# NATIONAL PARK SERVICE MONTEZUMA CASTLE NATIONAL MONUMENT

# PARKING LOT ADDITION AND REDESIGN

### **ENGINEERS**:

FAHAD ALKHALDI FQA2@NAU.EDU BRIAN HERNANDEZ-NG BLH275@NAU.EDU RNJ26@NAU.EDU

**ANDREW MCLAUGHLIN** AJM692@NAU.EDU **JACOB ROBINSON** 

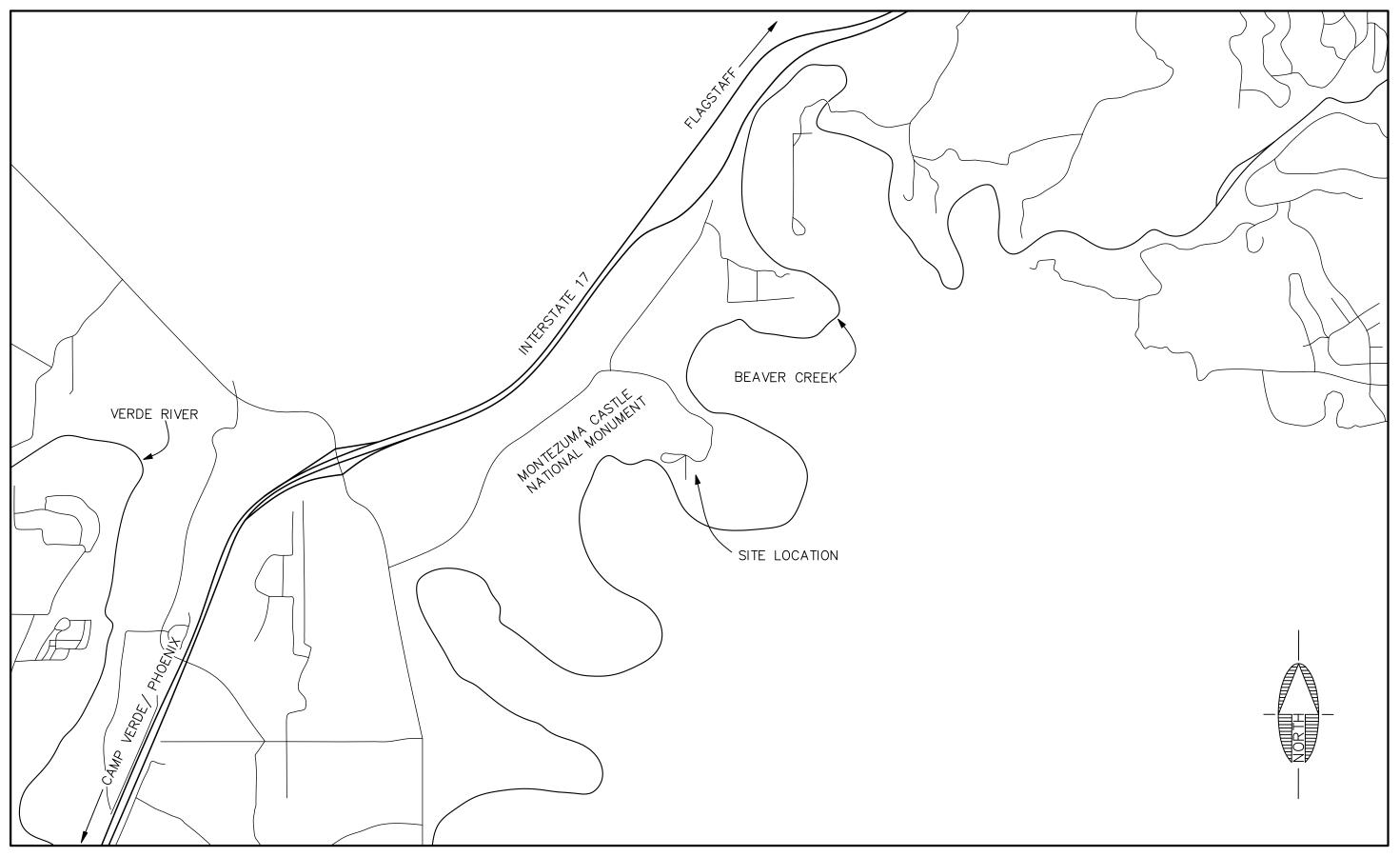
CW795@NAU.EDU

JJR286@NAU.EDU CAYLA WASHINGTON

ADDRESS: 3600 S. LAS VEGAS BLVD

TELEPHONE NUMBER: (702) 982-0000

LAS VEGAS, NV 89109



# CLIENT:

RICHARD GOEPFRICH RICHARD\_GOEPFRICH@NPS.GOV cell: (928) 821-5830

MONTEZUMA CASTLE RD CAMP VERDE, AZ



ARK

# LEGEND:

PROP. SIDEWALK EX. CONTOUR MINOR EX. CONTOUR MAJOR PROP. CONTOUR MINOR PROP. CONTOUR MAJOR EX. STRIPING PROP. STRIPING PROP. CROSSWALK

### ABBREVIATIONS:

ASPHALT CONCRETE AC AGGREGATE BASE CONCRETE BOTTOM OF RAMP **CURB AND GUTTER** CENTERLINE EXISTING GRADE **ELEVATION EXISTING** FINISHED GRADE HIGH DENSITY POLYETHYLENE INV MAG MARICOPA ASSOCIATION OF GOVERNMENTS PROPOSED SIGN STORM DRAIN TOP OF CURB

DECOMPOSED GRANITE

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CONSTRUCTION WORK IS NOT STARTED WITHIN THE ONE (1) YEAR PERIOD, OR HAS BEEN DISCONTINUED FOR ANY REASON FOR LONGER THAN ONE (1) YEAR, THE PLANS SHALL BE RESUBMITTED FOR REVIEW AND RE-APPROVAL. 2. PLAN REVIEW BY THE OFFICIALS DOES NOT EXTEND TO MATERIAL QUANTITIES SHOWN ON THE PLANS.

3. A PUBLIC WORKS PERMIT, ISSUED BY THE NATIONAL PARK SERVICES, IS REQUIRED FOR ALL WORK IN NATIONAL PARK RIGHTS-OF-WAY OR EASEMENTS AND FOR CONSTRUCTION OF ANY IMPROVEMENTS INTENDED TO BECOME

PUBLIC PROPERTY. 4. THE OFFICIALS SHALL BE NOTIFIED TWENTY-FOUR (24) HOURS PRIOR TO BEGINNING DIFFERENT PHASES OF CONSTRUCTION SO THAT

INSPECTORS MAY BE SCHEDULED. 5. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH, CURRENT "MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION," THE FEDERAL HIGHWAY ADMINISTRATION URBAN DESIGN MANUAL, AND WITH GENERALLY ACCEPTED ENGINEERING DESIGN AND CONSTRUCTION PRACTICE. ALL WORK AND MATERIALS, WHICH DO NOT CONFORM TO THE STANDARDS AND SPECIFICATIONS, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND UNDERSTANDING, WHICH MAKES MINOR MODIFICATIONS TO CERTAIN MAG

ANY WORK PERFORMED WITHOUT THE KNOWLEDGE AND APPROVAL OF THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

SPECIFICATIONS AND DETAILS.

7. THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN, IN HIS JUDGMENT, PROGRESS IS UNSATISFACTORY, WORK BEING DONE IS UNAUTHORIZED OR DEFECTIVE, WEATHER CONDITIONS ARE UNSUITABLE, OR THERE IS DANGER TO THE PUBLIC HEALTH OR

8. THE ENGINEER MAY ORDER ANY OR ALL MATERIALS USED IN THE WORK TO BE TESTED ACCORDING TO THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) AND THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARDS. THE CONTRACTOR SHALL, AT HIS EXPENSE, SUPPLY ALL SAMPLES REQUIRED FOR

9. ACCESS THAT MEETS FIRE ACCESS SHALL BE IN PLACE AND APPROVED BEFORE AND AT ALL TIMES DURING ONSITE COMBUSTIBLE CONSTRUCTION AND /OR PRIOR TO ISSUANCE OF BUILDING PERMITS IN NEW SUBDIVISIONS. FIRE DEPARTMENT AND ENGINEERING SECTION APPROVAL IS REQUIRED FOR OBSTRUCTION OF ACCESS OR WATER SYSTEM SHUTDOWN.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STREETS AND OF PARTIALLY COMPLETED PORTIONS OF THE WORK LINTIL FINAL ACCEPTANCE OF THE WORK THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A CONSTRUCTION SCHEDULE FOR ANY STREETS REQUIRED TO BE CLOSED OR PARTIALLY CLOSED FOR THE CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL REOPEN THE STREETS NO LATER THAN THE OPENING DATE SHOWN ON THE CONSTRUCTION SCHEDULE OR UPON ORDER OF THE ENGINEER. THE REGULATION AND CONTROL OF CONSTRUCTION TRAFFIC SHALL BE AS DIRECTED BY THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE. APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL WRITTEN FINAL ACCEPTANCE OF A COMPLETE WORKABLE UNIT. ANY DEFECTS WHICH APPEAR IN THE WORK WITHIN ONE (1) YEAR FROM THE DATE OF ACCEPTANCE AND WHICH ARE DUE TO IMPROPER WORKMANSHIP OR INFERIOR MATERIALS SUPPLIED SHALL BE CORRECTED BY OR AT THE EXPENSE OF THE OWNER/DEVELOPER OR THE CONTRACTOR.

12. ACCEPTANCE OF COMPLETED PUBLIC IMPROVEMENTS WILL NOT BE GIVEN UNTIL DEFECTIVE OR UNAUTHORIZED WORK IS REMOVED, AND FINAL CLEAN-UP IS COMPLETE. 13. LOCATION OF UNDERGROUND UTILITIES BEFORE WORK IS BEGUN IS TO BE ACCOMPLISHED IN ACCORDANCE WITH A.R.S.

SECTION 40- 360.22. 14. IF WORK IS DONE ON PRIVATE PROPERTY IN RELATION TO A PROJECT CONSTRUCTED UNDER THESE STANDARDS, THE CONTRACTOR WILL PROVIDE THE OFFICIALS WITH WRITTEN AUTHORIZATION FROM THE PROPERTY OWNER TO

15. THE ESTABLISHMENT AND USE OF TEMPORARY CONSTRUCTION YARDS SHALL CONFORM TO THE CURRENT ZONING CODE STANDARDS FOR TEMPORARY USES.

16. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED APPROVALS AND PERMITS AS DEEMED NECESSARY BY THE OFFICIALS TO DISPOSE OF EXCAVATED

17. ALL CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER AND PERFORMED UNDER THE DIRECT SUPERVISION OF A REGISTERED LAND SURVEYOR OR CIVIL

ENGINEER. 18. ALL TRAFFIC SIGN SHEETING SHALL BE TYPE VIII AS DESIGNED BY ASTM D4956-07E1 STANDARD SPECIFICATIONS FOR RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL, UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION PLANS.

