DS #: 5087

APN: 125-27-410-006

PROJECT: Tenaya & Sky Pointe Multi Family Condominiums

SUBMITTAL: 2nd

SCANNED BY/DATE:

CHECKED BY/DATE:

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: March 25, 2019
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: **Tenaya & Sky Pointe Multi Family Condominiums**			**COPIES TO:** Taney Engineering
Cross Streets:	NWC of Sky Pointe Drive & Tenaya Way			Lennar
File Number:	F:\Depot\DSMemos\DS5087B.doc			Bart Anderson, P.E., DevCo
Parcel Number:	125-27-410-006			CCRFCD
Zoning Action:	TMP-74632; SDR-74631; SUP-74630; WVR-74629; MOD-74628 & VAR-74692			
FEMA Flood Zone	YES	NO	**X**	
Proposed Storm Drain	YES	NO	**X**	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal (Paid on 2/12/2019)	1/17/2019	2/12/2019	Not Approved	$400.00	503112: $400
2nd Submittal	3/6/2019	3/25/2019	See Comments Below	$400.00	503600: $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. **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.

   Please note that effective March 15, 2019, the CCRFCD adopted new requirements for drainage study concurrence submittal. Follow the link below for specific guidance.

   http://gustfront.ccrfcd.org/LandDev/LandDev.aspx

2. ***Figure 8 (Developed Basin Map)*** of the last submittal shows the developed condition on existing topography which is not acceptable. Revise to show the proposed site layout to reflect the true developed basin condition. — Rec'd on 3/27/19

3. At the northwest corner of the development, provide a minimum 18"-high stem wall adjacent to the sidewalk next to the full length of the proposed drop inlet for the protection of **Building 11**.

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/R60E/27
AREA G-27

Recd: 3/6/19

ADDENDUM #1

TO THE

TECHNICAL DRAINAGE STUDY

FOR

TENAYA & SKY POINTE

MULTI-FAMILY (CONDOMINIUMS)

DS 5087

LEN-18-002

CITY OF LAS VEGAS

G-27

MARCH 2019

Key # 666504

Prepared for:

Lennar
2490 Paseo Verde Pkwy., Suite 120
Henderson, NV 89074
(702) 821-4651

$40

PROFESSIONAL ENGINEER - STATE OF NEVADA
LEE L. GONG
Exp. 6-30-19
CIVIL
No. 026257

3-5-19

Engineer's Seal

TANEY ENGINEERING

6030 S. Jones Blvd.
Las Vegas, NV 89118
Phone (702) 362-8844
Fax (702) 362-5233

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL

DRAINAGE STUDY INFORMATION FORM

Name of Development: Tenaya & Sky Pointe Date: March 5, 2019

Location of Development: a) Descriptive (Cross Streets) North/South: Tenaya Way

East/West: Sky Pointe Drive

b) Section: 27 Township: 19S Range: 60E

c) APN : 125-27-410-006

Name of Owner: Lennar

Telephone No.: (702) 821-4651 Fax No.: (800) 736-9100 E-Mail Address:

Address: 2490 Paseo Verde Pkwy., Suite 120, Henderson, NV 89074

Contact Person-Name: Lee L. Gong, P.E. **Telephone No.:** (702) 362-8844

* **E-Mail Address:** LeeG@taneycorp.com **Fax No.:** (702) 362-5233

Firm: Taney Engineering

Address: 6030 S. Jones, Suite 100, Las Vegas NV. 89118

Type of Land Development/Land Disturbance Process:

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

1. Total Owned Land Area: At Site: 6.05+/- acres Being Developed/Disturbed: 6.05+/- acres
2. Is a portion or all of the subject property located in a designated 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.): Apartment/Condo
5. Approximate upstream land area which drains to the subject site: 25+/- acres
6. Has the site drainage been evaluated in the past? ☒ **YES** ☐ **NO** If yes, please identify documentation: TDS for Ann/Tenaya Sav-on, DS 2397
7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: The majority of the site will discharge to the northeast corner and very little of it will discharge to Sky Pointe.
8. Briefly describe your proposed schedule for the subject project: A.S.A.P

PROFESSIONAL ENGINEER - STATE OF NEVADA
LEE L. GONG
Exp. 6-30-19
CIVIL
No. 026257

Engineer's Seal 3-5-19

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.

*New Required Field

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

Local Entity File No.

Revision	Date

REFERENCE:

STANDARD FORM 1

Updated 05/01/2008

TANEY ENGINEERING
6030 S. JONES BLVD. LAS VEGAS, NV 89118
PHONE: (702) 362-8844 | FAX: (702) 362-5233
TANEYCORP.COM

Job No. LEN-18-002

Date: March 5, 2019

JURISDICTION:
Albert Sung, P.E.
Flood Control
City of Las Vegas Public Works
333 N. Rancho Drive
Las Vegas, NV 89106

ADDENDUM #1 to the Technical Drainage Study for Tenaya & Sky Pointe

Dear Mr. Sung:

Taney Engineering is submitting Addendum #1 in response to comments and questions on the Technical Drainage Study for **Tenaya & Sky Pointe.** A response to each comment from City of Las Vegas review memorandum dated on February 12, 2019 is provided below.

Comment 1: **Provide a copy of the zoning/planning conditions associated with this site (TMP-74632; SDR-74631; SUP-74630; WVR-74629; MOD-74628 & VAR-74692) 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 Counci0.* Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be re vised and resubmitted.**

The drainage study and plans are in compliance with these conditions. A copy of the zoning/planning conditions has been provided in Appendix D of this addendum.

Comment 2: **The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.***

Concurrence from Clark County Regional Flood Control District (CCRFCD) will be obtained once approval from CLV is received.

Comment 3: **The WSPG model needs to account for the inlet and manhole as a "JX" Junction structure) instead of as a "R" (reach) to properly account for the losses associated with flowing through these structures.**

The WSPG model has been revised to include junction structures instead of the reaches. In doing this caused the HGL to rise quite a bit; therefore, the onsite RCP had to upsize to a 48" RCP. This has been called out on the plans. The revised WSPG input and output may be found in Appendix C.

Comment 4: **It is not clear whether there is a wall, a wrought iron gate or just wide open at the northwest corner of the subject development. Provide clarification in the next submittal.**

A wrought iron gate has been called out on the plans at the northwest corner of the site. A detail for the 20' gate can be found on the plans.

Comment 5: **The ponding depth for the 3-5'x5' grate inlet is calculated to be 0.81 '. The flow will overshoot pass the proposed inlet and may as well impact the adjacent condo buildings along the drainage easement before it is able to achieve the ponding depth of 0.81 ' required to capture the 109cfs claimed in the report. Address and resolve in the next submittal. Provide a wall on the south side of the drainage easement to protect the condo buildings.**

There are two reasons why the flow will not bypass the grate inlets. First is that the grates have been placed in a sump condition by lowering the top of the grates 0.81' below the edge of the concrete apron. This depression of the grates allows for the ponding depth to be achieved without overshooting the inlets. This elevation difference from the top of the grate to the edge of the concrete apron has been called out on detail N of the improvement plans. The second reason is that the velocity of the flow coming to the grates is equal to 7.33 ft/s. According to the Drainage of Highway Pavements manual, this velocity is not high enough to splash over the 15-feet of grate length that is proposed. And according to the graph that has been provided from the manual, even a 4-foot grate length would be able to capture 100 percent of the flow with a velocity of 7 ft/s. This design that has been proposed will ensure that the 100-year flow will be captured and a wall will not be needed between the easement and condo buildings. In an emergency overflow condition, flow will pond up to the edge of the concrete apron and then overflow east through the 20' drainage easement. As was stated in the original submittal, even in an overflow condition, all FFs are over 18-inches above the 100-year water surface elevation in this emergency condition.

Comment 6: **If the proposed inlet cannot capture 100% of the 100-year flow in the public drainage easement, then the surface of the easement must be concrete lined.**

The proposed inlets will capture 100% of the 100-year flow in the drainage easement. Please refer to the response to Comment 5 for detail about the design. The easement will remain as not being concreted.

Comment 7: **The whole onsite discharges to the east end of *Street E* through a 26'-wide public drainage easement. Clearly show that the area between Street E and the sidewalk in *Tenaya Way* must be concrete lined. Provide a longitudinal section to identify the required concrete portion in the next submittal.**

A construction note has been added on the plan view to callout concrete between Street E and the sidewalk for this area. A detailed section W has been added to the plans to show the required concrete portion.

Comment 8: **It is understood that the 100-year flow depth in the interior streets can be as low as 0.11 '. However, the minimum *Garage Finished Floor***

(GFF) elevations must be set at a minimum of 0.5' above the adjacent flow line. For example, at the intersection of *Street* B and *Street E,* the flow line elevation is at 55.52 but the western most garage of *Building* 11 was set at GFF=2355.93. Raise the GFF to 2356.02. Double check all other buildings for compliance to the criteria.

All GFF elevations were double checked and meet the criteria. The only GFF that was revised is that of Building 11. The garage finish floor has been raised to 2356.31 which now makes it 0.79' above the FL.

Comment 9: **Clarify the existing and proposed drainage facilities on the existing and developed basin maps. Do not show proposed facilities on the existing basin map, or label accordingly. Provide full size drainage basin maps in the next submittal.**

All the existing facilities have been labeled with "EX" before the type of facility. The only proposed facilities are the three 5'x5' grate inlets and the 48" RCP in the drainage easement that connects to the existing 36" RCP. 24"x36" basin maps have been provided at the end of the study. Note that the drainage basin maps have been scaled to the 11x17 sheet size so these have also been provided in Appendix B.

Comment 10: **GD1 Section A: show the appropriate curb and gutter on the section. The current section does not show gutter along the inside median where flow is conveyed but the label indicates gutter. Update accordingly.**

The A curb has been revised to a L curb to provide a gutter on the high side of the median to convey the flow on this side of that side of the street.

Comment 11: **Grading Plan G2: The 26' Private Drainage Easement should be dedicated as "public".**

The 26' drainage easement has been revised to be public to be privately maintained.

Comment 12: **Sheet PP10: The HGL at the proposed drop inlet appears to be less than one foot (1 ') below the top of grate. Specify that the grate to be tied down for possible blow-off protection.**

Due to the upsizing of the storm drain pipe from Comment 3, the HGL has been lowered and now is more than one foot below the top of the grate. There is no need for the grate to be tied down.

Comment 13: **The 20'-public drainage easement on the north side of the project is existing. Label with recorded map number on the grading plan in the next submittal.**

The 20' existing drainage easement has been labeled on the grading plan with the corresponding map number.

Comment 14: **Provide *City* of *Las Vegas* recorded document number for all existing drainage facilities on the grading plans.**

All of the drainage facilities have been labeled with the corresponding document numbers on the grading plans.

Comment 15: **The proposed wrought iron fence must utilize RTC Uniform Standard Drawing 425.S 1. Revise *Detail Sections PIGD1 and RIG01 accordingly.***

Detail Sections P and R have been revised to utilize the RTC Uniform Standard Drawing for wrought iron fences.

Comment 16: **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 or by separate document. The easement must be recorded prior to the final approval of the improvement plans.**

Noted.

A copy of the City of Las Vegas comments has been provided directly following this letter. If you need any additional information, please do not hesitate to call our office.

Sincerely,
TANEY ENGINEERING

Jeff Thomson
Hydrologist I

APPENDIX

APPENDIX A

Comment Letter

APPENDIX B

Figures

APPENDIX C

Hydraulic Calculations

APPENDIX D

Reference Material

APPENDIX E

Improvement Plans

APPENDIX A

Comment Letter

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: February 12, 2019
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: **Tenaya & Sky Pointe Multi Family Condominiums**			**COPIES TO:** Taney Engineering
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Parcel Number:	125-27-410-006			CCRFCD
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FEMA Flood Zone	YES	NO	X	
Proposed Storm Drain	YES	NO	X	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal (Paid on 2/12/2019)	1/17/2019	2/12/2019	See Comments Below	$400.00	503112: $400
			TOTAL FEES (LDDRS):	**$400.00**	----

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:
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1. Provide a copy of the zoning/planning conditions associated with this site (**TMP-74632; SDR-74631; SUP-74630; WVR-74629; MOD-74628 & VAR-74692**) 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 re vised and resubmitted.

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3. The WSPG model needs to account for the inlet and manhole as a "JX" (junction structure) instead of as a "R" (reach) to properly account for the losses associated with flowing through these structures.

4. It is not clear whether there is a wall, a wrought iron gate or just wide open at the northwest corner of the subject development. Provide clarification in the next submittal.

5. The ponding depth for the 3-5'x5' grate inlet is calculated to be 0.81'. The flow will overshoot pass the proposed inlet and may as well impact the adjacent condo buildings along the drainage easement before it is able to achieve the ponding depth of 0.81' required to capture the 109cfs claimed in the report. Address and resolve in the next submittal.

   Provide a wall on the south side of the drainage easement to protect the condo buildings.

6. If the proposed inlet cannot capture 100% of the 100-year flow in the public drainage easement, then the surface of the easement must be concrete lined.

7. The whole onsite discharges to the east end of *Street E* through a 26'-wide public drainage easement. Clearly show that the area between Street E and the sidewalk in *Tenaya Way* must be concrete lined. Provide a longitudinal section to identify the required concrete portion in the next submittal.

8. It is understood that the 100-year flow depth in the interior streets can be as low as 0.11'. However, the minimum *Garage Finished Floor* (GFF) elevations must be set at a minimum of 0.5' above the adjacent flow line. For example, at the intersection of *Street B* and *Street E*, the flow line elevation is at 55.52 but the western most garage of ***Building 11*** was set at GFF=2355.93. Raise the GFF to 2356.02.

   Double check all other buildings for compliance to the criteria.

9. Clarify the existing and proposed drainage facilities on the existing and developed basin maps. Do not show proposed facilities on the existing basin map, or label accordingly. Provide full size drainage basin maps in the next submittal.

10. **GD1 Section A:** show the appropriate curb and gutter on the section. The current section does not show gutter along the inside median where flow is conveyed but the label indicates gutter. Update accordingly.

11. **Grading Plan G2:** The 26' Private Drainage Easement should be dedicated as "public".

12. **Sheet PP10**: The HGL at the proposed drop inlet appears to be less than one foot (1') below the top of grate. Specify that the grate to be tied down for possible blow-off protection.

13. The 20'-public drainage easement on the north side of the project is existing. Label with recorded map number on the grading plan in the next submittal.

14. Provide *City of Las Vegas* recorded document number for all existing drainage facilities on the grading plans.

15. The proposed wrought iron fence must utilize RTC Uniform Standard Drawing 425.S1. Revise *Detail Sections P/GD1* and *R/GD1* accordingly.

16. 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 or by separate document. The easement must be recorded prior to the final approval of the improvement plans.

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

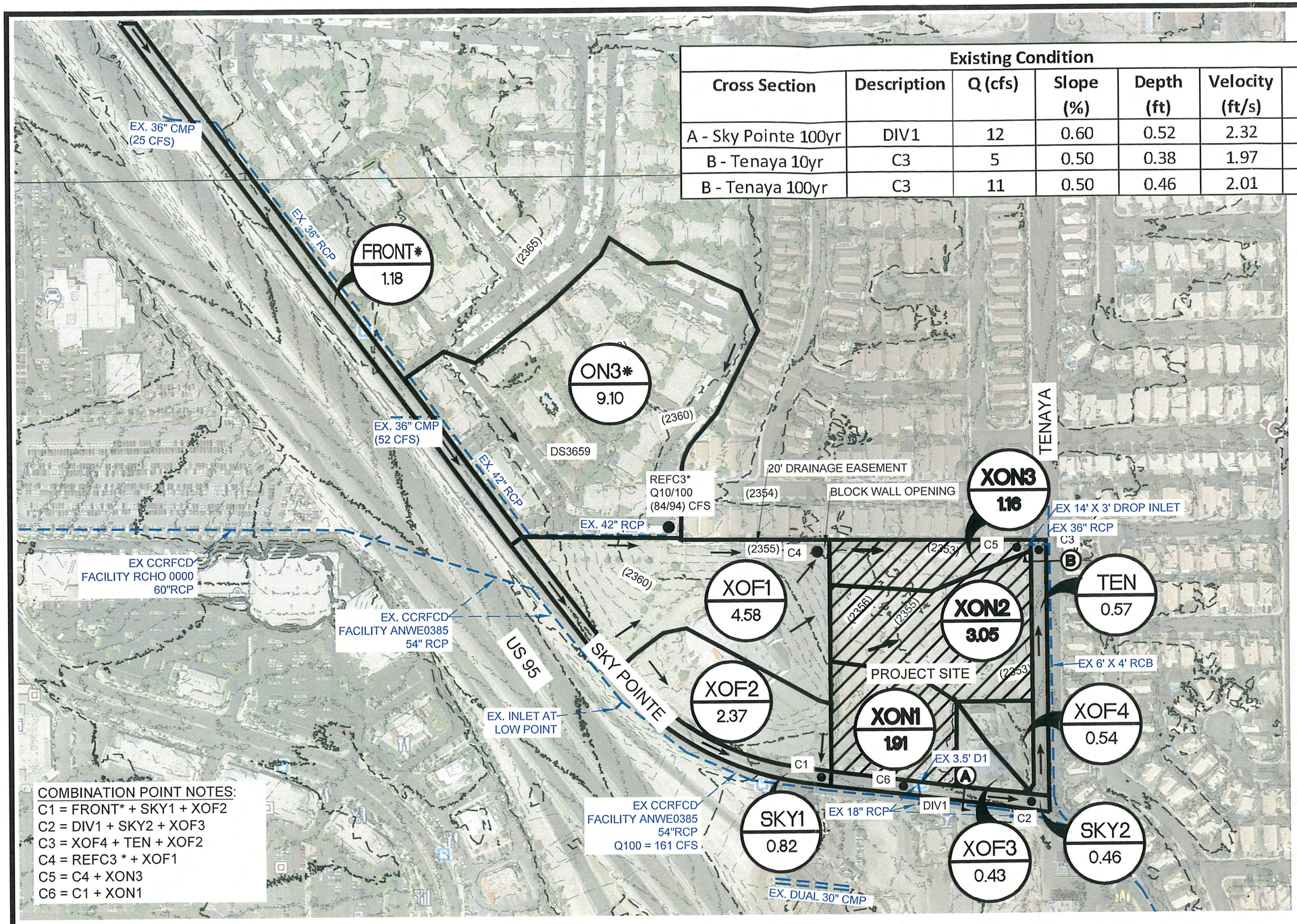
T/R/S: T19S/R60E/27
AREA G-27

APPENDIX B

Figures

Existing Condition						
Cross Section	Description	Q (cfs)	Slope (%)	Depth (ft)	Velocity (ft/s)	DxV
A - Sky Pointe 100yr	DIV1	12	0.60	0.52	2.32	1.21
B - Tenaya 10yr	C3	5	0.50	0.38	1.97	0.75
B - Tenaya 100yr	C3	11	0.50	0.46	2.01	0.92

Existing Condition			
Basin	Area (acres)	Q_{10} (cfs)	Q_{100} (cfs)
C1	-	6	11
C2	-	6	15
C3	-	5	11
C4	-	92	109
C5	-	93	111
C6	-	8	16
D1	-	3	4
DIV1	-	5	12
REFC3*	-	84	94
FRONT*	1.18	2	3
SKY1	0.82	1	2
SKY2	0.46	1	2
TEN	0.57	1	2
XOF1	4.58	8	15
XOF2	2.37	2	6
XOF3	0.43	1	2
XOF4	0.54	1	2
XON1	1.91	2	5
XON2	3.05	3	7
XON3	1.16	1	3



COMBINATION POINT NOTES:
C1 = FRONT* + SKY1 + XOF2
C2 = DIV1 + SKY2 + XOF3
C3 = XOF4 + TEN + XOF2
C4 = REFC3 * + XOF1
C5 = C4 + XON3
C6 = C1 + XON1

DRAINAGE LEGEND

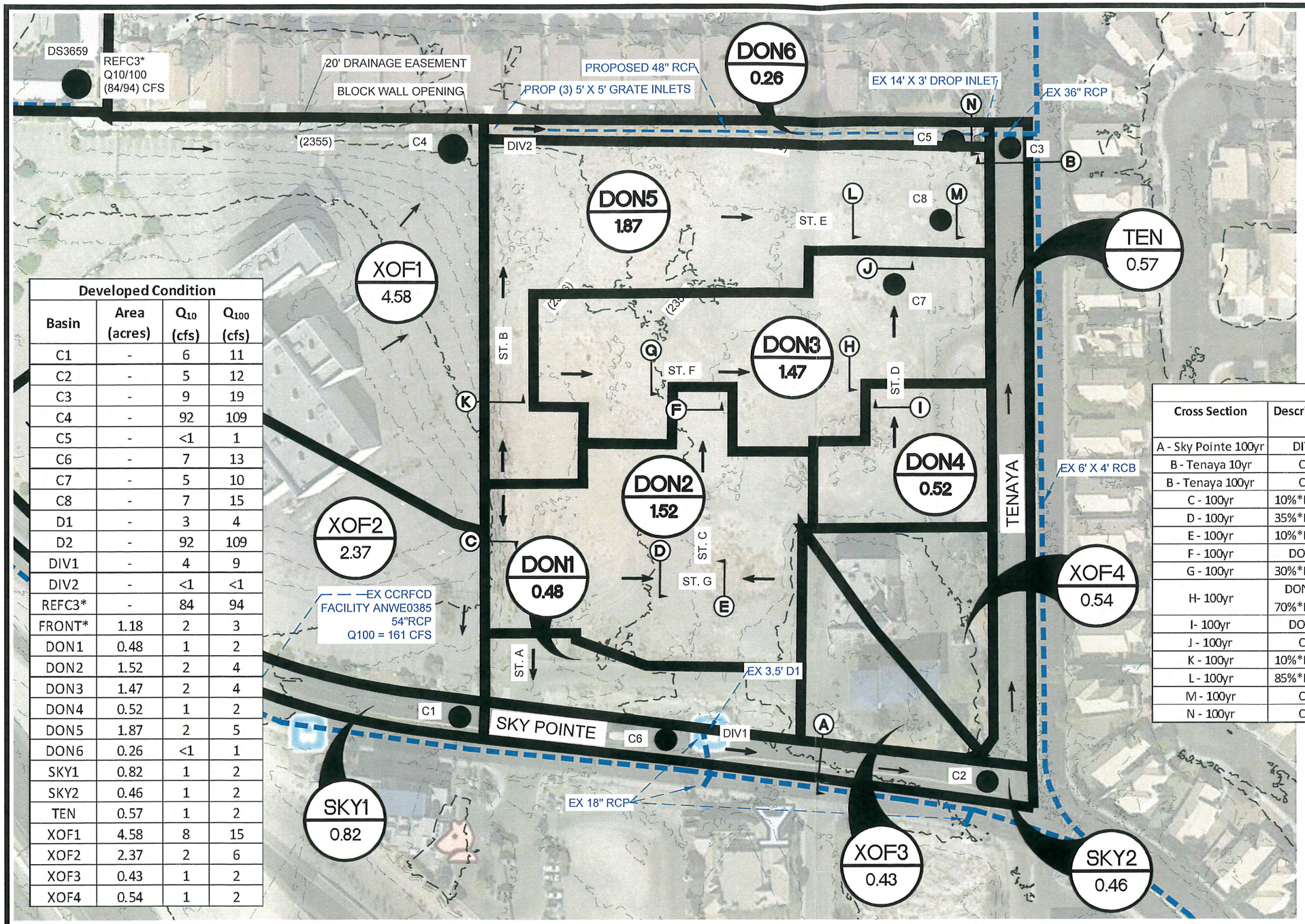
XOF1 / xxx	BASIN IDENTIFICATION
	BASIN AREA (ACRES)
	BASIN BOUNDARY
C1	CONCENTRATION POINT
	FLOW PATH
A	CROSS SECTION
XX/XXX (XX/XXX)	10-YR/100-YR FLOW (CFS)
	REFERENCE FLOW (CFS)

NOTES:
* REFERENCED FLOW FROM THE TDS FOR EAGLE CREST CONDOS, DS3959
- BLUE TEXT = STORM DRAIN INFORMATION

250 0 125 250 500
(IN FEET)
1 inch = 250ft.

