

**GRADING NOTE:**  
 AT BUILDING PERIMETER, WHETHER FOR CURRENT CONSTRUCTION OR FUTURE CONSTRUCTION, IN ALL UNPAVED LOCATIONS, GRADES SHALL SLOPE A MINIMUM OF 1/4" PER FOOT AWAY FROM THE BUILDING FOR THE FIRST 10 FT FROM THE BUILDING UNLESS A DRAINAGE SWALE WITH FLOW LINE IS PROVIDED WITHIN THE 10 FEET. AT PAVED LOCATIONS MINIMUM SLOPE SHALL BE -2% AWAY FROM THE BUILDING.

**BEST MANAGEMENT PRACTICES (BPM)**

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL SECTION 1500  
 Parking Lot Low Impact Development (LID)  
 BMP required treatment area = 75%  
 Determine BMP Design Precipitation - 85% Rainfall Depth  
 $D_p(\text{site}) = 1.25$   
 $D_p(\text{McCorran}) = 1.25 [D_p(\text{McCorran})]$   
 $D_p(\text{site}) = 1.25 [D_p(\text{McCorran})]$   
 $D_p(\text{McCorran}) = 0.32$   
 $D_p = 1.25(0.32) = 0.40$   
 Calculate BMP Design Peak Discharge With 90% Impervious,  $Q_p$   
 $Q_p/A_{90\%} = 1.5042(Q_p) - 0.0066$   
 $Q_p/A_{90\%} = 1.5042(0.40) - 0.0066$   
 $Q_p/A_{90\%} = 0.60$   
 Calculate Adjustment for  $Q_p/A$  Relative to 90% Impervious  
 Adjustment =  $0.0059(\% \text{ impervious}) + 0.4688$   
 Adjustment =  $0.0059(85) + 0.4688 = 0.9703$   
 $Q_p/A = [Q_p/A_{90\%}] [\text{Adjustment}]$   
 $Q_p/A = 0.60(0.9703) = 0.582$   
 $Q_p = Q_p/A(A)$   
 $Q_p = 0.582(A)$   
 $Q_p(\text{area 1}) = 0.582(1.0)$   
 $Q_p(\text{area 2}) = 0.582(0.69)$   
 $Q_p(\text{area 2}) = 0.40 \text{ cfs}$   
 BMP Treatment =  $1.0 + 0.69 = 86\% > 75\%$   
 Find Depth  
 $Q = (R^2 \sqrt{S}) / (A)$   
 $R = \frac{Q A}{\sqrt{S}}$   
 $A = (b + x)(y) / 2$   
 $P = b + 2\sqrt{V + x^2}$   
 $R = \frac{(b + x)(y)}{2}$   
 $b + 2\sqrt{V + x^2}$   
 $n = 0.025 \quad n = 0.025$   
 $S = 0.005 \quad S = 0.005$   
 $A(\text{area 1}) = 0.757 \text{ sq ft}$   
 depth = 0.1451 ft  
 $V = Q/A = 0.582/0.757 = 0.769 \text{ fps}$   
 $V(d) = 0.769(0.1451) = 0.1116$   
 $A(\text{area 2}) = 0.593 \text{ sq ft}$   
 depth = 0.1186 ft  
 $V = Q/A = 0.4/0.593 = 0.675 \text{ fps}$   
 $V(d) = 0.675(0.1186) = 0.0753$

**STORMWATER MANAGEMENT NOTES:**

**STANDARD NOTE NO. 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 THE CITY OF LAS VEGAS 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.

**STANDARD NOTE NO. 2:** ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND/OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE UNIFIED DEVELOPMENT CODE OF THE CITY OF LAS VEGAS, THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.

**STANDARD NOTE NO. 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.

**STANDARD NOTE NO. 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 ACTIVITY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.

**STANDARD NOTE NO. 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. SEDIMENTS MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

