

ORDINANCE NUMBER 670

AN ORDINANCE OF THE TOWN OF PARADISE VALLEY, ARIZONA, APPROVING AN INTERMEDIATE AMENDMENT TO AMEND THE SPECIAL USE PERMIT FOR TEMPLE SOLEL, 6805 EAST MCDONALD DRIVE, PROVIDING FOR THE ADDITION OF A SOLAR PANEL SYSTEM ON FOUR NEW CARPORTS AND THE ROOF OF THE EXISTING MEETING HALL BUILDING; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town of Paradise Valley Planning Commission held a public hearing on September 17, 2013, in the manner prescribed by law, for the purpose of considering an Intermediate Amendment to the Special Use Permit for Temple Solel, and recommended approval to the Town Council; and

WHEREAS, the Town of Paradise Valley Town Council held a public hearing on October 10, 2013, in the manner prescribed by law, to hear and to take action on the Intermediate Amendment to the Special Use Permit for Temple Solel, as recommended by the Planning Commission.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND TOWN COUNCIL OF THE TOWN OF PARADISE VALLEY, ARIZONA THAT:

SECTION I. In General

1. The Special Use Permit for Temple Solel is on the land legally described as the West half of the Northwest quarter of the Northwest quarter of the Northeast quarter of Section Fifteen (15), Township Two (2) North, Range Four (4), East of the Gila and Salt River Base and Meridian; Except the North 33 feet for roads; and Except the West 25 feet. Assessor Parcel Number 173-07-004D (hereinafter "the Property").
2. The Special Use Permit for the Property is hereby amended to permit the addition of a solar panel system on four new carports and the roof of the existing meeting hall building, subject to the stipulations set forth in Exhibit A, attached hereto. The existing Special Use Permit and Special Use Permit Stipulations shall remain in full force and effect.
3. This Intermediate Amendment to the Special Use Permit for Temple Solel is approved in accordance with Section 1102.7 of the Zoning Ordinance.

SECTION 2. Severability. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions thereof.

SECTION 3. Effective Date. This ordinance shall become effective at the time and in the manner prescribed by law.

PASSED AND ADOPTED by the Mayor and Town Council of the Town of Paradise Valley, Arizona, this 10th day of October, 2013.

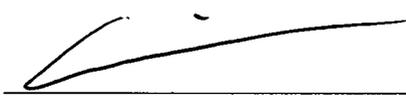


Scott P. LeMarr, Mayor

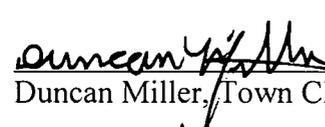
SIGNED AND ATTESTED TO THIS 10th DAY OF October 2013

APPROVED AS TO FORM:

ATTEST:



Andrew M. Miller, Town Attorney



Duncan Miller, Town Clerk

**EXHIBIT A
TO
ORDINANCE NUMBER 670**

STIPULATIONS

**TOWN OF PARADISE VALLEY
INTERMEDIATE AMENDMENT TO THE SPECIAL USE PERMIT FOR
TEMPLE SOLEL
SUP-13-6**

New Stipulations for the addition of a solar panel system on four new carports and the roof of the existing meeting hall building.

1. All improvements to the property shall be in substantial compliance with the following:
 - a. The Narratives, prepared by Green Choice Solar and dated August 13, 2013, September 10, 2013, September 11, 2013 and October 4, 2013;
 - b. Sheet SP1, Site Plan and Panel Layout, prepared by Green Choice Solar and dated October 2, 2013;
 - c. Schematic Elevation Plans, prepared by Arizona Structural Group and dated August 27, 2013;
 - d. Sky-Beam Light Detail prepared by Voigt Lighting;
 - e. Sheet 1 of 1, Photometric Plan dated August 14, 2013; and
 - f. Sheet L1, Landscape Plan, prepared by Green Choice Solar and dated October 2, 2013.
2. The landscaping must be maintained and the applicant must work with the two neighbors on the west to optimize the location of the landscaping that has been proposed in the landscape plan.
3. All existing Special Use Permit stipulations shall remain in full force and effect.



October 4, 2013

TOWN OF PARADISE VALLEY
Planning and Building Department
6401 E. Lincoln Drive
Paradise Valley, AZ 85253-4399

Additional Narrative for SUP-Application:
*New Solar Panel System on New Car Shading Structures and Existing Roof at
6805 E. McDonald Dr., Scottsdale, AZ 85253 (TEMPLE SOLEL PROJECT)*

Review Board,

On September 26, 2013 The Town of Paradise Valley reviewed our amended request for an intermediate SUP. During that meeting, our proposal for the addition of New Car Shading Structures with Solar Panels was reviewed and commented on. Requirements that resulted from the meeting, was for our company to work together with the nearby neighbors to provide an improved landscape plan to satisfy not only the nearby neighbors, but also the Temple Solel property and community. In addition, after our September 26 meeting, ADA parking requirements were brought to our attention by the Town Building Official, slightly modifying our design.

Green Choice Solar has performed the following to satisfy the Town's requirements:

- A meeting was held on October 1, 2013 at the Temple Solel property with the two neighbors directly to the west of the property. It was explained that the landscape plan could be modified to the satisfaction of the neighbors and encouraged their input. The neighbors requested a copy and were given the landscape plan to label where they desired trees/landscaping as to provide shielding of the new Temple parking structures. Also, a CAD drawing was requested so the residents could work with their own private Landscape Architect to provide further direction to our firm. A CAD drawing was sent to both residents via email on October 2, 2013. No further enhancements to the landscaping has been communicated to our firm from the residents at the time of writing this letter, but we shall continue to work with them and will incorporate their input on receiving it into our landscape plan. The site for the landscaping was walked with the residents and although exact input was not received about specific locations that will come in the future, 5 new 24" box trees were added to the plan for increased shielding for the neighbors as requested by the Town in the previous meeting.
- Per the Town Building Official, 38% of the ADA parking needs to be covered by the new parking canopies. Per the Building Official, the percentage of the total ADA spaces are required to be covered by the same percentage of the total parking spots that are covered (38%). Therefore, 6 ADA spots are to be covered by the new structures (14 total are on site). Please see the updated plan showing the relocated ADA spots below structure A.
- Structure A on the West side of the parking area has been re-designed for a clearance height of 8'-2", with a total structure height (height to the top of the solar panels) of 10'-2", thereby resulting in an increased overall height of only 2".

Note, please see previous narratives for other information regarding previous requirements/modifications to the project.

The Photovoltaic system proposed will provide great benefit to the Temple Solel congregation building and will also benefit the Town of Paradise Valley by utilizing natural, clean, renewable source of energy.

Please call if you have any questions or comments.

Sincerely,
Green Choice Solar

A handwritten signature in black ink that reads "Erik G. Carter". The signature is written in a cursive style with a large initial "E".

Erik G. Carter, P.E.
Structural Engineer



September 11, 2013

TOWN OF PARADISE VALLEY
Planning and Building Department
6401 E. Lincoln Drive
Paradise Valley, AZ 85253-4399

Additional Narrative for SUP-Application:
New Solar Panel System on New Car Shading Structures and Existing Roof at
6805 E. McDonald Dr., Scottsdale, AZ 85253 (TEMPLE SOLEL PROJECT)

Review Board,

On August 20, 2013 The Town of Paradise Valley Planning Commission reviewed our amended request for an intermediate SUP. During that meeting it was discovered that the request complied with the recommended setbacks, heights and illumination standards specified in the SUP guidelines. Although the request does comply with current SUP guidelines, it was noted that there may be a visible effect on the surrounding neighbors.

Therefore; Green Choice Solar has mitigated any concerns that the planning commission may have had on the visual effect of surrounding neighbors by amending our request with respect to the visual effect of mechanical equipment as follows:

- Structure A on the West side of the parking area has been re-designed with a reduction in total height to 10' clear.
- Structure A on the West side of the parking area has been re-designed to eliminate the "saw tooth" portion of the structure, thereby mounting the solar modules in a flush alignment. This will eliminate the visual tilt of the solar modules.
- Structure A on the West side of the parking area has been re-designed with a reduction in total length by 30'.
- Although the under canopy lighting is well within SUP guideline producing zero lumens at the property line, all under canopy lighting will be re-designed to operate on a dusk to 10:00 pm timer. Please note: in some special circumstances such as an event or function held in the evening, the lighting may possibly remain on later than the 10 pm time, but shall be turned off at the conclusion of the event/function.
- A completed landscaping plan has been included into this amendment to add an additional level of screening of the mechanical equipment.

To include: 18 additional drought tolerant trees planted near the Western property line. Selected varieties will be evaluated on the maximum growth height and circumference consistent with the height of structure A.

To include: 9 additional drought tolerant shrubs planted near the Western property line. Selected varieties will be evaluated on the maximum growth height and circumference consistent with the height of structure A.

The Photovoltaic system proposed will provide great benefit to the Temple Solel congregation building and will also benefit the Town of Paradise Valley by utilizing natural, clean, renewable source of energy.

Please call if you have any questions or comments.

Sincerely,
Green Choice Solar

A handwritten signature in black ink, appearing to read 'Erik G. Carter', written over a horizontal line.

Erik G. Carter, P.E.
Structural Engineer



September 10, 2013

TOWN OF PARADISE VALLEY
Planning and Building Department
6401 E. Lincoln Drive
Paradise Valley, AZ 85253-4399

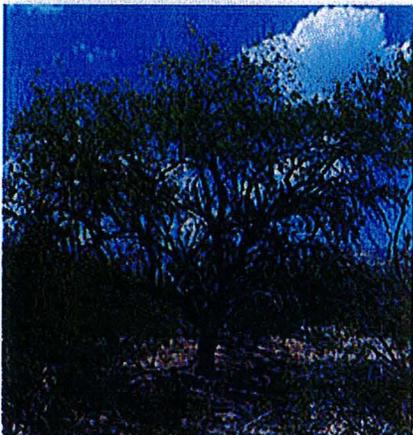
Plant Varieties to be used for:

New Solar Photovoltaic System at 6805 E. McDonald Dr., Scottsdale, AZ 85253 (TEMPLE SOLEL PROJECT)

Review Board,

Below are a sample of the plant varieties we are proposing to use at the above mentioned project:

Mesquite (*Prosopis Glandulosa*)



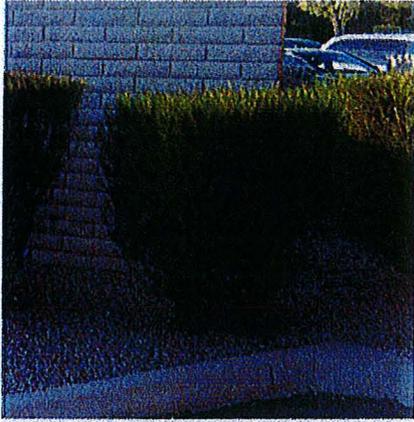
Desert Willow (*Chilopsis Linearis*)



Palo Verde (*Cercidium Floridum*)



Cassia (*Senna Artemisioides*)



Vitex (*Agnus-castus*)



Texas Laurel (*Calia Secundiflora*)

Please call if you have any questions or comments.