TANEY ENGINEERING
6030 S. JONES BLVD STE#100
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

FIGURE 8
EXISTING BASIN MAP
TENAYA & SKY POINTE



Developed Condition			
Basin	Area (acres)	Q_{10} (cfs)	Q_{100} (cfs)
C1	-	6	11
C2	-	5	12
C3	-	9	19
C4	-	92	109
C5	-	<1	1
C6	-	7	13
C7	-	5	10
C8	-	7	15
D1	-	3	4
D2	-	92	109
DIV1	-	4	9
DIV2	-	<1	<1
REFC3*	-	84	94
FRONT*	1.18	2	3
DON1	0.48	1	2
DON2	1.52	2	4
DON3	1.47	2	4
DON4	0.52	1	2
DON5	1.87	2	5
DON6	0.26	<1	1
SKY1	0.82	1	2
SKY2	0.46	1	2
TEN	0.57	1	2
XOF1	4.58	8	15
XOF2	2.37	2	6
XOF3	0.43	1	2
XOF4	0.54	1	2

COMBINATION POINT NOTES:
C1 = FRONT* + SKY1 + XOF2
C2 = DIV1 + SKY2 + XOF3
C3 = C8 + XOF4 + TEN
C4 = REFC3 * + XOF1
C5 = C4 + XON3
C6 = C1 + XON1
C7 = DON2 + DON3 + DON4
C8 = C7 + DON5

Developed Condition						
Cross Section	Description	Q (cfs)	Slope (%)	Depth (ft)	Velocity (ft/s)	DxV
A - Sky Pointe 100yr	DIV1	12	0.60	0.52	2.32	1.21
B - Tenaya 10yr	C3	9	0.50	0.44	1.91	0.84
B - Tenaya 100yr	C3	19	0.50	0.55	2.19	1.20
C - 100yr	10%*DON2	1	1.40	0.26	2.06	0.54
D - 100yr	35%*DON2	1.5	0.52	0.17	1.22	0.21
E - 100yr	10%*DON2	1	0.50	0.15	1.10	0.17
F - 100yr	DON2	4	0.50	0.43	1.86	0.80
G - 100yr	30%*DON3	1.5	1.11	0.15	1.63	0.24
H- 100yr	DON2 + 70%*DON3	7	0.62	0.27	2.03	0.55
I- 100yr	DON4	2	0.50	0.19	1.29	0.25
J - 100yr	C7	10	0.50	0.32	2.19	0.70
K - 100yr	10%*DON5	1	1.50	0.26	2.11	0.55
L - 100yr	85%*DON5	4.5	0.59	0.24	1.68	0.40
M - 100yr	C8	15	0.53	0.37	2.61	0.97
N - 100yr	C5	1	0.66	0.11	0.78	0.09

DRAINAGE LEGEND

XOF1 / XXX	BASIN IDENTIFICATION
	BASIN AREA (ACRES)
	BASIN BOUNDARY
C1	CONCENTRATION POINT
	FLOW PATH
A	CROSS SECTION
XX/XXX	10-YR/100-YR FLOW (CFS)
(XX/XXX)	REFERENCE FLOW (CFS)

NOTE:
* REFERENCED FLOW FROM THE TDS FOR EAGLE CREST CONDOS, DS3959
- BLUE TEXT = STORM DRAIN INFORMATION

250 0 125 250 500
(IN FEET)
1 inch = 250ft.

TANEY ENGINEERING
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FIGURE 8
DEVELOPED BASIN MAP
TENAYA & SKY POINTE

APPENDIX C

Hydraulic Calculations

```
T1 TENAYA & SKY POINTE
T2 ONSITE STORM DRAIN - 100 YEAR EVENT
T3 TANEY ENGINEERING 2018 - LEN-18-002
SO   1000.000  42.290  2      .013                45.670
R    1054.610  43.430  2      .013                                .000    .000 1
JX   1057.110  43.530  1      .013     .000           43.630          .0        .000
R    1059.610  43.630  1      .013                                .000    .000 1
R    1295.620  44.820  1      .013                                .000    .000 0
JX   1298.120  44.920  1      .013     .000           45.020          .0        .000
R    1300.620  45.020  1      .013                                .000    .000 1
R    1522.680  46.400  1      .013                                .000    .000 0
SH   1522.680  46.400  1      .013                49.900
CD   1  4   0    .000   4.000    .000  .000  .000  .00
CD   2  4   0    .000   3.000    .000  .000  .000  .00
Q           109.000   .0
```

TENAYA & SKY POINTE
ONSITE STORM DRAIN - 100 YEAR EVENT
TANEY ENGINEERING 2018 - LEN-18-002

Station / L/Elem	Invert Elev / Ch Slope	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head / SF Ave	Energy Grd.El. / HF	Super Elev / SE Dpth	Critical Depth / Froude N	Flow Top Width / Norm Dp	Height/ Dia.-FT / "N"	Base Wt or I.D. / X-Fall	ZL / ZR	No Wth Prs/Pip / Type Ch
1000.000	42.290	3.380	45.670	109.00	15.42	3.69	49.36	.00	2.92	.00	3.000	.000	.00	0 .0
54.610	.0209					.0267	1.46	3.38	.00	3.00	.013	.00	.00	PIPE
1054.610	43.430	3.883	47.313	109.00	15.42	3.69	51.01	.00	2.92	.00	3.000	.000	.00	0 .0
JUNCT STR	.0400					.0162	.04	3.88	.00		.013	.00	.00	PIPE
1057.110	43.530	6.348	49.878	109.00	8.67	1.17	51.05	.00	3.16	.00	4.000	.000	.00	0 .0
2.500	.0400					.0058	.01	6.35	.00	1.71	.013	.00	.00	PIPE
1059.610	43.630	6.321	49.951	109.00	8.67	1.17	51.12	.00	3.16	.00	4.000	.000	.00	0 .0
236.010	.0050					.0058	1.36	6.32	.00	3.63	.013	.00	.00	PIPE
1295.620	44.820	6.490	51.310	109.00	8.67	1.17	52.48	.00	3.16	.00	4.000	.000	.00	0 .0
JUNCT STR	.0400					.0058	.01	6.49	.00		.013	.00	.00	PIPE
1298.120	44.920	6.404	51.324	109.00	8.67	1.17	52.49	.00	3.16	.00	4.000	.000	.00	0 .0
2.500	.0400					.0058	.01	6.40	.00	1.71	.013	.00	.00	PIPE
1300.620	45.020	6.377	51.397	109.00	8.67	1.17	52.56	.00	3.16	.00	4.000	.000	.00	0 .0
222.060	.0062					.0058	1.28	6.38	.00	3.15	.013	.00	.00	PIPE
1522.680	46.400	6.275	52.675	109.00	8.67	1.17	53.84	.00	3.16	.00	4.000	.000	.00	0 .0

APPENDIX D

Reference Material

LAS VEGAS CITY COUNCIL

CAROLYN G. GOODMAN
Mayor

LOIS TARKANIAN
Mayor Pro Tem

STAVROS S. ANTHONY
BOB COFFIN
STEVEN G. SEROKA
MICHELE FIORE
CEDRIC CREAR

SCOTT D. ADAMS
City Manager

DEPARTMENT OF PLANNING

ROBERT SUMMERFIELD
DIRECTOR

DEVELOPMENT SERVICES CENTER
DEPARTMENT OF PLANNING
333 N. RANCHO DRIVE
3RD FLOOR
LAS VEGAS, NV 89106
702.229.6301 | VOICE
702.474.7463 | FAX
711 | TTY

cityoflasvegas
lasvegasnevada.gov

November 29, 2018

RECEIVED
12/4/18

Mr. Dave Cornoyer
Greystone Nevada, LLC
9275 W. Russell Road, 4th Floor
Las Vegas, Nevada 89148

RE: MOD-74628 [PRJ-74594] - MAJOR MODIFICATION RELATED TO VAR-74692, SDR-74631 AND TMP-74632 PLANNING COMMISSION MEETING OF DECEMBER 11, 2018

Dear Applicant:

Please be advised the City of Las Vegas Planning Commission at its regular meeting on ***December 11, 2018*** as referred to above, will consider your request. This meeting will be held at 6:00 P. M. at the Council Chambers of City Hall, 495 South Main Street, Las Vegas, Nevada.

A copy of staff's recommendations, any conditions related to your application and the ***final agenda*** will available on-line on *Wednesday, December 5, 2018* at www.lasvegasnevada.gov. If you do not have access to the Internet and would prefer receiving hard copies of the documentation, please call the Case Planning Division at (702) 229-6301 or come into the Development Services Center at 333 North Rancho Drive, 3rd Floor, Las Vegas, Nevada 89106 to request your copies.

The Planning Commission requires that you or your representative be present at this meeting.

Sincerely,

Steve Gebeke, AICP
Planning Supervisor
Case Planning Division

SG:nl

cc:

Ms. Elisha Scrogum
Taney Engineering
6030 S. Jones Blvd.
Las Vegas, Nevada 89118

LAS VEGAS CITY COUNCIL

CAROLYN G. GOODMAN
Mayor

LOIS TARKANIAN
Mayor Pro Tem

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cityoflasvegas
lasvegasnevada.gov

November 29, 2018

Mr. Dave Cornoyer
Greystone Nevada, LLC
9275 W. Russell Road, 4th Floor
Las Vegas, Nevada 89148

RE: SDR-74631 [PRJ-74594] - SITE DEVELOPMENT PLAN REVIEW RELATED TO MOD-74628, VAR-74692 AND TMP-74632 PLANNING COMMISSION MEETING OF DECEMBER 11, 2018

Dear Applicant:

Please be advised the City of Las Vegas Planning Commission at its regular meeting on ***December 11, 2018*** as referred to above, will consider your request. This meeting will be held at 6:00 P. M. at the Council Chambers of City Hall, 495 South Main Street, Las Vegas, Nevada.

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lasvegasnevada.gov

November 29, 2018

Mr. Dave Cornoyer
Greystone Nevada, LLC
9275 W. Russell Road, 4th Floor
Las Vegas, Nevada 89148

RE: TMP-74632 [PRJ-74594] - TENTATIVE MAP RELATED TO MOD-74628, VAR-74692 AND SDR-74631
PLANNING COMMISSION MEETING OF DECEMBER 11, 2018

Dear Applicant:

Please be advised the City of Las Vegas Planning Commission at its regular meeting on ***December 11, 2018*** as referred to above, will consider your request. This meeting will be held at 6:00 P. M. at the Council Chambers of City Hall, 495 South Main Street, Las Vegas, Nevada.

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The Planning Commission requires that you or your representative be present at this meeting.

Sincerely,

Steve Gebeke, AICP
Planning Supervisor
Case Planning Division

SG:nl

cc:

Ms. Elisha Scrogum
Taney Engineering
6030 S. Jones Blvd.
Las Vegas, Nevada 89118

LAS VEGAS CITY COUNCIL

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cityoflasvegas
lasvegasnevada.gov

November 29, 2018

Mr. Dave Cornoyer
Greystone Nevada, LLC
9275 W. Russell Road, 4th Floor
Las Vegas, Nevada 89148

RE: VAR-74692 [PRJ-74594] - VARIANCE RELATED TO MOD-74628, SDR-74631 AND TMP-74632
PLANNING COMMISSION MEETING OF DECEMBER 11, 2018

Dear Applicant:

Please be advised the City of Las Vegas Planning Commission at its regular meeting on ***December 11, 2018*** as referred to above, will consider your request. This meeting will be held at 6:00 P. M. at the Council Chambers of City Hall, 495 South Main Street, Las Vegas, Nevada.

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Sincerely,

Steve Gebeke, AICP
Planning Supervisor
Case Planning Division

SG:nl

cc:

Ms. Elisha Scrogum
Taney Engineering
6030 S. Jones Blvd.
Las Vegas, Nevada 89118

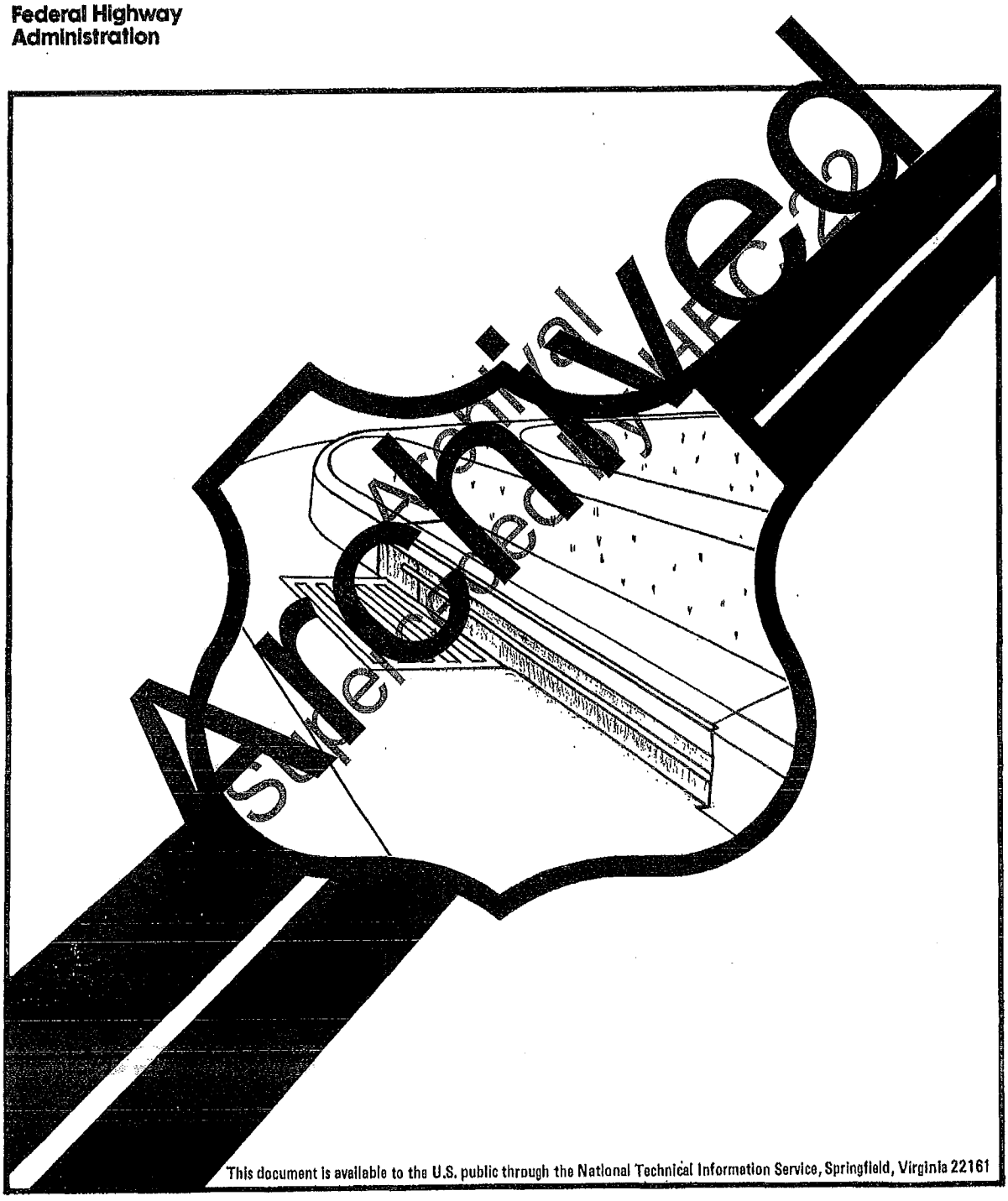
DRAINAGE OF HIGHWAY PAVEMENTS

Hydraulic Engineering
Circular No. 12

FHWA-TS-84-202

March 1984

U.S. Department
of Transportation
**Federal Highway
Administration**



Archived
Stacked Area

This document is available to the U.S. public through the National Technical Information Service, Springfield, Virginia 22161

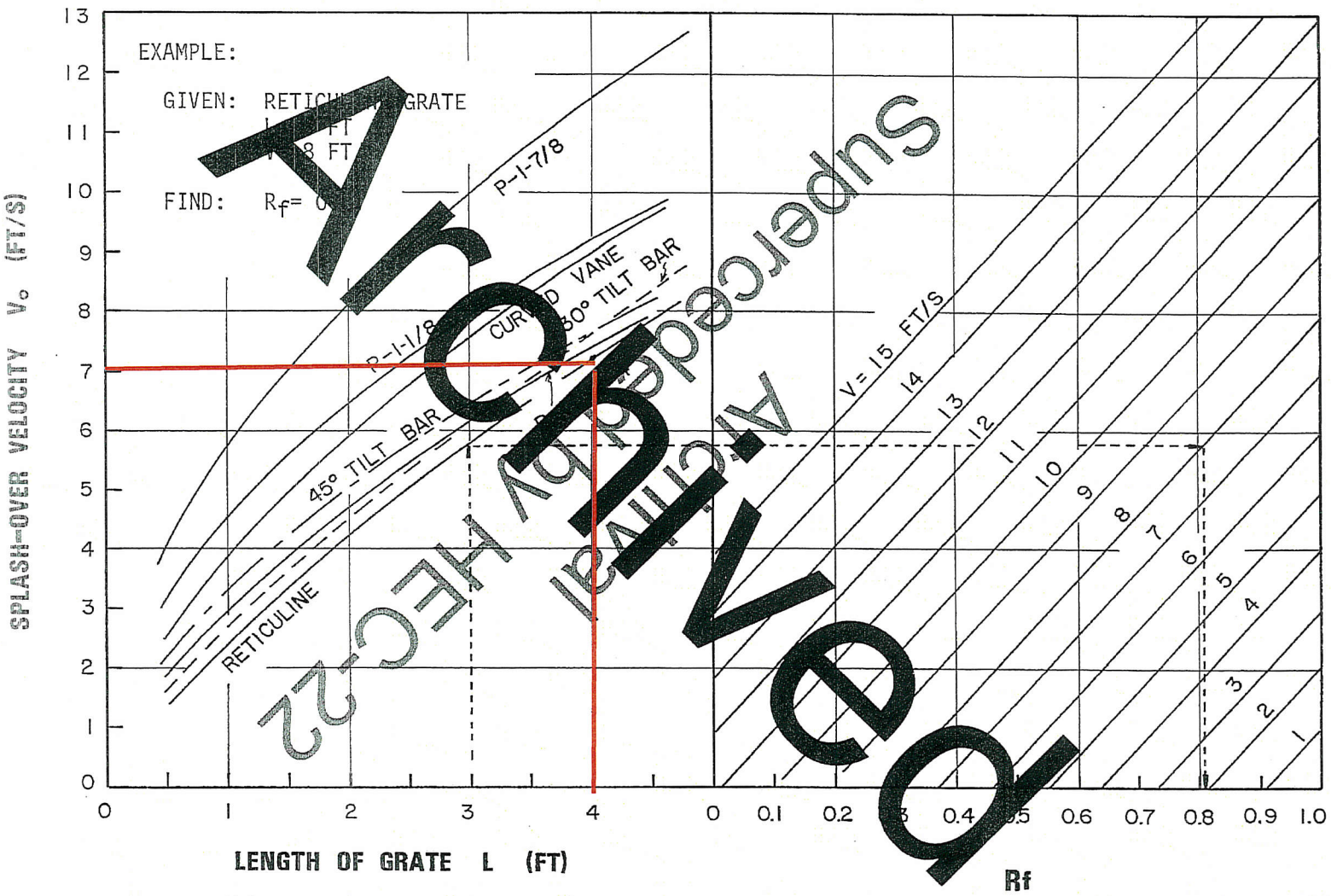


CHART 7. Grate inlet frontal flow interception efficiency.

Table 4. Average debris handling efficiencies of grates tested.

Rank	Grate	Longitudinal slope	
		Ø.ØØ5	Ø.Ø4
1	CV - 3-1/4 - 4-1/4	46	61
2	3Ø - 3-1/4 - 4	44	55
3	45 - 3-1/4 - 4	43	58
4	P - 1-7/8	32	
5	P - 1-7/8 - 4	18	28
6	45 - 2-1/4 - 4	16	23
7	Recticuline	12	16
8	P - 1-1/8	9	20

slope of the pavement, the length of the grate, and flow velocity.

The ratio of frontal flow to total gutter flow, E_o, for a straight cross slope is expressed by equation (7):

$$E_o = \frac{Q_w}{Q} = 1 - (1 - W/T)^{2.6} \quad (7)$$

where: Q = total gutter flow, ft^3/s (m^3/s)
Q_w = flow in width W, ft^3/s (m^3/s)
W = width of depressed gutter or grate, ft (m)
T = total spread of water in the gutter, ft (m)

Chart 4, section 2, provides a graphical solution of E_o for either straight cross slopes or depressed gutter sections.

