

DS #: 4546

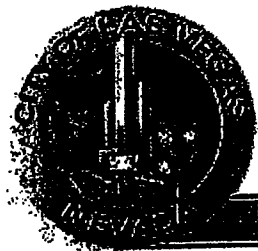
APN: 137-34-212-001

PROJECT: Summerlin Village 23A Unit 2 - Parcel "O" - update # 2

SUBMITTAL: Supplement

SCANNED BY/DATE: _____

CHECKED BY/DATE: _____



CITY OF LAS VEGAS			DATE:
INTER-OFFICE MEMORANDUM			December 18, 2012
TO: Land Development Services Department of Public Works			FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT: Drainage Study for: Summerlin Village 23A Unit 2 – Parcel “O” – Update #2			COPIES TO: Slater Hanifan Group
Cross Streets:	SWC of Alta Drive & Fox Hill Drive		Woodside Homes
File Number:	F:\Depot\DSMemos\DS4546E.doc		Bart Anderson, P.E., DevCo
Parcel Number:	137-34-212-001		CCRFCD
Zoning Action:	TMP-43967		
FEMA Flood Zone	YES	NO	X
Proposed Storm Drain	YES	NO	X

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	1/18/2012	1/31/2012	Not Approved	\$400.00	271744: \$400
2 nd Submittal	2/22/2012	3/7/2012	Conditional Approval	\$400.00	275222: \$400
3 rd Submittal	5/31/2012	6/7/2012	Conditional Approval	\$100.00	285167: \$100
Notarized Letter Recv'd	9/12/2012	9/12/2012	Approved	N/C	N/C
Supplement	12/17/2012	12/17/2012	See Comments Below	N/C	N/C
TOTAL FEES (LDDRS):				\$900.00	----

REMARKS:

Supplement: Update letter for Alta Drive Interim Grading by G.C. Wallace Inc. to remove previous Condition #1 of the subject Summerlin Village 23A Parcel “O” Study

The Drainage Study for the subject project has been reviewed and:

X	is approved subject to conformance to all City standards and the following conditions:
	must be resubmitted or supplemented including the following:3
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.

1. The rough graded onsite without any permanent cover such as paving, building construction or planting, is considered ongoing project under construction whereas a *Stormwater Pollution Prevention Plan* must be kept active under the NDEP Permit. In order to close out the permit, the developer must install permanent cover to the site to stabilize and control stormwater pollution to the satisfaction of NDEP.
2. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
3. All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such in the final map.
4. All onsite storm drains and the associated facilities are privately owned and to be privately maintained by the Homeowners Association.

5. The subject drainage study addresses *Interim improvements (Phase I only)* as well as the *Final Improvements (Phase I and Phase II)*. However, if *Phase II Improvement* commences more than one year after the final approval of this study, a drainage study update will be required to address the future *Phase II Improvement*.

In an effort to increase administrative efficiency, the City of Las Vegas Public Works Department requires all soil reports, drainage studies and traffic impact analysis submittals to be accompanied by an electronic copy of the submittal. Electronic documents must be submitted with one original hard copy of the study. Electronic documents should be on a universal computer-readable digital output replicating your submittal to be used for archival or display purposes. This may be more than one file if necessary. An Indexed Portable Document Format (PDF) or Print Ready CAD file formats with a minimum of 300dpi are the desired formats, but provided it is a high quality digitized replication of the submittal, other formats may be acceptable. If figures are in color, they must be scanned in color and saved as a separate file. The new submittal requirement is effective on **July 1, 2011**. If there are any questions regarding these new requirements, please contact Albert Sung in the Flood Section at (702) 229-2001 or Rick Schroder in Traffic Engineering at (702) 229-6327.

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Amendment and accepted by the *City of Las Vegas Flood Control Section*. Additionally, conditional acceptance of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the *Nevada Division of Environmental Protection* a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

END OF REMARKS

ays

T/R/S: T20S/R59E/34

AREA K-34



CITY OF LAS VEGAS			DATE:
INTER-OFFICE MEMORANDUM			September 12, 2012
TO: Land Development Services Department of Public Works			FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT: Drainage Study for: Summerlin Village 23A Unit 2 – Parcel “O” – Update #1			COPIES TO: Slater Hanifan Group
Cross Streets:	SWC of Alta Drive & Fox Hill Drive		Woodside Homes
File Number:	F:\Depot\DSMemos\DS4546D.doc		Bart Anderson, P.E., DevCo
Parcel Number:	137-34-212-001		CCRFC
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- Note to Land Development:** The development of the subject Parcel “O” is based on the flood protection provided by an *Interim Channel* aligned adjacent to the north of *Alta Drive*. However, this *Interim Channel* has not been constructed yet. No building permit related to Parcel “O” shall be issued prior to the complete construction of the *Interim Channel*.
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END OF REMARKS
ays

T/R/S: T20S/R59E/34
AREA K-34

Albert Sung

From: Kylie Rowbury [krowbury@shg-inc.com]
Sent: Wednesday, September 12, 2012 9:58 AM
To: Albert Sung
Cc: Corey Lieber; Kellin Collins; Mark Failla
Subject: DS4546 Parcel O
Attachments: 120322 THHC PTG.pdf

Albert,

Per our phone conversation this morning, I've attached the permission to grade letter to satisfy condition number 4 of the CLV conditional approval letter for Summerlin Village 23A Unit 2 Parcel O. Please let me know if you need anything else prior to issuing final approval.

Thanks,

Kylie Rowbury, P.E.
Project Engineer

SLATER HANIFAN GROUP

"The Benchmark of Our Profession."

LAS VEGAS

5740 S. ARVILLE STREET #216
LAS VEGAS, NEVADA 89118
PHONE: (702) 284-5300
FAX: (702) 284-5399
www.shg-inc.com

PHOENIX

11801 N. TATUM BLVD. #124
PHOENIX, ARIZONA 85028
PHONE: (602) 687-9664
FAX: (602) 687-9693

Any files contained within are to be used for information ONLY. Accuracy and/or design information to be verified from approved original plans. Use of electronic media is at the sole risk of the user.

The Howard Hughes Corporation
Summerlin Office
10801 W. Charleston Blvd.
3rd Floor
Las Vegas, NV 89135

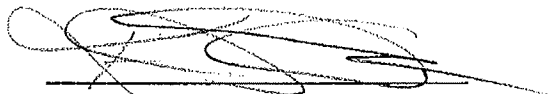
T 702.791.4000
F 702.791.4486
www.howardhughes.com

March 22, 2012

City of Las Vegas
333 North Rancho Drive
Las Vegas, NV 89106

Re: Permission to Grade
Assessor's Parcel Numbers 137-34-210-005, 137-22-000-015, 137-34-313-001

I, Kevin T. Orrock, the authorized signatory for The Howard Hughes Company, LLC, property owner of Assessor's parcel numbers 137-34-210-005, 137-22-000-015, 137-34-313-001 (otherwise known as Parcel N and future HOA and roadways) hereby allows Woodside Homes to grade within the above-mentioned parcels as shown on the attached exhibit and as identified on the grading plans (Summerlin Village 23A, Unit No. 2, Parcel O – Phase 1 prepared by Slater Hanifan Group for Woodside Homes) for the proposed Summerlin Village 23A Parcel "O" development.


Kevin T. Orrock
Vice President

Acknowledgement:

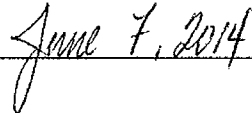
STATE OF NEVADA)
)SS
COUNTY OF CLARK)

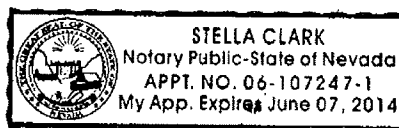
This instrument was acknowledged before me on 22 day of March, 2012, by
Kevin T. Orrock

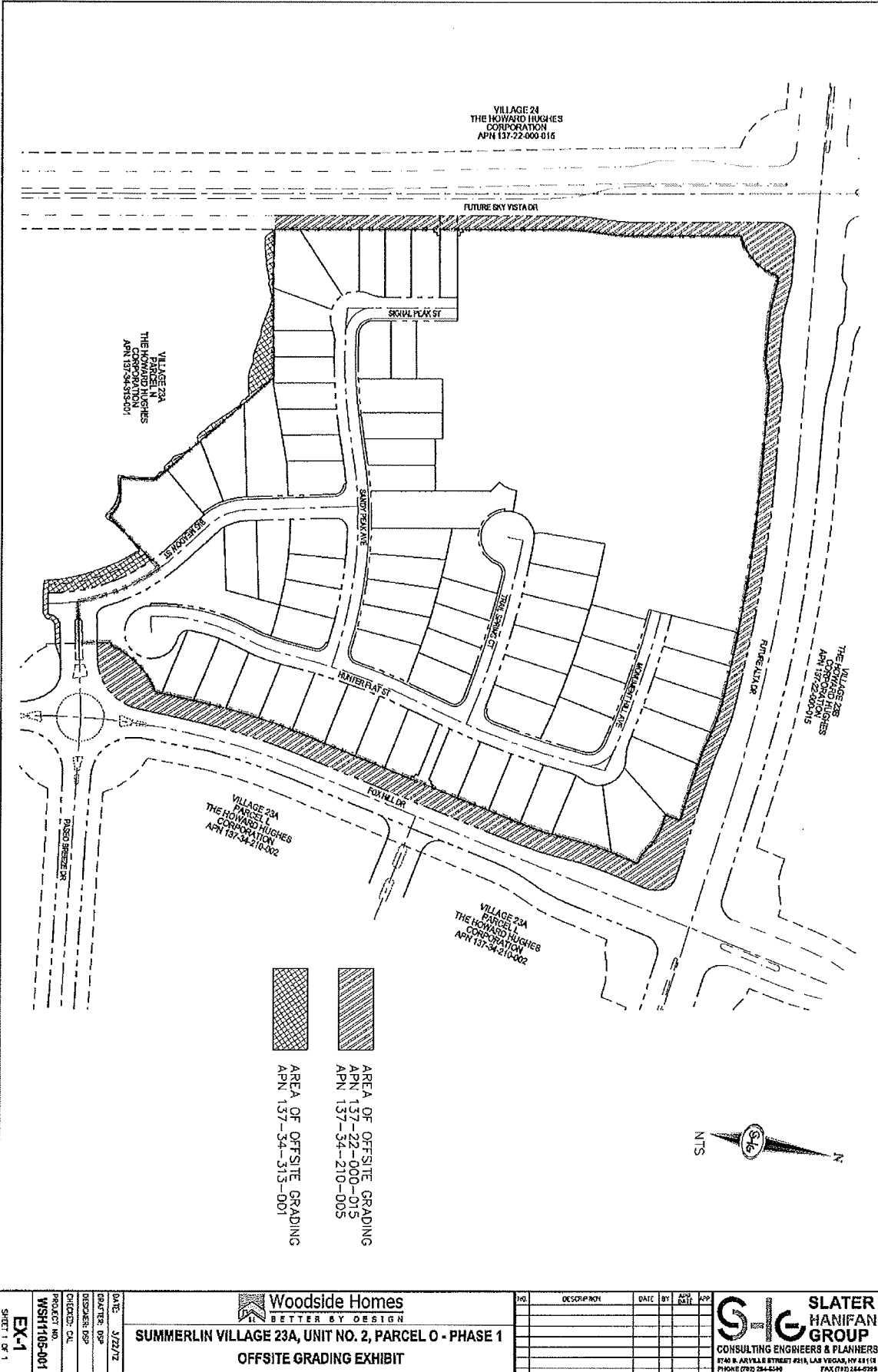
Notary Public



My Commission Expires:







CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM

DATE:

June 7, 2012

TO:

Land Development Services
Department of Public Works

FROM:

Albert Sung, P.E.
Flood Control Project Engineer
Department of Public Works

SUBJECT:

Drainage Study for:

Summerlin Village 23A Unit 2 – Parcel "O" – Update #1

Cross Streets:

SWC of Alta Drive & Fox Hill Drive

File Number:

F:\Depot\DSMemos\DS4546C.doc

Parcel Number:

137-34-212-001

Zoning Action:

TMP-43967

COPIES TO:

Slater Hanifan Group

Woodside Homes

Bart Anderson, P.E., DevCo

CCRFC

FEMA Flood Zone

YES

NO

X

Proposed Storm Drain

YES

NO

X

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3 rd Submittal	5/31/2012	6/7/2012	See Comments Below	\$100.00	285167: \$100
TOTAL FEES (LDDRS):				\$900.00	----

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- Note to Land Development:** The development of the subject Parcel "O" is based on the flood protection provided by an *Interim Channel* aligned adjacent to the north of *Alta Drive*. However, this *Interim Channel* has not been constructed yet. No building permit related to Parcel "O" shall be issued prior to the complete construction of the *Interim Channel*.
- The developer/engineer proposed rough grading in the future *Phase II* area. *City of Las Vegas Planning Department's* approval for the proposed rough grading must be obtained prior to the final approval of the drainage study.
- The rough graded onsite without any permanent cover such as paving, building construction or planting, is considered ongoing project under construction whereas a *Stormwater Pollution Prevention Plan* must be kept active under the NDEP Permit. In order to close out the permit, the developer must install permanent cover to the site to stabilize and control stormwater pollution to the satisfaction of NDEP.
- It appears that the southernmost portion of the project has grading construction encroaching into the adjacent *Parcel N*. Obtain a notarized letter of permission from the adjacent parcel owner for offsite grading activities prior to the final approval of the drainage study.

* Add: All Onsite Storm Drains and the associated facilities are privately owned and to be privately maintained by the HOA.

5. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
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END OF REMARKS
ays

T/R/S: T20S/R59E/34
AREA K-34

Albert Sung

From: Linda Hartman-Maynard
Sent: Thursday, August 30, 2012 4:42 PM
To: Albert Sung
Cc: Doug Rankin
Subject: Andorra and Castille

Albert,

I met with Doug Rankin, Planning Manager, to review the grading plans for the Andorra and Castille residential subdivision. In response to condition number two of the Drainage Study, Planning approval is given to allow the developer to rough grade the future Phase II area along with the fine grading of Phase I.

Linda Hartman-Maynard

City of Las Vegas
Department of Building and Safety
W: (702)229-6899
F: (702)382-1240
lmaynard@lasvegasnevada.gov

 *** FAX TX REPORT ***

TRANSMISSION OK

JOB NO. 4200
 DESTINATION ADDRESS 2845399
 PSWD/SUBADDRESS
 DESTINATION ID
 ST. TIME 06/07 11:31
 USAGE T 00' 55
 PGS. 2
 RESULT OK

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM

DATE:

June 7, 2012

TO:

Land Development Services
 Department of Public Works

FROM:

Albert Sung, P.E.
 Flood Control Project Engineer
 Department of Public Works

SUBJECT:

Drainage Study for:

Summerlin Village 23A Unit 2 – Parcel "O" – Update #1

COPIES TO:

Slater Hanifan Group

Cross Streets:

SWC of Alta Drive & Fox Hill Drive

Woodside Homes

File Number:

F:\Depot\DSMemos\DS4546C.doc

Bart Anderson, P.E., DevCo

Parcel Number:

137-34-212-001

CCRFCD

Zoning Action:

TMP-43967

FEMA Flood Zone

YES

NO

X

Proposed Storm Drain

YES

NO

X

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- The rough graded onsite without any permanent cover such as paving, building construction or

TRANSMITTAL

To: Albert Sung, P.E.

Date: May 31, 2012

City of Las Vegas

Project No.: WSH1105.000

Department of Public Works

333 N. Rancho Drive, 7TH Floor

Las Vegas, NV 89106

From: Kylie Rowbury, P.E.

Subject: Summerlin Village 23A Unit 2 Parcel O – Update No. 1

CC: Mark Failla, SHG

CC: _____

CC: Corey Lieber, SHG

CC: _____

CC: Steve Jones, SHG

CC: _____

Transmitting Via:

- ☐ Mail
☒ Messenger / MDS
☐ Federal Express
☐ Pickup

For:

- ☒ Review & Comment
☐ Per your Request
☐ Information/File

Acknowledgement of Receipt:

- ☐ Not Required
☒ Acknowledgement Required
Received By: _____
Date: _____ Time: _____

Copies	Description
<u>1</u>	<u>\$100 Submittal Fee (ck#50120037)</u>
<u>1</u>	<u>Technical Drainage Study Update No. 1</u>
<u>1</u>	<u>Previously Approved Plan, Profile & Detail Sheets w/revision bubbles around updates (bound)</u>
<u>1</u>	<u>Revised Plan, Profile & Detail Sheets (bound)</u>
<u>1</u>	<u>Stamped and Signed Standard Form 1 (bound)</u>
<u>1</u>	<u>CD containing PDF of submittal documents (bound)</u>

Comments:

Enclosed please find the above listed items in support of our application of *Update No. 1 to the Technical Drainage Study for Summerlin Village 23A Unit 2 Parcel O*. Please contact us if there are any questions at 702-284-5300. Thanks.

Signed: _____



Kylie Rowbury, P.E.

TECHNICAL DRAINAGE STUDY
UPDATE NO. 1

**Summerlin Village 23A Unit 2
Parcel O**

City of Las Vegas, Nevada

Job No.: WSH1105.000

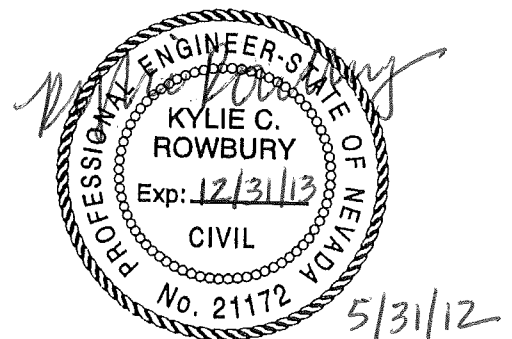
Date: May 2012

Prepared By:

Slater Hanifan Group, Inc.
5740 S. Arville Street, Suite 216
Las Vegas, Nevada 89118
Phone: 702-284-5300 • Fax: 702-284-5399

Prepared For:

Woodside Homes
5888 W. Sunset Road, Suite 200
Las Vegas, Nevada 89118
Phone: 702-889-7800 • Fax: 702-889-0801



Kylie Rowbury, P.E.
NV Professional Engineer No. 21172

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Summerlin Village 23A Unit 2 Parcel O – Update No. 1 Date: May 2012
 Location of Development: a) Descriptive (Cross Streets): North/South: Fox Hill Drive
East/West: Alta Drive
 b) Section: 34 Township: 20 S Range: 59 E
 c) APN: 137-34-212-001

Name of Owner: Woodside Homes
 Telephone No.: (702) 889-7800 Fax No.: (702) 889-0801 E-mail Address: EdwardD@woodside-homes.com
 Address: 5888 W. Sunset Road, Suite 200, Las Vegas, NV 89118

Contact Person – Name: Kylie Rowbury, P.E. Telephone No.: (702) 284-5300
 *E-mail Address: krowbury@shg-inc.com Fax No.: (702) 284-5399
 Firm: Slater Hanifan Group
 Address: 5740 S. Arville Street, Suite 216, Las Vegas, NV 89131

Type of Land Development/Land Disturbance Process:

☐ Rezoning	☐ Subdivision Map	☐ Clearing and grading Only
☐ Parcel Map	☒ Planned Unit Development	☐ Other (Please specify below)
☐ Large Parcel Map	☐ Building Permit	☐

1. Total Owned Land Area: At Site: 21.08 ± Acres Being Developed/Disturbed: All

2. Is a portion or all of the subject property located in a FEMA Flood Hazard Area? ☐ Yes** ☒ No

3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? ☒ Yes** ☐ No

4. Proposed type of development (Residential, Commercial, Etc.): Residential

5. Approximate upstream land area which drains to the subject site: 0 ± Acres

6. Has the site drainage been evaluated in the past? ☒ Yes** ☐ No If yes, please identify documentation: _____

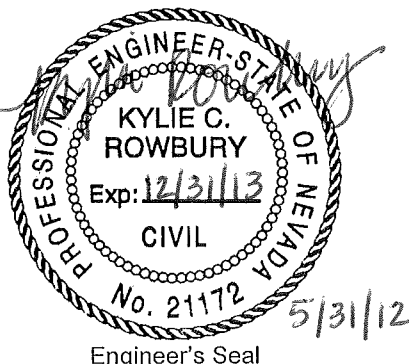
Technical Drainage Study for Summerlin Village 23A Unit 2 Improvements (CLV DS3402)

Technical Drainage Study for Summerlin Village 23A Rough Grading (CLV DS3077C)

Conceptual Drainage Study for Summerlin Village 23A (CLV DS3077A)

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: _____
South in Fox Hill Drive storm drain

8. Briefly describe your proposed schedule for the subject project: Phase 1 followed by Phase 2



Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

*Newly Required Field

**Review and concurrence of the Clark County Regional Flood Control District is required

Local Entity File No.	Revision	Date

REFERENCE:

STANDARD FORM 1

Updated 05/01/2008

WSH1105.000

May 31, 2012

Albert Sung, P.E. – Flood Control Project Engineer
City of Las Vegas Department of Public Works
731 S. Fourth Street
Las Vegas, Nevada 89101

**Subject: Update No. 1 to the Technical Drainage Study for
Summerlin Village 23A Unit 2 Parcel O (CLV # DS4546)**

Dear Mr. Sung:

This letter is intended to serve as an Update to the *Technical Drainage Study for Summerlin Village 23A Unit 2 Parcel O* (CLV # DS4546), which was approved by the City of Las Vegas on March 7, 2012. Subsequent to the approval of the Technical Drainage Study, the site entry road has been re-designed based on coordination with Summerlin and the adjacent Lennar project (Summerlin Parcel N). The entry road is now going to be gated, which in turn requires the throat of the entry road to be elongated.

This update addresses revised design, including revisions to the roadway, flood control improvements, and finished floor elevations. The revisions influence both the interim (Phase1) and proposed conditions; therefore, updates have been made with respect to both conditions. Note that the hydrologic analyses provided with the approved Technical Drainage Study for both the interim and proposed conditions remain valid. Interior hydraulic computations, including street hydraulic computations (with the exception of Big Meadow Street), drainage easement computations, and emergency overflow computations also remain valid.

INTERIM CONDITION

Discussion of Revised Street Flow (Interim Condition)

In the interim condition, perimeter street flows for existing Fox Hill Drive and future Alta Drive, as well as the adjacent Collector Channel within the Sky Vista Drive alignment remain the same as presented in the approved Technical Drainage Study. Interior street flows remain the same as presented in the approved Technical Drainage Study with the exception of Sections 5W and 5E along Big Meadow Street. The slope in the roadway has been revised with this Update Study in order to tie in with revisions to the entry road. Therefore, revised interim condition street flow computations for Sections 5W and 5E have been performed and are included in Appendix C for reference. Section locations are illustrated on revised Exhibit F located in Appendix B and street flow hydraulic properties are summarized in the table below.

Interim Condition Street Flow Summary					
Section	Slope (%)	Q ₁₀₀ (cfs)	Depth (ft)	Velocity (fps)	VxD
SECTION 5W (Q = ½CP3)	4.50	7.5	0.36	5.74	2.1
SECTION 5E (Q = ½CP3)	4.50	7.5	0.36	5.74	2.1

Upon review of the table above, it is noted that despite the grading revisions to Big Meadow Street, 100-year street flow criteria as set forth in the CCRFCD Manual are still met. Since 100-year flows meet 10-year criteria, 10-year flows have not been reported.

Discussion of Revised Flood Control Facilities (Interim Condition)

Storm Drain & Drop Inlets: Although the overall flood control scheme remains the same as proposed with the original Technical Drainage Study, the alignment of the drop inlets and storm drain has been revised as a result of changes to the entry road design. In addition, the previously proposed 18-inch laterals extending from the 42-inch RCP main to the proposed drop inlets in Big Meadow Street has been upsized to a 24-inch pipe. Note that no changes have been made to the proposed drainage facilities in Hunter Flat Street (previously Yankee Meadow Street). The table below summarizes the facilities proposed with Phase 1 of the Parcel O development. See revised Exhibit H located in Appendix B for an illustration of the proposed flood control facilities.

Interim Condition Flood Control Facility Summary					
ID	Facility	Description of Flow	Q _{FACILITY} (cfs)	Q _{BYPASS} (cfs)	Comment
1	Proposed Sump Inlet	Q = CP2	57	0	15.0-ft Mod. Type C Drop Inlet
2A	Proposed CG Inlet	Q = ½CP3	7.5	0	20.0-ft Type CM D.I. 24-inch Lateral
2B	Proposed CG Inlet	Q = ½CP3	7.5	0	20.0-ft Type CM D.I. 24-inch Lateral

A revised drop inlet computation is included in Appendix D and incorporates the revised street slope in Big Meadow Street; however, the drop inlet sizes remain the same as the original study. A revised interim condition WSPG analysis for the proposed 24-inch storm drain laterals is also included in Appendix D. Per the CCRFCD Manual, the resulting HGL is at minimum 1-foot below finished grade and has been labeled on the profile sheets included in Appendix G. Since no revisions were made to Facility No. 1, the WSPG and drop inlet computations from the original Technical Drainage Study remain valid and no further analysis is provided for those facilities.

Discussion of Revised Finished Floors (Interim Condition)

A lot fit analysis was performed subsequent to the approval of the original Technical Drainage Study and several finished floor elevations throughout the site have been revised. Please see the previously approved plans with revision bubbles, located in Appendix F, for reference to the finished floors that have been revised. As discussed in the original Technical Drainage Study, in some locations, the interim condition flows are higher than the proposed condition flows in the Phase 1 interior roadways and vice versa. Therefore, street section hydraulic computations have been performed for all street sections for both interim and proposed condition flows and finished floors have been checked against the higher flow depths. Please see the Proposed Condition section of this letter for further discussion on proposed finished floors.

PROPOSED CONDITION

Discussion of Revised Street Flow (Proposed Condition)

In the proposed condition, perimeter street flows for existing Fox Hill Drive and future Alta Drive, as well as the adjacent Collector Channel within the Sky Vista Drive alignment remain the same as presented in the approved Technical Drainage Study. As discussed above, interior street flows remain the same as presented in the approved Technical Drainage Study with the exception of Sections 5W and 5E along Big Meadow Street. Revised proposed condition street flow computations for Sections 5W and 5E have been performed and are included in Appendix C for reference. Section locations are illustrated on revised Exhibit G located in Appendix B and street flow hydraulic properties are summarized in the table below.

Proposed Condition Street Flow Summary					
Section	Slope (%)	Q₁₀₀ (cfs)	Depth (ft)	Velocity (fps)	VxD
SECTION 5W (Q = ½CP3)	4.50	9	0.38	5.89	2.2
SECTION 5E (Q = ½CP3)	4.50	9	0.38	5.89	2.2

Upon review of the table above, it is noted that despite the grading revisions to Hunter Flat Street, 100-year street flow criteria as set forth in the CCRFCD Manual are still met in the proposed condition. Since 100-year flows meet 10-year criteria, 10-year flows have not been reported.

Discussion of Revised Flood Control Facilities (Proposed Condition)

Storm Drain & Drop Inlets: No additional storm drain and/or drop inlets are proposed with Phase 2. However, the updated Phase 1 facilities have been analyzed utilizing the proposed condition flows. See calculations included in Appendix D. See Exhibit H located in Appendix B for an illustration of the flood control facilities. Hydraulic flow characteristics for the facilities in the proposed condition are summarized in the table below.

Proposed Condition Flood Control Facility Summary					
ID	Facility	Description of Flow	Q _{FACILITY} (cfs)	Q _{BYPASS} (cfs)	Comment
1	Proposed Sump Inlet	Q = CP2	52	0	15.0-ft Mod. Type C Drop Inlet
2A	Proposed CG Inlet	Q = ½CP3	8.0	1.0	20.0-ft Type CM D.I. 24-inch Lateral
2B	Proposed CG Inlet	Q = ½CP3	8.0	1.0	20.0-ft Type CM D.I. 24-inch Lateral

A revised proposed condition WSPG analysis for the proposed 24-inch storm drain laterals is included in Appendix D and the resulting HGL is at minimum 1-foot below finished grade per the CCRFCD Manual criteria. As approved in the original Technical Drainage Study, the continuous grade Drop Inlets No. 2A and No. 2B allow ± 1 cfs of bypass flow.

Discussion of Revised Finished Floors (Proposed Condition)

As previously discussed, several of the finished floor elevations for the site have been revised from the original Technical Drainage Study and a revised finished floor analysis has been performed with this update. All proposed finished floor elevations have been determined to be a vertical distance above the gutter flowline of twice the depth of flow in the street and 6-inches above the top of curb on the high side of the lot in accordance with the Manual. Finished floor elevations are based on either interim or proposed condition street flows, whichever are higher, based on which street section is being referenced. All finished floor elevations are in compliance with the CCRFCD Manual criteria. The revised finished floor analysis has been provided in Appendix E. Per CLV requirements, the finish floor elevation for lots adjacent to emergency overflow weirs must be higher than the headwater elevation over the weir. The revised finished floor elevation for Lot 1 adjacent to the emergency overflow weir has been checked and still meets CLV criteria.

Conclusions

1. The project site is located within a FEMA designated Zone X, an area determined to be outside the 0.2% annual chance floodplain.
2. The project site is adjacent to proposed CCRFCD Facility APAD 0146, an existing 10-foot by 8-foot RCB located in Alta Drive. CCRFCD concurrence will be obtained upon conditional approval from Clark County.
3. Three (3) drop inlets and associated storm drain facilities are proposed to collect and convey flow from the developed Parcel O site to the existing storm drain facilities within Fox Hill Drive.
4. Finished floor elevations for entire site have been elevated to at least a height of two times the depth of flow in the adjacent street and 6-inches above the top of curb measured from the high side of the lot. For lots adjacent to the drainage easement, the

finish floor elevations have been elevated to a height of 18-inches above the water surface elevation over the weir or twice the depth of channel flow, whichever is higher.

5. This proposed development is in conformance with the concept set forth in the V23A Conceptual Study, as well as the Rough Grade Study and Unit 2 Study. Note that the site discharge is approximately equal to the allowable discharges set forth in the Unit 2 Study. Therefore, development of the proposed site does not negatively impact downstream properties and/or facilities and the design is considered acceptable.
6. The improvement plans submitted with the previously approved Technical Drainage Study have been redlined with revision bubbles to outline the extents of the revisions performed with this update. The redlined plans are included in Appendix F.
7. The improvement plans included in Appendix G of this study support the drainage patterns, conclusions and/or recommendations detailed in this study.

If you have any questions or require additional information, please do not hesitate to contact us at 284-5300.

Respectfully Submitted,

SLATER HANIFAN GROUP



Kylie Rowbury, P.E.
Flood Control Division

pc: Steve Jones, SHG
Mark Failla, SHG
Corey Lieber, SHG

LIST OF APPENDICES

Appendix A Approval Letter

Technical Drainage Study for Summerlin Village 23A Unit 2 Parcel O
(CLV DS4546, by SHG)

Appendix B Revised Drainage Exhibits

Appendix C Revised Flowmaster Hydraulic Computations

- Interim Condition
- Proposed Condition

Appendix D Revised Drop Inlet and Storm Drain Hydraulic Computations

- Drop Inlets
- WSPG Analysis
 - Interim Condition
 - Proposed Condition

Appendix E Revised Finished Floor Analysis

Appendix F Previously Approved Plan, Profile and Detail Sheets
(with revision bubbles around updated areas)

Appendix G Revised Plan, Profile and Detail Sheets

APPENDIX A

Approval Letter

Technical Drainage Study for Summerlin Village 23A Unit 2 Parcel O
(CLV DS4546, by SHG)

CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		March 7, 2012
TO: Land Development Services Department of Public Works		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for:	COPIES TO:
	Summerlin Village 23A Unit 2 - Parcel "O"	Slater Hanifan Group
Cross Streets:	SWC of Alta Drive & Fox Hill Drive	Woodside Homes
File Number:	F:\Depot\DSMemos\DS4546B.doc	Bart Anderson, P.E., DevCo
Parcel Number:	137-34-212-001	CCRFC
Zoning Action:	TMP-43967	
FEMA Flood Zone	YES	NO X
Proposed Storm Drain	YES	NO X

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	1/18/2012	1/31/2012	Not Approved	\$400.00	271744: \$400
2 nd Submittal	2/22/2012	3/7/2012	See Comments Below	\$400.00	275222: \$400
TOTAL FEES (LDDRS):					****

REMARKS:

The Drainage Study for the subject project has been reviewed and:

	is approved subject to conformance to all City standards and the following conditions:
	must be resubmitted or supplemented including the following:
X	is conditionally approved subject to Clark County Regional Flood Control District concurrence.

- Note to Land Development:** The development of the subject Parcel "O" is based on the flood protection provided by an *Interim Channel* aligned adjacent to the north of *Alta Drive*. However, this *Interim Channel* has not been constructed yet. No building permit related to Parcel "O" shall be issued prior to the complete construction of the *Interim Channel*.
- The developer/engineer proposed rough grading in the future *Phase II* area. *City of Las Vegas Planning Department's* approval for the proposed rough grading must be obtained prior to the final approval of the drainage study.
- The rough graded onsite without any permanent cover such as paving, building construction or planting, is considered ongoing project under construction whereas a *Stormwater Pollution Prevention Plan* must be kept active under the NDEP Permit. In order to close out the permit, the developer must install permanent cover to the site to stabilize and control stormwater pollution to the satisfaction of NDEP.
- This drainage study is acceptable in concept;** however, *City of Las Vegas* will not formally accept the study until the *Clark County Regional Flood Control District (CCRFC)* has issued a letter of concurrence. The Engineer should contact the CCRFC to confirm that they have begun their review.
- It appears that the southernmost portion of the project has grading construction encroaching into the adjacent *Parcel N*. Obtain a notarized letter of permission from the adjacent parcel owner for offsite grading activities prior to the final approval of the drainage study.

6. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
7. All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such in the final map.
8. The subject drainage study addresses *Interim improvements (Phase I only)* as well as the *Final Improvements (Phase I and Phase II)*. However, if *Phase II Improvement* commences more than one year after the final approval of this study, a drainage study update will be required to address the future *Phase II Improvement*.

