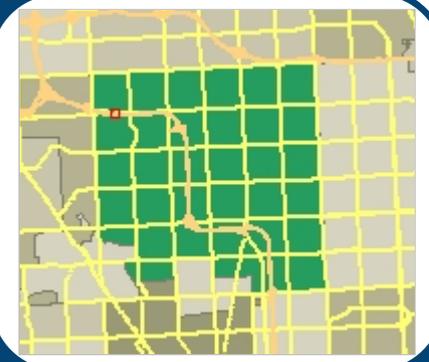
234 0 117 234Feet

Scale 1: 1,404



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

Printed: 4/26/2011



Legend

-  I-75
- Road Centerline**
 -  Major Road
 -  Industrial Road
 -  Local Road
- Zoning**
 -  (PUD) Planned Unit Development
 -  (B-1) Local Business District
 -  (B-2) Community Business District
 -  (B-3) General Business District
 -  (R-C) Research Center District
 -  (C-F) Community Facilities District
 -  (C-J) Consent Judgment
 -  (E-P) Environmental Protection District
 -  (R-EC) Residential Elder Care
 -  (P-1) Vehicular Parking District
 -  (H-S) Highway Service District
 -  (M-1) Light Industrial District
 -  (O-1) Office Building District
 - (O-M) Office Mid-Rise District
 - (OSC) Office Service Commercial District
 - (CR-1) One Family Residential Cluster District
 - (R-1A) One Family Residential District
 - (R-1B) One Family Residential District
 - (R-1C) One Family Residential District
 - (R-1D) One Family Residential District
 - (R-1E) One Family Residential District
 - (R-1T) One Family Attached Residential Distr
 - (R-2) Two Family Residential District
 - (R-M) Multiple Family Residential Medium De
 - (RM-1) Multiple Family Residential District Lc
 - (RM-2) Multiple Family Residential District (M
 - (RM-3) Multiple Family Residential District (Hi
-  Ponds and Basins
-  Streams and Creeks
-  Parcels

Aerial Photos - 2010

-  Red:Band_1
-  Green:Band_2

Printed: 4/26/2011

234 0 117 234 Feet

Scale 1: 1,404



July 11, 2011

Planning Department
City of Troy
500 West Big Beaver Road
Troy, Michigan 48084

Re: Special Use Request for #2420 Square Lake Road
"Angel from Albania" Adult Foster Care Home
Section 6, City of Troy

Dear City of Troy Planning Department:

Attached to this letter are the following items:

- One (1) Special Use Request Application
- One (1) Special Use Approval Initial Submittal Checklist
- One (1) Certified Boundary Survey
- One (1) Site Plan
- One (1) Floor Plan
- Two (2) pages of photos of the exterior of the home
- One (1) CD containing PDF copies of the aforementioned items
- One (1) check in the amount of \$1,800.00 (Special Use Approval Fee)
- One (1) check in the amount of \$640.00 (\$1,500.00 Escrow Fee minus \$860.00 from unused portion of previous Special Use Request escrow).

These materials are being submitted for Planning Commission review in conjunction with a request being made to the Zoning Board of Appeals to allow up to ten (10) adults to be cared for.

On June 14, 2011 this site received Special Use Approval for an Adult Foster Care Small Group Home from the Planning Commission. The approval was contingent upon the following three (3) items:

1. The maximum number of adult foster care residents shall be 9.
2. The Site Plan shall be corrected as per the recommendation of the report prepared by Carlisle/Wortman Associates, Inc. (calculations under "Site Criteria" on the Site Plan).
3. An opaque screen fence or landscaping shall be provided to obscure the trash storage area in the east façade.

Items no. 2 and 3 above have been addressed on the updated Site Plan attached.

July 11, 2011
Planning Department, City of Troy
Re: Special Use Request for #2420 Square Lake Road

However, regarding item no. 1 above, a variance is being sought from the Zoning Board of Appeals for the tenth (10th) foster care resident.

The application, as previously submitted and approved on June 14, 2011 by the Planning Commission, remains exactly the same otherwise.

Your consideration of our request is greatly appreciated.

Sincerely,



Nathan P. Robinson, P.E.
President
nrobinson@horizoneng.net

cc.: Besnik & Angelina Gojka

attachments

CERTIFICATE OF SURVEY

CERTIFIED TO: BESNIK & ANGELINA GOJKA
2420 W. SQUARE LAKE ROAD
TROY, MI 48098

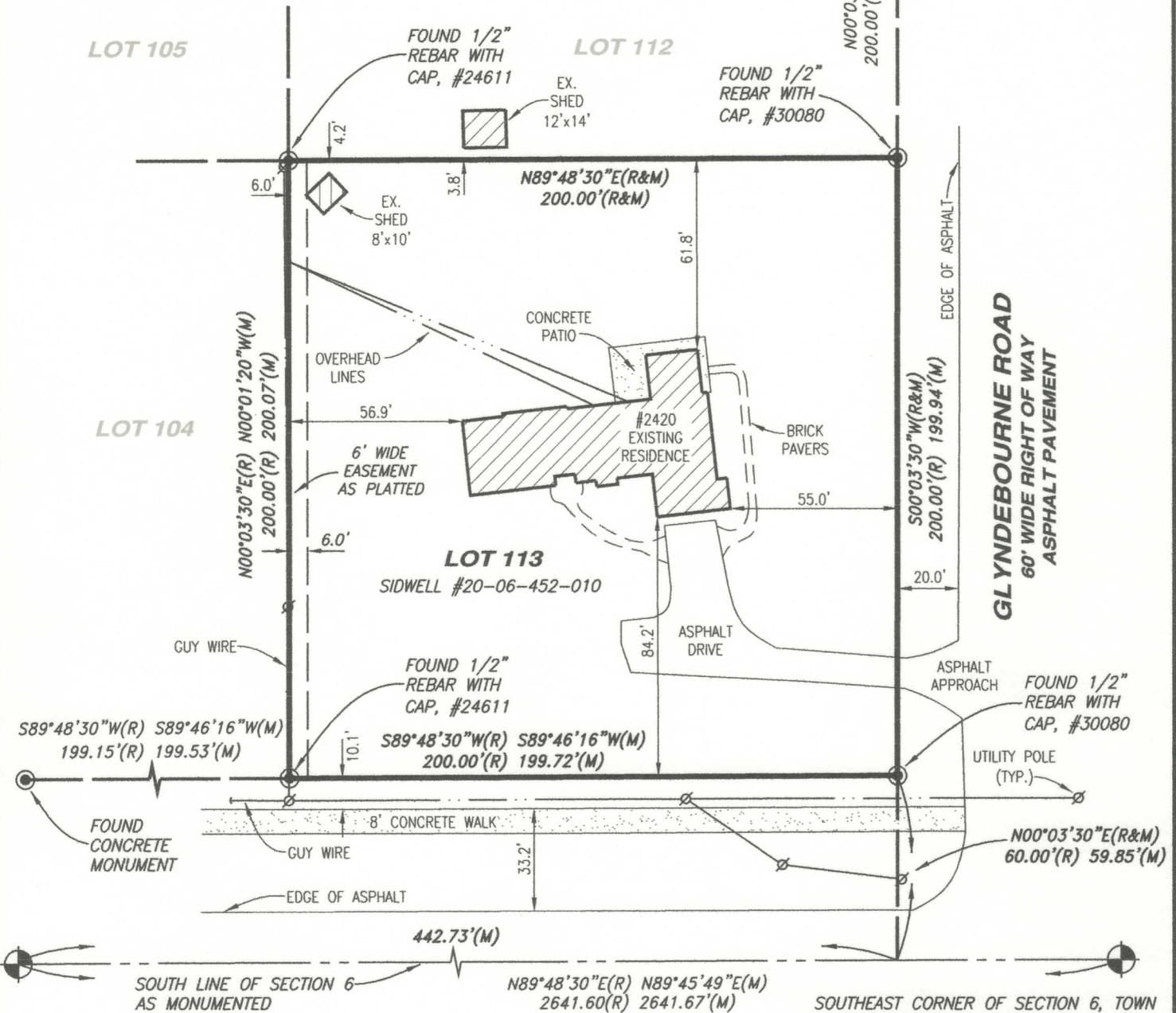
NORTH



SCALE: 1"=50'

PROPERTY DESCRIPTION:

SIDWELL #20-06-452-010
LOT 113, "CHARNWOOD HILLS NO.3", A SUBDIVISION OF PART OF THE SOUTHEAST 1/4 OF SECTION 6, TOWN 2 NORTH, RANGE 11 EAST, TROY TOWNSHIP (NOW CITY OF TROY), OAKLAND COUNTY, MICHIGAN AS RECORDED IN LIBER 78 OF PLATS, PAGE 6 OF OAKLAND COUNTY RECORDS.