The ratio of side flow, Q_s, to total gutter flow is:

$$\frac{Q_s}{Q} = 1 - \frac{Q_w}{Q} = E_o \quad (8)$$

The ratio of frontal flow intercepted to total frontal flow, R_f, is expressed by equation (9):

$$R_f = 1 - Ø.ØØ9 (V - V_o) \quad (9)$$

where: V = velocity of flow in the gutter, ft/s (m/s)
V_o = gutter velocity where splash-over first occurs

Archived
Superseded by HEC-22

APPENDIX E

Improvement Plans

IMPROVEMENT PLANS
FOR
N TENAYA WAY & SKY POINTE DR
MULTI-FAMILY CONDOMINIUMS
CITY OF LAS VEGAS, NEVADA
APN: 125-27-410-006

Avoid overhead power line contact, it's costly.
Call before you Overhead
1-702-227-2929

Call before you Dig
Avoid cutting underground utility lines, it's costly.
CALL 811
OR 1-800-227-2600

SHEET INDEX

Sheet Number	Sheet Title	SheetTitle1	SheetTitle2	SheetTitle3
1	C1		COVER SHEET	
2	C2		GENERAL NOTES AND QUANTITIES	
3	G1		GRADING PLAN 1	
4	G2		GRADING PLAN 1	
5	G3		GRADING PLAN 3	
6	G4		GRADING PLAN 4	
7	GD1		GRADING DETAILS 1	
8	GD2		GRADING DETAILS 2	
9	PP1	PLAN AND PROFILE 1	STREET A	STA 9+50.00 TO 12+16.58
10	PP2	PLAN AND PROFILE 2	STREET B	STA 1+00.00 TO STA 5+30.46
11	PP3	PLAN AND PROFILE 3	STREET C	STA 9+50.00 TO STA 12+55.87
12	PP4	PLAN AND PROFILE 4	STREET D	STA 9+00.00 TO STA 13+47.03
13	PP5	PLAN AND PROFILE 5	STREET E	STA 9+50.00 TO STA 12+50.00
14	PP6	PLAN AN DPROFILE 6	STREET E	STA 12+50.00 TI STA 15+72.18
15	PP7	PLAN AND PROFILE 7	STREET F	STA 9+50.00 TO STA 12+00.00
16	PP8	PLAN AND PROFILE 8	STREET F	STA: 12+00.00 TO 14+41.00
17	PP9	PLAN AND PROFILE 9	STREET G	STA: 9+50.00 TO 13+10
18	PP10	PLAN AND PROFILE 10	NORTH STORM DRAIN	STA: 9+00.00 TO 12+50.00
19	PP11	PLAN AND PROFILE 11	NORTH STORM DRAIN	STA: 12+50.00 TO 15+80.00
20	PP12		SEWER EASEMENT	
21	PP13		TENAYA WAY	
22	MUT		MASTER UTILITY PLAN	
23	UT1		UTILITY PLAN 1	
24	UT2		UTILITY PLAN 2	
25	UT3		UTILITY PLAN 3	
26	UT4		UTILITY PLAN 4	
27	TR1	TRAFFIC AND	HORIZONTAL CONTROL PLAN 1	
28	TR2	TRAFFIC AND	HORIZONTAL CONTROL PLAN 2	
29	TR3	TRAFFIC AND	HORIZONTAL CONTROL PLAN 3	
30	TR4	TRAFFIC AND	HORIZONTAL CONTROL PLAN 4	

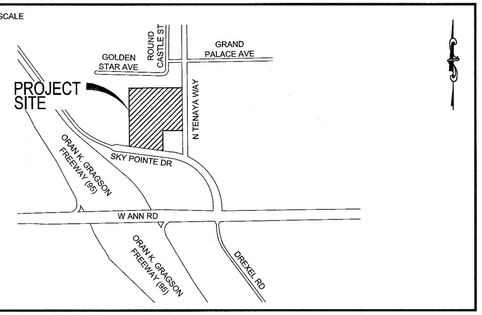
LEGEND

	EXISTING	PROPOSED
PROJECT BOUNDARY		
RIGHT-OF-WAY		
CENTERLINE		
PROPERTY LINE		
EDGE OF PAVEMENT		
SIDEWALK		
CURB AND GUTTER		
FENCE		
CONTOUR (1' INTERVAL)		
CONTOUR (5' INTERVAL)		
DIRECTION OF FLOW		
CUT LINE-ASPHALT		
SCARP (SLOPE VARIES)		
DESIGN ELEVATION	(10.00)	10.00
FUTURE ELEVATION		[10.00]
NUMBER OF RETAINING COURSES		10
RETAINING WALL		
CMU WALL		
SOLID GROUTED WALL - NO RETAINING		
CUT-OFF WALL		
POWER POLE		
SIDEWALK RAMP		
CURB DROP INLET		
STORM DRAIN W/MANHOLE		
CUT-FILL LINE		
SIGHT VISIBILITY ZONE		
CAP & 2" BLOW OFF VALVE		
WATERLINE FITTINGS		
GATE VALVE		
FIRE HYDRANT		
SEWER LINE W/MANHOLE		
SEWER LATERAL		
WATER LINE		
WATER LATERAL W/METER		
PRESSURE REDUCING VALVE		PRV
BACKWATER VALVE		BWV
200A SERVICE PEDESTAL		
STREET LIGHT CONDUIT		
F.A.S.T. CONDUIT		
TRAFFIC SIGN		
STOP SIGN W/STREET NAME SIGN		
100W HPS LUMINAIRE W/11 GA. POLE		
250W HPS LUMINAIRE W/11 GA. POLE		
400W HPS LUMINAIRE W/11 GA. POLE		

ENGINEER
TANEY ENGINEERING
6030 SOUTH JONES BLVD
LAS VEGAS, NV 89118
(702) 362-8844 PHONE (702) 362-5233 FAX

DEVELOPER
LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603

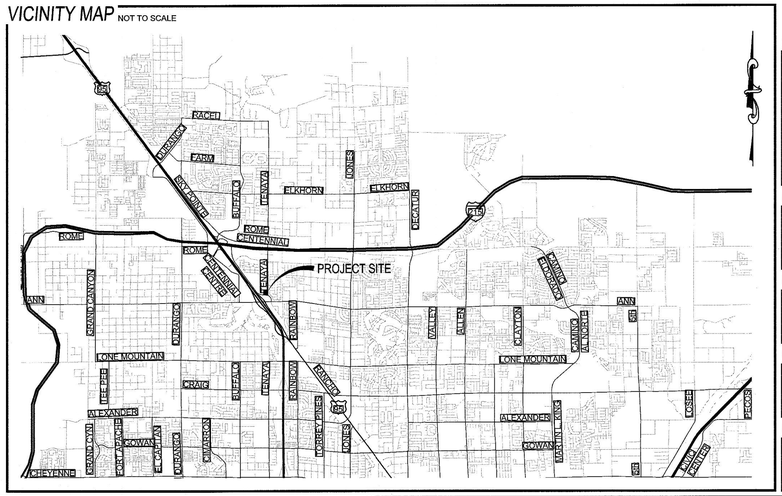
SITE MAP
NOT TO SCALE



ABBREVIATIONS

AC	ASPHALTIC CONCRETE	EX	EXISTING	PT	POINT OF TANGENCY
ACP	ASBESTOS CEMENT PIPE	FF	FINISH FLOOR ELEVATION	PVC	POLYVINYL CHLORIDE
AVE	AVENUE	FG	FINISH GRADE	R	RADIUS
BC	BACK OF CURB	FH	FIRE HYDRANT	RCB	REINFORCED CONCRETE BOX
BCR	BACK OF CURB RADIUS	FL	FLOW LINE	RCP	REINFORCED CONCRETE PIPE
BFE	BASE FLOOD ELEVATION	FT	FEET	RW	RIGHT-OF-WAY
BFP	BACK FLOW PREVENTOR	G	GRADING	RT	RIGHT
BLM	BUREAU OF LAND MANAGEMENT	GB	GRADE BREAK	SD	STORM DRAIN
BM	BENCH MARK	GFF	GARAGE FINISH FLOOR	SHT	SHEET
BO	BOUNDARY	HP	HIGH POINT	STLT	STREETLIGHT
BRPM	BLUE RAISED PAVEMENT MARKER	HPG	HIGH PRESSURE GAS	SNWA	SOUTHERN NEVADA WATER AUTHORITY
BVC	BEGIN VERTICAL CURVE	INV	INVERT	SS	SANITARY SEWER
BW	BOTTOM OF WALL	LF	LINEAR FEET	ST	STREET
CATV	CABLE TELEVISION	LN	LANE	STA	STATION
CC	CLARK COUNTY	LS	LANDSCAPE	STD	STANDARD
CCFD	CLARK COUNTY FIRE DEPARTMENT	LT	LEFT	SVZ	SIGHT VISIBILITY ZONE
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	LVVWD	LAS VEGAS VALLEY WATER DISTRICT	SW	SIDEWALK
CL	CENTERLINE	MAX	MAXIMUM	SY	SQUARE YARD
CLSM	CONTROLLED LOW STRENGTH MATERIAL	MH	MANHOLE	TC	TOP OF CURB
CLV	CITY OF LAS VEGAS	MIN	MINIMUM	TELE	TELEPHONE
CMP	CORRUGATED METAL PIPE	NO	NUMBER	TF	TOP OF FOOTING
CNLV	CITY OF NORTH LAS VEGAS	NTS	NOT TO SCALE	T.O.P.	TOP OF PIPE
CO	CLEAN OUT, SEWER	OC	ON CENTER	TR	TOP OF RETAINING
COH	CITY OF HENDERSON	PB	PULL BOX	TW	TOP OF WALL
CY	CUBIC YARD	PC	POINT OF CURVE	TYP	TYPICAL
DCSWCS	DESIGN AND CONSTRUCTION STANDARDS FOR WASTE WATER COLLECTION SYSTEMS	PCC	POINT OF COMPOUND CURVE	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
DG	DECOMPOSED GRANITE	PE	POLYETHYLENE	UT	UTILITY
DI	DROP INLET	PI	POINT OF INTERSECTION	USD	UNIFORM STANDARD DRAWING
DIP	DUCTILE IRON PIPE	PL	PROPERTY LINE	VC	VERTICAL CURVE
DR	DRIVE	PLT	PLATE	VCP	VITRIFIED CLAY PIPE
EC	END OF CURVE	POC	POINT OF CONNECTION	VG	VALLEY GUTTER
EG	EXISTING GRADE	PP	POWER POLE	W	WATER
ELEC	ELECTRICAL	P&P	PLAN AND PROFILE	ZC	ZERO LIP CURB
EP	EDGE OF PAVEMENT	PRC	POINT OF REVERSE CURVE		
EVC	END VERTICAL CURVE	PROJ	PROJECT		
		PRV	PRESSURE REDUCING VALVE		

VICINITY MAP
NOT TO SCALE


RACHEL
ALEXANDRA
FARM
SKY POINTE
SHEFFIELD
TENAYA
JONES
ELKHORN
ELKHORN
DECATUR
ROME
ROME
CENTENNIAL
ROME
ANTHEM CENTER
TENAYA
PROJECT SITE
CHEYENNE EXPRESSWAY
ANN
ANN
GRAND CANYON
DURANGO
RAINBOW
DEAN MARTIN
BUFFALO
DURANGO
CRAIG
ALEXANDER
TENAYA
RAINBOW
FLAMINGO
CHEYENNE
GRAND CANYON
DURANGO
DURANGO
TORREY PINES
JONES
ALEXANDER
COWAN
TORREY PINES
CLOSE
PECOS
LONE MOUNTAIN
LONE MOUNTAIN
CRAYDON
LAMB
CRAIG
CAMINO AL NORTE
CAMINO AL NORTE
LAMB
CRAIG
CAMINO AL NORTE
LAMB
CRAIG
CAMINO AL NORTE
LAMB
CRAIG

CLV 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, NEVADA AREA". 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 WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE CITY, PRIOR TO 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 OF EVERY 300' IN EXTRUDED-TYPE CURB.

8. AC PAVEMENT TO BE ONE-HALF INCH (1/2") 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 TRANSITIONS TO BE AS SHOWN ON PLANS.

12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE (COMPANY_REPORT#, DATE) 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 CLEANOUTS, 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 HEREON.

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

21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAPS MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINTIES OF ± 0.09 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).

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

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

CLV STREETLIGHT NOTES

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

2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS, ETC., LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC/ELECTRICAL FIELD OPERATIONS DIVISION AND THE CONSTRUCTION PROJECT REPRESENTATIVE. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623.10.03 (E) OF THE SPECIFICATIONS.

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

4. ALL EMPTY CONDUIT SHALL HAVE PULL STRINGS INSTALLED PRIOR TO FINAL INSPECTION.

5. ANY STRUCTURE, SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM OF EIGHTEEN INCHES (18") TO THE FACE OF STREET LIGHTING POLE ON ALL SIDES WHEN STREET LIGHT IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.

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

7. SERVICE POINTS SHALL BE COORDINATED WITH NEVADA POWER COMPANY, AND WHEREVER POSSIBLE, SHALL BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE PLANS.

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

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

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

LEGAL DESCRIPTION

THAT PORTION OF THE SOUTHEAST QUARTER (SE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 27, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., IN THE CITY OF LAS VEGAS, CLARK COUNTY, NEVADA FILED IN BOOK 88 OF PLATS, PAGE 55 OF OFFICIAL RECORDS OF SAID COUNTY.

EARTHWORK

TOTAL FOR OVERALL DEVELOPMENT: XX, XXX CY CUT / XX,XXX CY FILL / XX,XXX CY NET

NOTE: THIS OPINION OF THE CUT AND FILL QUANTITIES IS PROVIDED AS REQUIRED BY THE GOVERNING ENTITY. THIS INFORMATION SHOULD NOT BE USED FOR BIDDING PURPOSES. ALL CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN QUANTITIES. THESE TOTALS ARE RAW AND DO NOT ACCOUNT FOR SHRINKAGE AND SUBSIDENCE.

CLV TRAFFIC NOTES

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

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

3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONES. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENT INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.

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

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

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.

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

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

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

10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO EQUIPMENT AND FLAG PERSONS NECESSARY TO ENSURE THE SAFETY OF THE PUBLIC IN AND AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHTS-OF-WAY.

11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.

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

13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE NO. 229-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.

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

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

CLV 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 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. THE 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, BARRICADES, ETC.

STORMWATER RUNOFF MANAGEMENT NOTES

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 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 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 IIIA.5.

4. AT A MINIMUM, THE CONTRACTOR R 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 AND ACTUAL RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECCESSARY. SOME EXCEPTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION IIIA.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.

SOUTHERN NEVADA SOUTHWEST GAS CORP. GENERAL NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020.
2. MINIMUM HORIZONTAL AND VERTICAL CLEARANCES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND UTILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC SHALL BE AT LEAST 12-INCHES OR GREATER AS DICTATED BY LOCAL CODES AND STANDARDS.
   A) ANY DEVIATION FROM SPECIFIED MINIMUM CLEARANCES MUST BE APPROVED BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIES.
3. FOR VALVE ADJUSTMENT CONTACT 702-668-6107 48 HOURS PRIOR TO CONSTRUCTION.
4. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND/OR STRUCTURES CONTACT 702-365-2099.
5. SWG STANDBY CONTACT NUMBER: (702-400-1789)

SOUTHWEST GAS CORPORATION — DATE

CLV FIRE DEPARTMENT 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 THE 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 ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. [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 THE 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 1000 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 FOR AN ALTERNATING BASIS. [IFC § C102.8]

13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT 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 ANAPPROVED 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 IS 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]

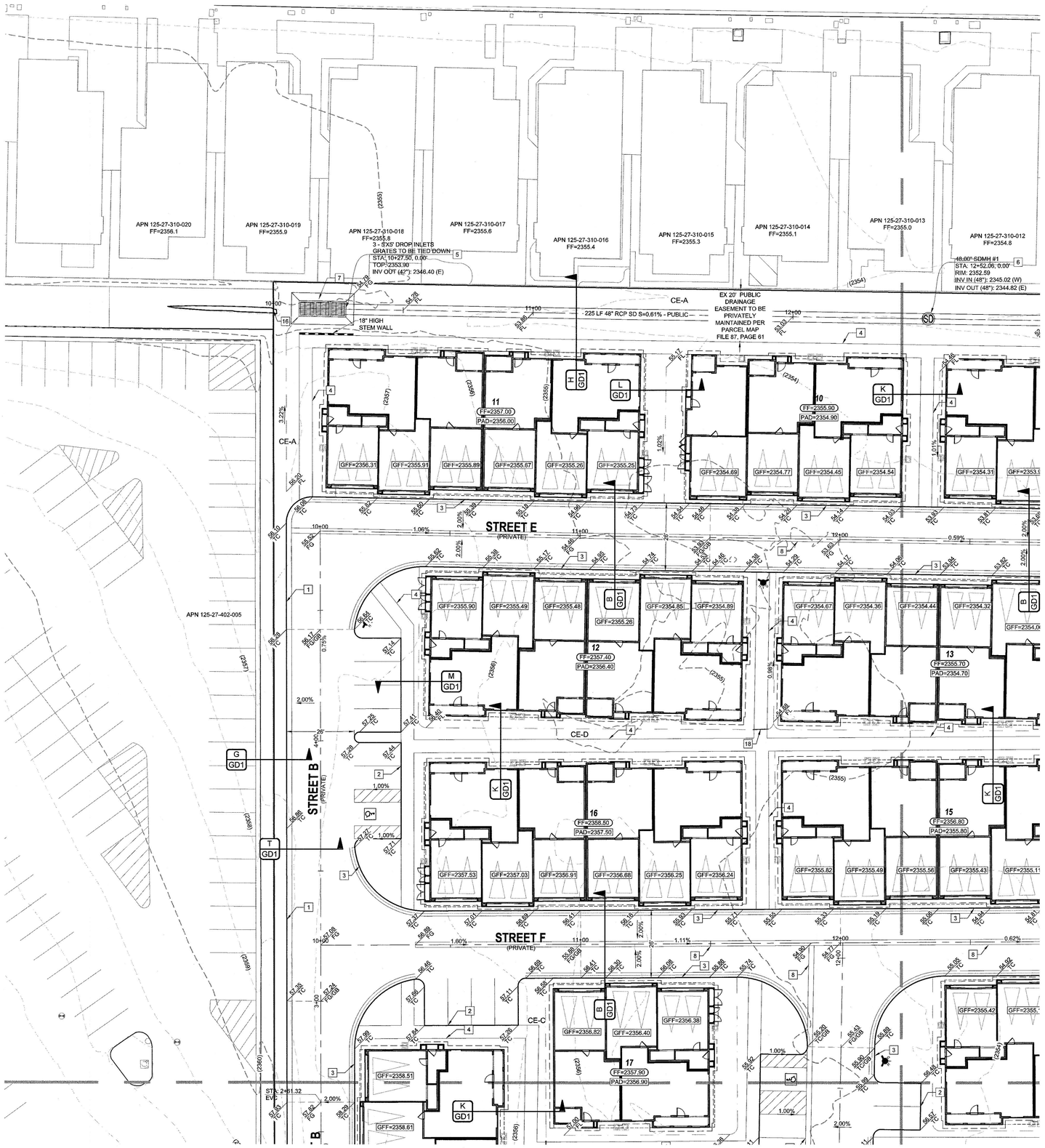
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12%, ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [IFC § 503.2.7, § 503.2.8]

21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [IFC § 503.2.4]

22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 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]

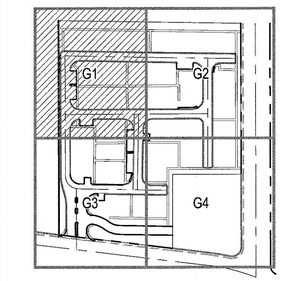
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIR



SCALE: 1" = 20'

20' 10' 20' 40' 60'

KEY MAP



CONSTRUCTION NOTES

1. 24" L-TYPE CURB & GUTTER (CCAUSD #216)
2. 6" HIGH A-TYPE CURB (CCAUSD #219)
3. R-TYPE CURB (CCAUSD #217.3,S1)
4. 5' WIDE SIDEWALK (CCAUSD #234)
5. 3 - 5'X5' JENSEN PRECAST DROP INLETS
6. 48" TYPE II STORM DRAIN MANHOLE (CCAUSD#405)
7. DROP INLET CONCRETE APRON (NDOT R-4.2.7, SEE DETAIL N/GD1)
8. 2' VALLEY GUTTER (DETAIL J/GD1)
9. 8' CROSS GUTTER (CCAUSD#228)
10. REMOVE EXISTING CURB
11. REMOVE EXISTING CHAIN-LINK FENCE
12. REMOVE EXISTING HANDICAP RAMP
13. REMOVE EXISTING VALLEY GUTTER
14. INSTALL SIDEWALK DRAIN (CCAUSD#236)
15. INSTALL 5' CURB CUT (DETAIL Q/GD1)
16. INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)
17. INSTALL ACCESS GATE (DETAIL P/GD1)
18. INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19. REMOVE EXISTING ASPHALT ROAD
20. CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21. CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')

EARTHWORK

TOTAL FOR OVERALL DEVELOPMENT: XX, XXX CY CUT / XX,XXX CY FILL / XX,XXX CY NET

NOTE: THIS OPINION OF THE CUT AND FILL QUANTITIES IS PROVIDED AS REQUIRED BY THE GOVERNING ENTITY. THIS INFORMATION SHOULD NOT BE USED FOR BIDDING PURPOSES. ALL CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN QUANTITIES. THESE TOTALS ARE RAW AND DO NOT ACCOUNT FOR SHRINKAGE AND SUBSIDENCE.

FLOOD ZONE

THIS PROJECT IS LOCATED IN FLOOD ZONE "X", AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD PLAIN PER FIRM PANEL 32003C2150E, REVISED DATE.

UTILITY DISCLAIMER

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GRADING NOTES

COMPLETION OF SECTION II OF DRAINAGE COMPLIANCE REPORT REQUIRED.

ADD 2300 FEET TO ALL GRADE TAGS TO GET ACTUAL ELEVATION.

THE ELEVATION DIFFERENCE BETWEEN THE PAD AND FINISH FLOOR IS DETERMINED FROM THE MINIMUM THICKNESS REQUIRED PER THE GEOTECHNICAL REPORT. FINISH FLOORS MAY INCREASE DEPENDING ON THE TYPE OF SOIL AND FOUNDATION PLAN USED. NOTE THAT THE STRUCTURAL PLANS & GEOTECHNICAL REPORT SHALL SUPERSEDE THE CIVIL IMPROVEMENT PLANS.

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ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENTS HAVE BEEN OBTAINED FROM THE OFFSITE OWNER AND GIVEN TO THE GOVERNING ENTITY.

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

GRADING CERTIFICATION

I CERTIFY THIS GRADING PLAN COMPLIES WITH THE APPROVED DRAINAGE STUDY, HTE# XX-XXXXX, ON FILE WITH CLARK COUNTY FOR THIS PROJECT.

ROBERT D. CUNNINGHAM, PE DATE

ACCEPTANCE OF PLANS FOR FILING

BY:
DEVELOPMENT AND FLOOD CONTROL DATE

Avoid overhead power line contact, it's costly.
Call before you Overhead
1-702-227-2929

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 736-9100

TANEY ENGINEERING
8030 S. JONES BOULEVARD
LAS VEGAS, NEVADA 89139
(702) 362-8844 FAX: (702) 362-5233

EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
GRADING PLAN 1

PROFESSIONAL ENGINEER STATE OF NEVADA
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22616
3-27-19

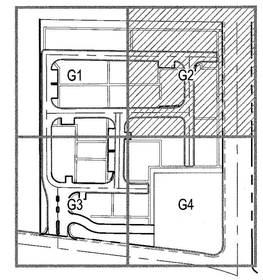
DATE:	3/27/2019
SCALE:	1"=30'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	G1
SHEET NUMBER:	3 OF 30
---	---
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNIE\GIS\PSD\MGS\SHEET DWGS\LEN002_SHT_G.DWG

SCALE: 1" = 20'

20' 10' 20' 40' 60'

KEY MAP



CONSTRUCTION NOTES

1. 24" L-TYPE CURB & GUTTER (CCAUSD #216)
2. 6" HIGH A-TYPE CURB (CCAUSD #219)
3. R-TYPE CURB (CCAUSD #217.3.S1)
4. 5' WIDE SIDEWALK (CCAUSD #234)
5. 3 - 5'X5' JENSEN PRECAST DROP INLETS
6. 48" TYPE II STORM DRAIN MANHOLE (CCAUSD#405)
7. DROP INLET CONCRETE APRON (NDOT R-4.2.7, SEE DETAIL N/GD1)
8. 2' VALLEY GUTTER (DETAIL J/GD1)
9. 8' CROSS GUTTER (CCAUSD#228)
10. REMOVE EXISTING CURB
11. REMOVE EXISTING CHAIN-LINK FENCE
12. REMOVE EXISTING HANDICAP RAMP
13. REMOVE EXISTING VALLEY GUTTER
14. INSTALL SIDEWALK DRAIN (CCAUSD#236)
15. INSTALL 5' CURB CUT (DETAIL Q/GD1)
16. INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)
17. INSTALL ACCESS GATE (DETAIL P/GD1)
18. INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19. REMOVE EXISTING ASPHALT ROAD
20. CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21. CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A='8' / B='8')

EARTHWORK

TOTAL FOR OVERALL DEVELOPMENT: XX, XXX CY CUT / XX,XXX CY FILL / XX,XXX CY NET

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GRADING NOTES

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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

GRADING CERTIFICATION

I CERTIFY THIS GRADING PLAN COMPLIES WITH THE APPROVED DRAINAGE STUDY, HTE# XX-XXXXX, ON FILE WITH CLARK COUNTY FOR THIS PROJECT.