19. WHEN THE CONSTRUCTION PLANS SPECIFY GRAFFITI CONTROL ON BRIDGES OR OTHER STRUCTURES, THE CONTRACTOR SHALL SEAL THE STRUCTURE FIRST USING MONOCHEM AQUASEAL ME 12 AND THEN APPLY MONOCHEM PERMASHIELD, SACRIFICIAL GRAFFITI CONTROL

20. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AND RESEEDED IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. IN THE EVENT THAT THE CONSTRUCTION ACTIVITY DISTURBS MORE THAN ONE (1) ACRE, A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PREPARED IN ORDER TO OBTAIN A CONSTRUCTION GENERAL PERMIT FROM ADEQ.

#### WATER NOTES

ALL DESIGN, CONSTRUCTION, TESTING AND INSPECTION SHALL CONFORM TO THE ADEQ REQUIREMENTS: WATER DISTRIBUTION IN ACCORDANCE WITH BULLETINS 10 AND 8, AND SEWER COLLECTION IN ACCORDANCE WITH AAC TITLE 18. IN THE EVENT THE ADEQ REQUIREMENTS CONFLICT WITH THESE STANDARDS, THE MORE RESTRICTIVE SHALL

A. ROUGH GRADING SHALL BE COMPLETED WITHIN ONE-TENTH (1/10) OF A FOOT OF PLAN GRADE AND APPROVED BY THE ENGINEER'S AUTHORIZED REPRESENTATIVES PRIOR TO INSTALLATION OF UNDERGROUND UTILITIES.

B. NO TRENCH SHALL BE FILLED WITH BEDDING MATERIAL OR BACKFILL UNTIL THE EXCAVATION AND PIPE LAYING, RESPECTIVELY, HAVE BEEN APPROVED BY THE ENGINEER'S AUTHORIZED REPRESENTATIVE.

C. A WATER PRESSURE TEST IS REQUIRED OF ALL WATER LINES AND A HYDROSTATIC OR AIR TEST IS REQUIRED OF ALL SEWER LINES AND MANHOLES. TESTS ARE TO BE CONDUCTED AFTER BACKFILLING IS COMPLETE AND COMPACTED ON ALL PUBLIC AND/OR PRIVATE UNDERGROUND UTILITIES.

D. WATER AND SEWER SERVICE LINES ARE TO BE MARKED AS SHOWN ON THE STANDARD SERVICE DETAILS.

WATER LINE DISINFECTION IS TO BE ACCOMPLISHED AS OUTLINED IN ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) "BULLETIN NO. 8."

WATER PIPE CLASSIFICATION SHALL BE CLASS 305 FOR A.W.W.A. C-900 PVC AND CLASS 350 FOR DUCTILE IRON UNLESS OTHERWISE APPROVED BY THE ENGINEER. C-900 SHALL CONFORM TO CAST-IRON-EQUIVALENT OUTSIDE DIAMETER AND HAVE ELASTOMERIC GASKETS AND COUPLINGS. ALL DUCTILE IRON PIPE SHALL BE POLYETHYLENE ENCASED IN ACCORDANCE WITH MAG SPECIFICATIONS.

ALL MATERIALS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61 INCLUDING, BUT NOT LIMITED TO, GASKETS, LUBRICANTS, PIPE FITTINGS, AND VALVES (NSF-PW SEAL) (R18-4-119B). H. ALL PUBLIC SANITARY SEWER LINES AND PRIVATE SEWER SERVICE LINES WITHIN A PUBLIC UTILITY EASEMENT OR RIGHT-OF-WAY WILL BE INSPECTED PRIOR TO ACCEPTANCE BY THE

WATER AND SEWER MAINS SHALL BE SEPARATED IN ORDER TO PROTECT PUBLIC WATER SYSTEMS FROM POSSIBLE CONTAMINATION. ALL DISTANCES ARE MEASURED PERPENDICULARLY FROM THE OUTSIDE OF THE SEWER MAIN TO THE OUTSIDE OF THE WATER MAIN. SEPARATION REQUIREMENTS ARE AS

# 1. A WATER MAIN SHALL NOT BE PLACED:

WITHIN SIX (6) FEET, HORIZONTAL DISTANCE, AND LESS THAN TWO (2) FEET, VERTICAL DISTANCE, ABOVE THE TOP OF A SEWER MAIN UNLESS EXTRA PROTECTION IS PROVIDED. EXTRA PROTECTION SHALL CONSIST OF CONSTRUCTING THE SEWER MAIN WITH MECHANICAL JOINT DUCTILE IRON PIPE OR WITH SLIP-JOINT DUCTILE IRON PIPE IF JOINT RESTRAINT IS PROVIDED. ALTERNATE EXTRA PROTECTION SHALL CONSIST OF ENCASING BOTH THE WATER AND SEWER MAINS IN AT LEAST SIX (6) INCHES OF CONCRETE FOR AT LEAST TEN (10) FEET BEYOND THE AREA COVERED BY THIS SUBSECTION.

WITHIN TWO (2) FEET HORIZONTALLY AND TWO (2) FEET BELOW THE SEWER MAIN. WHEN A WATER MAIN IS PLACED BELOW A SEWER MAIN, EXTRA PROTECTION IS ALWAYS REQUIRED REGARDLESS OF THE VERTICAL SEPARATION. 2. NO WATER PIPE SHALL PASS THROUGH OR

COME INTO CONTACT WITH ANY PART OF A SEWER MANHOLE. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND MANHOLES SHALL BE SIX (6) FEET, MEASURED FROM THE CENTER OF THE MANHOLE. 3. THE MINIMUM SEPARATION BETWEEN FORCE

MAINS OR PRESSURE SEWERS AND WATER MAINS SHALL BE TWO (2) FEET VERTICALLY AND SIX (6) FEET HORIZONTALLY UNDER ALL CONDITIONS. WHERE A SEWER FORCE MAIN CROSSES ABOVE OR LESS THAN SIX (6) FEET BELOW A WATER LINE, THE SEWER MAINS SHALL BE ENCASED IN AT LEAST SIX (6) INCHES OF CONCRETE OR CONSTRUCTED USING MECHANICAL JOINT DUCTILE IRON PIPE FOR TEN (10) FEET ON EITHER SIDE OF THE WATER MAIN.

4. EVEN WHEN EXTRA PROTECTION IS UTILIZED, THE MINIMUM CLEARANCE BETWEEN WATER AND SEWER SHALL BE ONE (1) FOOT. 5. THE SEPARATION REQUIREMENTS DO NOT APPLY TO BUILDING, PLUMBING, OR INDIVIDUAL HOUSE SERVICE CONNECTIONS.

J. WHEN HYDROSTATIC TESTING IS PERFORMED, SEWER LINES SHALL BE TESTED FOR INFILTRATION/EXFILTRATION IN ACCORDANCE WITH ADEQ ENGINEERING BULLETIN NO. 11. MANHOLES SHALL BE TESTED BY FILLING THE MANHOLE WITH WATER. THE APPLICANT SHALL ENSURE THAT THE DROP IN WATER LEVEL DOES NOT EXCEED ONE-THOUSANDTH (0.001) OF THE TOTAL MANHOLE VOLUME IN ONE (1) HOUR. WHEN AIR TESTING IS PERFORMED, SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH ASTM F1417-92. MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244.

K. SEWER PIPE SHALL BE SDR 35, ASTM

D3034 FOR PVC PIPE, OR CLASS 150 DIP LINED WITH PROTECTO 401 CERAMIC EPOXY OR HDPE ASTM F894. ALL DUCTILE IRON PIPELINES SHALL BE POLYETHYLENE ENCASED IN ACCORDANCE WITH MAG SPECIFICATIONS. SPECIAL DESIGN CONSIDERATIONS MAY REQUIRE A HIGHER CLASS RATING OF DIP.

NO WATER SETTLING OF TRENCH FILL MATERIAL IS ALLOWED.

M. ALL WATER AND SEWER DESIGN AND CONSTRUCTION SHALL CONFORM TO THE CURRENT ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) REQUIREMENTS. WHEN ADEQ REQUIREMENTS ARE IN CONFLICT WITH THESE STANDARDS, THE MORE RESTRICTIVE SHALL APPLY.

INSTALLED PRIOR TO TESTING THE WATER OR SEWER MAIN AS REQUIRED. (STRIP WIRE TWO (2) INCHES AT TERMINATION OF THE SERVICE.) O. WATER VALVES SHALL AND MANHOLES BE ADJUSTED IN ACCORDANCE WITH MARICOPA ASSOCIATION OF GOVERNMENTS.

N. TRACER WIRES AND TAPES SHALL BE

P. ONE HUNDRED PERCENT (100%) OF THE SEWER LINE SHALL BE TESTED FOR UNIFORM SLOPE BY REMOTE CAMERA AND TESTED FOR SHORT-TERM DEFLECTION.

WHEN A SEWER SERVICE IS REQUIRED TO BE ABANDONED, IT SHALL BE ABANDONED AT THE PROPERTY LINE AND CAPPED USING THE APPROPRIATE MATERIALS (PVC, CLAY, OR CONCRETE).

2. WHEN AN EXISTING WATER SERVICE IS REQUIRED TO BE ABANDONED IT SHALL BE ABANDONED AT THE MAIN. THE SADDLE AND CORP. STOP SHALL BE REMOVED AND THE MAIN CLAMPED WITH AN APPROVED FULL CIRCLE REPAIR CLAMP.

Q. THE LOCATION OF WATER SERVICES SHALL BE IDENTIFIED BY BRANDING A "W" ON THE TOP OR FACE OF CURB.

R. SEWER SERVICE LOCATIONS SHALL BE IDENTIFIED BY BRANDING AN "S" ON THE TOP OR FACE OF THE CURB. PAVING NOTES

A. EXACT POINT OF MATCHING TERMINATION AND OVERLAY, IF NECESSARY, SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE. WHEN A LONGITUDINAL JOINT ASSOCIATED WITH A TRENCH PATH, PAVEMENT MATCHUP OR OTHER OCCURS ON A STREET THAT INCLUDES A BIKE LANE, THE JOINT SHALL BE LOCATED OUTSIDE THE BIKE LANE.

B. NO JOB WILL BE CONSIDERED COMPLETE UNTIL:

1. ALL CURBS, PAVEMENTS, SIDEWALKS, CATCH BASINS, STORM DRAINS, AND MANHOLES HAVE BEEN CLEANED OF ALL DIRT AND DEBRIS; 2. SURVEY MONUMENTS ARE INSTALLED AND

3. ALL FRAMES, COVERS, AND VALVE BOXES ARE ADJUSTED TO GRADE. NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UTILITY LINES ARE COMPLETED AND APPROVED UNDER PROPOSED

D. BASE COURSE WILL NOT BE PLACED UNTIL SUBGRADE HAS BEEN APPROVED BY THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE. THE LOCATION OF ALL WATER VALVES. FIRE HYDRANTS, AND MANHOLES MUST AT ALL TIMES DURING CONSTRUCTION BE REFERENCED

AND MADE ACCESSIBLE TO THE OFFICIALS. F. UTILITY FACILITIES IN CONFLICT WITH THIS WORK WILL BE RELOCATED BY THE PERMITTEE OR THE UTILITY OWNER. THIS ACTIVITY SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY TO PREVENT ANY UNNECESSARY INTERRUPTION OF SERVICE TO EXISTING

CUSTOMERS. G. EXISTING STREET NAME SIGNS, TRAFFIC SIGNS AND DEVICES ASSOCIATED WITH THE PROJECT SHALL BE MAINTAINED DURING CONSTRUCTION AND RELOCATED BY THE CONTRACTOR AS SHOWN ON THE APPROVED

H. ANY CHANGES OR ADDITIONS TO PAVEMENT MARKINGS CAUSED BY PAVEMENT OVERLAY, CHIP SEAL, OR INSTALLATION OF UNDERGROUND FACILITIES SHALL BE SHOWN ON THE APPROVED PLANS.

