

DEPARTMENT OF PUBLIC WORKS

MAYOR :

CAROLYN G. GOODMAN

CITY COUNCIL :

STAVROS S. ANTHONY, MAYOR PRO TEM

LOIS TARKANIAN

STEVEN D. ROSS

RICKI Y. BARLOW

BOB COFFIN

BOB BEERS

CITY MANAGER :

ELIZABETH N. FRETWELL

DIRECTOR OF PUBLIC WORKS :

DAVID N. BOWERS, P.E., P.T.O.E.

CITY ENGINEER :

ALLEN E. PAVELKA, P.E.



SHAUMBER ROAD REALIGNMENT CENTENNIAL PKWY TO WASHBURN RD

BID# : 15.45398

FUNDED BY:
REGIONAL TRANSPORTATION COMMISSION
MOTOR VEHICLE FUEL TAX

REVIEWED BY:

Allen Pavelka 01/20/15
CLV City Engineer Date

Paula 1/20/15
CLV Project Manager Date

P.C. White 1-20-15
CLV City Traffic Engineer Date

Ed Lanier 1-20-15
CLV Construction Management Date

Paula 12-18-14
Regional Transportation Commission of So. Nevada Date

Tim Discher 12/23/14
Las Vegas Valley Water District Date
ENGINEERING SERVICES MANAGER
PROJECT # 122987
SHEETS G1, G2, G3, G4, R1, R2, R3, RD1, RD2, RD8, RD9, RD10, DT-6, DT-7, DT-8,
SD1, SD2, SD8, SD6, SD9

Allen Pavelka 12/19/14
NV Energy - Distribution 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 OR 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'S RULES AND REGULATIONS.

Eric Hamer 12/19/14
NV Energy - Transmission Date

Mike 12/19/14
Southwest Gas Corporation Date

Veronica Figueroa 12/19/14
Central Telephone Company, d/b/a CenturyLink Date
THE AFFIXED CENTURYLINK NEVADA APPROVAL DOES NOT ASSUME OR
GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING
OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE
ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED
STATUTES AND/OR PUBLIC UTILITY COMMISSION STANDARD REGULATIONS.

Stephanie Smith 12/19/14
Cox Communications Las Vegas Inc. Date

THE SIGNATURE ABOVE ACKNOWLEDGES THAT THE UTILITY COMPANY REPRESENTATIVE HAS REVIEWED
THE PLANS, AND THAT TO THE BEST OF HIS OR HER KNOWLEDGE THE UTILITY LINES ARE SHOWN IN THE
CORRECT LOCATIONS AND ARE THE CORRECT SIZES. WHILE SUCH DATA HAS BEEN COLLECTED WITH
REASONABLE CARE, THERE IS NO EXPRESSED OR IMPLIED GUARANTEE THAT THE LOCATIONS ARE EXACT.
THE CONTRACTOR SHALL BEAR THE RESPONSIBILITY OF OBTAINING THE ACTUAL FIELD LOCATIONS.

THE SIGNATURE ABOVE FURTHER ACKNOWLEDGES THAT THE UTILITY COMPANY DOES NOT ANTICIPATE
CONSTRUCTION OR MAINTENANCE IN THE PROJECT AREA FOR FIVE (5) YEARS IN CONFORMANCE WITH
THE CLV NO-CUT POLICY.

REVISIONS

NO.	DATE	DESCRIPTION
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DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT MANAGEMENT

CITY ENGINEER: ALLEN E. PAVELKA, P.E.
PROGRAM MANAGER: JEREMY LEVITT, P.E.

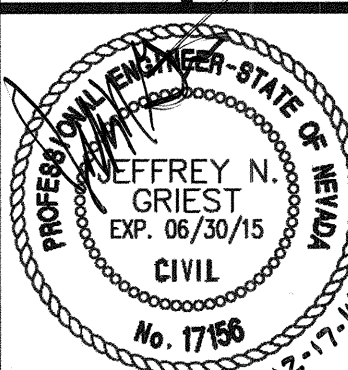
DESIGNED BY: B. MAHAN
DRAWN BY: J. GRIEST
CHECKED BY: J. GRIEST
APPROVED BY: J. GRIEST

CH2M HILL
2445 VILLAGE VIEW DRIVE, SUITE 300
LAS VEGAS, NV 89134
PHONE 702-398-1170 FAX 702-398-1107

COVER SHEET

SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

SHEET:



SHEET:

1 of 52
DATE December 16, 2014
DRAWING NO. 107V6351

HANSEN NO. 45398

DRAWING LIST

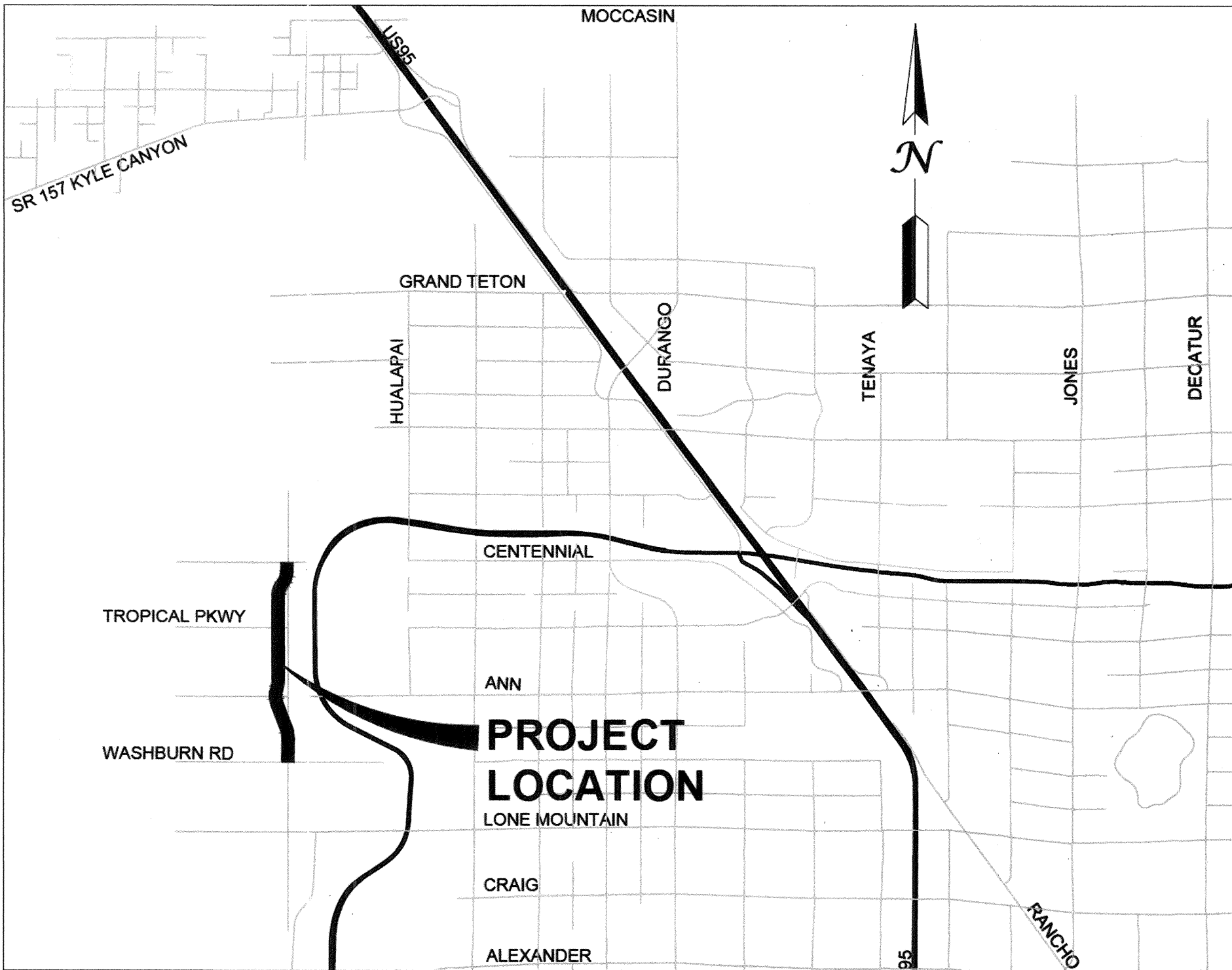
SHEET NO.	DRAWING NO.	DESCRIPTION
1	G1	COVER SHEET
2	G2	DRAWING LIST, VICINITY MAP, LEGEND & ABBREVIATIONS
3	G3	GENERAL NOTES
4	G4	PROJECT KEYMAP
5	HC-1	HORIZONTAL CONTROL PLAN
6	HC-2	HORIZONTAL CONTROL PLAN
7	HC-3	HORIZONTAL CONTROL PLAN
8	HC-4	HORIZONTAL CONTROL PLAN
9	TY1	ROADWAY TYPICAL SECTIONS
10	TY2	ROADWAY TYPICAL SECTIONS
11	TY3	ROADWAY TYPICAL SECTIONS
12	TY4	ROADWAY TYPICAL SECTIONS
13	TY5	ROADWAY TYPICAL SECTIONS
14	R1	REMOVAL PLAN "SR" 54+50 TO "SR" 60+00
15	R2	REMOVAL PLAN "SR" 113+50 TO "SR" 126+75
16	R3	REMOVAL PLAN TROPICAL PKWY & ANN ROAD
17	RD1	ROADWAY PLAN & PROFILE "SR" 54+50 TO "SR" 55+00
18	RD2	ROADWAY PLAN & PROFILE "SR" 55+00 TO "SR" 64+00
19	RD3	ROADWAY PLAN & PROFILE "SR" 64+00 TO "SR" 73+00
20	RD4	ROADWAY PLAN & PROFILE "SR" 73+00 TO "SR" 82+00
21	RD5	ROADWAY PLAN & PROFILE "SR" 82+00 TO "SR" 91+00
22	RD6	ROADWAY PLAN & PROFILE "SR" 91+00 TO "SR" 100+00
23	RD7	ROADWAY PLAN & PROFILE "SR" 100+00 TO "SR" 109+00
24	RD8	ROADWAY PLAN & PROFILE "SR" 109+00 TO "SR" 116+00
25	RD9	ROADWAY PLAN & PROFILE "SR" 116+00 TO "SR" 124+00
26	RD10	ROADWAY PLAN & PROFILE "AR" 10+00 TO "AR" 17+00
27	DT1	MEDIAN ISLAND GEOMETRICS
28	DT2	POWER POLE BARRIER RAIL PROTECTION DETAIL
29	DT3	INTERSECTION GRADING PLAN
30	DT4	INTERSECTION GRADING PLAN
31	DT5	INTERSECTION GRADING PLAN
32	DT6	MISCELLANEOUS WATER DETAILS
33	DT7	MISCELLANEOUS WATER DETAILS
34	DT8	MISCELLANEOUS WATER & DRAINAGE DETAILS
35	DT9	RCP HEADWALL DETAILS
36	DT10	TYPE II RCB HEADWALL DETAILS
37	DT11	TYPE I RCB HEADWALL DETAILS
38	SD1	GRADING & DRAINAGE PLAN "SR" 37+00 TO "SR" 55+00
39	SD2	GRADING & DRAINAGE PLAN "SR" 55+00 TO "SR" 73+00
40	SD3	GRADING & DRAINAGE PLAN "SR" 73+00 TO "SR" 91+00
41	SD4	GRADING & DRAINAGE PLAN "SR" 91+00 TO "SR" 109+00
42	SD5	GRADING & DRAINAGE PLAN "SR" 109+00 TO "SR" 126+75
43	SD6	GRADING & DRAINAGE PLAN "AR" 10+00 TO "AR" 17+00
44	SD7	CULVERT STORM DRAIN PROFILE
45	SD8	CULVERT STORM DRAIN PROFILE
46	SD9	CULVERT STORM DRAIN PROFILE
47	ST1	STRIPING & SIGNING PLAN "SR" 37+00 TO "SR" 55+00
48	ST2	STRIPING & SIGNING PLAN "SR" 55+00 TO "SR" 73+00
49	ST3	STRIPING & SIGNING PLAN "SR" 73+00 TO "SR" 91+00
50	ST4	STRIPING & SIGNING PLAN "SR" 91+00 TO "SR" 109+00
51	ST5	STRIPING & SIGNING PLAN "SR" 109+00 TO "SR" 123+50
52	ST6	STRIPING & SIGNING PLAN CENTENNIAL PKWY & ANN RD