ROBERT D. CUNNINGHAM, PE DATE

ACCEPTANCE OF PLANS FOR FILING

BY:
DEVELOPMENT AND FLOOD CONTROL DATE

GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

Avoid overhead power line contact, it's costly.
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1-702-227-2929

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NO.	DESCRIPTION	BY	SH'TS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 736-9100

TENAYE ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-8333

EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
GRADING PLAN 1

PROFESSIONAL ENGINEER STATE OF NEVADA
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22816
10/31/18
3-27-19

DATE:	3/27/2019
SCALE:	1"=30'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	G2
SHEET NUMBER:	4 OF 30
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CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANN\ENG\PFS\DWGS\SHEET DWGS\LEN002_SHT_G.DWG

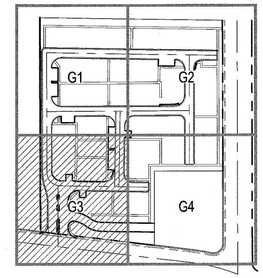
MATCHLINE SEE SHEET G1

MATCHLINE SEE SHEET G4

SCALE: 1" = 20'

20' 10' 20' 40' 60'

KEY MAP



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2. 6" HIGH A-TYPE CURB (CCAUSD #219)
3. R-TYPE CURB (CCAUSD #217.3.S1)
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21. CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')

GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

EARTHWORK

TOTAL FOR OVERALL DEVELOPMENT: XX, XXX CY CUT / XX,XXX CY FILL / XX,XXX CY NET

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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

GRADING CERTIFICATION

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ROBERT D. CUNNINGHAM, PE DATE

ACCEPTANCE OF PLANS FOR FILING

BY: _____
DEVELOPMENT AND FLOOD CONTROL DATE

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Call before you Overhead
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Call before you Dig
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NO.	DESCRIPTION	BY	SH'TS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4623 FAX: (702) 739-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-8383

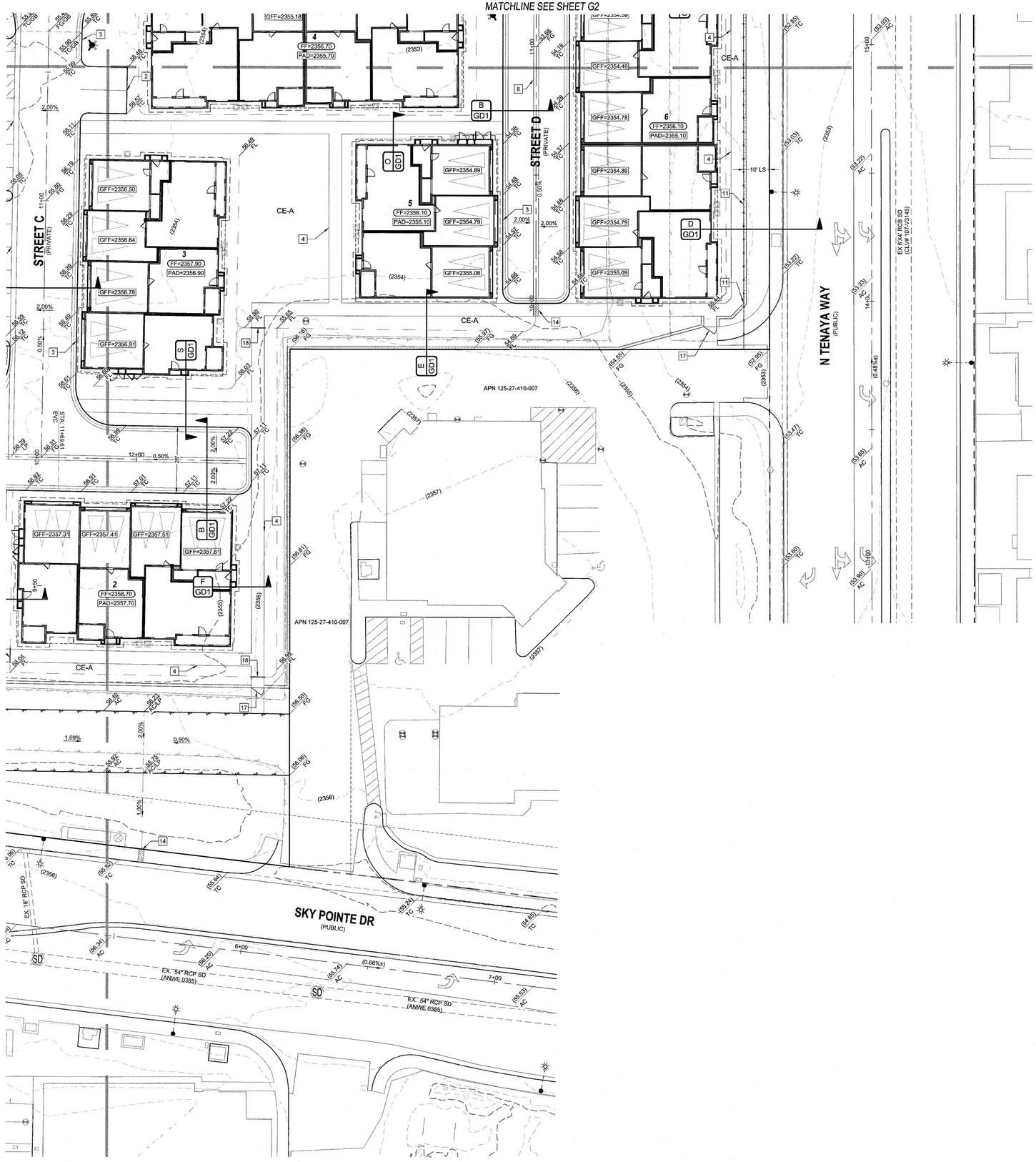
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
GRADING PLAN 3

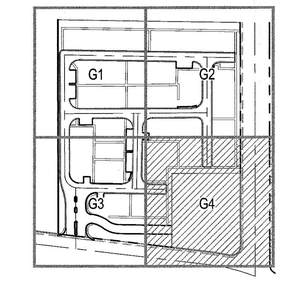
REGISTERED PROFESSIONAL ENGINEER STANLEY FONG No. 22616 STATE OF NEVADA
STANLEY FONG Exp. 6-30-19 CIVIL
2-27-19

DATE:	3/27/2019
SCALE:	1"=30'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	G3
SHEET NUMBER:	5 OF 30
----	----
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNEN\GUPS\DWGS\SHEET DWGS\LEN002_SHT_G.DWG



KEY MAP



CONSTRUCTION NOTES

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9	8' CROSS GUTTER (CCAUSD#228)	10	REMOVE EXISTING CURB
11	REMOVE EXISTING CHAIN-LINK FENCE	12	REMOVE EXISTING HANDICAP RAMP
13	REMOVE EXISTING VALLEY GUTTER	14	INSTALL SIDEWALK DRAIN (CCAUSD#236)
15	INSTALL 5' CURB CUT (DETAIL Q/GD1)	16	INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)
17	INSTALL ACCESS GATE (DETAIL P/GD1)	18	INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19	REMOVE EXISTING ASPHALT ROAD	20	CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21	CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')		

GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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EARTHWORK

TOTAL FOR OVERALL DEVELOPMENT: XX, XXX CY CUT / XX,XXX CY FILL / XX,XXX CY NET

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NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

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ROBERT D. CUNNINGHAM, PE DATE

ACCEPTANCE OF PLANS FOR FILING

BY: DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

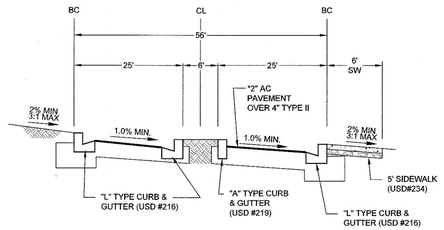
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
GRADING PLAN 4

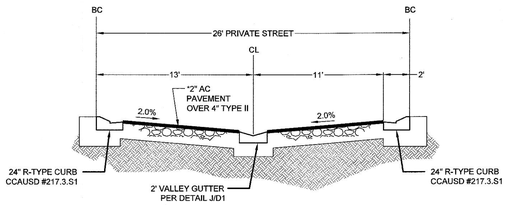
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22616
3-27-19

DATE:	3/27/2019
SCALE:	1"=30'
JOB NO:	LEN-18-002
DESIGNED BY:	SF
CHECKED BY:	RC
SHEET NAME:	G4
SHEET NUMBER:	6 OF 30
	CLV 0000000

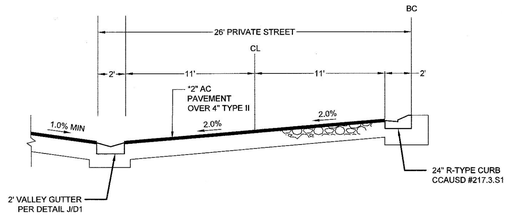
LAST PLOT: Jeff Thomsen
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANN\ENGI\PSD\DWGS\SHEET DWGS\LEN002_SHT_G.DWG



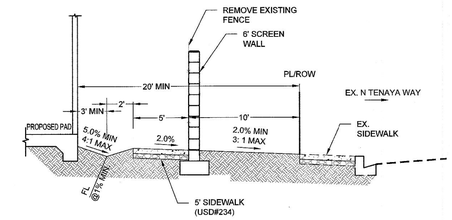
A ***GATED ENTRANCE SECTION***
NTS



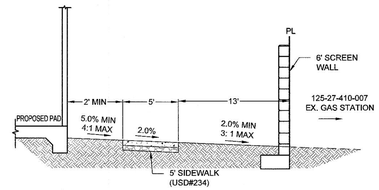
B ***26' PRIVATE DRIVE***
TYPICAL PRIVATE STREET
NTS



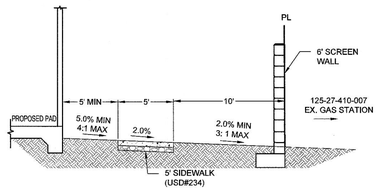
C ***26' PRIVATE DRIVE***
STREET C
NTS



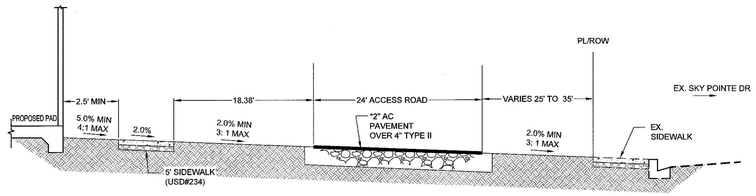
D ***EAST BOUNDARY***
SECTION
NTS



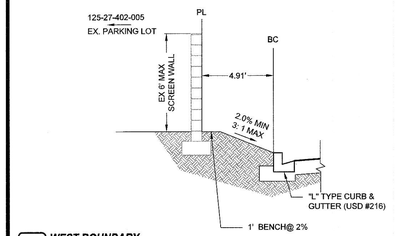
E ***SOUTHEAST BOUNDARY***
SECTION
NTS



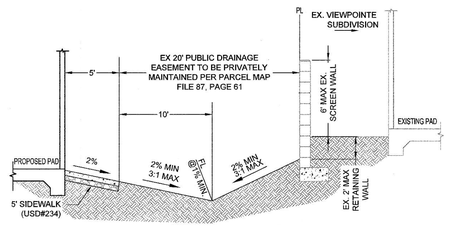
F ***SOUTHEAST BOUNDARY***
SECTION
NTS



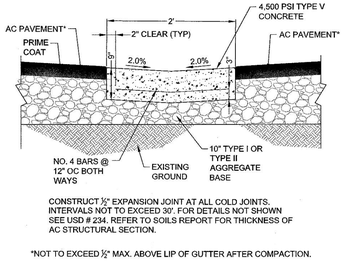
I ***SOUTH BOUNDARY***
SECTION
NTS



G ***WEST BOUNDARY***
SECTION
NTS



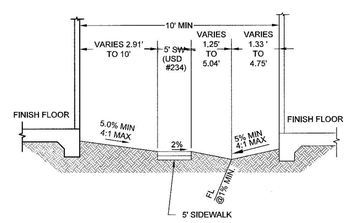
H ***NORTH BOUNDARY***
SECTION
NTS



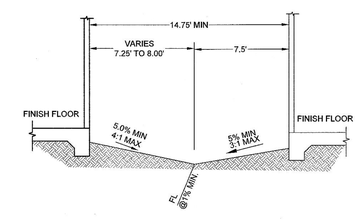
CONSTRUCT ½" EXPANSION JOINT AT ALL COLD JOINTS. INTERVALS NOT TO EXCEED 30'. FOR DETAILS NOT SHOWN SEE USD # 234. REFER TO SOILS REPORT FOR THICKNESS OF AC STRUCTURAL SECTION.

*NOT TO EXCEED ½" MAX. ABOVE LIP OF GUTTER AFTER COMPACTION.

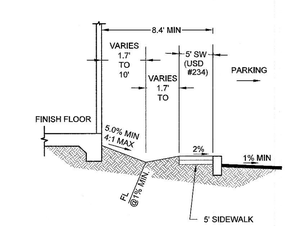
J ***2' VALLEY GUTTER***
MODIFIED USD#228
NTS



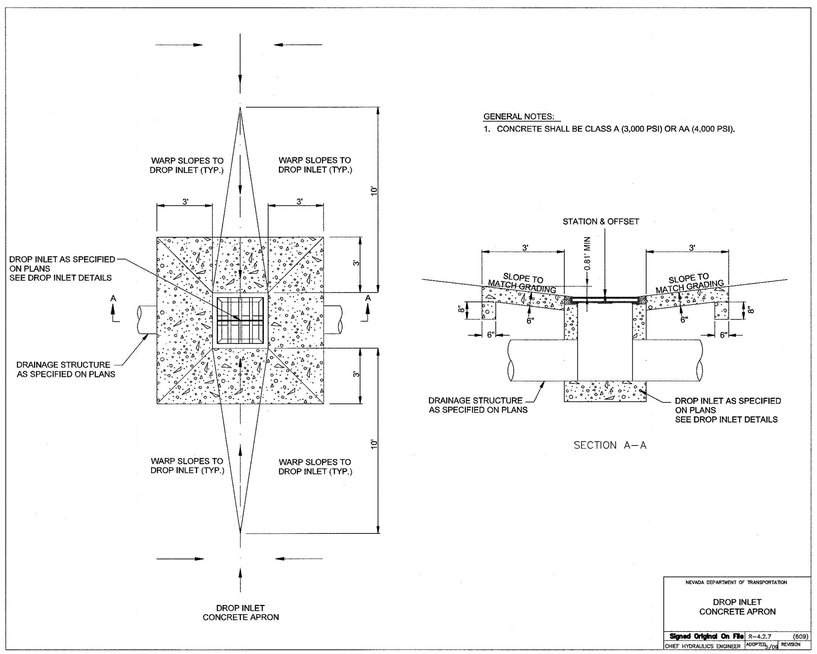
K ***SECTION***
NTS



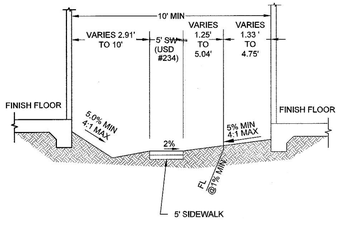
L ***SECTION***
NTS



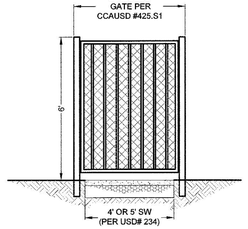
M ***SECTION***
NTS



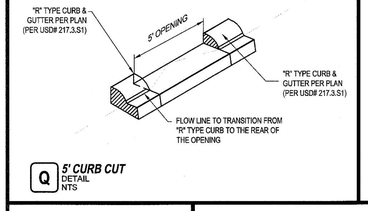
N ***DROP INLET CONCRETE APRON***
NDOT R-4.2.7
NTS



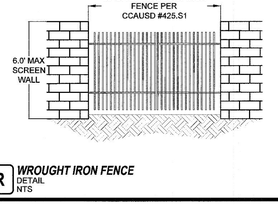
O ***SECTION***
NTS



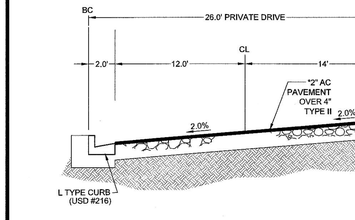
P ***ACCESS GATE***
DETAIL
NTS



Q ***5' CURB CUT***
DETAIL
NTS

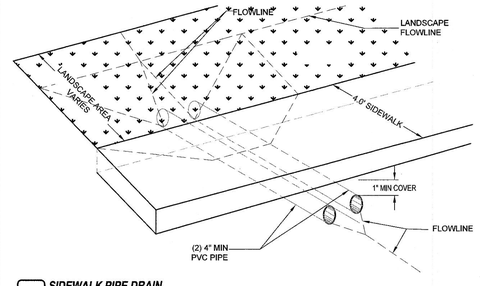


R ***WROUGHT IRON FENCE***
DETAIL
NTS



S ***SECTION***
NTS

T ***SECTION***
NTS



U ***SIDEWALK PIPE DRAIN***
PIPES UNDERNEATH SIDEWALK
NTS

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4663 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
GRADING DETAILS 1

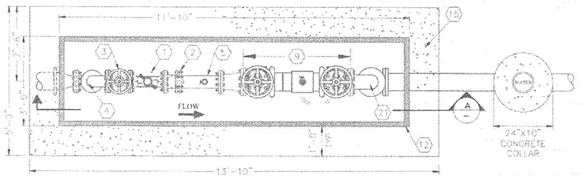
REGISTERED PROFESSIONAL ENGINEER
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22616
STATE OF NEVADA
3-27-19

DATE:	3/27/2019
SCALE:	NTS
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	GD1
SHEET NUMBER:	7 OF 30
---	---
CLV	0000000

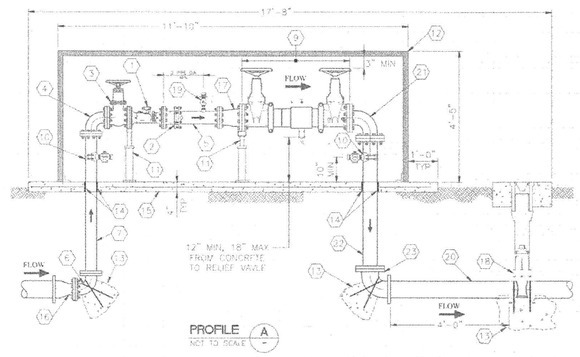
Avoid overhead power line contact. It's costly.
Call before you Overhead
1-702-227-2929

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNEX\GI\PSDWGS\SHEET DWGS\LEN002_SHT_DET.DWG



PLAN VIEW OF 4" OR 6" METER ASSEMBLY WITH 6" OR 8" RPPA
NOT TO SCALE



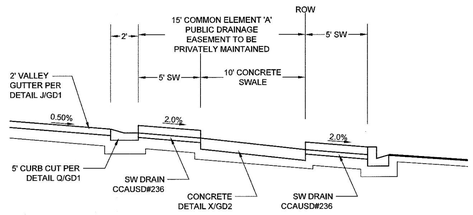
MATERIAL LIST

1. 4" WATER METER (OCTAVE-ULTRASONIC)
2. 4" RFCA RESTRAINED FLANGED COUPLING ADAPTER
3. 4" FLG X FLG NRS GATE VALVE
4. 4" FLG X FLG 90° BEND
5. 4" FLG X PE DIP SPOOL WITH 2" TEST PORT
6. 4" FLG X MJ RESTRAINT 90° BEND
7. 4" FLG x PE DIP SPOOL (CUT AS REQUIRED)
8. NOT USED
9. APPROVED IN LINE 6" REDUCED PRESSURE PRINCIPLE ASSEMBLY RPPA (WITH NRS VALVES)
10. 2" SERVICE SADDLE AND 2" N.P.T. CORP STOP W/ BRASS CAP (BYPASS TO BE INSTALLED 45° OFFSET FROM FLOW AND ONLY REQUIRED IN A SINGLE FEED SYSTEM)
11. ADJUSTABLE PIPE SUPPORT
12. INSULATED ENCLOSURE
13. CONCRETE THRUST/ANCHOR BLOCK
14. 1/2" EXPANSION JOINT MATERIAL
15. CONCRETE PAD (4" THICK) WITH WELDED WIRE FABRIC, 4 x 4 - W1.4 x W1.4
16. 6" X 4" REDUCER FLANGED TO 90° BEND (WITH 4" METER ONLY)
17. 6" X 4" FLG REDUCER (WITH 4" METER INSTALLATION ONLY)
18. PO X PO GATE VALVE TO MATCH PIPE SIZE
19. 2" BALL VALVE WITH BRASS FIRE HOSE DOUBLE MALE NIPPLE 2" NPT X 2.5" NH ADAPTER AND BRASS CAP
20. 6" PE X PE PIPE SPOOL
21. 6" FLG X FLG 90° BEND
22. 6" FLG x PE DIP SPOOL (CUT AS REQUIRED)
23. 6" PO X MJ RESTRAINT 90° BEND

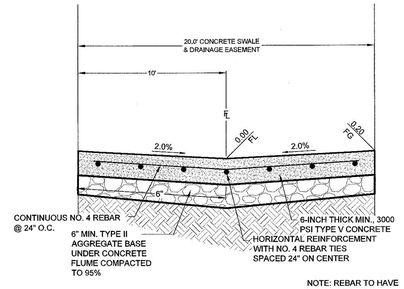
DIMENSION NOTES:

1. FOR 6" METER INSTALLATION, ALL PIPE SIZE AS SHOWN WILL INCREASE TO 6", WITH 8" PIPE AFTER AN 8" RPPA INSTALLATION.
2. 8" X 6" REDUCER IS REQUIRED BETWEEN THE FLG X PE SPOOL WITH TEST PORT AND THE RPPA FOR THE INSTALLATION OF AN 8" RPPA
3. ENCLOSURE SIZE FOR A 6" METER WITH A 6" RPPA (L x W x H) IS: 12FT X 3FT X 4.5FT (FOR ASSEMBLIES WITH NRS GATE VALVES)
4. ENCLOSURE SIZE FOR A 6" METER WITH AN 8" RPPA (L x W x H) IS: 14.5FT X 3.5FT X 5.5FT (FOR ASSEMBLIES WITH NRS GATE VALVES)
5. IF USING WATTS 909 SERIES PRRA, DIMENSIONS ARE: (L + 2FT) X (W+1FT) X H

V ***6" METER AND 8" RPPA***
LVVWD DETAIL
NTS



W ***DRAINAGE EASEMENT***
NTS



X ***20' CONCRETE SWALE***
NTS

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4693 FAX: (702) 735-9100

STANLEY CONSULTANTS
6030 S. JONES BOULEVARD
LAS VEGAS, NEVADA 89118
(702) 362-8844 FAX: (702) 362-5233

EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
GRADING DETAILS 2

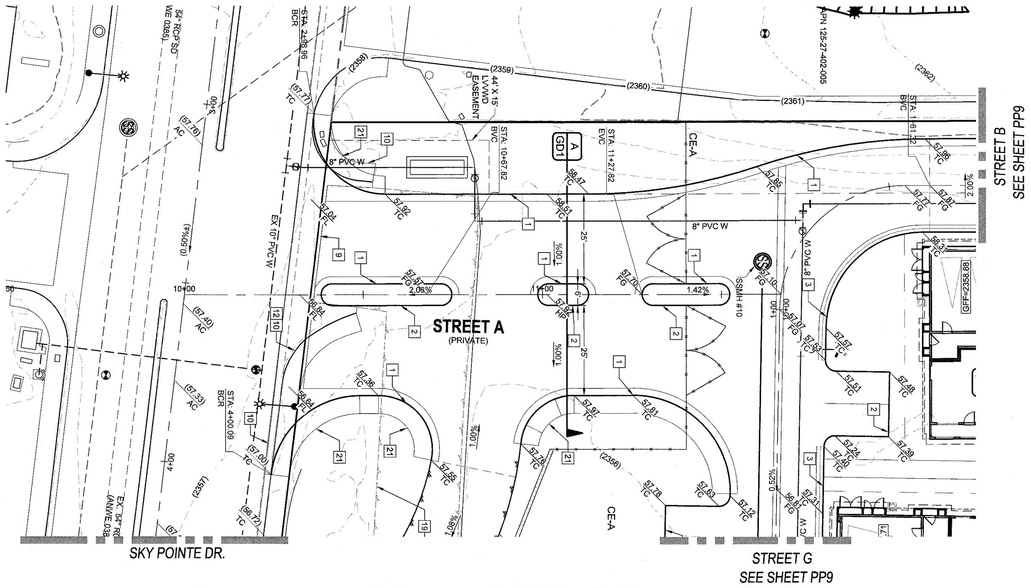
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22515
3-27-19