In an effort to increase administrative efficiency, the City of Las Vegas Public Works Department requires all soil reports, drainage studies and traffic impact analysis submittals to be accompanied by an electronic copy of the submittal. Electronic documents must be submitted with one original hard copy of the study. Electronic documents should be on a universal computer-readable digital output replicating your submittal to be used for archival or display purposes. This may be more than one file if necessary. An Indexed Portable Document Format (PDF) or Print Ready CAD file formats with a minimum of 300dpi are the desired formats, but provided it is a high quality digitized replication of the submittal, other formats may be acceptable. If figures are in color, they must be scanned in color and saved as a separate file. The new submittal requirement is effective on **July 1, 2011**. If there are any questions regarding these new requirements, please contact Albert Sung in the Flood Section at (702) 229-2001 or Rick Schroder in Traffic Engineering at (702) 229-6327.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the Nevada Division of Environmental Protection a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

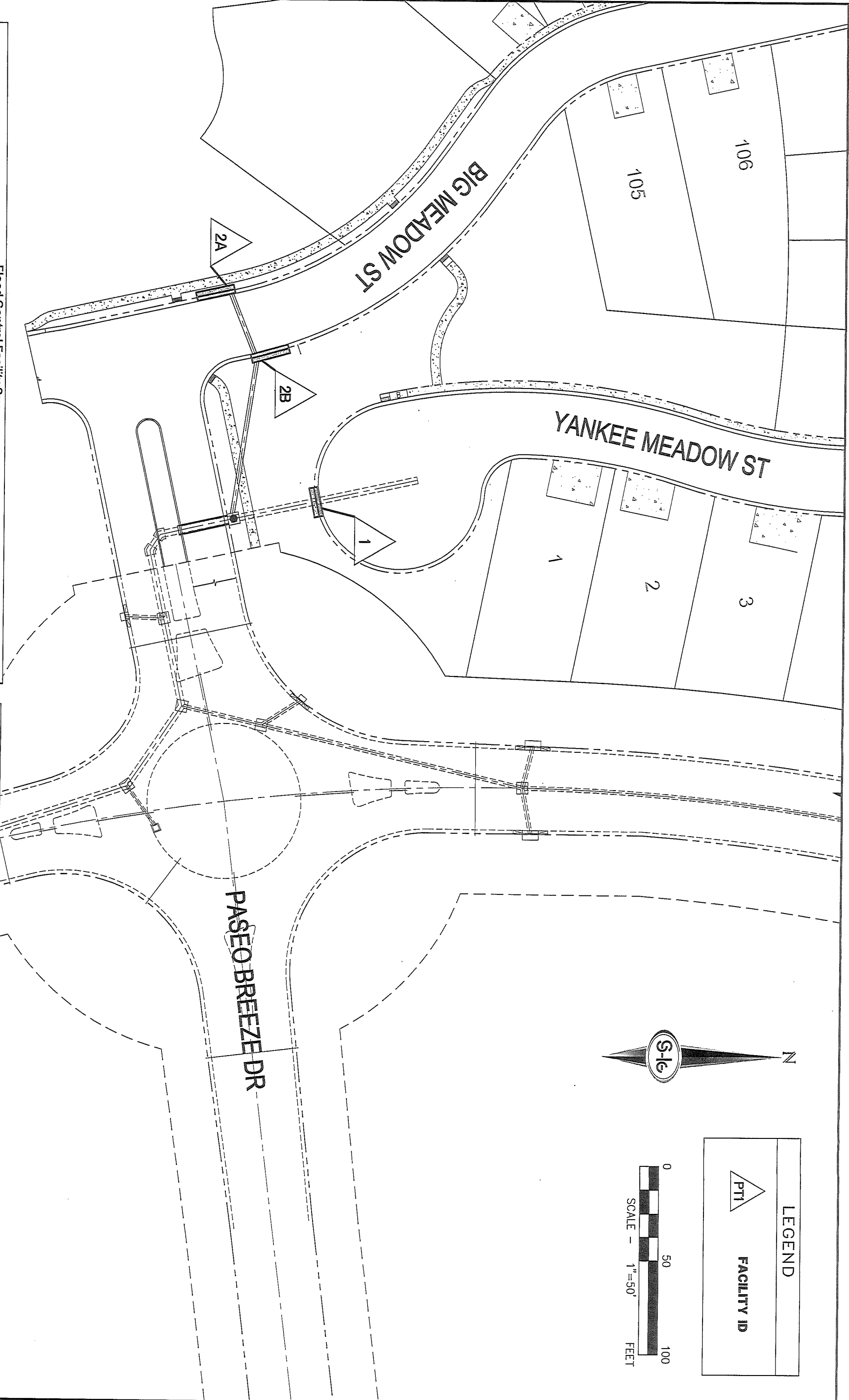
END OF REMARKS
ays

T/R/S: T20S/R59E/34
AREA K-34

Post-It® Fax Note 7671		Date	3/7/12	# of pages	2
To	Kylie Rowbury	From	Albert Sung		
Co./Dept.	SHG	Co.	CLW		
Phone #		Phone #	229-2001		
Fax #	284-5399	Fax #			

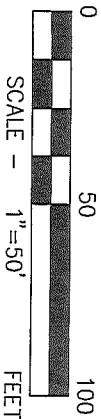
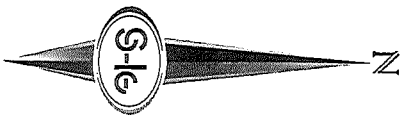
APPENDIX B

Revised Drainage Exhibits



Flood Control Facility Summary				
Interim Condition				
ID	Facility	Description of Flow	Q _{Facility} (cfs)	Q _{Bypass} (cfs)
1	Proposed Sump Inlet	Q = CP2	57	0
2A	Proposed CG Inlet	Q = ½CP3	7.5	0
2B	Proposed CG Inlet	Q = ¼CP3	7.5	0
		15.0-ft Mod. Type C Drop Inlet		
		20.0-ft Type CM Drop Inlet, 24-inch C-900 SD Lateral		
		20.0-ft Type CM Drop Inlet, 24-inch C-900 SD Lateral		

Flood Control Facility Summary				
Proposed Condition				
ID	Facility	Description of Flow	Q _{Facility} (cfs)	Q _{Bypass} (cfs)
1	Proposed Sump Inlet	Q = CP2	52	0
2A	Proposed CG Inlet	Q = ½CP3	8	1
2B	Proposed CG Inlet	Q = ¼CP3	8	1
		15.0-ft Mod. Type C Drop Inlet		
		20.0-ft Type CM Drop Inlet, 24-inch C-900 SD Lateral		
		20.0-ft Type CM Drop Inlet, 24-inch C-900 SD Lateral		



LEGEND

PT1

FACILITY ID

APPENDIX C

Revised Flowmaster Hydraulic Computations

Interim Condition

SECTION 5W (Interim)

Worksheet for Irregular Channel

Project Description	
Worksheet	SECTION 5W (Interim)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Input Data	
Channel Slope	4.50 %
Discharge	7.5 cfs

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Method	Improved Lotter's Method
Closed Channel Weighting Method	Horton's Method

Results	
Mannings Coefficient	0.013
Water Surface Elevation	0.36 ft
Elevation Range	0.00 to 0.58
Flow Area	1.3 ft ²
Wetted Perimeter	11.23 ft
Top Width	10.82 ft
Actual Depth	0.36 ft
Critical Elevation	0.49 ft
Critical Slope	0.46 %
Velocity	5.74 ft/s
Velocity Head	0.51 ft
Specific Energy	0.87 ft
Froude Number	2.91
Flow Type	Supercritical

Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00.00	0+06.00	0.013
0+06.00	0+22.50	0.016

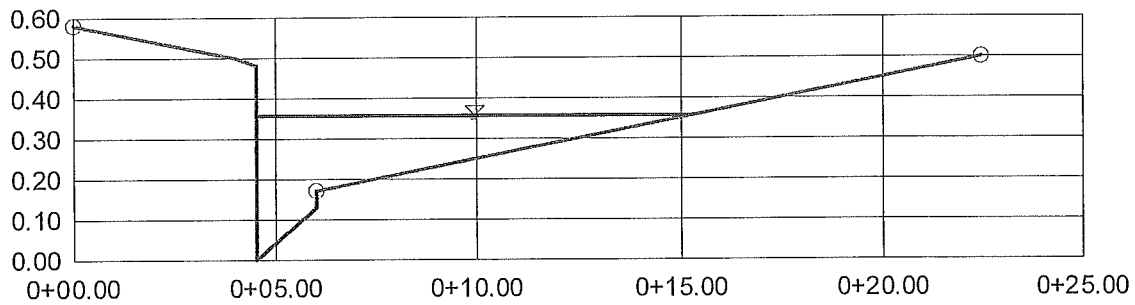
Natural Channel Points	
Station (ft)	Elevation (ft)
0+00.00	0.58
0+04.00	0.50
0+04.50	0.48
0+04.50	0.00
0+06.00	0.13
0+06.00	0.17
0+22.50	0.50

SECTION 5W (Interim)

Cross Section for Irregular Channel

Project Description	
Worksheet	SECTION 5W (Interim)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data	
Mannings Coefficient	0.013
Channel Slope	4.50 %
Water Surface Elevation	0.36 ft
Elevation Range	0.00 to 0.58
Discharge	7.5 cfs



V:10.0
H:1
NTS

SECTION 5E (Interim)

Worksheet for Irregular Channel

Project Description	
Worksheet	SECTION 5E (Interim)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Input Data	
Channel Slope	4.50 %
Discharge	7.5 cfs

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Method	Improved Lotter's Method
Closed Channel Weighting Method	Horton's Method

Results	
Mannings Coefficient	0.013
Water Surface Elevation	0.36 ft
Elevation Range	0.00 to 0.58
Flow Area	1.3 ft ²
Wetted Perimeter	11.23 ft
Top Width	10.82 ft
Actual Depth	0.36 ft
Critical Elevation	0.49 ft
Critical Slope	0.46 %
Velocity	5.74 ft/s
Velocity Head	0.51 ft
Specific Energy	0.87 ft
Froude Number	2.91
Flow Type	Supercritical

Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00.00	0+06.00	0.013
0+06.00	0+22.50	0.016

Natural Channel Points	
Station (ft)	Elevation (ft)
0+00.00	0.58
0+04.00	0.50
0+04.50	0.48
0+04.50	0.00
0+06.00	0.13
0+06.00	0.17
0+22.50	0.50

SECTION 5E (Interim)

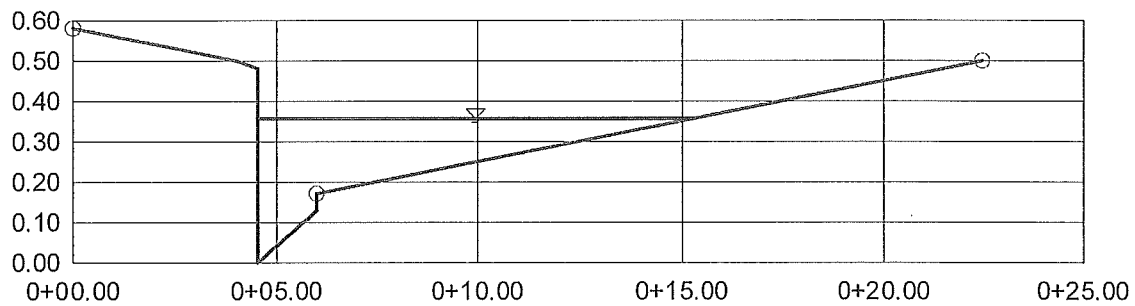
Cross Section for Irregular Channel

Project Description

Worksheet	SECTION 5E (Interim)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data

Mannings Coefficient	0.013
Channel Slope	4.50 %
Water Surface Elevation	0.36 ft
Elevation Range	0.00 to 0.58
Discharge	7.5 cfs



V:10.0
H:1
NTS

Proposed Condition

SECTION 5W (Proposed)

Worksheet for Irregular Channel

Project Description	
Worksheet	SECTION 5W (Proposed)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Input Data	
Channel Slope	4.50 %
Discharge	9 cfs

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Method	Improved Lotter's Method
Closed Channel Weighting Method	Horton's Method

Results	
Mannings Coefficient	0.013
Water Surface Elevation	0.38 ft
Elevation Range	0.00 to 0.58
Flow Area	1.5 ft ²
Wetted Perimeter	12.23 ft
Top Width	11.80 ft
Actual Depth	0.38 ft
Critical Elevation	0.51 ft
Critical Slope	0.47 %
Velocity	5.89 ft/s
Velocity Head	0.54 ft
Specific Energy	0.91 ft
Froude Number	2.89
Flow Type	Supercritical

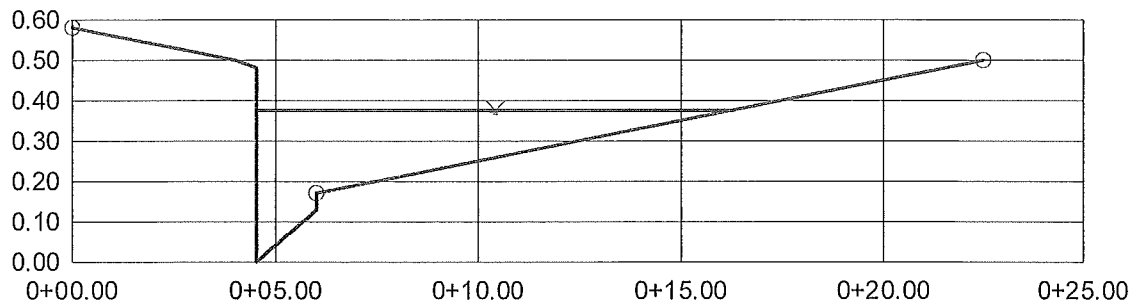
Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00.00	0+06.00	0.013
0+06.00	0+22.50	0.016

Natural Channel Points	
Station (ft)	Elevation (ft)
0+00.00	0.58
0+04.00	0.50
0+04.50	0.48
0+04.50	0.00
0+06.00	0.13
0+06.00	0.17
0+22.50	0.50

SECTION 5W (Proposed) Cross Section for Irregular Channel

Project Description	
Worksheet	SECTION 5W (Proposed)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data	
Mannings Coefficient	0.013
Channel Slope	4.50 %
Water Surface Elevation	0.38 ft
Elevation Range	0.00 to 0.58
Discharge	9 cfs



V:10.0
H:1
NTS

SECTION 5E (Proposed)

Worksheet for Irregular Channel

Project Description	
Worksheet	SECTION 5E (Proposed)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Input Data	
Channel Slope	4.50 %
Discharge	9 cfs

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Method	Improved Lotter's Method
Closed Channel Weighting Method	Horton's Method

Results	
Mannings Coefficient	0.013
Water Surface Elevation	0.38 ft
Elevation Range	0.00 to 0.58
Flow Area	1.5 ft ²
Wetted Perimeter	12.23 ft
Top Width	11.80 ft
Actual Depth	0.38 ft
Critical Elevation	0.51 ft
Critical Slope	0.47 %
Velocity	5.89 ft/s
Velocity Head	0.54 ft
Specific Energy	0.91 ft
Froude Number	2.89
Flow Type	Supercritical

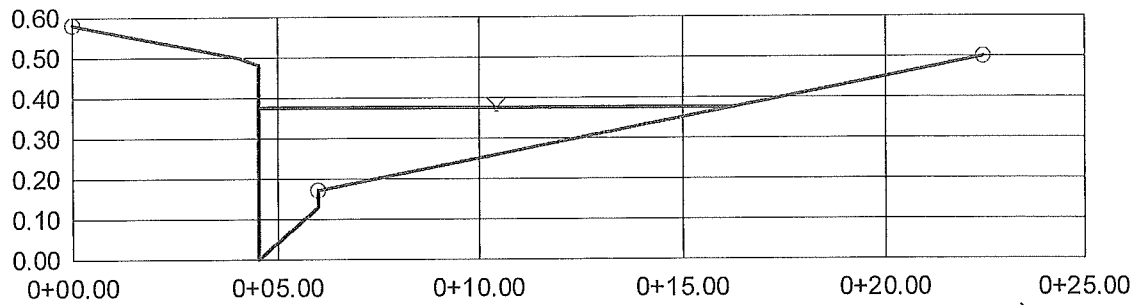
Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00.00	0+06.00	0.013
0+06.00	0+22.50	0.016

Natural Channel Points	
Station (ft)	Elevation (ft)
0+00.00	0.58
0+04.00	0.50
0+04.50	0.48
0+04.50	0.00
0+06.00	0.13
0+06.00	0.17
0+22.50	0.50

SECTION 5E (Proposed) Cross Section for Irregular Channel

Project Description	
Worksheet	SECTION 5E (Proposed)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data	
Mannings Coefficient	0.013
Channel Slope	4.50 %
Water Surface Elevation	0.38 ft
Elevation Range	0.00 to 0.58
Discharge	9 cfs



V:10.0
H:1
NTS

APPENDIX D

Revised Drop Inlet and Storm Drain Hydraulic Computations

Drop Inlets

Project:	Summerlin Village 23A Parcel O - Update	
Title:	Mod. Type C Drop Inlet (Continuous Grade)	
Subtitle:	20-ft Drop Inlet	
By:	KCR	
Date:	5/30/2012	
Input:	Variable:	Input:
Street Flow (cfs)	Q	9.0
Longitudinal Slope (ft/ft)	S_o	0.0450
Manning's Coefficient	n	0.016
Street Flow Velocity (fps)	V	5.89
Street Flow Depth (ft)	D	0.38
Street Cross Slope (ft/ft)	S_x	0.02
Grate Width (ft)	W	1.5
Grate Depression (in)	D_g	2.0
Length of Grate (ft)	L_g	17.5
Length of Curb Opening (ft)	L_c	20.00
Clogging Factor - Grate (%)	CF_g	50%
Clogging Factor - Curb (%)	CF_c	50%
Effective Grate Length (ft)	L_{ge}	8.8
Effective Curb Opening Length (ft)	L_{ce}	10.00
Output (Grate):	Equation:	Output (Grate):
¹ R_f - Frontal Flow Factor	$1 - 0.09(V - V_x)$ if $V > V_x$; else Frontal Flow Factor = 1	1.00
² V_o - Splash Over Velocity (fps)	$V_x = p + q * L_g - r * L_{ge}^2 + sy * L_{ge}^3$; where $p=0.30, q=4.85, r=1.31, sy=0.15$ (for Vane Grate)	42.93
¹ E - Grate Flow Ratio	Frontal Flow/Side Flow	0.33
² Q_w - Frontal Flow (cfs)	$Q_w = Q[1 - (1 - (W/T))^{2.67}]$	3.00
¹ Q_s - Side Flow (cfs)	$Q_s = Q - Q_w$	6.0
T - Side Flow Spread (ft)	$(D - D_g)/S_x$	10.67
¹ R_s - Side Flow Factor	$1 / (1 + (0.15 * V^{1.8}) / (S_x * L_{ge}^{2.3}))$	0.45
¹ Q_{gi} - Intercepted Flow (cfs)	$(R_f * E + R_s * (1 - E)) * Q$	5.7
Output (Curb):	Equation:	Output (Curb):
¹ S_e - Equivalent Cross Slope (ft/ft)	$S_x + S_g * E$	0.057
Q_{sx} - Remaining Flow After Grate Interception (cfs)	$Q - Q_{gi}$	3.328
S_g - Gutter Cross Slope (ft/ft)	D_g/W	0.111
¹ L_t - Effective Interception Length (ft)	$0.60 * Q_{sx}^{0.42} * S_o^{0.30} * (1/n * S_e)^{0.6}$	26.16
¹ Q_{ci} - Intercepted Flow (cfs)	$(1 - (1 - L_{ce}/L_t)^{1.8}) * Q_{sx}$ or Q_{sx} if L_t is less than L_{ce}	1.9
Output (Combination):		Output (Combination):
Total Intercepted Flow (cfs)	Intercepted (Grate) + Intercepted (Curb)	8
¹ Formula referenced from the CCRFCD Manual		
² Formula referenced from FHWA Urban Drainage Design Manual (HEC-22)		

INTERIM: TOTAL $Q_{BYPASS} = 0$ CFS

PROPOSED: TOTAL $Q_{BYPASS} = 2$ CFS (1 CFS PER INLET)

WSPG Analysis

Interim Condition

LAT_INT.WSQ

7.5

0 Q

LAT_INT.WSP

0	T1	SUMMERLIN VILLAGE 23A PARCEL 0 UPDATE NO. 1			
	T2	STORM DRAIN LATERAL TO PARCEL 0			
	T3	24-INCH RCP TO CG INLETS - INTERIM CONDITION			
	SO	100.003364.37 24		3364.39	
	R	185.003367.28 24	.013		30. 1
	JX	185.003367.28 24 24	.013		
	R	219.503367.61 24	.013	3367.28	45.
	SH	219.503367.61 24			
	CD	18 4			
	CD	24 4	1.5		
	CD	30 4	2.5		
	CD	36 4	3.		
	CD	42 4	3.5		
	CD	48 4	4.		

LAT_INT.OUT

DATE: 5/30/2012
TIME: 14:36

PAGE 1

F0515P
WATER SURFACE PROFILE - CHANNEL DEFINITION LISTING

CARD CODE	SECT NO	CHN TYPE	NO OF PIERS	AVE PIER WIDTH	HEIGHT 1 DIAMETER	BASE WIDTH	ZL	ZR	INV DROP	Y(1)	Y(2)	Y(3)	Y(4)	Y(5)	Y(6)	Y(7)	Y(8)	Y(9)	Y(10)
-----------	---------	----------	-------------	----------------	-------------------	------------	----	----	----------	------	------	------	------	------	------	------	------	------	-------

CD	18	4			1.50														
CD	24	4			2.00														
CD	30	4			2.50														
CD	36	4			3.00														
CD	42	4			3.50														
CD	48	4			4.00														

F 0 5 1 5 P

PAGE NO 3

WATER SURFACE PROFILE - TITLE CARD LISTING

HEADING LINE NO 1 IS -

SUMMERLIN VILLAGE 23A PARCEL 0 UPDATE NO. 1

HEADING LINE NO 2 IS -

STORM DRAIN LATERAL TO PARCEL 0

HEADING LINE NO 3 IS -

24-INCH RCP TO CG INLETS - INTERIM CONDITION
F 0 5 1 5 P

PAGE NO 2

WATER SURFACE PROFILE - ELEMENT CARD LISTING

ELEMENT NO	1 IS A SYSTEM OUTLET U/S DATA	STATION	INVERT	SECT	W S ELEV
------------	-------------------------------	---------	--------	------	----------

3364.39

ELEMENT NO	2 IS A REACH U/S DATA	STATION	INVERT	SECT	RADIUS	ANGLE	ANG PT	MAN H
------------	-----------------------	---------	--------	------	--------	-------	--------	-------

N 0.013

1

ELEMENT NO	3 IS A JUNCTION U/S DATA	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4
------------	--------------------------	---------	--------	------	-------	-------	---	----	----	----------	----------	-------	-------

*
7.5
0.013
0.0
3367.28
0.00
45.00
0.00*
INVERT ELEV -WARNING
INVERT ELEV -WARNING

THE ABOVE ELEMENT CONTAINED AN INVERT ELEV WHICH WAS NOT GREATER THAN THE PREVIOUS INVERT ELEV -WARNING

ELEMENT NO	4 IS A REACH U/S DATA	STATION	INVERT	SECT	RADIUS	ANGLE	ANG PT	MAN H
------------	-----------------------	---------	--------	------	--------	-------	--------	-------

N 0.013

0

ELEMENT NO	5 IS A SYSTEM HEADWORKS U/S DATA	STATION	INVERT	SECT	W S ELEV
------------	----------------------------------	---------	--------	------	----------

0.00

NO EDIT ERRORS ENCOUNTERED-COMPUTATION IS NOW BEGINNING

** WARNING NO. 2 ** - WATER SURFACE ELEVATION GIVEN IS LESS THAN OR EQUALS INVERT ELEVATION IN HDWKDS, W.S.ELEV = INV + DC

Page 1

SUMMERLIN VILLAGE 23A PARCEL 0 UPDATE NO. 1
STORM DRAIN LATERAL TO PARCEL 0
24-INCH RCP TO CG INLETS - INTERIM CONDITION

STATION	INVERT ELEV	DEPTH OF FLOW	W.S. ELEV	Q	VEL	VEL HEAD	ENERGY GRD.EL.	SUPER ELEV	CRITICAL DEPTH	HGT/ DIA	BASE/ ID NO.	ZL	NO PIER	AVBPR
L/ELEM	SO					SF AVE	HF							
100.00	3364.37	0.853	3365.223	15.0	11.74	2.139	3367.362	0.00	1.396	2.00	0.00	0.00	0	0.00
23.57	0.03424					.029361	0.69					0.00		
123.57	3365.18	0.874	3366.051	15.0	11.36	2.002	3368.053	0.00	1.396	2.00	0.00	0.00	0	0.00
18.89	0.03424					.026343	0.50					0.00		
142.46	3365.82	0.907	3366.731	15.0	10.83	1.821	3368.552	0.00	1.396	2.00	0.00	0.00	0	0.00
11.97	0.03424					.023157	0.28					0.00		
154.43	3366.23	0.940	3367.173	15.0	10.32	1.655	3368.828	0.00	1.396	2.00	0.00	0.00	0	0.00
8.25	0.03424					.020366	0.17					0.00		
162.68	3366.52	0.976	3367.492	15.0	9.84	1.504	3368.996	0.00	1.396	2.00	0.00	0.00	0	0.00
6.12	0.03424					.017930	0.11					0.00		
168.80	3366.72	1.013	3367.738	15.0	9.39	1.368	3369.106	0.00	1.396	2.00	0.00	0.00	0	0.00
4.63	0.03424					.015793	0.07					0.00		
173.43	3366.88	1.052	3367.936	15.0	8.95	1.244	3369.180	0.00	1.396	2.00	0.00	0.00	0	0.00
3.55	0.03424					.013924	0.05					0.00		
176.98	3367.01	1.093	3368.098	15.0	8.53	1.130	3369.228	0.00	1.396	2.00	0.00	0.00	0	0.00
2.72	0.03424					.012286	0.03					0.00		
179.70	3367.10	1.136	3368.235	15.0	8.13	1.027	3369.262	0.00	1.396	2.00	0.00	0.00	0	0.00
2.03	0.03424					.010856	0.02					0.00		
181.73	3367.17	1.182	3368.350	15.0	7.76	0.934	3369.284	0.00	1.396	2.00	0.00	0.00	0	0.00
1.50	0.03424					.009604	0.01					0.00		
183.23	3367.22	1.230	3368.449	15.0	7.40	0.849	3369.298	0.00	1.396	2.00	0.00	0.00	0	0.00
1.02	0.03424					.008507	0.01					0.00		

SUMMERLIN VILLAGE 23A PARCEL 0 UPDATE NO. 1
STORM DRAIN LATERAL TO PARCEL 0
24-INCH RCP TO CG INLETS - INTERIM CONDITION

SUMMERLIN VILLAGE 23A PARCEL 0 UPDATE NO. 1
STORM DRAIN LATERAL TO PARCEL 0
24-INCH RCP TO CG INLETS - INTERIM CONDITION

[illegible]

DATE	TIME	WIND DIRECTION	WIND FORCE	SEA STATE	CLOUDS	WEATHER	REMARKS
146.34	.	I					R
148.78	.						R
151.21	.						R
153.65	.						R
156.09	.						R
158.53	.						R
160.97	.						R
163.41	.						R
165.85	.						R
168.29	.						R
170.72	.						R
173.16	.						R
175.60	.						R
178.04	.						R
180.48	.						R
182.92	.						R
185.36	.						R
187.80	.						R
190.23	.						R
192.67	.						R
195.11	.						R
197.55	.						R
199.99	.						R
202.43	.						R
204.87	.						R
207.31	.						R
209.74	.						R
212.18	.						R
214.62	.						R
217.06	.						R
219.50	.						R
3364.37	.						R
3364.89	.						R
3365.42	.						R
3365.94	.						R
3366.47	.						R
3366.99	.						R
3367.51	.						R
3368.04	.						R
3368.56	.						R
3369.09	.						R
3369.61	.						R

NOTES

1. GLOSSARY

- GLOSSARY
- | | | |
|---|---|-------------------------|
| I | = | INVERT ELEVATION |
| C | = | CRITICAL DEPTH |
| W | = | WATER SURFACE ELEVATION |
| H | = | HEIGHT OF CHANNEL |
| E | = | ENERGY GRADE LINE |
| X | = | CURVES CROSSING OVER |
| B | = | BRIDGE ENTRANCE OR EXIT |
| Y | = | WALL ENTRANCE OR EXIT |

Page 4

Proposed Condition

LAT_PR.WSQ

8.

0 9

LAT_PR.WSP

0	T1	SUMMERLIN VILLAGE 23A PARCEL 0	UPDATE NO. 1			
	T2	STORM DRAIN LATERAL TO PARCEL 0				
	T3	24-INCH RCP TO CG INLETS - PROPOSED CONDITION				
	SO	100.003364.37	24		3364.39	
	R	185.003367.28	24	.013		30. 1
	JX	185.003367.28	24	.013		
	R	219.503367.61	24	.013		45.
	SH	219.503367.61	24			
	CD	18	4			
	CD	24	4	1.5		
	CD	30	4	2.5		
	CD	36	4	3.		
	CD	42	4	3.5		
	CD	48	4	4.		

LAT_PR.OUT

TIME: 3MT1

F0515P

WATER SURFACE PROFILE - CHANNEL DEFINITION LISTING

PAGE 1

[illegible]

F0515P

WATER SURFACE PROFILE - TITLE CARD LISTING

HEADING LINE NO 1 IS -

SUMMERLIN VILLAGE 23A PARCEL 0 UPDATE NO. 1

STORM DRAIN LATERAL TO PARCEL 0

HEADING LINE NO 3 IS -

24-INCH RCP TO CG INLETS - PROPOSED CONDITION
F 0 5 1 5 P

WATER SURFACE PROFILE - ELEMENT CARD LISTING

ELEMENT NO	1 IS A SYSTEM OUTLET	*	INVERT	SECT
	U/S DATA	STATION	100.00	3364.37
				24

W S ELEV
3364.39

ELEMENT NO	2	IS A REACH	STATION	INVERT	SECT	N
		U/S DATA				
			3367.28	24		0.013

ELEMENT NO	3	IS A JUNCTION	*	*	*
		U/S DATA	STATION	INVERT	SECT LAT-1

ELEMENT NO	3 IS A JUNCTION U/S DATA	*	* STATION	* INVERT	* SECT	* LAT-1	* LAT-2	N	Q3	*	Q4	INVERT-3
			185.00	3367.28	24	24	0	0.013	8.0		0.0	3367.28
THE ABOVE ELEMENT CONTAINED AN INVERT ELEV WHICH WAS NOT GREATER THAN THE PREVIOUS INVERT ELEV -WARNING												
THE ABOVE ELEMENT CONTAINED AN INVERT ELEV WHICH WAS NOT GREATER THAN THE PREVIOUS INVERT ELEV -WARNING												