Sincerely,
Green Choice Solar

Erik G. Carter, P.E.
Structural Engineer



August 13, 2013

TOWN OF PARADISE VALLEY
Planning and Building Department
6401 E. Lincoln Drive
Paradise Valley, AZ 85253-4399

Narrative for SUP-Application:

New Solar Panel System on New Car Shading Structures and Existing Roof at
6805 E. McDonald Dr., Scottsdale, AZ 85253 (TEMPLE SOLEL PROJECT)

Review Board,

This firm is proposing the addition a Photovoltaic Solar Panel System to the above mentioned project. The project will consist of four new parking structures as well as new metal racking on the existing roof that will support new solar panels. We are providing this narrative to further clarify the project and are seeking "Approval" in order to proceed with the permit process. The parking structures and metal racking will provide shade for cars while supporting solar panels that will provide energy to the Temple Solel congregation. The overall project consists of a total of 910 panels (with 2 additional "dummy panels" added for aesthetics only) in which 798 panels will be supported by the four new parking structures with a tilt of 5 degrees from the horizon line and 112 panels will be supported by metal racking on the existing roof with a tilt of 12 degrees from the horizon line. The parking structures will be constructed of steel columns with steel beams and C-pulins on top of the beams. The maximum height of the tallest parking structures will be about 14'-6". All the new car structures will be painted tan to match the building so they will blend in aesthetically with the building. To minimize the impact of the addition of the structures, they will all be designed to cover the current existing parking spaces. No new parking spaces will be created or landscape areas will be altered (except plant replacing and trimming). Lighting occurring under the parking canopies will be minimal and shielded so that the illumination will be pointed downward. Lighting will generally turn on at dusk and turn off at 10 pm. Lighting may be turned on in the evenings during special events or occasions at the Temple exceeding the 10 pm time, but shall be turned off at the conclusion of the event. The panels on the roof will maintain a low profile and be concealed from ground view behind the roof parapet. The maximum height of the panels above the roof will be about 2'-0" above the roof deck while the existing building parapet being approximately 2'-6" above the roof deck. Please see the attached site plan, photos and schematic elevation drawings attached for more information.

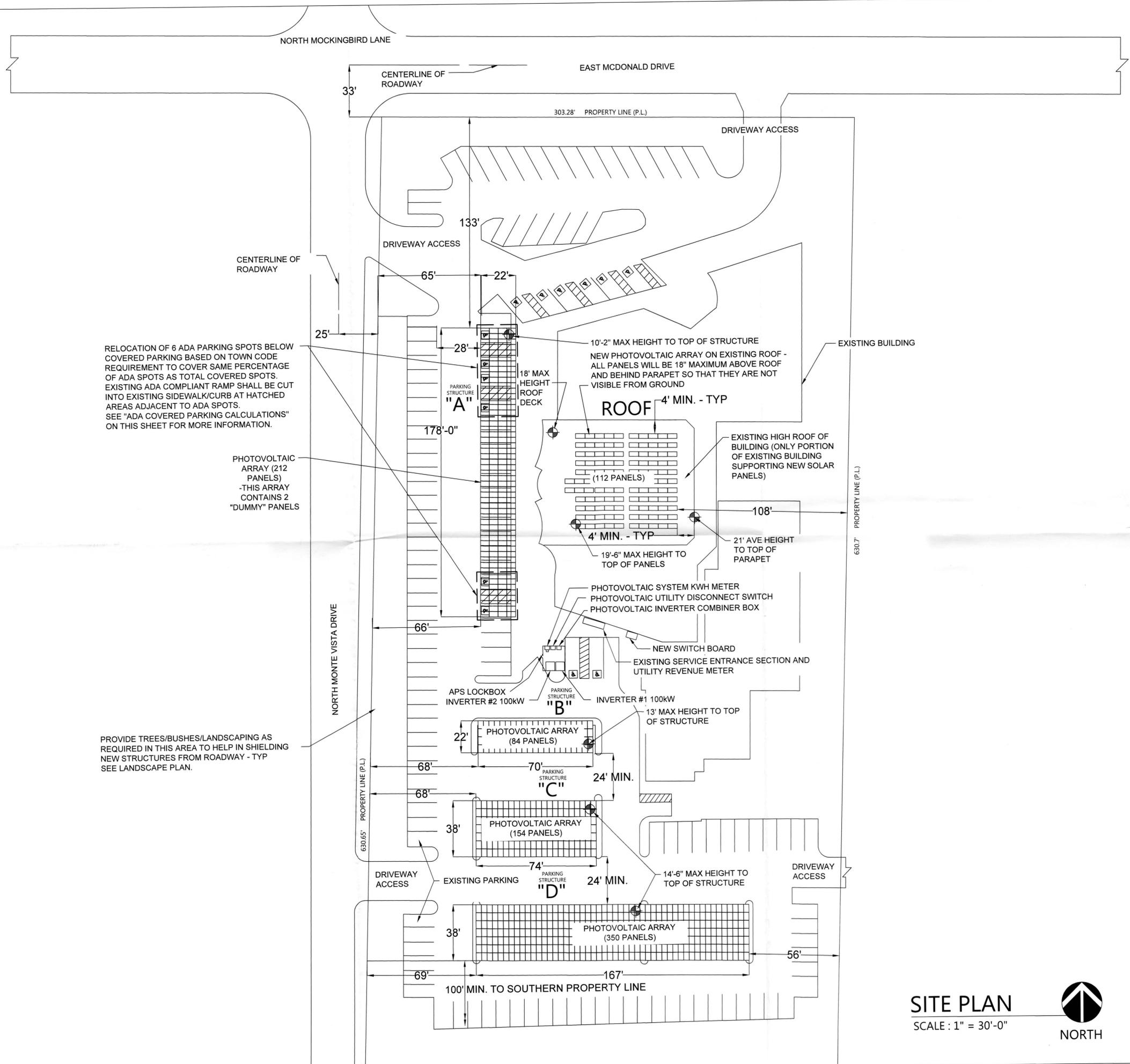
We have read the SUP Guidelines and realize that some aspects of the project may not align with the recommendations of the guidelines. For example, the additional lot coverage due to the structures exceeds the Towns recommended guidelines. To alleviate the lot coverage, 112 panels have been placed on the roof to minimize the impact of the additional coverage due to new structures. We have met these guidelines when possible and realize that the Intermediate Application Process is required due to some of these items.

The addition of the Photovoltaic system will provide great benefit to the Temple Solel congregation building and will also benefit the Town of Paradise Valley by utilizing natural resources as an energy supply in lieu of other conventional methods used in the past.

Please call if you have any questions or comments.

Sincerely,
Green Choice Solar

Erik G. Carter, P.E.
Structural Engineer



RELOCATION OF 6 ADA PARKING SPOTS BELOW COVERED PARKING BASED ON TOWN CODE REQUIREMENT TO COVER SAME PERCENTAGE OF ADA SPOTS AS TOTAL COVERED SPOTS. EXISTING ADA COMPLIANT RAMP SHALL BE CUT INTO EXISTING SIDEWALK/CURB AT HATCHED AREAS ADJACENT TO ADA SPOTS. SEE "ADA COVERED PARKING CALCULATIONS" ON THIS SHEET FOR MORE INFORMATION.

PHOTOVOLTAIC ARRAY (212 PANELS) - THIS ARRAY CONTAINS 2 "DUMMY" PANELS

PROVIDE TREES/BUSHES/LANDSCAPING AS REQUIRED IN THIS AREA TO HELP IN SHIELDING NEW STRUCTURES FROM ROADWAY - TYP SEE LANDSCAPE PLAN.

TEMPLE SOLEL "SITE PLAN"

GENERAL BUILDING INFORMATION:

2012 IBC, 2011 NEC, 2012 IFC
Occupancy: II 105 mph (Vult)
Exposure "C"
"Risk Category" = II

AREA CALCULATIONS:

Parcel: 173-07-004D
Total Lot Area: 190,792 sf (Net)
Existing Building Lot Coverage: 40,091 sf
New Additional Parking Structures:
A: 3,916 sf C: 2,810 sf
B: 1,540 sf D: 6,346 sf
Total New Parking Structure Coverage: = 14,612 sf

Existing vs. New Coverage:
[14,612/40,091] x 100% = 36%

Total New Lot Coverage vs. Lot Area:
[(14,612+40,091)/190,792] x 100% = 28.7%

ADA COVERED PARKING CALCULATIONS:

Existing Parking Spots: 210
ADA Parking Spots: 14
Total Covered Parking by New Canopies: 80
% of Parking Covered by Canopies: 38%
Req' Number of ADA Covered Parking: 14 x .38 = 6

Photovoltaic Panel/System Size Info:

Existing Roof:
12 Degree Panel Tilt
S-Energy SM 250 Panels
112 Panels (8 strings x 14 panels per string)
Roof System Size = 28,000 kWp

New Parking Structures:
5 Degree Panel Tilt (Structures B, C and D)
S-Energy SM 250 Panels
588 Panels (42 strings x 14 panels per string)
0 Degree Panel Tilt (Structure A)
S-Energy SM 250 Panels
210 Panels (15 strings x 14 panels per string)
Parking Structure Size = 199,500 kWp

Total Number of Panels = 910 (+2 Dummy Panels)
Total System Size = 227,500 kWp

Inverter Info: (2) KACO XP100-U-H4

TYPICAL PARKING STRUCTURE NOTES:

- 1) Color and materials shall match the building.
- 2) Structures will be a minimum of 10' away from any structure.
- 3) Structures shall have a minimum of a 24' drive aisle.
- 4) Fascia will be a minimum of 4" width.
- 5) Roof deck will be a pre-finished non-reflective color.
- 6) No native plants shall be disturbed by this project.
- 7) All lighting must be shielded, directed downward and recessed where occurs. See photometric plan for more information regarding light fixture specification, lumens, watts, etc.
- 8) Lighting will require a separate permit where occurs.

SITE PLAN & PANEL LAYOUT

TEMPLE SOLEL
6805 E. McDONALD ROAD
SCOTTSDALE, ARIZONA 85253

DATE: 02/08/2013

| DESIGN: | EGC |
|------------|-----|
| ENGINEER: | |
| REVIEWED: | |
| REVISION: | |
| PROJECT #: | |

APPROVALS

DESIGN: EGC
ENGINEER:
REVIEWED:
REVISION:
PROJECT #:

DATE: 10/02/2013

SCALE: 1" = 30'-0"

REV: (1/7/50)

SP1
1 OF 1

GREEN CHOICE SOLAR, LLC.
15344 N. 83RD WAY
SCOTTSDALE, AZ 85260
480.398.2740 FAX: 480.398.2761

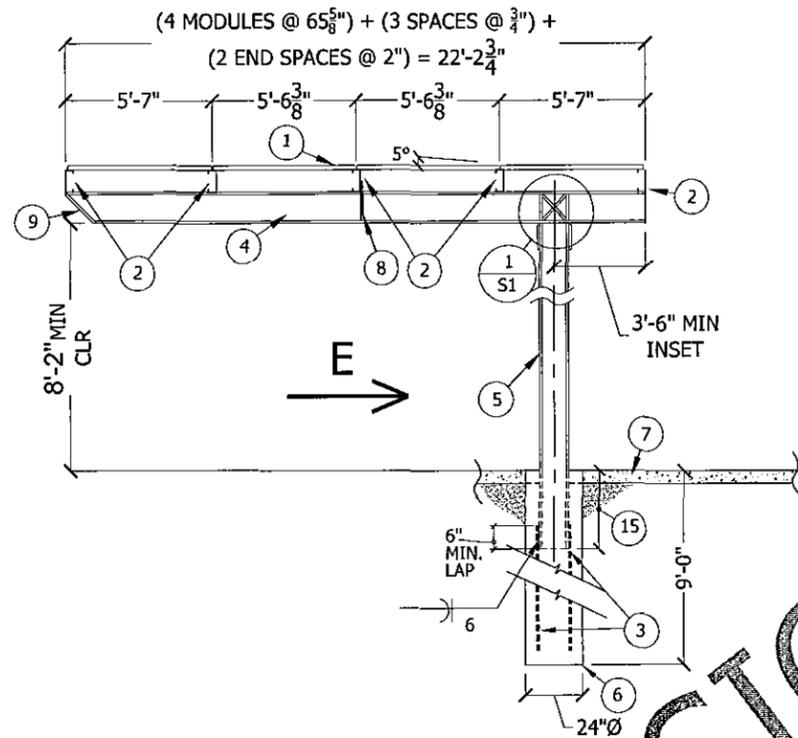


SITE PLAN

SCALE: 1" = 30'-0"