ON PROJECTS WHERE THE CONTRACTOR CAUSES EXCESSIVE DAMAGE TO AN EXISTING PAVED STREET OR THERE ARE MULTIPLE STREET CUTS (MAXIMUM OF FOUR (4) IN FIVE HUNDRED (500) FEET) AN ASPHALT OVERLAY SHALL BE REQUIRED.

J. A PRIME COAT IS NOT REQUIRED UNLESS SO SPECIFIED IN THE SOILS AND PAVEMENT REPORT AND/OR SHOWN ON THE PLANS.

K. ALL CURB AND GUTTER, SIDEWALK, DRIVEWAYS, AND SIDEWALK RAMPS SHALL BE CONSTRUCTED ON A MINIMUM THREE (3) INCHES OF AGGREGATE BASE COURSE (ABC). THE ABC SHALL BE CONSTRUCTED IN ACCORDANCE WITH MAG SECTION 310, AND SHALL BE COMPACTED TO NINETY-FIVE PERCENT (95%) RELATIVE DENSITY. ALL PRECAST STRUCTURES SUCH AS MANHOLE BASES, CATCH BASINS, AND BOX CULVERTS SHALL BE CONSTRUCTED ON A MINIMUM OF THREE (3) INCHES OF ABC.

L. PERMANENT PAVEMENT MARKINGS. 1. LONGITUDINAL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

(MUTCD). 2. TRANSVERSE PAVEMENT MARKINGS SUCH AS STOP BARS, CROSSWALKS, ARROWS, AND LEGENDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

M. TEMPORARY PAVEMENT MARKINGS. 1. TEMPORARY PAVEMENT MARKINGS, WHEN APPROVED, SHALL BE INSTALLED IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

1. THE USE OF TEMPORARY MARKINGS IS STRONGLY DISCOURAGED AND MAY ONLY BE USED WITH PRIOR APPROVAL. WHEN IT IS USED, THE CONTRACTOR MUST BE AVAILABLE TO

RESTRIPE AS NEEDED UNTIL THE PERMANENT MARKINGS CAN BE INSTALLED. 2. WHEN IT IS IMPRACTICABLE FOR THE CONTRACTOR TO PROVIDE PERMANENT MARKINGS, THE PUBLIC WORKS DEPARTMENT

MAY INSTALL THE MARKINGS ON BEHALF OF THE CONTRACT PROVIDED THE FEE FOR THE WORK IS AGREED UPON AND PAID FOR IN ADVANCE. N. THE MAXIMUM THICKNESS OF A SINGLE

LIFT OF PAVEMENT SHALL BE FOUR (4) INCHES. LANDSCAPING NOTES ADJACENT SITE IMPROVEMENTS, PAVEMENT

CONSTRUCTION, IRRIGATION INSTALLATION AND FINISH GRADING SHALL BE COMPLETED PRIOR TO PLANTING WORK. DO NOT PLANT WHEN CONDITIONS ARE NOT SUITABLE FOR DIGGING, MIXING, RAKING AND/OR GRADING, PLANTING NEEDS TO OCCUR DURING THE MONTHS THAT IRRIGATION SYSTEMS ARE IN OPERATION. THEREFORE, PLANTING MAY OCCUR BETWEEN APRIL 1ST AND SEPTEMBER 30TH.

A. TREE AND SHRUB INSTALLATION. 1. SOIL EXCAVATED FROM THE PLANTING PIT SHALL BE TYPICALLY CONSIDERED ACCEPTABLE AS BACKFILL MATERIAL FOR PLANTING. 2. ALL CONTAINERS SHALL BE REMOVED PRIOR TO PLANT INSTALLATION IN A MANNER

THAT DOES NOT DISTURB THE POTTED SOIL OR

ROOT BALL.

3. SET THE ROOT BALL ON SIX (6) INCHES OF FIRM PLANTING SOIL, PLUMB AND IN THE CENTER OF THE PIT WITH THE ROOT BALL CROWN SLIGHTLY ABOVE THE SAME ELEVATION AS ADJACENT FINISHED LANDSCAPE GRADES. REMOVE ANY WIRE, TWINE, BURLAP, OR OTHER MATERIAL FROM THE UPPER ONE-THIRD (1/3) OF THE ROOT BALL OF BALLED AND BURLAPPED STOCK. WIRE BASKETS AND SYNTHETIC BURLAP SHALL BE COMPLETELY REMOVED AFTER THE ROOT BALL HAS BEEN PLACED IN ITS FINAL LOCATION.

4. ONCE PLANT IS SET, PLACE BACKFILL MATERIAL AROUND BASE AND SIDES OF ROOT BALL AND WORK EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS. WHEN BACKFILLING IS TWO-THIRDS (2/3) COMPLETE, WATER THOROUGHLY. PLACE THE REMAINDER OF THE BACKFILL AND REPEAT WATERING UNTIL NO MORE IS ABSORBED. PLACE THE FINAL LAYER OF BACKFILL AND WATER.

5. ALL DECIDUOUS TREES SHALL BE WRAPPED FROM THE GROUND LINE UP TO AND INCLUDING THE FIRST PRIMARY CROTCH FORMED BY THE FIRST MAJOR BRANCH. WRAPPING SHALL BE DONE AFTER THE PLANT HAS BEEN INSTALLED.

6. TWO (2) TO THREE (3) INCHES OF SPECIFIED MULCH SHALL BE PLACED IN THE AREA DISTURBED BY EXCAVATION OF THE PLANTING WELL.

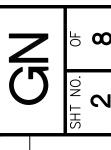
B. GROUND COVER INSTALLATION. 1. PRIOR TO PLANTING ACTIVITIES, COMPLETELY REMOVE EXISTING WEEDS INCLUDING ROOTS. IMMEDIATELY PRIOR TO INSTALLATION, CULTIVATE GROUND COVER AREAS TO A DEPTH OF SIX (6) INCHES AND GRADE SMOOTHLY AND UNIFORMLY. PLANT GROUND COVER SO THE ROOT CROWN IS AT OR SLIGHTLY ABOVE THE BED'S FINISH GRADE. AFTER PLANTING OF GROUND COVER AND PRIOR TO MULCHING, SPREAD PRE-EMERGENT WEED CONTROL OVER PLANTING BED SOIL SURFACE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN DIRECTIONS. INSTALL THE SPECIFIED MULCH TO A DEPTH OF TWO (2) INCHES OVER THE ENTIRE

GROUND COVER BED. C. LANDSCAPE COMPLETION.

1. PRUNE DEAD OR DAMAGED BRANCHES, MAKING ALL CUTS AT BRANCH COLLAR. MAINTAIN THE NATURAL HABIT, SHAPE AND SPECIFIED SIZE. REMOVE ALL TAGS, LABELS, AND OTHER MATERIAL.

	SIGN SCHEDULE								
KEYNOTE NUMBER	MUTCD SIGN CODE	SIZE (IN)	SIGN DESCRIPTION	QUANTITY	DIRECTION — SIGN IS VISIBLE FROM THIS DIRECTION OF TRAVEL	# OF POSTS (/EA)			
251	R2-1	24X30	'SPEED LIMIT 15 MPH'	1	WESTBOUND	1			
252	R7-1	12X18	'NO PARKING ANYTIME'	2	WESTBOUND	1			
253	R1-1	30X30	'STOP'	1	NORTHBOUND	1			
254	R3-1 MODIFIED	12X18	'NO RIGHT TURN BUS ONLY'	1	NORTH/WESTBOUND	1			
255	N/A	12X18	'ADDITIONAL PARKING'	1	WESTBOUND	1			
256	R6-1R	12X36	'ONE-WAY' (RIGHT)	1	WESTBOUND	1			
257	R6-1L	12X36	'ONE-WAY' (LEFT)	2	EASTBOUND	1			
258	D9-6	12X18	RESERVED PARKING SYMBOL OF ACCESSIBILITY	8	WESTBOUND	1			
259	N/A	12X18	'15 MINUTE PARKING - LOADING & UNLOADING ZONE'	1	EASTBOUND	1			
260	R5-1	30X30	'DO NOT ENTER'	2	SOUTHBOUND	1			
261	N/A	14X10	'RESTRICTED AREA — EMPLOYEE ONLY'	3	SOUTHBOUND	1			
262	N/A	12X18	'BUS AND RV PARKING ONLY'	4	NORTHBOUND	1			
263	N/A	12X18	'MOTORCYCLE PARKING ONLY'	1	NORTHBOUND	1			
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DEMOLITION	UNITS	QUANTITY
01 CLEAR AND GRUB	SY	5135
02 REMOVE AND DISPOSE EXISTING ASPHALT	SY	550
03 REMOVE AND DISPOSE EXISTING CURB AND GUTTER	LF	20
NEW CONSTRUCTION	UNITS	QUANTITY
200 EARTHWORK (NET FILL)	CY	660
211 TYPE A ASPHALT PAVEMENT (4" AC/ 8" ABC)	SY	4355
212 TYPE A CONCRETE PAVEMENT (9" PCC/ 12" ABC)	SF	2300
213 TYPE A CONCRETE SIDEWALK (6" PCC/ 4" ABC)	SF	2900
214 TYPE A CURB AND GUTTER	LF	850
215 LANDSCAPING PER GRADING PLAN	SF	1450
216 CROSSWALK PAVEMENT MARKINGS	LF	250
217 4" WHITE PAINTED PARKING LINE PER DETAIL 3.04	LF	1600
218 CONVERT NORMAL STALLS TO ADA PARKING	EA	6
220 INSTALL SIDEWALK RAMP MAG STD 236-2	EA	1
221 INSTALL 4" THICK 1/4" MINUS DECOMPOSED GRANITE	SF	607
222 MOTORCYCLE PARKING SPOT PER DETAIL 3.04	EA	1
251 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
252 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
253 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
254 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
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258 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
259 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
260 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
261 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
262 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
263 INSTALL AND FURNISH MUTCD PER SIGN SCH.	EA	1
DRAINAGE	UNITS	QUANTITY
501 CHANNEL CUT INTO GRADE	LF	705
502 18" CORRUGATED HDPE (SMOOTH INTERIOR)	LF	60
503 DOUBLE HEADWALL PER MAG STD 501-22	EA	2
SWPPP	UNITS	QUANTIY
700 Straw Rolls	LF	602
701 Rock Dams	CY	4.75



ELIM

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DATE		
NOL		
DESCRIPTION		

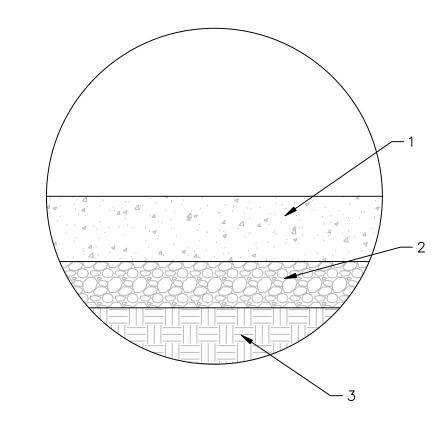
1. 4" THICK ASPHALT CONCRETE (3/4" MIX) PER MAG SPEC. 321 DETAILS AND SPECS. 2. 8" THICK ABC PER MAG SPEC. 702 DETAILS AND SPECS. 100% COMPACTION.

