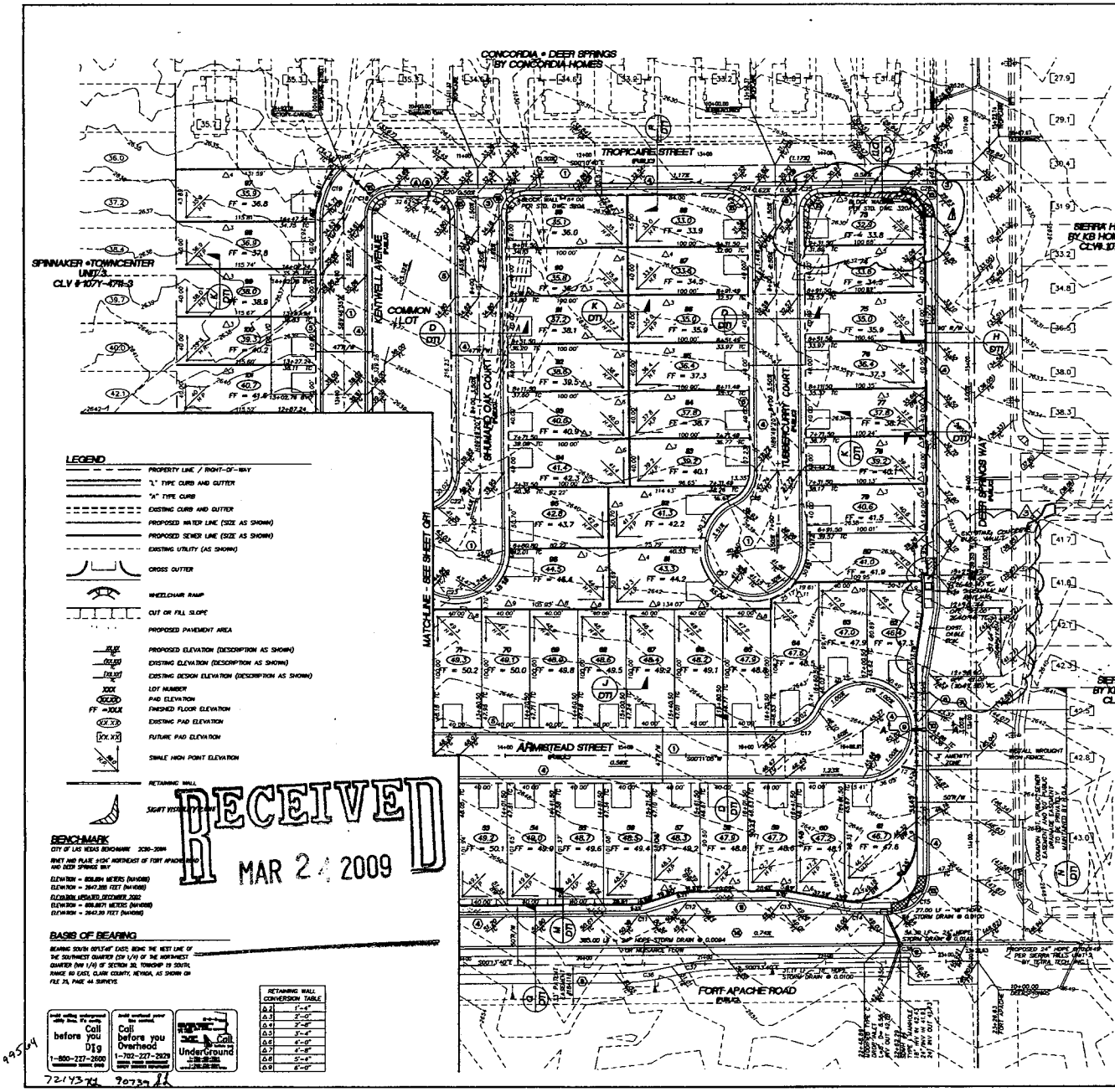


CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	30.00'	47.34'	30.22'	90°24'45"
C2	30.00'	23.77'	12.55'	45°24'07"
C3	30.00'	23.77'	12.55'	45°24'07"
C4	49.50'	191.42'	38.94'	270°98'15"
C5	25.00'	39.09'	24.82'	89°35'15"
C6	25.00'	39.45'	25.16'	90°22'45"
C7	28.00'	31.42'	20.00'	90°00'00"
C8	20.00'	28.66'	17.37'	81°56'24"
C9	28.00'	31.42'	20.00'	90°00'00"
C10	20.00'	31.42'	20.00'	90°00'00"
C11	20.00'	4.94'	2.48'	14°02'10"
C12	20.00'	7.33'	3.63'	14°30'10"
C13	20.30'	4.87'	2.44'	9°27'44"
C14	20.30'	3.39'	1.70'	9°27'44"
C15	30.00'	47.00'	29.89'	89°17'25"
C16	49.50'	174.00'	62.18'	246°09'20"
C17	30.00'	34.54'	19.54'	65°90'20"
C18	20.00'	31.42'	19.87'	89°20'15"
C19	53.00'	47.50'	24.84'	43°12'08"
C20	20.00'	31.42'	20.00'	90°00'00"
C21	20.00'	31.42'	20.00'	90°00'00"
C22	30.00'	34.64'	19.54'	66°09'20"
C23	30.00'	174.00'	62.18'	246°09'20"
C24	20.00'	31.42'	20.00'	90°00'00"
C25	20.00'	31.42'	20.00'	90°00'00"
C26	30.00'	34.64'	19.54'	66°09'20"
C27	49.50'	174.00'	62.18'	246°09'20"
C28	28.00'	38.34'	23.07'	80°09'25"
C29	2.00'	6.28'	----	180°00'00"
C30	200.00'	42.01'	23.61'	12°28'05"
C31	200.00'	42.01'	23.61'	12°28'05"