SOUTH 1/4 CORNER OF SECTION 6, TOWN 2 NORTH, RANGE 11 EAST, CITY OF TROY, OAKLAND COUNTY, MICHIGAN. FOUND OAKLAND COUNTY REMONUMENTATION CAP, #25854 IN MONUMENT BOX AS RECORDED IN LIBER 17277, PAGE 615 OF OAKLAND COUNTY RECORDS.

SQUARE LAKE ROAD
VARIABLE WIDTH RIGHT OF WAY
ASPHALT PAVEMENT

SOUTHEAST CORNER OF SECTION 6, TOWN 2 NORTH, RANGE 11 EAST, CITY OF TROY, OAKLAND COUNTY, MICHIGAN. FOUND OAKLAND COUNTY REMONUMENTATION CAP, #25854 IN MONUMENT BOX AS RECORDED IN LIBER 17277, PAGE 623 OF OAKLAND COUNTY RECORDS.

SURVEYOR'S NOTES

1. BASIS OF BEARING
SOUTH 00° 03' 30" WEST ALONG THE EASTERLY LINE OF LOTS 112 AND 113 AS PLATTED AND AS MONUMENTED IN FIELD.

I HEREBY CERTIFY THAT I HAVE SURVEYED THE THE PROPERTY HEREIN DESCRIBED AND THAT THE DRAWING HEREON DELINEATED IS A CORRECT REPRESENTATION OF THE SAME. I ALSO CERTIFY THAT THE RATIO OF CLOSURE MEETS THE REQUIREMENTS OF PUBLIC ACT 132 OF 1970 AND IS GREATER THAN 1 IN 5000.

Shane P. Azbell
SHANE P. AZBELL, P.S., #46724

AZTEC
LAND SURVEYORS INC.

P.O. BOX 353
HOLLY, MI 48442
PHONE: 586-306-1253 FAX: 480-287-8799



SEAL:

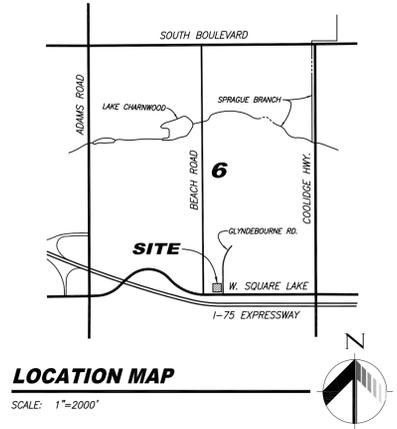
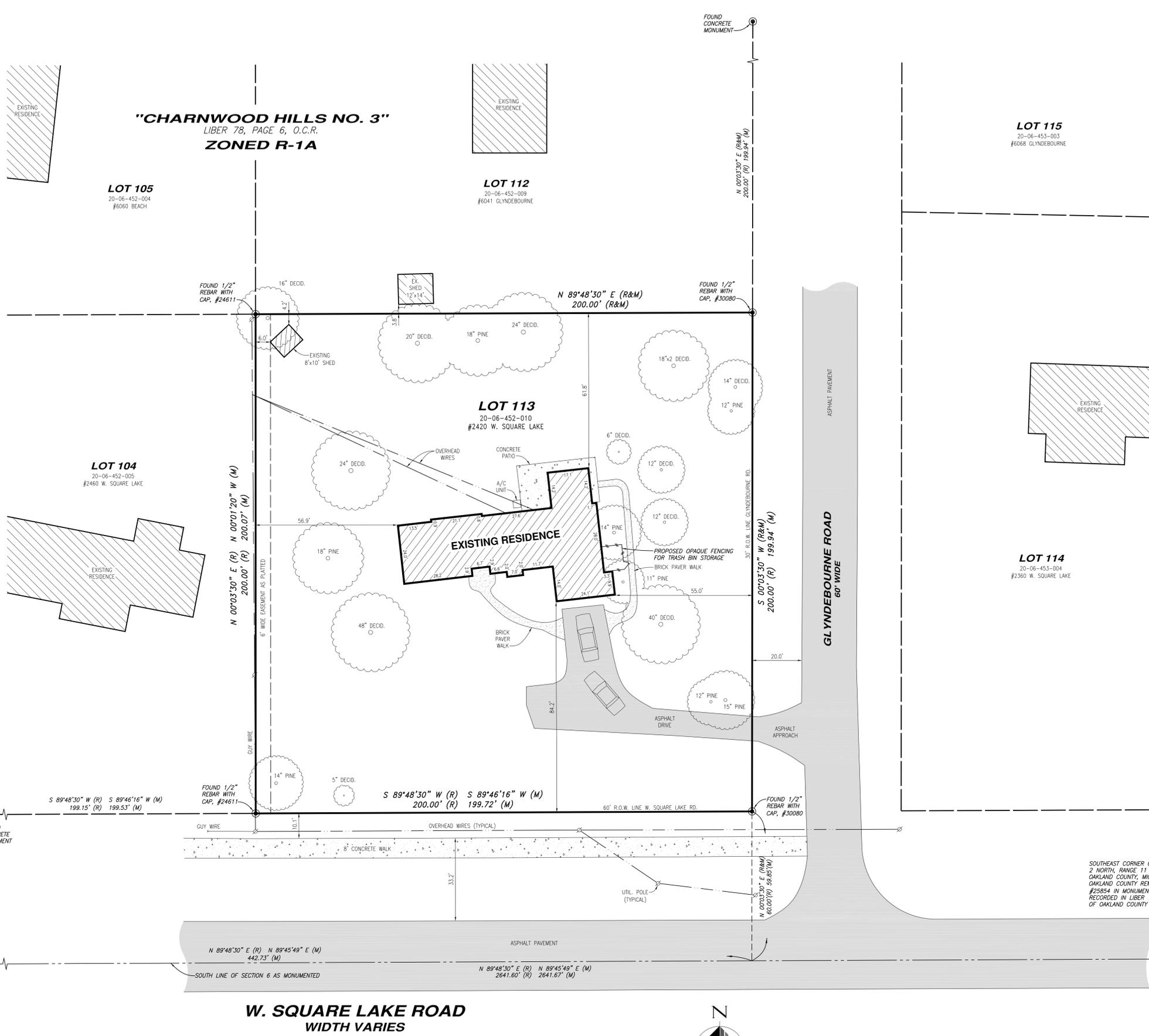
SHANE P. AZBELL
PROFESSIONAL SURVEYOR
NO. 46724

PAGE 1 OF 1

LEGEND:

- = SECTION CORNER
- ⊙ = FOUND MONUMENT (AS NOTED)
- = SET 1/2" REBAR AND CAP, #46724
- R = RECORD
- M = MEASURED
- C = CALCULATED

JOB NO: 11-039
DATE: 3/17/11
REVISED
DRAWN BY: SA



PROPERTY DESCRIPTION
 SIDWELL #20-06-425-010
 LOT 113, "CHARNWOOD HILLS NO. 3", A SUBDIVISION OF PART OF THE SOUTHEAST 1/4 OF SECTION 6, TOWN 2 NORTH, RANGE 11 EAST, TROY TOWNSHIP (NOW CITY OF TROY), OAKLAND COUNTY, MICHIGAN AS RECORDED IN LIBER 78 OF PLATS, PAGE 6 OF OAKLAND COUNTY RECORDS.