ABBREVIATIONS

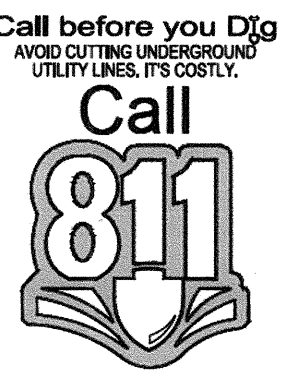
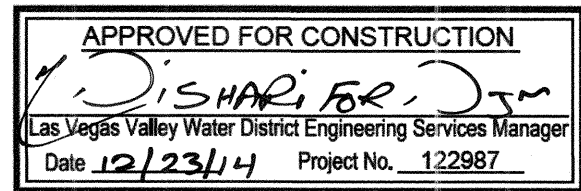
A	ABANDON	N	NORTH
AC	ASPHALT CONCRETE/CEMENT	NA	NOT APPLICABLE
ACP	ASBESTOS CEMENT PIPE	NDOT	NEVADA DEPT OF TRANSPORTATION
ADJ	ADJUST	NE	NORTHEAST
AL	ALUMINUM	NEC	NECESSARY
ALIGN	ALIGNMENT	NO	NUMBER
AP	ANGLE POINT	NTS	NOT TO SCALE
APPROX	APPROXIMATELY	NW	NORTHWEST
AV	AIR VAG	OC	ON CENTER
AVE	AVENUE	OD	OUTSIDE DIAMETER
B	BOTTOM	OH	OVERHEAD
BLVD	BOULEVARD	ORIG	ORIGINAL
BM	BENCH MARK	P ESMT	PERMANENT EASEMENT
BO	BLOW OFF	PB	PULL BOX
BOT	BOTTOM	PE	POLYETHYLENE
BRG	BEARING	PERM	PERMANENT
C	CABLE TELEVISION	PJF	PREFORMED JOINT FILLER
CAB	CABINET	PL	PROPERTY LINE
CATV	CABLE TELEVISION	PL	STEEL PLATE
C TO C	CENTER TO CENTER	POC	POINT ON CURVE
CCFR	CENTRIFUGALLY CAST FIBERGLASS	POL	POINT ON LINE
	REINFORCED	PSF	POUNDS PER SQUARE FOOT
CCPW	CLARK COUNTY PUBLIC WORKS	PSI	POUNDS PER SQUARE INCH
CCSD	CLARK COUNTY SANITATION DISTRICT	P/P OR PP	POWER POLE
CL	CENTER LINE	PT	POINT, POINT OF TANGENCY
CLR	CLEAR	PVC	POLYVINYL CHLORIDE
CLV	CITY OF LAS VEGAS	PVMNT	PAVEMENT
CMP	CORRUGATED METAL PIPE	R	RIGHT, RADIUS
CONC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
CONST	CONSTRUCT	RD	ROAD
COR	CORNER	RDRCR	REDUCER
CPLG	COUPLING	REINF	REINFORCE
CT	COURT	REP	REPLACE OR REPLACEMENT
CU	CUBIC	REQD	REQUIRED
DCSWCS	DESIGN AND CONSTRUCTION	ROW	RIGHT OF WAY
	STANDARDS FOR WASTEWATER	RP	REDUCE PRESSURE PRINCIPLE ASSEMBLY
	COLLECTION SYSTEMS	RPPA	REDUCE PRESSURE PRINCIPLE ASSEMBLY
		RW	RECLAIMED WATER
DEG	DEGREE	S	SLOPE
DET	DETAIL	S	SOUTH
DI	DROP INLET	SCH	SCHEDULE
DIA	DIAMETER	SD	STORM DRAIN
DIM	DIMENSION	SDMH	STORM DRAIN MANHOLE
DIST	DISTANCE	SE	SOUTHEAST
DWG	DRAWING	SHT	SHEET
DR	DRIVE	SIM	SIMILAR
D/W	DRIVEWAY	SL	STREET LIGHT
E	ELECTRICAL	SLB	STREET LIGHT BOX
EA	EAST	SMH	SEWER MANHOLE
EF	EACH FACE	SNWS	SOUTHERN NEVADA WATER SYSTEM
EFF	TREATED EFFLUENT	SPECS	CONTRACT SPECIFICATIONS
EL	ELEVATION	SQ	SQUARE
ELB	ELBOW	SS	SANITARY SEWER
ELEC	ELECTRICAL	SSMH	SANITARY SEWER MANHOLE
ENGR	ENGINEER	SST	STAINLESS STEEL
EW	EACH WAY	ST	STREET
EX	EXISTING	STA	STATION
EXP	EXPANSION	STD	STANDARD
EXC	EXCAVATION	STL	STEEL
		STLT	STREET LIGHT
		SYMM	SYMMETRICAL
		SW	SOUTHWEST
		S/W	SIDEWALK
F	FIBER OPTIC - FAST	T	TEST STATION
FLEX	FLEXIBLE	TOP	TOP
FRP	FIBERGLASS REINFORCED PLASTIC	TBD	TO BE DETERMINED
FT	FOOT	TBM	TEMPORARY BENCH MARK
FTG	FOOTING	TE	TELEPHONE
FND	FOUND	TEFO	TRAFFIC ENGINEERING FIELD OPERATIONS
FO	FIBER OPTIC	TEMP	TEMPORARY
G	GAS	TRANS	TRANSMISSION
GA	GAGE	TS	TRAFFIC SIGNAL
GALV	GALVANIZED	TSB	TRAFFIC SIGNAL BOX
GND	GROUND	TYP	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE	UDACS	UNIFORM DESIGN & CONSTRUCTION STANDARDS
HP	HIGH PRESSURE	UG	UNDERGROUND
HT	HEIGHT	UGE	UNDERGROUND ELECTRICAL
HORIZ	HORIZONTAL	UGT	UNDERGROUND TELEPHONE
ID	INSIDE DIAMETER	USD OR USDOCA	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
IN	INCH	USS	UNIFORM STANDARD SPECIFICATION
INCR	INCREASE	UTL	UTILITY
INV	INVERT	VCP	VITRIFIED CLAY PIPE
IRR	IRRIGATION PIPE	VERT	VERTICAL
IC	TRAFFIC SIGNAL INTERCONNECT	VL	VAULT
L	LEFT	W	WATER
L	LOOP	W	WEST
LBS	POUNDS	W	WIDTH
LF	LINEAR FEET	WM	WATER METER
LG	LENGTH	WMH	WATER MANHOLE
LVVWD	LAS VEGAS VALLEY WATER DISTRICT	WSS	WATER SAMPLE STATION
M&O	MILL AND OVERLAY	WTS	WATER TEST STATION
MATL	MATERIAL	WV	WATER VALVE
MAX	MAXIMUM	W	WITH
MECH	MECHANICAL	W/O	WITHOUT
MH	MANHOLE		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MN	MAIN		
MOD	MODIFY OR MODIFIED		
MON	MONUMENT		
MTN	MOUNTAIN		

LEGEND

EXISTING NON-ANNOTATED FEATURES	
INDEX CONTOUR	POWER POLES
INTERMEDIATE CONTOUR	POLE ANCHOR
CURB LINE	TRANSMISSION TOWER
GUTTER/CONCRETE EDGE	LIGHT POLE
FENCE	POST/POLE
RETAINING WALL	SIGN
BLOCK WALL	FIRE HYDRANT
EXISTING RIGHT OF WAY	MANHOLE
SECTION LINE	OR VALVE COVER
PATENT EASEMENT	TRAFFIC SIGNAL
CATV CABLE TELEVISION CONDUIT	R.R./CROSSWALK SIGNAL
4" PE G GAS PIPE (SIZE & TYPE VARIES)	MAIL BOX
12" SS SANITARY SEWER PIPE (SIZE VARIES)	MISC. OBJECT
8" PVC W WATER PIPE (SIZE & TYPE VARIES)	WATER METER
4" UGT TELEPHONE CONDUIT (# OF CONDUIT & SIZE VARIES)	WATER MANHOLE
18" RCP SD STORM DRAIN PIPE (SIZE VARIES)	WATER BLOW OFF
TS TRAFFIC SIGNAL CONDUIT	PIPE CAP
6" UGE ELECTRICAL CONDUIT (# OF CONDUIT & SIZE VARIES)	PIPE CAP WITH BLOW OFF
OHP OVERHEAD ELECTRICAL LINE	AIR VALVE
OHP TRANS OVERHEAD ELECTRICAL TRANSMISSION LINE	REDUCE PRESSURE PRINCIPLE ASSEMBLY
IC INTERCONNECT CONDUIT (FAST)	TEST STATION
FO FIBER OPTIC CONDUIT	PULL BOX
SL STREET LIGHT CONDUIT	CABLE TELEVISION BOX
TREELINE	ELECTRICAL MANHOLE
BRUSHLINE	ELECTRICAL BOX OR VAULT
	TRAFFIC SIGNAL BOX
	FIBER OPTIC BOX
	STREET LIGHT BOX
	TELEPHONE BOX
	UTIL. VAULT/BOX
	METER BOX



VICINITY MAP



HANSEN NO. 45398

REVISIONS

NO.	DATE	DESCRIPTION
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DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT MANAGEMENT

CITY ENGINEER: ALLEN E. PAVELKA, P.E.
PROGRAM MANAGER: JEREMY LEVITT, P.E.
DESIGNED BY: B. MAHAN
DRAWN BY: J. GRIEST
CHECKED BY: J. GRIEST
APPROVED BY: J. GRIEST

CH2M HILL
2448 VILLAGE VIEW DRIVE, SUITE 300
LAS VEGAS, NV 89134
PHONE 702-368-6171 FAX 702-368-1107

SHEET: DRAWING LIST, VICINITY MAP, LEGEND & ABBREVIATIONS

TITLE: SHAUMBER ROAD REALIGNMENT CENTENNIAL PKWY TO WASHBURN RD

PROFESSIONAL ENGINEER - STATE OF NEVADA
JEFFREY N. GRIEST
EXP. 06/30/15
CIVIL
No. 17166

SHEET: G2

2 of 52

DATE: December 17, 2014

DRAWING NO.: 107V6351

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 EDITION; 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 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 STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER OR 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 4500 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION, 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. JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS.
9. CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE WATER-TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION. ANY CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY SHALL BE REMOVED AND REPLACED PER USD 216.
10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER USD 235; CASE I. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY PROJECT REPRESENTATIVE.
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, OR AS DESIGNATED IN THE FIELD BY CITY PROJECT REPRESENTATIVE.
12. EXACT LOCATION OF ALL SAWCUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY PROJECT REPRESENTATIVE IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED, AND SHALL BE DONE ONLY BY A NEVADA PROFESSIONAL LAND SURVEYOR IN ACCORDANCE WITH THE UNIFORM STANDARD DRAWINGS - CLARK COUNTY AREA. A RECORD-OF-SURVEY FOR REPLACEMENT OF PERMANENT SURVEY MONUMENTS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO RECORDING. THE RECORD-OF-SURVEY SHALL BE PREPARED IN ACCORDANCE WITH NEVADA REVISED STATUTES 625.350.
14. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTER UNLESS WRITTEN APPROVAL IS GRANTED BY THE CLV BUILDING DEPARTMENT.
15. 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 CLV BUILDING DEPARTMENT.
16. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHTS OF WAY.
17. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, SEWER CLEANOUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
18. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT AND CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
19. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC. THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE ENGINEER CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
20. SANITARY SEWER AND STORM DRAIN FINAL LOCATION INFORMATION SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PROJECT ACCEPTANCE. THE INFORMATION SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, AND THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXITS THE PUBLIC RIGHT-OF-WAY. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION INFORMATION MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINITIES OF ± 0.09 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION INFORMATION.
21. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST ADDITION.
22. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

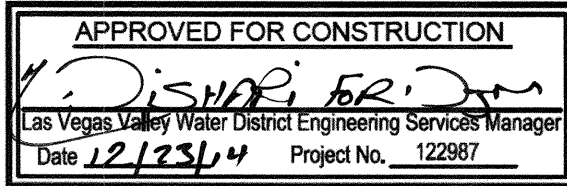
REVISED JANUARY 23, 2014 (CPM VERSION)

LAS VEGAS VALLEY WATER DISTRICT
STANDARD NOTES

LVVWD PROJECT NO. 122987

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN INSPECTIONS, PLEASE REFER TO THE PROJECT# IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600

ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.



