

DS #: 5392

APN: 140-31-102-003

PROJECT: Oran K. Grayson Elementary School Addition

SUBMITTAL: 2nd

SCANNED BY/DATE:

CHECKED BY/DATE:



CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: February 4, 2021
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:	
	Oran K. Gragson Elementary School Addition	
Cross Streets:	SEC of Bonanza Road & Honolulu Street	
File Number:	F:\Depot\DSMemos\DS5392B.doc	
Parcel Number:	140-31-102-003	
Zoning Action:	20-0301-SDR1 & 20-0301-VAR1	
FEMA Flood Zone	YES	NO X
Proposed Storm Drain	YES	NO X
COPIES TO:		Lochsa Engineering
		School Board of Trustees
		Bart Anderson, P.E., DevCo

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	12/1/2020	12/22/2020	Not Approved	\$400.00	4085386: \$400
2 nd Submittal	1/25/2021	2/4/2021	See Comments Below	\$400.00	4144405: \$400
			TOTAL FEES (LDDRS):	\$800.00	----

REMARKS:

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

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

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 Update 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/R62E/31
AREA N-31

Addendum to the Technical Drainage Study for the Oran K. Gragson Elementary School Addition

January 2021

Prepared for:

School Board of Trustees
Jamie Schneck
1180 Military Tribute Place
Henderson, Nevada 89074
(702) 799-6450

Prepared by:

Lochsa Engineering
6345 South Jones Boulevard, Suite 100
Las Vegas, Nevada 89118
(702) 365-9312

Lochsa Job No. 201091

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: ORAN K. GRAGSON ELEMENTARY SCHOOL ADDITION Date: JANUARY 25, 2021

Location of Development: a) Descriptive (Cross Streets) North/South: Honolulu St.

East/West: Bonanza Rd.

b) Section: 31 Township: 20 SOUTH Range: 62 EAST

c) APN : 140-31-102-003

Name of Owner: School Board of Trustees

Telephone No.: (702) 799-6450 Fax No.: _____ E-Mail Address: N/A

Address: 1180 Military Tribute Place Henderson, NV 89014

Contact Person-Name: CHRIS BLAKE, EI Telephone No.: 702-365-9312

* E-Mail Address: CHRIS.BLAKE@LOCHSA.COM Fax No.: 702-365-9317

Firm: LOCHSA ENGINEERING

Address: 6345 S JONES BLVD STE 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: 9.48 +/- ACRES Being Developed/Disturbed: 1.29 +/- 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

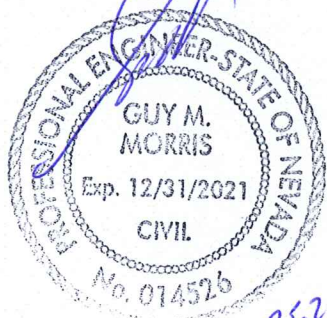
4. Proposed type of development (Residential, Commercial, Etc.): COMMERCIAL

5. Approximate upstream land area which drains to the subject site: 250 +/- ACRES

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: NEAR NORTHEAST CORNER OF SITE

8. Briefly describe your proposed schedule for the subject project: ASAP



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.

***New Required Field**

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

	Revision	Date

Local Entity File No. _____

REFERENCE:

STANDARD FORM 1

COMMENT LETTER

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: December 22, 2020
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: Oran K. Gragson Elementary School Addition		COPIES TO: Lochsa Engineering
Cross Streets:	SEC of Bonanza Road & Honolulu Street	School Board of Trustees
File Number:	F:\Depot\DSMemos\DS5392A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	140-31-102-003	
Zoning Action:	XXXXX	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES NO X	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	12/1/2020	12/22/2020	See Comments Below	\$400.00	4085386: \$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:
X	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. Provide a copy of the zoning/planning conditions 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. Page 3 of the *Study* stated that an offsite exhibit (Figure OF1) has been created and included in Appendix C. It also said that offsite basin FX1 was determined to impact *Honolulu Street* west of the subject site. However, no such figure was found in Appendix C.

In **DR1** and **DR2** (Existing and Developed Conditions Onsite Drainage Maps), *Basin FX1* was shown. However, without showing the whole basin and pertinent topographic information, it was not justifiable to merely stating that the basin area is limited to 7.13 acres. Resolve in the next submittal.

In an effort to increase administrative efficiency, for all original and re-submittal packages including updates and the addenda, the City of Las Vegas Public Works Department requires both a hardcopy and a digital copy (PDF) on CD for the drainage study.

A letter sealed and signed by a Nevada registered civil engineer must be included in every submittal certifying documents on the electronic CD matches 100% of the hardcopy submittal. The new submittal requirement is effective on May 1, 2019. If there are any questions regarding these new requirements, please contact Albert Sung in the City Flood Control Section at (702) 229-6541.

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/R62E/31

AREA N-31

January 24, 2021

Albert Sung, P.E.
City of Las Vegas Public Works Department
(Flood Control Division)
333 North Rancho Drive
Las Vegas, NV 89106

Subject: **Addendum to Technical Drainage Study for Oran K. Gragson Elementary
School Addition**
Lochsa Job No. 201091

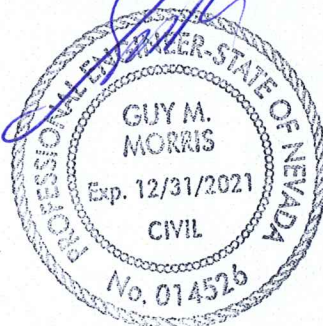
Mr. Sung:

This letter certifies that all items provided on the **Addendum to the Technical Drainage Study for Oran K. Gragson Elementary School Addition** electronic submittal matches the paper version bound into the study.

Respectfully submitted,

LOCHSA ENGINEERING

Guy Morris, P.E.



1-25-21

January 24, 2021

Albert Sung, P.E.
City of Las Vegas Public Works Department
Flood Control Division
495 S. Main Street
Las Vegas, NV 89101

Subject: **Addendum to the Technical Drainage Study for Oran K. Gragson Elementary
School Addition
CLV DS5392A
Parcel Number 140-31-102-003
Lochsa Job #201091**

Dear Albert Sung,

Lochsa Engineering is in receipt of your comment letter for the above referenced project. In response to your comments, the following responses are being offered:

1. Provide a copy of the zoning/planning conditions 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: Noted. A NOFA has been provided.

2. Page 3 of the *Study* stated that an offsite exhibit (Figure OF1) has been created and included in Appendix C. It also said that offsite basin FX1 was determined to impact *Honolulu Street* west of the subject site. However, no such figure was found in Appendix C.

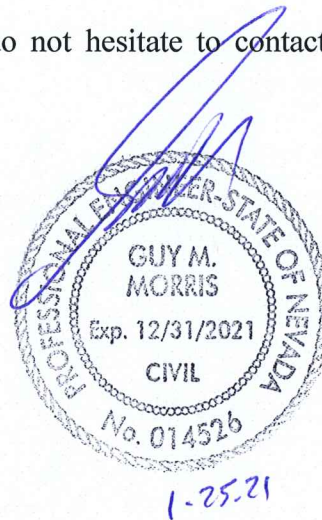
In **DR1** and **DR2** (Existing and Developed Conditions Onsite Drainage Maps), *Basin FX1* was shown. However, without showing the whole basin and pertinent topographic information, it was not justifiable to merely stating that the basin area is limited to 7.13 acres. Resolve in the next submittal.

Response 2: Noted. We have provided the Offsite Exhibit OF1. This exhibit was left out by accident in the initial submittal.

If you have any questions or comments, please do not hesitate to contact our office at your earliest convenience.

Sincerely,
LOCHSA ENGINEERING


Chris Blake, EI
Hydrologist



COMMENT #1

NOFA



**LAS VEGAS
CITY COUNCIL**

CAROLYN G. GOODMAN
Mayor

STAVROS S. ANTHONY
Mayor Pro Tem

MICHELE FIORE

CEDRIC CREAR

BRIAN KNUDSEN

VICTORIA SEAMAN

OLIVIA DIAZ

JORGE CERVANTES
City Manager

DEPARTMENT OF PLANNING
ROBERT SUMMERFIELD
DIRECTOR

CITY HALL
495 S. MAIN ST.
3RD FLOOR
LAS VEGAS, NV 89101
702.229.6301 | VOICE
702.464.2545 | FAX
711 | TTY



cityoflasvegas
lasvegasnevada.gov

January 13, 2021

School Board of Trustees
1180 Military Tribute Place
Henderson, Nevada 89074

**RE: 20-0301-VAR1 AND 20-0301-SDR1
PLANNING COMMISSION MEETING OF JANUARY 12, 2021**

Dear Applicant:

The Planning Commission at a regular meeting held on *January 12, 2021* voted to **APPROVE** a requests on 9.48 acres at 550 North Honolulu Street (APN 140-31-102-003), C-V (Civic) Zone, Ward 3 (Diaz).

20-0301-VAR1 - TO ALLOW DEVIATIONS FROM TITLE 19.10.020 C-V (CIVIC) DEVELOPMENT STANDARDS.

20-0301-SDR1 - FOR A PROPOSED 28,226 SQUARE-FOOT EXPANSION TO AN EXISTING 63,160 SQUARE-FOOT PUBLIC SCHOOL, PRIMARY.

This approval is subject to the following conditions:

20-0301-VAR1 CONDITIONS

Planning

1. Conformance to the approved conditions for Site Development Plan Review (20-0301-SDR1).
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 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.
4. These Conditions of Approval shall be affixed to the cover sheet of any plan set submitted for building permit.
5. All City Code requirements and design standards of all City departments must be satisfied, except as modified herein.

20-0301-SDR1 CONDITIONS

Planning

1. Approval of and conformance to the Conditions of Approval for Variance (20-0301-VAR1) shall be required, if approved.
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, landscape plan, and building elevations, date stamped 11/16/20, except as amended by conditions herein.
4. 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.
5. These Conditions of Approval shall be affixed to the cover sheet of any plan set submitted for building permit.
6. A fully operational fire protection system, including fire apparatus roads, fire hydrants and water supply, shall be installed and shall be functioning prior to construction of any combustible structures.
7. All City Code requirements and design standards of all City Departments must be satisfied, except as modified herein.

Public Works

8. The sidewalk adjacent to this site shall meet Public Right-of-Way Accessibility Guidelines (PROWAG) in accordance with code requirements of Title 13.56.040 to the satisfaction of the City Engineer concurrent with development of this site. Grant any Pedestrian Access Easement needed to complete this requirement.
9. Coordinate with the sewer billing Department to update the sewer fees in correlation to the number of increase in students. Sewer fees, if any, shall be paid prior to issuance of off-site permits.

10. A Traffic Impact Analysis addressing vehicular and pedestrian circulation around the school must be submitted to and approved by the Department of Public Works prior to the issuance of any building or grading permits, submittal of any construction drawings or the recordation of a Map subdividing this site, whichever may occur first. Comply with the recommendations of the approved Traffic Impact Analysis prior to occupancy of the site. No recommendation of the approved Traffic Impact Analysis, nor compliance therewith, shall be deemed to modify or eliminate any condition of approval imposed by the Planning Commission or the City Council on the development of this site.
11. The submitted Drainage Plan and Technical Drainage Study must be submitted to and approved by the Department of Public Works prior to the issuance of any building or grading permits or submittal of any construction drawings, whichever may occur first. Provide and improve all drainageways recommended in the approved drainage plan/study. The developer of this site shall be responsible to construct such neighborhood or local drainage facility improvements as are recommended by the City of Las Vegas Neighborhood Drainage Studies and approved Drainage Plan/Study concurrent with development of this site.

This action by the Planning Commission on **January 12, 2021** is final unless a written appeal is filed with the City Clerk within ten days of the date of the Planning Commission's decision as allowed by code or there is a review action filed by the City Council within the same time period. For additional information on appeals or review requests submitted please access <https://www.lasvegasnevada.gov/Business/Permits-Licenses/Building-Permits/Permit-Application-Status>, or contact the Department of Planning and Development at 702.229.6301 after **January 25, 2021**. No building permits or business licenses related to these items shall be issued prior to the expiration of the required ten day waiting period, or until any filed appeal is resolved pursuant to LVMC Title 19.18.

Sincerely,



Eric McCammond
Senior Management Analyst
Case Planning Division

EM:nl

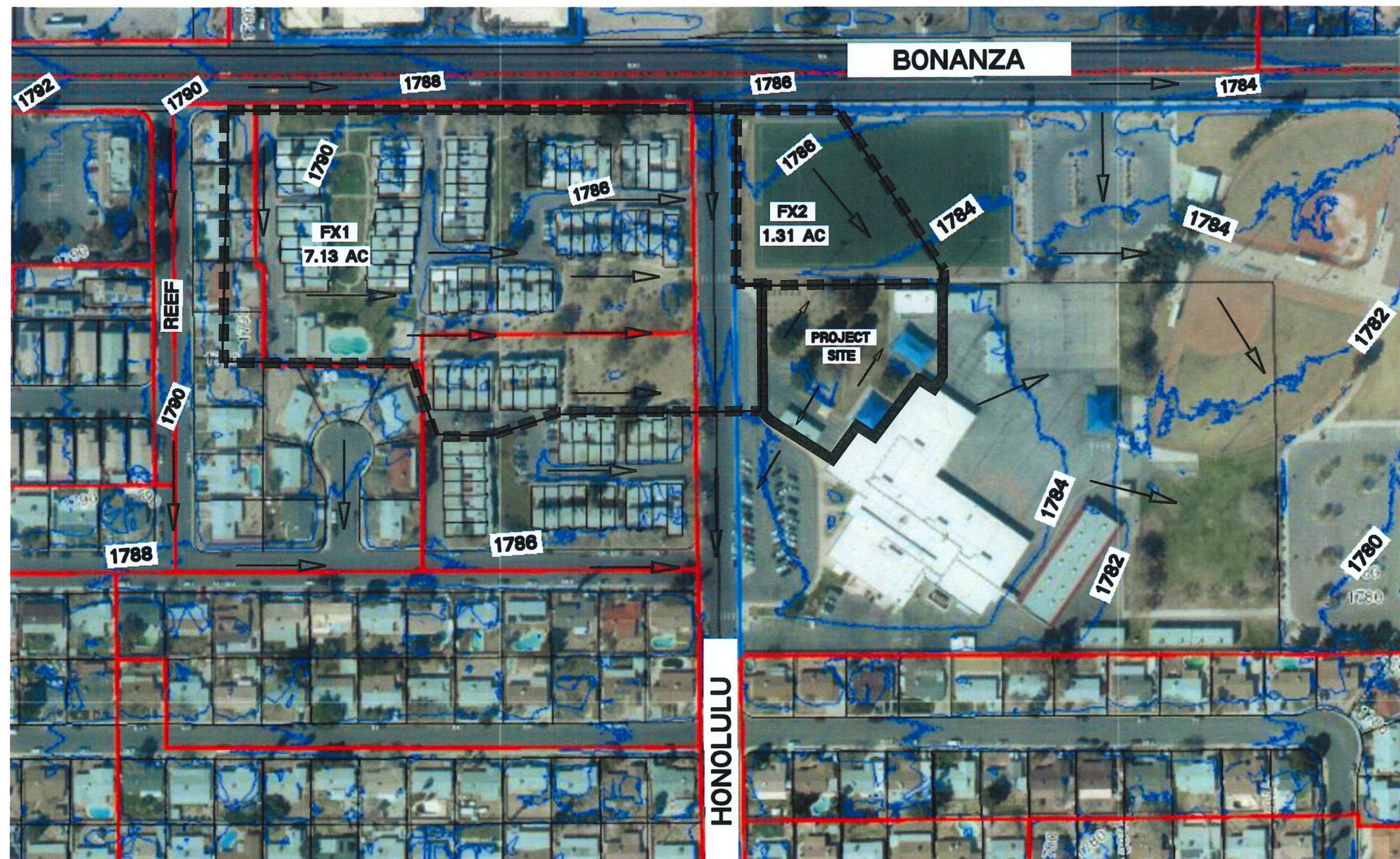
cc:

Linda K. Perri
Clark County School District
1180 Military Tribute Place
Henderson, Nevada 89074

Ms. Lucia Gonzalez
CCSD - Real Property Management
1180 Military Tribute Place
Henderson, Nevada 89074

COMMENT #2

OFFSITE BASIN EXHIBIT OF1



Peak Flow Summary

Existing Condition

HEC-1 ID	Area (acres)	10-year Flow (cfs)	100-year Flow (cfs)	
FX1	7.13	5	13	
NX1	0.28	<1	1	
CPX1	-	5	14	(FX1+NX1)
FX2	1.31	1	3	
NX2	1.01	2	4	
CPX2	-	3	7	(FX2+NX2)

Peak Flow Summary

Developed Condition

HEC-1 ID	Area (acres)	10-year Flow	100-year Flow	
FX1	7.13	5	13	
ND1	0.28	1	1	
CPD1	-	5	14	(FX1+ND1)
FX2	1.31	1	3	
ND2	1.01	2	4	
CPD2	-	3	7	(FX2+ND2)

DRAINAGE LEGEND

ND1

DRAINAGE BASIN LABEL



CONCENTRATION POINT

CPD1

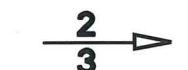
COMBINATION POINT



ONSITE BASIN BOUNDARY



OFFSITE BASIN BOUNDARY



Q10 FLOW IN CFS (INTERIM)
Q100 FLOW IN CFS (INTERIM)



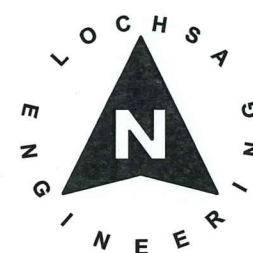
Q10 (V10)(D10)
Q100 (V100)(D100)



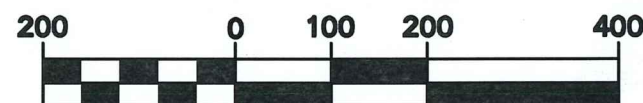
BASIN FLOW DIRECTION



COMBINED FLOW DIRECTION



GRAPHIC SCALE



(IN FEET)
1 Inch = 200 ft.