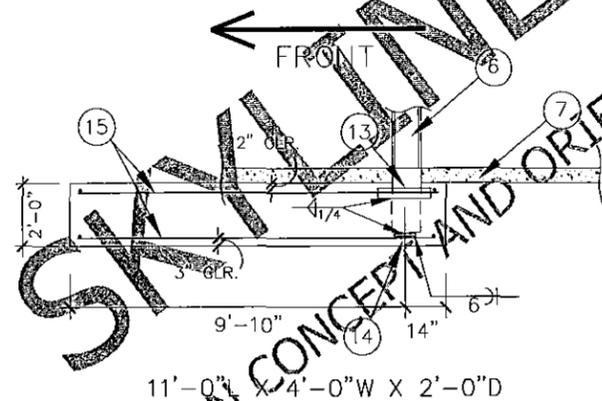


NORTH



SECTION AA

CAR SHADING STRUCTURE



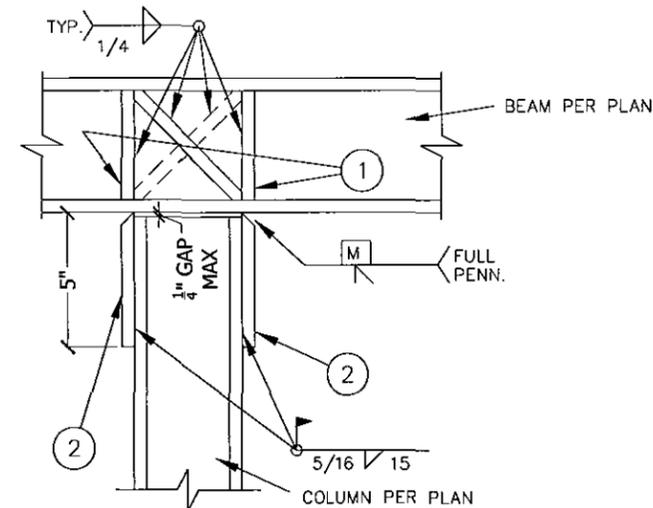
ALTERNATE SPREAD FOOTING

KEY NOTES:

1. S-ENERGY SM-60 SERIES SOLAR MODULES
2. C- 10" X 3 1/2" X 14 GA., 55 KSI, PURLINS, TYP
3. (2) #9 EA FLANGE BRACE TYP. SEE 1/S8 OR 2/S8
EXTEND TO 3" MIN. 12" MAX FROM BOTTOM OF POLE FTG.
4. W10 X 26 BM 50 KSI
5. W12 X 30 COLUMN, 50 KSI
6. CIP CONCRETE POLE FOOTING
7. ASPHALT
8. FLANGE BRACE TYP. SEE 1/S8 OR 2/S8
9. 3/16 x bf END PLATE
10. 4 #6 TOP LONGWAY W/ 1 #6 SHORTWAY EA END
11. 4 #6 LONGWAY BTM W/ 1 #6 SHORTWAY EA END
12. SIDE PLATES 3/8 X 2 X 14
BASE PLATES 3/8 X 6 X 42
14. EMBED COLUMN 21"
15. 4'-6" MIN EMBEDMENT

NOTE:
ALL STEEL INCLUDING
R's TO BE GRD 50

1. 3/8" X 3" VERT. & DIAG STIFF. R's EACH SIDE
2. SIDE R's 3/8 X 5 X 5



BEAM TO COLUMN

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.

ARIZONA
STRUCTURAL GROUP

706 East Bell Rd., Suite 105
Phoenix, Arizona 85022
(602) 287-8720 FAX: (602) 287-8737

AUTHORIZATION
TO PROCEED

BY _____

| | |
|-----------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-27-13 | |
| REVISIONS | |
| COMMENT | DATE |
| △ CLIENT CHANGES | 12-19-12 |
| △ CHANGE ORDER | 5-22-13 |
| △ CLIENT CHANGES | 7-30-13 |
| △ CHANGE ORDER | 8-27-13 |

SHEET NO.

S1 of 8

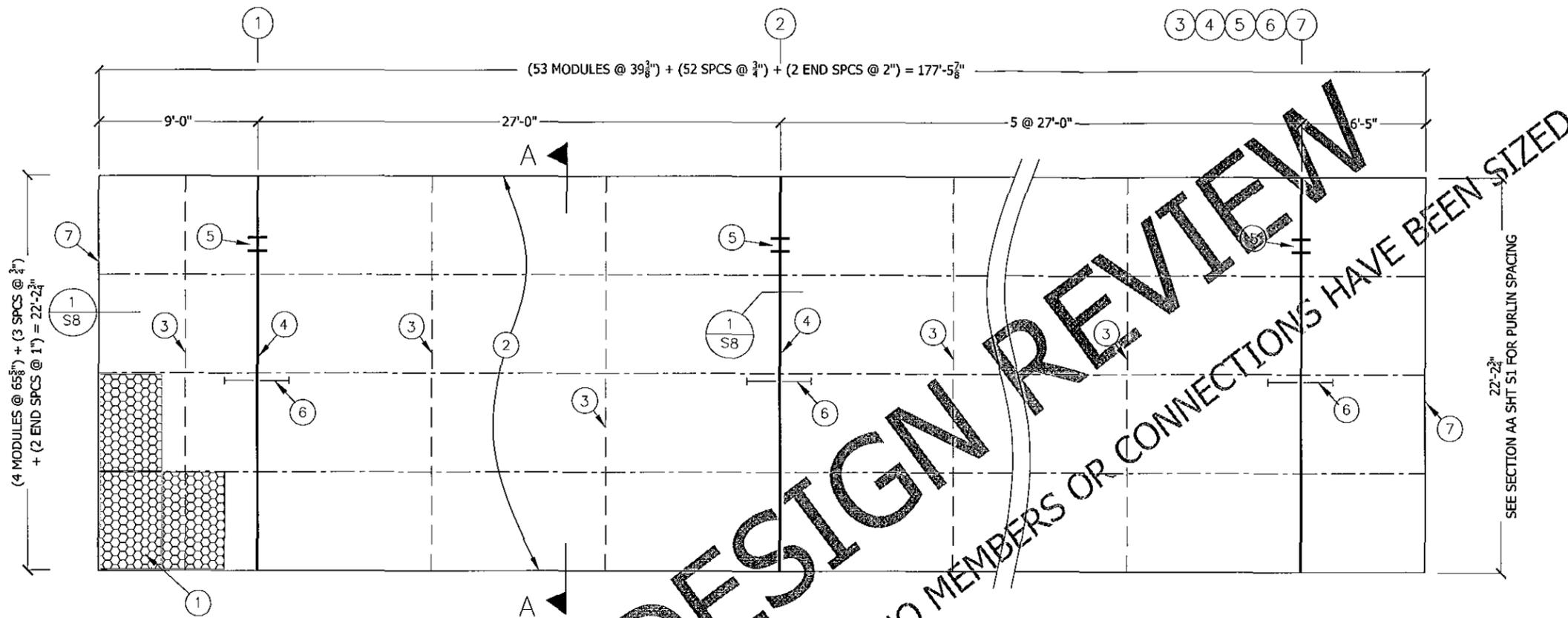
JOB: TEMPLE SOLEL SOLAR SHADE

CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234

SKYLINE DESIGN REVIEW

NO MEMBERS OR CONNECTIONS HAVE BEEN SIZED

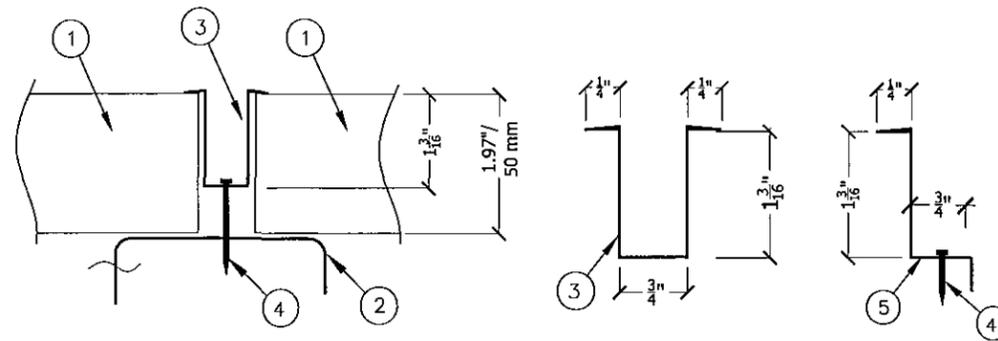
FOR DESIGN CONCEPT AND ORIENTATION ONLY.



KEY NOTES:

1. S-ENERGY SM-60 SERIES SOLAR MODULES
2. C- 10" X 3 1/2" X 14 GA., 55 KSI, PURLINS, TYP
3. (2) #9 EA FLANGE
EXTEND TO 3" MIN., 12" MAX
FROM BOTTOM OF POLE FTG.
4. W12 X 26 BM, 50 KSI
5. W12 X 30 COLUMN, 50 KSI
6. CIP CONCRETE POLE FOOTING
7. ASPHALT
8. FLANGE BRACE TYP - SEE 1/S8 OR 2/S8
9. 3/16 x 6" END PLATE
10. 4 #6 TOP LONGWAY W/ 1 #6 SHORTWAY EA END
11. 4 #6 LONGWAY BM W/ 1 #6 SHORTWAY EA END
12. SIDE PLATES 3/8 X 2 X 14
13. BASE PLATES 3/8 X 6 X 42
14. IMBED COLUMN 21"
15. 4-6" MIN EMBEDMENT

1. S-ENERGY SM-60 SERIES SOLAR MODULES
2. PURLINS PER PLAN
3. 6063-T6 ALUMINUM CLIP-2.5" LONG BY OTHERS
4. 2 #10 TEKS EA. CLIP
5. 6063-T6 ALUM END CLIP-4" LONG BY OTHERS



SOLAR MODULES TO PURLINS

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.

