DS #: 4903

APN: 126.12.810.005

PROJECT: Skye Canyon - Parcel 2.29

SUBMITTAL: 2nd

SCANNED BY/DATE:

CHECKED BY/DATE:

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: August 28, 2017
TO: **Land Development Services** Department of Building & Safety			FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: **Skye Canyon - Parcel 2.29**		**COPIES TO:** Slater Hanifan Group
Cross Streets:	SWC Skye Village Dr. & Eagle Canyon Ave.		KAG Development West LLC/ Ninety-Five Management, LLC
File Number:	F:\Depot\DSMemos\DS4903B.doc		Bart Anderson, P.E., DevCo
Parcel Number:	126-12-810-005		CCRFCD
Zoning Action:	TMP-70749		
FEMA Flood Zone	YES	NO X	
Proposed Storm Drain	YES X	NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal	7/3/2017	7/11/2017 & 7/18/2017	Not Approved	$400.00	488472: $400
2nd Submittal	8/3/2017 & 8/28/2017	8/28/2017	See Comments Below	$400.00	489274: $400
			TOTAL FEES (LDDRS):	**$800.00**	**----**

REMARKS:

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

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

1. No ***Certificate of Occupancy*** on the houses will be issued until after the *Detention Basin #1* has been accepted for Substantial Completion by the City.
2. All roadway and flood control facilities as proposed and approved in ***Skye Canyon Phase 2 Infrastructures*** must be substantially constructed prior to the issuance of occupancy permits.
3. **This drainage study is acceptable in concept**; however, *City of Las Vegas* will not formally accept the study until the *Clark County Regional Flood Control District* (CCRFCD) has issued a letter of concurrence. The engineer should contact the CCRFCD to confirm that they have begun their review.
4. 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.

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
WSP/AYS

T/R/S: T19S/R59E/S12
AREA F-12

****
*** FAX TX REPORT ***
****

TRANSMISSION OK

JOB NO.	0041
DESTINATION ADDRESS	7022845399
PSWD/SUBADDRESS	
DESTINATION ID	
ST. TIME	08/28 16:17
USAGE T	00'45
PGS.	2
RESULT	OK

CITY OF LAS VEGAS
INTER-OFFICE MEMORANDUM

DATE: August 28, 2017

TO:
Land Development Services
Department of Building & Safety

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

SUBJECT: Drainage Study for:
Skye Canyon - Parcel 2.29

Cross Streets: SWC Skye Village Dr. & Eagle Canyon Ave.

File Number: F:\Depot\DSMemos\DS4903B.doc

Parcel Number: 126-12-810-005

Zoning Action: TMP-70749

FEMA Flood Zone	YES	NO X
Proposed Storm Drain	YES X	NO

COPIES TO:
Slater Hanifan Group
KAG Development West LLC/
Ninety-Five Management, LLC
Bart Anderson, P.E., DevCo
CCRFCD

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
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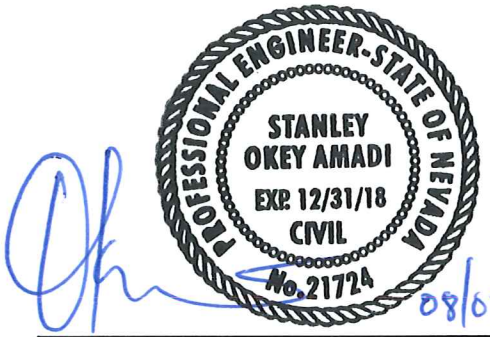
TECHNICAL DRAINAGE STUDY
ADDENDUM
Skye Canyon Parcel 2.29
City of Las Vegas, Nevada

Job No.: OLY1710.000
Date: August 2017

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:
Ninety-Five Management, LLC
11411 Southern Highlands Parkway, Suite 300
Las Vegas, NV 89141
Phone: 702-220-6565 ▪ Fax: 702-220-6566



Stanley Okey Amadi, P.E.
NV Professional Engineer No. 21724

Assisted by: Andrew Howard, P.E.

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL

DRAINAGE STUDY INFORMATION FORM

Name of Development: Skye Canyon - Parcel 2.29 Addendum Date: August 2017

Location of Development: a) Descriptive (Cross Streets): North/South: Skye Village Drive

East/West: Eagle Canyon Avenue

b) Section: 12 Township: 19 S. Range: 59 E.

c) APN: 126-12-810-005

Name of Owner: KAG Development West, LLC./Ninety-Five Management, LLC

Telephone No.: 702-220-6565 Fax No.: 702-220-6566 E-mail Address: mbolduc@olympiacompanies.com

Address: 11411 Southern Highlands Parkway, Suite 300 Las Vegas NV 89141

Contact Person – Name: Stanley Okey Amadi, P.E. Telephone No.: (702) 284-5300

*E-mail Address: samadi@shg-inc.com Fax No.: (702) 284-5399

Firm: Slater Hanifan Group

Address: 5740 S. Arville #216 Las Vegas NV 89118

Type of Land Development/Land Disturbance Process:

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

1. Total Owned Land Area: At Site: 18.38+/- acres Being Developed/Disturbed: 18.38+/- acres

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

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

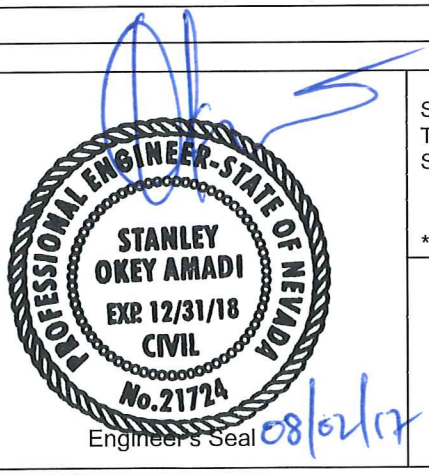
4. Proposed type of development (Residential, Commercial, Etc.): Single family residential

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

6. Has the site drainage been evaluated in the past? ☒ Yes** ☐ No If yes, please identify documentation: Skye Canyon Master Drainage Study (DS4420), Skye Canyon Phase 2 Infrastructure Technical Drainage Study & Updates (DS4739)

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: through existing storm drain laterals... into Skye Village Drive and Eagle Canyon Avenue

8. Briefly describe your proposed schedule for the subject project: Two phases: first phase construct storm drain infrastructure and half of... residential lots and streets, second phase construct remaining residential lots and streets



Engineer's Seal 08/02/17

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: STANDARD FORM 1

Updated 05/01/2008

OLY1710.000

8/3/2017

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

Subject: Addendum to the Technical Drainage Study for Skye Canyon Parcel 2.29 (CLV # DS4903)

Dear Mr. Sung:

The following are responses to comments contained in the July 18, 2017 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-70749) 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: A copy of the approved zoning/planning conditions (TMP-70749) associated with the site has been provided in Appendix B for reference.

2. **Comment:** *An Update to the Skye Canyon Phase 2 Infrastructure Drainage Study has been submitted for review recently. The subject Parcel 2.29 drainage study cannot be approved prior to the conditional approval of the Phase 2 Infrastructure study update.*

   Response: Acknowledged.

3. **Comment:** *No Certificate of Occupancy on the houses will be issued until after the detention basin has been accepted for Substantial Completion by the City.*

   Response: Acknowledged.

4. **Comment:** *All roadway and flood control facilities as proposed and approved in Skye Canyon Phase 2 Infrastructures must be substantially constructed prior to the issuance of occupancy permits.*

   Response: Acknowledged.

5. **Comment:** *The site is adjacent to or crosses an existing or proposed Clark County Regional Flood Control District (CCRFCD) master planned facility (CNKC 0050). Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.*

Response: Acknowledged. A copy of the technical drainage study and addendum will be submitted to CCRFCD for concurrence upon receipt of a conditional approval letter from CLV.

6. **Comment:** *For development in two or more phases, City of Las Vegas does not allow rough grading (such as rough pad and interior street grading) in the future phases in conjunction with the present phase improvements. Contour grading (to balance cut & fill) is the only grading activity allowed in the future phases. The other option is to leave the future phases in a natural and undisturbed condition.*

   If the intention is to rough grade the future phase as proposed in the improvement plans, obtain acceptance from City Land Development Section prior to the final approval of the subject drainage study.

   Response: The intention is to rough grade the future phase as shown on the improvement plans; therefore, acceptance from the City Land Development Department has been obtained and is provided in Appendix B for reference.

7. **Comment:** *Section 1 and 2: 100-Year Onsite Street Flow (Min. Slope) calculates the maximum street flow using a minimum slope of 0.6%. Sheet G-3 for Phase II shows slopes along Skye Plum Street and Skye Vineyard Drive as 0.5%. Please clarify.*

   Response: The 0.6% slope used in the calculation is the minimum centerline slope of the onsite streets. It is acknowledged that both Skye Plum Street and Skye Vineyard Drive have slopes of 0.5% called out on Sheet G-3 on the Phase II plans; however, these slopes are only along the curb for the short transition section near the intersections. Typically, these transition slopes are not used in street hydraulic computations, and are considered negligible to the design due to their extents. Therefore, the onsite street sections are acceptable as submitted and no changes have been made.

8. **Comment:** *Please verify the slope along Skye Vineyard Drive on sheet G-3 (Phase II) is in fact 0.5% as shown. The minimum allowable slope is 0.4%.*

   Response: The grading plans have been checked and it is confirmed that the minimum proposed slope is 0.5%, as shown in the transition sections just north of Skye Camp Drive, in Skye Plum Street and Skye Vineyard Drive. The improvement plans do not propose street slopes of 0.4%.

9. **Comment:** *Per the Drop Inlet Sizing Computations DI1 and DI2 bypass 0.6 cfs each. A total of 1.2 cfs bypass is directed toward DI3. Therefore, DI3 should be sized for basin ON1-D(b) + Bypass (33 cfs + 1.2 cfs = 34.2 cfs) DI3 computations show an intercepted flow of 33.5 cfs. Please clarify or adjust accordingly.*

   Response: The difference between the intercepted flow of 33.5 cfs (rounded to 34 cfs) and the impacting flow of 34.2-cfs, is 0.2-cfs, and was therefore considered negligible. In addition, the originally submitted computations utilized a ponding depth at the drop inlet of only 0.67-ft (8-inches) which is conservative since the Type CM2 drop inlet has a 0.83-ft (10-inch) drop from top of curb to top of grate per the Clark County Area Uniform Standard Drawing No. 412.1. Revised computations have been included in Appendix C which show that DI3 has the

capacity to intercept 41.4 cfs if the 0.83-ft sump depth is utilized. Therefore, the drop inlet design is acceptable and no changes are required.

10. **Comment:** *Invert elevations and HGL elevations for the storm drain plan and profile provided on Sheets PP-4 and PP-5 do not match the WSPG output results provided in the report. Please check and adjust accordingly.*

    Response: The invert elevations and HGL elevations for the storm drain plan and profiles have been checked against the WSPGW models, and it is acknowledged that the invert elevation of Facility DI3, shown in the Skye Desert Drive Plan and Profile on Sheet PP-5, was modeled incorrectly. However, the invert elevations and HGLs on Sheet PP-4, as well as the elevations in the Common Element E Plan and Profile on Sheet PP-5, are correct. The WSPGW model for the Eagle Canyon Avenue lateral extension has been revised, and the output results are provided in Appendix D. Please note that the HGLs were not impacted by the adjustments, so the plans have not been revised.

11. **Comment:** *Provide an Emergency Overflow Path scenario that assumes all drop inlets (DI 1, DI2 and DI3) are not functioning and provide the path, depth, and weir calculations for this scenario as applicable.*

    Response: Please note that emergency overflow analysis is typically performed for sump inlets only. Emergency Overflow computations were provided as Section EMERG in the original submittal. It was assumed that the entire flow impacting Facility DI3 (34-cfs) weirs north through the easement and flows into Eagle Canyon Avenue as surface flow. However, please note that Facilities DI1 and DI2 are continuous-grade inlets, so emergency overflow analysis is not typically performed. Therefore, the emergency overflow analysis in the original submittal only included flow impacting the DI3 sump inlet. The emergency overflow weir depth elevation was utilized in the original submittal in the finished floor analysis to confirm that Lot No's. 19 and 20 are adequately flood protected. Please refer to the original TDS submittal for the emergency overflow hydraulic section and associated finished floor analysis.

12. **Comment:** *DI3 and the lateral appears to be against the general flow direction of the downstream mainline in Eagle Canyon Avenue. Relocate DI3 to the northern curb in Skye Desert Drive so that the lateral will be aligned in a better angle with the mainline. Review and revise accordingly.*

    Response: It is acknowledged that the design of the DI3 lateral is unusual. However, the drop inlet cannot be relocated to the northern curb due to utility conflicts. The existing sewer and water stubs from Eagle Canyon Avenue enter the project site in the west half of Skye Desert Drive so there is not enough room remaining for the 17.5-ft long drop inlet to be located along the northern curb.

    Please note that the onsite lateral from DI3 and the offsite lateral into the Eagle Canyon Avenue mainline storm drain have a relative angle of approximately 124 degrees which means that the flows will turn less than 60 degrees within the existing offsite drop inlet. Therefore, the design is considered acceptable and no changes have been made.

13. **Comment:** *Sheet G3 of Phase 1: There is an existing stub at the northeast corner of the subject Parcel and appears to not conveying any flow going forward. Address whether this stub is to be removed or abandoned in place in the next submittal.*

    Response: The stub will be abandoned in place and a note has been added to the plans to clarify.

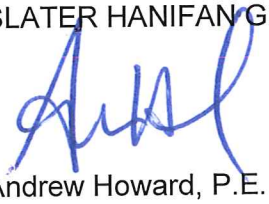
14. **Comment:** *Clearly label all proposed public drainage easements (privately maintained) on the grading plans and all pertinent sheets.*

    Response: The proposed public drainage easements (privately maintained) have been labeled on the grading plans and all pertinent sheets.

We believe that the above responses and associated improvement plan revisions on the plans have satisfied your concerns as stipulated in the review memorandum. The revised grading, plan, profile, and detail sheets adopting the revisions addressed in this letter have been included in Appendix E. If you have any questions or require additional information, please do not hesitate to contact us at (702) 284-5300.

Respectfully Submitted,

SLATER HANIFAN GROUP



Andrew Howard, P.E.

cc: Stanley Okey Amadi, P.E. – SHG
Mark Failla. P.E., CFM – SHG
Tracy Stratton – SHG
Jerry Slater, P.E. – SHG

APPENDIX

Appendix A: CLV Comment Letter

Appendix B: Response to Comment Nos. 1 & 6
CLV Land Development Acceptance
& Planning/Zoning Conditions Approval

Appendix C: Response to Comment No. 9
Revised Drop Inlet Computation for DI3

Appendix D: Response to Comment No. 10
Revised WSPGW Model

Appendix E: CD of Electronic Files and Revised Improvement Plans

APPENDIX A

CLV Comment Letter

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: July 18, 2017
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SUBJECT:	Drainage Study for: **Skye Canyon - Parcel 2.29**			**COPIES TO:** Slater Hanifan Group
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Zoning Action:	TMP-70749			
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			TOTAL FEES (LDDRS):	**$400.00**	-----

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2. An Update to the ***Skye Canyon Phase 2 Infrastructure Drainage Study*** has been submitted for review recently. The subject ***Parcel 2.29*** drainage study cannot be approved prior to the conditional approval of the ***Phase 2 Infrastructure*** study update.
3. No ***Certificate of Occupancy*** on the houses will be issued until after the *Detention Basin #1* has been accepted for Substantial Completion by the City.
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8. Please verify the slope along Skye Vineyard Drive on sheet G-3 (Phase II) is in fact 0.5% as shown. The minimum allowable slope is 0.4%.
9. Per the Drop Inlet Sizing Computations DI1 and DI2 bypass 0.6 cfs each. A total of 1.2 cfs bypass is directed toward DI3. Therefore DI3 should be sized for basin ON1-D(b) + Bypass (33 cfs + 1.2 cfs = 34.2 cfs). DI3 computations show an intercepted flow of 33.5 cfs. Please clarify or adjust accordingly.
10. Invert elevations and HGL elevations for the storm drain plan and profile provided on *Sheets PP-4* and *PP-5* do not match the WSPG output results provided in the report. Please check and adjust accordingly.
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12. DI3 and the lateral appears to be against the general flow direction of the downstream mainline in *Eagle Canyon Avenue*. Relocate DI3 to the northern curb in *Skye Desert Drive* so that the lateral will be aligned in a better angle with the mainline. Review and revise accordingly.
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END OF REMARKS
WSP/AYS

T/R/S: T19S/R59E/S12
AREA F-12

APPENDIX B

CLV Land Development Acceptance
& Planning/Zoning Conditions Approval

Rhonda Miller

From: Shaun Boulton <sboulton@LasVegasNevada.GOV>
Sent: Tuesday, August 01, 2017 2:47 PM
To: Rhonda Miller
Cc: David Guerra; Tracy Stratton; Brian Chapman; Chelsea Jensen; Shannon Cooper
Subject: RE: Skye Canyon 2.29 - Grading

Hi Rhonda,

The grading plan you sent over looks fine and we won't have any issues as long as you don't add in the FF or pad elevations for the mass graded areas.

Thank You,

Shaun Boulton, P.E. | Project Engineer
Building & Safety
333 N. Rancho Drive, Las Vegas, NV 89106
702-229-6565

lasvegasnevada.gov

City of Las Vegas Building & Safety

Your opinion is important! Click here to take a short survey.

This e-mail transmission, and any documents, files, or previous e-mail messages attached to it may contain confidential information that is legally privileged. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that any disclosure, copying, distribution or use of any of the information contained in or attached to this transmission is prohibited. If you have received this transmission in error, please immediately notify us by reply e-mail, by forwarding this to sender and destroy the original transmission and its attachments without reading or saving them in any manner. Thank you.

From: Rhonda Miller [mailto:rmiller@shg-inc.com]
Sent: Friday, July 28, 2017 2:30 PM
To: Shaun Boulton
Cc: David Guerra; Tracy Stratton; Brian Chapman; Chelsea Jensen; Shannon Cooper
Subject: Skye Canyon 2.29 - Grading

Hi Shaun,

Parcel 2.29 in Skye Canyon is being developed in two phases. Phase 1 of the development proposes rough grade contours within Phase 2. Per the attached TDS letter comment #6 we need approval from Land Development to do this.

Phase 2 of this site is being graded with Phase 1 to provide a better earthwork balance. This site slopes approximately 5% west to east. If Phase 1 is graded alone there would be a significant amount of import. If Phase 2 were graded on it's own, there would be a significant amount of export. To minimize the grading effort, we are proposing that both phases are graded together.

Please see the attached grading plan for your review and consideration.

Thank you for your help!

Rhonda Miller
Assistant Project Manager

SLATER HANIFAN GROUP
"The Benchmark of Our Profession."

We're proud to be ranked #9 on Zweig Group's *"2016 Best Firms To Work For."*

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FAX: (702) 284-5399
www.shg-inc.com

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11201 N. TATUM BLVD. #250
PHOENIX, AZ 85028
PHONE: (602) 687-9664

LAKE HAVASU CITY
60 S. ACOMA BLVD. #C104
LAKE HAVASU CITY, AZ 86403
PHONE: (928) 202-4104
FAX: (602) 483-1007

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

CITY OF Las Vegas

LAS VEGAS
CITY COUNCIL
Carolyn G. Goodman
Mayor

Steven D. Ross
Mayor Pro Tem
Lois Tarkanian
Ricki Y. Barlow
Stavros S. Anthony
Bob Coffin
Bob Beers

Elizabeth N. Fretwell
City Manager

July 12, 2017

Mr. Marc Bolduc
KAG Development West, LLC
11411 Southern Highlands, Ste. 300
Las Vegas, Nevada 89141

RE: TMP-70749 [PRJ-70622] - TENTATIVE MAP
PLANNING COMMISSION MEETING OF JULY 11, 2017

Dear Applicant:

Your request for a Tentative Map FOR A 122-LOT SINGLE-FAMILY RESIDENTIAL SUBDIVISION on 18.38 acres at the southwest corner of Eagle Canyon Avenue and Skye Village Road (APN 126-12-810-005), T-D (Traditional Development) Zone [L (Low Density Residential) Skye Canyon Land Use Designation], Ward 6 (Ross) [PRJ-70622], was considered by the Planning Commission on July 11, 2017.

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 within four (4) years of the approval of the Tentative Map, this action is void.

2. Street names must be provided in accordance with the City's Street Naming Regulations.

3. 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.

4. 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

CITY HALL
495 S. MAIN ST.
LAS VEGAS, NV 89101
702.229.6011
TTY 711
cityoflasvegas
lasvegasnevada.gov

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.

5. All development is subject to the conditions of City Departments and State Subdivision Statutes.

Public Works

6. Private streets must be granted and labeled on the Final Map for this site as Public Utility Easements (P.U.E.), Public Sewer Easements, and Public Drainage Easements to be privately maintained by the Homeowner's Association.

7. If not already constructed or guaranteed by the master developer, construct half street improvements on Skye Village Road and Eagle Canyon Avenue including appropriate overpaving (where legally able) adjacent to this site concurrent with development. Install all appurtenant underground facilities, if any, adjacent to this site needed for the future traffic signal system concurrent with development of this site. Extend all required underground utilities, such as electrical, telephone, etc., located within public rights-of-way, past the boundaries of this site prior to construction of hard surfacing (asphalt or concrete). Per condition #17 of the Skye Canyon II Parent Tentative Map (TMP-65803), if not already constructed or guaranteed by the master developer, a minimum two lanes of asphalt pavement on village streets providing the main access to this site and a working sanitary sewer connection shall be provided prior to a final inspection of any dwelling units within this Tentative Map.

8. Per condition of approval #14 of the Skye Canyon II Parent Tentative Map (TMP-65803), grant Pedestrian Access Easements for all sidewalks located outside of the public street right-of-way by adding a note within the Owner's Certificate on each Final Map to read, "A minimum 5-foot wide pedestrian walkway easement is hereby granted overlying all sidewalks located in common areas abutting public streets, where such sidewalks are not located within public street right-of-way, together with the right of ingress thereto and egress therefrom these easements."

