

DS #: 4557

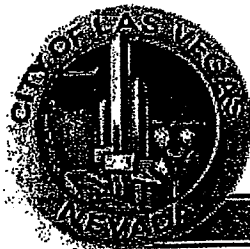
APN: 137-34-313-001

PROJECT: Catalina - Summerlin V23/t Parcel 10

SUBMITTAL: 2nd

SCANNED BY/DATE: _____

CHECKED BY/DATE: _____





CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		August 2, 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:
	Catalina – Summerlin V23A Parcel N	Slater Hanifan Group
Cross Streets:	West of Fox Hill Drive & Paseo Breeze Drive	Greystone Nevada / Lennar Homes
File Number:	F:\Depot\DSMemos\DS4557B.doc	Bart Anderson, P.E., DevCo
Parcel Number:	137-34-313-001	
Zoning Action:	TMP-45230	
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	5/31/2012	6/11/2012	Not Approved	\$400.00	285166: \$400
2 nd Submittal	7/17/2012 & 8/2/2012	8/2/2012	See Comments Below	\$400.00	289869: \$400
			TOTAL FEES (LDDRS):	\$800.00	----

REMARKS:

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:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. The developer/engineer proposed rough grading in the future *Phase 2* area. Consult with *City of Las Vegas Planning Department* for approval of the proposed rough grading prior to the final approval of the improvement plans.
2. **Sheet G-2 (Phase 1):** A proposed drainage easement must be expanded from the drop inlet to the *Fox Hill Drive* right-of-way line.
3. The subject drainage study addresses *Interim improvements (Phase 1)* as well as the *Final improvements (Phase 1 and Phase 2)*. However, if *Phase 2 Improvements* commence more than one year after the final approval of this study, a drainage study update will be required to address the future *Phase 2 Improvements*.

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

Albert Sung

From: Linda Hartman-Maynard
Sent: Tuesday, July 17, 2012 9:13 AM
To: Steve Jones
Cc: Albert Sung
Subject: FW: Attached Image
Attachments: 4675_001.pdf

Steve,

Please see the attached approval for the two-foot grade difference at Catalina, Phase 1 & 2.

Also, Planning does not have an issue with the shared wall between the subdivisions. Is it an issue with Summerlin?

Thank you,

Linda Hartman-Maynard

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

From: MFD-155@LasVegasNevada.gov [<mailto:MFD-155@LasVegasNevada.gov>]
Sent: Tuesday, July 17, 2012 8:57 AM
To: Linda Hartman-Maynard
Subject: Attached Image



LEN1202.000

June 18, 2012

Mrs. Linda Hartman-Maynard
City of Las Vegas Development Services Center
Current Planning Division
333 N. Rancho Dr. 2nd Floor
Las Vegas, NV 89106

Subject: Summerlin Village 23A – Parcel "N" AKA Catalina
Perimeter Grade Difference Request

Mrs. Hartman-Maynard:

On behalf of our client, Lennar Homes (LH), this letter describes the justification for allowing LH to design the site along the perimeter of the development to have proposed grades greater than 2-feet higher or lower than existing grade. This information is provided as requested in Comment #2 of the review of the Technical Drainage Study for this site completed by Albert Sung on June 11, 2012.

There is a large vertical difference from the high side of the parcel the low side as it falls at over 5% across the site. As a condition of the purchase of the property from The Howard Hughes Company, LH is required to design their perimeter wall to be in compliance with The Paseos – A Summerlin Village Residential Design Criteria and the proposed adjacent perimeter street designs for Sky Vista Dr., Alta Dr. and Fox Hill Dr. These designs are, in several areas, greater than 2-feet higher or lower than the existing grade. However, Summerlin as a master planned community is designing the entire area with the best interest of each parcel in mind and will require each parcel to be in compliance with their design criteria.

We appreciate your assistance with this matter, if you need more information or have any questions, do not hesitate to contact me at 702-284-5300.

Very truly yours,

SLATER HANIFAN GROUP, INC.

S. Tracy Stratton
Project Manager

CC: Chelsea Peltier, SHG

CATALINA PH 1 & 2
APPROVED
2' KO ONLY / GRADE DIFFERENCE
NO SITE CHANGES APPROVED PER THIS
BY CDM 7.12.12
CURRENT PLANNING DIVISION
CITY OF LAS VEGAS

TRANSMITTAL

To: Albert Sung, P.E.

Date: July 17, 2012

City of Las Vegas

Project No.: LEN1202.000

333 N. Rancho Drive

Las Vegas, NV 89106

From: Steve Jones, P.E.

Subject: Technical Drainage Study for Catalina

CC: Tracy Stratton, SHG

CC: _____

CC: Chelsea Peltier, SHG

CC: _____

CC: Mark Failla, 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>Addendum No. 1 to the Subject Study</u>
<u>1</u>	<u>Revised Grading Plan and Detail Sheets (bound in back)</u>
<u>1</u>	<u>Stamped and Signed Standard Form 1 (bound in front)</u>
<u>1</u>	<u>\$400 Submittal Fee (Greystone Nevada, LLC Check #326204)</u>
<u>1</u>	<u>CD containing PDF of submittal documents</u>

Comments:

Enclosed please find the above listed items in response to the comments issued on June 11, 2012 regarding the *Technical Drainage Study for Catalina* which is a residential subdivision on Parcel N within Summerlin Village 23A.

Please contact us if there are any questions at 702-284-5300. Thanks.

Signed: _____

Steve Jones, P.E.
Assistant Project Manager – Flood Control Division

TECHNICAL DRAINAGE STUDY
ADDENDUM NO. 1

Catalina

City of Las Vegas, Nevada

Job No.: LEN1202.000

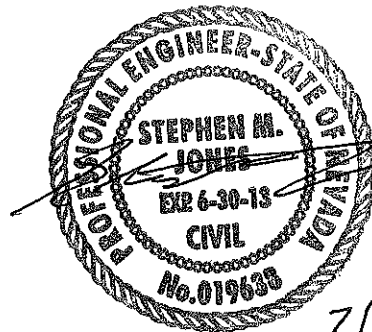
Date: July 2012

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:

Lennar Homes
2490 Paseo Verde Parkway, Suite 120
Henderson, NV 89014
Phone: 702-736-9100 • Fax: 702-736-9200



7/17/2012

Steve Jones, P.E.
NV Professional Engineer No. 19638

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Catalina – Addendum No. 1 Date: July 2012
 Location of Development: a) Descriptive (Cross Streets): North/South: Fox Hill Drive
East/West: Paseo Breeze Drive
 b) Section: 34 Township: 20 South Range: 59 East
 c) APN: 137-34-313-001

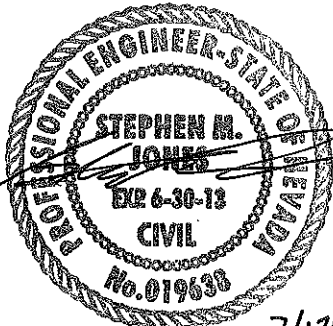
Name of Owner/Developer: Greystone Nevada, LLC / Lennar Homes
 Telephone No.: 702-736-9100 Fax No.: 702-736-9200 E-mail Address: Robert.Johnson@Lennar.com
 Address: 2490 Paseo Verde Parkway, Suite 120; Henderson, NV 89074

Contact Person – Name: Steve Jones, P.E. Telephone No.: 702-284-5300
 *E-mail Address: sjones@shg-inc.com Fax No.: 702-284-5399
 Firm: Slater Hanifan Group
 Address: 5740 S. Arville Street, Suite 216; Las Vegas, NV 89118

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	

- Total Owned Land Area: At Site: 16.5 Acres +/- Being Developed/Disturbed: All
- Is a portion or all of the subject property located in a FEMA Flood Hazard Area? ☐ Yes** ☒ No
- Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? ☐ Yes** ☒ No
- Proposed type of development (Residential, Commercial, Etc.): Single-Family Residential
- Approximate upstream land area which drains to the subject site: 0 Acres
- Has the site drainage been evaluated in the past? ☒ Yes** ☐ No If yes, please identify documentation:
Conceptual Drainage Study for Summerlin Village 23A, by G.C. Wallace (DS3077);
Technical Drainage Study for Summerlin Village 23A Unit 1 Improvements, by G.C. Wallace (DS3126);
Update #2 to the Technical Drainage Study for Summerlin Village 23A Unit 2 Improvements, by G.C. Wallace (DS3402)
Technical Drainage Study for Esperanza, by Slater Hanifan Group
- If known, please briefly identify the proposed discharge point(s) of runoff from the site: Existing Storm Drain in Fox Hill Drive
- Briefly describe your proposed schedule for the subject project: 2 Phases;
Both Phase 1 & Phase 2 technically addressed by this study.



Engineer's Seal

7/17/2012

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

Revision	Date

Local Entity File No. _____

REFERENCE: SHG Job LEN1202.000

STANDARD FORM 1

Updated 05/01/2008

LEN1202.000

July 17, 2012

Albert Sung, P.E.
City of Las Vegas Department of Public Works
333 N. Rancho Drive
Las Vegas, Nevada 89106

**Subject: Addendum No. 1 to the Technical Drainage Study for Catalina
(CLV # DS4557)**

Dear Mr. Sung:

The following are responses to comments contained in the June 11, 2012 review memorandum, regarding the above referenced project. A copy of the City of Las Vegas (CLV) comment letter has been provided in Appendix A of this submittal. The comments have been individually addressed as follows:

1. **Comment:** *Provide a copy of the zoning/planning conditions associated with this site (TMP-45230) with the next submittal to verify compliance with conditions. Flood Control will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the City Council). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted;*

Response: The associated planning conditions of approval have been included in Appendix B. Note that no conditions affect the site drainage as presented in the previous submittal.

2. **Comment:** *Sites with a grade difference of 2 feet above or below existing are required to have approval from the City Planning and Development Department. The engineer must submit copies of the grading plans and detail sheet with a letter justifying the grade difference to the City Planning Department (229-6301). The engineer must provide Planning approval with the next submittal;*

Response: The 2-ft grade difference has been approved by the Planning Department, and has been included in Appendix B.

3. **Comment:** *The developer/engineer proposed rough grading in the future Phase 2 area. Consult with City of Las Vegas Planning Department for approval of the proposed rough grading prior to the final approval of the drainage study;*

Response: Acknowledged.

4. **Comment:** *It appears that the subject development is using an existing perimeter wall which is owned by the adjacent Parcel "O" development to the north. Consult and obtain approval from City Planning Department for whether this is allowed or not. Revise all pertinent grading plans and detail sheets accordingly if necessary;*

Response: The plans and Detail 1/D-1 have been revised to show that the existing perimeter wall is entirely on Parcel "O" property, per Parcel "O" plans (CLV #44992).

5. **Comment:** *By the same token, it appears that the subject development is placing its perimeter wall centering at the property line to the south, i.e. encroaching into the adjacent Parcel "M" (Esperanza). Consult with and obtain approval from City Planning Department for direction. Revise all pertinent grading plans and detail sheets accordingly if necessary;*

Response: Catalina utilizes an existing perimeter wall constructed by Esperanza at the center of the property line, per Detail 5/D-1. The perimeter wall has been placed at this location to satisfy "Summerlin – Paseos" development guidelines. After coordination with the Planning Department, utilization of the existing shared perimeter wall is considered acceptable. Email coordination with Ms. Maynard in the Planning Department has been included in Appendix B.

6. **Comment:** *Page 11 of the Study stated that at Station 116+74.98, the HGL does not remain 1-ft below the Fox Hill roadway grade. Is there any storm drain manhole at or close to the location? If yes, that storm drain manhole must be modified to be bolted down. Provide an additional construction sheet and a corresponding drainage update for the revision;*

Response: An existing manhole is located at Station 116+74.98 in Desert Sunrise Road. A detail has been added to Sheet P-1 of the Catalina Phase 1 improvements, directing the contractor to bolt down the associated manhole. The referenced Summerlin Village 23A Unit 1 Improvements profile sheet showing the manhole location and revised HGL less than 1-ft below the roadway grade has been provided in Appendix C.

Note that at Station 116+74.98, an existing lateral storm drain is extended into existing Parcel F. Upon inspection of the Parcel F storm drain profile, the 0.8-ft increase in HGL from previously approved in the storm drain at this location does not surcharge at the existing drop inlet and adversely impact the existing residential development. Refer to Appendix C for the assessment of the HGL increase.

7. **Comment:** *Sheet G-1 & G-2 (Phase 1):*
- *Per Section Detail 6/D-1, a swale is proposed adjacent to the screen/flood wall. Show the swale on plan with flow line elevations at regular intervals;*
 - *Provide dimension of a proposed riprap pad at the interface between Phase 1 and Phase 2 in Barranca Avenue and Estrella Street;*

Response:

- The grading plan has been revised accordingly.
- The grading plan has been revised accordingly.

8. **Comment:** *Sheet G-2 (Phase 1) – A proposed 10-ft drainage easement must be expanded from the drop inlet to the right-of-way line with the full street width. Review and revise accordingly;*

Response: A 39-ft wide public drainage easement has been proposed from the back of curb at the eastern terminus of Capistrano Avenue to the edge of property. Per the final map included in Appendix D, that dedicated Summerlin Village 23A Unit No. 2 including the infrastructure roadways, the common lot between Parcel N and the Fox Hill right-of-way has already been dedicated as a utility easement, allowing the construction of the proposed storm drain with rights to ingress and egress. Therefore, extension of the 39-ft drainage easement beyond the property line toward Fox Hill is unnecessary.

9. **Comment:** *Sheet D-1 (Phase 1) Detail 6 – Indicate that the depth in the proposed swale is 6-inch minimum;*

Response: The detail has been revised accordingly.

10. **Comment:** *Phase 2 Plans – Address whether Sky Vista Drive will be at least half street improved prior to the Phase 2 construction;*

Response: Upon installation of the Phase 2 improvements, it is assumed that the collector channel in the Sky Vista Drive alignment will remain in place. If Sky Vista Drive is improved as a half street when Phase 2 construction starts, a drainage study update will be processed for this project.

11. **Comment:** *Private streets must be public drainage easements. Provide a note on the grading plans "Note: All Private Streets are P.U., Public Sewer Easements and Public Drainage Easements to be privately maintained by the H.O.A.";*

Response: The appropriate note has been added to the plans.

12. **Comment:** *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;*

Response: The appropriate note has been added to the plans.

13. **Comment:** *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;*

Response: Refer to Sheet C-2 on the plans for the quantity estimate of all drainage improvements.

14. **Comment:** *The subject drainage study addresses Interim Improvements (Phase 1) as well as the Final Improvements (Phase 1 and Phase 2). However, if Phase 2 Improvements commence more than one year after the final approval of this study, a drainage study update will be required to address the future Phase 2 Improvements;*

Response: Acknowledged.

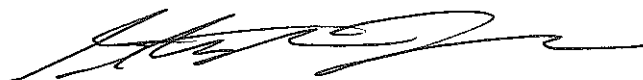
15. **Comment:** *Add a note on all pertinent sheets for the construction of all storm drain drop inlets per a newly adopted USDCCA Drawing No. 421 (Stormwater Quality Management Stamp and Sign Detail);*

Response: The callout has been added to the applicable construction notes where drop inlets are proposed.

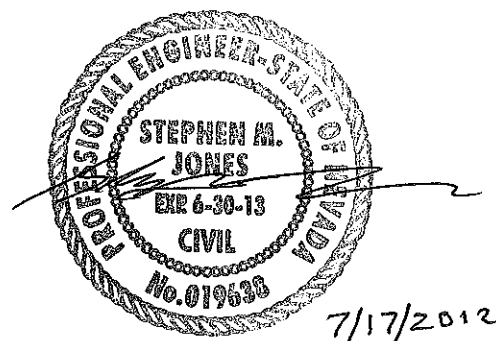
The grading plan, profile and detail sheets have been revised to address CLV comments have been included in Appendix E. If you have any questions or require additional information, please do not hesitate to contact us at 284-5300.

Respectfully Submitted,

SLATER HANIFAN GROUP



Steve Jones, P.E.
Assistant Project Manager - Flood Control Division



pc: Tracy Stratton - SHG
Mark Failla, P.E., CFM - SHG
Jerry Slater, P.E. - SHG

APPENDIX CONTENTS

Appendix A – 6/11/2012 CLV Comments

Appendix B – Response to Comments No. 1, 2 & 5
(Planning Approvals – TMP, 2-ft Grade Difference & Shared Perimeter Wall)

Appendix C – Response to Comment No. 6
(Bolted Storm Drain Manhole & Parcel F Storm Drain Profile)

Appendix D – Response to Comment No. 8 (Final Map for Village 23A Unit #2)

Appendix E – Revised Grading, Profile and Detail Sheets

APPENDIX A

CLV Comment Letter

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: June 11, 2012
TO: Land Development Services Department of Public Works		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	COPIES TO:	
Drainage Study for:	Slater Hanifan Group	
Catalina – Summerlin V23A Parcel N	Greystone Nevada / Lennar Homes	
Cross Streets:	West of Fox Hill Drive & Paseo Breeze Drive.	Bart Anderson, P.E., DevCo
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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	5/31/2012	6/11/2012	See Comments Below	\$400.00	285166: \$400
TOTAL FEES (LDDRS):				\$400.00	----

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

	is approved subject to conformance to all City standards and the following conditions:
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1. Provide a copy of the zoning/planning conditions associated with this site (**TMP-45230**) with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.
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3. The developer/engineer proposed rough grading in the future *Phase 2* area. Consult with *City of Las Vegas Planning Department* for approval of the proposed rough grading prior to the final approval of the drainage study.
4. It appears that the subject development is using an existing perimeter wall which is owned by the adjacent Parcel "O" Development to the north. Consult with and obtain approval from *City Planning Department* for whether this is allowed or not. Revise all pertinent grading plans and detail sheets accordingly if necessary.

5. By the same token, it appears that the subject development is placing its perimeter wall centering at the property line to the south, ie, encroaching into the adjacent Parcel "M" (Esperanza). Consult with and obtain approval from *City Planning Department* for direction. Revise all pertinent grading plans and detail sheets accordingly if necessary.
6. Page 11 of the Study stated that at Station 116+74.98, the HGL does not remain 1-ft below the Fox Hill roadway grade. Is there any storm drain manhole at or close to the location? If yes, that storm drain manhole must be modified to be bolted down. Provide an additional construction sheet and a corresponding drainage update for the revision.
7. **Sheet G-1 & Sheet G-2 (Phase 1):**
 - Per Section Detail 6/D-1, a swale is proposed adjacent to the screen/flood wall. Show the swale on plan with flow line elevations at regular intervals.
 - Provide dimension of a proposed riprap pad at the interface between Phase 1 and Phase 2 in Barranca Avenue and Estrella Street.
8. **Sheet G-2 (Phase 1):** A proposed 10'-drainage easement must be expanded from the drop Inlet to the right-of-way line with the full street width. Review and revise accordingly.
9. **Sheet D-1 (Phase 1):**

Detail 6: Indicate that the depth in the proposed swale is 6"-minimum.
10. **Phase 2 Plans:** Address whether Sky Vista Drive will be at least half-street improved prior to the Phase 2 construction.
11. Private streets must be public drainage easements. Provide a note on the grading plans "Note: All Private Streets are P.U., Public Sewer Easements and Public Drainage Easements to be privately maintained by the HOA."
12. 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.
13. 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.
14. The subject drainage study addresses *Interim Improvements (Phase 1)* as well as the *Final improvements (Phase 1 and Phase 2)*. However, if *Phase 2 Improvements* commence more than one year after the final approval of this study, a drainage study update will be required to address the future *Phase 2 Improvements*.
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END OF REMARKS

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

APPENDIX B

Response to Comments No. 1, 2 & 5

(Planning Approvals – Tentative Map, 2-ft Grading Difference & Shared Perimeter Wall)



LAS VEGAS
CITY COUNCIL

CAROLYN G. GOODMAN
MAYOR

STAVROS S. ANTHONY
MAYOR PRO TEM

LOIS TARKANIAN
STEVEN D. ROSS
RICKI Y. BARLOW
BOB COFFIN
BOB BEERS

ELIZABETH N. FRETWELL
CITY MANAGER

CITY OF LAS VEGAS
DEPARTMENT OF PLANNING
DEVELOPMENT SERVICES CENTER
333 NORTH RANCHO DRIVE
3RD FLOOR
LAS VEGAS, NEVADA 89106

VOICE 702.229.6301

FAX 702.474.0352

TTY 702.386.9108

www.lasvegasnevada.gov

July 11, 2012

Mr. Robert Johnson
Greystone Nevada, LLC
2490 Paseo Verde Parkway
Henderson, Nevada 89074

JUL 13 2012

**RE: TMP-45230 - TENTATIVE MAP - CATALINA
PLANNING COMMISSION MEETING OF JULY 10, 2012**

Dear Mr. Johnson:

Your request for a Tentative Map FOR AN 84-LOT SINGLE-FAMILY RESIDENTIAL SUBDIVISION on 16.47 acres at the southwest corner of Fox Hill Drive and Paseo Breeze Drive (APN 137-34-313-001), P-C (Planned Community) Zone [SF3 (Single Family Detached) Summerlin West Special Land Use Designation], Ward 2 (Beers), was considered by the Planning Commission on July 10, 2012.

The Planning Commission voted to **APPROVE** your request, subject to the following:

Planning

1. Approval of the Tentative Map shall be for no more than four (4) years. If a Final Map is not recorded on all or a portion of the area embraced by the Tentative Map with four (4) years of the approval of the Tentative Map, this action is void.
2. Conformance to the requirements and conditions of approval of the Summerlin Design Review Committee (SDRC) addressed in a letter dated 04/20/12.
3. All development shall conform to the Summerlin West Development Agreement (DA-0001-96), Village 23A and 23B Master Development Plan (SV-0018-01), Minor Modification (MOD-2994) and the Summerlin Development Standards.
4. Street names must be provided in accordance with the City's Street Naming Regulations.
5. A fully operational fire protection system, including fire apparatus roads, fire hydrants and water supply, shall be installed and shall be functioning prior to construction of any combustible structures.