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 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.
5. 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 |
|---------------------------|------------|----------------|
| A. PAVEMENT AREA SUBGRADE | 0.1± | +0.0' TO -0.1' |
| B. ENGINEERED FILL | 0.5± | +0.1' TO -0.1' |
- COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE. COMPACTION SHALL COMPLY WITH THE REQUIREMENTS OF THE ENGINEER.
6. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
7. 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.
8. 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.
9. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, SUCH ITEM SHALL BE PROVIDED, AS DIRECTED BY THE CITY ENGINEER, AT NO EXPENSE TO THE CITY OF LAS VEGAS. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED JULY 2008 (CPM VERSION)

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. STREETS 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. CONNECTION 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 LVVWD 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 SEWERS REQUIRES THE USE OF C-900 PVC PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

REVISED JANUARY 2008

CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM 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 "SUGGESTED ROUTE TO SCHOOL" IS ENCLOSED 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 REPLACED 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. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE VIP CLASS 6 REFLECTIVE SHEETING OR APPROVED EQUAL. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. 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 HERE UNDER, 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 ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
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 # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

REVISED MAY 5, 2008



Call before you Overhead 1-702-227-2929 NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT



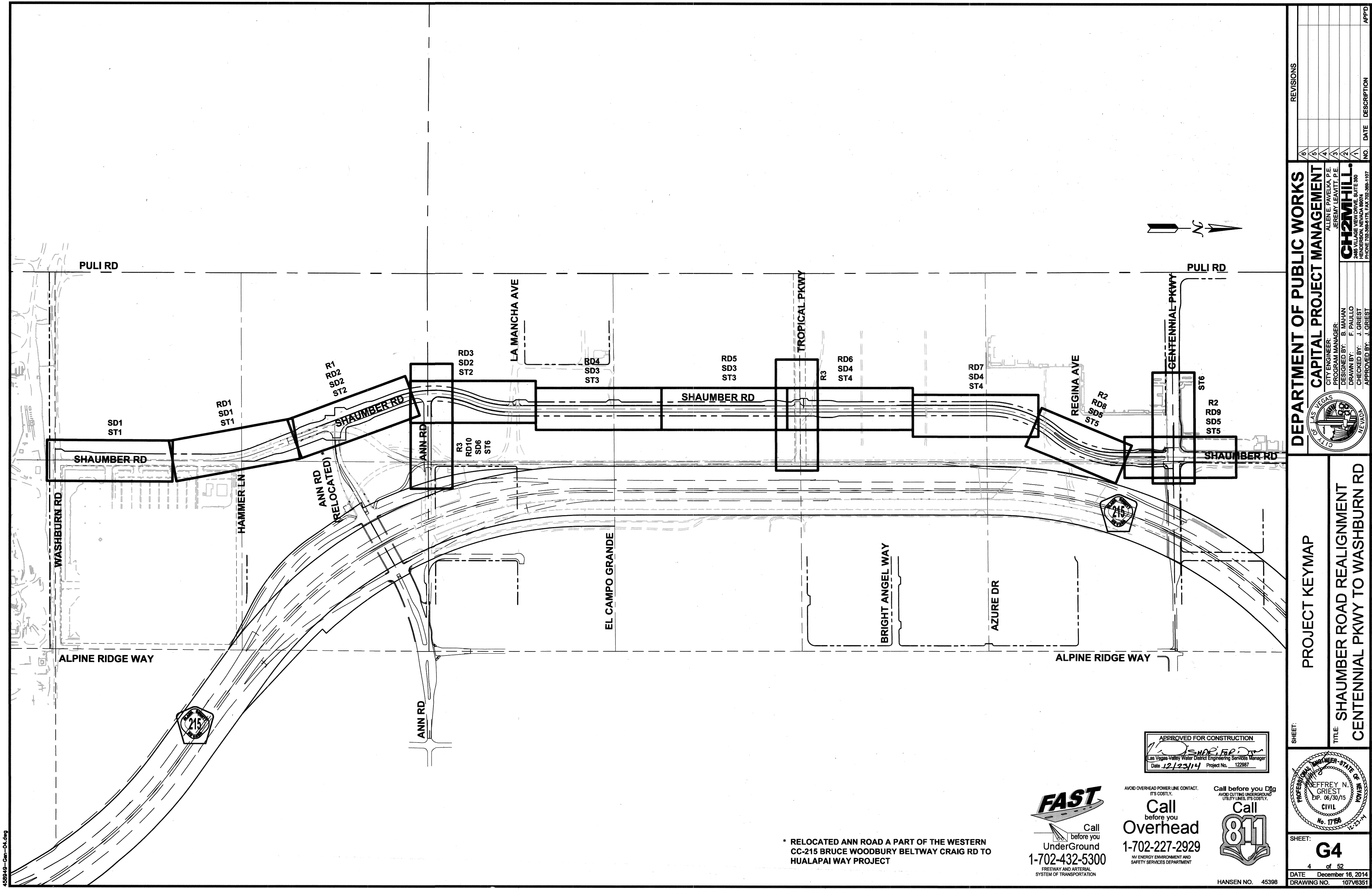
HANSEN NO. 45398

REVISIONS		NO.	DATE	DESCRIPTION	APPROVED
DATE	BY				

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT
CITY ENGINEER: ALEJANDRO PAVELKA, PE
PROGRAM MANAGER: JEREMY LEVITT, PE
DESIGNED BY: B. MAHAN
DRAWN BY: J. GRIEST
CHECKED BY: J. GRIEST
APPROVED BY: J. GRIEST
CH2M HILL
2485 VILLAGE VIEW DRIVE, SUITE 300
LAS VEGAS, NV 89162
PHONE: 702-368-1170 FAX: 702-368-1107

GENERAL NOTES
SHEET: 3 of 52
TITLE: SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

PROFESSIONAL ENGINEER - STATE OF NEVADA
JEFFREY N. GRIEST
Exp. 06/30/15
CIVIL
No. 17166
12-22
SHEET: G3
DATE: December 16, 2014
DRAWING NO. 107V6351



458549-Gen-04.dwg

* RELOCATED ANN ROAD A PART OF THE WESTERN
CC-215 BRUCE WOODBURY BELTWAY CRAIG RD TO
HUALAPAI WAY PROJECT

FAST
Call before you
UnderGround
1-702-432-5300
FREIGHTWAY AND ARTERIAL
SYSTEM OF TRANSPORTATION

Call before you
Overhead
1-702-227-2929
NV ENERGY ENVIRONMENT AND
SAFETY SERVICES DEPARTMENT

Call before you Dig
1-800-881-8111
AVOID CUTTING UNDERGROUND
UTILITY LINES, IT'S COSTLY.

APPROVED FOR CONSTRUCTION
Las Vegas Valley Water District Engineering Services Manager
Date 12/23/14 Project No. 122987

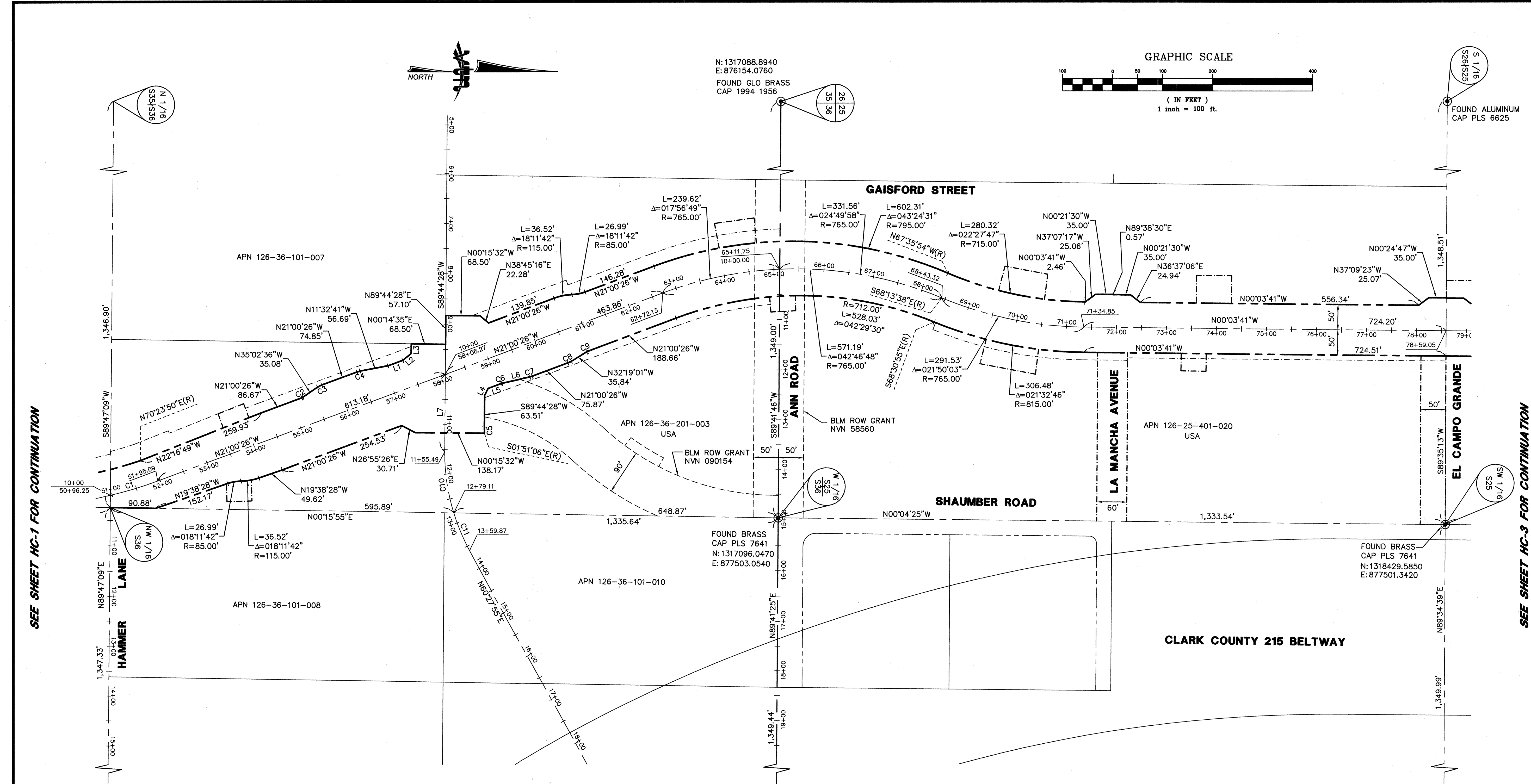
PROFESSIONAL ENGINEER - STATE OF NEVADA
JEFFREY N. GRIEST
Exp. 06/30/15
CIVIL
No. 17766
12-23-14

SHEET: **G4**
4 of 52
DATE December 16, 2014
DRAWING NO. 107V6351

PROJECT KEYMAP
SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT
CITY ENGINEER: ALLEN E. PAVELKA, P.E.
PROGRAM MANAGER: JEREMY LEAVITT, P.E.
DESIGNED BY: B. MAHAN
DRAWN BY: F. PAULLO
CHECKED BY: J. GRIEST
APPROVED BY: J. GRIEST
CH2M HILL
2485 VILLAGE VIEW DRIVE, SUITE 300
LAS VEGAS, NV 89162
PHONE 702-398-1171 FAX 702-398-1107

REVISIONS			
NO.	DATE	DESCRIPTION	APPD.
1			
2			
3			
4			
5			
6			



SEE SHEET HC-1 FOR CONTINUATION

SEE SHEET HC-3 FOR CONTINUATION

LEGEND

- FOUND MONUMENT AS INDICATED
- SECTION LINE
- QUARTER SECTION LINE
- SIXTEENTH SECTION LINE
- RIGHT-OF-WAY LINE
- PROPOSED BLM RIGHT-OF-WAY GRANT
- STREET CENTERLINE
- ADJOINING PROPERTY LINE
- DRAINAGE EASEMENT
- SLOPE EASEMENT

