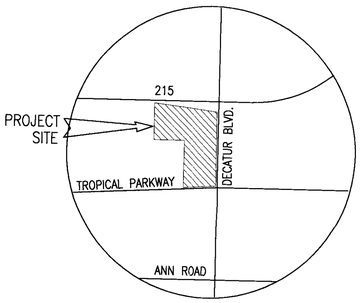
SUMMARY TABLE			
SUBAREA DESIGNATION	Q10 (CFS)	Q10 (CFS)	COMMENT
ON-DEV1	4	9	INTO STORM DRAIN
ON-DEV2	8	15	INTO STORM DRAIN
ON-DEV3	7	14	TO TROPICAL PARKWAY
ON-DEV4	6	12	TO DECATUR BLVD.
ON-DEV5	6	11	TO DECATUR BLVD.
ON-DEV6	11	21	TO DECATUR BLVD.
ON-DEV7	6	11	TO DECATUR BLVD.
COM-1	28	54	COMBINED AREAS
ON-DEV8	3	7	INTO STORM DRAIN



VICINITY MAP
N.T.S.

LEGEND

	PROJECT BOUNDARY
	SUBAREA BOUNDARY
ON-DEV1	SUBAREA DESIGNATION
1.00 AC.	SUBAREA AREA
	DRAINAGE FLOW

SOIL TYPE "D" ENTIRE SITE

Q10=33 CFS
Q100=100 CFS

Q10=18 CFS
Q100=45 CFS

Q10 SURFACE=6 CFS
Q100 SURFACE=282 CFS
Q10/100 PIPE=52 CFS

2279.88
T.C.

S=0.0070

TROPICAL PARKWAY

ON-DEV3
4.94 AC.

F.F.=2285.15

EMERGENCY SPILLOVER WEIR FOR C.B.#1&2
W.S.E.=2284.36

LAT. "B-1"

C.B. #1

C.B. #2

ON-DEV8
2.16 AC.

C.B. #4

EMERGENCY SPILLOVER FOR C.B.#4

LAT. "B-2"

ON-DEV7
3.74 AC.

C.B. #3

EMERGENCY SPILLOVER WEIR FOR ALL C.B.
W.S.E.=2283.89

LINE "B"

LINE "A"

ON-DEV2
6.05 AC.

ON-DEV1
3.04 AC.

ON-DEV4
4.56 AC.

ON-DEV5
3.99 AC.

ON-DEV6
7.95 AC.

215

105' R/W

S=0.0045

2278.37
T.C.

105' R/W

DECATUR BOULEVARD

0 40 80 160 240
SCALE:1"=80'

Last Update:3/28/11
O:\3000-3099\3033\3033HYD.dwg

NOTICE TO CONTRACTOR:

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY

CALL before you DIG

1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:

A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARRCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:

NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.

(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:

CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM

STATION BLV90
2566

ELEVATION = 697.5653 METERS (NAVD88)
2288.60 FEET

This grading plan is a part of drainage study #4524 which was received on 3/29/11 and Rejected on 4/12/11. Page 1 of 16

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
CIVIL
No. 14386

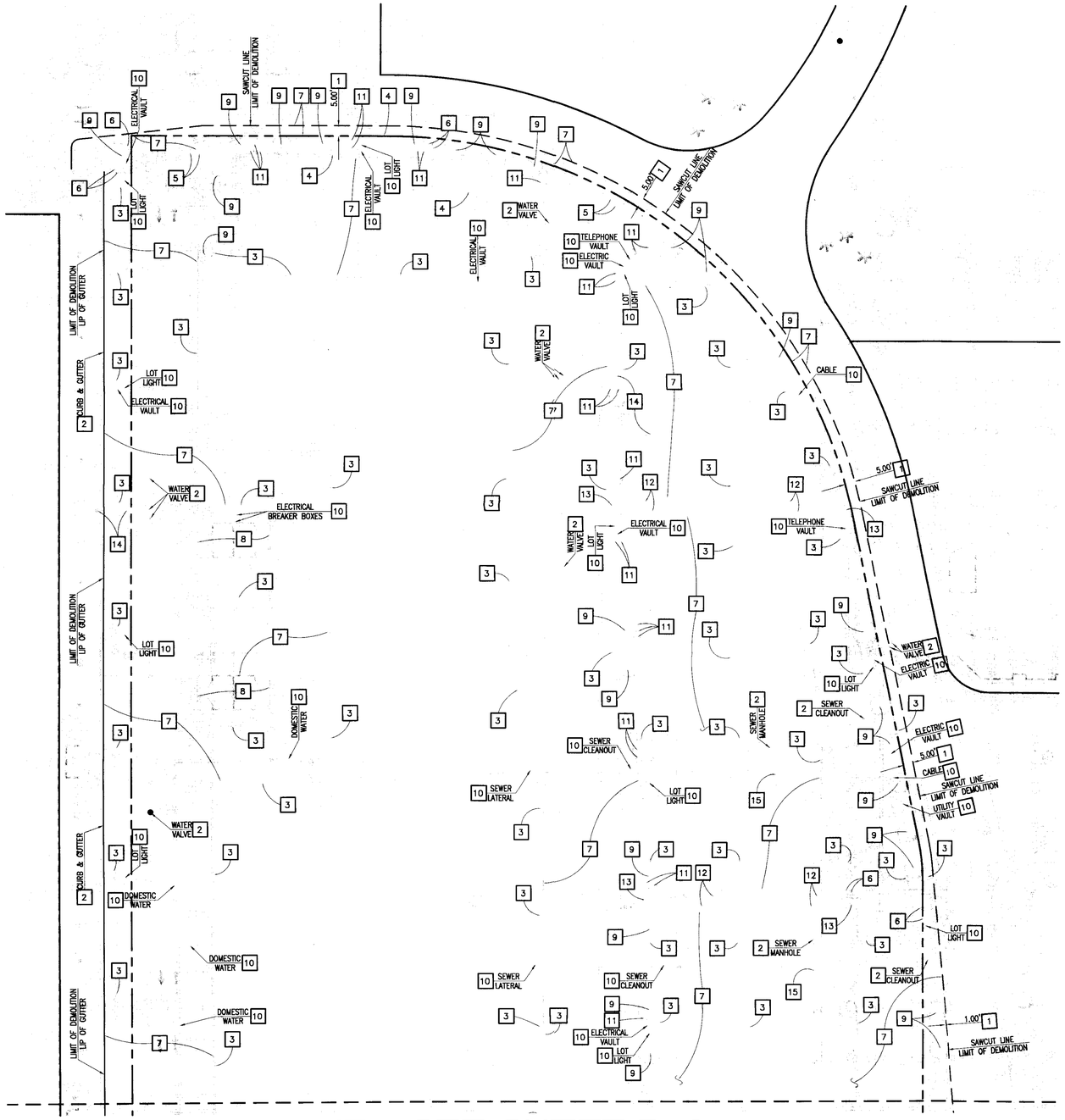
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING / LAND SURVEYING
14348 TIERCEVINE BOULEVARD
LAS VEGAS, NEVADA 89138
PH.(702)951-5811 FAX(702)951-5813

TITLE: HYDROLOGY MAP FOR

PROJECT: WINCO LAS VEGAS
DECATUR BOULEVARD
CITY OF LAS VEGAS
NEVADA

WORK ORDER NO.	J.N. 3033
DESIGN BY:	B.P.W.
DRAWN BY:	B.P.W.
DATE:	MARCH 2011
SCALE:	1"=80'
SHEET 1 OF 1 SHEETS	
CLV DWG. NO.	



MATCH LINE - SEE SHEET D-2

DEMOLITION NOTES:

1. SAWCUT LINE AND REMOVE EXISTING AC PAVEMENT
2. PROTECT IN PLACE
3. REMOVE EXISTING CURB
4. REMOVE EXISTING CURB & GUTTER
5. REMOVE EXISTING CONCRETE VALLEY GUTTER
6. REMOVE EXISTING CONCRETE CHANNEL
7. REMOVE EXISTING AC PAVEMENT
8. REMOVE EXISTING TRASH ENCLOSURE
9. REMOVE AND/OR RELOCATE EXISTING TREE (SEE LANDSCAPE PLANS)
10. REMOVE AND/OR RELOCATE EXISTING UTILITY AND ALL APPURTENANCES (CONTRACTOR TO CONTACT THE UTILITY COMPANY PRIOR TO ANY WORK)
11. REMOVE AND/OR RELOCATE EXISTING IRRIGATION CONTROL VALVE (SEE LANDSCAPE PLANS)
12. REMOVE EXISTING SIDEWALK
13. REMOVE EXISTING HANDICAP RAMP
14. RELOCATE EXISTING FIRE HYDRANT (SHEET U-1)
15. CAP EXISTING SEWER LATERAL AT END OF THE WYE

— INDICATES: UNDERGROUND UTILITIES TO BE REMOVED

NOTICE TO CONTRACTOR:

1. CONTRACTOR SHALL REMOVE ALL STRUCTURES, FOOTINGS, PAVEMENT, CURBS, LANDSCAPING TREES, FENCES, WALLS, UTILITIES, SIGNS, LIGHTS, AND ALL OTHER IMPROVEMENTS.
2. CONTRACTOR SHALL LEAVE SITE IN A SMOOTH GRADED CONDITION WITH POSITIVE DRAINAGE.
3. CONTRACTOR SHALL COMPLY WITH BEST MANAGEMENT PRACTICES FOR STORM WATER POLITION PREVENTION.
4. SAND BAGS OR GRADED BERM SHALL BE PLACED AT THE LIMITS OF DEMOLITION.
5. CONTRACTOR SHALL PREVENT DUST AND DEBRIS FROM LEAVING THE SITE.
6. REMOVE EXISTING UNDERGROUND UTILITIES AS SHOWN. CONTRACTOR TO CONTACT UTILITY CO. AND VERIFY LOCATION AND OBTAIN ALL PERMITS REQUIRED FOR REMOVALS.
7. ALL DEMOLITION WORK WITHIN PUBLIC RIGHT OF WAY SHALL BE COMPLETED AND APPROVED BY CITY INSPECTORS SATISFACTION.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY AQMD PERMITS AND IDENTIFY ALL ASBESTOIS LINED CONDUITS AND COVERINGS ON EXISTING STRUCTURES, BOTH ABOVE AND BELOW GROUND. CONTRACTOR SHALL PROPERLY DISPOSE OF ALL ASBESTOS CONTAMINATED MATERIALS AND PROPERLY STOCKPILE TO PROTECT EXISTING GROUND FROM BECOMING CONTAMINATED.
9. AT THE END OF WORK DAY, EXCAVATIONS SHALL BE FENCED AND BARRICADED. TRENCHES SHALL BE FILLED PAVED AND BARRICADED TO ALLOW SAFE MOVEMENT OF TRAFFIC.
10. THE CONTRACTOR SHALL MAINTAIN ON A 24 HOUR BASIS ALL SIGNS, DELINEATED BARRICADES TO INSURE PROPER FLOW AND SAFETY OF TRAFFIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ANY ADDITIONAL DEVICES NECESSARY TO ASSURE SAFETY TO THE PUBLIC AT ALL TIME DURING CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING ALL NECESSARY CALCULATIONS PLANS AND DETAILS FOR ALL SHORING REQUIRED. CONTRACTOR SHALL ALSO BE RESPIONSIBLE FOR PROCESSING SHORING PLANS THROUGH THE LOCAL AGENCY FOR APPROVAL.

UTILITY COMPANIES:

WATER:
LAS VEGAS VALLEY WATER DISTRICT
1001 SOUTH VALLEY VIEW BLVD.
LAS VEGAS, NV. 89153
(702) 258-3846
ATTN. GREG SMETANY

ELECTRICAL:
NV ENERGY
7155 LINDELL ROAD
LAS VEGAS, NV. 89118
(702) 402-6717
ATTN. DON JACKSON

SEWER:
CITY OF LAS VEGAS
333 N. RANCHO DRIVE
LAS VEGAS, NV. 89153
(702) 229-2178
ATTN. TIM PARKS

GAS:
KERN RIVER GAS TRANSMISSION COMPANY
--
LAS VEGAS, NV. 89153
(702) 639-3605
ATTN. RICK WONNER

TELEPHONE:
CENTURY LINK
6700 VIA AYSTI PARKWAY
LAS VEGAS, NV. 89119
(702) 244-6759
ATTN. GARY SKINNER

0 15 30 60 90
SCALE:1"=30'

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/14/11. Page 2 of 16

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF ((W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30,, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CCLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90 25E6
ELEVATION = 697.505 METERS (NAVD88) 2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1	X	X	X	X

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No 14365

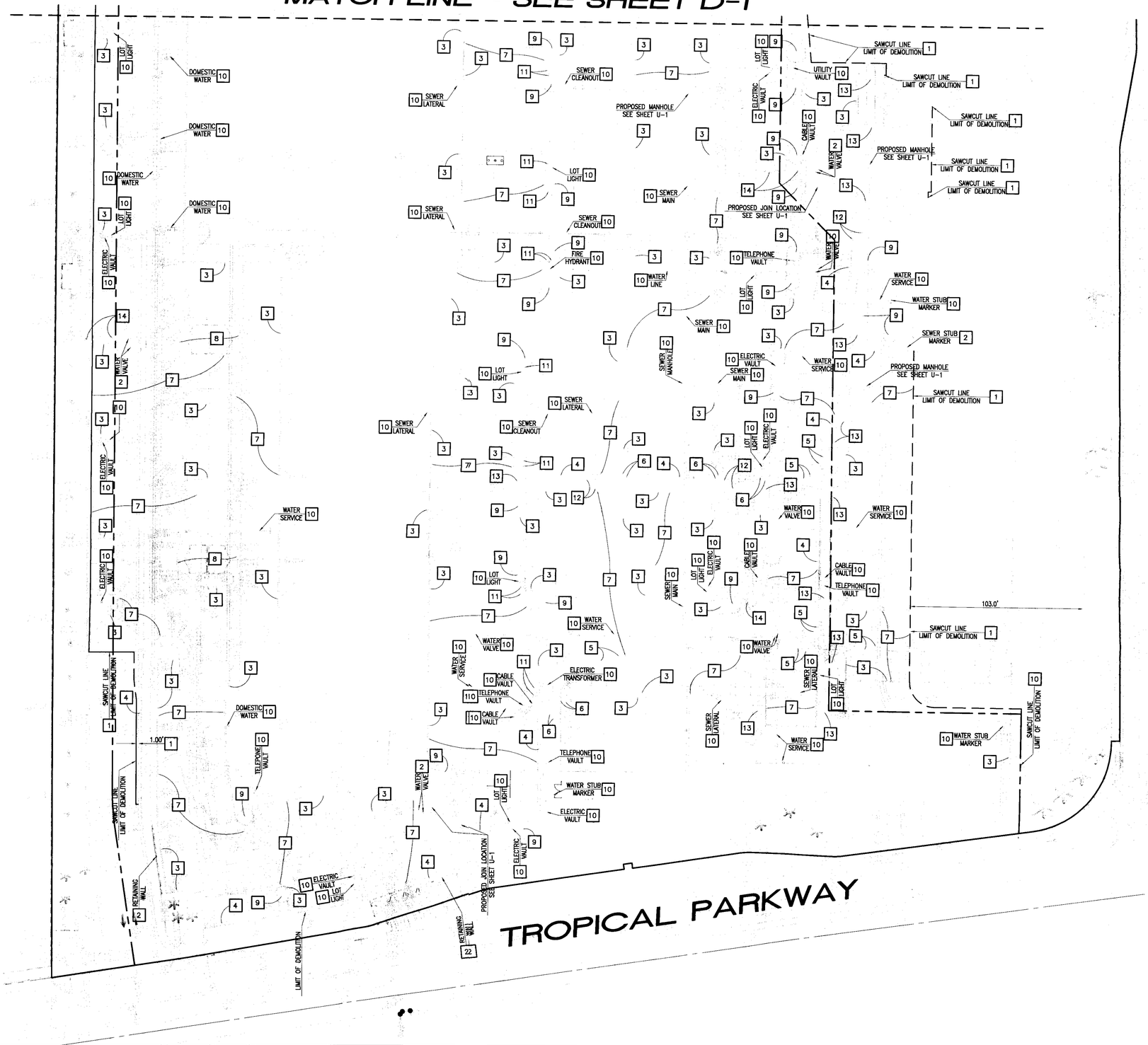
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING / LAND SURVEYING
14348 TEREDTONE BOULEVARD
LAS VEGAS, NEVADA 89138
PH.(702)951-5811 FAX(702)951-5813

TITLE: DEMOLITION PLAN
PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS NEVADA

WORK ORDER NO. --
DESIGN BY: J.P.
DRAWN BY: J.P.
DATE: MARCH 2011
SCALE: 1" = 30'
SHEET D-1 OF 15 SHEETS
CLV DWG. NO. XX

MATCH LINE - SEE SHEET D-1



DEMOLITION NOTES:

1. SAWCUT LINE AND REMOVE EXISTING AC PAVEMENT
2. PROTECT IN PLACE
3. REMOVE EXISTING CURB
4. REMOVE EXISTING CURB & GUTTER
5. REMOVE EXISTING CONCRETE VALLEY GUTTER
6. REMOVE EXISTING CONCRETE CHANNEL
7. REMOVE EXISTING AC PAVEMENT
8. REMOVE EXISTING TRASH ENCLOSURE
9. REMOVE AND/OR RELOCATE EXISTING TREE (SEE LANDSCAPE PLANS)
10. REMOVE AND/OR RELOCATE EXISTING UTILITY AND ALL APPURTENANCES (CONTRACTOR TO CONTACT THE UTILITY COMPANY PRIOR TO ANY WORK)
11. REMOVE AND/OR RELOCATE EXISTING IRRIGATION CONTROL VALVE (SEE LANDSCAPE PLANS)
12. REMOVE EXISTING SIDEWALK
13. REMOVE EXISTING HANDICAP RAMP
14. RELOCATE EXISTING FIRE HYDRANT (SEE SHEET U-1)
15. CAP EXISTING SEWER LATERAL AT END OF THE WYE

—— INDICATES UNDERGROUND UTILITIES TO BE REMOVED

NO.	DATE	BY	APP'D.	REVISION DESCRIPTION
1				

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
NO 14986

STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING / LAND SURVEYING
14348 TUMBLESTONE BOULEVARD
LAS VEGAS, NEVADA 89141
PH.(702)837-4811 FAX(702)837-4132

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/12/11. Page 3 of 16.

