DS #: 4562

APN: 139-26-201-004

PROJECT: A-Cab

SUBMITTAL: 2nd

SCANNED BY/DATE:

CHECKED BY/DATE:

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: September 13, 2012
TO: **Land Development Services** Department of Public Works				FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: **A-Cab**			**COPIES TO:** APTUS
Cross Streets:	SWQ of Bruce Street & Searles Avenue			Four Fours LLC
File Number:	F:\Depot\DSMemos\DS4562B.doc			Bart Anderson, P.E., DevCo
Parcel Number:	139-26-201-004			
Zoning Action:	SDR-43399			
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	7/19/2012	8/2/2012	Not Approved	$400.00	290121: $400
2nd Submittal	8/29/2012	9/12/2012	See Comments Below	$400.00	294596: $400
			TOTAL FEES (LDDRS):	**$800.00**	**----**

REMARKS:

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

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

1. Provide a legal description and an exhibit for the proposed 20'-public drainage easement (privately maintained) to *City of Las Vegas Right-of-Way Section* for recordation by separate document prior to the final acceptance of the improvement plans. Contact Mary Wulff at (702) 229-2139 for the recordation process.

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

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

END OF REMARKS

ays

T/R/S: T20S/R61E/26

AREA M-26

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

TRANSMISSION OK

JOB NO.	4770
DESTINATION ADDRESS	8391213
PSWD/SUBADDRESS	
DESTINATION ID	
ST. TIME	09/13 16:47
USAGE T	01'25
PGS.	1
RESULT	OK

CITY OF LAS VEGAS
INTER-OFFICE MEMORANDUM

DATE: September 13, 2012

TO:
Land Development Services
Department of Public Works

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

SUBJECT:	Drainage Study for: **A-Cab**		**COPIES TO:** APTUS
Cross Streets:	SWQ of Bruce Street & Searles Avenue		Four Fours LLC
File Number:	F:\Depot\DSMemos\DS4562B.doc		Bart Anderson, P.E., DevCo
Parcel Number:	139-26-201-004		
Zoning Action:	SDR-43399		
FEMA Flood Zone	YES	NO X	
Proposed Storm Drain	YES	NO X	

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HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL

DRAINAGE STUDY INFORMATION FORM

Rec'd: 8/29/12

Name of Development: A-Cab Date: 8/12/2012

Location of Development: a) Descriptive (Cross Streets) North/South Searles Ave East/West Las Vegas Blvd.
b) Sect. 26 Twn. 20 S Rng. 61 E

DS 4562

Name of Owner: Four Fours LLC Assessors Parcel No: 139-26-201-004

Telephone No.: 702-277-1333 Facsimile No.:

Address: 1500 Searles Avenue

M-26

Las Vegas NV 89032

Contact Person Name: Landon Christopherson Telephone No: 702-839-1200

$400

Firm: APTUS

Address: 1200 South 4th Street, Las Vegas, Nevada 89104

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	[XX]	Building Permit		

1. Total Owned Land Area: At Site: 1.94 +/- ac Being Developed/Disturbed: 1.94 +/- ac

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.)? Commercial

5. Approximate upstream land area which drains to the subject site? 28 +/- ac

6. Has the site drainage been evaluated in the past? YES [NO] If yes, please identify documentation:

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site:
Onsite runoff will discharge to right-of-way.

8. Briefly describe your proposed schedule for the subject project: As soon as possible

PROFESSIONAL ENGINEER-STATE OF NEVADA
LEONARD L. CHRISTOPHERSON
EXP. 12-31-12
CIVIL
No. 15257

Engineer's Seal

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.

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

Revision	Date

Local Entity File No.

Reference:

STANDARD FORM 1

ADDENDUM #1 TO
UPDATE #1 TO THE TECHNICAL DRAINAGE STUDY
FOR
A-CAB TAXI FACILITY
(APN# 139-26-201-004)

Prepared for:

A-Cab
1500 Searles Avenue
Las Vegas, NV 89101

Prepared by:

Aptus
1200 South 4th Street #108
Las Vegas, Nevada 89104

August 2012

This report is intended to serve as ADDENDUM #1 TO *UPDATE #1 TO THE TECHNICAL DRAINAGE STUDY A-CAB TAXI FACILITY,* prepared by Landon Christopherson, P.E. dated May 20, 2012. The revisions in this addendum are intended to supersede the data contained in the technical drainage study.

The comments in a letter dated August 02, 2012 from Land Development Services – Department of Public Works and the responses are included below:

COMMENT#1: Provide a copy of the zoning/planning conditions (SDR-43399) associated with this site with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council).* Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.

RESPONSE#1: The zoning/planning conditions (SDR-43399) are included in this addendum.