COURSE TABLE

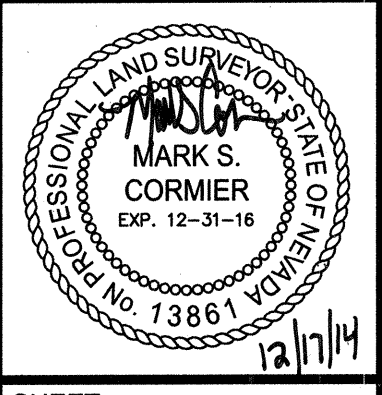
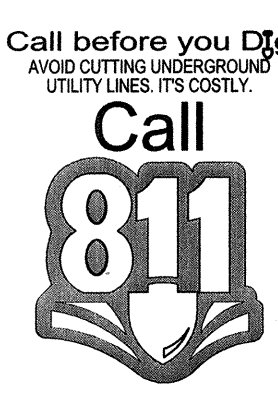
NO.	BEARING	LENGTH
L1	N21°00'26"W	30.00'
L2	N40°18'40"W	21.80'
L3	S89°44'28"W	18.97'
L4	N64°46'27"W	15.54'
L5	N21°00'26"W	28.34'
L6	N13°24'45"W	57.21'
L7	N89°44'28"E	155.49'

CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	TANGENT
C1	800.00'	7°04'45"	98.84'	49.48'
C2	10.00'	14°02'10"	2.45'	1.23'
C3	40.00'	14°02'10"	9.80'	4.92'
C4	40.00'	9°27'44"	6.61'	3.31'
C5	444.00'	1°35'34"	12.34'	6.17'
C6	10.00'	7°35'41"	1.33'	0.66'
C7	40.00'	7°35'41"	5.30'	2.65'
C8	40.00'	11°18'36"	7.90'	3.96'
C9	10.00'	11°18'36"	1.97'	0.99'
C10	400.00'	17°42'26"	123.62'	62.31'
C11	400.00'	11°34'06"	80.76'	40.52'



Call before you Overhead
1-702-227-2929
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT



SHEET: **HC-2**
6 of 52

DATE: December 17, 2014
DRAWING NO.: 107V6351

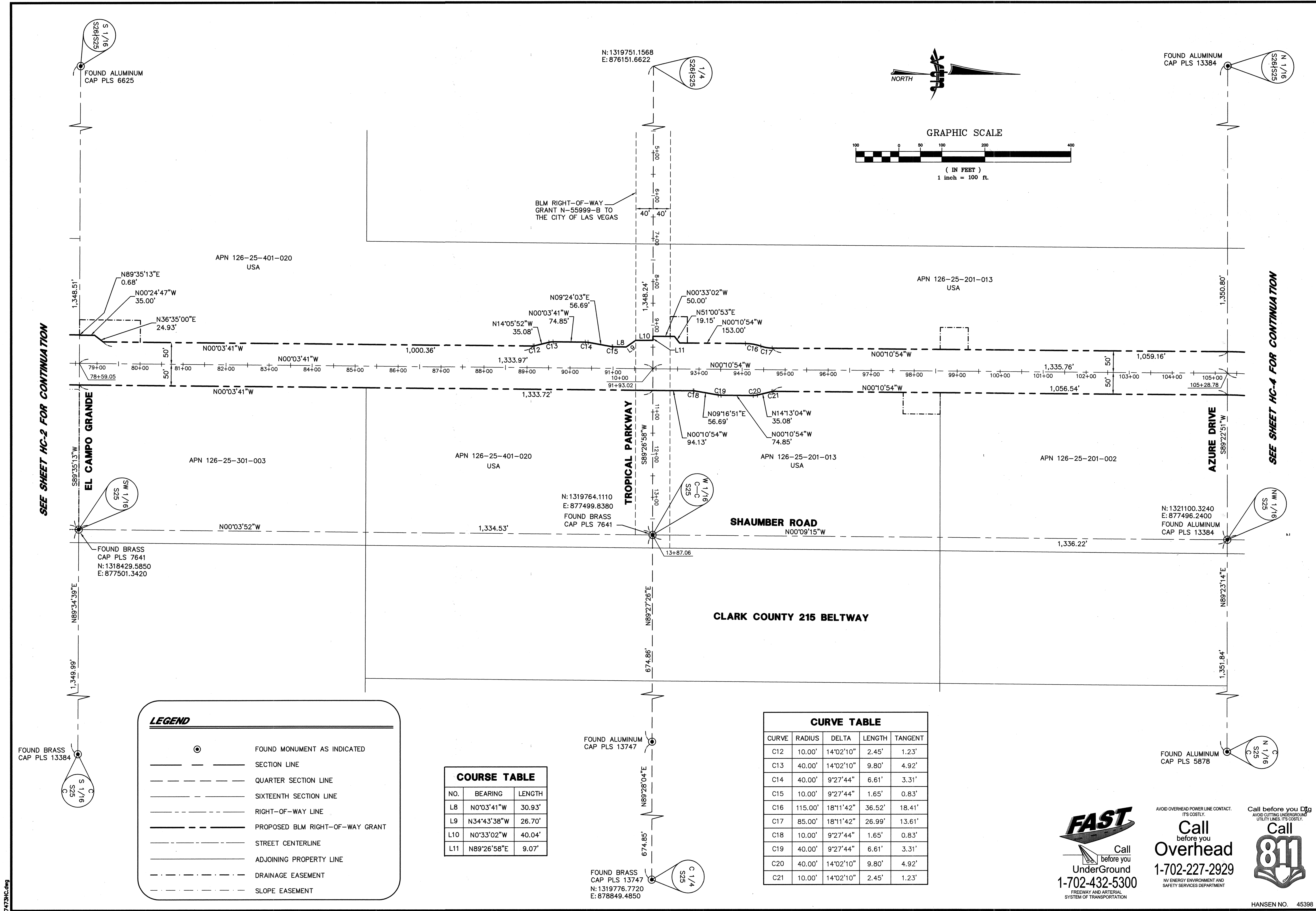
HORIZONTAL CONTROL PLAN

SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

NO.	DATE	DESCRIPTION	APPROVED
1			
2			
3			
4			
5			
6			

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT
CITY ENGINEER: ALENE PAVELKA, P.E.
DESIGNED BY: JEREMY LEVITT, P.E.
DRAWN BY: MSC
CHECKED BY: TZ
APPROVED BY:

REVISIONS



SEE SHEET HC-2 FOR CONTINUATION

SEE SHEET HC-4 FOR CONTINUATION

LEGEND

- FOUND MONUMENT AS INDICATED
- SECTION LINE
- QUARTER SECTION LINE
- SIXTEENTH SECTION LINE
- RIGHT-OF-WAY LINE
- PROPOSED BLM RIGHT-OF-WAY GRANT
- STREET CENTERLINE
- ADJOINING PROPERTY LINE
- DRAINAGE EASEMENT
- SLOPE EASEMENT

COURSE TABLE		
NO.	BEARING	LENGTH
L8	N0°03'41"W	30.93'
L9	N34°43'38"W	26.70'
L10	N0°33'02"W	40.04'
L11	N89°26'58"E	9.07'

CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	TANGENT
C12	10.00'	14°02'10"	2.45'	1.23'
C13	40.00'	14°02'10"	9.80'	4.92'
C14	40.00'	9°27'44"	6.61'	3.31'
C15	10.00'	9°27'44"	1.65'	0.83'
C16	115.00'	18°11'42"	36.52'	18.41'
C17	85.00'	18°11'42"	26.99'	13.61'
C18	10.00'	9°27'44"	1.65'	0.83'
C19	40.00'	9°27'44"	6.61'	3.31'
C20	40.00'	14°02'10"	9.80'	4.92'
C21	10.00'	14°02'10"	2.45'	1.23'

FAST
Call before you
UnderGround
1-702-432-5300
FREIGHTWAY AND ARTERIAL
SYSTEM OF TRANSPORTATION

Call before you Dig
Overhead
1-702-227-2929
NV ENERGY ENVIRONMENT AND
SAFETY SERVICES DEPARTMENT

Call before you Dig
UnderGround
1-702-227-2929
NV ENERGY ENVIRONMENT AND
SAFETY SERVICES DEPARTMENT

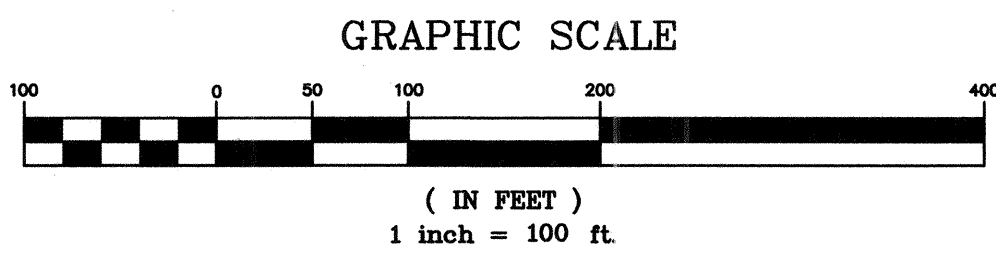
REVISIONS		NO.		DATE		DESCRIPTION	
1		1					
2		2					
3		3					
4		4					
5		5					
6		6					

DEPARTMENT OF PUBLIC WORKS	
CAPITAL PROJECT MANAGEMENT	
CITY ENGINEER:	ALLEN PAVEKA, P.E.
PROGRAM MANAGER:	JEREMY LEAVITT, P.E.
DESIGNED BY:	MSC
DRAWN BY:	TZ
CHECKED BY:	
APPROVED BY:	

HORIZONTAL CONTROL PLAN	
SHAUMBER ROAD REALIGNMENT	
CENTENNIAL PKWY TO WASHBURN RD	

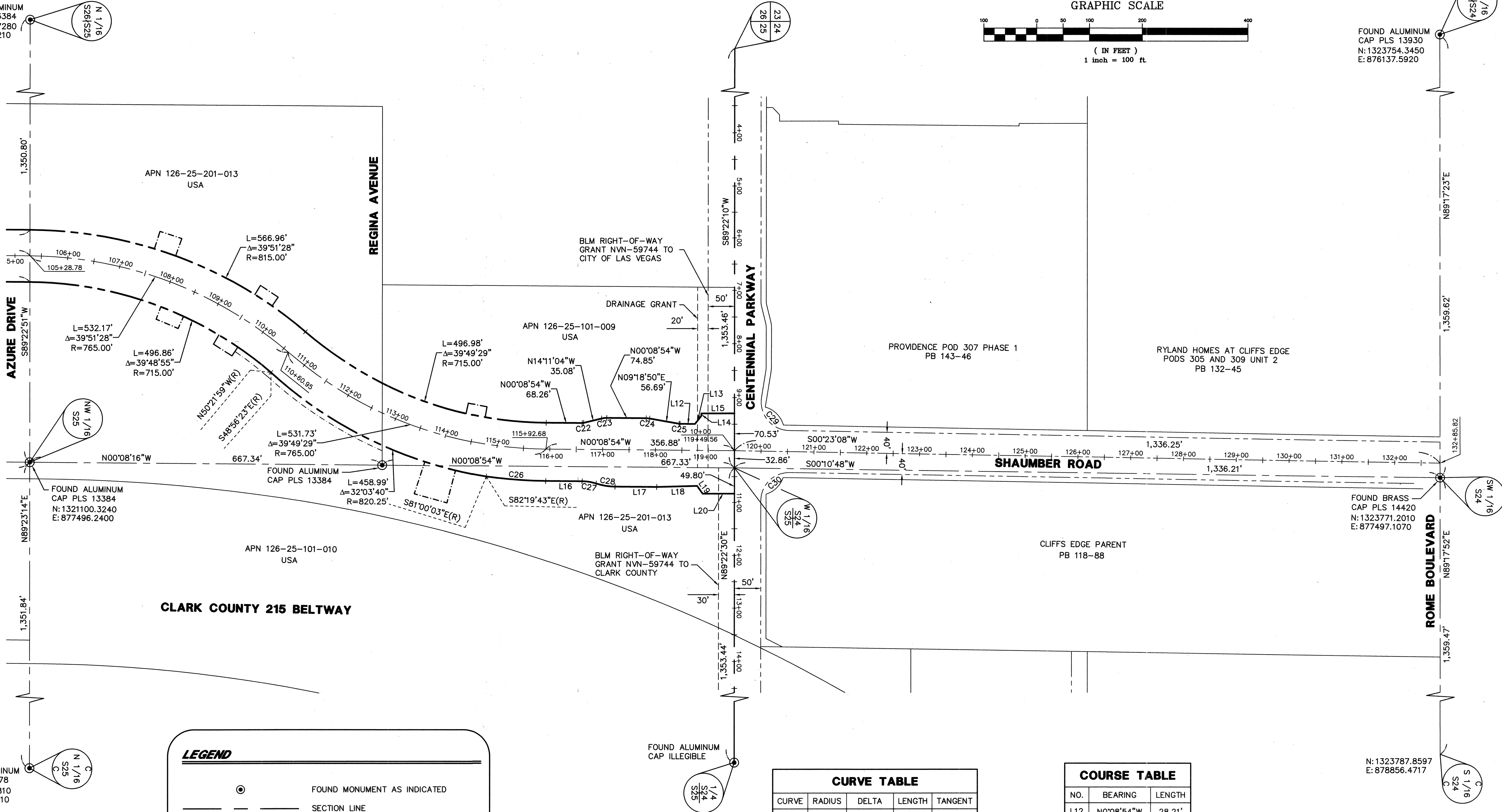
SHEET:	HC-3
DATE:	December 17, 2014
DRAWING NO.:	107V6351