9. All landscaping and private improvements installed with this project 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. Per condition of approval # 19 of the Skye Canyon II Parent Tentative Map (TMP-65803), landscaping within calculated Site Visibility Restriction Zones (SVRZs) will be limited in height by the City Traffic Engineer.

10. No structures, and no trees or vegetation taller than three feet, shall be allowed within the proposed Public Sewer Easement in Common Element "C".

11. Prior to the submittal of any construction drawings, submit a revision to the Skye Canyon Wastewater Master Plan to account for the increased development of Parcel 2.29.

12. Meet with the Fire Protection Engineering Section of the Department of Fire Services to discuss fire requirements for the proposed subdivision. The design and layout of all onsite private circulation and access drives shall meet the approval of the Department of Fire Services. No parking is allowed on one side of stub streets where the curb to curb width is 32 feet unless allowed by the Fire Code.

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 (702-229-2136) 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. Prior to recordation of the Final Map for this site, a queuing analysis shall be submitted and approved.

15. A working sanitary sewer connection shall be in place prior to final inspection of any units within this development. Full permanent improvements on all major access streets, 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. All off-site improvements 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 in accordance with the approved Development Agreement.

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. 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.

18. Comply with all applicable conditions of approval for the Sky Canyon II Parent Tentative Map (TMP-65803) and any other site related actions.

This action by the Planning Commission on **July 11, 2017** 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 submitted please access http://www.lasvegasnevada.gov/CheckStatus/DevelopmentApp.htm, or contact the Department of Planning and Development at 702.229.6301 after ***July 19, 2017***. 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:nl

cc:

Ms. Chelsea Jensen
Slater Hanifan Group
5740 South Arville, Ste. 216
Las Vegas, Nevada 89118

APPENDIX C

Revised Drop Inlet Computation for DI3

Curb Inlet Sizing Computation

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS

Project Name & Number:	**Skye Canyon Parcel 2.29**
Date:	**5/25/2017**
By:	**AJH**

Notes:		
Facility ID:	SDDI#3	
Drainage Condition	Ultimate	
Source of Flow	Q100 = Basin ON1-D(b) + DI Bypass	
Design Flow (cfs)	34.0	
Inlet Type:	Type CM2 (Sump)	
Inlet Length:	17.-ft	
Number of Grates:	6	
Input:	**Variable:**	**Input:**
Depth at Inlet (ft)	D	0.83
Grate Width (ft)	W	1.50
Length of Grate (ft)	L_g	15.00
Length of Curb Opening (ft)	L_c	17.00
Height of Curb Opening (ft)	H	0.50
Weir Coef. - Curb Opening	W_c	2.3
Weir Coef. - Grate	W_g	3.0
Orifice Coef.	O_c	0.67
Grate Coef.	G_c	0.60
Clogging Factor - Grate (%)	CF_g	50
Clogging Factor - Curb (%)	CF_c	50
Output (Grate):	**Equation:**	**Output (Grate):**
Effective Weir Length (ft)	$2*W+L_g$	18.00
Adjusted Effective Weir Length (ft)	$2*(1-CF_g/100)*W+(1-CF_g/100)*L_g$	9.00
Grate Open Area (sf)	$W*L_g$	22.50
Adjusted Grate Open Area (sf)	Grate Open Area * $G_c*(1-CF_g/100)$	6.75
Controlling Flow Type (weir/orifice)	If D<1.792*(Adj. Grate Open Area/Adj. Eff. Length)	weir
	use weir, else orifice	
Intercepted Flow (cfs)	weir: W_g*(Adj. Eff. Weir Length)$*D^{1.5}$	20.5
	orifice: O_c*(Adj. Grate Open Area)$*(64.4*D)^{0.5}$	
Output (Curb):	**Equation:**	**Output (Curb):**
Effective Weir Length (ft)	L+1.8*W	19.70
Adjusted Effective Weir Length (ft)	$L+1.8(1-CF_c/100)*W$	18.41
Curb Open Area (sf)	L*H	8.50
Adjusted Curb Open Area (sf)	Curb Open Area * $(1-CF_c/100)$	4.25
Controlling Flow Type (weir/orifice)	If D<H, weir, else orifice	orifice
Intercepted Flow (cfs)	weir: W_c*(Adj. Eff. Weir Length)$*D^{1.5}$	20.81
	orifice: O_c*(Adj. Curb Open Area)$*(64.4*(D-H/2))^{0.5}$	
Output (Total):	**Equation:**	**Output (Total):**
Capacity Intercepted Flow (cfs)	Intercepted (Grate) + Intercepted (Curb)	**41.4**

APPENDIX D

Revised WSPGW Model

```
T1 SKYE CANYON PARCEL 2.29
T2 ONSITE STORM DRAIN
T3 FROM EXISTING OFFSITE 42" RCP SD STUB (E3) FROM EAGLE CANYON TO PROPOSED ONSITE DI#3 (DI3)
SO   1000.00 2839.13  42      .013                  2843.34
R    1030.00 2839.49  42      .013                                                  56.0   1
JX   1030.00 2840.49  30 30   .013   25.5            2840.49          90.0
R    1066.99 2840.86  30      .013
SH   1066.99 2840.86  30      .013
CD  18  4   0    .000   1.500      .000  .000  .000   .00
CD  24  4   0    .000   2.000      .000  .000  .000   .00
CD  30  4   0    .000   2.500      .000  .000  .000   .00
CD  36  4   0    .000   3.000      .000  .000  .000   .00
CD  42  4   0    .000   3.500      .000  .000  .000   .00
Q             34.000   .0
```

FILE: EAGLE-LAT.WSW W S P G W - EDIT LISTING - Version 14.07 Date: 7-21-2017 Time: 3:41: 6

WATER SURFACE PROFILE - CHANNEL DEFINITION LISTING PAGE 1

CARD CODE	SECT NO	CHN TYPE	NO OF PIER/PIP	AVE PIER WIDTH	HEIGHT 1 DIAMETER	BASE WIDTH	ZL	ZR	INV DROP	Y(1)	Y(2)	Y(3)	Y(4)	Y(5)	Y(6)	Y(7)	Y(8)	Y(9)	Y(10)
CD	18	4	0		1.500														
CD	24	4	0		2.000														
CD	30	4	0		2.500														
CD	36	4	0		3.000														
CD	42	4	0		3.500														

W S P G W PAGE NO 1

WATER SURFACE PROFILE - TITLE CARD LISTING

HEADING LINE NO 1 IS -
SKYE CANYON PARCEL 2.29

HEADING LINE NO 2 IS -
ONSITE STORM DRAIN

HEADING LINE NO 3 IS -
FROM EXISTING OFFSITE 42" RCP SD STUB (E3) FROM EAGLE CANYON TO PROPOSED O

W S P G W PAGE NO 2

WATER SURFACE PROFILE - ELEMENT CARD LISTING

ELEMENT NO 1 IS A SYSTEM OUTLET

	STATION	INVERT	SECT	W S ELEV
U/S DATA	1000.000	2839.130	42	2843.340

ELEMENT NO 2 IS A REACH

	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
U/S DATA	1030.000	2839.490	42	.013	.000	.000	56.000	1

ELEMENT NO 3 IS A JUNCTION

	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4
U/S DATA	1030.000	2840.490	30	30	0	.013	25.500	.000	2840.490	.000	90.000	.000

	RADIUS	ANGLE
	.000	.000

ELEMENT NO 4 IS A REACH

	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
U/S DATA	1066.990	2840.860	30	.013	.000	.000	.000	0

ELEMENT NO 5 IS A SYSTEM HEADWORKS

	STATION	INVERT	SECT	W S ELEV
U/S DATA	1066.990	2840.860	30	.000

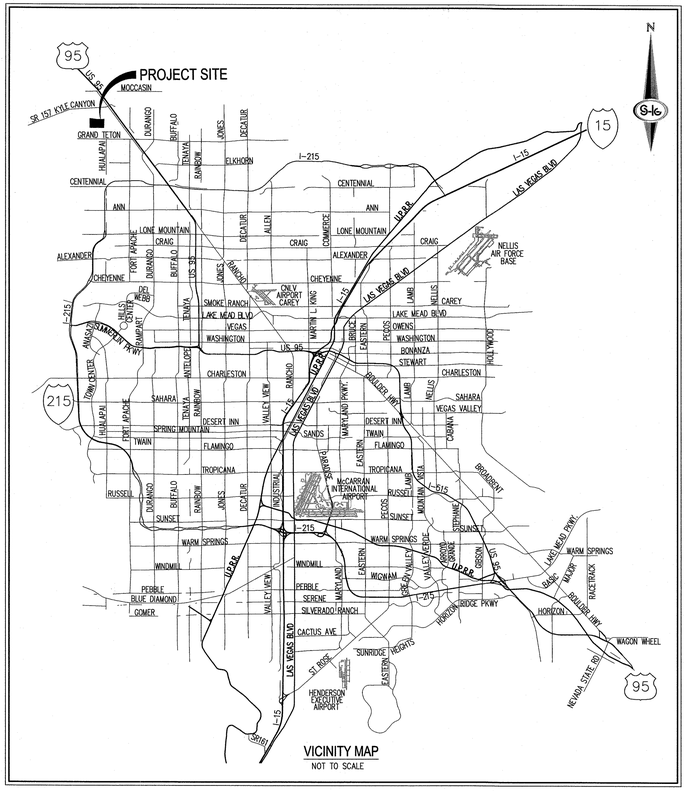
SKYE CANYON PARCEL 2.29
ONSITE STORM DRAIN
FROM EXISTING OFFSITE 42" RCP SD STUB (E3) FROM EAGLE CANYON TO PROPOS

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1000.000	2839.130	4.210	2843.340	59.50	6.18	.59	2843.93	.00	2.42	.00	3.500	.000	.00	0 .0
30.000	.0120					.0035	.10	4.21	.00	1.83	.013	.00	.00	PIPE
1030.000	2839.490	4.094	2843.584	59.50	6.18	.59	2844.18	.00	2.42	.00	3.500	.000	.00	0 .0
JUNCT STR	.0000					.0052	.00	4.09	.00		.013	.00	.00	PIPE
1030.000	2840.490	3.661	2844.151	34.00	6.93	.74	2844.90	.00	1.98	.00	2.500	.000	.00	0 .0
36.990	.0100					.0069	.25	3.66	.00	1.74	.013	.00	.00	PIPE
1066.990	2840.860	3.545	2844.405	34.00	6.93	.74	2845.15	.00	1.98	.00	2.500	.000	.00	0 .0

♀

APPENDIX E

CD of Electronic Files and Revised Improvement Plans



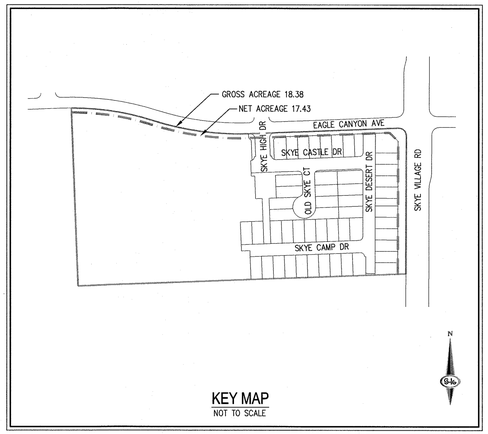
IMPROVEMENT PLANS FOR SKYE CANYON - PARCEL 2.29 PHASE 1

A SINGLE FAMILY RESIDENTIAL SUBDIVISION OF THE SKYE CANYON MASTER-PLANNED COMMUNITY WITHIN THE CITY OF LAS VEGAS, NEVADA

APN: 126-12-810-005

CITY OF LAS VEGAS NEVADA

SHEET LIST TABLE		
NO.	SHEET	TITLE
1	C-1	COVER SHEET
2	C-2	GENERAL NOTES
3	C-3	GENERAL NOTES AND QUANTITIES
4	G-1	GRADING PLAN - I
5	G-2	GRADING PLAN - II
6	G-3	GRADING PLAN - III
7	G-4	GRADING PLAN - IV
8	G-5	GRADING PLAN - V
9	G-6	GRADING PLAN - VI
10	D-1	STREET SECTIONS AND DETAILS
11	D-2	GRADING SECTIONS AND DETAILS
12	D-3	GRADING SECTIONS AND DETAILS
13	D-4	GRADING SECTIONS AND DETAILS
14	PP-1	PLAN AND PROFILE - I
15	PP-2	PLAN AND PROFILE - II
16	PP-3	PLAN AND PROFILE - III
17	PP-4	PLAN AND PROFILE - IV
18	PP-5	PLAN AND PROFILE - V
19	PP-6	PLAN AND PROFILE - VI
20	PP-7	PLAN AND PROFILE - VII
21	PP-8	PLAN AND PROFILE - VIII
22	PP-9	PLAN AND PROFILE - IX
23	MU-1	MASTER UTILITY PLAN
24	U-1	UTILITY PLAN - I
25	U-2	UTILITY PLAN - II
26	U-3	UTILITY PLAN - III
27	U-4	UTILITY PLAN - IV
28	U-5	UTILITY PLAN - V
29	U-6	UTILITY PLAN - VI
30	T-1	TRAFFIC PLAN - I
31	T-2	TRAFFIC PLAN - II
32	T-3	TRAFFIC PLAN - III
33	T-4	TRAFFIC PLAN - IV



APPROVALS

CITY ENGINEER-ALLEN PAVELKA PE, #9029 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.

LAS VEGAS FIRE AND RESCUE DATE

CHRIS KNIGHT, DIRECTOR DATE
BUILDING AND SAFETY

THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING DEPARTMENT.

CENTRAL TELEPHONE CO. DBA CENTURYLINK DATE

THE AFFIXED CENTURYLINK 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 STATUES AND / OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE:_____ PROJECT NO.____######____
LVVWD APPROVED FIRE FLOW____2,000_____GPM AT 20 PSI RESIDUAL
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 CORPORATION DATE

COX COMMUNICATIONS LAS VEGAS, INC. DATE

OWNER/DEVELOPER

K.A.G. LLC/NINETY-FIVE MANAGEMENT LLC
11411 SOUTHERN HIGHLANDS PKWY SUITE 300
LAS VEGAS, NV 89141
PH: (702) 220-6565
FX: (702)
CONTACT: BOBBY WILLIAMSON

ENGINEER

SLATER HANIFAN GROUP, INC.
5740 S. ARVILLE STREET, SUITE 216
LAS VEGAS, NV 89118
PH: (702) 284-5300
FX: (702) 284-5399
CONTACT: JERRY SLATER

LEGAL DESCRIPTION

BEING A PORTION OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

BENCHMARK

BM 7LV90 7NWS CITY OF LAS VEGAS RIVET AND ROUND PLATE IN CONCRETE CYLINDER, SOUTHEAST CORNER OF HUALAPAI WAY AND IRON MOUNTAIN ROAD.

ELEV: 2840.13 FEET (865.67 METERS) (NAVD 1988)

BASIS OF BEARINGS

SOUTH 00°34'18" EAST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE ¼) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., AS PER FILE 151, PAGE 14, OF SURVEYS ON FILE IN THE COUNTY RECORDER'S OFFICE.

FEMA FLOOD ZONE INFORMATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE 'X' (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER, 2002.

PROJECT INFORMATION

ACREAGE (GROSS):	= 18.38 AC
ACREAGE (NET):	= 17.43 AC
DENSITY (LOTS/NET ACRE):	= 2.87 DU/NET AC
ZONING:	= T-D
TOTAL NO. OF RESIDENTIAL LOTS	= 50
TOTAL NO. OF COMMON ELEMENTS	= 10
MINIMUM LOT SIZE	= 4,050 SF±
MAXIMUM LOT SIZE	= 6,576 SF±
PROVIDED OPEN SPACE	= 73,688 SF±

EARTHWORK SUMMARY (UNADJUSTED)

CUT	120,165 CY.
FILL	113,639 CY.
NET	6,526 CY.

DEVIATIONS FROM STANDARDS

NONE

SWPPP 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 IN A CONTIGUOUS SUBDIVISION IS CONSIDERED UNDER CONSTRUCTION UNTIL 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/SWPC/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. NVR100000 ALONG WITH THE APPROPRIATE FILLING FEE.

GEOTECHNICAL ENGINEER

PREPARED BY: GEOTEK RESIDENTIAL, LLC
ADDRESS: 6835 ESCONDIDO ST #A, LAS VEGAS, NV 89119
PHONE: 702-897-1424
PROJECT No. 12208-LVR
DATED: MARCH 30, 2016

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

COVER SHEET

S12 R59 R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS

PROJECT NO.
OLY1710-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp: 06/30/2018
CIVIL
No. 14167

C-1
SHEET 1 OF 33

J:\OLY710-000 skye canyon parcel 2.29\dwg\improv\oly710-000_cvr.dwg, 8/2/2017 5:27 PM, Brian Chapman

STORMWATER RUNOFF MANAGEMENT

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

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

LEGAL DESCRIPTION

BEING A PORTION OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

BENCHMARK

BM 7LV90 7NWS CITY OF LAS VEGAS RIVET AND ROUND PLATE IN CONCRETE CYLINDER, SOUTHEAST CORNER OF HUALAPAI WAY AND IRON MOUNTAIN ROAD.

ELEV: 2840.13 FEET (865.67 METERS) (NAVD 1988)

BASIS OF BEARINGS

SOUTH 00°34'18" EAST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE ¼) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., AS PER FILE 151, PAGE 14, OF SURVEYS ON FILE IN THE COUNTY RECORDER'S OFFICE.

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 PERFORM 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 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 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 LVVWD 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.

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # ###### (REVISED 01/09/2017)

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 DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. 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.
14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

    ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

15. NO LEAD COMPLIANCE NOTE:
TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE USED.

GRADING NOTES

1. INDICATED GRADES OTHER THAN T.C., F.G. & GUTTER F.L. ARE ROUGH GRADES.
2. THE ROUGH GRADING PLANS SHALL BE ON THE JOB SITE AT ALL TIMES. THE ROUGH GRADING SHALL BE FINISHED IN CONFORMANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS. THE GRADING QUANTITIES ARE BASED ON THE ELEVATION AND DETAILS SHOWN ON THE PLANS. ANY DEVIATIONS FROM THE PLANS WILL RESULT IN QUANTITY CHANGES.
3. CARE SHALL BE EXERCISED IN GRADING CORNER LOTS.
4. ROUGH PAD ELEVATIONS SHALL BE GRADED TO WITHIN 0.1' OF THE PAD ELEVATIONS SHOWN ON THE PLANS. WHEN GRADING IS COMPLETE PER THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE LOTS CAN BE INSPECTED. AT THAT TIME THE ENGINEER SHALL ALSO DECIDE IF ANY ADDITIONAL DITCHES OR BERMS ARE REQUIRED. THE CONTRACTOR IS REQUESTED NOT TO REMOVE ANY OF HIS ROUGH GRADING EQUIPMENT UNTIL HE RECEIVES GRADING APPROVAL FROM THE ENGINEER.
5. SOILS REPORT PREPARED BY GEOTEK RESIDENTIAL, LLC, PROJECT NO. 12208-LVR, DATED MARCH 30, 2016.
6. EARTHWORK QUANTITIES (RAW):
   -CUT = 120,165 CUBIC YARDS.
   -FILL = 113,639 CUBIC YARDS

   A) THE ABOVE QUANTITIES DO NOT REFLECT LOSSES DUE TO SUBSIDENCE OR SHRINKAGE.
   B) THE ABOVE QUANTITIES DO REFLECT USING NATIVE MATERIAL IN LIEU OF TYPE I GRAVEL BASE MATERIAL FOR STREET SECTIONS.
   C) THE ABOVE QUANTITIES DO NOT REFLECT ANY EARTHWORK WHICH MAY BE REQUIRED BY THE ENGINEER TO CONSTRUCT ADDITIONAL PROTECTIVE DITCHES OR BERMS NOT SHOWN ON THESE DRAWINGS.

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE # 6325, FOR HYDRANT SPECIFICATIONS, AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICT'S – **APPROVED PRODUCTS LIST** ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR ALL INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK [IFC 105.7.12]
4. ON ANT 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. [IFC 3310, 3312]
5. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, THE CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS. [IFC 507.5.7.3]
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [IFC 106.3]
7. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. [IFC 507.2.1, NFPA 24]
8. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [IFC 507]
9. PRIVATE HYDRANTS SHALL BE PANTED RED. [IFC 507.5.7.1]
10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [IFC 507]
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [IFC C102]
    - RESIDENTIAL- 500 FT UNSPRINKLERED; 600 FT SPRINKLERED.
    - COMMERCIAL- 300 FT UNSPRINKLERED; 400 FT 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 A MAXIMUM OF 1,000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [IFC C102.8]
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IFC C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC C102.4]
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC C102.7]
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [IFC C102.6]
18. TWO (2) 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. [IFC C104]
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. [IFC 503.2.3]
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%. [IFC 503.2.7, 503.2.8]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FEET OUTSIDE AND 28 FEET INSIDE TURNING RADIUS. [IFC 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FT 6 INS. [IFC 503.2.1]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FT FLOW LINE TO FLOW LINE WITH PARALLEL PARKING PERMITTED ON BOTH SIDES. NOT LESS THAN 32 FT WIDE, FLOW LINE TO FLOW LINE, WHERE PARKING IS PERMITTED ONLY ON ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD. NOT LESS THAN 24 FT WIDE, FLOW LINE TO FLOW LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE. FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 24 FT. [IFC 503.2.1.1]
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. THE DISTANCE COULD BE INCREASED TO 250 FT IF THE BUILDING IS SPRINKLERED. [IFC 503.1.1]
25. 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 FT. COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE BUILDINGS EXCEED 2 STORIES OR 30 FEET IN HEIGHT, OR EXCEEDING 62,000 SQUARE FEET IN AREA. [IFC 503.1.2]
26. ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [IFC 503.2.5]
27. 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 OF 100 FEET ALONG THE 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 NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [IFC 503.3]
28. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE IFC 503.6 AND IFC APPENDIX M.

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	
A. PAVEMENT AREA SUBGRADE	0.1'+	+0.0' TO -0.1'	SEE SOILS REPORT
B. ENGINEERED FILL	0.5'+	+0.1' TO -0.1'	SEE SOILS REPORT

COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.

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 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 UPON COMPLETION OF THE PROJECT. 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.