**ARIZONA
STRUCTURAL GROUP**

706 East Bell Rd, Suite 105
Phoenix, Arizona 85022
(602) 287-8720 FAX: (602) 287-8737

AUTHORIZATION
TO PROCEED

BY

| | |
|-----------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |

ISSUE DATE
8-27-13

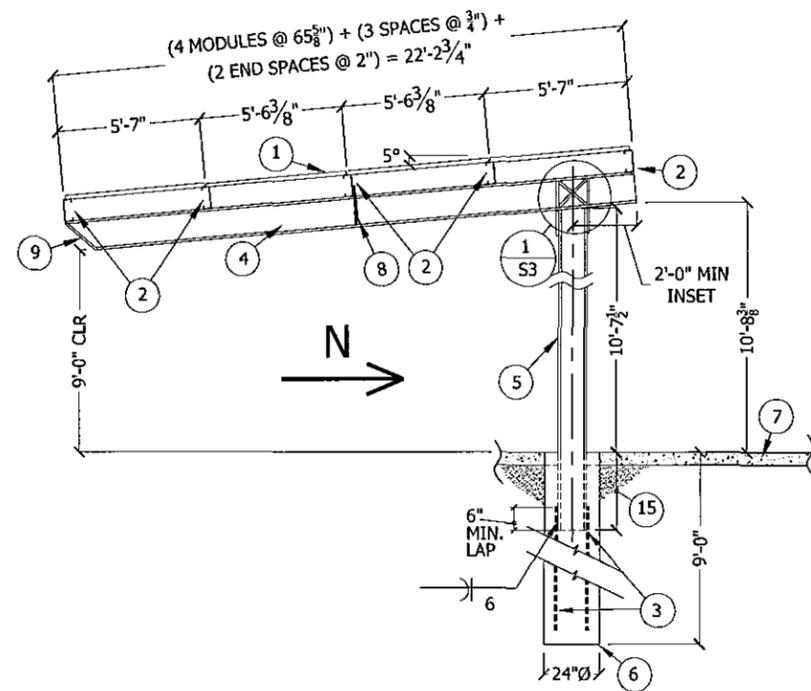
REVISIONS

| COMMENT | DATE |
|----------------|----------|
| CLIENT CHANGES | 12-19-12 |
| CHANGE ORDER | 5-22-13 |
| CLIENT CHANGES | 7-30-13 |
| CHANGE ORDER | 8-27-13 |

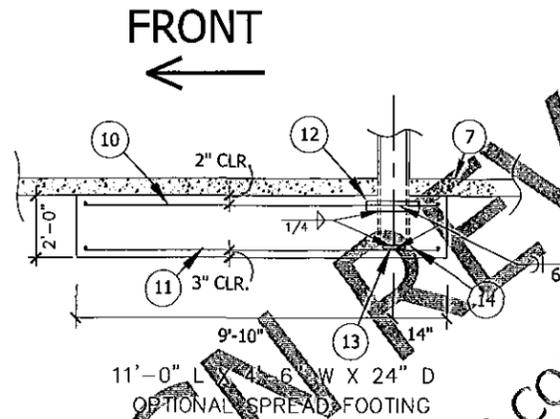
SHEET NO.

S2 of 8

JOB: TEMPLE SOLEL SOLAR SHADE
CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234



SECTION BB
CAR SHADE STRUCTURE B



KEY NOTES:

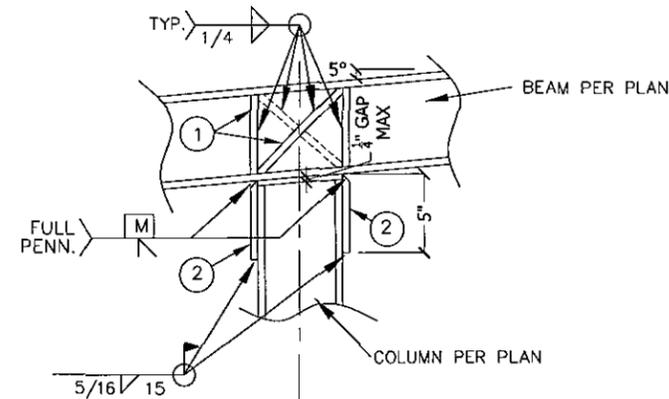
1. S-ENERGY SM-60 SERIES SOLAR MODULES
2. C- 10" X 3 1/2" X 14 GA., 55 KSI, PURLINS, TYP
3. (2) #9 EA FLANGE
EXTEND TO 3" MIN., 12" MAX
FROM BOTTOM OF POLE FTG.
4. W12 X 26 BM, 50 KSI
5. W12 X 35 COLUMN, 50 KSI
6. CIP CONCRETE POLE FOOTING
7. ASPHALT
8. FLANGE BRACE TYP - SEE 1/8 OR 2/8
9. 3/16 x bf END PLATE
10. 4 #6 TOP LONGWAY W/ 1 #6 SHORTWAY EA END
11. 4 #6 LONGWAY BTM W/ 1 #6 SHORTWAY EA END
12. SIDE PLATES 3/8 X 2 X 14
13. BASE PLATES 3/8 X 6 X 42
14. EMBED COLUMN 21"
15. 4'-6" MIN EMBEDMENT

SKYLINE DESIGN REVIEW

FOR DESIGN CONCEPT AND ORIENTATION ONLY. NO MEMBERS OR CONNECTIONS HAVE BEEN SIZED

NOTE:
ALL STEEL INCLUDING
R's TO BE GRD 50

1. 3/8" X 3" VERT. & DIAG.
STIFF. R's EACH SIDE
2. SIDE R's 3/8 X 5 X 5



BEAM TO COLUMN

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.

ARIZONA
STRUCTURAL GROUP

706 East Bell Rd., Suite 105
Phoenix, Arizona, 85022
(602) 287-8720 FAX: (602) 287-8737

AUTHORIZATION
TO PROCEED

BY _____

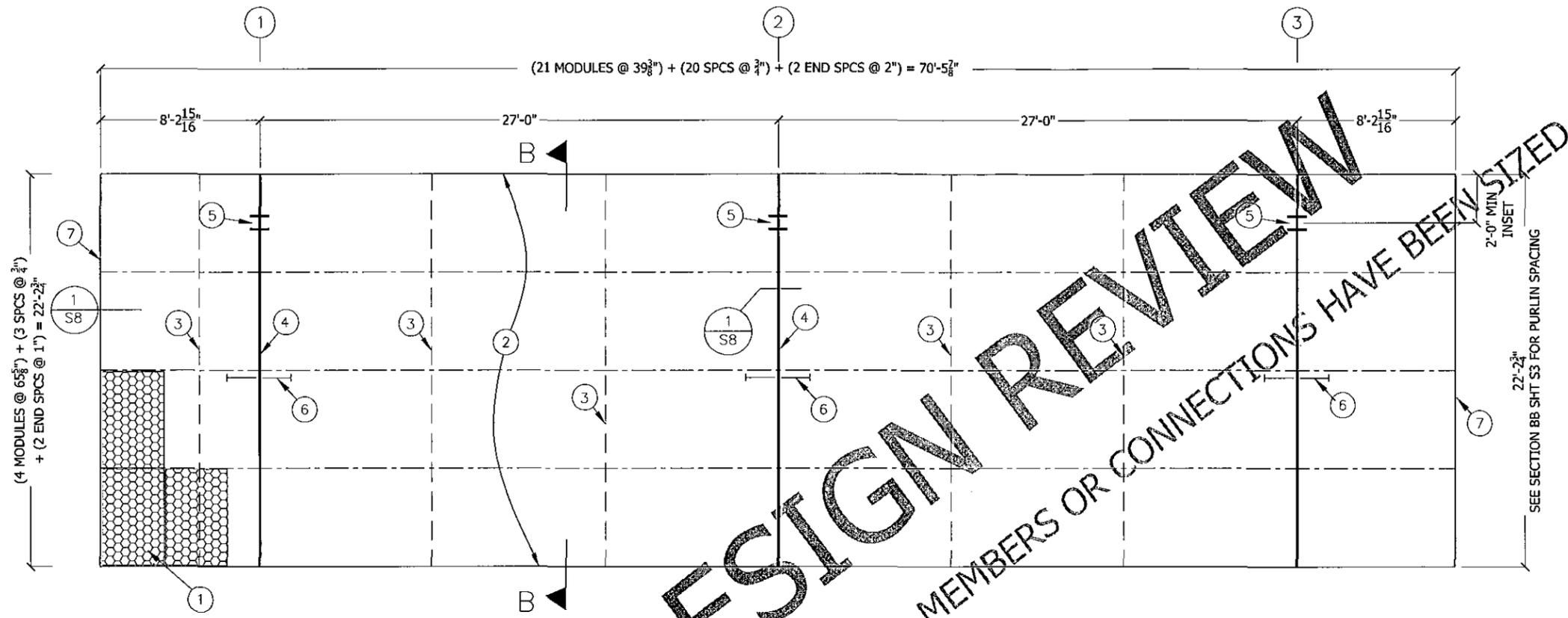
| | |
|---------------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-27-13 | |
| REVISIONS | |
| COMMENT | DATE |
| ▲ CLIENT CHANGES 12-19-12 | |
| ▲ CHANGE ORDER 5-22-13 | |
| ▲ CLIENT CHANGES 7-30-13 | |
| ▲ CHANGE ORDER 8-27-13 | |

SHEET NO.

S3 of 8

JOB: TEMPLE SOLEL SOLAR SHADE

CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234

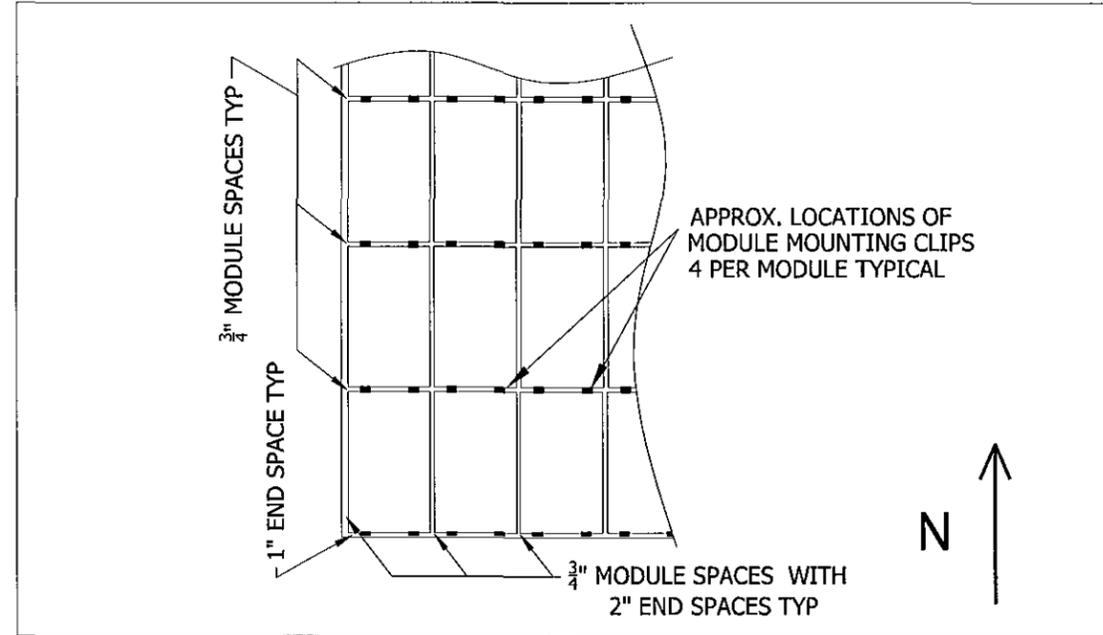


FRAMING PLAN
CAR SHADE STRUCTURE B

KEY NOTES:

1. S-ENERGY SM-60 SERIES SOLAR MODULES
2. C- 10" X 3 1/2" X 14 GA., 50 KSI, PURLINS
3. SAG RODS @ 9'-0" MAX 4'-6" FROM BM AT CANT'L - SEE 1/S8, 2/S8
4. W12 X 26 BM, 50 KSI
5. W12 X 35 COLUMN, 50 KSI
6. FLANGE BRACE TYP - SEE 1/S8, 2/S8
7. C- 10" X 2" X 18 GA END CAP

SKYLINE DESIGN REVIEW
FOR DESIGN CONCEPT AND ORIENTATION ONLY. NO MEMBERS OR CONNECTIONS HAVE BEEN SIZED



TYP. MODULE SPACING STRUCTURES B, C & D 1

JOB: TEMPLE SOLEL SOLAR SHADE
CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234