COMMENT#2: The notion of 10% split of the Q100 = 70cfs from Basin B1 into Basin B2 had not been clearly demonstrated in the subject drainage study. The flow split should be done in a few methods to support the final conclusion. Calculations such as weir flow and the Pima County split flow method are acceptable.

It appears that more survey shots / street grades are needed in Gragson Avenue upstream of the subject site to verify the location and width of the proposed weir for the split flow.

RESPONSE#2: The Pima County split flow method was used and the calculations are included in this addendum. The calculations show that there is 7 cfs coming from Basin B2 with 63 cfs continuing down Gragson Avenue. Figure 4 has been revised to reflect the new flows along with the depth of flow calculations associated. Additional survey shots were taken as suggested.

COMMENT#3: The proposed 20' – drainage easement must be labeled as "Public Drainage Easement to the Privately Maintained" on the grading plan and to be granted as such by separate document prior to the final approval of the drainage study.

RESPONSE#3: The drainage easement was relabeled as requested.

COMMENT#4: The slope in the proposed drainage easement indicates very flat conveyance, ie, less than 1%. Provide a 2'-wide concrete valley gutter within the drainage easement. Provide hydraulic calculation to verify that the total width of the drainage easement contains the 100-year flow.

RESPONSE#4: A 2-foot valley gutter has been added in the flow line of the drainage easement.

COMMENT#5: The slope in the proposed drainage easement indicates very flat conveyance, ie, less than 1%. Provide a 2'-wide concrete valley gutter within the drainage easement. Provide hydraulic calculation to verify that the total width of the drainage easement contains the 100-year flow.

RESPONSE#5: The FlowMaster calculation for the onsite drainage easement used a channel slope of 1% which as stated in Comment #4 is not correct. The actual slope in the drainage easement ranges from 0.25% to 0.8%. Review and re-calculate accordingly.

COMMENT#6: The depth of flow using FlowMaster was revised accordingly and the width of the drainage easement was increased to 30-feet to assure the 100-year flows are contained inside the easement.

RESPONSE#6: Revise the bar scale to show "1 inch = 30 ft." instead of "1" = 40 ft".

COMMENT#7: The bar scale has been revised to the correct scale.

City Comment Letter

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: August 2, 2012
TO: **Land Development Services** Department of Public Works				FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: **A-Cab**			**COPIES TO:** APTUS
Cross Streets:	SWQ of Bruce Street & Searles Avenue			Four Fours LLC
File Number:	F:\Depot\DSMemos\DS4562.doc			Bart Anderson, P.E., DevCo
Parcel Number:	139-26-201-004			
Zoning Action:	SDR-43399			
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	7/19/2012	8/2/2012	See Comments Below	$400.00	290121: $400
			TOTAL FEES (LDDRS):	**$400.00**	----

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

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1. Provide a copy of the zoning/planning conditions (**SDR-43399**) associated with this site with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.

2. The notion of 10% split of the Q_{100}=70cfs from Basin B1 into Basin B2 had not been clearly demonstrated in the subject drainage study. The flow split should be done in a few methods to support the final conclusion. Calculations such as weir flow and the Pima County split flow method are acceptable.

   It appears that more survey shots / street grades are needed in Gragson Avenue upstream of the subject site to verify the location and width of the proposed weir for the split flow.

3. The proposed 20'-drainage easement must be labeled as "Public Drainage Easement to be Privately Maintained" on the grading plan and to be granted as such by separate document prior to the final approval of the drainage study.

4. The slope in the proposed drainage easement indicates very flat conveyance, ie, less than 1%. Provide a 2'-wide concrete valley gutter within the drainage easement. Provide hydraulic calculation to verify that the total width of the drainage easement contains the 100-year flow.

5. The FlowMaster calculation for the onsite drainage easement used a channel slope of 1% which as stated in Comment #4 is not correct. The actual slope in the drainage easement ranges from 0.25% to 0.8%. Review and re-calculate accordingly.

6. Revise the bar scale to show "**1 inch = 30 ft.**" instead of "1" = 40 ft.".

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

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

END OF REMARKS
ays

T/R/S: T20S/R61E/26
AREA M-26

Zoning/Planning Conditions

December 5, 2011

Mr. C. Jay Nady
Four Fours, LLC
1500 Searles Avenue
Las Vegas, Nevada 89101

RE: SDR-43399 - MINOR SITE DEVELOPMENT PLAN REVIEW ADMINISTRATIVE CYCLE

Dear Mr. Nady:

Your request Minor Amendment to an approved Site Development Plan Review (SDR-39147) TO MODIFY THE LANDSCAPE BUFFERS ALONG THE EAST PERIMETER, MODIFY THE PARKING CONFIGURATION AND REDUCE THE FLOOR AREA OF BUILDING 'C' TO 4,985 SQUARE FEET WHERE 5,000 SQUARE FEET WAS APPROVED on 1.94 acres at 1500 Searles Avenue (APN 139-26-201-004), C-M (Commercial/Industrial) Zone, Ward 5 (Barlow), has been considered administratively by the Department of Planning Staff.