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 ISSUE; 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 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 INTERFERENCE'S 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 (½") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
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 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 RESIDENTIAL LLC, REPORT #12208-LVR, MARCH 30, 2016 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 METER 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 UTILITY COMPANY AND THE CITY ENGINEER.

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 NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN

ABBREVIATIONS

AC	ASPHALTIC CONCRETE OR ACRE
AGG	AGGREGATE BASE
APN	ASSESSORS PARCEL NUMBER
APPROX OR ~	APPROXIMATE
AVE	AVENUE
@	AT
BC	BEGIN CURVE OR BACK OF CURB
BCR	BEGINNING OF CURB RETURN
BHW	BOTTOM OF HEADWALL
BLDG	BUILDING
BLVD	BOULEVARD
BM	BENCHMARK
BVC	BEGIN VERTICAL CURVE
BWV	BACK WATER VALVE
CC	CLARK COUNTY
CCAUSD	CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS
CCPW	CLARK COUNTY PUBLIC WORKS
CCRFCD	CLARK COUNTY REGIONAL FLOOD DISTRICT
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT
CE	COMMON ELEMENT
CL/C/LC	CENTERLINE
CLR	CLEAR OR CLEARANCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CM&RC	CEMENT MORTAR LINED AND COATED
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CT	COURT
CY OR CU YD	CUBIC YARD
DCWCS	DESIGN AND CONSTRUCTION FOR WASTEWATER COLLECTION SYSTEMS
DET	DETAIL
DI	DUCTILE IRON OR DRAIN INLET
DIA, ø	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DWG(S)	DRAWING
DWY	DRIVEWAY
EA	EACH
ECR	END CURB RETURN
EG	EXISTING GROUND
EL	ELEVATION
ESMT	EASEMENT
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EX OR EXIST	EXISTING
FC	FACE OF CURB
FF	FINISHED FLOOR
FG	FINISHED GRADE
FGH	FINISHED GRADE, HIGH SIDE
FGL	FINISHED GRADE, LOW SIDE
FH	FIRE HYDRANT
FL	FLOWLINE
FT	FEET OR FOOT
FUT	FUTURE
GRD	GRADE OR GROUND
GB	GRADE BREAK OR GRADE CHANGE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HOA	HOME OWNERS ASSOCIATION
HORZ	HORIZONTAL
HP	HIGH POINT
HWL	HIGH WATER LEVEL
HDWL OR HW	HEADWALL
HYD	HYDRAULIC OR HYDRANT
ID	INSIDE DIAMETER
IN	INCH
INT	INTERSECTION
INV	INVERT ELEVATION
IP	IRON PIPE
IRRG	IRRIGATION
LF	LINEAR FEET
LP	LOW POINT
LT OR L	LEFT
LVVWD	LAS VEGAS VALLEY WATER DISTRICT
LWL	LOW WATER LEVEL
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MUE	MUNICIPAL UTILITY EASEMENT
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION
NPC	NEVADA POWER COMPANY
NTS	NOT TO SCALE
NUE	NONEXCLUSIVE UTILITY EASEMENT
OC	ON CENTER
OD	OUTSIDE DIAMETER OR OVERALL DIMENSION
OFF	OFFSET
ORIG	ORIGINAL
PAE	PUBLIC OR PEDESTRIAN ACCESS EASEMENT
PB	PULL BOX
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PDE	PUBLIC DRAINAGE EASEMENT
P, OR PL	PROPERTY LINE
POB	POINT OF BEGINNING
POC	POINT OF CURVATURE
POE	POINT OF ENDING
PRC	POINT OF REVERSE CURVATURE
PRELIM	PRELIMINARY
PROP	PROPOSED
PRV	PRESSURE REDUCING VALVE
PUE	PUBLIC UTILITY EASEMENT
PT	POINT OF TANGENT OR POINT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
QTY	QUANTITY
R	RADIUS
RCA	REINFORCED CONCRETE ARCH
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY ESMT	ROADWAY EASEMENT
REQD	REQUIRED
REV	REVISION
RG	ROUGH GRADE
RT OR R	RIGHT
R/W, ROW	RIGHT OF WAY
S	SLOPE
SCH	SCHEDULE
SD	STORM DRAIN
SDDI	STORM DRAIN DROP INLET
SDMH	STORM DRAIN MANHOLE
SEC	SECTION
SF	SQUARE FEET
SHT	SHEET
SNWA	SOUTHERN NEVADA WATER AUTHORITY
SPECS	SPECIFICATIONS
ST	STREET
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
STL	STEEL OR STREET LIGHT
SW	SIDEWALK
SWG	SOUTHWEST GAS
SWR OR SS	SANITARY SEWER
SY	SQUARE YARD
TAN	TANGENT
TC	TOP OF CURB
TCD	TRAFFIC CONTROL DEVICE
TF	TOP OF FLOOR OR TOP OF FOOTING
TG	TOP OF GRATE
THRU	THROUGH
THW	TOP OF HEADWALL
TP	TOP OF PIPE
TW	TOP OF WALL
TRW	TOP OF RETAINING WALL
TSW	TOP OF SCREEN WALL
TYP	TYPICAL
UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
VC	VERTICAL CURVE
VERT	VERTICAL
VG	VALLEY GUTTER
WI	WROUGHT IRON
WL	WATER LINE
WPZ	WATER PRESSURE ZONE
WT	WEIGHT
WTR	WATER LINE

SPECIAL NOTE

IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED WHICH 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 CLARK COUNTY DEPT. OF PUBLIC WORKS. TEMPORARY CONSTRUCTION ITEMS INCLUDE: PAVEMENT TRANSITIONS, PROTECTIVE DITCHES AND BERMS, ROAD SIGNS AND BARRICADES, ETC.

NOTICE TO CONTRACTOR

-QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

-EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 LOCATIONS. CALL BEFORE YOU DIG: (800) 227-2600

LEGEND

EXISTING	PROPOSED	DESCRIPTION
(1900)	1900	5' CONTOUR
		1' CONTOUR
		STRIPING
		SEWER MANHOLE
		CURB AND GUTTER
EX 8" PVC SS	8" PVC SS	SANITARY SEWER PIPE AND FLOW ARROW
EX 8" PVC WTR	8" PVC WTR	WATER PIPE
		WATER GATE VALVE
		FIRE HYDRANT
		WATER BLOW-OFF
		WATER LATERAL W/ METER
		SANITARY SEWER LATERAL
		STREETLIGHT
		EDGE OF PAVEMENT
		TRAFFIC SIGN
PAD= XXX.X FF = XXX.X	PAD= XXX.X FF = XXX.X	PAD ELEVATION FINISHED FLOOR ELEVATION
XX(XX.X) TC	XX(XX.X) TC	ELEVATION
		RETAINING WALL
		STORM DRAIN W/ MANHOLE

	EXISTING GAS GATE VALVE
MH	EXISTING UNKNOWN MANHOLE
GAS	EXISTING GAS, SIZE PER PLAN
	EXISTING POWER POLE
	EXISTING TRAFFIC SIGNAL
	EXISTING WALL
	WATER PIPE FITTING
POC	WATER POINT OF CONNECTION
POC	SEWER POINT OF CONNECTION
	DAYLIGHT LINE
	STREET CENTERLINE
	RIGHT-OF-WAY
	MATCHLINE
	BOUNDARY LINE
	PHASE LINE
P	PROPERTY LINE
	FLOWLINE
	SAWCUT
	CUT/FILL TRANSITION LINE
	SIDEWALK
	EX STRIPING TO BE OBLITERATED
	GRADE BREAK LINE
	REFLECTIVE RAISED PAVEMENT MARKERS
BWV	BACK WATER VALVE
	WROUGHT IRON FENCE
	PONY WALL
	DECORATIVE PERIMETER WALL
	DECORATIVE PERIMETER RETAINING WALL
	PROPOSED CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
	EXISTING CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
	FUTURE CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB

	PROPOSED SCARP AREA
	DRIVEWAY
	PROPOSED RIP RAP
	SIGHT VISIBILITY ZONE PER STD DWG NO. 201.2
	HANDICAP RAMP

QUANTITIES

			PRIVATE	PUBLIC
DRAINAGE				
1.	60" TYPE III STORM DRAIN MANHOLE	EA	1	–
2.	48" TYPE I STORM DRAIN MANHOLE	EA	1	–
3.	10.0' TYPE "CM2" DROP INLET	EA	–	–
4.	15.0' TYPE "CM2" DROP INLET	EA	2	–
5.	17.5' TYPE "CM2" DROP INLET	EA	1	–
6.	18" RCP CLASS III STORM DRAIN	LF	80	–
7.	24" RCP CLASS III STORM DRAIN	LF	81	–
8.	30" RCP CLASS III STORM DRAIN	LF	37	–
9.	36" RCP CLASS IV STORM DRAIN	LF	–	–
10.	RIPRAP D50=8", THK=16"	SF	–	–
11.	8' WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	2,785	–
12.	SIDEWALK UNDER DRAIN	EA	1	–
13.	CONCRETE FLUME PER DETAIL 33 ON SHEET D-3	LF	24	–
SEWER SYSTEM				
1.	4" PVC SEWER LATERAL (PRIVATE)	LF	1529	–
2.	8" PVC SEWER PIPE (PUBLIC)	LF	–	1477
3.	STANDARD 48" SEWER MANHOLE (PUBLIC)	EA	–	8
4.	8" SEWER PIPE CAP	EA	–	2
5.	BACK WATER VALVE	EA	21	–
6.	8" C-900 WATER QUALITY SEWER PIPE (PUBLIC)	EA	–	198
7.				
WATER SYSTEM				
1.	FIRE HYDRANT ASSEMBLY W/6" GATE VALVE PER UDACS PLATE NO. 40	EA	–	4
2.	6" PVC WATER PIPE (CLASS 150)	LF	–	35
3.	8" PVC WATER PIPE (CLASS 150)	LF	–	2847
4.	8" DIP WATER PIPE (CLASS 53)	LF	–	–
5.	8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39	EA	–	14
6.	8" X 6" TEE PER UDACS PLATE NO. 31	EA	–	2
7.	8" X 8" TEE PER UDACS PLATE NO. 31	EA	–	7
8.	8" 5 DEGREE BEND WITH RESTRAINED JOINTS	EA	–	2
9.	8" 11.25 DEGREE BEND PER UDACS PLATE NO. 31	EA	–	7
10.	8" 22.5 DEGREE BEND PER UDACS PLATE NO. 31	EA	–	–
11.	8" 45 DEGREE BEND PER UDACS PLATE NO. 31	EA	–	–
12.	8" 45 DEGREE VERTICAL BEND PER UDACS PLATE NO. 31	EA	–	4
13.	6" CAP AND 2" BLOW-OFF ASSEMBLY W/CAP PER UDACS PLATE NO. 36	EA	–	2
14.	1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 2	EA	–	50
15.	6" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39	EA	–	2
16.	1" COPPER SERVICE W/ 3/4" METER & 1" RPPA PER UDACS PLATE NO. 4 & 8	EA	–	1
17.	8" CAP AND 2" BLOW-OFF ASSEMBLY W/CAP PER UDACS PLATE NO. 36	EA	–	8
STREET IMPROVEMENTS				
1.	2" A.C. PAVEMENT W/ 4" TYPE II AGGREGATE BASE	SY	6285	–
2.	STANDARD 18" TYPE "L" ISLAND CURB & GUTTER W/6" TYPE II AGGREGATE BASE	LF	144	–
3.	STANDARD 8" TYPE "A" ISLAND CURB W/6" TYPE II AGGREGATE BASE	LF	162	–
4.	STANDARD 30" TYPE "ROLL" CURB & GUTTER W/6" TYPE II AGGREGATE BASE	LF	3141	–
5.	5' WIDE CONCRETE SIDEWALK W/4" TYPE II AGGREGATE BASE	SF	16274	–
6.	PAVERS PER LANDSCAPE PLAN BY OTHERS AND APPROVED GEOTECH REPORT	SY	580	–
7.				
TRAFFIC SIGNALS				
1.	30" STOP SIGN WITH POST (R1-1)	EA	5	–
2.	9" STREET NAME SIGN (D-3, BROWN W/ WHITE LETTERS)(6 POLES x 2 PER POLE=12)	EA	10	–
3.	BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKER	EA	4	–
4.	CROSSWALK MARKINGS	LF	–	–
5.	TYPE A SIGN PER "SOUTHERN NEVADA FIRE CODE AMENDMENTS" SECTION M101.1	EA	4	–
6.	REMOVABLE TYPE 3 BARRICADE W/ END OF ROAD MARKERS PER CCAUSD 601	EA	2	–
7.				
8.				
DRY UTILITIES				
1.	100W H.P.S. LUMINAIRE STREET LIGHT W/DECORATIVE POLE	EA	14	–
2.	1-1/4" PVC STREET LIGHT CONDUIT WITH (2) #4 AND (1) #8 CONDUCTORS	LF	1671	–
3.	NO. 3-1/2 PULL BOX W/METAL COVER	EA	4	–
4.	STUB AND CAP WITH P30 PULLBOX W/"FIBER OPTIC" INSCRIBED ON LID	EA	2	–
5.	200 AMP SERVICE PEDESTAL (STLT)	EA	1	–
6.				

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE _____ PROJECT No. ######
LVVWD APPROVED FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

GENERAL NOTES AND QUANTITIES

S12 T19 R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS
PROJECT NO.
OLY1710-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY A. SLATER
Exp: 06/30/2018
CIVIL
No. 14167
8.2.17

C-3
SHEET 3 OF 33

J:\Oly1710-000 Skye canyon parcel 2.29\dwg\improv\Oly1710-000_cvr.dwg 8/2/2017 5:27 PM Brian Chatman

0 30 60
SCALE - 1"=30' FEET

CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE

OWNER RESPONSIBLE TO PROWDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2800 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 120,165 CU YDS
FILL= 113,639 CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE

1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 IN THEIR PROPER LOCATION.

2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED LIP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES

1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2012, SECTION 2304.11.2.2.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
4. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
8. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLEPING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXIST) WITHIN THE SIGHT VISIBILITY ZONES.

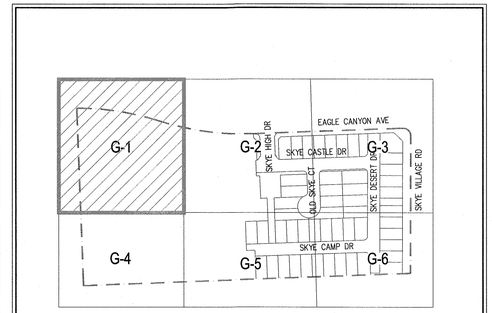
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(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 ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY, REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPS WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPS SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.



KEY MAP
NOT TO SCALE

GRADING NOTES

1. CONSTRUCT 30" ROLL CURB AND GUTTER PER CCAUSD NO. 217.S1. CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY
2. INSTALL "L" TYPE CURB AND GUTTER PER CCAUSD #216
3. INSTALL 5' WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE II AGGREGATE BASE) PER CCAUSD #234
4. INSTALL 8-FT CROSS GUTTER PER DETAIL 29 ON SHEET D-3
5. INSTALL 2" ASPHALT PAVEMENT OVER 4" TYPE II AGGREGATE BASE
6. CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT CCAUSD NO. 235, CASE I & 235.1
7. CONSTRUCT 10' TRANSITION FROM "L" CURB TO ROLL CURB PER DETAIL 30 ON SHEET D-3
8. INSTALL CONCRETE FLUME PER DETAIL 33 ON SHEET D-3
9. INSTALL SIDEWALK DRAIN PER CCAUSD #236
10. PERIMETER LANDSCAPE TO BE CONSTRUCTED BY MASTER DEVELOPER
11. INSTALL WROUGHT IRON FENCE WITH PEDESTRIAN ACCESS PER DETAILS ON SHEET D-3
12. INSTALL "A" TYPE ISLAND CURB PER CCAUSD NO. 219
13. INSTALL 24' WIDE GATE PER CCAUSD DWG NO. 425.S1
14. CONNECT TO EXISTING 36" RCP SD PER CLV#107V6296
15. INSTALL 2' WIDE CURB OPENING PER DETAIL 32 ON SHEET D-3
16. INSTALL PEDESTRIAN GATE PER DETAIL 28 ON SHEET D-3 OR APPROVED EQUAL
17. INSTALL 18" CLASS III RCP STORM DRAIN
18. INSTALL 24" CLASS III RCP STORM DRAIN
19. INSTALL 15 LF TYPE "CM2" DROP INLET PER CCAUSD #412.1 AND #421
20. INSTALL 17.5 LF TYPE "CM2" DROP INLET PER CCAUSD #412.1 AND #421
21. INSTALL 48" TYPE I SDMH PER CCAUSD #403
22. INSTALL 60" TYPE III SDMH PER CCAUSD #406
23. INSTALL 30" CLASS III RCP STORM DRAIN
24. INSTALL PAVERS SECTION PER LANDSCAPE PLAN BY OTHERS AND APPROVED GEOTECH REPORT

BONDABLE DRAINAGE QUANTITIES (PRIVATE)

8' WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	2,785
60" TYPE II STORM DRAIN MANHOLE	EA	1
48" TYPE I STORM DRAIN MANHOLE	EA	1
15.0' TYPE "CM2" DROP INLET	EA	2
17.5' TYPE "CM2" DROP INLET	EA	1
18" RCP CLASS III STORM DRAIN	LF	80
24" RCP CLASS III STORM DRAIN	LF	81
30" RCP CLASS III STORM DRAIN	LF	37
SIDEWALK UNDER DRAIN	EA	1
CONCRETE FLUME PER DETAIL 33 ON SHEET D-3	LF	24

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY 0S4903 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

JERRY J. SLATER, P.E. 14167 DATE

FAST
Call before you UnderGround
1-702-432-5300
FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T)

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

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call 811
OR
1-800-227-2600

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

NO.	DESCRIPTION	DATE	BY	APP.	APP. DATE

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

GRADING PLAN - I

S12
R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS

PROJECT NO.
OLY1710-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp. 06/30/2018
CIVIL
No. 14167
8-2-17

G-1
SHEET 4 OF 33

J:\OLY1710-000_skye canyon, parcel 2.29\dwg\mgrov\OLY1710-000_grd.dwg 8/2/2017 5:28 PM Brian Chapman

0 30 60
SCALE - 1"=30' FEET

N

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SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

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LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

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

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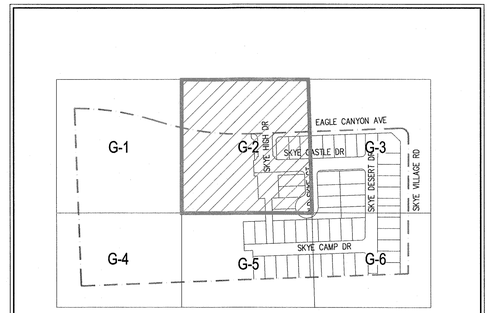
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.



KEY MAP
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1. CONSTRUCT 30" ROLL CURB AND GUTTER PER CCAUSD NO. 217.S1. CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY
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5. INSTALL 2" ASPHALT PAVEMENT OVER 4" TYPE II AGGREGATE BASE
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24" RCP CLASS III STORM DRAIN	LF	81
30" RCP CLASS III STORM DRAIN	LF	37
SIDEWALK UNDER DRAIN	EA	1
CONCRETE FLUME PER DETAIL 33 ON SHEET D-3	LF	24

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS4903 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

JERRY J. SLATER, P.E. 14167 DATE

FAST
Call before you UnderGround
1-702-432-5300
FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

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

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Call 811
OR
1-800-227-2600

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

GRADING PLAN - II

S12 T19 R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS

PROJECT NO.
OLY1710-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp. 06/30/2018
CIVIL
No. 14167
8-2-17

G-2
SHEET 5 OF 33

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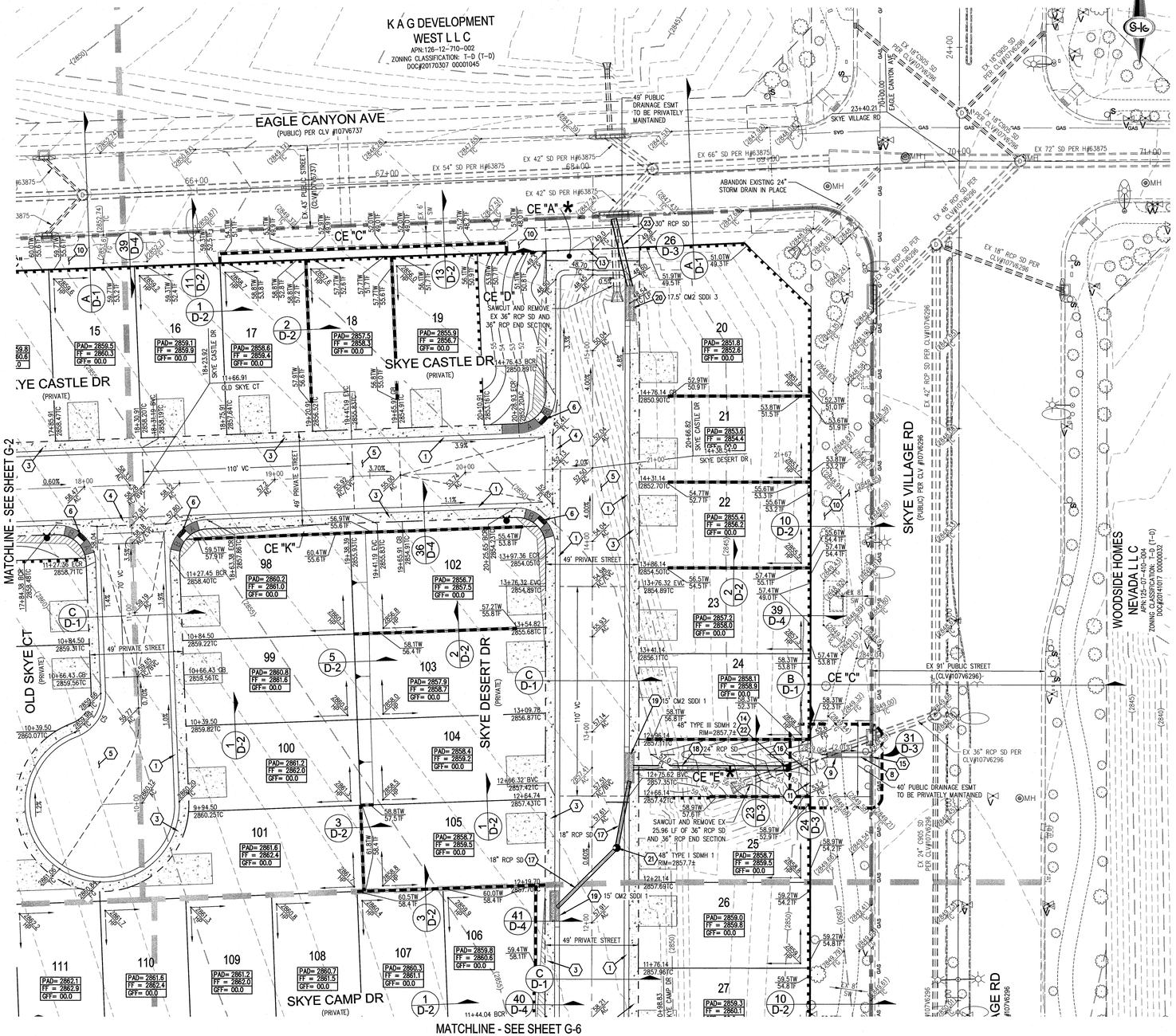

* COMMON ELEMENT E TO BE PUBLIC DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED. COMMON ELEMENT A TO BE LVVWD, CCWRD, AND PUBLIC DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED.