Mr. Robert Johnson
Greystone Nevada, LLC
TMP-45230 - Page Two
July 11, 2012

6. In conjunction with creation, declaration and recordation of the subject common-interest community, and prior to recordation of the Covenants, Codes and Restrictions ("CC&R"), or conveyance of any unit within the community, the Developer is required to record a Declaration of Private Maintenance Requirements ("DPMR") as a covenant on all associated properties, and on behalf of all current and future property owners. The DPMR is to include a listing of all privately owned and/or maintained infrastructure improvements, along with assignment of maintenance responsibility for each to the common interest community or the respective individual property owners, and is to provide a brief description of the required level of maintenance for privately maintained components. The DPMR must be reviewed and approved by the City of Las Vegas Department of Field Operations prior to recordation, and must include a statement that all properties within the community are subject to assessment for all associated costs should private maintenance obligations not be met, and the City of Las Vegas be required to provide for said maintenance. Also, the CC&R are to include a statement of obligation of compliance with the DPMR. Following recordation, the Developer is to submit copies of the recorded DPMR and CC&R documents to the City of Las Vegas Department of Field Operations.
7. All development is subject to the conditions of City Departments and State Subdivision Statutes.

Public Works

8. Unless already constructed or guaranteed by the adjacent developer to the north, construct the full width of the entry street (AKA Paseo Breeze Drive) adjacent to this site concurrent with development of this site. If this site develops prior to the site to the north, appropriate easements outside the bounds of this Tentative Map for full construction of the entry street (AKA Paseo Breeze Drive) and for complete access from the entry street shall be granted by separate document prior to the approval of construction drawings for this site or the recordation of a map, whichever may occur first.
9. Private streets must be granted and labeled on the Final Map for this site as Public Utility Easements (P.U.E.), City of Las Vegas Sewer Easements, and Public Drainage Easements to be privately maintained by the Homeowner's Association.
10. Grant appropriate public easements (Sewer, Drainage, etc) over common lots as required by the Department of Public Works on the Final Map for this site.

Mr. Robert Johnson
Greystone Nevada, LLC
TMP-45230 - Page Three
July 11, 2012

11. Appropriate public easements (Sever, Drainage, Emergency Access, etc) over the adjacent common lot "D" of the Summerlin Village 23A Unit No. 2 Final Map (book 121 page 12) shall be granted to the City of Las Vegas by separate document as determined by the Department of Public Works prior to the recordation of a Final Map for this site requiring these easements. These easements are outside the boundary of this Tentative Map and are to be privately maintained.
12. All landscaping shall be situated and maintained so as to not create sight visibility obstructions for vehicular traffic at all development access drives and abutting street intersections.
13. Prior to the release of a Final Map for recordation on this site, the property owner must contact the Special Improvement District Section of the Department of Public Works (229 2136) and sign a notarized affidavit acknowledging and agreeing to a per lot assessment of all lots that will be created through a Final Map for this site. The City shall prepare an apportionment report following recordation of the Final Map and this apportionment report must be signed by the property owner prior to the release of any building permits for this site.
14. If not already constructed or guaranteed by a method allowed per Title 19.02.130.C and 19.02.130.E, extend the existing 8" public sewer in Paseo Breeze Drive at least 5 feet past the limits of construction for this site.
15. No structures, trees or vegetation taller than three feet shall be allowed within Common Lot "D" due to the proposed public sewer easement.
16. A Drainage Plan and Technical Drainage Study must be submitted to and approved by the Department of Public Works prior to the issuance of any building or grading permits, submittal of any construction drawings or the submittal of a Map subdividing this site, whichever may occur first. Provide and improve all drainageways recommended in the approved drainage plan/study. The developer of this site shall be responsible to construct such neighborhood or local drainage facility improvements as are recommended by the City of Las Vegas Neighborhood Drainage Studies and approved Drainage Plan/Study concurrent with development of this site.
17. A minimum of two lanes of asphalt pavement on Fox Hill Drive adjacent to this site, and a working sanitary sewer connection shall be in place prior to final inspection of any owner occupied units within this development. Per Title 19.02.130.D.2, 50% of the full permanent improvements on Desert Moon Drive and Fox Hill Drive, including all required landscaped areas between the perimeter wall and adjacent public street, shall be constructed and accepted by the City prior to issuance of any building permits beyond 50% of all units within this development. Additionally per Title 19.02.130.D.3 all off-site improvements for Desert Moon Road and Fox Hill Drive

Mr. Robert Johnson
Greystone Nevada, LLC
TMP-45230 - Page Three
July 11, 2012

adjacent to this site, including all required landscaped areas between the perimeter walls and adjacent public streets, shall be constructed and accepted prior to issuance of building permits beyond 75%. The above thresholds notwithstanding, all required improvements shall be constructed within 24 months of approval of construction drawings unless otherwise allowed by the Department of Public Works.

18. Site development to comply with all applicable conditions of approval for Summerlin Village 23A, SV-0018-01, Z 0119-96 and all other applicable site-related actions.
19. The approval of all Public Works related improvements shown on this Tentative Map is in concept only. Specific design and construction details relating to size, type and/or alignment of improvements, including but not limited to street, sewer and drainage improvements, shall be resolved prior to approval of the construction plans by the City. No deviations from adopted City Standards shall be allowed unless specific written approval for such is received from the City Engineer prior to the recordation of a Final Map or the approval of subdivision-related construction plans, whichever may occur first. Approval of this Tentative Map does not constitute approval of any deviations. If such approval cannot be obtained, a revised Tentative Map must be submitted showing elimination of such deviations.

This action by the Planning Commission on **July 10, 2012** is final unless a written appeal is filed with the City Clerk within seven days of the date of the Planning Commission's decision as allowed by code or there is a review action filed by the City Council within the same time period. For additional information on appeals or review requests please access <http://www.lasvegasnevada.gov/CheckStatus/DevelopmentApp.htm>, or contact the Department of Planning and Development at 702.229.6301 after **July 17, 2012**. No building permits or business licenses related to these items shall be issued prior to the expiration of the required ten day waiting period, or until any filed appeal is resolved pursuant to LVMC Title 19.18.

Sincerely,



Steve Gebeke, AICP
Planning Supervisor
Case Planning Division

SG:clb

cc: Ms. Chelsea Peltier
Slater Hanifan Group
5740 South Arville Street, Suite #216
Las Vegas, Nevada 89118



LEN1202.000

June 18, 2012

Mrs. Linda Hartman-Maynard
City of Las Vegas Development Services Center
Current Planning Division
333 N. Rancho Dr. 2nd Floor
Las Vegas, NV 89106

Subject: Summerlin Village 23A – Parcel "N" AKA Catalina
Perimeter Grade Difference Request

Mrs. Hartman-Maynard:

On behalf of our client, Lennar Homes (LH), this letter describes the justification for allowing LH to design the site along the perimeter of the development to have proposed grades greater than 2-feet higher or lower than existing grade. This information is provided as requested in Comment #2 of the review of the Technical Drainage Study for this site completed by Albert Sung on June 11, 2012.

There is a large vertical difference from the high side of the parcel the low side as it falls at over 5% across the site. As a condition of the purchase of the property from The Howard Hughes Company, LH is required to design their perimeter wall to be in compliance with The Paseos – A Summerlin Village Residential Design Criteria and the proposed adjacent perimeter street designs for Sky Vista Dr., Alta Dr. and Fox Hill Dr. These designs are, in several areas, greater than 2-feet higher or lower than the existing grade. However, Summerlin as a master planned community is designing the entire area with the best interest of each parcel in mind and will require each parcel to be in compliance with their design criteria.

We appreciate your assistance with this matter, if you need more information or have any questions, do not hesitate to contact me at 702-284-5300.

Very truly yours,

SLATER HANIFAN GROUP, INC.

S. Tracy Stratton
Project Manager

CC: Chelsea Peltier, SHG

CATALINA PH 1 & 2

APPROVED

2' KO ONLY / GRADE DIFFERENCE
NO SITE CHANGES APPROVED PER THIS

BY: cdm 2.17.12

CURRENT PLANNING DIVISION
CITY OF LAS VEGAS

Steve Jones

From: Linda Hartman-Maynard <lmaynard@LasVegasNevada.GOV>
Sent: Tuesday, July 17, 2012 9:13 AM
To: Steve Jones
Cc: Albert Sung
Subject: FW: Attached Image
Attachments: 4675_001.pdf

Steve,

Please see the attached approval for the two-foot grade difference at Catalina, Phase 1 & 2.

Also, Planning does not have an issue with the shared wall between the subdivisions. Is it an issue with Summerlin?

Thank you,

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

From: MFD-155@LasVegasNevada.gov [<mailto:MFD-155@LasVegasNevada.gov>]
Sent: Tuesday, July 17, 2012 8:57 AM
To: Linda Hartman-Maynard
Subject: Attached Image

APPENDIX C

Response to Comment No. 6
(Bolted Storm Drain Manhole & Parcel F Storm Drain Profile)

Storm Drain Hydraulic Summary							
Existing Fox Hill Storm Drain - Revised Flows							
WSPG Station	Unit?	Fox Hill Station	Storm Drain Size (in.)	Q ₁₀₀ (cfs)	HGL (ft)	FG (ft)	Previous HGL (ft)
1000.00	1	100+30.43	72	469	105.7	111.1	105.7
1064.86	1	100+76.29	72	469	107.4	113.3	105.1
1244.41	1	102+56.12	72	469	109.8	116.7	107.3
1244.41	1	102+56.12	72	401	112.1	116.7	110.8
1629.90	1	106+47.33	72	401	116.0	120.5	113.9
1629.90	1	106+47.33	66	351	116.5	120.5	115.1
2406.05	1	114+25.00	66	351	125.4	127.1	122.6
2406.05	1	114+25.00	60	336	124.5	127.1	122.1
2500.02	1	115+17.25	60	336	126.6	128.0	124.0
2660.12	1	116+74.98	60	336	129.5	132.2	126.3
2660.12	1	116+74.98	60	298	131.4	132.2	130.6
2995.29	1	120+09.65	60	298	136.2	142.3	134.4
2995.29	1	120+09.65	60	279	137.1	142.3	135.8
3663.63	1	126+77.01	60	279	151.2	162.4	153.1
3663.63	1	126+77.01	54	230	151.0	162.4	155.2
3711.69	1	127+25.00	54	230	154.0	164.1	155.9
3711.69	1	127+25.00	54	215	153.7	164.1	157.1
4388.88	1	134+01.20	54	215	188.0	199.2	189.9
4492.13	1	135+04.08	54	215	190.4	202.2	192.0
4492.13	1	135+04.08	54	205	190.1	202.2	194.0
4581.72	1	135+57.62	54	205	193.2	203.0	195.5
4661.39	1	136+25.17	54	205	196.1	204.7	199.2
4748.08	1	136+99.47	54	205	199.2	205.6	200.9
4818.60	1	137+81.33	54	205	202.5	207.5	202.8
4818.60	1	137+81.33	54	146	205.4	207.5	205.9
4987.45	1	139+50.00	54	146	205.4	215.2	208.2
5253.40	1	142+15.95	54	146	218.5	227.1	221.2
5253.40	1	142+15.95	42	138	219.2	227.1	220.7
5772.91	2	147+35.46	42	138	245.3	253.1	245.4
5772.91	2	147+35.46	42	93	248.9	253.1	249.2
6027.45	2	149+90.00	42	93	254.2	264.6	255.7
6129.95	2	150+91.05	42	93	256.9	267.1	258.1
6181.17	2	151+24.85	42	93	258.7	267.9	260.2

+0.8'

* EXCERPTED FROM INITIAL SUBMITTAL

[illegible]

DESIGN: JJJ
DRAWN: SDG
CHECK: GBW
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 08-22-02
PLOT TIME: 10:50:01

 **G.C. WALLACE, INC.**
Engineers/Planners/Surveyors
1322 SOUTH RAINBOW BLVD., #45 VEGAS, NEVADA, 89146
OFFICE: (702) 304-2000, FAX: (702) 804-2200
SUMMERLIN OFFICE: 6000 CHARLESTON BLVD., STE. 120
OFFICE: (702) 804-2100, FAX: (702) 804-2202

12
 SHEET
 VILLAGE 29A UNIT 1 IMPROVEMENTS
 -SPINE-ROAD-PLAN AND PROFILE
 DESERT STA 119+60 TO 121+00
 SUNRISE ROAD

107-V3374-1
17 of 51 cuts

CONSTRUCTION NOTE:
RESTRAIN 24" WATERMAIN JOINTS FROM 117+21 TO 117+33 AND 119+28 TO 119+40

WATER NOTE:
1. PVC RESTRAINED JOINTS MUST BE "NON-POINT LOADING".
2. ALL 24" WATERMAIN RESTRAINING JOINTS TO BE CATHODICALLY PROTECTED AS PER DETAIL 4 ON SHEET 44.

150,000' VC
PV STA = 115+50
PVI ELEV = 3228.48
A.D. = 2.173
K = 69.018

HGL=37.1'
SMH # 7
42.3± TMH

HGL=31.4'
SMH # 55
32.2± TMH

Q₁₀₀ = 262 cfs
Q₁₀₀ = 278 cfs

Q₁₀₀ = 281 cfs
Q₁₀₀ = 298 cfs

Q₁₀₀ = 319 cfs
Q₁₀₀ = 336 cfs

120+62.12
5' W

100-YEAR HGL

24" PVC DR-18 WATER (3435 ZONE)

119+34.37
11.25' BEND

118+35.60
8' W

3.01%

1.4' MIN COVER

100-YEAR HGL

116+89.64
8' W

117+27.98
11.25' BEND

24" PVC DR-18 WATER (3435 ZONE)

160.10 LF 60" CLASS III RCP @ 1.64%
Q₁₀₀ = 319 cfs

146.79 LF 10" SDR-35 PVC @ 1.65%

116+74.98, 1.50' LT
19.30 INV IN 42"
18.00 INV IN 60"
17.80 INV OUT 60"

116+61.03, 16.06' LT
14.64 INV IN 8"
14.64 INV IN 8"
14.44 INV OUT 10"

341.95 LF 8" SDR-35 PVC @ 3.81%

120+09.65, 1.50' LT
31.60 INV IN 24" (S)
31.10 INV IN 24" (N)
28.80 INV IN 60"
28.60 INV OUT 60"

119+90.00, 15.00' LT
28.23 INV IN 8"
28.03 INV OUT 8"

333.83 LF 8" SDR-35 PVC @ 4.01%

335.17 LF 60" CLASS III RCP @ 3.15%
Q₁₀₀ = 281 cfs

ORIGINAL GRADE @ CL

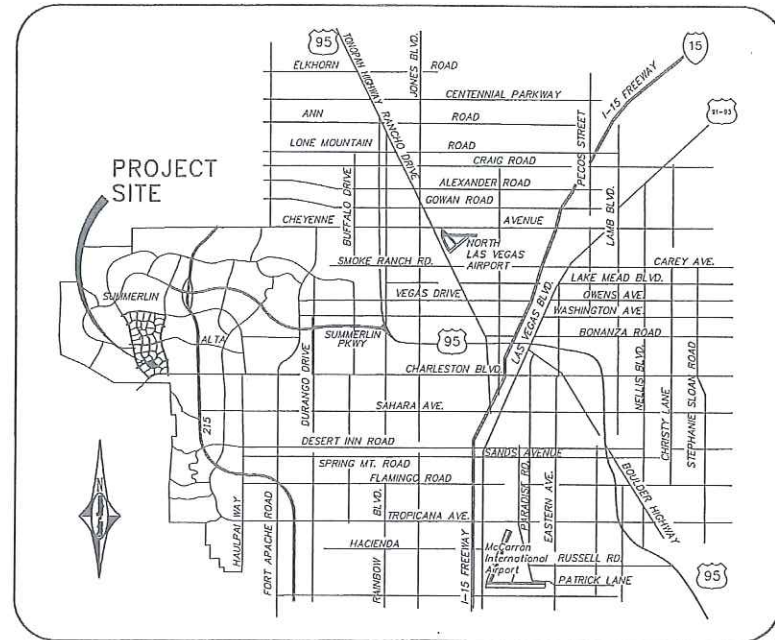
DESIGN GRADE @ CL

EX ROUGH GRADING @ CL

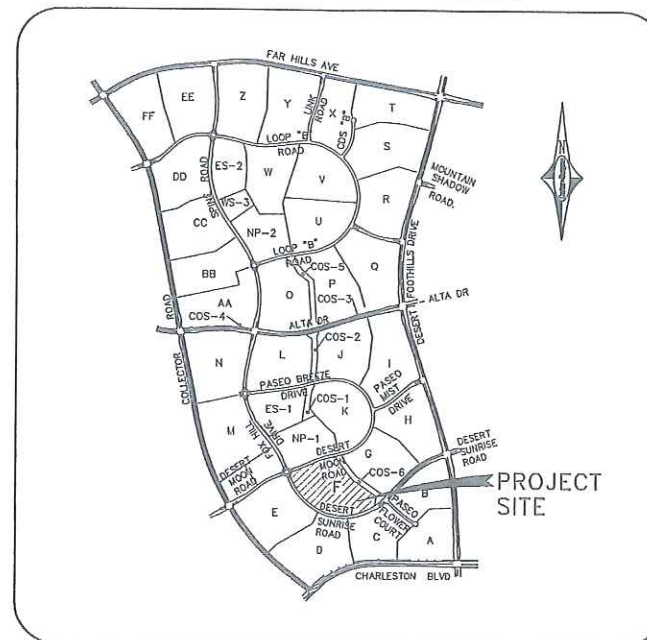
IMPROVEMENT PLANS LAS LOMAS @ THE PASEOS

(A RESIDENTIAL PLANNED DEVELOPMENT)

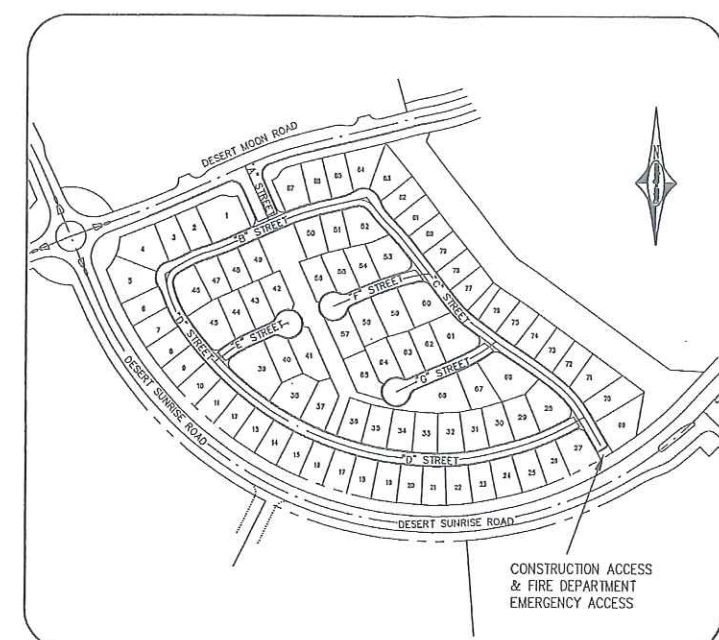
PARCEL F @ VILLAGE 23A



VICINITY MAP



LOCATION MAP



SITE MAP

OWNER:

THE HOWARD HUGHES CORPORATION,
A DELAWARE CORPORATION
10000 W Charleston Blvd Ste. 200
Las Vegas, Nevada 89135-1004
(702) 791-4200

DEVELOPER:

THE HOWARD HUGHES CORPORATION,
A DELAWARE CORPORATION
10000 W Charleston Blvd Ste. 200
Las Vegas, Nevada 89135-1004
(702) 791-4200

ENGINEER:

Carter Burgess

Consultants in Planning, Engineering,
Construction Management, and Related Services
6655 Bermuda Road, Las Vegas, NV. 89119
(702) 938-5400 Fax (702) 938-5454

LEGAL DESCRIPTION

LOT 9 OF "SUMMERLIN VILLAGE 23A UNIT No. 1" AS
SHOWN BY MAP THEREOF IN BOOK 108, PAGE 29
OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE,
CLARK COUNTY, NEVADA.

BASIS OF BEARING

NORTH 05° 59' 55" WEST BEING THE BEARING OF THE WEST LINE
OF SECTION 34, T 20 S, R 59 E, M.D.M., CITY OF LAS VEGAS, CLARK
COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN FILE 91,
PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDERS OFFICE,
CLARK COUNTY, NEVADA.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK OLV09 36NW6 RIVET & PLATE IN
TOP OF CURB RETURN @ NW CORNER OF PAVILLION CENTER & ALTA.
3024.26 FEET OR 921.7971 METERS NAVD 1988 DATUM

APN # 137-34-810-001

SHEET INDEX

SHEET	TITLE
1	COVER SHEET
2	NOTE SHEET
3	GRADING PLAN (SHEET 1 OF 3)
4	GRADING PLAN (SHEET 2 OF 3)
5	GRADING PLAN (SHEET 3 OF 3)
6	DETAIL SHEET (SHEET 1 OF 2)
7	DETAIL SHEET (SHEET 2 OF 2)
8	PLAN AND PROFILE - C STREET

SERVICES

SANITARY SEWER: CITY OF LAS VEGAS
WATER: LAS VEGAS VALLEY WATER DISTRICT
POWER: NEVADA POWER COMPANY
GAS: SOUTHWEST GAS CORPORATION
TELEPHONE: SPRINT
CABLE T.V.: COX COMMUNICATIONS
REFUSE: REPUBLIC SERVICES OF SOUTHERN NEVADA

APPROVALS

CHARLIE KAJKOWSKI, JR., PE#4784, CITY ENGINEER DATE

APPROVAL OF THESE PLANS IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE
DEDICATED RIGHT-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT
AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED
STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIFICALLY LISTED UNDER DEVIATIONS
FROM STANDARD THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED
IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND
SPECIFICATIONS CLARK COUNTY AREA NEVADA.

M. MARGO WHEELER, AICP, CURRENT PLANNING MANAGER DATE
THIS PLAN MEETS THE APPLICABLE STANDARDS OF PLANNING AND DEVELOPMENT DEPARTMENT

CITY FIRE MARSHAL DATE

LAS VEGAS VALLEY WATER DISTRICT (SHEETS 1, 2, 12 & 13) DATE

NEVADA POWER COMPANY DATE

Nevada Power Company acknowledges that we have
received your plans and will provide service to all
electrical needs associated with this project. Nevada
Power Company reserves the right to address any
existing or future utility issues once the final design is
completed. The new utility design shall be in
compliance with the Nevada Public Utility
Commission's rules and regulations.

SOUTHWEST GAS COMPANY DATE

SPRINT DATE

The offixed Sprint Nevada approval does not assume
or guarantee liability for known or unknown conflicts
with existing or proposed improvements. Resolution of
any conflict will be accomplished pursuant to Local
Ordinances, Nevada Revised Statutes and/or Public
Utility Commission Rules and Regulations.