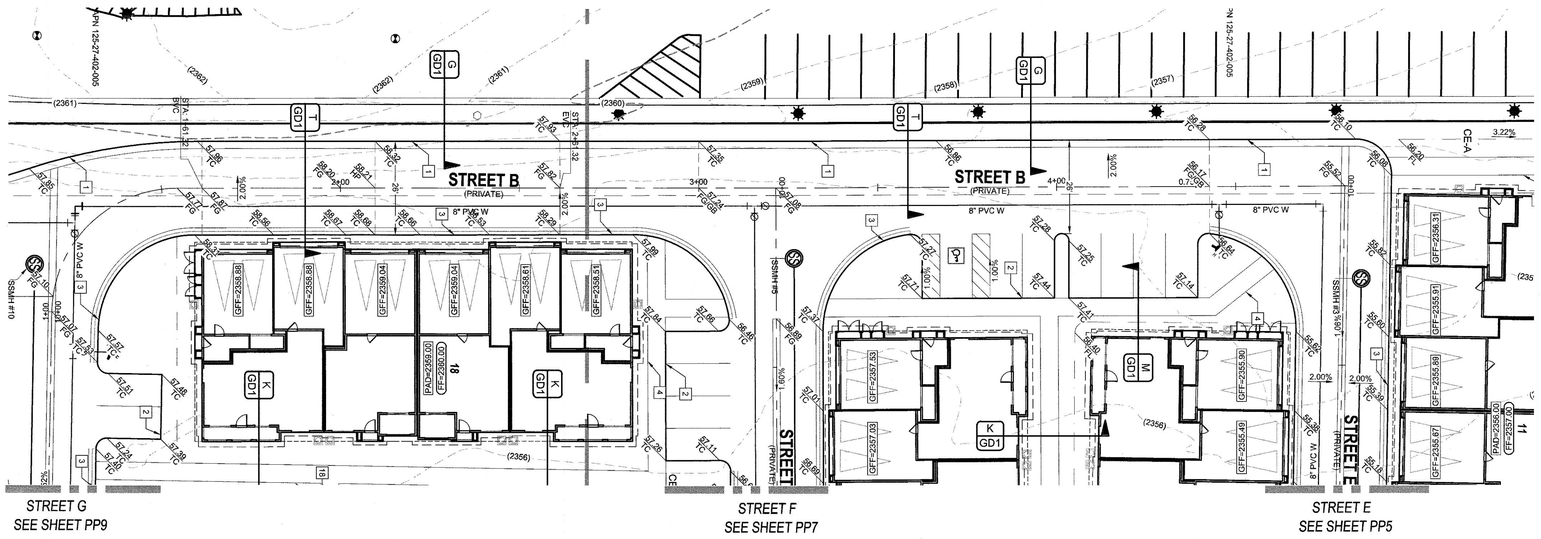
DATE:	3/27/2019
SCALE:	1"=30'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	GD2
SHEET NUMBER:	8 OF 30
---	---
CLV	0000000

Avoid overhead power line contact. It's costly.
Call before you Overhead
1-702-227-2929

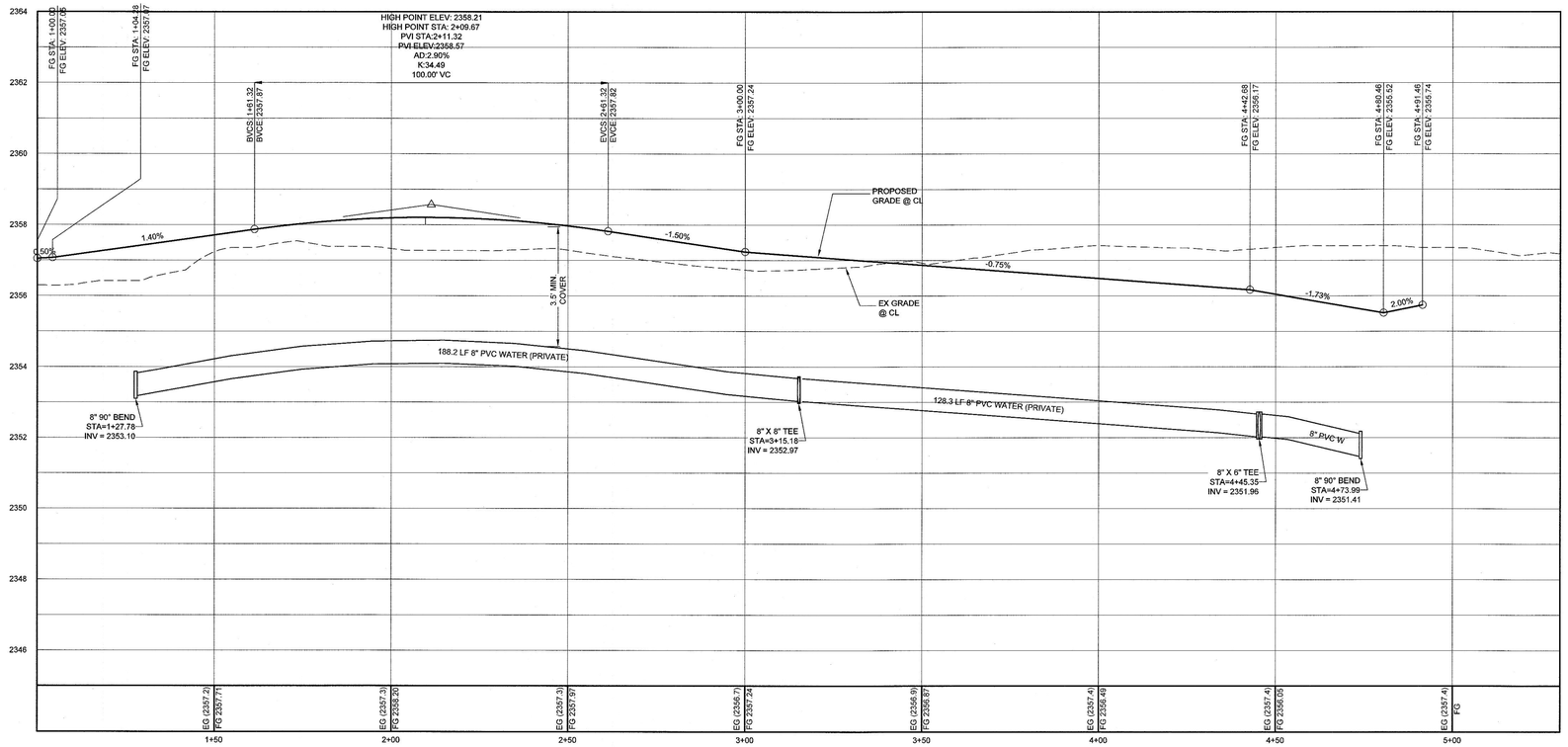
Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811 OR 1-800-227-2600

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNEX\PS\DWGS\SHEET DWGS\LEN002_SHT_DET.DWG


STREET A
(PRIVATE)
SKY POINTE DR.
STREET G
SEE SHEET PP9
STREET B
SEE SHEET PP9
8" PVC W
CE-A
CE-A
10+00
11+00
4+00
2.08%
1.42%
0.52%
1.69%
STA 4+00.00
BOR
STA 9+67.82
BVC
STA 10+67.82
EVC
STA 11+27.82
EVC
STA 11+81.03
EVC
44' X 15' LOT LINE DRAINAGE EASEMENT
EX 10" PVC W
EX 8" PVC W
EX 8" SEWER
EX 24" SD
EX 36" SD
EX 18" SD
EX 8" SEWER
EX 8" SEWER
EX MANHOLE
EX MANHOLE
EX MANHOLE



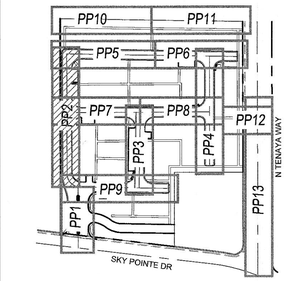
STREET B (PRIVATE) - PLAN
STA: 1+00.00 TO 5+30.46



STREET B (PRIVATE) - PROFILE
STA: 1+00.00 TO 5+30.46
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



CONSTRUCTION NOTES

1	24" L-TYPE CURB & GUTTER (CCAUSD #216)	2	6" HIGH A-TYPE CURB (CCAUSD #219)
3	R-TYPE CURB (CCAUSD #217.3.S1)	4	5' WIDE SIDEWALK (CCAUSD #234)
5	3 - 5'X5' JENSEN PRECAST DROP INLETS	6	48" TYPE II STORM DRAIN MANHOLE (CCAUSD#405)
7	DROP INLET CONCRETE APRON (NDOT R-4.2.7, SEE DETAIL N/GD1)	8	2' VALLEY GUTTER (DETAIL J/GD1)
9	8' CROSS GUTTER (CCAUSD#228)	10	REMOVE EXISTING CURB
11	REMOVE EXISTING CHAIN-LINK FENCE	12	REMOVE EXISTING HANDICAP RAMP
13	REMOVE EXISTING VALLEY GUTTER	14	INSTALL SIDEWALK DRAIN (CCAUSD#236)
15	INSTALL 5' CURB CUT (DETAIL Q/GD1)	16	INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)
17	INSTALL ACCESS GATE (DETAIL P/GD1)	18	INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19	REMOVE EXISTING ASPHALT ROAD	20	CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21	CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')		

DEPTH OF COVER DURING CONSTRUCTION
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

WATER MAIN JOINT DEFLECTION NOTE (PVC 4"-24")

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MAXIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02.

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTING SHALL BE USED.

Call before you Dig
Avoid cutting underground utility lines. it's costly.
CALL 811 OR 1-800-227-2600

Avoid overhead power line contact. It's costly.
Call before you Overhead
1-702-227-2929

GEOTECHNICAL
FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

UTILITY DISCLAIMER
EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 EXISTING LOCATIONS.

LINE AND CURVE DATA
FOR LINE AND CURVE DATA TABLES, SEE THE GRADING PLAN SHEETS FOR THIS PROJECT.

PROFILE NOTES
ADD 2300 FEET TO ALL GRADE TAGS TO GET ACTUAL ELEVATION.

ALL PRIVATE STREETS AND DRAINAGE EASEMENTS ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION (H.O.A.).

ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENTS HAVE BEEN OBTAINED FROM THE OFFSITE OWNER AND GIVEN TO GOVERNING ENTITY.

BENCHMARK
CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY:_____
DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5333

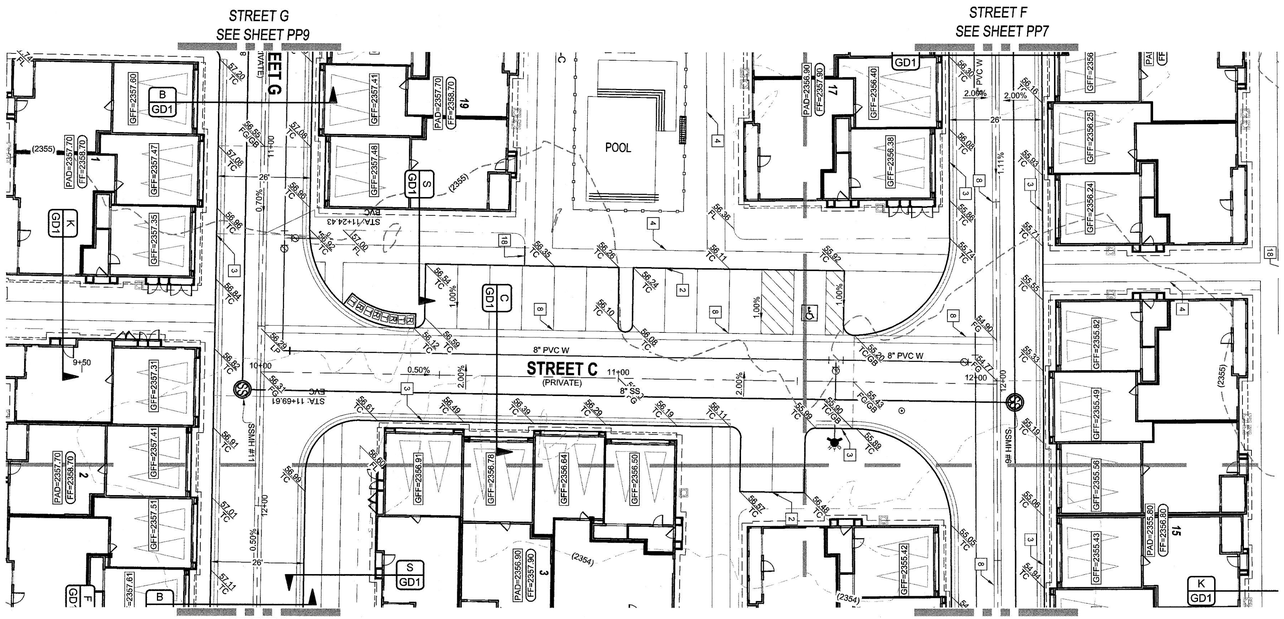
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 2
STREET B
STA 1+00.00 TO STA 5+30.46

REGISTERED PROFESSIONAL ENGINEER
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22616
7-27-19

DATE: 3/27/2019
SCALE: 1"=20'
JOB NO: LEN-18-002
DESIGNED BY: SF CHECKED BY: RC
SHEET NAME: PP2
SHEET NUMBER: 10 OF 30
CLV 0000000

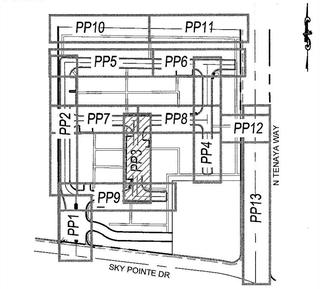
LAST PLOT: Jeff Thomas
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNE\ENGR\PSD\WGS\SHEET DWGS\LEN002_SHT_PROF1.DWG



STREET C (PRIVATE) - PLAN
STA: 9+50.00 TO 12+55.87

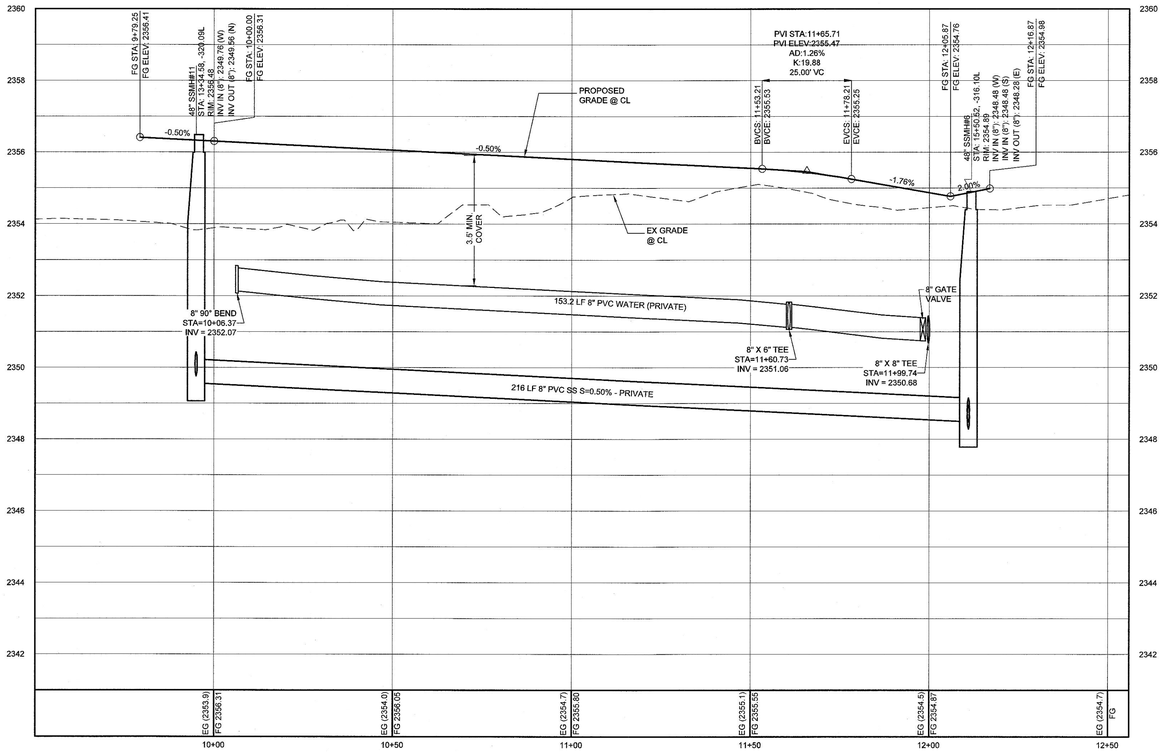
SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



CONSTRUCTION NOTES

1. 24" L-TYPE CURB & GUTTER (CCAUSD #216)
2. 6" HIGH A-TYPE CURB (CCAUSD #219)
3. R-TYPE CURB (CCAUSD #217.3.S1)
4. 5' WIDE SIDEWALK (CCAUSD #234)
5. 3 - 5'X5' JENSEN PRECAST DROP INLETS
6. 48" TYPE II STORM DRAIN MANHOLE (CCAUSD#405)
7. DROP INLET CONCRETE APRON (NDOT R-4.2.7, SEE DETAIL N/GD1)
8. 2' VALLEY GUTTER (DETAIL J/GD1)
9. 8' CROSS GUTTER (CCAUSD#228)
10. REMOVE EXISTING CURB
11. REMOVE EXISTING CHAIN-LINK FENCE
12. REMOVE EXISTING HANDICAP RAMP
13. REMOVE EXISTING VALLEY GUTTER
14. INSTALL SIDEWALK DRAIN (CCAUSD#236)
15. INSTALL 5' CURB CUT (DETAIL O/GD1)
16. INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)
17. INSTALL ACCESS GATE (DETAIL P/GD1)
18. INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19. REMOVE EXISTING ASPHALT ROAD
20. CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21. CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')



STREET C (PRIVATE) - PROFILE
STA: 9+50.00 TO 12+55.87
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

DEPTH OF COVER DURING CONSTRUCTION
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

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OR
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1-702-227-2929

GEOTECHNICAL
FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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LINE AND CURVE DATA
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PROFILE NOTES
ADD 2300 FEET TO ALL GRADE TAGS TO GET ACTUAL ELEVATION.

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BENCHMARK
CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX, FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM; ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY:
DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 921-4603 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NEVADA 89118
(702) 362-8844 FAX: (702) 362-5233

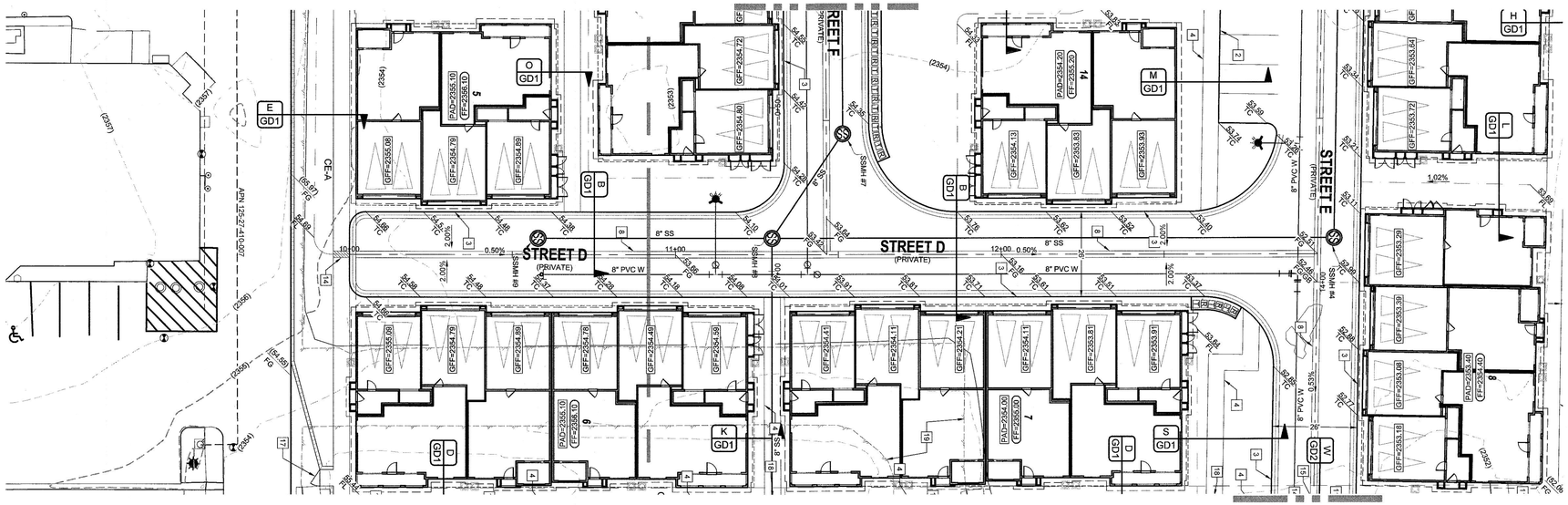
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 3
STREET C
STA 9+50.00 TO STA 12+55.87

STANLEY FONG Exp. 6-30-19 CIVIL No. 22616 — REGISTERED PROFESSIONAL ENGINEER — STATE OF NEVADA
7-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	PP3
SHEET NUMBER:	11 OF 30
---	---
CLV	0000000

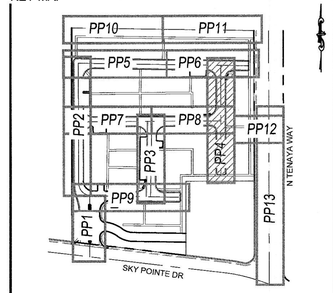
LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNIE\GUIPS\DWGS\SHEET DWGS\LEN002_SHT_PROF1.DWG