FOUND ALUMINUM
CAP PLS 13384
N: 1321085.7280
E: 876145.5210



FOUND ALUMINUM
CAP PLS 13930
N: 1323754.3450
E: 876137.5920

SEE SHEET HC-3 FOR CONTINUATION



FOUND ALUMINUM
CAP PLS 5878
N: 1321114.7810
E: 878848.0010

LEGEND

- FOUND MONUMENT AS INDICATED
- SECTION LINE
- - - QUARTER SECTION LINE
- - - SIXTEENTH SECTION LINE
- - - RIGHT-OF-WAY LINE
- - - PROPOSED BLM RIGHT-OF-WAY GRANT
- - - STREET CENTERLINE
- - - ADJOINING PROPERTY LINE
- - - DRAINAGE EASEMENT
- - - SLOPE EASEMENT

CURVE TABLE

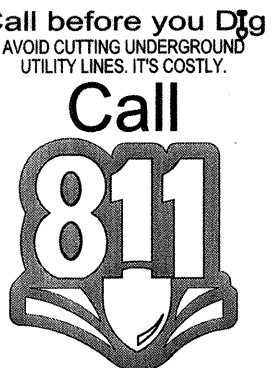
CURVE	RADIUS	DELTA	LENGTH	TANGENT
C22	10.00'	14°02'10"	2.45'	1.23'
C23	40.00'	14°02'10"	9.80'	4.92'
C24	40.00'	9°27'44"	6.61'	3.31'
C25	10.00'	9°27'44"	1.65'	0.83'
C26	826.00'	7°49'11"	112.73'	56.45'
C27	85.00'	18°11'42"	26.99'	13.61'
C28	115.00'	18°11'42"	36.52'	18.41'
C29	54.00'	98°26'47"	92.78'	62.61'
C30	54.00'	91°00'37"	85.78'	54.96'

COURSE TABLE

NO.	BEARING	LENGTH
L12	N0°08'54"W	28.21'
L13	N51°43'00"W	19.25'
L14	S89°27'59"W	4.92'
L15	N0°37'50"W	62.75'
L16	N0°08'54"W	69.02'
L17	N0°08'54"W	78.93'
L18	N2°11'58"W	76.58'
L19	N54°17'28"E	18.32'
L20	N0°37'29"W	60.00'



Call before you Dig
Overhead
1-702-227-2929
NV ENERGY ENVIRONMENT AND
SAFETY SERVICES DEPARTMENT



SHEET:
HC-4

DATE December 17, 2014
DRAWING NO. 107V6351

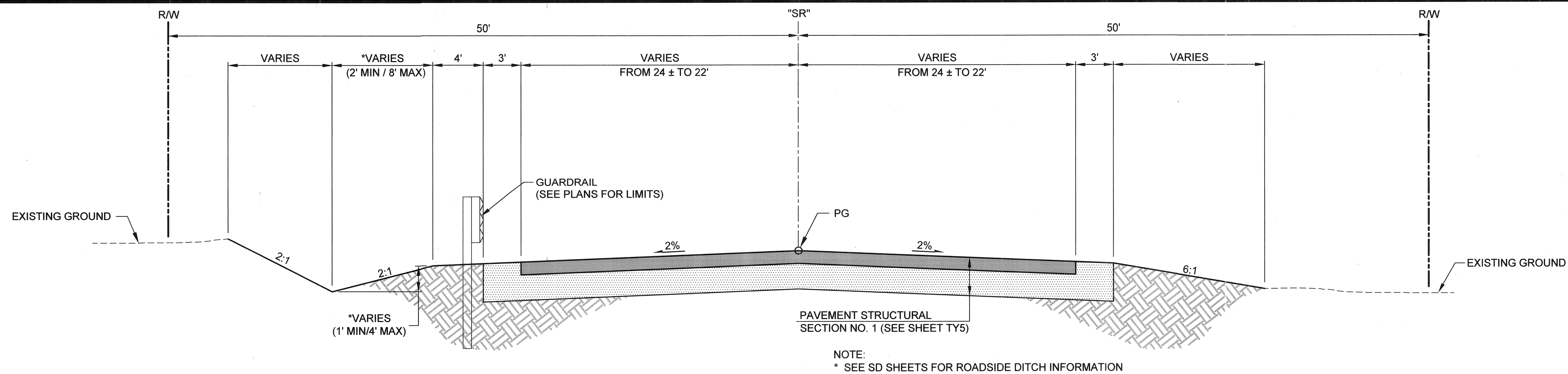
HORIZONTAL CONTROL PLAN

SHAUMBURN ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

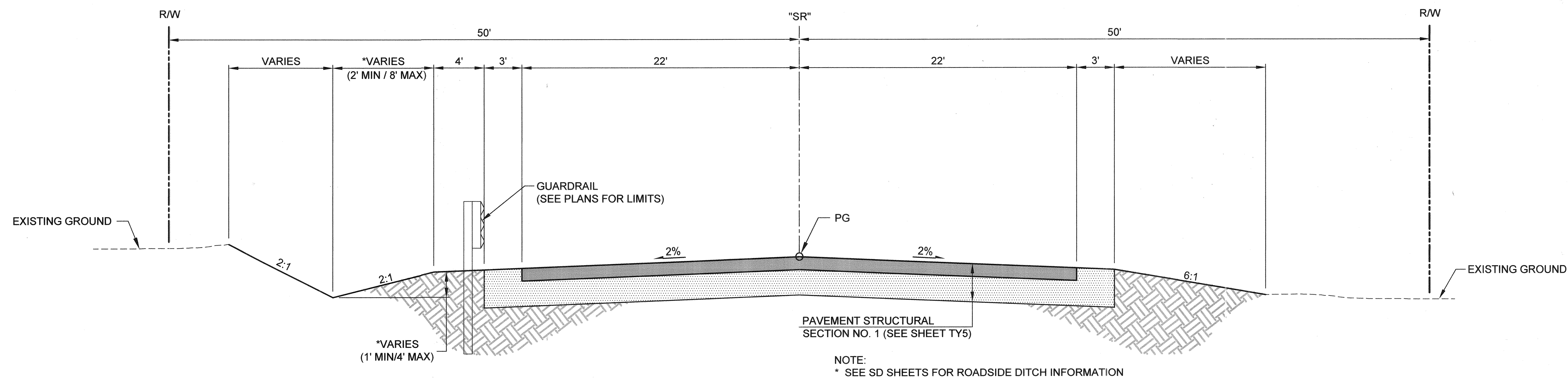
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

CITY ENGINEER: ALERE PAVEIRA, P.E.
DESIGNED BY: JEREMY LEVITT, P.E.
DRAWN BY: JSC
CHECKED BY: TZ
APPROVED BY: [Signature]

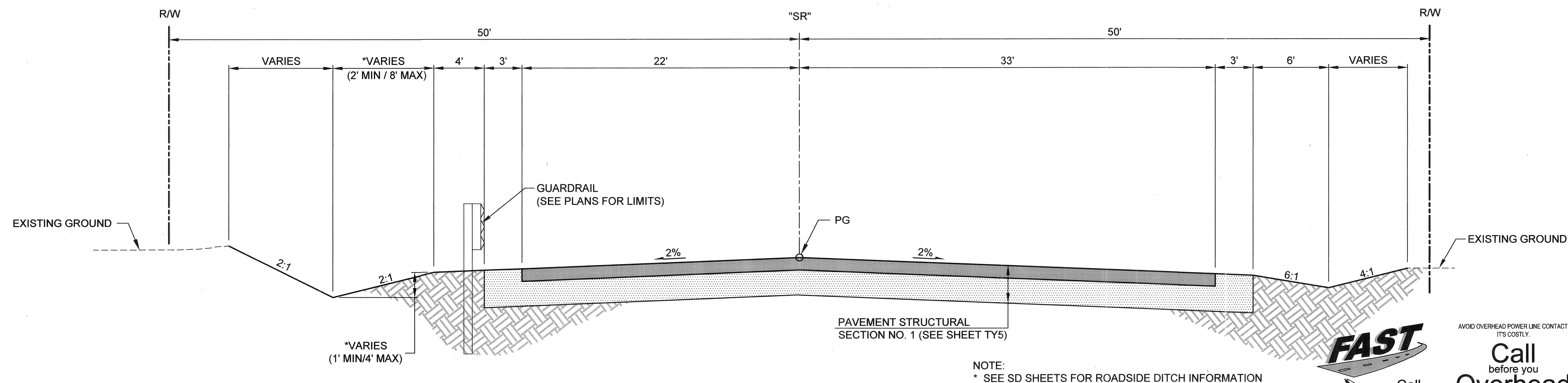
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"SR" 54+50.00 TO "SR" 55+50.00



"SR" 55+50.00 TO "SR" 58+07.78



"SR" 58+07.78 TO "SR" 62+72.13

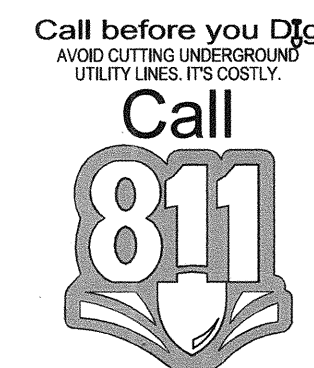


AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.