0 15 30 60 90
SCALE:1"=30'

NOTICE TO CONTRACTOR:

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY

CALL before you Dig

1-800-227-2600

UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:

A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TTOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PPARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:

NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.

(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:

CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM

STATION BLV90
2568

ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:

WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704

PH. (208) 377-0110

ATTN. DAVID VAN ETTEN

DEMOLITION PLAN

WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.

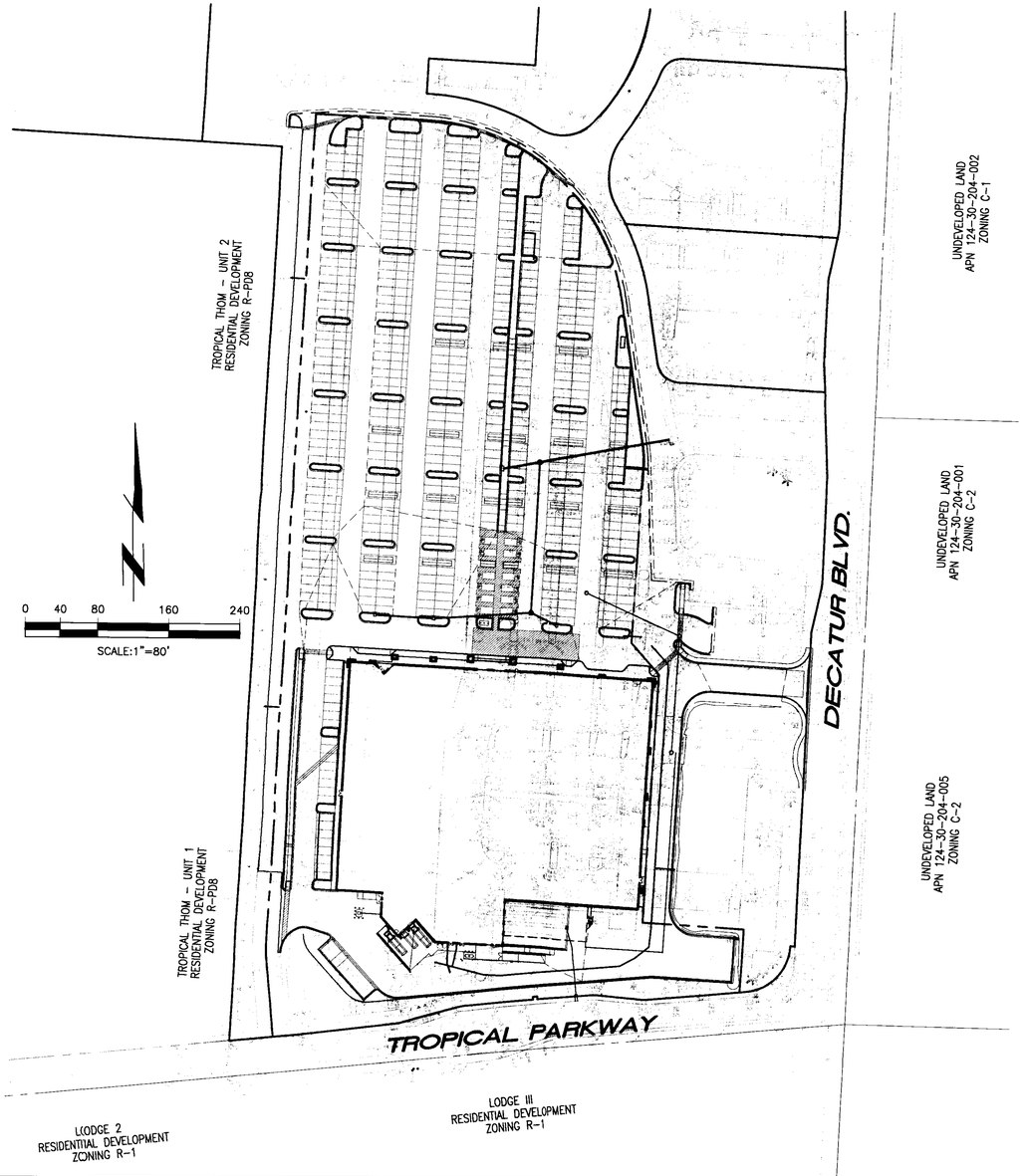
CITY OF LAS VEGAS — NEVADA

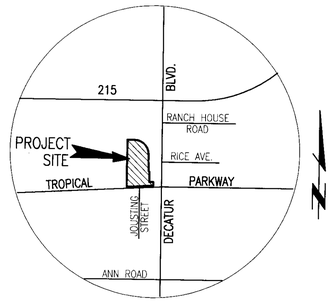
PROJECT:

TITLE:

WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 30'
SHEET	D-2 of 15 SHEETS
CLV DWG. NO.	XX

WINCO FOODS
IMPROVEMENT PLANS
FOR
WINCO FOODS, LLC
A.P.N. No. 125-25-614-001





VICINITY MAP
N.T.S.

SHEET INDEX:

T-1	COVER SHEET
T-2	GENERAL NOTES, ABBREVIATIONS AND LEGEND
D-1	DEMOLITION PLAN
D-2	DEMOLITION PLAN
G-1	GRADING DETAIL SHEET
G-2	GRADING PLAN
G-3	GRADING PLAN
G-4	GRADING PLAN
G-5	GRADING PLAN
G-6	DIMENSION CONTROL PLAN
U-1	UTILITY PLAN
U-2	UTILITY PROFILE SHEET
U-3	UTILITY DETAIL SHEET
U-4	UTILITY DETAIL SHEET
U-5	UTILITY DETAIL SHEET

APPROVALS:

NV ENERGY _____ DATE

NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OF FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

SOUTHWEST GAS COMPANY _____ DATE

EMBARQ _____ DATE

THE AFFIXED EMBARQ APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOW OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OR ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

LAS VEGAS VALLEY WATER DISTRICT _____ DATE
PROJECT No.

COX COMMUNICATIONS LAS VEGAS, INCORPORATED _____ DATE

M. MARGO WHEELER _____ DATE
THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING AND DEVELOPMENT DEPARTMENT.

CITY FIRE MARSHALL _____ DATE

JORGE A. CERVANTES, P.E. No. 13977, P.T.O.E. – CITY ENGINEER _____ DATE

APPROVAL OF THESE PLANS IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHT-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS, EXCEPT THOSE SPECIFICALLY LISTED UNDER DEVIATIONS FROM STANDARD. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA, NEVADA.

CITY OF NORTH LAS VEGAS _____ DATE

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/14/11. Page 4 of 16.

NOTICE TO CONTRACTOR:

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:

A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF ('W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:

NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.

BENCHMARK:

CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90
25E6
ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:

WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1	x	x	x	

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No. 14385

STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
STRUCTURAL ENGINEERING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
(714) 521-4811 FAX (714) 521-4173

TITLE: COVER SHEET

PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS NEVADA

WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 80'
SHEET	T-1 OF 15 SHEETS
CLV DWG. NO.	XX

City of Las Vegas General Notes

1. All construction and materials shall be in accordance with the "Uniform Standard Specifications for Public Works Construction Off-Site Improvements, Clark County area Nevada", latest issue; the "Uniform Standard Drawings for Public Works Construction, Clark County area Nevada", latest revised edition; the "Summerlin Improvement Standards" for work in the Summerlin area; and other applicable approved standards issued by the controlling agency; the Uniform Building Code; and all local city codes and ordinances applicable, except as noted on this sheet as "Deviations from Standards".

2. The existence and location of any overhead or underground utility lines, pipes, or structures shown on these Plans are obtained by a research of the available records. Existing utilities as shown from CLV Plans Library are approximate and for record purposes. Existing utilities are located on plans only for the convenience of the Contractor. Existing utility service laterals may not be shown on the plans. The Contractor shall, at his own expense, locate all underground and overhead interference's which may affect his operation during construction and shall take all necessary precautions to avoid damage to same. The Contractor shall use extreme caution when working near overhead utilities so as to safely protect all personnel and equipment, and shall be responsible for all cost and liability in connection therewith.

3. The Contractor shall take all precautionary measures necessary to protect existing utility lines, structures and street improvements which are to remain in place, from damage, and all such improvements or structure damaged by the Contractor's operations shall be repaired or replaced satisfactory to the City Engineer and owning utility company at the expense of the Contractor.

4. All construction shall be as shown on these plans, any revisions shall have the prior written approval of the City Engineer.

5. Type V cement shall be used in all off-site concrete work. Concrete to be 3000 P.S.I. minimum @ 28 days. Mix designs to be approved by the City, prior to the use on the project.

6. Permits are required for any work in the public Right-of-way. The Contractor shall secure all permits and inspections required for this construction.

7. Expansion joints required, maximum every 300' in extruded-type curb.

8. AC pavement to be one-half inch (½") above lip of all gutters after compaction, except at sidewalk ramp and cross gutters.

9. Curb and gutter found to be unacceptable to the City of Las Vegas shall be removed and replaced per standard drawing 216.

10. Sidewalk ramps shall be constructed in each quadrant of an intersection per standard drawing 235. Exact location of ramps may be adjusted in the field by a City Inspector.

11. Contractor shall provide all necessary horizontal and vertical transitions between new construction and existing surfaces to provide for proper drainage and for ingress and egress to new construction. The extent of transitions to be as shown on plans.

12. All grading work shall conform to the soils report as prepared by the Soils Engineer approved by the City Engineer, and as shown on these plans.

13. Exact location of all sawcut lines may be adjusted or determined in the field by a City of Las Vegas Engineer if location on plans is not clearly shown, or existing pavement condition requires relocations.

14. The Contractor shall take all precautions necessary to protect existing permanent survey monuments. any monuments disturbed shall be replaced and adjusted per available records in accordance with N.R.S. Stature No. 625.550.

15. Utility company meter boxes, manhole lids, valve covers, etc., shall be located out of driveways, driveway aprons flowlines, and cross gutters unless written approval is granted by the utility company and the City Engineer.

16. Wall Notes:

17. All walls, new or existing, are only shown on civil plans for the purpose of reviewing grading relationships; flood control and sight distance at intersections. New walls require a separate permit and inspection by the Building Department.

18. Asphalt mix design must be submitted and approved by the City Engineer prior to the placement of Asphalt within City Right of Way.

19. Contractor shall adjust all new and existing inlets, valve boxes, manhole rims, and sewer clean outs, etc. to finish grade as applicable whether or not they are shown on the plans.

20. Materials, handling and placement of Portland Cement Concrete shall be in accordance with applicable sections of NDOT or the Clark County Area Specifications (as applicable) and the plans and details shown hereon.

City of Las Vegas Sewer Notes

1. All construction and materials shall be in accordance with the latest edition of the Design and Construction Standards for Wastewater Collection Systems and the Uniform Standard Specifications for Public Works' Construction Off-Site Improvements, Clark County Area, Nevada, as amended. It will be the responsibility of the Contractor to be aware of the contents of the above specifications.

2. It shall be the Contractor's responsibility to perform construction as per plans. Any additions, deletions, or changes shall first meet with the approval of the City Planning Engineer.

3. Chisel "S" or "G" in curbs where sewer or gas laterals pass under the curb.

4. Polyvinyl (PVC) sewer pipe shall meet ASTM D-3034 SDR 35 specifications, installed with sand bedding and backfill of Type II aggregate base.

5. All manholes paved in streets eighty (80') foot R/W and larger shall have concrete collars. Street less than eighty (80') foot R/W will require retrofit if paving does not conform to city standards at the manhole.

6. Tee saddles shall be used to connect sewer laterals to existing main lines up to twelve inch (12") diameter. Connections to fifteen inch (15") or larger mains shall require special procedures. In line "Y" 's shall be used on lines twelve inches (12") or above.

7. Water mains shall be protected in accordance with LVWD Standards whenever a sewer main crosses over a water main or the sewer is less than eighteen inch (18") under a water main.

8. All Contractors installing sewer mains that will be under the jurisdiction of the City of Las Vegas must be State of Nevada Class "A" Contractors.

9. The City of Las Vegas will not accept any sewer mains which have a vertical deflection of more than one tenth (0.1) of a foot from the approved construction plans at any location. Sewer mains found to exceed this tolerance will have to be repaired or removed or replaced to the satisfaction of the City Planning Engineer prior to acceptance by the City of Las Vegas.

10. Installation of curved sewer requires special construction procedures and inspections. Contact City of Las Vegas Construction Services 24 hours prior to installation.

City of Las Vegas Traffic Notes

1. All construction signing, barricading, and traffic delineation shall conform to the "Nevada Work Zone Traffic Control Handbook", Latest Edition, and to the "Manual on Uniform Traffic Control Devices", Latest Edition.

2. The Street Sign Contractor shall obtain street names and block numbering from the Planning Department prior to construction.

3. Before any work is started in the right-of-way, the Contractor shall install all advance warning signs for the construction zone, The Contractor shall install temporary stop signs at all new street encroachments into existing City streets where warranted immediately after first grading work is accomplished, and shall maintain said signs until permanent signs are installed.

4. When a designated "Safe Route To School" is encroached upon by a construction work zone and Public Works Staff identifies a need for students to be assisted in the safe crossing through that work zone, the Contractor shall be required to provide a qualified "crossing guard". The guard shall be present for the full duration of time that children are likely to be present.

5. If the improvements necessitate the obliteration, temporary obstruction, temporary removal or relocation of any existing traffic pavement marking, such pavement marking shall be restored or replace with like materials to the satisfaction of the City Traffic Engineer.

6. The Contractor shall be responsible for providing and installing all permanent signs shown on the plans. Street name signs shall conform in their entirety to current City Standards. All other signs shall be standard size unless otherwise specified on the plans. All sign posts shall be installed in accordance with the current City Standards.

7. When a proposed Street Light Standard is located within five (5') feet of any proposed sign shown on the plans to be mounted on a signpost, the sign shall be mounted on the Street Light Standard and the signpost shall be eliminated.

8. All permanent traffic control devices called for hereon shall be in place and in final position prior to allowing any public traffic onto the portions of the road(s) being improved hereunder, regardless of the status of completion of paving or other off-site improvements called for by these plans.

9. Street signs and stop signs shall be installed per City Standard Specifications for placement of street name signs.

10. The Contractor shall provide barricades, signs, flashers, other equipment and flag persons necessary to insure the safety of workers and visitors.

11. Work in public streets, once begun, shall be expedited to completion so as to provide minimum inconvenience to adjacent property owners and to the traveling public.

12. The Contractor shall be responsible for notifying Citizens Area Transit (C.A.T.) if the construction interrupts or relocates a bus stop or has an adverse effect on bus service on that street to arrange for temporary relocation of stop.

13. Guards shall be obtained by contacting the Metropolitan Police Department Special Events Unit (Phone No: 229-3442) who will provide officers properly trained in traffic control. Fees for the use of these officers shall be set up by Metro and will be paid by the Contractor. The Contractor is responsible for all arrangements with Metro.

City of Las Vegas Streetlight Notes

1. All street lighting installations shall be in accordance with the street lighting plans, the "Uniform Standard Specifications for Public Works Construction Off- Site Improvements, Clark County Area, Nevada", Latest Revision, and the "Uniform Standard Drawings for Public Works Construction Off-Site improvements, Clark County Area, Nevada", Latest Revision.

2. No deviation of street light, pull box, conduits (etc.) locations shall be permitted without written approval of the Traffic/Electrical Field Operations Division and the City Engineer. Any deviation from the plan location will require compliance with section 623.1.0.03 (e) of the specifications.

3. All existting street lighting shall remain operational during construction.

4. All empty conduit shall have pull strings installed prior to final inspection.

5. Any structure such as block walls, chain link fences, retaining walls, etc., shall leave a minimum clearance of eighteen inches (18") to the face of street lightning pole on all sides when streetlight is installed behind sidewalk, and shall at no time completely enclose the street lighting pole.

6. As-built drawings shall be supplied to the Electrical Services Section prior to any pre-final inspection. The as-built drawing needs to be stamped as-built and signed by the preparer.