STREET D (PRIVATE) - PLAN
STA: 9+00.00 TO 13+47.03

STREET E
SEE SHEET PP6

KEY MAP



CONSTRUCTION NOTES

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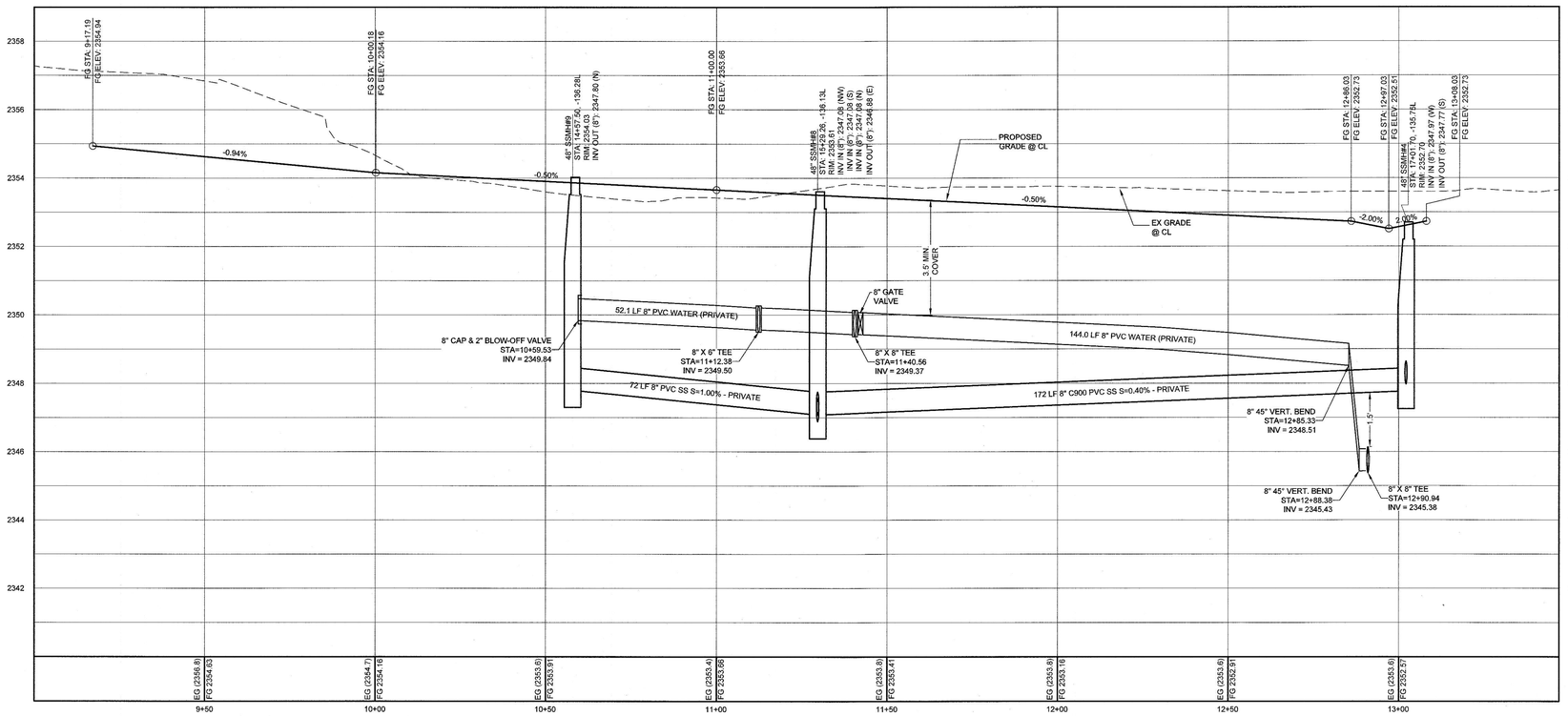
19. REMOVE EXISTING ASPHALT ROAD
20. CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21. CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')



STREET D (PRIVATE) - PROFILE
STA: 9+00.00 TO 13+47.03
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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BENCHMARK

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ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY:
DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 735-9100

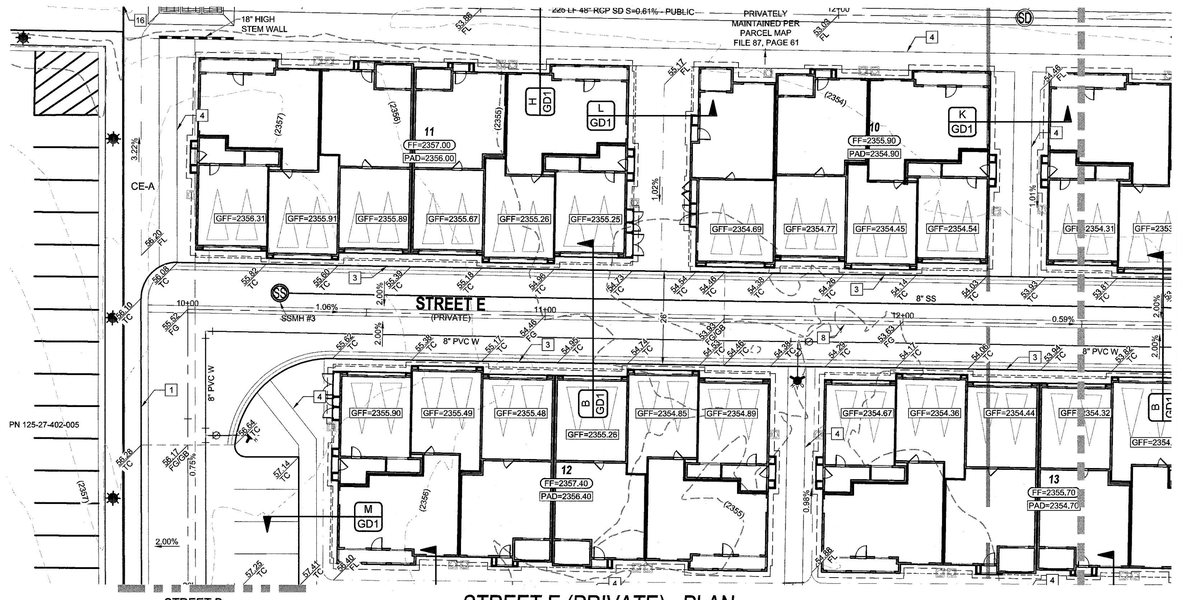
STANLEY CONSULTANTS
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5223

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 4
STREET D
STA 9+00.00 TO STA 13+47.03

STANLEY FONG Exp. 6-30-19 CIVIL No. 22616 REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA

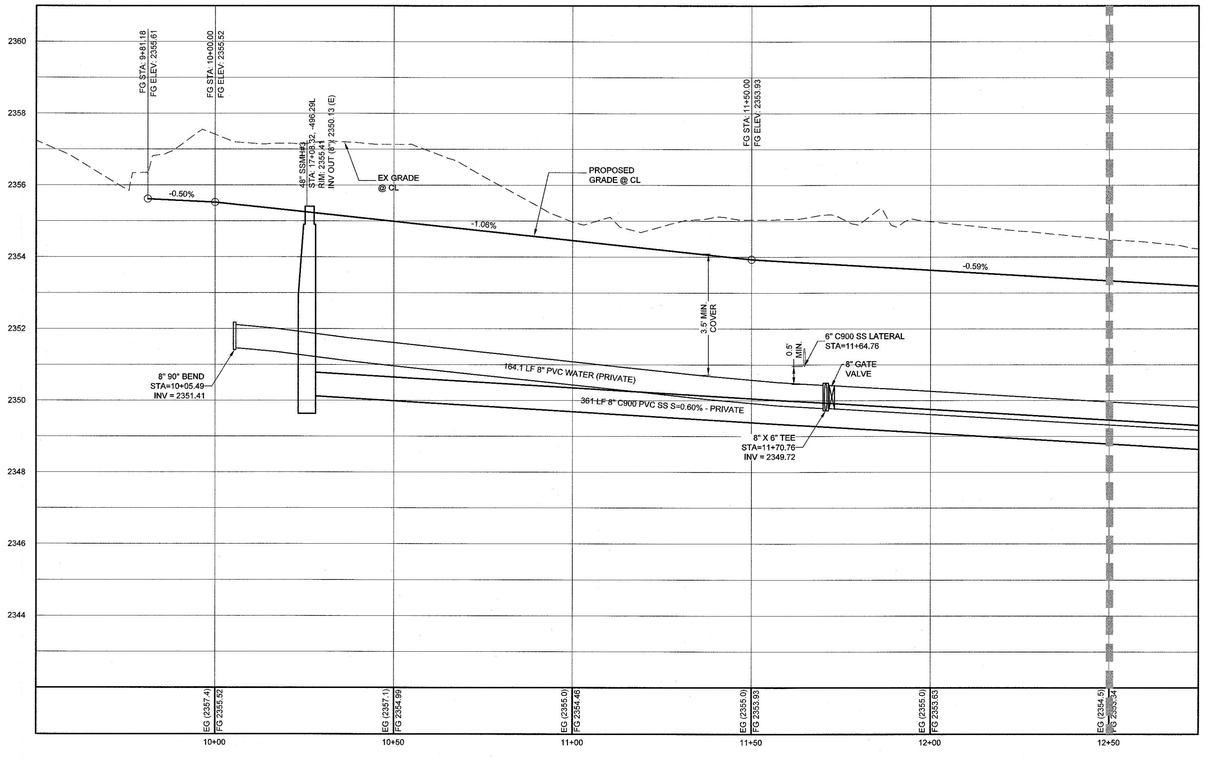
DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	PP4
SHEET NUMBER:	12 OF 30
CLV	0000000

LAST PLOT: Jeff Thomsen
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANN\ENG\PS\DWGS\SHEET DWGS\LEN002_SHT_PROF1.DWG



STREET B
SEE SHEET PP2

STREET E (PRIVATE) - PLAN
STA: 9+50.00 TO 12+50.00

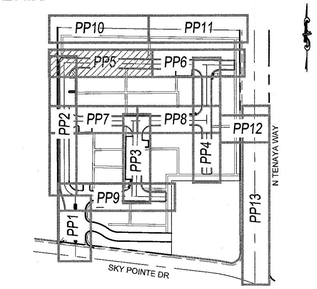


MATCHLINE STA: 12+50 SEE SHEET PP6

STREET E (PRIVATE) - PROFILE
STA: 9+50.00 TO 12+50.00
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



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19	REMOVE EXISTING ASPHALT ROAD
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GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY:
DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SH'TS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4663 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

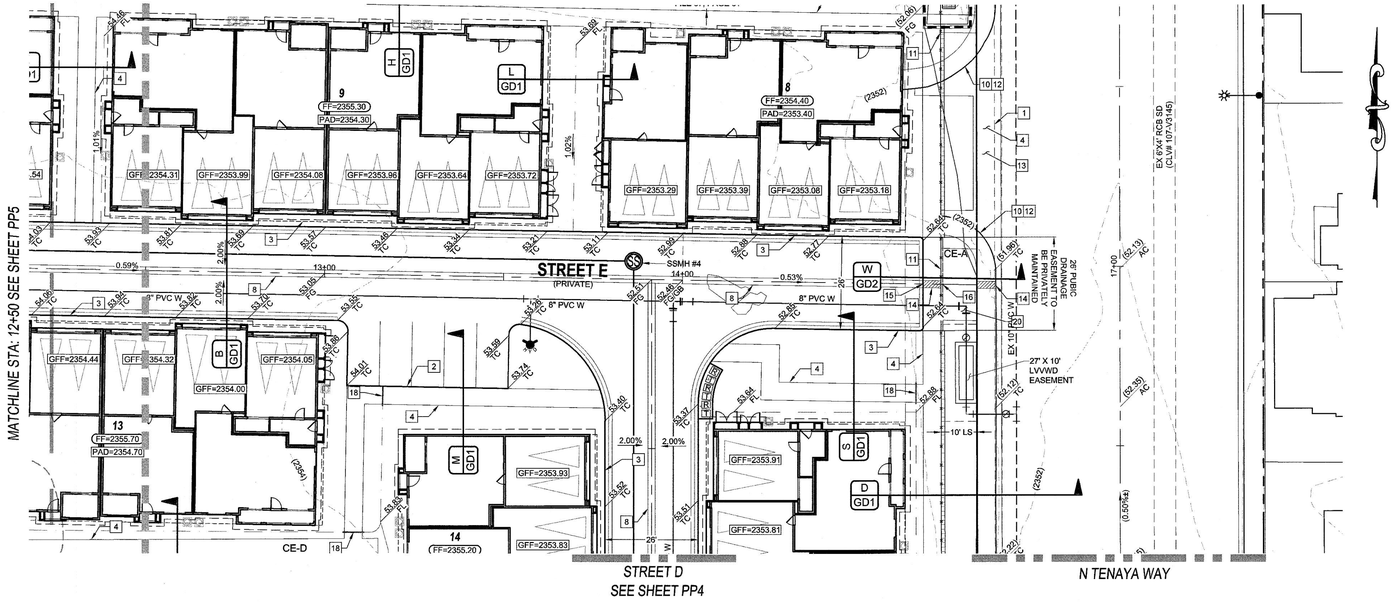
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 5
STREET E
STA 9+50.00 TO STA 12+50.00

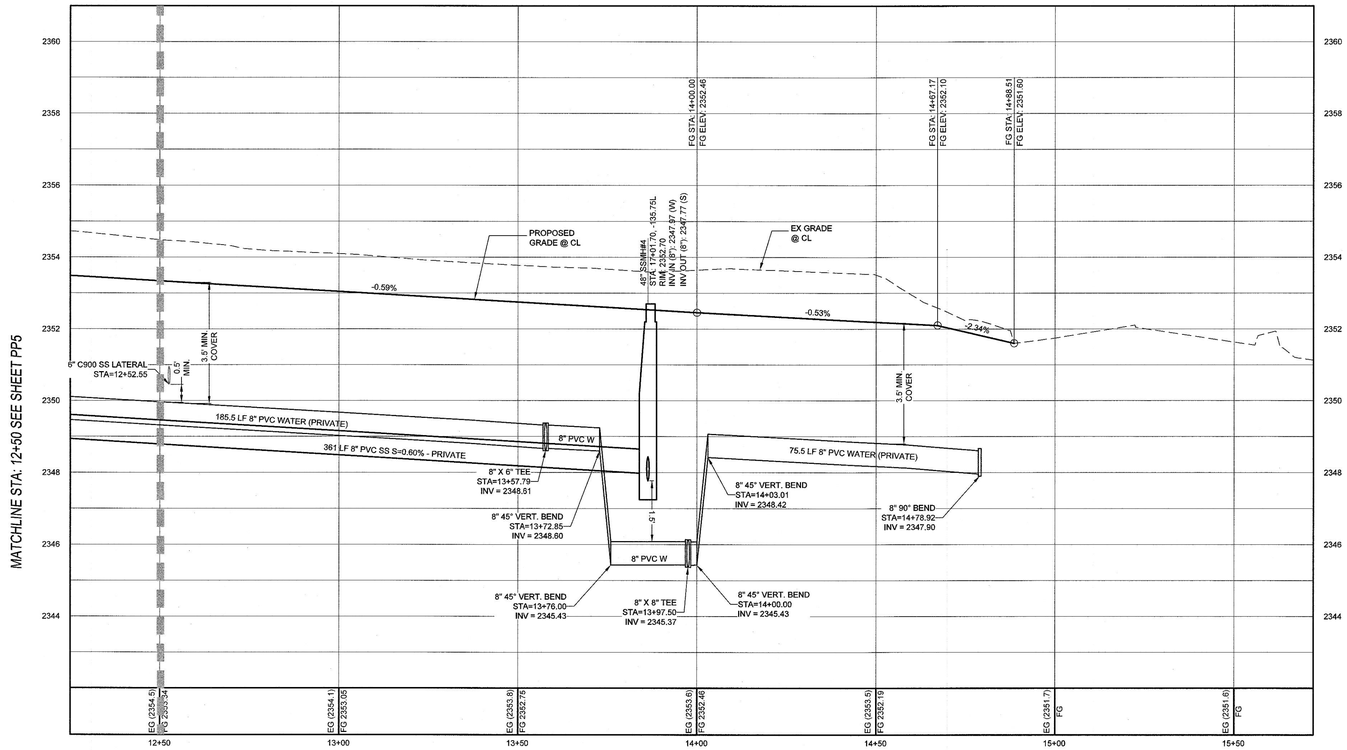
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22816
3-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY:	SF
CHECKED BY:	RC
SHEET NAME:	PP5
SHEET NUMBER:	13 OF 30
	CLV 0000000

LAST PLOT: jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANN\ENGR\PS\DWGS\SHEET DWGS\LEN002_SHT_PROF1.DWG



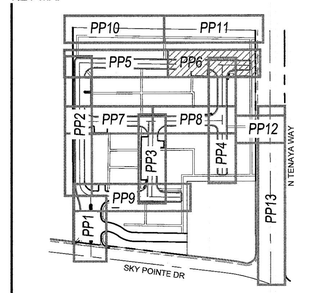
STREET E (PRIVATE) - PLAN
STA: 12+50.00 TO 15+72.18



STREET E (PRIVATE) - PROFILE
STA: 12+50.00 TO 15+72.18
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



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GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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APPROVED FOR CONSTRUCTION

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PROJECT# 122XXX. FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY: DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SH'TS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 739-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

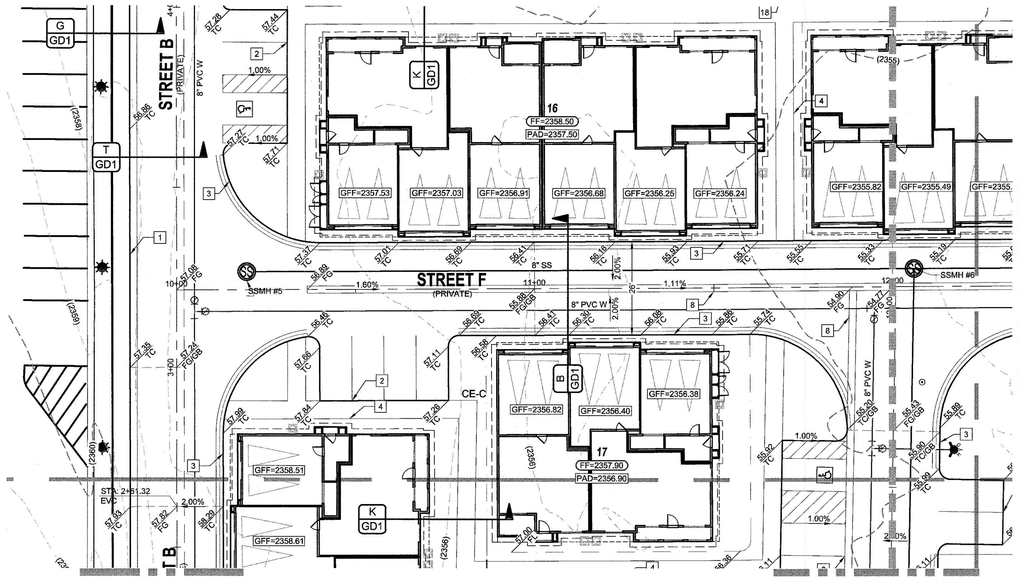
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AN DPROFILE 6
STREET E
STA 12+50.00 TI STA 15+72.18

STANLEY FONG Exp. 6-30-19 CIVIL No 22616 — 3-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	PP6
SHEET NUMBER:	14 OF 30
---	---
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LEN\MARLEN-18-002 - TENAYA & ANN\ENG\PS\DWGS\SHEET DWGS\LEN002_SHT_PROF1.DWG



STREET B
SEE SHEET PP2

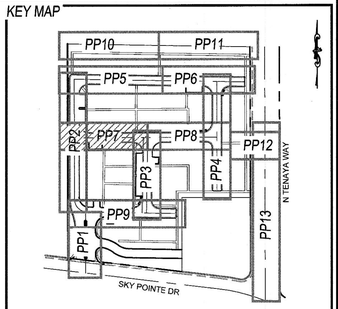
STREET F (PRIVATE) - PLAN
STA: 9+50.00 TO 12+00.00

STREET B
SEE SHEET PP2

STREET F (PRIVATE) - PROFILE
STA: 9+50.00 TO 12+00.00
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



CONSTRUCTION NOTES

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2 — 6" HIGH A-TYPE CURB (CCAUSD #219)
3 — R-TYPE CURB (CCAUSD #217.3.S1)
4 — 5' WIDE SIDEWALK (CCAUSD #234)
5 — 3 - 5'X5' JENSEN PRECAST DROP INLETS
6 — 48" TYPE II STORM DRAIN MANHOLE (CCAUSD#405)
7 — DROP INLET CONCRETE APRON (NDOT R-4.2.7, SEE DETAIL N/GD1)
8 — 2' VALLEY GUTTER (DETAIL J/GD1)
9 — 8' CROSS GUTTER (CCAUSD#228)
10 — REMOVE EXISTING CURB
11 — REMOVE EXISTING CHAIN-LINK FENCE
12 — REMOVE EXISTING HANDICAP RAMP
13 — REMOVE EXISTING VALLEY GUTTER
14 — INSTALL SIDEWALK DRAIN (CCAUSD#236)
15 — INSTALL 5' CURB CUT (DETAIL O/GD1)
16 — INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)
17 — INSTALL ACCESS GATE (DETAIL P/GD1)
18 — INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19 — REMOVE EXISTING ASPHALT ROAD
20 — CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21 — CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')

GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

UTILITY DISCLAIMER

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LINE AND CURVE DATA

FOR LINE AND CURVE DATA TABLES, SEE THE GRADING PLAN SHEETS FOR THIS PROJECT.