Call before you Overhead

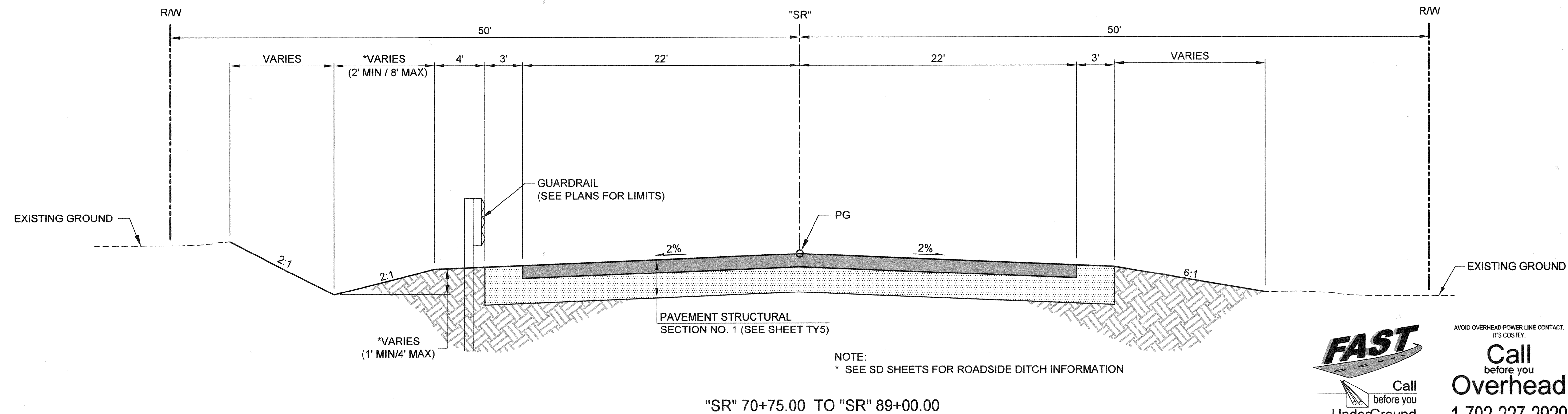
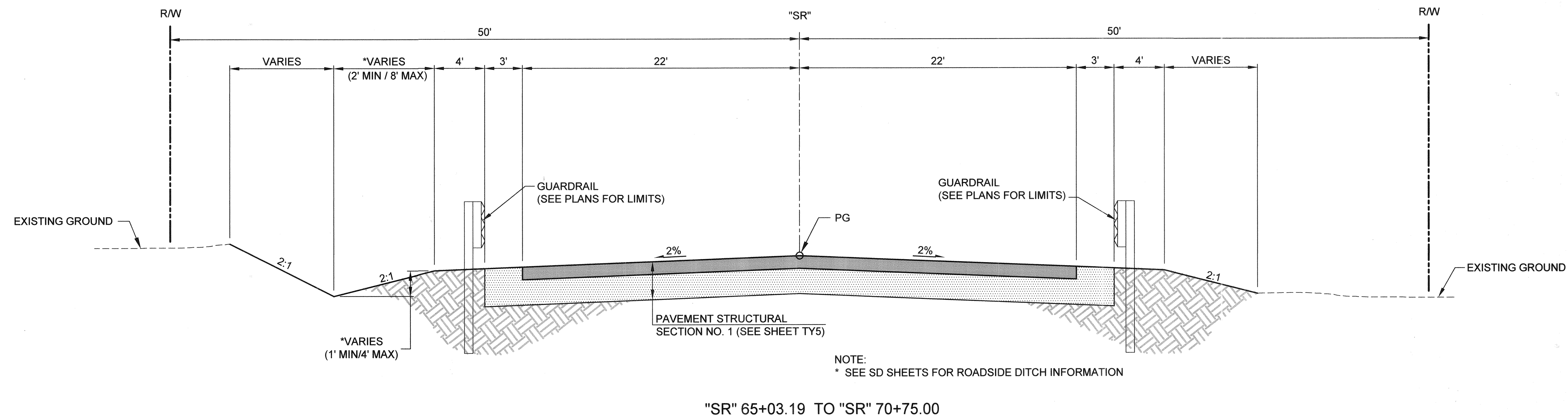
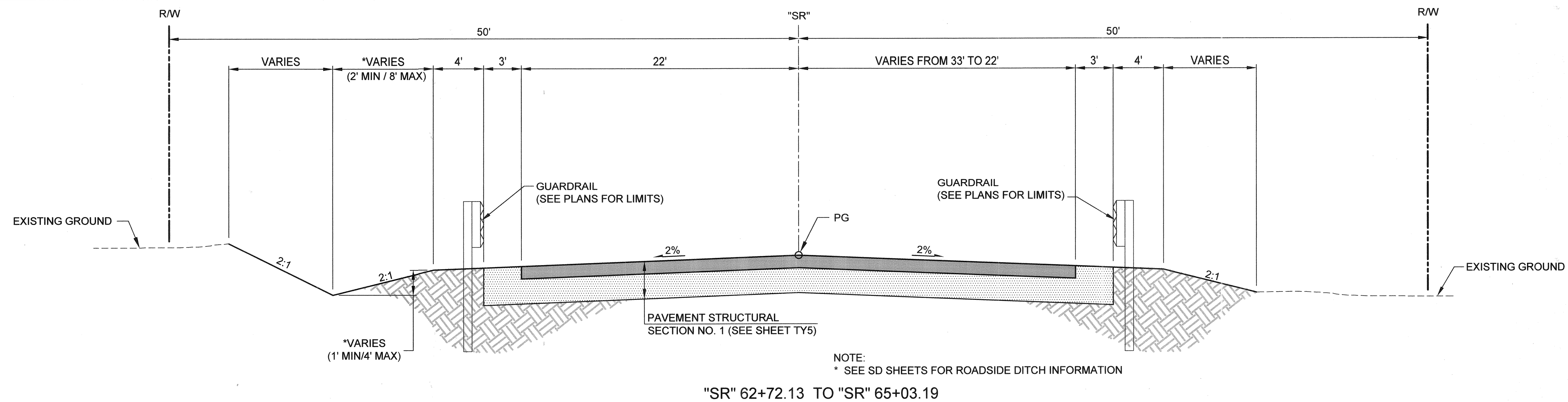
1-702-227-2929

NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

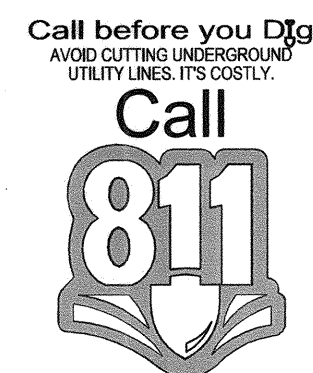


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DEPARTMENT OF PUBLIC WORKS		CAPITAL PROJECT MANAGEMENT		CITY ENGINEER: ALLEN PAVELKA, P.E.		PROGRAM MANAGER: JEREMY LEVITT, P.E.		DESIGNED BY: B. MAHAN		DRAWN BY: S. BOURQUE		CHECKED BY: L. WILCOX		APPROVED BY: J. GRIEST	
ROADWAY TYPICAL SECTIONS		SHAUMBER ROAD REALIGNMENT		CENTENNIAL PKWY TO WASHBURN RD		SHEET: TY1		9 of 52		DATE: January 7, 2015		DRAWING NO: 107V6351		HANSEN NO. 45398	



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NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT



REVISIONS		DESCRIPTION		DATE		NO.	
6							
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2							
1							

DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT MANAGEMENT

CITY ENGINEER: ALIENE PAVELKA, P.E.
PROGRAM MANAGER: JEREMY LEVITT, P.E.
DESIGNED BY: B. MAHAN
DRAWN BY: S. BOURQUE
CHECKED BY: L. WILCOX
APPROVED BY: J. GRIEST

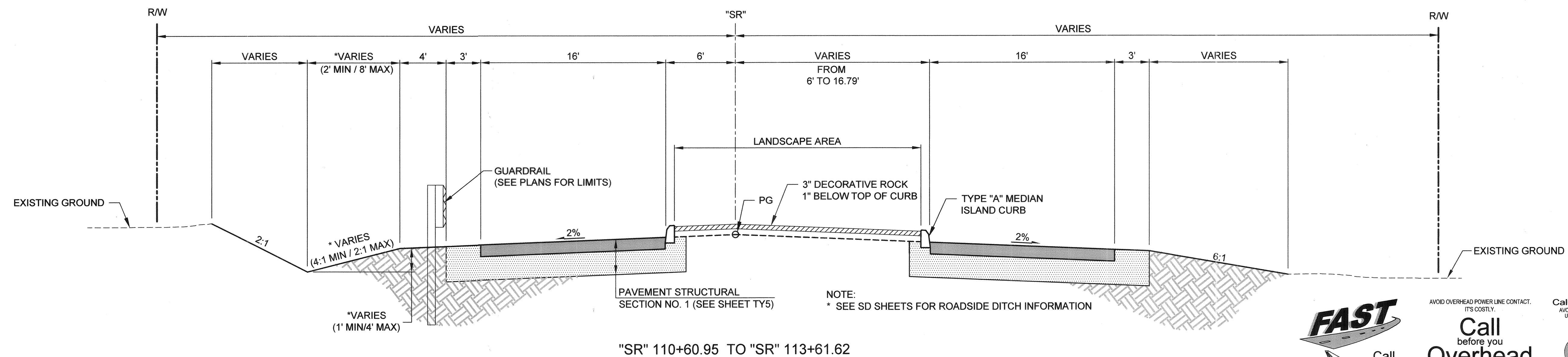
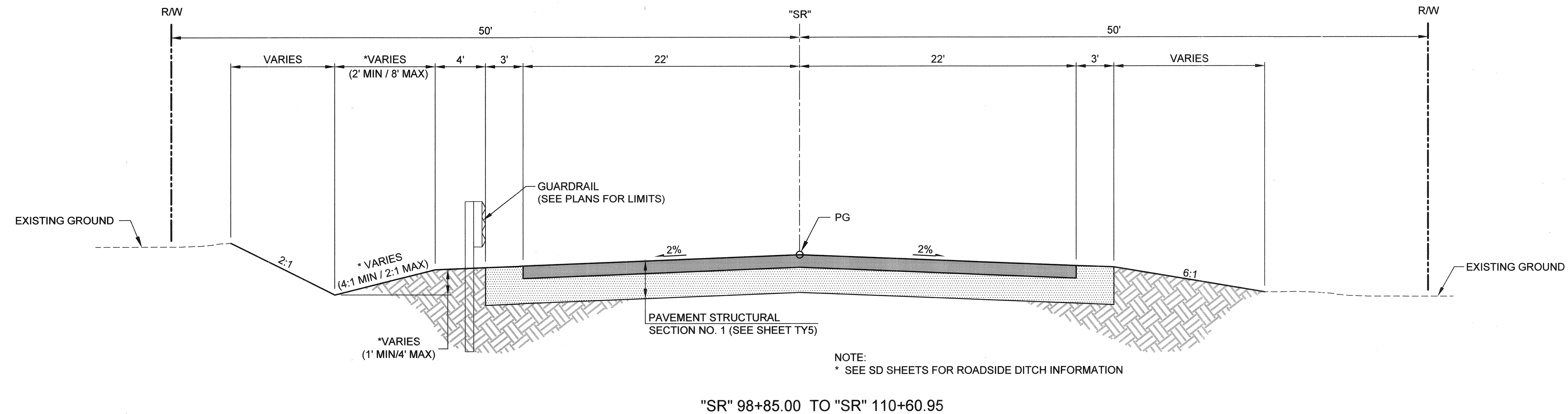
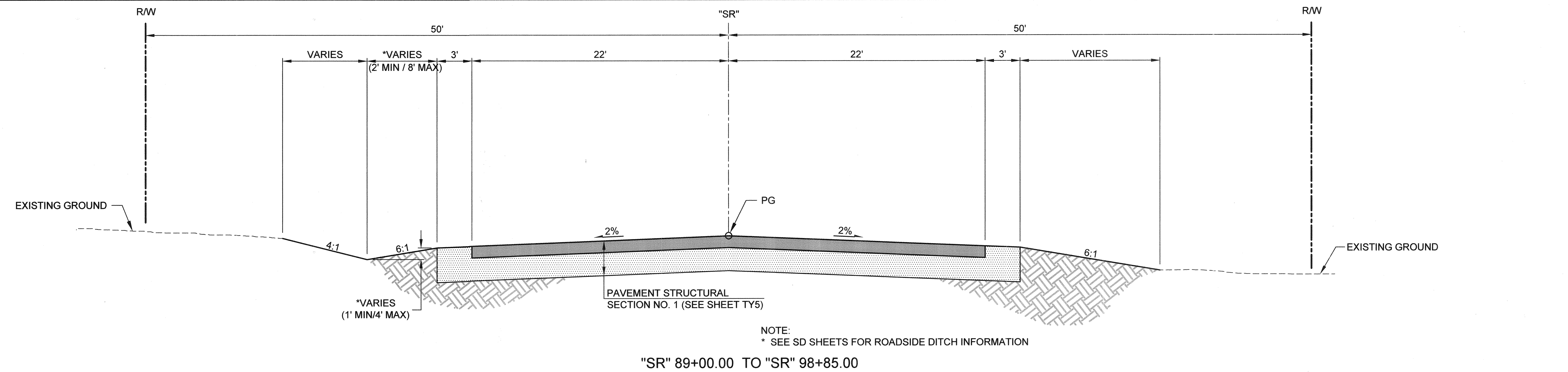
CH2MHILL
2885 VILLAGE VIEW DRIVE, SUITE 350
PHOENIX, AZ 85028
PHONE 702-368-1175 FAX 702-368-1107