SCALE - 1"=30' (0 / 30 / 60 FEET)

CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2800 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 120,165 CU YDS
FILL= 113,639 CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE

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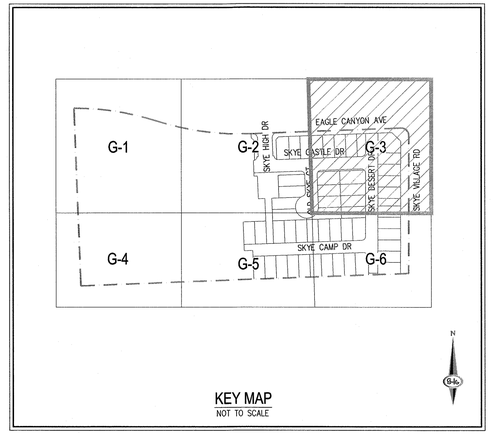

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JERRY J. SLATER, P.E. 14167 DATE

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NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

GRADING PLAN - III

S12 T19 R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS
PROJECT NO. OLY1710-000

PROFESSIONAL ENGINEER STATE OF NEVADA JERRY J. SLATER No. 14167 Exp. 08/31/2018 CIVIL 8.2.17

G-3
SHEET 6 OF 33

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0 30 60
SCALE - 1"=30' FEET

N

S-16

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SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
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FILL= 113,639 CU YDS

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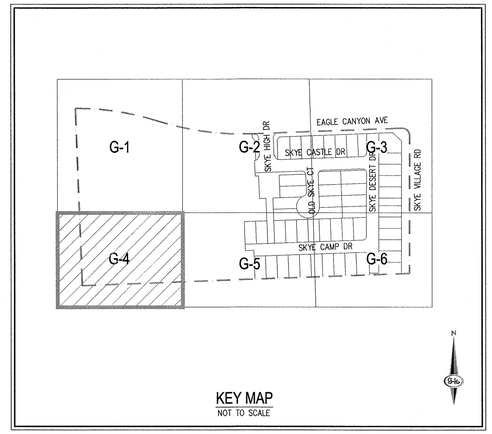

KEY MAP
NOT TO SCALE

GRADING NOTES

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FLOOD CERTIFICATION

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JERRY J. SLATER, P.E. 14167 DATE

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

NO.	DESCRIPTION	DATE	BY	APP DATE	APP

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

GRADING PLAN - IV

S12 T19 R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS

PROJECT NO.
OLY1710-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY J. SLATER
Exp. 06/30/2018
CIVIL
No. 14167
8.2.17

G-4
SHEET 7 OF 33

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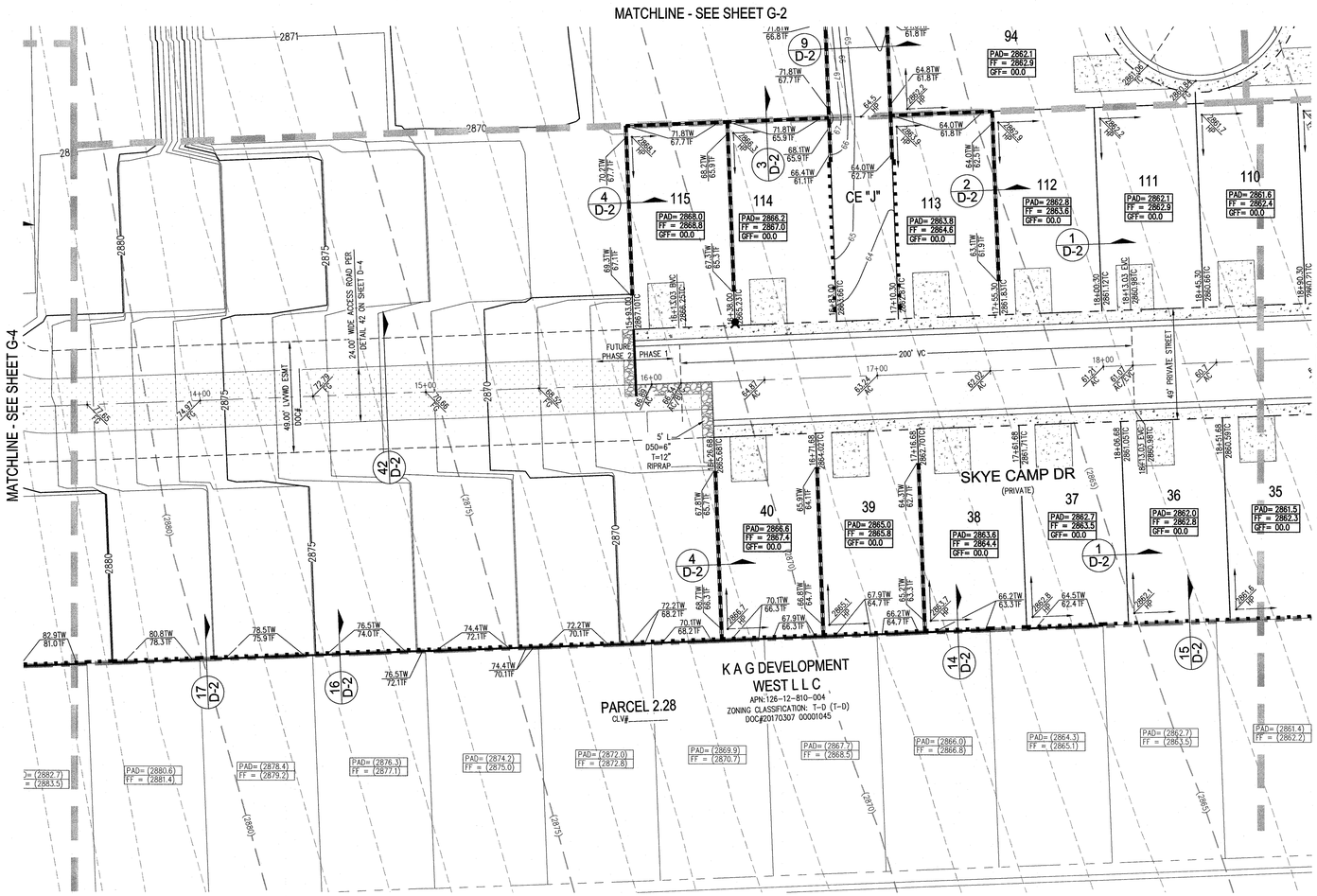

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ADD 2800 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

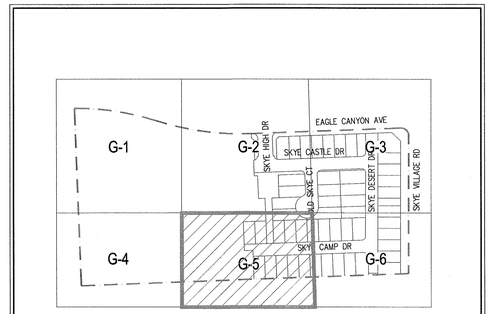
SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 120,165 CU YDS
FILL= 113,639 CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.



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3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
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LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(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 ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPS WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
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CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1
GRADING PLAN - V

S12 T19 R59

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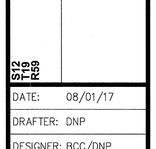

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SHEET 8 OF 33

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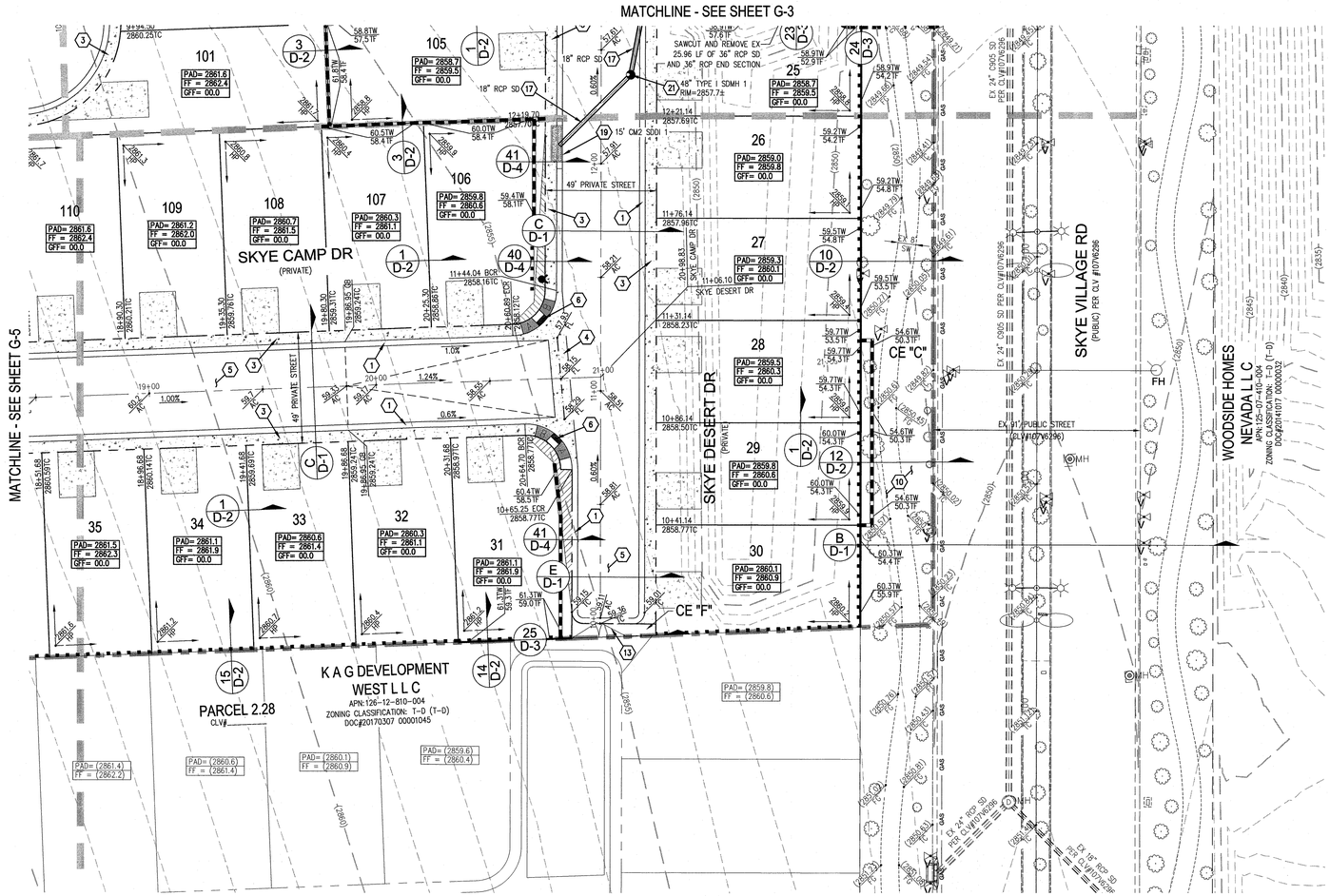

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S-16

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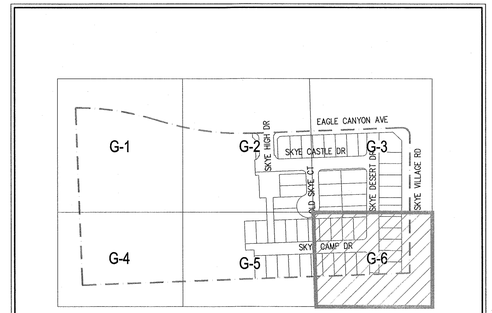

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NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

GRADING PLAN - VI

S12
T19
R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS

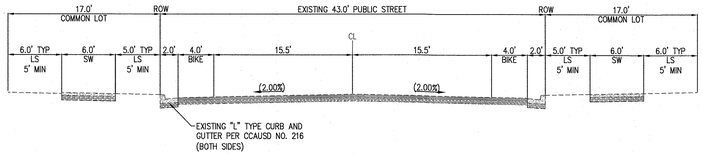
PROJECT NO.
OLY1710-000

PROFESSIONAL ENGINEER - STATE OF NEVADA - JERRY SLATER - Ex. 06/30/2018 - CIVIL - No. 14167

8/2/17

G-6
SHEET 9 OF 33

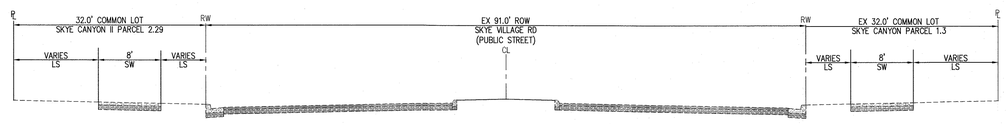
J:\oly1710-000 skye canyon parcel 2.29\dwg\improv\oly1710-000_grd.dwg 8/2/2017 5:30 PM Brian Chapman



A. EXISTING STREET SECTION (PUBLIC)

NOT TO SCALE

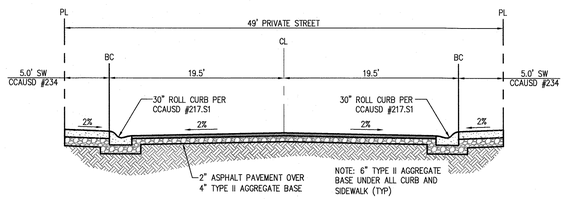
EAGLE CANYON AVENUE



B. EXISTING STREET SECTION (PUBLIC)

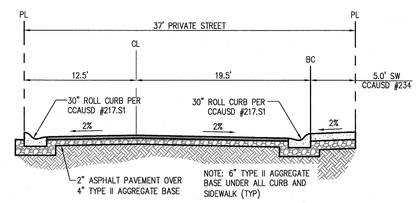
NOT TO SCALE

SKYE VILLAGE ROAD



C. 49' INTERIOR STREET SECTION (PRIVATE)

NOT TO SCALE



E. 37' INTERIOR STREET SECTION (PRIVATE)

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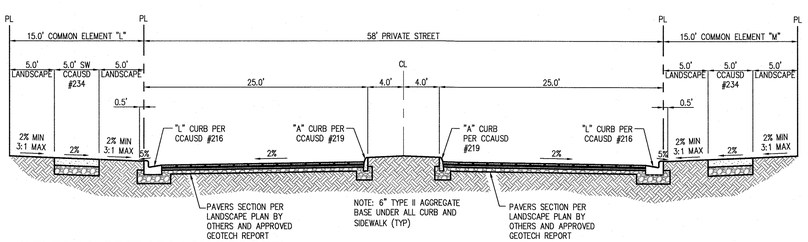

F. 58' ENTRY STREET SECTION (PRIVATE)

NOT TO SCALE

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

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CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

STREET SECTIONS AND DETAILS

S12
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PROFESSIONAL ENGINEER – STATE OF NEVADA
JERRY A. SLATER
Exp. 06/30/2018
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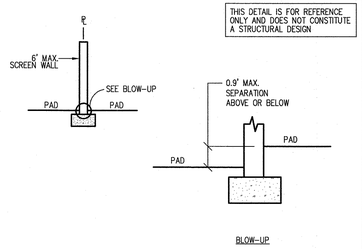
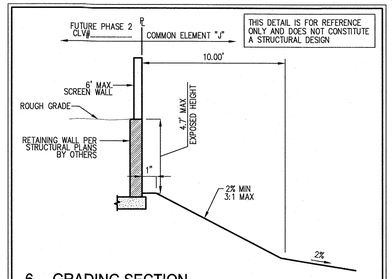
No. 14167

D-1
SHEET 10 OF 33

J:\oly1710-000 skye canyon parcel 2.29\dwg\Improv\oly1710-000_d1.dwg 8/2/2017 5:31 PM Brian Chapman



1. PAD TO PAD W/O RET WALL
NOT TO SCALE



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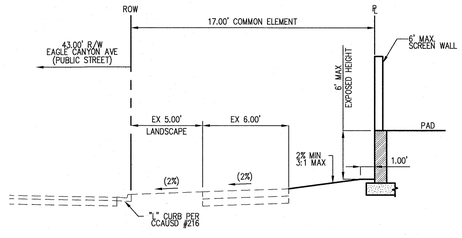
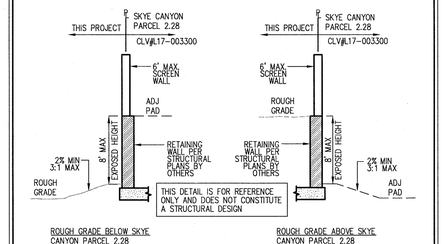


11. PAD ABOVE EX STREET WITH RETAINING WALL
NOT TO SCALE



16. ROUGH GRADE PERIMETER SECTION W/ RET WALL
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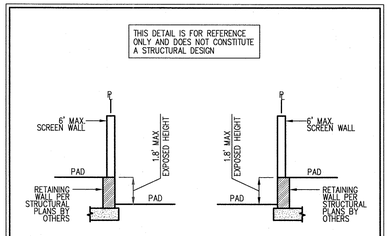

2. SIDEYARD WITH RETAINING WALL
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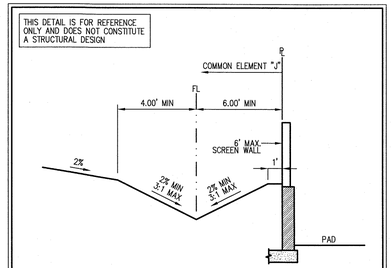

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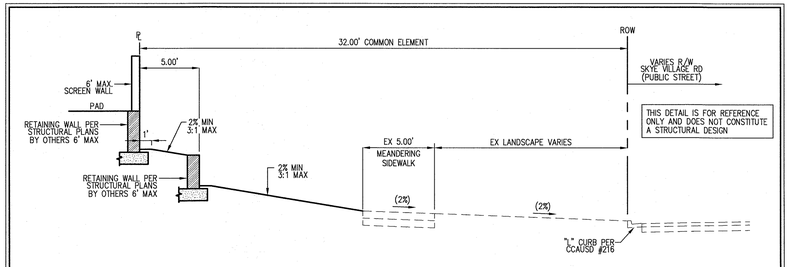

12. PERIMETER SECTION - PAD ABOVE EX STREET WITH DOUBLE RETAINING WALL
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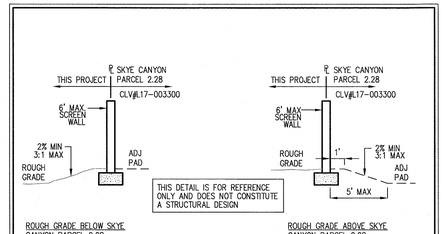

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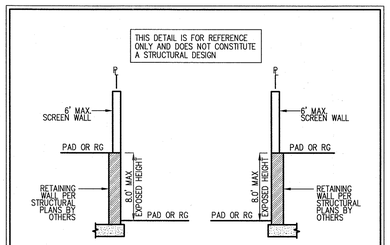
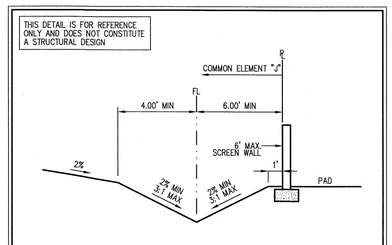


3. REAR YARD WITH RETAINING WALL
NOT TO SCALE



8. GRADING SECTION
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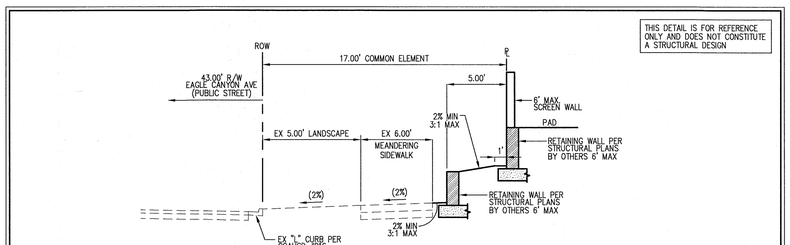
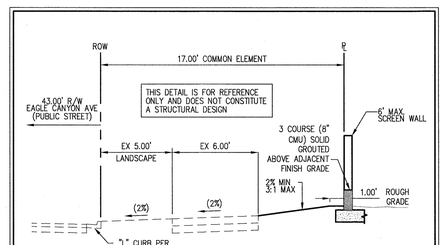