C32	200.00'	42.01'	23.61'	12°28'05"
C33	200.00'	42.01'	23.61'	12°28'05"
C34	2.00'	6.28'	----	180°00'00"
C35	7.50'	23.56'	----	180°00'00"
C36	200.00'	42.01'	23.61'	12°28'05"
C37	200.00'	42.01'	23.61'	12°28'05"
C38	2.00'	6.28'	----	180°00'00"

GRADING NOTES

1. TETRA TECH SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES IN THE PLANS OR CONDITIONS IN THE FIELD.
2. ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENT HAVE BEEN OBTAINED FROM THE OFFSITE OWNER AND GIVEN TO THE CITY OF LAS VEGAS.
3. FOR AREAS THAT ARE FLATTER THAN 2:1 SLOPE, OR LESS THAN 1' ELEVATION DIFFERENCE, SCARPS ARE NOT SHOWN ON PLAN FOR CLARITY PURPOSES.
4. ALL SLOPE AREAS SHALL HAVE A MINIMUM ONE FOOT SHOULDER NEXT TO WALL PRIOR TO STARTING SLOPE.
5. PAD SECTION SHOWN ON PLANS IS FOR REFERENCE ONLY. FOR ACTUAL SECTION, REFER TO GEOTECHNICAL REPORT FOR SOILS ENGINEERS' RECOMMENDATION.
6. ALL SIDEWALK INSTALLATIONS SHALL CONFORM TO ADA REQUIREMENTS.
7. RETAINING WALL ELEVATIONS ARE SHOWN FOR CONVENIENCE ONLY. CONTRACTOR MUST VERIFY EXACT TOP OF FOOTINGS, STEPPED FOOTINGS, AND TOP OF RETAINING WALLS TO MATCH FIELD CONDITIONS, PRIOR TO COMMENCEMENT OF WORK.