ELEMENT NO	4 IS A REACH	U/S DATA	STATION	INVERT	SECT
			219.50	3367.61	24

0.013 N

ELEMENT NO	5	IS A SYSTEM HEADWORKS	U/S DATA	STATION	INVERT	SECT
				219.50	3367.61	24

W S ELEV
0.00

```

NO EDIT ERRORS ENCOUNTERED-COMPUTATION IS NOW BEGINNING
*** WARNING NO. 2 ** - WATER SURFACE ELEVATION GIVEN IS LESS THAN OR EQUALS INVERT ELEVATION IN HDWKDS, W.S.ELEV = INV + DC &
                                     Page 1

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LAT_PR.OUT

F0515P

LICENSEE: SLATER HANIFAN GROUP

WATER SURFACE PROFILE LISTING

SUMMERLIN VILLAGE 23A PARCEL 0 UPDATE NO. 1

STORM DRAIN LATERAL TO PARCEL 0

24-INCH RCP TO CG INLETS - PROPOSED CONDITION

STATION	INVERT ELEV	DEPTH OF FLOW	W.S. ELEV	Q	VEL	VEL HEAD	ENERGY GRD.EL.	SUPER ELEV	CRITICAL DEPTH	NORM DEPTH	HGT/ DIA	BASE/ ID NO.	ZL	NO PIER	AVBPR
L/ELEM	SO					SF AVE	HF						ZR		
100.00	3364.37	0.886	3365.256	16.0	11.90	2.201	3367.457	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
14.40	0.03424					.029726	0.43						0.00		
114.40	3364.86	0.898	3365.761	16.0	11.70	2.124	3367.885	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
22.93	0.03424					.027252	0.62						0.00		
137.33	3365.65	0.931	3366.579	16.0	11.15	1.930	3368.509	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
13.69	0.03424					.023963	0.33						0.00		
151.02	3366.12	0.966	3367.083	16.0	10.63	1.755	3368.838	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
9.32	0.03424					.021091	0.20						0.00		
160.34	3366.44	1.003	3367.439	16.0	10.14	1.596	3369.035	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
6.78	0.03424					.018582	0.13						0.00		
167.12	3366.67	1.042	3367.710	16.0	9.67	1.451	3369.161	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
5.15	0.03424					.016379	0.08						0.00		
172.27	3366.84	1.082	3367.926	16.0	9.22	1.319	3369.245	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
3.89	0.03424					.014450	0.06						0.00		
176.16	3366.98	1.125	3368.102	16.0	8.79	1.199	3369.301	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
2.98	0.03424					.012764	0.04						0.00		
179.14	3367.08	1.170	3368.249	16.0	8.38	1.090	3369.339	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
2.27	0.03424					.011286	0.03						0.00		
181.41	3367.16	1.217	3368.374	16.0	7.99	0.991	3369.365	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
1.61	0.03424					.009994	0.02						0.00		
183.02	3367.21	1.268	3368.480	16.0	7.62	0.901	3369.381	0.00	1.442	0.860	2.00	0.00	0.00	0	0.00
1.14	0.03424					.008866	0.01						0.00		

LICENSEE: SLATER HANIFAN GROUP

WATER SURFACE PROFILE LISTING

F0515P

Page 2

STATION	INVERT ELEV	DEPTH OF FLOW	W.S. ELEV	Q	VEL	VEL HEAD	ENERGY GRD.EL.	SUPER ELEV	CRITICAL DEPTH	NORM DEPTH	HGT/DIA	BASE/ID NO.	ZL	NO PIER	AVBPT
L/ELEM	SO					SF AVE	HF								
184.16	3367.25	1.321	3368.572	16.0	7.26	0.819	3369.391	0.00	1.442		2.00	0.00	0.00	0	0.00
0.63	0.03424					.007881	0.00			0.860			0.00		
184.79	3367.27	1.379	3368.652	16.0	6.92	0.744	3369.396	0.00	1.442		2.00	0.00	0.00	0	0.00
0.21	0.03424					.007020	0.00			0.860			0.00		
185.00	3367.28	1.442	3368.722	16.0	6.60	0.676	3369.398	0.00	1.442		2.00	0.00	0.00	0	0.00
UNJECT STR	0.00000					.003934	0.00						0.00		
185.00	3367.28	2.232	3369.512	8.0	2.55	0.101	3369.613	0.00	1.007		2.00	0.00	0.00	0	0.00
27.88	0.00957					.001239	0.03			0.830			0.00		
212.88	3367.55	2.000	3369.547	8.0	2.55	0.101	3369.648	0.00	1.007		2.00	0.00	0.00	0	0.00
6.62	0.00957					.001165	0.01			0.830			0.00		
219.50	3367.61	1.942	3369.552	8.0	2.57	0.102	3369.654	0.00	1.007		2.00	0.00	0.00	0	0.00

100.00	I	W	C	H	E	R
102.44						
104.88						
107.32						
109.76						
112.19						
114.63						
117.07						
119.51						
121.95						
124.39						
126.83						
129.27						
131.70						
134.14						
136.58						
139.02						
141.46						
143.90						

NOTES

1. GLOSSARY

I = INVERT ELEVATION
C = CRITICAL DEPTH
W = WATER SURFACE ELEVATION
H = HEIGHT OF CHANNEL
E = ENERGY GRADE LINE
X = CURVES CROSSING OVER
B = BRIDGE ENTRANCE OR EXIT
Y = WALL ENTRANCE OR EXIT

2. STATIONS FOR POINTS AT A JUMP MAY NOT BE PLOTTED EXACTLY

APPENDIX E

Revised Finished Floor Analysis

SUMMERLIN VILLAGE 23A PARCEL O
FINISH FLOOR ANALYSIS - CITY OF LAS VEGAS JURISDICTION

INPUT INFORMATION				FINISHED FLOORS						NOTES
Lot Number	Hydraulic Section Utilized	T/C ¹ (ft)	F/L ² (ft)	D ₁₀₀ (ft)	Flowline F.F. ³ _{-min} (ft)	T/C + 6" F.F. ⁴ _{-min} (ft)	F.F. ⁵ -Design (ft)	Flowline Check	T/C + 6" Check	See References on Last Sheet
1	1	3377.58	3377.08	0.56	3378.20	3378.08	3378.9	OK	OK	
2	1	3379.14	3378.64	0.56	3379.76	3379.64	3380.5	OK	OK	
3	1	3381.18	3380.68	0.56	3381.80	3381.68	3382.2	OK	OK	
4	1	3383.62	3383.12	0.56	3384.24	3384.12	3384.5	OK	OK	
5	1	3386.07	3385.57	0.56	3386.69	3386.57	3387.0	OK	OK	
6	1	3388.36	3387.86	0.56	3388.98	3388.86	3389.4	OK	OK	
7	1	3389.82	3389.32	0.56	3390.44	3390.32	3391.4	OK	OK	
8	1	3391.00	3390.50	0.56	3391.62	3391.50	3392.6	OK	OK	
9	1	3392.53	3392.03	0.56	3393.15	3393.03	3394.1	OK	OK	
10	1	3393.67	3393.17	0.56	3394.29	3394.17	3395.3	OK	OK	
11	1	3394.80	3394.30	0.56	3395.42	3395.30	3396.4	OK	OK	
12	1	3395.94	3395.44	0.56	3396.56	3396.44	3397.5	OK	OK	
13	1	3397.33	3396.83	0.56	3397.95	3397.83	3398.9	OK	OK	
14	1	3398.65	3398.15	0.56	3399.27	3399.15	3400.3	OK	OK	
15	4	3400.44	3399.94	0.36	3400.66	3400.94	3402.0	OK	OK	
16	4	3403.05	3402.55	0.36	3403.27	3403.55	3404.3	OK	OK	
17	4	3405.66	3405.16	0.36	3405.88	3406.16	3406.9	OK	OK	
18	4	3408.27	3407.77	0.36	3408.49	3408.77	3409.5	OK	OK	
19	4	3410.88	3410.38	0.36	3411.10	3411.38	3412.1	OK	OK	
20	4	3413.49	3412.99	0.36	3413.71	3413.99	3414.7	OK	OK	
21	4	3416.10	3415.60	0.36	3416.32	3416.60	3417.3	OK	OK	
22	4	3420.13	3419.63	0.36	3420.35	3420.63	3421.4	OK	OK	
23	4	3422.74	3422.24	0.36	3422.96	3423.24	3424.0	OK	OK	
24	4	3425.35	3424.85	0.36	3425.57	3425.85	3426.6	OK	OK	
25	4	3427.96	3427.46	0.36	3428.18	3428.46	3429.2	OK	OK	
26	4	3430.57	3430.07	0.36	3430.79	3431.07	3431.8	OK	OK	
27	4	3432.98	3432.48	0.36	3433.20	3433.48	3434.2	OK	OK	
28	4	3434.14	3433.64	0.36	3434.36	3434.64	3435.7	OK	OK	
29	4	3434.77	3434.27	0.36	3434.99	3435.27	3436.4	OK	OK	
30	5W	3434.47	3433.97	0.38	3434.73	3434.97	3436.1	OK	OK	
31	5W	3433.48	3432.98	0.38	3433.74	3433.98	3434.7	OK	OK	
32	5W	3430.92	3430.42	0.38	3431.18	3431.42	3432.2	OK	OK	
33	5W	3428.44	3427.94	0.38	3428.70	3428.94	3429.7	OK	OK	

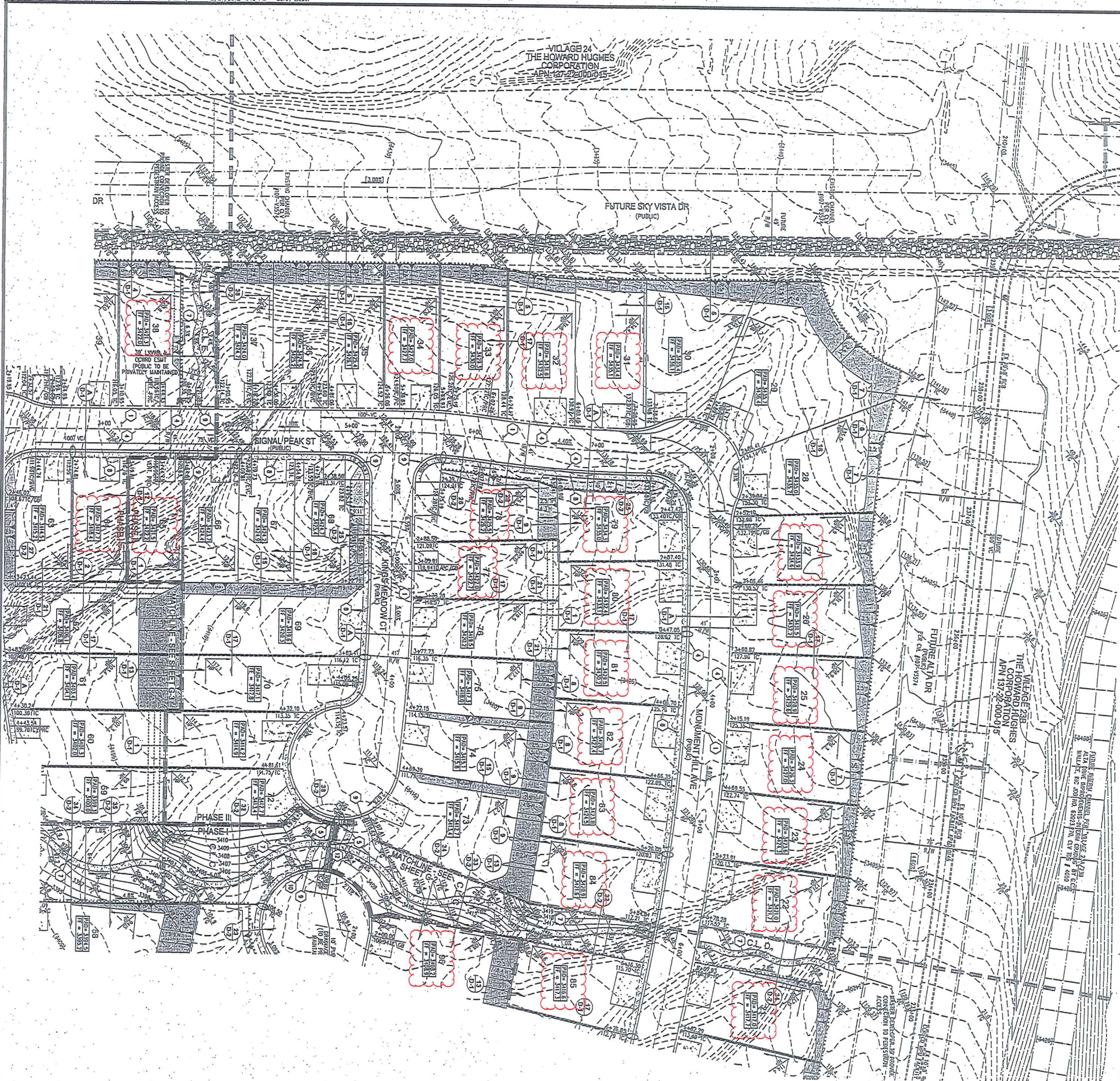
SUMMERLIN VILLAGE 23A PARCEL 0 FINISH FLOOR ANALYSIS - CITY OF LAS VEGAS JURISDICTION										
INPUT INFORMATION				FINISHED FLOORS						
Lot Number	Hydraulic Section Utilized	T/C ¹ (ft)	F/L ² (ft)	D ₁₀₀ (ft)	Flowline F.F. ³ _{min} (ft)	T/C + 6" F.F. ⁴ _{min} (ft)	F.F. ^{-Design} (ft)	Flowline Check	T/C + 6" Check	NOTES
34	5W	3426.05	3425.55	0.38	3426.31	3426.55	3427.5	OK	OK	See References on Last Sheet
35	5W	3424.52	3424.02	0.38	3424.78	3425.02	3426.1	OK	OK	
36	5W	3423.60	3423.10	0.38	3423.86	3424.10	3425.2	OK	OK	
37	5W	3423.10	3422.60	0.38	3423.36	3423.60	3424.7	OK	OK	
38	5W	3420.35	3419.85	0.38	3420.61	3420.85	3421.1	OK	OK	
39	5W	3416.05	3415.55	0.38	3416.31	3416.55	3417.3	OK	OK	
40	5W	3412.99	3412.49	0.38	3413.25	3413.49	3414.6	OK	OK	
41	5W	3411.51	3411.01	0.38	3411.77	3412.01	3413.1	OK	OK	
42	5W	3410.63	3410.13	0.38	3410.89	3411.13	3412.2	OK	OK	
43	5W	3409.74	3409.24	0.38	3410.00	3410.24	3411.3	OK	OK	
44	5W	3408.63	3408.13	0.38	3408.89	3409.13	3410.2	OK	OK	
45	5W	3406.91	3406.41	0.38	3407.17	3407.41	3408.5	OK	OK	
46	5W	3404.93	3404.43	0.38	3405.19	3405.43	3406.5	OK	OK	
47	5W	3402.94	3402.44	0.38	3403.20	3403.44	3404.5	OK	OK	
48	5W	3400.94	3400.44	0.38	3401.20	3401.44	3402.5	OK	OK	
49	5W	3398.89	3398.39	0.38	3399.15	3399.39	3400.5	OK	OK	
50	2	3393.40	3392.90	0.35	3393.60	3393.90	3394.8	OK	OK	
51	2	3391.06	3390.56	0.35	3391.26	3391.56	3392.7	OK	OK	
52	2	3388.75	3388.25	0.35	3388.95	3389.25	3390.4	OK	OK	
53	2	3386.60	3386.10	0.35	3386.80	3387.10	3388.2	OK	OK	
54	2	3386.34	3385.84	0.35	3386.54	3386.84	3387.9	OK	OK	6
55	2	3388.04	3387.54	0.35	3388.24	3388.54	3389.6	OK	OK	
56	2	3389.75	3389.25	0.35	3389.95	3390.25	3391.4	OK	OK	
57	2	3391.67	3391.17	0.35	3391.87	3392.17	3393.4	OK	OK	
58	2	3393.59	3393.09	0.35	3393.79	3394.09	3395.2	OK	OK	
59	2	3398.36	3397.86	0.35	3398.56	3398.86	3400.0	OK	OK	
60	2	3400.38	3399.88	0.35	3400.58	3400.88	3402.0	OK	OK	
61	2	3402.48	3401.98	0.35	3402.68	3402.98	3404.1	OK	OK	
62	2	3405.19	3404.69	0.35	3405.39	3405.69	3406.8	OK	OK	
63	2	3413.56	3413.06	0.35	3413.76	3414.06	3415.2	OK	OK	
64	2	3416.76	3416.26	0.35	3416.96	3417.26	3418.0	OK	OK	
65	2	3420.63	3420.13	0.35	3420.83	3421.13	3421.9	OK	OK	
66	2	3422.76	3422.26	0.35	3422.96	3423.26	3424.4	OK	OK	

SUMMERLIN VILLAGE 23A PARCEL 0 FINISH FLOOR ANALYSIS - CITY OF LAS VEGAS JURISDICTION										
INPUT INFORMATION				FINISHED FLOORS						
Lot Number	Hydraulic Section Utilized	T/C ¹ (ft)	F/L ² (ft)	D ₁₀₀ (ft)	Flowline F.F. _{min} ³ (ft)	T/C + 6" F.F. _{min} ⁴ (ft)	F.F.-Design (ft)	Flowline Check	T/C + 6" Check	NOTES
67	2	3423.31	3422.81	0.35	3423.51	3423.81	3424.9	OK	OK	
68	2	3423.82	3423.32	0.35	3424.02	3424.32	3425.4	OK	OK	
69	3	3419.10	3418.60	0.43	3419.46	3419.60	3420.3	OK	OK	
70	3	3416.12	3415.62	0.43	3416.48	3416.62	3417.8	OK	OK	
71	3	3413.35	3412.85	0.43	3413.71	3413.85	3414.9	OK	OK	
72	3	3411.75	3411.25	0.43	3412.11	3412.25	3413.4	OK	OK	
73	3	3411.77	3411.27	0.43	3412.13	3412.27	3413.4	OK	OK	
74	3	3414.13	3413.63	0.43	3414.49	3414.63	3415.8	OK	OK	
75	3	3416.35	3415.85	0.43	3416.71	3416.85	3418.0	OK	OK	
76	3	3418.57	3418.07	0.43	3418.93	3419.07	3420.2	OK	OK	
77	3	3421.09	3420.59	0.43	3421.45	3421.59	3422.4	OK	OK	
78	3	3424.31	3423.81	0.43	3424.67	3424.81	3425.5	OK	OK	
79	4	3433.40	3432.90	0.36	3433.62	3433.90	3434.7	OK	OK	
80	4	3431.48	3430.98	0.36	3431.70	3431.98	3432.7	OK	OK	
81	4	3428.62	3428.12	0.36	3428.84	3429.12	3429.9	OK	OK	
82	4	3425.76	3425.26	0.36	3425.98	3426.26	3427.0	OK	OK	
83	4	3422.89	3422.39	0.36	3423.11	3423.39	3424.1	OK	OK	
84	4	3420.03	3419.53	0.36	3420.25	3420.53	3421.3	OK	OK	
85	4	3415.70	3415.20	0.36	3415.92	3416.20	3416.9	OK	OK	
86	4	3412.79	3412.29	0.36	3413.01	3413.29	3414.0	OK	OK	
87	4	3409.97	3409.47	0.36	3410.19	3410.47	3411.2	OK	OK	
88	4	3407.14	3406.64	0.36	3407.36	3407.64	3408.4	OK	OK	
89	4	3404.32	3403.82	0.36	3404.54	3404.82	3405.6	OK	OK	
90	4	3401.24	3400.74	0.36	3401.46	3401.74	3402.5	OK	OK	
91	3	3393.88	3393.38	0.43	3394.24	3394.38	3395.1	OK	OK	6
92	3	3396.62	3396.12	0.43	3396.98	3397.12	3397.9	OK	OK	
93	3	3399.44	3398.94	0.43	3399.80	3399.94	3400.7	OK	OK	
94	3	3402.26	3401.76	0.43	3402.62	3402.76	3403.5	OK	OK	
95	3	3405.08	3404.58	0.43	3405.44	3405.58	3406.3	OK	OK	
96	3	3407.25	3406.75	0.43	3407.61	3407.75	3408.4	OK	OK	
97	3	3404.35	3403.85	0.43	3404.71	3404.85	3405.1	OK	OK	6
98	3	3401.73	3401.23	0.43	3402.09	3402.23	3403.3	OK	OK	
99	3	3399.13	3398.63	0.43	3399.49	3399.63	3400.7	OK	OK	

SUMMERLIN VILLAGE 23A PARCEL 0										
FINISH FLOOR ANALYSIS - CITY OF LAS VEGAS JURISDICTION										
INPUT INFORMATION				FINISHED FLOORS					NOTES	
Lot Number	Hydraulic Section Utilized	T/C ¹ (ft)	F/L ² (ft)	D ₁₀₀ (ft)	Flowline F.F. ³ -min (ft)	T/C + 6" F.F. ⁴ -min (ft)	F.F.-Design (ft)	Flowline Check	T/C + 6" Check	See References on Last Sheet
100	3	3396.53	3396.03	0.43	3396.89	3397.03	3398.1	OK	OK	
101	3	3393.98	3393.48	0.43	3394.34	3394.48	3395.6	OK	OK	