The Department of Planning Staff has administratively ***APPROVED*** your request subject to the following:

Planning

1. Conformance to the approved conditions for Site Development Plan Review (SDR-39147), except as amended herein.

2. This approval shall be void two years from the date of final approval, unless exercised pursuant to the provisions of LVMC Title 19.16. An Extension of Time may be filed for consideration by the City of Las Vegas.

3. All development shall be in conformance with the site plan date stamped 12/01/11 and landscape plan date stamped 09/29/11, except as amended by conditions herein.

4. Any changes based upon right-of-way, traffic or drainage studies or street improvements required by the city or public utilities shall not reduce the widths of perimeter landscape buffers, height of walls or quantities of plant materials from that on submitted landscape plans date stamped 09/29/11. Any changes based upon subsequently submitted studies must be accommodated elsewhere on the site.

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

VOICE 702.229.6301
FAX 702.474.0352
TTY 702.386.9108
www.lasvegasnevada.gov

5. Prior to occupancy, all necessary building permits shall be obtained and final inspections shall be completed in compliance with Title 19 and all codes as required by the Department of Building and Safety.

6. These Conditions of Approval shall be affixed to the cover sheet of any plan set submitted for building permit.

7. A technical landscape plan, signed and sealed by a Registered Architect, Landscape Architect, Residential Designer or Civil Engineer, must be submitted prior to or at the same time application is made for a building permit. A permanent underground sprinkler system is required, and shall be permanently maintained in a satisfactory manner; the landscape plan shall include irrigation specifications. Installed landscaping shall not impede visibility of any traffic control device.

8. All City Code requirements and design standards of all City Departments must be satisfied, except as modified herein.

Public Works

9. Comply with all applicable previous conditions of approval for SDR-39147 and all other site-related actions.

This action by the Department of Planning staff on December 5, 2011 is final unless a written appeal is filed with the Director of the Department of Planning within ten days of the date of this letter.