COX COMMUNICATIONS DATE

SUMMERLIN APPROVAL

GERALD M. ROBBINS DATE

DISCLAIMER NOTE:

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY.
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE
THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL
EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING
CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING
UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO
RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN
IN THEIR PROPER LOCATION.
CONTRACTOR TO NOTIFY ENGINEER OF ANY CHANGES OR DISCREPANCIES.

Avoid calling underground
utility lines. It's costly.
Call before you
Dig
1-800-227-2600
(nationwide service only)

Avoid overhead power
line contact.
Call before you
Overhead
1-702-593-6111
NEVADA POWER COMPANY
(SEE SAFETY SERVICE DEPARTMENT)

The Howard Hughes Corporation
10000 West Charleston Blvd., Ste. 200
Las Vegas, Nevada 89135-1004

Carter Burgess
Consultants in Planning, Engineering,
Construction Management, and Related Services
6655 Bermuda Road
Las Vegas, NV 89119
(702) 938-5400 Fax (702) 938-5454

IMPROVEMENT PLAN
COVER SHEET

LAS LOMAS @ THE PASEOS
PARCEL F @ VILLAGE 23A

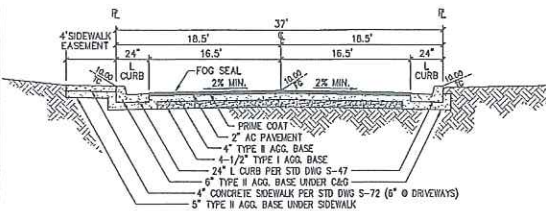
DRAWN BY: TAT	DESIGNED BY: AL	CHECKED BY: DW	PROJECT NO: 246812	SCALE: N/A	HORIZ. VERT.
PRELIMINARY, NOT FOR CONSTRUCTION					
DENNIS P. WERTZLER CIVIL					
SHEET 1 OF 8 SHEETS CLV DRAWING NO.					

DISCLAIMER NOTE:

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. CONTRACTOR TO NOTIFY ENGINEER OF ANY CHANGES OR DISCREPANCIES.

Avoid cutting underground utility lines. No cuts.
Call before you Dig
1-800-227-2600
UNDERGROUND SERVICE BUREAU

Avoid overhead power line contact.
Call before you Overhead
1-702-593-6111
NEVADA POWER INFORMATION AND SAFETY SERVICES DEPARTMENT



NOTES:

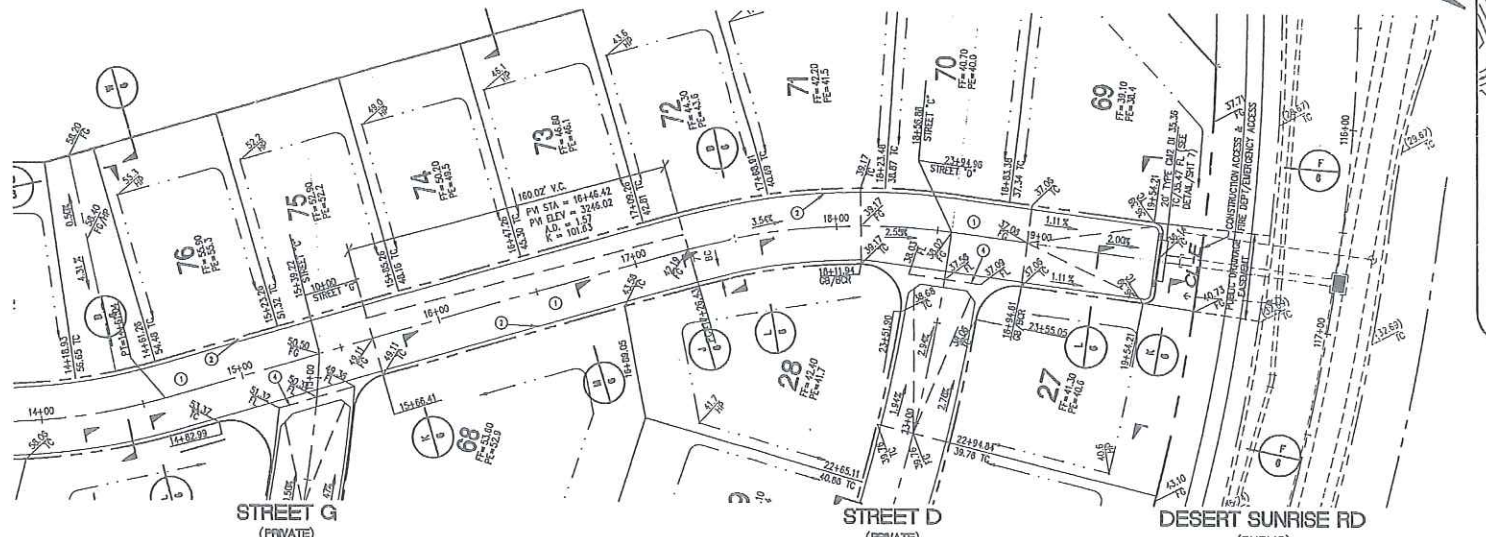
1. PUBLIC TRAFFIC CONTROL AND STREET LIGHT EASEMENTS SHALL BE PROVIDED ON THE APPROPRIATE SIDE OF THOSE PRIVATE STREETS WHERE SUCH ITEMS ARE TO BE INSTALLED AND ARE TO BE MEASURED FROM THE RIGHT-OF-WAY LINE. STREET LIGHTS SHALL NOT ENCRUMBER INTO SIDEWALKS OR WALKWAYS.
2. GRADING SHALL BE IN ACCORDANCE WITH THE SOILS REPORT.

NOTE: CONTRACTOR TO CONFORM WITH THE GEOGRAPHICAL ENGINEER OR DESIGN STANDARDS FOR ALL STREET DESIGNS.

37' PRIVATE RESIDENTIAL STREET
(SUMMERLIN STD. DWG. S-14) NTS

LEGEND

	EXISTING	PROPOSED
RIGHT OF WAY	---	---
SEWER MAIN	EX. 8" SWR	8" SWR
SEWER MANHOLE	EX. 8" WTR	8" WTR
WATER MAIN	EX. 8" WTR	8" WTR
LOT NUMBER	42	42
RATE OF GRADE	(0.50%)	0.50%
BLOCK WALL	---	---
RETAINING WALL	---	---
WALL PILASTER	---	---
FINISH FLOOR ELEVATION	N/A	FT= 36.03
PAD ELEVATION	N/A	PAD= 35.2
SCARP	---	---
LANDLOCK 450	N/A	---
SWR2	N/A	---

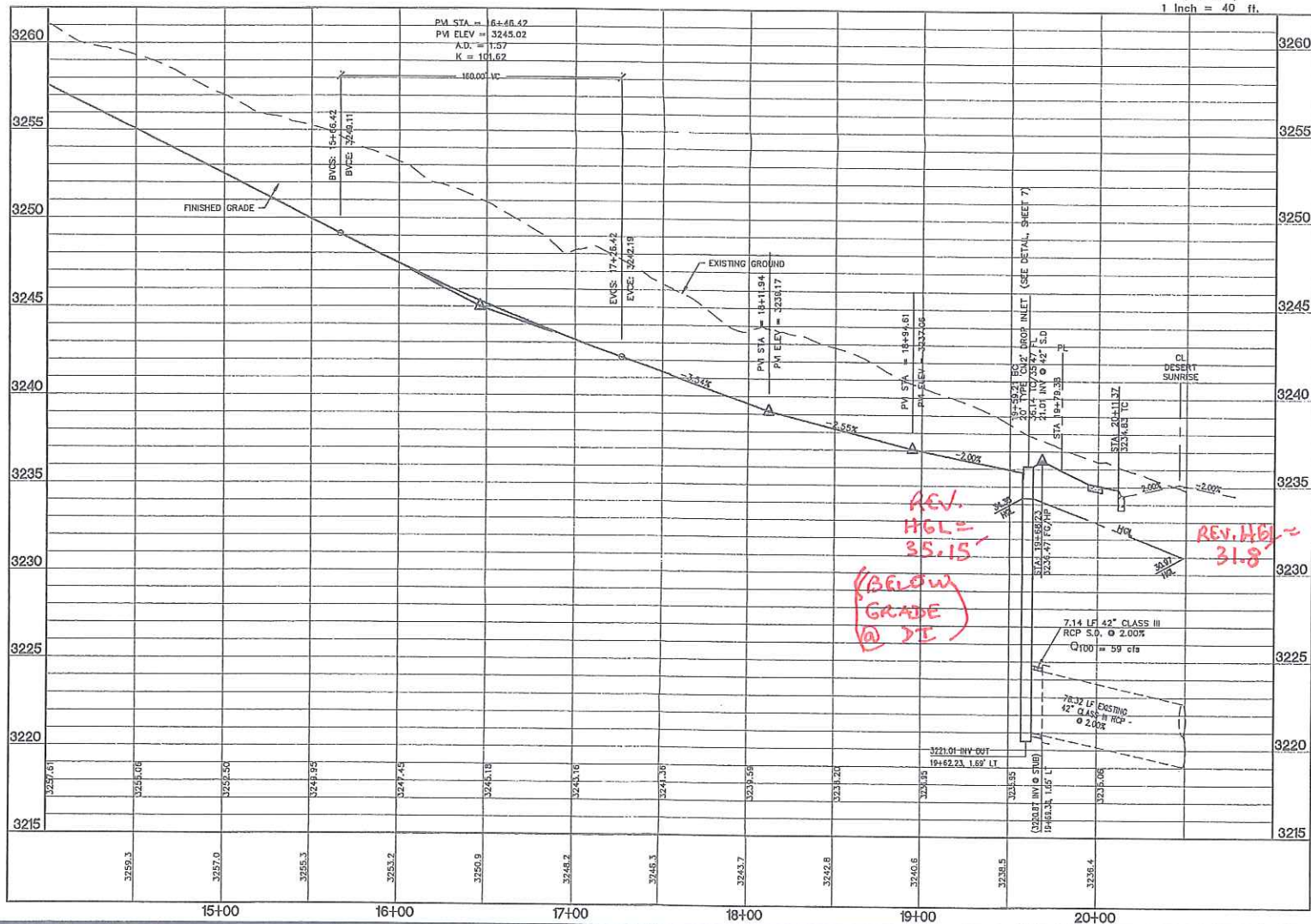


STREET C
PRIVATE

STREET D
(PRIVATE)

DESERT SUNRISE RD
(PUBLIC)

(IN FEET)
1 Inch = 40 ft.



BASIS OF BEARING

NORTH 05° 59' 55" WEST BEING THE BEARING OF THE WEST LINE OF SECTION 34, T 20 S, R 59 E, N.M.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDERS' OFFICE, CLARK COUNTY, NEVADA.

BENCHMARK

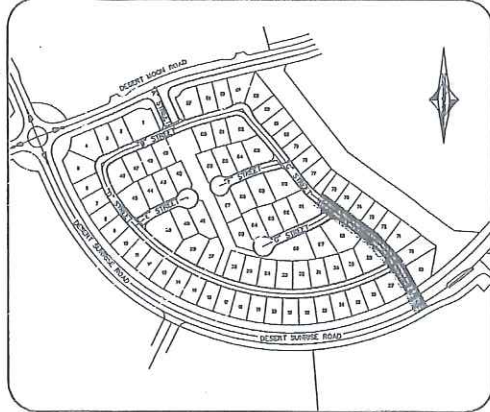
CITY OF LAS VEGAS BENCHMARK OVER 30X30X10 RIVET & PLATE IN TOP OF CURB RETURN @ NW CORNER OF PARILLION CENTER & ALTA. 3024.78 FEET OR 921.7971 METERS MAYD 1988 DATUM

LEGAL DESCRIPTION

THE PASEOS AT SUMMERLIN VILLAGE 23A UNIT No. 1, BEING A SUBDIVISION OF A PORTION OF PARCEL 1 AS SHOWN BY MAP THEREOF ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDERS' OFFICE, CLARK COUNTY, NEVADA.

(+0.8' INCREASE IN HGL FROM APPROVED VILLAGE 23A UNIT 1 IMPROVEMENTS)

This grading plan is a part of drainage study # 3397 which was received on 8/15/03 and rejected on 8/12/03. Page 8 Of 10.



KEY MAP

The Howard Hughes Corporation

10000 West Charleston Boulevard, Suite 500
Las Vegas, Nevada 89136-1004

Cartier Burgess

Consultants in Planning, Engineering,
Construction Management, and Related Services

6555 Bermuda Road
Las Vegas, NV 89119
(702) 886-5400 Fax (702) 886-5454

PLAN AND PROFILE
C STREET

PARCEL F • VILLAGE 23A
THE PASEOS • SUMMERLIN

DRAWN BY:
TAM

DESIGNED BY:
CS

CHECKED BY:
DW

PROJECT NO:
240812



SHEET
8
8 OF 8 SHEETS
CLV DRAWING NO.

APPENDIX D

Response to Comment No. 8
(Final Map for Village 23A Unit #2)

Instr. 20041209-000130D
 No Transmittal Points:
 PL 121 0012
 Plat

20041209-000130D
 Fee: \$14.00
 1st Plt: \$0.00

1	Q1097841	11/6/07
2	T00000279	
3	Receptor:	
4	OF WALLACE RD	
5	France Davis	500
6	Clark County Recorder	Psc: 00

Instr: 20041203-0001300
Exp Type: Full Page
PL 121 0012
plat

THE HOWARD HUGHES CORPORATION, A DELAWARE CORPORATION, DOES HEREBY CERTIFY THAT IT IS THE OWNER OF THE PARCEL OF LAND WHICH IS SHOWN UPON THIS MAP OF:

SUMMERLIN VILLAGE 23A UNIT NO. 2

FURTHERMORE, THE ABOVE NAMED OWNER OF THE WITHIN PLATTED LANDS, HEREBY GRANTS AND CONVEYS TO NEVADA POWER COMPANY, SPRINT, JOINTLY AND SEVERALLY, SOUTHWESTERN POWER CORPORATION, SOUTHWESTERN POWER CORPORATION, SOUTHWESTERN COMMUNICATIONS LAS VEGAS, INC., AND TO THEIR SUCCESSORS AND ASSIGNS, A FIVE FOOT WIDE EASEMENT ON ALL PROPERTY LINES ADJUTING PUBLIC STREETS, FOR WATER MAINS, SEWER LINES, GAS LINES, CABLES, AND ALL OTHER UTILITIES, AND FOR ALL OTHER EQUIPMENT PADS, AND AN ADDITIONAL TWO FEET AROUND TRANSFORMER PADS AND ELEVANT PADS, AND A PERMANENT EASEMENT SHOWN HEREON AS COMMON TO THE ADJUTING LOTS, "A" THROUGH "H" WITHIN THE WITHIN PLATTED LANDS, FOR THE OPERATION, REMOVAL AND/OR ABANDONMENT OF SUBTERRANEAN AND ABOVE-GROUND UTILITY LINES, AND FOR THE CONSTRUCTION, MAINTENANCE, REPAIR, REPLACEMENT, AND/OR REMOVAL THEREOF AND EGRESS THEREFROM.

DATED THIS 26th DAY OF may, 2004.
THE HOWARD HUGHES CORPORATION, A DELAWARE CORPORATION

CERTIFICATE OF ACKNOWLEDGMENT

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON May 2, 2001, 2001
BY Lawrence A. Sencen AS Executive Vice President
OF THE HOWARD HUGHES CORPORATION, A DELAWARE CORPORATION.


 BUREAU OF LAND MANAGEMENT
 U.S. Department of the Interior
 1616 North 1st Avenue
 Denver, CO 80202
 303-837-1800
 www.blm.gov

WE, THE HEREIN NAMED EASEMENT RECIPIENTS APPROVE THE GRANT OF THE DESIGNATED EASEMENTS.

Joel Martell 6/3/0
SOUTHWEST GAS CORPORATION JOEL MARTELL DATE

James H. Hatzenduehler 5/25
SPRINT DATE

DATE
 12/2/2004
 CITY OF LAS VEGAS CHARLES V. KOWSKI, JR. BENAZRA
 DATE

I, RANDY W. MIROMICKI, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, AS AGENT FOR G.O. WALLACE INC., CERTIFY THAT:

- RANDY W. MROWICKI
PROFESSIONAL LAND SURVEYOR
NEVADA LICENSE NO. 11141

SEE SHEET 2 AND 3 FOR LEGAL DESCRIPTION

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 FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

RECORDATION OF THIS SUBDIVISION MAP WILL ESTABLISH A LIMITED WATER COMMITMENT FROM THE LAS VEGAS VALLEY WATER DISTRICT AS FOLLOWS:

LOT/BLOCK	WATER COMMITMENT ACRE-FEET/YEAR
1/C	1.0
2/C	1.0
3/C	1.0
4/C	1.0
5/A	1.0
6/A	1.0
7/D	1.0
8/B	1.0

I, ALAN R. RIECKI, CITY SURVEYOR OF THE CITY OF LAS VEGAS, NEVADA
DO HEREBY CERTIFY THAT I HAVE EXAMINED THE FINAL SUBMISSION MAP OF:
SUMMERLIN VILLAGE 23A UNIT NO. 2

ALAN R. RIEKKI, PLS
CITY SURVEYOR
CITY OF LAS VEGAS, NEVADA
NEVADA LICENSE NO. 12469

THIS FINAL MAP IS APPROVED BY THE CLARK COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY, AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND A COMMUNITY SYSTEM FOR DISPOSAL OF SEWAGE.

CERTIFICATE OF WATER RESOURCES DIVISION

THIS FINAL MAP IS APPROVED BY THE DIVISION OF WATER RESOURCES OF THE
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY
SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

CERTIFICATE OF DIRECTOR OF
PLANNING AND DEVELOPMENT APPROVAL

I CERTIFY THAT THIS FINAL MAP SUBSTANTIALLY COMPLIES WITH THE TENTATIVE MAP AND ANY APPROVED ALTERATIONS THERE TO; THAT THE MAP COMPLIES WITH APPLICABLE STATUTORY AND ORDINANCE PROVISIONS; THAT ALL CONDITIONS IMPOSED UPON THE FINAL MAP HAVE BEEN MET; AND THAT THE MAP WAS APPROVED AND THE PARCELS HEREIN WERE ACCEPTED BY THE PLANNING DEPARTMENT OF THE CITY OF LAS VEGAS, NEVADA ON THE 2ND DAY OF DECEMBER, 2004.

 12/2/2004
ROBERT S. GENZER
DIRECTOR OF PLANNING AND DEVELOPMENT
CITY OF LAS VEGAS, NEVADA

ANY SUBSEQUENT CHANGES TO THIS MAP
SHOULD BE EXAMINED AND MAY BE DETERMINED
BY REFERENCE TO THE COUNTY RECORDER'S
CUMULATIVE MAP INDEX.
N.R.S. 278.5695



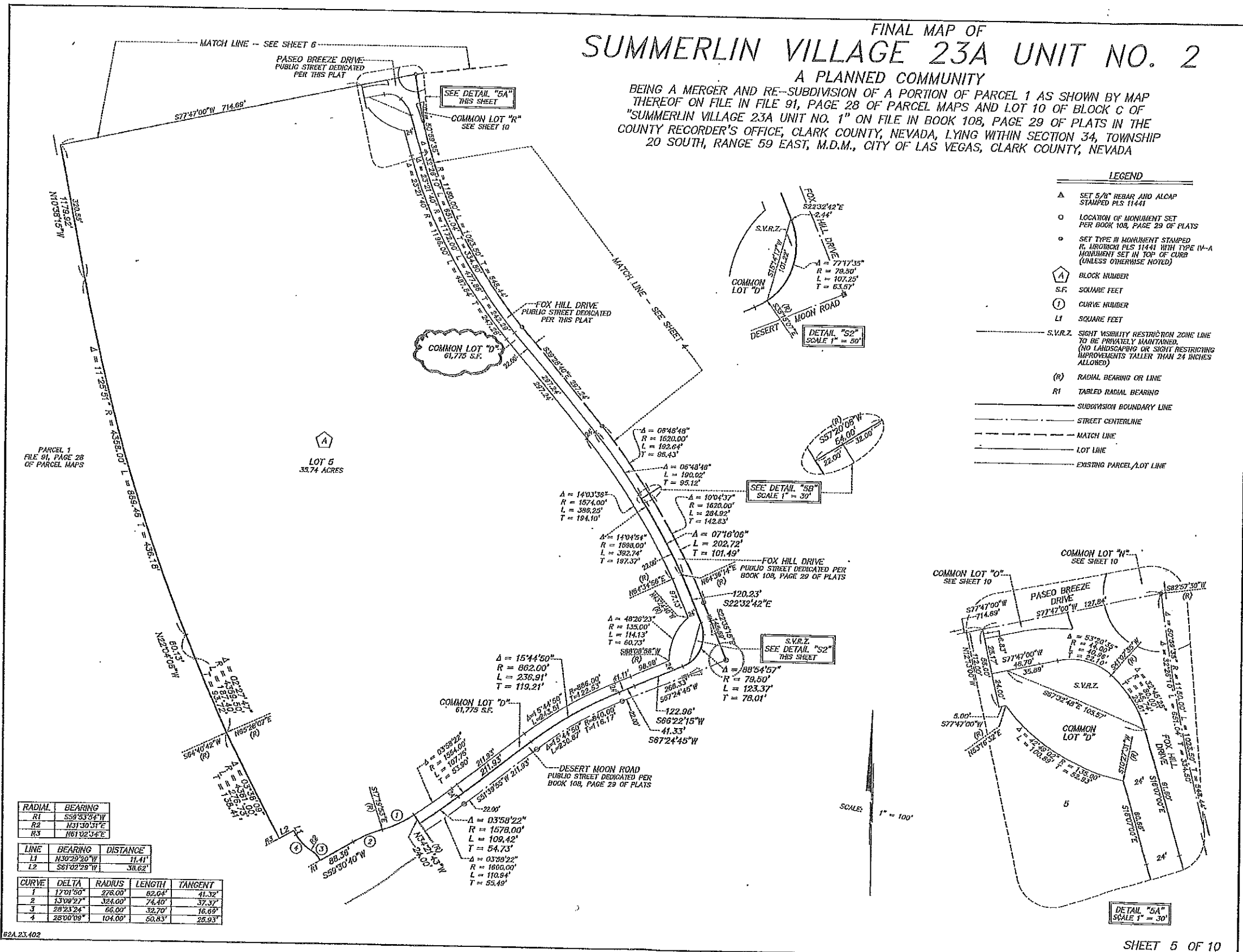
G.C. WALLACE, INC.
Engineers/Planners/Surveyors
 1555 SOUTH RAINBOW BLVD./LAS VEGAS, NEVADA 89146
 PHONE: (702) 604-2003