DRAWN BY: JD SCALE: 1"=200'

CHECKED BY: CB DATE: 1/21/21

LOCHSA ENGINEERING
6345 SOUTH JONES BLVD., SUITE 100
LAS VEGAS, NV 89118
P: 702 365-9312, F: 702 365-9317

FILE NAME: C-201091-OFFMAP.DWG

LEGEND

FOUND MONUMENTATION

CENTER LINE _____

ROW LINE _____

EASEMENT LINE _____

SECTION LINE _____

PROPERTY LINE _____

ADJACENT PROPERTY LINE _____

OFFSITE BASIN MAP

**ORAN K. GRAGSON
ELEMENTARY SCHOOL**

PROJECT No.:
201091

SHEET No.

OF1

SHEET 1 OF 1

APN: 140-31-102-002
CITY OF LAS VEGAS
OR: 19960131:02357
8.02 ACRES

PROPOSED TWO STORY
18 CLASSROOM BLDG
FF=1786.60

PROPOSED KINDERGARTEN
PLAYGROUND TURF AREA

PROPOSED
GARDEN AREA

EXISTING BUILDING
APN: 140-31-102-003
FF=(1786.60)

EX.
PLAYGROUND

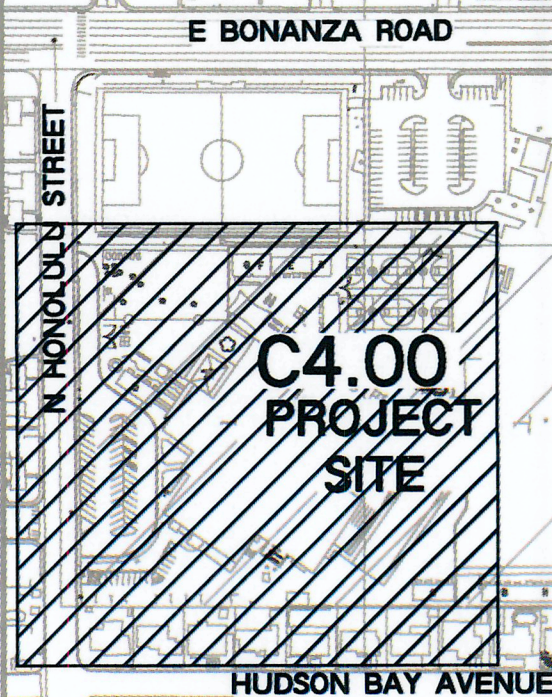
EX. BLDG

SIGHT VISIBILITY ZONE (SVZ)

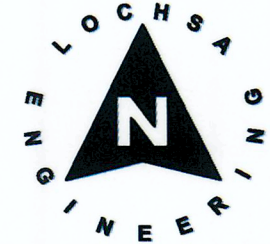
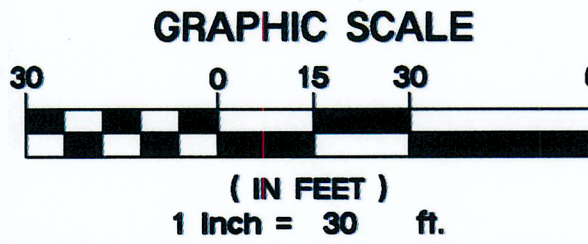
SIGHT VISIBILITY ZONE AREA
NOTE:
NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SVZ. ANY OBJECT, IF PLACED, SAID OBJECT IS MAINTAINED AT LESS THAN 24" IN HEIGHT MEASURED FROM TOP OF CURB OR 27" MEASURED FROM THE TOP OF ADJACENT ASPHALT GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

GEOTECHNICAL:

ALL GRADING SHALL BE PERFORMED IN COMPLIANCE WITH THE SOILS REPORT PREPARED BY: NOVA GEOTECHNICAL, DATED: DEC. 14, 2022.
PROJECT No. # G-20-179,
PHONE: (702) 873-3478
MARTIN D. JENSEN P.E.



VICINITY MAP
NOT TO SCALE



STORMWATER MANAGEMENT NOTES:

- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- 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 THE CLARK COUNTY BUILDING ADMINISTRATION CODE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.12.
- ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

SPECIAL NOTE TO CONTRACTOR:

EXISTING IRRIGATION, LANDSCAPING, ELECTRICAL, LIGHTING, SIGNAGE AND OTHER EXISTING IMPROVEMENTS MAY BE IMPACTED BY PROPOSED CONSTRUCTION. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING IMPROVEMENTS AND IDENTIFY CONFLICTS. CONTRACTOR SHALL COORDINATE WITH SITE FACILITIES AND ENGINEERING STAFF TO REMOVE AND/OR RELOCATE ANY AND ALL IMPROVEMENTS IN CONFLICT.

ADJUSTMENT, RELOCATION & RESTORATION NOTE:

CONTRACTOR IS RESPONSIBLE TO RESTORE/ REPLACE SURFACE IMPROVEMENTS AS NECESSARY TO PROVIDE SURFACING CONSISTENT WITH EXISTING AND ADJACENT IMPROVEMENTS IN ALL AREAS IN WHICH EXISTING IMPROVEMENTS REQUIRE ADJUSTMENT, RELOCATION, RESTORATION OR REMOVAL (INCLUDING, BUT NOT LIMITED TO THE POSSIBLE RELOCATION OF PLANTERS, LIGHTING IMPROVEMENTS, COMMUNICATIONS, SANITARY SEWER CLEAN-OUTS, DRAINS, WATER IMPROVEMENTS, ETC.). CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE AND TO PROVIDE CONTINUED SERVICE TO ALL IMPACTED IMPROVEMENTS. CONTRACTOR IS RESPONSIBLE TO INVESTIGATE SITE CONDITIONS PRIOR TO BIDDING TO IDENTIFY AND QUANTIFY ANY CONCERNS ASSOCIATED WITH THE RELOCATION OF IMPROVEMENTS.

NOTE:

ADD 1700 FEET TO ALL ELEVATIONS ON PLAN
EXISTING UTILITY NOTE:
CONTRACTOR TO ADJUST ALL EXISTING UTILITIES MATCH PROPOSED FINISH GRADE ELEVATIONS.

LEGEND:

- PROPOSED AC PAVEMENT
- PROPOSED CONCRETE
- PROPOSED BMP AREA
- PROPOSED LANDSCAPE SEE LANDSCAPE PLANS FOR SPECIFICATIONS
- ADA PATH
- DEEPEMED FOOTING

GRADING NOTES:

- SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
- CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL NOTIFY LOCHSA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. LOCHSA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
- CONTRACTOR TO ENSURE POSITIVE DRAINAGE. NO PONDING ALLOWED. CONTRACTOR TO FOLLOW RECOMMENDATIONS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, AND COMPACTION. REFER TO THE REPORT PREPARED BY NOVA GEOTECHNICAL, PROJECT NO. G-20-179, DATED: DEC. 14, 2020, PHONE: (702) 873-3478

TYPICAL GRADING IN LANDSCAPE AREAS AWAY FROM BUILDING

CUT	FILL	NET
28 CY	1,983 CY	1,955 CY

NOTE: CUT/FILL QUANTITIES ARE TO FINISHED GRADE & DO NOT INCLUDE MATERIAL THICKNESS'S, FOOTINGS, ETC.

FLOOD ZONE NOTE:

THE PROJECT SITE IS COVERED BY THE FLOOD INSURANCE RATE MAP (FIRM) OF THE CLARK COUNTY, NEVADA AND INCORPORATED AREAS, COMMUNITY PANEL NUMBER: 32003C2170F, DATED NOVEMBER 16, 2011. THE PROJECT SITE FALLS WITHIN ZONE X (UNSHADED), DESCRIBED BY FEMA AS: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

GRADING PLAN CERTIFICATION

NAME: GUY M. MORRIS PE #4526 DATE
CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED DRAINAGE STUDY CLV XX-XXXXX FOR THIS SITE ON FILE AT CLARK COUNTY FOR THIS PROJECT.

NOTE:

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SAFETY ALERT

Call Before You Dig
Avoid cutting underground utility lines. It's costly.

1-702-432-5300
1-702-227-2929
1-800-227-2800

APN:

140-31-102-003

BASIS OF BEARINGS:

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983 SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN. ZONE: LAS VEGAS ELEVATION ZONE DATUM (REFERENCE FRAME); NAD 1983(2011) EPOCH 2010.0 SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

BENCHMARK:

CLARK COUNTY BENCHMARK: 2LV023054 BEING A RIVET & PLATE IN TOP OF CURB AT NE CORNER OF BONANZA & SANDHILL 543.45 METERS OR 1782.98 U.S. SURVEY FEET

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	60" ROW LED STREETLIGHTS	80" ROW LED STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	(-2210)								(12.35)		⊙	⊙ = SANITARY SEWER						⊙	⊙	⊙
ROW LINE	DISTURBANCE LIMIT	PROPOSED:	(-2122)								(12.34)		⊙	⊙ = STORM DRAIN						⊙	⊙	⊙
	SWALE LINE												⊙	⊙ = ELECTRICAL						⊙	⊙	⊙
													⊙	⊙ = TELEPHONE						⊙	⊙	⊙

REVISIONS:

REV.	DESCRIPTION:	DATE:
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		



ethos three ARCHITECTURE

Lochsa Engineering

9385 S Eastern Avenue, Suite 220, Las Vegas, NV 89123
p: 702.456.1070 f: 702.456.1020 www.ethosthree.com

CONSULTANT:

CONSTRUCTION MGMT: DATE:

BUILDING DEPARTMENT:

ASBESTOS WORK IS:
REQUIRED ☐ NOT REQUIRED ☐

MPID: 0014610

CLARK COUNTY SCHOOL DISTRICT
CONSTRUCTION MANAGEMENT DEPARTMENT 1180 MILITARY TRIBUTE PL. HENDERSON, NV 89074 PHONE: 702-799-8710

ORAN K GRAGSON ELEMENTARY SCHOOL

OVERALL GRADING PLANS

ELEMENTARY SCHOOL ADDITION

C4.00
SHEET 6 OF 16

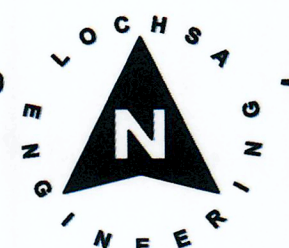
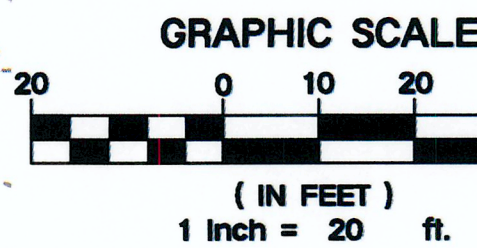
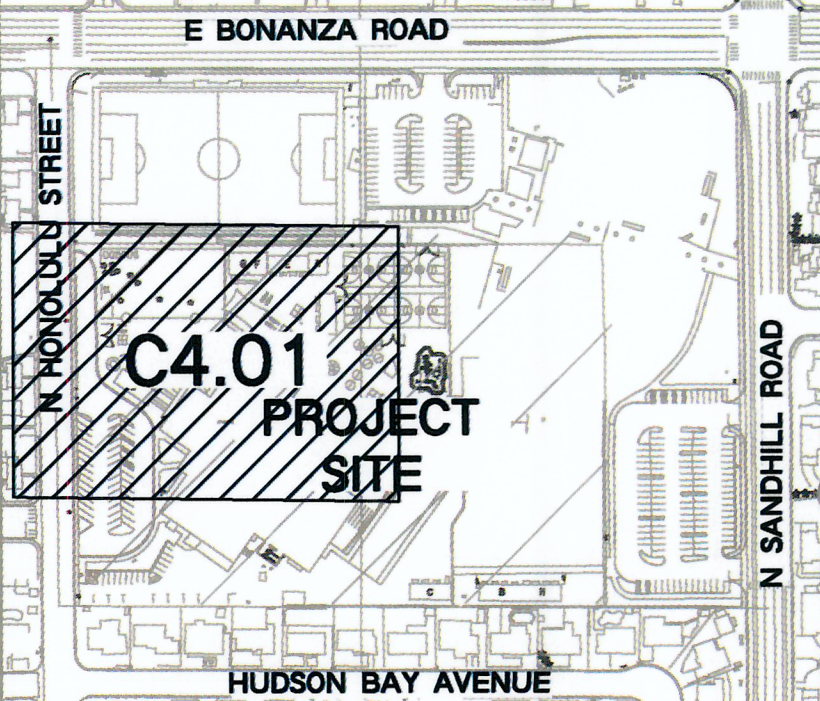
APN: 140-31-102-002
CITY OF LAS VEGAS
OR: 19960131:02357
8.02 ACRES

PROPOSED TWO STORY
18 CLASSROOM BLDG
FF=1786.60

PROPOSED KINDERGARTEN
PLAYGROUND TURF AREA

PROPOSED
GARDEN AREA

EXISTING BUILDING
APN: 140-31-102-003
FF=(1786.60)



CONSTRUCTION NOTES:

- ALL PRIVATE CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (USDCCA)" LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.
- EXISTING FENCE, PROTECT IN PLACE.
- CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
- CONSTRUCT CONCRETE PAVEMENT PER DETAIL 1 ON C7.01.
- CONSTRUCT 4" VALLEY GUTTER PER DETAIL 5 ON C6.02.
- CONSTRUCT "A" TYPE CURB PER DETAIL 3 ON C7.01.
- CONSTRUCT "L" TYPE CURB PER USDCCA NO. 216.
- SAWCUT AND MATCH EXISTING GRADE.
- CONSTRUCT 42" RAILING/HAND RAIL PER ARCHITECTURAL PLANS.
- CONSTRUCT DEEPEENED FOOTING.
- CONSTRUCT TURNED DOWN SIDEWALK PER DETAIL 4 ON C7.01.
- TEMPORARY REMOVE THE 6" CHAIN LINK FENCE WHILE CONSTRUCTING THE 10' SIDEWALK.
- TRENCH PAVEMENT REPAIR/RESTORATION PER CCAUSD #500.3, #500.4, #500.5, & #503. REPLACE CURB, GUTTER AND SIDEWALK AS NECESSARY.
- CONSTRUCT RAMP PER DETAIL 9 ON C7.01.
- CONSTRUCT 32" WIDE COMMERCIAL DRIVEWAY PER DETAIL 9 ON C7.01 AND CCAUSD NO. 227.51.
- TRENCH AND BACKFILL PER SOILS REPORT. REPLACE AC, PLAYGROUND PAINT, VALLEY GUTTER, CURB AND GUTTER, WALLS, AND SIDEWALK AS NECESSARY.
- CONSTRUCT AUTOMOBILE PARKING AC PAVEMENT PER DETAIL 1 ON C7.01.
- CONSTRUCT TRUCK ACCESS AC PAVEMENT PER DETAIL 1 ON C7.01.
- REPLACE EXISTING "SAFE ROUTES NO PARKING" IN-KIND.

ASBESTOS WORK IS:
☐ REQUIRED ☐ NOT REQUIRED

MPID: 0014610

MAX 2% H.S.
MIN. 5% L.S.

TYPICAL GRADING IN LANDSCAPE AREAS AWAY FROM BUILDING		
CUT	FILL	NET
28 CY	1,083 CY	1,085 CY

NOTE: CUT/FILL QUANTITIES ARE TO FINISHED GRADE & DO NOT INCLUDE MATERIAL THICKNESS, FOOTINGS, ETC.