3. NATIVE SUBGRADE SCARIFIED TO A MIN. DEPTH OF 8", MOISTURE CONDITIONED TO OPTIMUM TO +4% ABOVE OPTIMUM PER MAG SPEC. 301. 95% COMPACTION

ASPHALT PAVEMENT SECTIONS ARE BASED ON THE GEOTECHNICAL EVALUATION FOR MONTEZUMA CASTLE NATIONAL MONUMENT PARKING LOT ADDITION PREPARED BY

V13

ASPHALT PAVEMENT SECTION

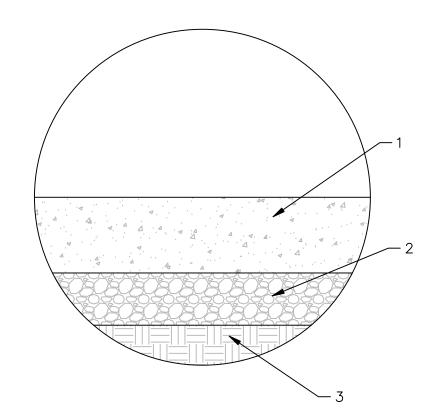


1. 6" PORTLAND CEMENT CONCRETE (PCC), 4000 PSI PER PAVING NOTES SHEET GN - GENERAL NOTES. 2. 4" THICK ABC PER MAG SPEC. 702 AND TO MAG UNIFORM DETAILS AND SPECS. 95% COMPACTION. 3. NATIVE SUBGRADE SCARIFIED TO A MIN. DEPTH OF 8". MOISTURE CONDITIONED TO OPTIMUM TO +4% ABOVE OPTIMUM PER MAG SPEC. 301. 95% COMPACTION

- CONCRETE PAVEMENT SECTIONS ARE BASED ON THE GEOTECHNICAL EVALUATION FOR MONTEZUMA CASTLE NATIONAL MONUMENT PARKING LOT ADDITION PREPARED BY OTHERS.

WIDTH OF SIDEWALK NOTED ON PLANS

3.02 CONCRETE SIDEWALK SECTION



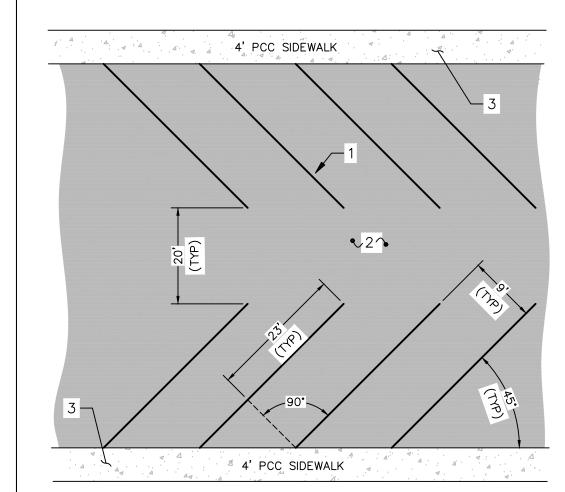
1. 9" PORTLAND CEMENT CONCRETE, 4000 PSI PER PAVING

NOTES SHEET GN - GENERAL NOTES. 2. 12" THICK ABC PER MAG SPEC. 702 AND TO MAG UNIFORM DETAILS AND SPECS. 95% COMPACTION. 3. NATIVE SUBGRADE SCARIFIED TO A MIN. DEPTH OF 8", MOISTURE CONDITIONED TO OPTIMUM TO +4% ABOVE OPTIMUM PER MAG SPEC. 301. 95% COMPACTION

- CONCRETE PAVEMENT SECTIONS ARE BASED ON THE GEOTECHNICAL EVALUATION FOR MONTEZUMA CASTLE NATIONAL MONUMENT PARKING LOT ADDITION PREPARED BY OTHERS.

- BUS PARKING PAD IS 10' X 55'.

(3.03) CONCRETE BUS PARKING PAD SECTION



1. 4" THICK WHITE PAINTED LINE TO BE PLACED ON NEW PAVEMENT FOLLOWING ALIGNMENT PROVIDED IN DETAIL AND HORIZONTAL CONTROL. 2. NEW 4" ASPHALT CONCRETE ON 8" A.B.C. PER DETAIL 3.01 ON

SHEET DT - DETAILS. 3. NEW 6" PCC SIDEWALK ON 4" A.B.C. PER DETAIL 3.02 ON

SHEET DT - DETAILS.

3.04 TYPICAL PARKING LOT SPOT DETAIL

—— VAR. ——— EXISTING GRADE\_ TURN ENDS DOWN 12" TYP 1. CENTERLINE OF CHANNEL TO BE CONTROL — SEE HORIZONTAL CONTROL SHEET. SIZE OF WIDTH CENTERED ALONG CENTERLINE.

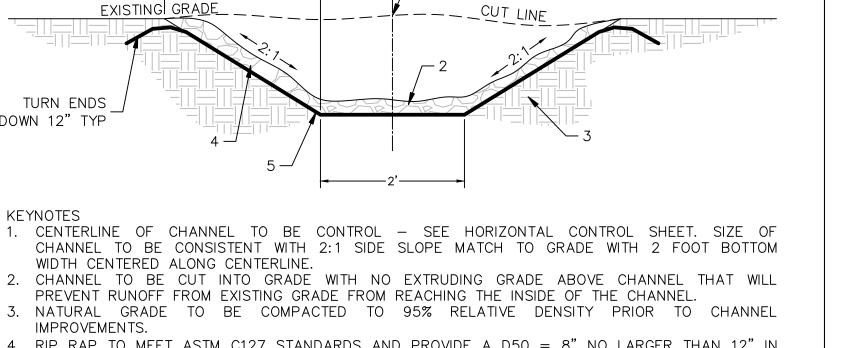
PREVENT RUNOFF FROM EXISTING GRADE FROM REACHING THE INSIDE OF THE CHANNEL. 3. NATURAL GRADE TO BE COMPACTED TO 95% RELATIVE DENSITY PRIOR TO CHANNEL

4. RIP RAP TO MEET ASTM C127 STANDARDS AND PROVIDE A D50 = 8" NO LARGER THAN 12" IN SIZE AND TO BE PLACED IN A WAY THAT DOES NOT IMPEDE FLOWS.

5. GEO-SYNTHETIC FABRIC SUCH AS MIRAFI 140N FILTER FABRIC OR APPROVED EQUAL MUST BE

PLACED BELOW RIPRAP AND ANCHORED TO GROUND USING INDUSTRY STANDARDS

(3.06) CHANNEL CROSS SECTION



1. PARKING LOT PER NEW CONSTRUCTION, IMPROVEMENT SHEETS, AND DETAIL 3.01 ON THIS SHEET.

2. 4" THICK WHITE PAINT STRIPING PER MUTCD STANDARDS PROPOSED 4' PCC SIDEWALK PER DETAIL 3.02 ON THIS SHEET. ALIGNMENT OF SIDEWALK

PROVIDED ON HORIZONTAL CONTROL SHEET.

PROPOSED CURB AND GUTTER PER MAG STANDARD DETAILS ON THIS SHEET. PARKING STALLS PER DETAIL 3.04 ON THIS SHEET.

NEW 'MOTORCYCLE PARKING ONLY' SIGN PER SIGN SCHEDULE ON SHEET GN.

NEW CROSS WALK PER MUTCD STANDARDS AND SPECIFICATIONS. 8. EXISTING LANDSCAPE TO STAY PER IMPROVEMENT SHEETS

SPECIFICATIONS:

MOTORCYCLE PARKING SPOT TO BE SAME LENGTH AND SIZE AS NORMAL PARKING SPOT WITH MADE MODIFICATIONS ABOVE. THE PARKING IS TO HAVE A 2 FOOT OFFSET FROM NORMAL PARKING STALL WITH A 10 FOOT DISTANCE AS SHOWN IN DETAIL. STRIPING WITHIN PARKING LOT TO MEET MUTCD STANDARDS ON FILLED SPOTS AND / OR LOCAL CODES.

VAN STALL ADA STALL EXISTING SIDEWALK

NEW PARKING SPACE IDENTIFICATION SIGN AND POST, LOCATION PER PLAN. SIGN SHALL INTERNATIONAL SYMBOL OF ACCESSIBILITY. ADDITIONAL VAN PLAQUE REQUIRED FOR VAN STALLS. POST SHALL BE 2" SQUARE SET IN SLEEVE, FACE OF SIGN 2' FROM FACE OF CURB AND OUTSIDE OF RAMP OR WING. REFER TO ADA REQUIREMENTS FOR MORE INFORMATION.

2. 4" YELLOW STRIPE PER ADA DESIGN GUIDELINE FOR DISABLED ACCESS PARKING AND ACCESSIBLE ROUTE AT VEHICULAR TRAFFIC AREAS AND SPECIAL PROVISIONS.

3FT X 3FT INTERNATIONAL SYMBOL OF ACCESSIBILITY, ALIGNED WITH THE END OF THE YELLOW SYMBOL WITH BLUE BACKGROUND.

4. ACCESS AISLE STRIPING, INCLUDING: 4" YELLOW BORDER STRIPE; 4" YELLOW 45°HATCH STRIPING @ 36" O.C. MAX; THE WORDS "NO PARKING", WITH UPPERCASE 12" MINIMUM HEIGHT LETTERING, LOCATED SO THAT IT IS VISIBLE BY ENFORCEMENT OFFICIALS.

TRENCH WIDTH: A = 2\*(DIA)"MIN.

1. STANDARD BEDDING: GRANULAR MATERIAL, 3/4" MAX. COMPACTED TO 95%. CLSM BEDDING: 1 SACK CONTROLLED LOW STRENGTH MATERIAL (CLSM) PER MAG STANDARD SPECIFICATION SECTION 604 SHALL BE USED IN LOCATIONS WHERE TRENCH WIDTH IS LESS THAN THE MINIMUM DIMENSIONS SHOWN IN TABLE A. 2. STORM DRAIN TO BE CONCRETE ENCASED WITH TYPE A CONCRETE WITH A COMPRESSIVE STRENGTH OF 4000 PSI WITH 5% AIR ENTRAINMENT. PROFILE PROVIDED IN IMPROVEMENT SHEET. 3. EXISTING ROAD MATERIAL TO BE REPLACED WITH NEW OR SIMILAR MATERIAL COMPACTED TO 95% RELATIVE DENSITY. 4. NATIVE MATERIAL, 8" MIN. 24" MAX COMPACTED TO 95%.

