



NORTHWEST ASSOCIATED CONSULTANTS, INC.

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PLANNING REPORT - Major Site and Building Plan Review

TO: Sunfish Lake Mayor and City Council
Sunfish Lake Planning Commission

FROM: Michelle Barness/Alan Brixius

DATE: February 13, 2013

RE: Sunfish Lake – 2250 Delaware Avenue – Site and Building Plan Review

FILE: 211.01 – 13.01

3/5/13 CC Mtg.

Agenda

Item

6b

Application Accepted:	January 21, 2013
Planning Commission Date:	February 20, 2013
Tentative City Council Review:	March 5, 2013
60-day Review:	March 22, 2013

BACKGROUND

2250 Delaware LLC is requesting approval of a Major Site and Building Plan Review to allow the construction of a new home and garage at 2250 Delaware Avenue. A Major Site and Building Plan Review requires review and recommendation by the Planning Commission and final approval by the City Council.

Section 1243.03 Shoreland District Ordinance establishes a minimum 200 foot setback from the Ordinary High Water Level (OHWL), except “where adjacent principal buildings have setbacks less than those required, the minimum setback in the case of both initial construction as well as building additions shall be no less than the average setback of the two (2) adjacent principal structures.” The two properties adjoining 2250 Delaware Avenue average a shoreline setback of approximately 100 feet. As such, any new home at the property could be constructed as close as 100 feet to the shoreline without requiring a shoreline setback variance. In this case, the applicant would like to build further back from the shoreline, in the approximate location of the existing home on the property (at between 130-140 feet from the shoreline), and therefore will not be required to request a variance.

The building footprint of the proposed home and attached garage will be approximately 907 square feet larger than the previous home and attached garage. The existing home at 2250 Delaware Avenue is a two story home. The total floor area of the first floor, including attached garage, is 3,497 square feet. The total finished floor area is approximately 3,671 square feet. The existing garage is two stalls with a floor area of 440 square feet.

The total floor area of the proposed two story home is:

	<u>House</u>	<u>Garage</u>
Basement Floor:	2,103 square feet	
First Floor:	2,849 square feet	1,357 square feet
Second Floor:	1,780 square feet	
Total Floor Area:	6,732 square feet	1,357 square feet

Sunfish Lake Zoning Ordinance Section 1202.02.F defines the gross floor area of a building as the floor area exclusive of the basement or cellar. Our ordinance does not provide a definition that distinguishes basements from cellars, as such the planning commission may exclude the basement from the gross floor area of the house.

APPROVALS REQUIRED	
Major Site and Building Plan Review	To permit the construction of a new house and garage at 2250 Delaware Avenue.

Attached for reference:

- Exhibit A: Site Survey (Sheet 1/12)
- Exhibit B: Site Plan (Sheet 2/12)
- Exhibit C: Lower Floor Plan (Sheet 3/12)
- Exhibit D: First Floor Plan (Sheet 4/12)
- Exhibit E: Second Floor Plan (Sheet 5/12)
- Exhibit F: Exterior Elevations and Roof Plan (Sheets 6/12-7/12)
- Exhibit G: Building Sections (Sheet 8/12)
- Exhibit H: Landscape Plan (Sheet 9/12)
- Exhibit I: Lighting Plan and Fixture Details (Sheets 10/12-12/12)
- Exhibit J: City Forester Comments
- Exhibit K: City Engineer

ISSUES ANALYSIS

Major Site and Building Plan Review

The property at 2250 Delaware Avenue is zoned R-1, Single Family Residential and is also within the Shoreland Overlay District surrounding Sunfish Lake. The following table illustrates the application of both the R-1 District requirements and the Shoreland Overlay District requirements to the property.

R-1 District Standards	Required	Proposed	Compliant
Front Setback (south –setback to the public street.)	100 feet	est. 540 feet	Yes
Side Setback (east and west)	50 feet	est. 200 feet	Yes
Rear Setback (shoreland - north)	50 feet	135 -140 feet to shoreline	Yes
Front Accessory Setback (Setback to the public street.)	100 feet	est. 580 feet	Yes
Side Accessory Setback	25 feet	est. 30 feet	Yes
Rear Accessory Setback	25 feet	est. 235 feet	Yes
Maximum Building Coverage	10%	6.56%	Yes
Building Height Limitation (height above average existing grade)	30 feet	27.5 feet	Yes
Shoreland Overlay District Standards	Required	Proposed	Compliant
Buildable lot area above OHWM*	2.5 acres	9.87 acres	Yes
Frontage on improved public street/private road	200 feet	420 feet	Yes
Lot width at building setback line	200 feet	415 feet	Yes
Lot width at OHWM* of abutting water body	150 feet	835 feet	Yes
Building setback from OHWM*	200/100 feet	135-140 house feet	Yes**
Building setback from property line located adjacent to street	100 feet	est. 540 feet	Yes
Maximum lot coverage by impervious surface	30%	6.56%	Yes
Accessory building side yard setback	50 feet	30 feet	Yes***
Sewage system setback from OHWM*	150 feet	134 feet	Yes****

* OHWM (Ordinary High Water Mark)

** Site buildings must meet average shoreline setback of two adjoining properties, or approximately 100 feet, to be compliant.

*** Existing outbuildings are within 30 feet of side lot lines, but will not be enlarged or reconstructed in connection with the proposed project, and hence may be allowed to continue in the same manner (Section 1215.02 Provisions for Non-Conforming Buildings, Structure, Uses and Lots).

**** A sewage treatment system shall not be considered non-conforming if the only deficiency is the sewage treatment system's improper setback from the ordinary high water mark/elevation (Section 1243.08 Non-Conformities in the Shoreland District).

Lot Area Requirements. As illustrated in the table above, the lot in question meets the R-1 District standards for lot area, width and setbacks.

Building Height. According to the Ordinance, no building structure shall exceed two and a half stories or 30 feet in height above existing grade (measured from the average existing ground level). According to the site survey, the average existing ground elevation around the proposed home is 960.8 feet in elevation, so that any new structure should not exceed 990.8 feet in elevation, or 30 feet. The top of the proposed principal building does not exceed 988.3 feet in elevation, with a total average building height of 27.5 feet, meeting the R-1 District 30 foot height limit. The existing home on the property currently reaches an elevation of 987 feet, so that the proposed home requires an increase in elevation of only 1.3 feet.

Building Materials. Both the principal building and the garage will be constructed of a combination of brick, stone, and Hardie plank siding, all approved exterior building finishes. The foundation of the principal building will consist of a reinforced poured concrete wall, and roofing materials will consist of fiberglass shingles by Elk. The City Building Inspector has reviewed the plan set and has no comments regarding this application. A more thorough Building Code review will be conducted with the building permit application. The building plans were also reviewed against the Sunfish Lake Design Guidelines, and were found to successfully meet the standards set forth therein. A discussion of proposed improvements in relation to the Design Guidelines is provided in the Site and Building Evaluation Criteria discussion later in this report.

High Water Elevation. Permanent structures on lakes must have a lowest floor elevation at a level at least three feet above the highest known water level, or three feet above the OHWM, whichever is higher. The proposed structure has a floor elevation approximately 20 feet above the OHWM of 937 feet (and approximately 19 feet above the highest known water level of 938.1 feet), meeting this requirement.

Accessory Buildings. An attached garage not exceeding 1,250 square feet (first floor) shall be considered an integral part of the principal building. However, the building plans indicate that the attached garage will be 1,357 square feet in area, which is 107 square feet larger than Ordinance permits. The applicants will need to demonstrate that the attached garage has been reduced down to a maximum of 1,250 square feet in area as a condition of approval.

Placement and Design of Roads, Driveways, and Parking Areas. According to the Ordinance, private roads and parking areas shall be designed to take advantage of natural vegetation and topography to achieve maximum screening from view from public waters. The driveway and parking lot area are located north of the house, and west of the location of the existing driveway on the property (placing it farther from the lake). While the driveway is located uphill from the lake, so that it will be visible from the lake to some extent, a few mature oak and maple trees exist between the lake and the proposed driveway providing a limited screening effect. No shrubs or perennials have been proposed in the landscape plan to the east of the driveway in the direction of the lake; incorporating these in the landscape plan would provide a more immediate

screening effect on the parking area, as well as function to slow stormwater runoff from impervious surfaces associated with the home and garage.

The proposed parking area expansion meets the design standards listed in Section 1243.05 of the Zoning Ordinance, including providing bituminous surfacing (the proposed driveway will connect to the existing bituminous driveway), and a buffer of at least 25 feet between the property line and the parking area.

Lighting. Exterior lighting of homes or property is allowed as necessary for safety purposes provided the impact on surrounding properties is minimized and it is in compliance with Section 1216.06 of the Zoning Ordinance, which states the following:

- Any exterior lighting shall be arranged as to deflect light away from any adjoining residential property;
- Direct or sky-reflected glare (e.g., up lighting and flood lighting) shall not be directed into any adjoining property; and
- The source of lights shall be hooded or controlled in some manner so as not to light adjacent property.

The applicants' exterior lighting plan includes six brass framed outdoor wall lanterns (two located on a south covered entry to the home and four located along the north extent of the attached garage), and one brass framed outdoor pendant chandelier. All proposed lighting fixtures are hooded, and no exterior lighting is proposed on the east side of the home facing the lake. The fixtures on the north and south sides of the home are not anticipated to be overly visible from adjoining properties or the lake. Upon installation, all lights or combination of lights which cast any light on residential property or over public water shall not exceed one foot candle (meter reading) as measured from the edge of water abutting the subject property. This may be demonstrated by providing evidence of at which distance out from proposed light fixtures, meter readings will fall below the required one foot candle measurement.