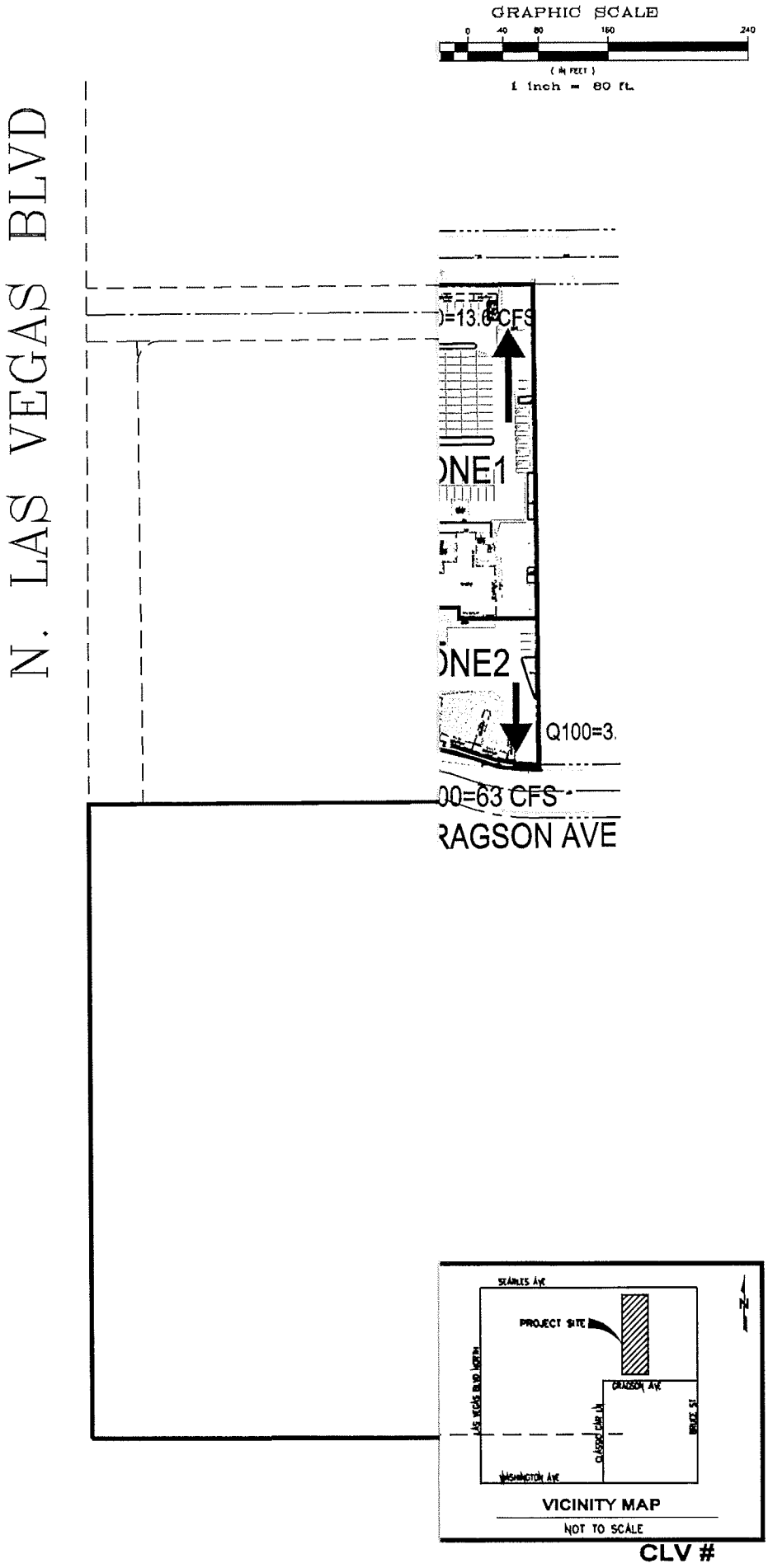
Sincerely,

Steve Gebeke
Planning Supervisor
Case Planning Division

SG:clb

cc: Ms. Kristen Neuman
APTUS
1200 South Fourth Street
Las Vegas, Nevada 89104

Figure 4



CLV #

A Cab Taxi Company
Construction Documents
1500 Searles Avenue
Las Vegas, Nevada 89101

APTUS
1200 South 4th Street
Suite 206
Las Vegas, Nevada 89104
P 702.839.1200
F 702.839.1213

APTUS PROJECT NO. 09.065

ARCHITECT

ENGINEER

LEONARD L. CHRISTOPHERSON EXP. 12/31/12 CIVIL

NOTES

NO.	DESCRIPTION	DATE

ISSUED

TITLE
EXISTING CONDITION

DRAWING NO.
FIGURE 4

Split

Pima County ~~Slit~~ Flow Calculations

PIMA COUNTY FLOW SPLIT
GREGSON AVENUE SPLIT FLOWS

Computation of Flow Split at Intersection (PIMA County's Flow Split Formula)

$$QL = 0.042 \left(\frac{Q_m^{0.93} \times Wss^{0.85}}{S_m^{0.41} \times W_m^{0.79}} \right) \qquad Q_O = 46.8 \times W_{ss} \times Y_O \times S_s^{0.5} - Q_L$$

Where:

Q=	Flow in Main street before split
Q_L=	Lateral flow into lot (cfs)
Q_m=	Main Street flow measured between the curbs (cfs)
S_m=	Longitudinal slope of the main street (feet per foot)
W_m=	Width the main street (cfs)
W_{ss}=	Width of flow split (ft)
Q_o=	Flow inside street (cfs)
Y_o=	Average depth of overbank flow (ft)
S_s=	Longitudinal slope of the lot (feet per foot)

INPUT

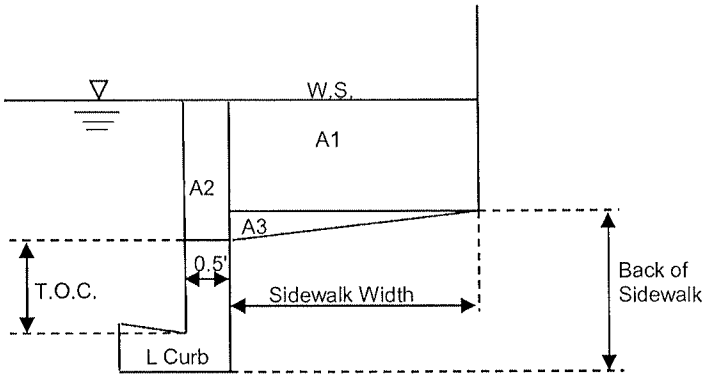
Q=	70	cfs	
Q_{OB}=	13	cfs	(See Attached Flowmaster Cross Section)
Q_m=	43	cfs	(See Attached Flowmaster Cross Section)
W_{ss}=	47	ft	Measured area of wier
S_m=	0.0273		
W_m=	50	ft	Measured between Face of Curbs
Y_o=	0.245	ft	(See Attached Flowmaster Cross Section)
S_s=	0.02		