CONSTRUCTION NOTES

1. 47' PUBLIC ST. = CONSTRUCT 2" AC PAVING OVER 8.5" TYPE II BASE PER TOWN CENTER STANDARDS.
2. 60' PUBLIC ST. = CONSTRUCT 3" AC PAVING OVER 8.5" TYPE II BASE PER TOWN CENTER STANDARDS.
3. CONSTRUCT 8' WIDE CROSS GUTTER PER STD. DWG. 226
4. CONSTRUCT "L" CURB PER STD. DWG. 216
5. CONSTRUCT 4' WIDE CONCRETE SIDEWALK PER STD. DWG. 234
6. CONSTRUCT 5' WIDE CONCRETE SIDEWALK PER STD. DWG. 234 AND TOWNCENTER STANDARDS W/ AMENITY ZONE TREATMENT, DETAIL SHT. DT2
7. 80' PUBLIC HALF ST. = CONSTRUCT 3" AC PAVING OVER 8.5" TYPE II BASE PER STD DWG. 204 AND 208.1
8. CONSTRUCT "A" TYPE MEDIAN CURB PER STD. DWG. 219
9. CONSTRUCT SIDEWALK UNDER-DRAIN PER STD. DWG. 238.
10. CONSTRUCT CONCRETE FLUME PER DETAIL SHEET DT1
11. CONSTRUCT BUS TURN-OUT PER STD. DWG. 234.1
12. REMOVE AND REPLACE AC PAVEMENT BACKFILL PER UDACS PLATE 22
13. CONSTRUCT SIDEWALK RAMPS PER TOWNCENTER STANDARDS AND DETAIL SHEET DT2
14. 100' PUBLIC HALF ST. = CONSTRUCT 3" AC PAVING OVER 20.5" TYPE II BASE PER STD DWG. 203 AND DETAIL G, SHEET DT1
15. CONSTRUCT SIDEWALK RAMP PER STD. DWG. 235, CASE I

CERTIFICATION

I HEREBY CERTIFY THAT THE GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH THE CITY OF LAS VEGAS FOR THIS PROJECT.

JOSEPH D. THOMPSON, P.E. 8217 — 8-4-09

RECEIVED
MAR 24 2009

ROYAL CONSTRUCTION
3320 N. BUFFALO DRIVE, SUITE 208
LAS VEGAS, NEVADA 89129
(702) 873-7751

TETRA TECH, INC.
INFRASTRUCTURE SERVICES GROUP
4001 N. BUFFALO DRIVE, SUITE 100, LAS VEGAS, NEVADA 89129 (702) 646-4000

GRADING PLAN

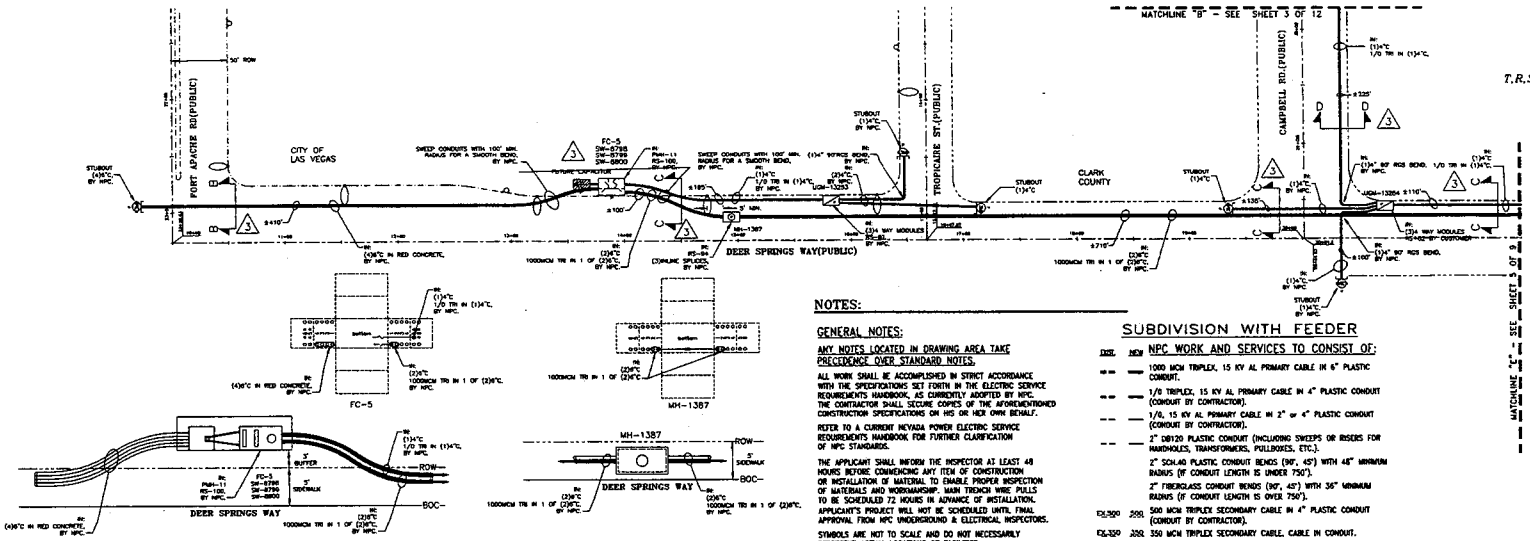
SPINNAKER AT TOWNCENTER I- UNIT 4
CITY OF LAS VEGAS