13. PAD ABOVE SREET WITH DOUBLE RETAINING WALL
NOT TO SCALE



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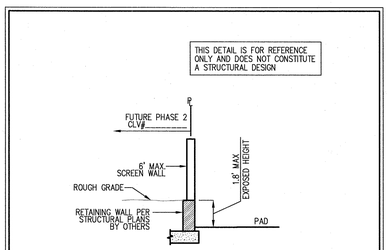
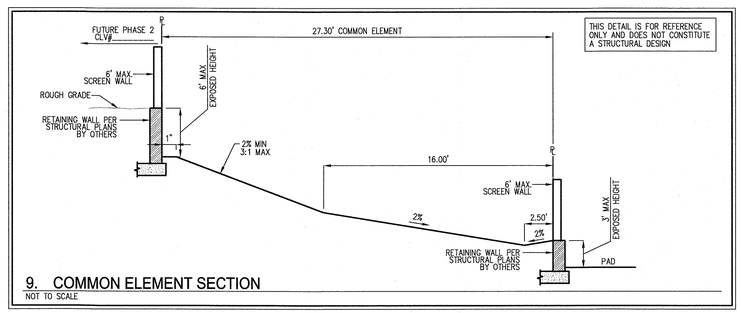
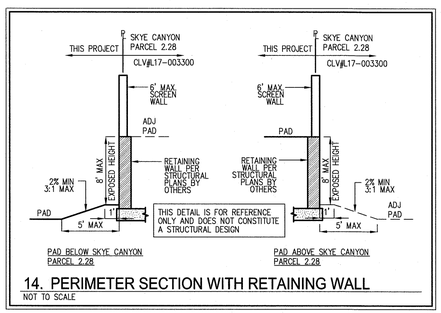


4. SIDEYARD WITH RETAINING WALL
NOT TO SCALE



9. COMMON ELEMENT SECTION
NOT TO SCALE



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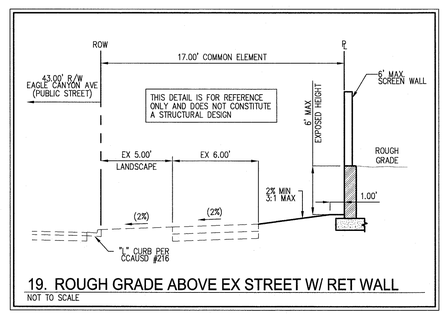

19. ROUGH GRADE ABOVE EX STREET W/ RET WALL
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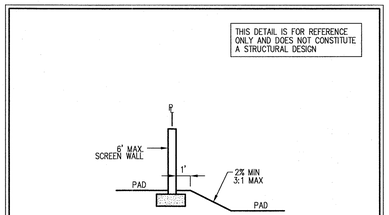
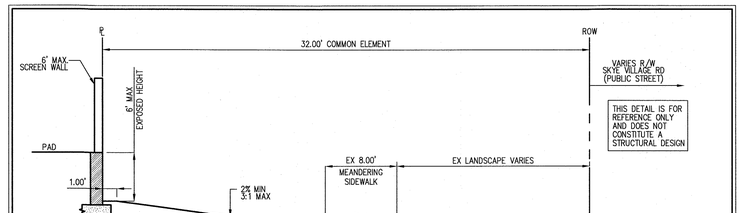


5. REAR YARD WITH SCARP
NOT TO SCALE



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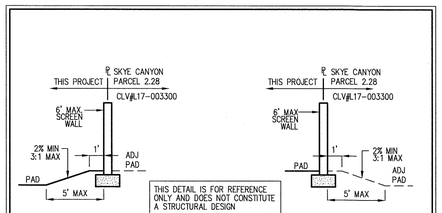
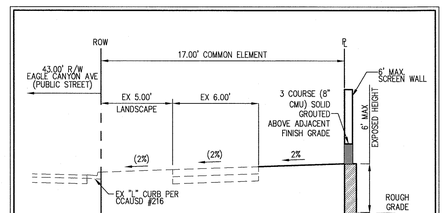
NOT TO SCALE



15. PERIMETER SECTION WITHOUT RETAINING WALL
NOT TO SCALE



20. ROUGH GRADE BELOW EX STREET W/ RET WALL
NOT TO SCALE

SLATER HANIFAN GROUP
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NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1
GRADING SECTIONS AND DETAILS

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D-2
SHEET 11 OF 33

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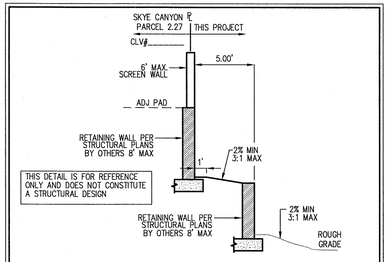
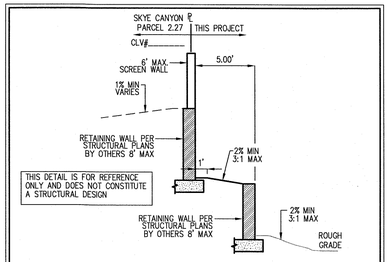


21. ADJACENT PAD W/ DOUBLE RET WALL

NOT TO SCALE



22. PERIMETER SECTION W/ DOUBLE RET WALL

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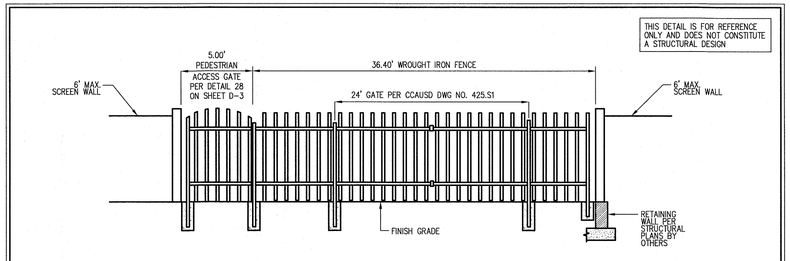
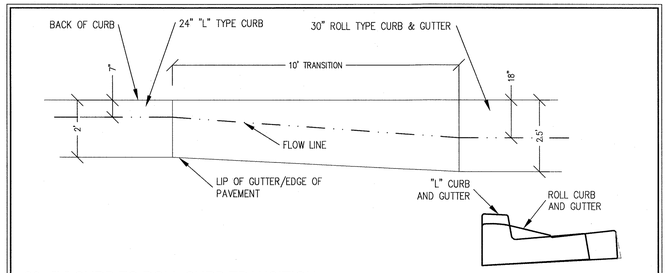


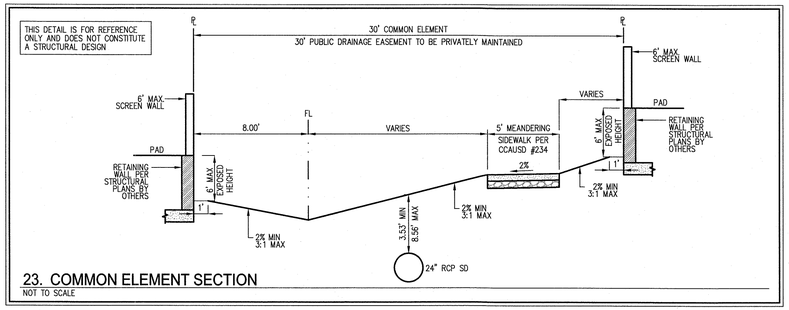
27. FENCE SECTION

NOT TO SCALE



30. "L" CURB TO ROLL CURB TRANSITION

NOT TO SCALE



23. COMMON ELEMENT SECTION

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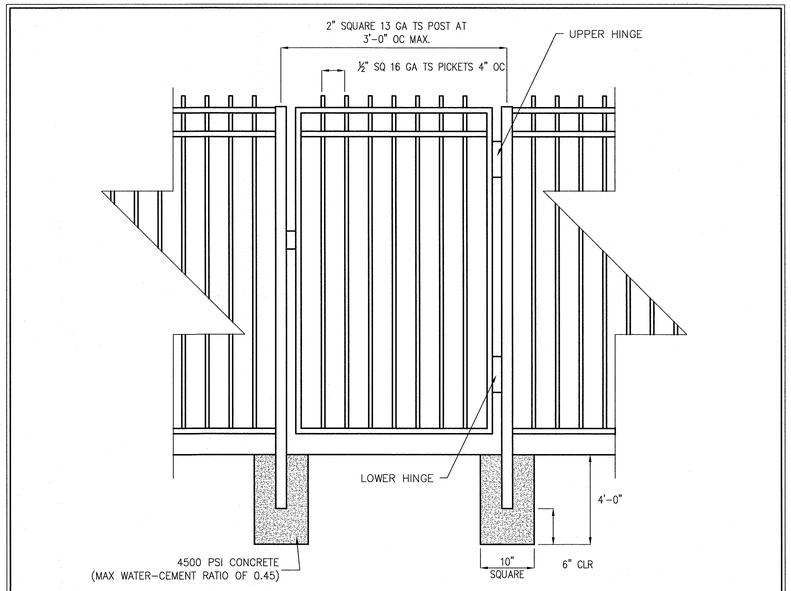

28. PEDESTRIAN GATE

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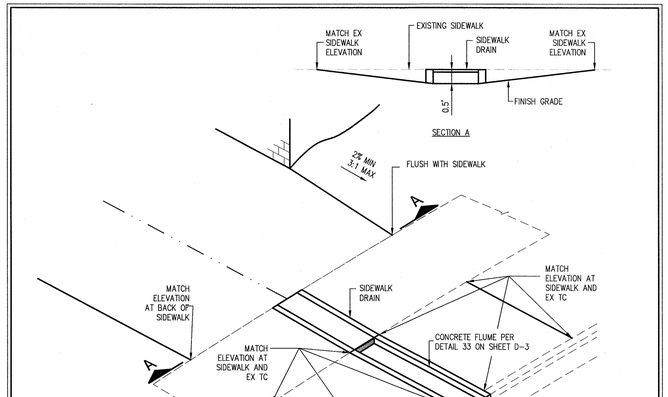
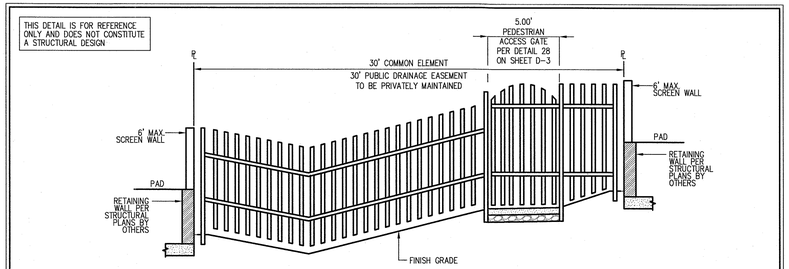


31. GRADING DETAIL

NOT TO SCALE



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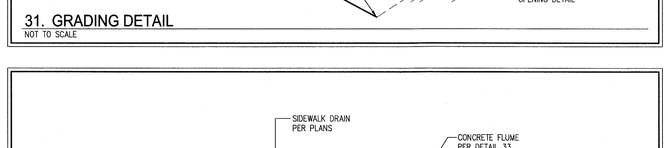
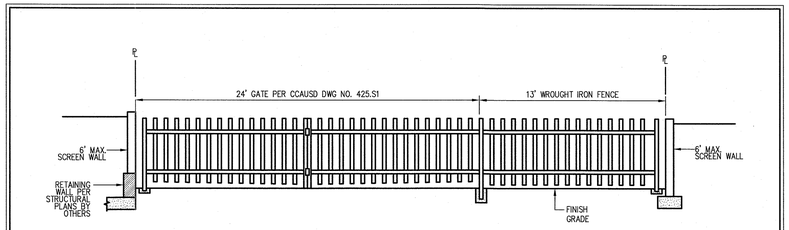


32. CURB OPENING DETAIL

NOT TO SCALE



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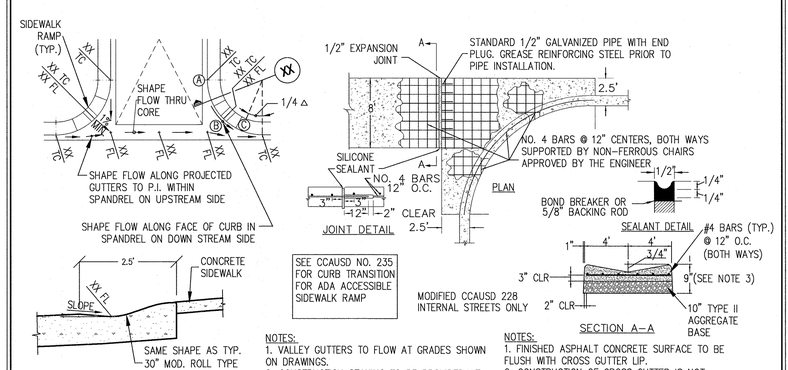
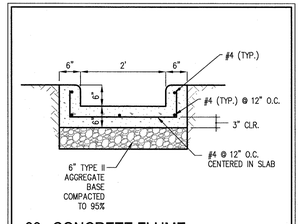


NOTES:
1. VALLEY GUTTERS TO FLOW AT GRADES SHOWN ON DRAWINGS.
2. CONSTRUCTION STAKING TO BE PROVIDED AT ALL POINTS DESIGNATED BY XX SHOWN ON DETAIL ABOVE.
3. MAINTAIN SECTION "X" FROM POINT A TO POINT B, TRANSITION AREA FROM POINT B TO POINT C.

NOTES:
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.

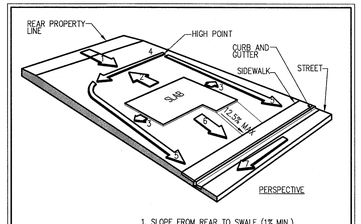
29. MODIFIED 8' WIDE CROSS GUTTER

NOT TO SCALE



33. CONCRETE FLUME

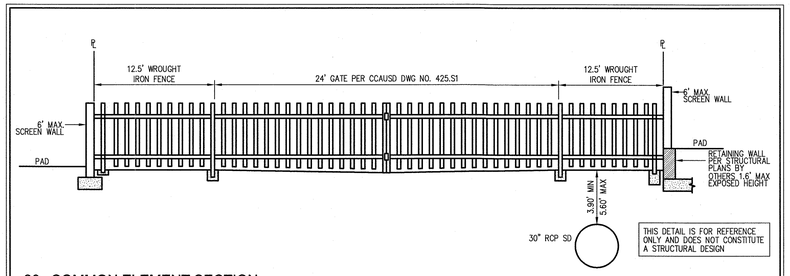
NOT TO SCALE



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

34. TYPE "A" LOT GRADING (TYP.)

NOT TO SCALE



26. COMMON ELEMENT SECTION

NOT TO SCALE

SLATER HANIFAN GROUP
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5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
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NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

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D-3
SHEET 12 OF 33

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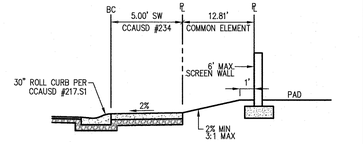
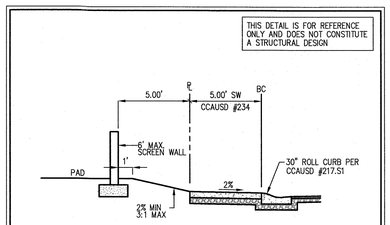
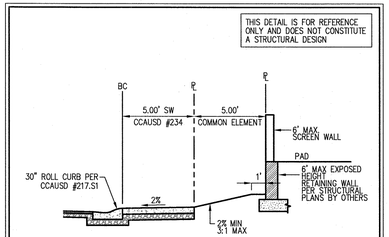


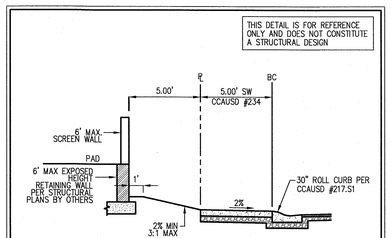
CORNER LOT W/O RETAINING WALL
35. W/ ADJACENT COMMON ELEMENT
NOT TO SCALE



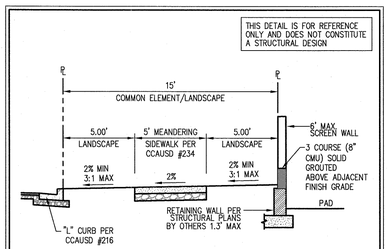
40. CORNER LOT W/O RETAINING WALL
NOT TO SCALE



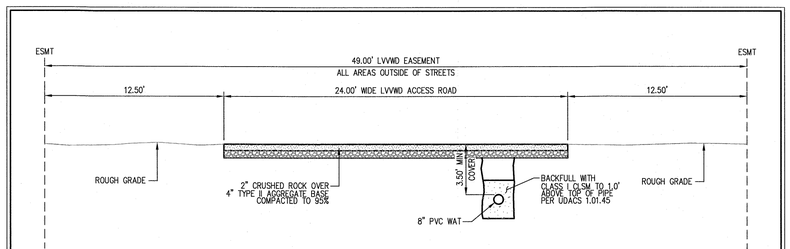
CORNER LOT W/ RETAINING WALL
36. W/ ADJACENT COMMON ELEMENT
NOT TO SCALE



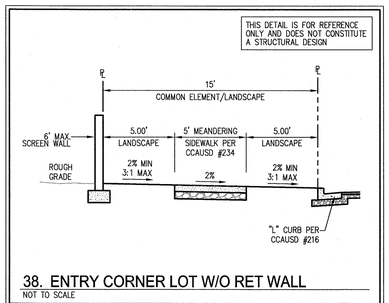
41. CORNER LOT W/ RETAINING WALL
NOT TO SCALE



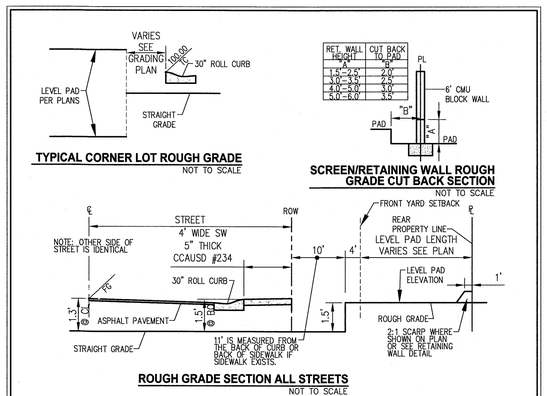
37. ENTRY CORNER LOT W/ RET WALL
NOT TO SCALE



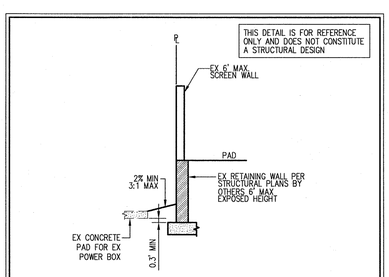
42. ACCESS ROAD SECTION
NOT TO SCALE



38. ENTRY CORNER LOT W/O RET WALL
NOT TO SCALE



43. TYPICAL ROUGH GRADE SECTIONS
NOT TO SCALE



39. GRADING SECTION
NOT TO SCALE

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1
GRADING SECTIONS AND DETAILS

S12
T19
R59

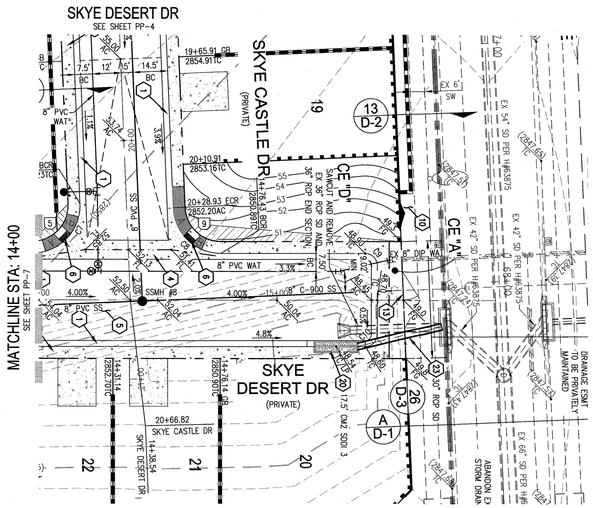
DATE: 8/2/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS

PROJECT NO.
OLY1710-000

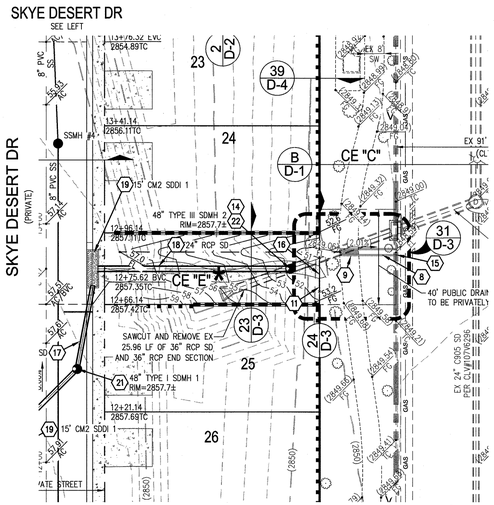
PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp. 06/30/2018
CIVIL
No. 14167
8.2.17

D-4
SHEET 13 OF 33

J:\oly1710-000_skye canyon parcel 2.29\dwg\improv\oly1710-000_d12.dwg 8/2/2017 5:32 PM Brian Chapman



SKYE DESERT DR - PLAN VIEW
(PRIVATE)



COMMON ELEMENT "E"- PLAN VIEW
(PRIVATE)

SKYE DESERT DR - PROFILE VIEW
HORIZ: 1" = 30'
VERT: 1" = 3'

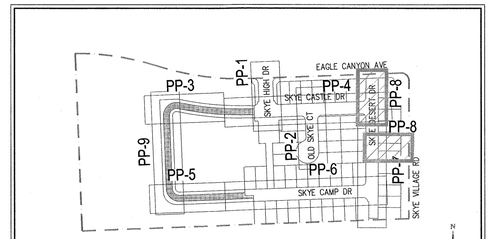
COMMON ELEMENT "E"- PROFILE VIEW
HORIZ: 1" = 30'
VERT: 1" = 3'

SKYE DESERT DR - PROFILE VIEW
HORIZ: 1" = 30'
VERT: 1" = 3'

CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

LEGAL DESCRIPTION
BEING A PORTION OF ALL OF GOVERNMENT LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 AND 16 OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.