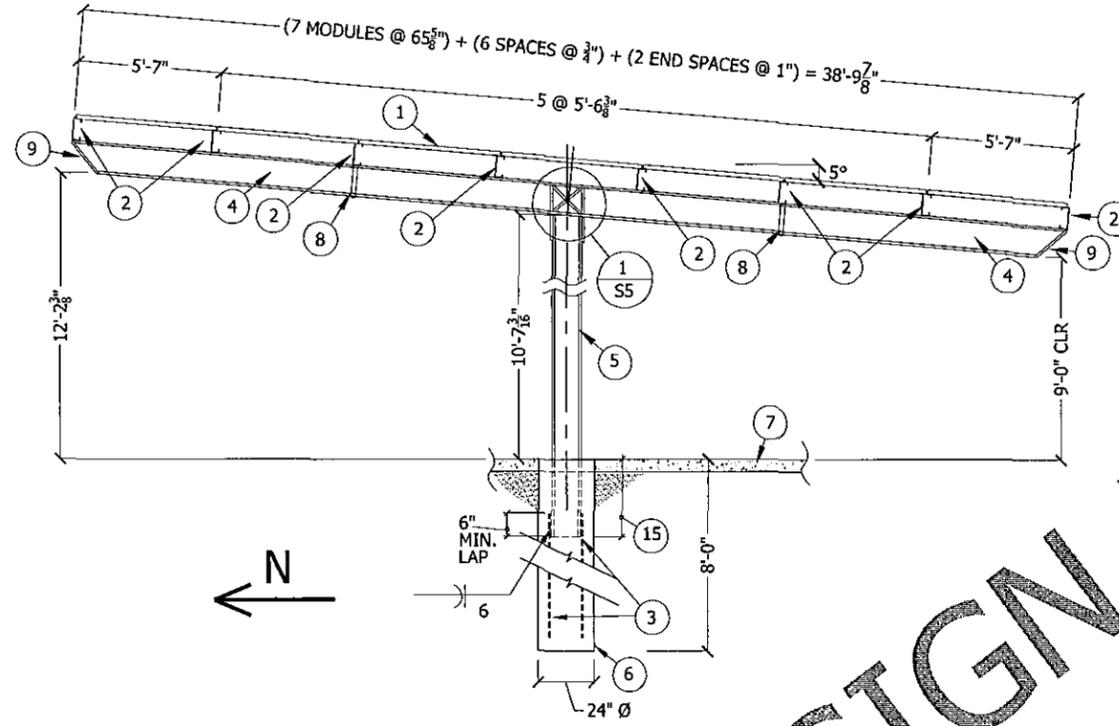
| | |
|---------------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-27-13 | |
| REVISIONS | |
| COMMENT | DATE |
| ▲ CLIENT CHANGES 12-19-12 | |
| ▲ CHANGE ORDER 5-22-13 | |
| ▲ CLIENT CHANGES 7-30-13 | |
| ▲ CHANGE ORDER 8-27-13 | |

SHEET NO.
S4 of 8

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.

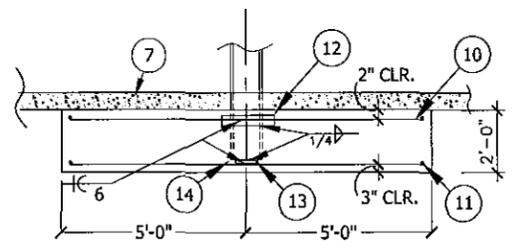
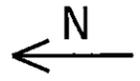
**ARIZONA
STRUCTURAL GROUP**
706 East Bell Rd, Suite 105
Phoenix, Arizona 85022
(602) 287-8720 FAX: (602) 287-8737

AUTHORIZATION
TO PROCEED
BY _____



KEY NOTES:

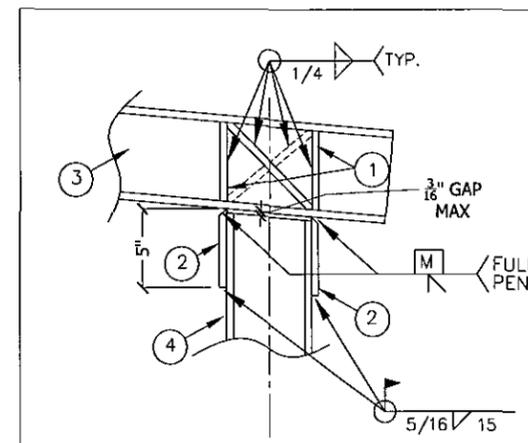
1. S-ENERGY SM-60 SERIES SOLAR MODULES
2. C- 10" x 3 1/2" x 14 GA, 55 KSI, PURLINS
3. (1) #7 EA FLANGE
EXTEND TO 3" MIN., 12" MAX
FROM BOTTOM OF POLE FTG.
4. W12 x 26 BM, 50 KSI
5. W12 x 35 COLUMN, 50 KSI
6. CIP CONCRETE POLE FOOTING
ASPHALT
8. FLANGE BRACE TYP - SEE 15S, 2/S8
9. 3/16 x bf END PLATE
10. 4 #6 TOP LONGWAY W/ 1 #6 SHORTWAY EA END
11. 4 #6 LONGWAY BTM W/ 1 #6 SHORTWAY EA END
12. SIDE PLATES 3/8 X 2 X 14
13. BASE PLATES 3/8 X 6" X 42"
14. EMBED COLUMN 21"
3'-6" MIN EMBEDMENT



10'-0" X 4'-0" X 2'-0"
OPTIONAL SPREAD FOOTING

SKYLINE DESIGN REVIEW

NO MEMBERS OR CONNECTIONS HAVE BEEN SIZED



1. 3/8" X 3" VERT. & DIAG.
STIFF. PL'S EACH SIDE
2. SIDE PL 3/8 X 5 X 5
3. BEAM PER PLAN
4. COL PER PLAN

BEAM TO COLUMN

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.

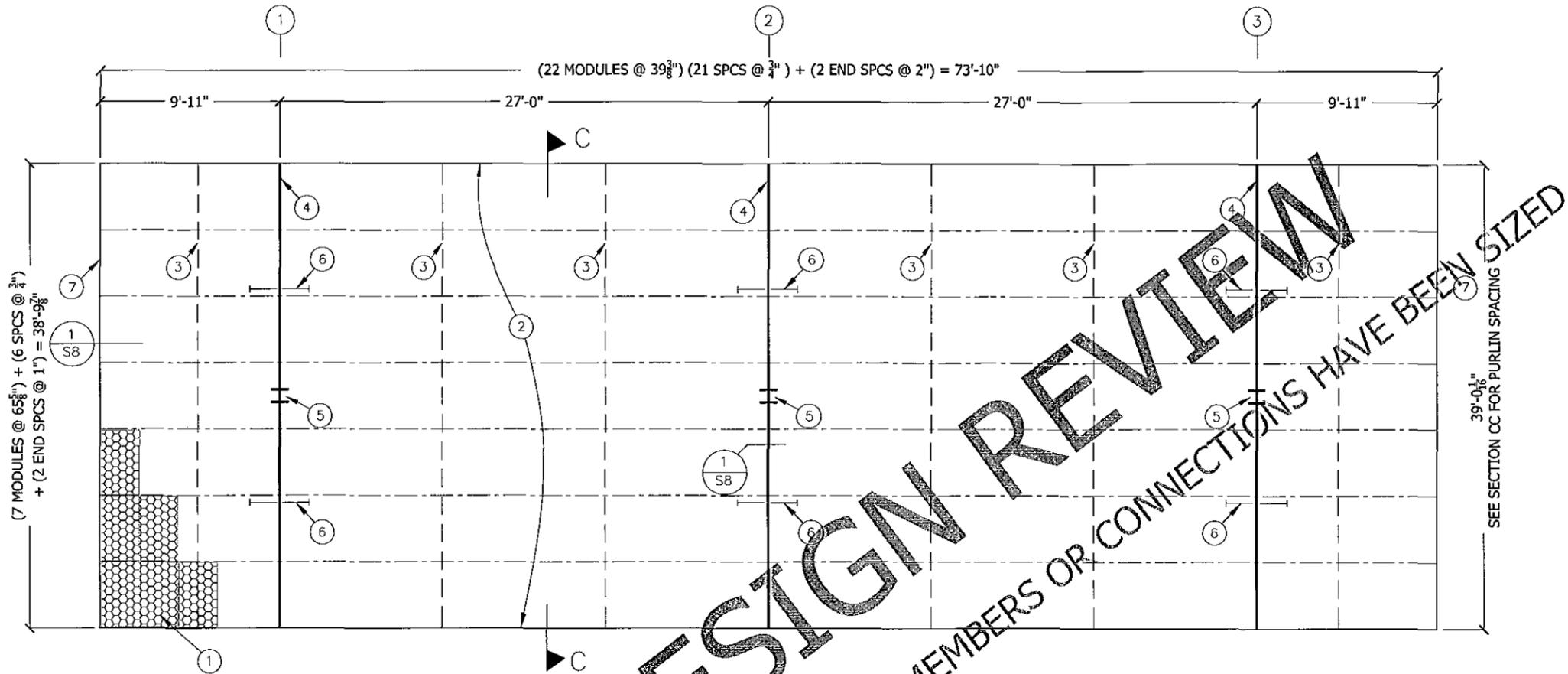
**ARIZONA
STRUCTURAL GROUP**
706 East Bell Rd, Suite 105
Phoenix, Arizona 85022
(602) 287-8720 FAX: (602) 287-8737

AUTHORIZATION
TO PROCEED
BY _____

| | |
|---------------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-27-13 | |
| REVISIONS | |
| COMMENT | DATE |
| △ CLIENT CHANGES 12-19-12 | |
| △ CHANGE ORDER 5-22-13 | |
| △ CLIENT CHANGES 7-30-13 | |
| △ CHANGE ORDER 8-27-13 | |

SHEET NO.
S5 of 8

JOB: TEMPLE SOLEL SOLAR SHADE
CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234



KEY NOTES:

- 1. S-ENERGY SM-60 SERIES SOLAR MODULES
- 2. C- 10" x 3-1/2" x 14 GA., 55 KSI, PURLINS
- 3. SAG RODS @ 9'-0" MAX, SEE 1/S8 OR 2/S8
- 4. W12 x 26 BM, 50 KSI
- 5. W12 x 35 COLUMN 50 KSI
- 6. FLANGE BRACE - SEE 1/S8 OR 2/S8
- 7. [- 10" x 2" x 18 GA END CAP

CANOPY SHADING STRUCTURE C
 ROOF FRAMING PLAN

SKYLINE DESIGN REVIEW

FOR DESIGN CONCEPT AND ORIENTATION ONLY. NO MEMBERS OR CONNECTIONS HAVE BEEN SIZED

JOB: TEMPLE SOLEL SOLAR SHADE
CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234

| | |
|-----------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-27-13 | |
| REVISIONS | |
| COMMENT | DATE |
| △ CLIENT CHANGES | 12-19-12 |
| △ CHANGE ORDER | 5-22-13 |
| △ CLIENT CHANGES | 7-30-13 |
| △ CHANGE ORDER | 8-27-13 |