FFB \$1410.00 DEBILITY. Six

BOOK 121 PAGE 822

FINAL MAP OF SUMMERLIN VILLAGE 23A UNIT NO. 2 A PLANNED COMMUNITY

BEING A MERGER AND RE-SUBDIVISION OF A PORTION OF PARCEL 1 AS SHOWN BY MAP THEREOF ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS AND LOT 10 OF BLOCK C OF "SUMMERLIN VILLAGE 23A UNIT NO. 1" ON FILE IN BOOK 108, PAGE 29 OF PLATS IN THE COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA, LYING WITHIN SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA



RADIAL BEARING		
R1	S59°53'34"W	
R2	N31°30'31"E	
R3	N61°32'34"E	

LINE BEARING DISTANCE		
L1	N30°28'20"W	11.41'
L2	S61°02'29"W	38.62'

CURVE	DELTA	RADIUS	LENGTH	TANGENT
1	17°01'50"	278.00'	82.04'	41.32'
2	13°08'27"	324.00'	74.40'	37.37'
3	28°23'24"	66.00'	32.70'	16.69'
4	28°00'09"	104.00'	60.83'	25.93'

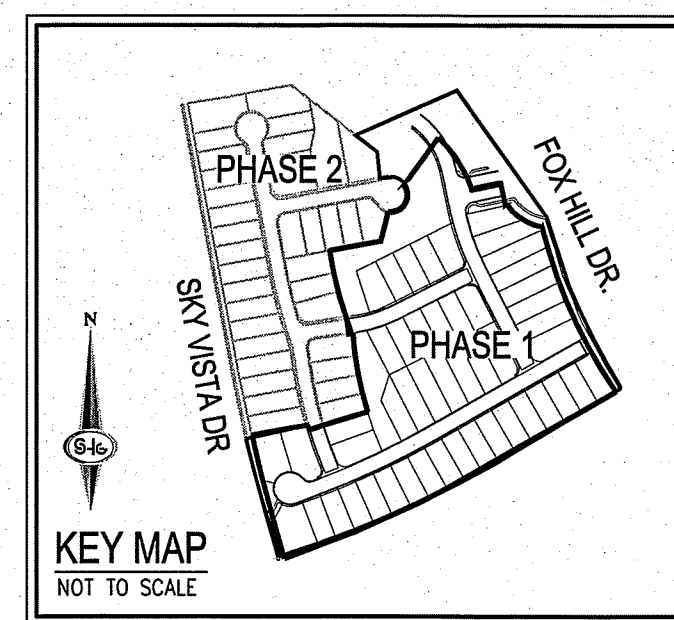
- LEGEND**
- ▲ SET 5/8" REBAR AND ALOAP STAMPED PLS 11441
 - LOCATION OF MONUMENT SET PER BOOK 108, PAGE 29 OF PLATS
 - SET TYPE III MONUMENT STAMPED R, UROCK PLS 11441 WITH TYPE IV-A MONUMENT SET IN TOP OF CURB (UNLESS OTHERWISE NOTED)
 - △ BLOCK NUMBER
 - S.F. SQUARE FEET
 - ① CURVE NUMBER
 - L1 SQUARE FEET
 - S.V.R.Z. SIGHT VISIBILITY RESTRICTION ZONE LINE TO BE PRIVATELY MAINTAINED (NO LANDSCAPING OR SIGHT RESTRICTING IMPROVEMENTS TALLER THAN 24 INCHES ALLOWED)
 - (R) RADIAL BEARING OR LINE
 - R1 TABLED RADIAL BEARING
 - SUBDIVISION BOUNDARY LINE
 - STREET CENTERLINE
 - MATCH LINE
 - LOT LINE
 - EXISTING PARCEL/LOT LINE

APPENDIX E

Revised Grading, Profile & Detail Sheets

CATALINA PHASE 1

A SINGLE FAMILY DETACHED
RESIDENTIAL COMMUNITY
A PORTION OF APN 137-34-313-001



LEGAL DESCRIPTION

LOCATED WITHIN PARCEL M 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.

BENCHMARK

FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION 787+19.42 OF CHARLESTON BLVD, OLIV09-34S5E6

NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

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.

APPROVALS	
ACTING CITY ENGINEER-DAVID BOWERS PE, PTOE #16736	DATE
APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED OF RIGHT-OF-WAY, AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIALLY LISTED UNDER DEVIATIONS FROM STANDARDS. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, CLARK COUNTY AREA, NEVADA.	
CLY FIRE MARSHALL	DATE
DOUG RANKIN, ACP PLANNING MANAGER	DATE
THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING AND DEVELOPMENT DEPARTMENT.	
CENTURYLINK	DATE
THE AFFIXED EMBARGO APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND / OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.	
APPROVED FOR CONSTRUCTION	
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER PROJECT NO. 112426 DATE: _____ SHEETS:	
APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM LAS VEGAS VALLEY WATER DISTRICT.	
NV ENERGY	DATE
NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.	
SOUTHWEST GAS	DATE
COX COMMUNICATIONS LAS VEGAS, INC.	DATE

SHEET INDEX		
SHEET NUMBER	SHEET DESCRIPTION	SHEET TITLE
1	C-1	COVER SHEET
2	C-2	GENERAL NOTES AND QUANTITIES
3	G-1	GRADING PLAN I
4	G-2	GRADING PLAN II
5	D-1	GRADING SECTIONS AND DETAILS
6	P-1	PLAN AND PROFILE I

<u>SUMMERLIN</u>																					
SIGNATURE LINE	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>OWNER</u> GREYSTONE NEVADA, LLC 2490 PASO VERDE PARKWAY SUITE 120 HENDERSON, NV 89074 PH (702) 458-7700 FX (702) 889-0801 <u>DEVELOPER</u> LENNAR COMMUNITIES NEVADA, LLC 2490 PASO VERDE PARKWAY SUITE 120 HENDERSON, NV 89074 PH (702) 458-7700 FX (702) 889-0801 <u>ENGINEER</u> SLATER HANFAN GROUP 5740 S. ARVILLE ST SUITE 216 LAS VEGAS, NV 89118 PH (702) 284-5300 FX (702) 284-5399 <u>PROJECT INFORMATION</u> APN: 137-34-331-001 <table style="width: 100%; border-collapse: collapse;"><tr><td style="width: 60%;">NET ACREAGE</td><td style="width: 40%; text-align: right;">10.31 AC</td></tr><tr><td>RESIDENTIAL LOTS</td><td style="text-align: right;">48</td></tr><tr><td>COMMON ELEMENTS</td><td style="text-align: right;">4</td></tr><tr><td>DENSITY</td><td style="text-align: right;">6.65 – DU/AC</td></tr><tr><td>TYPICAL LOT SIZE</td><td style="text-align: right;">5,170 SF (47'x110') 7,050 SF (47'x150')</td></tr><tr><td>ZONING</td><td style="text-align: right;">P-C</td></tr><tr><td>LANDWORK SUMMARY (ADJUSTED)</td><td></td></tr><tr><td style="padding: 5px 0 0 20px;">CUT</td><td style="text-align: right; padding: 5px 0 0 20px;">- CY</td></tr><tr><td style="padding: 5px 0 0 20px;">FILL</td><td style="text-align: right; padding: 5px 0 0 20px;">- CY</td></tr><tr><td style="padding: 5px 0 0 20px;">SITE IMPORT</td><td style="text-align: right; padding: 5px 0 0 20px;">- CY</td></tr></table>		NET ACREAGE	10.31 AC	RESIDENTIAL LOTS	48	COMMON ELEMENTS	4	DENSITY	6.65 – DU/AC	TYPICAL LOT SIZE	5,170 SF (47'x110') 7,050 SF (47'x150')	ZONING	P-C	LANDWORK SUMMARY (ADJUSTED)		CUT	- CY	FILL	- CY	SITE IMPORT	- CY
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ZONING	P-C																				
LANDWORK SUMMARY (ADJUSTED)																					
CUT	- CY																				
FILL	- CY																				
SITE IMPORT	- CY																				

NOTE

NOTE: ALL LAND SURFACE AREA DISTURBANCES OVER 1 ACRE REQUIRE A STORMWATER DISCHARGE PERMIT ISSUED BY THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP). A PHASED CONSTRUCTION UNIT WITH A STORMWATER DISCHARGE PERMIT IS REQUIRED UNDER CONSTRUCTION UNIT 1. ALL STRIPPED SURFACE AREAS HAVE BEEN COVERED BY PAVING, BUILDING CONSTRUCTION OR PLANTING. A STORMWATER DISCHARGE PERMIT APPLICATION AND ASSOCIATED INFORMATION MAY BE DOWNLOADED FROM THE WEB SITE:
[HTTP://WWW.STATE.NV.US/BWPC/STORM01.HTM](http://www.state.nv.us/bwpc/storm01.htm) PROJECTS THAT DISTURB MORE THEN ONE ACRE OF LAND MUST SUBMIT TO NDEP A "NOTICE OF INTENT" FOR INCLUSION UNDER STORMWATER PERMIT NO. NVST001000 ALONG WITH THE APPROPRIATE FILLING FEE.



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
do UnderGround**
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

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

Call
811

or
1-800-227-2600
AND
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-6000

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

LAS VEGAS, NEVADA

LENNAR®

**CATALINA PHASE 1
COVER SHEET**

DATE: 07/16/12

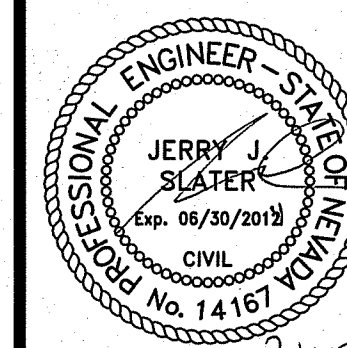
DRAFTER: BCC

DESIGNER: BCC

CHECKED: STS

PROJECT NO.

LEN1202-000



C-1

SHEET 1 OF 6

2.1 CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST EDITION, THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE STANDARD SPECIFICATIONS ISSUED BY THE CONTROLLING AGENCY, THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".

2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.

3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.

4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.

5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.

6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.

7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.

8. AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE ALL OF ALL CUTTERS AFTER CONSTRUCTION, EXCEPT AT SIDEWALK RAMPS AND CROSS CUTTERS.

9. CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.

10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.

11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR IMPROVED AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.

12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY: GEOTEK REPORT #9942-LV6, JUNE 4, 2010 APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.

13. EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.

14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.

15. UTILITY COMPANY LETTER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE CITY ENGINEER. ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF 19.12.040.

WALL NOTES:

16. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS, FLOOD CONTROL, AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.

17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.

18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.

19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF MOOT OR THE CLARK COUNTY AREA "UNIFORM STANDARD SPECIFICATIONS (AS APPLICABLE)" AND THE PLANS AND DETAILS SHOWN HEREON.

20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC. THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.

21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE OFFSITE INSPECTION AND TESTING CENTER PRIOR TO PROJECT ACCEPTANCE. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, AND THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXITS THE PUBLIC RIGHT-OF-WAY. THE LOCATION SHALL BE DESCRIBED BY STATE PLANE COORDINATES WHICH SHALL BE BASED ON THE "NEVADA COORDINATE SYSTEM OF 1983, EAST ZONE" AS DEFINED BY THE NEVADA REVISED STATUTES CHAPTER 327, AND TIED TO THE CITY OF LAS VEGAS VERTICAL CONTROL BENCHMARK NETWORK. COORDINATES MUST BE CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR. CERTAINITIES OF +/- 0.1 METER (+/- 0.3 FEET). A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).

22. SANITARY SEWER SERVICE LATERALS REQUIRE THE INSTALLATION OF A MARKER BALL AT THE CONNECTION OF THE SEWER SERVICE LATERAL TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERAL EXITS THE PUBLIC RIGHT-OF-WAY. STORM DRAIN LATERALS REQUIRE THE INSTALLATION OF A MARKER BALL AT THE CONNECTION OF THE STORM DRAIN LATERAL TO THE STORM DRAIN MAIN AND WHERE THE STORM DRAIN LATERAL EXITS THE PUBLIC RIGHT-OF-WAY OR WHERE THE STORM DRAIN LATERAL CONNECTS TO A DROP INLET. THE MARKER BALL SHALL BE 3M 4" MARKER BALL 1404-XR OR APPROVED EQUAL.

23. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS. LATEST EDITION.

24. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

2.2 CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.

2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE CONSTRUCTION AS PER PLANS, ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.

3. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.

4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SD-35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE I AGGREGATE BASE.

5. ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.

6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.

7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.

8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.

9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1") OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.

10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

2.3 CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST EDITION.

2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.

3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS. WORKER WARNING SIGNS MUST BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.

4. WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCRONCHED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSURED IN THE SAFE CROSSING OF THE PUBLIC WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.

5. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKINGS, SUCH PAVEMENT MARKINGS SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE, VP CLASS 6 REFLECTIVE SHEETING OR APPROVED EQUAL. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL, SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.

7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.

8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER. REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.

9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.

10. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER. REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.

11. FIRE HYDRANTS SPACING SHALL BE: RESIDENTIAL - 500 FEET UNSPRINKLERED; 600 FEET SPRINKLERED. COMMERCIAL - 300 FEET UNSPRINKLERED; 400 FEET SPRINKLERED.

12. WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT MAXIMUM 1000' SPACING. TO PROVIDE FOR TRANSPORTATION HAZARDS, WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR OR MORE TRAFFIC LANES AND HAVE A TRAFFIC CONTROL OF MORE THAN 3000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FEET ON AN ALTERNATING BASIS.

13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE REQUIRED RADII OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIIUS OF THE CUL-DE-SAC.

14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION.

15. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FEET, AS MEASURED BY AN APPROVED ROUTE.

16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FEET, AS MEASURED BY AN APPROVED ROUTE.

17. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FEET.

18. TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN.

19. ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS.

20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FEET PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%.

21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FEET OUTSIDE AND 28 FEET INSIDE TURNING RADII.

22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL BE NOT LESS THAN 13 FEET 6 INCHES.

23. FIRE DEPARTMENT ACCESS ROADS IN ALL RESIDENTIAL DEVELOPMENTS (EXCEPT FOR THE APARTMENT BUILDINGS) SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 36 FEET FLOW LINE TO THE FLOW LINE. THE WIDTH MAY BE REDUCED TO 24 FEET FLOW LINE TO THE FLOW LINE IF PARALLEL PARKING IS ALLOWED ON ONE SIDE ONLY, AND 40 FEET FLOW LINE TO THE FLOW LINE IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. THESE WIDTHS MAY BE REDUCED BY 4 FEET IF ALL BUILDINGS ARE SPRINKLERED.

24. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS 100 FEET ALONG ALL DESIGNATED FIRE LANES SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED HIGHER THAN 10 FEET OR LESS THAN 6 FEET FROM ROADWAY LEVEL. THE CURB OR FLOW LINE ON THE REQUESTED LVD INSPECTION, WHEN PROVIDED SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.

25. A FIRE DEPARTMENT ACCESS ROAD SHALL EXTEND TO WITHIN 50 FEET OF A SINGLE EXTERIOR DOOR PROVIDING ACCESS TO THE INTERIOR OF THE BUILDING.

26. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED WITHIN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 250 FEET IF THE BUILDING IS SPRINKLERED.

27. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 100 FEET AND MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FEET, AND FOR ALL COMMERCIAL, INDUSTRIAL, AND MULTI-FAMILY RESIDENTIAL DEVELOPMENTS.

28. ALL DEAD-END FIRE APPARATUS ACCESS ROADS AND OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA HAVING A MINIMUM DIAMETER OF 81 FEET.

29. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS 100 FEET ALONG ALL DESIGNATED FIRE LANES SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED HIGHER THAN 10 FEET OR LESS THAN 6 FEET FROM ROADWAY LEVEL. THE CURB OR FLOW LINE ON THE REQUESTED LVD INSPECTION, WHEN PROVIDED SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.

30. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM, SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

31. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO ROAD COMPLETION OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREET LIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS.

32. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS WILL BE IN CONJUNCTION WITH THIS PROJECT. THE COMPLETE COORDINATE, ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEO) AT (702) 228-6331.

33. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO ROAD COMPLETION OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREET LIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS.

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2.5 CITY OF LAS VEGAS GRADING NOTES

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.

3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.

4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.

5. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.

6. CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

A. PAVEMENT AREA SUBGRADE HORIZONTAL +0.1" VERTICAL COMPACTION +0.0" TO -0.1" SEE SOILS REPORT

B. ENGINEERED FILL HORIZONTAL +0.5" VERTICAL COMPACTION +0.1" TO -0.1" SEE SOILS REPORT

7. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.

8. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY WATER.

9. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND PROTECTED FROM THE PUBLIC. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.

10. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT'S ORDINANCE # 5667, "HYDRANT SPECIFICATIONS", AND "HYDRANT INSTALLATION SPECIFICATION".

2. AUTHORIZED FIRE HYDRANTS FOR THIS PROJECT ARE: KENNEDY - GUARDIAN MODELS K81A AND K81D B. WELLES - SUPER CATLION 250 MODEL A-403 C. CLOW - MEDALLION MODEL F-2548L10 D. TROY VALVE - PATRIOT MODEL T1000 NEVADA HYDRANT E. U.S. PIPE - METROLFLOW-W-01

3. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW.

4. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF STREET ADJACENT TO THE FIRE HYDRANTS AS REQUIRED BY ORDINANCE # 5667.

5. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES SHALL BE CONDUCTED BEFORE THE LINES CALL THE CITY OF LAS VEGAS INSPECTION HOT-LINE AT 229-2010 TO REQUEST AN INSPECTION BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.

6. PAINTING OF THE CURBS AND FIRE HYDRANTS AND ALL OTHER WORK NECESSARY AS REQUIRED BY ORDINANCE # 5667, FOR THE PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.

7. A PERMIT IS REQUIRED FROM THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR THE ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK.

8. PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.

9. PRIOR TO THE FINAL OCCUPANCY, A FLOW TEST MUST BE WITNESSED BY THE CITY OF LAS VEGAS FIRE DEPARTMENT TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW.

10. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE UL LISTED, A.W.W.A. APPROVED, AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE.

11. FIRE HYDRANTS SPACING SHALL BE: RESIDENTIAL - 500 FEET UNSPRINKLERED; 600 FEET SPRINKLERED. COMMERCIAL - 300 FEET UNSPRINKLERED; 400 FEET SPRINKLERED.

12. WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT MAXIMUM 1000' SPACING. TO PROVIDE FOR TRANSPORTATION HAZARDS, WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR OR MORE TRAFFIC LANES AND HAVE A TRAFFIC CONTROL OF MORE THAN 3000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FEET ON AN ALTERNATING BASIS.

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16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FEET, AS MEASURED BY AN APPROVED ROUTE.

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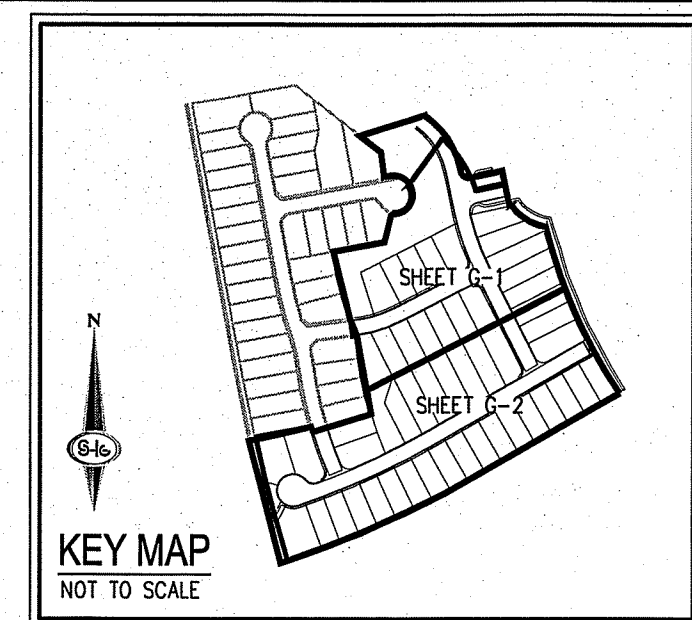
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SLATER
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CONSULTING ENGINEERS & PLANNERS
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PHONE (702) 284-5300
FAX (702) 284-5399