OUTPUT

Q_L=	7	cfs
Q_o=	63	cfs

At =	1.96 sqft
V =	6.87 ft/s
Qob =	13 cfs

Water Surface	0.47
Bk Walk Elev =	0.45
Top of Curb Elev =	0
Sidewalk Width =	8
Curb Width =	0
Curb Elev =	0
A1 =	0.16
A2 =	1.8
A3 =	0
A total =	1.96 sqft



A1 = (W.S.- 0.6) x 0.5
A2 = (W.S. - 0.5) x 0.5
A3 = 1/2 (5 x 0.1)
At = A1 + A2 + A3

Qob= V x At.

Depth of Flow Calculations

SPLIT POINT 1
Worksheet for Irregular Channel

Project Description	
Project File	c:\old_c\documents and settings\lchristopherson\my documents\misc. items\llc\haestad\fmw\a
Worksheet	existing offsites
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Water Elevation

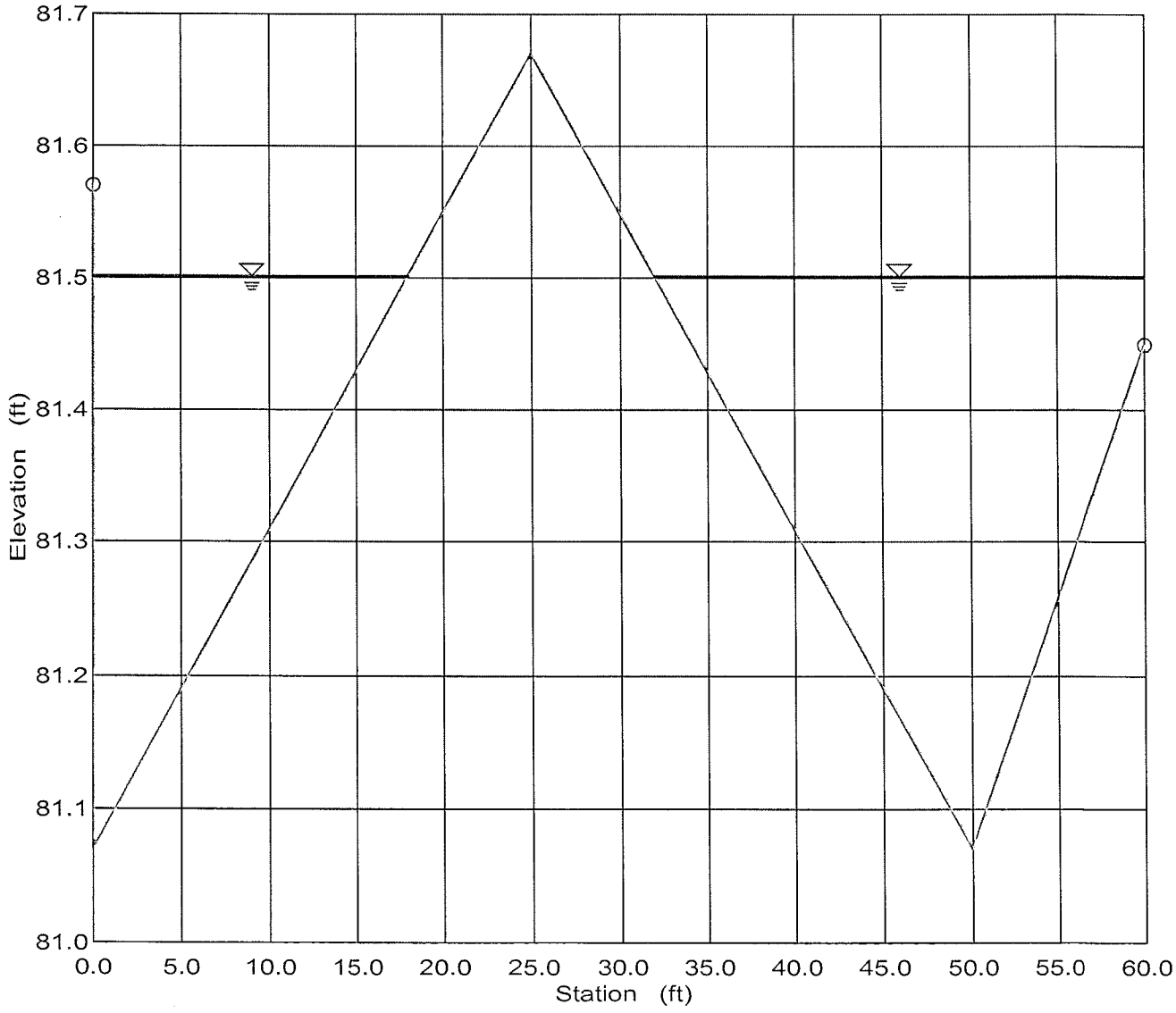
Input Data				
Channel Slope	2.7300 %			
Elevation range: 81.07 ft to 81.67 ft.				
Station (ft)	Elevation (ft)	Start Station	End Station	Roughness
0.00	81.57	0.00	60.00	0.013
0.00	81.07			
25.00	81.67			
50.00	81.07			
60.00	81.45			
Discharge	70.00 cfs			