Grading and Drainage.

Steep Slopes. The proposed grading plan includes work within areas of steep slopes (in excess of 12%). The applicant shall be required to comply with the recommendations of the City Engineer pertaining to site grading (see Exhibit K).

Topographic Alteration and Erosion Control. The applicant has provided some information on erosion and sediment control, and re-vegetation specifications. Erosion control methods include a silt stop fence which will wrap around the north, east, and south extent of construction on the site (including the septic area). The location of this control device generally seems adequate for intercepting the potential movement of runoff and sediment towards the lake. Sediment will be removed when the silt fence is 1/3 full. In addition, the site is to be landscaped, mulched and sodded as soon as practical once construction winds down. The City Engineer has reviewed the site plan and provided additional recommendations for site erosion control measures as outlined in his report (see Exhibit K).

The Shoreland Overlay District limits the impervious surface coverage of lots to not exceed 30% of the lot area. The proposed home and garage will decrease the amount of impervious surface coverage on the site from 6.78% of the site to 6.56% of the site, which is a positive change meeting Ordinance standards. Part of the nature of this small ratio of impervious surface coverage to building and hard surface coverage relates to the size of the parcel itself. The site is 9.87 acres, so that while the house and driveway provide sizable hard surface coverage adjacent to the lake, the overall ratio stays low. We would recommend increased stormwater treatment measures on the site to further mitigate stormwater runoff and preserve water quality in the lake. Options for increasing the quality of pervious surface on the site for this purpose will be explored in the stormwater management section below.

Stormwater Management. The applicant submitted a site survey illustrating drainage on the site in association with the proposed home and garage. Drainage along the north, east, and south portions of the home will move towards the lake, and drainage on the west side of the home will move overland towards Delaware Avenue. Water draining south of the home will first settle in a vegetated wetland near the shoreline, before moving through a pipe to the lake. The parcel hosts a significant amount of tree coverage surrounding the home and adjacent to the shoreline. This natural cover will aid in slowing the movement of stormwater runoff towards the lake. Additional stormwater treatment measures nearer the home can help intercept stormwater runoff at its origin.

Planning staff suggests the installation of a raingarden planted to the east of the new driveway, which would help mitigate runoff from the driveway's surface. The demolished driveway located east of the new driveway (between the new driveway and the lake) would serve as an opportune location for a new raingarden; both because it sits lower in elevation than the new driveway (so that water moving off of the new driveway will pass by the area on the way to the lake), and because this location will be in transition in the course of construction activities (it will need to be demolished and restored in order to create the new driveway). Another option for improvement includes increasing the vegetated buffer along the shoreline to include additional low growing natural vegetation where none currently exists. The DNR or local water and soil conservation district can provide advice as to appropriate species.

Landscaping/ Fencing/Screening. The applicants have not proposed any new fencing on the property. Areas of existing fencing, including a small 150 square foot woven wire fence enclosure (west of the house), woven wire fencing running north of the existing driveway, and woven wire fence running along the west boundary of the site and heading east to existing outbuildings, will be maintained. Three separate retaining walls will be constructed adjacent to the new home and garage, and one freestanding retaining wall to the east of the house will be removed. The City Engineer has further recommendations regarding the installation of new retaining walls, as described in his report (see Exhibit K).

Six trees are to be removed from the lot in the course of constructing the new buildings, totaling approximately 70 inches in diameter. Trees to be removed include four birch trees, an apple tree, and a maple tree. The site plan also indicates that 40 trees will be

saved, including apples, maples, birches, oaks, cottonwoods, and pines. Trees identified for removal are in the immediate area of the proposed driveway and garage, on the north and south side of the house. No trees are being removed between the house and the lake. The City Forester has reviewed the tree removal and preservation plan and endorses the plan as is. He suggested that there were in fact a few ash trees identified for preservation that the applicants may consider removing. Green Ash trees have limited long-term survivability without preventative insecticide treatments due to increasing invasion and destruction of the tree species by the Emerald Ash Borer insect.

After an onsite inspection of the trees on the property, the City Forester noted that several trees were not identified correctly on the applicants' site plan. This may be of concern to the owners since it could eventually lead to confusion when in the course of construction, some trees are to be removed and some are to be protected. This issue must be corrected prior to construction.

In addition, the City Forester emphasized that the tree protection measures identified on the site plan appear inadequate for protecting very mature oak and maple trees immediately adjacent to where construction will be going on. He recommends that the applicants require the contractor to install robust fencing (such as chain link fencing) during the construction period to keep vehicles, construction materials or debris, and construction equipment a minimum of 20 feet away from all the mature oaks and maples to be saved. Currently orange tree protection ribbon is identified on the site plan in the area of these trees, but in most cases the protection ribbon does not protect the trees to a distance of 20 feet. Old, mature trees can be seriously injured by even the most seemingly benign construction activities.

Tree protection measures must include marking trees to be saved with a red flag, so as to clearly differentiate them from trees to be removed. Also, the City may further require that the developer retain a professional forester to prepare a forest inventory and management plan for the development, in order to control and abate any existing or potential loss.

The site plan indicates a tree line adjacent to the shoreline. It is unclear whether the mowed area of the lawn in the direction of the lake meets the shoreline beneath this canopy cover, and if so, to what degree the mowed area extends along the shoreline. The City Shoreland Ordinance allows only up to 20% of the Shoreland Impact Zone (an area from the OHWM to 50% of the structural setback, or 100 feet) to be mowed to the shoreline, a condition which must be maintained on the property into the future. Lots existing at the time of ordinance passage containing mowed areas in excess of 20% may continue in the same manner, as long as the area isn't increased (the 2250 Delaware lot meets this exception, having been established prior to creation of the Shoreland Ordinance). In this case, the applicant is not required to reduce mowed area along the shoreline. However, there is a desire among Sunfish Lake residents to maintain or improve water quality in the lake, and the removal and construction of a new home provides the opportunity to re-examine the state of natural vegetation along the shoreline with the intent of better intercepting stormwater runoff moving to the lake. We recommend the installation of a 20 foot ground level vegetated buffer strip along the shoreline where a ground level vegetated shoreline buffer does not currently exist

(excluding existing lawn areas along the shoreline, which may be maintained if so desired). The shoreline buffer strip shall consist of native grasses, forbs and shrub species.

We recommend that a revised site plan be provided for the review and approval of the City Forester that includes:

1. Improved tree preservation measures (specifically, some manner of robust fencing), to protect mature oak and maple trees in the vicinity of construction which are not intended for removal. The robust fencing must establish a minimum 20 foot protected buffer around the trees.
2. Corrected identification of trees species on the property (both those designated for preservation and removal).
3. Indication of areas for the installation of a ground level vegetated shoreline buffer, a minimum of 20 feet in depth back from the shoreline, excluding areas which are, a) already vegetated with ground level shoreline vegetation, or b) currently lawn.

Septic System. The applicant provided the location of both primary and secondary septic system mounds on the site. It should be noted that the proposed location of the septic mounds does not meet the Shoreland Overlay District OHWM sewage system setback of 150 feet (the mounds are approximately 134 feet back from the OHWM), however a variance is not required according to Section 1243.08.C, Non-Conforming Sewage Treatment Systems of the Zoning Ordinance.

Detailed construction plans and applicable permits will be required in conjunction with the building permit application for the septic systems, and the applicant must comply with the recommendations of the City Septic Systems Specialist pertaining to the removal of existing septic areas and installation of the proposed primary and secondary septic areas.

Site and Building Plan Evaluation Criteria. As described in Section 1208.04 of the City Zoning Ordinance, the Planning Commission, as its basis of recommendation, and the City Council, as its basis for decision, shall evaluate the effects of the proposed site and building plans. This review shall include, but is not limited to, the following:

- A. Whether the proposed improvements are compatible and in harmony with the existing structures in the surrounding community.

Comment: The proposed single family home is a permitted use in the R-1 District. While the proposed home is larger than the existing house on the site, the building and site plan appear to comply with R-1 standards (garage size is the one exception; the applicants will need to demonstrate compliance with Ordinance area requirements for attached garages as a condition of approval). In addition, the architecture is of quality design consistent with City Design Guidelines. The Planning Commission will need to make a finding as to whether

this proposed home is compatible and in harmony with the surrounding community.

- B. Whether the proposed improvements preserve the character and nature of the surrounding community, including the natural landscape and woodland characteristics of the community.

Comment: The applicant makes efforts to preserve the quality of the natural landscape on the subject property. Six trees will be removed in the course of construction, and significantly more will be protected and maintained. The proposed landscape plan for the new home will include small trees, shrubs and perennials, adding to the beauty of the finished home. Additionally, the applicant makes an effort to preserve existing vegetation between the home and the Sunfish Lake shoreline. Though impervious surface coverage on the site is less than that allowed by Ordinance, the applicant should consider additional measures for intercepting and treating stormwater runoff of from the site given that the new home and garage still create extensive hard surface cover near the lake. Planning staff has made recommendations for addressing this issue in this report. Overall, the project does a good job of respecting the nature of the surrounding community.

- C. Whether the proposed improvements are not constructed of unsightly, improper or unsuitable materials.