102	5W	3390.64	3390.14	0.38	3390.90	3391.14	3392.3	OK	OK	
103	5W	3387.78	3387.28	0.38	3388.04	3388.28	3389.4	OK	OK	
104	5W	3386.30	3385.80	0.38	3386.56	3386.80	3387.7	OK	OK	
105	5E	3388.39	3387.89	0.38	3388.65	3388.89	3389.4	OK	OK	
106	5E	3390.78	3390.28	0.38	3391.04	3391.28	3392.4	OK	OK	
Where: 1: Top of Curb at High Side of Lot 2: TC-0.38 (For Roll Curb), TC-0.5 (For L Curb) 3: Minimum Allowable Finished Floor Elevation above flowline elevation @ high side of lot = (2 x D ₁₀₀) + F/L 4: City of Las Vegas minimum allowable finished floor elevation = T.C. @ high side of lot + 6-inches 5: Design G.F.F. calculated as 1' max below design F.F. per maximum step down in garage. 6: These lots have an adjacent solid grouted wall that protects the FF.										
City of Las Vegas Finished Floor Criteria: -The finished floor shall be set a vertical distance above the gutter flowline of at least twice the depth of flow in the gutter flowline up to a maximum of 18 inches above the WSEL in the street. -The finished floor shall be set a vertical distance of at least 6-inches above the highest adjacent top of curb.										

APPENDIX F

Previously Approved Plan, Profile and Detail Sheets
(with revision bubbles around updated areas)



DRAINAGE QUANTITIES		PUBLIC PRIVATE	
1	15G 400 THE "C" GROUP MEET	EA	1
2	250 400 THE "C" GROUP MEET	EA	2
3	19 645 8 THE "C" GROUP MEET	EA	82
4	60 THE IN STION DRAIN W/MEET	EA	1
5	1 6082 500 GROUT DRY BLOCK WALL	IF	164
6	2 60825 500 GROUT DRY BLOCK WALL	IF	2550
7	8 8000 CONCRETE WALKY CUTTER	SF	1500
8	500000 DRAIN	EA	2
9	200000 DRAIN	SF	1
10	200000 DRAIN	EA	1
11			
12			
13			



LEGEND

===== PLAGE BOUNDARY
===== LAGOON
===== RICHLY CULTIVATED
----- RICHLY WOODY
----- FERTILE WET
===== DUNE AND OUTLET
===== EXPOSING DUNE AND OUTLET
----- FUTURE DUNE AND OUTLET
----- FUTURE BEACH LINE

----- TIDALINE

===== PROPOSED ELEVATION
===== EXISTING ELEVATION
===== FUTURE ELEVATION

----- 10'-0"----- EXISTING CONTOUR (1'-11")
----- 15'-0"----- EXISTING CONTOUR (1'-11")
----- 20'-0"----- PROPOSED CONTOUR (1'-11")
----- 25'-0"----- PROPOSED CONTOUR (1'-11")

===== PROPOSED 10' DUNE
===== PROPOSED 15' DUNE
===== PROPOSED 20' DUNE
===== PROPOSED 25' DUNE

===== REMAINING WALL
===== REMAINING WALL
===== EXISTING WALL
===== EXISTING RETAINING WALL
===== EXISTING WALL

===== EXISTING RETAINING WALL

GRADING NOTES

1. CONSIDERED 1/2 THE WEIGHT OF ITEM #1 TYPE II
2. CONSIDERED 3/4 THE WEIGHT OF ITEM #1 OVER 60% OF THE HISTORIC DATA
3. SMOOT AND VATCHI DESIGN RANGES
4. CONSIDERED 1/2 THE COTR AND COTR FOR SMOOT AND VATCHI HISTORIC STATISTICS 3-14
5. CONSIDERED SMOOT DATA PER COTR 10, 25
6. CONSIDERED SMOOT DATA PER SMOOT
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 Call



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 Call before you Dig
 800.455.6000

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do UnderGround

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CLARK COUNTY PUBLIC UTILITIES
AND
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CLARK COUNTY DEPARTMENT OF PUBLIC SAFETY

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POWER LINES. IT'S COSTLY.

**CALIBER ONE
OVERHEAD**

1-702-227-2929

LEGAL DESCRIPTION

SUBMERLIN VILLAGE 23A UNIT NO. 2 PARCEL 0 AS SHOWN ON THE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LONG WHOLE SECTION 34, TOWNSHIP 20 SOUTH, RANGE 39 EAST 14TH, CLARK COUNTY, NEVADA.

SUMMERLIN

SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE DATE _____

THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE

FEMALE FLOOD ZONE DESIGNATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DECLARED AND SHADDED ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD AND AREA OF 2% ANNUAL CHANCE FLOOD), PER F 33003C17506, DATED NOVEMBER 16, 2011.

BENCHMARK
FOUND 10001 BRASS CAP, 50 FEET NORTH OF STATION
78719.42 OF CHURCHSTON BLVD, ALWD-31556

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

CORREY A. LEECH, P.E. 158/5 _____ DATE _____

BASIS OF BEARING
NORTH 05°59'55" WEST, BEING THE BEARING OF
WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH
RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS,
COUNTY, NEVADA, AS SHOWN BY MAP THEREOF
FILE IN BOOK 143, PAGE 47 OF PLATS IN THE
CLARK COUNTY RECORDERS OFFICE, NEVADA.



Woodside Homes
BETTER BY DESIGN

**SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
PHASE I & II GRADING PLAN I**

LAS VEGAS, NV

[illegible]

S-I-E SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5309

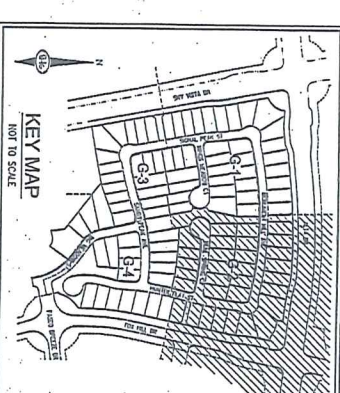
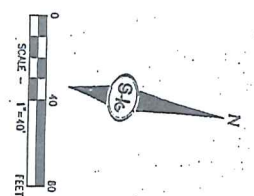

 G-1
 SHEET 3 OF 19
 1/1/12

DATE:	11/22/11
DRAFTER:	DSP
DESIGNER:	DSP
CHECKED:	CAL
PROJECT NO.:	
WSH1105-000	

S34
T20S
R59E

SUMMERLIN

P



STORMWATER RUNOFF MANAGEMENT

[illegible]

GENERAL NOTES

[illegible]

LEGEND

- [illegible]

LEGAL DESCRIPTION

SUNDELTEN VILLAGE 23A UNIT NO. 2 PARCEL 0 AS SHOWN ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LYING WITHIN SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST 14D11, CLARK COUNTY, NEVADA.

FEMA FLOOD ZONE DESIGNATION

THE PROJECT SITE IS LOCATED WITHIN A FEWA DESIGNATED ZONE X AND SHADED ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD PLAIN AND AREA OF 2% ANNUAL CHANCE FLOOD), PER FIRM PANEL 32003C1750F, DATED NOVEMBER 16, 2011.

FLOOD CERTIFICATION

CONCEPT THAT THIS GROWING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

WEST

RANGE 50 EAST, H.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

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 AND
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 1-702-432-5300
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 AROUND HITTING UNDERGROUND TRAFFIC
 SCENE, STREETS AND STREET LIGHT
 SYSTEMS. CANADIAN, IT'S COMING.

AND HITTING OVERHEAD POWER LINES, IT'S COSTLY.

CALL BEFORE YOU GO OVERHEAD

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SUMMERLIN	DATE
SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN ATTITUDE OF THE APPLICABLE DESIGN CRITERIA. UNDER NO CIRCUMSTANCES SHALL THE SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUME RESPONSIBILITY FOR PLANNING CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.	

BENCHMARK
FOUND ABOUT BRASS CAP, 50 FEET NORTH OF STATION
787+19.42 OF CHAULESTON BLVD. CLAYTON-315556
HAND 60 ELEVATION = 978.351 METERS = 3209.81 FEET

BASIS OF BEARING
NORTH 05.59'55" WEST BEING THE BEARING OF THE
WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH,
RANGE 59 EAST, 10.M. CITY OF LAS VEGAS, CLARK
COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON
FILE IN BOOK 143, PAGE 47 OF PLATS IN THE
CLARK COUNTY RECORDER'S OFFICE, NEVADA.

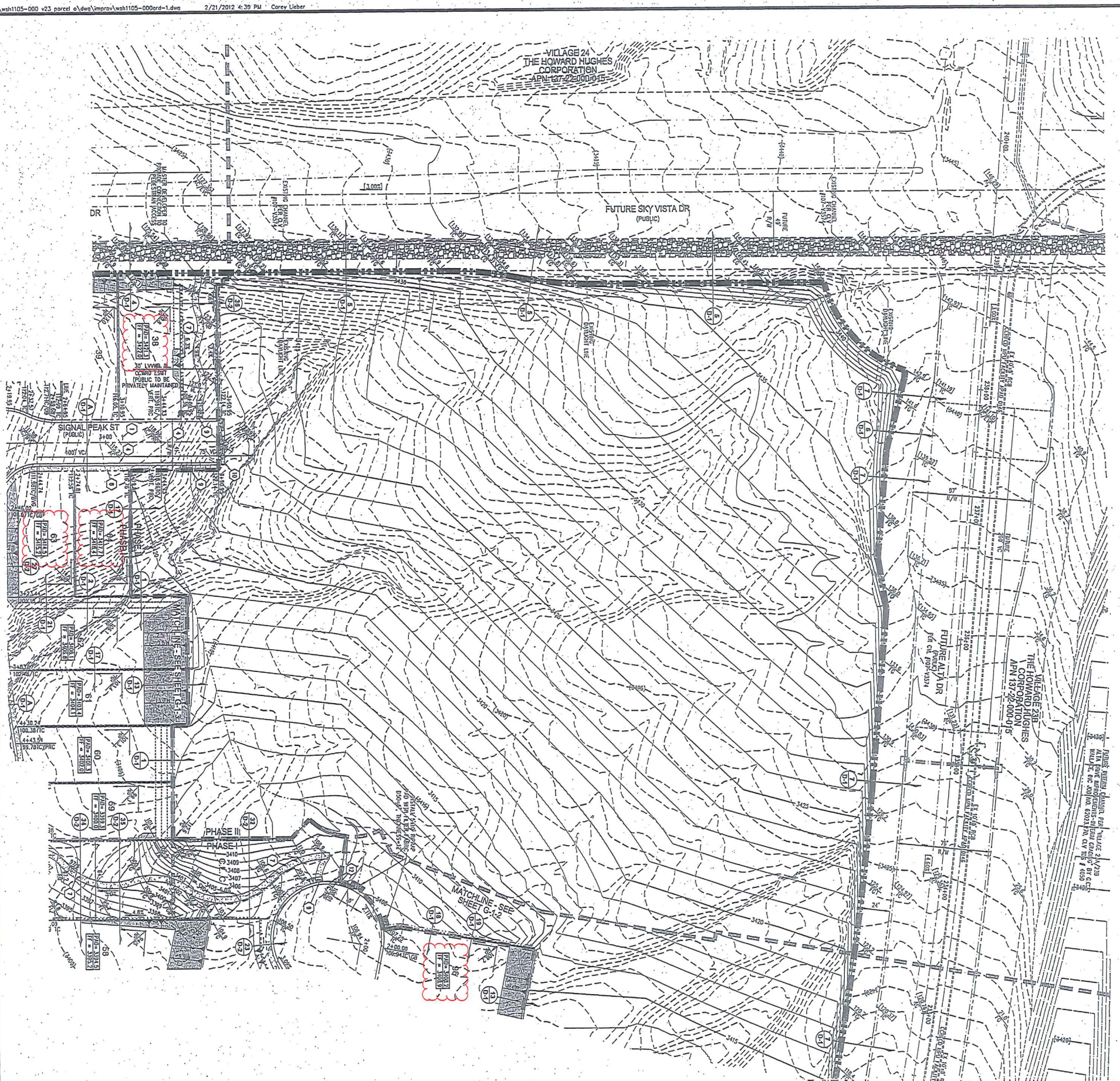


Woodside Homes
BETTER BY DESIGN

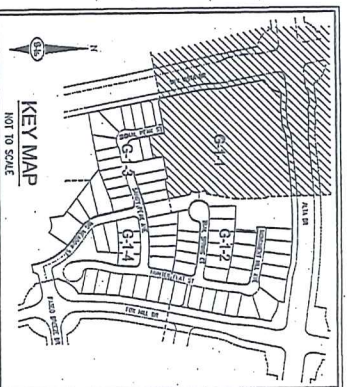
**SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
PHASE I & II GRADING PLAN II**

[illegible]

S-I-E SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89116
PHONE (702) 284-5300 FAX (702) 284-5359



PHASE I DRAINAGE QUANTITIES		PUBLIC	PRIVATE
1.	150 HMO THE CUT ROAD ALLEY	150	--
2.	200 HMO THE CUT ROAD ALLEY	1	--
3.	100 HMO THE CUT ROAD ALLEY	10	--
4.	100 CULVERT HMO-STREET DRAIN	10	--
5.	100 THE 11 STREET DRAIN DRAINAGE	150	--
6.	1 CULVERT 3000 CULVERT AND CULVERT WALL	--	150
7.	2 CULVERTS 3000 CULVERT AND CULVERT WALL	--	2150
8.	100 THE CULVERT VEHICLE DRAIN	50	--
9.	--	--	--
10.	--	1500	--

[illegible][illegible]

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POWER LINES. IT'S COSTLY.
CALL BEFORE
YOU DO
OVERHEAD**



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Call  before you
do UnderGround
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-432-5300
LAS VEGAS AREA
COMBATED TRAFFIC SYSTEM

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call

1-800-221-2600
OR
CLACK COUNTY RAINCO OPERATIONS
1-702-435-7544

LEGAL DESCRIPTION	FEMA FLOOD ZONE DESIGNATION
SECTION 234, TOWNSHIP 2 N, RANGE 0.5 S, SONG IN THE N QUARTER, 143, 144 E. OF FLANK IN THE CLARK COUNTY RECORDERS OFFICE, NEARBY, TOWNSHIP 234, SECTION 31, TOWNSHIP 20, SONG IN RANGE 0.5 EAST 144, CLARK COUNTY, IOWA.	THE PROJECT SITE IS LOCATED WITHIN A FLOOD DESIGNATED ZONE X AND IS NOT A FLOOD HAZARD. THE PROJECT SITE IS NOT IN A FLOOD AND AREA OF SPECIAL CONCERN (FLOOD, FIRM PANEL 130007575E, DATED SEPTEMBER 27, 2002.
I CERTIFY THAT THE FLOODING DATA IS IN CONFORMANCE WITH THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM ACT FOR THE SUBJECT PROJECT. _____ ON THE 31 ST OF JULY 2005	DATE
GARY A. LEBMAN, P.E. 15875 _____ DATE	

BENCHMARK

NORTH 05-93-87 WEST BEING THE BEARING OF THE WEST LINE OF SECTION 14, TOWNSHIP 26 SOUTH, RANGE 83 EAST, COUNTY OF DEUEL, STATE OF NEBRASKA; AND SHOWN BY A BAR THEREON ON PLAT IN BOOK 134 PAGE 47 OF PLANS IN THE CLARK COUNTY RECORDS OFFICE, NEBASKA.

[illegible][illegible]

DATE: 11/22/11	
DRAWER: BSP	
DESIGNER: OSP	
CHECKED: CAL	
PROJECT NO. WSH1105-000	

04
20S
69E

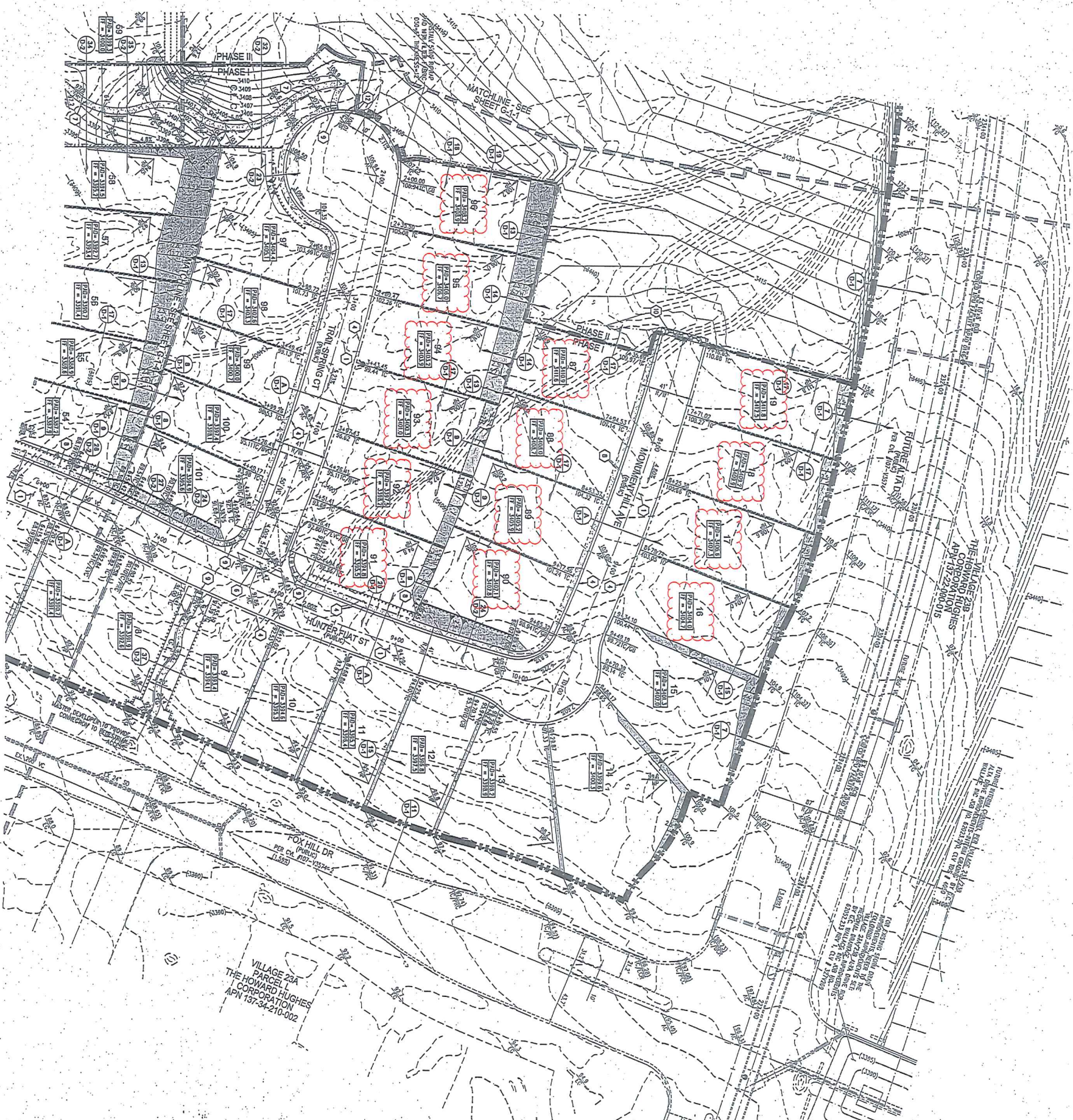
 **Woodside Homes**
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO.

PHASE I GRADING PLAN

[illegible]

**S-I-G SLATER
HANIFAN
GROUP**
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #210, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399



STORMWATER RUNOFF MANAGEMENT

[illegible]

GENERAL NOTES

[illegible]

GRADING NOTES

1. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
2. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
3. STATE OF MIND NOT EXISTING INDEPENDENTLY
4. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
5. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
6. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
7. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
8. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
9. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
10. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
11. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
12. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
13. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
14. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD
15. CONSCIOUSNESS: THE STATE OF BEING AWARE OF THE EXTERNAL WORLD

LEGEND

- ===== FIVE-BODY
===== MONOLE
===== BODAY CHRENDISE
===== PIGHT-GAY
===== PROBITY LINC
===== GAIN AND OUTER
===== POSING GAIN AND OUTER
===== RUNNE GAIN AND OUTER
===== GAZE BREAK LINC
===== FLONK
===== PROPOSED EXTENSION
===== DASHING EXTENSION
===== (GOLD)
===== RUNNE EXTENSION
===== POSING CONCORD (5-7)
===== POSING CONCORD (5-7)
===== POSING CONCORD (5-7)
===== PROPOSED CONCORD (5-7)
===== PROPOSED PLO AND
===== PRESSED TROUBLE EXTENSION
===== (7-7) (7-7)
===== PLAYER EXTENSION WAIL
===== RECORDED EXTENSION WAIL

Call before you Dig
Avoid cutting underground utility lines. It's costly.

Call

811

or

1-800-227-2600

**CLARK COUNTY AND
AFFILIATE OPERATIONS
1-702-455-7514**

LEGAL DESCRIPTION

SUMMITTOWN VILLAGE 23A UNIT NO. 2 PARCEL 0 A BOOK 143, PAGE 47 OF PLATS IN THE CLARK OFFICE, NEVADA, LYING WITHIN SECTION 34, T10N RANGE 59 EAST R4D1E, CLARK COUNTY, NEVADA.

FEMA FLOOD ZONE DESIGNATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD AND AREA OF 2% ANNUAL CHANCE FLOOD), PER FEMA PANEL 33003C1750C, DATED SEPTEMBER 27, 2002.