7. Service point shall be coordinated with Nevada Power Company, and wherever possible, be located near the center of the circuit. Service points shall be shown on the plans.

8. It shall be assumed that in the absence of an existing, workable circuit to attach to, all installations shall require a new service for operation of the circuit.

9. Wherever there is an overhead utility that may conflict with the installation of street lightning circuits and/or poles, these conflicts must be resolved between the developer and the utilities involved before streetlight bases are installed at no expense to the City of Las Vegas.

10. The Comtractor shall furnish complete service to transformers and control systems if required on plans.

City of Las Vegas Grading Notes

1. In the event that any unforeseen conditions not covered by these notes are encountered during grading operations, the Owner/Engineer shall be immediately notified for direction.

2. It shall be the responsibility of the Contractor to perform all necessary cuts and fills within the limits of this project and the related off-site work, so as to generate the desired subgrade, finish grades and slopes shown.

3. Contractor shall take full responsibility for all excavation. Adequate shoring shall be designed and provided by the Contractor to prevent undermining of any adjacent features or facilities and/or caving of the excavation.

4. The Contractor is warned that an earthwork balance was not necessarily the intent of this project. Any additional material required or leftover material following earthwork operations becomes the responsibility of the Contractor.

5. The Grading Contractor is responsible to coordinate with the owner to provide for the requirements of the project Storm Water Pollution Prevention Plan (SWPPP) and associated permit.

6. Contractor shall grade to the lines and elevations shown on the plans within the following horizontal and vertical tolerances and degrees of compaction, in the areas indicated:

	Horizontal	Vertical	
		Compaction	
A. Pavement Area Subgrade	0.1'+	+0.0'to -0.1'	See Soils Report
B. Engineerred Fill	0.5'+	+0.1'to-0.1	See Soils Report

Compactiom Testing will be performed by the owner or his representative

7. All cut and fill slopes shall be protected until effective erosion control has been established.

8. The use of potable water without a special permit for building or construction purposes including consolidation of backfill or dust control is prohibited. The Contractor shall obtain all necessary permits for construction water.

9. The Contractor shall maintain the streets, sidewalks and all other public right-of- way in a clean, safe and usable condition. All spills of soil, rock or construction debris shall be promptly removed from the publicly owned property during construction and upon completion of the project. All adjacent property, private or public shall be maintained in a clean, safe and usable condition.

10. In the event that any temporary construction item is required that is not shown on these drawings, the owner agrees to provide and install such item at his own expense and at the direction of the City Engineer. Temporary construction includes ditches, berms, road signs and barricades, etc.

City of Las Vegas Fire Department Notes

1. All work shall be done in strict accordance with the City of Las Vegas Fire Department "Hydrant Specifications"; "Hydrant Installation Specifications"; and Ordinance No.3994.

2. Authorized hydrants for this project are:
   A. Kennedy Guardian
   B. Mueller a-423 Centurion
   C. Clow Model 2546 Medallion

3. On any new home or building installation, accessible fire hydrants shall be installed before combustible construction commences and said fire hydrants shall be in good working order with an adequate water supply.

4. Contractor shall place a blue reflective marker at centerline of street adjacent to fire hydrant as required in Ordinance No. 3944 to identify fire hydrant locations.

5. Contractor shall call the Las Vegas Building Department at 229-2071 for underground inspection, pressure and flush verification of all fire hydrants and fire lines before back filling.

6. Painting of the curbs and hydrant and any work necessary for protection of hydrants from physical damage, per Ordinance No. 3944, shall be completed before approval by the City of Las Vegas Fire Department.

7. A permit is required from the Fire Department for on-site water lines and fire hydrants. The permit and Contractor's material and test certificate for underground piping form shall be obtained from the Fire Protection Engineer prior to any work beginning.

8. Private fire hydrants shall be painted red.

9. A flow test must be witnessed by the Fire Department prior to occupancy for verification of required on-site water supply.

10. All on-site fire main materials must be U.L. listed and A.W.W.A. approved.

11. Fire Hydrant Spacing:
    Residential - 500 feet unsprinklered; 1000 feet sprinklered.
    Commercial, including multi-family - 300 feet unsprinklered; 600 feet sprinklered.

12. Where new water mains are extended along streets, hydrants shall be spaced at maximum one-thousand (1,000') foot spacing to provide for transportation hazards.

13. No fire hydrant shall be located within the required radius of a cul-de-sac or within twenty (20') feet of the perimeter of the radius of the cul-de-sac.

14. No fire hydrant shall be located within six feet (6') of any curb return, driveway, power pole, street light or any other obstruction.

15. Two sources of supply are required whenever there are four (4) or more fire hydrants installed on a single system.

16. Not more than two (2) hydrants can be out of service due to a single main break.

17. Fire apparatus access roads shall have an unobstructed width of not less than twenty feet (20') provided no parking is allowed, not less than twenty-eight feet (28') if parallel parking is allowed on one side, and not less than thirty-six feet (36') if parallel parking is allowed on both sides. Vertical clearance shall not be less than thirteen-feet-six - inches (13' 6").

18. The turning radius for any fire apparatus access road and/or fire lane, public or private, shall be not less than forty-five feet (45') outside radius and twenty-two feet (22') inside radius.

19. A fire apparatus road shall be required when any portion of an exterior wall of the first story is located more than one-hundred fifty feet (150') from a Fire Department vehicle access (See exceptions in IUFC 94, section 902.2).

20. All dead end fire apparatus access roads and/or fire lanes, public or private, in excess of one-hundred fifty feet (150') in length shall be provided with an approved turn around area. See Ordinance No. 3944.

21. Access roads shall be marked by placing approved signs at the start of the designated fire lane, one sign at the end of the fire lane and with signs at intervals of one-hundred feet (100') along all designated fire lanes. Signs to be placed on both sides of an access roadway if needed to prevent parking on either side. Signs to be installed no higher than ten feet (10') or less than six feet (6') form roadway level. The curbs along or on the pavement or cement if curb is not present, shall be painted with a red weather resistant paint in addition to the signs.

22. Electrically controlled access gates shall be provided with an approved emergency vehicle detector/receiver system. Said system shall be installed in accordance with the City of Las Vegas Guidelines for Automatic Emergency Vehicle Access Gates.

Las Vegas Valley Water District Notes

1. No work shall begin until the water plans have been released for construction by the LVWD. Following water plan approval, forty-eight (48) hour notice shall be given to the LVWD Communication Support Center (258-7171) prior to the start of construction. Notice must be given by 2:00 P.M. the business day prior to a LVWD inspection.

2. All work shall conform to LVWD standard plates, drawing, and specifications and the Uniform Design and Construction Standards for Water Distribution Systems (UDACS), latest edition.

3. All work, except as modified by these plans or by note 2, shall be done in accordance with the most current draft or edition of the Uniform Standard Specifications for Public Works Construction Off-Site Improvements, Clark County Area.

4. A single pipe material shall be used throughout the project, unless otherwise appiproved by the LVWD.

5. All service laterals two inches (2") in diameter and smaller shall be copper tubing with LVWD approved service saddles.

6. All water meter boxes shall be located outside of driveway areas.

7. All valves shall be located outside of driveways, gutters, curbs and alley gutters..

8. The following requirements must be met in the event a water line and a sanitarry sewer or storm sewer line cross: A minimum eighteen inch (18?) vertical separation (outside to outside) must be maintained when the water line is installed over the sanitary or storm sewer line. If the vertical separation cannot be maintained or the water line must be placed under the sanitary or storm sewer line, the sanitary or storm sewer line must be constructed with one of the following or, as shown on these plans:
   A. Potable water supply quality material
   B. Encasement, with four inch (4") concrete (minimum)
   C. Sleeving with potable water supply quality pipe.

Each provision must extend along the sanitary or storm sewer, on either side of the water main, a minimum ten foot (10') distance perpendicular to the exterior of main.

9. Warning tape shall be required over all mains, all six inch (6") diameter and larger service laterals, and any service lateral not installed perpendicular to the main in accordance with Standard Plate No. 27.

10. All water facilities shall be filled, disinfected, pressure tested, flushed, filled and an acceptable water sample obtained prior to connection to the LVWD'S Distribution System.

11. The Contractor must obtain all meters two inches (2") and smaller from LVWD (Central Stores. Telephone 258-3152 forty-eight (48) hours prior to pick-up.

12. Construction may interrupt service, with LVWD approval and proper notification, between the hours of 10:00 P.M. and 6:00 A.M. Sunday through Thursday. Circumstances that may require temporary service feed must have prior LVWD approval.

13. All water facility construction materials used must be as listed on the LVWD'S pre-approved materials and manufacturers listing for new facilities, latest revision or specifically approved on these plans.

14. Approval of these plans for the water stubout installation will not be construed as a commitment for water service to this property.

Las Vegas Valley Water District Notes Continued

15. CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER)
In the event the water plans show one or more valved outlets extending out of paved areas, installations of these outlets is acceptable, however, if the outlets are incorrectly located or not used for any reason when the property is developed, the developer shall abandon the outlets at the connection to the active main in accordance with the district's standards and at the developer's expense.

16. WATER CROSSING NOTE
The following are the requirements that must be met when there is a water- sewer crossing: When protection of the water line is considered, the minimum vertical distance of eighteen inches (18") must be maintained when the water line is installed over the sewer/storm line. If this distance cannot be maintained because of physical obstructions or the water line must be placed under the sewer/storm line, the sewer/line must be constructed with any on if the following:
   A. Extra heavy cast iron or ductile iron pipe
   B. Water supply quality
   C. Encasement with 4 inches minimum of concrete or sleeving with water quality pipe.

Each of these provisions must be extended for ten feet (10') on either sides of the water line at 90 degrees to the crossing.

LEGEND:

℞	—PROPERTY LINE
R/W	—RIGHT OF WAY
℄	—CENTERLINE
ARCH.	—ARCHITECTURAL
T.C.	—TOP OF CURB
F.L.	—FLOW LINE
F.S.	—FINISH SURFACE
T.S.	—TOP OF CONCRETE SLAB
H.P.	—HIGH POINT
F.F.	—FINISH FLOOR
R.D.	—ROOF DRAIN
R.C.P.	—REINFORCED CONCRETE PIPE
INV.	—INVERT
S =	—SLOPE
F.G.	—FINISH GRADE
S.D.	—STORM DRAIN
T.R.	—TOP OF RAIL
ST.LT.	—STREET LIGHT
G.B.	—GRADE BREAK
H.P.	—HIGH POINT
H	—HEIGHT OF RETAINING
C.F.	—CURB FACE
B.W.	—BACK OF WALK
L.S.	—LANDSCAPING
A.B.	—AGGREGATE BASE
P.V.C.	—POLYVINYLCHLORIDE
C.I.P.	—CAST IRON PIPE
F.H.	—FIRE HYDRANT
P.P.	—POWER POLE
C.B.	—CATCH BASIN
R=	—RATE OF GRADE
B.C.R.	—BEGIN OF CURB RETURN
E.C.R.	—END OF CURB RETURN
L.P.	—LOW POINT
S.W.	—STEM WALL
T.O.P.	—TOP OF PIPE
B.O.P.	—BOTTOM OF PIPE
R	—RATE OF GRADE
T.F.	—TOP OF FOOTING
T.W.	—TOP OF WALL
C.M.B.	—CRUSHED MISC. BASE
S.F.	—SQUARE FEET
(0.00)	—EXISTING ELEVATION
B.O.W.	—BOTTOM OF WALL
T.G.	—TOP OF GRATE
N.G.	—NATURAL GRADE
TOP	—TOP OF SLOPE
TOE	—TOE OF SLOPE
E.P.	—EDGE OF PAVEMENT
A.C.	—ASPHALT CONCRETE
C.L.F.	—CHAIN LINK FENCE
CONC.	—CONCRETE
PKWY DRAIN	—PARKWAY DRAIN
H.C.	—HANDICAP
EXIST.	—EXISTING
TRANS PAD	—TRANSFORMER PAD
BLDG	—BUILDING
M.H.	—MANHOLE
T.B.	—TOP OF BERM
T.E.	—TRASH ENCLOSURE

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/14/11. Page 5 of 16.

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
2	4/11	x	x	
1	3/11	x	x	

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No 14385
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14348 TYE STONE, SUITE 150
LAS VEGAS, NEVADA 89138
PH.(702)951-4811 FAX(702)951-4113

TITLE: GENERAL NOTES, LEGEND AND ABBREVIATION SHEET — NEVADA

PROJECT: WINCO FOODS — TROPICAL PARKWAY AND DECATUR BLVD. — CITY OF LAS VEGAS

WORK ORDER NO. --
DESIGN BY: J.P.
DRAWN BY: J.P.
DATE: MARCH 2011
SCALE: NONE
SHEET T-2 OF 15 SHEETS
CLV DWG. NO. XX

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

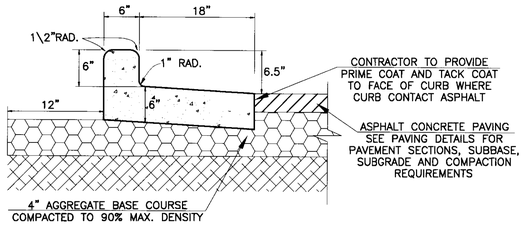
LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90 25E6
ELEVATION = 697.505 METERS (NAVD88) 2288.40 FEET

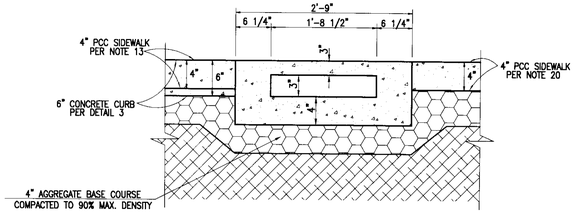
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN



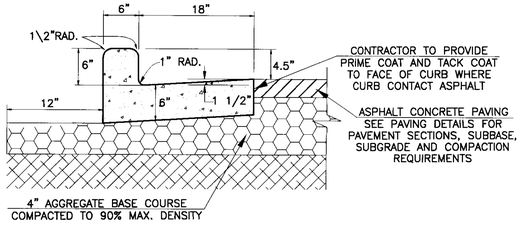
6" CONCRETE CURB ONLY DETAIL: (3)

N.T.S.



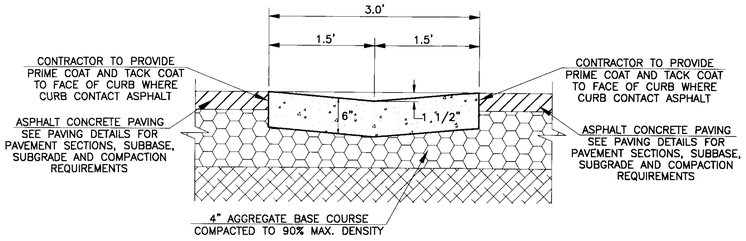
2.0' WIDE BOX UNDER SIDEWALK (6)

N.T.S.



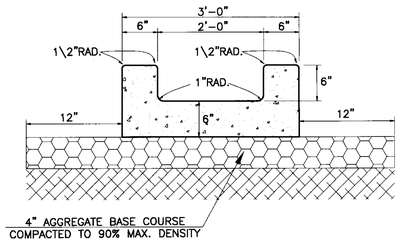
6' CURB AND GUTTER DETAIL: (4)

N.T.S.



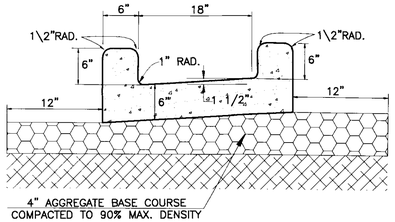
3' WIDE CONCRETE VALLEY GUTTER: (7)

N.T.S.



24" CONCRETE CHANNEL DETAIL: (5)

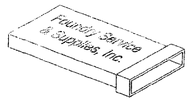
N.T.S.



18" CONCRETE CHANNEL DETAIL: (11)

N.T.S.