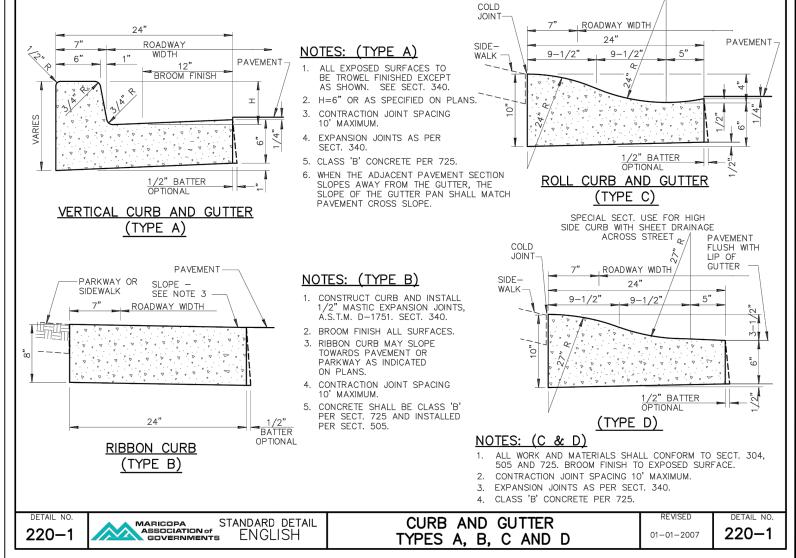
5. UNDISTURBED NATIVE MATERIAL. 6. UNDISTURBED MAINTENANCE ROAD.

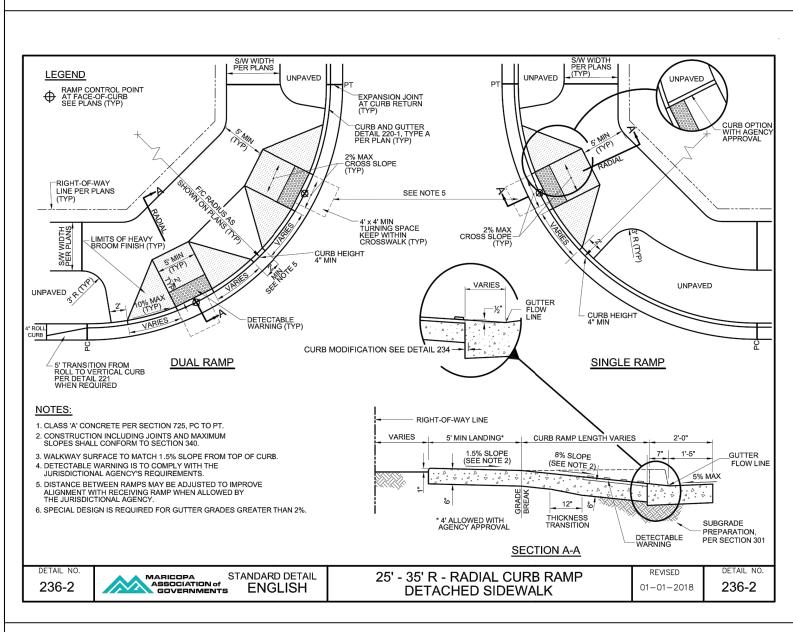
7. STORM DRAIN PIPE. 8. TRENCH WALL. PROVIDE TRENCH PROTECTION AND SHORING AS REQUIRED.

NOTES: TRENCH SECTIONS ARE BASED ON THE GEOTECHNICAL EVALUATION FOR MONTEZUMA CASTLE NATIONAL MONUMENT PARKING LOT ADDITION PREPARED BY OTHERS.

3.08 TRENCH DETAIL

NO.4 BAR -MORTAR PLASTER FOOTING BLOCKS TO BE 8"x8"x16". FILL ALL CORES WITH GROUT MIX 1:3. DOUBLE PIPE HEADWALL **ELEVATION** HEADWALL DIMENSIONS I. ALL CONCRETE SHALL BE CLASS 'A' PER SECT. 505 & 725. 2. CONCRETE MASONRY UNITS (BLOCK) PER SECT. 510, 775 & 776. 3. CONCRETE REINF. SHALL BE NO.4 BAR 12" O.C. BOTH WAYS. PIPE SIZE NOMINAL PIPE SIZE GIVEN FOR REINFORCED DETAIL "A" HEADWALL 501-01-2012 **501-2** 





.05\MOTORCYCLE PARKING SPOT

V13

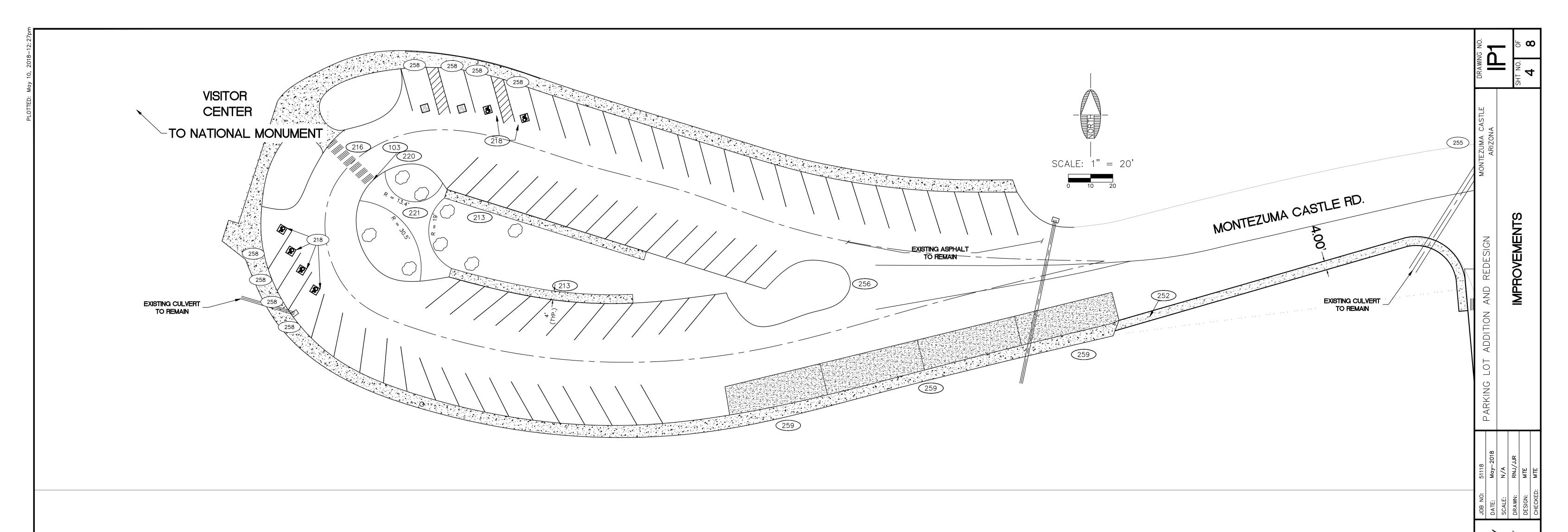
名の入ADA TYPICAL DETAIL

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# DEMO

103 REMOVE AND DISPOSE OF EXISTING CURB AND GUTTER.

# NEW CONSTRUCTION

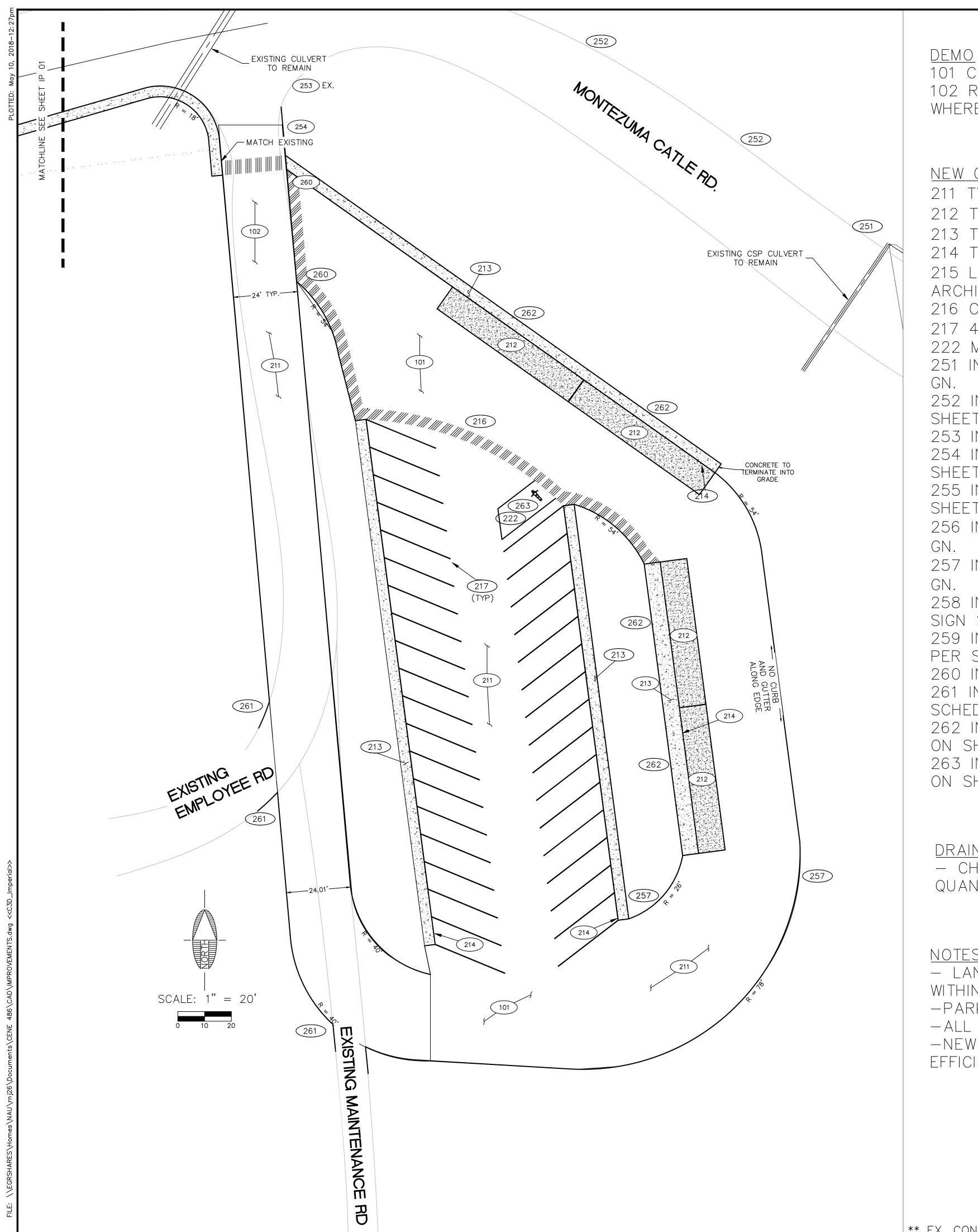
- 213 TYPE A CONCRETE SIDEWALK (6"PCC/4" ABC) PER DETAIL 3.02, SHEET DT
- 216 CROSSWALK PAVEMENT MARKING PER MUTCD.
- 218 (6 EA.) CONVERT STANDARD STALLS TO ADA PARKING STALL. MARKINGS PER DETAIL 307., SHEET DT.
- 220 INSTALL SIDEWALK RAMP PER MAG STD.236-2 ON SHEET DT.
- 221 INSTALL 4" THICK OF  $\frac{1}{4}$ " MINUS DECOMPOSED GRANITE ON 95% COMPACTED SUBGRADE.
- 251 INSTALL SPEED LIMIT 15 MPH SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 252 INSTALL NO PARKING ANYTIME SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 253 INSTALL STOP SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 254 INSTALL NO RIGHT TURN BUS ONLY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 255 INSTALL ADDITIONAL PARKING SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 256 INSTALL ONE-WAY (RIGHT) SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 257 INSTALL ONE-WAY (LEFT) SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 258 INSTALL RESERVED PARKING SYMBOL OF ACCESSIBILITY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 259 INSTALL 15 MINUTE PARKING LOADING & UNLOADING ZONE SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 260 INSTALL DO NOT ENTER SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 261 INSTALL RESTRICTED AREA EMPLOYEE ONLY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.
- 262 INSTALL BUS AND RV PARKING ONLY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN. 263 INSTALL MOTORCYCLE PARKING ONLY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.