- SITE CRITERIA**
- PARCEL SUMMARY:**
 - ADDRESS: 2420 W. SQUARE LAKE ROAD
 - PARCEL ID NO.: 20-06-452-010
 - EXISTING ZONING: R-1A, SINGLE FAMILY RESIDENTIAL
 - ADJACENT ZONINGS: R-1A TO WEST, NORTH, & EAST; R-14 & R-1B TO SOUTH ACROSS I-75
 - LOT SIZE REQUIRED: 21,780 S.F.
 - LOT SIZE EXISTING: 39,973 S.F. (0.918 ACRE)
 - LOT WIDTH REQUIRED: 120'
 - LOT WIDTH EXISTING: 199.72'
 - BUILDING & USE SUMMARY:**
 - USE EXISTING: ADULT FOSTER CARE - FAMILY HOME
 - USE PROPOSED: ADULT FOSTER CARE - SMALL GROUP HOME
 - BUILDING AREA REQUIRED: 1,600 S.F.
 - BUILDING AREA EXISTING: 2,482 S.F.
 - BUILDING HEIGHT ALLOWED: 2.5 STORIES; 30'
 - BUILDING HEIGHT EXISTING: 1 STORY; 9.75'
 - LOT COVERAGE ALLOWED: 30%
 - LOT COVERAGE EXISTING: 6.5%
 - ALLOWABLE NUMBER OF ADULTS CARED FOR (PER LOT SIZE CALCULATION):**
 - 1 PERSON PER 4,000 S.F. LOT AREA
 - = 39,973 S.F. / 4,000 = 9.993 = 9 ADULTS
 - PROPOSED NUMBER OF ADULTS CARED FOR: 10 ***
 - NOTE: VARIANCE IS TO BE SOUGHT FROM ZONING BOARD OF APPEALS FOR 10TH ADULT.**
 - SETBACK SUMMARY:**

BUILDING:	REQUIRED:	EXISTING:
FRONT (TO W. SQUARE LAKE):	40'	84.2'
FRONT (TO GLYNDEBOURNE):	40'	55.0'
REAR:	45'	61.8'
SIDE:	15'	56.9'
 - PARKING SUMMARY:**
 - SPACES REQUIRED: 1 SPACE PER CAREGIVER
 - SPACES PROVIDED: (2 CAREGIVERS) x (1 SPACE) = 2

- NOTES**
- SURVEY IS AS PREPARED AND PROVIDED BY AZTEC LAND SURVEYORS INC., JOB NO. 11-039, DATED MARCH 17, 2011.
 - ALL INFORMATION SHOWN ON THIS PLAN IS EXISTING. ALL WORK WITHIN THE STRUCTURE IS COMPLETE. NO ADDITIONAL WORK IN THE INTERIOR, NOR SITE WORK IS PROPOSED AS A PART OF THIS PLAN.

LEGEND

	EXISTING ASPHALT PAVEMENT
	EXISTING CONCRETE PAVEMENT
	EXISTING BRICK PAVERS

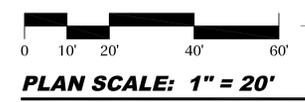
SOUTHEAST CORNER OF SECTION 6, TOWN 2 NORTH, RANGE 11 EAST, CITY OF TROY, OAKLAND COUNTY, MICHIGAN. FOUND OAKLAND COUNTY REMONUMENTATION CAP, #25854 IN MONUMENT BOX AS RECORDED IN LIBER 17277, PAGE 623 OF OAKLAND COUNTY RECORDS.

BEACH ROAD
86' WIDE

SOUTH 1/4 CORNER OF SECTION 6, TOWN 2 NORTH, RANGE 11 EAST, CITY OF TROY, OAKLAND COUNTY, MICHIGAN. FOUND OAKLAND COUNTY REMONUMENTATION CAP, #25854 IN MONUMENT BOX AS RECORDED IN LIBER 17277, PAGE 615 OF OAKLAND COUNTY RECORDS.

W. SQUARE LAKE ROAD
WIDTH VARIES

INTERSTATE 75 CORRIDOR



REVISIONS:
6-15-11 REVISED PER PLANNING COMMISSION
7-11-11 UPDATED LOW ZONING BOARD OF APPEALS REQUEST

CLIENT:
BESSIE K. ANGELINA GOJKA
2420 W. SQUARE LAKE ROAD
TROY, MI 48068
(313) 976-5656

PROJECT:
"Angel from Albania"
Adult Foster Care Home
#2420 W. SQUARE LAKE ROAD
PARCEL 20-06-452-010
PART OF THE S.E. 1/4 OF SECTION 6, T.2N., R.11E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN

PLANNING:
SPECIAL USE REQUEST

JOB NO: 11-027
DATE: 4-19-11
DRAWN BY: N.P.R.

SEAL:
HORIZON
ENGINEERING LLC
CIVIL ENGINEERING, SITE PLANNING & LAND DEVELOPMENT CONSULTING
P.O. Box 182158, Shelby Township, Michigan 48318
Phone 586.453.8097 Fax 586.560.0053

SHEET:
1 OF **1**
MUNICIPAL REVIEW NUMBERS:

NOTE: FACILITY SIZE
THIS ADULT FOSTER CARE FACILITY SHALL PROVIDE ASSISTANCE TO 1-12 PEOPLE.

NOTE: HEATING SYSTEM
THIS FACILITY IS HEATED BY A FORCED AIR SYSTEM LOCATED IN THE MECHANICAL CLOSET.

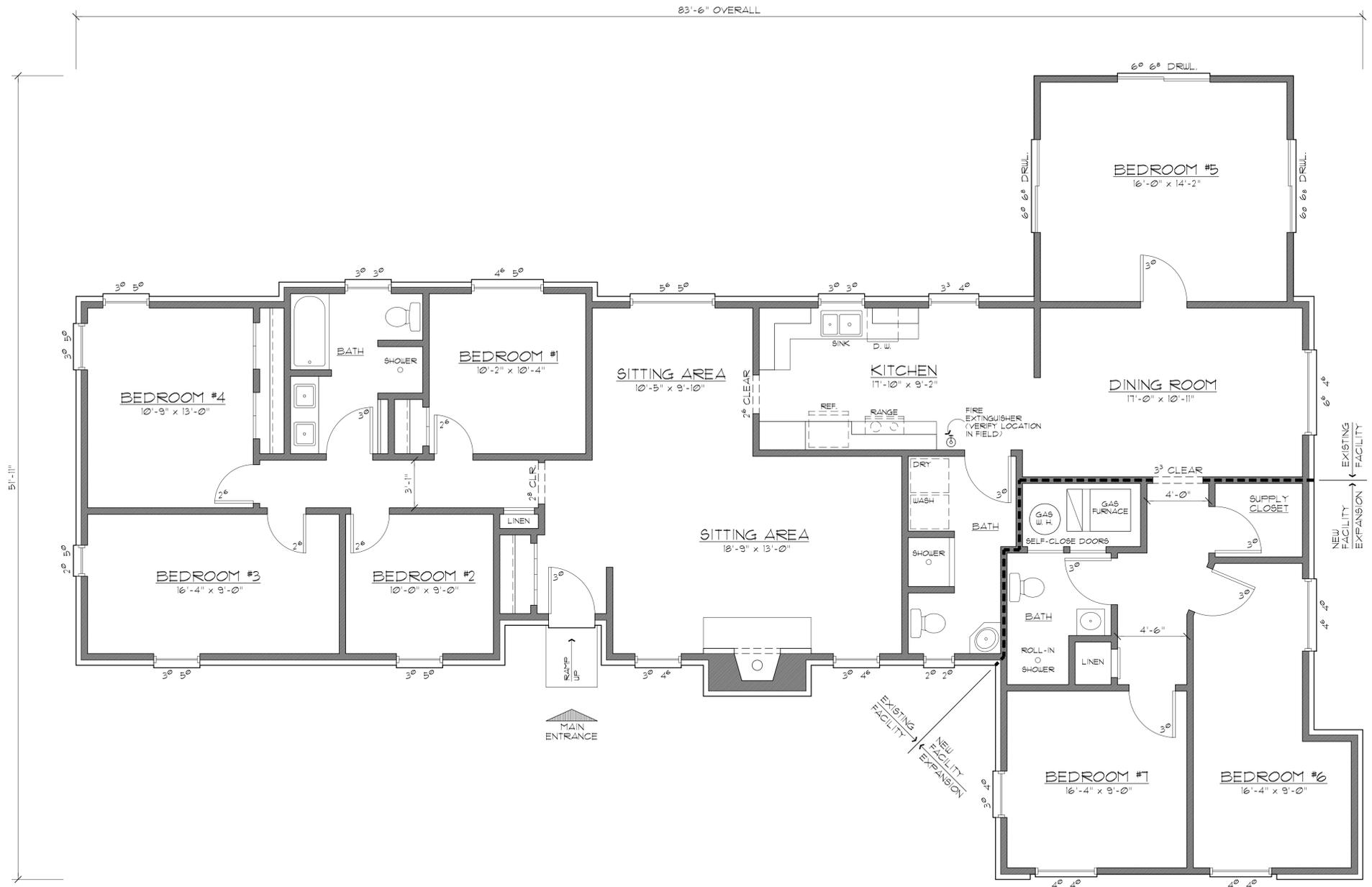
NOTE: DOOR SIZE
ALL DOORS THROUGHOUT FACILITY ARE 6'-8" IN HEIGHT.