Foundry Service & Supplies, Inc.
11808 Burke Street, Santa Fe Springs, CA 90670
Ph: (562) 945-6511
Fax: (562) 696-1633

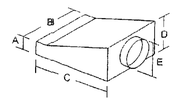


UNDER SIDEWALK
Rectangular Drain Pipe Specification Sheet

Available in 4', 5', and 6' Lengths — Prices effective 4/1/2008

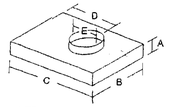
Size	Round Pipe Equivalent	Outside Dimensions	Inside Dimensions	Transverse Area Net	Weight
#1	4"	5.50 x 3.75	5.00 x 3.00	15.00 Sq. In.	5#/LF
#2	6"	8.50 x 4.25	8.00 x 3.50	28.00 Sq. In.	7#/LF
#2A	6"	12.13 x 3.75	11.38 x 3.00	34.13 Sq. In.	12#/LF
#3	8"	15.88 x 4.50	15.13 x 3.50	52.94 Sq. In.	17#/LF
#3A	8"	21.50 x 4.00	20.50 x 3.00	61.50 Sq. In.	22#/LF
#4	10"	23.75 x 4.50	22.75 x 3.50	79.62 Sq. In.	25#/LF
#5	12"	33.00 x 4.50	32.00 x 3.50	112.00 Sq. In.	33#/LF

TYPE L ADAPTORS — Horizonial Round to Rectangular Pipe Adaptor



Size	A	B	C	D	E	Weight
#1	3.75	5.50	8.00	4.75	4.00	5 #
#2	4.25	8.50	12.00	6.75	6.00	10.5 #
#2A	3.75	12.13	12.00	6.63	6.00	16 #
#3	4.50	15.88	16.50	9.50	8.00	31 #
#3A	4.00	21.50	16.50	9.50	8.00	50 #
#4	4.50	23.75	20.00	11.50	10.00	67 #
#5	4.50	33.00	24.00	14.00	12.00	85 #

TYPE T ADAPTORS — Vertical Round to Rectangular Pipe Adaptor

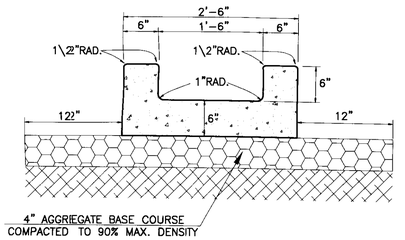


Size	A	B	C	D	E	Weight
#1	3.75	5.50	8.00	5.00	4.00	4 #
#2	4.25	8.50	10.00	6.00	6.00	8.5 #
#2A	3.75	12.13	10.00	6.00	6.00	19 #
#3	4.50	15.88	12.00	7.00	8.00	28 #
#3A	4.00	21.50	12.00	7.00	8.00	38 #
#4	4.50	23.75	14.00	8.00	10.00	49 #
#5	4.50	33.00	18.00	11.00	12.00	60 #

Custom sizes are available upon request.
City of Los Angeles, Department of Public Works Approved.

UNDEIR SIDEWALK DETAIL: (12)

N.T.S.



18" CONCRETE CHANNEL DETAIL: (21)

N.T.S.

This grading plan is a part of drainage study #4524 which was received on 3/29/11 and Rejected on 4/27/11. Page 6 of 16.

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you DIG
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, (CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90 25E6
ELEVATION = 697.505 METERS (NAVD88) 2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1				

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No. 14385

STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING · LAND SURVEYING
CONSTRUCTION MANAGEMENT
14 AMROAD, CALIFORNIA 92358
PH(760)521-4611 FAX(760)521-4173
NEVADA

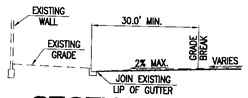
TITLE: GRADING DETAILS

PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS

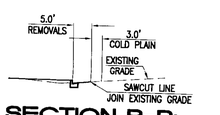
WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	NONE
SHEET	G-1 of 15 SHEETS
CLV DWG. NO.	XX

GRADING CONSTRUCTION NOTES:

1. PROTECT EXISTING UTILITIES IN PLACE.
2. ADJUST EXISTING UTILITY TO GRADE.
3. CONSTRUCT 6" CONCRETE CURB ONLY PER DETAIL ON SHEET G-1.
4. CONSTRUCT 6" CONCRETE CURB AND GUTTER PER DETAIL ON SHEET G-1.
5. CONSTRUCT 24" CONCRETE CHANNEL PER DETAIL SHEET G-1.
6. CONSTRUCT 2' WIDE CONCRETE BOX CULVERT UNDERNEATH SIDEWALK, PER DETAIL ON SHEET G-1.
7. CONSTRUCT 3.0' WIDE VALLEY GUTTER PER DETAIL SHEET G-1.
8. CONSTRUCT 2" A.C. OVER 6" CLASS II A.B. (AUTO PARKING) PER SOILS PER SOIL REPORT.
9. CONSTRUCT 3" A.C. OVER 6" CLASS II A.B., (DRIVE AISLE) PER SOILS PER SOIL REPORT.
10. CONSTRUCT 8" P.C.C. OVER 10" COMPACTED SOILS, WITH #4 REBAR AT 12" O.C. AT MIDDLE OF THE SLAB PER SOIL REPORT.
11. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
12. INSTALL RECTANGULAR DRAIN PER FOUNDRY SERVICE SUPPLY, INC. MODEL No. 3A. CONNECT TO TYPE 'I' ADAPTOR SHOWN ON PLUMBING PLAN.
13. CONSTRUCT 4" P.C.C. SIDEWALK PER ARCH. PLANS.
14. ROOF DRAIN PER ARCHITECT PLANS
15. CONSTRUCT A.D.A. RAMP, ELEVATIONS PER PLANS.
16. LANDSCAPE PER LANDSCAPE ARCH. PLANS.
17. CONSTRUCT CATCH BASIN & LOCAL DEPRESSION PER STORM DRAN PLAN. SEE SHEET U-1.
18. GRIND AND OVERLAY EXISTING A.C. PAVEMENT WITH MINIMUM 2" THICK.
19. CONSTRUCT MATERIAL HANDLING TANK PER PLUMBING PLAN, RE: P2. (OBTAIN PERMIT BY PLUMBING).
20. CONSTRUCT RETAINING WALL PER DETAILS ON STRUCTURAL PLANS, RE: S1. (OBTAIN PERMIT BY STRUCTURE ENGINEER).
21. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
22. CART RACK PER ARCHITECT PLANS.

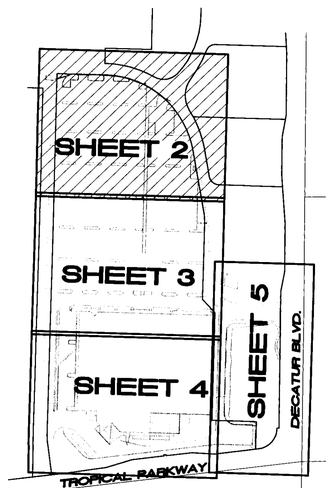


SECTION A-A:
N.T.S.



SECTION B-B:
N.T.S.

NOTE:
ALL ONSITE STORM DRAINS ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.



SHEET INDEX:

MATCH LINE - SEE SHEET 3

0 10 20 40 60
SCALE:1"=20'

This grading plan is a part of drainage study #4524 which was received on 3/29/11 and Rejected on 4/12/11. Page 7 of 16.

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1	X	X	X	X

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No 14986
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING / LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

TITLE: GRADING PLAN
PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS NEVADA

WORK ORDER NO. ---
DESIGN BY: J.P.
DRAWN BY: J.P.
DATE: MARCH 2011
SCALE: 1" = 20'
SHEET G-2 OF 15 SHEETS
CLV DWG. NO. XX

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION BLV90 25E6
ELEVATION = 697.505 METERS (NAVD88) 2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

MATCH LINE - SEE SHEET 2

MATCH LINE - SEE SHEET 4

SEE SHEET 5

GRADING CONSTRUCTION NOTES:

1. PROTECT EXISTING UTILITIES IN PLACE.
2. ADJUST EXISTING UTILITY TO GRADE.
3. CONSTRUCT 6" CONCRETE CURB ONLY PER DETAIL ON SHEET G-1.
4. CONSTRUCT 6" CONCRETE CURB AND GUTTER PER DETAIL ON SHEET G-1.
5. CONSTRUCT 24" CONCRETE CHANNEL PER DETAIL SHEET G-1.
6. CONSTRUCT 2' WIDE CONCRETE BOX CULVERT UNDERNEATH SIDEWALK, PER DETAIL ON SHEET G-1.
7. CONSTRUCT 3.0' WIDE VALLEY GUTTER PER DETAIL SHEET G-1.
8. CONSTRUCT 2" A.C. OVER 6" CLASS II A.B. (AUTO PARKING) PER SOILS PER SOIL REPORT.
9. CONSTRUCT 3" A.C. OVER 6" CLASS II A.B., (DRIVE AISLE) PER SOILS PER SOIL REPORT.
10. CONSTRUCT 5" P.C.C. OVER 10" COMPACTED SOILS, WITH #4 REBAR AT 12" O.C. AT MIDDLE OF THE SLAB PER SOIL REPORT.
11. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
12. INSTALL RECTANGULAR DRAIN PER FOUNDRY SERVICE SUPPLY, INC. MODEL No. 3A. CONNECT TO TYPE 'I' ADAPTOR SHOWN ON PLUMBING PLAN.
13. CONSTRUCT 4" P.C.C. SIDEWALK PER ARCH. PLANS.
14. ROOF DRAIN PER ARCHITECT PLANS
15. CONSTRUCT A.D.A. RAMP, ELEVATIONS PER PLANS.
16. LANDSCAPE PER LANDSCAPE ARCH. PLANS.
17. CONSTRUCT CATCH BASIN & LOCAL DEPRESSION PER STORM DRAN PLAN. SEE SHEET U-1.
18. GRIND AND OVERLAY EXISTING A.C. PAVEMENT WITH MINIMUM 2" THICK.
19. CONSTRUCT MATERIAL HANDLING TANK PER PLUMBING PLAN, RE: P2. **(OBTAIN PERMIT BY PLUMBING).**
20. CONSTRUCT RETAINING WALL PER DETAILS ON STRUCTURAL PLANS, RE: S1. **(OBTAIN PERMIT BY STRUCTURE ENGINEER).**
21. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
22. CART RACK PER ARCHITECT PLANS.

NOTE:
ALL ONSITE STORM DRAINS ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.

SECTION C-C:
N.T.S.

SECTION D-D:
N.T.S.

SECTION E-E:
N.T.S.

SHEET INDEX:
N.T.S.

SCALE:1"=20'

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NNORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (WW 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF F PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF F CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90
25E6
ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/19/11. Page 8 of 16

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION

REINHARD C. STENZEL
6/30/12
CIVIL
No. 14385
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING
14348 PRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
(714)521-4811 FAX(714)521-4173

TITLE: GRADING PLAN
PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS NEVADA

WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 20'
SHEET G-3 OF 15 SHEETS	
CLV DWG. NO.	XX

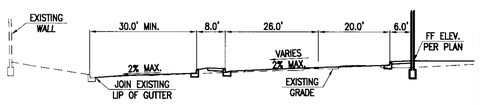
MATCH LINE – SEE SHEET 3

SEE SHEET 5

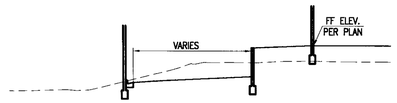
TROPICAL PARKWAY

GRADING CONSTRUCTION NOTES:

1. PROTECT EXISTING UTILITIES IN PLACE.
2. ADJUST EXISTING UTILITY TO GRADE.
3. CONSTRUCT 6" CONCRETE CURB ONLY PER DETAIL ON SHEET G-1.
4. CONSTRUCT 6" CONCRETE CURB AND GUTTER PER DETAIL ON SHEET G-1.
5. CONSTRUCT 24" CONCRETE CHANNEL PER DETAIL SHEET G-1.
6. CONSTRUCT 2' WIDE CONCRETE BOX CULVERT UNDERNEATH SIDEWALK, PER DETAIL ON SHEET G-1.
7. CONSTRUCT 3.0' WIDE VALLEY GUTTER PER DETAIL SHEET G-1.
8. CONSTRUCT 2" A.C. OVER 6" CLASS II A.B. (AUTO PARKING) PER SOILS PER SOIL REPORT.
9. CONSTRUCT 3" A.C. OVER 6" CLASS II A.B., (DRIVE AISLE) PER SOILS PER SOIL REPORT.
10. CONSTRUCT 8" P.C.C. OVER 10" COMPACTED SOILS, WITH #4 REBAR AT 12" O.C. AT MIDDLE OF THE SLAB PER SOIL REPORT.
11. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
12. INSTALL RECTANGULAR DRAIN PER FOUNDRY SERVICE SUPPLY, INC. MODEL No. 3A, CONNECT TO TYPE 'T' ADAPTOR SHOWN ON PLUMBING PLAN.
13. CONSTRUCT 4" P.C.C. SIDEWALK PER ARCH. PLANS.
14. ROOF DRAIN PER ARCHITECT PLANS
15. CONSTRUCT A.D.A. RAMP, ELEVATIONS PER PLANS.
16. LANDSCAPE PER LANDSCAPE ARCH. PLANS.
17. CONSTRUCT CATCH BASIN & LOCAL DEPRESSION PER STORM DRAN PLAN. SEE SHEET U-1.
18. GRIND AND OVERLAY EXISTING A.C. PAVEMENT WITH MINIMUM 2" THICK.
19. CONSTRUCT MATERIAL HANDLING TANK PER PLUMBING PLAN, RE: P2. (OBTAIN PERMIT BY PLUMBING).
20. CONSTRUCT RETAINING WALL PER DETAILS ON STRUCTURAL PLANS, RE: S1. (OBTAIN PERMIT BY STRUCTURE ENGINEER).
21. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
22. CART RACK PER ARCHITECT PLANS.

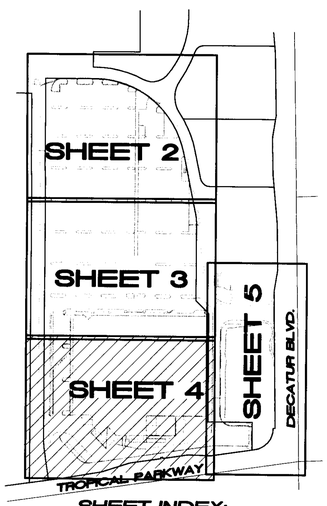


SECTION G-G:
N.T.S.



SECTION K-K:
N.T.S.

NOTE:
ALL ONSITE STORM DRAINS ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.



SHEET INDEX:
N.T.S.

SCALE:1"=20'

(PUBLIC) EX. 42" RCP STORM DRAIN PER C.L.V. DWG. No. 10774451

(PUBLIC) EX. TYPE "CM" DROP INLET L=7.5' PER C.L.V. DWG. NO. 10774966

3677-4617-3

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you DIG
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF TITHE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HANLF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGASS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 J OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDEER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90
2565
ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4524 which was received on 3/29/11 and Rejected on 4/12/11. Page 9 of 16

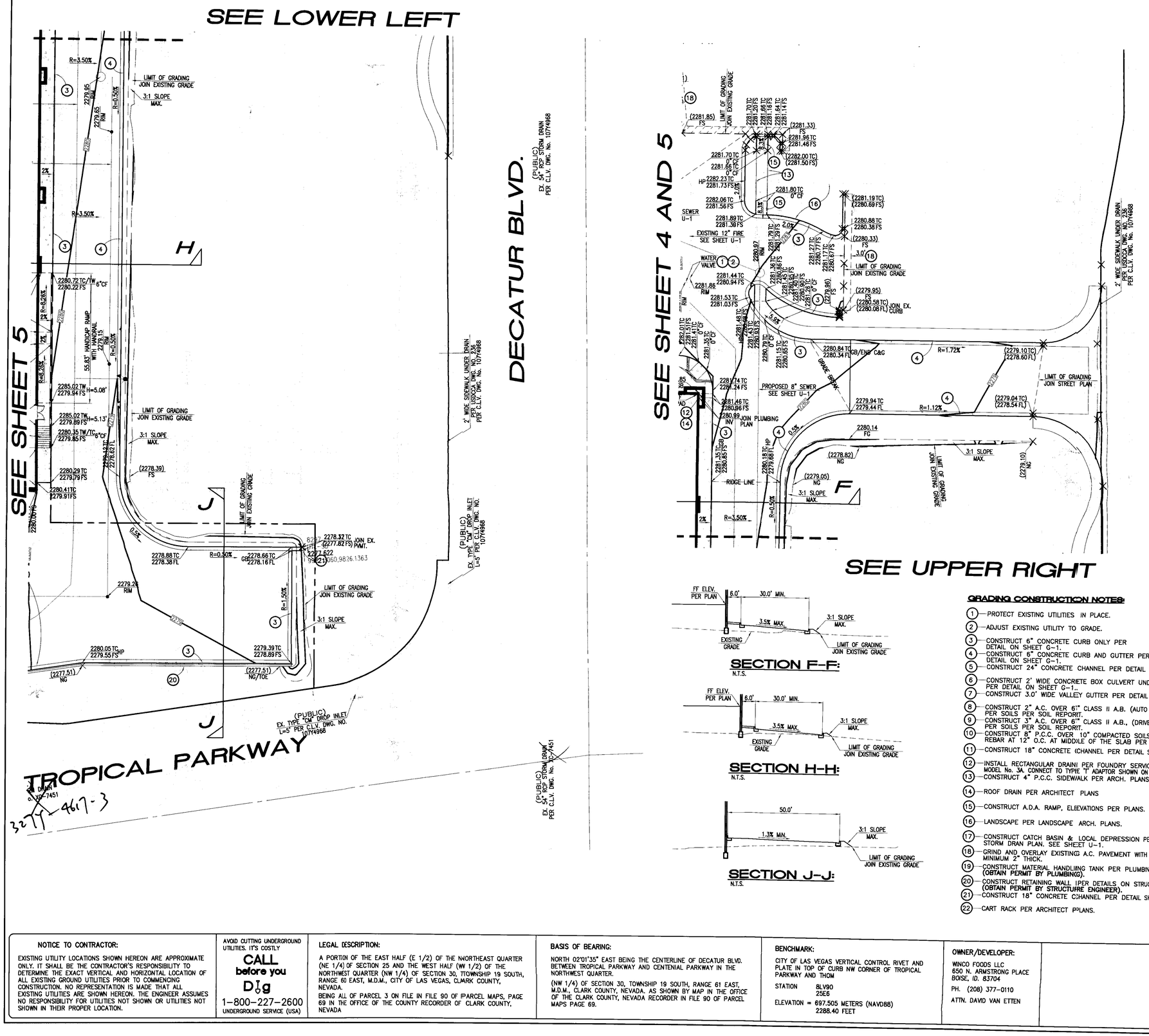
NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1				

PROFESSIONAL ENGINEER – STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No 14385
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING · LAND SURVEYING
STRUCTURAL ENGINEERING
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

TITLE: GRADING PLAN
PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS
NEVADA

WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 20'
SHEET G-4 OF 15 SHEETS	
CLV DWG. NO.	XX



SECTION F-F:
N.T.S.