ROADWAY TYPICAL SECTIONS

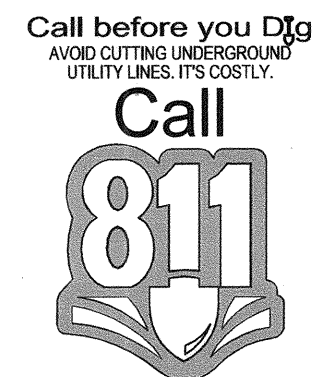
SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

TY2

10 of 52
DATE: January 7, 2015
DRAWING NO: 107V6351
HANSER NO: 45398



AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.
Call before you Overhead 1-702-227-2929
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

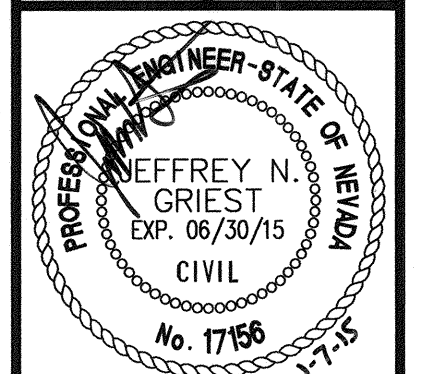


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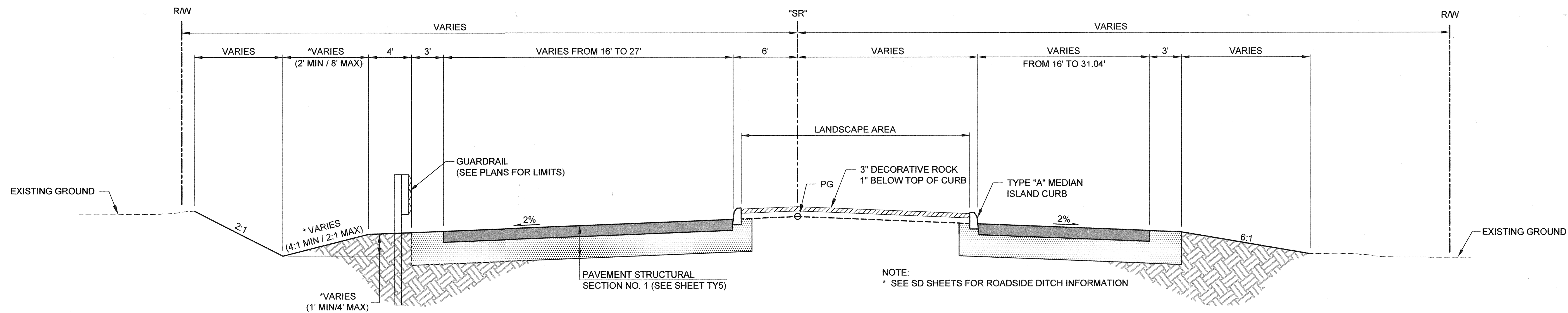
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT
CITY ENGINEER: ALIENE PAVELKA, P.E.
PROGRAM MANAGER: JEREMY LEVITT, P.E.
DESIGNED BY: B. MAHAN
DRAWN BY: S. BOURQUE
CHECKED BY: L. WILCOX
APPROVED BY: J. GRIEST

CH2MHILL
2485 VILLAGE VIEW DRIVE, SUITE 350
PHOENIX, AZ 85028
PHONE 702-369-4175 FAX 702-369-1107

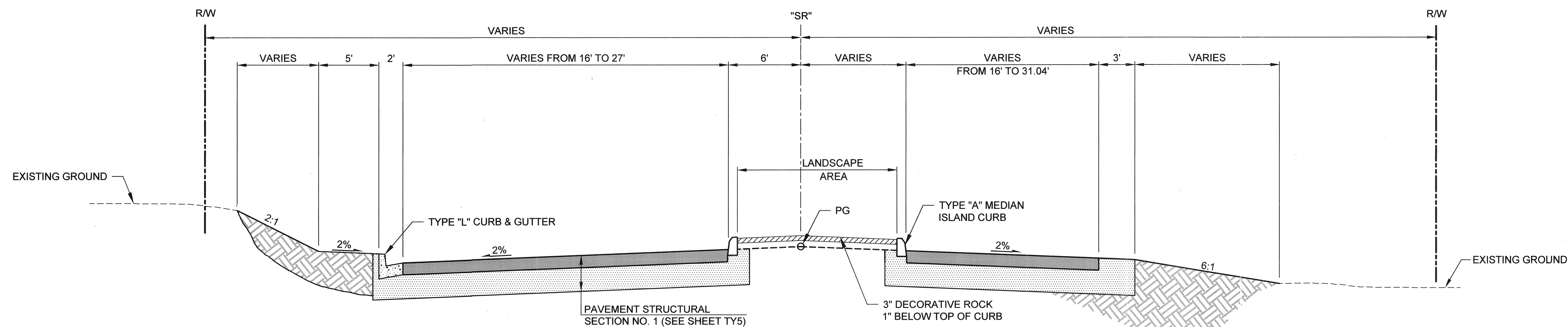
ROADWAY TYPICAL SECTIONS
TITLE: SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD



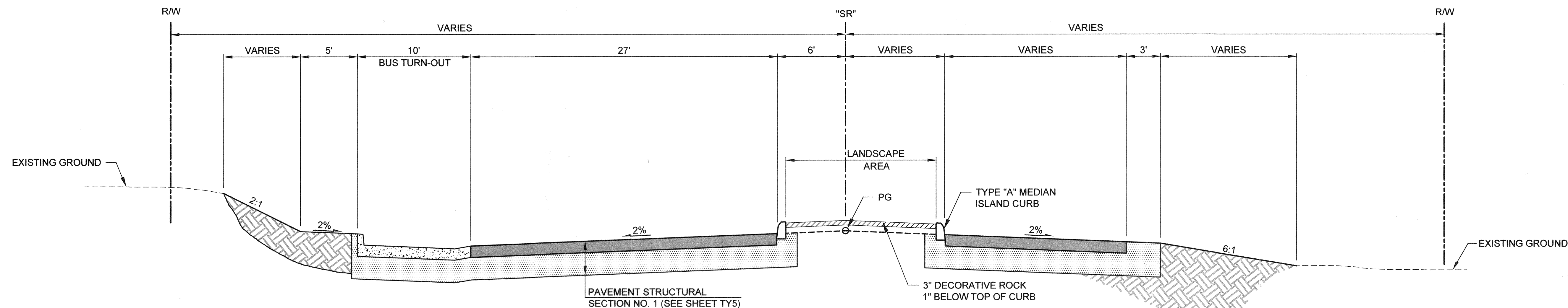
SHEET: TY3
11 of 52
DATE: January 7, 2015
DRAWING NO. 107V6351



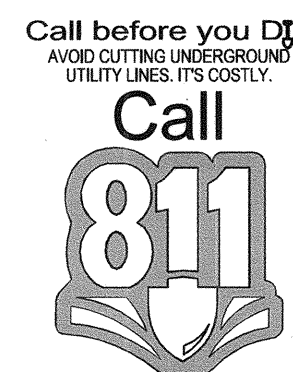
"SR" 113+61.62 TO "SR" 115+92.68



"SR" 115+92.68 TO "SR" 116+60.94



"SR" 116+60.94 TO "SR" 117+07.09

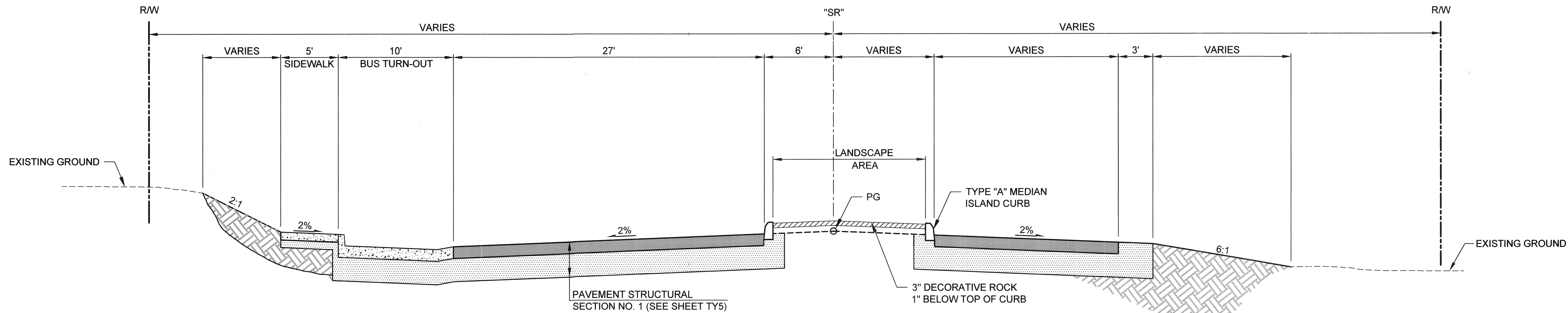


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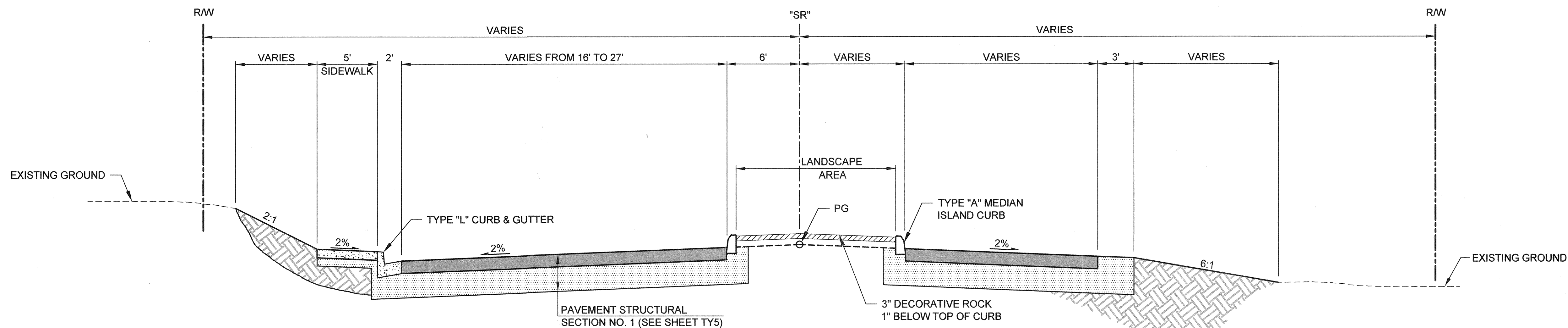
DEPARTMENT OF PUBLIC WORKS	CITY ENGINEER: ALLENE PAVEKA, P.E.
CAPITAL PROJECT MANAGEMENT	PROGRAM MANAGER: JEREMY LEAVITT, P.E.
	DESIGNED BY: B. MAHAN
	DRAWN BY: S. BOURQUE
	CHECKED BY: L. WILCOX
	APPROVED BY: J. GRIEST
	CH2M HILL
	2485 VILLAGE VIEW DRIVE, SUITE 300
	PHOENIX, AZ 85024-1175, FAX 702-369-1107