NOTE: DOOR FIRE RATINGS
ALL DOORS THROUGHOUT FACILITY HAVE 20 MINUTE FIRE RATING.

NOTE: INTERIOR FINISHES (WALLS / CEILING)
EXISTING FACILITY: PLASTER
NEW FACILITY EXPANSION: GYPSUM BOARD

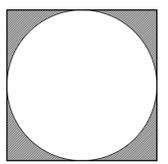
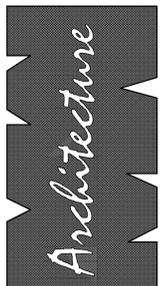
NOTE: TYPE OF CONSTRUCTION
FACILITY TYPE OF CONSTRUCTION: 5A

NOTE: FIRE EXTINGUISHER
THIS FACILITY SHALL HAVE (1) UNDERWRITERS LABORATORIES APPROVED 2A 10BC FIRE EXTINGUISHER (TO BE LOCATED IN FIELD BY INSPECTOR). EXTINGUISHER TO BE EXAMINED AND MAINTAINED AS RECOMMENDED BY MANUFACTURER.



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

TOTAL SQUARE FOOTAGE: 2,482 SF.



PROJECT:
ANGEL FROM ALBANIA
ADULT FOSTER CARE
FACILITY
TROY, MICHIGAN

CLIENT:
ANGEL FROM ALBANIA
2420 W. SQUARE LAKE RD.
TROY, MI 48098

DATE: 1/13/11
DWG BY: J.H.
JOB NO.: 091611
CHK BY:

A1



Front (South) Elevation



Right Side (East) Elevation



Left Side (West) Elevation



Rear (North) Elevation



CARLISLE/WORTMAN ASSOCIATES, INC.
Community Planners /Landscape Architects

605 S. Main, Suite 1
Ann Arbor, MI 48104
734-662-2200
fax 734-662-1935

6401 Citation Drive, Suite E
Clarkston, MI 48346
248-625-8480
fax 248-625-8455

MEMORANDUM

TO: Brent Savidant
FROM: Zachary Branigan
DATE: August 25, 2011
RE: Angel From Albania Foster Care Small Group Home

We are in receipt of a new submittal for a revised special use request for an approved adult foster care small group home in an existing residential structure in the R-1A District that requests authorization to serve an additional resident. The site is located on Square Lake Road, at the northwest corner of the intersection of Square Lake Road and Glyndebourne Road. The record copy of the application has been appropriately signed and sealed.

This request, from Angle of Albania Foster Care Small Group Home, comes after the applicant was granted, in June of 2011, a special use permit limiting the facility to no more than 9 residents. This limitation was imposed due to the size of the parcel, which was just below 40,000 square feet. A property must have 4,000 square feet of area for each resident of an adult foster care small group home. Consequently, in this case the occupancy was limited to 9. Subsequently the applicant pursued, and was granted, a variance that was approved with the following language:

In order to allow 10 adult foster care residents, a 27 square foot variance to the requirement that the land parcel be at least 40,000 square feet in area. Adult foster care small group homes are required to have at least 4,000 square feet of lot area per adult, excluding employees and/or caregivers. The subject property measures 39,973 square feet.

The applicant is therefore eligible to serve 10 residents where 9 would normally be permitted. However, regardless of the number of tenants, an adult foster care small group home in the R-1A District is permitted only by special use approval. The previous application that was approved in June requested 9 residents, while this new special use permit would allow for 10 residents.

As with the last proposal, on its exterior, the site has not changed, and will not change as a result of this application (with the exception of the new garbage area screen fence required by the previous approval). We have reviewed the project with regard to the special use requirements and specific use provisions for small group homes in the Ordinance. Given the limited nature of this request, we have provided comments in a memorandum format and have reported directly on the issues pertaining to the use of the site for a similar facility with an additional resident.

For any use requiring special use approval, the Planning Commission shall approve the application, approve the application with conditions, deny the application or postpone action.

Use Standards

Section 6.02.B lists specific use provisions for Adult Foster Care Small Group Homes. They are as follows:

1. *A site plan, prepared in accordance with Article 8 shall be required to be submitted. A site plan has been submitted. **Given the nature of this special use as an existing facility in an existing residential structure, some elements normally required for new construction have been waived by the Zoning Administrator. We are satisfied that the submitted materials are sufficient to review the application.***
2. *The subject parcel shall meet the minimum lot area requirements for the zoning district in which it is located, provided there is a minimum site area of four thousand (4,000) square feet per adult, excluding employees and/or caregivers. **The permitted density, based on the City of Troy's requirements, is for 4,000 square feet per resident. This would allow 9 residents. The applicant has received a variance to permit 10 residents on 39,973 square feet of site area.***
3. *The property is maintained in a manner that is consistent with the character of the neighborhood. **We feel that the facility is compliant with this condition, especially with the provision of a small section of opaque fencing to obscure the trash storage area, as discussed and approved previously. The addition of one more resident will not change this conclusion.***
4. *One (1) off-street parking space per employee and/or caregiver shall be provided. **The site plan indicates that up to two caregivers will be present on site. The existing driveway provides satisfactory parking for two cars. The driveway could, in fact, accommodate additional cars.***
5. *Appropriate licenses with the State of Michigan shall be maintained. **It is our understanding from the application that the applicant has State of Michigan licensure for the existing facility and that licensure for the larger number of residents is contingent on approval of the City of Troy's special land use permit. Consequently, this condition is satisfied.***

General Standards of Approval

According to Section 9.03.A, the Planning Commission shall consider the following general standards and any standards established for a specific use when reviewing a special use request.

1. *Compatibility with Adjacent Uses. **The Special Use shall be designed and constructed in a manner harmonious with the character of adjacent property and the surrounding area. In determining whether a Special Use will be harmonious and not create a significant detrimental impact, as compared to the impacts of permitted uses. The use is proposed with***

one additional resident from what was approved. The facility has sufficient room to allow for this resident. To our knowledge, the City has not received any complaints or experienced difficulties with the existing facility. The site is indistinguishable from a large single family home and is a suitable permitted use in the district. Consequently, we believe it will remain harmonious with the character of the area and will not have a detrimental impact.