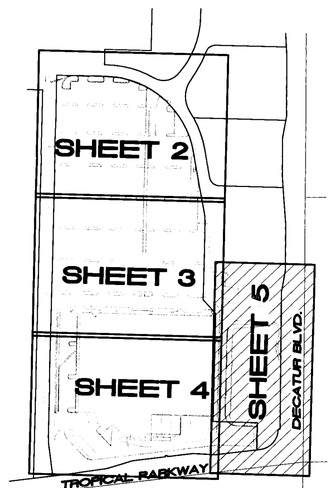
SECTION H-H:
N.T.S.

SECTION J-J:
N.T.S.

GRADING CONSTRUCTION NOTES:

1. PROTECT EXISTING UTILITIES IN PLACE.
2. ADJUST EXISTING UTILITY TO GRADE.
3. CONSTRUCT 6" CONCRETE CURB ONLY PER DETAIL ON SHEET G-1.
4. CONSTRUCT 6" CONCRETE CURB AND GUTTER PER DETAIL ON SHEET G-1.
5. CONSTRUCT 24" CONCRETE CHANNEL PER DETAIL SHEET G-1.
6. CONSTRUCT 2' WIDE CONCRETE BOX CULVERT UNDERNEATH SIDEWALK, PER DETAIL ON SHEET G-1..
7. CONSTRUCT 3.0' WIDE VALLEY GUTTER PER DETAIL SHEET G-1.
8. CONSTRUCT 2" A.C. OVER 6" CLASS II A.B. (AUTO PARKING) PER SOILS PER SOIL REPORT.
9. CONSTRUCT 3" A.C. OVER 6" CLASS II A.B., (DRIVE AISLE) PER SOILS PER SOIL REPORT.
10. CONSTRUCT 8" P.C.C. OVER 10" COMPACTED SOILS, WITH #4 REBAR AT 12" O.C. AT MIDDLE OF THE SLAB PER SOIL REPORT.
11. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
12. INSTALL RECTANGULAR DRAIN PER FOUNDRY SERVICE SUPPLY, INC. MODEL No. 3A. CONNECT TO TYPE 'T' ADAPTOR SHOWN ON PLUMBING PLAN.
13. CONSTRUCT 4" P.C.C. SIDEWALK PER ARCH. PLANS.
14. ROOF DRAIN PER ARCHITECT PLANS
15. CONSTRUCT A.D.A. RAMP, ELEVATIONS PER PLANS.
16. LANDSCAPE PER LANDSCAPE ARCH. PLANS.
17. CONSTRUCT CATCH BASIN & LOCAL DEPRESSION PER STORM DRAN PLAN. SEE SHEET U-1.
18. GRIND AND OVERLAY EXISTING A.C. PAVEMENT WITH MINIMUM 2" THICK.
19. CONSTRUCT MATERIAL HANDLING TANK PER PLUMBING PLAN, RE: P2. (OBTAIN PERMIT BY PLUMBING).
20. CONSTRUCT RETAINING WALL PER DETAILS ON STRUCTURAL PLANS, RE: S1. (OBTAIN PERMIT BY STRUCTURE ENGINEER).
21. CONSTRUCT 18" CONCRETE CHANNEL PER DETAIL SHEET G-1.
22. CART RACK PER ARCHITECT PLANS.

NOTE:
ALL ONSITE STORM DRAINS ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.



SHEET INDEX:
N.T.S.

0 10 20 40 60
SCALE:1"=20'

NO.	DATE	BY	APP'D.	REVISION DESCRIPTION
1	X	X	X	

PROFESSIONAL ENGINEER STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No. 14365

STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14348 TUMBLESTONE BOULEVARD
LAS VEGAS, NEVADA 89138
PH. (702)837-4811 FAX (702)837-4813

NEVADA

TITLE: GRADING PLAN

PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.

CITY OF LAS VEGAS

WORK ORDER NO.	---
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 20'
SHEET	G-5 OF 15 SHEETS
CLV DWG. NO.	XX

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

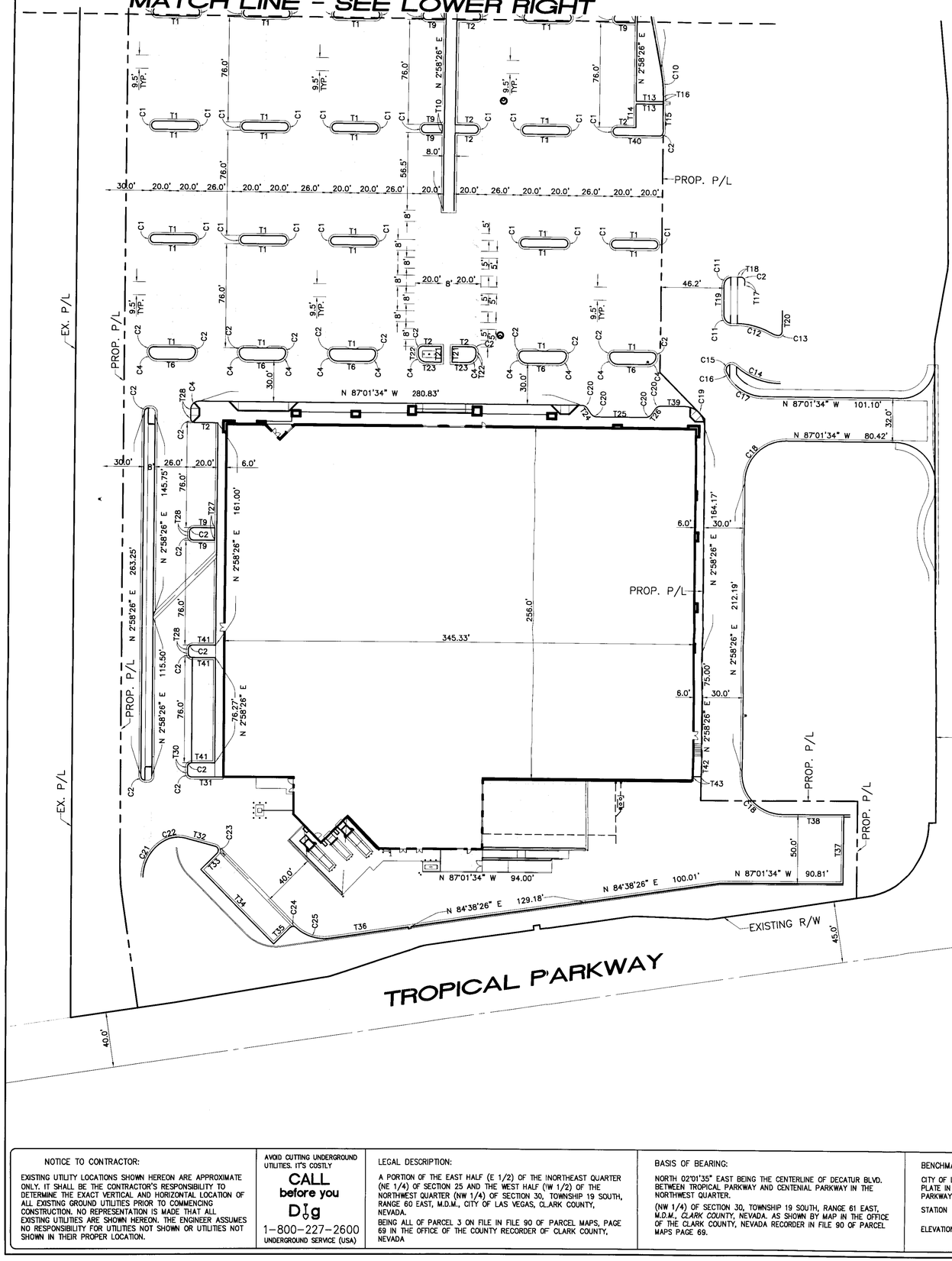
LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

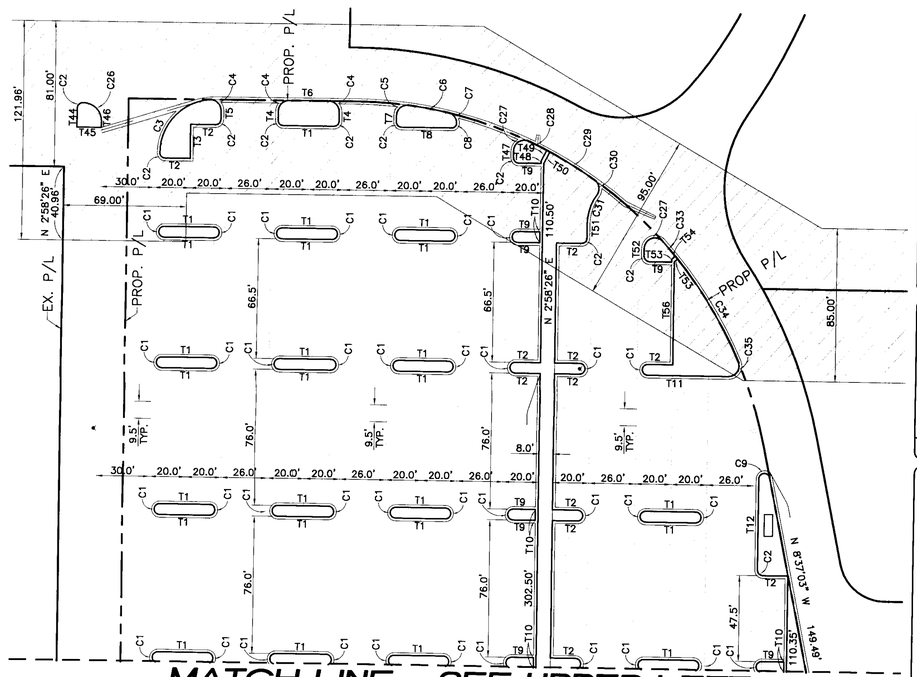
BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION BLV90
25E6
ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/12/11. Page 10 of 16





CURVE DATA TABLE				
NO.	DELTA	RADIUS	LENGTH	TANGENT
C1	180°00'00"	3.00'	9.42'	
C2	90°00'00"	3.00'	4.71'	3.00'
C3	85°17'38"	30.00'	44.66'	27.613'
C4	90°00'00"	6.00'	9.42'	6.000'
C5	97°00'52"	6.00'	10.16'	6.778'
C6	05°35'18"	235.00'	22.92'	11.47'
C7	68°08'35"	6.00'	7.14'	4.06'
C8	99°15'15"	3.00'	5.20'	3.53'
C9	168°24'31"	3.00'	8.82'	29.56'
C10	11°35'29"	100.00'	20.23'	10.15'
C11	79°26'10"	6.00'	8.32'	4.98'
C12	29°51'31"	50.00'	26.05'	13.33'
C13	101°24'56"	3.00'	5.31'	3.67'
C14	40°14'16"	50.00'	35.11'	18.32'
C15	93°27'52"	4.00'	6.53'	4.25'
C16	08°42'10"	30.00'	4.58'	2.30'
C17	43°24'44"	30.00'	22.73'	11.94'
C18	90°00'00"	30.00'	47.12'	30.00'
C19	90°00'00"	15.00'	23.56'	15.00'
C20	55°00'00"	5.00'	4.80'	2.60'
C21	63°57'21"	30.00'	33.49'	18.73'
C22	40°59'05"	20.00'	14.31'	7.47'
C23	120°13'53"	3.00'	6.30'	5.22'
C24	87°56'32"	3.00'	4.60'	2.89'
C25	51°16'32"	30.00'	26.85'	14.40'
C26	90°00'00"	10.00'	15.71'	10.00'
C27	114°13'31"	6.00'	11.96'	9.28'
C28	02°44'55"	235.00'	11.27'	5.64'
C29	07°11'16"	235.00'	29.48'	14.76'
C30	90°05'59"	6.00'	9.48'	6.06'
C31	35°14'57"	28.00'	17.23'	8.90'
C32	137°10'42"	6.00'	14.37'	15.30'
C33	02°37'18"	235.00'	10.75'	5.38'
C34	16°10'15"	235.00'	66.33'	33.38'
C35	113°32'29"	6.00'	11.89'	9.16'

TANGENT TABLE		
T1	N 87°01'34" W	28.00'
T2	N 87°01'34" W	14.00'
T3	N 02°58'26" E	19.00'
T4	N 02°58'26" E	5.03'
T5	N 87°01'34" W	4.95'
T6	N 87°01'34" W	22.00'
T7	N 02°58'26" E	3.32'
T8	N 87°01'34" W	27.96'
T9	N 87°01'34" W	12.50'
T10	N 02°58'26" E	6.00'
T11	N 87°01'34" W	44.98'
T12	N 02°58'26" E	55.63'
T13	N 87°01'34" W	20.00'
T14	N 02°58'26" E	17.15'
T15	N 02°58'26" E	20.15'
T16	N 02°58'26" E	3.02'
T17	N 02°58'26" E	3.06'
T18	N 87°01'34" W	2.36'
T19	N 02°58'26" E	21.96'
T20	N 02°58'26" E	15.24'
T21	N 02°58'26" E	11.50'
T22	N 02°58'26" E	2.50'
T23	N 87°01'34" W	11.00'
T24	N 32°11'44" W	4.88'
T25	N 87°01'34" W	36.00'
T26	N 38°08'37" E	4.88'
T27	N 02°58'26" E	9.00'
T28	N 02°58'26" E	3.00'
T29	N 02°58'26" E	6.50'
T30	N 02°58'26" E	4.23'
T31	N 87°01'34" W	22.87'
T32	N 72°15'27" W	22.88'
T33	N 47°58'26" E	16.86'
T34	N 42°01'34" W	76.00'
T35	N 47°58'26" E	17.02'
T36	N 84°38'26" E	58.65'
T37	N 02°58'26" E	48.50'
T38	N 87°01'34" W	45.00'
T39	N 87°01'34" W	17.50'
T40	N 87°01'34" W	31.00'
T41	N 87°01'34" W	17.00'
T42	N 02°58'26" E	14.80'
T43	N 87°01'34" W	6.00'
T44	N 02°58'26" E	10.61'
T45	N 87°11'15" W	13.61'
T46	N 02°58'26" E	3.58'
T47	N 02°58'26" E	3.87'
T48	N 02°58'26" E	1.45'
T49	N 30°26'08" E	6.79'
T50	N 30°26'08" E	7.36'
T51	N 02°58'26" E	7.80'
T52	N 02°58'26" E	4.19'
T53	N 02°58'26" E	1.53'
T54	N 53°15'42" E	2.64'
T55	N 53°15'42" E	2.35'
T56	N 02°58'26" E	57.00'

INDICATES EXISTING SURFACE DRAINAGE EASEMENT

0 20 40 80 120
SCALE:1"=40'

NOTICE TO CONTRACTOR:

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you DIG
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:

A PORTION OF THE EAST HALF (E 1/2) OF THE INORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:

NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:

CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90 25E6
ELEVATION = 697.505 METERS (NAVD88) 2288.40 FEET

OWNER/DEVELOPER:

WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/12/11. Page 11 of 16.