Comment: The exterior materials of the proposed house and garage meet Ordinance requirements, create aesthetic appeal, and otherwise maintain the character of the locality. Further, they meet the requirements of the Sunfish Lake Design Guidelines, in that they:

1) Preserve sensitive areas during construction (applicants plan on installing silt fencing during construction, and plan on restoring exposed areas immediately after construction; Planning Staff, the City Forester, and the City Engineer have made additional recommendations for protecting mature trees, natural vegetation and Sunfish Lake during construction activities, including recommending the use of stronger fencing for protecting trees, heavy duty silt fencing, and biorolls).

2) Locate site buildings to respond to specific site conditions (the proposed house and garage will be located in approximately the same location as existing buildings on the site, reducing the need for additional grading or the additional removal of extensive vegetative cover on the site).

3) Organized buildings according to a clear design concept (through the use of architectural techniques including asymmetrical balance of building features and major architectural elements (the front entryway); in addition, significant window openings facing south may increase access to passive solar heating, and significant window openings to the east harness views to the lake).

4) Integrated attractive building features in the architectural design (a covered stone entryway, a stone terrace, detailed window openings, roof details including a chimney and roof overhangs, dormer windows, etc.).

5) Using attractive and complementary exterior finish materials (stone, brick, etc.).

- D. Whether the proposed improvements will not materially adversely affect any natural resources in the community, except when there is no feasible and prudent alternative to the proposed location of the improvements. For purposes of this clause, "natural resources" shall include, but not be limited to, all mineral, animal, botanical, air, water, land, timber, soil, quietude, recreational, historical, scenic and aesthetic resources.

Comment: The subject property is located on Sunfish Lake, and within the Shoreland Overlay District. Future use of the lot shall make it a priority to consider the preservation of natural areas within the lot (specifically within the 200 foot setback along the shoreline), and the protection of water quality by minimizing the removal of vegetation and maximizing the control of stormwater runoff, erosion, and any other impactful water-borne substances associated with residential development (fertilizer and pesticides, automobile oils and fluids, etc.).

- E. Whether the proposed site and improvements shall have an appearance that will not have an adverse effect upon adjacent residential properties.

Comment: The proposed home and garage are positioned in the same location as the existing home and garage on the property, however the new building will be slightly taller and has a larger building footprint. Nearby neighbors are positioned north and south of the subject property along the lake, thus the larger home is not likely to interfere with view sheds from surrounding residential properties. In addition, because the majority of the house expansion occurs towards the west (away from the lake), and the proposed home is in fact narrower than the existing home nearer the lake, its functional and visual impact on the lake will be reduced.

- F. Whether the proposed site improvement complies with drainage requirements, as provided in Section 1216.04 of the Zoning Ordinance.

Comment: The City Engineer has reviewed the proposed site improvements and provided comments in Exhibit K.

SUMMARY AND RECOMMENDATION

The applicants are requesting approval of a Major Site and Building Plan review to allow the construction of a new home and garage at 2250 Delaware Avenue. Planning staff recommends approval of the Major Site and Building Plan based on finding that the proposal will have minimal impact on site conditions related to vegetation, land

alteration, or neighboring property. This recommendation would be conditioned upon the following:

1. The applicant shall provide a revised site plan, for review by the City Forester, which includes the following:
 - a) Improved tree preservation measures (specifically, some manner of robust fencing), to protect mature oak and maple trees in the vicinity of construction which are not intended for removal. The robust fencing must establish a minimum 20 foot protected buffer around the trees.
 - b) Corrected identification of trees species on the property (both those designated for preservation or removal).
 - c) Indication of areas for the installation of a ground level vegetated shoreline buffer, a minimum of 20 feet in depth back from the shoreline, excluding areas which are, 1) already vegetated with ground level shoreline vegetation, or 2) currently lawn.
2. A revised landscape plan which incorporates:
 - a) An area of shrubs and perennials to the east of the driveway, in the direction of the lake, to provide improved screening for the parking area.
 - b) A raingarden located between the new driveway and the lake (in the area of the demolished driveway), to mitigate stormwater runoff flowing off of the driveway and nearby building surfaces towards the lake.
3. The applicant shall provide revised building plans demonstrating that the attached garage has been reduced down to a maximum of 1,250 square feet in area.
4. The applicant shall provide proof that upon completion of installation of lights, all lights or combination of lights which cast any light on residential property or over public water do not exceed one foot candle (meter reading) as measured from the edge of water abutting the subject property, and from adjacent property lines. This may be demonstrated by providing evidence of at which distance out from proposed light fixtures meter readings will fall below the required one foot candle measurement.
5. The applicant shall review all comments made by the City Engineer in Exhibit K, and adhere to all his recommendations pertaining to site grading, erosion control and protection of the sanitary sewer and well.
6. The applicant must comply with the recommendations of the City Septic Systems Specialist pertaining to the removal of existing septic areas and installation of the proposed primary and secondary septic areas.

7. The applicants must comply with City Code demolition requirements, including completing a building permit application and submitting it along with a completed *Dakota County Intent to Perform Demolition* form to the Dakota County Environmental Services Division, as described in the "General Permit Form" provided on the Sunfish Lake website. All requirements associated with these permits must be complied with.

c: Cathy Iago, City Clerk
David Neameyer, City Building Official
Ron Wasmund, City Septic System Inspector
Don Sterna, City Engineer
Jim Nayer, City Forester
Tim Kuntz, City Attorney
2250 Delaware LLC, Applicant
Bob Moser, Moser Homes, Inc., Builder

CERTIFICATE OF SURVEY

(SHEET 1 OF 2 SHEETS)

for Moser Homes, Inc.

Tel. (651) 483-3132

1000 Co. Rd E, Suite 220, Shoreview, MN 55174

owner 2250 Delaware LLC

2250 Delaware Ave, Sunfish Lake, MN 55118

LOT DATA:

LEGAL DESCRIPTION:

Lot 1, Block 1, ANGELL ACRES,

Dakota County, Minnesota.

EXISTING IMPERVIOUS:

HOUSE = 3,497 sq ft

OUT BLDG 1 = 589 sq ft

OUT BLDG 2 = 1,796 sq ft

OUT BLDG 3 = 986 sq ft

DECK = 452 sq ft

PATIO 1 = 795 sq ft

PATIO 2 = 582 sq ft

WALKS = 482 sq ft

TOTAL = 29,159 sq ft or 8.78%

GENERAL NOTES:

1. INFORMATION RETAINING EXISTING HOMES

2. ALL EXISTING IMPERVIOUS ARE SHOWN

3. ARE TAKEN FROM PLANS FROM LOCALS

4. ASSOCIATES DATED 12/17/02

5. INFORMATION FROM DAKOTA COUNTY GIS SYSTEM

6. TOPOGRAPHY AROUND THE PROPOSED HOMES

7. SEE SHEET 2 FOR UPDATED TOPOGRAPHY NEAR HOME.



VICINITY MAP

LEGEND

- DENOTES IRON MONUMENT FOUND AS Labeled
- DENOTES GAS METER
- DENOTES POWER POLE
- △ DENOTES EXISTING SPOT ELEVATION
- △ DENOTES STORM SEWER APPROX
- △ DENOTES NET LAND
- △ DENOTES EXISTING HOME
- △ DENOTES EXISTING 2 FOOT CONTOURS, CONTOURS
- △ DENOTES EXISTING HOME WERE FIELD SHOT ON 1/27/13
- △ DENOTES EXISTING HOME WERE FIELD SHOT ON 1/27/13
- △ DENOTES TREE LINE
- △ DENOTES OVERHEAD WIRE
- △ DENOTES CONCRETE SURFACE
- △ DENOTES BITUMINOUS SURFACE
- △ DENOTES DRIVEWAY
- △ DENOTES DRIVEWAY
- △ DENOTES DRIVEWAY

BENCHMARK

BENCHMARK: MDOOT GSD

Station #710 (NOS name)

SW corner of Delaware

Author and Soles Church

(NAD83)