ROADWAY TYPICAL SECTIONS	TITLE: SHAUMBER ROAD REALIGNMENT
	CENTENNIAL PKWY TO WASHBURN RD

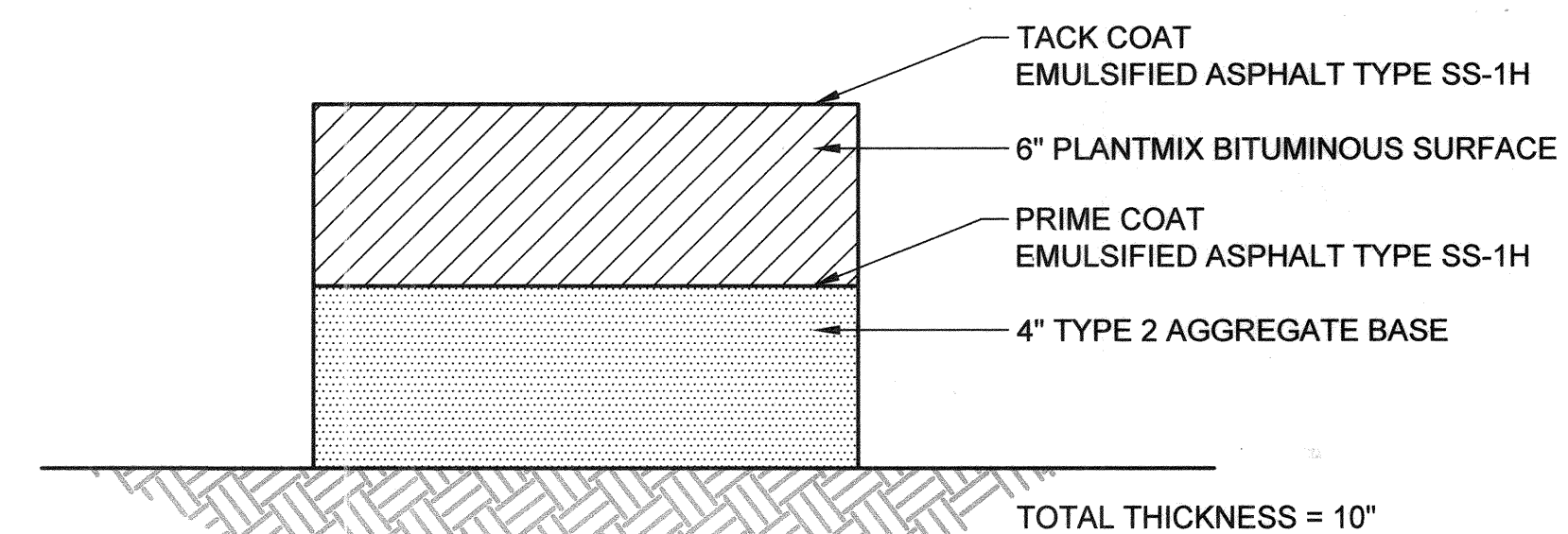
PROFESSIONAL ENGINEER STATE OF NEVADA	JEFFREY N. GRIEST
	EXP. 06/30/15
	CIVIL
	No. 17166
SHEET: TY4	12 of 52
DATE: January 7, 2015	DRAWING NO. 107V6351
HANSEN NO. 45398	BID NO. 15.45398



"SR" 117+07.09 TO "SR" 118+46.08



"SR" 118+46.08 TO "SR" 118+74.15



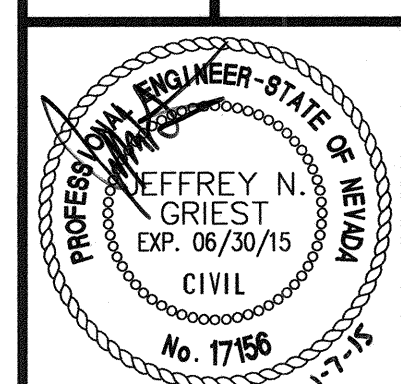
PAVEMENT STRUCTURAL SECTION No. 1

REVISED	NO.	DATE	DESCRIPTION	APPD

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT
 CITY ENGINEER: ALENE PAVEVA, P.E.
 PROGRAM MANAGER: JEREMY LEVITT, P.E.
 DESIGNED BY: B. MAHAN
 DRAWN BY: S. BOURQUE
 CHECKED BY: L. WILCOX
 APPROVED BY: J. GRIEST

CH2M HILL
 2448 VILLAGE VIEW DRIVE, SUITE 300
 PHOENIX, ARIZONA 85028
 PHONE 602-958-6175, FAX 602-958-1107

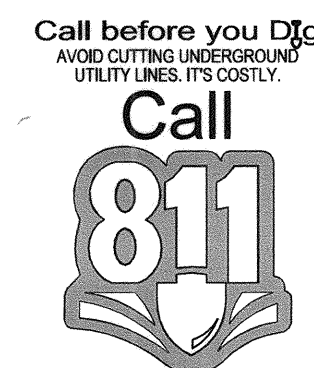
ROADWAY TYPICAL SECTIONS
SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

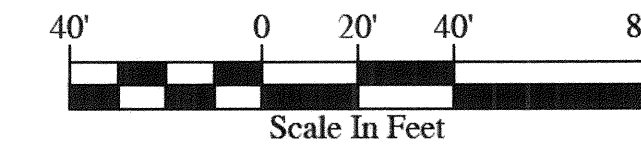
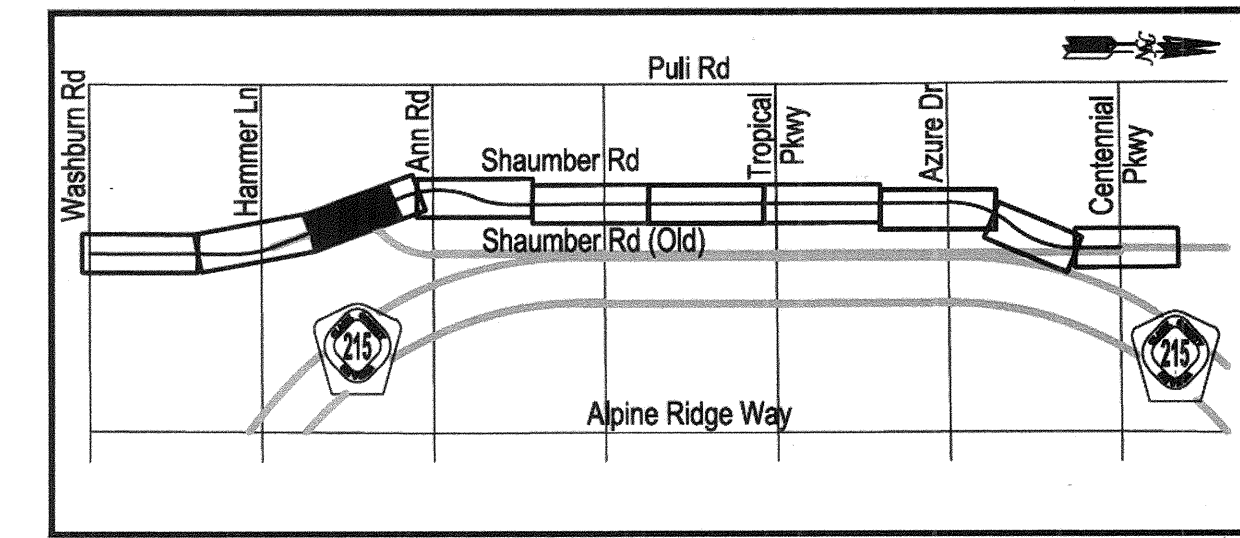
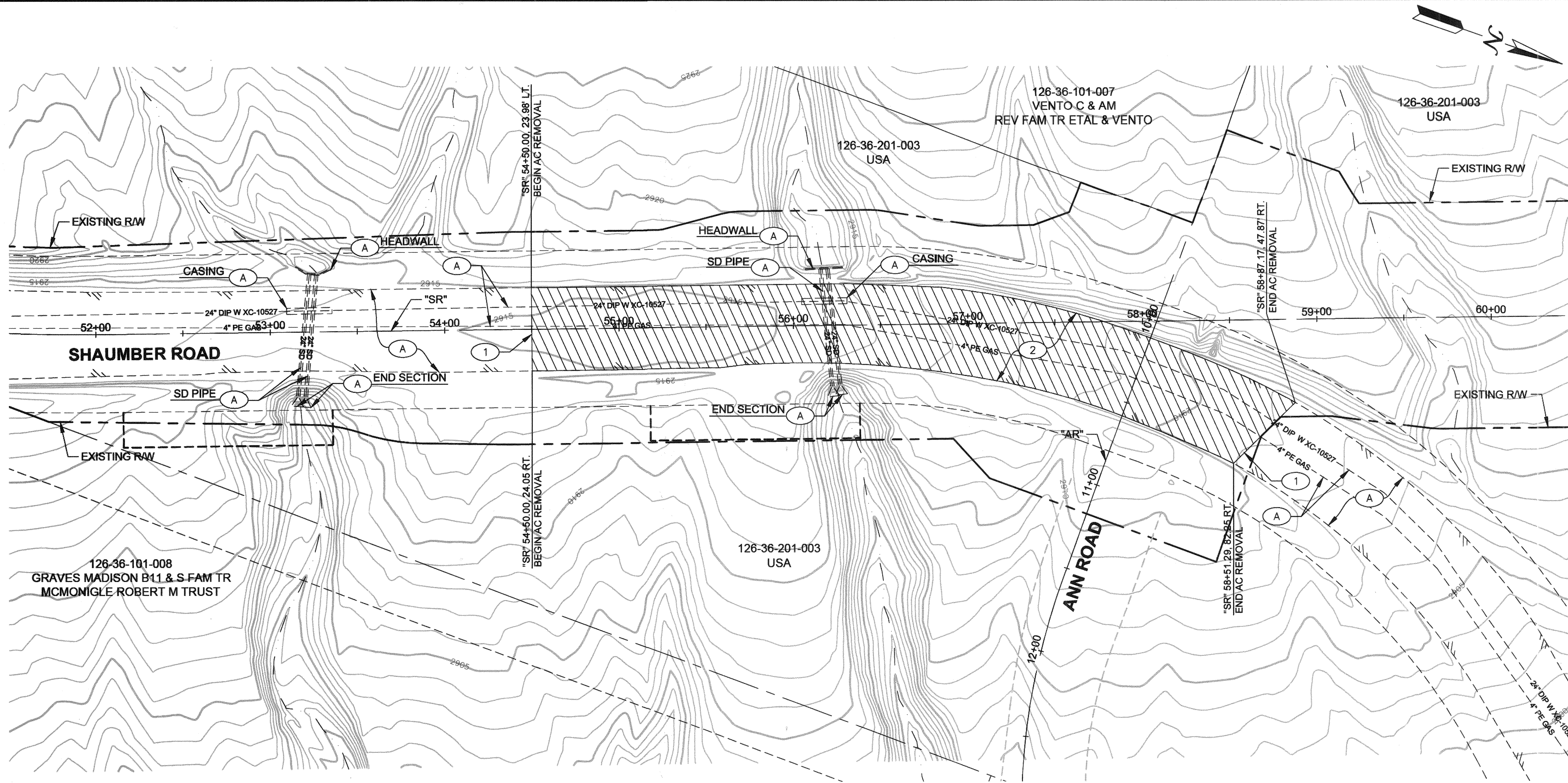


TY5
 13 of 52
 DATE: January 7, 2015
 DRAWING NO: 107V6351
 BID NO: 14-4398



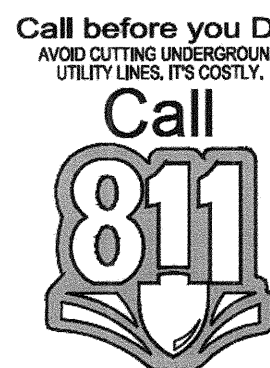
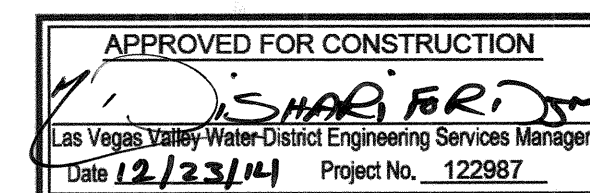
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 NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT





LEGEND:

- ① REMOVAL NOTES
- ASPHALT TO BE REMOVED
- REMOVAL NOTES:**
 - A PROTECT IN PLACE
 - 1 SAWCUT AND MATCH EXISTING
 - 2 REMOVE EXISTING ASPHALT (20,416 SF)



REMOVAL PLAN
"SR" 54+50 TO "SR" 60+00
TITLE: SHAUMBER ROAD REALIGNMENT
CENTENNIAL PKWY TO WASHBURN RD

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT
CITY ENGINEER: ALLEN E. PAVELKA, P.E.
PROGRAM MANAGER: JEREMY LEVITT, P.E.
DESIGNED BY: B. MAHAN
DRAWN BY: F. PAULLO
CHECKED BY: J. GRIEST
APPROVED BY: J. GRIEST

REVISIONS	NO.	DATE	DESCRIPTION	APPD
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PROFESSIONAL SEAL
JEFFREY N. GRIEST
CIVIL
No. 1755
12-22-14
SHEET: R1
14 of 52
DATE: December 17, 2014
DRAWING NO. 107V6351
HANSSEN NO. 45398
BD NO. 14-0339