FLOOD ZONE NOTE:
THE PROJECT SITE IS COVERED BY THE FLOOD INSURANCE RATE MAP (FIRM) FOR THE CLARK COUNTY, NEVADA, AND INCORPORATED AREAS, COMMUNITY PANEL NUMBER: 32003C2170F, DATED NOVEMBER 16, 2011. THE PROJECT SITE FALLS WITHIN ZONE "X" (UNSHADED), DESCRIBED BY FEMA AS: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

GRADING PLAN CERTIFICATION

NAME: GUY M. MORRIS PE #14526 DATE: _____

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED DRAINAGE STUDY CLV XX-XXXXX FOR THIS SITE ON FILE AT CLARK COUNTY FOR THIS PROJECT.

NOTE:

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SAFETY ALERT
Call Before You Dig
Avoid cutting underground utility lines. It's costly.

Call Before You Overhead
Call 1-800-227-2829

1-702-432-5300

60" ROW LED 80" ROW LED STREETLIGHTS

GRADING NOTES:

- SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
- CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL NOTIFY LOCHSA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLAN. LOCHSA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
- CONTRACTOR TO ENSURE POSITIVE DRAINAGE. NO PONDING ALLOWED. CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, AND COMPACTION. REFER TO THE REPORT PREPARED BY NOVA GEOTECHNICAL PROJECT NO. G-20-179, DATED: DEC. 14, 2020, PHONE: (702) 873-3478

SPECIAL NOTE TO CONTRACTOR:

EXISTING IRRIGATION, LANDSCAPING, ELECTRICAL, LIGHTING, SIGNAGE AND OTHER EXISTING IMPROVEMENTS MAY BE IMPACTED BY PROPOSED CONSTRUCTION. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING IMPROVEMENTS AND IDENTIFY CONFLICTS. CONTRACTOR SHALL COORDINATE WITH SITE FACILITIES AND ENGINEERING STAFF TO REMOVE AND/OR RELOCATE ANY AND ALL IMPROVEMENTS IN CONFLICT.

ADJUSTMENT, RELOCATION & RESTORATION NOTE:

CONTRACTOR IS RESPONSIBLE TO RESTORE/REPLACE SURFACE IMPROVEMENTS AS NECESSARY TO PROVIDE SURFACING CONSISTENT WITH EXISTING AND ADJACENT IMPROVEMENTS IN ALL AREAS IN WHICH EXISTING IMPROVEMENTS REQUIRE ADJUSTMENT, RELOCATION, RESTORATION OR REMOVAL (INCLUDING, BUT NOT LIMITED TO, THE POSSIBLE RELOCATION OF PLANTERS, LIGHTING IMPROVEMENTS, COMMUNICATIONS, SANITARY SEWER CLEAN-OUTS, DRAINS, WATER IMPROVEMENTS, ETC.). CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE AND TO PROVIDE CONTINUED SERVICE TO ALL IMPACTED IMPROVEMENTS. CONTRACTOR IS RESPONSIBLE TO INVESTIGATE SITE CONDITIONS PRIOR TO BIDDING TO IDENTIFY AND QUANTIFY ANY CONCERNS ASSOCIATED WITH THE RELOCATION OF IMPROVEMENTS.

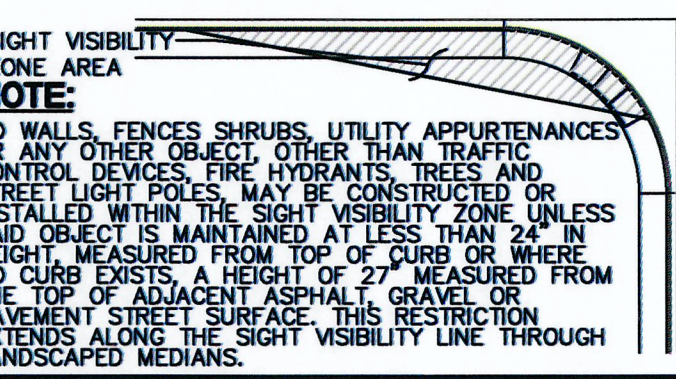
NOTE:

ADD 1700 FEET TO ALL ELEVATIONS ON PLAN
EXISTING UTILITY NOTE:
CONTRACTOR TO ADJUST ALL EXISTING UTILITIES TO MATCH PROPOSED FINISH GRADE ELEVATIONS.

LEGEND:

- PROPOSED AC PAVEMENT
- PROPOSED CONCRETE
- PROPOSED BMP AREA
- PROPOSED LANDSCAPE
- SEE LANDSCAPE PLANS FOR SPECIFICATIONS
- ADA PATH
- DEEPEENED FOOTING

SIGHT VISIBILITY ZONE (SVZ)



GEOTECHNICAL:

ALL GRADING SHALL BE PERFORMED IN COMPLIANCE WITH THE SOILS REPORT PREPARED BY: NOVA GEOTECHNICAL, DATED: DEC. 14, 2020, PROJECT NO. G-20-179, PHONE: (702) 873-3478, MARTIN D. JENSEN P.E.

STORMWATER MANAGEMENT NOTES:

- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- 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 THE CLARK COUNTY BUILDING ADMINISTRATIVE CODE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY: REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
- 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.

A.P.N.:

140-31-102-003

BASIS OF BEARINGS:

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN. ZONE: LAS VEGAS ELEVATION ZONE. FRAME: NAD 1983(2011) EPOCH 2010.0 SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

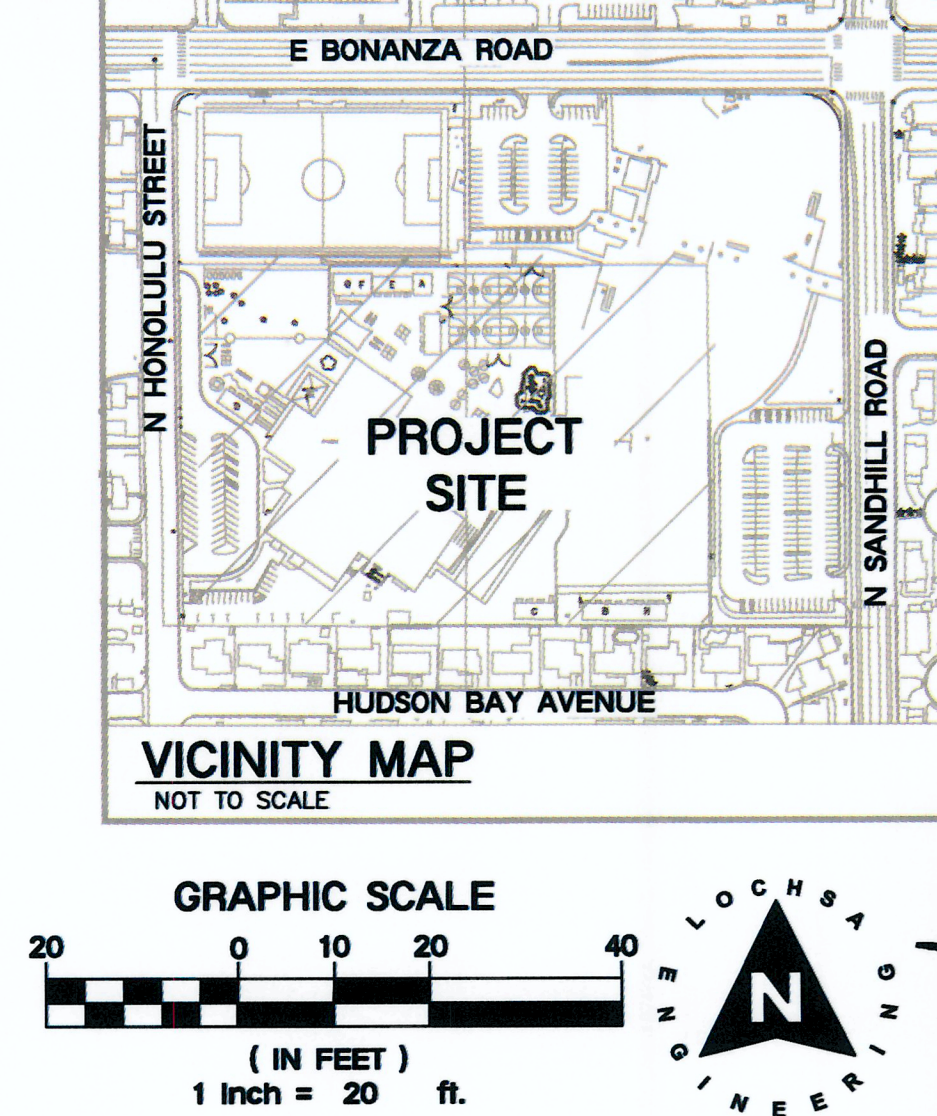
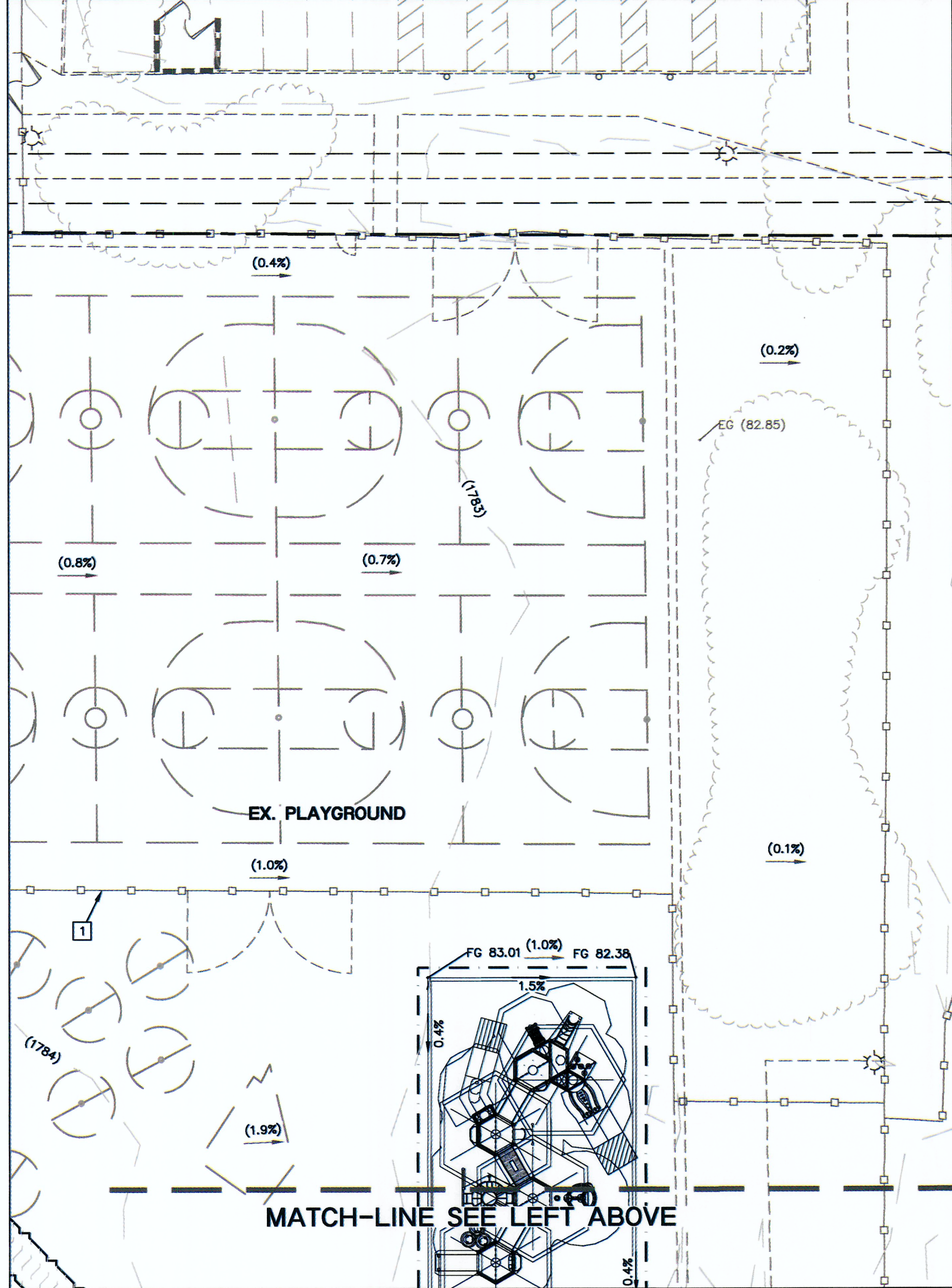
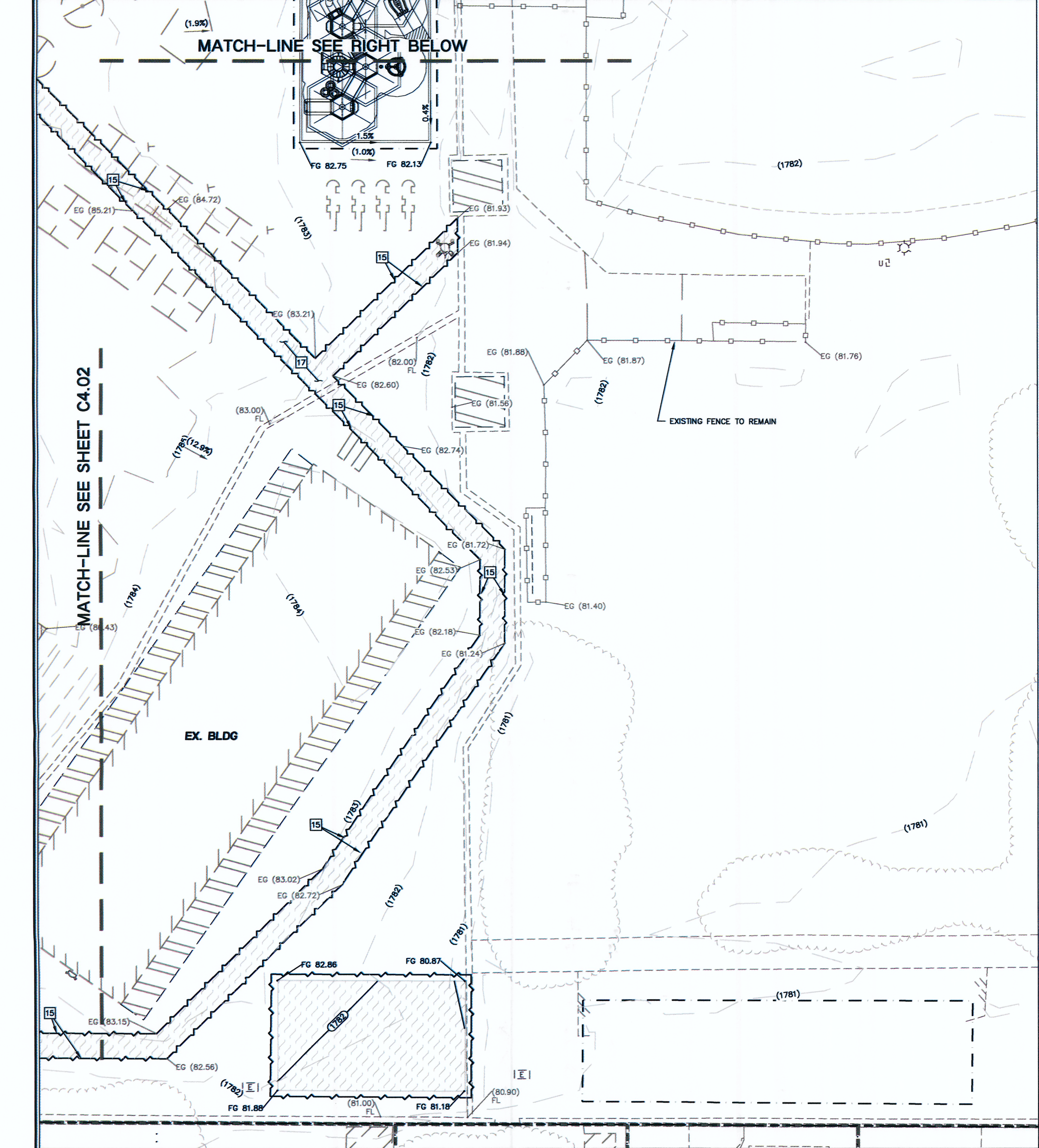
BENCHMARK:

CLARK COUNTY BENCHMARK: 2LV203054 BEING A RIVET & PLATE IN TOP OF CURB AT NE CORNER OF BONANZA & SANDHILL 543.45 METERS OR 1782.98 U.S. SURVEY FEET

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	60" ROW LED STREETLIGHTS	80" ROW LED STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	(2210)								(12.34)			⑤ = SANITARY SEWER						(BWV)		
ROW LINE	DISTURBANCE LIMIT	PROPOSED:	(2122)								(12.34)			⑥ = STORM DRAIN						(BWV)		
	SWALE LINE													⑦ = ELECTRICAL								
														⑧ = TELEPHONE								

C4.01

SHEET 7 OF 16



- CONSTRUCTION NOTES:**
1. ALL PRIVATE CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (USDCCA)" LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.
 2. EXISTING FENCE, PROTECT IN PLACE.
 3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
 4. CONSTRUCT CONCRETE PAVEMENT PER DETAIL 1 ON C7.01.
 5. CONSTRUCT 4" VALLEY GUTTER PER DETAIL 5 ON C6.02.
 6. CONSTRUCT "A" TYPE CURB PER DETAIL 3 ON C7.01.
 7. CONSTRUCT "L" TYPE CURB PER USDCCA NO. 216.
 8. SAWCUT AND MATCH EXISTING GRADE.
 9. CONSTRUCT 42" RAILING/HAND RAIL PER ARCHITECTURAL PLANS.
 10. CONSTRUCT DEEPEENED FOOTING.
 11. CONSTRUCT TURNED DOWN SIDEWALK PER DETAIL 4 ON C7.01.
 12. TEMPORARY REMOVE THE 6" CHAIN LINK FENCE WHILE CONSTRUCTING THE 10' SIDEWALK.
 13. TRENCH PAVEMENT REPAIR/RESTORATION PER CCAUSD #500.3, #500.4, #500.5, & #503. REPLACE CURB, GUTTER AND SIDEWALK AS NECESSARY.
 14. CONSTRUCT RAMP PER DETAIL 9 ON C7.01.
 15. CONSTRUCT 32" WIDE COMMERCIAL DRIVEWAY PER DETAIL 9 ON C7.01 AND CCAUSD, NO. 227.SI
 16. TRENCH AND BACKFILL PER SOILS REPORT, REPLACE AC, PLAYGROUND PAINT, VALLEY GUTTER, CURB AND GUTTER, WALLS, AND SIDEWALK AS NECESSARY.
 17. CONSTRUCT AUTOMOBILE PARKING AC PAVEMENT PER DETAIL 1 ON C7.01.
 18. CONSTRUCT TRUCK ACCESS AC PAVEMENT PER DETAIL 1 ON C7.01.
 19. REPLACE EXISTING "SAFE ROUTES NO PARKING" IN-KIND.