SHEET NO.
S6 of 8

AUTHORIZATION
 TO PROCEED

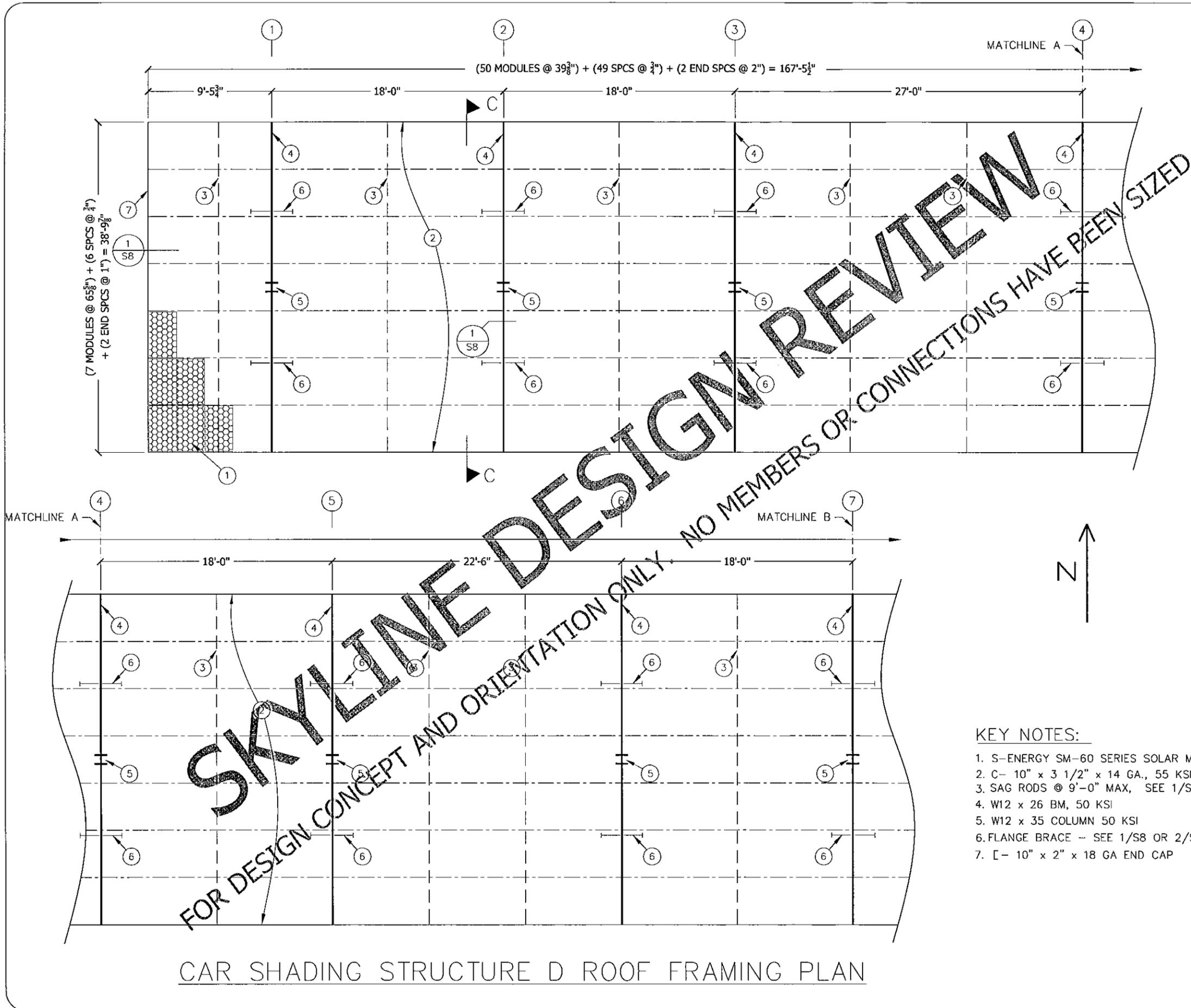
BY _____

**ARIZONA
 STRUCTURAL GROUP**

706 East Bell Rd., Suite 105
 Phoenix, Arizona 85022
 (602) 287-8720 FAX: (602) 287-8737

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.





- KEY NOTES:**
1. S-ENERGY SM-60 SERIES SOLAR MODULES
 2. C- 10" x 3 1/2" x 14 GA., 55 KSI, PURLINS
 3. SAG RODS @ 9'-0" MAX, SEE 1/S8 OR 2/S8
 4. W12 x 26 BM, 50 KSI
 5. W12 x 35 COLUMN 50 KSI
 6. FLANGE BRACE -- SEE 1/S8 OR 2/S8
 7. C- 10" x 2" x 18 GA END CAP

CAR SHADING STRUCTURE D ROOF FRAMING PLAN

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.

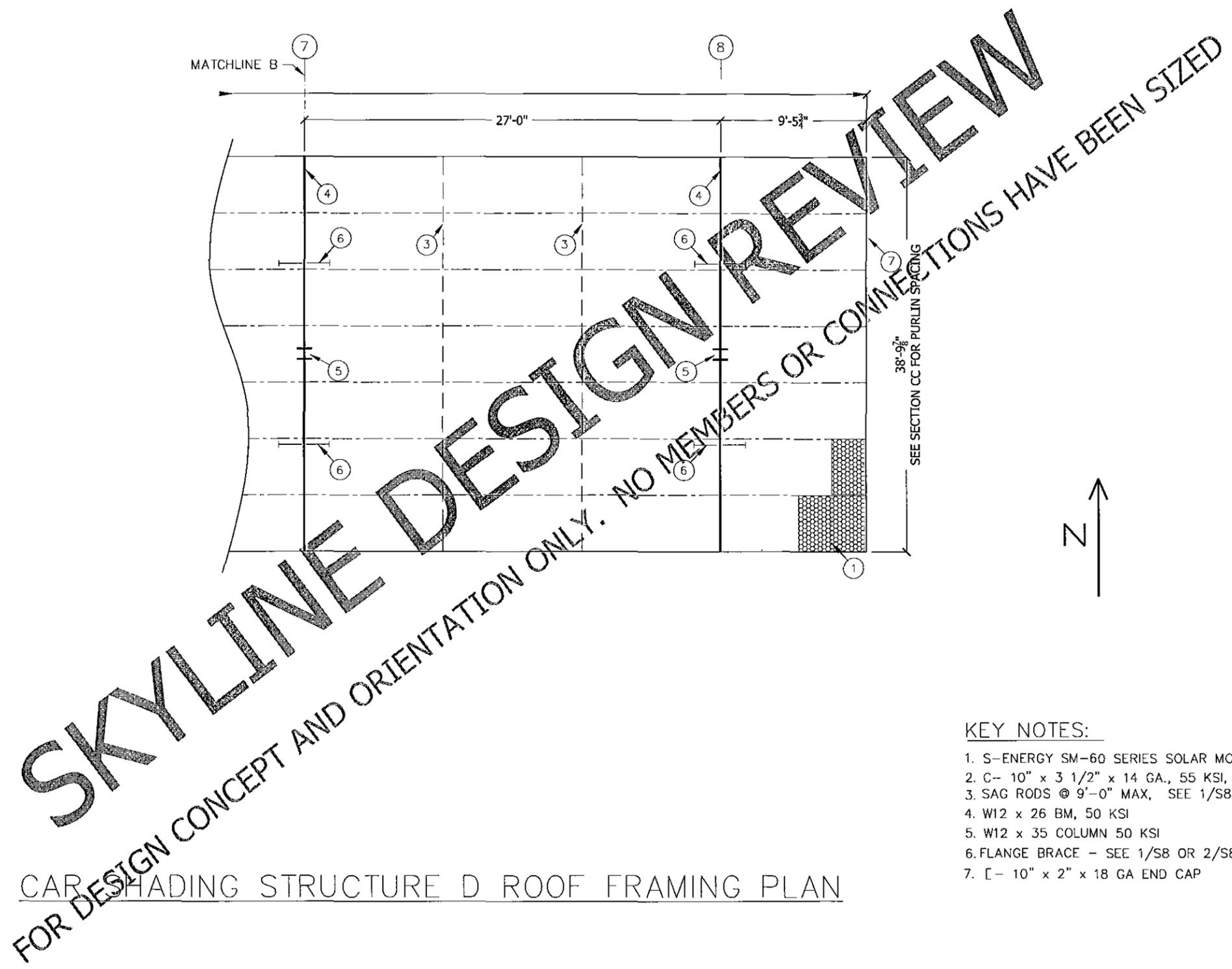
ARIZONA STRUCTURAL GROUP
706 East Bell Rd., Suite 105
Phoenix, Arizona 85022
(602) 287-8720 FAX: (602) 287-8737

AUTHORIZATION TO PROCEED
BY _____

| | |
|---------------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-27-13 | |
| REVISIONS | |
| COMMENT | DATE |
| △ CLIENT CHANGES 12-19-12 | |
| △ CHANGE ORDER 5-22-13 | |
| △ CLIENT CHANGES 7-30-13 | |
| △ CHANGE ORDER 8-27-13 | |

SHEET NO.
S7 of 8

JOB: TEMPLE SOLEL SOLAR SHADE
CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234



CAR SHADING STRUCTURE D ROOF FRAMING PLAN

KEY NOTES:

1. S-ENERGY SM-60 SERIES SOLAR MODULES
2. C- 10" x 3 1/2" x 14 GA., 55 KSI, PURLINS
3. SAG RODS @ 9'-0" MAX, SEE 1/S8 OR 2/S8
4. W12 x 26 BM, 50 KSI
5. W12 x 35 COLUMN 50 KSI
6. FLANGE BRACE - SEE 1/S8 OR 2/S8
7. [- 10" x 2" x 18 GA END CAP

JOB: TEMPLE SOLEL SOLAR SHADE
 CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234

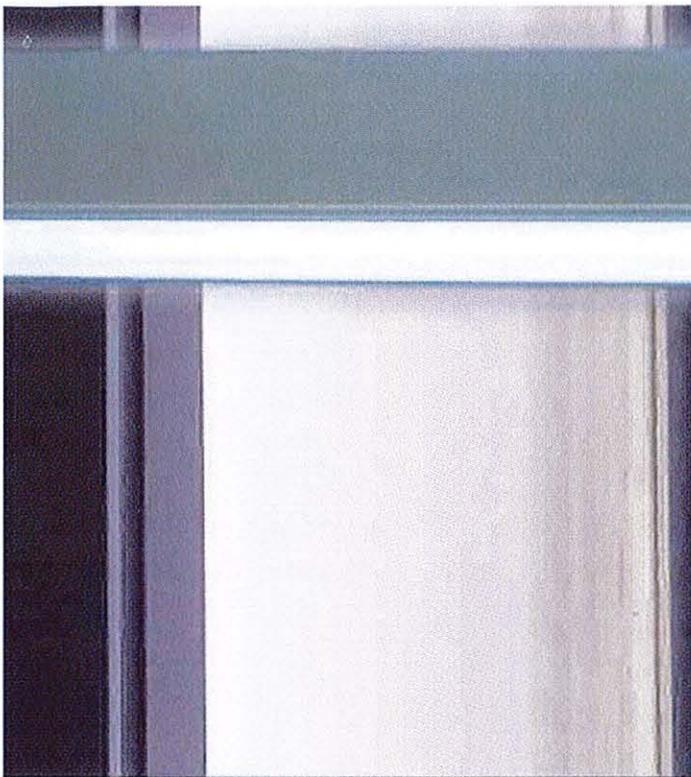
| | |
|---------------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-27-13 | |
| REVISIONS | |
| COMMENT | DATE |
| △ CLIENT CHANGES 12-19-12 | |
| △ CHANGE ORDER 5-22-13 | |
| △ CLIENT CHANGES 7-30-13 | |
| △ CHANGE ORDER 8-27-13 | |

SHEET NO.
S7a of 8

AUTHORIZATION
TO PROCEED
BY _____

ARIZONA
 STRUCTURAL GROUP
 706 East Bell Rd, Suite 105
 Phoenix, Arizona 85022
 (602) 287-8720 FAX: (602) 287-8737

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.



Model Skybeam II

For a clear aesthetic choice.

The Performance and beauty of precision crafted extruded aluminum.

The Sky Beam series by Voigt is an architectural building block.

A wide range of design and lighting options is available to meet almost any job requirement for Indoor and Outdoor use.

Design your own Sky Beam to meet your requirements.

Applications:

- Commercial
- Office
- Hospitals
- Schools
- Supermarkets
- Industrial
- Lobby
- Parking Garage
- Stadiums



| |
|---------|
| Project |
| Notes |

Configure product using standard options. For other custom options contact Voigt.