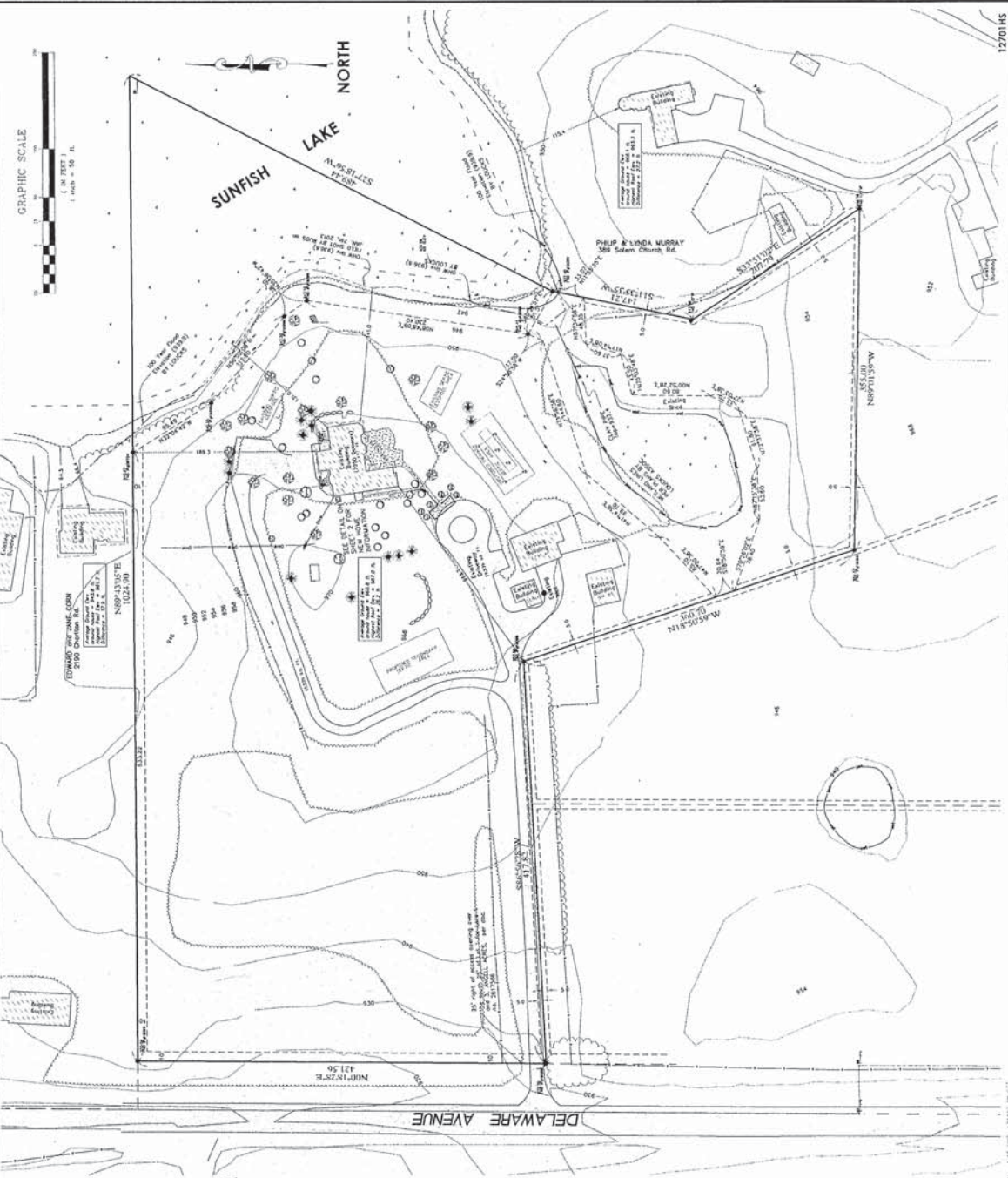
E.G. RUD & SONS, INC.

Professional Land Surveyors

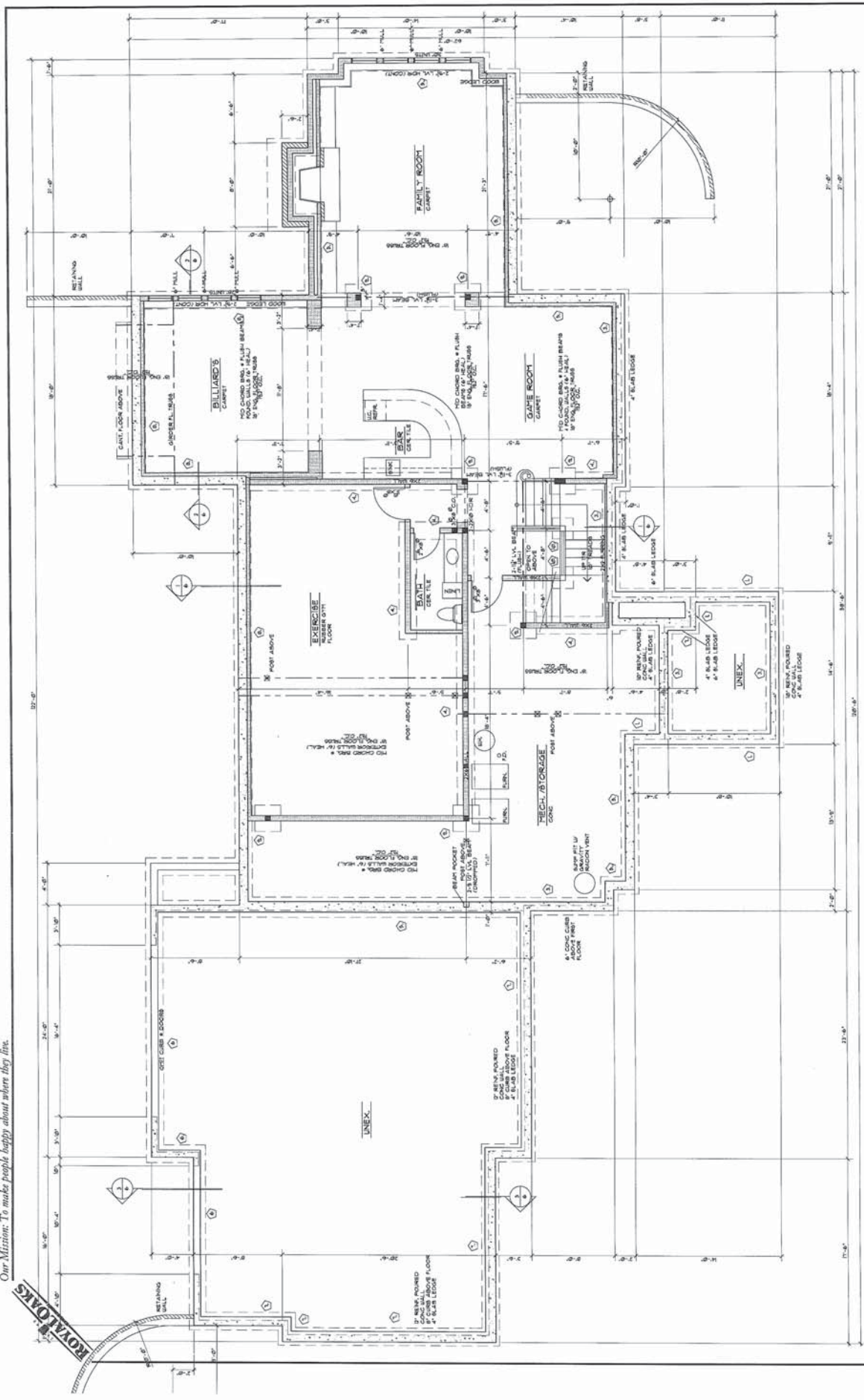
6776 Lake Drive NE, Suite 110

Lino Lakes, MN 55014

Tel. (651) 361-8200 Fax (651) 361-8701



Our Mission: To make people happy about where they live.



LOWER FLOOR PLAN
1/4" = 1'-0"
203 SQ. FT. FINISHED AREA
(EXCLUDING MECH. & STORAGE)

Exhibit C - Lower Floor Plan

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NEW HOME FOR THE:
2250 DELAWARE, LLC
SUNFISH LAKE, MN

DATE:	1/21/2013
DRAWN BY:	RDS
CHECKED BY:	K.L.
REV BY:	DATE:



PROJECT NO:	0000
SHEET NO:	1 OF X

Our Mission: To make people happy about where they live.