### NOTES

- 1. OWNER TO PROVIDE MULTIPLE PICNIC TABLES AND TO BE INSTALLED BY CONTRACTOR UNLESS STATED OTHERWISE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER.
- 2. NEW SIDEWALK TO FOLLOW PARALLEL TO EX. ROAD. IF ADDITIONAL ASPHALT IS REQUIRED CONTRACTOR SHALL SAWCUT 1' FROM EDGE AND MATCH EXISTING PAVEMENT THICKNESS.
- 3. EX. PARKING STALLS MAY NOT REPRESENT ACTUAL PARKING STALL LINES.
- 4. ALL EX. PARKING STALL STRIPING TO REMAIN THE SAME UNLESS DENOTED BY NEW CONSTRUCTION.
- 5. ALL SIDEWALK, CURB, GUTTER, CATCH BASINS, STORMWATER DRAINAGE TO REMAIN.
- 6. NO CHANGE TO PAVEMENT MARKINGS ARE MADE ON THIS SHEET.
- 7. REMOVE LANDSCAPE AS NECESSARY TO INSTALL NEW SIDEWALK AND D.G..
  ALL TREE REMOVALS ARE PROHIBITED UNLESS APPROVED BY OWNER AND
  ENGINEER.
- 8. NEW CONSTRUCTION SHALL NOT IMPEED ON EXISTING PARKING OR PUBLIC FROM SAFELY AND EFFICIENTLY REACHING CUSTOMER SERVICE DESK.
- 9. CONTRACTOR TO LOCATE UTILITIES. ANYTHING SHOWN IS APPROXIMATE.
- 10. TREE LOCATION IS APPROXIMATE.
- 11. EXISTING SIGNS ARE TO REMAIN UNLESS NOTED IN DEMOLITION NOTES.

3600 S. LAS VEGAS BLVD LAS VEGAS, NV 89109

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101 CLEAR AND GRUB WITH IN PARKING LOT IMPROVEMENT 102 REMOVE AND DISPOSE ASPHALT SAWCUT EX. ASPHALT WHERE NEW AC WILL MATCH TO.

# NEW CONSTRUCTION

211 TYPE A ASPHALT PAVEMENT (4" AC/8" ABC) PER DETAIL 3.01, SHEET DT

212 TYPE A CONCRETE PAVEMENT (9" PCC/12" ABC) PER DETAIL 3.03, SHEET DT

213 TYPE A CONCRETE SIDEWALK (6"PCC/4" ABC) PER DETAIL 3.02, SHEET DT

214 TYPE A CURB AND GUTTER PER MAG STD. DET. 220-1.

215 LANDSCAPING PER EXISTING, GRADING PLAN (SHEET GD), LANDSCAPE ARCHITECT AND OWNER.

216 CROSSWALK PAVEMENT MARKING PER THE MUTCD.

217 4" THICK WHITE PAINTED PARKING LINE PER DETAIL 3.04, SHEET DT

222 MOTORCYCLE PARKING PER DETAIL 3.05, SHEET DT.

251 INSTALL SPEED LIMIT 15 MPH SIGN AND POST PER SIGN SCHEDULE ON SHEET

252 INSTALL NO PARKING ANYTIME SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.

253 INSTALL STOP SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.

254 INSTALL NO RIGHT TURN BUS ONLY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.

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262 INSTALL BUS AND RV PARKING ONLY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.

263 INSTALL MOTORCYCLE PARKING ONLY SIGN AND POST PER SIGN SCHEDULE ON SHEET GN.

# DRAINAGE

- CHANNEL CONSTRUCTION NOTES ARE CALLED OUT ON SHEET GD. NO QUANTITIES TAKEN FROM THIS SHEET.