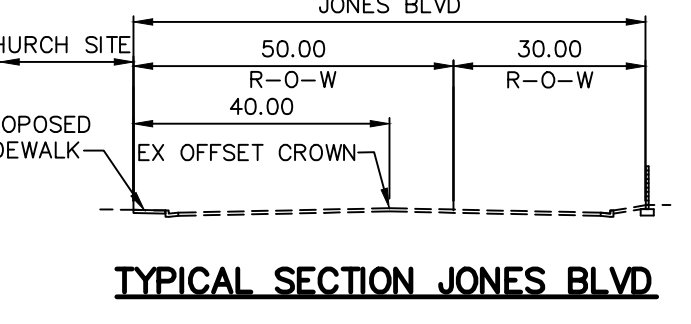
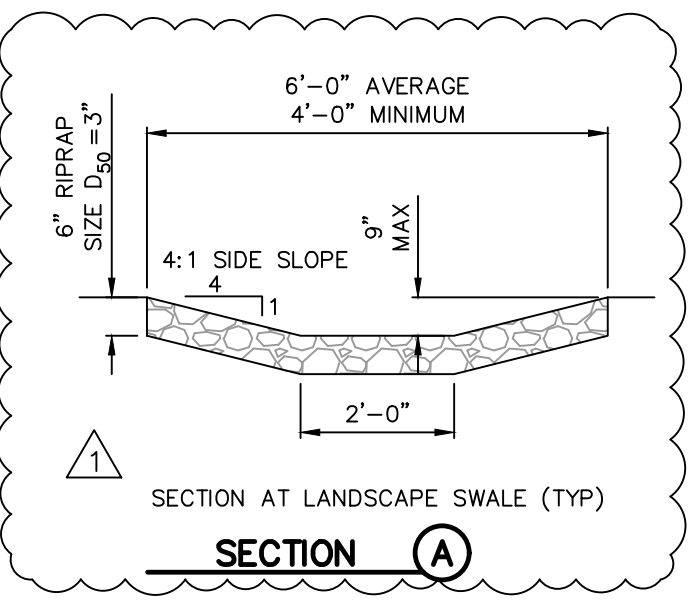
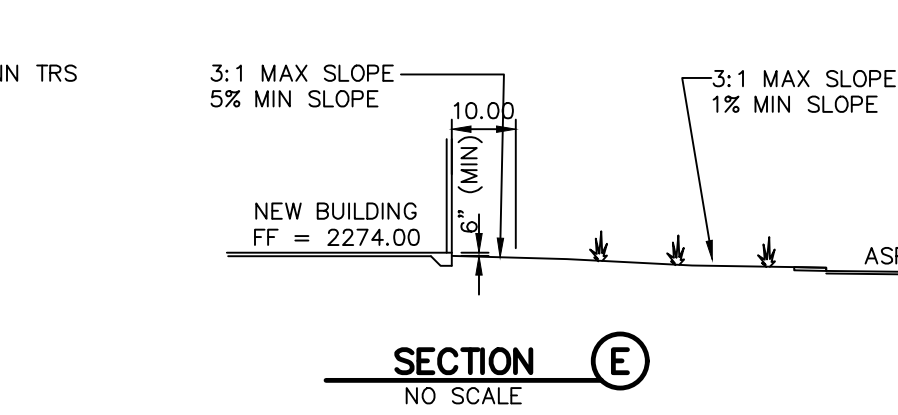
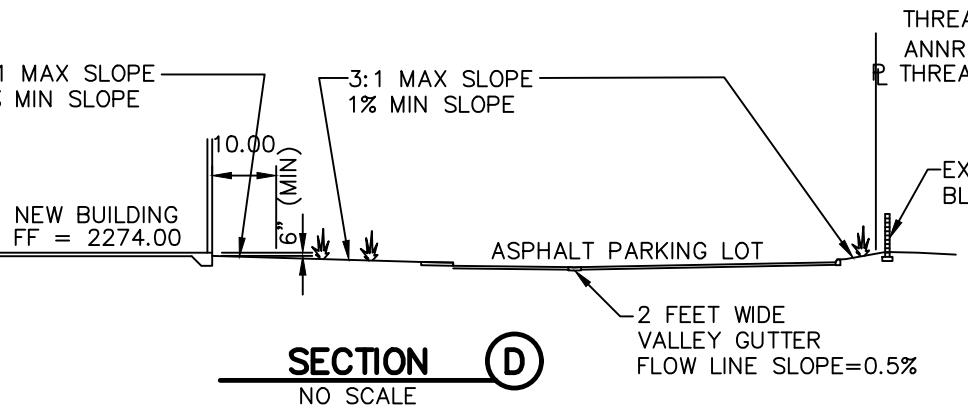
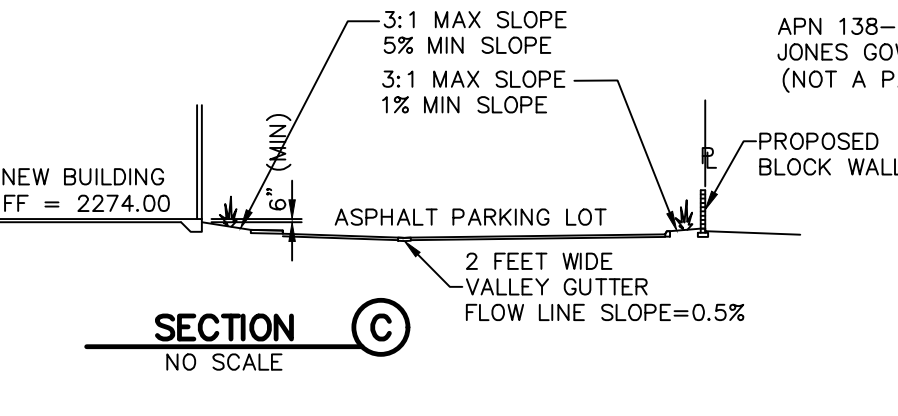