KEY MAP
NOT TO SCALE

SCALE – 1"=30' (0, 30, 60 FEET)

RAMP TRANSITION LENGTHS
FOR 1:12 SIDE SLOPES

CASE NO.	GRADE % "B" TO "A"	"A" MIN.	"B" MIN.
1	-6 TO -5.01	4.5'	21.5'
2	-5 TO -4.01	4.5'	15.0'
3	-4 TO -3.01	4.5'	12.0'
4	-3 TO -2.01	4.5'	9.5'
5	-2 TO 2	8.0'	8.0'
6	2.01 TO 3	9.5'	4.5'
7	3.01 TO 4	12.0'	4.5'
8	4.01 TO 5	15.0'	4.5'
9	5.01 TO 6	21.5'	4.5'

SIDEWALK RAMPS USING AMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD NO. 235, CASE I

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	TANGENT
C1	31.42'	20.00'	90°00'00"	20.00'
C2	31.42'	20.00'	90°00'00"	20.00'
C3	31.44'	20.00'	90°03'38"	20.02'
C4	31.39'	20.00'	89°56'22"	19.98'
C5	29.33'	23.50'	71°30'50"	16.92'
C6	166.81'	38.00'	251°30'50"	52.77'
C7	32.25'	20.00'	92°22'40"	20.85'
C8	30.59'	20.00'	87°37'20"	19.19'
C9	7.85'	5.00'	90°00'00"	5.00'
C10	7.85'	5.00'	90°00'00"	5.00'
C11	30.61'	20.00'	87°40'58"	19.21'
C12	32.22'	20.00'	92°19'02"	20.83'
C13	7.85'	5.00'	90°00'00"	5.00'
C14	7.85'	5.00'	90°00'00"	5.00'

WATER NOTES
1. INSTALL 6" CAP WITH BLOWOFF PER DCSWCS SECTION 2.2.5
2. INSTALL 8" 11.25° BEND PER UDACS PLATE NO. 31
3. INSTALL 8" 45° VERTICAL BEND PER UDACS PLATE NO. 31 (MECHANICAL RESTRAINT WHERE SHOWN IN PROFILE)
4. INSTALL 8" 5° BEND PER UDACS PLATE NO. 31 (MECHANICALLY RESTRAINED)
5. INSTALL 8" CAP WITH BLOWOFF PER DCSWCS SECTION 2.2.5
6. INSTALL 8" x 6" TEE PER UDACS PLATE NO. 31
7. INSTALL 8" x 8" TEE PER UDACS PLATE NO. 31
8. INSTALL 6" PVC WATER PIPE
9. INSTALL 8" PVC WATER PIPE
10. INSTALL 8" x 6" TEE PER UDACS PLATE NO. 31 AND FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE NO. 40
11. INSTALL 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39
12. INSTALL 6" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39
13. INSTALL 1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 2
14. INSTALL 1" COPPER SERVICE W/ 3/4" IRRIGATION METER AND 1" RPPA PER UDACS PLATE NO. 4 & 8
15. REMOVE CAP & BLOW-OFF ASSEBLY PER UDACS PLATE NO. 36 & CONNECT TO 8" WATER PIPE BY OTHERS

SEWER NOTES
1. INSTALL 48" SSMH PER DCSWCS SD-1A THRU SD-4 AND SD-9
2. INSTALL 8" CAP WITH THRUST BLOCK PER DCSWCS SECTION 2.2.5
3. INSTALL 8" PVC SS PER DCSWCS SD-15 AND SD-17
4. INSTALL 8" C-900 SS PER DCSWCS SD-1A THRU SD-4 AND SD-9
5. MANHOLE SHALL BE CORROSION PROTECTED WITH AGENCY APPROVED FACTORY INSTALL PVC LINER OR FIELD APPLIED COATING PER DCSWCS SECTION 3.16.8 (A AND B)
6. INSTALL 4" SEWER LATERAL (PRIVATE) PER SD-22, SD-23, & SD-25 W/8" x 4" WYE (TYPICAL) (C-900 WHERE SHOWN ON PLANS)
7. REMOVE CAP AND CONNECT TO EXISTING 8" SS (BY OTHERS)

SEWER CONNECTION NOTE
ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTENCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

DISCLAIMER NOTE
1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 IN THEIR PROPER LOCATION.
2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED LIP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES
1. CONSTRUCT 30" ROLL CURB AND GUTTER PER CCAUSD NO. 217.S1. CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.
2. INSTALL "L" TYPE CURB AND GUTTER PER CCAUSD #216
3. INSTALL 5' WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE II AGGREGATE BASE) PER CCAUSD #234
4. INSTALL 8-FT CROSS GUTTER PER DETAIL 29 ON SHEET D-3
5. INSTALL 2" ASPHALT PAVEMENT OVER 4" TYPE II AGGREGATE BASE
6. CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT CCAUSD NO. 235, CASE I & 235.1
7. CONSTRUCT 10' TRANSITION FROM "L" CURB TO ROLL CURB PER DETAIL 30 ON SHEET D-3
8. INSTALL CONCRETE FLUME PER DETAIL 33 ON SHEET D-3
9. INSTALL SIDEWALK DRAIN PER CCAUSD #236
10. PERIMETER LANDSCAPE TO BE CONSTRUCTED BY MASTER DEVELOPER
11. INSTALL WROUGHT IRON FENCE WITH PEDESTRIAN ACCESS PER DETAILS ON SHEET D-3
12. INSTALL "A" TYPE ISLAND CURB PER CCAUSD NO. 219
13. INSTALL 24' WIDE GATE PER CCAUSD DWG NO. 425.S1
14. CONNECT TO EXISTING 36" RCP SD PER CLV#107V6296
15. INSTALL 2' WIDE CURB OPENING PER DETAIL 32 ON SHEET D-3
16. INSTALL PEDESTRIAN GATE PER DETAIL 28 ON SHEET D-3 OR APPROVED EQUAL
17. INSTALL 18" CLASS III RCP STORM DRAIN
18. INSTALL 24" CLASS III RCP STORM DRAIN
19. INSTALL 15 LF TYPE "CM2" DROP INLET PER CCAUSD #412.1 AND #421
20. INSTALL 17.5 LF TYPE "CM2" DROP INLET PER CCAUSD #412.1 AND #421
21. INSTALL 48" TYPE I SDMH PER CCAUSD #403
22. INSTALL 60" TYPE III SDMH PER CCAUSD #406
23. INSTALL 30" CLASS III RCP STORM DRAIN
24. INSTALL PAVERS SECTION PER LANDSCAPE PLAN BY OTHERS AND APPROVED GEOTECH REPORT

OWNER/DEVELOPER
K.A.G. DEVELOPMENT WEST/NINETY-FIVE MANAGEMENT LLC
11411 SOUTHERN HIGHLANDS PKWY SUITE 300
LAS VEGAS, NV 89141
PH: 702-220-5565
FX: 702-220-6566
CONTACT: BOBBY WILLIAMSON

ENGINEER
SLATER HANIFAN GROUP, INC.
5740 S. ARVILLE STREET, SUITE 216
LAS VEGAS, NV 89118
PH: (702) 284-5300
FX: (702) 284-5399
CONTACT: JERRY SLATER

BENCHMARK
USDA BRASS CAP ON AN IRON PIPE, 140' SOUTHWEST OF TELEPHONE POLE #26994T, SOUTHWEST CORNER OF THE U.S. 95/KYLE CANYON TURNOFF.

ELEVATION = 2817.62 FEET, 858.813 METERS
N.A.V.D. 88
PER THE CLARK COUNTY VERTICAL CONTROL LAST REVISED 2003

BASIS OF BEARINGS
SOUTH 00°08'59" WEST, BEING THE BEARING OF THE EAST LINE OF THE SOUTHEAST QUARTER (SE1/4) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.DM., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN BOOK 147, PAGE 71 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

PUBLIC UTILITY EASEMENT NOTE
ALL PRIVATE STREETS ARE P.U.E, PUBLIC SEWER EASEMENTS AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE _____ PROJECT No. #####

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

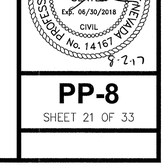
NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 1

PLAN AND PROFILE - VIII

S12 T19 R59

DATE: 08/01/17
DRAFTER: DNP
DESIGNER: BCC/DNP
CHECKED: STS
PROJECT NO. OLY1710-000



PP-8
SHEET 21 OF 33

X:\oly17\0-000 skye canyon parcel 2.29\dwg\engrav\oly17\0-000_engr.dwg 8/3/2017 6:46 AM Brion Chapman

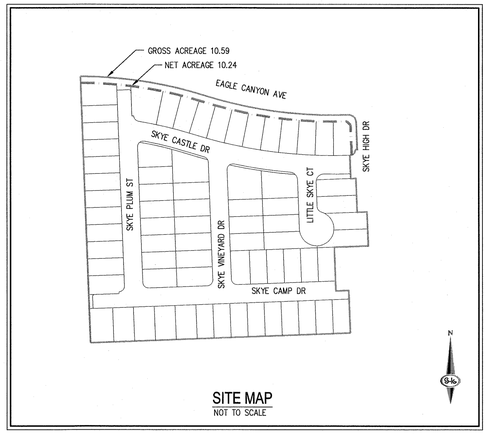
IMPROVEMENT PLANS
FOR
SKYE CANYON - PARCEL 2.29
PHASE 2

A SINGLE FAMILY RESIDENTIAL SUBDIVISION OF THE SKYE CANYON
MASTER-PLANNED COMMUNITY WITHIN THE CITY OF LAS VEGAS, NEVADA

APN: 126-12-810-005

CITY OF LAS VEGAS NEVADA

SHEET INDEX		
NO.	TITLE	DESCRIPTION
1	COVER SHEET	C-1
2	GENERAL NOTES	C-2
3	GENERAL NOTES AND QUANTITIES	C-3
4	GRADING PLAN – I	G-1
5	GRADING PLAN – II	G-2
6	GRADING PLAN – III	G-3
7	GRADING PLAN – IV	G-4
8	GRADING SECTIONS AND DETAILS – I	D-1
9	GRADING SECTIONS AND DETAILS – II	D-2
10	GRADING SECTIONS AND DETAILS – III	D-3



SITE MAP
NOT TO SCALE

PROJECT INFORMATION

ACREAGE (GROSS):	= 10.59 AC
ACREAGE (NET):	= 10.24 AC
DENSITY (LOTS/NET ACRE):	= 6.9 DU/NET AC
ZONING:	= T-D
TOTAL NO. OF RESIDENTIAL LOTS	= 71
TOTAL NO. OF COMMON ELEMENTS	= 3
MINIMUM LOT SIZE	= 4,050 SF±
MAXIMUM LOT SIZE	= 6,737 SF±
PROVIDED OPEN SPACE	= ____ SF±

EARTHWORK SUMMARY (UNADJUSTED)

CUT	120,165 CY.
FILL	113,639 CY.
NET	6,526 CY.

DEVIATIONS FROM STANDARDS

NONE

SWPPP 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 IN A CONTIGUOUS SUBDIVISION IS CONSIDERED UNDER CONSTRUCTION UNTIL 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 PROJECTS THAT DISTURB MORE THEN ONE ACRE OF LAND MUST SUBMIT TO NDEP A "NOTICE OF INTENT" FOR INCLUSION UNDER STORMWATER PERMIT NO. NVR100000 ALONG WITH THE APPROPRIATE FILLING FEE.

GEOTECHNICAL ENGINEER

PREPARED BY: GEOTEK RESIDENTIAL, LLC
ADDRESS: 6835 ESCONDIDO ST #A, LAS VEGAS, NV 89119
PHONE: 702-897-1424
PROJECT No. 12208-LVR
DATED: MARCH 30, 2016

APPROVALS

CITY ENGINEER–ALLEN PAVELKA PE, #9029 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.

LAS VEGAS FIRE AND RESCUE DATE

CHRIS KNIGHT, DIRECTOR DATE
BUILDING AND SAFETY

THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING DEPARTMENT.

CENTRAL TELEPHONE CO. DBA CENTURYLINK DATE

THE AFFIXED CENTURYLINK 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 STATUES AND / OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: _____ PROJECT NO. ######
LVVWD APPROVED FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL
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 CORPORATION DATE

COX COMMUNICATIONS LAS VEGAS, INC. DATE

OWNER/DEVELOPER

K.A.G. LLC/NINETY-FIVE MANAGEMENT LLC
11411 SOUTHERN HIGHLANDS PKWY SUITE 300
LAS VEGAS, NV 89141
PH: (702) 220-6565
FX: (702)
CONTACT: BOBBY WILLIAMSON

ENGINEER

SLATER HANIFAN GROUP, INC.
5740 S. ARVILLE STREET, SUITE 216
LAS VEGAS, NV 89118
PH: (702) 284-5300
FX: (702) 284-5399
CONTACT: JERRY SLATER

LEGAL DESCRIPTION

BEING A PORTION OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

BENCHMARK

USDA BRASS CAP ON AN IRON PIPE, 14.0' SOUTHWEST OF TELEPHONE POLE #26994T, SOUTHWEST CORNER OF THE U.S. 95/KYLE CANYON TURNOFF.

ELEVATION = 2817.62 FEET, 858.813 METERS
N.A.V.D. 88
PER THE CLARK COUNTY VERTICAL CONTROL LAST REVISED 2003

BASIS OF BEARINGS

THE BASIS OF BEARING IS SOUTH 00°22'12" WEST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEAVAD, AS SHOWN BY MAP THEREOF IN FILE 151, PAGE 14 OF SURVEYS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

FEMA FLOOD ZONE INFORMATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE 'X' (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER, 2002.

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

COVER SHEET

S12
T19
R59

DATE: 08/02/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS
PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp. 06/30/2018
CIVIL
No. 14167

C-1
SHEET 1 OF 10

J:\Oly1710-001 skye canyon parcel 2.29 phase 2\dwg\improv\oly1710-001_cvr.dwg 8/2/2017 5:22 PM Brian Chapman

STORMWATER RUNOFF MANAGEMENT

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

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

LEGAL DESCRIPTION

BEING A PORTION OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., CLARK COUNTY, NEVADA.

BENCHMARK

BM 7L-V90 7NWS CITY OF LAS VEGAS RIVET AND ROUND PLATE IN CONCRETE CYLINDER, SOUTHEAST CORNER OF HUALAPAI WAY AND IRON MOUNTAIN ROAD.

ELEV: 2840.13 FEET (865.67 METERS) (NAVD 1988)

BASIS OF BEARINGS

SOUTH 00°34'18" EAST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE ¼) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST M.D.M., AS PER FILE 151, PAGE 14, OF SURVEYS ON FILE IN THE COUNTY RECORDER'S OFFICE.

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 PERFORM 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 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 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 LVVWD 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 OF ONE (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.

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # ###### (REVISED 01/09/2017)

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 DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. 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.
14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

    ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

15. NO LEAD COMPLIANCE NOTE:
TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE USED.

GRADING NOTES

1. INDICATED GRADES OTHER THAN T.C., F.G. & GUTTER F.L. ARE ROUGH GRADES.
2. THE ROUGH GRADING PLANS SHALL BE ON THE JOB SITE AT ALL TIMES. THE ROUGH GRADING SHALL BE FINISHED IN CONFORMANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS. THE GRADING QUANTITIES ARE BASED ON THE ELEVATION AND DETAILS SHOWN ON THE PLANS. ANY DEVIATIONS FROM THE PLANS WILL RESULT IN QUANTITY CHANGES.
3. CARE SHALL BE EXERCISED IN GRADING CORNER LOTS.
4. ROUGH PAD ELEVATIONS SHALL BE GRADED TO WITHIN 0.1' OF THE PAD ELEVATIONS SHOWN ON THE PLANS. WHEN GRADING IS COMPLETE PER THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE LOTS CAN BE INSPECTED. AT THAT TIME THE ENGINEER SHALL ALSO DECIDE IF ANY ADDITIONAL DITCHES OR BERMS ARE REQUIRED. THE CONTRACTOR IS REQUESTED NOT TO REMOVE ANY OF HIS ROUGH GRADING EQUIPMENT UNTIL HE RECEIVES GRADING APPROVAL FROM THE ENGINEER.
5. SOILS REPORT PREPARED BY GEOTEK RESIDENTIAL, LLC, PROJECT NO. 12208-LVR, DATED MARCH 30, 2016.
6. EARTHWORK QUANTITIES (RAW):
   -CUT = 120,165 CUBIC YARDS.
   -FILL = 113,639 CUBIC YARDS

   A) THE ABOVE QUANTITIES DO NOT REFLECT LOSSES DUE TO SUBSIDENCE OR SHRINKAGE.
   B) THE ABOVE QUANTITIES DO REFLECT USING NATIVE MATERIAL IN LIEU OF TYPE I GRAVEL BASE MATERIAL. FOR STREET SECTIONS.
   C) THE ABOVE QUANTITIES DO NOT REFLECT ANY EARTHWORK WHICH MAY BE REQUIRED BY THE ENGINEER TO CONSTRUCT ADDITIONAL PROTECTIVE DITCHES OR BERMS NOT SHOWN ON THESE DRAWINGS.

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE # 6325, FOR HYDRANT SPECIFICATIONS, AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICT'S – **APPROVED PRODUCTS LIST** ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR ALL INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK [IFC 105.7.12]
4. ON ANT 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. [IFC 3310, 3312]
5. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, THE CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS. [IFC 507.5.7.3]
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [IFC 106.3]
7. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. [IFC 507.2.1, NFPA 24]
8. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [IFC 507]
9. PRIVATE HYDRANTS SHALL BE PAINTED RED. [IFC 507.5.7.1]
10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [IFC 507]
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [IFC C102]
    - RESIDENTIAL- 500 FT UNSPRINKLERED; 600 FT SPRINKLERED.
    - COMMERCIAL- 300 FT UNSPRINKLERED; 400 FT 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 A MAXIMUM OF 1,000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [IFC C102.8]
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IFC C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC C102.4]
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC C102.7]
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [IFC C102.6]
18. TWO (2) 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. [IFC C104]
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. [IFC 503.2.3]
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%. [IFC 503.2.7, 503.2.8]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FEET OUTSIDE AND 28 FEET INSIDE TURNING RADIUS. [IFC 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FT 6 INS. [IFC 503.2.1]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FT FLOW LINE TO FLOW LINE WITH PARALLEL PARKING PERMITTED ON BOTH SIDES. NOT LESS THAN 32 FT WIDE, FLOW LINE TO FLOW LINE, WHERE PARKING IS PERMITTED ONLY ON ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD. NOT LESS THAN 24 FT WIDE, FLOW LINE TO FLOW LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE. FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 24 FT. [IFC 503.2.1.1]
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. THE DISTANCE COULD BE INCREASED TO 250 FT IF THE BUILDING IS SPRINKLERED. [IFC 503.1.1]
25. 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 FT. COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE BUILDINGS EXCEED 2 STORIES OR 30 FEET IN HEIGHT, OR EXCEEDING 62,000 SQUARE FEET IN AREA. [IFC 503.1.2]
26. ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [IFC 503.2.5]
27. 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 OF 100 FEET ALONG THE 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 NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [IFC 503.3]
28. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE IFC 503.6 AND IFC APPENDIX M.

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	
A. PAVEMENT AREA SUBGRADE	0.1'+	+0.0' TO -0.1'	SEE SOILS REPORT
B. ENGINEERED FILL	0.5'+	+0.1' TO -0.1'	SEE SOILS REPORT

COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.

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 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 UPON COMPLETION OF THE PROJECT. 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.

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 ISSUE; 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 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 (½") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
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 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 RESIDENTIAL LLC, REPORT #12208-LVR, MARCH 30, 2016 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 METER 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 UTILITY COMPANY AND THE CITY ENGINEER.