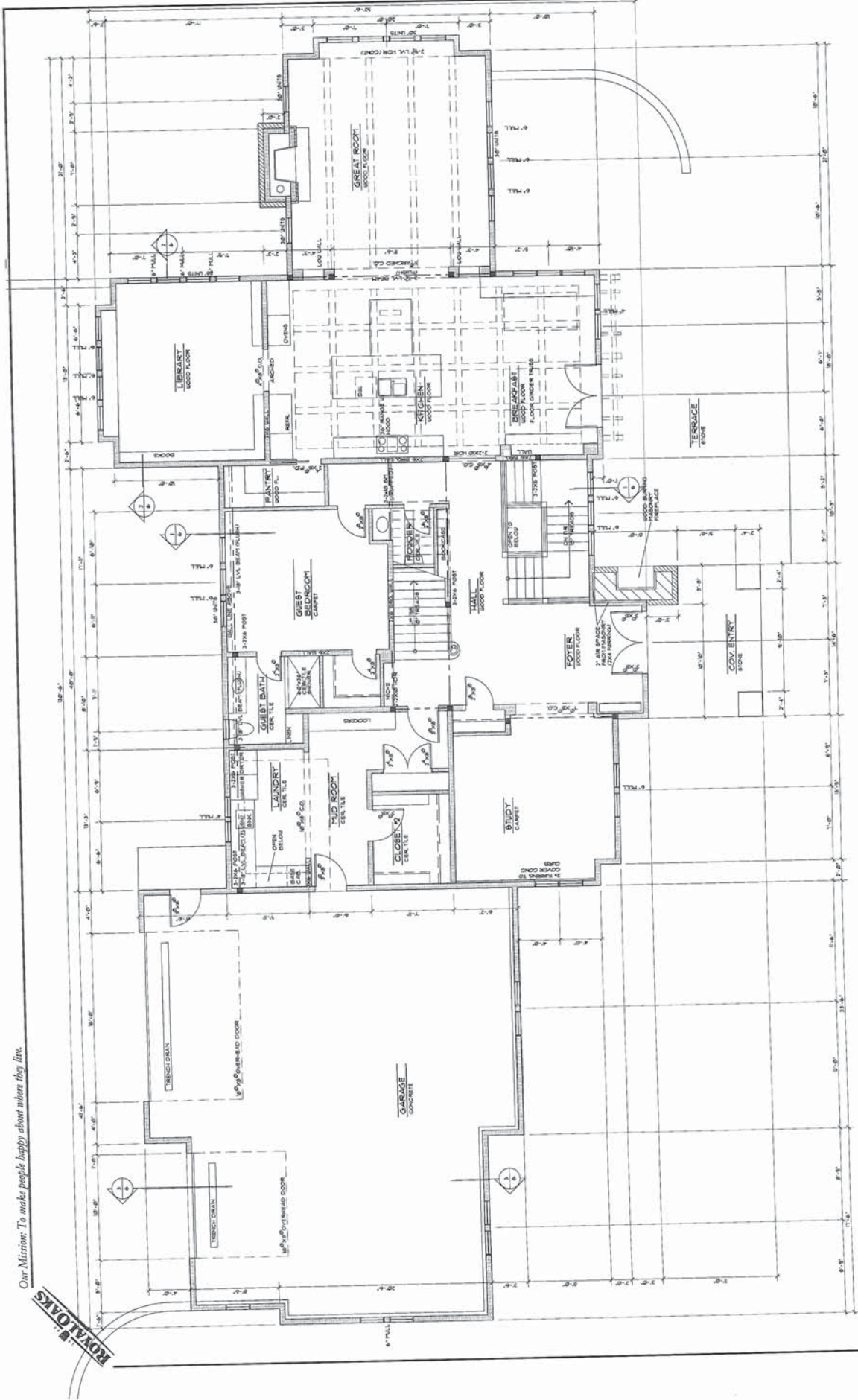
ROYAL OAKS DESIGN
1988
10000
2 OF X

NEW HOME FOR THE:
2250 DELAWARE, LLC
SUNFISH LAKE, MN

DATE:	1/21/2013
DRAWN BY:	RJS
CHECKED BY:	K.L.
REV BY:	DATE:



PROJECT NO:	0000
SHEET NO:	2 OF X



1 FIRST FLOOR PLAN
2 1/4" = 1'-0"
2849 SQ. FT. FINISHED AREA
(EXCLUDING GARAGE)
1351 SQ. FT. GARAGE

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Exhibit D - First Floor Plan

Our Mission: To make people happy about where they live.



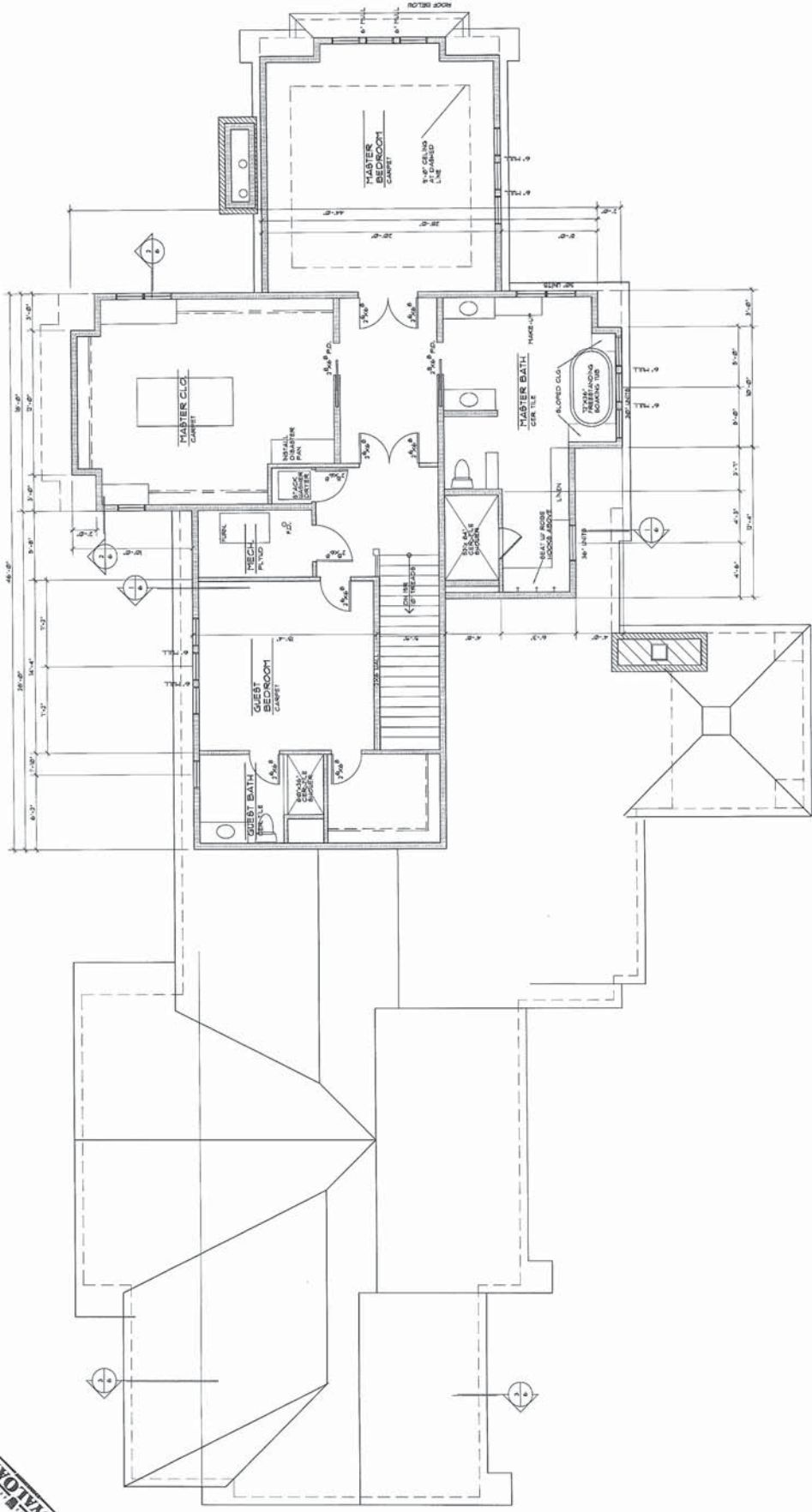
ROYAL OAKS DESIGN
10000
3 OF X

NEW HOME FOR THE:
2250 DELAWARE, LLC
SUNFISH LAKE, MN

DATE:	1/21/2013
DRAWN BY:	RJS
CHECKED BY:	K.L.
REV BY:	DATE:

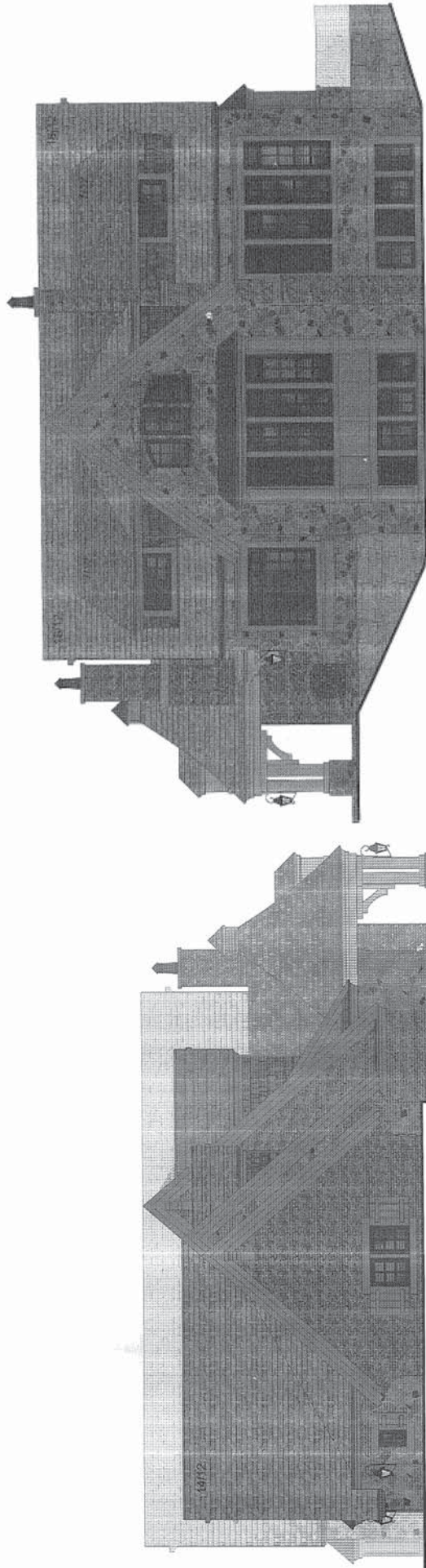


PROJECT NO:	0000
SHEET NO:	3 OF X



1 SECOND FLOOR PLAN
1/4" = 1'-0"
1800 SQ. FT. FINISHED AREA
(EXCLUDING STAIR OPENING)

Exhibit E - Second Floor Plan

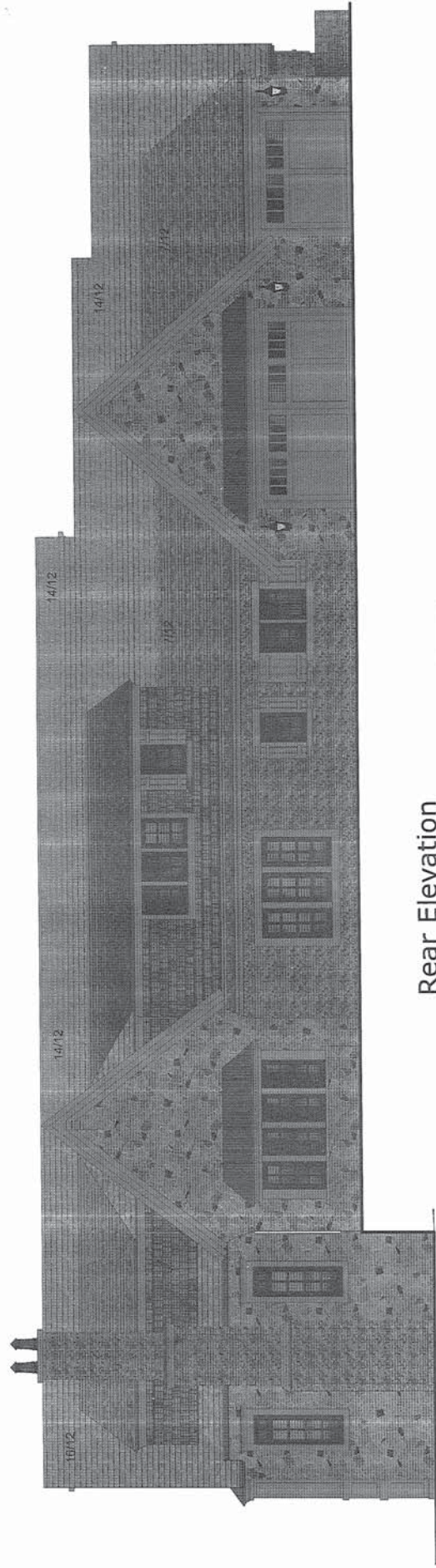


Left Elevation

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

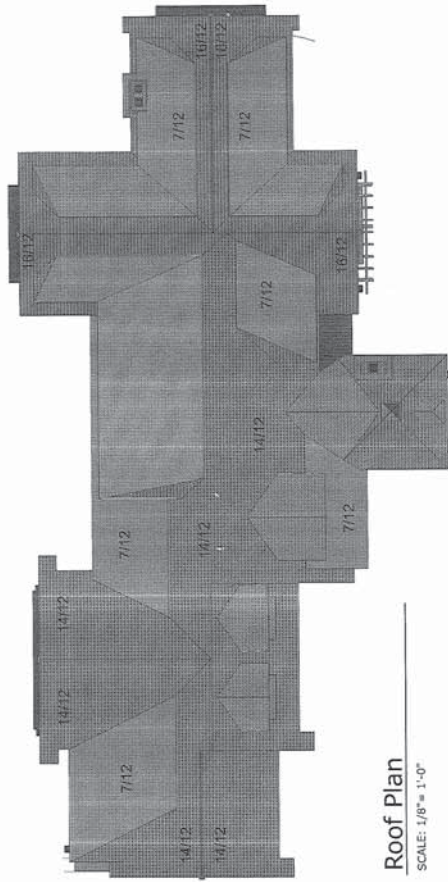
Right Elevation

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



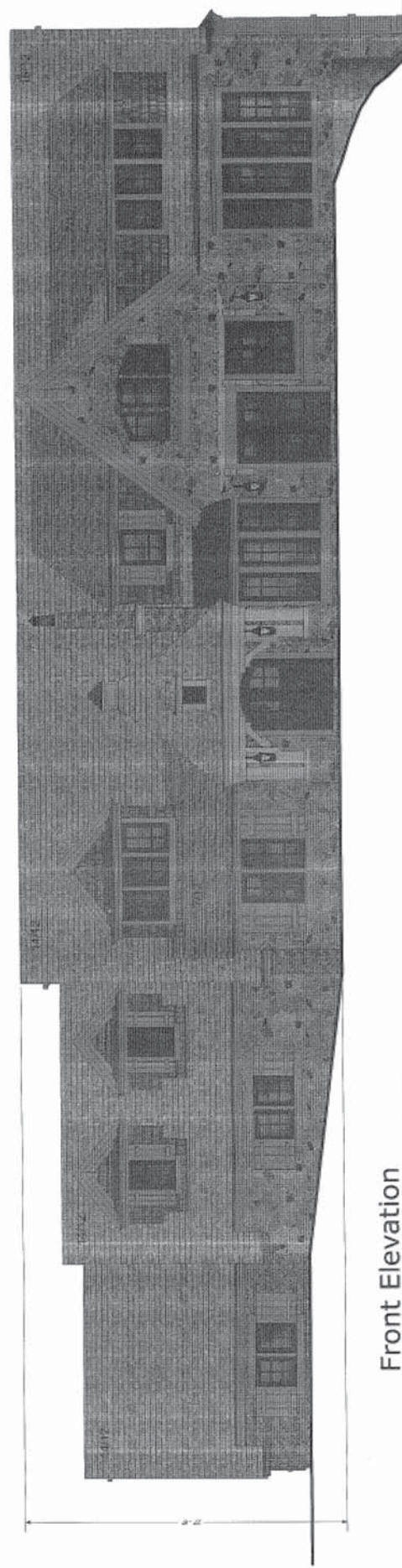
Rear Elevation

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



Roof Plan

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



Front Elevation

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

Our Mission: To make people happy about where they live.



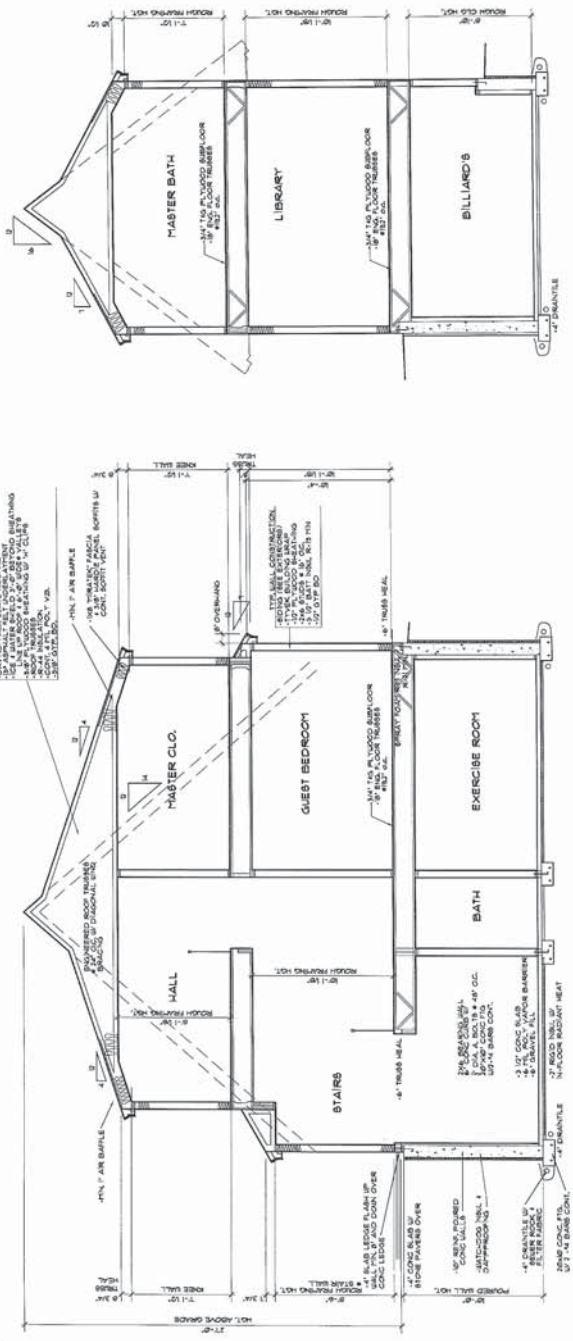
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NEW HOME FOR THE:
2250 DELAWARE, LLC
SUNFISH LAKE, MN

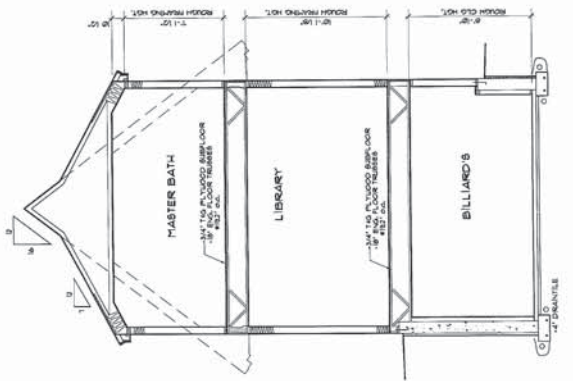
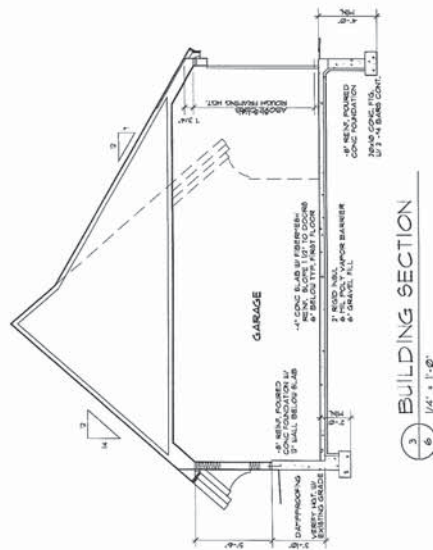
DATE:	12/12/2012
DRAWN BY:	RDS
CHECKED BY:	K.J.L.
REV BY:	
DATE:	