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LA FOR THE SUBJECT PROJECT.

SUMMERLIN

THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN CRITERIA. MEMBER SIGNATURES AND THE SIGNATURE RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLAN CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.

SIGNATURE _____ DATE _____

BENCHMARK

FOUND FOOT BRASS CAP, 50 FEET NORTH OF STAIRCASE
707+19.42 OF CHARLESTON BLVD, OLVD9-3J5566
NAVD 83 ELEVATION = 978.351 METERS = 3209.01 FEET

BASIS OF BEARING

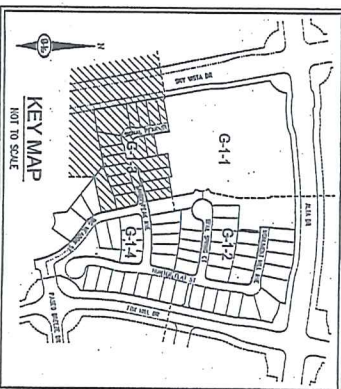
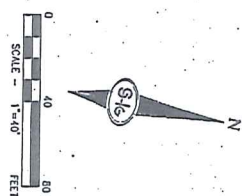
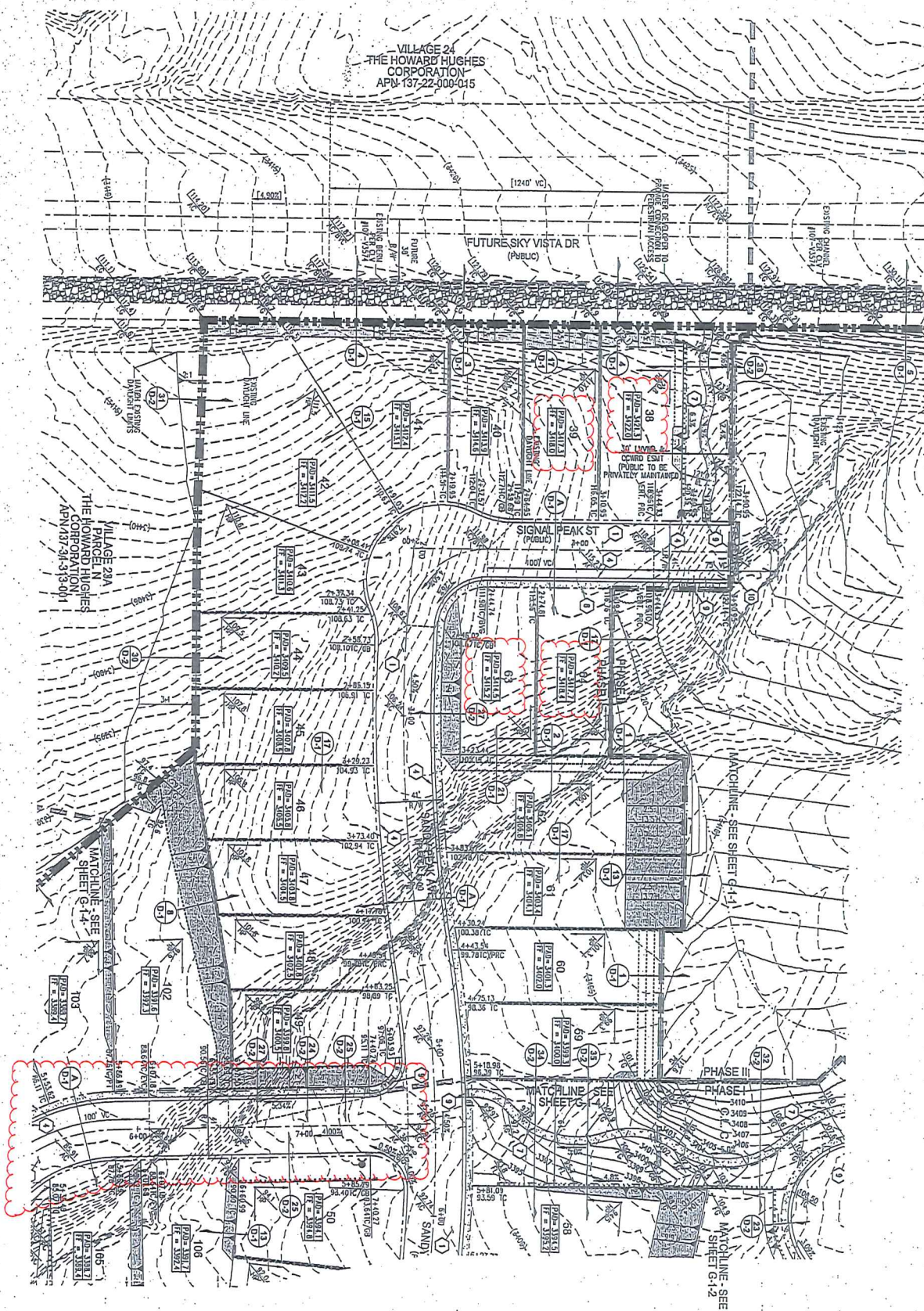
NORTH 05 59 55 WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK



SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
PHASE I GRADING PLAN II

[illegible]

**S-I-G SLATER
HANIFAN
GROUP**
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5100 FAX (702) 284-5100



STORMWATER RUNOFF MANAGEMENT

- [illegible]

GENERAL NOTES

- [illegible]

GRADING NOTES

- [illegible]

END

- PHASE ELEVATION
W/LOCATOR
RADIAL CONTAINER
RICH-G-BAY
PROPERTY LINE
CORG AND CUTTER
EXISTING CORG AND CUTTER
TONGUE CORG AND CUTTER
GRADE EXIST. USE
NATIVE
PROPOSED ELEVATION
EXISTING ELEVATION
FUTURE ELEVATION
3-40' EXISTING CONTOR (3-F1)
EXISTING CONTOR (1-F1)
3-40' PROPOSED CONTOR (3-F1)
PROPOSED CONTOR (1-F1)
PROPOSED PIG AND
PUSHED LOCK ELEVATION
REMAINING WALL
PLASTER REMAINING WALL
OCCUPANCY WILL
OCCUPANCY REMAINING WALL

1-800-227-2600
AND
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDONS. ITS COSTLY.

Cal

do before you

do Underground

1-702-455-7511

CLARK COUNTY TRAFFIC OPERATIONS

AND

1-702-432-5300

LAS VEGAS AREA

COMPUTERIZED TRAFFIC SYSTEM



AND HITTING OVERHEAD POWER LINES, IT'S COSTLY. CALL BEFORE YOU DO OVERHEAD

1-702-227-2929

LEGAL DESCRIPTION

STARDUST VILLAGE 23A UNIT NO. 2 PARCEL 0 AS SHOWN ON FILE 1 BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LYING WITHIN SECTION 31, TOWNSHIP 20 SOUTH RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

FEMA FLOOD ZONE DESIGNATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X AND SHUDD ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD FLOOD AND AREA OF 25 ANNUAL CHANCE FLOOD), PER FIRM PANEL 320003C1/50E, DATED SEPTEMBER 27, 2002.

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

*	*

SUMMERLIN

DATE _____

REVIEW OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN CRITERIA, NEITHER SHAWNEER NOR THE NEW COLLEGE ASSUMES RESPONSIBILITY FOR PLANNING, PROVISIONS, AND CODES.

1

NORTH OF STATION
LYO-34556
EARS = 3209.01 FEET

NG

THE BEARING
IN 34, TOWNSHIP
M.D.M., CITY OF
MEYADA, AS
FILE IN BOOK



Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
PHASE I GRADING PLAN III

[illegible]

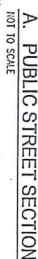
S-I-E SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89119
PHONE (702) 284-5300 FAX (702) 284-5399

2.2.1

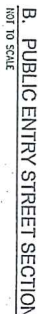
No. 15815

G-1-3

SHEET 9 OF 19.



A. PUBLIC STREET SECTION
NOT TO SCALE



B. PUBLIC ENTRY STREET SECTION
NOT TO SCALE



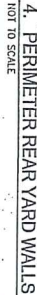
1. INTERIOR RETAINING WALLS



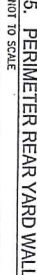
2. INTERIOR RETAINING WALLS



3. PERIMETER REAR YARD WALLS



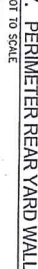
4. PERIMETER REAR YARD WALLS



5. PERIMETER REAR YARD WALL



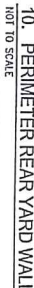
5. PERIMETER REAR YARD WALL

PERIMETER REAR YARD WALL
NOT TO SCALE

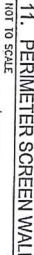
8. INTERIOR REAR YARD WALLS
NOT TO SCALE



9. INTERIOR REAR YARD WALLS



10. PERIMETER REAR YARD WALL
NOT TO SCALE



11. PERIMETER SCREEN WALL



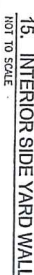
12. 24" U-CHANNEL DETAIL
NOT TO SCALE.



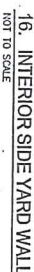
13. REAR YARD WALL
NOT TO SCALE



14. REAR YARD WALL
NOT TO SCALE



15. INTERIOR SIDE YARD WALL
NOT TO SCALE



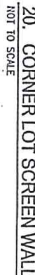
16. INTERIOR SIDE YARD WALL
NOT TO SCALE



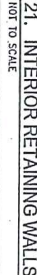
18. SIDE YARD WALL
NOT TO SCALE



19. SIDE YARD WALL
NOT TO SCALE

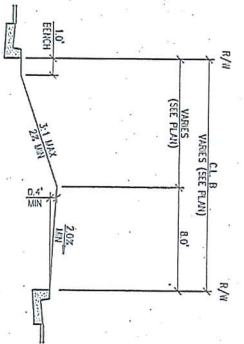


20. CORNER LOT SCREEN WALL
NOT TO SCALE



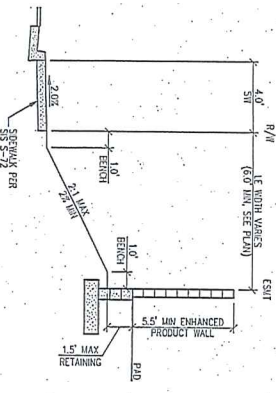
21. INTERIOR RETAINING WALLS

23. SIDE YARD SECTION
NOT TO SCALE

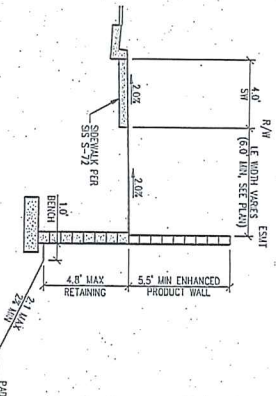


28. GRADING SECTION
NOT TO SCALE

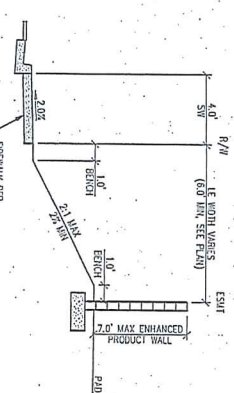
24. CORNER LOT RETAINING WALL
NOT TO SCALE



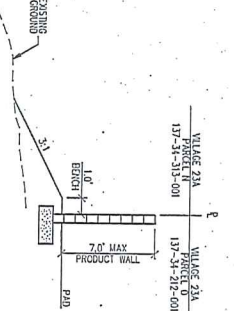
29. CORNER LOT RETAINING WALL
NOT TO SCALE



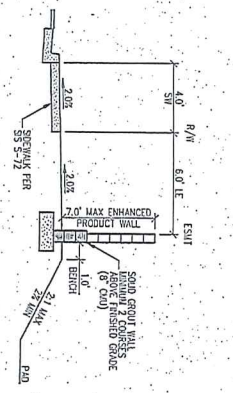
25. CORNER LOT SCREEN WALL
NOT TO SCALE



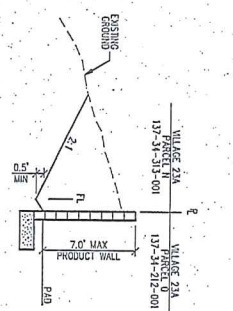
30. PERIMETER WALL
NOT TO SCALE



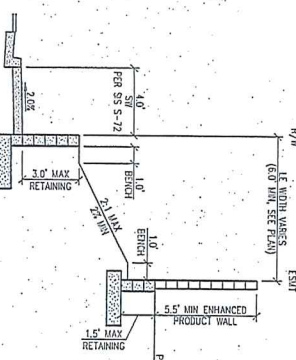
26. CORNER LOT SCREEN WALL
NOT TO SCALE



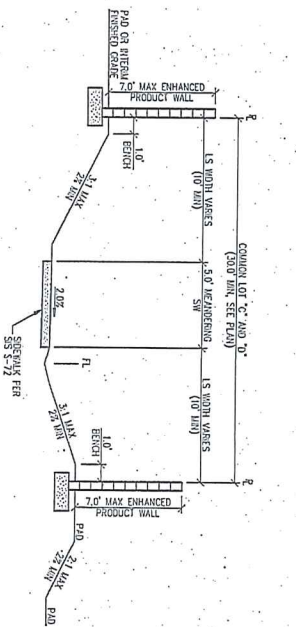
31. PERIMETER WALL
NOT TO SCALE



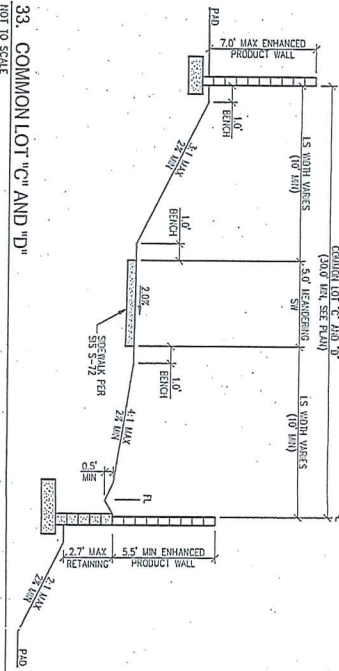
27. CORNER LOT STEPPED RETAINING WALLS
NOT TO SCALE



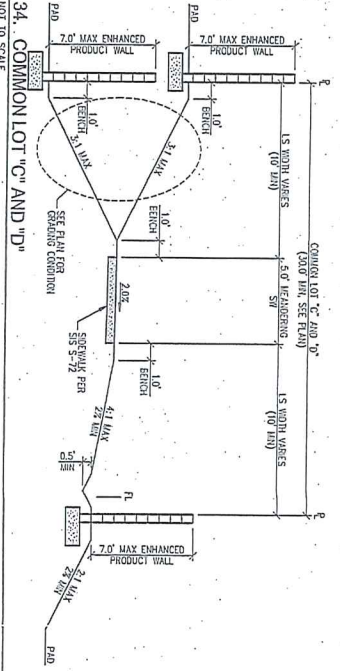
32. COMMON LOT "C" AND "D"
NOT TO SCALE



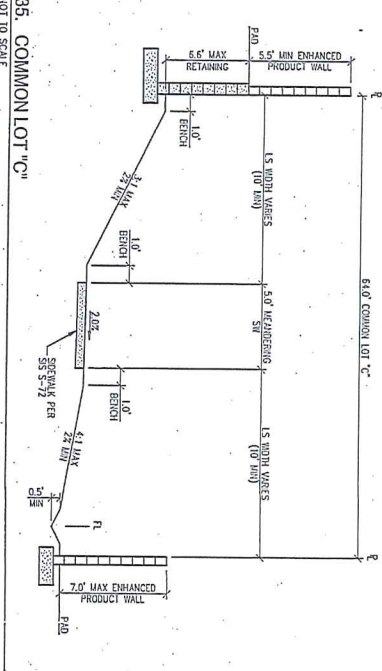
33. COMMON LOT "C" AND "D"
NOT TO SCALE



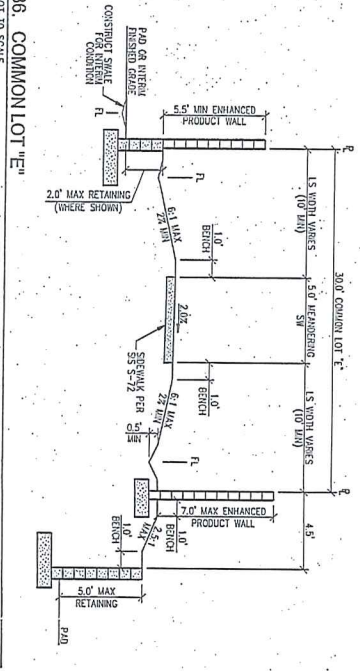
34. COMMON LOT "C" AND "D"
NOT TO SCALE



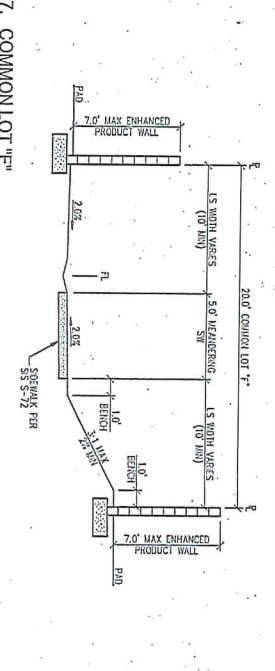
35. COMMON LOT "C"
NOT TO SCALE



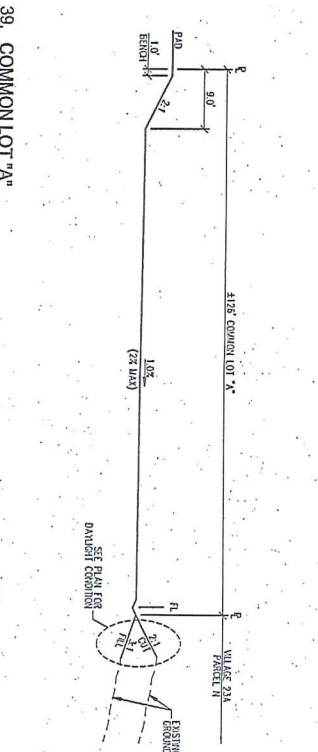
36. COMMON LOT "E"
NOT TO SCALE



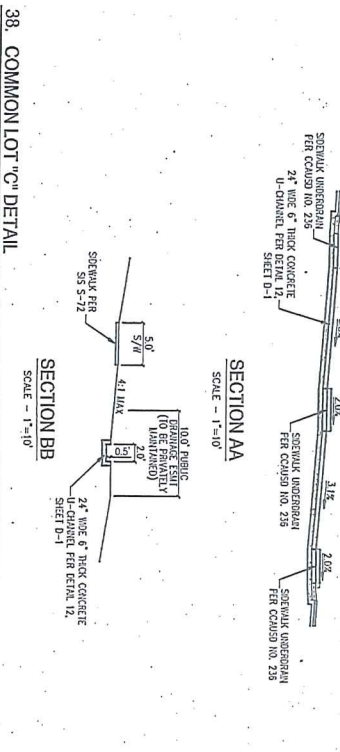
37. COMMON LOT "F"
NOT TO SCALE



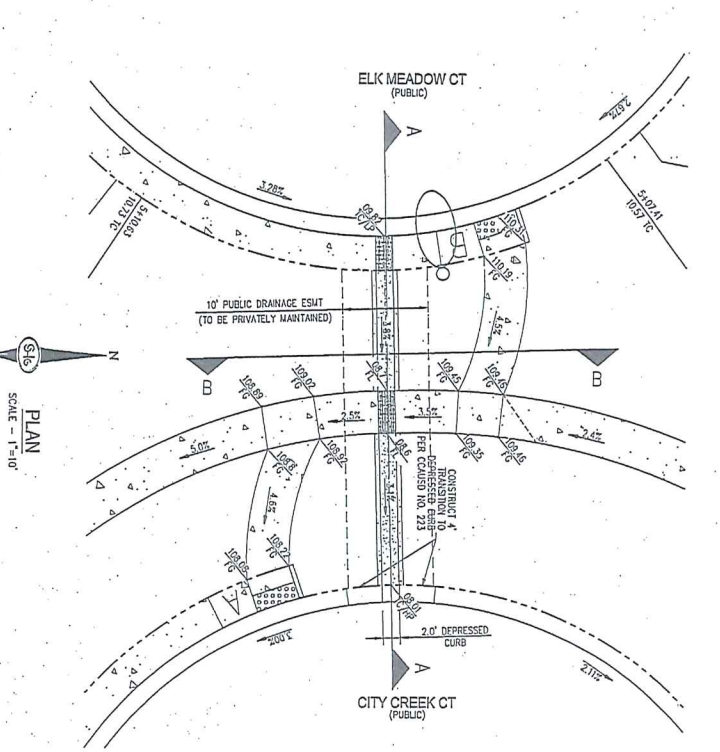
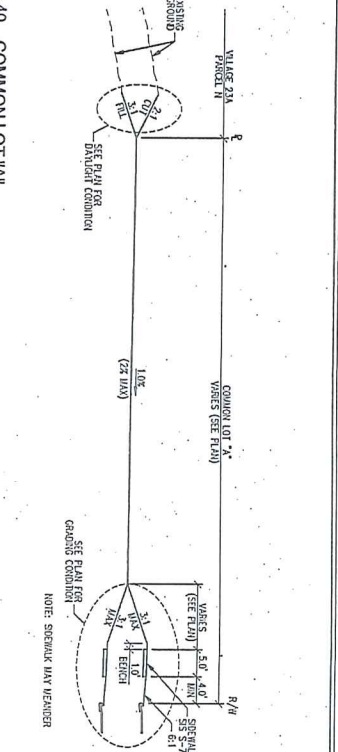
39. COMMON LOT "A"
NOT TO SCALE



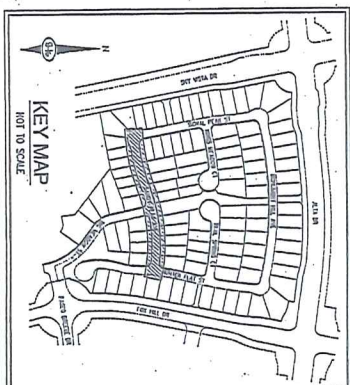
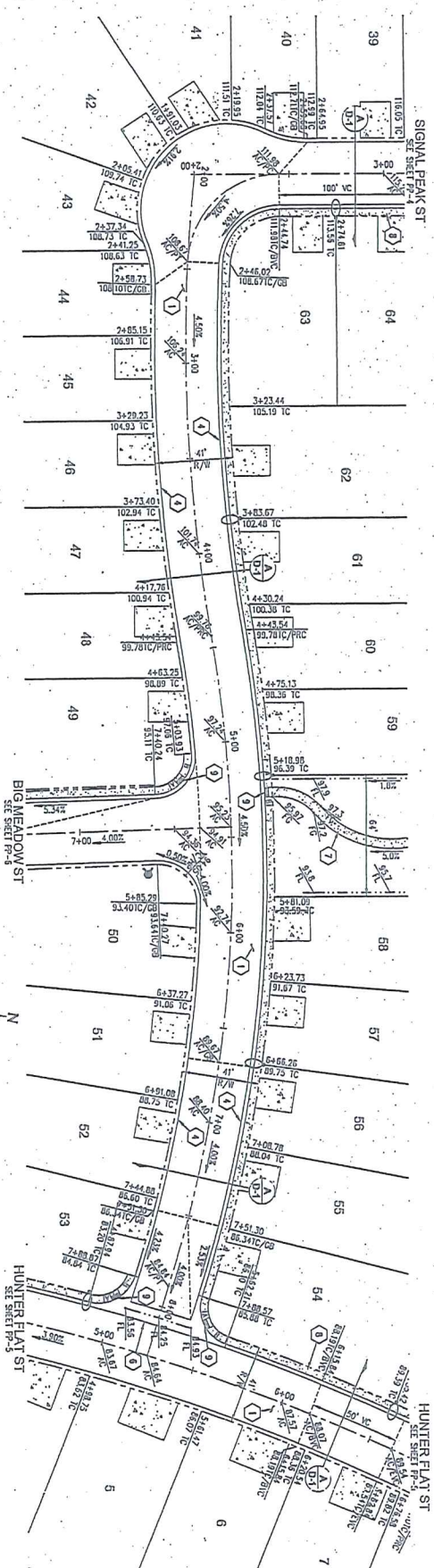
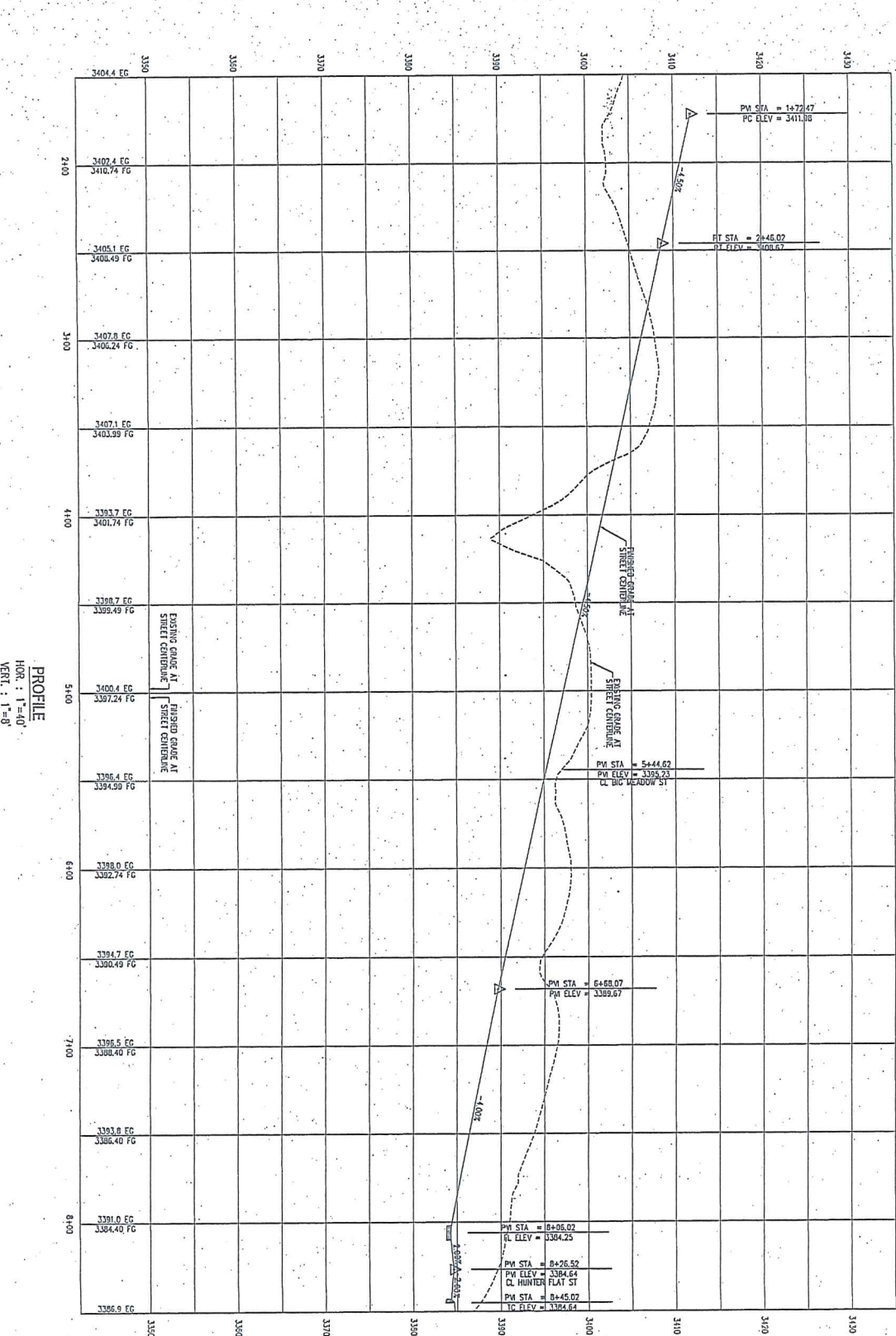
38. COMMON LOT "C" DETAIL
NOT TO SCALE



40. COMMON LOT "A"
NOT TO SCALE



NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

[illegible][illegible]

S-I-E SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89116
PHONE (702) 284-5300 FAX (702) 284-5399

LAS VEGAS, NV



Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
SANDY PEAK AVE - PLAN AND PROFILE

S34
T20S
R59E

DATE: 11/22/11

DRAFTER: DSP

DESIGNER, DSO

02301111, 101

CHECKED: CAL

PROJECT NO.

WSH1105-

COLLIER

ENGINEER

27

Corey A. Heber

ESS
En 12/31/2011

CIVIL
PROF

No. 15875

חמ

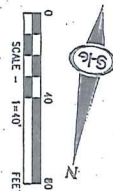
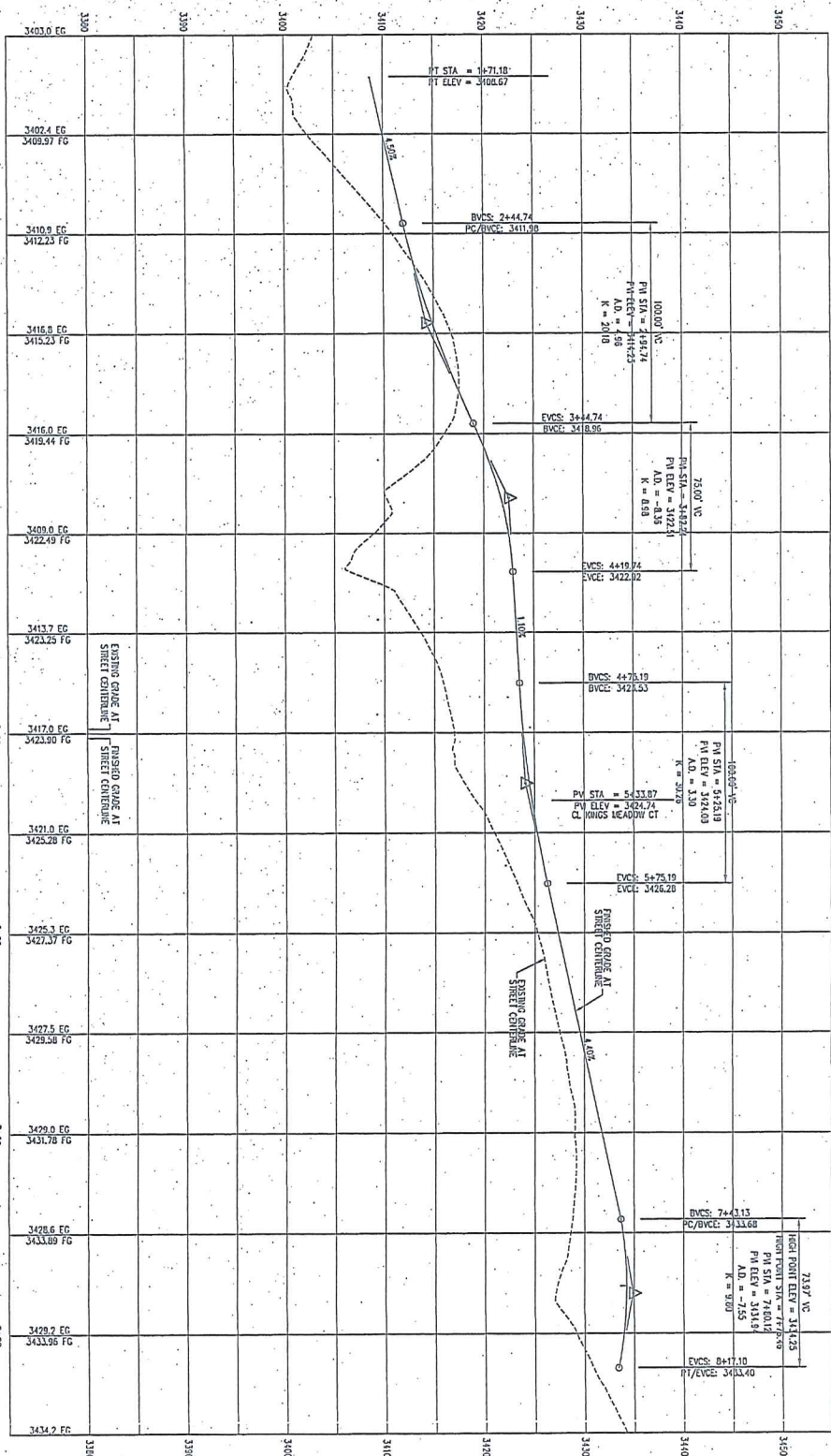
—

SHEET 15 OF 15

[illegible]

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**S-I SLATER
HANIFAN
GROUP**
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89116
PHONE (702) 284-5300 FAX (702) 284-5399

LAS VEGAS, NV

Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
MOUNT HOLLY ST - PLAN AND PROFILE

S34
T20S
R59E

DATE: 11/22/11

DRAFTER: DSP

DESIGNER: DSH

CHICAGO, Ill.

PROJECT NO.
WSH1105-000

WSH1105-000

PP-4
SHEET 16 OF 19

BENCHMARK
 READ NORTH BEARS C&P, 40 FEET NORTH OF STATION
 31749+42 OF CHOLESTON ELEV. 6100, NAVS-13556
 31749+42 ELEVATION = 918.31 METERS = 3020.41 FEET

BASIS OF BEARING
 NORTH 05°59'56" WEST BEING THE BEARING OF THE
 WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE
 12 EAST, COUNTY OF CLATSOP, CLATSOP COUNTY, OREGON,
 FILE IN BOOK 113, PAGE 47 OF PLATS IN THE
 CLATSOP COUNTY RECORDER'S OFFICE, REYNOLDS.

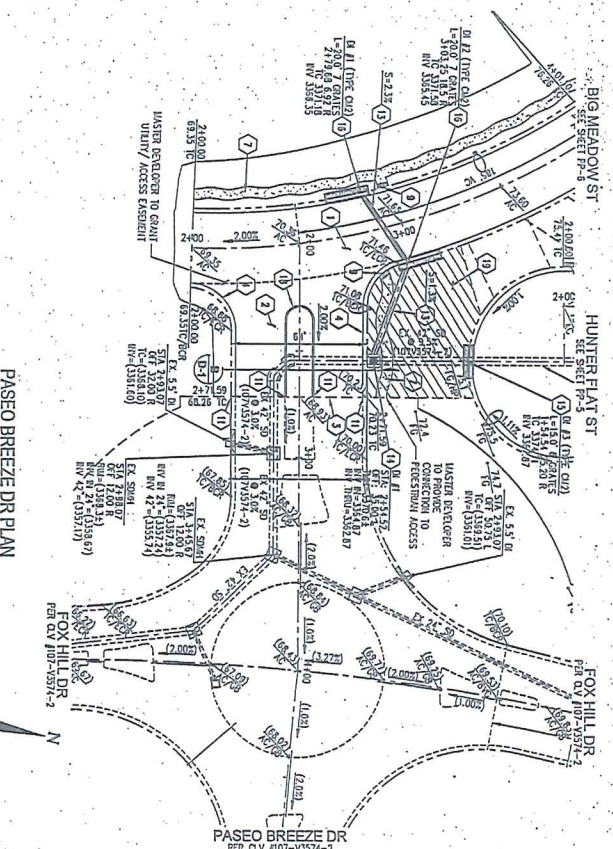
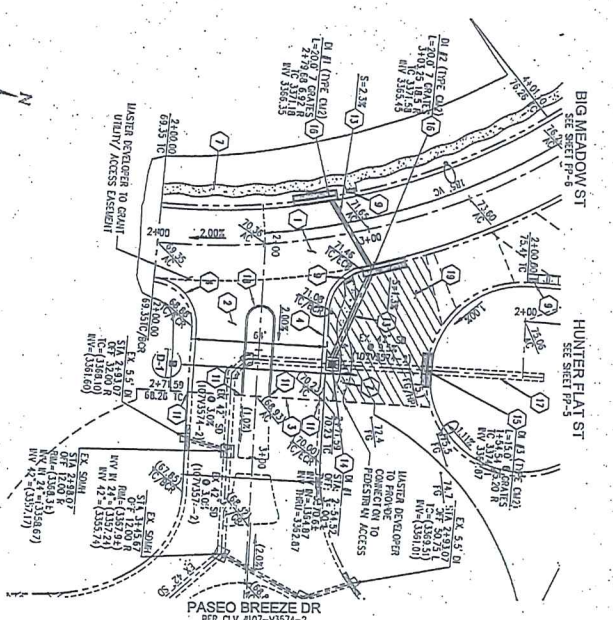
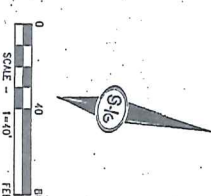
DOE
 SOUTHERN RECREATIONAL RESORT DEVELOPMENT COMMITTEE
 HAS SOUTHWEST 1/4 PLAT 107, OF THESE DOCUMENTS FOR CONFORMANCE TO THE
 SOUTHERN RECREATIONAL RESORT DEVELOPMENT ACT, ASSUMES RESPONSIBILITY FOR PLAN
 CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.

**Call before you
 dig**
 1-800-455-6000
 Talk, listen and be safe
 1-702-432-5500
 WEEDS AND OTHER PLANTS OF AGGRAVATION

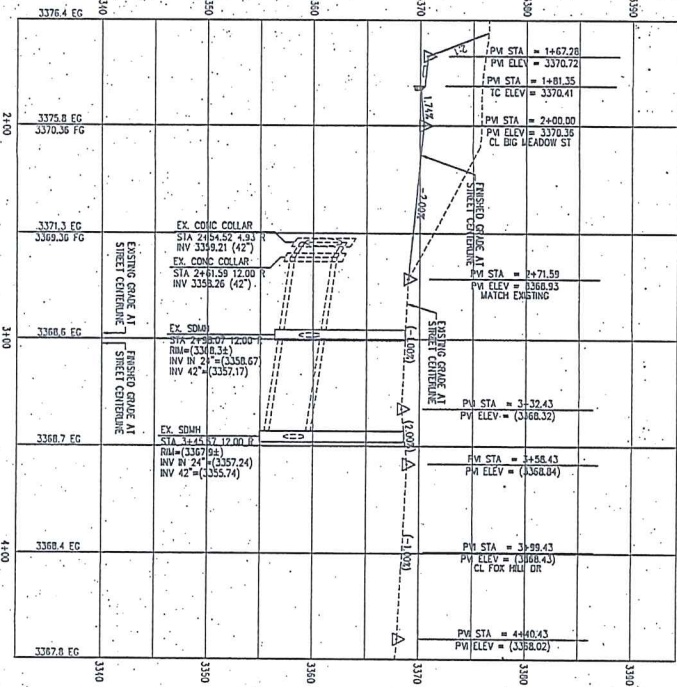
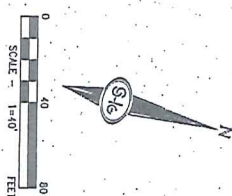
SLIMMERLIN

**MOD HITING OVERHEAD
 POWER LINES IN CLATSOP,
 OREGON**
 1-702-227-2929

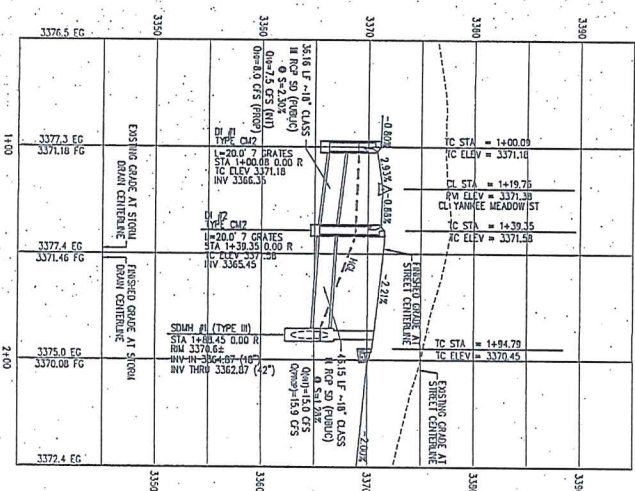
**CLATSOP COUNTY
 OVERHEAD**

PASO BREEZE DR PLAN
(PUBLIC)

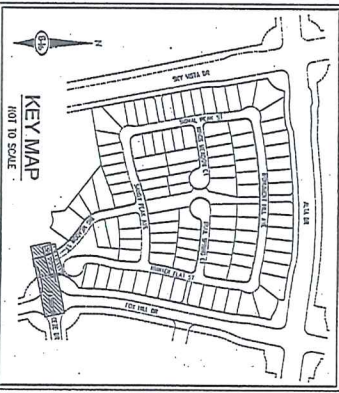
STORM DRAIN LATERAL PLAN
(PUBLIC)



PROFILE
HOR. : 1"=40'
VERT. : 1"=8'



PROFILE
HOR. : 1"=41'
VERT. : 1"=8'



- [illegible]

[illegible]

**S-I-G SLATER
HANIFAN
GROUP**
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89116
PHONE (702) 284-5300 FAX (702) 284-5350



Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
PASEO BREEZE DR - PLAN AND PROFILE
STORM DRAIN LATERAL - PLAN AND PROFILE

DATE:	11/22/11
DRAFTER:	DSP
DESIGNER:	DSP
CHECKED:	CAL
PROJECT NO.	WSH1105-0000

PP-7
SHEET 19 OF 19

BASIS OF BEARING
NORTH 05°39'35" WEST, BEING THE BEARING OF THE
MEASURE OF SECTION 36, TOWNSHIP 20 SOUTH,
RANGE 23 EAST, AND CITY OF LAS VEGAS, CLARK
COUNTY, NEVADA, AS SHOWN BY WAS THEREON ON
FILE IN BOOK 143, PAGE 42 OF PLATS IN THE
CLARK COUNTY RECORDER'S OFFICE, NEVADA.

BENCHMARK
FOUND 100T BRASS CAP, 50 FEET NORTH OF STATION
707+19.42 OF CHARLESTON BLVD, OLVD-345566
NAVD 83 ELEVATION = 970.351 METERS = 3209.01 FEET

STUDENT/RESIDENT DESIGN REVIEW COMMITTEE	DATE
THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO DESIGN INTENT OF THE APPLICABLE DESIGN CRITERIA, NEITHER STUDENT/NR NOR THE STUDENT/RESIDENT DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR FULL CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.	

SUMMERLIN

Call before you Dig
 800-4-A-DIG
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 605 SOUTH BLAKE CIRCLE
 1-702-455-6000

AVOID HATING UNDERGROUND TRAFFIC
SOCIAL SYSTEMS AND STREET LIGHT
SYSTEM. COORDINATE ITS COSTLY.

Call before you
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CLARK COUNTY PUBLIC UTILITIES
AND
1-702-432-5300
INTEREST AND AIRTEL, SYSTEM OF TRANSPORTATION.

AND BIDDING OVERHEAD
POWER LINES. IT'S COSTLY.
CALL BEFORE
YOU DO
OVERTHEAD

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1-702-227-2929

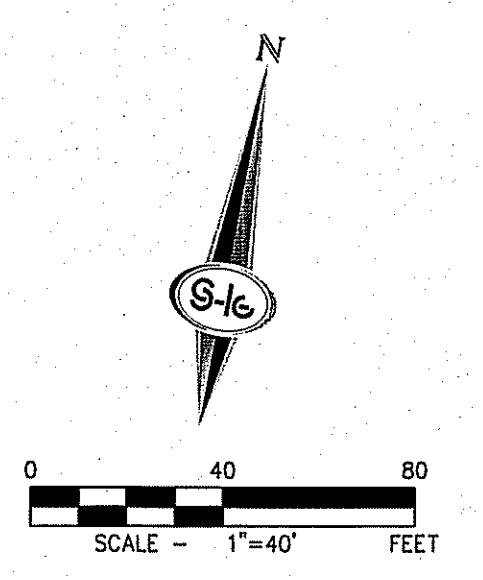
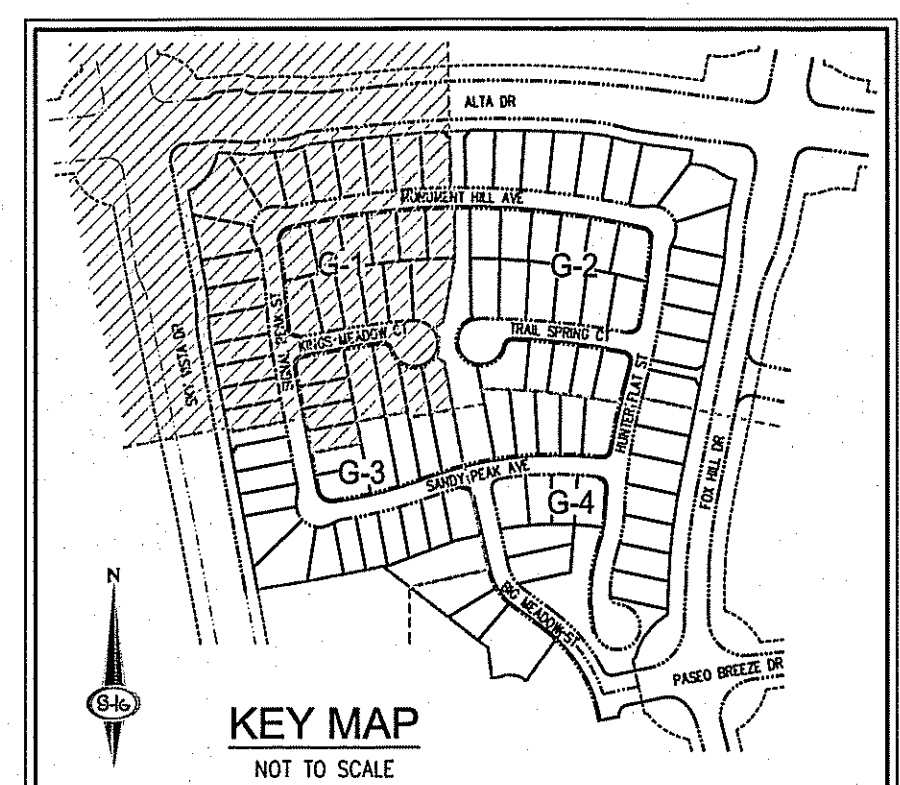
APPENDIX G

Revised Plan, Profile and Detail Sheets

1. Wash 105-020-023 parcel shown in map with 105-020-023 and 105-020-024. 5/31/2012 10:28 AM Day Plot



DRAINAGE QUANTITIES		PUBLIC		PRIVATE	
1.	15.0" MOD TYPE "CM" DROP INLET	EA	1	-	-
2.	20.0" MOD TYPE "CM" DROP INLET	EA	2	-	-
3.	24" C-900 PVC STORM DRAIN	LF	120	-	-
4.	60" TYPE III STORM DRAIN MANHOLE	EA	1	-	-
5.	1 COURSE SOLID GROUT CMU BLOCK WALL	LF	-	-	168
6.	2 COURSES SOLID GROUT CMU BLOCK WALL	LF	-	-	2,980
7.	8" WIDE CONCRETE VALLEY GUTTER	SF	1,920	-	-
8.	SIDEWALK DRAIN	EA	2	-	-
9.	2.0' CONCRETE CHANNEL	SF	-	-	34
10.	SIDEWALK DRAIN	EA	-	-	1
11.					
12.					
13.					



LEGEND	
[Symbol]	PHASE BOUNDARY
[Symbol]	ROADWAY CENTERLINE
[Symbol]	RIGHT-OF-WAY
[Symbol]	PROPERTY LINE
[Symbol]	CURB AND GUTTER
[Symbol]	EXISTING CURB AND GUTTER
[Symbol]	FUTURE CURB AND GUTTER
[Symbol]	GRADE BREAK LINE
[Symbol]	FLOWLINE
[Symbol]	PROPOSED ELEVATION
[Symbol]	EXISTING ELEVATION
[Symbol]	FUTURE ELEVATION
[Symbol]	EXISTING CONTOUR (5'-FT)
[Symbol]	EXISTING CONTOUR (1'-FT)
[Symbol]	PROPOSED CONTOUR (5'-FT)
[Symbol]	PROPOSED CONTOUR (1'-FT)
[Symbol]	PROPOSED PAD AND FINISHED FLOOR ELEVATION
[Symbol]	RETAINING WALL
[Symbol]	PLANTER RETAINING WALL
[Symbol]	DECORATIVE WALL
[Symbol]	DECORATIVE RETAINING WALL
[Symbol]	DECORATIVE WROUGHT IRON FENCE

- ### GRADING NOTES
- CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 4" TYPE I AGGREGATE BASE
 - CONSTRUCT 3" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
 - SAW CUT AND MATCH EXISTING IMPROVEMENTS
 - CONSTRUCT 1" TYPE CURB AND GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-47
 - CONSTRUCT SIDEWALK DRAIN PER CCAUSD NO. 235
 - CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-54
 - CONSTRUCT 5" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 - CONSTRUCT 4" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 - CONSTRUCT SIDEWALK RAMP PER SUMMERLIN IMPROVEMENT STANDARDS S-73
 - SEE DETAIL 38 ON SHEET D-2 FOR GRADING AND SECTIONS IN THIS AREA
 - FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER
 - CONSTRUCT 4" TRANSITION TO DEPRESSION CURB PER CCAUSD NO. 223
 - INSTALL 24" C-900 PVC STORM DRAIN
 - INSTALL 60" TYPE III STORM DRAIN MANHOLE
 - INSTALL 15.0" TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
 - INSTALL 20.0" TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
 - REMOVE EXISTING STORM DRAIN BEYOND PROPOSED DROP INLET
 - CONSTRUCT A-CURB PER SUMMERLIN IMPROVEMENT STANDARDS S-49
 - PRIVATE DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED
 - SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES

STORMWATER RUNOFF MANAGEMENT

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ. FT.))

- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT AND CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS OF WAYS OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN TITLE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION 14.A.5.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.1 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION 14.A.12.
- ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

GENERAL NOTES

- FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2006, SECTION 2304.11.2.2.
- THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
- ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
- MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
- SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
- ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
- CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL.
- EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLACING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
- NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.
- ALL ELEVATIONS SHOWN, WITH EXCEPTION TO PAD AND FINISHED FLOOR ELEVATIONS, ARE THE VALUE SHOWN PLUS 3.00'.

Call before you Dig
Avoid cutting underground utility lines. IT'S COSTLY.

Call 811
1-800-227-2600
CLARK COUNTY TRAFFIC ENGINEERS
1-702-455-6000

Call before you do Underground
Avoid hitting underground traffic signal systems and street light system. IT'S COSTLY.

Call 1-702-455-6000
CLARK COUNTY TRAFFIC ENGINEERS
1-702-432-5300
(FREEMAN AND ATERIAL SYSTEMS OF TRANSPORTATION)

Call before you do Overhead
Avoid hitting overhead power lines. IT'S COSTLY.

Call 1-702-227-2929

LEGAL DESCRIPTION

SUMMERLIN VILLAGE 23A UNIT NO. 2 PARCEL O AS SHOWN ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LYING WITHIN SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

FEMA FLOOD ZONE DESIGNATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X AND SHADOWED ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD PLAIN AND AREA OF 2% ANNUAL CHANCE FLOOD), PER FIRM PANEL 32003C1750F, DATED NOVEMBER 16, 2011.

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

COREY A. LIEBER, P.E. 15875 DATE _____

SUMMERLIN

SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE DATE _____

THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN CRITERIA. NEITHER SUMMERLIN NOR THE SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLAN CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.

BENCHMARK

FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION 787+19.42 OF CHARLESTON BLVD, OLIV9-345566
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

BASIS OF BEARING

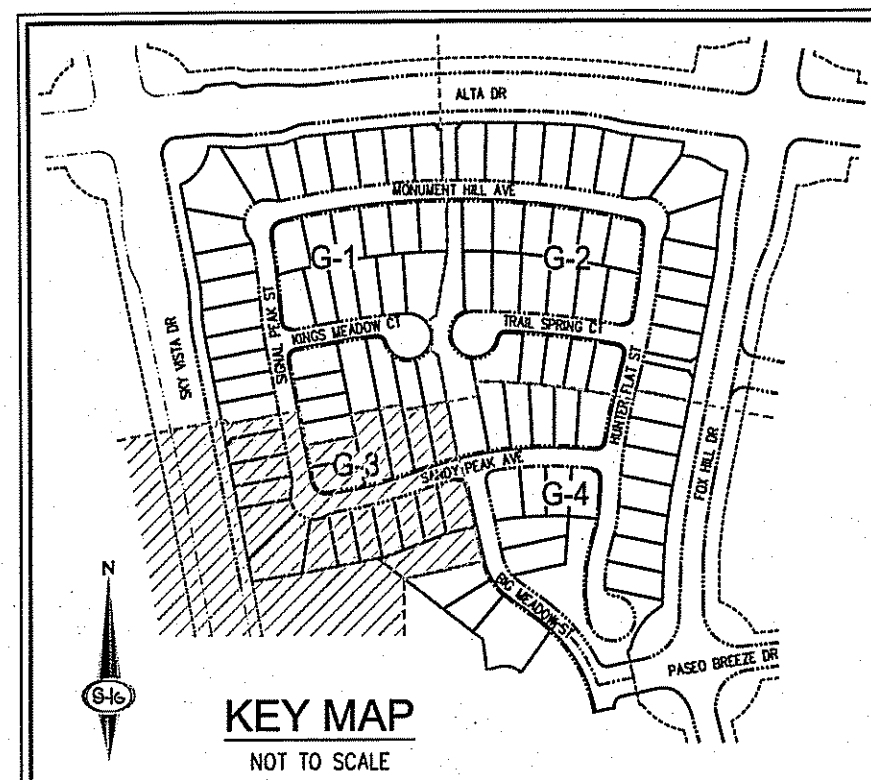
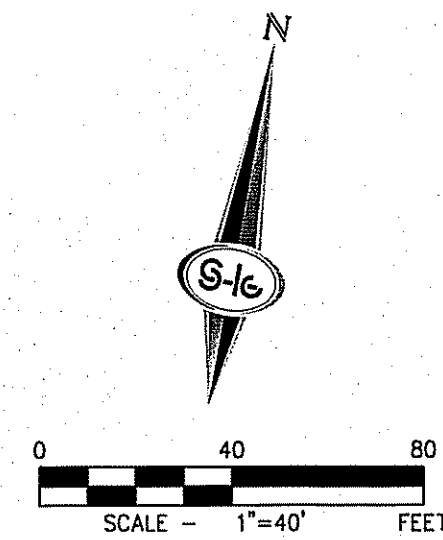
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5389

Woodside Homes
BETTER BY DESIGN

DATE: 5/31/12
DRAFTER: DSP
DESIGNER: DSP
CHECKED: CAL
PROJECT NO.: WSH1105-000

G-1
SHEET 3 OF 19
DS4546



LEGEND

100% 100% 100% PHASE BOUNDARY

100% 100% 100% MATCHLINE

100% 100% 100% ROADWAY CENTERLINE

100% 100% 100% RIGHT-OF-WAY

100% 100% 100% PROPERTY LINE

100% 100% 100% CURB AND GUTTER

100% 100% 100% EXISTING CURB AND GUTTER

100% 100% 100% FUTURE CURB AND GUTTER

100% 100% 100% GRADE BREAK LINE

100% 100% 100% FLOWLINE

100% 100% 100% PROPOSED ELEVATION

100% 100% 100% EXISTING ELEVATION

100% 100% 100% FUTURE ELEVATION

100% 100% 100% EXISTING CONTOUR (5'-FT)

100% 100% 100% EXISTING CONTOUR (1'-FT)

100% 100% 100% PROPOSED CONTOUR (5'-FT)

100% 100% 100% PROPOSED CONTOUR (1'-FT)

100% 100% 100% PROPOSED PAD AND FINISHED FLOOR ELEVATION

100% 100% 100% RETAINING WALL

100% 100% 100% PLANTER RETAINING WALL

100% 100% 100% DECORATIVE WALL

100% 100% 100% DECORATIVE RETAINING WALL

100% 100% 100% DECORATIVE WROUGHT IRON FENCE

GRADING NOTES

1. CONSTRUCT 2" AGGREGATE WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
2. CONSTRUCT 3" AGG. PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
3. SAWCUT AND MATCH EXISTING IMPROVEMENTS
4. CONSTRUCT 1" TYPE CURB AND GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-47
5. CONSTRUCT SIDEWALK DRAIN PER CAUSD NO. 236
6. CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-64
7. CONSTRUCT 5" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
8. CONSTRUCT 4" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
9. CONSTRUCT SIDEWALK RAMPS PER SUMMERLIN IMPROVEMENT STANDARDS S-75
10. SEE DETAIL 38 ON SHEET D-2 FOR GRADING AND SECTIONS IN THIS AREA
11. FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER
12. CONSTRUCT 4" TRANSITION TO DEPRESSIONED CURB PER CAUSD NO. 223
13. INSTALL 24" C-900 PVC STORM DRAIN
14. INSTALL 60" TYPE III STORM DRAIN MANHOLE
15. INSTALL 15.0" TYPE CM2 DROP INLET PER CAUSD NO. 4121 AND 421
16. INSTALL 20.0" TYPE CM2 DROP INLET PER CAUSD NO. 4121 AND 421
17. REMOVE EXISTING STORM DRAIN BEYOND PROPOSED DROP INLET
18. CONSTRUCT 4" CURB PER SUMMERLIN IMPROVEMENT STANDARDS S-49
19. PRIVATE DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED

SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES

STORMWATER RUNOFF MANAGEMENT

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT AND/OR CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE WATERSHED OF THE PROJECT. THE DEBRIS AND/OR POLLUTANTS OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT, SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED BY THE OWNER AND HIS OR HER AGENT AUTHORIZED ENGINEER OR INSPECTOR IF PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN TITLE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO NEVADA STORMWATER MANAGEMENT PERMIT FOR CONSTRUCTION ACTIVITY NW1000000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION. VEHICLES AND EQUIPMENT LOCATED ON ALL EXPOSED AREAS SHALL BE COVERED WITH TARP OR OTHER EQUIPMENT COVERING MATERIALS AND EQUIPMENT. THE CONTRACTOR OR HIS AGENT SHALL REPORT OR MODIFY THE WATERSHED POLLUTION RISK ASSESSMENT IN AS MUCH AS POSSIBLE EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NW1000000, SECTION III.A.5.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITH SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

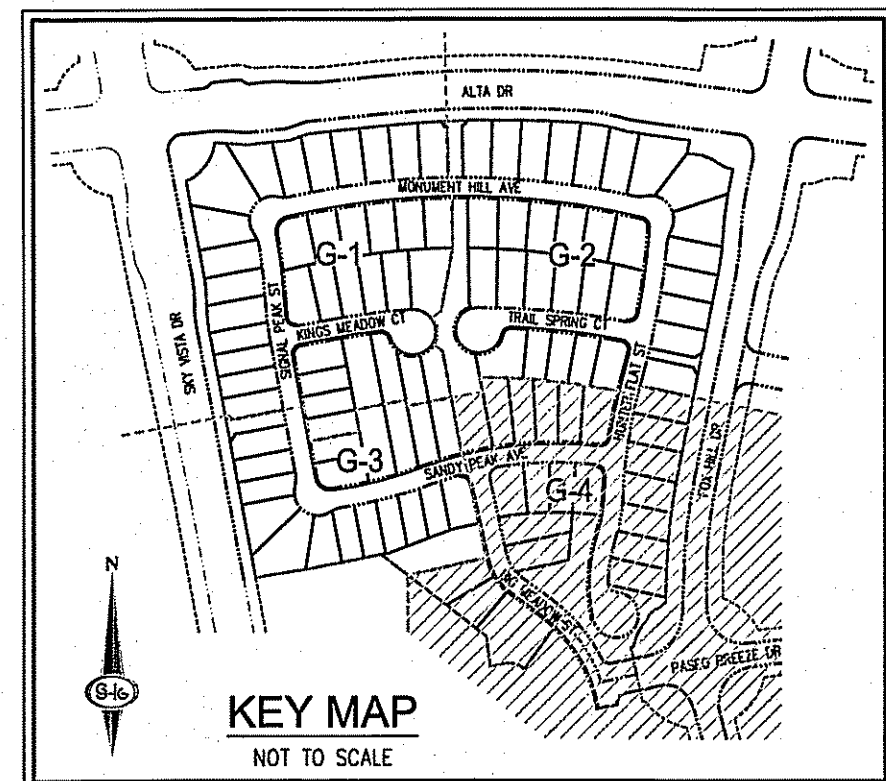
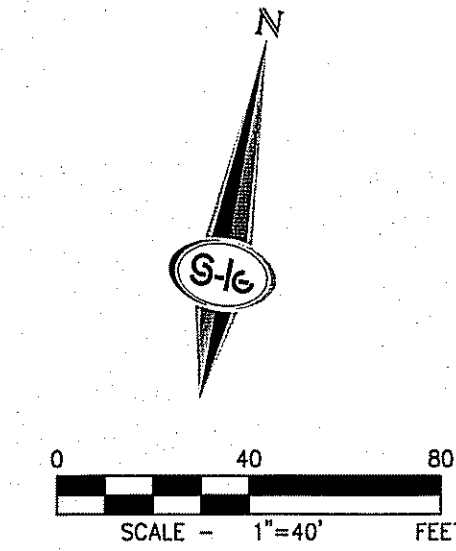
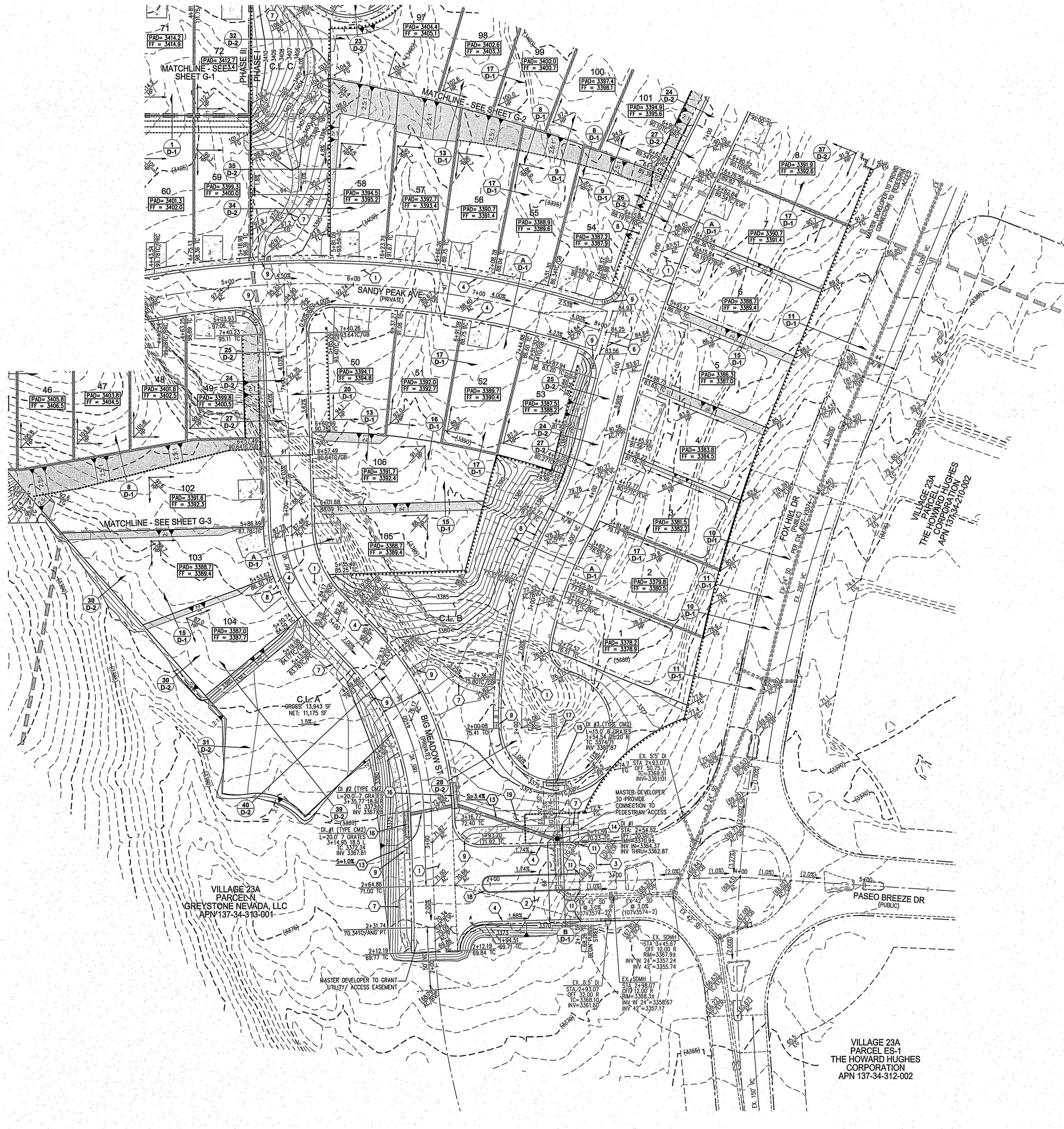
GENERAL NOTES

1. FINAL GRADES ADJUSTED TO STRUCTURES' SHALL BE IN CONFORMANCE WITH BSC 2006, SECTION 230.411.2.2.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWF.
4. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE SWF OR UNDESIGNED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL.
8. EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES. OWNER NOTIFIER ENGINEER TO VERIFY EXISTING UTILITY RECORDS. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE RESPONSIBLE FOR VERIFYING EXISTING UTILITY LOCATIONS DURING CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLACING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF UTILITY LOCATION OR DAMAGE DURING CONSTRUCTION.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXIST) WITHIN THE SIGHT VISIBILITY ZONES.
10. ELEVATIONS SHOWN, WITH EXCEPTION TO PAD AND FINISHED FLOOR ELEVATIONS, ARE THE VALUE SHOWN PLUS 3300'.

Call before you Dig Avoid cutting underground utility lines. It's costly. Call 811 OR 1-800-227-2600 AND CLARK COUNTY TOLL FREE 1-702-455-6000	AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY. Call before you do Under Ground 1-702-455-6000 CLARK COUNTY TRAFFIC OPERATIONS AND 1-702-432-5300 FREWAY AND ARTERIAL SYSTEM OF TRANSPORTATION	AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY. CALL BEFORE YOU DO OVERHEAD 1-702-227-2929
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<u>LEGAL DESCRIPTION</u> SUMMERLIN VILLAGE 23A UNIT NO. 2 PARCEL O AS SHOWN ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LYING WITHIN SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.	<u>SUMMERLIN</u> SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE DATE THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN CRITERIA. NEITHER SUMMERLIN NOR THE SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLAN CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.
<u>FEMA FLOOD ZONE DESIGNATION</u> THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X AND SHADED ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD PLAIN AND AREA OF 2% ANNUAL CHANCE FLOOD), PER FIRM PANEL 32003C1750F, DATED NOVEMBER 16, 2011.	<u>BENCHMARK</u> FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION 787+18.42 OF CHARLESTON BLVD. 0.109+JASSET NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET
<u>FLOOD CERTIFICATION</u> I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.	<u>BASIS OF BEARING</u> NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.
COREY A. LIEBER, P.E. 15875 DATE	

\\slater\105-000\023\p023.dwg 5/31/2012 12:37 PM Don Pail



LEGEND	
[Symbol]	PHASE BOUNDARY
[Symbol]	MATCHLINE
[Symbol]	ROADWAY CENTERLINE
[Symbol]	RIGHT-OF-WAY
[Symbol]	PROPERTY LINE
[Symbol]	CURB AND GUTTER
[Symbol]	EXISTING CURB AND GUTTER
[Symbol]	FUTURE CURB AND GUTTER
[Symbol]	GRADE BREAK LINE
[Symbol]	FLOWLINE
[Symbol]	PROPOSED ELEVATION
[Symbol]	EXISTING ELEVATION
[Symbol]	FUTURE ELEVATION
[Symbol]	EXISTING CONTOUR (5-FT)
[Symbol]	EXISTING CONTOUR (1-FT)
[Symbol]	PROPOSED CONTOUR (5-FT)
[Symbol]	PROPOSED CONTOUR (1-FT)
[Symbol]	PROPOSED PAD AND FINISHED FLOOR ELEVATION
[Symbol]	RETAINING WALL
[Symbol]	PLANTER RETAINING WALL
[Symbol]	DECORATIVE WALL
[Symbol]	DECORATIVE RETAINING WALL
[Symbol]	DECORATIVE WROUGHT IRON FENCE

GRADING NOTES	
1	CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
2	CONSTRUCT 3" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
3	SAWCUT AND MATCH EXISTING IMPROVEMENTS
4	CONSTRUCT 8" TYPE CURB AND GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-6
5	CONSTRUCT SIDEWALK DRAIN PER CCAUSD NO. 236
6	CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-6