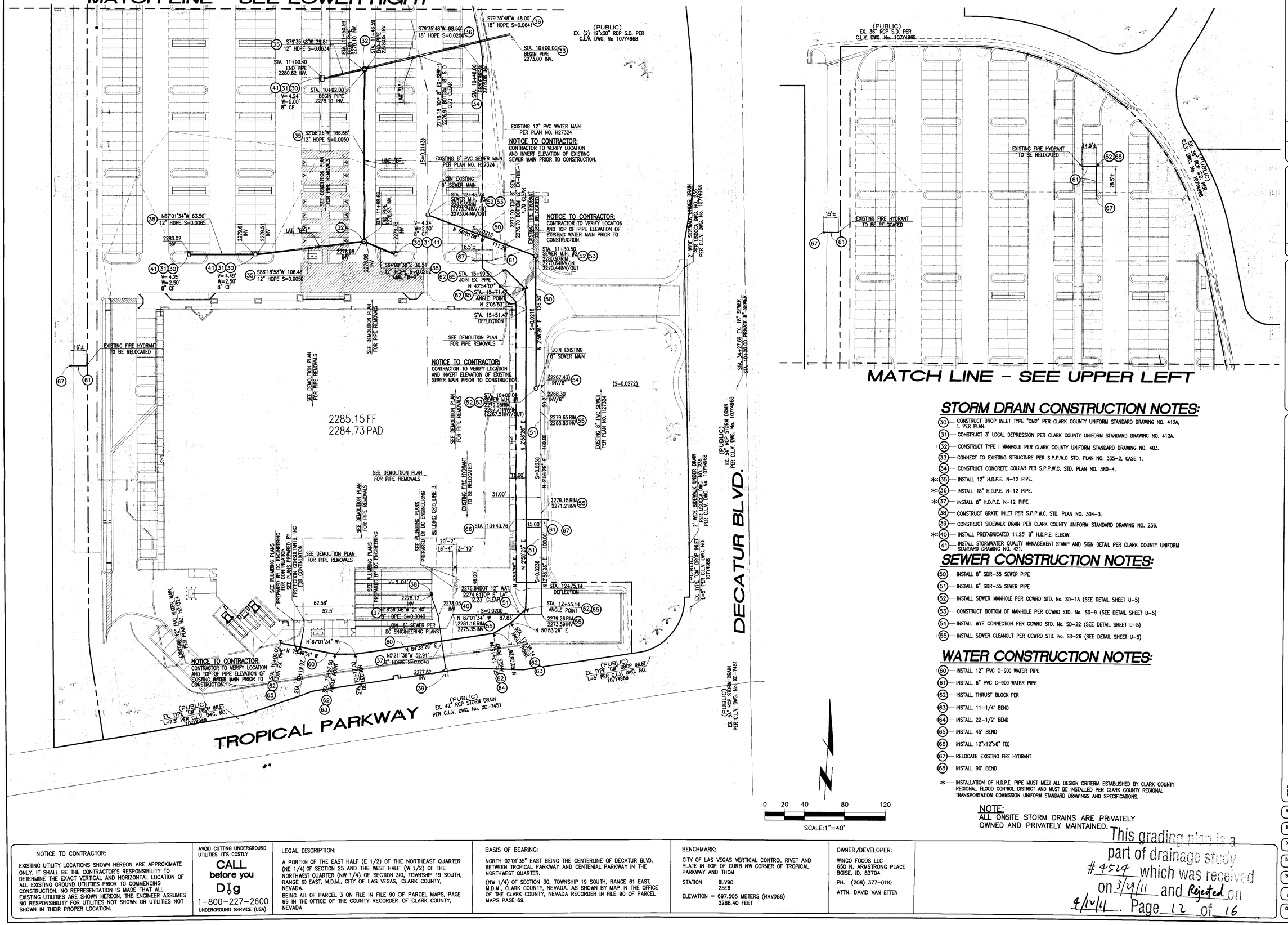
NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1	x	x	x	

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No 14989
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING · LAND SURVEYING
STRUCTURAL ENGINEERING
14 N. MEDIAN, CALIFORNIA 93638
(559) 673-4611 FAX (559) 673-4172

TITLE: DIMENSION CONTROL PLAN
PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS
NEVADA

WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 40'
SHEET	G-6 OF 15 SHEETS
CLV DWG. NO.	XX



STORM DRAIN CONSTRUCTION NOTES:

30 CONSTRUCT DROP INLET TYPE "CM2" PER CLARK COUNTY UNIFORM STANDARD DRAWING NO. 412A.
31 CONSTRUCT 3' LOCAL DEPRESSION PER CLARK COUNTY UNIFORM STANDARD DRAWING NO. 412A.
32 CONSTRUCT TYPE I MANHOLE PER CLARK COUNTY UNIFORM STANDARD DRAWING NO. 403.
33 CONNECT TO EXISTING STRUCTURE PER S.P.P.W.C STD. PLAN NO. 335-2, CASE 1.
34 CONSTRUCT CONCRETE COLLAR PER S.P.P.W.C. STD. PLAN NO. 380-4.
*35 INSTALL 12" H.D.P.E. N-12 PIPE.
*36 INSTALL 18" H.D.P.E. N-12 PIPE.
*37 INSTALL 8" H.D.P.E. N-12 PIPE.
38 CONSTRUCT GRATE INLET PER S.P.P.W.C. STD. PLAN NO. 304-3.
39 CONSTRUCT SIDEWALK DRAIN PER CLARK COUNTY UNIFORM STANDARD DRAWING NO. 236.
*40 INSTALL PREFABRICATED 11.25° 8" H.D.P.E. ELBOW.
41 INSTALL STORMWATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL PER CLARK COUNTY UNIFORM STANDARD DRAWING NO. 421.

SEWER CONSTRUCTION NOTES:

50 INSTALL 8" SDR-35 SEWER PIPE
51 INSTALL 6" SDR-35 SEWER PIPE
52 INSTALL SEWER MANHOLE PER CCWRD STD. No. SD-1A (SEE DETAIL SHEET U-5)
53 CONSTRUCT BOTTOM OF MANHOLE PER CCWRD STD. No. SD-9 (SEE DETAIL SHEET U-5)
54 INSTALL WYE CONNECTION PER CCWRD STD. No. SD-22 (SEE DETAIL SHEET U-5)
55 INSTALL SEWER CLEANOUT PER CCWRD STD. No. SD-26 (SEE DETAIL SHEET U-5)

WATER CONSTRUCTION NOTES:

60 INSTALL 12" PVC C-900 WATER PIPE
61 INSTALL 6" PVC C-900 WATER PIPE
62 INSTALL THRUST BLOCK PER
63 INSTALL 11-1/4° BEND
64 INSTALL 22-1/2° BEND
65 INSTALL 45° BEND
66 INSTALL 12"x12"x6" TEE
67 RELOCATE EXISTING FIRE HYDRANT
68 INSTALL 90° BEND

* INSTALLATION OF H.D.P.E. PIPE MUST MEET ALL DESIGN CRITERIA ESTABLISHED BY CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT AND MUST BE INSTALLED PER CLARK COUNTY REGIONAL TRANSPORTATION COMMISSION UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS.

NOTE:
ALL ONSITE STORM DRAINS ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you DIG
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THIE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90 25E6
ELEVATION = 697.505 METERS (NAVD88) 2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4529 which was received on 3/4/11 and Rejected on 4/14/11. Page 12 of 16

NO.	DATE	BY	APP'VD.	REVISION DESCRIPTION
1				
2				
3				
4				
5				

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No 14388

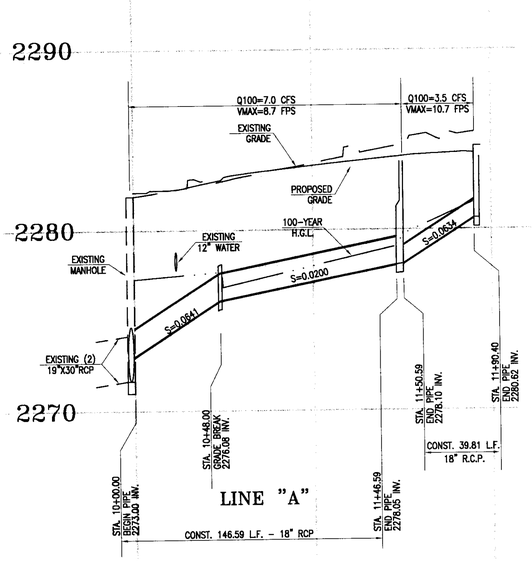
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING • SURVEYING
14545 E. FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
(714)521-4811 FAX(714)521-4173

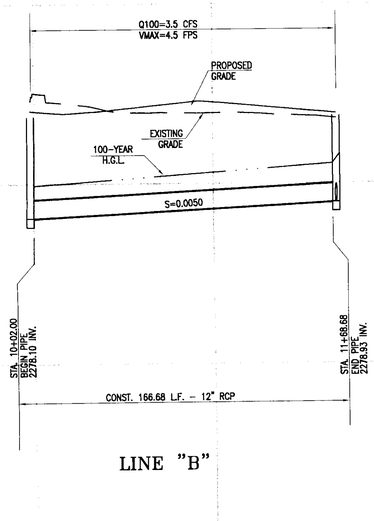
TITLE: UTILITY PLAN
PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS
NEVADA

WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 40'
SHEET	U-1 OF 15 SHEETS
CLV DWG. NO.	XX

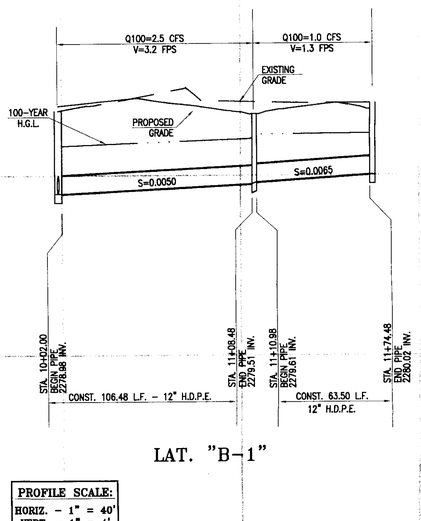
NOTE:
ALL ONSITE STORM DRAINS ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.



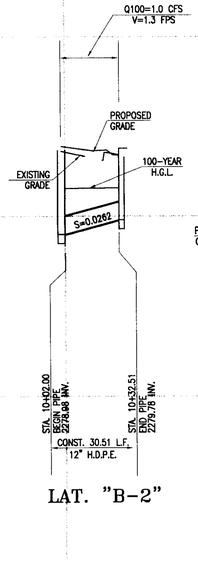
LINE "A"



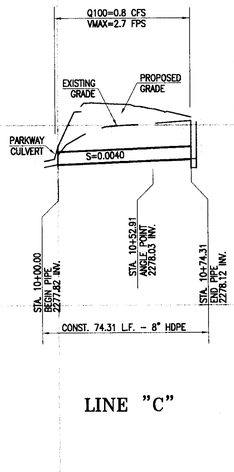
LINE "B"



LAT. "B-1"



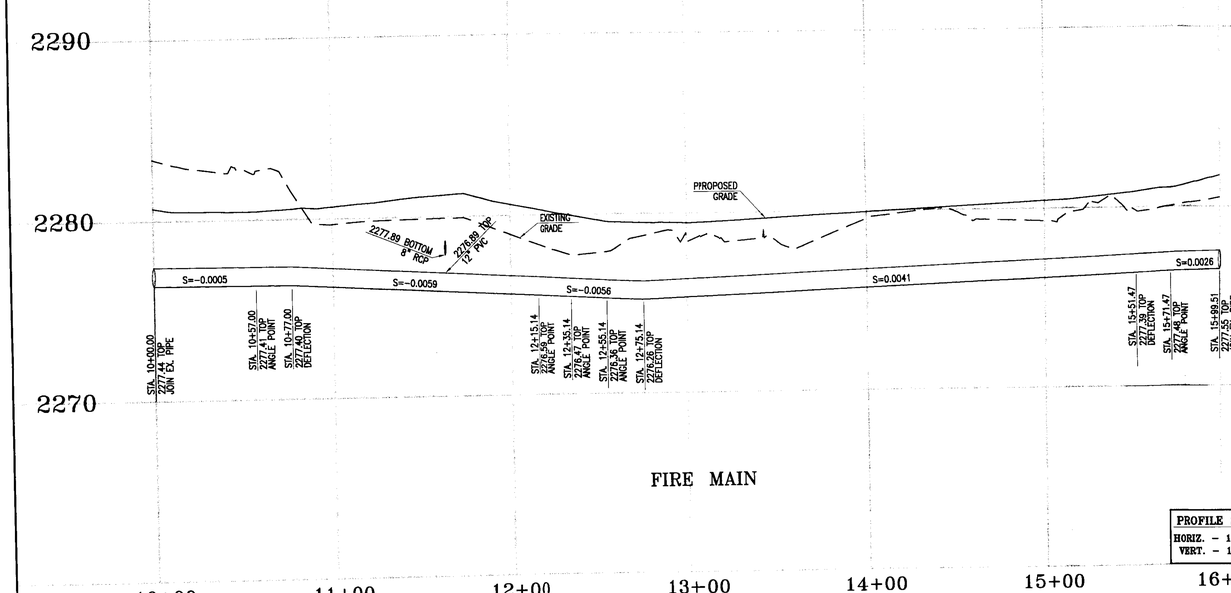
LAT. "B-2"



LINE "C"

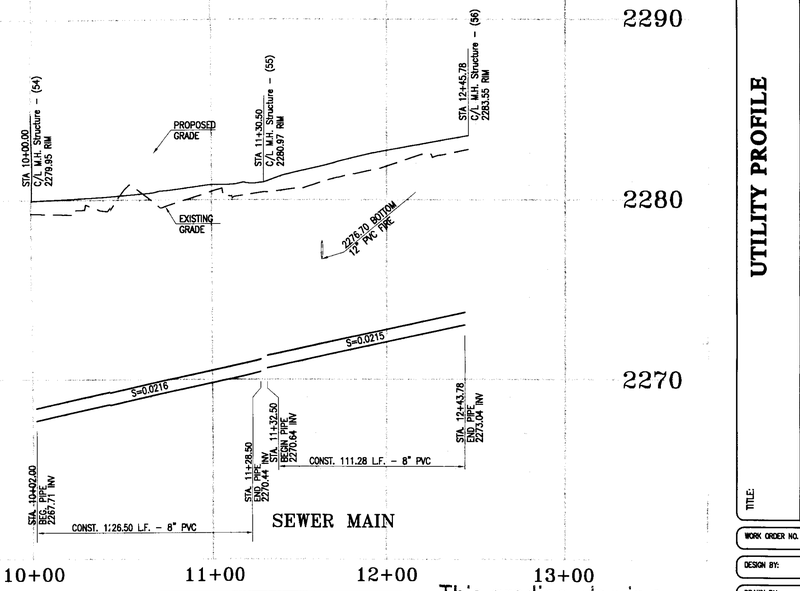
PROFILE SCALE:
HORIZ. - 1" = 40'
VERT. - 1" = 4'

NOTE:
ALL ONSITE STORM DRAINS ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.



FIRE MAIN

PROFILE SCALE:
HORIZ. - 1" = 40'
VERT. - 1" = 4'



SEWER MAIN

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you DIG
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90
25E6
ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4524 which was received on 3/29/11 and Rejected on 4/14/11. Page 13 of 16

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1	4/12	X	X	

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No. 14585

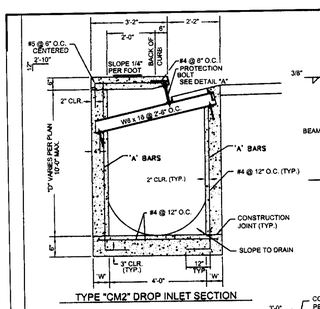
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14 MASON • IRVINE, CALIFORNIA 92618
PH.(714)931-6611 FAX(714)931-6113

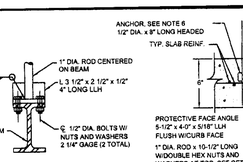
TITLE: UTILITY PROFILE

PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS
NEVADA

WORK ORDER NO.	--
DESIGN BY:	J.P.
DRAWN BY:	J.P.
DATE:	MARCH 2011
SCALE:	1" = 40'
SHEET	U-2 OF 15 SHEETS
CLV DWG. NO.	XX

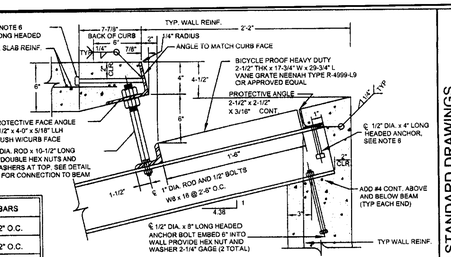


TYPE "CM2" DROP INLET SECTION

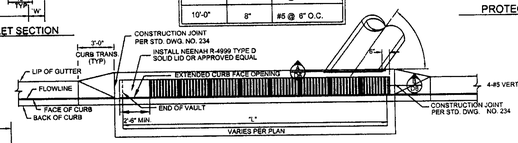


DETAIL "B"

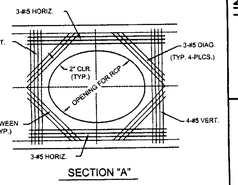
D (MAX)	DIM. 'W'	Ⓐ BARS
4'-0"	6"	#4 @ 12" O.C.
6'-0"	6"	#4 @ 12" O.C.
8'-0"	8"	#5 @ 12" O.C.
10'-0"	8"	#5 @ 6" O.C.



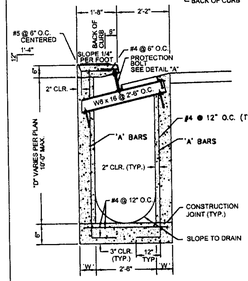
PROTECTIVE FACE & ROD - DETAIL "A"



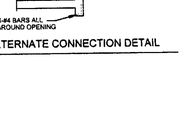
DROP INLET LAYOUT PLAN



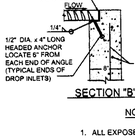
SECTION "A"



TYPE "DM2" DROP INLET SECTION



ALTERNATE CONNECTION DETAIL



SECTION "B"

NOTES:

1. ALL EXPOSED METALS SHALL BE HOT EDIP GALVANIZED AFTER FABRICATION.
2. PROVIDE 1/2" (MIN.) CLEARANCE ALL AROUND THE STEEL BEAM. DRY PACK AFTER INSTALLATION.
3. WHEN REQUIRED BY LENGTH OF OPENING, PLATE ANGLE MAY BE DELIVERED IN SECTIONS AND BUTT WELDED IN PLACE.
4. ALL GALVANIZED DAMAGED BY WELDING SHALL RECEIVE TWO COATS OF GALVALLOY OR EQUAL.
5. CONCRETE SHALL BE MODIFIED CLASS DA 4000 PSI, SEE SPECIAL PROVISIONS SECTION 501.
6. ANGLE ANCHORS SHALL BE EMBEDDED MIDPOINT IN EACH ENDWALL AND EVENLY SPACED, (MAXIMUM SPACING OF 2').