2. *Compatibility with the Master Plan. The proposed Special Use shall be compatible and in accordance with the goals and objectives of the City of Troy Master Plan and any associated sub-area and corridor plans. **The proposed use does not conflict with the Master Plan. The Master Plan calls for the area to remain single family and this use, while permitted only by special use approval, is a typical use in a single family district.***
3. *Traffic Impact. The proposed Special Use shall be located and designed in a manner which will minimize the impact of traffic, taking into consideration: pedestrian access and safety; vehicle trip generation (i.e. volumes); types of traffic, access location, and design, circulation and parking design; street and bridge capacity and, traffic operations at nearby intersections and access points. Efforts shall be made to ensure that multiple transportation modes are safely and effectively accommodated in an effort to provide alternate modes of access and alleviate vehicular traffic congestion. **The proposed use may create one or two additional vehicle trips per day for visitors of the one additional resident, but will not create a noticeable traffic volume increase beyond what is reasonably expected in a single family environment.***
4. *Impact on Public Services. The proposed Special Use shall be adequately served by essential public facilities and services, such as: streets, pedestrian or bicycle facilities, police and fire protection, drainage systems, refuse disposal, water and sewage facilities, and schools. Such services shall be provided and accommodated without an unreasonable public burden. **The proposed use has no additional impact on public services from any typical use permitted in the R-1A District by right or as a special use.***
5. *Compliance with Zoning Ordinance Standards. The proposed Special Use shall be designed, constructed, operated and maintained to meet the stated intent of the zoning districts and shall comply with all applicable ordinance standards. **The existing facility meets with Ordinance standards and will continue to comply with Ordinance standards should the request be approved.***
6. *Impact on the Overall Environment. The proposed Special Use shall not unreasonably impact the quality of natural features and the environment in comparison to the impacts associated with typical permitted uses. **The proposed project will not have a detrimental effect on the environment to a degree any higher than any other permitted use.***
7. *Special Use Approval Specific Requirements. The general standards and requirements of this Section are basic to all uses authorized by Special Use Approval. The specific and detailed requirements relating to particular uses and area requirements must be also satisfied for those uses. **The specific use standards for the use are satisfied, as noted above.***

According to Section 9.03.B, the Planning Commission must also consider the following:

1. *The nature and character of the activities, processes, materials, equipment, or conditions of operation; either specifically or typically associated with the use.*
2. *Vehicular circulation and parking areas.*
3. *Outdoor activity, storage and work areas.*
4. *Hours of operation.*
5. *Production of traffic, noise vibration, smoke, fumes odors, dust, glare and light.*

We believe the land use as proposed is of such location and character as to be compatible with the orderly development or use of adjacent land and/or Districts. The vehicular circulation and proposed activities are not detrimental to the area. The site currently houses an existing facility that has operated in a satisfactory manner and has been complementary to the neighborhood.

Recommendation

We support the applicant's request. The site was a successful, viable foster care facility and was approved for expansion into two new rooms to serve as a small group home with no more than 9 residents. This proposal adds one more resident, based on the variance granted to reduce the area requirement, but no exterior changes are proposed and the facility can accommodate the resident. The facility will receive State of Michigan approval once a certificate of occupancy is issued by the City of Troy. The facility has not been problematic in the past and the proposal represents only a modest increase in capacity. We recommend the Planning Commission approve the request.

Please do not hesitate to contact us with any questions, comments, or concerns.

Sincerely,



CARLISLE/WORTMAN ASSOCIATES, INC.
Zachary G. Branigan, LEED AP, AICP
Associate

225-02-1114

6. PUBLIC HEARING – SPECIAL USE REQUEST AND PRELIMINARY SITE PLAN REVIEW (File Number SU 388) – Proposed Adult Foster Care Home, North Side of Square Lake, East of Beach (2420 W Square Lake), Section 6, Currently Zoned R-1A (One Family Residential) District

PUBLIC HEARING OPENED

David Bardlow, 2460 W. Square Lake, support.
John Weisgerber, 2475 Charnwood, oppose.
Larry English, 6140 Beach Road, oppose.

PUBLIC HEARING CLOSED

Resolution # PC-2011-06-036

Moved by: Edmunds
Seconded by: Strat

RESOLVED, That Special Use Approval and Preliminary Site Plan Approval for the proposed Adult Foster Care Small Group Home, located on the north side of Square Lake and east of Beach Road, at 2420 W. Square Lake, Section 6, within the R-1A zoning district, be granted, subject to the following:

1. The maximum number of adult foster care residents shall be 9.
2. Sheet 1 shall be corrected as per the recommendation of the report prepared by CWA.
3. An opaque screen fence or landscaping shall be provided to obscure the trash storage area on the east façade.

Yes: All present (8)
Absent: Maxwell

MOTION CARRIED

OTHER BUSINESS

7. SPECIAL USE REQUEST AND PRELIMINARY SITE PLAN REVIEW (File Number SU 388 A) – Proposed Adult Foster Care Home, North Side of Square Lake, East of Beach (2420 W. Square Lake), Section 6, Currently Zoned R-1A (One Family Residential) District

A variance request for this item is scheduled at the August 16, 2011 Zoning Board of Appeals.

G:\SPECIAL USE\SU 388 A Angel From Albania Adult Foster Care Sec 06\Minutes\08-09-11 Regular Meeting_Final.doc

4. HEARING OF CASES

- A. **VARIANCE REQUEST, ANGELINA AND BESNIK GOJKA, 2420 W. SQUARE LAKE ROAD** – In order to allow 10 adult foster care residents, a 27 square foot variance to the requirement that the land parcel be at least 40,000 square feet in area. Adult foster care small group homes are required to have at least 4,000 square feet of lot area per adult, excluding employees and/or caregivers. The subject property measures 39,973 square feet.

SECTION: 6.02 (B) (2)

Moved by Bartnik
Seconded by Kneale

RESOLVED, to grant the request.

YES: All present

MOTION PASSED

DATE: September 7, 2011
TO: Planning Commission
FROM: R. Brent Savidant, Planning Director
SUBJECT: SUSTAINABLE DEVELOPMENT CHECKLIST

The recently adopted Zoning Ordinance contains Sustainable Development provisions that promote environmentally sustainable and energy efficient design and development practices (see Section 12.01).

There are provisions identified throughout the Zoning Ordinance where the use of sustainable design measures may be used to satisfy, modify, or replace a specific requirement. Once prequalified as a Sustainable Design Project (SDP), the use of a sustainable design measure to satisfy a specific Ordinance requirement is authorized. Approval of a site plan with a modification permitted under this Section shall be considered the formal approval of the SDP status of the project.

This process requires the creation of an SDP checklist, separate from the Zoning Ordinance. A draft document was provided to the Planning Commission for review and comment at the June 14, 2011 Regular meeting. The document was discussed by the Planning Commission at the July 12, 2011 Regular meeting, with some minor revisions made. The previous draft was revised by adding language about other forms of renewable energy, clarifying that eligible brownfield sites need to be MDEQ brownfield sites, confirming that professional seals are not necessary at this stage, as well as correcting some minor grammatical errors.

Separate Rules and Procedures will be created for the Sustainable Design Review Committee. The Rules and Procedures will be adopted by the Committee.

A draft resolution which recommends that the City Council adopt the SDP provisions is attached.

Please be prepared to discuss this item at the September 13, 2011 Regular meeting.

Attachment:
Draft Sustainable Development Checklist, dated July 18, 2011

cc: File/Sustainable Development Option

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PROPOSED RESOLUTION
Sustainable Development Checklist

Resolution # PC-2011-09-

Moved by:

Seconded by:

WHEREAS, The City of Troy Zoning Ordinance included a Sustainable Design Option, which is intended to promote environmentally sustainable and energy efficient design and development practices for the construction of new and the rehabilitation of existing buildings and sites within the City; and,

WHEREAS, Section 12.01 of the City of Troy Zoning Ordinance established the requirement of a separate Sustainable Development Checklist; and,

WHEREAS, The Planning Commission developed the Sustainable Development Checklist.

THEREFORE BE IT RESOLVED, The Planning Commission hereby recommends to City Council that the Sustainable Development Checklist be approved.

Yes:

Absent:

MOTION CARRIED/FAILED

City of Troy

Sustainable Development Checklist

Established by Section 12.01 of the City of Troy Zoning Ordinance

DRAFT

July 18, 2011

Adopted by the Troy Planning Commission on XXXXXX

TROY Sustainable Development Project Checklist

1. Summary

The purpose of the Sustainable Development Project (SDP) option is to encourage development and redevelopment in the City of Troy to incorporate features designed to minimize adverse impacts on the natural and built environment. The SDP option is established by Section 12.01 of the Zoning Ordinance. SDP status will empower applicants to seek a modification from certain elements of the Zoning Ordinance and receive benefits directly related to the sustainable features proposed for their project.

This SDP application includes a variety of areas within which a project can provide sustainable measures in exchange for regulatory flexibility. Once it has been determined that a project design has included measures which are directly related to and which mitigate for the modification sought by the applicant, Prequalified SDP status can be awarded by the Sustainable Development Review Committee (SDRC). There are 7 groups of potential measures provided which can be applied to a variety of areas within the Zoning Ordinance.