7	CONSTRUCT 5" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
8	CONSTRUCT 4" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
9	CONSTRUCT SIDEWALK RAMPS PER SUMMERLIN IMPROVEMENT STANDARDS S-72
10	SEE DETAIL 38 ON SHEET D-2 FOR GRADING AND SECTIONS IN THIS AREA
11	FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER
12	CONSTRUCT 4" TRANSITION TO DEPRESSIONED CURB PER CCAUSD NO. 223
13	INSTALL 24" C-900 PVC STORM DRAIN
14	INSTALL 60" TYPE III STORM DRAIN MANHOLE
15	INSTALL 15.0" TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
16	INSTALL 20.0" TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
17	REMOVE EXISTING STORM DRAIN BEYOND PROPOSED DROP INLET
18	CONSTRUCT A-CURB PER SUMMERLIN IMPROVEMENT STANDARDS S-49
19	PRIVATE DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED
SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES	

STORMWATER RUNOFF MANAGEMENT
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT AND CONSTRUCTION DEBRIS OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR ACCUMULATE IN THE PUBLIC RIGHTS OF WAYS OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN TITLE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

GENERAL NOTES

1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2006, SECTION 2304.11.2.2.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
4. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL.
8. EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLACING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.
10. ALL ELEVATIONS SHOWN, WITH EXCEPTION TO PAD AND FINISHED FLOOR ELEVATIONS, ARE THE VALUE SHOWN PLUS 3300'.

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CLARK COUNTY TRAFFIC DEPARTMENT
1-702-455-6000

Call before you do UnderGround
Avoid hitting underground traffic signal systems and street light system conduits. It's costly.
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CLARK COUNTY TRAFFIC DEPARTMENT
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Call before you do Overhead
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1-702-227-2929

LEGAL DESCRIPTION
SUMMERLIN VILLAGE 23A UNIT NO. 2, PARCEL O AS SHOWN ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LYING WITHIN SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

FEMA FLOOD ZONE DESIGNATION
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X AND SHADY ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD PLAN AND AREA OF 2% ANNUAL CHANCE FLOOD), PER FIRM PANEL 32003C1750F, DATED NOVEMBER 16, 2011.

SUMMERLIN
SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE DATE _____
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BENCHMARK
FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION 787+19.42 OF CHARLESTON BLVD, OLIVOS-34556
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
COREY A. LIEBER, P.E. 15875 DATE _____

BASIS OF BEARING
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

SLATER HANFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

Woodside Homes
BETTER BY DESIGN

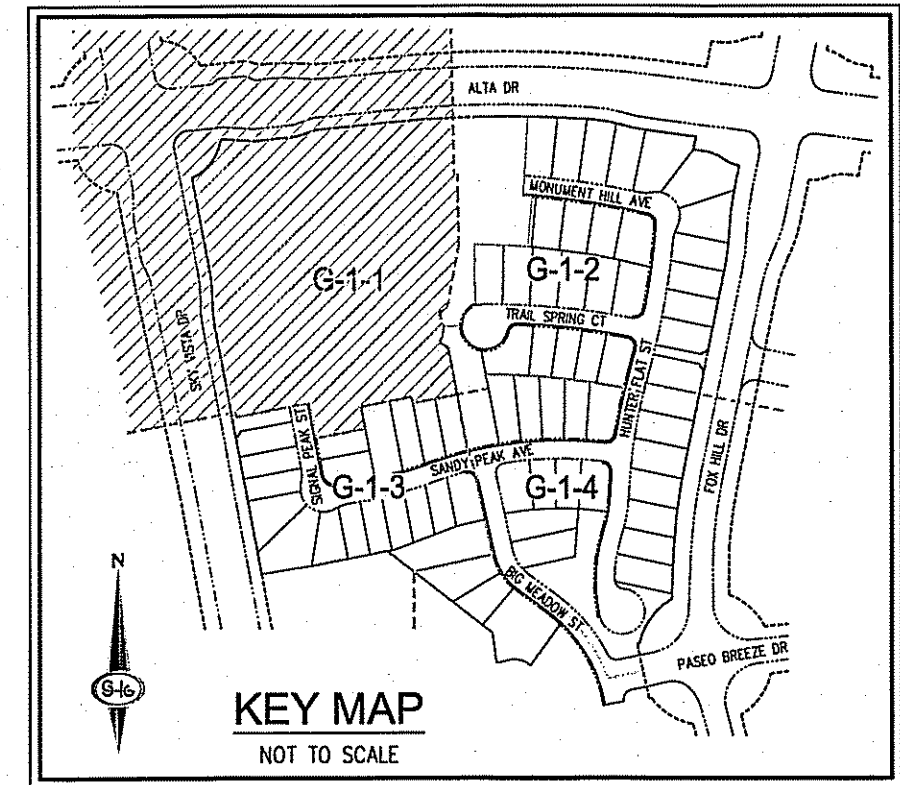
DATE: 5/31/12
DRAFTER: DSP
DESIGNER: DSP
CHECKED: CAL
PROJECT NO. WSH1105-000

ENGINEER
COREY A. LIEBER
P.E. 15875
CIVIL
5-31-12

G-4
SHEET 6 OF 19
DS4546



PHASE I DRAINAGE QUANTITIES		PUBLIC	PRIVATE
1. 15.0' MOD TYPE "CM" DROP INLET	EA	1	--
2. 20.0' MOD TYPE "CM" DROP INLET	EA	2	--
3. 24" C-900 PVC STORM DRAIN	LF	120	--
4. 60" TYPE II STORM DRAIN MANHOLE	EA	1	--
5. 1 COURSE SOLID GROUT CMU BLOCK WALL	LF	--	168
6. 2 COURSE SOLID GROUT CMU BLOCK WALL	LF	--	2,936
7. 6' WIDE CONCRETE VALLEY GUTTER	SF	1,920	--
8.			
9.			



STORMWATER RUNOFF MANAGEMENT
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ. FT.))

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN THE PUBLIC RIGHTS OF WAYS OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN TITLE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

GENERAL NOTES

1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2006, SECTION 2304.11.2.2.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
4. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL.
8. EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLACING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.
10. ALL ELEVATIONS SHOWN, WITH EXCEPTION TO PAD AND FINISHED FLOOR ELEVATIONS, ARE THE VALUE SHOWN PLUS 3.00'.

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.
Call before you dig
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-432-5300
COMPUTERIZED TRAFFIC SYSTEM

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
1-800-227-2600
AND
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

- GRADING NOTES**
1. CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
 2. CONSTRUCT 3" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
 3. SAWCUT AND MATCH EXISTING IMPROVEMENTS
 4. CONSTRUCT 4" TYPE CURB AND GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-7
 5. CONSTRUCT SIDEWALK DRAIN PER CCAUSD NO. 236
 6. CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-64
 7. CONSTRUCT 15" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 8. CONSTRUCT 4" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 9. CONSTRUCT SIDEWALK RAMPS PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 10. INSTALL 5x37 RIPRAP PAD WITH FILTER FABRIC D50=6", THICKNESS=12"
 11. FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER
 12. CONSTRUCT 4" TRANSITION TO DEPRESSED CURB PER CCAUSD NO. 223
 13. INSTALL 24" C-900 PVC STORM DRAIN
 14. INSTALL 60" TYPE II STORM DRAIN MANHOLE
 15. INSTALL 15.0' TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
 16. INSTALL 20.0' TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
 17. REMOVE EXISTING STORM DRAIN BEYOND PROPOSED DROP INLET
 18. CONSTRUCT 4" CURB PER SUMMERLIN IMPROVEMENT STANDARDS S-49
 19. PRIVATE DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED
- SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES

LEGEND	
---	PHASE BOUNDARY
---	MATCHLINE
---	ROADWAY CENTERLINE
---	RIGHT-OF-WAY
---	PROPERTY LINE
---	CURB AND GUTTER
---	EXISTING CURB AND GUTTER
---	FUTURE CURB AND GUTTER
---	GRADE BREAK LINE
---	FLOWLINE
---	PROPOSED ELEVATION
---	EXISTING ELEVATION
---	FUTURE ELEVATION
---	EXISTING CONTOUR (5'-FT)
---	EXISTING CONTOUR (1'-FT)
---	PROPOSED CONTOUR (5'-FT)
---	PROPOSED CONTOUR (1'-FT)
---	PROPOSED PAD AND FINISHED FLOOR ELEVATION
---	RETAINING WALL
---	PLANTER RETAINING WALL
---	DECORATIVE WALL
---	DECORATIVE RETAINING WALL
---	DECORATIVE WROUGHT IRON FENCE

LEGAL DESCRIPTION
SUMMERLIN VILLAGE 23A UNIT NO. 2 PARCEL 0 AS SHOWN ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LYING WITHIN SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

FEMA FLOOD ZONE DESIGNATION
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X AND SHADDED ZONE X (AREA OUTSIDE THE 500-YEAR FLOOD PLAIN AND AREA OF 2% ANNUAL CHANCE FLOOD), PER FIRM PANEL 32003C1750C, DATED SEPTEMBER 27, 2002.

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED FLOOD STUDY _____ ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
COREY A. LIEBER, P.E. 15875 DATE

SUMMERLIN
SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE DATE
THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN CRITERIA. NEITHER SUMMERLIN NOR THE SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLAN CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.

BENCHMARK
FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION 787+19.42 OF CHARLESTON BLVD, DLV09-34566
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

BASIS OF BEARING
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

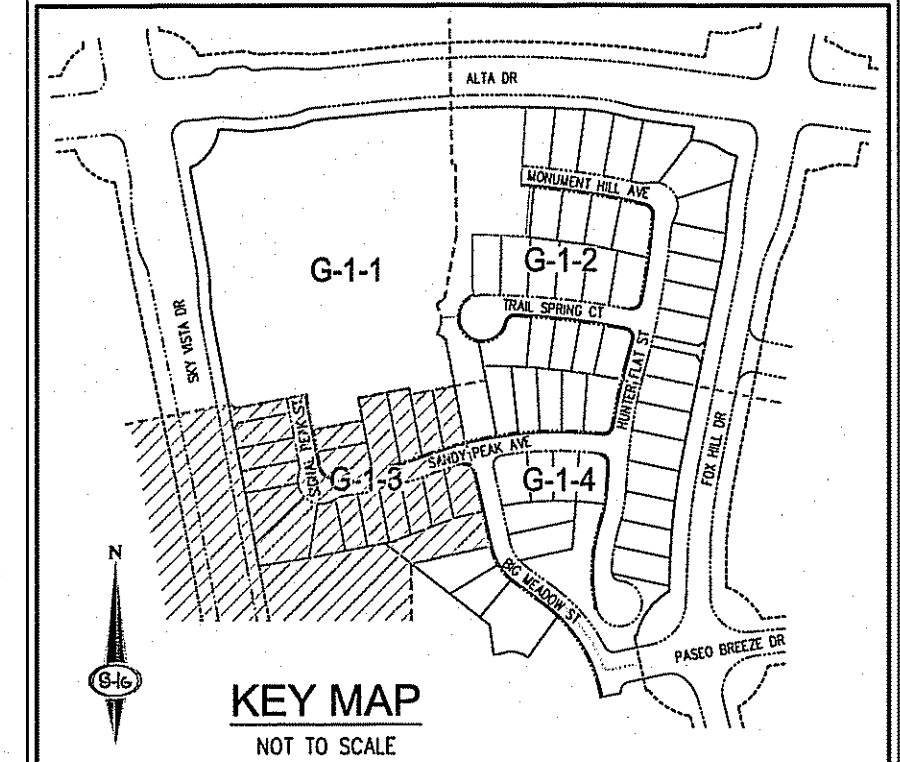
Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL 0
PHASE I GRADING PLAN

DATE: 5/31/12
DRAFTER: DSP
DESIGNER: DSP
CHECKER: CAL
PROJECT NO. WSH1105-000

ENGINEER
COREY A. LIEBER
12/31/2011
CIVIL
EXPIRATION DATE 12/31/2015

G-1-1
SHEET 7 OF 19
DS4546



1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN

IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXIST) WITHIN THE SIGHT VISIBILITY ZONES.

10. ALL ELEVATIONS SHOWN, WITH EXCEPTION TO PAD AND FINISHED FLOOR ELEVATIONS, ARE THE VALUE SHOWN PLUS 3300'.

 ROADWAY CENTERLINE
 RIGHT-OF-WAY
 PROPERTY LINE
 CURB AND GUTTER
 EXISTING CURB AND GUTTER
 FUTURE CURB AND GUTTER
 GRADE BREAK LINE
 FLOWLINE
 PROPOSED ELEVATION
 EXISTING ELEVATION
 FUTURE ELEVATION
 EXISTING CONTOUR (5-FT)
 EXISTING CONTOUR (1-FT)
 PROPOSED CONTOUR (5-FT)
 PROPOSED CONTOUR (1-FT)
 PROPOSED, PAD AND FINISHED FLOOR ELEVATION
 RETAINING WALL
 PLANTER RETAINING WALL
 DECORATIVE WALL
 DECORATIVE RETAINING WALL
 DECORATIVE WROUGHT IRON FENCE

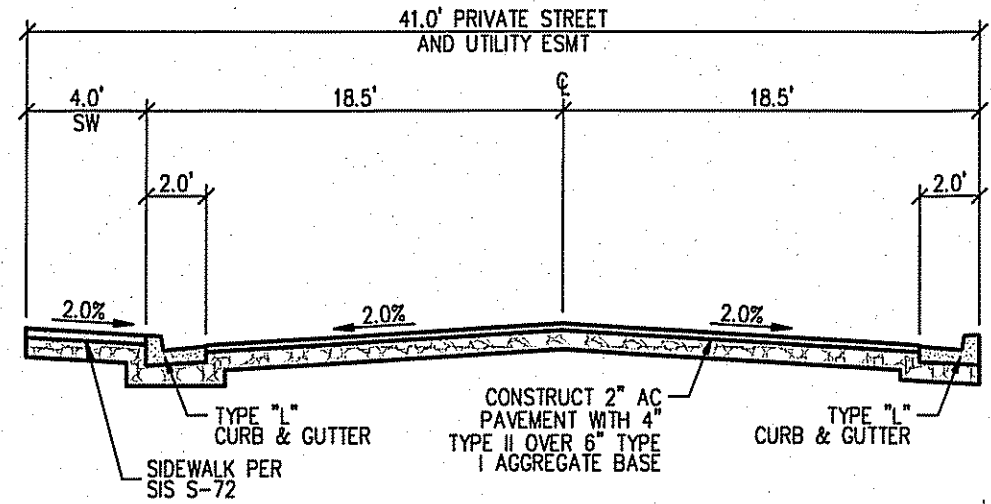
Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call



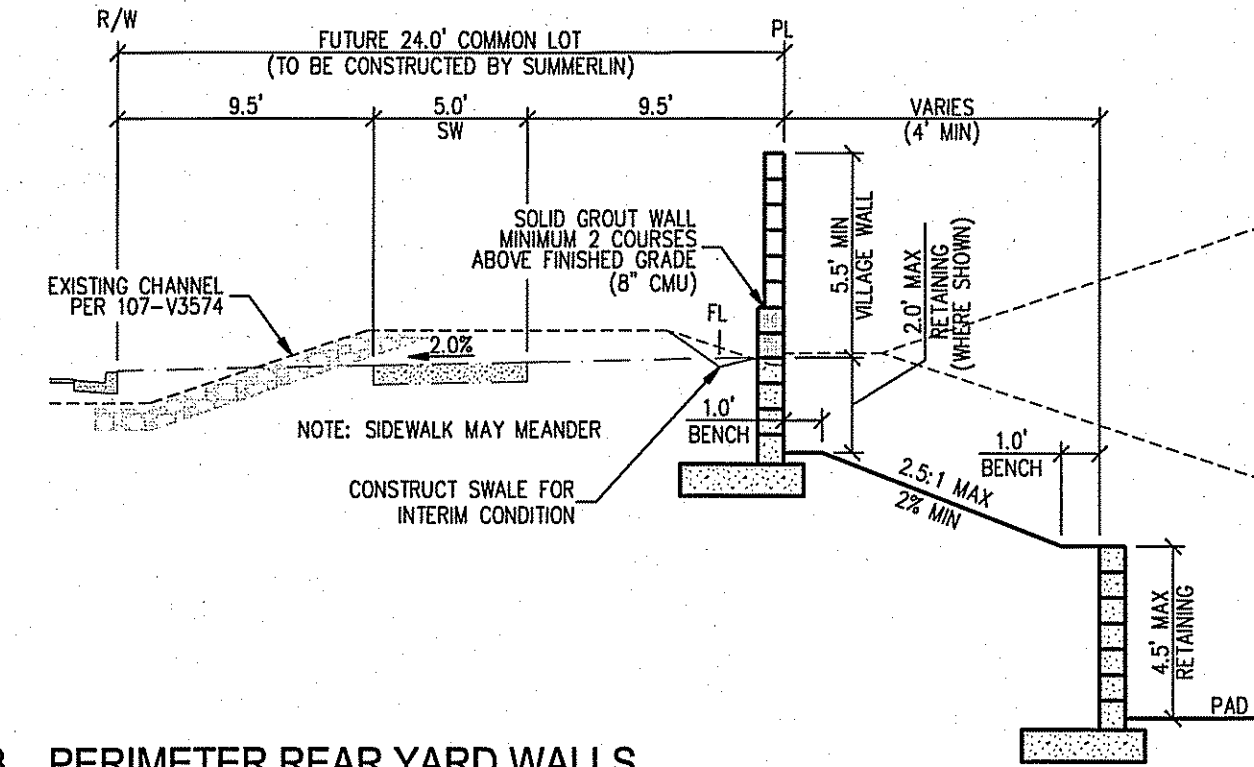
OR
1-800-227-2600
AND
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

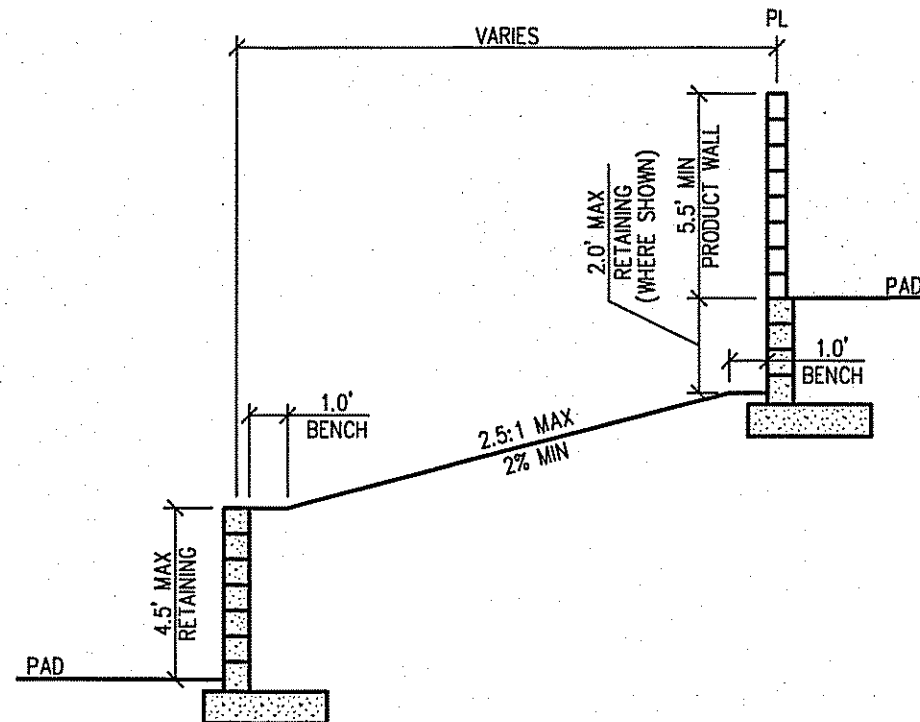
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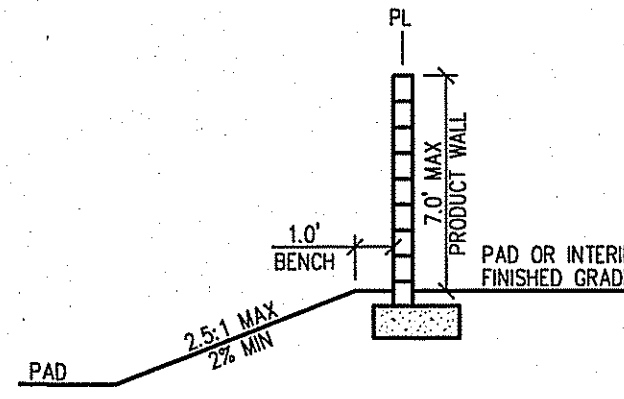
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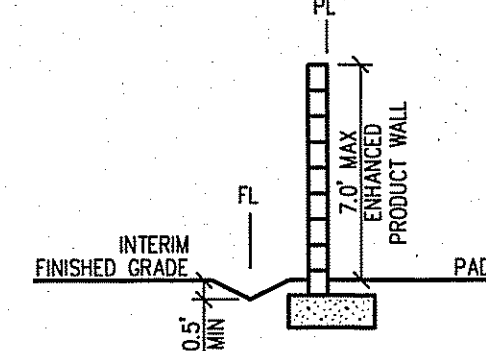
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NOT TO SCALE



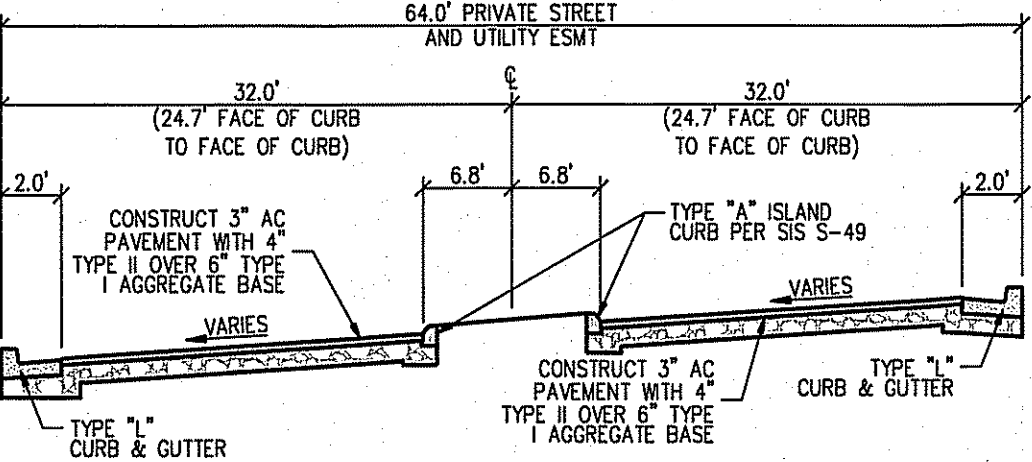
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NOT TO SCALE



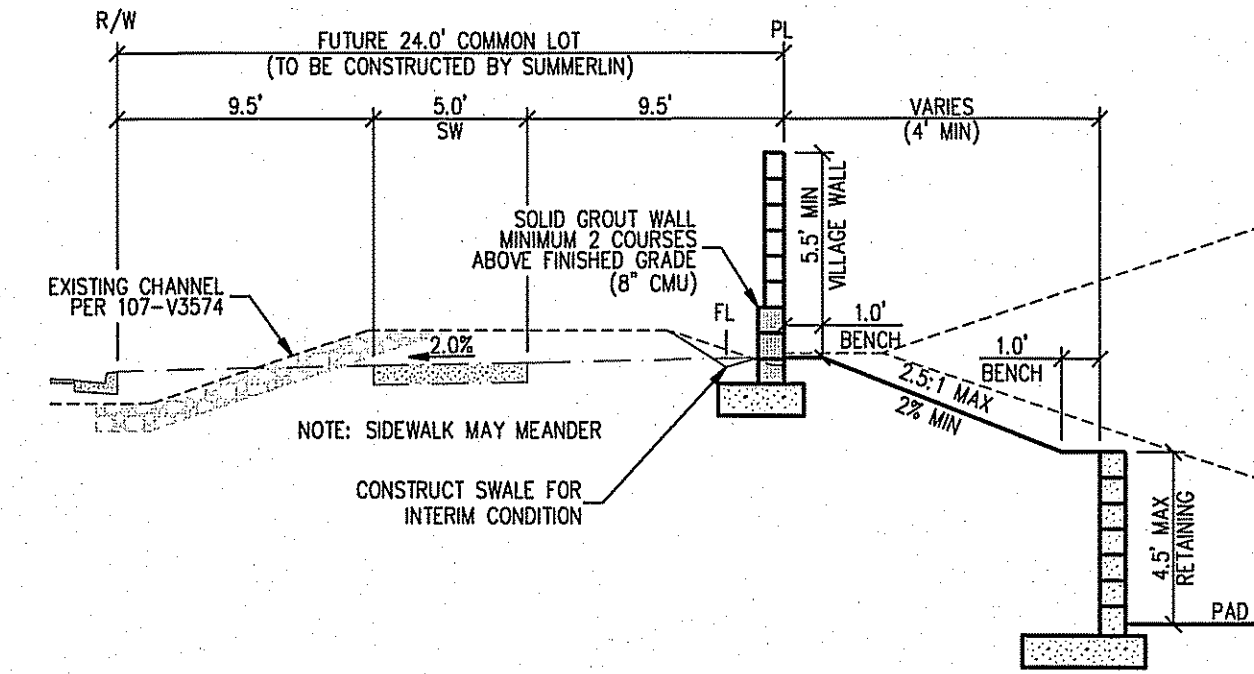
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NOT TO SCALE



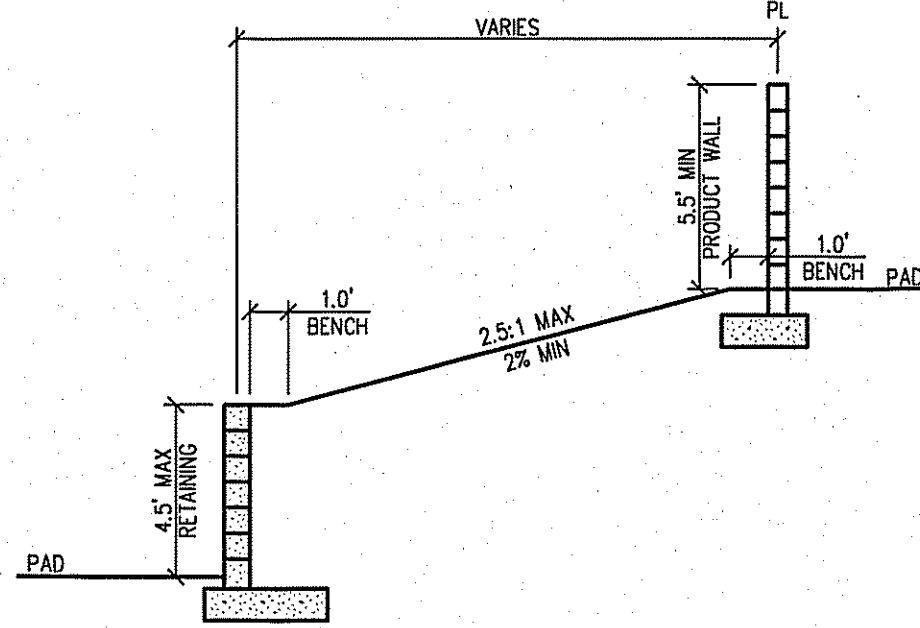
18. SIDE YARD WALL
NOT TO SCALE



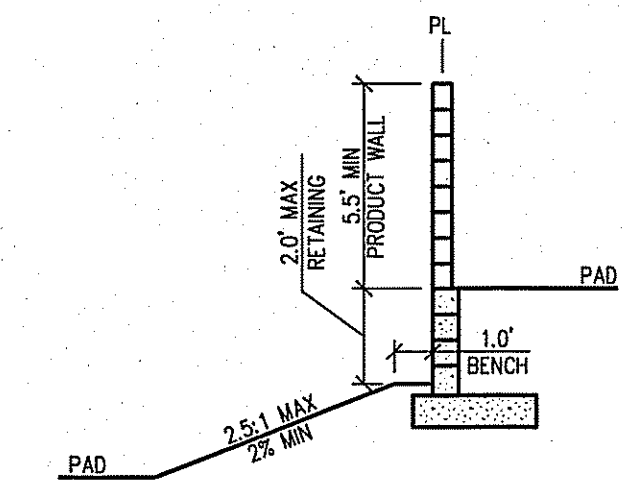
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NOT TO SCALE



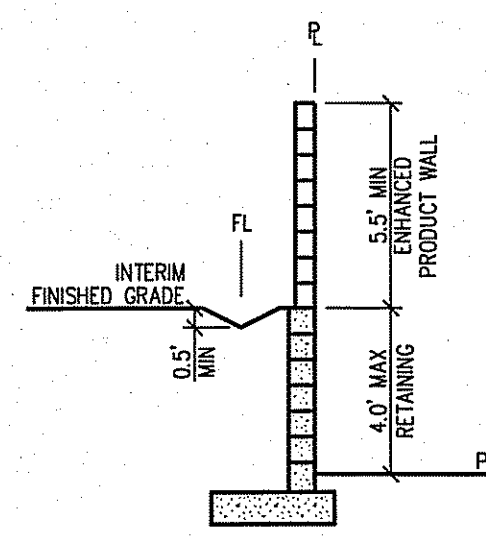
4. PERIMETER REAR YARD WALLS
NOT TO SCALE



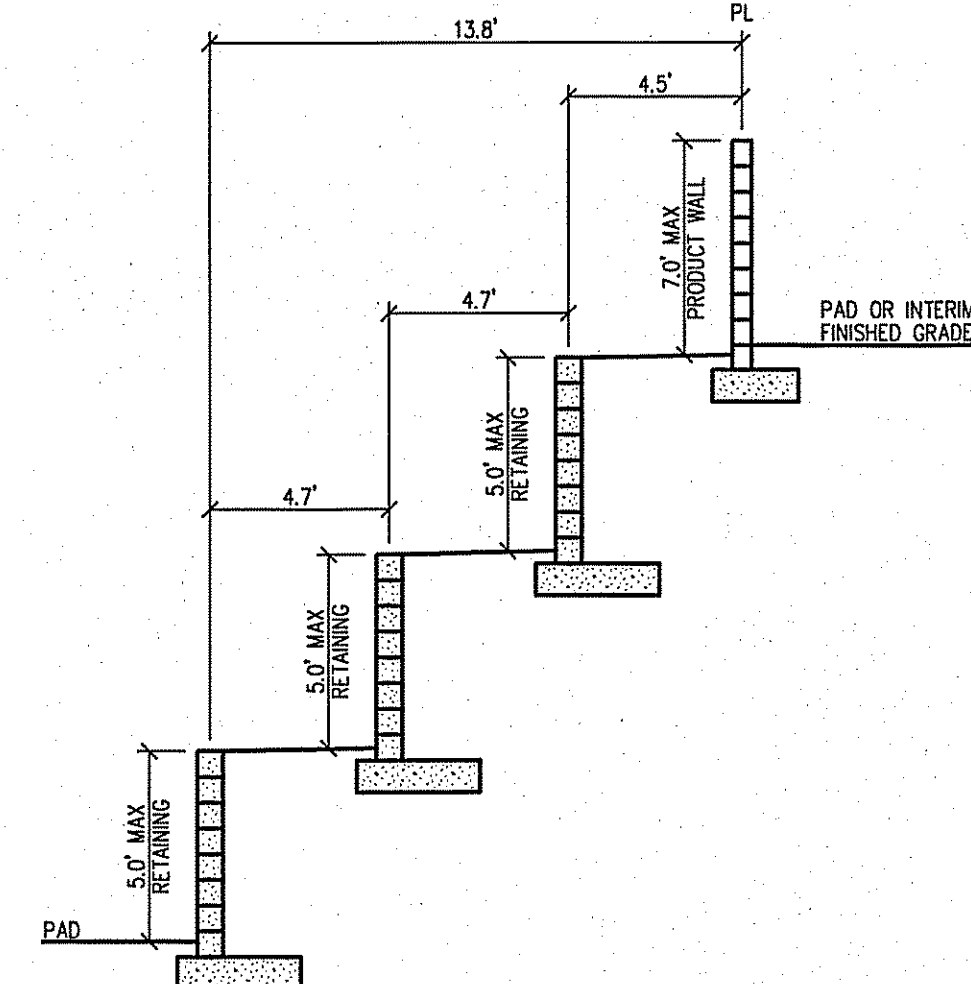
9. INTERIOR REAR YARD WALLS
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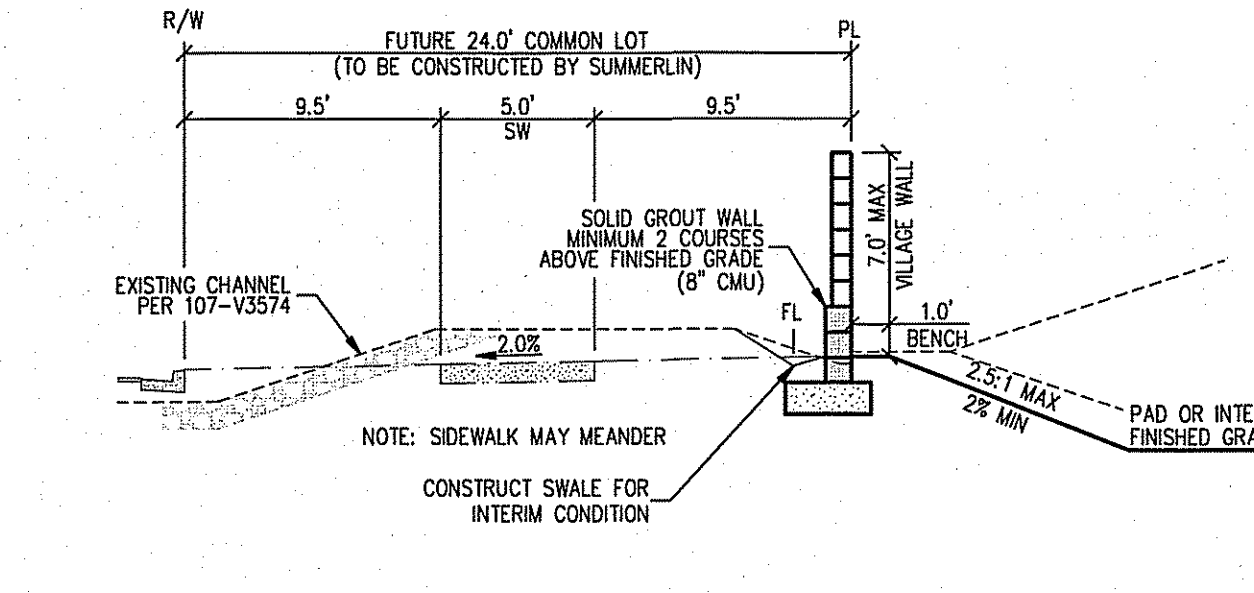
14. REAR YARD WALL
NOT TO SCALE



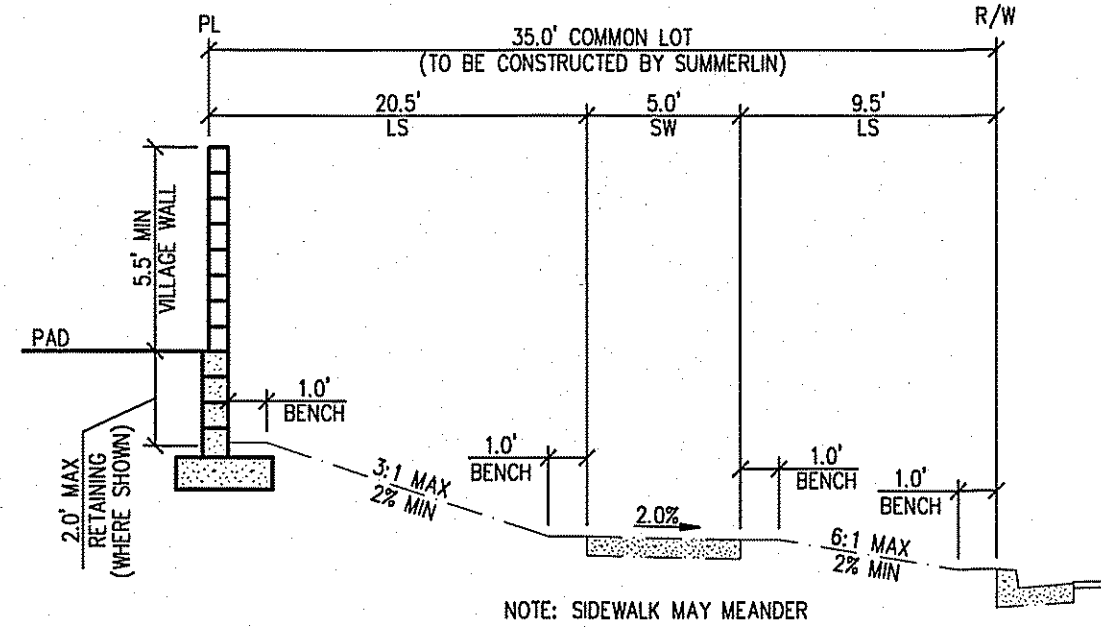
19. SIDE YARD WALL
NOT TO SCALE



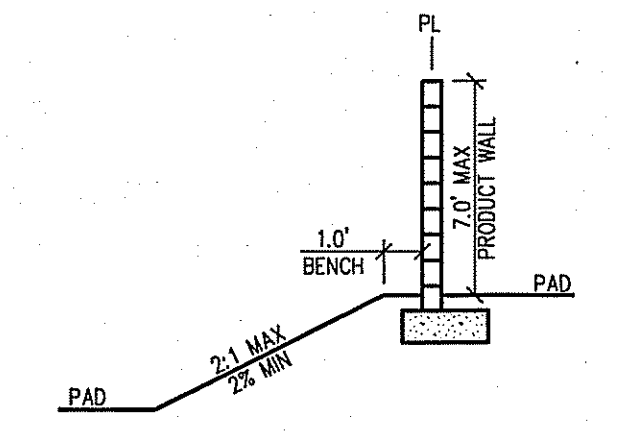
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NOT TO SCALE



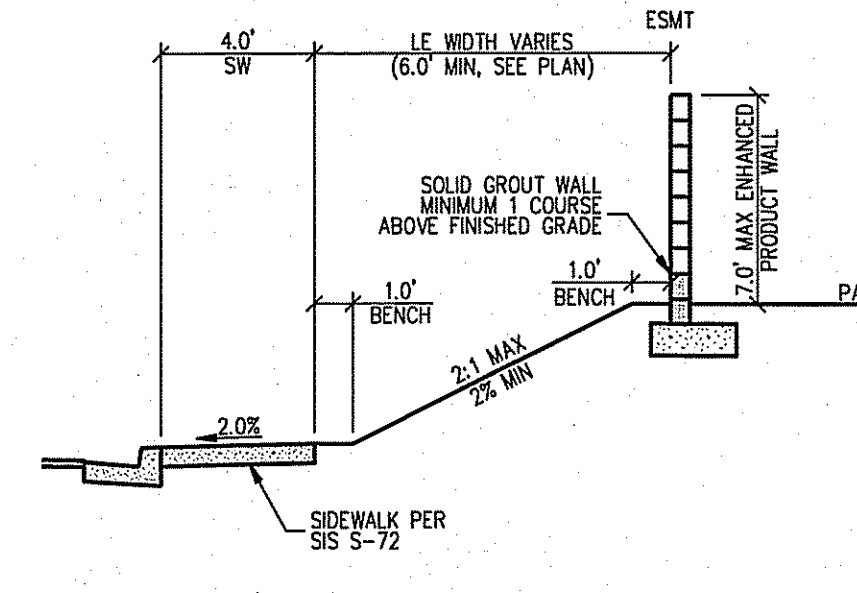
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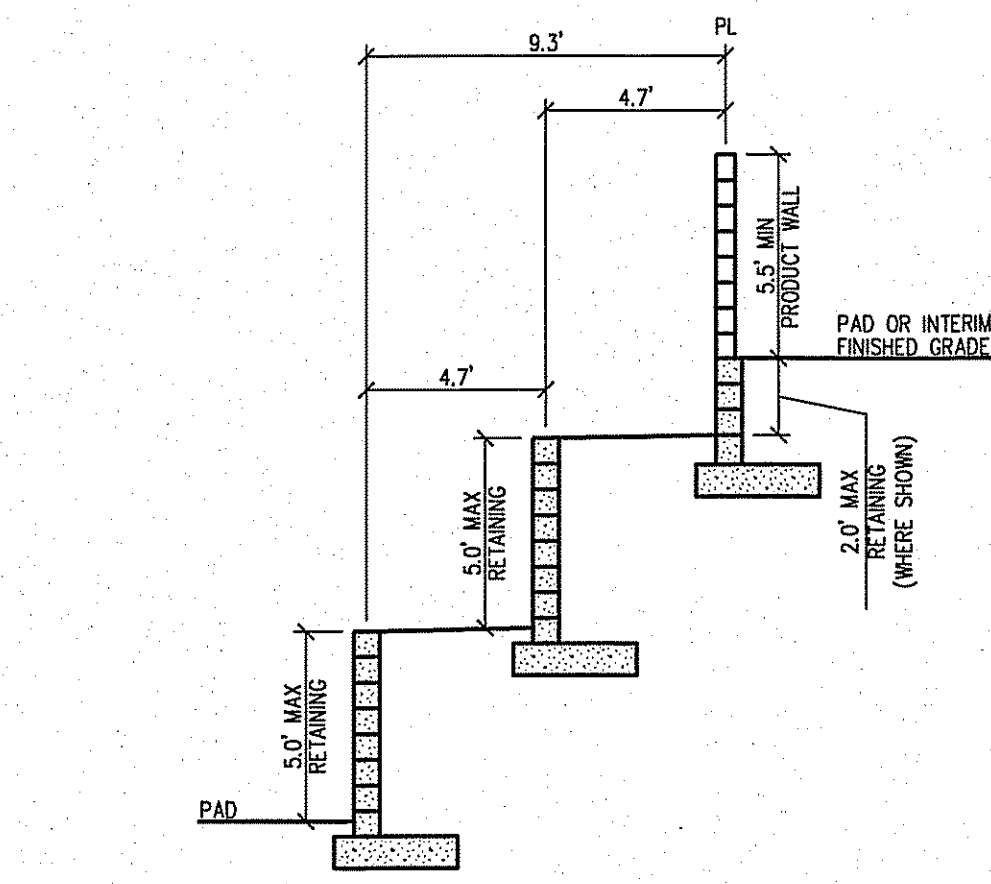
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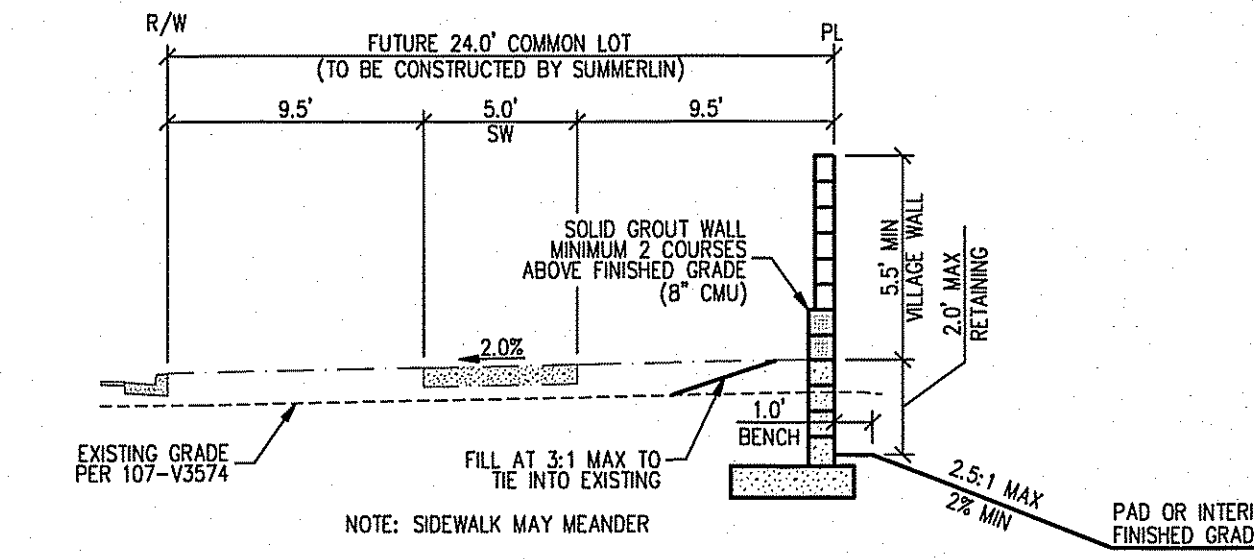
15. INTERIOR SIDE YARD WALL
NOT TO SCALE



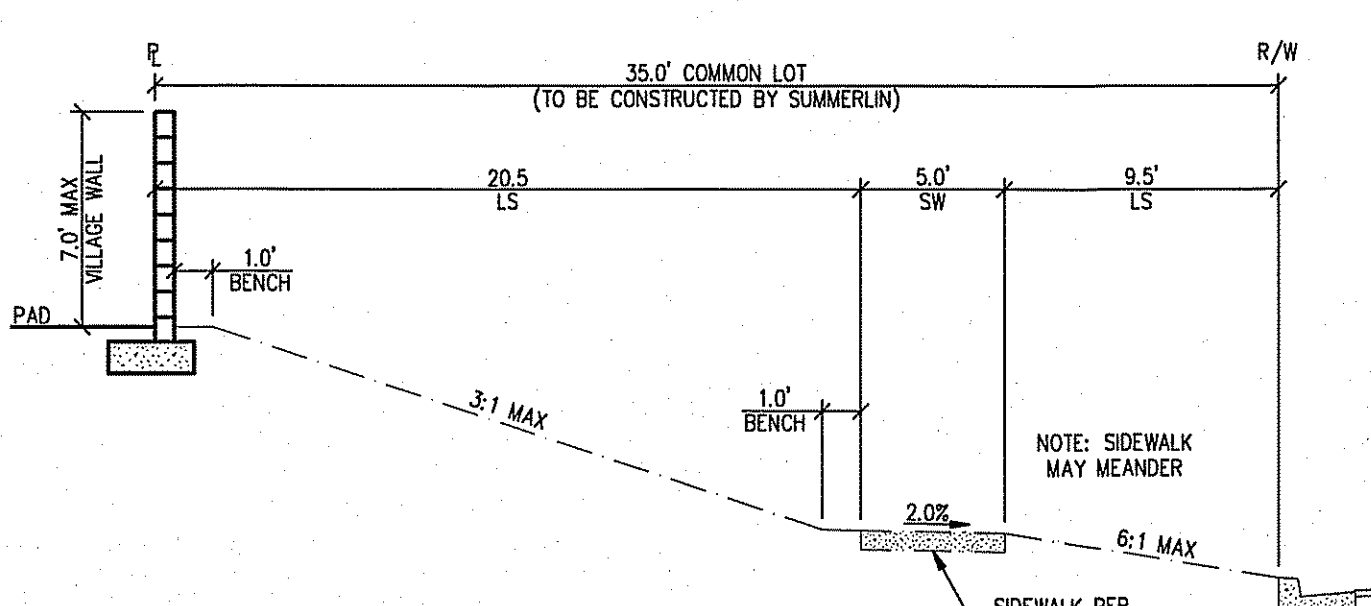
20. CORNER LOT SCREEN WALL
NOT TO SCALE



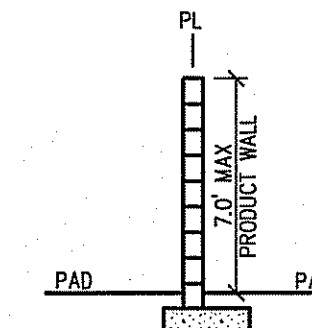
2. INTERIOR RETAINING WALLS
NOT TO SCALE



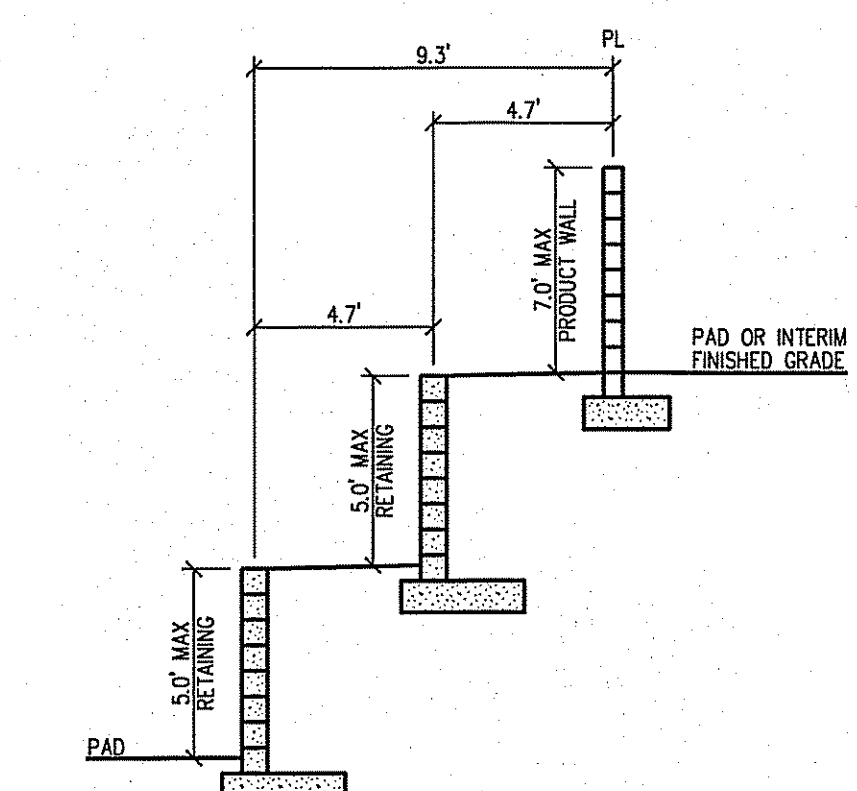
6. PERIMETER REAR YARD WALL
NOT TO SCALE



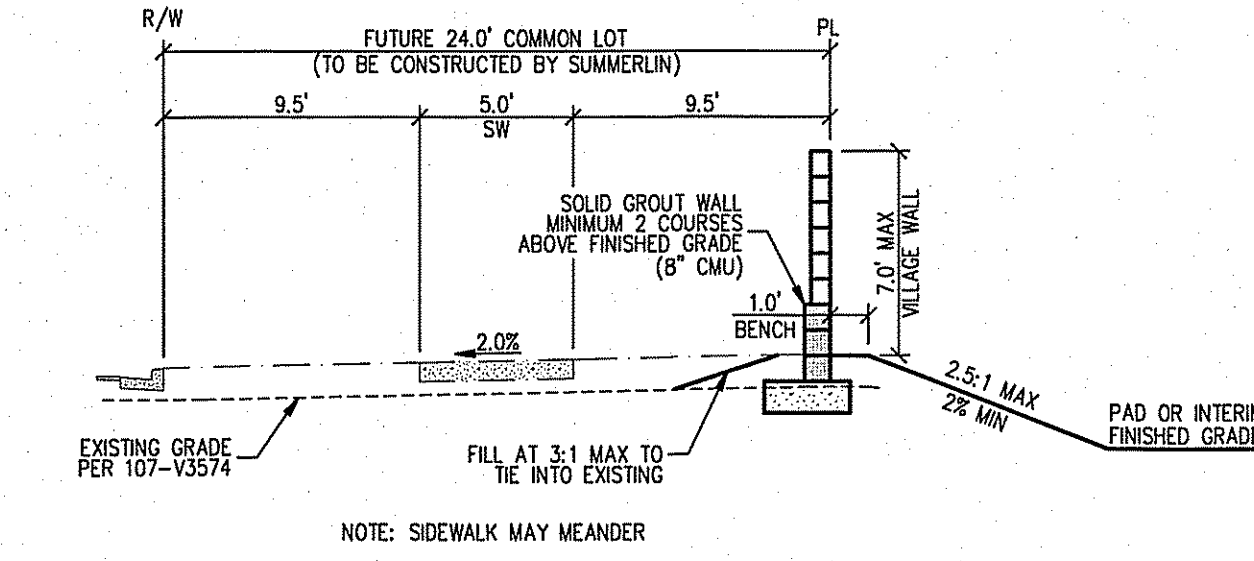
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NOT TO SCALE



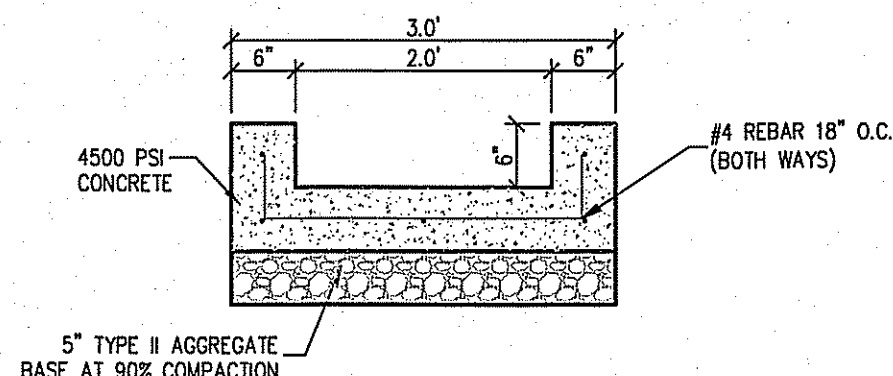
16. INTERIOR SIDE YARD WALL
NOT TO SCALE



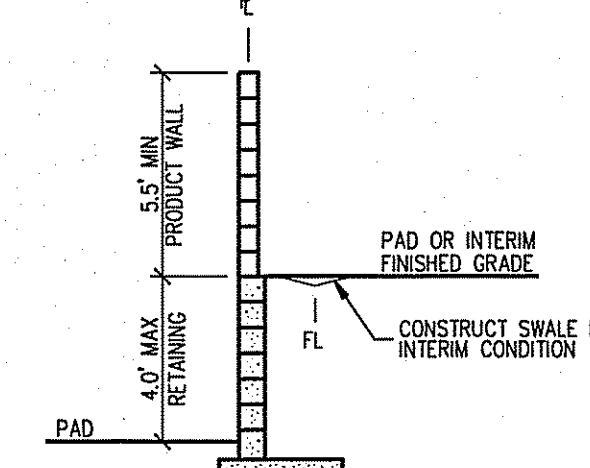
21. INTERIOR RETAINING WALLS
NOT TO SCALE



7. PERIMETER REAR YARD WALL
NOT TO SCALE



12. 24\"/>



17. INTERIOR SIDE YARD WALLS
NOT TO SCALE

SLATER
HANIFAN
GROUP

CONSULTING ENGINEERS & PLANNERS

5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

APP. DATE

BY

DATE

DESCRIPTION

NO.

Woodside Homes
BETTER BY DESIGN

7745
R03E

DATE: 5/31/12
DRAFTER: DSP
DESIGNER: DSP
CHECKED: CAL
PROJECT NO.
WSH1105-000

ENGINEER
COREY
JIEBER
Exp. 12/31/2013