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 NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SH

ABBREVIATIONS

AC	ASPHALTIC CONCRETE OR ACRE	FUT	FUTURE	QTY	QUANTITY
AGG	AGGREGATE BASE	GRD	GRADE OR GROUND	R	RADIUS
APN	ASSESSORS PARCEL NUMBER	GB	GRADE BREAK OR GRADE CHANGE	RCA	REINFORCED CONCRETE ARCH
APPROX OR ~	APPROXIMATE	GV	GATE VALVE	RCB	REINFORCED CONCRETE BOX
AVE	AVENUE	HDPE	HIGH DENSITY POLYETHYLENE	RCP	REINFORCED CONCRETE PIPE
@	AT	HOA	HOME OWNERS ASSOCIATION	RD	ROAD
BC	BEGIN CURVE OR BACK OF CURB	HORZ	HORIZONTAL	ROWY ESMT	ROADWAY EASEMENT
BCR	BEGINNING OF CURB RETURN	HP	HIGH POINT	REQD	REQUIRED
BHW	BOTTOM OF HEADWALL	HWL	HIGH WATER LEVEL	REV	REVISION
BLDG	BUILDING	HDWL OR HW	HEADWALL	RG	ROUGH GRADE
BLVD	BOULEVARD	HYD	HYDRAULIC OR HYDRANT	RT OR R	RIGHT
BM	BENCHMARK	ID	INSIDE DIAMETER	R/W, ROW	RIGHT OF WAY
BVC	BEGIN VERTICAL CURVE	IN	INCH	S	SLOPE
BWV	BACK WATER VALVE	INT	INTERSECTION	SCH	SCHEDULE
CC	CLARK COUNTY	INV	INVERT ELEVATION	SD	STORM DRAIN
CCAUSD	CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS	IP	IRON PIPE	SDDI	STORM DRAIN DROP INLET
CCPW	CLARK COUNTY PUBLIC WORKS	IRRG	IRRIGATION	SDMH	STORM DRAIN MANHOLE
CCRFCD	CLARK COUNTY REGIONAL FLOOD DISTRICT	LF	LINEAR FEET	SEC	SECTION
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	LP	LOW POINT	SF	SQUARE FEET
CE	COMMON ELEMENT	LT OR L	LEFT	SHT	SHEET
CL/C/L/C	CENTERLINE	LVVWD	LAS VEGAS VALLEY WATER DISTRICT	SNWA	SOUTHERN NEVADA WATER AUTHORITY
CLR	CLEAR OR CLEARANCE	LWL	LOW WATER LEVEL	SPECS	SPECIFICATIONS
CLSM	CONTROLLED LOW STRENGTH MATERIAL	MAX	MAXIMUM	ST	STREET
CMLaC	CEMENT MORTAR LINED AND COATED	MECH	MECHANICAL	SSMH	SANITARY SEWER MANHOLE
CMU	CONCRETE MASONRY UNIT	MH	MANHOLE	STA	STATION
CONC	CONCRETE	MIN	MINIMUM	STD	STANDARD
CT	COURT	MISC	MISCELLANEOUS	STL	STEEL OR STREET LIGHT
CY OR CU YD	CUBIC YARD	MUE	MUNICIPAL UTILITY EASEMENT	SW	SIDEWALK
DCWCS	DESIGN AND CONSTRUCTION FOR WASTEWATER COLLECTION SYSTEMS	NDOT	NEVADA DEPARTMENT OF TRANSPORTATION	SWG	SOUTHWEST GAS
		NPC	NEVADA POWER COMPANY	SWR OR SS	SANITARY SEWER
DET	DETAIL	NTS	NOT TO SCALE	SY	SQUARE YARD
DI	DUCTILE IRON OR DRAIN INLET	NUE	NONEXCLUSIVE UTILITY EASEMENT	TAN	TANGENT
DIA, ø	DIAMETER	OC	ON CENTER	TC	TOP OF CURB
DIP	DUCTILE IRON PIPE	OD	OUTSIDE DIAMETER OR OVERALL DIMENSION	TCD	TRAFFIC CONTROL DEVICE
DR	DRIVE	OFF	OFFSET	TF	TOP OF FLOOR OR TOP OF FOOTING
DWG(S)	DRAWING	ORIG	ORIGINAL	TG	TOP OF GRATE
DWY	DRIVEWAY	PAE	PUBLIC OR PEDESTRIAN ACCESS EASEMENT	THRU	THROUGH
EA	EACH	PB	PULL BOX	THW	TOP OF HEADWALL
ECR	END CURB RETURN	PC	POINT OF CURVE	TP	TOP OF PIPE
EG	EXISTING GROUND	PCC	POINT OF COMPOUND CURVE	TW	TOP OF WALL
EL	ELEVATION	PDE	PUBLIC DRAINAGE EASEMENT	TRW	TOP OF RETAINING WALL
ESMT	EASEMENT	℄ OR PL	PROPERTY LINE	TSW	TOP OF SCREEN WALL
EP	EDGE OF PAVEMENT	POB	POINT OF BEGINNING	TYP	TYPICAL
EVC	END VERTICAL CURVE	POC	POINT OF CURVATURE	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
EX OR EXIST	EXISTING	POE	POINT OF ENDING		
FC	FACE OF CURB	PRC	POINT OF REVERSE CURVATURE	VC	VERTICAL CURVE
FF	FINISHED FLOOR	PRELIM	PRELIMINARY	VERT	VERTICAL
FG	FINISHED GRADE	PROP	PROPOSED	VG	VALLEY GUTTER
FGH	FINISHED GRADE, HIGH SIDE	PRV	PRESSURE REDUCING VALVE	WI	WROUGHT IRON
FGL	FINISHED GRADE, LOW SIDE	PUE	PUBLIC UTILITY EASEMENT	WL	WATER LINE
FH	FIRE HYDRANT	PT	POINT OF TANGENT OR POINT	WPZ	WATER PRESSURE ZONE
FL	FLOWLINE	PVC	POLYVINYL CHLORIDE	WT	WEIGHT
FT	FEET OR FOOT	PVI	POINT OF VERTICAL INTERSECTION	WTR	WATER LINE

SPECIAL NOTE

IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED WHICH 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 CLARK COUNTY DEPT. OF PUBLIC WORKS. TEMPORARY CONSTRUCTION ITEMS INCLUDE: PAVEMENT TRANSITIONS, PROTECTIVE DITCHES AND BERMS, ROAD SIGNS AND BARRICADES, ETC.

NOTICE TO CONTRACTOR

--QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

--EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 LOCATIONS. CALL BEFORE YOU DIG: (800) 227-2600

LEGEND

EXISTING	PROPOSED	DESCRIPTION
(1900)	1900	5' CONTOUR
		1' CONTOUR
		STRIPING
		SEWER MANHOLE
		CURB AND GUTTER
EX 8" PVC SS	8" PVC SS	SANITARY SEWER PIPE AND FLOW ARROW
EX 8" PVC WTR	8" PVC WTR	WATER PIPE
		WATER GATE VALVE
		FIRE HYDRANT
		WATER BLOW-OFF
		WATER LATERAL W/ METER
		SANITARY SEWER LATERAL
		STREETLIGHT
		EDGE OF PAVEMENT
		TRAFFIC SIGN
PAD= XXX.X FF = XXX.X	PAD= XXX.X FF = XXX.X	PAD ELEVATION FINISHED FLOOR ELEVATION
(00.00) TC	00.00 TC	ELEVATION
		RETAINING WALL
		STORM DRAIN W/ MANHOLE

	EXISTING GAS GATE VALVE
MH	EXISTING UNKNOWN MANHOLE
GAS	EXISTING GAS, SIZE PER PLAN
	EXISTING POWER POLE
	EXISTING TRAFFIC SIGNAL
	EXISTING WALL
	WATER PIPE FITTING
POC	WATER POINT OF CONNECTION
POC	SEWER POINT OF CONNECTION
	DAYLIGHT LINE
	STREET CENTERLINE
	RIGHT-OF-WAY
	MATCHLINE
	BOUNDARY LINE
	PHASE LINE
	PROPERTY LINE
	FLOWLINE
	SAWCUT
	CUT/FILL TRANSITION LINE
	SIDEWALK
	EX STRIPING TO BE OBLITERATED
	GRADE BREAK LINE
	REFLECTIVE RAISED PAVEMENT MARKERS
BWV	BACK WATER VALVE
	WROUGHT IRON FENCE
	PONY WALL
	DECORATIVE PERIMETER WALL
	DECORATIVE PERIMETER RETAINING WALL
	PROPOSED CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
	EXISTING CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
	FUTURE CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB

	PROPOSED SCARP AREA
	DRIVEWAY
	PROPOSED RIP RAP
	SIGHT VISIBILITY ZONE PER STD DWG NO. 201.2
	HANDICAP RAMP

QUANTITIES

			PRIVATE	PUBLIC
DRAINAGE				
1.	60" TYPE III STORM DRAIN MANHOLE	EA	–	–
2.	5.0' TYPE "CM2" DROP INLET	EA	–	–
3.	10.0' TYPE "CM2" DROP INLET	EA	–	–
4.	12.5' TYPE "CM2" DROP INLET	EA	–	–
5.	20.0' TYPE "CM2" DROP INLET	EA	–	–
6.	18" RCP CLASS IV STORM DRAIN	LF	–	–
7.	24" RCP CLASS IV STORM DRAIN	LF	–	–
8.	30" RCP CLASS IV STORM DRAIN	LF	–	–
9.	36" RCP CLASS IV STORM DRAIN	LF	–	–
10.	RIPRAP D50=8", THK=16"	SF	–	–
11.	8' WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	1,857	–
12.	SIDEWALK UNDER DRAIN	SF	–	–
13.				
SEWER SYSTEM				
1.	4" PVC SEWER LATERAL (PRIVATE)	LF	–	–
2.	8" PVC SEWER PIPE (PUBLIC)	LF	–	–
3.	STANDARD 48" SEWER MANHOLE (PUBLIC)	EA	–	–
4.	8" SEWER PIPE CAP	EA	–	–
5.	BACK WATER VALVE	EA	–	–
6.	8" C-900 WATER QUALITY SEWER PIPE (PUBLIC)	EA	–	–
7.				
WATER SYSTEM				
1.	FIRE HYDRANT ASSEMBLY W/6" GATE VALVE PER UDACS PLATE NO. 40	EA	–	–
2.	6" PVC WATER PIPE (CLASS 150)	LF	–	–
3.	8" PVC WATER PIPE (CLASS 150)	LF	–	–
4.	8" DIP WATER PIPE (CLASS 53)	LF	–	–
5.	8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39	EA	–	–
6.	8" X 6" TEE PER UDACS PLATE NO. 31	EA	–	–
7.	8" X 8" TEE PER UDACS PLATE NO. 31	EA	–	–
8.	8" 5 DEGREE BEND WITH RESTRAINED JOINTS	EA	–	–
9.	8" 11.25 DEGREE BEND PER UDACS PLATE NO. 31	EA	–	–
10.	8" 22.5 DEGREE BEND PER UDACS PLATE NO. 31	EA	–	–
11.	8" 45 DEGREE BEND PER UDACS PLATE NO. 31	EA	–	–
12.	8" 90 DEGREE BEND PER UDACS PLATE NO. 31	EA	–	–
13.	CAP AND 2" BLOW-OFF ASSEMBLY W/CAP PER UDACS PLATE NO. 36	EA	–	–
14.	1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 2	EA	–	–
15.	1" COPPER SERVICE W/ 1" METER PER UDACS PLATE NO. 4	EA	–	–
16.	1" COPPER SERVICE W/ 3/4" METER & 1" RPPA PER UDACS PLATE NO. 4 & 8	EA	–	–
		EA	–	
STREET IMPROVEMENTS				
1.	2" A.C. PAVEMENT W/ 4" TYPE II OVER 6" TYPE I AGGREGATE BASE	SY	–	–
2.	STANDARD 18" TYPE "L" ISLAND CURB & GUTTER W/6" TYPE I AGGREGATE BASE	LF	–	–
3.	STANDARD 8" TYPE "A" ISLAND CURB W/6" TYPE I AGGREGATE BASE	LF	–	–
4.	STANDARD 30" TYPE "ROLL" CURB & GUTTER W/6" TYPE I AGGREGATE BASE	LF	–	–
5.	4' WIDE CONCRETE SIDEWALK W/4" TYPE II AGGREGATE BASE	SF	–	–
6.				–
7.				
TRAFFIC SIGNALS				
1.	30" STOP SIGN WITH POST (R1-1)	EA	–	–
2.	9" STREET NAME SIGN (D-3, BROWN W/ WHITE LETTERS)(6 POLES x 2 PER POLE=12)	EA	–	–
3.	BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKER	EA	–	–
4.	CROSSWALK MARKINGS	LF	–	–
5.				
6.				
7.				
8.				
DRY UTILITIES				
1.	100W H.P.S. LUMINAIRE STREET LIGHT W/DECORATIVE POLE	EA	–	–
2.	1-1/4" PVC STREET LIGHT CONDUIT WITH (2) #4 AND (1) #8 CONDUCTORS	LF	–	–
3.	NO. 3-1/2 PULL BOX W/METAL COVER	EA	–	–
4.	150 AMP SERVICE PEDESTAL (IRR)	EA	–	–
5.	200 AMP SERVICE PEDESTAL (STLT)	EA	–	–
6.				

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE _____ PROJECT No. ######
LVVWD APPROVED FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

GENERAL NOTES AND QUANTITIES

S12
T19
R59

DATE: 08/02/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS

PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER – STATE OF NEVADA
JERRY J. SLATER
EXP. 06/30/2018
CIVIL
No. 14167

C-3
SHEET 3 OF 10

J:\oly1710-001 skye canyon parcel 2.29 phase 2\dwg\mpros\oly1710-001_cvr.dwg 8/2/2017 5:22 PM Brian Chapman

SCALE - 1"=30' (0 30 60 FEET)

CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2800 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 120,165 CU YDS
FILL= 113,639 CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE

1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 IN THEIR PROPER LOCATION.

2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED LIP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES

1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2012, SECTION 2304.11.2.2.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
3. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
4. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
8. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLEPING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
9. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXIST) WITHIN THE SIGHT VISIBILITY ZONES.

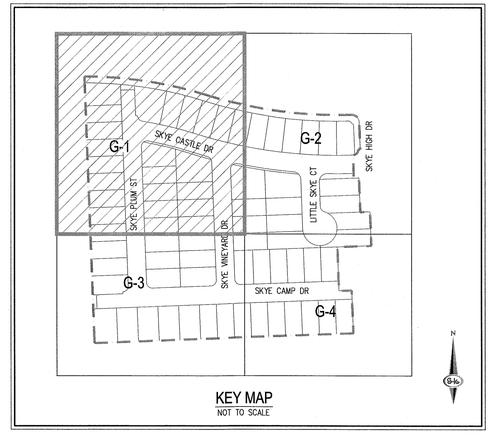
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(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 ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPS WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPS SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE 'X' (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.



KEY MAP
NOT TO SCALE

GRADING NOTES

1. CONSTRUCT 30" ROLL CURB AND GUTTER PER CCAUSD NO. 217.S1. CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY
2. INSTALL 5' WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE II AGGREGATE BASE) PER CCAUSD #234
3. INSTALL 8-FT CROSS GUTTER PER DETAIL 26 ON SHEET D-3
4. INSTALL 2" ASPHALT PAVEMENT OVER 4" TYPE II AGGREGATE BASE
5. CONSTRUCT SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT CCAUSD NO. 235, CASE 1 & 235.1
6. CONSTRUCT 10' ROLL CURB TRANSITION PER DETAIL 28 ON SHEET D-2
7. PERIMETER LANDSCAPE TO BE CONSTRUCTED BY MASTER DEVELOPER
8. INSTALL 24' WIDE GATE PER CCAUSED DWG NO. 425.S1
9. INSTALL DRIVEWAY PER CCAUSD #223
10. INSTALL 4" CONCRETE PAD OVER 6" TYPE II AGGREGATE BASE
11. INSTALL WROUGHT IRON FENCE WITH PEDESTRIAN GATE PER DETAIL 27 ON SHEET D-3 OR APPROVED EQUAL

BONDABLE DRAINAGE QUANTITIES (PRIVATE)

8' WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	1,857

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS4903 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

JERRY J. SLATER, P.E. 14167 DATE

FAST Call before you UnderGround 1-702-432-5300 FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

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

Call before you Dig AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 OR 1-800-227-2600

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

NO.	DESCRIPTION	DATE	BY	APP.	APP. DATE

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

GRADING PLAN - I

S12 T19 R59

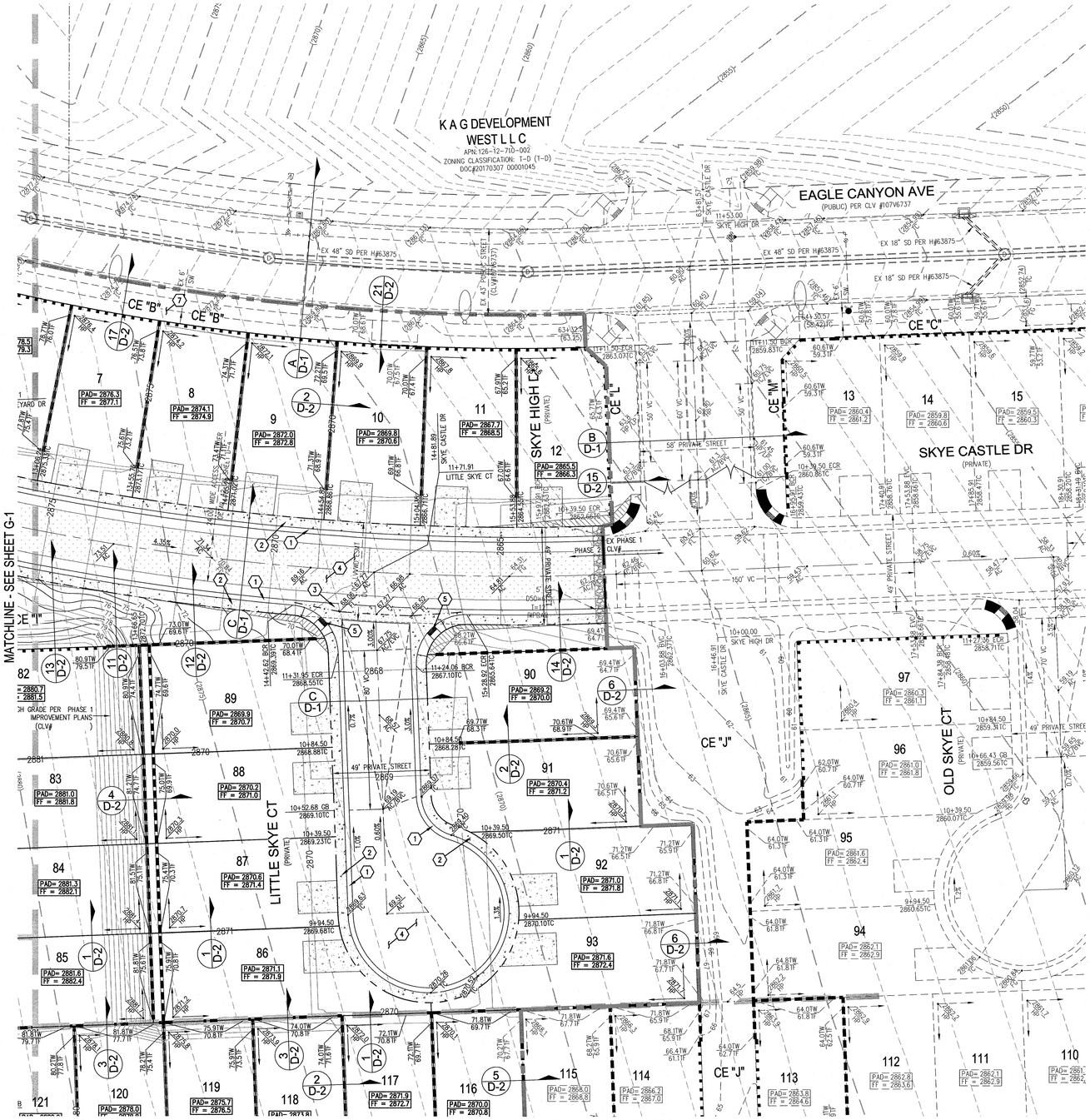
DATE: 08/02/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS

PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER - STATE OF NEVADA - JERRY SLATER - Exp: 06/30/2018 - CIVIL - No. 14167

G-1
SHEET 4 OF 10

J:\Oly1710-001 skye canyon parcel 2.29 phase 2\dwg\improv\oly1710-001_grd.dwg 8/2/2017 5:23 PM Brian Chapman



0 30 60
SCALE – 1"=30' FEET

N

S-16

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2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED LIP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES

1. FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2012, SECTION 2304.11.2.2.
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5. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
6. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
7. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
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LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(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 ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPS WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
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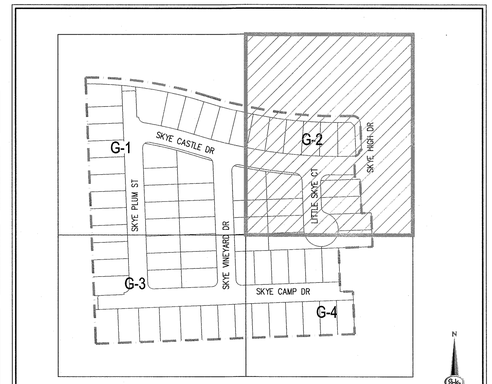
FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.



KEY MAP
NOT TO SCALE

GRADING NOTES

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BONDABLE DRAINAGE QUANTITIES (PRIVATE)

8' WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	1,857

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS4903 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

JERRY J. SLATER, P.E. 14167 DATE

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

NO.	DESCRIPTION	DATE	BY	APP.	APP. DATE

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

GRADING PLAN - II

S12
R59
R59

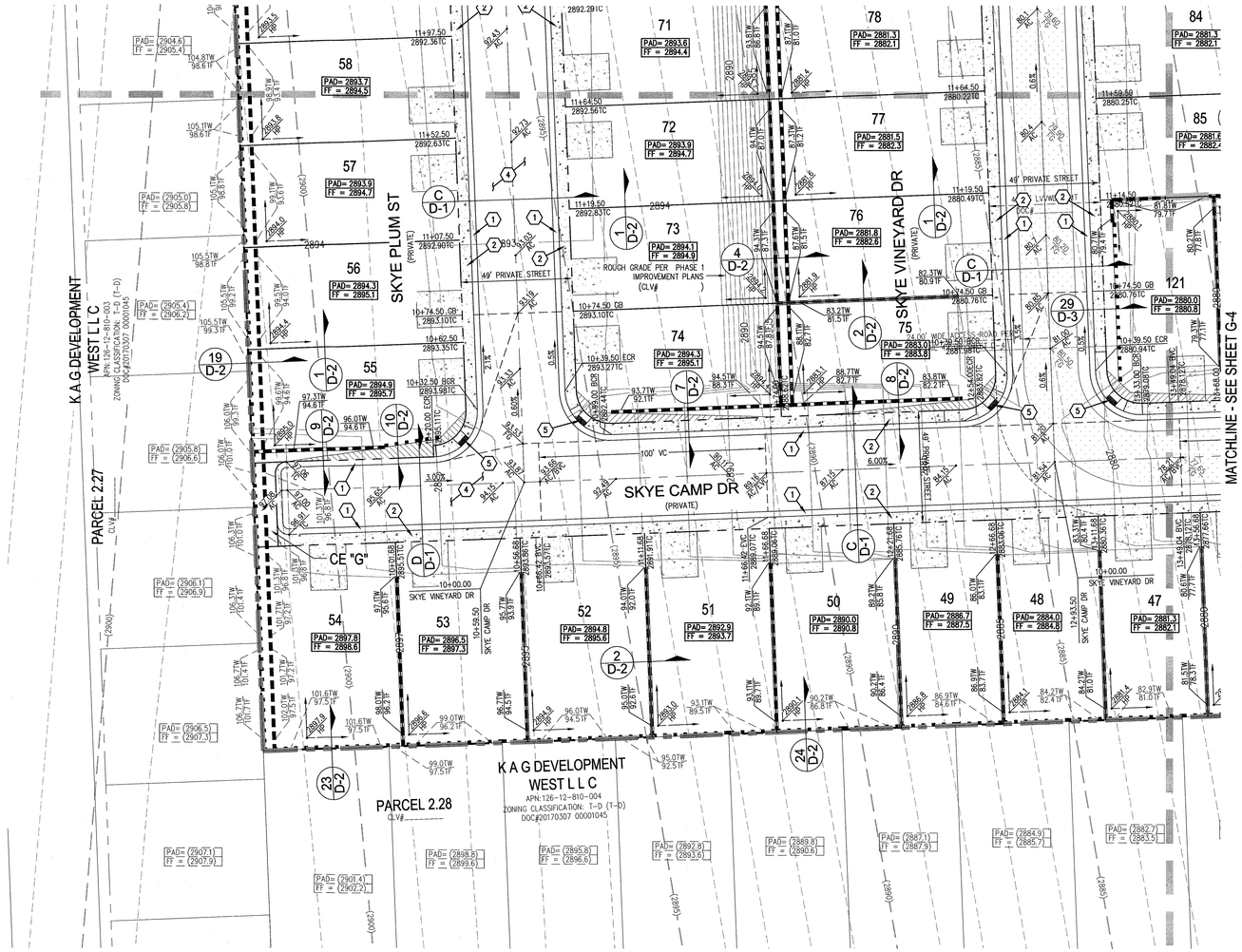
DATE: 08/02/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS

PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER – STATE OF NEVADA
JERRY J. SLATER
Exp. 06/30/2018
CIVIL
No. 14167
8-2-17

G-2
SHEET 5 OF 10

J:\OLY1710-001 skye canyon parcel 2.29 phase 2\dwg\improv\OLY1710-001 grd.dwg 8/2/2017 5:24 PM Brian Chapman



0 30 60
SCALE – 1"=30' FEET

CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2800 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 1801.00)

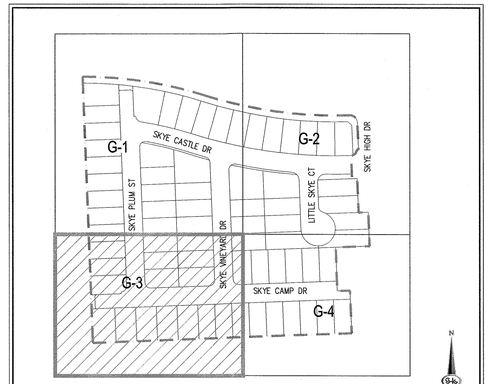
SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 120,165 CU YDS
FILL= 113,639 CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.