Results		
Wtd. Mannings Coefficient	0.013	
Water Surface Elevation	81.50	ft
Flow Area	10.19	ft²
Wetted Perimeter	46.50	ft
Top Width	46.00	ft
Height	0.43	ft
Critical Depth	81.70	ft
Critical Slope	0.003570	ft/ft
Velocity	6.87	ft/s
Velocity Head	0.73	ft
Specific Energy	82.23	ft
Froude Number	2.57	
Flow is supercritical.		
Flow is divided.		
Water elevation exceeds lowest end station by 0.05 ft.		

SPLIT POINT 1
Cross Section for Irregular Channel

Project Description	
Project File	c:\old_c\documents and settings\lchristopherson\my documents\misc. items\llc\haestad\fmw\a
Worksheet	existing offsites
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Water Elevation

Section Data		
Wtd. Mannings Coefficient	0.013	
Channel Slope	2.7300	%
Water Surface Elevation	81.50	ft
Discharge	70.00	cfs



DRAINAGE EASEMENT
Worksheet for Irregular Channel

Project Description	
Project File	c:\old_c\documents and settings\lchristopherson\my documents\misc. items\llc\haestad\fmw\a
Worksheet	DRAINAGE EASEMENT
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Water Elevation

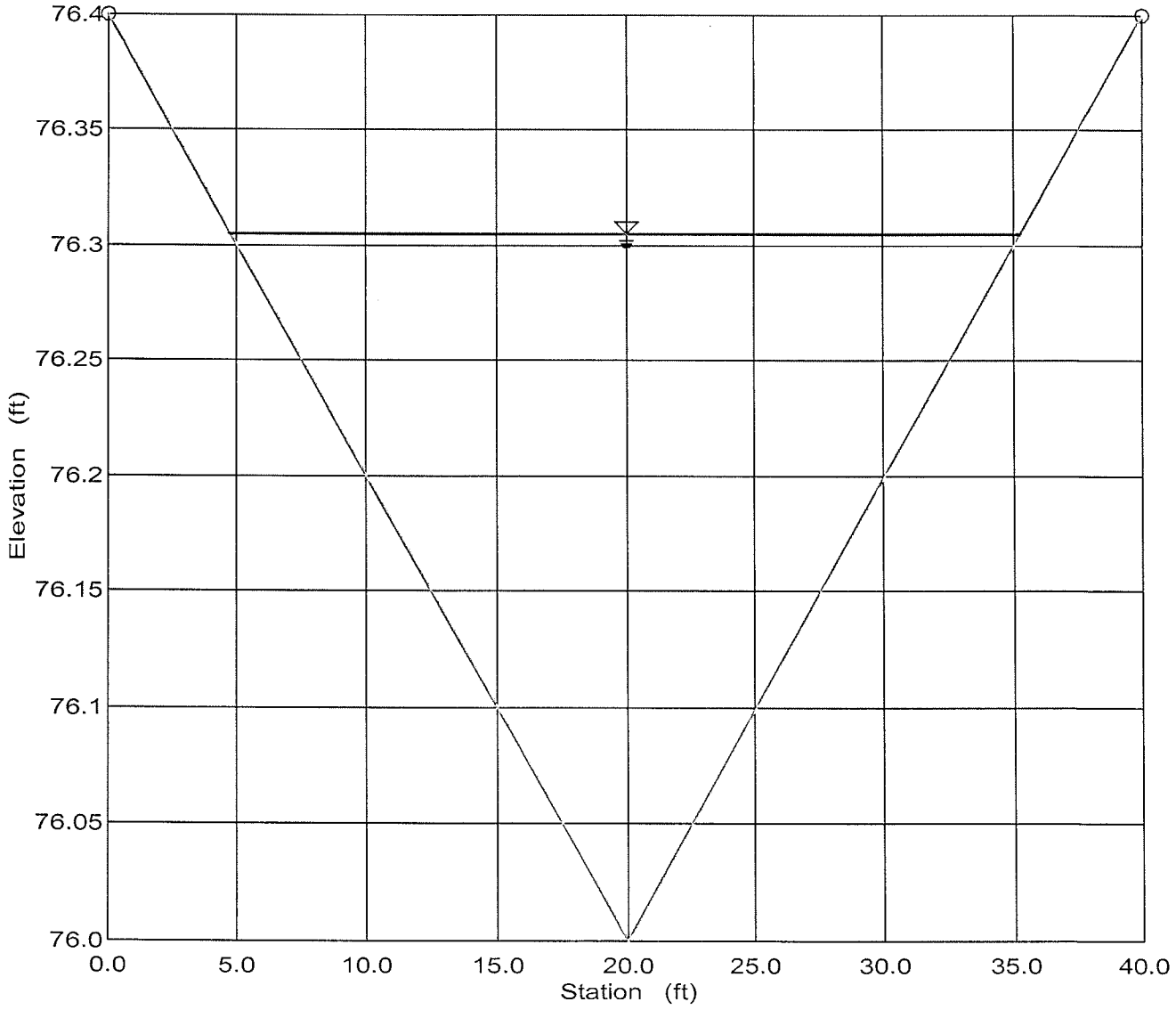
Input Data				
Channel Slope	0.4000 %			
Elevation range: 76.00 ft to 76.40 ft.				
Station (ft)	Elevation (ft)	Start Station	End Station	Roughness
0.00	76.40	0.00	40.00	0.012
20.00	76.00			
40.00	76.40			
Discharge	10.40 cfs			