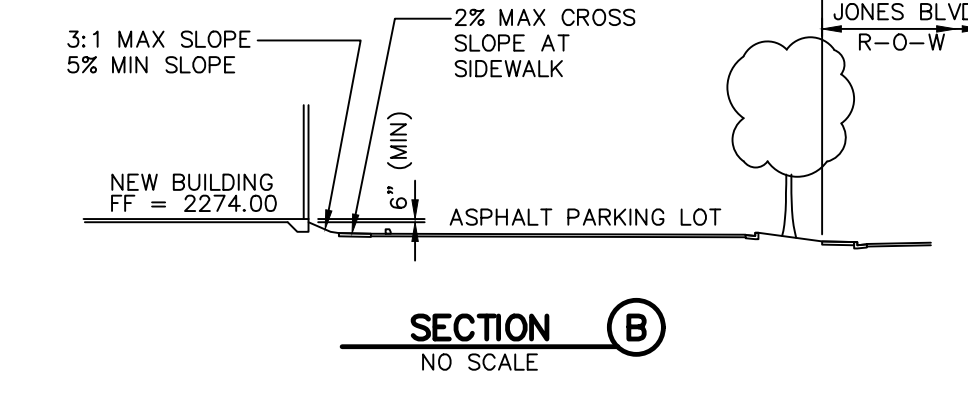
**STANDARD NOTE NO. 6:** POST-CONSTRUCTION BMPs (PCBMPs) / CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORMWATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.