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LAS VEGAS, NEVADA

LENNAR®

CATALINA PHASE 1 GRADING PLAN II

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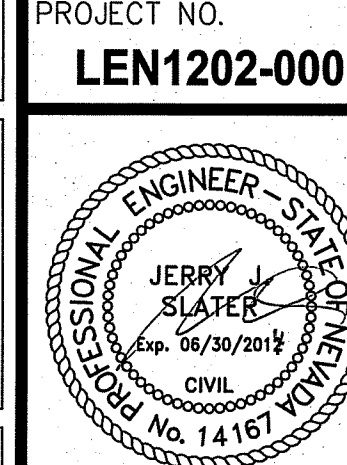
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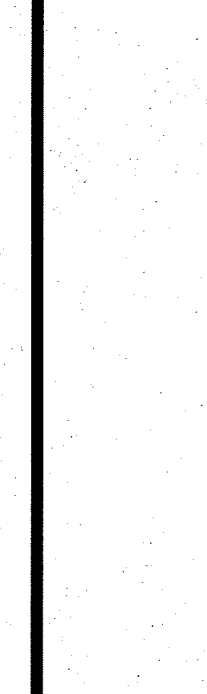
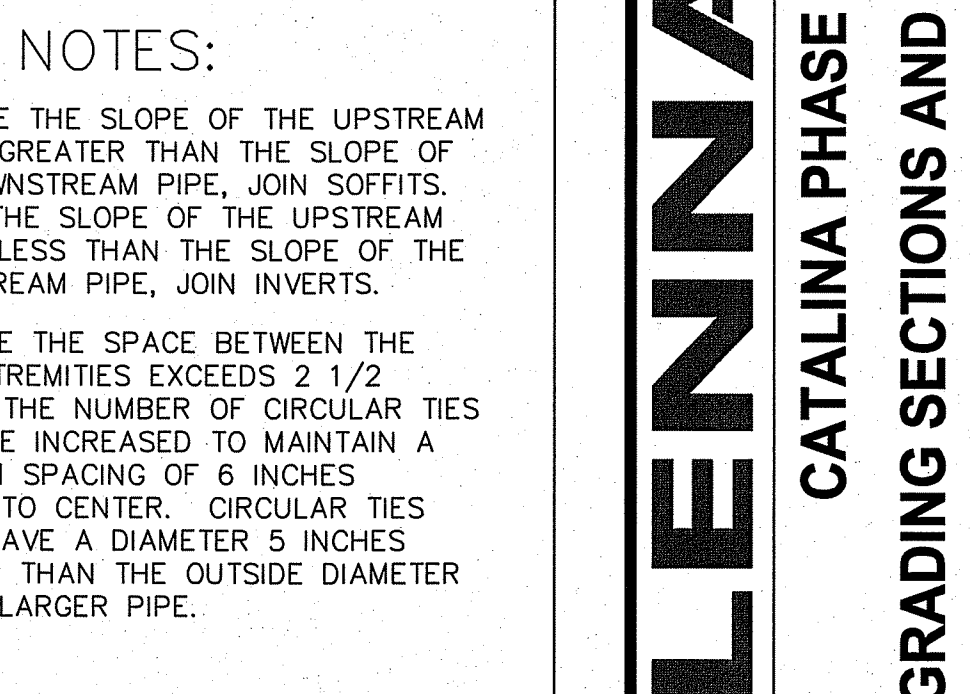
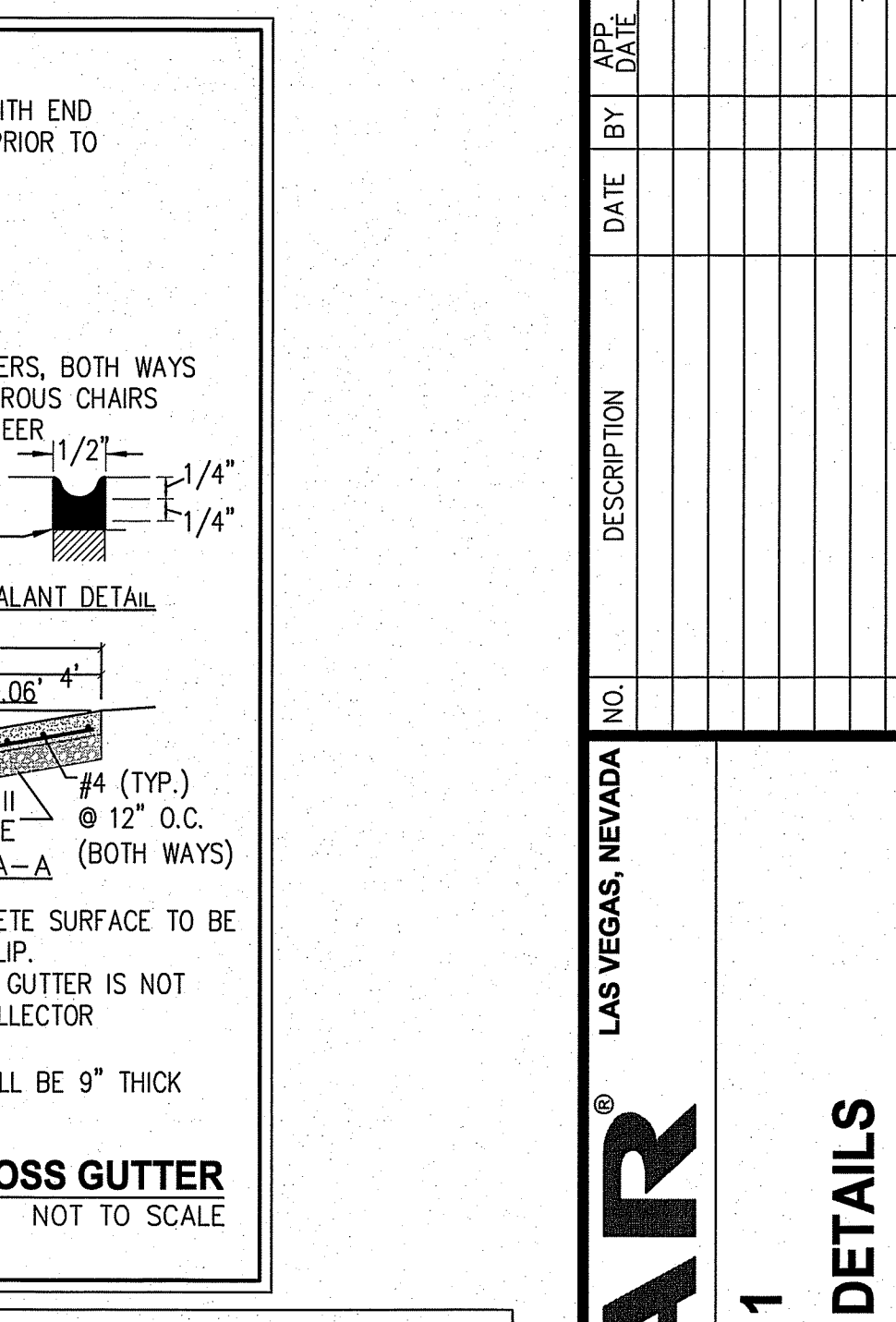
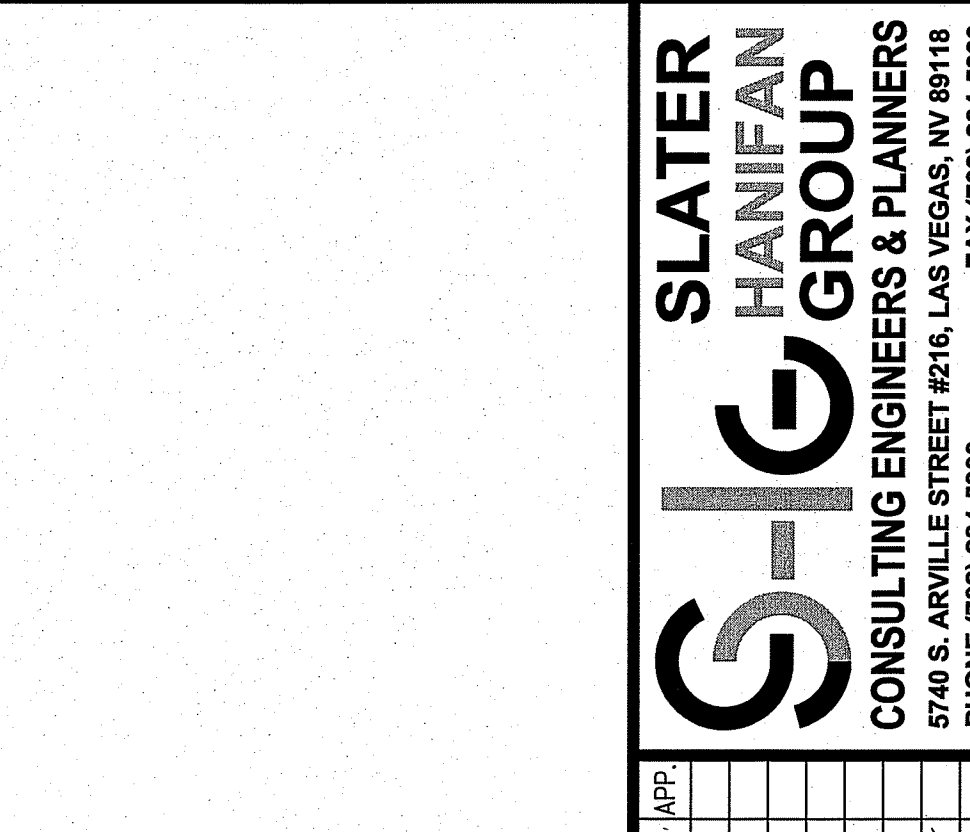
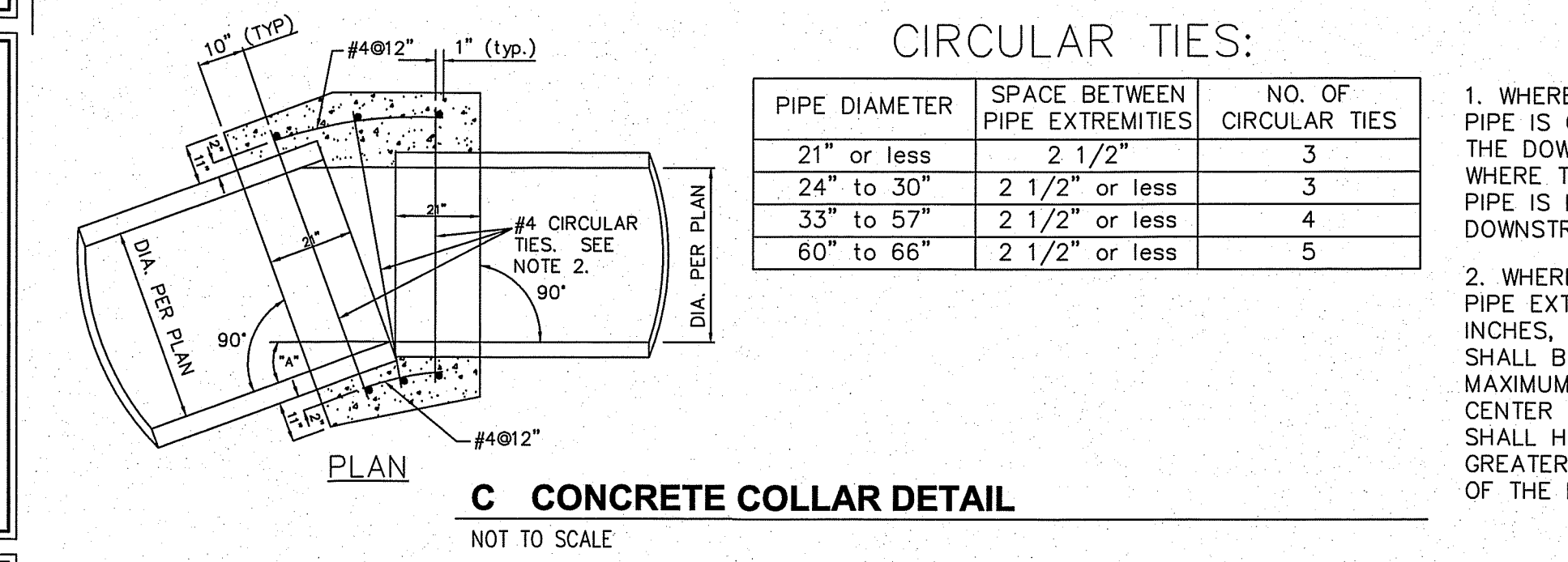
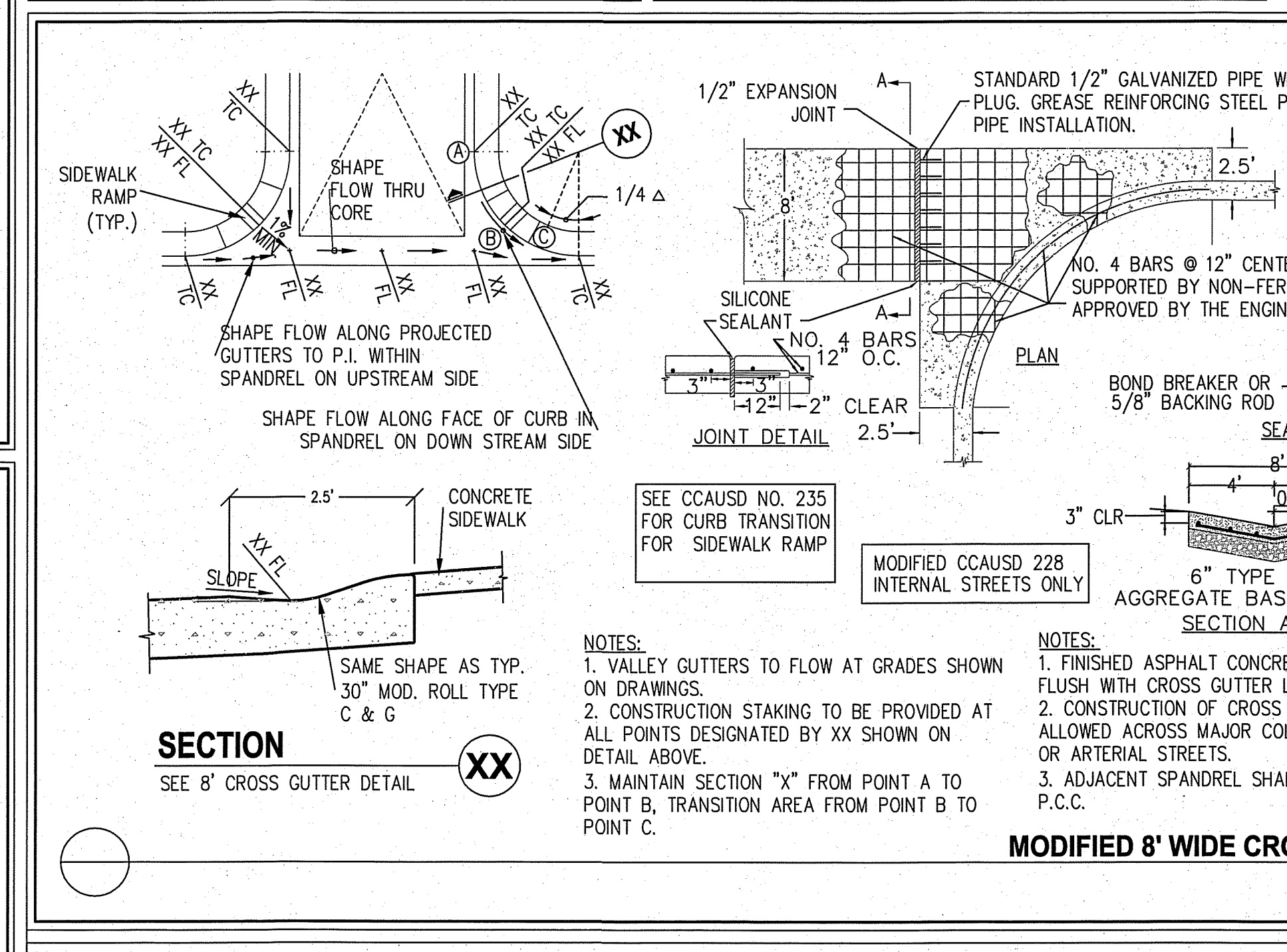
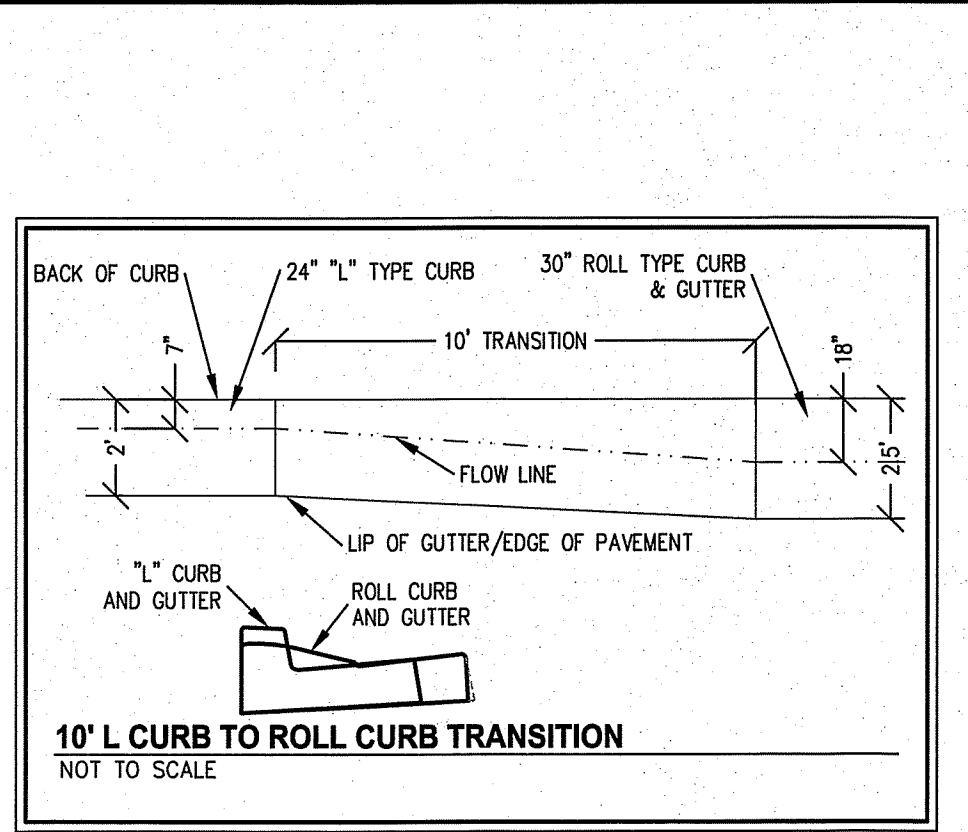
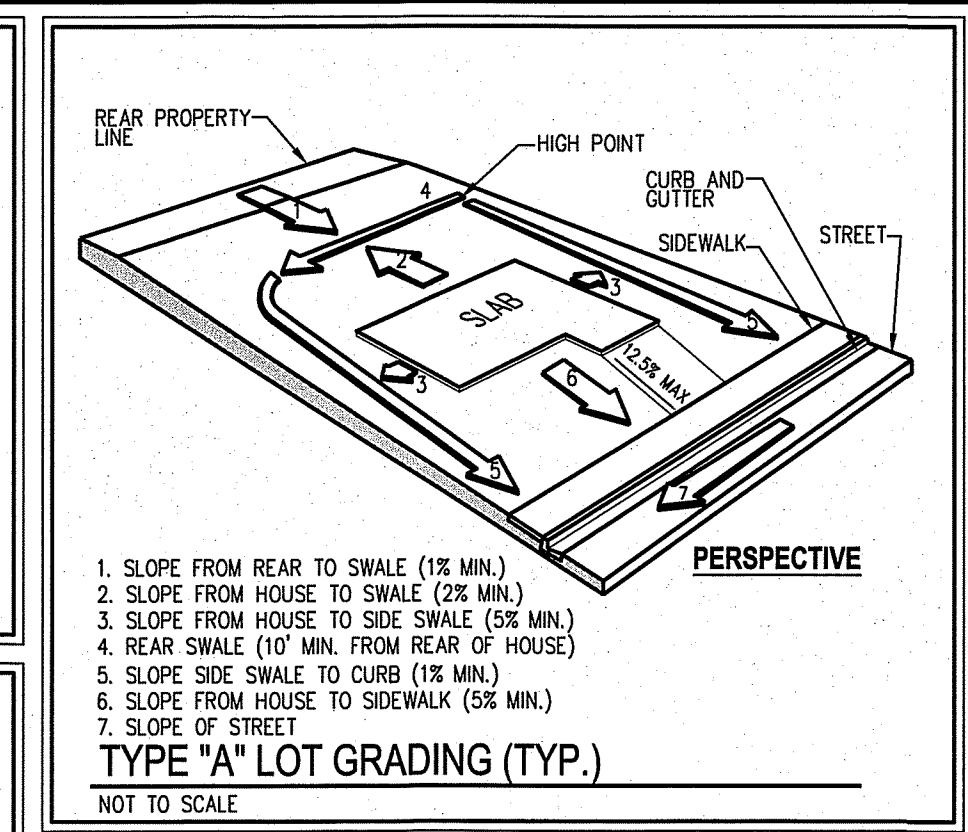