KEY MAP
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GRADING NOTES

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JERRY J. SLATER, P.E. 14167 DATE

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

GRADING PLAN - III

S12 T19 R59

DATE: 08/02/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS

PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER – STATE OF NEVADA
JERRY J. SLATER
Exp. 06/30/2018
CIVIL
No. 14167

G-3
SHEET 6 OF 10

J:\OLY710-001 skye canyon parcel 2.29 phase 2\dwg\improv\OLY710-001_grd.dwg 8/2/2017 5:24 PM Brian Chapman

0 30 60
SCALE - 1"=30' FEET

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SOILS REPORT

SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PROJECT NO. 12208-LVR DATED MARCH 30, 2016

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EARTHWORK QUANTITIES (RAW):
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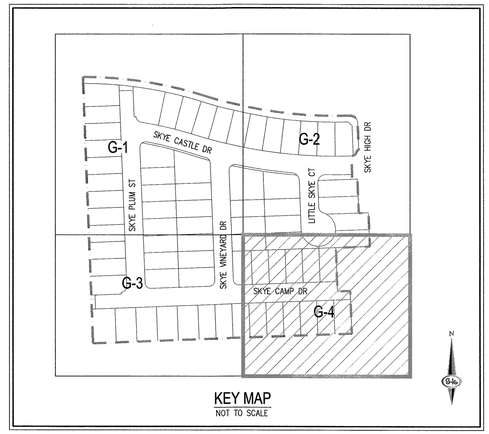

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JERRY J. SLATER, P.E. 14167 DATE

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PHONE (702) 284-5300 FAX (702) 284-5399

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

GRADING PLAN - IV

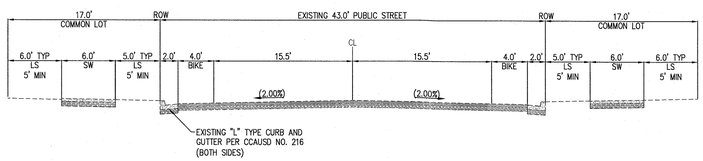
S12 T19 R59

DATE: 08/02/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS
PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY J. SLATER
No. 14167
CIVIL
8-7-17

G-4
SHEET 7 OF 10

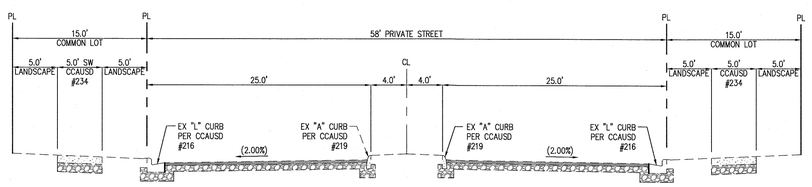
J:\oly1710-001 skye canyon parcel 2.29 phase 2\dwg\improv\oly1710-001_grd.dwg 8/2/2017 5:25 PM Brian Chapman



A. EXISTING STREET SECTION (PUBLIC)

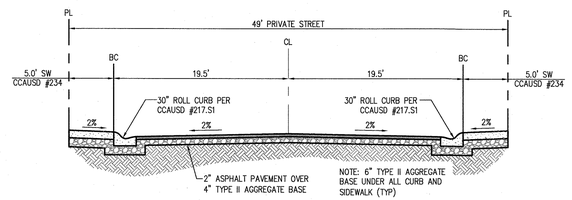
NOT TO SCALE

EAGLE CANYON AVENUE



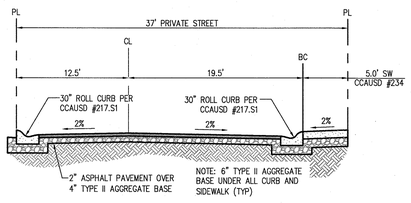
B. EXISTING ENTRY STREET SECTION (PRIVATE)

NOT TO SCALE



C. 49' INTERIOR STREET SECTION (PRIVATE)

NOT TO SCALE



D. 49' INTERIOR STREET SECTION (PRIVATE)

NOT TO SCALE

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

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

STREET SECTIONS AND DETAILS - I

S12
R59
R59

DATE: 8/2/17

DRAFTER: DNP

DESIGNER: BCC

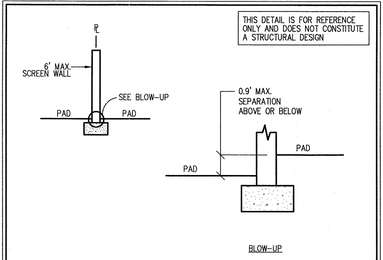
CHECKED: STS

PROJECT NO.
OLY1710-001

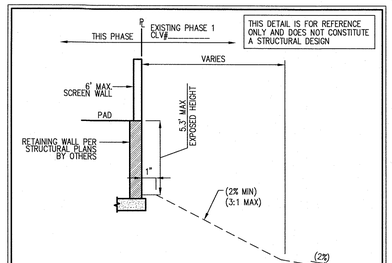
PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp. Jan/30/2018
CIVIL
No. 14167
8-2-17

D-1
SHEET 8 OF 10

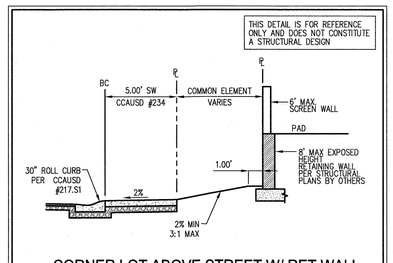
J:\oly\1710-001 skye canyon parcel 2.29 phase 2\dwg\improv\oly1710-001 dtl.dwg 8/2/2017 5:25 PM Brian Chapman



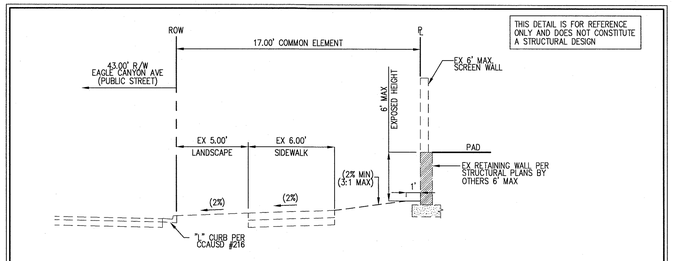
1. PAD TO PAD W/O RET WALL
NOT TO SCALE



6. GRADING SECTION
NOT TO SCALE



CORNER LOT ABOVE STREET W/ RET WALL
11. AND ADJACENT COMMON ELEMENT
NOT TO SCALE



16. PERIMETER STREET SECTION - PAD ABOVE STREET WITH RETAINING WALL
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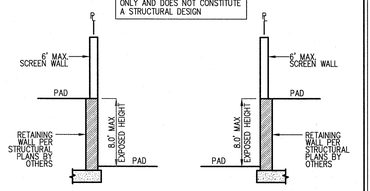
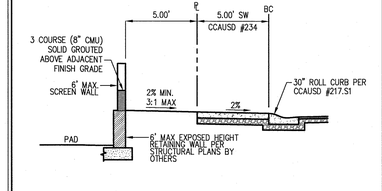
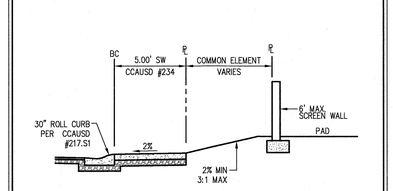


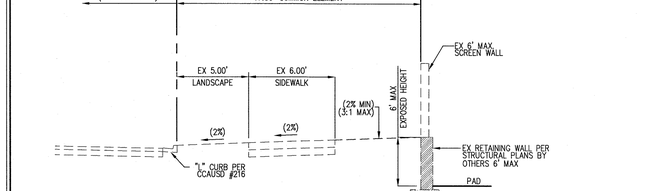
2. SIDEYARD WITH RETAINING WALL
NOT TO SCALE



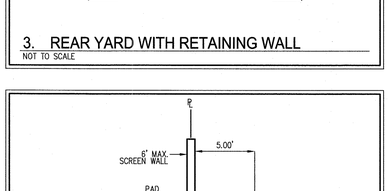
7. CORNER LOT W/ RET WALL ABOVE STREET
NOT TO SCALE



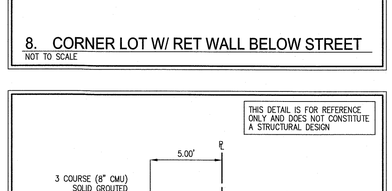
CORNER LOT BELOW STREET W/ RET WALL
12. AND ADJACENT COMMON ELEMENT
NOT TO SCALE



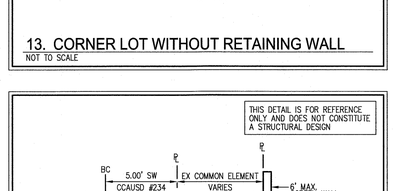
17. PERIMETER STREET SECTION - PAD ABOVE STREET WITHOUT RETAINING WALL
NOT TO SCALE



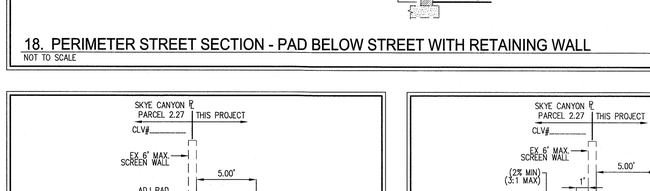
3. REAR YARD WITH RETAINING WALL
NOT TO SCALE



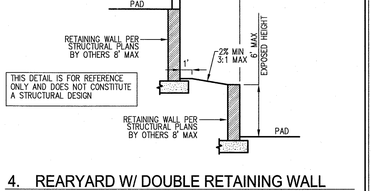
8. CORNER LOT W/ RET WALL BELOW STREET
NOT TO SCALE



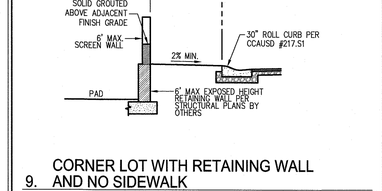
13. CORNER LOT WITHOUT RETAINING WALL
NOT TO SCALE



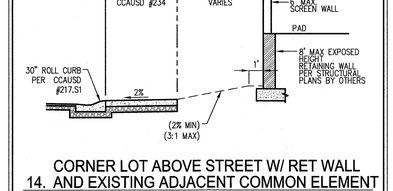
18. PERIMETER STREET SECTION - PAD BELOW STREET WITH RETAINING WALL
NOT TO SCALE



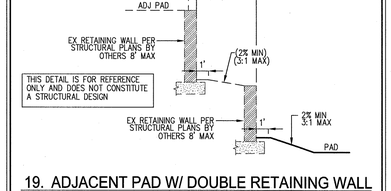
4. REARYARD W/ DOUBLE RETAINING WALL
NOT TO SCALE



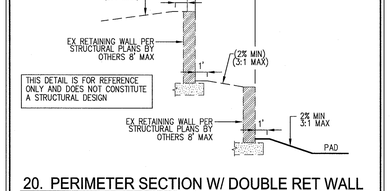
CORNER LOT WITH RETAINING WALL
9. AND NO SIDEWALK
NOT TO SCALE



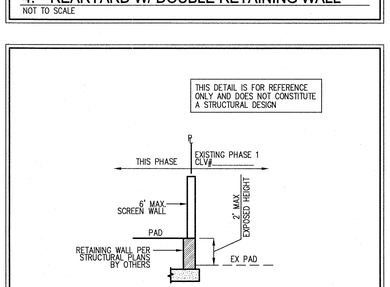
CORNER LOT ABOVE STREET W/ RET WALL
14. AND EXISTING ADJACENT COMMON ELEMENT
NOT TO SCALE



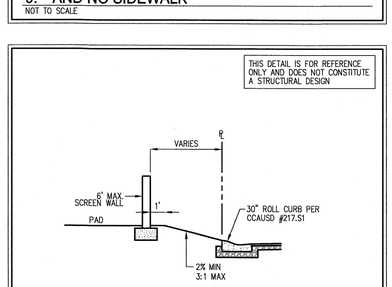
19. ADJACENT PAD W/ DOUBLE RETAINING WALL
NOT TO SCALE



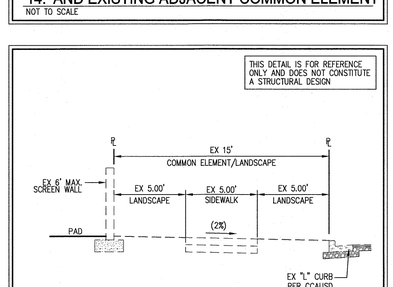
20. PERIMETER SECTION W/ DOUBLE RET WALL
NOT TO SCALE



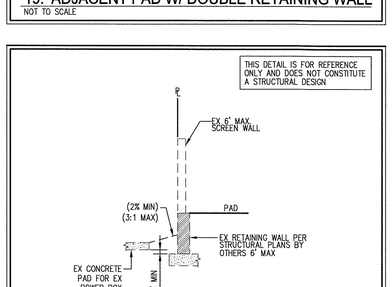
5. SIDEYARD WITH RETAINING WALL
NOT TO SCALE



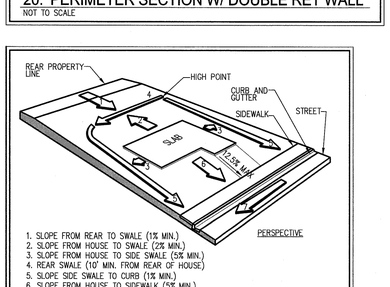
CORNER LOT WITHOUT RETAINING WALL
10. AND NO SIDEWALK
NOT TO SCALE



15. ENTRY CORNER LOT W/O RET WALL
NOT TO SCALE



21. PERIMETER SECTION PAD ABOVE PAD
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 (3% MIN.)
7. SLOPE OF STREET

22. TYPE "A" LOT GRADING (TYP.)
NOT TO SCALE

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

NO.	DESCRIPTION	DATE	BY	APP DATE	APP

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2
GRADING SECTIONS AND DETAILS - II

S12 T19 R59

DATE: 8/2/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS
PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp. 06/30/2018
CIVIL
No. 14167
8-2-17

D-2
SHEET 9 OF 10

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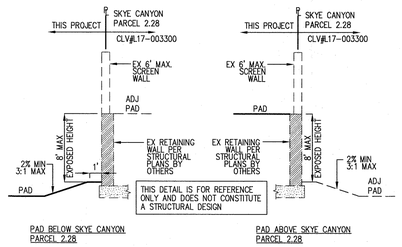
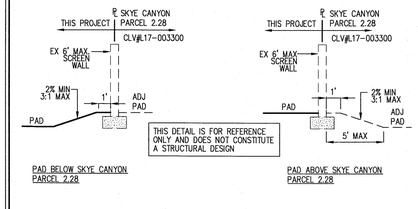


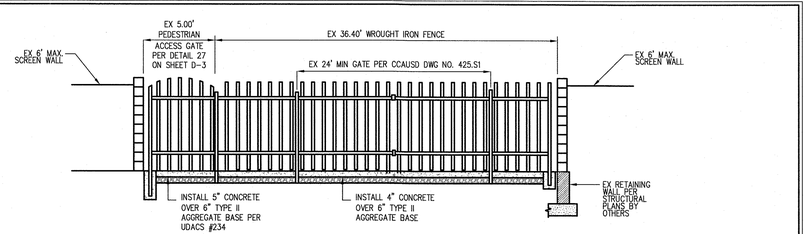
23. PERIMETER W/ RET WALL

NOT TO SCALE



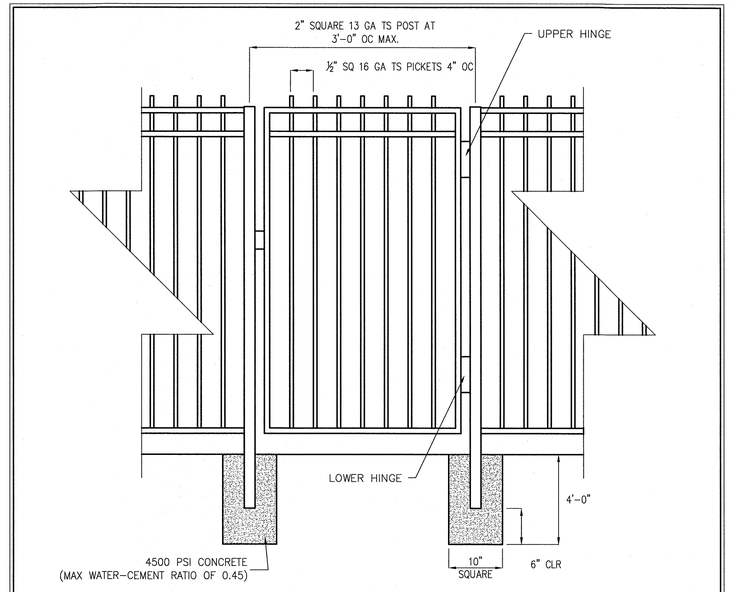
24. PERIMETER W/O RET WALL

NOT TO SCALE



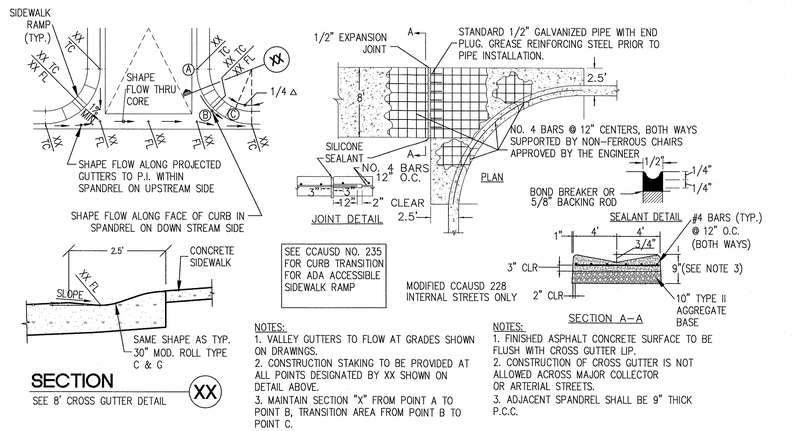
25. FENCE SECTION

NOT TO SCALE



27. PEDESTRIAN GATE

NOT TO SCALE

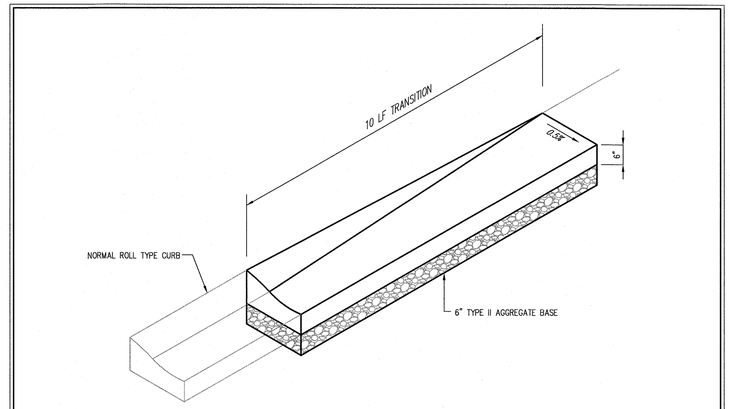


NOTES:
1. VALLEY GUTTERS TO FLOW AT GRADES SHOWN ON DRAWINGS.
2. CONSTRUCTION STAKING TO BE PROVIDED AT ALL POINTS DESIGNATED BY XX SHOWN ON DETAIL ABOVE.
3. MAINTAIN SECTION "X" FROM POINT A TO POINT B, TRANSITION AREA FROM POINT B TO POINT C.

NOTES:
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.

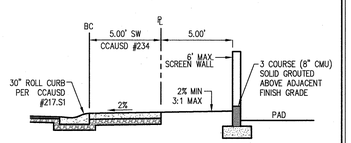
26. MODIFIED 8' WIDE CROSS GUTTER

NOT TO SCALE



28. ROLL CURB TRANSITION

NOT TO SCALE



29. CORNER LOT BELOW STREET W/O RET WALL

NOT TO SCALE

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
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NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

CITY OF LAS VEGAS, NV

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON - PARCEL 2.29 PHASE 2

GRADING SECTIONS AND DETAILS - III

S12 T19 R58

DATE: 8/2/17
DRAFTER: DNP
DESIGNER: BCC
CHECKED: STS

PROJECT NO.
OLY1710-001

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY SLATER
Exp. 06/30/2018
CIVIL
No. 14167

D-3
SHEET 10 OF 10

J:\OLY1710-001 skye canyon parcel 2.29 phase 2\dwg\improv\OLY1710-001_d12.dwg 8/2/2017 5:26 PM Brian Chapman