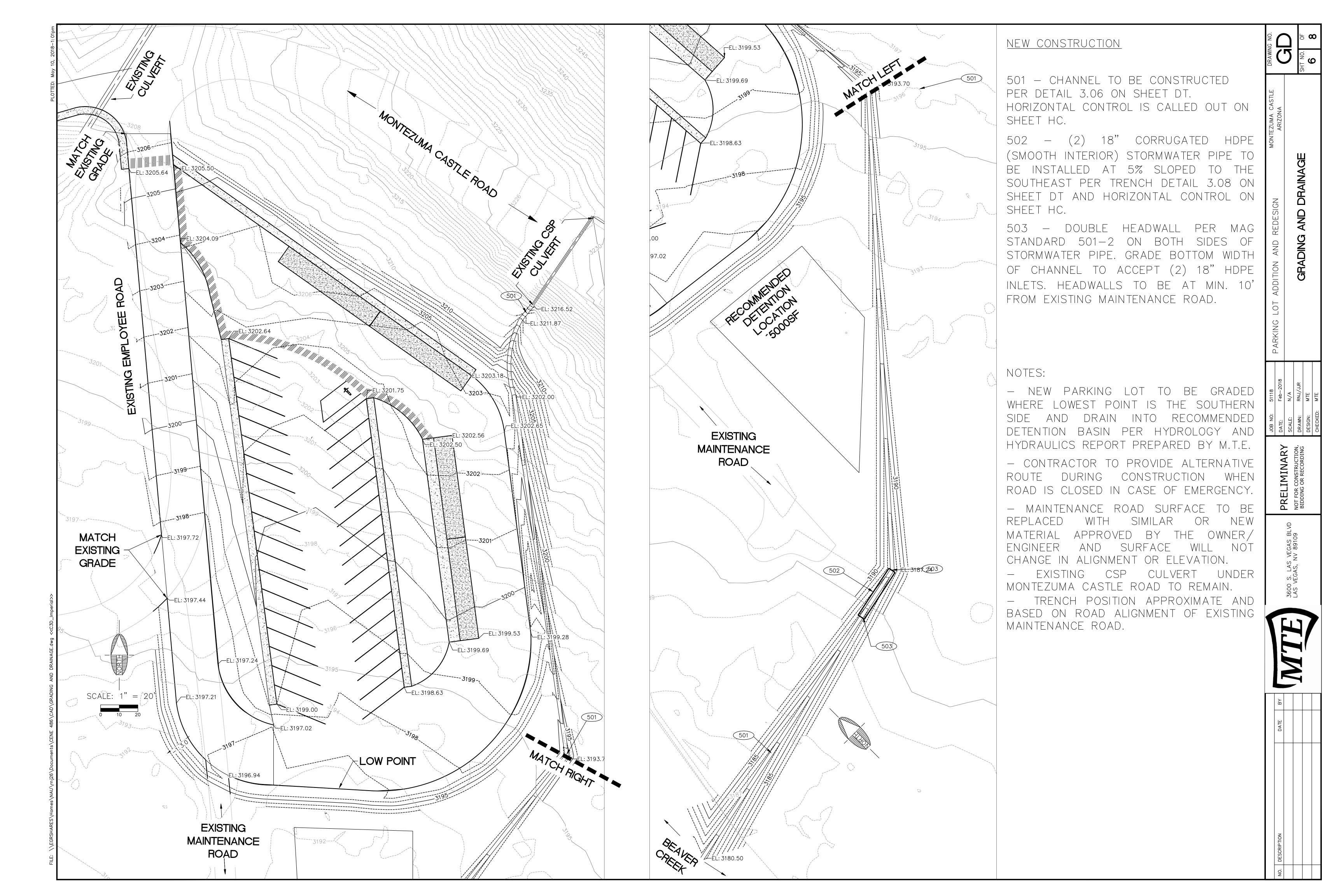
# NOTES

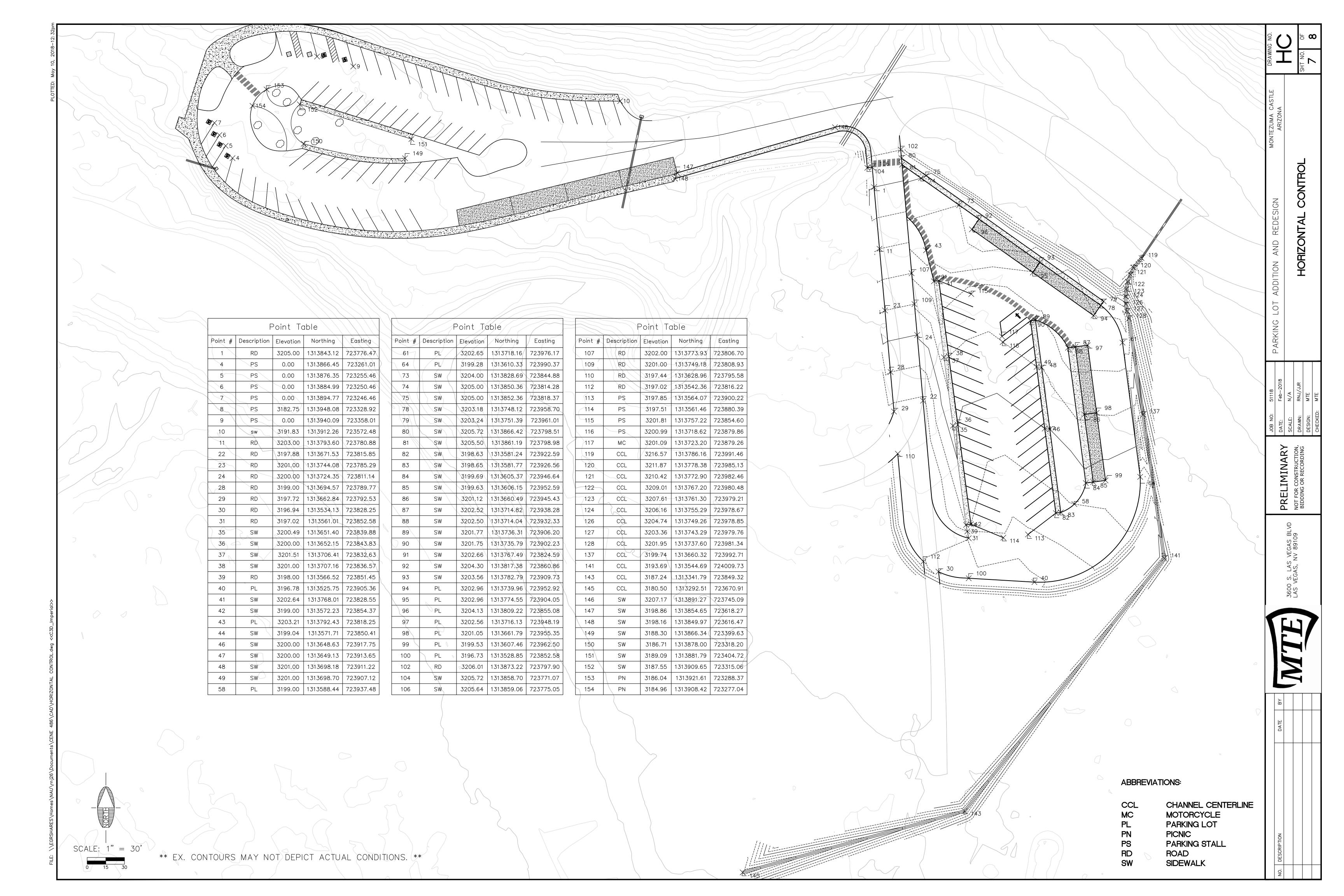
- LANDSCAPE AREA TO REMAIN EX. LANDSCAPE. DO NOT REMOVE WITHIN AREA. ALL TREES WITHIN AREA TO REMAIN UNLESS NOTED BY OWNER.
- -PARKING STALLS TO BE INSTALLED PER DETAIL 3.04 SHT DT.
- -ALL EXISTING SIDEWALK, CURB, GUTTER, CATCH BASINS, STORMWATER DRAINAGE TO REMAIN. -NEW CONSTRUCTION SHALL NOT IMPEED ON EXISTING PARKING OR PUBLIC FROM SAFELY AND EFFICIENTLY REACHING CUSTOMER SERVICE DESK.

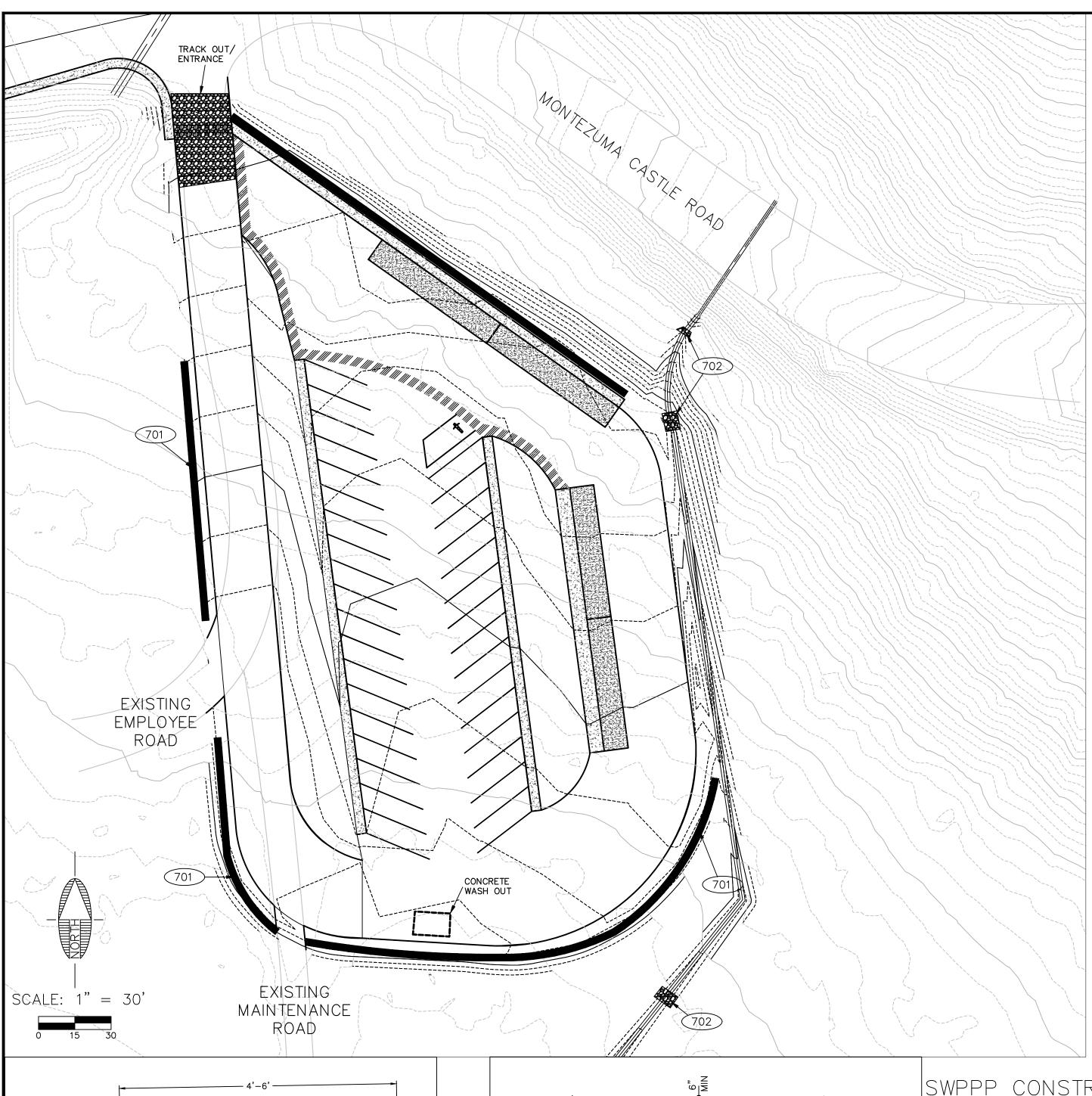
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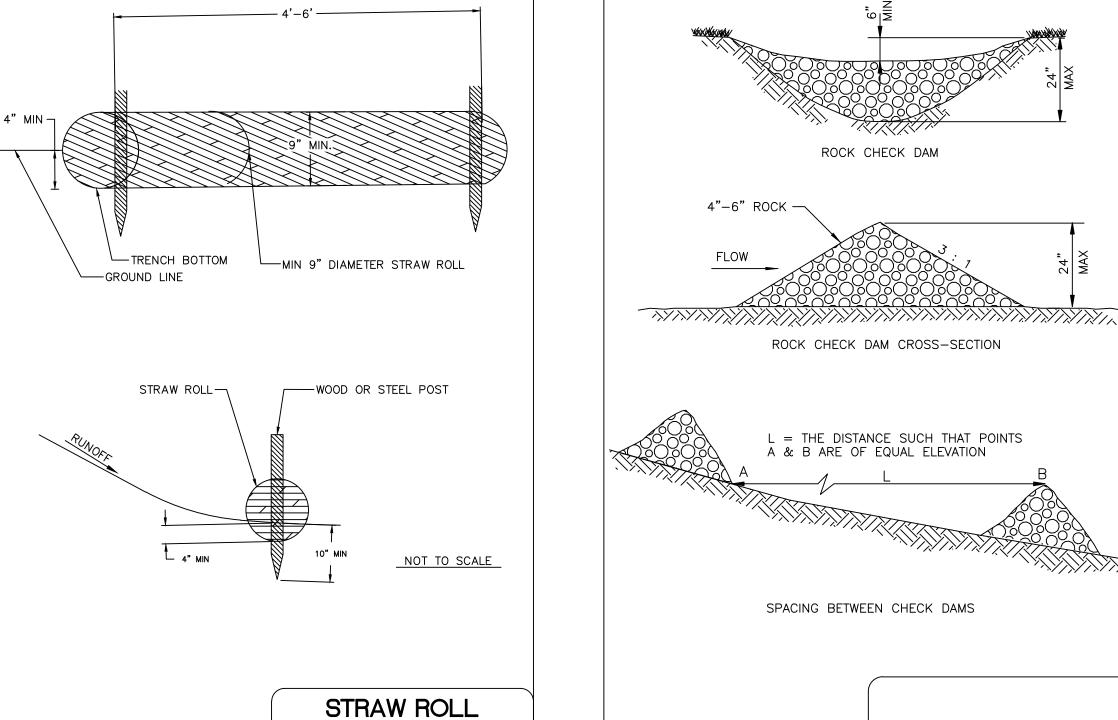
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STAKED

IN TRENCH

SWPPP CONSTRUCTION NOTES

**ROCK CHECK DAM** 

701 — INSTALL STRAW WATTLES PER DETAIL OF THIS SHEET

702 - INSTALL ROCK CHECK DAMS PER DETAIL ON THIS SHEET

EROSION & SEDIMENT CONTROL STANDARD NOTES

1. THE CONTRACTOR MUST NOTIFY BLUE STAKE AT 1-800-STAKE-IT AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH APPLICABLE COUNTY ORDINANCES AND POLICIES.

2. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE AND INSPECTED AND APPROVED BY THE PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR GRADING.

3. THE CONTRACTOR SHALL POST A SIGN AT THE MAIN ENTRANCE TO THE CONSTRUCTION SITE CONTAINING THE AZPDES AUTHORIZATION NUMBER AND/OR COPY OF NOTICE OF INTENT AUTHORIZATION, CONSTRUCTION SITE OPERATOR CONTACT NAME AND TELEPHONE NUMBER. A BRIEF PROJECT DESCRIPTION, AND THE LOCATION OF THE APPROVED STORM WATER POLLUTION PREVENTION PLAN. THE SIGN SHALL ALSO DISPLAY THE NAME, CONTACT INFORMATION, AND QUALIFICATIONS OF THE PERSONNEL PERFORMING

4. THE CONTRACTOR'S REPRESENTATIVE IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND

5. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL COMPLETE AND ADEQUATE STABILIZATION IS ACHIEVED.

6. WATER MUST BE PUMPED INTO AN APPROVED FILTERING DEVICE DURING DEWATERING OPERATIONS.

7. THE CONTRACTOR'S REPRESENTATIVE SHALL INSPECT AND DOCUMENT ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE 10. PLACE DRIP PANS OR ABSORBENT MATERIALS UNDER CONSTRUCTION EQUIPMENT WHEN FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

A. GRAVEL OUTLETS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP WHICH WILL 11. CLEAN UP SPILLS WITH ABSORBENT MATERIALS. PREVENT DRAINAGE. IF THE GRAVEL IS CLOGGED BY SEDIMENT, IT SHALL BE REMOVED AND CLEANED OR REPLACED.