PROFILE NOTES

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BENCHMARK

CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

DEPTH OF COVER DURING CONSTRUCTION
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

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Call before you Dig
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CALL 811 OR 1-800-227-2600

Avoid overhead power line contact. It's costly.
Call before you Overhead
1-702-227-2929

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT#: 122XXX, FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY:
DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4663 FAX: (702) 739-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NEVADA 89118
(702) 362-8844 FAX: (702) 362-9333

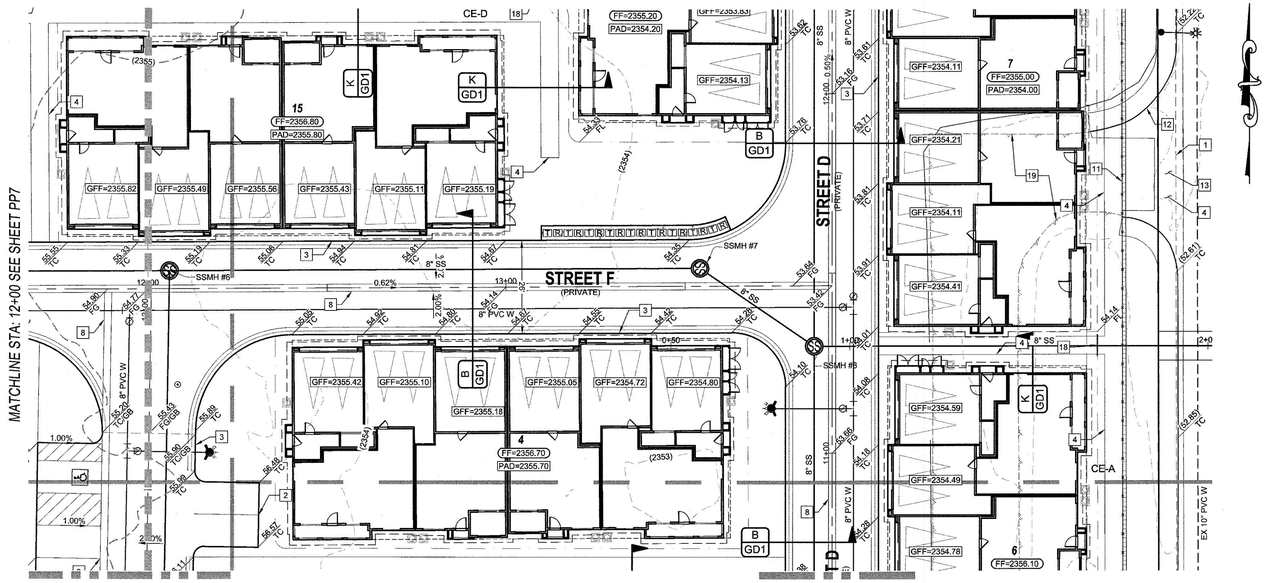
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 7
STREET F
STA 9+50.00 TO STA 12+00.00

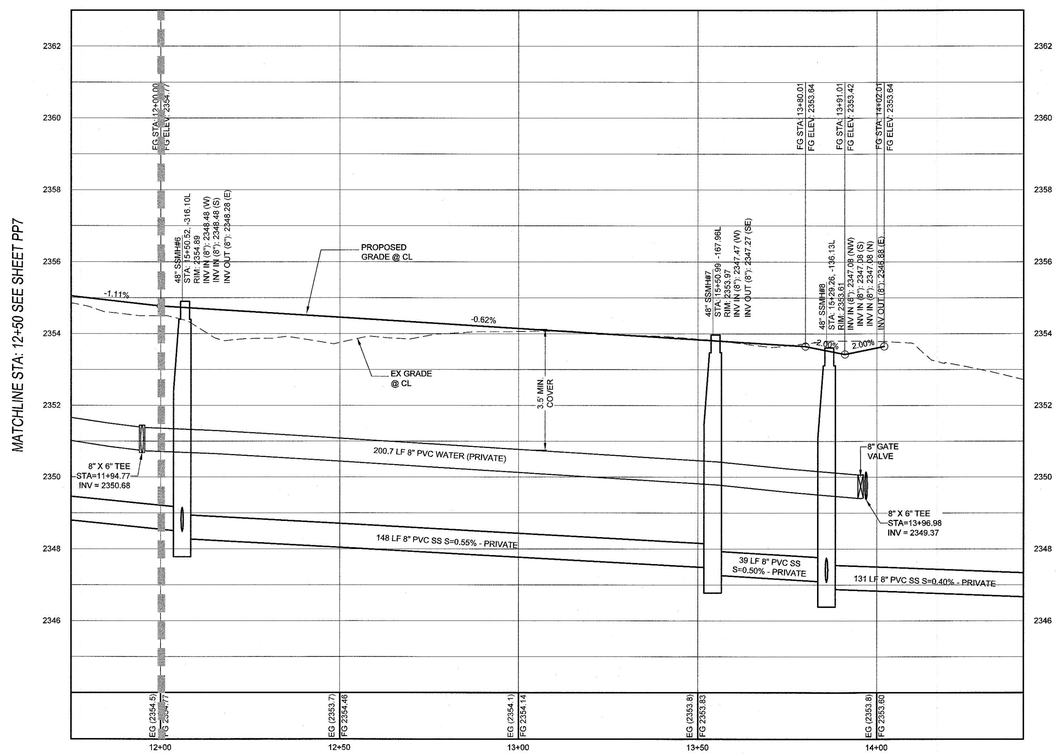
PROFESSIONAL ENGINEER — STANLEY FONG — Exp. 6-30-19 — CIVIL — No. 22616 — STATE OF NEVADA
3-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY:	SF
CHECKED BY:	RC
SHEET NAME:	PP7
SHEET NUMBER:	15 OF 30
	--- ---
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANN\ENG\PS\DWGS\SHEET DWGS\LEN002_SHT_PROF2.DWG



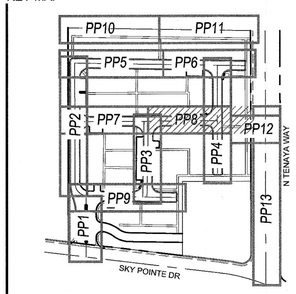
STREET F (PRIVATE) - PLAN
STA: 12+00.00 TO 14+41.00



STREET F (PRIVATE) - PROFILE
STA: 12+00.00 TO 14+41.00
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



CONSTRUCTION NOTES

1	24" L-TYPE CURB & GUTTER (CCAUSD #216)	
2	6" HIGH A-TYPE CURB (CCAUSD #219)	
3	R-TYPE CURB (CCAUSD #217.3.S1)	
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5	3 - 5'X5' JENSEN PRECAST DROP INLETS	
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8	2' VALLEY GUTTER (DETAIL J/GD1)	
9	6' CROSS GUTTER (CCAUSD#228)	
10	REMOVE EXISTING CURB	
11	REMOVE EXISTING CHAIN-LINK FENCE	
12	REMOVE EXISTING HANDICAP RAMP	
13	REMOVE EXISTING VALLEY GUTTER	
14	INSTALL SIDEWALK DRAIN (CCAUSD#236)	
15	INSTALL 5' CURB CUT (DETAIL Q/GD1)	
16	INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)	
17	INSTALL ACCESS GATE (DETAIL P/GD1)	
18	INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)	
19	REMOVE EXISTING ASPHALT ROAD	
20	CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)	
21	CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')	

GEOTECHNICAL
FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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LINE AND CURVE DATA
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NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

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ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

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1-702-227-2929

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY: DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4903 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

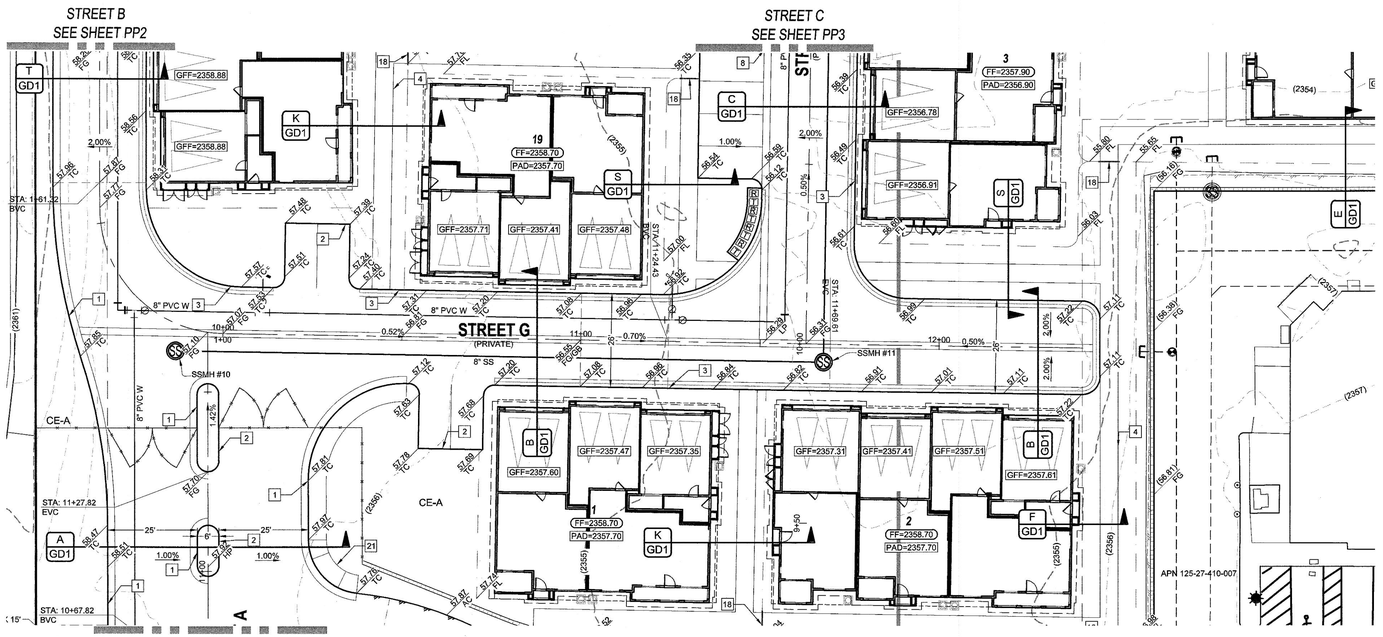
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 8
STREET F
STA: 12+00.00 TO 14+41.00

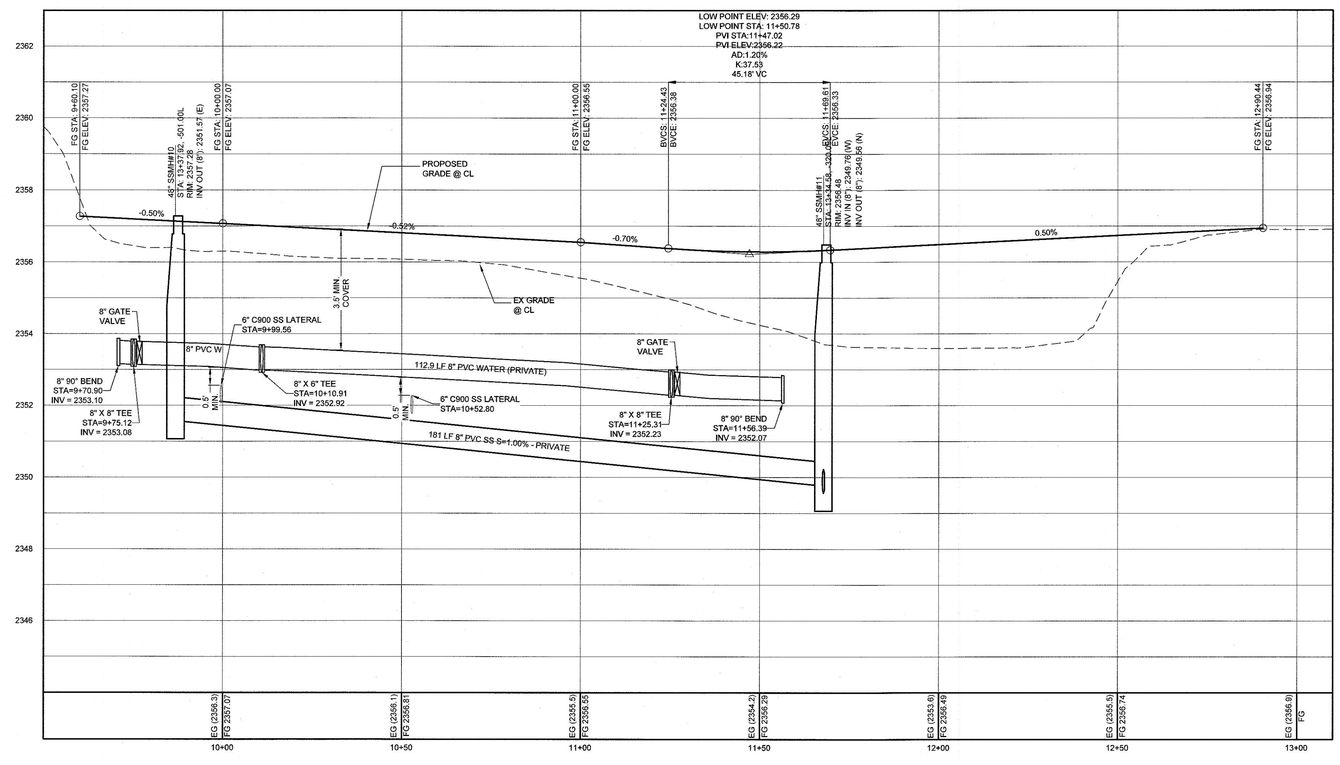
PROFESSIONAL ENGINEER STATE OF NEVADA
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22616
3-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY:	SF
CHECKED BY:	RC
SHEET NAME:	PP8
SHEET NUMBER:	16 OF 30
	CLV 0000000

LAST PLOT: Jeff Thomsen
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANN\ENG\PS\DWGS\SHEET DWGS\LEN002_SHT_PROF2.DWG



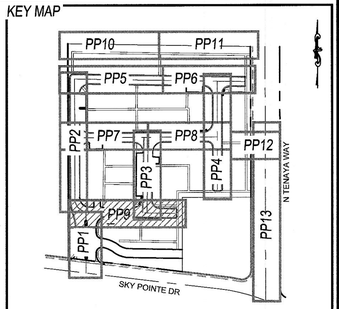
STREET G (PRIVATE) - PLAN
STA: 9+50.00 TO 13+10



STREET G (PRIVATE) - PROFILE
STA: 9+50.00 TO 13+10
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



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1. 24" L-TYPE CURB & GUTTER (CCAUSD #216)
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18. INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19. REMOVE EXISTING ASPHALT ROAD
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21. CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=6')

GEOTECHNICAL
FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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BENCHMARK
CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

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ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY: DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 739-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NEVADA 89118
(702) 362-8844 FAX: (702) 362-5233

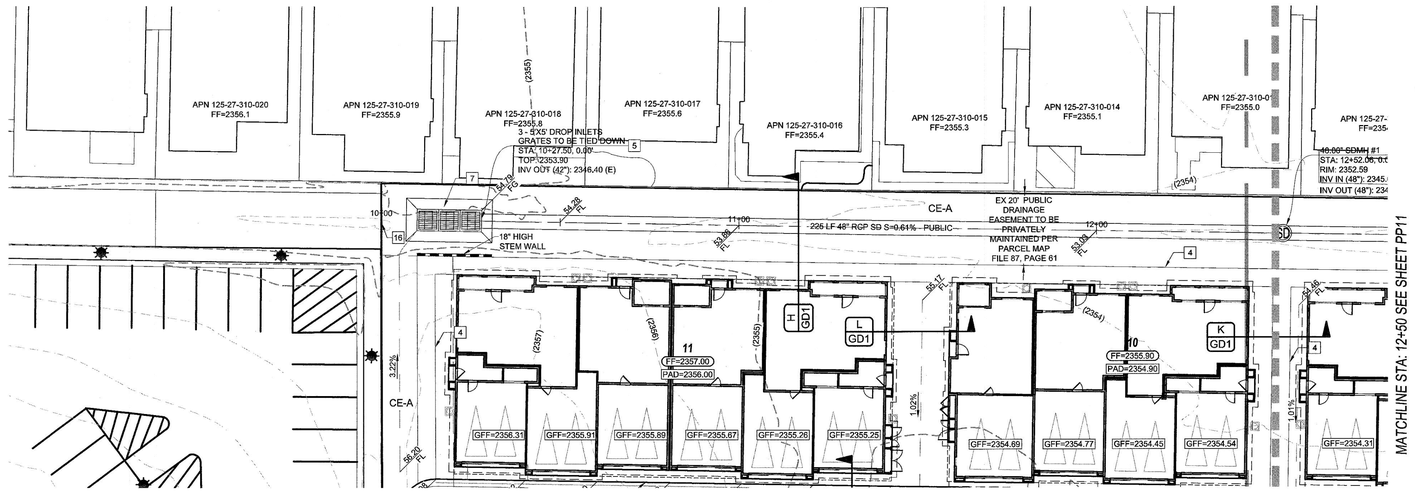
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 9
STREET G
STA: 9+50.00 TO 13+10

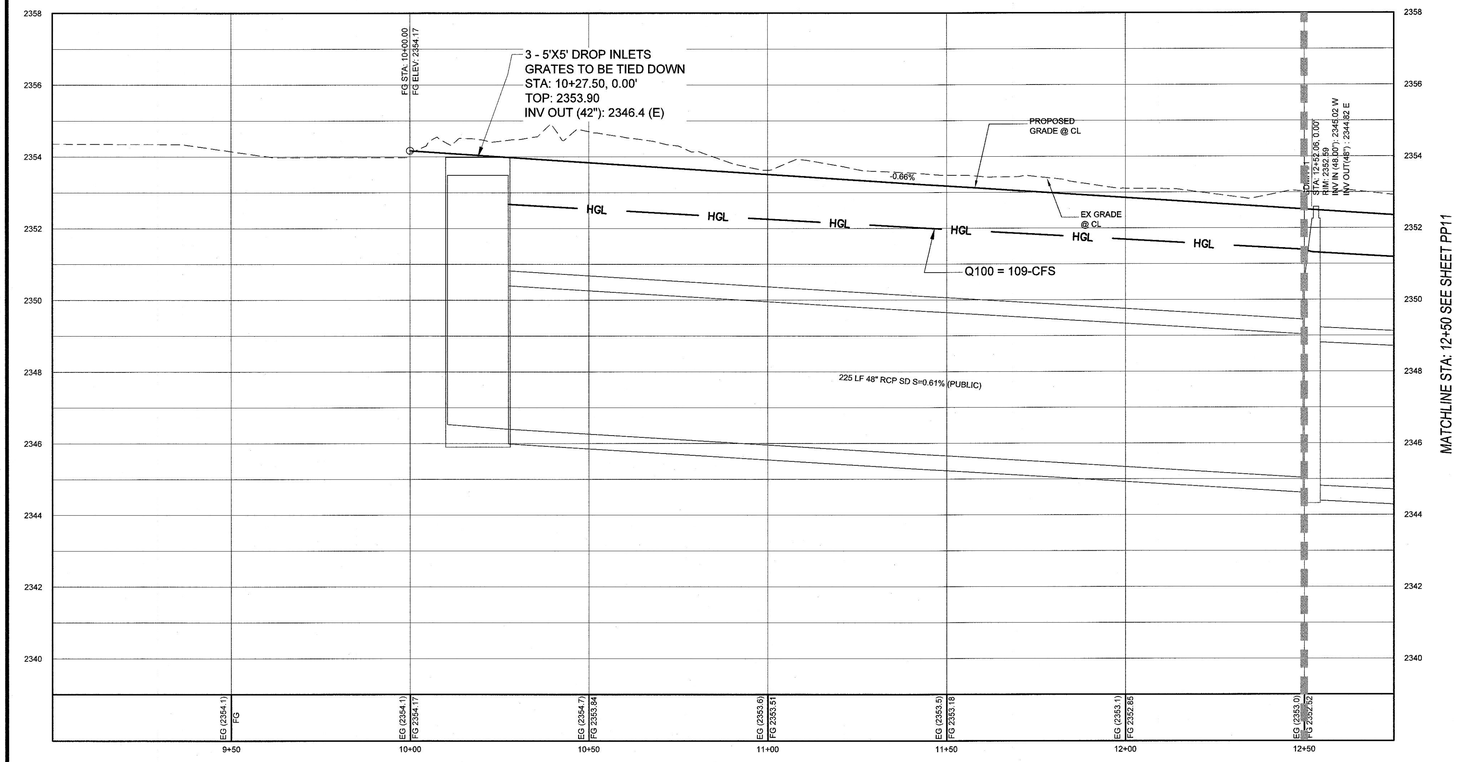
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22816
7-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	PP9
SHEET NUMBER:	17 OF 30
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNEN\GUIP\SDWS\SHEET DWGS\LEN002_SHT_PROF2.DWG



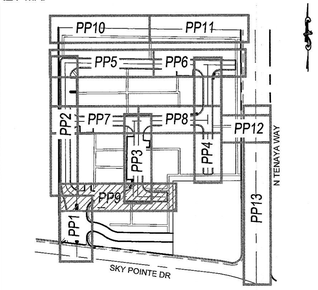
NORTH STORM DRAIN (PUBLIC) - PLAN
STA: 9+00.00 TO 12+50.00



NORTH STORM DRAIN (PUBLIC) - PROFILE
STA: 9+00.00 TO 12+50.00
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



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21. CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')

GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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BENCHMARK

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NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY: DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 735-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NEVADA 89118
(702) 362-8844 FAX: (702) 362-5233

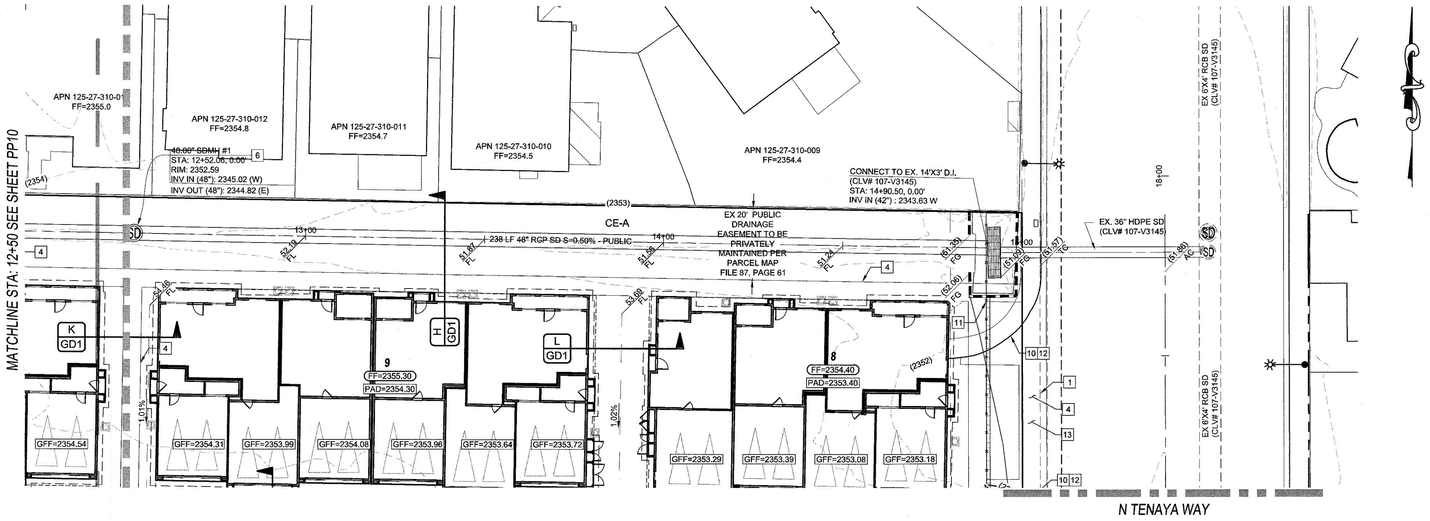
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 10
NORTH STORM DRAIN
STA: 9+00.00 TO 12+50.00

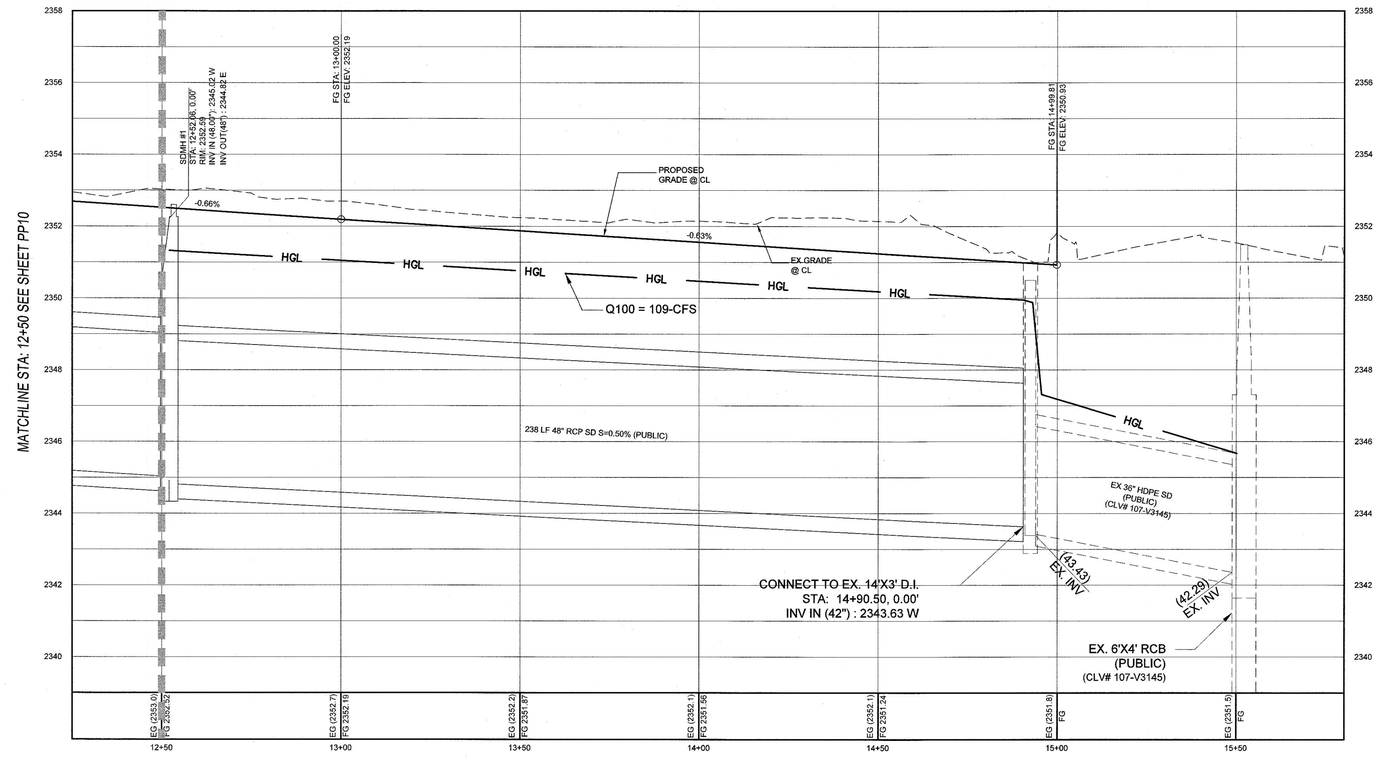
PROFESSIONAL ENGINEER STANLEY FONG No. 22816 STATE OF NEVADA
STANLEY FONG
Exp. 6-30-19
CIVIL
3-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY:	SF
CHECKED BY:	RC
SHEET NAME:	PP10
SHEET NUMBER:	18 OF 30
---	---
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNE\ENGR\SD\WCS\SHEET DWCS\SLEN002_SHT_PROF2.DWG