TYPICAL GRADING IN LANDSCAPE AREAS AWAY FROM BUILDING

CUT	FILL	NET
28 CY	1,983 CY	1,955 CY

NOTE: CUT/FILL QUANTITIES ARE TO FINISHED GRADE & DO NOT INCLUDE MATERIAL THICKNESS'S, FOOTINGS, ETC.

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GRADING PLAN CERTIFICATION

NAME: GUY M. MORRIS PE #14526 DATE: _____

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED DRAINAGE STUDY CLV XX-XXXXX FOR THIS SITE ON FILE AT CLARK COUNTY FOR THIS PROJECT.

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Call Before You Dig
Call 811 before you dig

Call Before You Dig
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GRADING NOTES:

1. SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
2. CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL NOTIFY LOCHSA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. LOCHSA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE. NO PONDING ALLOWED. CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, AND COMPACTION. REFER TO THE REPORT, PREPARED BY NOVA GEOTECHNICAL, PROJECT NO. G-20-179, DATED: DEC. 14, 2020, PHONE: (702) 873-3478

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NOTE:

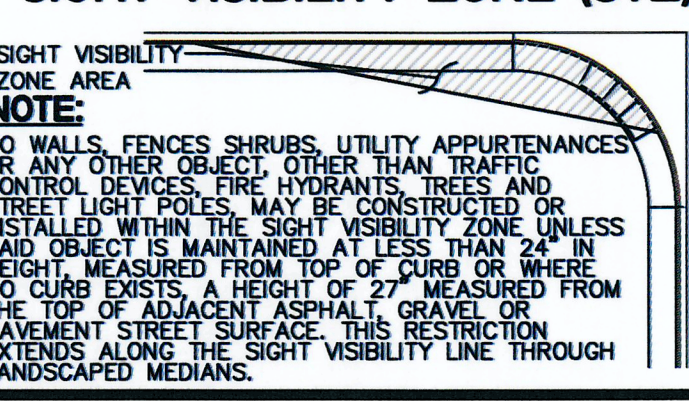
ADD 1700 FEET TO ALL ELEVATIONS ON PLAN

EXISTING UTILITY NOTE:
CONTRACTOR TO ADJUST ALL EXISTING UTILITIES TO MATCH PROPOSED FINISH GRADE ELEVATIONS.

LEGEND:

- PROPOSED AC PAVEMENT
- PROPOSED CONCRETE
- PROPOSED BMP AREA
- PROPOSED LANDSCAPE SEE LANDSCAPE PLANS FOR SPECIFICATIONS
- ADA PATH
- DEEPEENED FOOTING

SIGHT VISIBILITY ZONE (SVZ)



GEOTECHNICAL:
ALL GRADING SHALL BE PERFORMED IN COMPLIANCE WITH THE SOILS REPORT PREPARED BY: NOVA GEOTECHNICAL, DATED: DEC. 14, 2020, PROJECT NO. # G-20-179, PHONE: (702) 873-3478 MARTIN D. JENSEN P.E.

STORMWATER MANAGEMENT NOTES:

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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 THE CLARK COUNTY BUILDING ADMINISTRATIVE CODE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS, AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

A.P.N.:

140-31-102-003

BASIS OF BEARINGS:

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN. ZONE: LAS VEGAS ELEVATION ZONE. DATUM (REFERENCE FRAME): NAD 1983(2011) EPOCH 2010.0 SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

BENCHMARK:

CLARK COUNTY BENCHMARK: 2LV023054 BEING A RIVET & PLATE IN TOP OF CURB AT NE CORNER OF BONANZA & SANDHILL 543.45 METERS OR 1782.98 U.S. SURVEY FEET

LEGEND	CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	60" ROW LED STREETLIGHTS	80" ROW LED STREETLIGHTS
	PROPERTY LINE	SAWTOOTH	EXISTING:	(2210)								(12.34) BC		⊙	⊙ = SANITARY SEWER	⊙	⊙	▷	○	□	⊙ (BWV)	⊙	⊙
	ROW LINE	DISTURBANCE LIMIT	PROPOSED:	(2122)									(12.34) BC	⊙	⊙ = STORM DRAIN	⊙	⊙	▷	○	□	⊙ (BWV)	⊙	⊙
		SWALE LINE												⊙	⊙ = ELECTRICAL								
														⊙	⊙ = TELEPHONE								

C4.03

SHEET 9 OF 18

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PROJECT SITE

VICINITY MAP
NOT TO SCALE

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

CONSTRUCTION NOTES:

1. ALL PRIVATE CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (USDCCA)" LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.
2. EXISTING FENCE, PROTECT IN PLACE.
3. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
4. CONSTRUCT CONCRETE PAVEMENT PER DETAIL 1 ON C7.01.
5. CONSTRUCT 4" VALLEY GUTTER PER DETAIL 5 ON C6.02.
6. CONSTRUCT "A" TYPE CURB PER DETAIL 3 ON C7.01.
7. CONSTRUCT "L" TYPE CURB PER USDCCA NO. 216.
8. SAWCUT AND MATCH EXISTING GRADE.
9. CONSTRUCT 42" RAILING/HAND RAIL PER ARCHITECTURAL PLANS.
10. CONSTRUCT DEEPEENED FOOTING.
11. CONSTRUCT TURNED DOWN SIDEWALK PER DETAIL 4 ON C7.01.
12. TEMPORARY REMOVE THE 6" CHAIN LINK FENCE WHILE CONSTRUCTING THE 10' SIDEWALK.
13. TRENCH PAVEMENT REPAIR/RESTORATION PER CCAUSD #500.3, #500.4, #500.5, & #503. REPLACE CURB, GUTTER AND SIDEWALK AS NECESSARY.
14. CONSTRUCT RAMP PER DETAIL 9 ON C7.01.
15. CONSTRUCT 32" WIDE COMMERCIAL DRIVEWAY PER DETAIL 9 ON C7.01 AND CCAUSD, NO. 227.SI
16. TRENCH AND BACKFILL PER SOILS REPORT, REPLACE AC, PLAYGROUND PAINT, VALLEY GUTTER, CURB AND GUTTER, WALLS, AND SIDEWALK AS NECESSARY.
17. CONSTRUCT AUTOMOBILE PARKING AC PAVEMENT PER DETAIL 1 ON C7.01.
18. CONSTRUCT TRUCK ACCESS AC PAVEMENT PER DETAIL 1 ON C7.01.
19. REPLACE EXISTING "SAFE ROUTES NO PARKING" IN-KIND.

ASBESTOS WORK IS:
REQUIRED ☐ NOT REQUIRED ☐

MPID: 0014610

CLARK COUNTY SCHOOL DISTRICT
CONSTRUCTION MANAGEMENT DEPARTMENT 1180 MILITARY TRIBUTE PL HENDERSON NV 89074 PHONE: 702-799-8710

ORAN K GRAGSON ELEMENTARY SCHOOL
PROJECT: ORAN K GRAGSON ELEMENTARY SCHOOL

GRADING PLANS
DRAWING TITLE: GRADING PLANS

SHEET 3 OF 4

ELEMENTARY SCHOOL ADDITION
FACILITY: ELEMENTARY SCHOOL ADDITION

REVISIONS:

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SEAL:
GUY M. MORRIS
EXP. 12-31-21
CIVIL
No. 14526
N.V.

DATE: JAN 25, 2021
DRAWN BY: BZ
SUBMITTAL:
DATE: 201081
DATE: 201081

ethos three
ARCHITECTURE

Lochsa Engineering
8345 South Jones Blvd.
Suite 100
Las Vegas, NV 89119
Phone (702) 365-8912
Fax (702) 365-5817
www.lochsa.com

CONSULTANT:

CONSTRUCTION MGMT: DATE:

BUILDING DEPARTMENT:

ASBESTOS WORK IS:
REQUIRED ☐ NOT REQUIRED ☐

MPID: 0014610

CLARK COUNTY SCHOOL DISTRICT
CONSTRUCTION MANAGEMENT DEPARTMENT 1180 MILITARY TRIBUTE PL HENDERSON NV 89074 PHONE: 702-799-8710

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FACILITY: ELEMENTARY SCHOOL ADDITION

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ORAN K GRAGSON ELEMENTARY SCHOOL
PROJECT: ORAN K GRAGSON ELEMENTARY SCHOOL

GRADING PLANS
DRAWING TITLE: GRADING PLANS

SHEET 3 OF 4

ELEMENTARY SCHOOL ADDITION
FACILITY: ELEMENTARY SCHOOL ADDITION

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ORAN K GRAGSON ELEMENTARY SCHOOL
PROJECT: ORAN K GRAGSON ELEMENTARY SCHOOL

GRADING PLANS
DRAWING TITLE: GRADING PLANS

SHEET 3 OF 4

ELEMENTARY SCHOOL ADDITION
FACILITY: ELEMENTARY SCHOOL ADDITION

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CONSULTANT:

CONSTRUCTION MGMT: DATE:

BUILDING DEPARTMENT:

ASBESTOS WORK IS:
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MPID: 0014610

CLARK COUNTY SCHOOL DISTRICT
CONSTRUCTION MANAGEMENT DEPARTMENT 1180 MILITARY TRIBUTE PL HENDERSON NV 89074 PHONE: 702-799-8710

ORAN K GRAGSON ELEMENTARY SCHOOL
PROJECT: ORAN K GRAGSON ELEMENTARY SCHOOL

GRADING PLANS
DRAWING TITLE: GRADING PLANS

SHEET 3 OF

GRADING NOTES:

1. SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
2. CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL NOTIFY LOCHSA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. LOCHSA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE, NO PONDING ALLOWED. CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, AND COMPACTION. REFER TO THE REPORT PREPARED BY NOVA GEOTECHNICAL, PROJECT NO. G-20-179, DATED: DEC. 14, 2020, PHONE: (702) 873-3478

SPECIAL NOTE TO CONTRACTOR:

EXISTING IRRIGATION, LANDSCAPING, ELECTRICAL, LIGHTING, SIGNAGE AND OTHER EXISTING IMPROVEMENTS MAY BE IMPACTED BY PROPOSED CONSTRUCTION. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING IMPROVEMENTS AND IDENTIFY CONFLICTS. CONTRACTOR SHALL COORDINATE WITH SITE FACILITIES AND ENGINEERING STAFF TO REMOVE AND/OR RELOCATE ANY AND ALL IMPROVEMENTS IN CONFLICT.

ADJUSTMENT, RELOCATION & RESTORATION NOTE:

CONTRACTOR IS RESPONSIBLE TO RESTORE/ REPLACE SURFACE IMPROVEMENTS AS NECESSARY TO PROVIDE SURFACING CONSISTENT WITH EXISTING AND ADJACENT IMPROVEMENTS IN ALL AREAS IN WHICH POSSIBLE RELOCATION OF PLANTERS, LIGHTING IMPROVEMENTS, COMMUNICATIONS, SANITARY SEWER CLEAN-OUTS, DRAINS, WATER IMPROVEMENTS, ETC.). CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE AND TO PROVIDE CONTINUED SERVICE TO ALL IMPACTED IMPROVEMENTS. CONTRACTOR IS RESPONSIBLE TO INVESTIGATE SITE CONDITIONS PRIOR TO BIDDING TO IDENTIFY AND QUANTIFY ANY CONCERNS ASSOCIATED WITH THE RELOCATION OF IMPROVEMENTS.

NOTE:

ADD 1700 FEET TO ALL ELEVATIONS ON PLAN

EXISTING UTILITY NOTE:

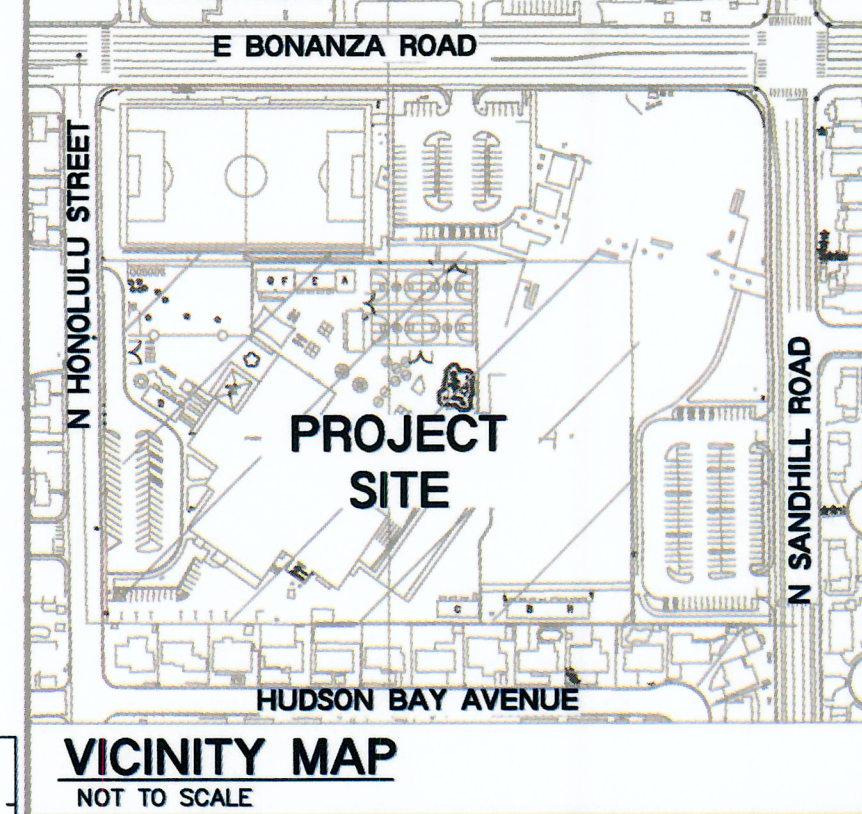
CONTRACTOR TO ADJUST ALL EXISTING UTILITIES MATCH PROPOSED FINISH GRADE ELEVATIONS.

LEGEND:

- PROPOSED AC PAVEMENT
- PROPOSED CONCRETE
- PROPOSED BMP AREA
- PROPOSED LANDSCAPE
- SEE LANDSCAPE PLANS FOR SPECIFICATIONS
- ADA PATH
- DEEPEENED FOOTING

GRAPHIC SCALE

10 0 05 10 20
(IN FEET)
1 inch = 10 ft.



REVISIONS:		
REV.	DESCRIPTION	DATE

ethos three
ARCHITECTURE

Lochsa
ENGINEERING

8985 S Eastern Avenue, Suite 220, Las Vegas, NV 89123
p: 702.456.1070 f: 702.456.7020 www.ethosthree.com

CONSULTANT:

PROFESSIONAL ENGINEER-STATE OF NEVADA
GUY M. MORRIS
EXP. 12-31-21
No. 14526

DATE: JAN 25, 2021
DRAWN BY: BZ
SUBMITTAL: 201091
A/E PROJECT NO.

PROPOSED TWO STORY
18 CLASSROOM BLDG
FF=1786.60

MAX 2% H.S.
MIN. 6% L.S.