Results		
Wtd. Mannings Coefficient	0.012	
Water Surface Elevation	76.31	ft
Flow Area	4.65	ft²
Wetted Perimeter	30.51	ft
Top Width	30.50	ft
Height	0.31	ft
Critical Depth	76.31	ft
Critical Slope	0.003923	ft/ft
Velocity	2.24	ft/s
Velocity Head	0.08	ft
Specific Energy	76.38	ft
Froude Number	1.01	
Flow is supercritical.		

DRAINAGE EASEMENT
Cross Section for Irregular Channel

Project Description	
Project File	c:\old_c\documents and settings\lchristopherson\my documents\misc. items\llc\haestad\fmw\a
Worksheet	DRAINAGE EASEMENT
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Water Elevation

Section Data		
Wtd. Mannings Coefficient	0.012	
Channel Slope	0.4000	%
Water Surface Elevation	76.31	ft
Discharge	10.40	cfs



Grading Plan

Provide more spot grades.

Split Flow

GRAGSON AVENUE (PUBLIC)

APN: 139-26-201-006
ANDERT PAULA H 1990 TRUST
BANK FIRST INTERSTATE NV N A
TRS WELLS FARGO

APN: 139-26-201-004
VALLEY BROADCASTING
COMPANY SMITH

APN: 139-26-201-005
HOUSING AUTHORITY CLV

SEARLES AVENUE (PUBLIC)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

X 40

LEGEND

- EXISTING/ ADJACENT RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVEMENT
- 1915 — 5' EXISTING GROUND CONTOUR
- 1' EXISTING GROUND CONTOUR
- EXISTING WALL
- PROPERTY LINE
- CENTER LINE
- SAWCUT LINE
- A1 — DETAIL NUMBER / SHEET NUMBER
- (14.58) BOR — EXISTING ELEVATION DESCRIPTION
- 14.22 BOR — PROPOSED ELEVATION DESCRIPTION
- 14.22 AC — PROPOSED AC ELEVATION DESCRIPTION
- (0.42%) — EXISTING RATE OF GRADE/ DIRECTION OF FLOW
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING PAVING TO BE REMOVED & REPLACED AS NEEDED WITH 2" MIN. AC PAVING.

GRADING CONSTRUCTION NOTES

1. CONSTRUCT "L" TYPE CURB & GUTTER PER C.C.A.U.S.D. STD. DWG. NO. 216.
2. CONSTRUCT COMMERCIAL DRIVEWAY PER C.C.A.U.S.D. STD. DWG. NO. 222A.
3. CONSTRUCT 5' SIDEWALK PER C.C.A.U.S.D. STD. DWG. NO. --.
4. CONSTRUCT ONSITE "A" CURB PER C.C.A.U.S.D. STD. DWG. NO. 219.
5. CONSTRUCT 2" AC MIN. IN PARKING AREA REFER TO SOILS REPORT
6. CONSTRUCT 3" AC MIN. IN ROADWAY REFER TO SOILS REPORT
7. SAWCUT EXISTING AC
8. CONSTRUCT 18" CURB OPENING

A Cab Taxi Company

Construction Documents

1500 Searles Avenue
Las Vegas, Nevada 89101

APTUS
1200 South 4th Street
Suite 206
Las Vegas, Nevada 89104
P 702.839.1200
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APTUS PROJECT NO. 09.065