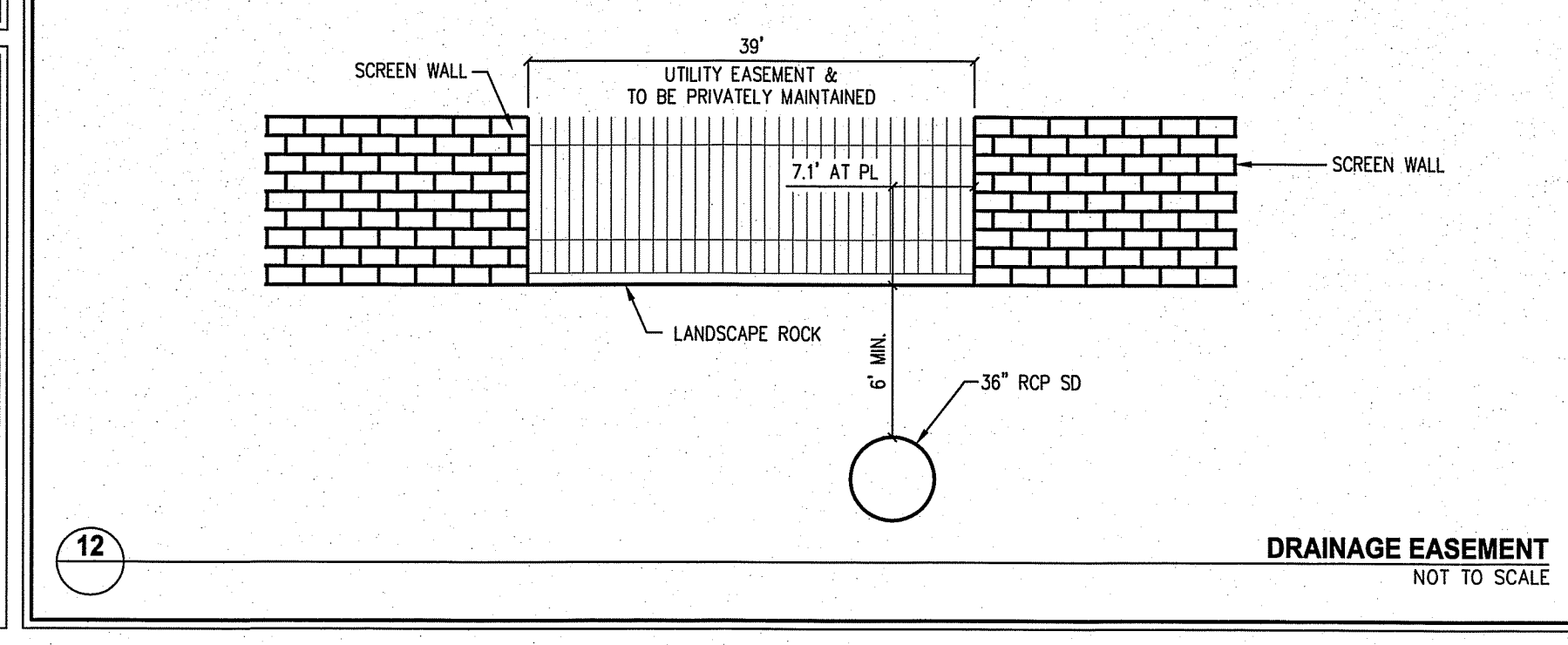
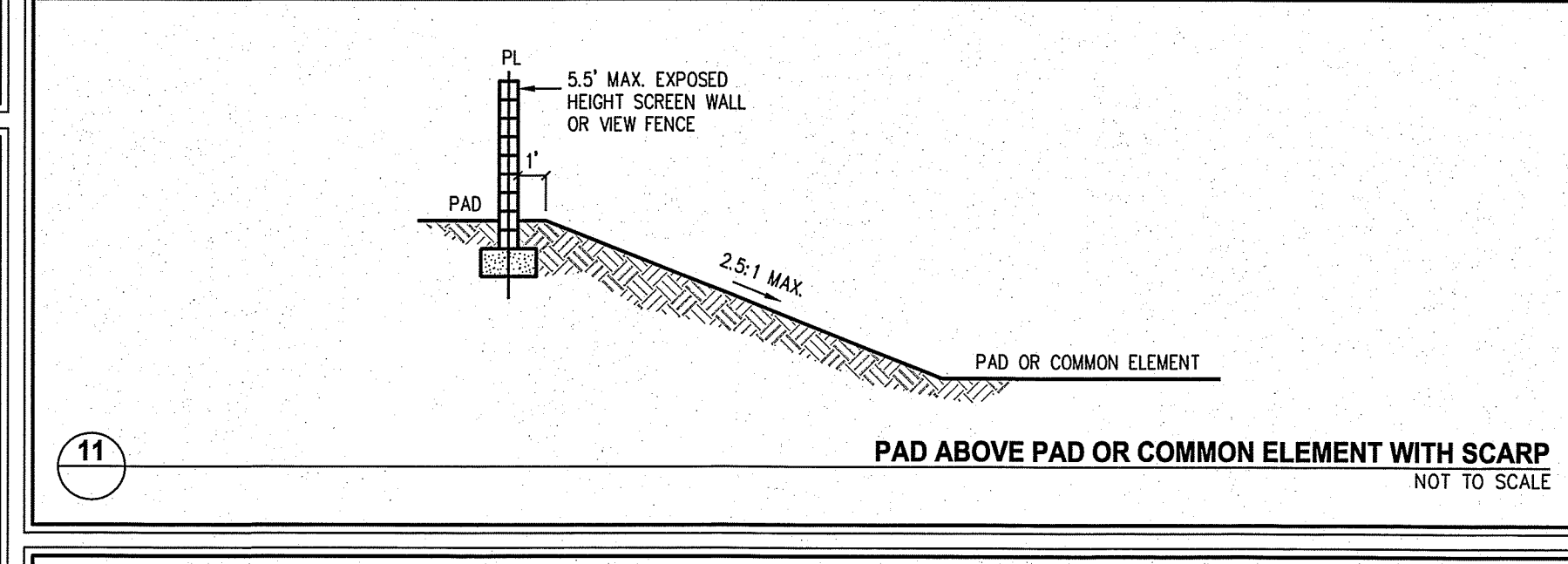
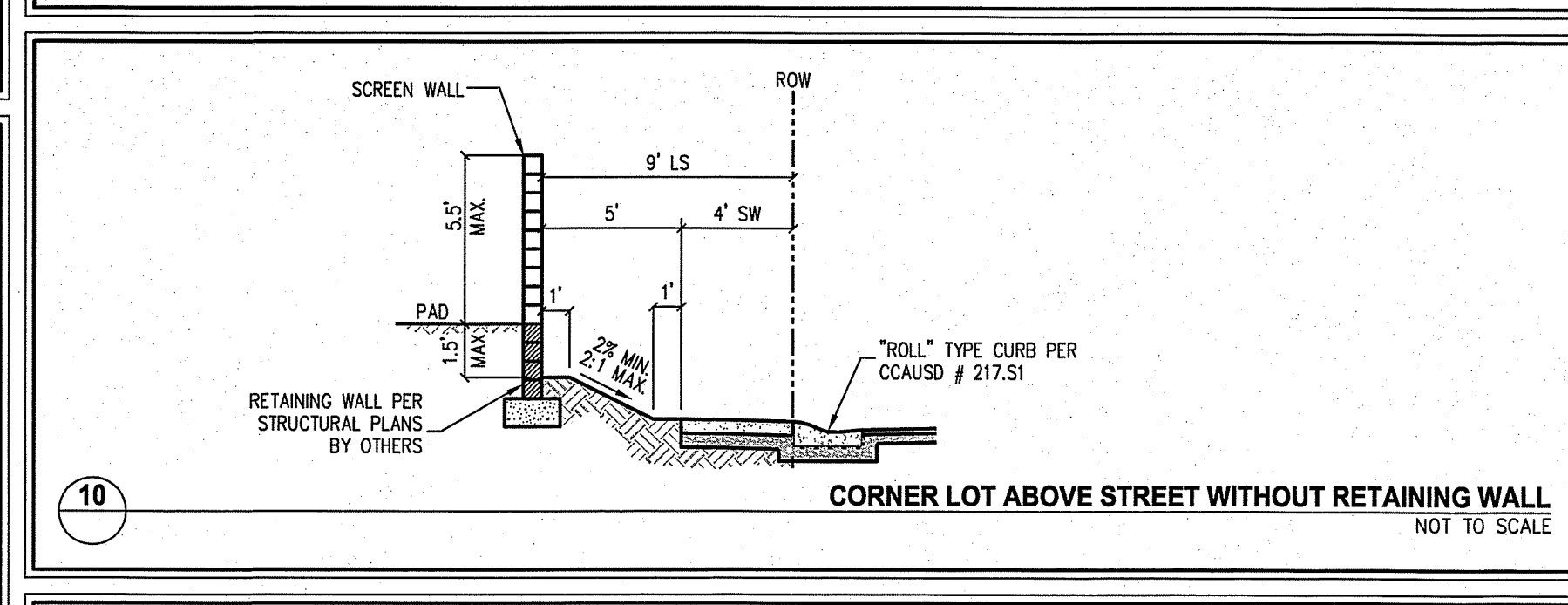
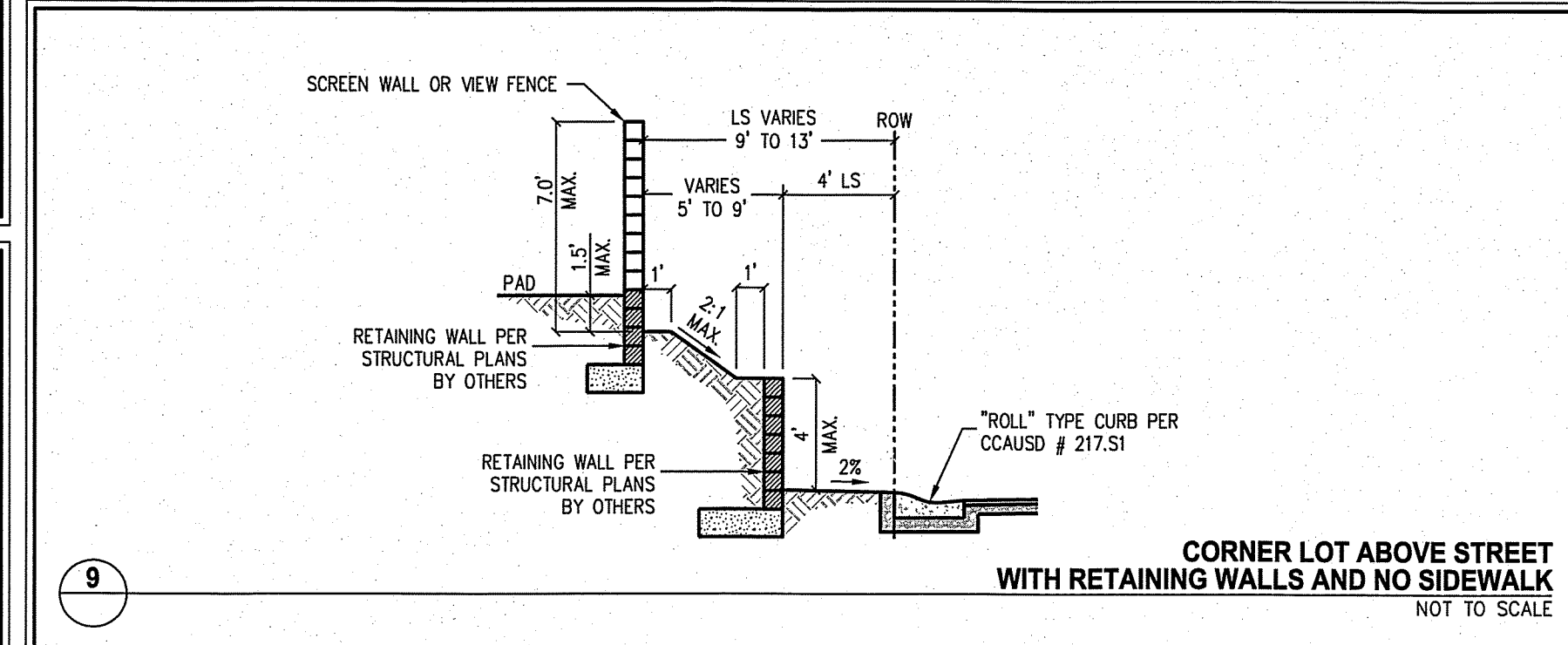
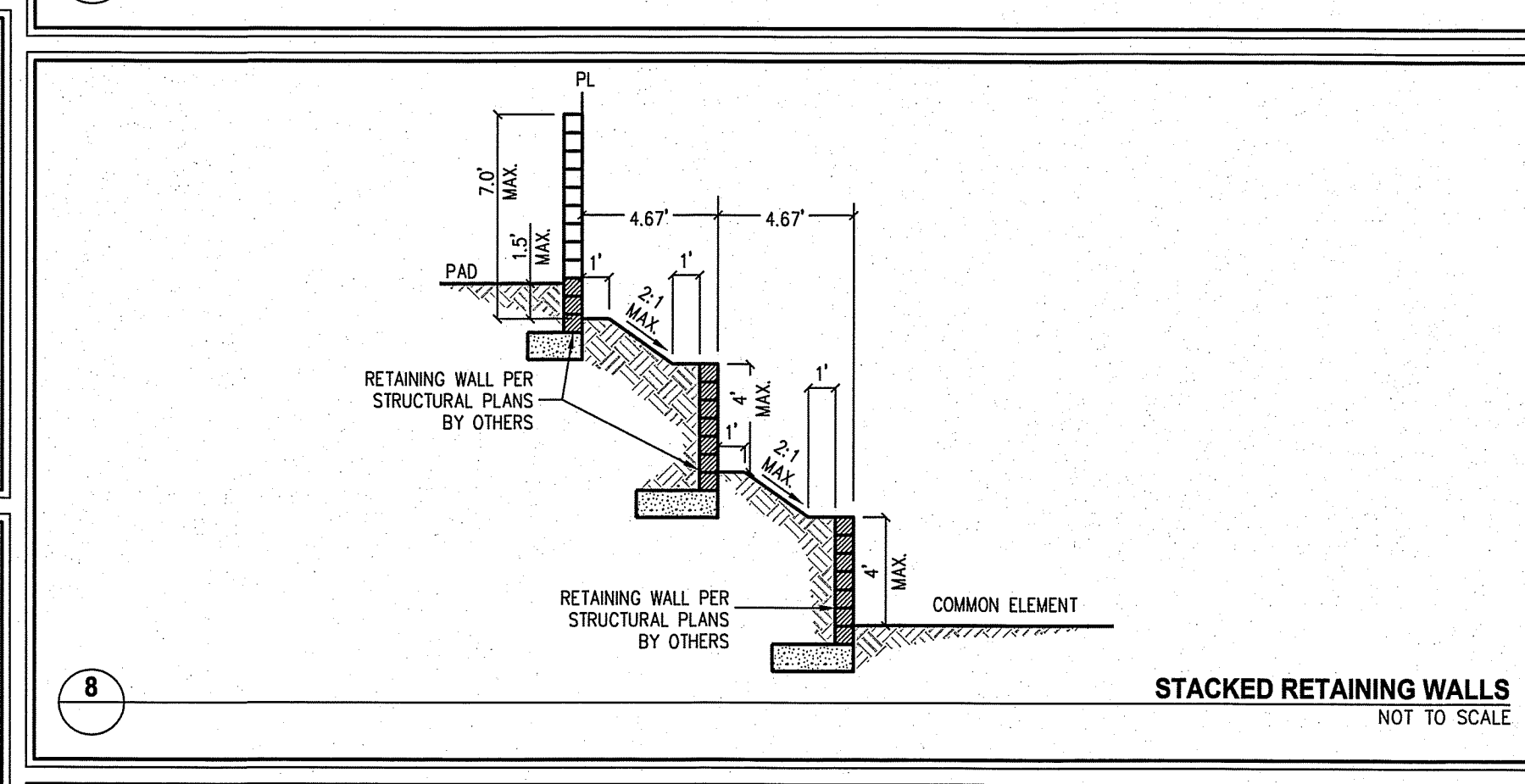
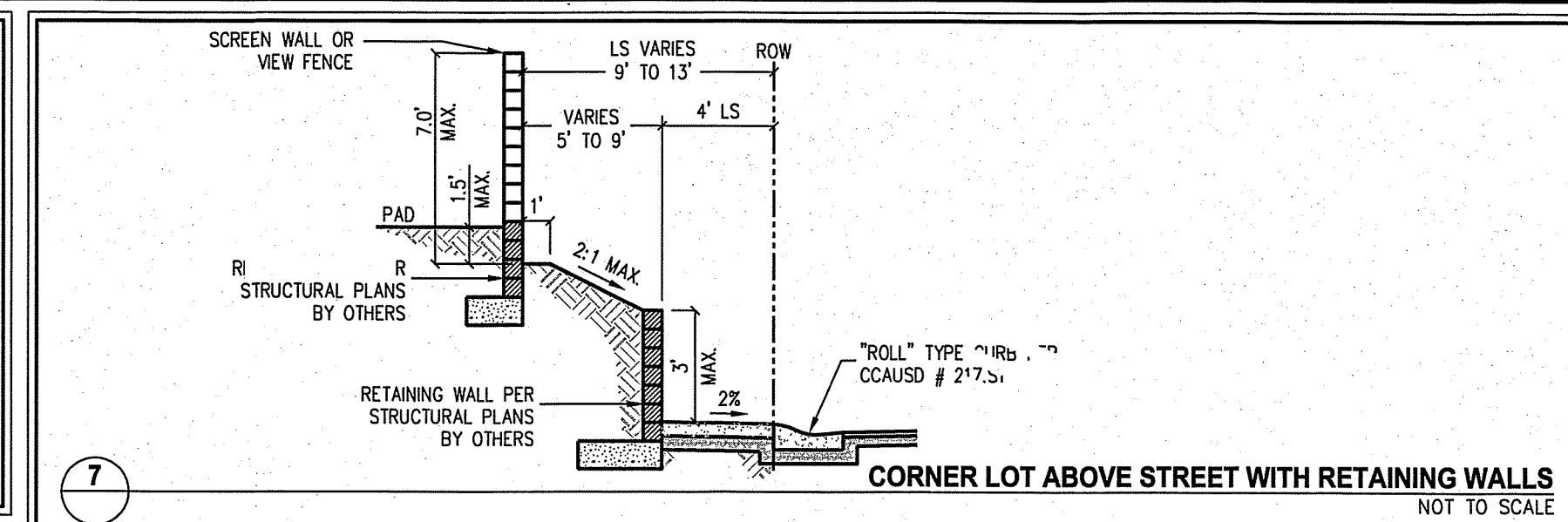
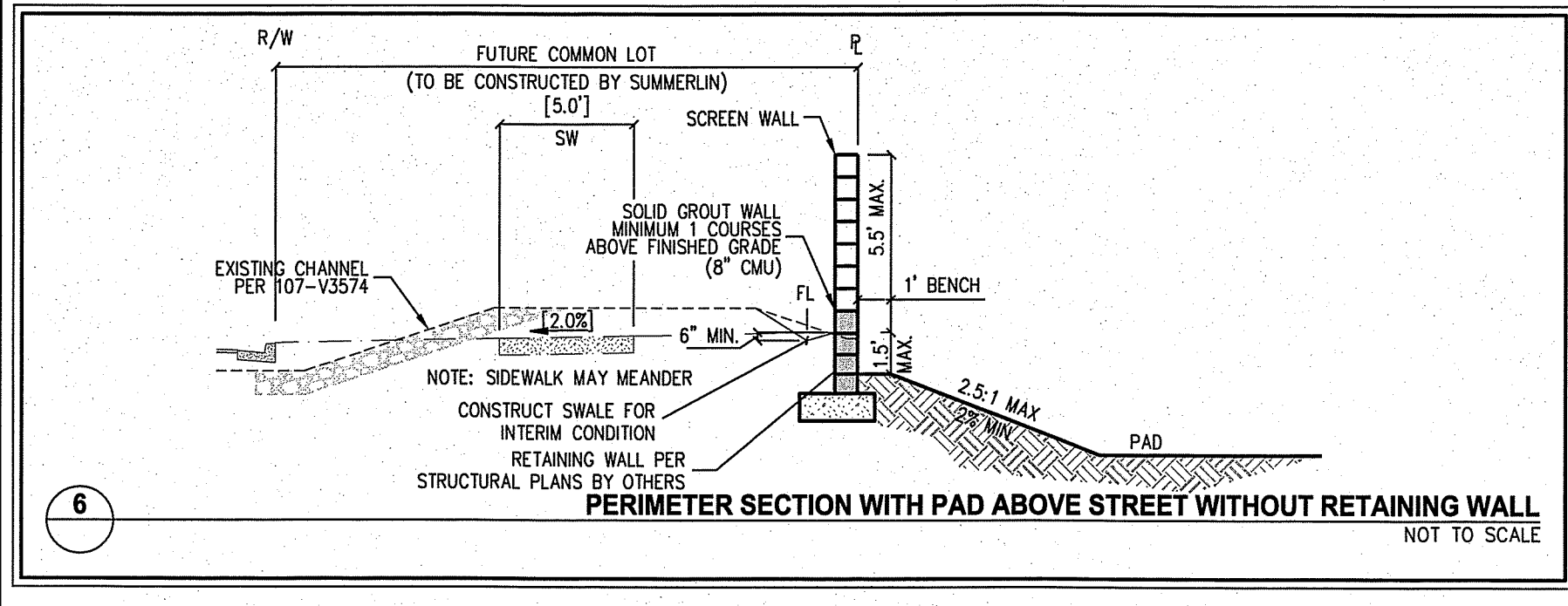
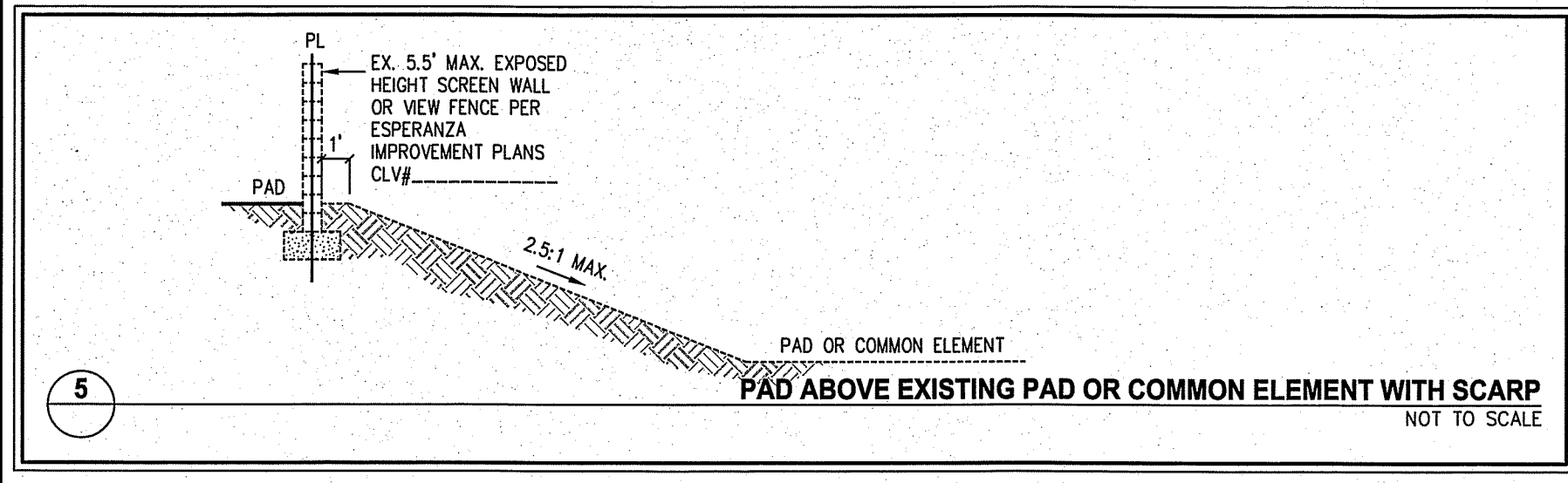
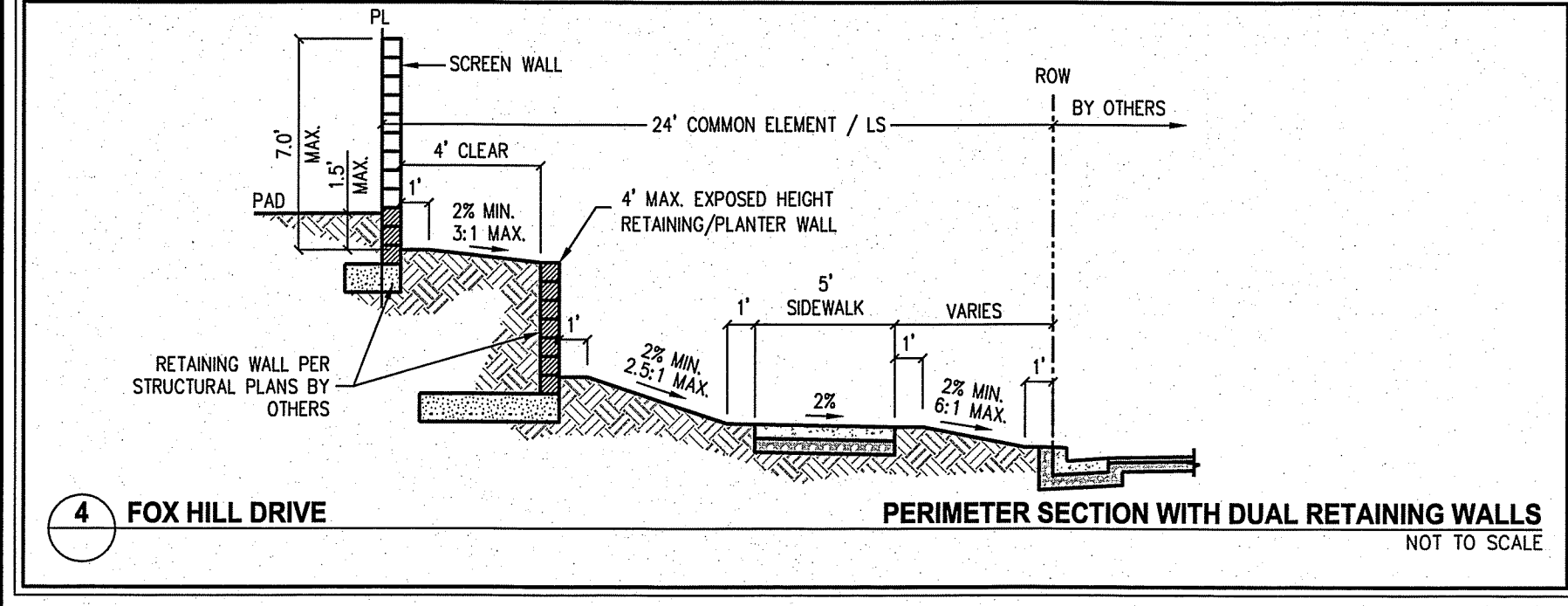
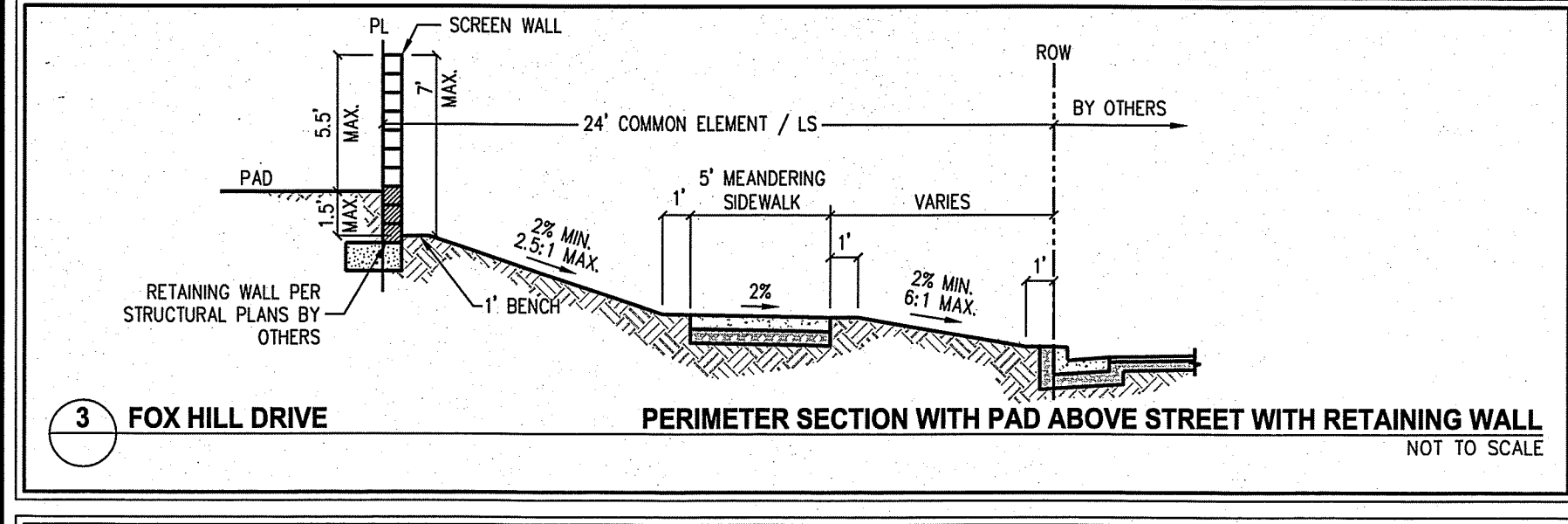
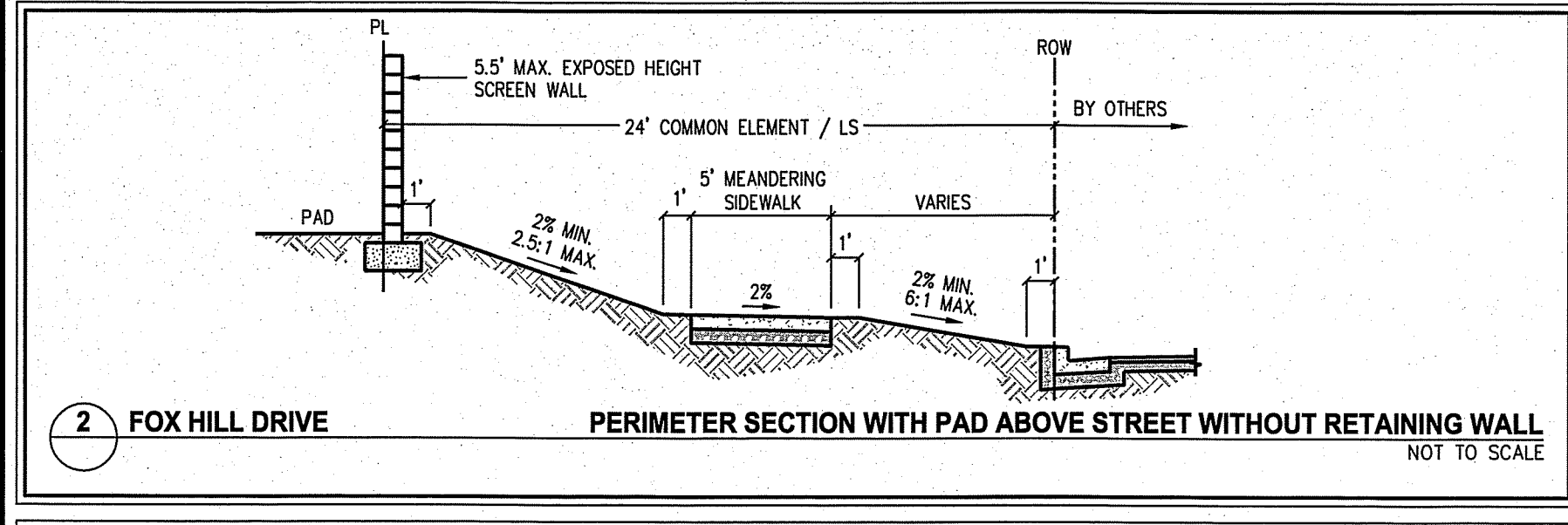
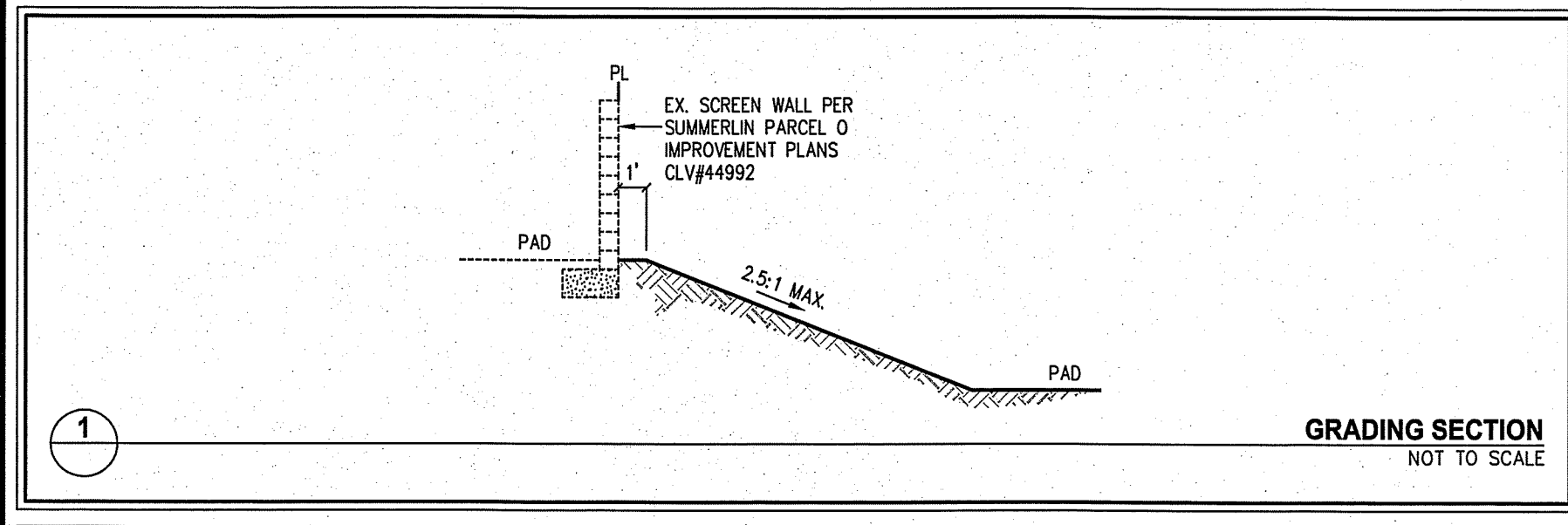
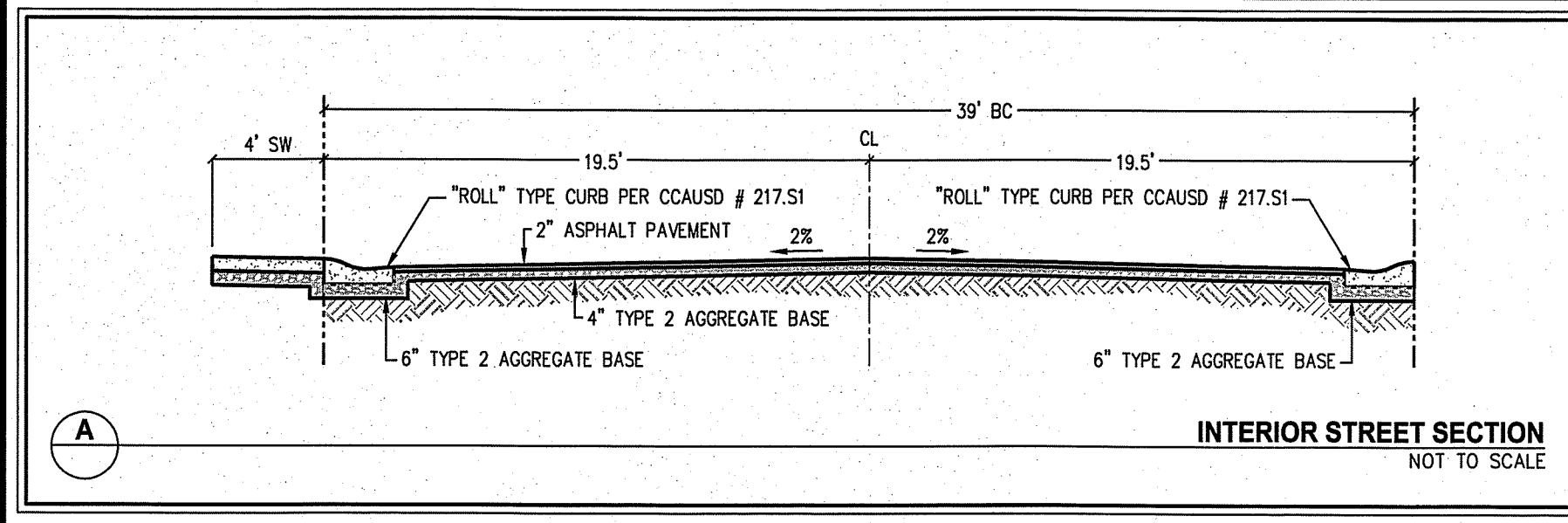
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G-2