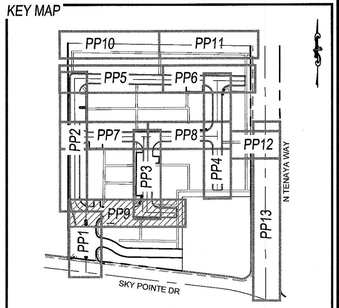
NORTH STORM DRAIN (PUBLIC) - PLAN
STA: 12+50.00 TO 15+80.00



NORTH STORM DRAIN (PUBLIC) - PROFILE
STA: 12+50.00 TO 15+80.00
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



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2 — 6" HIGH A-TYPE CURB (CCAUSD #219)
3 — R-TYPE CURB (CCAUSD #217,S1)
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7 — DROP INLET CONCRETE APRON (NDOT R-4.2.7, SEE DETAIL N/GD1)
8 — 2' VALLEY GUTTER (DETAIL J/GD1)
9 — 8' CROSS GUTTER (CCAUSD#228)
10 — REMOVE EXISTING CURB
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15 — INSTALL 5' CURB CUT (DETAIL Q/GD1)
16 — INSTALL WROUGHT IRON FENCE (DETAIL R/GD1)
17 — INSTALL ACCESS GATE (DETAIL P/GD1)
18 — INSTALL SIDEWALK PIPE DRAIN (DETAIL U/GD1)
19 — REMOVE EXISTING ASPHALT ROAD
20 — CONCRETE LINED DRAINAGE EASEMENT (DETAIL X/GD2)
21 — CONSTRUCT SIDEWALK RAMP (CCAUSD #235) - CASE 1 (A=8' / B=8')

NO.	DESCRIPTION	BY	SH'S.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4903 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NEVADA 89118
(702) 362-8844 FAX: (702) 362-6233

EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
PLAN AND PROFILE 11
NORTH STORM DRAIN
STA: 12+50.00 TO 15+80.00

GEOTECHNICAL
FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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BENCHMARK
CITY OF LAS VEGAS BENCHMARK 1LV90-28NE6
NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY:_____
DEVELOPMENT AND FLOOD CONTROL DATE

DEPTH OF COVER DURING CONSTRUCTION
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

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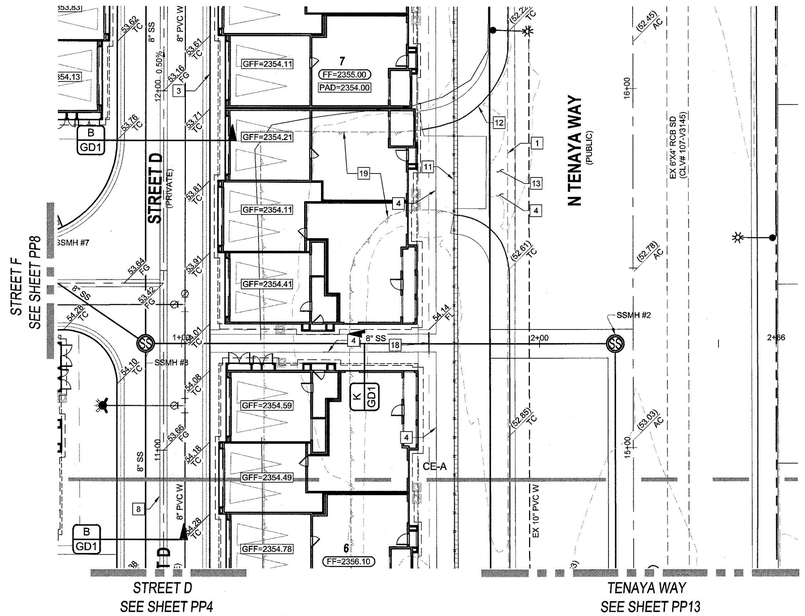
Call before you Overhead
1-702-227-2929

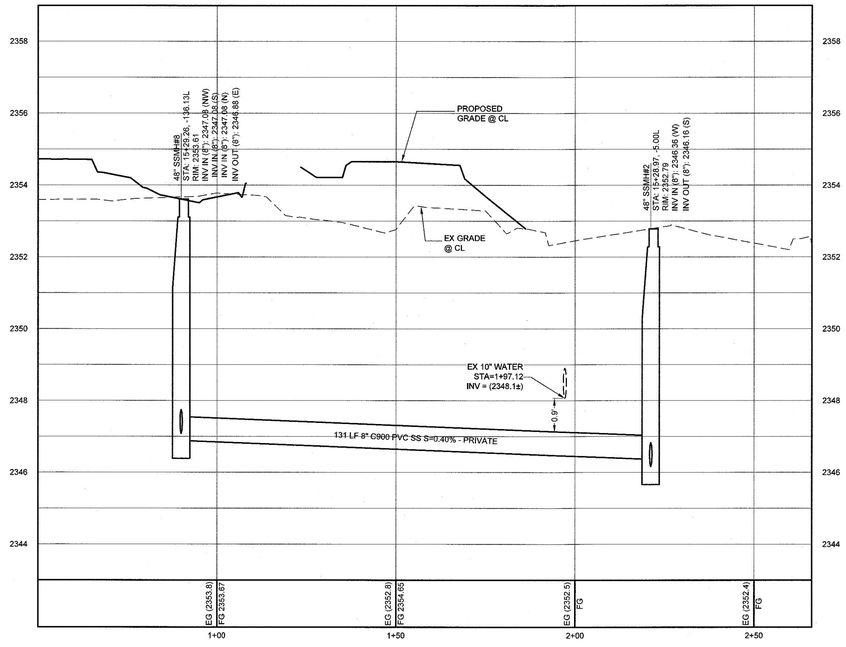
REGISTERED PROFESSIONAL ENGINEER — STANLEY FONG — Exp. 6-30-19 CIVIL — No. 22616 — STATE OF NEVADA — 3-27-19

DATE:	3/27/2019
SCALE:	1"=20'
JOB NO:	LEN-18-002
DESIGNED BY:	SF
CHECKED BY:	RC
SHEET NAME:	PP11
SHEET NUMBER:	19 OF 30
	CLV 0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANN\ENGR\PS\DWGS\SHEET DWGS\LEN002_SHT_PROF2.DWG



SEWER EASEMENT (PRIVATE) - PLAN
STA: 0+50.00 TO 2+50.00



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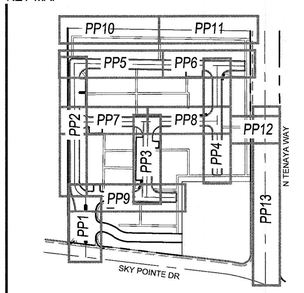
STA: 0+50.00 TO 2+50.00
SCALE: 1"=20' HORIZONTAL; 1"=2' VERTICAL

SCALE: 1" = 20'
20' 10' 20' 40' 60'

KEY MAP



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NO.	DESCRIPTION	BY	APPR.	DATE
	REVISIONS			

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4603 FAX: (702) 736-9100

TANEY ENGINEERING
6030 S. JONES BOULEVARD
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-6333

EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
SEWER EASEMENT

GEOTECHNICAL
FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
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NAVD88 ELEV: 731.7444 METERS (2400.73 FEET)

USC & GS BRASS CAP BM #U365, 200' W OF US 95 & 900' S OF CENTENNIAL PKWY.

ACCEPTANCE OF PLANS

SOUTHWEST GAS CORPORATION DATE

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE
LVVWD APPROVED FIRE FLOW: TOTAL: 1,750 GPM, ONSITE: 1,750 GPM

ACCEPTANCE OF PLANS FOR FILING

BY:
DEVELOPMENT AND FLOOD CONTROL DATE

REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22616
3-27-19

DATE:	3/27/2019
SCALE:	1"=30'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	PP12
SHEET NUMBER:	20 OF 30
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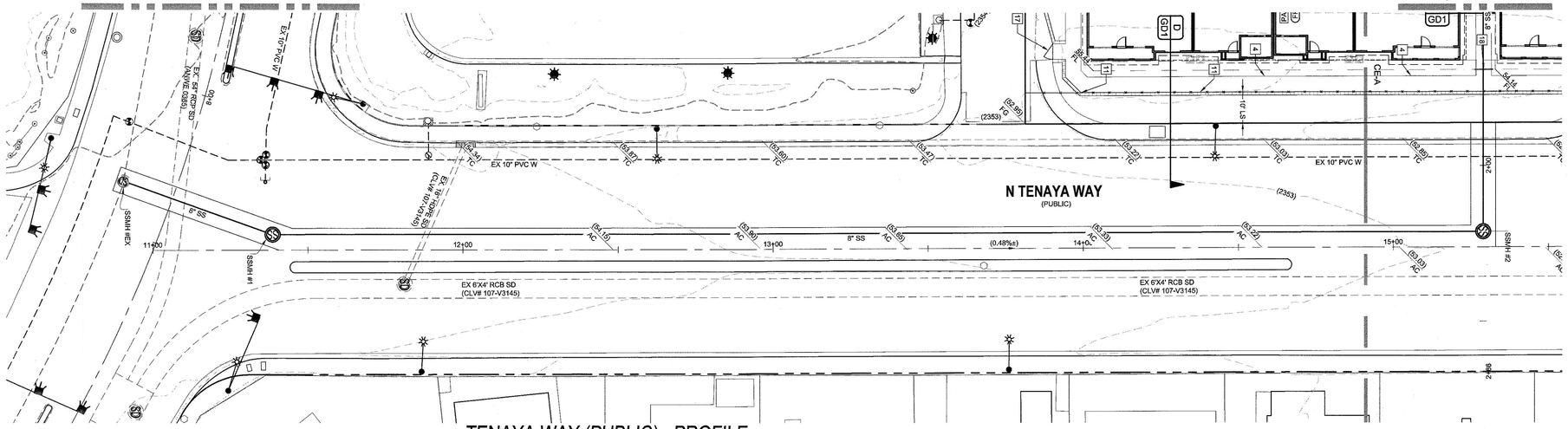
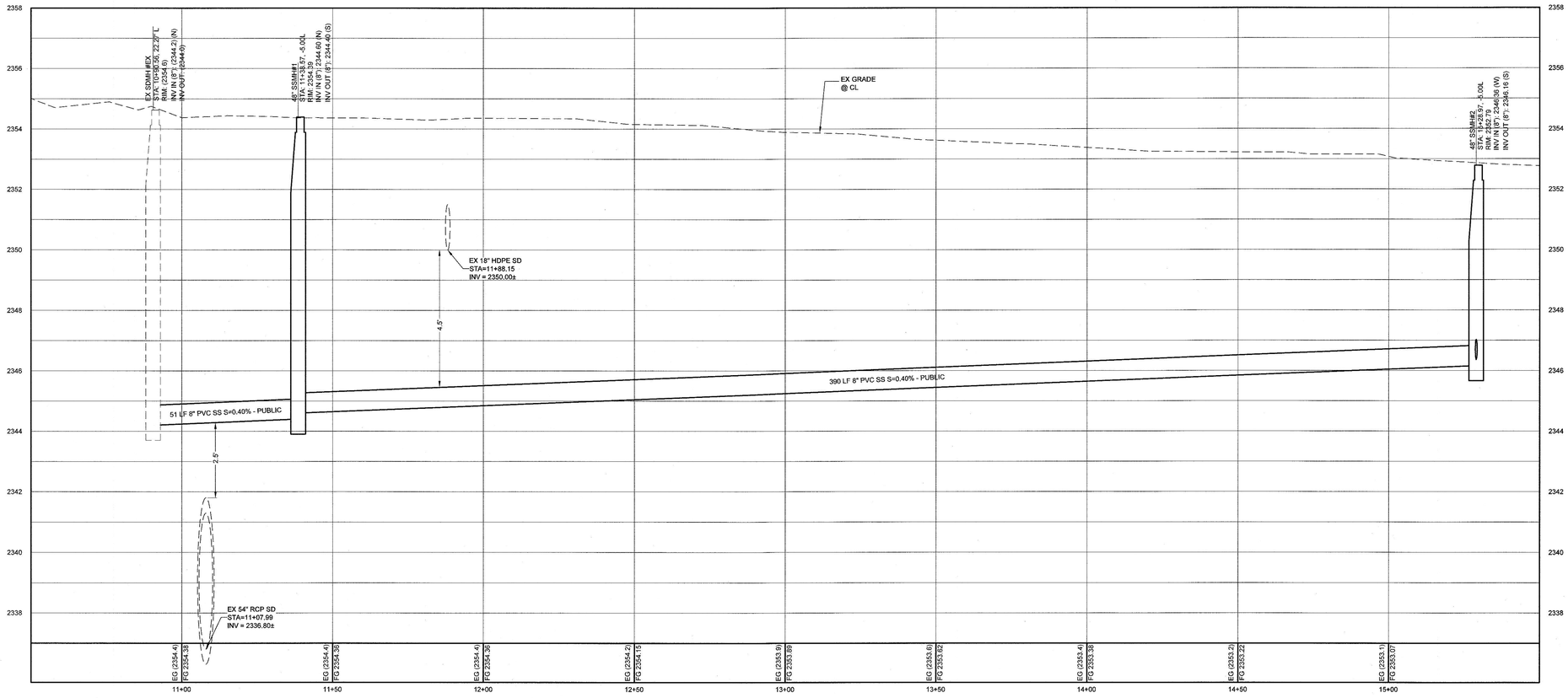
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\ACTIVE\LENNAR\LEN-18-002 - TENAYA & ANNEN\GIP\DWGS\SHEET DWGS\LEN002_SHT_PROF3.DWG



TENAYA WAY (PUBLIC) - PROFILE
STA: 10+50 TO 15+50



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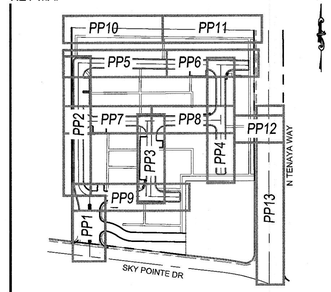

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GEOTECHNICAL

FIRM NAME
FIRM ADDRESS
LAS VEGAS, NV 89XXX
(702) XXX-XXXX

REPORT NO: XXXXX
DATE: XX/XX/XX

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LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT# 122XXX FIRST APPROVED DATE _____
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ACCEPTANCE OF PLANS FOR FILING

BY:_____
DEVELOPMENT AND FLOOD CONTROL DATE

NO.	DESCRIPTION	BY	SHTS.	APPR.	DATE
	REVISIONS				

LENNAR
9275 WEST RUSSELL ROAD, 4TH FLOOR
LAS VEGAS, NV 89148
(702) 821-4800 FAX: (702) 736-9100

TANEY ENGINEERING
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LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

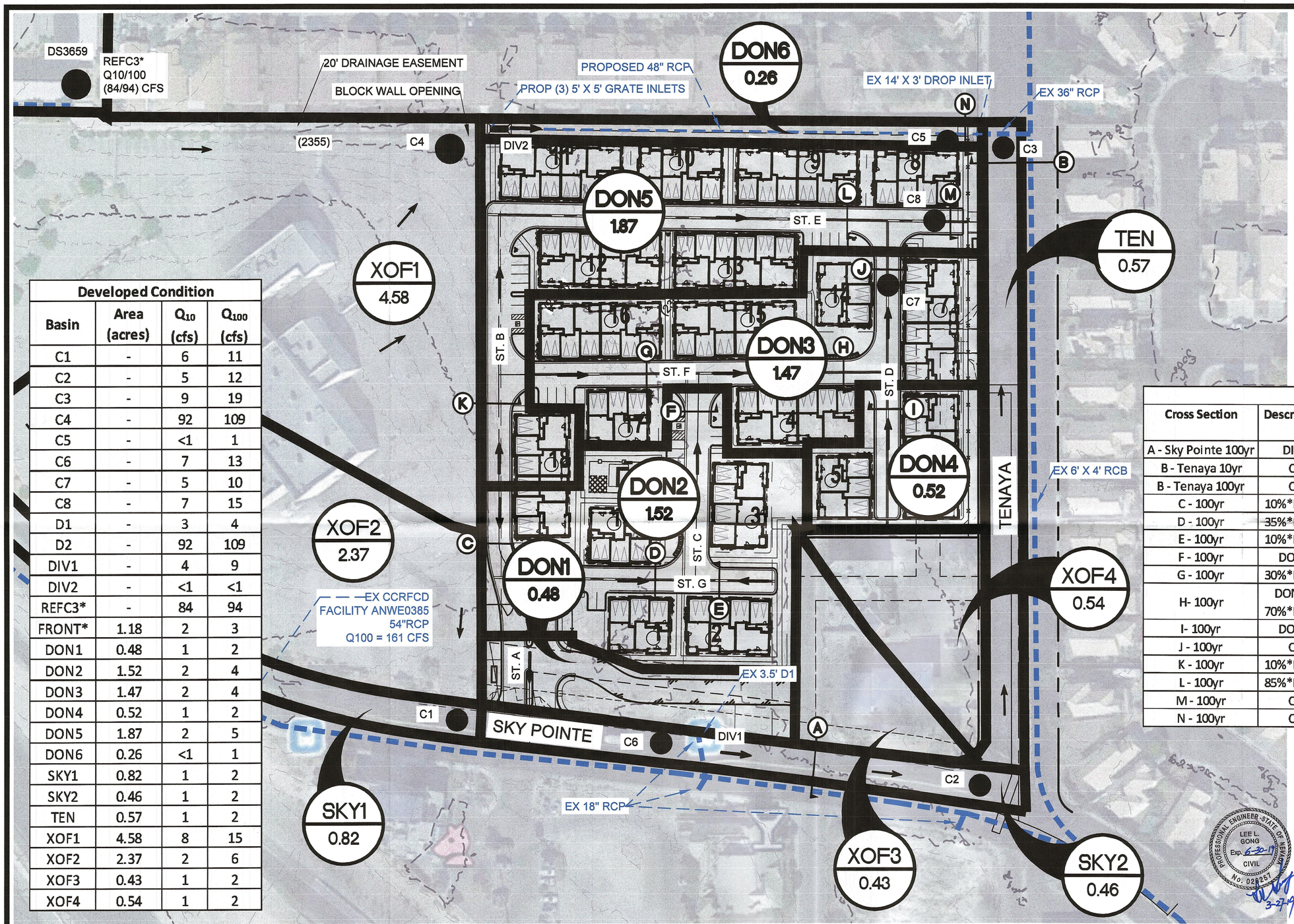
EST. 2000

N TENAYA WAY & SKYPOINTE DR
MULTI-FAMILY CONDOMINIUMS
TENAYA WAY

REGISTERED PROFESSIONAL ENGINEER
STANLEY FONG
Exp. 6-30-19
CIVIL
No. 22616
STATE OF NEVADA
3-27-19

DATE:	3/27/2019
SCALE:	1"=30'
JOB NO:	LEN-18-002
DESIGNED BY: SF	CHECKED BY: RC
SHEET NAME:	PP13
SHEET NUMBER:	21 OF 30
CLV	0000000

LAST PLOT: Jeff Thomson
FILE NAME: S:\NOTE\LENNAR\LEN-18-002 - TENAYA & ANNEX\GP\SUWGS\SHEET DWGS\LEN002_SHT_PROFS.DWG



Developed Condition			
Basin	Area (acres)	Q_{10} (cfs)	Q_{100} (cfs)
C1	-	6	11
C2	-	5	12
C3	-	9	19
C4	-	92	109
C5	-	<1	1
C6	-	7	13
C7	-	5	10
C8	-	7	15
D1	-	3	4
D2	-	92	109
DIV1	-	4	9
DIV2	-	<1	<1
REFC3*	-	84	94
FRONT*	1.18	2	3
DON1	0.48	1	2
DON2	1.52	2	4
DON3	1.47	2	4
DON4	0.52	1	2
DON5	1.87	2	5
DON6	0.26	<1	1
SKY1	0.82	1	2
SKY2	0.46	1	2
TEN	0.57	1	2
XOF1	4.58	8	15
XOF2	2.37	2	6
XOF3	0.43	1	2
XOF4	0.54	1	2

COMBINATION POINT NOTES:
C1 = FRONT* + SKY1 + XOF2
C2 = DIV1 + SKY2 + XOF3
C3 = C8 + XOF4 + TEN
C4 = REFC3 * + XOF1
C5 = C4 + XON3
C6 = C1 + XON1
C7 = DON2 + DON3 + DON4
C8 = C7 + DON5

Developed Condition						
Cross Section	Description	Q (cfs)	Slope (%)	Depth (ft)	Velocity (ft/s)	DxV
A - Sky Pointe 100yr	DIV1	12	0.60	0.52	2.32	1.21
B - Tenaya 10yr	C3	9	0.50	0.44	1.91	0.84
B - Tenaya 100yr	C3	19	0.50	0.55	2.19	1.20
C - 100yr	10%*DON2	1	1.40	0.26	2.06	0.54
D - 100yr	35%*DON2	1.5	0.52	0.17	1.22	0.21
E - 100yr	10%*DON2	1	0.50	0.15	1.10	0.17
F - 100yr	DON2	4	0.50	0.43	1.86	0.80
G - 100yr	30%*DON3	1.5	1.11	0.15	1.63	0.24
H- 100yr	DON2 + 70%*DON3	7	0.62	0.27	2.03	0.55
I- 100yr	DON4	2	0.50	0.19	1.29	0.25
J - 100yr	C7	10	0.50	0.32	2.19	0.70
K - 100yr	10%*DON5	1	1.50	0.26	2.11	0.55
L - 100yr	85%*DON5	4.5	0.59	0.24	1.68	0.40
M - 100yr	C8	15	0.53	0.37	2.61	0.97
N - 100yr	C5	1	0.66	0.11	0.78	0.09

DRAINAGE LEGEND

XOF1 / xxx	BASIN IDENTIFICATION
	BASIN AREA (ACRES)
	BASIN BOUNDARY
● C1	CONCENTRATION POINT
→	FLOW PATH
A	CROSS SECTION
XX/XXX	10-YR/100-YR FLOW (CFS)
(XX/XXX)	REFERENCE FLOW (CFS)

NOTE:
* REFERENCED FLOW FROM THE TDS FOR EAGLE CREST CONDOS, DS3959
- BLUE TEXT = STORM DRAIN INFORMATION

250 0 125 250 500
(IN FEET)
1 inch = 250ft.

TANEY ENGINEERING
6030 S. JONES BLVD STE#100
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

FIGURE 8
DEVELOPED BASIN MAP
TENAYA & SKY POINTE