CIVIL
Exp. 12/31/2013

5/31/12

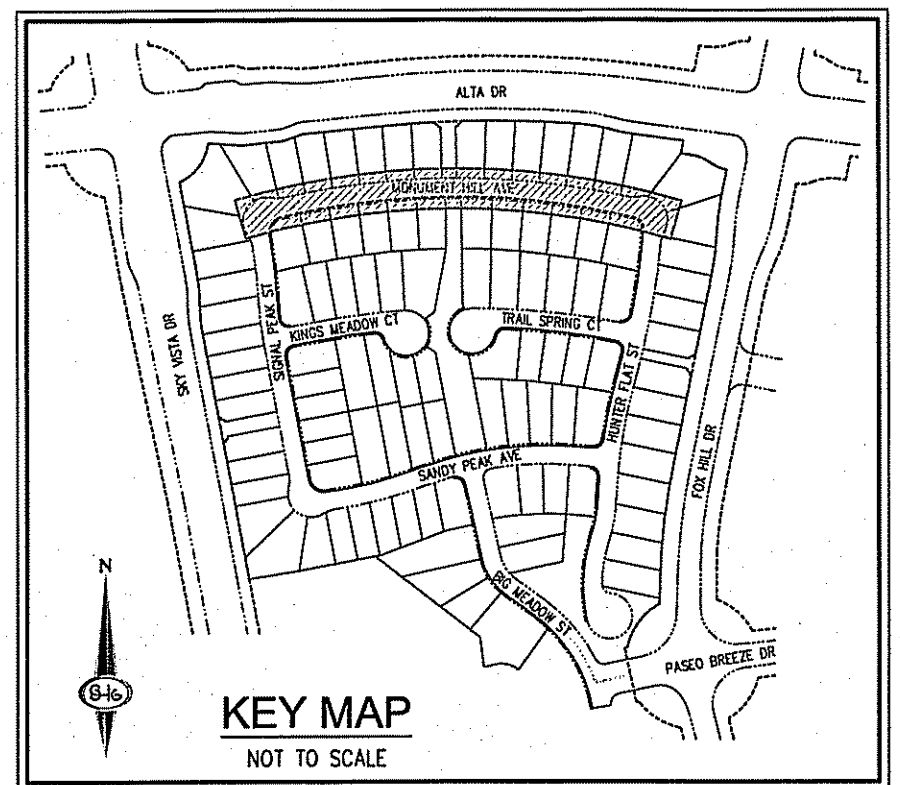
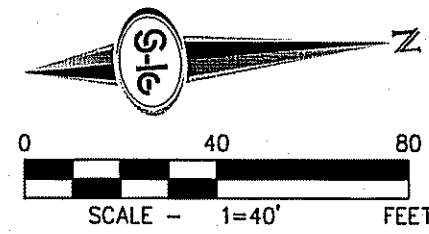
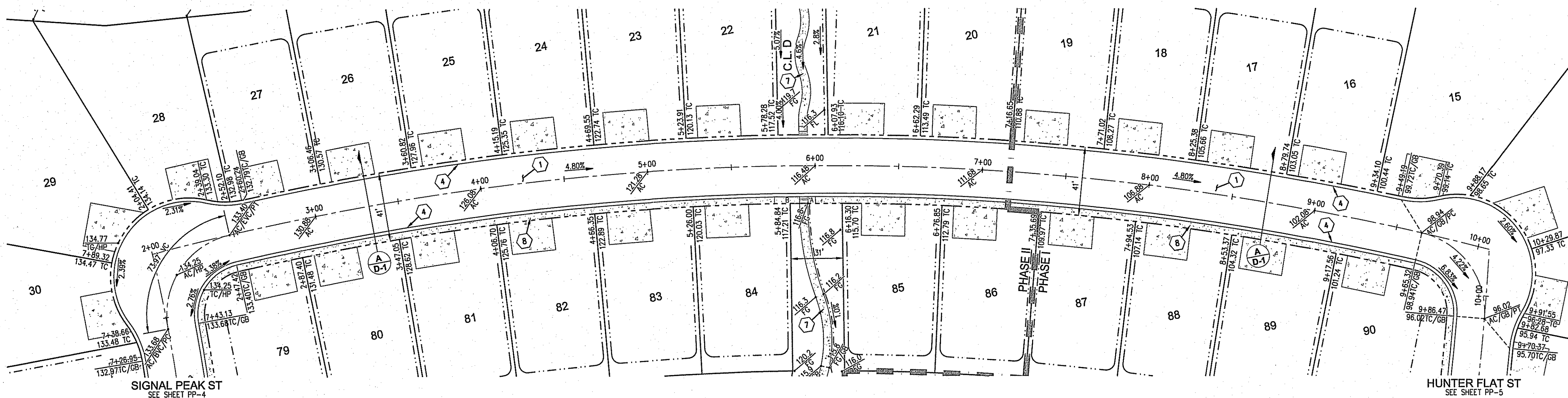
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SHEET 11 OF 19

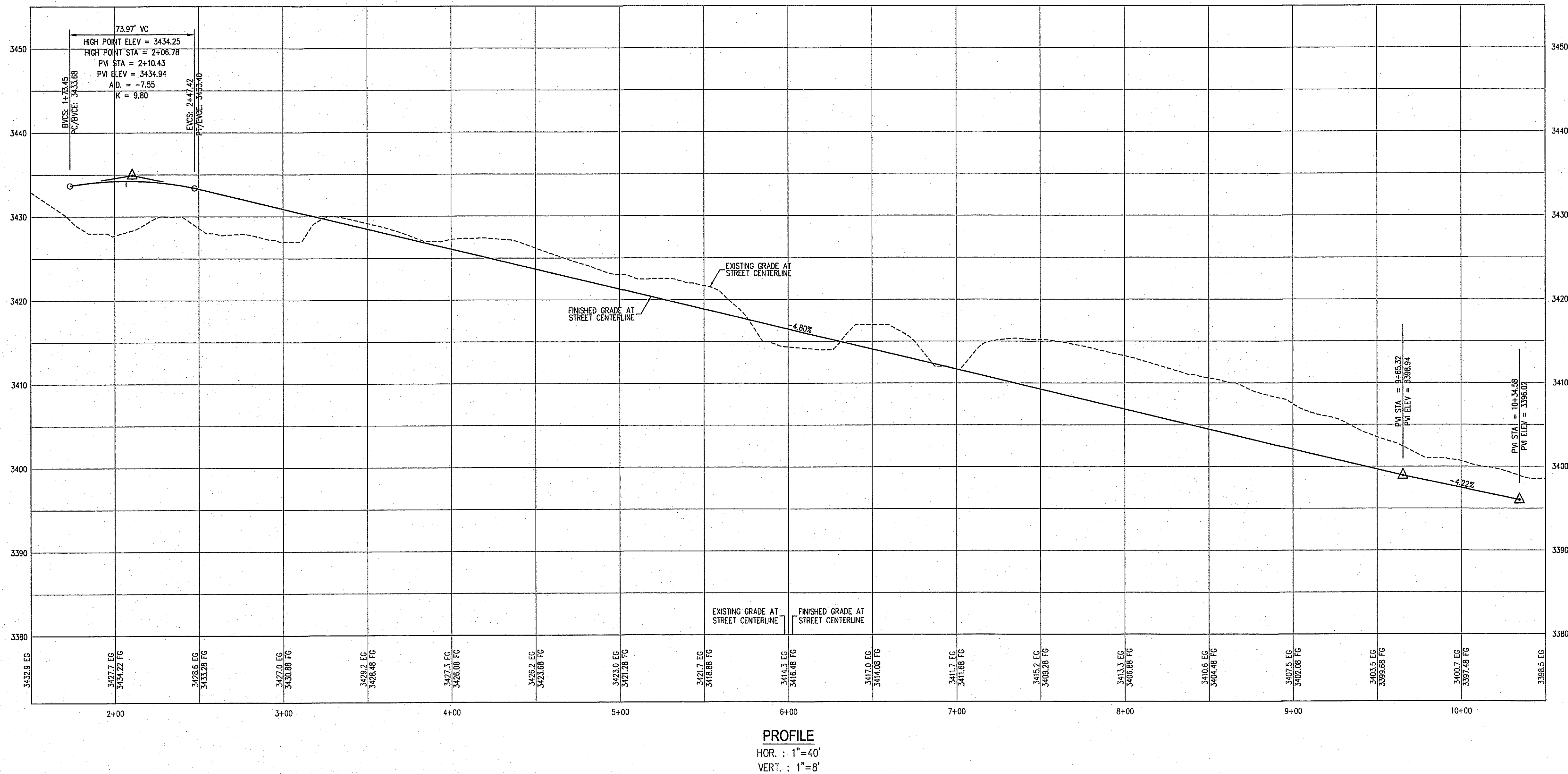
DS4546

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O

GRADING SECTIONS AND DETAILS I



- GRADING NOTES**
- CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
 - CONSTRUCT 3" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
 - SAWCUT AND MATCH EXISTING IMPROVEMENTS
 - CONSTRUCT 1" TYPE CURB AND GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-47
 - CONSTRUCT SIDEWALK DRAIN PER CCAUSD NO. 236
 - CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-64
 - CONSTRUCT 5' WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 - CONSTRUCT 4' WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 - CONSTRUCT SIDEWALK RAMPS PER SUMMERLIN IMPROVEMENT STANDARDS S-75
 - SEE DETAIL 38 ON SHEET D-2 FOR GRADING AND SECTIONS IN THIS AREA
 - FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER
 - CONSTRUCT 4" TRANSITION TO DEPRESSED CURB PER CCAUSD NO. 223
 - INSTALL 24" C-900 PVC STORM DRAIN
 - INSTALL 60" TYPE III STORM DRAIN MANHOLE
 - INSTALL 15.0' TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
 - INSTALL 20.0' TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
 - REMOVE EXISTING STORM DRAIN BEYOND PROPOSED DROP INLET
 - CONSTRUCT A-CURB PER SUMMERLIN IMPROVEMENT STANDARDS S-49
 - PRIVATE DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED
- SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES



Call before you Dig
Avoid hitting underground utility lines. It's costly.

Call 811
1-800-227-2600
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-6000

Call before you do UnderGround
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS
1-702-432-5300
FREEMAN AND METAL SYSTEM OF TRANSPORTATION

Call before you dig OVERHEAD
Avoid hitting overhead power lines. It's costly.

Call before you dig OVERHEAD
1-702-227-2929

SUMMERLIN

SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE DATE

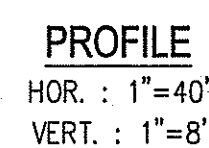
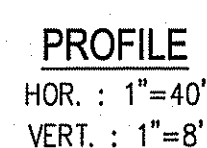
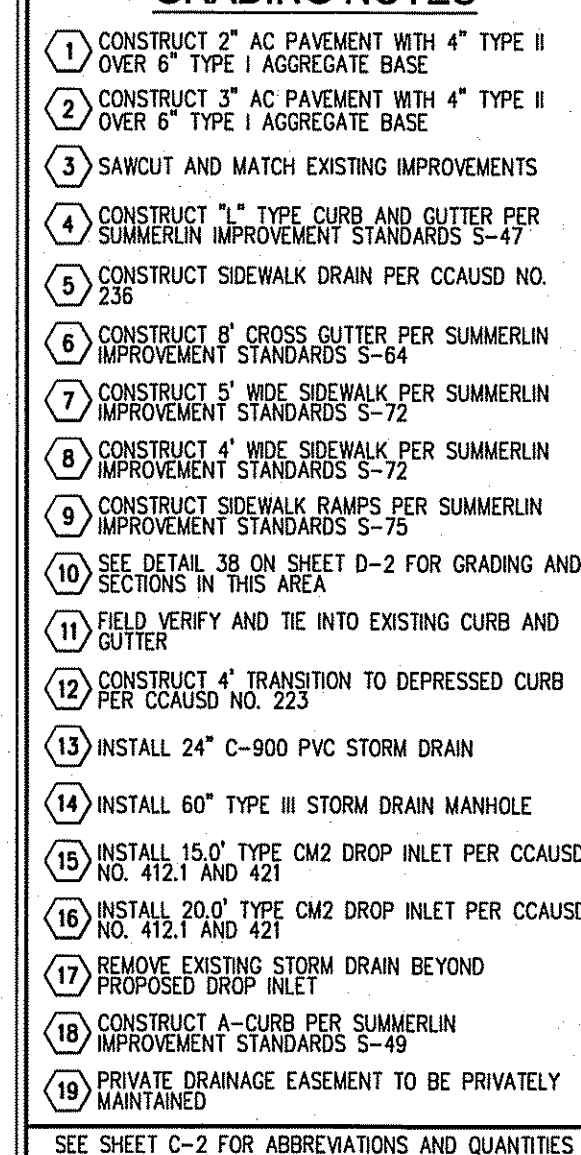
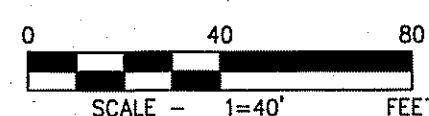
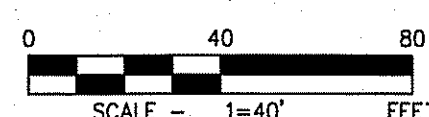
THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN CRITERIA. NEITHER SUMMERLIN NOR THE SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLAN CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.

BENCHMARK

FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION 787+19.42 OF CHARLESTON BLVD, OLVD09-3455E6
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

BASIS OF BEARING

NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, N.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.



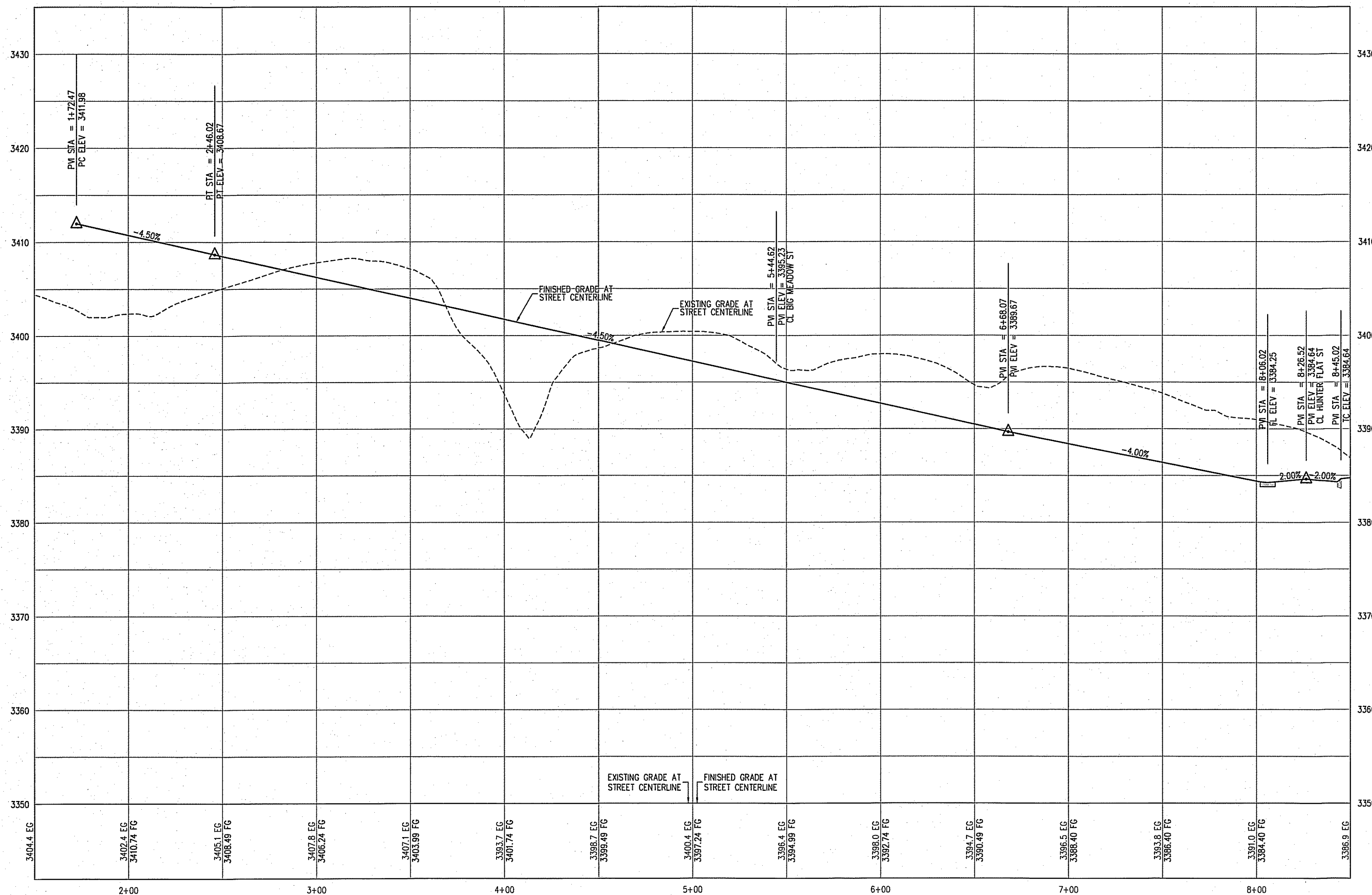
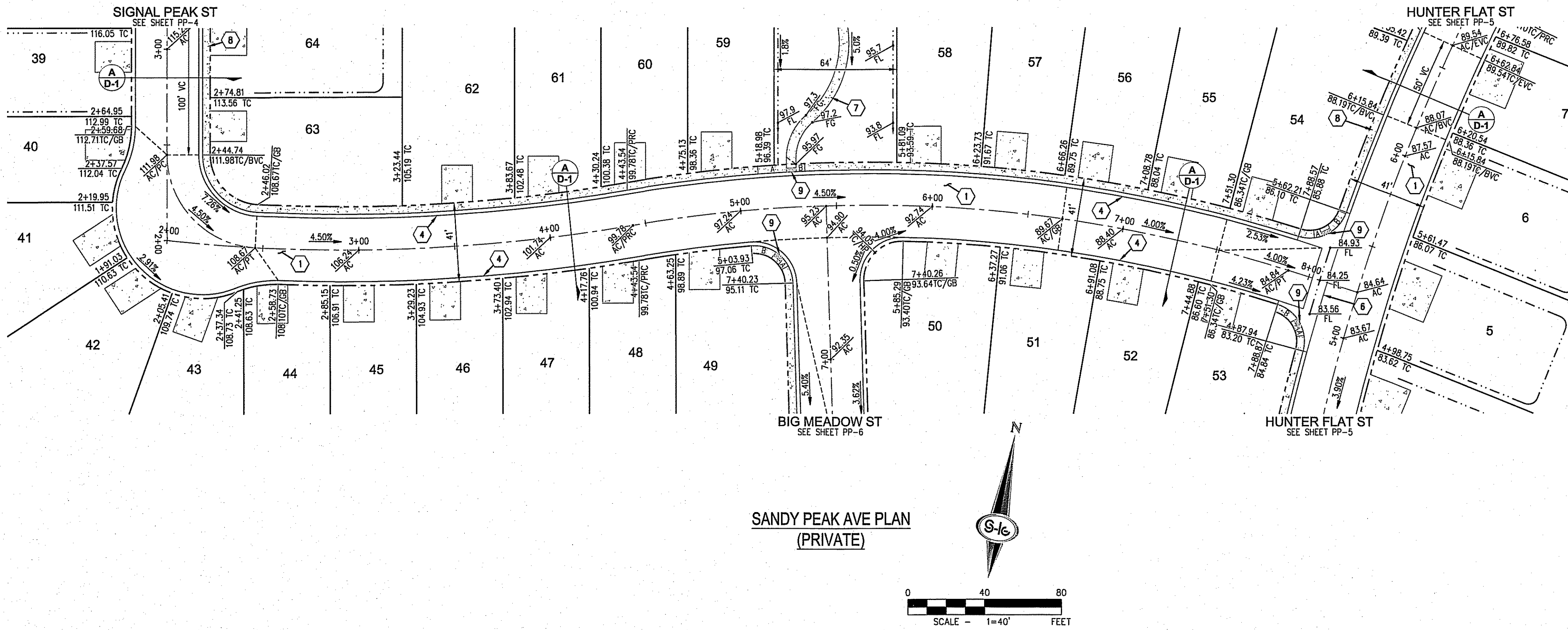
AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.

CALL BEFORE
YOU DO
OVERHEAD

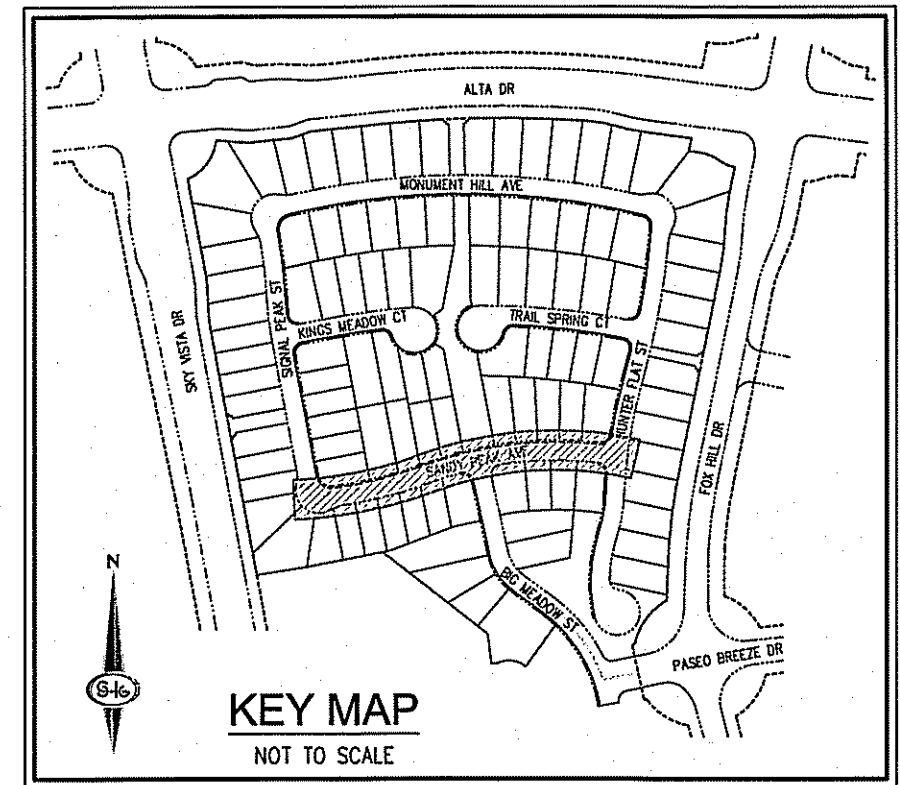
1-702-227-2929

BASIS OF BEARING
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE. NEVADA.

5/31/2012 10:29 AM Don Pail



PROFILE
HOR. : 1"=40'
VERT. : 1"=8'



GRADING NOTES

1. CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
2. CONSTRUCT 3" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
3. SAWCUT AND MATCH EXISTING IMPROVEMENTS
4. CONSTRUCT "L" TYPE CURB AND GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-47
5. CONSTRUCT SIDEWALK DRAIN PER CCAUSD NO. 236
6. CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-64
7. CONSTRUCT 5' WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
8. CONSTRUCT 4' WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
9. CONSTRUCT SIDEWALK RAMPS PER SUMMERLIN IMPROVEMENT STANDARDS S-75
10. SEE DETAIL 38 ON SHEET D-2 FOR GRADING AND SECTIONS IN THIS AREA
11. FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER
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14. INSTALL 60" TYPE III STORM DRAIN MANHOLE
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16. INSTALL 20.0" TYPE CM2 DROP INLET PER CCAUSD NO. 412.1 AND 421
17. REMOVE EXISTING STORM DRAIN BEYOND PROPOSED DROP INLET
18. CONSTRUCT A-CURB PER SUMMERLIN IMPROVEMENT STANDARDS S-49
19. PRIVATE DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED

SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES

Call before you Dig
Avoid hitting underground utility lines. It's costly.

Call
811
1-800-227-2600
OR
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-6000

Call before you do UnderGround
Avoid hitting underground traffic signal systems and street light system conduits. It's costly.

Call before you do UnderGround
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OR
CLARK COUNTY TRAFFIC OPERATIONS
1-702-432-5300
FREWAY AND MATERIAL SYSTEM OF TRANSPORTATION

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1-702-227-2929

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BENCHMARK
FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION
787+19.42 OF CHARLESTON BLVD, DLV09-345566
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

BASIS OF BEARING
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

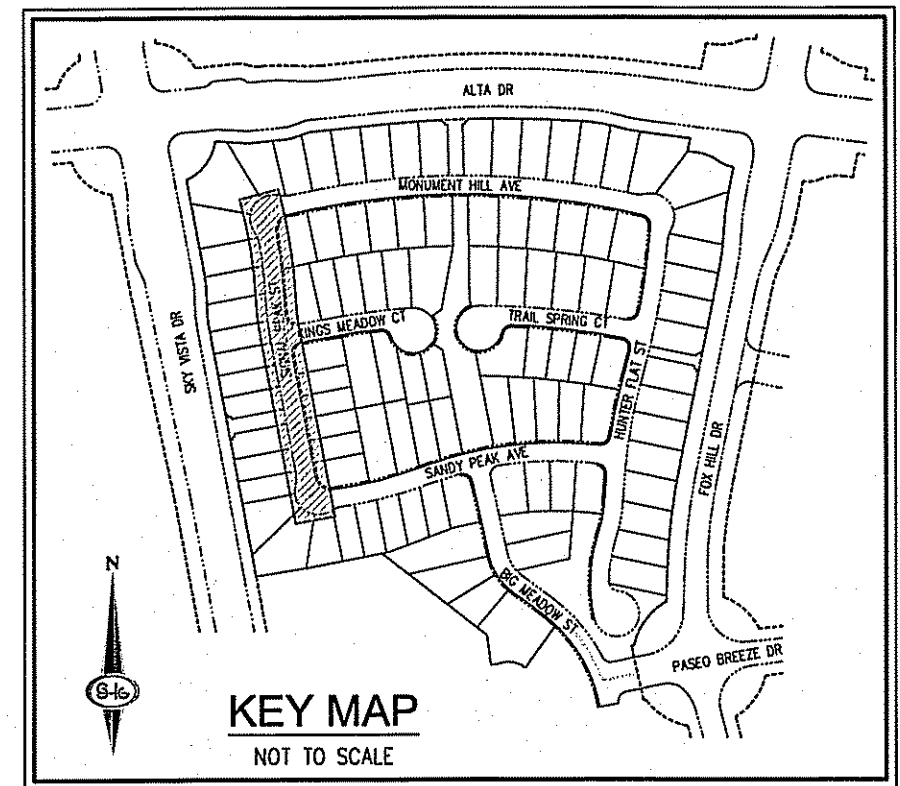
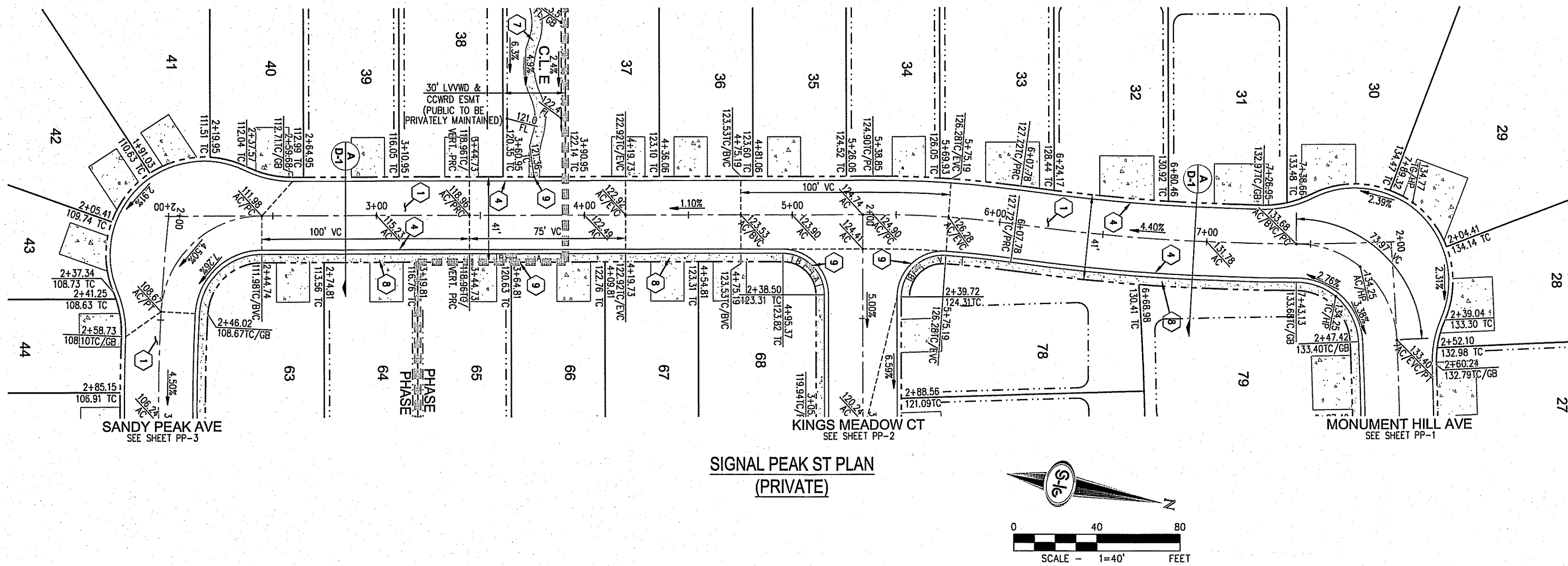
SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

Woodside Homes
BETTER BY DESIGN
SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
SANDY PEAK AVE - PLAN AND PROFILE

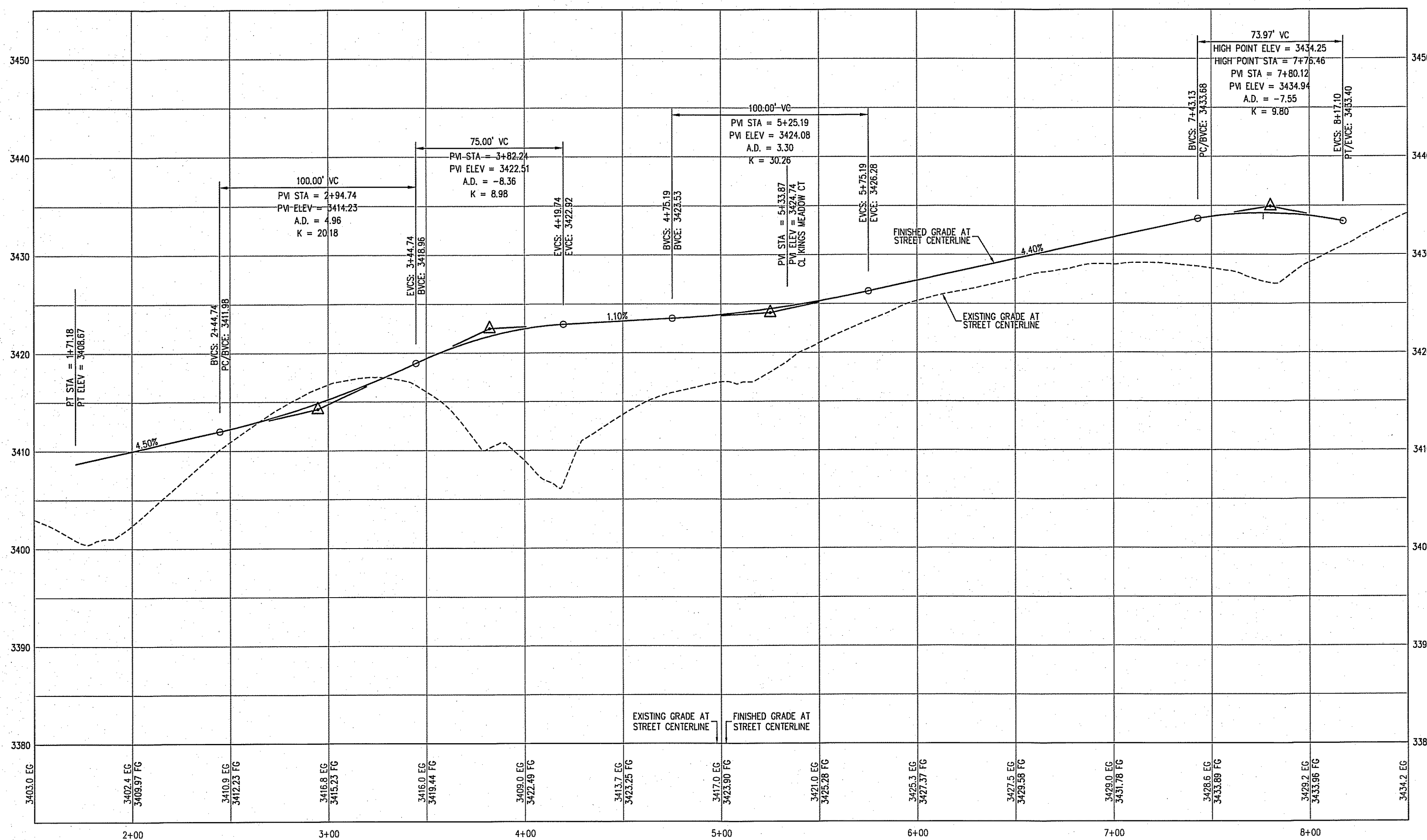
DATE: 5/31/12
DRAFTER: DSP
DESIGNER: DSP
CHECKED: CAL
PROJECT NO. WSH1105-000

REGISTERED PROFESSIONAL ENGINEER
CORRY A. LIEBER
Exp. 12/31/2013
CIVIL
CLARK COUNTY No. 151575

PP-3
SHEET 15 OF 19
DS4546



- ### GRADING NOTES
- CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
 - CONSTRUCT 3" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
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 - CONSTRUCT 1" TYPE CURB AND GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-47
 - CONSTRUCT SIDEWALK DRAIN PER CCAUSD NO. 235
 - CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-64
 - CONSTRUCT 5" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 - CONSTRUCT 4" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
 - CONSTRUCT SIDEWALK RAMP PER SUMMERLIN IMPROVEMENT STANDARDS S-75
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 - CONSTRUCT A-CURB PER SUMMERLIN IMPROVEMENT STANDARDS S-49
 - PRIVATE DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED
- SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES



PROFILE
HOR. : 1"=40'
VERT. : 1"=8'

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Call 811
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CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-6000

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.

Call before you do UnderGround
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS
1-702-432-5300
FREEWAY AND METEOR SYSTEM OF TRANSPORTATION

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

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BENCHMARK

FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION
787+19.42 OF CHARLESTON BLVD, OLVO9-34556
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

BASIS OF BEARING

NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

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CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5390

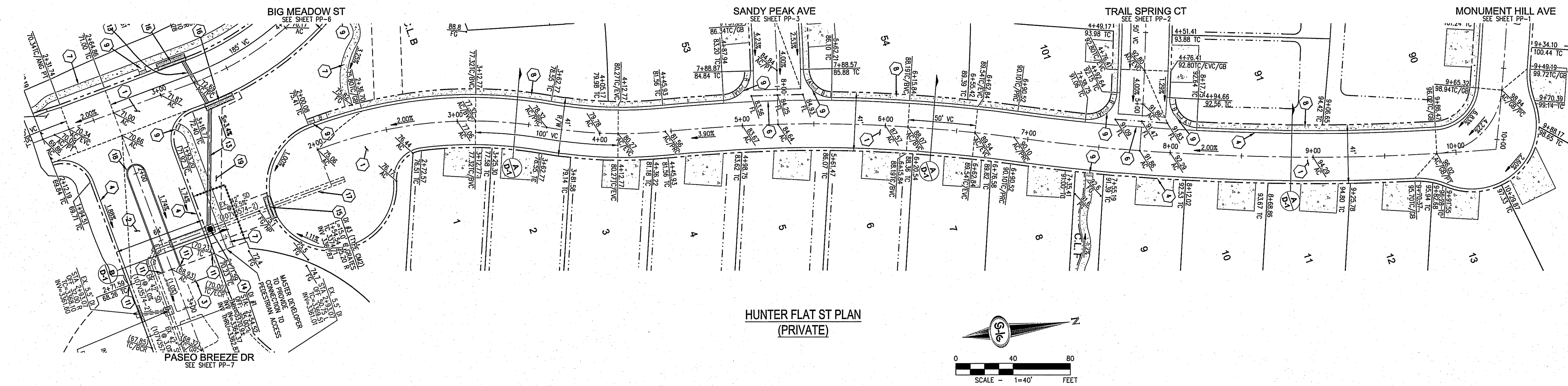
Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
MOUNT HOLLY ST - PLAN AND PROFILE

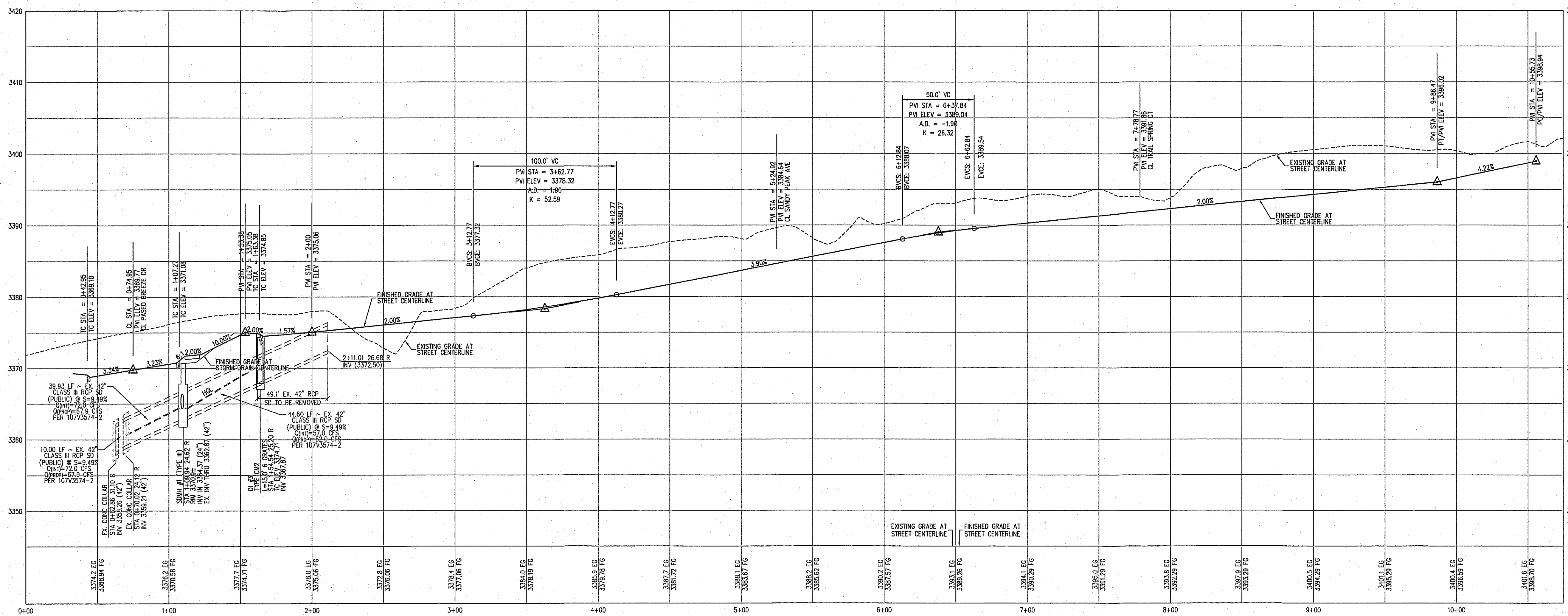
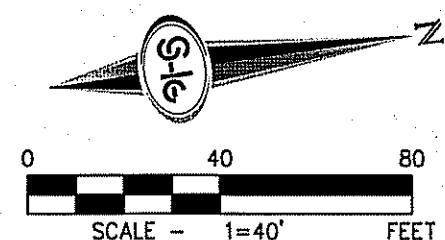
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DRAFTER: DSP
DESIGNER: DSP
CHECKED: CAL
PROJECT NO. **WSH1105-000**

PP-4
SHEET 16 OF 19
DS4546

\\slater\105-000-023\p02.dwg 5/31/2012 10:29 AM Dan Pelt



HUNTER FLAT ST PLAN
(PRIVATE)

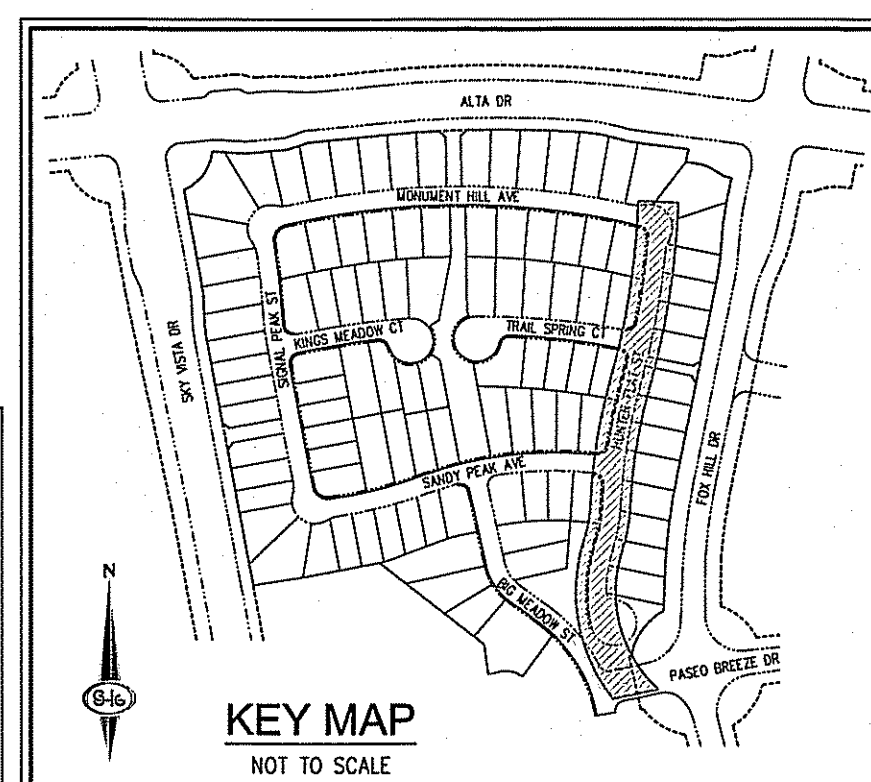


PROFILE
HOR. : 1"=40'
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GRADING NOTES

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6. CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-54
7. CONSTRUCT 5" WIDE SIDEWALK PER SUMMERLIN IMPROVEMENT STANDARDS S-72
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9. CONSTRUCT SIDEWALK RAMPS PER SUMMERLIN IMPROVEMENT STANDARDS S-75
10. SEE DETAIL 38 ON SHEET D-2 FOR GRADING AND SECTIONS IN THIS AREA
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SEE SHEET C-2 FOR ABBREVIATIONS AND QUANTITIES



KEY MAP
NOT TO SCALE

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OR
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1-702-455-6000

Call before you do Underground
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CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-6000
FREWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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1-702-227-2929

NO.	DESCRIPTION	DATE	BY	APP.

LAS VEGAS, NV

Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
YANKEE MEADOW ST - PLAN AND PROFILE

DATE: 5/31/12

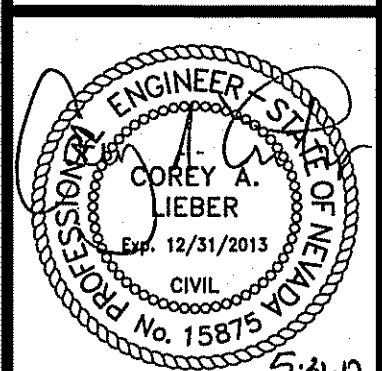
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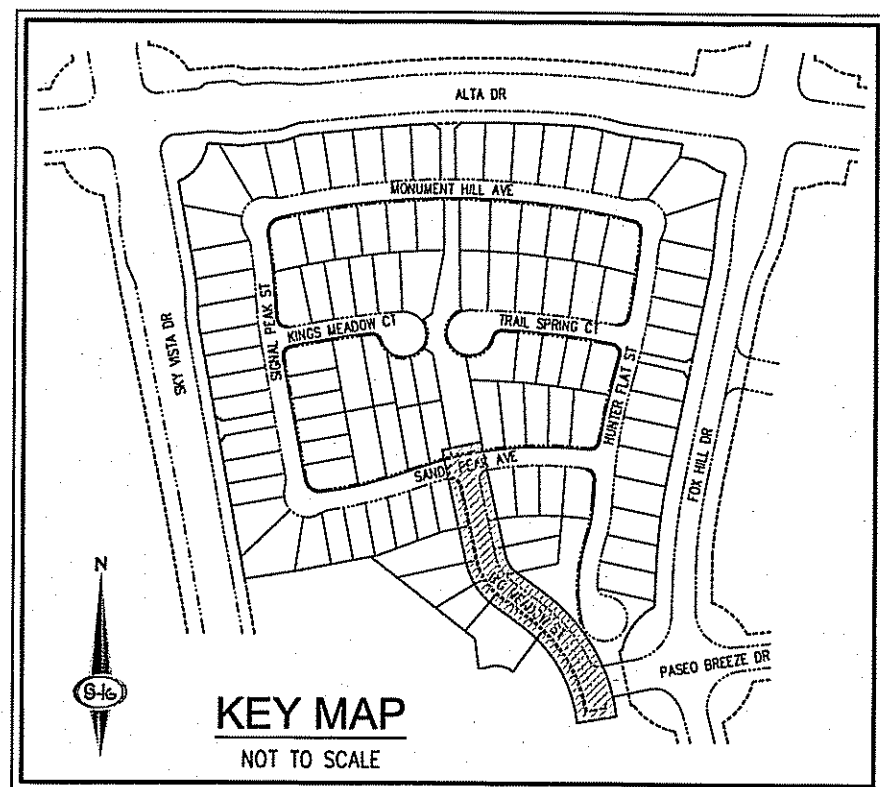
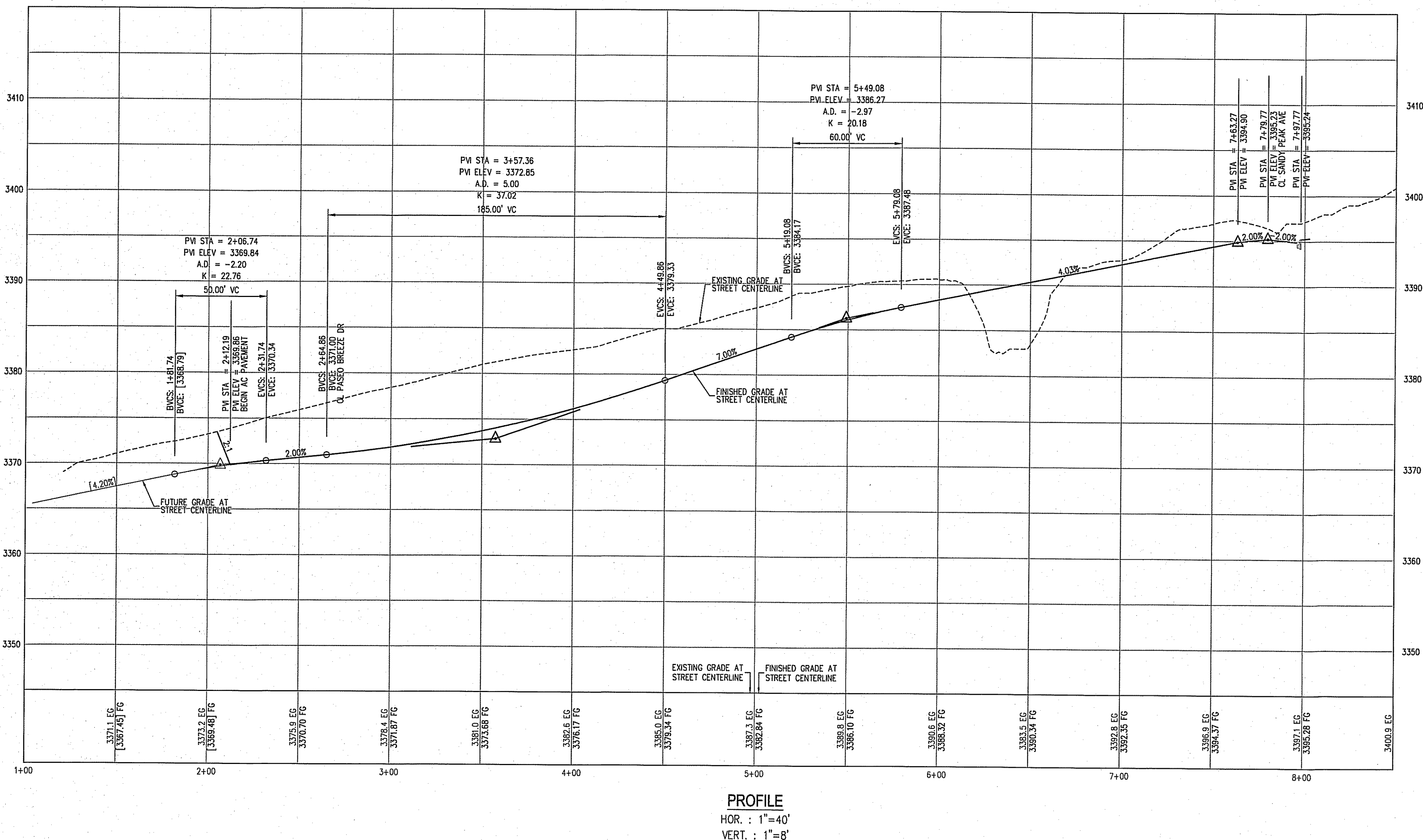
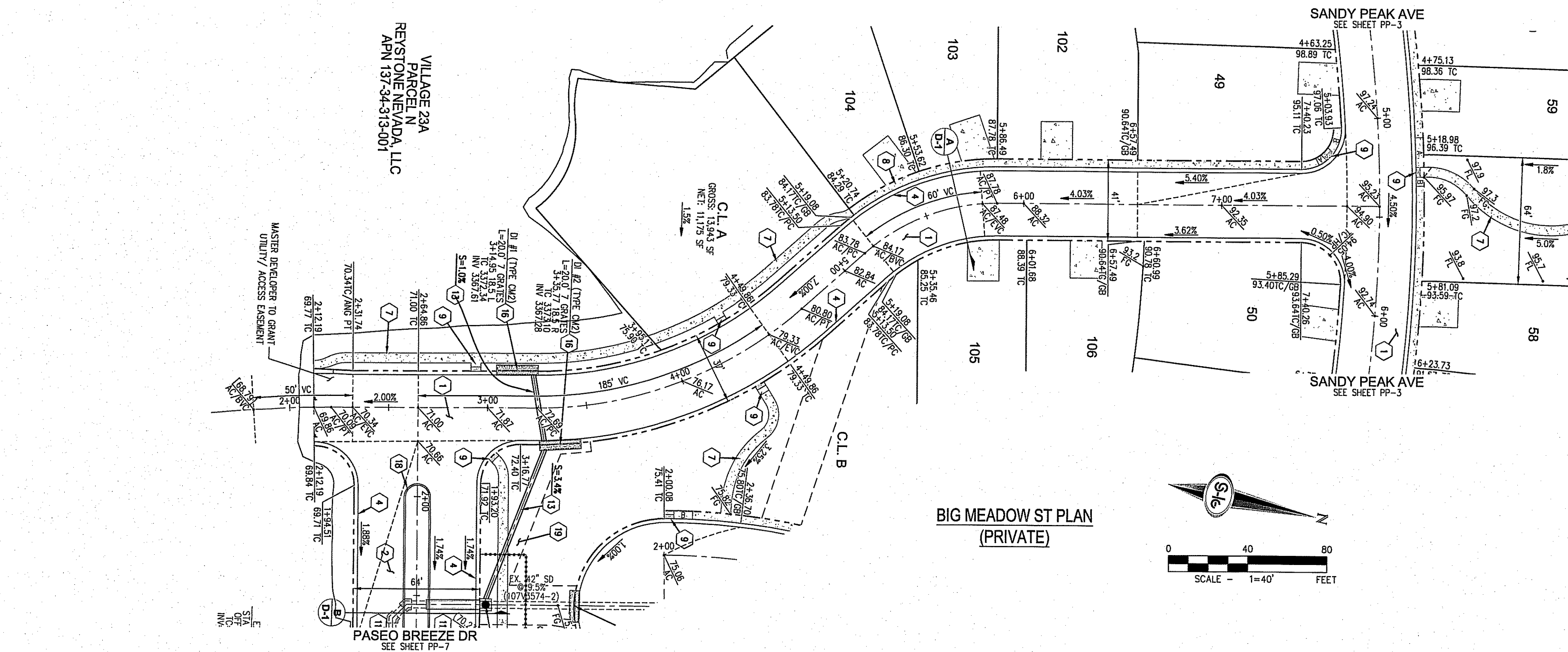
CHECKED: CAL

PROJECT NO.

WSH1105-000



PP-5
SHEET 17 OF 19
DS4546



- GRADING NOTES**
1. CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
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 6. CONSTRUCT 8" CROSS GUTTER PER SUMMERLIN IMPROVEMENT STANDARDS S-64
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CLARK COUNTY TRAFFIC OPERATIONS
1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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BENCHMARK

FOUND N00T BRASS CAP, 50 FEET NORTH OF STATION
787418.42 OF CHARLESTON BLVD, 01V09-345506
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

BASIS OF BEARING

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SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

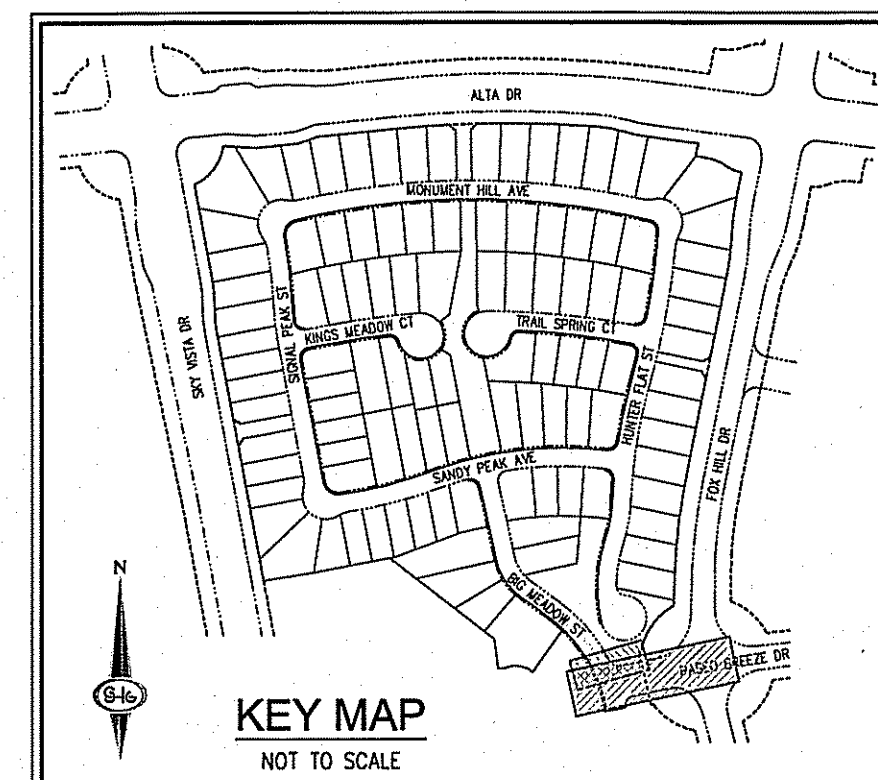
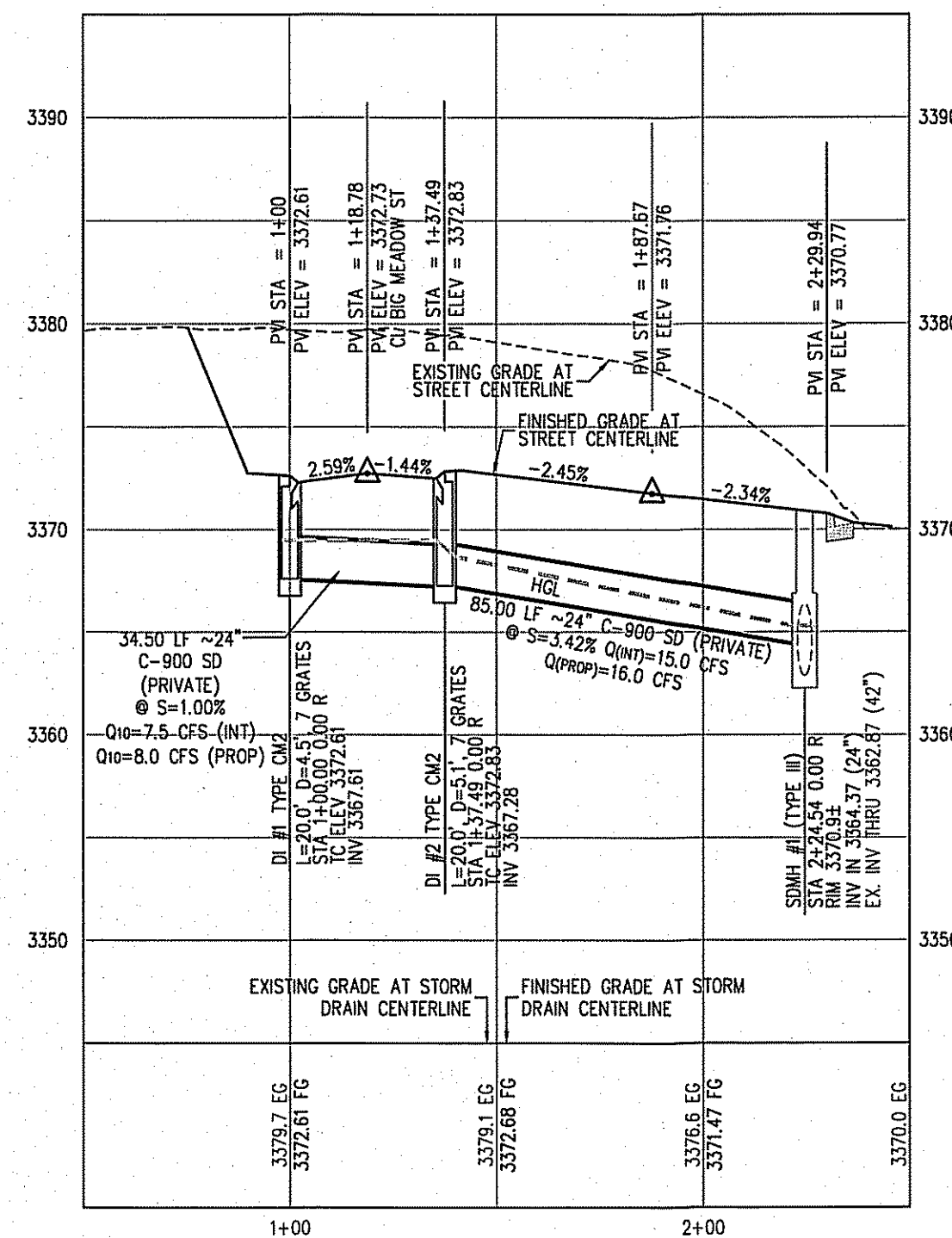
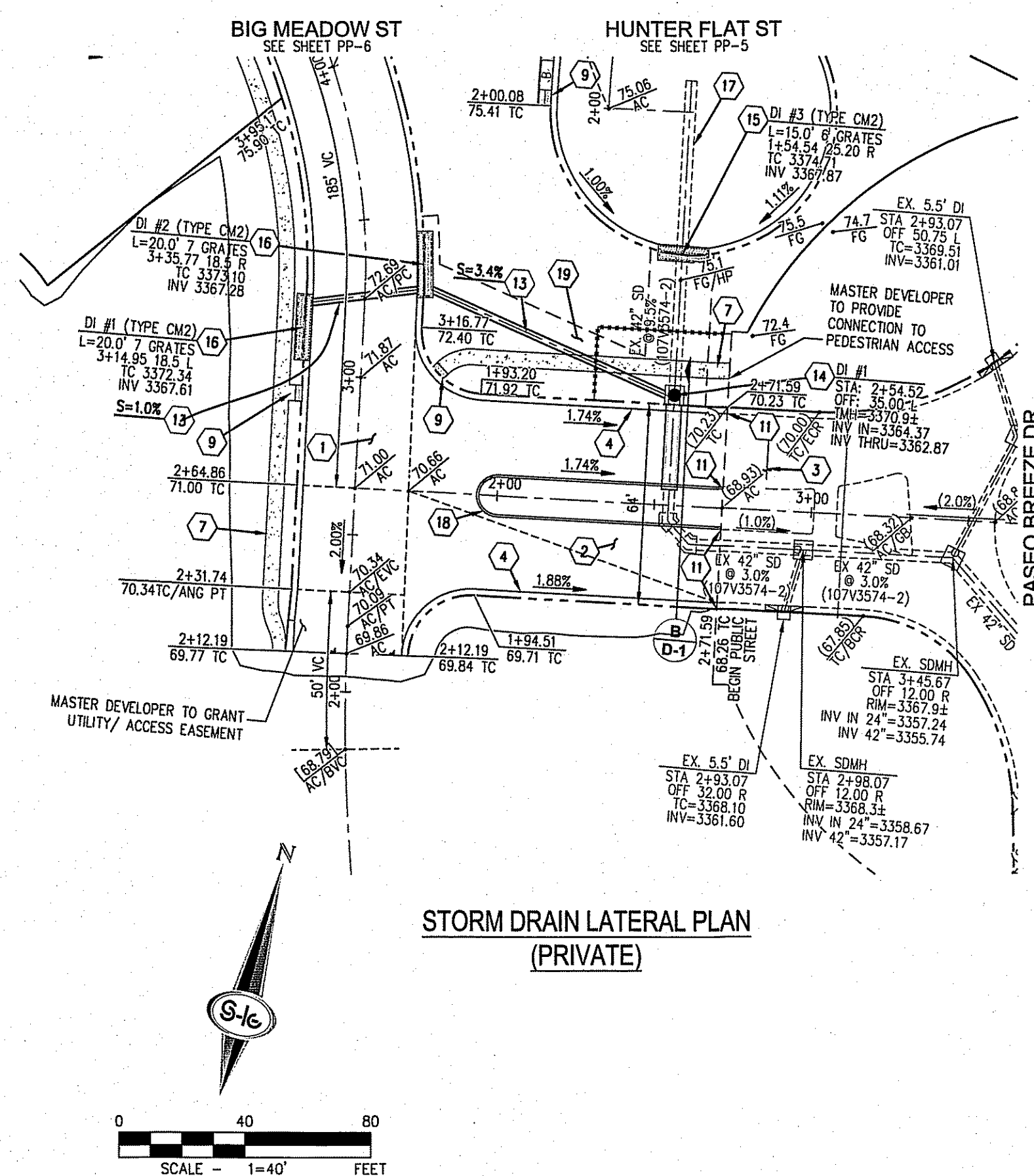
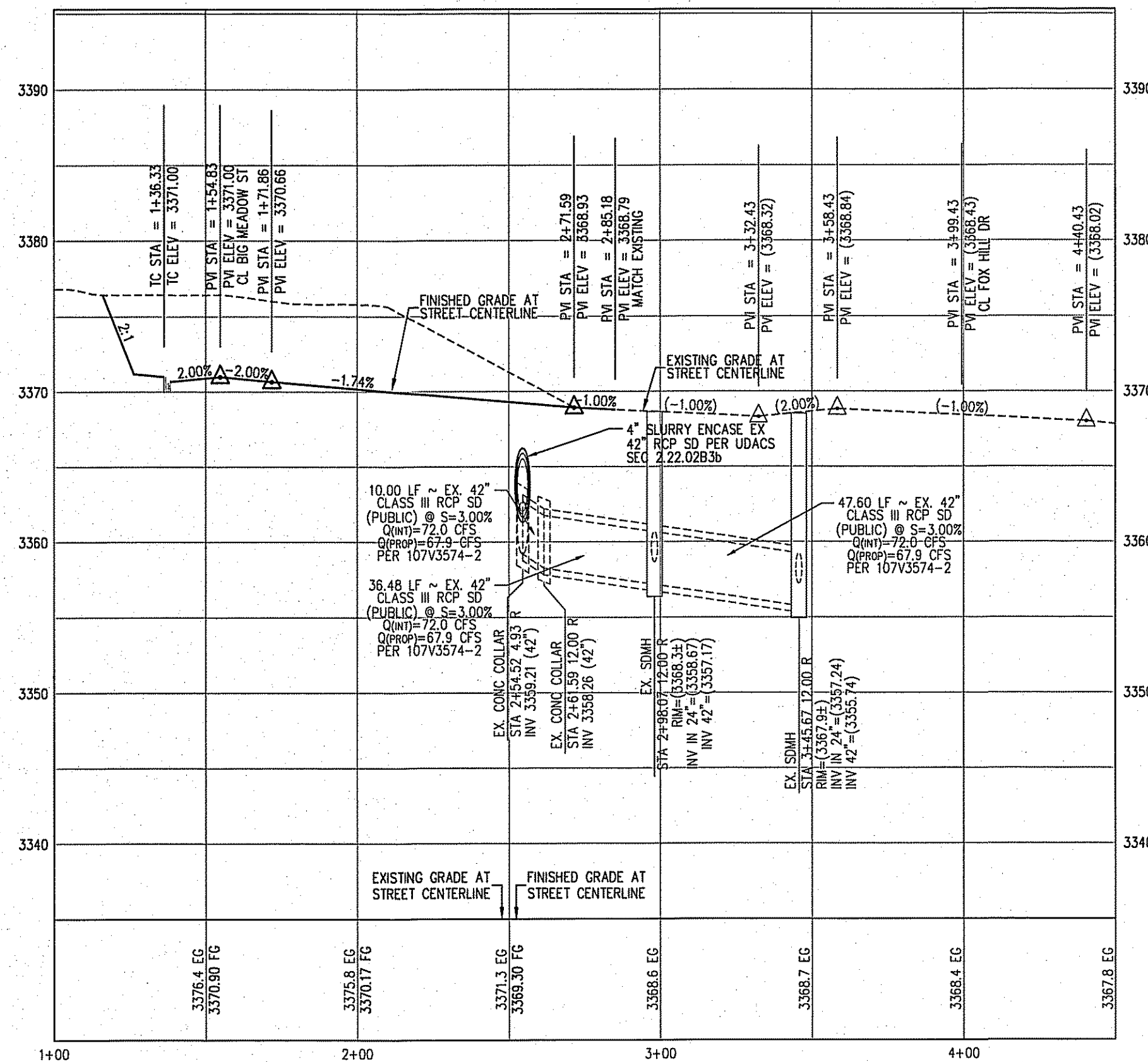
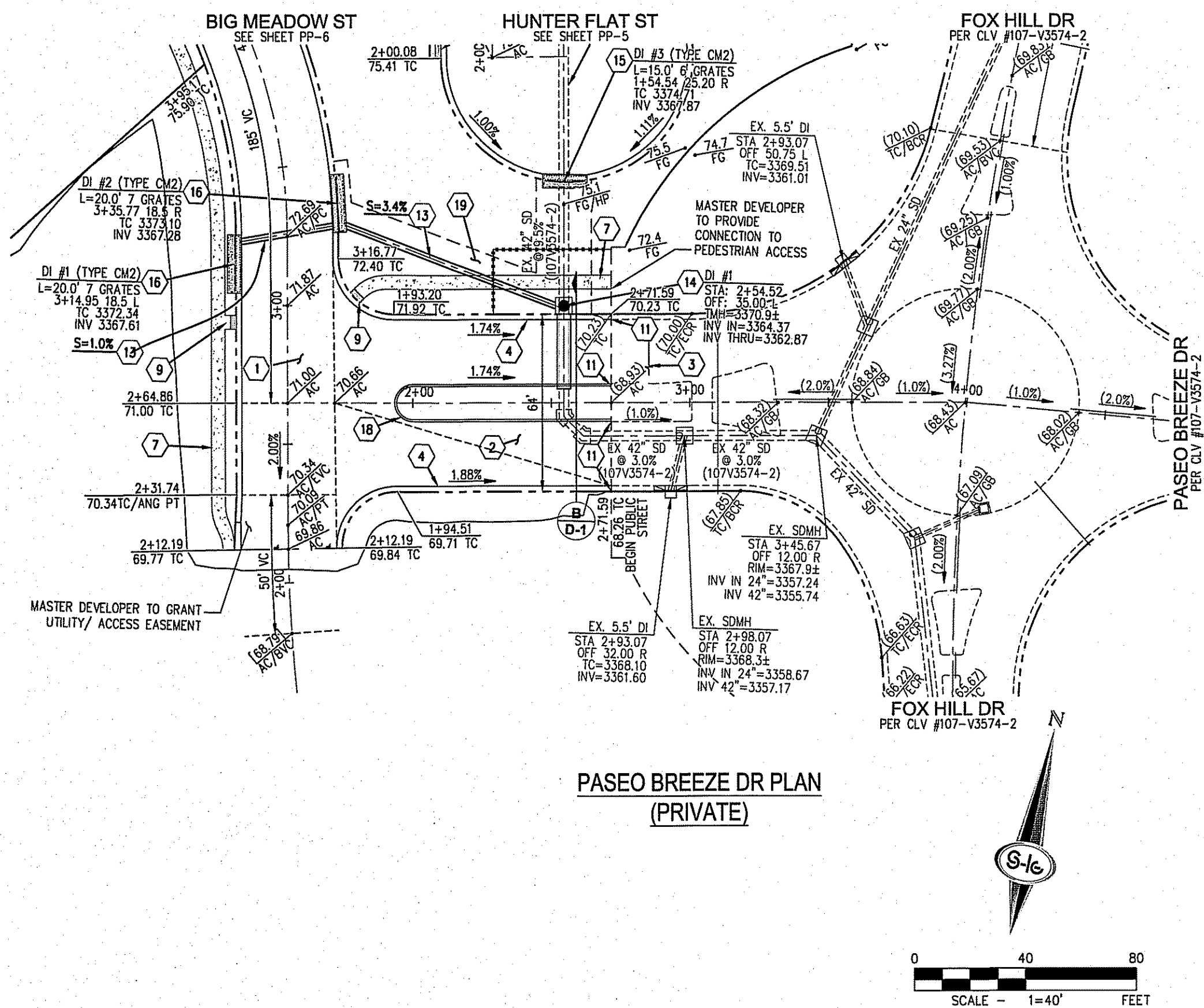
Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
BIG MEADOW ST - PLAN AND PROFILE

DATE: 5/31/12
DRAFTER: DSP
DESIGNER: DSP
CHECKED: CAL
PROJECT NO. **WSH1105-000**

PP-6
SHEET 18 OF 19
DS4546

5/31/12



- GRADING NOTES**
1. CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
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FREIGHTWAY AND METEOROLOGICAL SYSTEMS OF TRANSPORTATION

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BENCHMARK
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NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

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5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

Woodside Homes
BETTER BY DESIGN

SUMMERLIN VILLAGE 23A, UNIT NO. 2, PARCEL O
PASEO BREEZE DR - PLAN AND PROFILE
STORM DRAIN LATERAL - PLAN AND PROFILE

DATE: 5/31/12
DRAFTER: DSP
DESIGNER: DSP
CHECKED: CAL
PROJECT NO. WSH1105-000

PP-7
SHEET 19 OF 19
DS4546