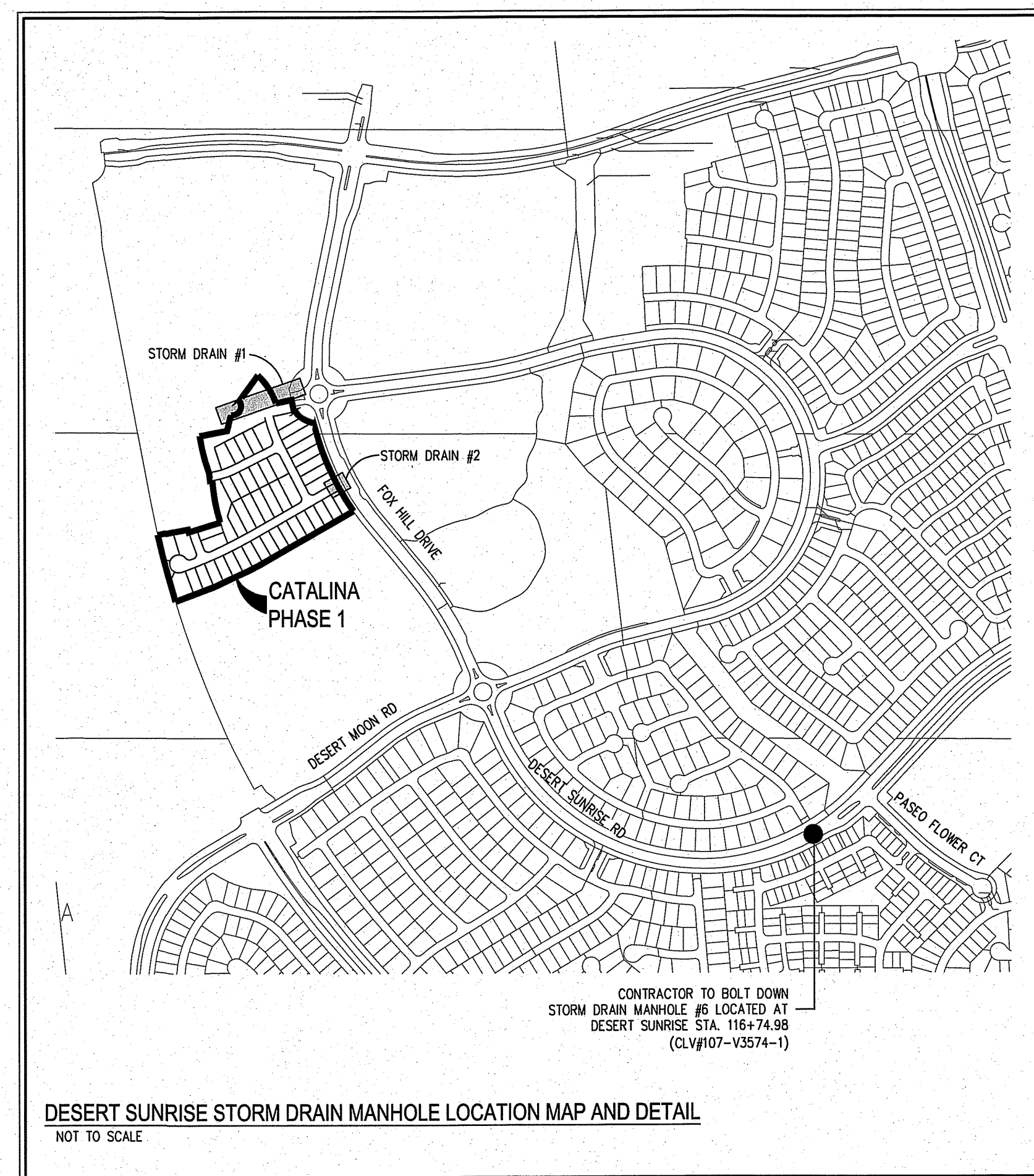
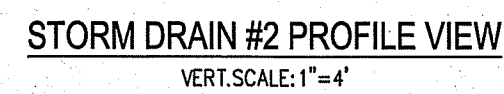
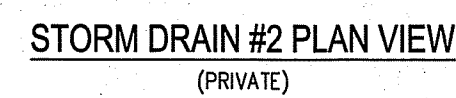
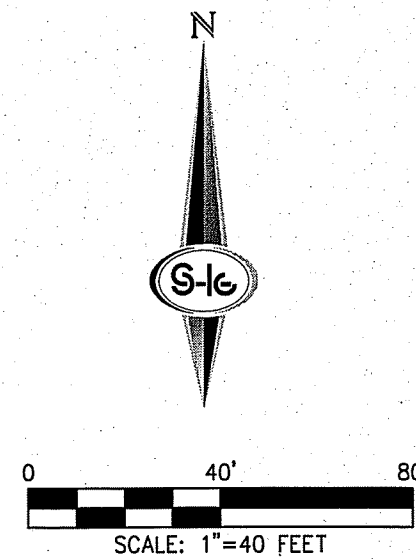
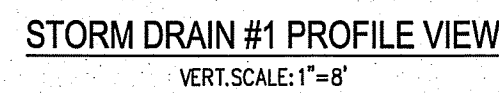
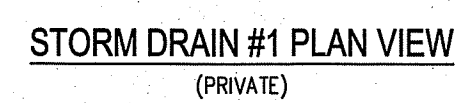


SLATER HANFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

LENNAR
LAS VEGAS, NEVADA
CATALINA PHASE 1
GRADING SECTIONS AND DETAILS

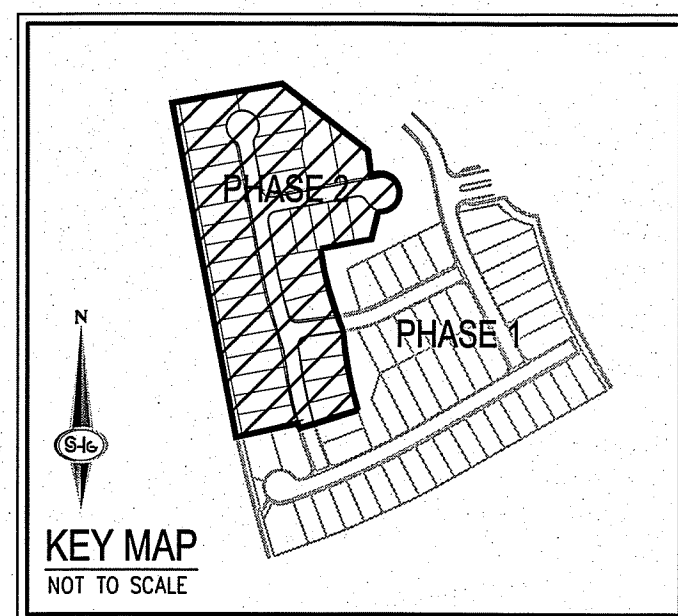
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PROJECT NO. LEN1202-000

D-1
SHEET 5 OF 6



CATALINA PHASE 2

A SINGLE FAMILY DETACHED
RESIDENTIAL COMMUNITY
A PORTION OF APN 137-34-313-001



LOCATED WITHIN PARCEL M 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.

FOUND NDOT BRASS CAP, 50 FEET NORTH OF STATION 787+19.42 OF CHARLESTON
BLVD, 0LV09-34SSE6
NAVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

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.

ACTING CITY ENGINEER-DAVID BOWERS PE, PTOE #16736 DATE _____

APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED OF RIGHT-OF-WAY, AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIALLY LISTED UNDER DEVIATIONS FORM STANDARDS. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, CLARK COUNTY AREA, NEVADA.

CLV FIRE MARSHALL	DATE
-------------------	------

DOUG RANKIN, AICP
PLANNING MANAGER

DATE

THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING AND
DEVELOPMENT DEPARTMENT.

CENTURYLINK	DATE
-------------	------

THE AFFIXED EMBARGO APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND / OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NO. 117426 DATE: _____
SHEETS: _____

APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM LAS VEGAS VALLEY WATER DISTRICT.

NV ENERGY	DATE
-----------	------

NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.

SOUTHWEST GAS	DATE
---------------	------

COX COMMUNICATIONS LAS VEGAS, INC. DATE

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.

GREYSTONE NEVADA, LLC
2490 PASEO VERDE PARKWAY
SUITE 120
HENDERSON, NV 89074
PH (702) 458-7700
FX (702) 889-0801

LENNAR COMMUNITIES NEVADA, LLC
2490 PASEO VERDE PARKWAY
SUITE 120
HENDERSON, NV 89074
PH (702) 458-7700
FX (702) 889-0801

SLATER HANIFAN GROUP
5740 S. ARVILLE ST SUITE 216
LAS VEGAS, NV 89118
PH (702) 284-5300
FX (702) 284-5399

APN: 137-34-313-002	
NET ACREAGE	6.45 AC
RESIDENTIAL LOTS	36
COMMON ELEMENTS	0
DENSITY	5.58 - DU/AC
TYPICAL LOT SIZE	5,170 SF (47'x110' 5,875 SF (47'x122')
ZONING	P-C
EARTHWORK SUMMARY (ADJUSTED)	
CUT	- CY
FILL	- CY
SITE IMPORT	- CY

NOTE: ALL LAND SURFACE AREA DISTURBANCES OVER 1 ACRE REQUIRE A STORMWATER DISCHARGE PERMIT ISSUED BY THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP). A PHASED CONSTRUCTION UNIT IN THE NEVADA DIVISION IS CONSIDERED UNDER A CONSTRUCTION UNIT WITH ALL STRIPPED SURFACE AREAS COVERED BY PAVING, GRASS, OR BUILDING CONSTRUCTION OR PLANTING. A STORMWATER DISCHARGE PERMIT APPLICATION AND ASSOCIATED INFORMATION MAY BE DOWNLOADED FROM THE WEB SITE:
[HTTP://WWW.STATE.NV.US/BWPC/STORM01.HTM](http://www.state.nv.us/bwpc/STORM01.HTM) PROJECTS THAT DISTURB MORE THEN ONE ACRE OF LAND MUST SUBMIT TO NDEP A "NOTICE OF INTENT" FOR INCLUSION UNDER STORMWATER PERMIT NO. NVRI00000 ALONG WITH THE APPROPRIATE FILLING FEE.