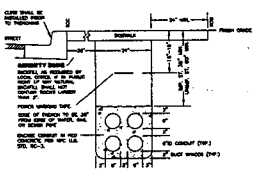
DRAWN BY
QUALITY CONTROL BY
QUALITY CONTROL BY
SUPERVISED BY
DESIGNED BY
SCALE 1"=40'
PROJECT NO. PNVRCC010
SHEET GR2
6 OF 21
DRAWING NO. 1074-4711-4

99504
72143 90739

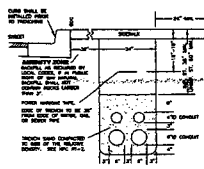
Submitted after final agenda
Date 3-26-09 Item 12

WVR-32158
SUPPLEMENTAL
03/26/09 PC

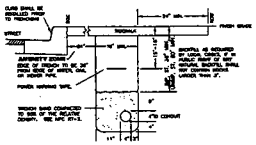




SECTION B-B DEER SPRINGS WAY
4-6" CONDUITS TRENCH DETAIL
(UNDER SIDEWALK)
(TYPICAL)



SECTION C-C DEER SPRINGS WAY
2-4" & 2-6" CONDUITS
TRENCH DETAIL
(UNDER SIDEWALK)
(TYPICAL)



SECTION D-D CAMPBELL ROAD
1-4" CONDUIT TRENCH DETAIL
(UNDER SIDEWALK)
(TYPICAL)

RECEIVED
MAR 24 2009

NOTES:

GENERAL NOTES:

ANY NOTES LOCATED IN DRAWING AREA TAKE PRECEDENCE OVER STANDARD NOTES.

ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN THE ELECTRIC SERVICE REQUIREMENTS HANDBOOK, AS CURRENTLY ADOPTED BY NPC. THE CONTRACTOR SHALL SECURE COPIES OF THE AFOREMENTIONED CONSTRUCTION SPECIFICATIONS ON HIS OR HER OWN BEHALF.

REFER TO A CURRENT NEVADA POWER ELECTRIC SERVICE REQUIREMENTS HANDBOOK FOR FURTHER CLARIFICATION OF NPC STANDARDS.

THE APPLICANT SHALL INFORM THE INSPECTOR AT LEAST 48 HOURS BEFORE COMMENCING ANY ITEM OF CONSTRUCTION OR INSTALLATION OF MATERIAL TO ENABLE PROPER INSPECTION OF MATERIALS AND WORKMANSHIP. MAIN TRENCH WIRE PULLS TO BE SCHEDULED 72 HOURS IN ADVANCE OF INSTALLATION. APPLICANT'S PROJECT WILL NOT BE SCHEDULED UNTIL FINAL APPROVAL FROM NPC UNDERGROUND & ELECTRICAL INSPECTORS.

SYMBOLS ARE NOT TO SCALE AND DO NOT NECESSARILY REPRESENT ACTUAL LOCATIONS OF FACILITIES.

THIS DRAWING ILLUSTRATES DATA COLLECTED FROM VARIOUS SOURCES AND MAY NOT REPRESENT A SURVEY OF THE PREMISES.

APPLICANT SHALL FIELD DETERMINE POSITION AND DEPTH OF EXISTING UTILITY EQUIPMENT PRIOR TO COMMENCING CONSTRUCTION.

USE CAUTION PRIOR TO EXCAVATION. CHECK TO ENSURE ADDITIONAL DEPTH IS NOT REQUIRED TO ACCOMMODATE GAS AND/OR WATER FACILITIES AND DRAINAGE CHANNELS.

CALL NEVADA POWER UNDERGROUND INSPECTORS 48 HOURS PRIOR TO COMMENCING CONSTRUCTION FOR TRENCH INSPECTION BEFORE COVERING TRENCH.

ALL NPC CABLE TO BE INSTALLED BEHIND CURB, UNLESS OTHERWISE STATED.