**DISCLAIMER:**

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

**CONSTRUCTION NOTES:**

1. INSTALL "A" TYPE CURB PER USD 219
2. INSTALL "L" TYPE CURB PER USD 219
3. REMOVE EXISTING DRIVEWAY AND INSTALL "L" TYPE CURB PER USD 216 MATCH EXISTING CURB AND GUTTER.
4. INSTALL 2' WIDE VALLEY GUTTER
5. INSTALL SIDEWALK RAMP, CASE 1 PER USD 235
6. INSTALL LOW IMPACT DEVELOPMENT (LID) LANDSCAPE SWALE PER DETAIL SHOWN IN SECTION "A"
7. CONSTRUCT 6 FEET TALL PRIVACY WALL (NON-RETAINING) ALONG PROPERTY LINE. USE BUILDING DEPARTMENT STANDARD WALL SECTION.
8. INSTALL SIDEWALK DRAIN PER USD 236
9. INSTALL SIDEWALK PER USD 234
10. INSTALL BUMPER CURB PER USD 238
11. OMIT 10 FEET OF CURB AT VALLEY GUTTER AS OPENING FOR FLOW.

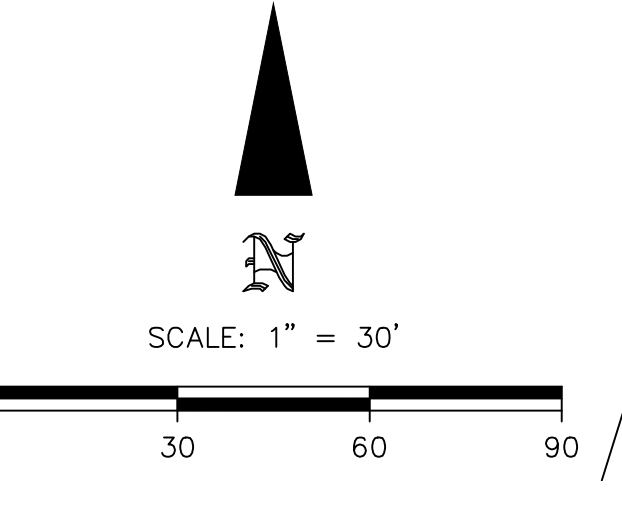


**CERTIFICATION NOTE:**  
 THIS SITE IS IN FEMA FLOOD ZONE X PER FIRM PANEL 32003C 2155 F NOVEMBER 16, 2011

**FLOODPLAIN NOTE:**  
 THERE IS NO 100-YEAR FLOODPLAIN SHOWN RELATIVE TO THIS SITE.

**DISTURBED AREA**  
 ON-SITE: 1.97 AC  
 OFF-SITE: NONE

**EARTH WORK QUANTITIES**  
 PRIVATE: 1140 CY CUT, 1036 CY FILL  
 OFFSITE: NONE CUT, NONE FILL



**BASIS OF BEARING:**

N84°06'34" W BEING THE NORTH LINE OF THE NE 1/4 SE 1/4 OF SECTION 11, TOWNSHIP 20 SOUTH, RANGE 60 EAST M.D.M. AS PER PARCEL MAP FILE 17 PAGE 28, CLARK COUNTY, NEVADA RECORDS.

**BENCHMARK:**

BM #7LV001166  
 RIVET AND PLATE IN THE TOP OF CURB AT THE SOUTHWEST CORNER OF GOWAN ROAD AND MAVERICK STREET  
 ELEVATION = 2278.71' (694.552m)  
 NAVD '88

**LEGAL DESCRIPTION:**

BEING A PORTION OF THE SE 1/4 OF THE NE 1/4 OF THE NE 1/4 OF THE SE 1/4 OF SECTION 11, TOWNSHIP 20 SOUTH, RANGE 60 EAST, M.D.M. CLARK COUNTY, NEVADA.

**APPLICABLE SOILS REPORT:**

GEOTECHNICAL INVESTIGATION REPORT  
 JOB#: 4120J064  
 NOVEMBER 18, 2020  
 WESTERN TECHNOLOGIES INC.  
 6633 WEST POST ROAD, SUITE 100  
 LAS VEGAS, NV 89118  
 (702) 798-8050

**LEGEND**

RIGHT-OF-WAY	---
PROPERTY LINE	---
EDGE OF ASPHALT	---
BLOCK WALL (NEW)	---
BLOCK WALL (EXIST)	---
BMP BOUNDARY	---
WIRE FENCE	---
CENTERLINE	---
EXISTING CONTOUR	---
FINISH CONTOUR	---
SET BACK LINE	---
EASEMENT LINE	---
EXISTING UTILITIES	---
FLOW DIRECTIONS	---
EXISTING GRADE	---
FINISH GRADE	---

**ABBREVIATIONS**

AC	ASPHALT CONC.	GV	GATE VALVE
B/W	BACK OF WALK	HP	HIGH POINT
CL	CENTERLINE	MH	MAN HOLE
EG	EXISTING GRADE	P	POWER LINE/CONDUIT
EP	EDGE PAVEMENT	PP	POWER POLE
EX	EXISTING	R-O-W	RIGHT-OF-WAY
FF	FINISH FLOOR ELEV	SD	STORM DRAIN
FG	FINISH GRADE	SS	SANITARY SEWER
FH	FIRE HYDRANT	T	TELEPHONE CABLE
FL	FLOW LINE	TC	TOP OF CURB
G	GAS LINE	W	WATER LINE
GB	GRADE BREAK	WM	WATER METER

PREPARED FOR: CHURCH OF GOD (SEVENTH DAY) ENGLISH  
 6116 FANTASTIC TACHI ST.  
 NORTH LAS VEGAS, NV 89081  
 PHONE: (702) 349-8502; (JOSE HERNANDEZ)

BY: L.H. AFFLECK  
 6465 W. Sahara Ave., Suite 102  
 Las Vegas, NV 89146  
 Cell: 702-431-4827  
 email: offleack.lh@gmail.com

**PLOT AND GRADING PLAN**

CHURCH OF GOD (SEVENTH DAY) ENGLISH  
 3523 NORTH JONES BLVD.  
 LAS VEGAS, NV 89108  
 APN 138-11-704-009

DRAWN BY: L.H. AFFLECK 3/18/24  
 DESIGNED BY: L.H. AFFLECK 3/18/24  
 CHECKED BY: L.H. AFFLECK 3/18/24  
 PROJECT NO: 17-001  
 SCALE: AS NOTED

SEAL  
 L.H. AFFLECK  
 CIVIL  
 NO. 07076  
 3/18/24

SHEET  
 C3  
 3 OF 5 SHEETS  
 DRAWING NO.