ARCHITECT

ENGINEER

PROFESSIONAL ENGINEER-STATE OF NEVADA
LEONARD L. CHRISTOPHERSON
EXP. 12/31/12
CIVIL
No. 15257
7/9/12

NOTES

EARTHWORKS

ESTIMATED CUT QUANTITY: 0 CY
ESTIMATED FILL QUANTITY: 228 CY

GEOTECHNICAL REPORT

NOTE:
THIS GRADING PLAN COMPLIES WITH THE APPROVED DRAINAGE STUDY # -----

LEONARD L. CHRISTOPHERSON, P.E. No. 15257 DATE:

NO.	DESCRIPTION	DA
	ISSUED	

TITLE
GRADING PLAN

DRAWING NO.
GP1.0

SHEET 3 OF 6

GENERAL NOTES

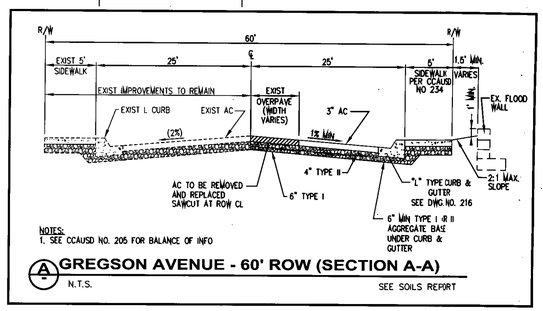
1. ADD 1800 TO ALL PLAN ELEVATIONS.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING PLAN ELEVATIONS AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
3. THIS SITE IS NOT LOCATED IN A 100 YEAR FLOOD PLAIN PER F.I.R.M. MAP No 32003C2170E REVISED NOVEMBER 16, 2011

BENCHMARK

BEING CITY OF LAS VEGAS BENCHMARK NO. OLV0129NSA, RIVET & PLATE IN TOP OF CURB @ SE CORNER OF BRUCE & TODD. BEING NAVD88 ELEVATION OF 1865.70 FEET / 568.66504 METERS AS SHOWN IN THE BENCHMARK BOOK OF THE CITY OF LAS VEGAS, NEVADA.

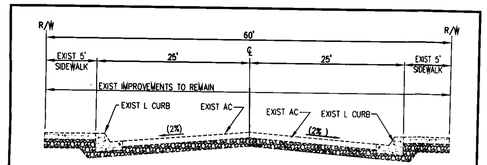
BASIS OF BEARING

BEING THE NORTH SECTION LINE OF THE (NW 1/4) OF SECTION 26, T. 20 E., R. 61 S., M.D.M. TAKEN AS N89°38'29"W AS SHOWN ON RECORD OF SURVEY MAP, FILE 58 PAGE 61 RECORDED IN THE OFFICIAL RECORDS OF CLARK COUNTY, NEVADA ON MARCH 04, 1991.



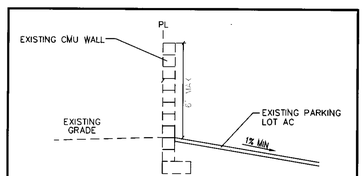
NOTES:
1. SEE CCAUSD NO. 205 FOR BALANCE OF INFO

A GREGSON AVENUE - 60' ROW (SECTION A-A)
N.T.S.
SEE SOILS REPORT

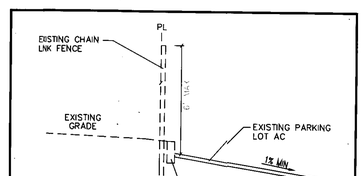


NOTES:
1. SEE CCAUSD NO. 205 FOR BALANCE OF INFO

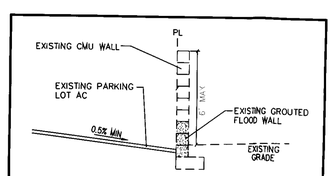
B SEARLES AVENUE - 60' ROW
N.T.S.
SEE SOILS REPORT



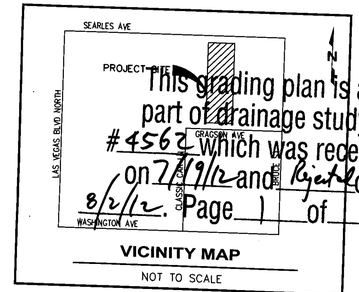
C SECTION DETAIL
N.T.S.



D SECTION DETAIL
N.T.S.



E SECTION DETAIL
N.T.S.



VICINITY MAP
NOT TO SCALE

This grading plan is a part of drainage study #4562 which was received on 7/9/12 and Rejected on 8/2/12. Page 1 of 1.

CLV #