TYPICAL GRADING IN LANDSCAPE AREAS
AWAY FROM BUILDING

CUT	FILL	NET
28 CY	1,983 CY	1,955 CY

NOTE: CUT/FILL QUANTITIES ARE TO FINISHED GRADE & DO NOT INCLUDE MATERIAL THICKNESS, FOOTINGS, ETC.

FLOOD ZONE NOTE:

THE PROJECT SITE IS COVERED BY THE FLOOD INSURANCE RATE MAP (FIRM) FOR THE CLARK COUNTY, NEVADA AND INCORPORATED AREAS, COMMUNITY PANEL NUMBER: 32003C2170F, DATED NOVEMBER 16, 2011. THE PROJECT SITE FALLS WITHIN ZONE "X" (UNSHADED), DESCRIBED BY FEMA AS: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

GRADING PLAN CERTIFICATION

NAME: GUY M. MORRIS PE #14526 DATE:

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED DRAINAGE STUDY CLV XX-XXXX FOR THIS SITE ON FILE AT CLARK COUNTY FOR THIS PROJECT.

CONSTRUCTION NOTES:

- 1. ALL PRIVATE CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (USDOCA)" LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.
- 2. CONSTRUCT CONCRETE SIDEWALK PER USDOCA No. 234.
- 3. CONSTRUCT CONCRETE PAVEMENT PER DETAIL 1 ON C7.01.
- 4. CONSTRUCT 4" VALLEY GUTTER PER DETAIL 5 ON C6.02.
- 5. CONSTRUCT "A" TYPE CURB PER DETAIL 3 ON C7.01.
- 6. CONSTRUCT "L" TYPE CURB PER USDOCA No. 216.
- 7. SAWCUT AND MATCH EXISTING GRADE.
- 8. CONSTRUCT 42" RAILING/HAND RAIL PER ARCHITECTURAL PLANS.
- 9. CONSTRUCT DEEPEENED FOOTING.
- 10. CONSTRUCT TURNED DOWN SIDEWALK PER DETAIL 4 ON C7.01.
- 11. TEMPORARY REMOVE THE 6" CHAIN LINK FENCE WHILE CONSTRUCTING THE 10' SIDEWALK.
- 12. TRENCH PAVEMENT REPAIR/RESTORATION PER CCAUSD #500.3, #500.4, #500.5, & #503. REPLACE CURB, GUTTER AND SIDEWALK AS NECESSARY.
- 13. CONSTRUCT RAMP PER DETAIL 9 ON C7.01.
- 14. CONSTRUCT 32" WIDE COMMERCIAL DRIVEWAY PER DETAIL 9 ON C7.01 AND CCAUSD, NO. 227.51.
- 15. TRENCH AND BACKFILL PER SOILS REPORT. REPLACE AC, PLAYGROUND PAINT, VALLEY GUTTER, CURB AND GUTTER, WALLS, AND SIDEWALK AS NECESSARY.
- 16. CONSTRUCT AUTOMOBILE PARKING AC PAVEMENT PER DETAIL 1 ON C7.01.
- 17. CONSTRUCT TRUCK ACCESS AC PAVEMENT PER DETAIL 1 ON C7.01.

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

SIGHT VISIBILITY ZONE (SVZ)

SIGHT VISIBILITY ZONE AREA

NOTE: NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES AND INSTALLED LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SVZ UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 2' IN HEIGHT, MEASURED FROM TOP OF CURB OR WHERE NO CURB EXISTS, A HEIGHT OF 27" MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL, OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SVZ VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

GEOTECHNICAL:

ALL GRADING SHALL BE PERFORMED IN COMPLIANCE WITH THE SOILS REPORT PREPARED BY: NOVA GEOTECHNICAL, DATED: DEC. 14, 2020, PROJECT NO. # G-20-179, PHONE: (702) 873-3478, MARTIN D. JENSEN P.E.

LEGEND	CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	60" ROW LED	80" ROW LED
	PROPERTY LINE	SAWCUT LINE	EXISTING:	(2210)								(12.34) BC									(BWV)		
	ROW LINE	DISTURBANCE LIMIT	PROPOSED:	(2122)								(12.34) BC									(BWV)		
		SWALE LINE																					

CLARK COUNTY SCHOOL DISTRICT
CONSTRUCTION MANAGEMENT DEPARTMENT 1180 MILITARY TRIBUTE PL. HENDERSON NV 89074 PHONE: 702-799-8710

PROJECT: **ORAN K GRAGSON ELEMENTARY SCHOOL**

DRAWING TITLE: **GRADING PLANS**

FACILITY: **DETAILED GRADING 4 OF 4**

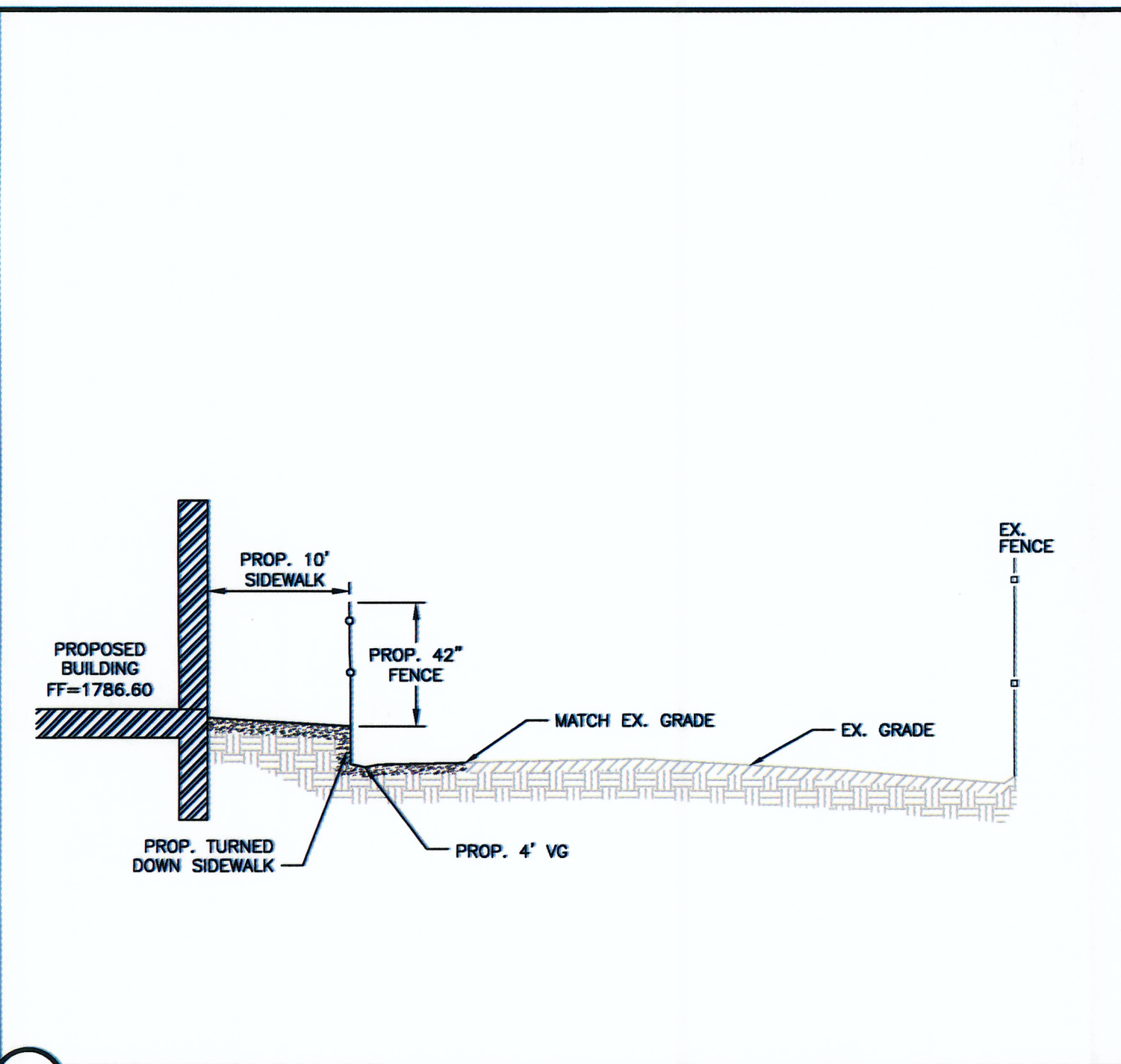
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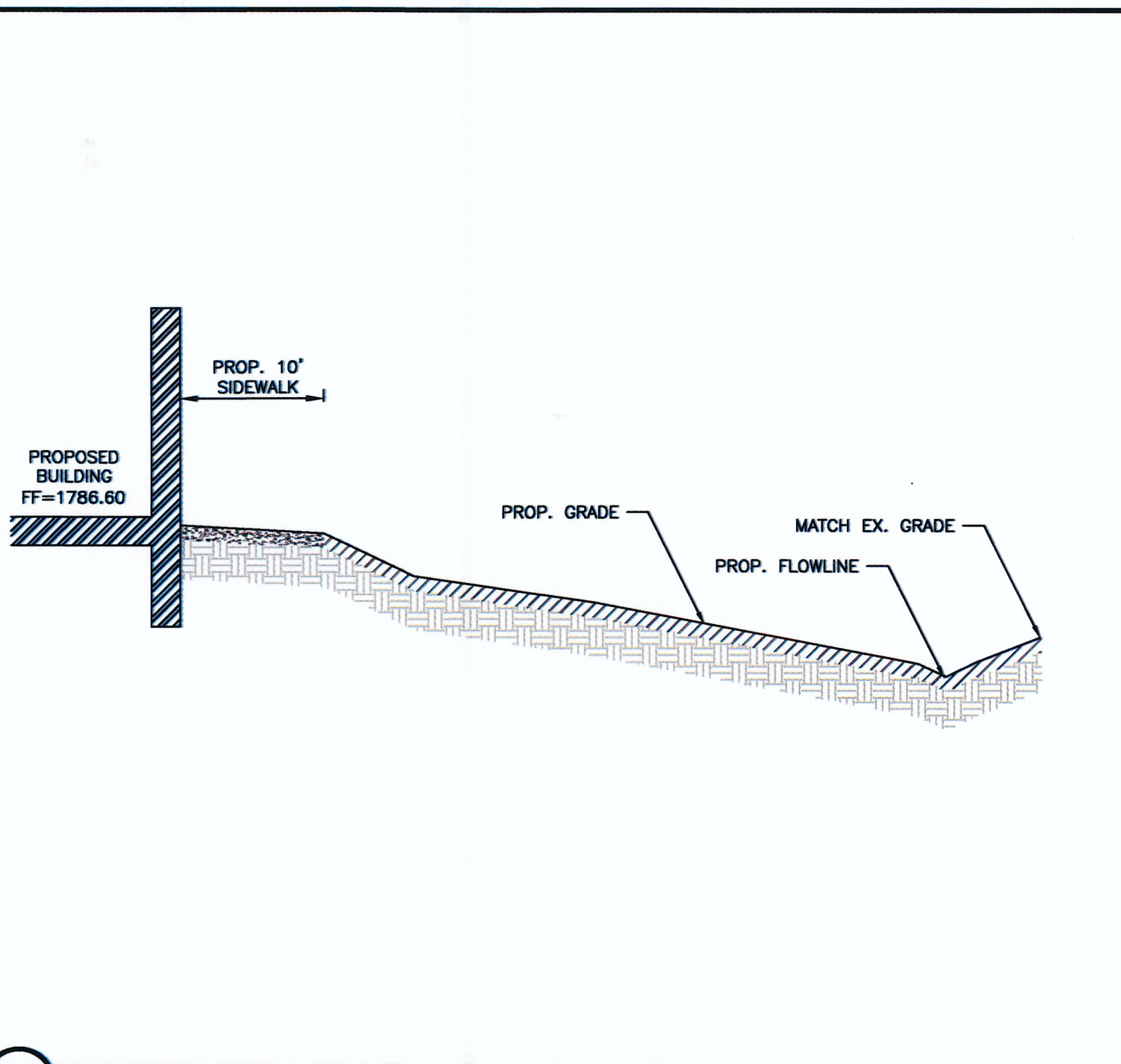
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1-800-227-2800