APPLICANT IS RESPONSIBLE FOR STAKING OF PROPERTY CORNERS & ELEVATIONS.

ALL HANDHOLES AND PULLBOXES SHALL BE INSTALLED TO FINISHED GRADE OR 6" ABOVE IF GRADE IS NOT ESTABLISHED.

WHEN INSTALLING CONDUIT IN FIELD, USE APPROPRIATE BENDS TO COMPLETE THE INSTALLATION.

DEFLECTION OF CONDUIT BENDS AND CONDUIT NOT TO EXCEED NPC STANDARDS.

NO COVERED PARKING IN SHADED AREAS.

NOTE: CONTRACTOR TO VERIFY STORM DRAIN LOCATIONS WITH DURANCO DRIVE IMPROVEMENT PLANS. ANY CONFLICTS MUST BE CORRECTED PRIOR TO INSTALLATION OF NPC FACILITIES.

SUBDIVISION WITH FEEDER

DIST.	NEW	NPC WORK AND SERVICES TO CONSIST OF:
		1000 MCM TRIPLEX, 15 KV AL PRIMARY CABLE IN 6" PLASTIC CONDUIT.
		1/0 TRIPLEX, 15 KV AL PRIMARY CABLE IN 4" PLASTIC CONDUIT (CONDUIT BY CONTRACTOR).
		1/0, 15 KV AL PRIMARY CABLE IN 2" or 4" PLASTIC CONDUIT (CONDUIT BY CONTRACTOR).
		2" DB120 PLASTIC CONDUIT (INCLUDING SWEEPS OR RISERS FOR HANDHOLES, TRANSFORMERS, PULLBOXES, ETC.).
		2" SCH.40 PLASTIC CONDUIT BENDS (90°, 45°) WITH 36" MINIMUM RADIUS (IF CONDUIT LENGTH IS UNDER 750').
		2" FIBERGLASS CONDUIT BENDS (90°, 45°) WITH 36" MINIMUM RADIUS (IF CONDUIT LENGTH IS OVER 750').
E2,500	2SS	500 MCM TRIPLEX SECONDARY CABLE IN 4" PLASTIC CONDUIT (CONDUIT BY CONTRACTOR).
E2,350	2SS	350 MCM TRIPLEX SECONDARY CABLE, CABLE IN CONDUIT.
E2,4/0	2S/2	4/0 AWG TRIPLEX SECONDARY CABLE, CABLE IN CONDUIT.
E2,2/0	2S/2	2/0 AWG TRIPLEX SECONDARY CABLE, CABLE IN CONDUIT.
		CONDUIT LOCATING DEVICE 18" ABOVE STUBOUT.
		SINGLE PHASE PRIMARY POLE RISER PER NPC U.G. STD. OEP-105.
		THREE PHASE PRIMARY POLE RISER PER NPC U.G. STD. OEP-106.
		800 AMP THREE PHASE, 12.47 KV PRIMARY POLE RISER PER NPC U.G. STD. OEP-101.
		SECONDARY RISER PER NPC U.G. STD. SSP-2.
SS	SS	SWITCHES (PMH-2, PMH-4, PMH-8, PMH-10, PMH-11, PMH-12).
CB	CB	1200KVAR CAPACITOR BANK PER NPC U.G. STD. UC-101.
		SINGLE PHASE RESIDENTIAL PADMOUNTED TRANSFORMER WITH SIZE AS NOTED, 7200-120/240V, PER NPC U.G. STD. UT-113.
		(2) SINGLE PHASE RESIDENTIAL COMMERCIAL TRANSFORMERS WITH SIZE AS NOTED, 7200-120/240V, CONNECT OPEN WYE-OPEN DELTA FOR THREE PHASE, 120-240V SERVICE. PER NPC U.G. STD. UT-113, WHERE APPLICABLE.
		SINGLE PHASE COMMERCIAL PADMOUNTED TRANSFORMER WITH SIZE AS NOTED, 7200-120/240V, PER NPC U.G. STD. UT-105.
		TERMINATION OF ALL MODULES, MAKES, SPLICES AND FINAL CONNECTIONS.
		NPC TO PROVIDE 6" TO (3)2" REDUCERS.
		NPC TO PROVIDE 4" TO (1)2" REDUCERS.
		PULLING OF CONDUCTOR IS CALCULATED DIRECTIONALLY. CREWS ARE TO ADHERE TO DIRECTION OF PULL WHERE APPLICABLE.
		NPC TO COIL PRIMARY CABLE IN PULLBOX FOR FUTURE SPLICES, WHERE APPLICABLE.
		NPC TO CUT EXISTING CONDUIT AND TERMINATE PRIMARY CABLES ON THE LOAD BREAK MODULE, WHERE APPLICABLE.