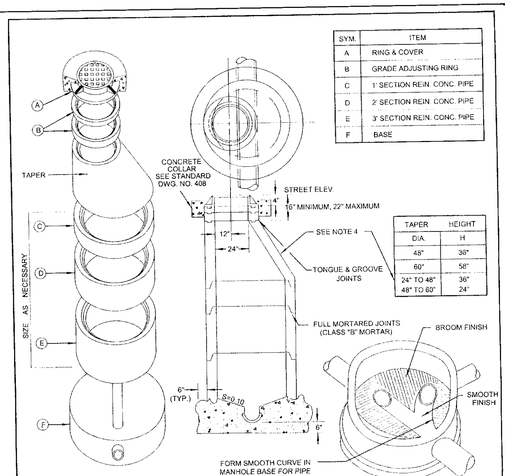
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE C-D MODIFIED DROP INLET

DATE : 10-9-08 | DWG. NO. 412A | 7/8

SPECIFICATION REFERENCE

501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
713	STEEL



EXPLODED VIEW

ISOMETRIC VIEW

SYM.	ITEM
A	RING & COVER
B	GRADE ADJUSTING RING
C	1' SECTION REIN. CONC. PIPE
D	2' SECTION REIN. CONC. PIPE
E	3' SECTION REIN. CONC. PIPE
F	BASE

TAPER	HEIGHT
DIA	H
48"	30"
60"	36"
24" TO 48"	36"
48" TO 60"	24"

NOTES:

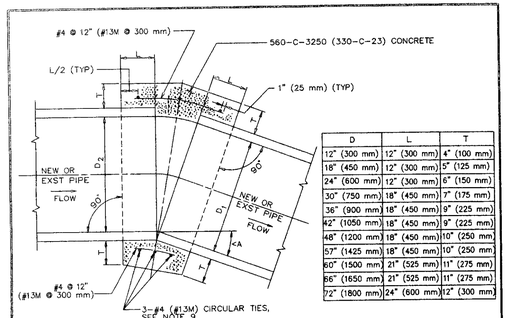
1. IN UNIMPROVED NON-TRAFFIC AREAS, TOP OF MANHOLE SHALL BE 6" TO 9" ABOVE GRADE.
2. PIPES SHALL NOT PROTRUDE MORE THAN 3" INSIDE OF MANHOLE SECTION. CONSTRUCT WATER TIGHT CONNECTION TO MANHOLE.
3. PIPE SECTION LENGTHS ARRANGED TO FIT DEPTH.
4. AN OPTIONAL TWO PIECE 24" TO 48" AND 48" TO 60" CONE MAY BE USED.

SPECIFICATION REFERENCE	
501	CONCRETE & MORTAR
609	CATCH BASINS, MANHOLES & INLETS

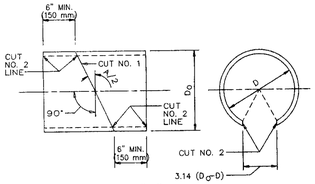
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE I MANHOLE

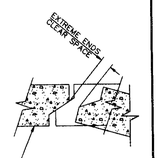
DATE 11-10-05 | DWG. NO. 403 | PAGE NO. 103



D	L	T
12" (300 mm)	12" (300 mm)	4" (100 mm)
18" (450 mm)	12" (300 mm)	5" (125 mm)
24" (600 mm)	12" (300 mm)	6" (150 mm)
30" (750 mm)	18" (450 mm)	7" (175 mm)
36" (900 mm)	18" (450 mm)	9" (225 mm)
42" (1050 mm)	18" (450 mm)	9" (225 mm)
48" (1200 mm)	18" (450 mm)	10" (250 mm)
57" (1425 mm)	18" (450 mm)	10" (250 mm)
60" (1500 mm)	21" (525 mm)	11" (275 mm)
66" (1650 mm)	21" (525 mm)	11" (275 mm)
72" (1800 mm)	24" (600 mm)	12" (300 mm)



DETAIL "A" (SEE NOTE 10)
SONO-TUBE, OR EQUAL, INTERIOR FORM



DETAIL "B"
TYPICAL JOINT FOR
REINFORCED CONCRETE PIPE

CUT NO. 1: SAW THE TUBE AT AN ANGLE OF A/2 WITH THE TRANSVERSE PLANE, REVERSE ONE SECTION AND TAPE BOTH SECTIONS TOGETHER FORMING THE DEFLECTION ANGLE A. CUT NO. 2: SAW THE TUBE LONGITUDINALLY REMOVING A STRIP 3.14 (D0-D) WIDE ON THE SIDE OPPOSITE THE OPEN JOINT. BEND THE ENDS OF THE CUT TOGETHER AND INSERT THE TUBE IN THE PIPE.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE 1992 REV. 1996, 1997, 1999, 2009

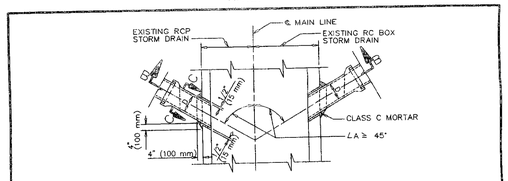
CONCRETE COLLAR FOR RCP
12" (300 mm) THROUGH 72" (1800 mm)

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

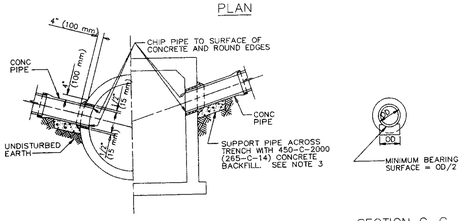
STANDARD PLAN 380-4 | SHEET 1 OF 2

DROP INLET TYPE "CM2" DETAIL: (30)(31)

N.T.S.



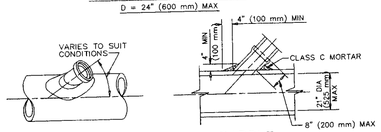
PLAN



SECTION B-B

SECTION C-C

CASE 1
PLAIN CONCRETE PIPE
D = 24" (600 mm) MAX



SADDLE PLAN

SADDLE SECTION

CASE 2
SADDLE CONNECTION

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE 1984 REV. 1996, 2009

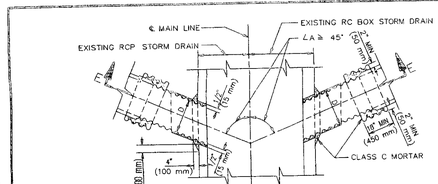
PIPE CONNECTIONS TO EXISTING STORM DRAINS

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

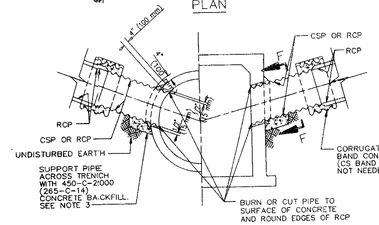
STANDARD PLAN 335-2 | SHEET 1 OF 3

PIPE CONNECTION DETAIL: (33)

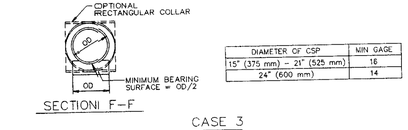
N.T.S.



PLAN



SECTION E-E



DIAMETER OF CSP	MIN GAGE
15" (375 mm) - 21" (525 mm)	16
24" (600 mm)	14

SECTIONI F-F

CASE 3
RCP OR CSP
D = 24" (600 mm) MAX

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PIPE CONNECTIONS TO EXISTING STORM DRAINS

STANDARD PLAN 335-2 | SHEET 2 OF 3

NOTES

CASE 1 AND CASE 3

1. OUTSIDE DIAMETER OF THE CONNECTOR PIPE SHALL NOT BE GREATER THAN 1/2 THE INSIDE DIAMETER OF THE RCP MAIN LINE.
2. INSIDE DIAMETER D OF THE CONNECTOR PIPE SHALL NOT BE GREATER THAN 24" (600 mm).
3. THE MINIMUM OPENING INTO THE EXISTING STORM DRAIN SHALL BE THE OUTSIDE DIAMETER OF THE CONNECTING PIPE PLUS 1" (30 mm). THE CONCRETE BACKFILL SUPPORTING THE CONNECTING PIPE MAY BE OMITTED IF THE PIPE IS LAID ON UNDISTURBED EARTH TO STORM DRAIN WALL.
4. ALL CSP AND FITTINGS SHALL BE GALVANIZED. BAND CONNECTORS MAY BE 2 GAGES LIGHTER THAN THE PIPE, BUT WITH A MINIMUM GAGE OF 16. THEY SHALL BE CONNECTED AT THE ENDS BY ANGLES HAVING MINIMUM DIMENSIONS OF 2"x2"x3/16" (50 mm x 50 mm x 5 mm) AND 5 1/2" (140 mm) BOLTS.
5. WHEN JOINING A RCP CONNECTOR PIPE TO A CSP CONNECTOR PIPE, THE INSIDE DIAMETER D OF THE CSP SHALL BE AT LEAST EQUAL TO BUT NOT MORE THAN 3" (75 mm) GREATER THAN THAT OF THE RCP.
6. CONNECTOR PIPES SHALL BE NOT MORE THAN 5' (1.5 m) ABOVE THE INVERT.
7. CONNECTOR PIPES SHALL ENTER MAIN LINE RCP RADIALLY.
8. WHEN CONNECTING TO A RCB, SPPWC 333 SHALL BE USED IF THE TOP OF THE CONNECTOR PIPE IS LESS THAN 12" (300 mm) BELOW THE SOFFIT OF THE RCB OR THE FLOW LINE OF THE PIPE IS LESS THAN 13" (330 mm) ABOVE THE FLOOR OF THE RCB AT THE INSIDE FACE.

CASE 2

9. SADDLE CONNECTIONS SHALL BE USED WHEN CONNECTING TO PIPES 21" (525 mm) OR LESS IN DIAMETER WITHOUT THE USE OF JUNCTION STRUCTURES OR PRECAST Y BRANCHES.
10. TRIM OR CUT SADDLE TO FIT SNUGLY OVER THE OUTSIDE OF THE MAIN PIPE SO ITS AXIS WILL BE ON THE LINE AND GRADE OF THE CONNECTING PIPE.
11. THE OPENING INTO THE PIPE SHALL BE CUT AND TRIMMED TO FIT THE SADDLE SO THAT NO PART WILL PROJECT WITHIN THE BORE OF THE SADDLE PIPE.
12. THE CONNECTOR PIPE SHALL BE SUPPORTED AS SHOWN IN CASE 1 AND CASE 3.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PIPE CONNECTIONS TO EXISTING STORM DRAINS

STANDARD PLAN 335-2 | SHEET 3 OF 3

NOTES

1. A CONCRETE COLLAR IS REQUIRED WHERE THE CHANGE IN GRADE EXCEEDS 10%.
2. FOR CURVE JOINTS (SEE DETAIL B, SHEET 1)

   IF THE EXTREME ENDS OF THE PIPE LEAVE A CLEAR SPACE THAT IS GREATER THAN 1" (25 mm), BUT IS LESS THAN 3" (75 mm) A CONCRETE COVER IS REQUIRED IN ACCORDANCE WITH SSPWC 306-1.2.4.

   IF THE EXTREME ENDS OF THE PIPE LEAVE A CLEAR SPACE THAT IS EQUAL TO OR GREATER THAN 3" (75 mm), BUT LESS THAN 6" (150 mm), A CONCRETE COLLAR IS REQUIRED. IF THE CLEAR SPACE IS 6" (150 mm) OR GREATER, A TRANSITION STRUCTURE IS REQUIRED.
3. CONCRETE COLLAR SHALL NOT BE USED FOR A SIZE CHANGE ON THE MAIN LINE.
4. CONNECTOR PIPES
   A. WHERE PIPES OF DIFFERENT DIAMETERS ARE JOINED WITH A CONCRETE COLLAR, L AND T SHALL BE THOSE OF THE LARGER PIPE. D=D_1 OR D_2, WHICHEVER IS GREATER.
   B. WHEN D_1 IS EQUAL TO OR LESS THAN D_2, JOIN INVERTS AND WHEN D_1 IS GREATER THAN D_2, JOIN SOFFITS.
5. FOR PIPE LARGER THAN 72" (1800 mm) SPECIAL COLLAR DETAILS ARE REQUIRED.
6. FOR PIPE SIZE NOT LISTED USE NEXT SIZE LARGER.
7. REINFORCEMENT SHALL CONFORM TO ASTM A 615 (A 615 M) GRADE 40 (300).
8. WHERE REINFORCING IS REQUIRED THE DIAMETER OF THE CIRCULAR TIES SHALL BE D+(2x WALL THICKNESS) + T.
9. REINFORCING SHALL BE USED WHERE THE PIPE DIAMETER IS GREATER THAN 21" (525 mm) AND ON ALL PIPES WHERE THE SPACES BETWEEN THE EXTREME OUTER ENDS IS 3" (75 mm) OR LARGER.

CIRCULAR TIES:

PIPE DIAMETER	NO. OF CIRCULAR TIES
21" (525 mm) OR LESS	3
24" (600 mm) TO 30" (750 mm)	3
33" (825 mm) TO 57" (1425 mm)	4
60" (1500 mm) TO 72" (1800 mm)	5

WHERE THE SPACE BETWEEN PIPE ENDS EXCEEDS 3" (75 mm), THE NUMBER OF CIRCULAR TIES SHALL BE INCREASED TO MAINTAIN AN APPROXIMATE SPACING OF 6" (150 mm) O.C.

10. WHERE THE PIPE IS 21" (525 mm) OR LESS IN DIAMETER AN INTERIOR FORM OF UNSEALED SONO-TUBE OR EQUAL SHALL BE USED TO PROVIDE A SMOOTH INTERIOR JOINT. THE PAPER FORM MAY BE LEFT IN PLACE (SEE DETAIL A). WHEN THE PIPE IS 24" (600 mm) OR LARGER A REMOVABLE INTERIOR FORM SHALL BE USED OR THE INTERIOR JOINT SHALL BE COMPLETELY FILLED WITH MORTAR AND NEATLY POINTED.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

CONCRETE COLLAR FOR RCP
12" (300 mm) THROUGH 72" (1800 mm)

STANDARD PLAN 380-4 | SHEET 2 OF 2

CONCRETE COLLAR DETAIL: (34)

N.T.S.

NOTICE TO CONTRACTOR:

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY

CALL before you DIG

1-800-227-2600

UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:

A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:

NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:

CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM

STATION 8LV90
25E6

ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:

WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704

PH. (208) 377-0110

ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4524 which was received on 3/29/11 and Rejected on 4/12/11. Page 14 of 16

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION

PROFESSIONAL ENGINEER - STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No 14386

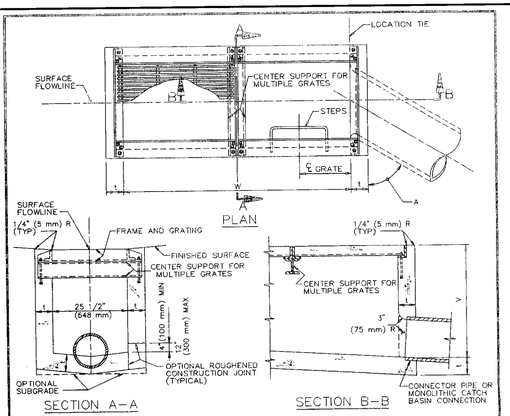
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING · LAND SURVEYING
14349 FRANKLIN AVENUE
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

TITLE:

PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS
NEVADA

WORK ORDER NO. --
DESIGN BY: J.P.
DRAWN BY: J.P.
DATE: MARCH 2011
SCALE:
SHEET U-3 OF 15 SHEETS
CLV DWG. NO. XX



STRUCTURAL DATA			
WALL AND SLAB DIMENSIONS AND REINFORCEMENT REQUIREMENTS			
NO. OF GRATES	MAX V	t	REINFORCEMENT FOR WALLS AND SLABS
1–2	4' (1.2 m)	6" (150 mm)	NOT REQUIRED
1–2	8' (2.4 m)	8" (200 mm)	
1–2	10' (3.0 m)	10" (250 mm)	REQUIRED
1–2	12' (3.5 m)	10" (250 mm)	
3–4	4' (1.2 m)	6" (150 mm)	NOT REQUIRED
3–4	7' (2.0 m)	8" (200 mm)	
3–4	8' (2.4 m)	8" (200 mm)	REQUIRED
3–4	12' (3.5 m)	10" (250 mm)	
5–6	4' (1.2 m)	6" (150 mm)	NOT REQUIRED
5–6	6' (1.8 m)	8" (200 mm)	
5–6	8' (2.4 m)	8" (200 mm)	REQUIRED
5–6	12' (3.5 m)	10" (250 mm)	
> 6	4' (1.2 m)	6" (150 mm)	
> 6	8' (2.4 m)	8" (200 mm)	REQUIRED
> 6	12' (3.5 m)	10" (250 mm)	