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
do UnderGround**
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-432-5300

OFFICIAL AND NATIONAL MEMBER OF THE NATIONAL
UNDERGROUND UTILITY LOCATING ASSOCIATION

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

Call
811

OR
1-800-227-2600

AND
CLARK COUNTY TRAFFIC OPERATIONS
1-703-261-5555

**SLATER
HANIFAN
S-G GROUP**
CONSULTING ENGINEERS & PLANNERS
5750 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300
FAX (702) 284-5399

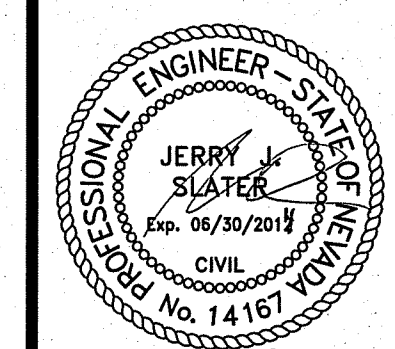
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LENNAR®
CATALINA PHASE 2
COVER SHEET

S34
T20
R59

DATE:	07/16/12
DRAFTER:	BCC
DESIGNER:	BCC
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PROJECT NO.
LEN1202-000



C-1
SHEET 1 OF 4

2.1 CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST EDITION, THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY, THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".

2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CITY PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.

3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORILY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.

4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.

5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.

6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.

7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.

8. AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE LIP OF ALL GUTTERS AFTER CONSTRUCTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.

9. CURB AND GUTTER FLOW TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.

10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.

11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.

12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY GEOTEK, REPORT #2412-11B, JUNE 4, 2010, APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.

13. EXISTANT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.

14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS, ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.E.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 16, APPENDIX D.

15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APPROXES, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER. ALL ABOVE GROUND UTILITY APPEARANCES SHALL CONFORM TO THE REQUIREMENTS OF 19.12.040.

16. WALL NOTES:
ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CITY PLANS FOR THE PURPOSE OF REVEALING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.

17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.

18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.

19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA, IN CLARK SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.

20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.

21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE OFFSITE INSPECTION AND TESTING SECTION PRIOR TO PROJECT ACCEPTANCE. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, AND THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXITS THE PUBLIC RIGHT-OF-WAY. THE LOCATION SHALL BE DESCRIBED BY STATE PLANE COORDINATES WHICH SHALL BE BASED ON THE "NEVADA DEPARTMENT OF 1983, EAST ZONE" AS DEFINED BY THE NEVADA REVISED STATUTES CHAPTER 327, AND TIED TO THE CITY OF LAS VEGAS VERTICAL CONTROL BENCHMARK NETWORK. COORDINATES MUST BE CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINITIES OF +/- 0.1 METER (+/- 0.3 FEET). A SEPARATE ELECTRONIC CD-ROM DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).

22. SANITARY SEWER SERVICE LATERALS REQUIRE THE INSTALLATION OF A MARKER BALL AT THE CONNECTION OF THE SEWER SERVICE LATERAL TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERAL EXITS THE PUBLIC RIGHT-OF-WAY. STORM DRAIN LATERALS REQUIRE THE INSTALLATION OF A MARKER BALL AT THE CONNECTION OF THE STORM DRAIN LATERAL TO THE STORM DRAIN MAIN AND WHERE THE STORM DRAIN LATERAL EXITS THE PUBLIC RIGHT-OF-WAY OR WHERE THE STORM DRAIN LATERAL CONNECTS TO A DROP INLET. THE MARKER BALL SHALL BE 3M 4" MARKER BALL 1404-XR OR APPROVED EQUAL.

23. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST EDITION.

24. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

2.2 CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.

2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.

3. CHSEL "S" OR "C" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.

4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.

5. ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETIRED IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.

6. THE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. LINE "Y" S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.

7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.

8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.

9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE CITY APPROVED CONSTRUCTION PLANS. IF ANY SEWER MAINS FOUND TO EXCEED THIS TOLERANCE, WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.

10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

2.3 CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADE, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL PLACE TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER INITIAL GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.

4. WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A METHOD OF CROSSING THROUGH THE WORK ZONE. THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.

5. IF THE IMPROVEMENTS NECESSITATE THE OBSTRUCTION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE NP CLASS REFLECTIVE SHEETING OR APPROVED EQUAL. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.

7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.

8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC INTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER. REGARDLESS OF THE STATUS OF COMPLETION PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.

9. STREET SIGNS AND STOPS SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP AND HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.

11. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP AND HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.

13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.

14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS OTHERWISE DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.

15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS AND FINAL PAVEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE PAVING TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNALS, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

2.4 CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST REVISION, AND ANY ADOPTED SPECIAL AREA STANDARDS.

2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (E/C) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF TRAFFIC ENGINEERING AND THE CITY ENGINEER.

3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.

4. ALL STREET LIGHTING CONDITIONS STUB SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE INSTALLED, AS TRAKER WIRE, WHEN "EMPTY" CONDUIT IS COMPLETELY INSTALLED FROM PSB TO PB. IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #8 THW WIRE WITH THE END INSULATED OR "SAFE OFF" PRIOR TO FINAL INSPECTION.

5. ANY STRUCTURE, SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE USE NO. 328.

6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TETO PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWINGS SHALL BE STAMPED AND SIGNED BY THE PREPARER.

7. SERVICE POINT SHALL BE COORDINATED WITH NV ENERGY COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE CITY PLANS.

8. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.

9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING CIRCUITS AND/OR PILES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED, AT NO EXPENSE TO THE CITY OF LAS VEGAS, BEFORE STREETLIGHT BASES ARE INSTALLED.

10. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.

11. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREET LIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS FOR ALL NEW PUBLIC STREET LIGHTS AND/OR SERVICE/INSTALLED UNDER THIS PLAN DESIGN WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TETO) AT (702) 229-6331.

2.5 CITY OF LAS VEGAS GRADING NOTES

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.

3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.

4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.

5. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.

6. CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

	HORIZONTAL	VERTICAL COMPACTION	SEE SOILS
A. PAVEMENT AREA SUBGRADE	0.1+/-	+0.0 TO -0.1	
B. ENGINEERED FILL	0.1+/-	+0.1 TO -0.1	SEE SOILS
REPORT	REPRESENTATIVE	TESTING WILL BE PERFORMED BY THE OWNER OR HIS	

7. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.

8. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.

9. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAR, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAR, SAFE AND USABLE CONDITION.

10. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BARRICADES, ROAD SIGNS AND BARRICADES, ETC.

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT'S ORDINANCE # 5667, "HYDRANT SPECIFICATIONS", AND "HYDRANT INSTALLATION SPECIFICATION".

2. AUTHORIZED FIRE HYDRANTS FOR THIS PROJECT ARE:
A. KENNEDY - GUARDIAN MODELS KB1A AND KB2
B. MUELLER - SUPER CENTURION 250 MODEL A-42-03
C. GLOW - MEDALLION MODEL F-254BLV0
D. TROY WATKINS ASSOCIATED T15000 NEVADA HYDRANT
E. U.S. PIPE - METROFLOW-W/-03

3. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW.

4. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS AS REQUIRED BY ORDINANCE # 5667.

5. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED PRIOR TO THE START OF CONSTRUCTION OF LAS VEGAS INSPECTION HOT-LINE AT 229-2017 TO REQUEST AN INSPECTION BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.

6. PAINTING OF THE CURBS AND FIRE HYDRANTS AND ALL OTHER WORK NECESSARY AS REQUIRED BY ORDINANCE # 5667, FOR THE PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.

7. A PERMIT IS REQUIRED FROM THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR THE ON-SITE WATER LINES AND FIRE HYDRANTS, THE PERMIT AND CONTRACTOR'S MATERIAL, AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK.

8. PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.

9. PRIOR TO THE FINAL OCCUPANCY, A FLOW TEST MUST BE WITNESSED BY THE CITY OF LAS VEGAS FIRE DEPARTMENT TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW.

10. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.N.W.I.A. APPROVED, AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE.

11. FIRE HYDRANTS SPACING SHALL BE:
RESIDENTIAL - 500 FEET UNSPRINKLERED; 600 FEET SPRINKLERED.
COMMERCIAL - 300 FEET UNSPRINKLERED; 400 FEET SPRINKLERED.

12. WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT MAXIMUM 1,000 FEET SPACING TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 300 FEET WIDE, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FEET ON AN ALTERNATING BASIS.

13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE REQUIRED RADII OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIIUS OF THE CUL-DE-SAC.

14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION.

15. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FEET, AS MEASURED BY AN APPROVED ROUTE.

16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FEET, AS MEASURED BY AN APPROVED ROUTE.

17. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FEET.

18. TWO SOURCES OF SUPPLY ARE REQUIRED WHEREVER THERE ARE 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN.

19. ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS. COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS. CALL BEFORE YOU DIG: 1 (800) 227-2600

20. THE TURNING RADII OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FEET OUTSIDE AND 28 FEET INSIDE TURNING RADII.

22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL BE NOT LESS THAN 13 FEET 6 INCHES.

23. FIRE DEPARTMENT ACCESS ROADS IN ALL RESIDENTIAL DEVELOPMENTS (EXCEPT FOR THE APARTMENT BUILDINGS) SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 36 FEET FLOW LINE TO THE FLOW LINE (THIS WIDTH MAY BE REDUCED TO 24 FEET, IF ALL BUILDINGS FRONTING THE STREET ARE SPRINKLERED) FOR MAIN RESIDENTIAL STREETS, WITH PARKING PERMITTED ON BOTH SIDES OF THE STREET. PRIVATE DRIVE AISLES, DRIVEWAYS, ETC. SHALL BE ALLOWED TO BE REDUCED TO A MINIMUM WIDTH OF 24 FEET WIDE FLOW LINE TO THE FLOW LINE WHEN SERVING NO MORE THAN 6 RESIDENCES, AND WHEN ON STREET PARKING IS DISALLOWED.

24. ALL FIRE APPARATUS ACCESS ROADS IN COMMERCIAL DEVELOPMENTS AND APARTMENT COMPLEXES SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 24 FEET (FLOW LINE TO THE FLOW LINE), PROVIDED NO PARKING IS ALLOWED ON EITHER SIDE, 32 FEET (FLOW LINE TO THE FLOW LINE), IF PARALLEL PARKING IS ALLOWED ON ONE SIDE ONLY, AND 40 FEET (FLOW LINE TO THE FLOW LINE), IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. THESE WIDTHS MAY BE REDUCED BY 4 FEET IF ALL BUILDINGS ARE SPRINKLERED.

25. A FIRE DEPARTMENT ACCESS ROAD SHALL EXTEND TO WITHIN 50 FEET OF A SINGLE EXTERIOR DOOR PROVIDING ACCESS TO THE INTERIOR OF THE BUILDING.

26. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 220 FEET IF THE BUILDING IS SPRINKLERED.

27. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 100 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FEET, AND FOR ALL COMMERCIAL, INDUSTRIAL, AND MULTI-FAMILY RESIDENTIAL DEVELOPMENTS.

28. ALL DEAD-END FIRE APPARATUS ACCESS ROADS AND FIRE LINES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA HAVING A MINIMUM DIAMETER OF 61 FEET.

29. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE STREET LIGHTING CIRCUITS AND/OR PILES. THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED, AT NO EXPENSE TO THE CITY OF LAS VEGAS, BEFORE STREETLIGHT BASES ARE INSTALLED.

30. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT #XXXXXX

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.

2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.

3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT RATED OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.

14. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.

5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.

6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.

7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.

8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.

9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.

10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.

11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.

12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES. LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

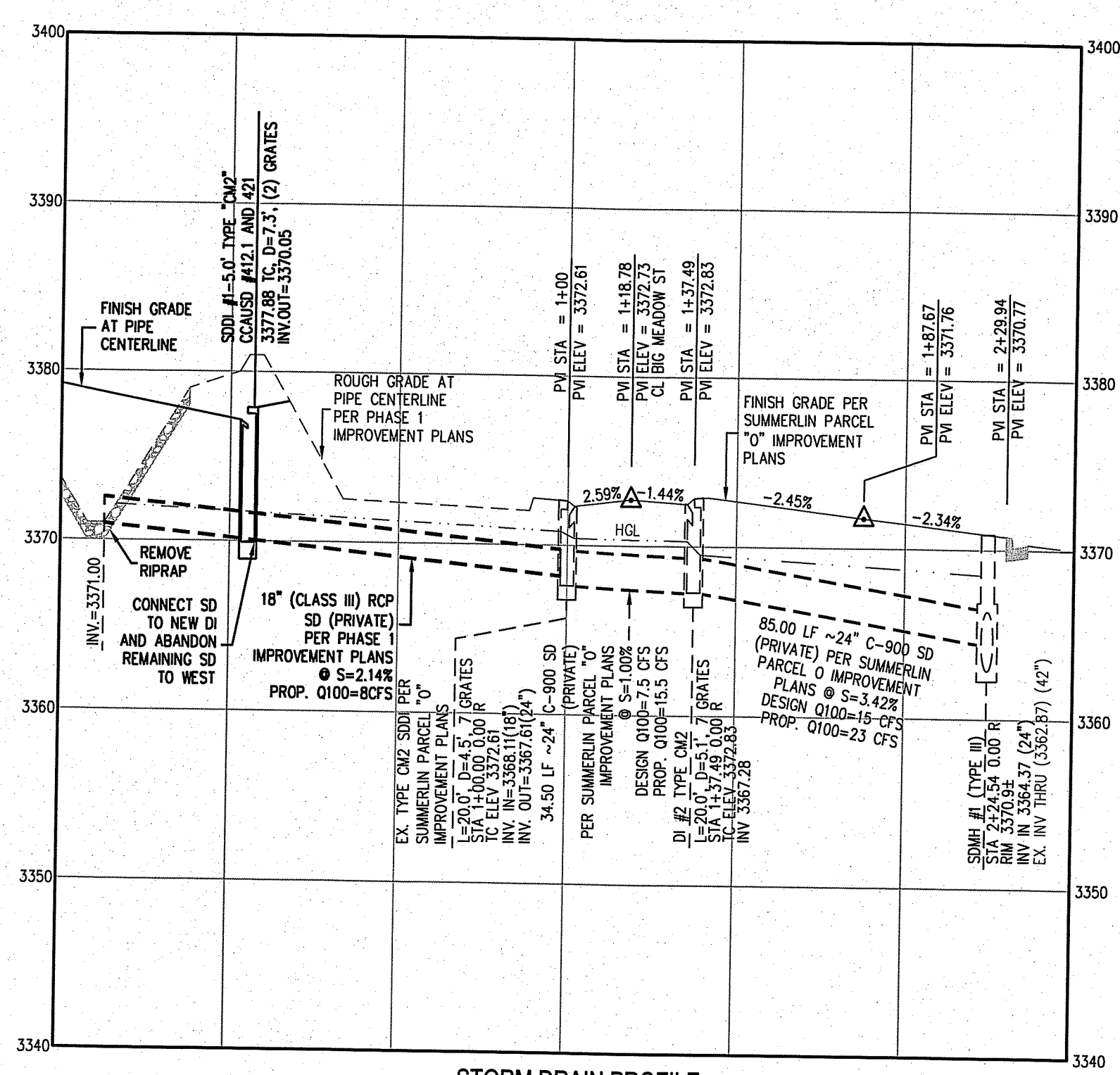
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.

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



GENERAL NOTES

1. FINAL GRASSES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH THE CITY OF CHICAGO SPEC 2304.11.2.
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 SLOTTED CURBS.
4. MAXIMUM MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEETS 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 PERMITS BUILDING PERMIT AND APPROVAL.
8. EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE. ONLY THE CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND REPORT DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOT BE RESPONSIBLE FOR DAMAGE TO EXISTING ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR/REPLACING FACILITIES IF ENGINEER/OWNER IS NOTIFIED OF ANY DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND ARE PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXIST) WITHIN THE SIGHT TRIANGLE ZONES.
10. ALL ELEVATIONS SHOWN, WITH EXCEPTION TO PAD AND FINISHED FLOOR ELEVATIONS, ARE THE VALUE SHOWN PLUS 3.00'.

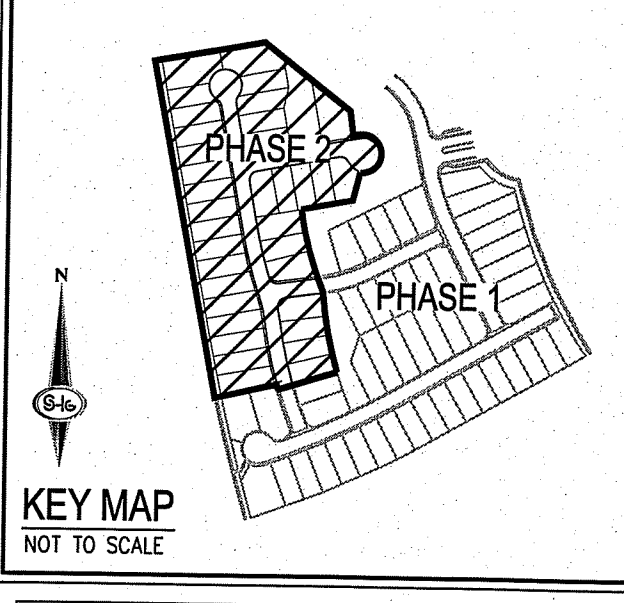
STORMWATER RUNOFF MANAGEMENT

1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND (IF APPLICABLE) THE

1. AUTHORIZED PERSONNEL, CONTRACTOR AND/OR THE
MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS
BEING TRANSPORTED OR STORED ON THE SITE. THE SITE
PUBLIC RIGHTS OF WAYS OF CLARK COUNTY AS A RESULT OF
CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE.
CONSTRUCTION DEBRIS OR CONSTRUCTION MATERIALS
MUST 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 UNUSUAL PROBLEMS OR CONDITIONS. THE
SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS
SET FORTH IN THE TITLE 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 HAS
CEASED. SOME EXCEPTIONS MAY APPLY: REFER TO NEVADA
STORMWATER MANAGEMENT GENERAL PERMIT FOR CONSTRUCTION ACTIVITY
NR1000000, SECTION II.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT
ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS,
AND AREAS USED FOR CONSTRUCTION OF THE PROJECT FOR
ENTRANCE AND EXIT LOCATIONS. INSPECTIONS SHALL BE
CONDUCTED WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.5 INCHES
OR MORE. INSPECTIONS SHALL BE CONDUCTED TO DETERMINE
IF THE STORMWATER POLLUTION PREVENTION PLAN IS
EFFECTIVE. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY
APPLY. SUCH EXCEPTIONS SHALL BE SPECIFICALLY IDENTIFIED
REFER TO NEVADA STORMWATER GENERAL PERMIT
FOR CONSTRUCTION ACTIVITY NR1000000, SECTION II.2.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN
SEVEN DAYS AFTER THE STORM EVENT. SEDIMENT REMOVAL
THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER.
SEDIMENT SHALL BE REMOVED WHEN BMP DESIGN CAPACITY HAS
BEEN REDUCED BY 50 PERCENT OR MORE.

STORM DRAIN NOTE

ALL ONSITE STORM DRAIN AND ASSOCIATED FACILITIES ARE
PRIVATELY OWNED AND MAINTAINED BY THE HOA



GRADING NOTES

- 1 CONSTRUCT 2" AC PAVEMENT WITH 4" TYPE II OVER 6" TYPE I AGGREGATE BASE
- 2 INSTALL 5.0" TYPE CM2 DROP INLET (2) GRATES PER CROSS SECTION 41" TYPE C-D MODIFIED DRO INLET AND CAUSAD NO. 421
- 3 SAWCUT AND MATCH EXISTING IMPROVEMENTS
- 4 INSTALL 30" ROLL CURB PER CAUSAD NO. 217.51 OVER 6" TYPE II AGGREGATE BASE
- 5 CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE BRICKS, ROUNDED DOMES OR EQUIVALENT PER CAUSAD NO. 235
- 6 FIELD VERIFY AND TIE INTO EXISTING CURB AND GUTTER
- 7 REMOVE RIPRAP
- 8 INSTALL 4" WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE 2 AGGREGATE BASE) PER CAUSAD #234

BLOOD CERTIFICATION

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

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.

PERIMETER SIDEWALKS

PERMITTER SIDEWALK DISPLAYED
FOR CONCEPTUAL PURPOSES
ONLY. MASTER DEVELOPER TO
PROVIDE DESIGN AND
CONNECTIONS FOR ONSITE
PEDESTRIAN ACCESS

BENCHMARK

AVD 88 ELEVATION = 978.351 METERS = 3209.81 FEET

ANALYSIS OF BEARING

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

LEGAL DESCRIPTION

A PORTION OF PARCEL N AS SHOWN ON FILE IN BOOK 143, PAGE 17 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA, LYING WITHIN SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST 14.D.M., CLARK COUNTY, NEVADA.

FEMA FLOOD ZONE DESIGNATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X
AREA OUTSIDE THE 500-YEAR FLOOD PLAIN) PER FIRM PANEL
2003C2150E, DATED SEPTEMBER 27, 2002.



INTERIOR STREET SECTION
NOT TO SCALE



GRADING SECTION
NOT TO SCALE



PAD ABOVE PAD OR COMMON ELEMENT WITH SCARF



SKY VISTA DR

REAR YARD WALL SECTION
NOT TO SCALE



SKY VISTA DR

REAR YARD WITH STACKED WALL SECTION
NOT TO SCALE



CORNER LOT ABOVE STREET WITH RETAINING WALLS
NOT TO SCALE



CORNER LOT ABOVE STREET WITHOUT RETAINING WALL
NOT TO SCALE



STACKED RETAINING WALLS
NOT TO SCALE



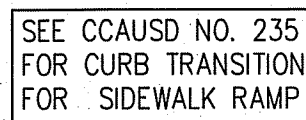
1. SLOPE FROM REAR TO SWALE (1% MIN.)
2. SLOPE FROM HOUSE TO SWALE (2% MIN.)
3. SLOPE FROM HOUSE TO SIDE SWALE (5% MIN.)
4. REAR SWALE (10' MIN. FROM REAR OF HOUSE)
5. SLOPE SIDE SWALE TO CURB (1% MIN.)
6. SLOPE FROM HOUSE TO SIDEWALK (5% MIN.)
7. SLOPE OF STREET

TYPE "A" LOT GRADING (TYP.)

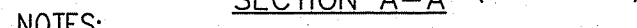


SECTION

SEE 8' CROSS GUTTER DETAIL



MODIFIED CCAUSD 228
INTERNAL STREETS ONLY



1. FINISHED ASPHALT CONCRETE SURFACE TO BE FLUSH WITH CROSS GUTTER LIP.
2. CONSTRUCTION OF CROSS GUTTER IS NOT ALLOWED ACROSS MAJOR COLLECTOR OR ARTERIAL STREETS.
3. ADJACENT SPANDREL SHALL BE 9" THICK P.C.C.

MODIFIED 8' WIDE CROSS GUTTER
NOT TO SCALE