DIST.	NEW	APPLICANT TO FURNISH AND INSTALL:
		ALL TRENCHING & BACKFILL, MEETING APPLICABLE NPC STANDARD (RT-7, RT-8, OR RT-12).
		17" X 30" HANDHOLE, PER NPC U.G. STD. RS-1 (WITH 8" COLLAR WHERE APPLICABLE).
		6" PLASTIC CONDUIT, PER NPC U.G. STD. RC-1 AND RC-2.
		6" PLASTIC CONDUIT BENDS (90°, 45°) WITH 48" MIN. RADIUS.
		6" RGS BENDS (90°, 45°) WITH 48" MIN. RADIUS, TAPED OR PVC COATED.
		4" PLASTIC CONDUIT, PER NPC U.G. STD. RC-1 AND RC-2.
		4" PLASTIC CONDUIT BENDS (90°, 45°) WITH 36" MIN. RADIUS. (IF CONDUIT LENGTH IS UNDER 100')
		4" RGS BENDS (90°, 45°) WITH 36" MINIMUM RADIUS, TAPED OR PVC COATED. (IF CONDUIT LENGTH IS OVER 100')
		IF THE CUSTOMER CHOOSES TO INSTALL A STREET CROSSING, NPC REQUIRES A 4" CONDUIT PER SECONDARY CABLE, AND A 2" CONDUIT PER 1/0 CABLE.
		COUPLING FOR 2", 4", OR 6" CONDUITS (AS APPLICABLE).
		2'-6" X 4' X 4' SPLICE PULLBOX PER NPC U.G. STD. RS-80.
		3' X 7' X 4' PULLBOX PER NPC U.G. STD. RS-82.
		PAD FOR (1) SINGLE PHASE RESIDENTIAL TRANSFORMER, PER NPC U.G. STD. RS-13 AND RS-5.
		PAD FOR (2) SINGLE PHASE RESIDENTIAL TRANSFORMERS, PER NPC U.G. STD. RS-14 AND RS-5.
		PAD FOR (1) SINGLE PHASE COMMERCIAL TRANSFORMER, PER NPC U.G. STD. RS-19 AND RS-5.
		5' X 10'-6" X 7' MANHOLE, PER NPC U.G. STD. RS-94.
		5' X 10'-6" X 7' MANHOLE FOR SWITCH, PER NPC U.G. STD. RS-98, RS-99, RS-100, OR RS-101.
		VEHICLE PROTECTIVE BARRIERS PER NPC U.G. STD. RS-6, WHERE APPLICABLE.

NOTE: NPC PROVIDES ELECTRICAL SERVICE ONLY TO:
1. LINE STRIKING PROTECTION
2. OVERLOAD PROTECTION
3. SHORT CIRCUIT PROTECTION
4. DEVICE TRIP INDICATION

PURPOSE OF PROJECT:
TO PROVIDE 1ø 120/240V SERVICE TO NEW RESIDENTIAL SUBDIVISION.

NOTE: HANDHOLE SHOULD HAVE 6' CLEARANCE FROM CENTER OF FIRE HYDRANT.