Example:
Sky Beam
2/120PLH

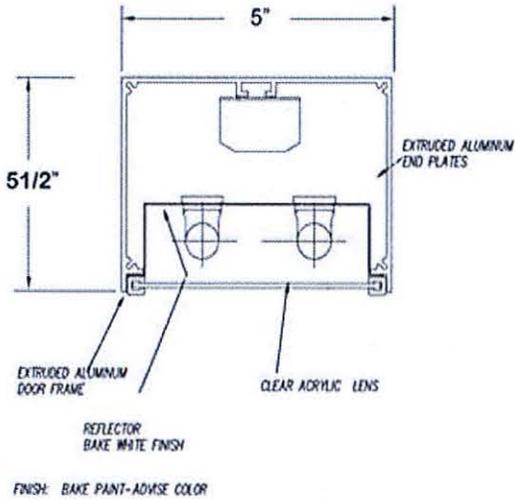
U
CA16
FWM
18
GW
120
DIM-1

| fixture series | lamp | optics | lens | suspension | length | finish | voltage | options |
|-----------------|--|--|---|---|---------------------------------------|--|------------|---|
| Sky-Beam | 2/120PLH | U | CA16 | FWM | 18 | GW | 120 | DIM-1 |
| C-54 | 1 to 2 lamps-Indicate # of lamps in each section and Type and wattage T8-32w T5-28w, 54wHO Other LED systems contact voigt MR-16 Lamps -- contact voigt | U-Up light D-Down light DIF-Diffusing reflector if this suffix is not included then an aluminum reflector is automatically furnished. LO-Louver- 1/2" x 1/2" plastic(up light only) | LP-Prismatic Lens LW-Lens White Diffuse LCL-Lens clear enclosing | FWM-Floating Wall Mounted DWM-Direct Wall Mounted R-18-Round Canopy w/18" Stem S-18-Rectilinear canopy w/18" stem. AC-Air Craft cable If other stem required, please indicate. | Stem Length AC-Air Craft cable | GW Gloss White is Standard Custom color and RAL available contact Voigt | 120 277 | ASY-Asymmetric Reflector C-Corner Section T-Tree Section DIM1 Advanced Mark VII dimming ballast (Not available for PL-H) DIM2 Advanced Mark X dimming ballast. Other Dimming Specify BAT-1 - Emergency Battery Back up G-Gasketing |

Consult Voigt for all custom requirements

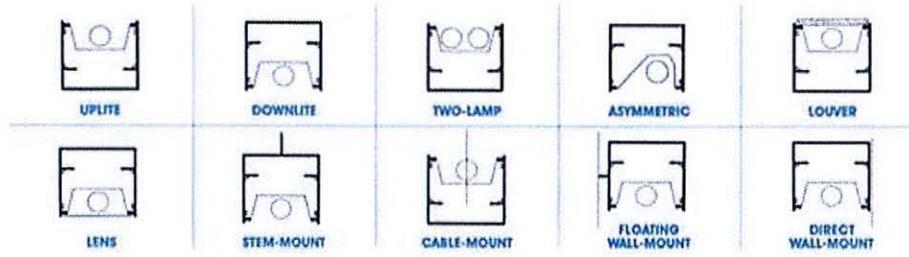
Sky-Beam SPECS

To facilitate the specification and ordering of sky-beam
 Because of the critical nature of dimensions and mechanical details, all sky-beam units, other than suspended, free hanging, and string runs will be fabricated only from drawings made by Voigt and approved by customer.
 In all such cases, complete construction details must be provided to Voigt Custom Engineering Department.



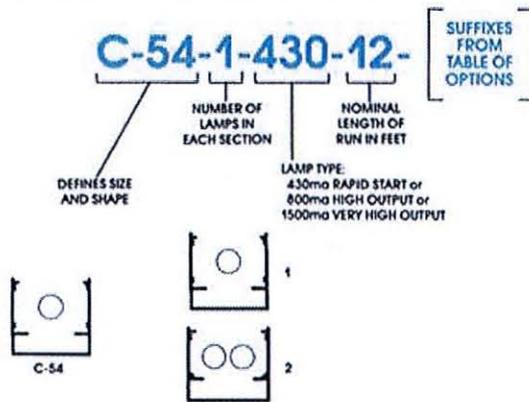
Voigt sky-beam C-54
 For a clear aesthetic choice.
 The performance and beauty of precision extruded aluminum

The MANY USES OF C-54 SKY-BEAM:



Dimensions are as follows; 5 1/2"H x 5", and custom lengths

Define your own precise job requirements by developing your specific **SKY-BEAM** catalog number from the information below:

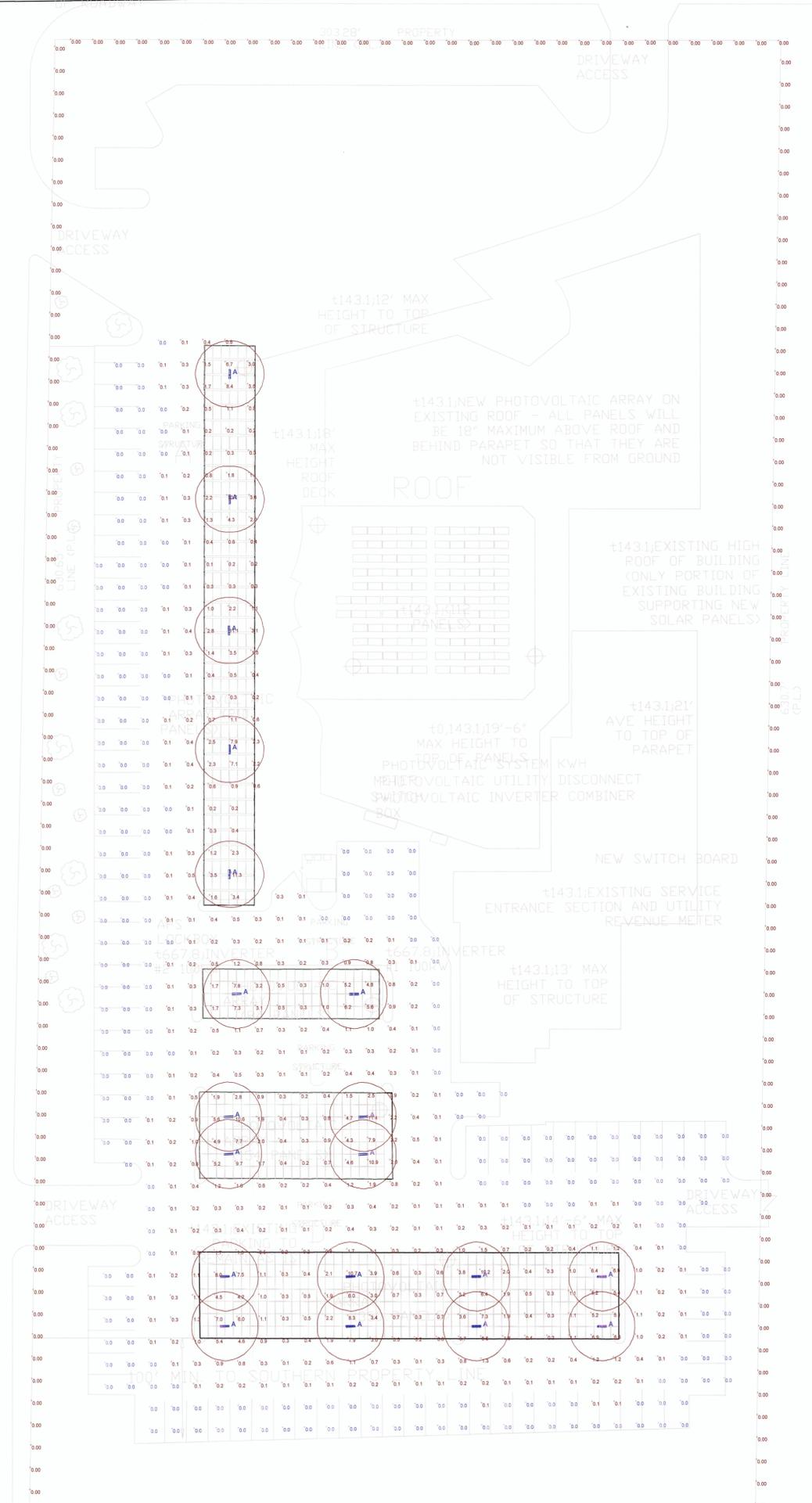


| LUMINAIRE SCHEDULE | | | | | | | |
|--------------------|-------|-----|---|-------------|------------------|------------------|------------------|
| Symbol | Label | Qty | Catalog Number | Description | Lamp | File | Lumens LFP Watts |
| A | 19 | | VOIGHT C54-2 3278 0' FC 384 GW C-54 XXX G | | Floor: 32W 4' T8 | C-54-2 32W T8 | 2900 0.75 70 |

| STATISTICS | | | | | | |
|--------------|--------|---------|---------|---------|---------|---------|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| Calc Zone #1 | | 0.00 fc | 0.00 fc | 0.00 fc | N/A | N/A |
| Calc Zone #8 | | 0.8 fc | 11.4 fc | 0.0 fc | N/A | N/A |

±143.1, PROVIDE SMALL BUSHES/LANDSCAPING AS REQUIRED IN THIS AREA TO HELP IN SHIELDING NEW STRUCTURES FROM ROADWAY - TYP

PROVIDE MIXTURE OF LANTANA (VERBENACEAE), TEXAS SAGE (LEUCOPHYLLUM FRUTESCENS), RED YUCCA (HESPERALOE PARVIFLORA), MORNING GLORY (CONVOLVULACEAE CHEOPUM), CASSIA (SENNA FABACEAE), NEROLIUM OLEANDER (APPOCYNACEAE), AND OTHER PLANTS ON-SITE.



TEMPLE SOLEL PHOTOMETRIC PLAN

Designer
Date
AUG 14 2013
Scale
1/20
Drawing No.