2. Zoning Ordinance Sections for which SDP status may be granted

The SDP process is voluntary, and may be applied to any application requiring site plan review under Section 8.02 of the Zoning Ordinance. This includes conventional projects requiring site plan review or special use approval. SDP projects may receive modifications from the Zoning Ordinance in the following six areas:

- A. Lot Coverage: For projects having SDP status, maximum lot coverage may be reduced in the R1-A through R1-C Districts, RT, MF, UR, CF, IB, OM, and RC Districts (Sections 4.06.D.5, 4.07.D.5, 4.08.D.6, 4.09.D.6, 4.11.D.3, 4.15.D.4, 4.17.D.5, 4.18.D.6,)
- B. IB Front Yard Parking: For projects having SDP status, Front yard parking may be permitted in the IB District (Section 4.15.D.3.a)
- C. One Family Cluster Density Bonus: SDP Status may be used as a qualifying factor for a dwelling unit density bonus in projects utilizing the One-Family Cluster Option (Section 10.04.D.2.a)
- D. One Family Cluster Dimensional Modifications: SDP Status may be used as a qualifying factor for dimensional requirement flexibility in projects utilizing the One-Family Cluster Option (Section 10.04.E.2)
- E. Landscaping Flexibility: All landscaping requirements within Section 13.02, Landscaping, may be modified for projects having SDP status. This includes greenbelt landscaping, screening, parking lot landscaping, and general

landscaping requirements (Section 13.02).

- F. Parking Requirement Deviations: Projects with SDP status are automatically eligible for a parking deviation if the measures proposed and the Prequalified SDP status is granted for measures directly related to the requested change in parking (Section 13.06.F).

3. Application Requirements and Administration

Figure 1: SDP Process Summary

Steps	
1	Applicant files an application seeking Prequalified SDP status for one of the purposes identified herein.
2	Zoning Administrator reviews the application to ensure that measures intended to satisfy the Prerequisites are proposed for the area of relief being sought, and that at least one qualifying measure is proposed for the area of relief being sought (Table 1)
3	The Sustainable Design Review Committee meets and considers the application within 30 days of the Zoning Administrator’s formal determination that the application is complete.
4	The Committee takes action on the request. If the Committee finds that the proposed measures will adequately offset the requested modification, the Committee shall grant the applicant Prequalified SDP status.
5	The project goes through the site plan approval process.
6	The SDP status is ratified by final site plan approval

Projects seeking SDP status shall meet the following criteria and prequalification:

- A. Application: The application for SDP status shall contain the following information:
 1. Applicant’s name, address, and telephone number. Professional seals are not required at the SDP application stage.
 2. Common description of the property and complete legal description.
 3. Dimensions of land, including width, length, acreage, and frontage.
 4. Existing zoning and current land use of the property under consideration and zoning and current land use of all adjacent properties.
 5. General location of all existing structures, roadways, and natural features.
 6. The general location of all proposed buildings, roadways, parking areas, and any other changes proposed to be made on the subject property.
 7. A specific list of proposed sustainable design measures being proposed with the following supporting information:
 - a. Any manufacturer information, such as specifications or cut sheets that detail the technology, attributes, and anticipated benefits of the features or equipment.

- b. Identification on the drawings providing information about the location, general design, and application of the sustainable design features being proposed.
 - c. A specific list of the areas within the Ordinance for which benefits are being sought with the SDP application.
 - d. A long-term maintenance plan documenting the proposed method of care for the measures being proposed.
- B. Prerequisites and Qualifying Measures: The application will first be reviewed by the Zoning Administrator to ensure that it specifically lists the benefits for which the application is being filed and demonstrates that the areas of the Ordinance for which an application is seeking or benefits are proportionally related to the SDP measures being proposed. *Every area of the Ordinance for which modification can be sought has at least one category of potential measures from which the applicant MUST select and incorporate sustainable design measures. These required sustainable design measure categories are Prerequisites.*

For instance, if an applicant wishes to provide less open space (exceeding lot coverage) than is required by the Ordinance, the categories of measures identified as Prerequisites include measures that would mitigate the negative consequences of providing insufficient open space. In this example, the applicant would be required to provide measures in each of the following areas of stormwater quantity control, stormwater quality control and reduction of heat island effect.

Every area of modification also has measure categories identified as Qualifying. Every project must, in addition to the Prerequisites, provide a measure in one Qualifying category. For instance, in the example above, in addition to providing measures in the Prerequisite categories (stormwater quantity control, stormwater quality control and reduction of heat island effect), they would also be required to provide a measure in one of the following Qualifying areas: redevelopment and reuse, brownfield redevelopment, light pollution reduction, or water recycling.

- C. Sustainable Design Review Committee: Within 30 days of the Zoning Administrator's formal determination that the application is complete, the Committee shall review any application that has been determined to meet the minimum required criteria for application for SDP status and has met the prerequisite standard of proposing measures directly related to the area or areas from which the applicant is seeking modification. The Committee will review the proposal and each proposed measure and requested modification contained in the application. If the Committee finds that the proposed measures will adequately offset the requested modification, the Committee shall grant the application Prequalified SDP status.

- D. Compliance: Throughout the course of site plan or special use approval, the SDP application and findings of the Sustainable Design Review Committee shall be contained in the application. These materials will be reviewed throughout the process by the Zoning Administrator or designee for compliance to Prequalified SDP status. The applicant shall enjoy SDP benefits or modification as outlined in the Prequalified SDP application approved by the Committee. Once a project is complete, the Zoning Administrator shall make a determination that the Committee's findings are confirmed. If a change to the project affects the conditions spelled out in the Prequalified SDP findings, the applicant shall lose the benefits provided by the SDP status or shall reappear before the Committee to request a revised prequalification.

- E. Prequalified SDP status shall become permanent when the Zoning Administrator grants final site plan approval, at which time the project is determined to have achieved full SDP status. The measures and modifications approved as part of the full SDP status are, like any element contained within an approved site plan, a required element of that final site plan and must be adhered to.

4. Sustainable Design Measures

The SDP option provides for seven areas where an applicant can provide sustainable design measures to seek flexibility in the six areas noted in Section 2, above. It is incumbent upon the applicant to devise an application submission demonstrating that the measure is met. The measures may be applied to the area of regulatory flexibility as follows in Table 1.

Table 1: Prerequisite and Qualifying Measures

P = Prerequisite. To obtain Prequalified SDP status, a project MUST include measures in the categories identified as a Prerequisite, below. (Example: Lot Coverage flexibility can only be granted if stormwater quality, stormwater quantity, heat island effect, and water efficient landscaping measures are proposed.)

Q = Qualifying. This measure will qualify as a supporting measure to achieve SDP status for the area under consideration for modification. These options help mitigate the potentially negative factors resulting from the requested modification. Every project qualifying for SDP status must provide at least one Qualifying measure in addition to the Prerequisites for the area of modification.

X = Indicates that this measure will not satisfy the requirements to achieve SDP status.

	A		B		C		D	E	F			G			
Category	Stormwater		Site Selection		Transportation		Light Pollution	Heat Islands	Water Resources			Renewables			
	Quality	Quantity	Redevelopment and Reuse	Brownfields	Alternative Fuel Vehicle Facilities	Commuter			Water Efficient Landscaping	Water Use Reduction	Water Recycling	Solar	Wind	Geothermal	Other
Lot Coverage	P	P	Q	Q	X	X	Q	P	P	X	Q	X	X	X	X
IB District Front Yard Parking	P	P	Q	Q	Q	Q	P	Q	Q	X	Q	X	X	X	X
One Family Cluster Density Bonus	P	P	X	X	Q	Q	P	Q	Q	Q	Q	Q	Q	Q	Q
One Family Cluster Dimensional Flexibility	P	P	X	X	Q	Q	P	Q	Q	Q	Q	Q	Q	Q	Q
Landscaping Flexibility	P	P	X	X	X	X	X	Q	P	Q	Q	X	X	X	X
Parking Requirement Deviations	Q	Q	Q	Q	P	P	P	Q	X	X	X	X	X	X	X

A. Stormwater

Urban development has complicated and, in many cases, impeded the natural cycle of our water resources. By introducing impervious surfaces on a large scale the recharging of groundwater, infiltration of stormwater into the landscape, and flow and volume of rivers and streams have been disrupted. Further, contaminants from automobiles, chemicals from industry, eroded soils, and other undesirable substances have become commonplace, and are frequently washed away with stormwater into the natural environment. By improving the way stormwater is managed on-site, development can mitigate these potentially negative consequences. Low Impact Design techniques reduce the quantity of stormwater leaving a site, and also improve the quality of that water.