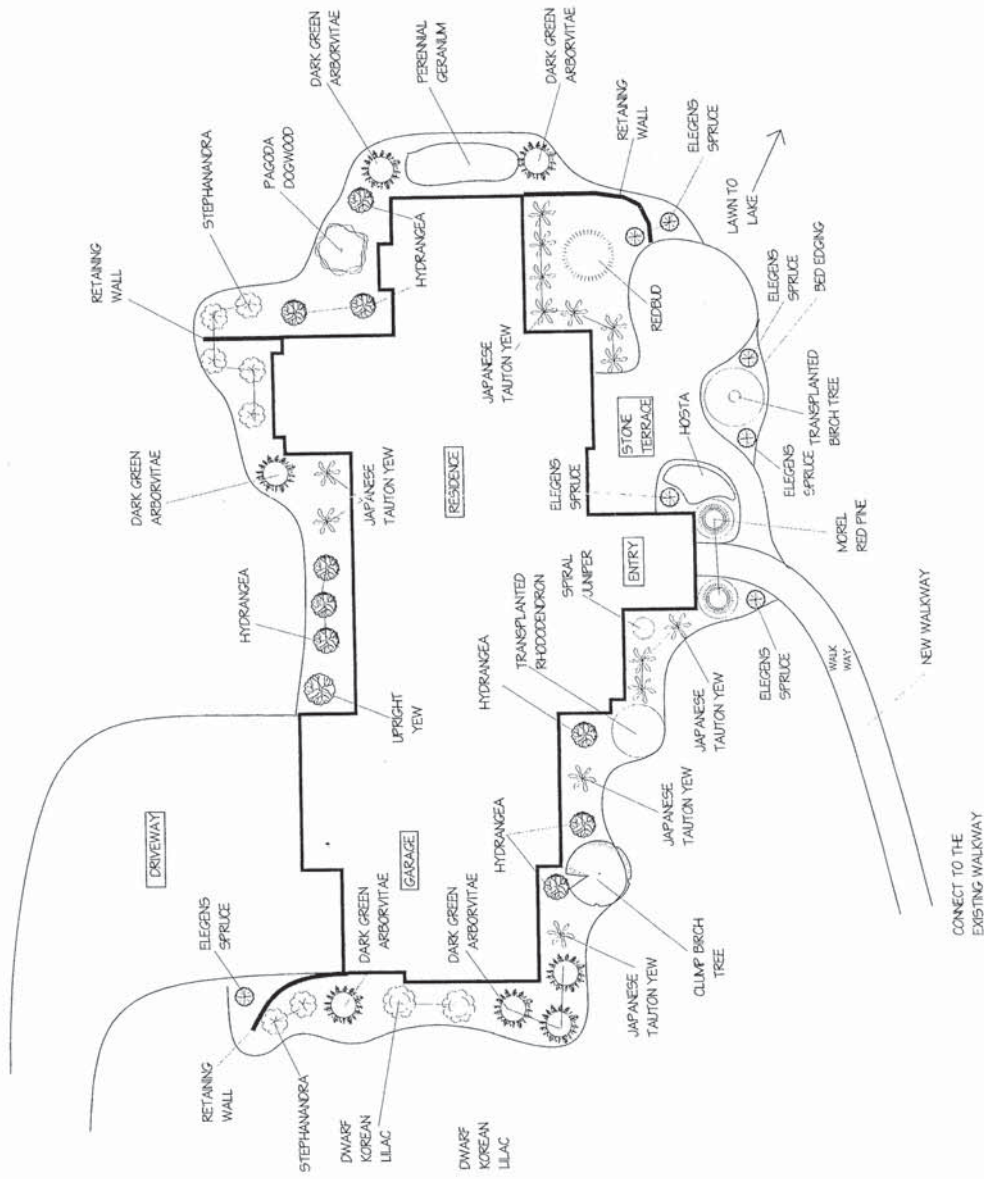
PROJECT NO.	0000
SHEET NO.	6 OF X



1 BUILDING SECTION
1/4" = 1'-0"



2 BUILDING SECTION
1/4" = 1'-0"



Landscape Design by: Jim Hanson
Natural Landscape Minnesota Inc.

Landscape Plan: Landscape Concept Plan
2550 Delaware Ave Sunfish Lk

Scale:
1/8" = 1'

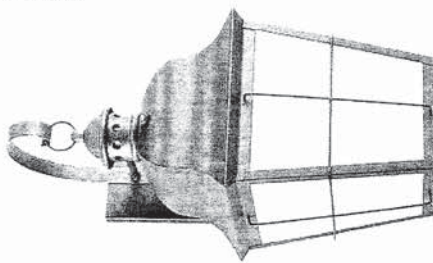
Revision #: One
Date: 1/17/2013

TYPE A FIXTURE

Visit our web site at www.SeaGullLighting.com
89273BLE-44 - page 1 of 2



89273BLE-44: One Light Outdoor Wall Lantern



Dimensions:

Length: 8 1/4"
Width: 9 1/4"
Height: 21"
Extends: 10"
Wire: 6 1/2"
Mounting Proc.: Cap Nuts
Connection: Mounted To Box



Bulbs:

1 - GU24 Self Ballasted PL13 26w Max. 120v - Included

Features:

- ENERGY STAR® Qualified
- Offers energy saving fluorescent lighting

Material List:

1 Body - Brass - Undefined
1 Housing - Glass - Undefined

Safety Listing:

ETL Listed for Wet Locations
cETL Listed for Wet Locations

Instruction Sheets:

English (HC-1485FB)

Collection: Chatham

Weathered Copper Outdoor Fluorescent Wall Lantern One Light with Frosted Seeded Glass.

This replaces 89263PBLE-44

UPC #:785652198755

Finish: Weathered Copper (44)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Filter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Shade	Glass	Undefined	4									

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	8	4 3/4	5/8		8 1/2	12 1/2

Replacement Bulb Data:

Product #	Open Lamp	Type	Base	Watts	Watts Consumed	Volts	Hours	Lumens	Temp (°K)	CRI
97106		Self Ballasted	GU24	26		120v	10000	1800	2700	81

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	UPS Ship
Individual	89273BLE-44	1	785652198755	12.5	12	24.25	2.105	7.8	Yes
NJ Pallet		36		48	40	77	85.556	280.8	No

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Job Name:

Job Type:

Comments:

Quantity:



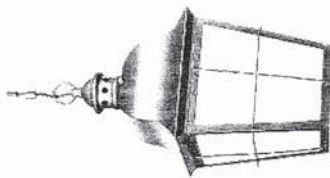
69272PBLE-44: Single Light Chatham Outdoor Pendant Dimensions:



Length: 9 1/4"
Width: 9 1/4"
Height: 19"

Height w/ Chain: 92 1/4"
Wire: 120' (color/Brown)
Chain: 72"

Mounting Prec.: Center Lock-Up
Connection: Mounted To Box



Bulbs:

1 - GU24 Self Ballasted PLS13 26w Max. 120v - Included

Features:

- ENERGY STAR® Qualified
- Offers energy saving fluorescent lighting
- Photocell included with this outdoor fixture for nighttime control

Material List:

- 1 Body - Brass - Weathered Copper
- 1 Housing - Glass - Frosted Seeded
- 1 Chain - Steel - Weathered Copper

Safety Listing:

cETL Listed for Damp Locations

Instruction Sheets:

English (HC-1613)

Collection: Chatham

Fluorescent One Light Outdoor Pendant with Weathered Copper Finish Solid Brass and Frosted Seeded Glass, Photocell Included.

This replaces 69262PBLE-44

UPC #:785652692727

Finish: Weathered Copper (44)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Filter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Frosted Seeded	4									

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Canopy			1 1/4	5 1/2		

Replacement Bulb Data:

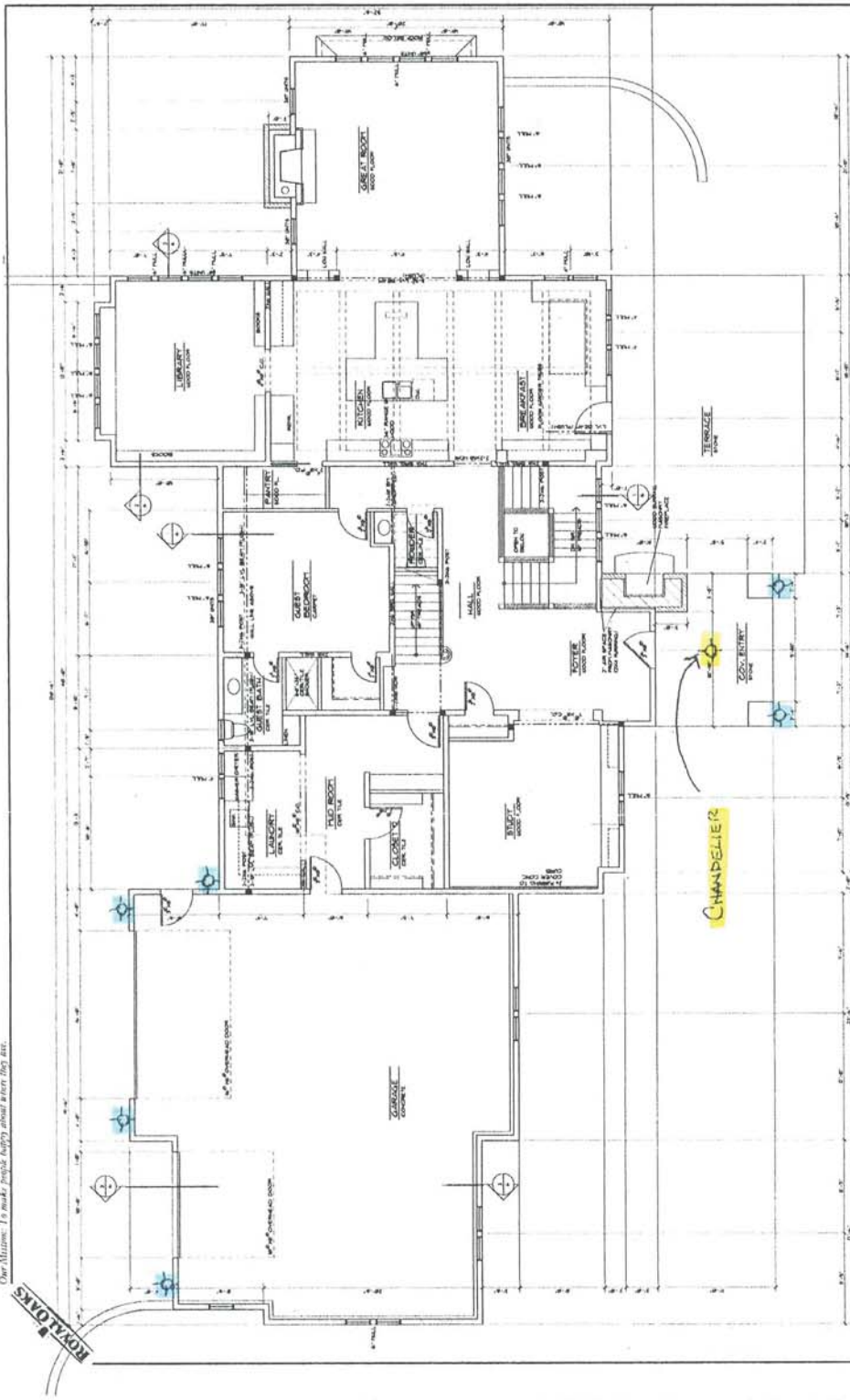
Product #	Open Lamp	Type	Base	Watts	Watts Consumed	Volts	Hours	Lumens	Temp (°K)	CRI
97106		Self Ballasted PLS13	GU24	26		120v	10000	1800	2700	81