GENERAL STRUCTURAL NOTES:

- All construction shall comply with the 2012 International Building Code with exceptions permitted by the City in authority
- Design Loads:
 - Live Load: NA
 - Wind Load: 105 mph Exposure C
 - Seismic: $V = .100 W$
- Allowable Foundation Pressure:

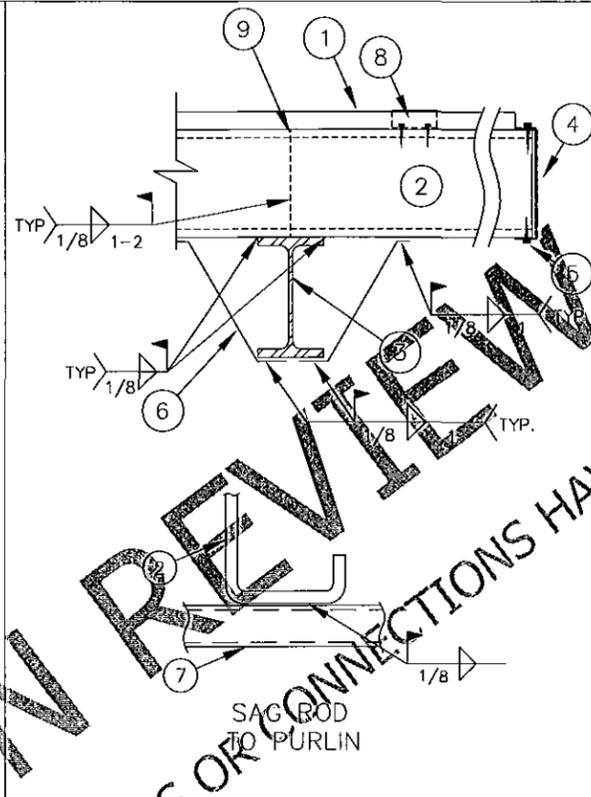
| | |
|---------|------------|
| Bearing | 1500 psf |
| Lateral | 150 psf/ft |
- Structural steel rolled sections and plates ASTM A572, $F_y = 50$ K.S.I. Weld rods E 70 low hydrogen. All AISC Codes and handbooks apply.
- Cold formed light gage purlins shall comply with AISI "Specification for design of cold-formed steel structural members" latest edition. Conforming to ASTM A570 minimum $F_y = 55,000$ psi. Where structural steel is furnished to a specific min. yield point greater than 36,000 psi, the ASTM or other designations shall be included near the erection mark.
- Concrete minimum 28 days compressive strength $F_c = 2,500$ psi.
- Reinforcing ASTM A706 Grade 60.
- Canopies to be painted in color compatible with adjacent building.
- Special Structural Inspection Requirements
 - Caisson Foundations (Table 1704.9): Verify size and depth of excavation, column placement, embedment length, reinforcing bar size, length and weld. One time prior to concrete placement.
 - Steel construction: Inspection of Field Welding; Single pass fillet welds $< \frac{5}{16}$ " periodic to verify weld size and length as specified. Continuous inspection of full penn. welds in shop by qualified agency. Furnish report to job site.

| | |
|----------------------------------|-------------------------------|
| 16 GA, 33 KSI HAT CHANNEL PURLIN | $S_x = .6695$ in ³ |
| Z - 6 X 2-1/2 X 16 GA., 55 ksi, | $S_x = 1.289$ in ³ |
| C - 10 X 3-1/2 X 14 GA., 55 ksi, | $S_x = 3.827$ in ³ |

| COLD FORMED MATERIAL GAUGE | THICKNESS |
|----------------------------|-----------|
| 14 | .0713" |
| 16 | .060 |

SKYLINE DESIGN

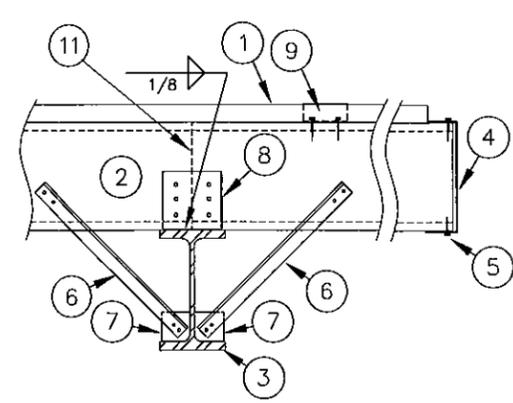
FOR DESIGN CONCEPT AND ORIENTATION ONLY. NO MEMBERS OR CONNECTIONS HAVE BEEN SIZED.



- S-ENERGY SM-60 SERIES SOLAR MODULES
- PURLIN PER PLAN
- BEAM PER PLAN
- [- 10 X 2 X 18 GA END CAP
- #12 TEK SCREWS EA PURLIN - T&B
- 2" X 1/8" FLANGE BRACE - SEE PLAN FOR LOCATION-
- TS- 1/2" x 1/2" x 1/8 GA. SAG RODS - SEE PLAN FOR LOCATION-
- 6063-T6 ALUMINUM CLIP
- PURLIN SPLICE AT INT BEAMS ONLY

BRACE AND PURLIN TO BEAM

1



- S-ENERGY SM-60 SERIES SOLAR MODULES
- PURLIN -SEE PLAN-
- BEAM PER PLAN
- [- 10 X 2 X 18 GA END CAP
- #12 TEK SCREWS EA PURLIN - T&B
- ∠ 1 1/2 X 1 1/2 X 1/8 FLANGE BRACE W/ 2 #12 TEKS EA END -SEE PLAN FOR LOCATION-
- ∠ 1/8 X 3 X 3
- ∠ 1/8 X 5 X 5 W/ 6 #12 TEKS TO PURLIN
- 6063-T6 ALUMINUM CLIP
- ∠ 1 X 1 X 1/8 SAG RODS W/ 2 #10 TEKS TO PURLIN -SEE PLAN FOR LOCATION-
- PURLIN SPLICE AT INT BEAMS ONLY

OPTIONAL BRACE AND PURLIN TO BEAM

2

This drawing is an instrument of service and is the sole property of Arizona Structural Group. No reproduction of this drawing in any form is permitted without written authorization of the engineer of record. This drawing is not valid unless signed with a "wet" signature.

**ARIZONA
STRUCTURAL GROUP**

706 East Bell Rd, Suite 105
Phoenix, Arizona 85022
(602) 287-8720 FAX: (602) 287-8737

AUTHORIZATION
TO PROCEED

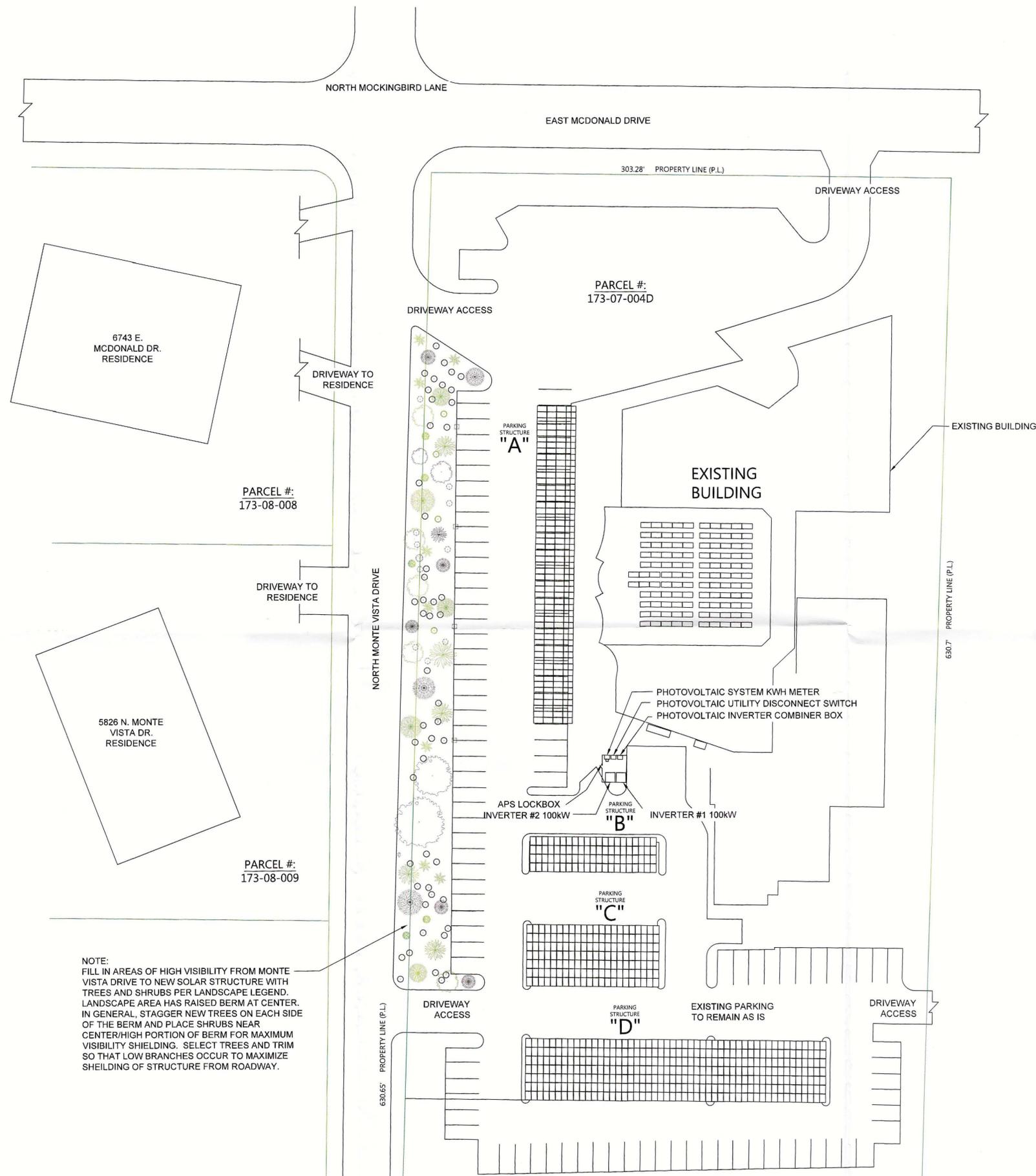
BY _____

| | |
|-----------------------|------------------|
| DRAWN BY GTL | CHECKED BED |
| SCALE NONE | JOB NO. 12200 |
| ISSUE DATE 8-12-13 | |

| REVISIONS | COMMENT | DATE |
|-----------|----------------|----------|
| 1 | CLIENT CHANGES | 12-19-12 |
| 2 | CHANGE ORDER | 5-22-13 |
| 3 | CLIENT CHANGES | 7-30-13 |
| 4 | CHANGE ORDER | 8-27-13 |

SHEET NO.
S8 of 8

JOB: TEMPLE SOLEL SOLAR SHADE
CLIENT: SKYLINE STEEL INC., 631 W. Commerce Ave., Gilbert, AZ 85234



NOTE:
 FILL IN AREAS OF HIGH VISIBILITY FROM MONTE VISTA DRIVE TO NEW SOLAR STRUCTURE WITH TREES AND SHRUBS PER LANDSCAPE LEGEND. LANDSCAPE AREA HAS RAISED BERM AT CENTER. IN GENERAL, STAGGER NEW TREES ON EACH SIDE OF THE BERM AND PLACE SHRUBS NEAR CENTER/HIGH PORTION OF BERM FOR MAXIMUM VISIBILITY SHIELDING. SELECT TREES AND TRIM SO THAT LOW BRANCHES OCCUR TO MAXIMIZE SHIELDING OF STRUCTURE FROM ROADWAY.

TEMPLE SOLE "LANDSCAPE LEGEND"

- EXISTING TREES:**
- Palo Verde (Cercidium Floridum)
 - Mesquite (Prosopis Glandulosa)
 - Desert Willow (Chilopsis Linearis)
- NEW TREES: (24" box u.n.o.) NUMBER:**
- New Palo Verde (Cercidium Floridum) 5
 - New Mesquite (Prosopis Glandulosa) 5
 - New Desert Willow (Chilopsis Linearis) 5
 - New Vitex (Agnus-castus) 8
- EXISTING SHRUBS:**
- Cassia (Senna Artemisioides)
 - Texas Sage (Leucophyllum frutescens)
 - Native Plant
- NEW SHRUBS: (5 gallon u.n.o.) NUMBER:**
- New Cassia (Senna Artemisioides) 4
 - New Texas Laurel (Catalpa Secundiflora) 5
- EXISTING MISCELLANEOUS:**
- Light Pole
 - Fire Hydrant

LANDSCAPE PLAN
 SCALE : N.T.S.

 NORTH

| | | | | | |
|-----------------------|------------|---|--------------|--------------------|-----------|
| LANDSCAPE PLAN | | TEMPLE SOLE 6805 E. McDONALD ROAD SCOTTSDALE, ARIZONA 85253 | REV: (1/906) | SCALE: 1" = 30'-0" | 1 OF 1 |
| | DATE | APPROVALS | DESIGN: | ENGINEER: | REVIEWED: |
| | 09/05/2013 | EGC | | | |
| | | | | | |
| | 10/02/2013 | EGC | | | |
| | | | | | |

GREEN CHOICE SOLAR, LLC.
 15344 N. 83RD WAY
 SCOTTSDALE, AZ 85260
 480.398.2740 FAX: 480.398.2761