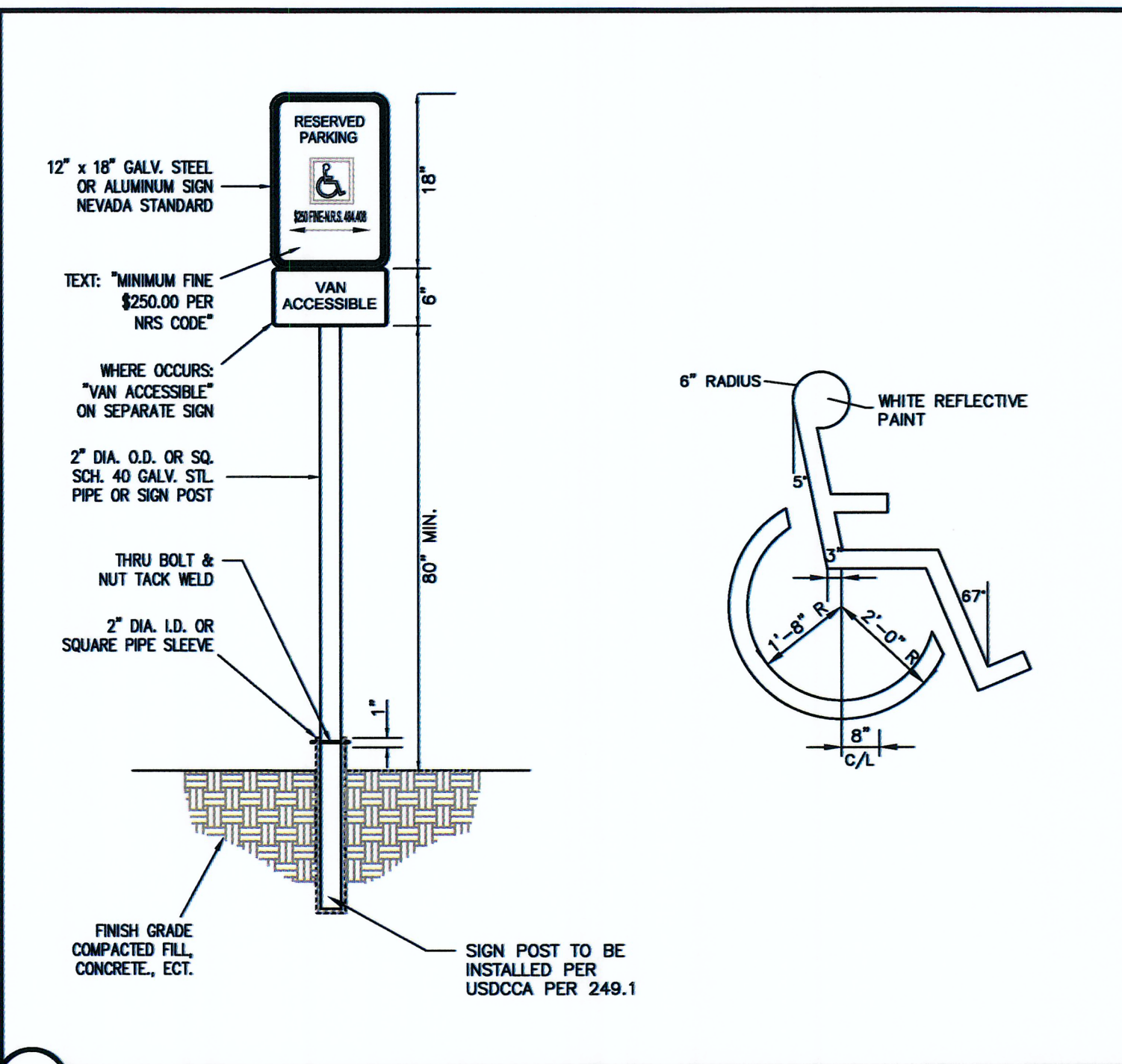
C4.04
SHEET 10 OF 16



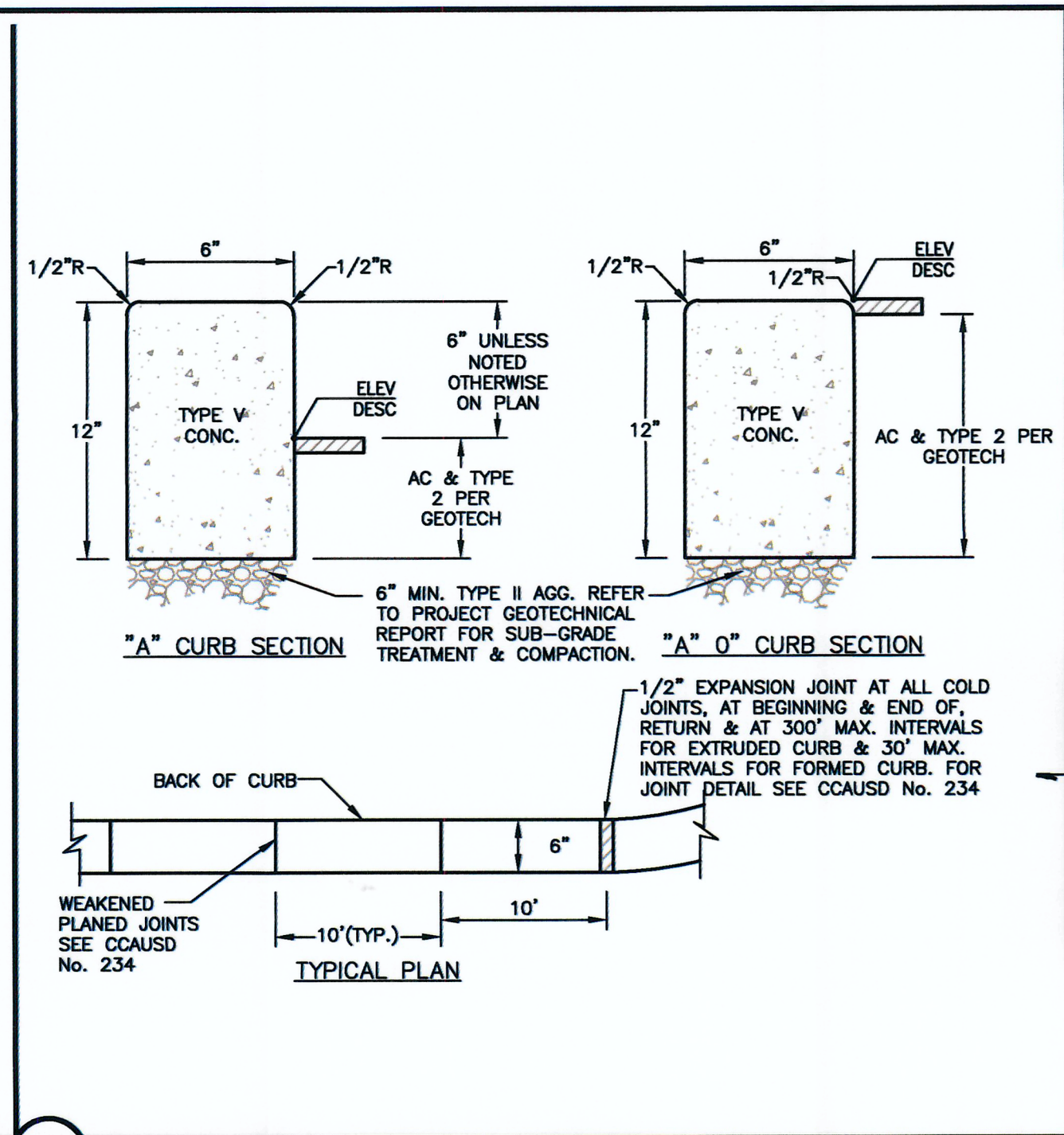
C EAST BUILDING NOT TO SCALE



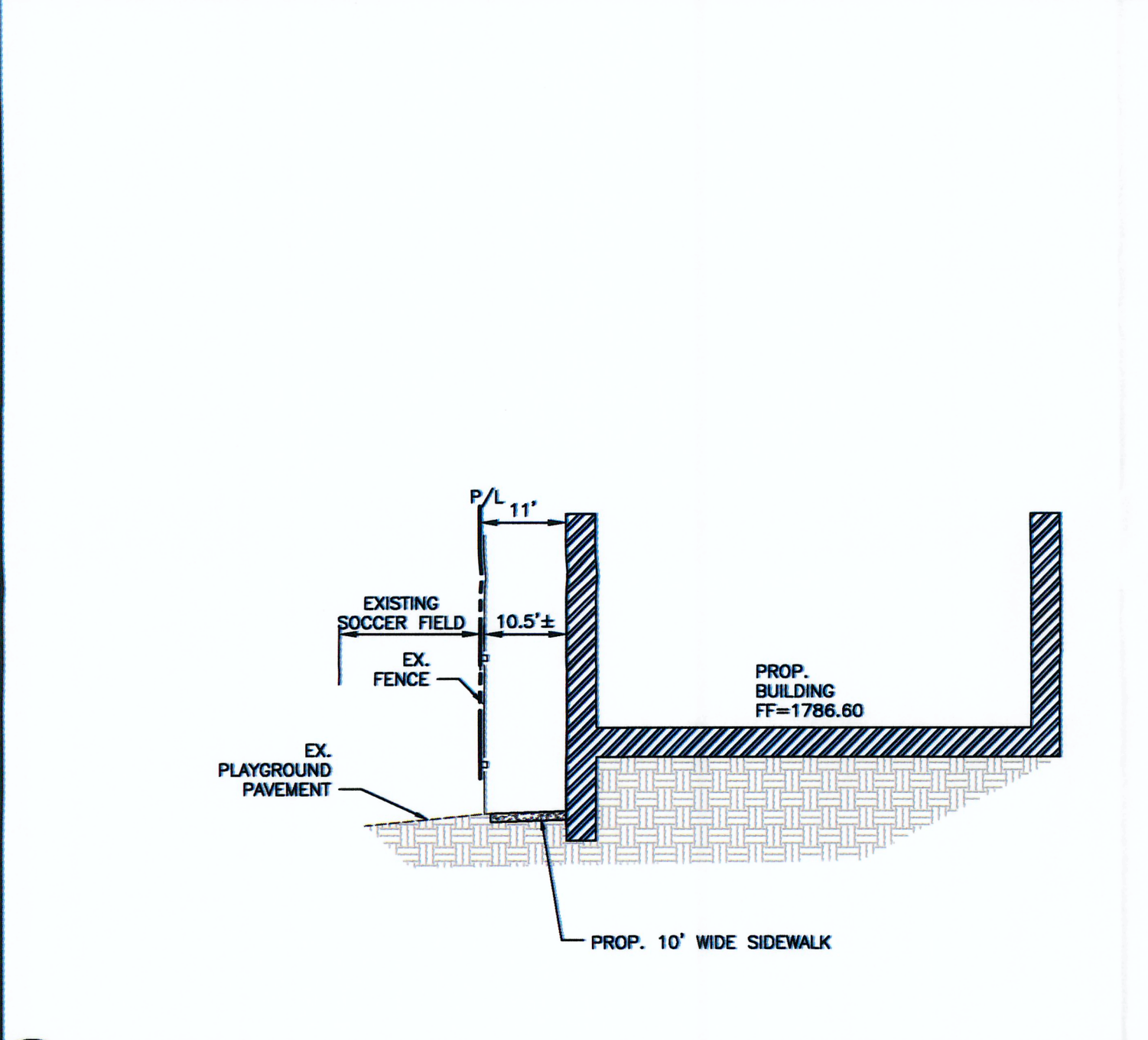
D SOUTH BUILDING NOT TO SCALE



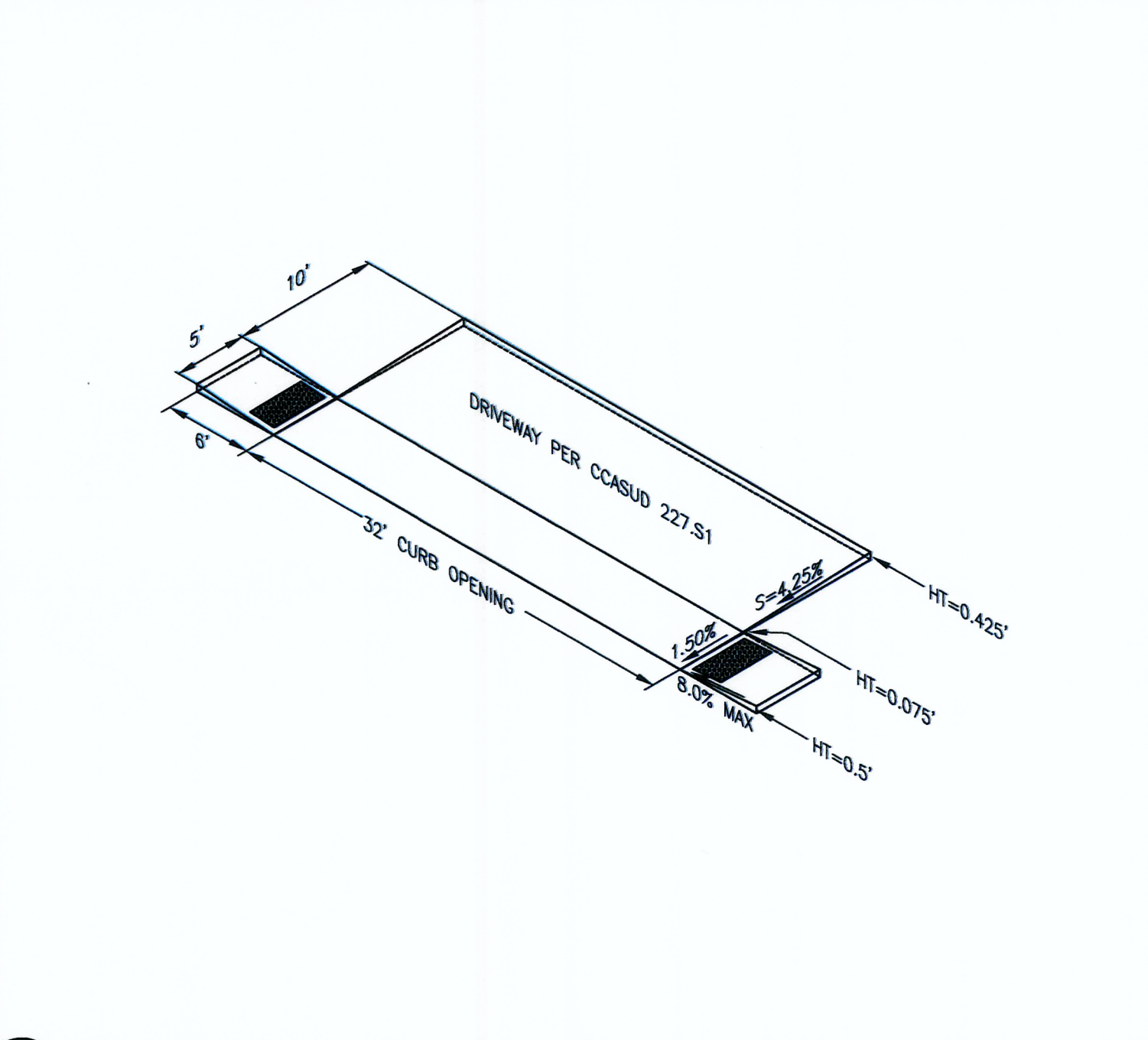
7 ADA PARKING SIGN AND MARKING NOT TO SCALE