Stormwater Quantity

To receive Prequalified SDP status for stormwater quantity measures, an applicant may propose to do the following, or additional measures not specifically listed here, provided that the applicant can demonstrate that similar benefits will be realized:

- RAIN GARDENS
- SWALES
- MANUFACTURED WETLANDS
- GREEN ROOF
- CISTERNS
- PERMEABLE PAVING
- PRESERVATION OF NATURAL AREAS BEYOND WHAT IS REQUIRED

Stormwater Quality

To receive Prequalified SDP status for stormwater quality measures, an applicant may propose to do the following, or additional measures not specifically listed here, provided that the applicant can demonstrate that similar benefits will be realized:

- RAIN GARDENS
- SWALES
- MANUFACTURED WETLANDS
- GREEN ROOF
- CISTERNS
- PERMEABLE PAVING
- PRESERVATION OF NATURAL AREAS BEYOND WHAT IS REQUIRED

B. Site Selection

Renovation of an existing building or site is often more sustainable than new construction. The renovation of existing facilities reduces landfill waste and reduces the need for new materials. Also, the renovation of existing facilities often eliminates the need for changes to underground utilities, access and circulation, and open space, given that building footprints are often preserved. These advantages mean that redevelopment properties can often be revitalized more quickly, efficiently, and sustainably than new construction.

Brownfield projects are often situated in excellent, high-traffic or well developed areas, although in most brownfield cases, the site is environmentally contaminated. This is a disadvantage to the developer in that there is often costly mitigation that must occur in order to make the site useful. Using SDP, the City can incentivize brownfield redevelopment.

Redevelopment and Reuse

To receive Prequalified SDP status for redevelopment and reuse measures, an applicant may propose to do the following:

- USE A SITE THAT IS PREVIOUSLY DEVELOPED AND VACANT

Brownfield Site

To receive Prequalified SDP status for brownfield site measures, an applicant may propose to do the following:

- USE A SITE ON WHICH CONTAMINATION EXISTS AT CONCENTRATIONS IN EXCESS OF THE STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY'S (MDEQ) REMEDIATION CRITERIA OF PART 201, ENVIRONMENTAL REMEDIATION, OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, AS AMENDED. THIS DETERMINATION MUST BE MADE IN WRITING BY THE MDEQ.

C. Transportation

Purpose:

Electric, hybrid, natural gas, fuel cell, or other alternative fuel vehicles help reduce greenhouse gas emission and fuel demands. Supporting these vehicles also encourages innovation and job creation in the automotive industry, thereby supporting job growth in Troy and Southeast Michigan. The infrastructure for alternative fuel vehicles is in its infancy, although a few simple elements can be incorporated into new development and redevelopment to empower adopters of new automotive technology to function in Troy. This approach will also help Troy compete for residents and companies that are attracted to this aggressive approach to promoting new technology.

Beyond alternative fuel vehicles, the community realizes even more benefit from those who choose transit or non-motorized means to get to the homes, jobs, and everyday activities. Successful regional transit will allow a wider range of people to choose Troy as a home or destination. Non-motorized transportation has both an environmental and overall community health benefit. Both options increase the number of pedestrians on the street, supporting the density in certain areas that are called for in the City of Troy Master Plan.

Alternative Fuel Vehicle Facilities

To receive Prequalified SDP status for alternative fuel vehicle measures, an applicant may propose to do the following:

- INSTALL RECHARGING STATIONS FOR NOT LESS THAN 2.5% OF THE PROVIDED PARKING SPACES
- INSTALL PRIORITY PARKING FOR HYBRID OR ALTERNATIVE FUEL VEHICLES FOR NOT LESS THAN 5% OF THE PROVIDED PARKING SPACES

Commuter Accommodations

To receive Prequalified SDP status for commuter measures, an applicant may propose to do the following:

- PROVIDE NON-MOTORIZED PATHWAYS AND BICYCLE AMENITIES THROUGHOUT THE PROJECT BEYOND THOSE REQUIRED BY THE ORDINANCE
- PROVIDE COMMUTER LOCKERS AND SHOWERS AND SECURE, COVERED BICYCLE PARKING FOR NOT LESS THAN 10% OF THE ESTIMATED STAFF OR RESIDENTS AND 5% OF THE ANTICIPATED CUSTOMERS
- PROVIDE COVERED SHELTER FOR TRANSIT PASSENGERS ON ESTABLISHED TRANSIT ROUTES

D. Light Pollution

Purpose:

Light pollution takes many forms, and can have many negative consequences. Simple problems, like trespass of excess light from one property to another, can be a nuisance. Substantial light pollution can create glare that makes night visibility for drivers a challenge. Regional light pollution can limit the ability to see the night sky clearly, and inappropriate light levels have been shown to affect sleep behavior. Further, by reducing unnecessary lighting, there is an energy reduction benefit that, on a widespread scale, can significantly reduce energy demand.

Light Pollution Reduction Measures

To receive Prequalified SDP status for light pollution reduction measures, an applicant may propose to do the following:

- REDUCE PROVIDED LIGHTING BY USING AUTOMATIC DEVICES FOR ALL NON EMERGENCY LIGHTING BY AT LEAST 50% BETWEEN 11 PM AND 5 AM AND HAVE FULL CUTOFF SHIELDING ON ALL FIXTURES TO PREVENT LIGHT TRESPASS

E. Heat Islands

Purpose:

Heat island effect is when atmospheric temperatures, indoors or outdoors, are artificially increased by elements of the built environment. For instance, a large expanse of asphalt absorbs and slowly releases heat throughout a parking area, where an expanse of grass would have remained cooler and avoided such an “island” of increased heat.

Techniques such as a high-reflectivity roof, sun shades, increased landscaping over a large parking area, or the use of a light, highly reflective pavement material can reduce the heat island effect and help maintain more comfortable temperatures that are closer to the natural condition on a site. These techniques reduce energy demands and naturally preserve comfort for the people who visit or reside in such places.

Heat Island Effect Reduction

To receive Prequalified SDP status for heat island effect measures, an applicant may propose to do the following:

- PLACE A MINIMUM OF 50% OF PARKING UNDERGROUND OR UNDER A STRUCTURE HAVING A ROOF SRI (SOLAR REFLECTANCE) OF AT LEAST 29 OR A STRUCTURE HAVING A GREEN ROOF
- SHADE 50% OR MORE OF THE SITE HARDSCAPE (PARKING, DRIVES, WALKS, COURTS, ETC., NOT INCLUDING BUILDINGS) WITH ANY OF THE FOLLOWING ALONE OR IN COMBINATION:
 - USE AN OPEN GRID PAVEMENT SYSTEM
 - LANDSCAPING CANOPY (WITHIN 5 YEARS OF PLANTING)
 - SOLAR ENERGY STRUCTURES
 - USING A STRUCTURE HAVING A ROOF SRI OF AT LEAST 29 OR A STRUCTURE HAVING A GREEN ROOF
 - USE HARDSCAPE MATERIALS WITH AN SRI OF AT LEAST 29
- USE ROOFING MATERIALS WITH AN SRI OF AT LEAST 29 (FOR ROOFS WITH A STEEP SLOPE – GREATER THAN 2:12) OR AT LEAST 78 (FOR ROOFS WITH A LOW SLOPE – EQUAL TO OR LESS THAN 2:12) FOR AT LEAST 75% OF THE ROOF SURFACE AREA.
- USE A GREEN ROOF FOR AT LEAST 75% OF THE ROOF SURFACE AREA.
- USE A COMBINATION OF THE MINIMUM SRI ROOF MATERIALS AND GREEN ROOF MATERIALS FOR AT LEAST 75% OF THE ROOF SURFACE AREA

F. Water Resources

Purpose:

While the State of Michigan is surrounded by the Great Lakes, most communities obtain their water from groundwater sources. Given the effect of urban development on the

natural recharging of groundwater, there is a benefit in many communities to reduce the amount of water used for everyday activities. Even in Troy, the cost of bringing water in through the regional water network is considerable in terms of the long-term demands placed on the network of underground utilities. By reducing the amount of water wasted in everyday use, the community will extend the useful life of its water resources and the water infrastructure.