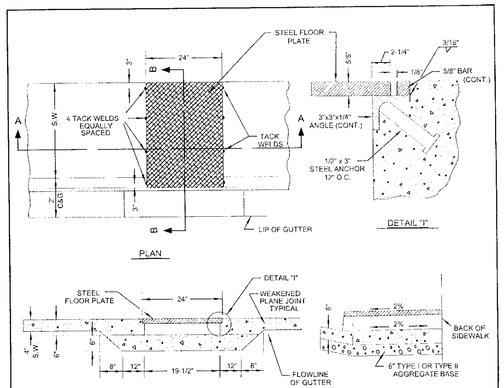
STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
PROMULGATED BY THE PUBLIC WORKS STANDARDS, INC., GREENBOOK COMMITTEE 1954 REV. 1992, 1996, 2009	GRATING CATCH BASIN–ALLEY (LONGITUDINAL)	STANDARD PLAN 304–3
	USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION	SHEET 1 OF 2

NOTES:

1. ALL CURVED CONCRETE SURFACES SHALL BE FORMED BY CURVED FORMS, AND SHALL NOT BE SHAPED BY PLASTERING.
2. ONE GRATING IS REQUIRED UNLESS OTHERWISE SHOWN ON THE PLANS.
3. FLOOR OF BASIN SHALL BE GIVEN A STEEL TROWEL FINISH AND SHALL HAVE A LONGITUDINAL AND LATERAL SLOPE OF 1:12 MINIMUM AND 1:3 MAXIMUM, EXCEPT WHERE THE SURFACE GRADE EXCEEDS 8% IN WHICH CASE THE LONGITUDINAL SLOPE OF THE FLOOR SHALL BE THE SAME AS THE SURFACE GRADE. SLOPE FLOOR FROM ALL DIRECTIONS TO THE OUTLET.
4. DIMENSIONS:
   B = 3'–6" (1.0 m)
   V_U = THE DEPTH AT THE UPSTREAM END OF THE BASIN AND SHALL BE DETERMINED BY THE REQUIREMENTS OF NOTE 3, BUT SHALL NOT BE LESS THAN 2.5" (750 mm).
   V_I = THE DEPTH AT THE INVERT OF THE INLET. NOTED ON THE PLANS.
   W = 2'–11 3/8" (900 mm) FOR ONE GRATING; ADD 3'–5 3/8" (1051 mm) FOR EACH ADDITIONAL GRATING.
   A = THE ANGLE, IN DEGREES, INTERCEPTED BY THE CENTERLINE OF THE CONNECTOR PIPE AND THE CATCH BASIN WALL TO WHICH THE CONNECTOR PIPE IS ATTACHED.
5. PLACE CONNECTOR PIPES AS INDICATED ON THE PLANS. UNLESS OTHERWISE SPECIFIED, THE CONNECTOR PIPE SHALL BE LOCATED AT THE DOWNSTREAM END OF THE BASIN. WHERE THE CONNECTOR PIPE IS SHOWN AT A CORNER, THE CENTERLINE OF THE PIPE SHALL INTERSECT THE INSIDE CORNER OF THE BASIN. THE PIPE MAY BE CUT AND TRIMMED AT A SKEW NECESSARY TO INSURE MINIMUM 3" (80 mm) PIPE EMBEDMENT, ALL AROUND, WITHIN THE CATCH BASIN WALL AND 3" (75 mm) RADIUS OF ROUNDING OF STRUCTURE CONCRETE, ALL AROUND, ADJACENT TO PIPE ENDS. A MONOLITHIC CATCH BASIN CONNECTION SHALL BE USED TO JOIN THE CONNECTOR PIPE TO THE CATCH BASIN WHENEVER ANGLE "A" IS LESS THAN 70° OR GREATER THAN 110°, OR WHENEVER THE CONNECTOR PIPE IS LOCATED IN A CORNER. THE OPTIONAL USE OF A MONOLITHIC CATCH BASIN CONNECTION IN ANY CASE IS PERMITTED. MONOLITHIC CATCH BASIN CONNECTIONS MAY BE CONSTRUCTED TO AVOID CUTTING STANDARD LENGTHS OF PIPE.
6. STEPS SHALL BE LOCATED AS SHOWN. IF THE CONNECTOR PIPE INTERFERES WITH THE STEPS, THEY SHALL BE LOCATED ON THE OPPOSITE WALL AT THE CENTERLINE OF THE DOWNSTREAM GRATING. STEPS SHALL BE BE SPACED 12" (300 mm) APART. THE TOP STEP SHALL BE 7" (175 mm) BELOW THE TOP OF THE GRATING AND PROJECT 2 1/2" (65 mm). ALL OTHER STEPS SHALL PROJECT 5" (130 mm).
7. THE FOLLOWING SSPWC ARE INCORPORATED HEREIN:
   308 MONOLITHIC CATCH BASIN CONNECTION
   309 CATCH BASIN REINFORCEMENT
   311 FRAME AND GRATING FOR CATCH BASINS
   635 STEEL STEP
   636 POLYPROPYLENE PLASTIC STEP

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
	GRATING CATCH BASIN–ALLEY (LONGITUDINAL)	STANDARD PLAN 304–3
		SHEET 2 OF 2

GRATE INLET DETAIL: (38)
N.T.S.



NOTES:

1. IF WIDTH OF PLATE IS GREATER THAN 24", A SPECIAL DESIGN IS REQUIRED.
2. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED AND ALL GALVANIZING DAMAGED BY FABRICATION OR INSTALLATION SHALL RECEIVE TWO COATS OF ALUMINUM PAINT (GALVONOX OR EQUAL).

SPECIFICATION REFERENCE	
302	BASE AGGREGATES
501	CONCRETE
710	STRUCTURAL STEEL

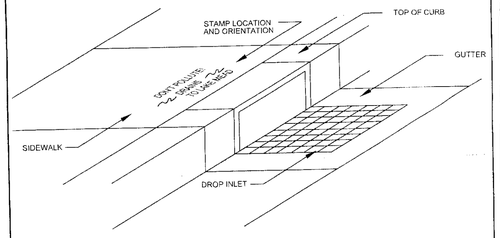
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

SIDEWALK DRAIN

DATE | DWG. NO. 236 | PAGE NO. 42

SIDEWALK DRAIN DETAIL: (39)
N.T.S.

STORMWATER INLET CONCRETE STAMP

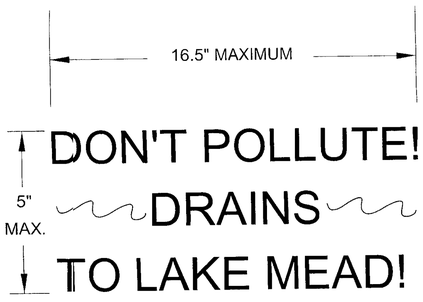


NOTES:

1. MESSAGE OR SYMBOL SHALL BE AS SHOWN ON THE DRAWING OR ON THE VERTICAL CURB NEXT TO THE DROP INLET OR AS APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER.
2. LETTERS SHALL BE 1-7/16" IN HEIGHT. THE MESSAGE SHALL BE CENTERED ON THE BACK OF THE INLET OR ON THE TOP OF CURB.
3. CONCRETE SHALL BE STAMPED IN SUCH A WAY AS TO PROVIDE FOR A CLEAR AND LEGIBLE IMAGE. (APPROXIMATE DEPTH OF 1/4").
4. ALL STAMPS SHALL BE APPROVED BY THE CITY OR COUNTY ENGINEER BEFORE BEING USED.
5. STAMP MAY BE PERMANENTLY CAST INTO CAST IRON FRAME OR PRE-CAST CONCRETE PORTIONS OF INLET.
6. WHERE RETROFITTING IS REQUIRED, AN EPOXIED PLACARD BEARING THE MESSAGE AND SYMBOL APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER SHALL BE PERMANENTLY AFFIXED ON THE TOP OF THE ADJACENT CURB.
7. THIS STANDARD IS REQUIRED IN THE LAS VEGAS VALLEY IN WHICH AREA WATER DRAINS TO LAKE MEAD.

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL
	DATE 12-09-10 | DWG. NO. 421 | SHEET 1 OF 3

STAMP MESSAGES AND SYMBOLS



SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL
	DATE 12-09-10 | DWG. NO. 421 | SHEET 2 OF 3

4" PLACARD - COLORS = BLUE AND GREEN

THIS EPOXY PLACARD MESSAGE AND SYMBOL HAS BEEN APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER. ANY OTHER EQUIVALENT MESSAGE AND SYMBOL DESIGNS WILL REQUIRE PRIOR APPROVAL OF THE APPROPRIATE CITY OR COUNTY BEFORE INSTALLATION. THE PLACARD MATERIAL SHALL BE EITHER POLYCARBONATE OR METAL AND THE FINISH SHALL BE UV AND ABRASION RESISTANT.

STORM DRAIN MARKER

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL
	DATE 12-09-10 | DWG. NO. 421 | SHEET 3 OF 3

STORM WATER QUALITY MANAGEMENT STAMP: (41)
N.T.S.

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you DIG
1–800–227–2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF (W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION BLV90 2566
ELEVATION = 697.505 METERS (NAVD88) 2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377–0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/14/11. Page 15 of 16

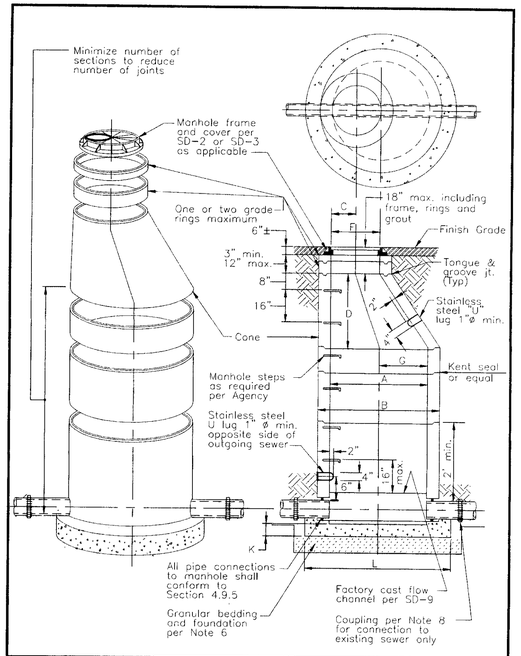
NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1	X	X	X	

PROFESSIONAL ENGINEER – STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No. 14385
STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
STRUCTURAL ENGINEERING
14 N. MERIDA • LAS VEGAS, NEVADA 89101
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

TITLE: UTILITY DETAILS
PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS NEVADA

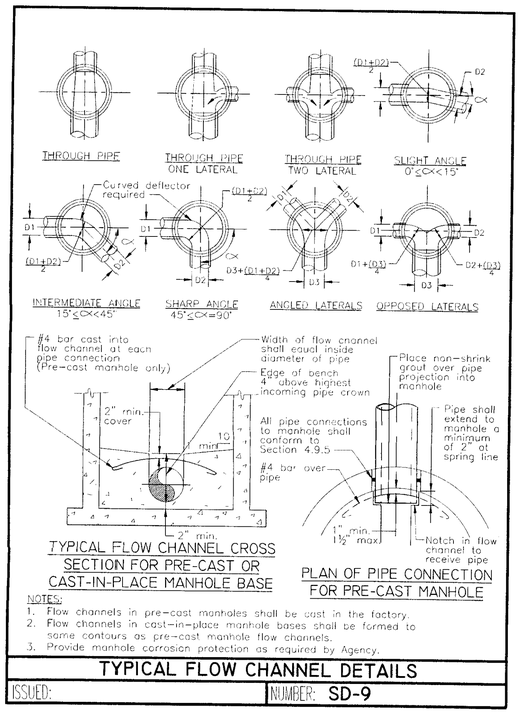
WORK ORDER NO. --
DESIGN BY: J.P.
DRAWN BY: J.P.
DATE: MARCH 2011
SCALE: NONE
SHEET U-4 OF 15 SHEETS
CLV DWG. NO. XX



STANDARD PRE-CAST MANHOLE

ISSUED: | NUMBER: SD-1A

SEWER MANHOLE DETAIL: N.T.S. (52)



TYPICAL FLOW CHANNEL CROSS SECTION FOR PRE-CAST OR CAST-IN-PLACE MANHOLE BASE

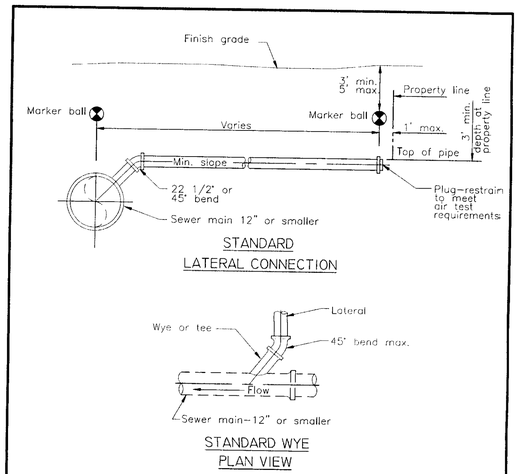
PLAN OF PIPE CONNECTION FOR PRE-CAST MANHOLE

NOTES:
1. Flow channels in pre-cast manholes shall be cast in the factory.
2. Flow channels in cast-in-place manhole bases shall be formed to same contours as pre-cast manhole flow channels.
3. Provide manhole corrosion protection as required by Agency.

TYPICAL FLOW CHANNEL DETAILS

ISSUED: | NUMBER: SD-9

BOTTOM OF MANHOLE DETAIL: N.T.S. (53)

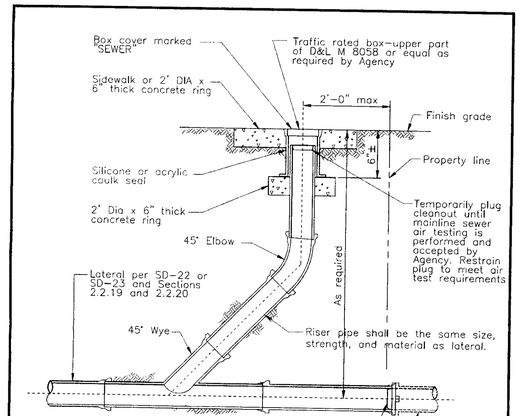


NOTES:
1. All construction shall conform to Section 3.17.
2. All concrete shall be 3000# minimum in accordance with Section 4.11.
3. 22 1/2° or 45° bend may be rotated at sewer main only.
4. Lateral connections shown are limited to main line sanitary sewers 12-inches in diameter or smaller unless otherwise directed by Agency.
5. Place locator ribbon per SD-15 above lateral along its full length.
6. Place marker ball per Section 3.14 and Section 4.12.3 over lateral at connection to main and at upstream end of lateral at property line. Marker ball shall be 3' min. below finish grade where possible.

LATERAL CONNECTION TO SEWER MAIN 12" DIA AND SMALLER

ISSUED: | NUMBER: SD-22

WYE CONNECTION DETAIL: N.T.S. (54)



NOTES:
1. Provide cleanouts for laterals where directed by Agency.
2. Marker ball at upstream end of lateral may be deleted for laterals with cleanouts.

LATERAL CLEANOUT

ISSUED: | NUMBER: SD-26

SEWER CLEANOUT DETAIL: N.T.S. (55)

NO.	DATE	BY	APPVD.	REVISION DESCRIPTION
1				

PROFESSIONAL ENGINEER STATE OF NEVADA
REINHARD C. STENZEL
6/30/12
CIVIL
No. 14385

STAMP DATE:

Thienes Engineering, Inc.
CIVIL ENGINEERING · LAND SURVEYING
STRUCTURAL ENGINEERING
14 MIMAR, CALIFORNIA 92630
(951)549-1621 · FAX(951)521-4173

NEVADA

TITLE: UTILITY DETAILS

PROJECT: WINCO FOODS
TROPICAL PARKWAY AND DECATUR BLVD.
CITY OF LAS VEGAS

WORK ORDER NO. --
DESIGN BY: J.P.
DRAWN BY: J.P.
DATE: MARCH 2011
SCALE: NONE
SHEET U-5 OF 15 SHEETS
CLV DWG. NO. XX

NOTICE TO CONTRACTOR:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING GROUND 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.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

LEGAL DESCRIPTION:
A PORTION OF THE EAST HALF (E 1/2) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 25 AND THE WEST HALF ((W 1/2) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.
BEING ALL OF PARCEL 3 ON FILE IN FILE 90 OF PARCEL MAPS, PAGE 69 IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA

BASIS OF BEARING:
NORTH 02°01'35" EAST BEING THE CENTERLINE OF DECATUR BLVD. BETWEEN TROPICAL PARKWAY AND CENTENIAL PARKWAY IN THE NORTHWEST QUARTER.
(NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 90 OF PARCEL MAPS PAGE 69.

BENCHMARK:
CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB NW CORNER OF TROPICAL PARKWAY AND THOM
STATION 8LV90
25E6
ELEVATION = 697.505 METERS (NAVD88)
2288.40 FEET

OWNER/DEVELOPER:
WINCO FOODS LLC
650 N. ARMSTRONG PLACE
BOISE, ID. 83704
PH. (208) 377-0110
ATTN. DAVID VAN ETTEN

This grading plan is a part of drainage study #4529 which was received on 3/29/11 and Rejected on 4/12/11. Page 16 of 16.