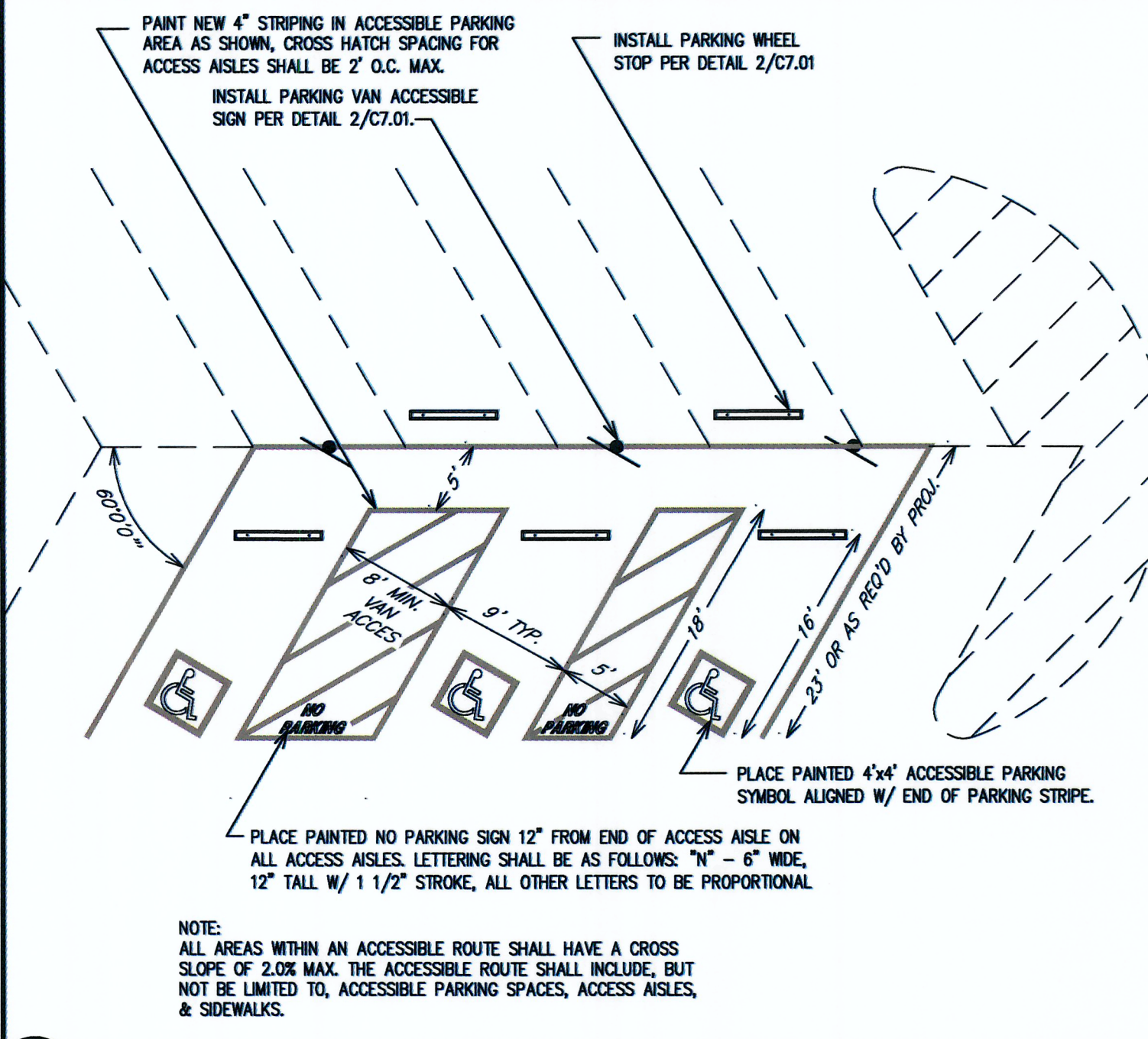
3 "A" CURB / 0-INCH CURB NOT TO SCALE



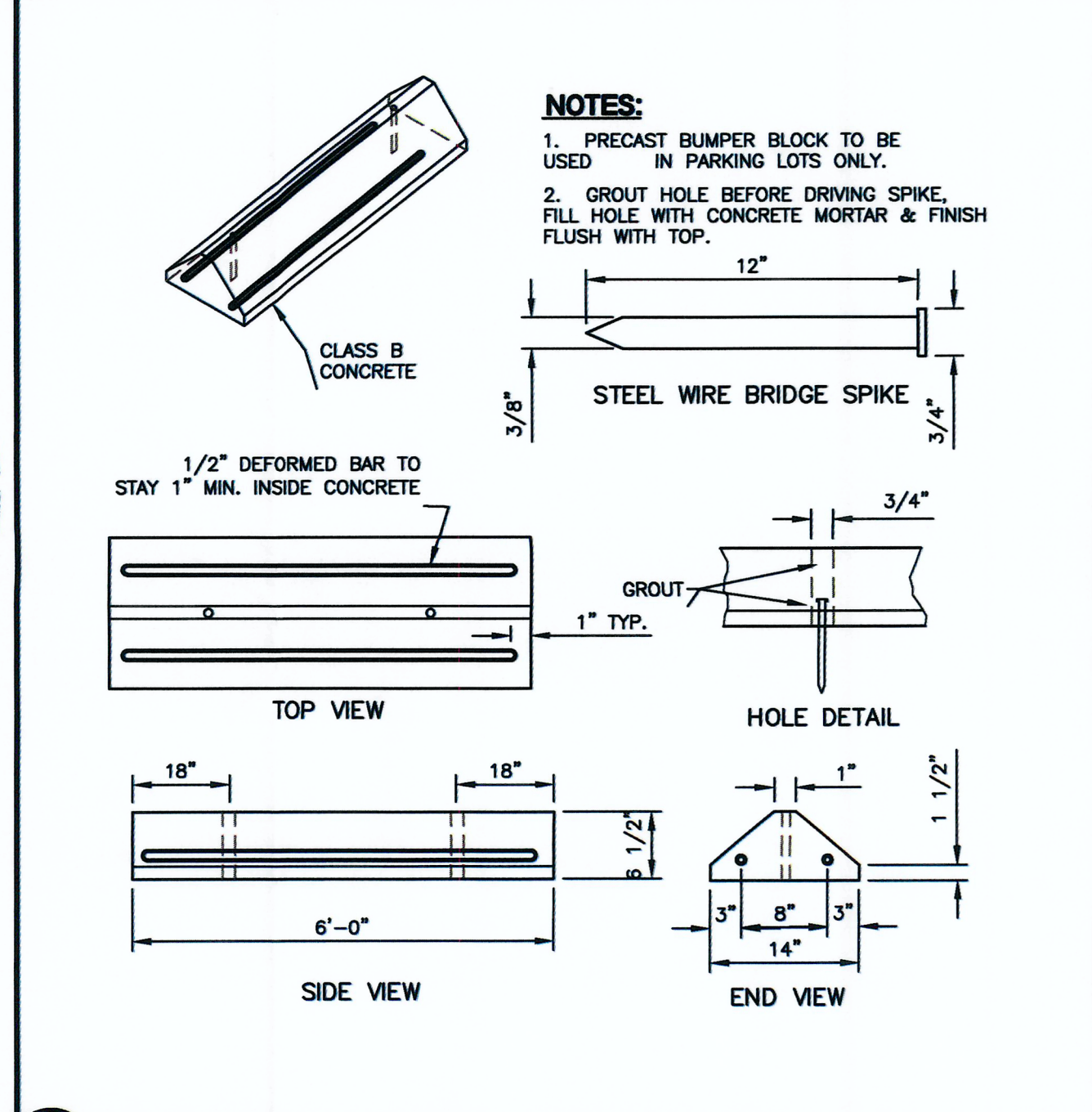
B NORTH BUILDING NOT TO SCALE



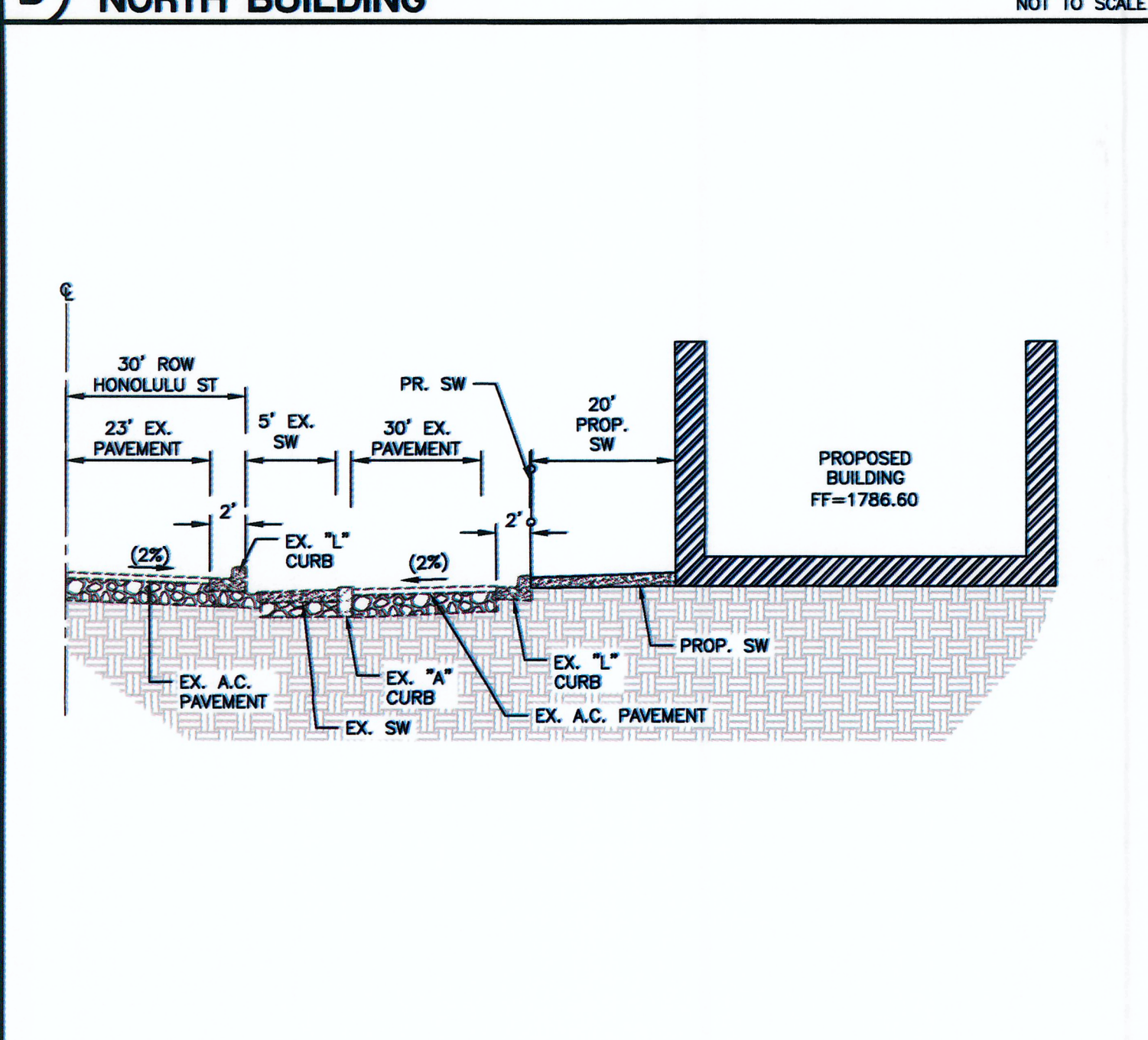
9 ADA RAMP DETAIL NOT TO SCALE



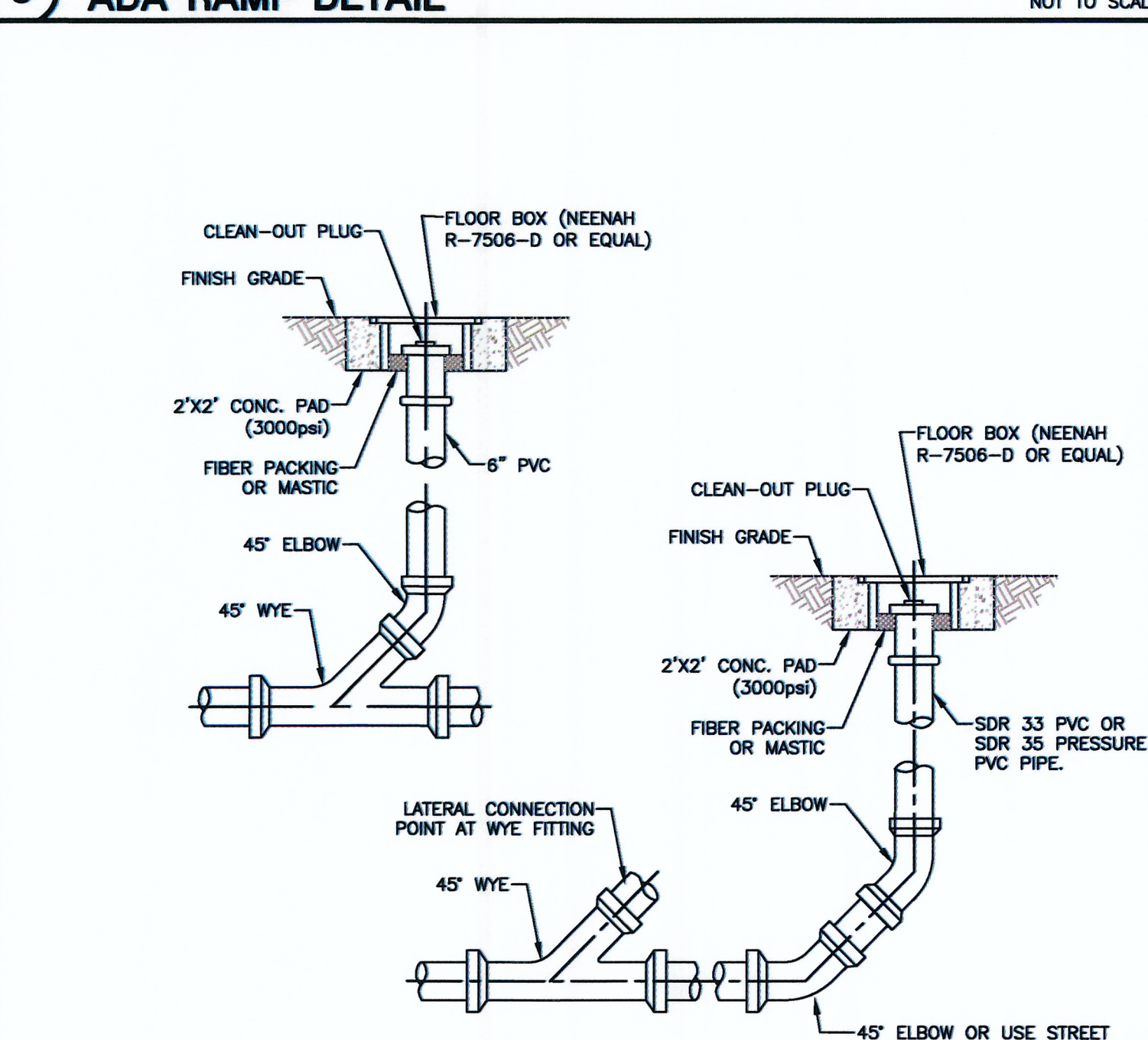
6 ACCESSIBLE PARKING DETAIL NOT TO SCALE



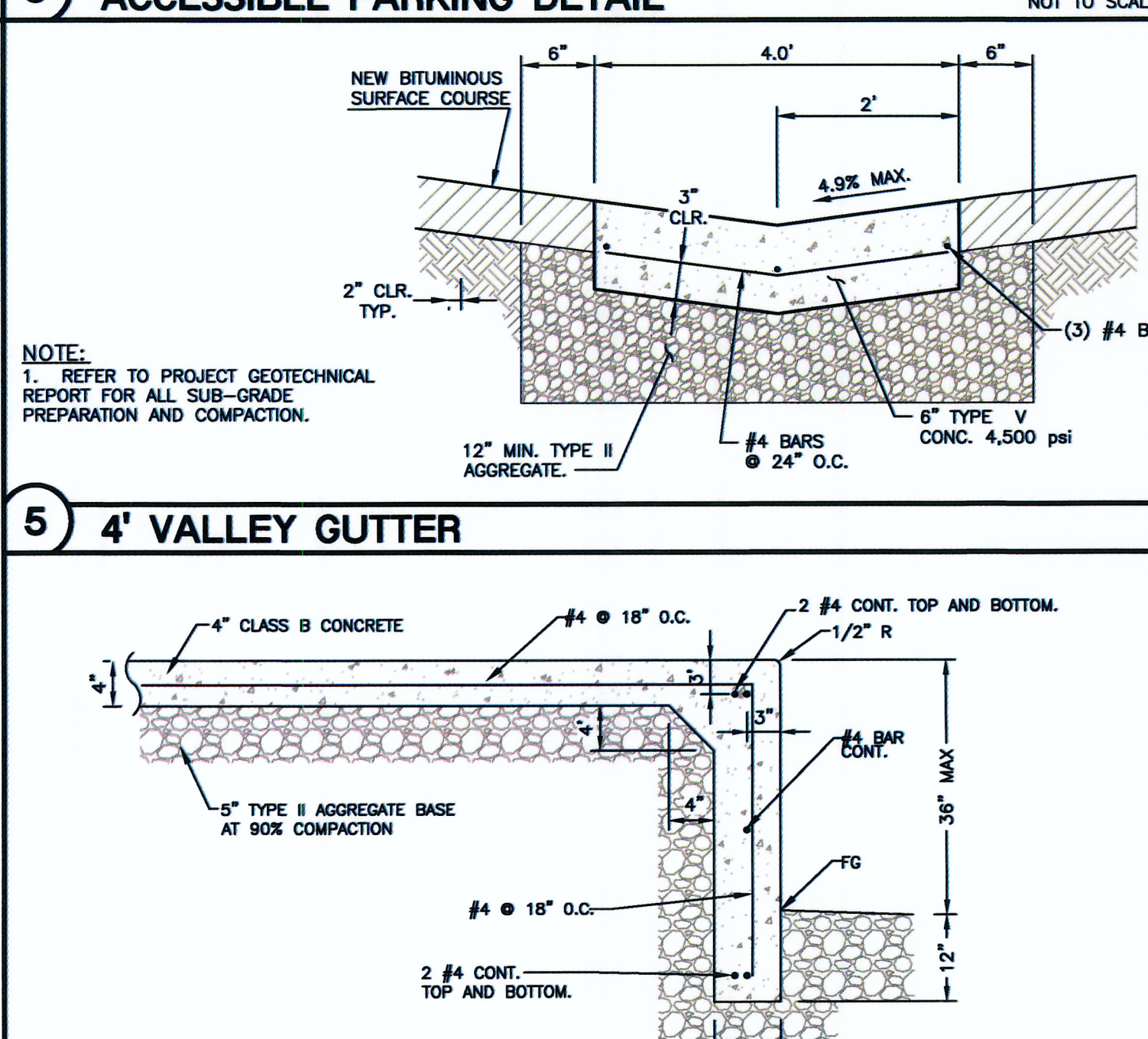
2 BUMPER BLOCK / WHEEL STOP NOT TO SCALE



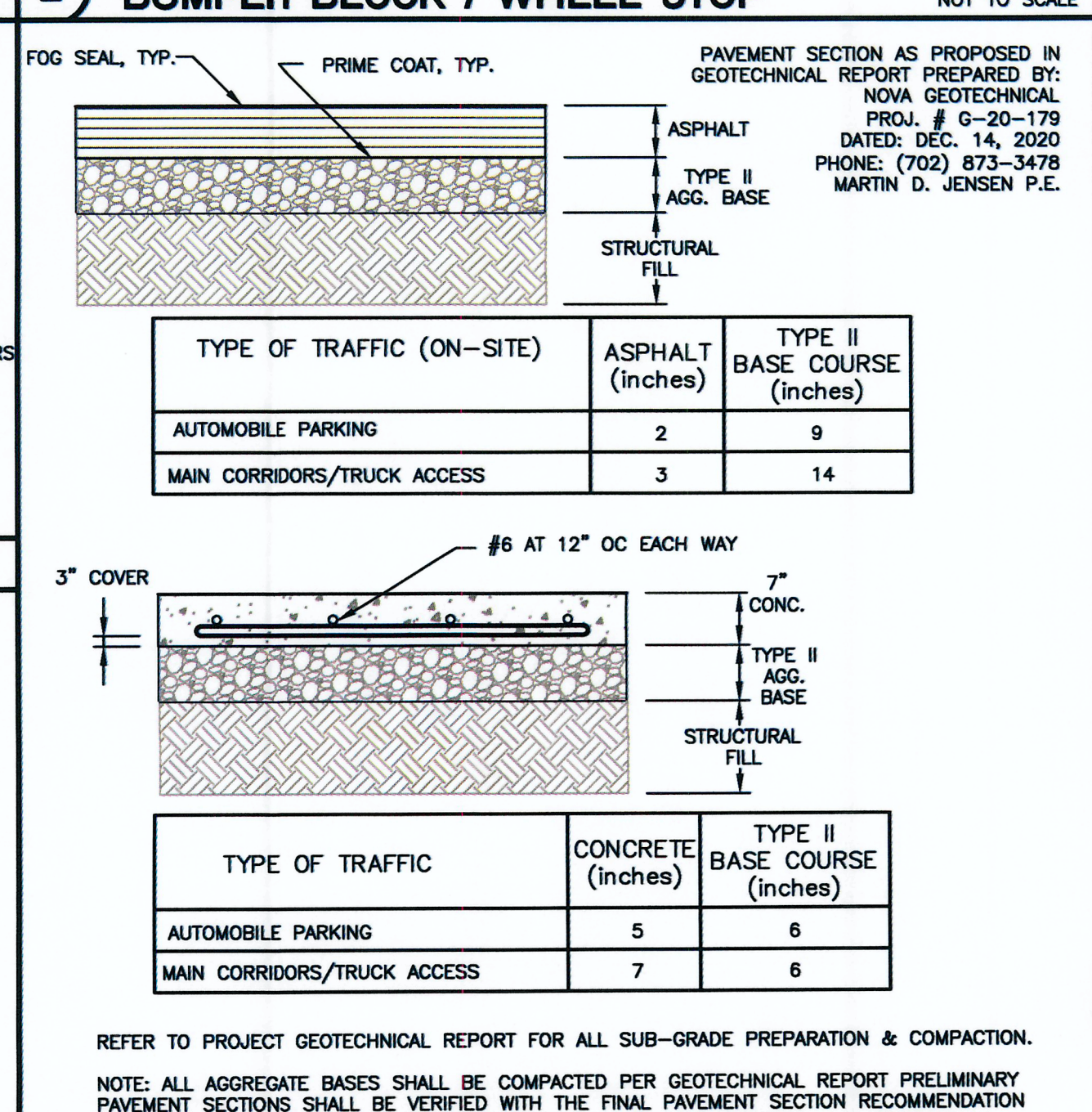
A WEST BUILDING NOT TO SCALE



8 SEWER CLEAN-OUT NOT TO SCALE



4 TURNED DOWN SIDEWALK NOT TO SCALE



1 AC AND CONCRETE PAVEMENT SECTION NOT TO SCALE

REVISIONS:

REV.	DESCRIPTION:	DATE:
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ethos three ARCHITECTURE

Lochsa Engineering

8985 S Eastern Avenue, Suite 220, Las Vegas, NV 89123
p: 702.456.1070 f: 702.456.7020 www.ethosthree.com

CONSULTANT:

PROJECT MANAGER: DATE:

COORDINATOR:

BUILDING DEPARTMENT:

CODE COMPLIANCE:

ASBESTOS WORK IS:
REQUIRED ☐ NOT REQUIRED ☐

MPID: 0014610

CLARK COUNTY SCHOOL DISTRICT
CONSTRUCTION MANAGEMENT DEPARTMENT 1180 MILITARY TRIBUTE PL HENDERSON NV 89074 PHONE: 702-799-8710

PROJECT: ORAN K GRAGSON ELEMENTARY SCHOOL

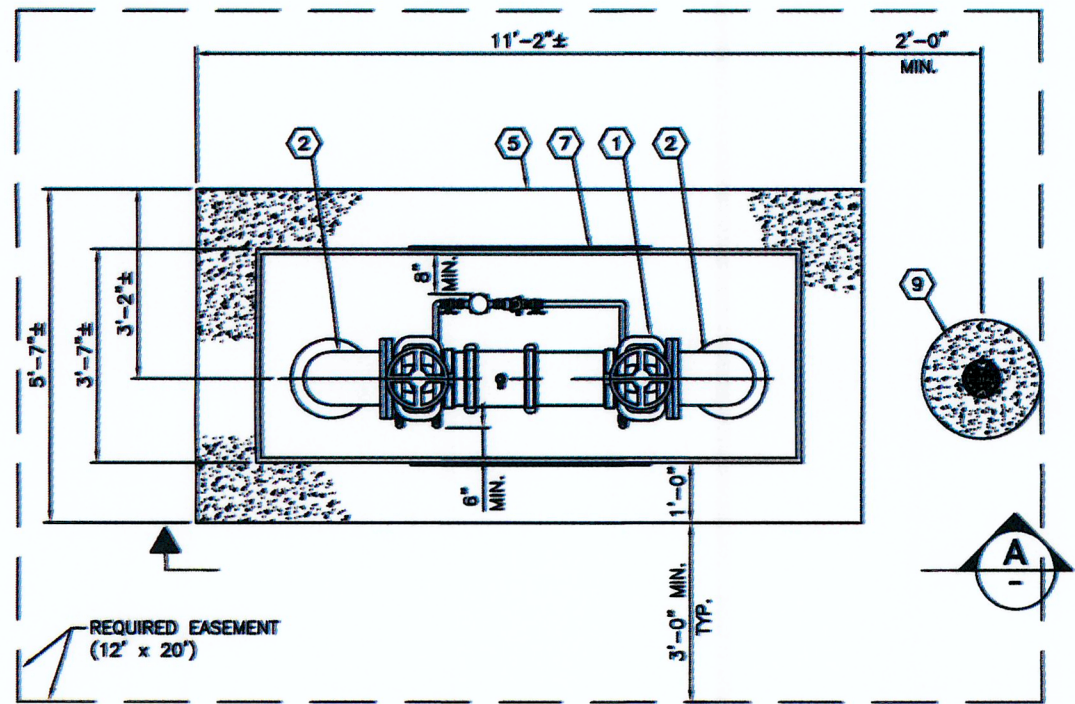
DRAWING TITLE: DETAIL SHEET 1

FACILITY: ELEMENTARY SCHOOL ADDITION

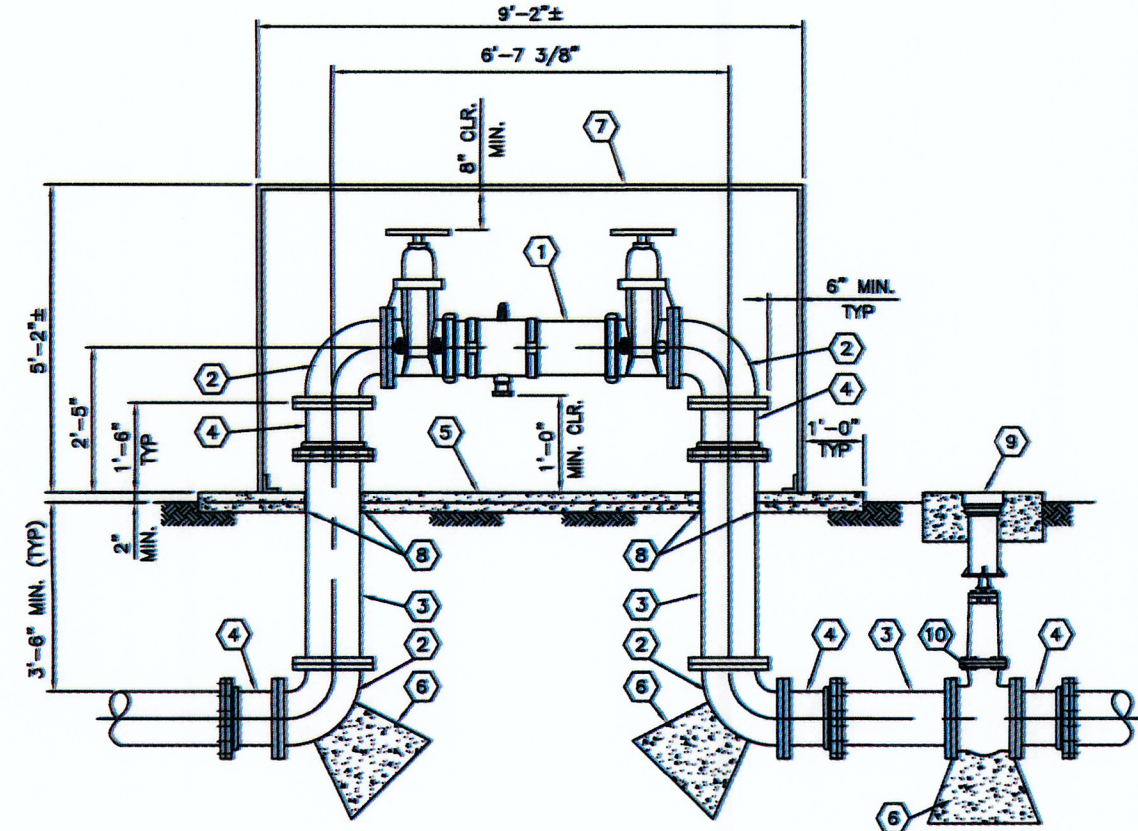
SHEET NO: C7.01

SHEET 15 OF 16

A 10" REDUCED PRESSURE DETECTOR ASSEMBLY (USE NRS GATE VALVES ONLY) NOT TO SCALE



PLAN



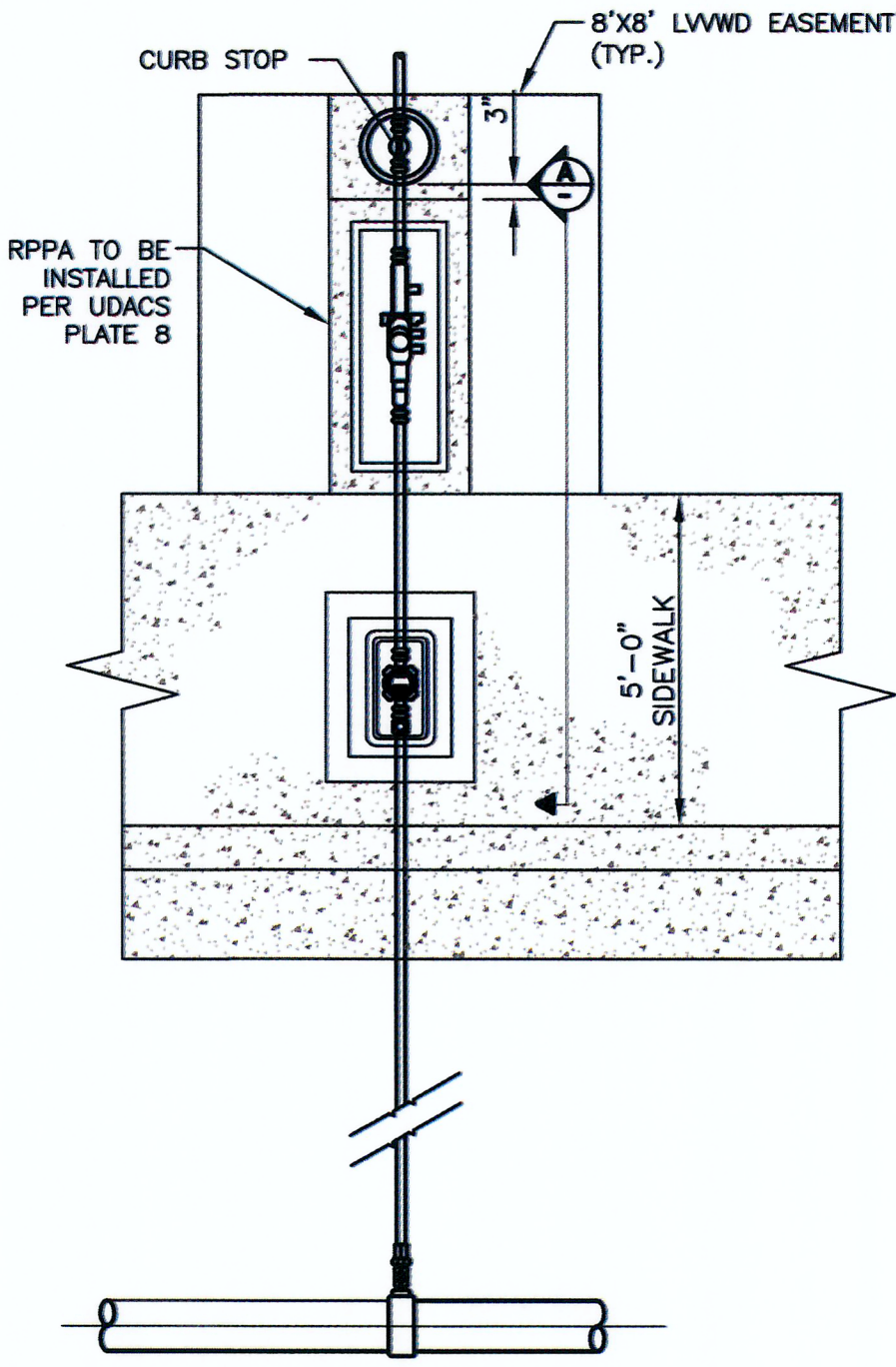
SECTION A

MATERIAL LIST

- 10" REDUCED PRESSURE DETECTOR (RPDA) BACKFLOW ASSEMBLY
- 10" FLG 90° BEND
- 10" FLG x PE DUCTILE IRON PIPE, PC 350 (CUT TO FIT)
- 10" ADAPTER FLANGE (RESTRAINED)
- CONCRETE SLAB (4" THK) WITH WELDED WIRE FABRIC, 4 x 4 - W1.4 x W1.4
- CONCRETE THRUST/ANCHOR BLOCK
- APPROVED ENCLOSURE (CONTRACTOR TO SUBMIT SHOP DRAWINGS)
- 1/2" EXPANSION JOINT MATERIAL
- VALVE BOX AND COLLAR (NOTE 2)
- 10" FLG GATE VALVE

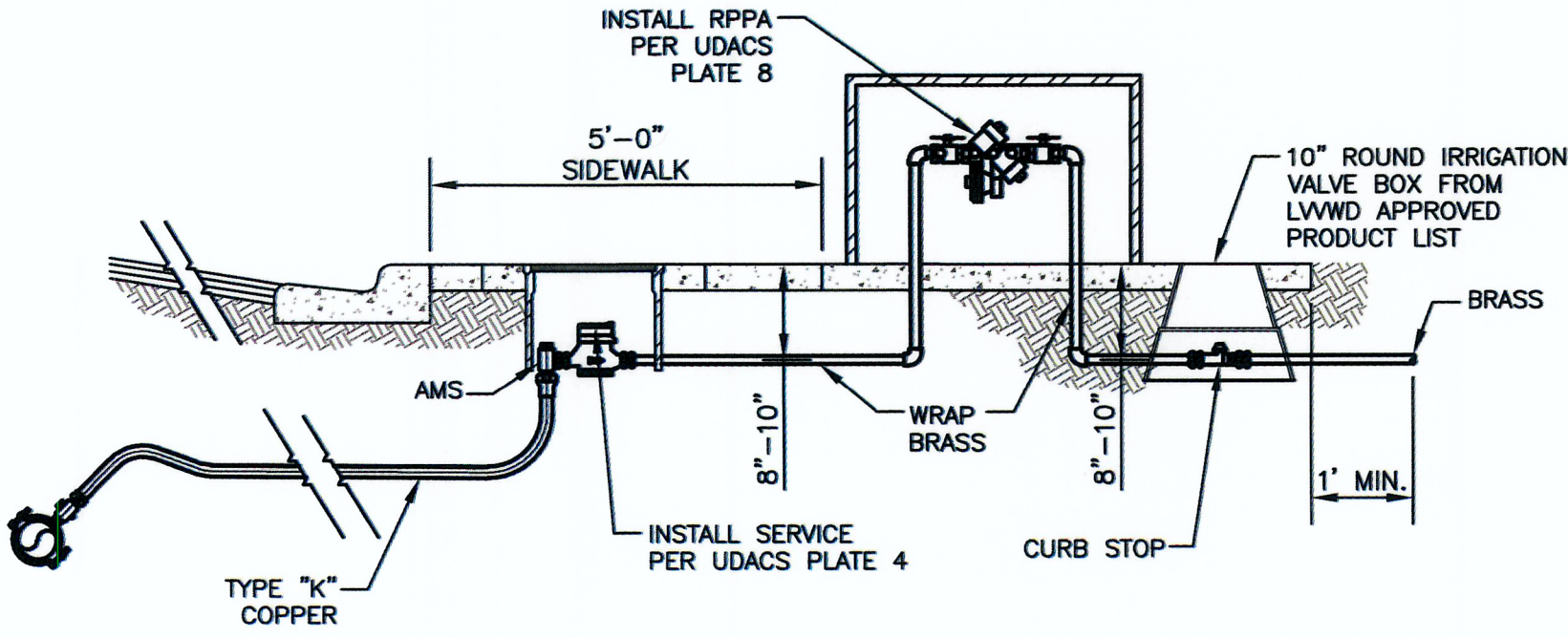
- NOTES:
- CONTRACTOR TO INSTALL #2 STAINLESS STEEL STRAIGHT CHAIN WITH DISTRICT PROVIDED LOCK THROUGH BACKFLOW ASSEMBLY GATE VALVE HANDWHEELS (AS REQUIRED).
 - CONTRACTOR TO INSTALL VALVE LOCK DEVICE WITH DISTRICT PROVIDED LOCK (AS REQUIRED).

B LVVWD METER WITH RPPA DETAIL



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. XXXXXX FIRST APPROVED DATE: _____ DATE _____
LVVWD APPROVED FIRE FLOW: TOTAL 1500 GPM/ONSITE 1500 GPM



NOT TO SCALE

REVISIONS:		
REV.	DESCRIPTION:	DATE:

SEAL:		DATE: JAN 25, 2021	DRAWN BY: BZ	SUBMITTAL: 201091
		A/E PROJECT NO. 201091		

		CONSULTANT:	
		8885 S Eastern Avenue, Suite 220, Las Vegas, NV 89123 p: 702.456.1070 f: 702.456.1020 www.ethosthree.com	

CONSTRUCTION MGMT:		DATE:
PROJECT MANAGER:		
COORDINATOR:		
BUILDING DEPARTMENT:		
CODE COMPLIANCE:		
AHERA REVIEW:		
ASBESTOS WORK IS:		
REQUIRED ☐ NOT REQUIRED ☐		
MPID: 0014610		

	CLARK COUNTY SCHOOL DISTRICT	
	CONSTRUCTION MANAGEMENT 180 MILITARY TRIBUTE PL HENDERSON NV 89074 PHONE: 702-799-8710	
PROJECT:	ORAN K GRAGSON ELEMENTARY SCHOOL	
DRAWING TITLE:	DETAIL SHEETS	
FACILITY:	ELEMENTARY SCHOOL ADDITION	

SHEET NO:	C7.02
SHEET 16 OF 18	