CLARK COUNTY PUBLIC WORKS PERMIT REQUIRED*

DEVELOPER/CONTRACTOR SHALL OBTAIN A COUNTY PERMIT BEFORE ANY EXCAVATION WORK WITHIN CLARK COUNTY RIGHT-OF-WAY

* NPC INSPECTOR WILL VERIFY COUNTY PERMIT FOR WORK DONE WITHIN COUNTY RIGHT-OF-WAY

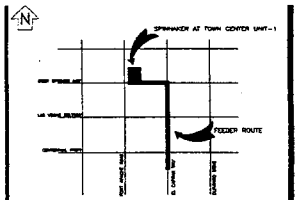
CITY OF LAS VEGAS PERMIT REQUIRED*

CONTACT CLV LAND DEVELOPMENT (229-6371) CLV CONSTRUCTION SERVICES MUST BE NOTIFIED 24 HOURS PRIOR TO COMMENCING CONSTRUCTION (229-6337)

*NPC INSPECTOR MUST BE NOTIFIED BY FAX 48 HOURS PRIOR TO COMMENCING CONSTRUCTION & WILL VERIFY CITY PERMIT FOR WORK DONE IN STREETS OR SIDEWALK. FAX PERMIT TO:
LAS VEGAS NORTH: 657-4354
LAS VEGAS SOUTH (HENDERSON): 556-4740
LAS VEGAS SOUTH (SPRING VALLEY): 252-4828

UNLESS OTHERWISE NOTED:

ALL SERVICE CONDUCTOR: 2/0 AL. TRI.
ALL TRANSFORMERS: 7200-120/240V-1ø PM
COMBINED A/C TONNAGE: 5 TONS
NUMBER OF UNITS: 87
MAIN SIZE: 200 AMPS
ESTIMATED KVA PER UNIT: 6 KVA
SQ. FT. OF LARGEST HOME: 2000 FT.



VICINITY MAP
(NOT TO SCALE)

EVERY EFFORT HAS BEEN MADE TO IDENTIFY ALL NPC FACILITIES. THE CUSTOMER SHALL CONFIRM THE EXISTENCE AND LOCATION OF THESE FACILITIES.

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
CALL 1-702-227-2929

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

REVISIONS

NO.	DESCRIPTION	DATE	G.A.
1	MADE CHANGES PER ROW & CO'T REQUEST.(KA	07/18/2002	
2	CONT REV & CUST REV REMOVING 1 SWITCH/CAP BANK & ADDED 10 ADDITIONAL LOTS	09/11/2002	
3	REVISED PER CO'T & ROW REQUEST.(KA)	09/16/2002	
4	REVISED PER CLARK COUNTY.(KA)	11/13/2002	
5	RELOCATED 2-4"C CROSSING FROM RODEO AVE. TO AZURE WAY, PER CUST. REQUEST.(KA)	01/07/2003	

DCA

TYPE OF EASEMENT:
- AERIAL
- STANDARD
- R/W-31
- UNDERGROUND
- AS BUILT UNDERGROUND
- R.O.E./R/W-5-COM
- 5-4 PARTY
- UNDERGROUND BY EXHIBIT
- (N-007) PERMIT
- (BLM) PERMIT
- RAILROAD-UPRR-PERMIT
- SO. NEVADA WATER PERMIT
- NOT REQUIRED

Misc. Info. N/A

JPA NOTES:
SPRINT CONTACT: N/A
PHONE NUMBER: N/A
DATE OF CONTACT
- TO SET NEW POLES
- TO STAKE NEW POLES
- TO PROVIDE ___ POLES
- FT. CLASS ___
- FT. CLASS ___
- FT. CLASS ___
- TO DIG POLE HOLES
- TO REMOVE EX. POLES

JPA#: N/A

NPC INFORMATION:

COORDINATOR: TRISHA GARVIN
PHONE: 657-4308
DESIGNER: T. KING/K. ALLRED
DCA: 657-4355
INSPECTOR: 378-3695
SCHEDULING: 657-4114,657-4116,657-4118
DISTRICT: LAS VEGAS

CUSTOMER INFORMATION:

DEVELOPER: SPINNAKER HOMES LLC
ENGINEER: TETRA TECH INC.
CONTACT: BEN YOUNG 768-7035
APPROVAL DATE: 05/09/2002

GOVERNMENT INFORMATION:

AGENCY: CITY OF LAS VEGAS/CLARK COUNTY
APPROVAL DATE: 10/30/2002 12-10-02

NEVADA POWER COMPANY

SPINNAKER AT TOWN CENTER
#1
DEER SPRINGS & FORT APACHE

PROJ. ID: 169261	SCALE: 1" = 50'
SHEET #: 4 OF 12	DATE: 02/19/2002

5-REVISION(S)

WVR-32158
SUPPLEMENTAL
03/26/09 PC

Received after final agenda
3-26-09 12
Date Item