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	UPS Ship
Individual	69272PBLE-44	1	785652692727	13.5	13.5	16.5	1.951	11.4	Yes
NJ Pallet		35		48	40	72	80	399	No
NV Pallet		35		48	40	72	80	399	No

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Our Mission: To make people happy about where they live.



1 FIRST FLOOR PLAN

TYPE "A" FIXTURE
(SEE PHOTO)

1/4" = 1'-0"
2012 SQ. FT. FINISHED AREA
(EXCLUDING GARAGE)
1011 SQ. FT. GARAGE

© 2012 Royal Oak Design, Inc.



PROJECT NO.	0000
SHEET NO.	2 OF 2

DATE	1/11/2013
DRAWN BY	RDS
CHECKED BY	A.L.
REV BY	DATE

NEW HOME FOR THE:
2250 DELAWARE, LLC
SUNFISH LAKE, MN

ROYAL OAKS DESIGN, INC.
10000 13TH AVE. S. #100
BURNSVILLE, MN 55337
TEL: 612.891.1000
WWW.ROYALOAKSDSIGN.COM

Michelle Barness

From: lstreecare@gmail.com on behalf of Jim Naves [jim@lstreecare.com]
Sent: Monday, January 28, 2013 4:24 PM
To: Alan Brixius; Michelle Barness
Subject: 2250 Delaware

Alan and Michelle:

With respect to the tree removal and tree protection drawing I have three comments after I did an on site walk about on January 28, 2013.

First, the plan seems reasonable regarding the trees to remove and the trees to save and I would endorse that. In fact there are a couple of mature ash trees that are identified for protection that they may want to reconsider saving.

Second, most of the trees noted on the plan are not identified correctly. In fact I needed to locate them by triangulation from the existing building to determine which trees were which. This may be of concern to the owners since that could lead to considerable confusion when some trees are to be removed and some protected.

Third, tree protection identified on the plan appears inadequate to protect the very mature oak trees immediately adjacent to where the construction will be going on. I recommend that the owners require that the contractors to install robust fencing (such as chain link fencing) during the construction period to keep vehicles, construction materials or debris, and construction equipment at least 20 feet away from all the mature oaks and maples that the owners want to save.

Trees that are this old can be seriously injured by construction activities as seemingly benign as one trip over their root system by a bobcat type loader.

Please give me a call if you have further questions.

Jim Naves
jim@lstreecare.com
612-803-9033

Living Sculpture, Tree and Shrub Care, Inc www.lstreecare.com



engineering · planning · environmental · construction

701 Xenia Avenue South
Suite 300
Minneapolis, MN 55416
Tel: 763-541-4800
Fax: 763-541-1700

Memorandum

To: Alan Brixius
Northwest Associated Consultants

From: Donald W. Sterna, PE
WSB & Associates, Inc. 

Date: February 11, 2013

Re: Major Site and Building Plan Review
2250 Delaware Avenue
City of Sunfish Lake, MN
WSB Project No. 1629-79

Project Background

Currently, a home exists at 2250 Delaware Avenue which the applicant is proposing to remove and construct a new residential house in its place, and it appears that no variances will be required to construct their project. The applicant is proposing to keep the outbuildings, however, regrade around the new home site location, as well as constructing a brand-new septic drain field system meeting current codes and regulations. The site is located along the west side of Sunfish Lake and has current access off of Delaware Avenue which will remain unchanged. The following review is only for the engineering, storm water management, and site grading issues. The building compliance and/or septic and well requirements will be handled by the City planners, and Building and Septic inspectors.

The existing impervious drainage is approximately 29,159 square feet, and the applicant is proposing to reduce that area by 937 square feet for a total proposed impervious service of 28,222 square feet. Since the application is proposing to reduce the impervious surface, there will not be any requirement for infiltration of storm water runoff management for this project. The application is in conformance with the City requirements listed under Section 1216.04 Storm Water Management.

Site Grading

The applicant's proposed site grading shows a positive slope away from the house foundation, therefore, requires no modifications to the proposed grading plan. However, there appears to be some issues relating to how the proposed contours will be graded around the northeast side of the building adjacent to the driveway and how the final contours will tie into the proposed wall which the application will need to reconcile as part of their final grading plan approval. The

applicant is proposing retaining walls as part of the project, and any wall 4 feet in height or taller will need to be design and signed by a registered professional engineer in the State of Minnesota. These plans will need to be provided to the City Engineer's office for review before final building permit is issued.

Erosion Control

The applicant will need to place, either silt fence or orange construction fence, around the proposed primary and secondary drain field and septic tank area to prevent destruction and/or soil compaction of these areas during construction. Also, the applicant is proposing to remove the existing septic drain field and tanks. The removal of these systems shall be in accordance with the MPCA requirements which require the top to be removed, tanks pumped, and the bottom concrete flushed, and filled with sand to allow drainage to migrate through the old septic tank. The applicant also has the option of totally removing and properly disposing of the tank which is at their option. The existing well adjacent to one of the outbuildings is proposed to remain on site and orange construction fence should be placed around the wellhead for protection as well.

The applicant will need to place heavy-duty silt fence around the perimeter of the building site which drains toward any wetland and/or lake to provide extra strength to support the silt fence. Also, we are requiring a six-inch bioroll be placed along the bottom of the silt fence that is capable of filtering fine silts that are present in the area as an extra layer of protection to trap any soil contamination prior to flowing into the water bodies surround the project areas. The purpose of the heavy-duty silt fence with the wire backing is necessary due to the fact that on previous projects in the City, standard silt fence has failed. The silt fence has a tendency to be knocked over and/or overwhelmed by sediment, thereby, allowing sediment to be discharged from the site which is not acceptable at this project location. The applicant will be required, as part of the permit, to maintain the silt fence in working shape and remove any or all sediment that accumulates along the fence during construction.

The proposed, temporary stockpile locations need to be moved to sites that are within 50 feet of a driving surface for the Sunfish Lake building ordinances. Also, the applicant will need to construct and maintain a rock construction entrance of approximately 50 feet in length and 50- to 20-feet wide at a point where the contractor is leaving the paved surface and entering an exposed dirt area to minimize tracking of material off the project site.

Sanitary Sewer and Well

The applicant proposes to abandon the existing septic system tank and rebuild a new system as part of the new home construction. The applicant will need to ensure the tanks are pumped out, and the bottom concrete slab and must be broken up and backfilled with suitable grading material to allow for drainage to pass through.

As previously mentioned in the memo, the Contractor will need to install, prior to any excavation, the protective fencing around the primary and secondary septic drain field, as well as around the existing and proposed well locations to protect them from soil compaction and/or destruction. If an existing well adjacent to the old house is abandoned, the applicant will need to

abandon the well in accordance with Minnesota State Rules and Regulations and have the work completed by a contractor that is certified well abandoning procedures. A copy of any well abandonment certification needs to be provided to the City engineer and planner's office for their files.

Conclusion and Recommendations

Based upon our review of the proposed site and grading plan for the proposed new home at 2250 Delaware Avenue, we take no exception to their proposed site and grading plans, with the exception of the above-noted items in this memorandum. Therefore, at this time since there are no variances being proposed, we hereby find the proposed plans to be in accordance with City requirements and recommend approval from an engineering standpoint for this project. Please note that the applicant will need to submit any structural retaining wall design and final wall plans to the City Engineer's office for review prior to issuing a building permit. Enclosed you will find a redlined copy of the plans with our comments. We are requesting that the redline set of plans, along with a narrative outlining your modifications to the plans, and a new set of plans addressing our comments, be resubmitted to our office prior to final issuing of the building permit on the project.

Enclosures

sm