Using water efficient landscaping, such as drought tolerant native species, reduces the need for water and maintenance costs. Reducing water use inside a building at the point of consumption is easily achieved through water efficient fixtures. Water recycling is often more involved, but has the added benefit of reducing stormwater quantity, in keeping with other measures within the SDP process.

Water Efficient Landscaping

To receive Prequalified SDP status for water efficient landscaping measures, an applicant may propose to do the following:

- REDUCE WATER CONSUMPTION DEMANDS FOR IRRIGATION BY MORE THAN 50% USING NATIVE SPECIES OVER CONVENTIONAL LANDSCAPING
- INSTALL IRRIGATION SYSTEMS USING ONLY CAPTURED RAINWATER OR RECYCLED WASTEWATER

Water Use Reduction

To receive Prequalified SDP status for water use reduction measures, an applicant may propose to do the following:

- REDUCE WATER CONSUMPTION BY 20% OR MORE OVER CONVENTIONAL DESIGN BY USING WATER EFFICIENT TOILETS (DUAL FLUSH, WATERLESS, LOW FLOW, ETC.), LOW FLOW FAUCETS, LOW FLOW SHOWERS, HIGH-EFFICIENCY WASHING MACHINES OR DISHWASHERS, ETC.

Water Recycling

To receive Prequalified SDP status for water recycling measures, an applicant may propose to do the following:

- CAPTURE MORE THAN 50% OF THE SITE'S WASTEWATER FOR NON-POTABLE USES

G. Renewables

Purpose:

Renewable sources of energy, such as wind, solar, or geothermal, represent cleaner, reliable sources of energy that do not place the same kind of long-term demands on the natural environment that are characteristic of fossil fuels. While not always ideally suited to the climate or condition present in every region or even specific property, renewable sources of energy do represent inexhaustible sources of energy. Solar power, for instance, can generate electricity or provide thermal energy to heat water or even to warm the air inside a building. Geothermal energy takes advantage of the reliable consistent temperatures within the soil beneath our feet. Wind power can enhance the electrical supply without any need for fuel. Other forms of renewable energy production may be proposed, subject to approval by the Committee.

Renewable energy represents a large potential growth area in the economy. By incentivizing the installation of renewable capacity, the City of Troy is also supporting job creation in manufacturing, research and development.

Solar

To receive Prequalified SDP status for solar energy measures, an applicant may propose to do the following:

- PROVIDE ON-SITE SOLAR ENERGY COLLECTORS OR SOLAR THERMAL SYSTEMS TO PRODUCE NOT LESS THAN 10% OF THE SITES ANTICIPATED ELECTRICITY USE AND/OR REDUCE THE LOAD FOR WATER HEATING BY NOT LESS THAN 50% FOR SOLAR THERMAL DEVICES.

Wind

To receive Prequalified SDP status for wind energy measures, an applicant may propose to do the following:

- PROVIDE ON-SITE WIND ENERGY CONVERSION SYSTEMS TO PRODUCE NOT LESS THAN 10% OF THE ANTICIPATED ELECTRICITY USEAGE.

Geothermal

To receive Prequalified SDP status for geothermal energy measures, an applicant may propose to do the following:

- PROVIDE ON-SITE GEOTHERMAL SYSTEM REDUCE THE LOAD FOR BUILDING HEATING AND COOLING BY NOT LESS THAN 50%.

Other

To receive Prequalified SDP status for renewable energy measures not listed here, an applicant may propose to do the following:

- PROVIDE INSTALLED RENEWABLE ENERGY PRODUCTION CAPACITY NOT LESS THAN 10% OF THE ANTICIPATED ELECTRICITY USAGE OR TO REDUCE THE LOAD FOR BUILDING HEATING AND COOLING BY NOT LESS THAN 50%

4. Definitions

- Alternative Fuel Vehicles- Motorized vehicles that use an energy source other than gasoline, or a combination of gasoline and another form of energy
- Bicycle Amenities- Services provided that make the use of bicycles more use friendly, such as covered storage, bike racks, pathways etc.
- Brownfield- Abandoned, idle, or under-used industrial and commercial properties where expansion or redevelopment is hindered or complicated by real or perceived environmental conditions (SEMCOG 2008)
- Captured Rainwater – Rainwater collected in rain barrels or cisterns for later use
- Cisterns- Containers that store large quantities of stormwater above or below ground (SEMCOG 2008)
- Contaminants- Pollutants which have negative effects the natural environment, sometimes being washed away by stormwater into the environment.
- Drought Tolerant – Plants that do not normally require artificial irrigation
- Glare- An effect of light pollution which causes decreased visibility
- Greenhouse Gas- A gas which is trapped within the atmosphere creating a heating effect on the environment, called the Greenhouse Effect
- Green Roof- A rooftop system that may include vegetation, waterproofing, insulation, fabrics, growth media, and other synthetic components allowing the roof to slow the rate of stormwater runoff (SEMCOG 2008)
- Groundwater- Natural water bearing subsurface layers of porous stone, sand, gravel, silt or clay via infiltration (SEMCOG 2008)
- Full Cutoff Shielding- A buffer used to block light from an affected area
- Hardscape- Paved surfaces such as parking lots, driveways, sidewalks, courts etc. not including buildings
- Heat Island Effect- When atmospheric temperatures, indoors or outdoors, are artificially increased by elements of the built environment
- High-Reflectivity Roof-- A type of roofing used to decrease the effects of the urban heat island, by reflecting heat that would otherwise be absorbed
- Impervious Surfaces- A surface that prevents the infiltration of water into the ground such as roofs, streets, sidewalks, driveways, parking lots, and highly compacted soils (SEMCOG 2008)
- Light Pollution- Pollution caused by light, in the form of excess light or the causation for a nuisance
- Low Impact Design- Site design and stormwater management techniques that

infiltrate, filter, store, evaporate, and detain runoff close to its source, and that result in maintaining a site's pre-settlement hydrology (Troy Zoning Ordinance, 2011)

- Manufactured Wetlands- A man-made wetland used to create more efficient systems of water run-off and retention
- Native Species- Plants that historically co-evolved with the local ecology, geology and climate (SEMCOG 2008)
- Permeable Paving – Paving that allows liquids to pass through (SEMCOG 2008)
- Prerequisites- The sustainable design measures that must be met before an application can be approved.
- Qualifying Measures- Measures that need to be met in addition to the prerequisites in order for a sustainable design project to be considered
- Rain Gardens- Landscaping that provides on-site detention, filtering of rainwater, groundwater recharge, and helps reduce runoff volume (Troy Master Plan, 2008).
- Recharging Stations- Stations that can be used to recharge alternative fuel vehicles requiring electricity
- Renewable Energy Installations – Equipment or structures that are designed to capture energy generated from natural resources such as sunlight, wind, rain, tides, and geothermal heat, which are renewable (naturally replenished)
- SRI (Solar Reflectance Index)- The amount of solar energy reflected off of a surface measured by the Solar Reflectance Index http://eetd.lbl.gov/coolroof/ref_01.htm
- Stormwater- Water consisting of precipitation runoff or snowmelt (SEMCOG 2008)
- Stormwater quantity- The amount of stormwater runoff
- Stormwater quality- The condition of the stormwater, including the amount of contaminants
- Swales- A shallow stormwater channel that can be vegetated with some combination of grasses, shrubs, and/or trees designed to slow, filter, and often infiltrate stormwater runoff (SEMCOG 2008)
- Water Efficient Landscaping- Landscaping which effectively processes water in the most efficient manner possible, reducing negative effects of poor stormwater management
- Water Recycling – The reuse of water from common domestic applications
- Watershed- The geographic area that drains to a specific watercourse outlet. The watershed for a major river may encompass a number of smaller sub-watersheds that ultimately contribute to their common outlet (SEMCOG 2008).