B. SILT FENCE AND SEDIMENT BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER. 14. PROPERLY STORE PAINTS AND SOLVENTS.

C. SEEDED AND SODDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A

GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED OR SODDED 8. INSPECTION FORMS SHALL BE COMPLETED BY THE CONTRACTOR'S INSPECTOR WITH THE 16. ALLOW MATERIAL DELIVERY AND STORAGE ONLY IN DESIGNATED AREAS AND AVOID

MINIMUM FOLLOWING INFORMATION: INSPECTION DATE, TITLE AND QUALIFICATIONS OF EACH TRANSPORT NEAR DRAINAGE PATHS AND WATERWAYS. INSPECTOR, WEATHER INFORMATION FOR PERIOD SINCE LAST INSPECTION, LOCATION OF DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS, LIST OF BMPS THAT NEED TO BE MAINTAINED OR INADEQUATE, LIST ADDITIONAL NEEDED BMPS, CORRECTIVE ACTION REQUIRED, SOURCES OF ALL NON-STORMWATER AND CONTROL MEASURES, DATES WHEN MAJOR GRADING ACTIONS OCCURRED, POLLUTANT DISCHARGE STATUS OF STORAGE AREAS,

19. USE WATERTIGHT DUMPSTERS FOR TRASH AND CONSTRUCTION WASTE.

9. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING INSPECTION RECORDS FOR AT LEAST THREE (3) YEARS FOLLOWING THE COMPLETION OF PROJECT.

10. THE SWPPP SHALL BE MODIFIED BY THE CONTRACTOR WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION OF AN INADEQUATE BMP WHEN NEEDED. BMPS SHALL BE MODIFIED OR ADDED AS SOON AS PRACTICABLE AFTER THE BMP HAS BEEN DETERMINED

11. PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED AND ALL WORK COMPLETED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN AREAS SHALL BE AWAY FROM STORM DRAINS, OPEN DITCHES, OR STREETS. (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN FOURTEEN (14) DAYS. ROADS AND PARKING AREAS SHALL BE STABILIZED AS SOON AS PRECIPITATION OR IRRIGATION IS AVAILABLE.

12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE REMOVED WITHIN 30 DAYS AFTER ADEQUATE SITE STABILIZATION AND AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, AS AUTHORIZED BY THE INSPECTORS. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF

13. WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE, THE ROAD WILL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT WILL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.

14. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.

15. FLOOD PLAIN LIMITS SHALL BE CLEARLY MARKED IN THE FIELD BY FLAGS, SIGNS,

16. TREE SAVE AREAS SHALL BE CLEARLY MARKED IN THE FIELD BY ORANGE SAFETY

17. ORANGE SAFETY FENCE MUST BE INSTALLED AROUND ALL SILT TRAPS AND SEDIMENT ACTIVE.

18. SEEDING AND MULCHING SHALL BE IN ACCORDANCE WITH THE STANDARDS.

19. THE SWPPP SHALL BE MODIFIED BY THE CONTRACTOR WITHIN 15 BUSINESS DAYS FOLLOWING ANY CHANGE IN DESIGN, CONSTRUCTION OPERATION, OR MAINTENANCE THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE OR NOT PREVIOUSLY ASSESSED IN THE SWPPP. 32. FACES OF FINISHED CUT AND FILL SLOPES SHALL BE PREPARED AND MAINTAINED TO 20. THE SWPPP SHALL BE MODIFIED BY THE CONTRACTOR WITHIN 15 BUSINESS DAYS IF IT IS DETERMINED THAT DISCHARGE IS CAUSING OR CONTRIBUTING TO WATER QUALITY

EXCEEDENCES OR THE SWPPP IS INEFFECTIVE. EROSION CONTROL MEASURES

ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS ESTABLISHED HEREIN.

### STRUCTURAL PRACTICES

VEGETATIVE PRACTICES

1. SILT FENCE BARRIER: SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWNSLOPE CREATES A HAZARDOUS CONDITION. OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT LADEN RUNOFF FROM SHEET FLOW AS INDICATED ON THE PLANS.

2. A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE THE ACCESS AREA INTERSECTS WITH EXISTING ROADS DURING MUDDY CONDITIONS. DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING

3. STORM DRAIN INLET & SPILLWAY PROTECTION: ALL STORM SEWER INLETS AND SPILLWAYS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLETS AND CULVERTS.

1. TOP SOILING (STOCKPILE) TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS ARE TO BE STABILIZED WITH TEMPORARY VEGETATION. PRIOR TO LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION & SEDIMENT PLAN TO THE OWNER COVERING THE STOCKPILE AREA WHICH MAY HAVE TO BE APPROVED BY THE PLAN APPROVING AUTHORITY BEFORE ANY ACTIVITY COMMENCES.

2. TEMPORARY SEEDING ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED.

3. GRASS AREAS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH SOD BY THE CONTRACTOR. THE SOD GRASS TYPE SHALL MATCH THE EXISTING AND SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE SOD IS STABILIZED.

# Construction Sequence

- INSTALL INLET PROTECTION
- 2. PAVEMENT REMOVAL AND INSTALL HAY BALES INSTALL CONSTRUCTION ENTRANCES
- 4. DRAINAGE INFRASTRUCTURE/UTILITIES 5. SITE CONSTRUCTION
- 6. PERMANENT REVEGETATION/SLOPE
- STABILIZATION 7. SCHEDULED MONITORING AND MAINTENANCE

GENERAL NOTES FOR EROSION CONTROL

ESPECIALLY WHEN RAIN IS IMMINENT.

1. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR ANY DAMAGED EROSION CONTROL MEASURES,

2. DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT APPROVAL OF THE INSPECTOR.

3. ALL PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH DAY. AFTER A RAIN STORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND DESILTING BASINS. ANY GRADED SLOPE SURFACE PROTECTION MEASURE DAMAGED DURING A RAIN STORM SHALL BE IMMEDIATELY REPAIRED.

FILL SLOPES AT THE CONSTRUCTION SITE PERIMETER MUST DRAIN AWAY FROM THE TOPS OF THE SLOPES AT THE END OF EACH DAY.

6. A COPY OF THE PROJECTS STORM WATER POLLUTION PROTECTION PLAN (SWPPP) SHALL BE MAINTAINED AT THE CONSTRUCTION SITE AND ALWAYS AVAILABLE FOR REVIEW.

7. PROTECT ALL STORM DRAINAGE STRUCTURES FROM SEDIMENT CLOGGING BY PROVIDING INLET PROTECTION AT ALL OPENINGS.

8. AVOID PAVING DURING WET WEATHER.

STORM WATER.

9. STORE MATERIALS AWAY FROM DRAINAGE COURSES TO PREVENT CONTACT WITH

12. OLD ASPHALT MUST BE DISPOSED OF PROPERLY.

13. KEEP WORK SITE CLEAN AND ORDERLY DAILY.

15. PERMANENTLY MARK STORM DRAIN STRUCTURES IN A MANNER APPROVED BY THE CONSTRUCTION INSPECTOR TO MINIMIZE INADVERTENT DISPOSAL OF RESIDUAL PAINTS, SOLVENTS, OR ANY OTHER POLLUTANT.

17. MINIMIZE THE USE OF HAZARDOUS MATERIALS ON SITE.

18. CLEAN UP LEAKS AND SPILLS IMMEDIATELY.

20. COLLECT SITE TRASH AS NEEDED, ESPECIALLY DURING RAINY OR WINDY CONDITIONS. 21. ARRANGE FOR REGULAR WASTE COLLECTION BEFORE CONTAINERS OVERFLOW.

22. DO NOT ALLOW BRUSHES OR PAINT CONTAINERS TO BE CLEANED OUT IN THE DIRT, STREET, GUTTER, OR STORM DRAINS.

23. STORE AND COVER DRY AND WET MATERIALS FROM CONCRETE PLACEMENT AWAY FROM DRAINAGE AREAS.

24. PERFORM WASHOUT OF CONCRETE TRUCKS IN DESIGNATED AREAS ONLY. WASHOUT

25. TEMPORARY SANITARY FACILITIES SHALL BE MAINTAINED IN GOOD WORKING ORDER BY A LICENSED SERVICE.

26. CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING HIS PLAN THROUGHOUT CONSTRUCTION AND INDICATE ANY AND ALL REVISIONS / UPDATES ON THIS PLAN.

27. CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT STORM TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION WATER WILL BE CONTAINED WITHIN THE PROJECT OR CHANNELED INTO THE STORM DRAIN SYSTEM PROVIDED THAT IT IS FREE FROM POLLUTANTS AND DEBRIS.

> 28. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM CORRECTING ERRORS OR OMISSIONS DISCOVERED DURING CONSTRUCTION. CONFORMANCE WITH THE REQUIREMENTS OF THIS PLAN SHALL IN NO WAY RELIEVE THE DEVELOPER FROM HIS RESPONSIBILITIES TO THE SITE AND ADJACENT PROPERTIES. TEMPORARY EROSION CONTROL SHALL CONSIST OF, BUT NOT BE LIMITED TO, CONSTRUCTING SUCH FACILITIES AND TAKING SUCH MEASURES AS ARE NECESSARY TO PREVENT. CONTROL AND ABATE WATER, MUD AND EROSION DAMAGE TO PUBLIC AND PRIVATE PROPERTY AS A RESULT OF THE CONSTRUCTION OF THIS PROPERTY.

> 29. CLEARING AND GRUBBING SHOULD BE LIMITED TO AREAS THAT WILL RECEIVE IMMEDIATE GRADING. EROSION CONTROL MEASURES WILL BE REQUIRED TO PROTECT AREAS WHICH HAVE BEEN CLEARED AND GRUBBED. THESE MEASURES MAY INCLUDE BUT NOT BE LIMITED TO: GRADED DITCHES, SAND OR GRAVEL BAGS, BARRIERS AND SILT FENCING. CARE SHALL BE EXERCISED TO PRESERVE VEGETATION BEYOND LIMITS OF GRADING AND PREVENT SEDIMENT DISCHARGE WHILE CONSTRUCTION IN THIS AREA IS

30. SEDIMENT CONTROL SHALL BE USED AT THE TOE OF ANY ERODIBLE SLOPE. 31. CONTRACTOR SHALL IMMEDIATELY RESTORE ANY DAMAGED EROSION CONTROL MEASURE WITHIN THE PROJECT BOUNDARY.

CONTROL AGAINST EROSION. THESE PERMANENT CONTROL MEASURES MAY CONSIST OF ADEQUATE SEEDING, PLANTING AND JUTE MATTING. THE PROTECTION FOR THE SLOPES SHALL BE INSTALLED AS SOON AS PRACTICABLE AND PRIOR TO CALLING FOR FINAL

33. AFTER A RAIN STORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERMS AND BASINS.

34. CONTRACTOR / SUBCONTRACTOR TRAINING IN SEDIMENT AND EROSION CONTROL IN ACCORDANCE WITH AZPDES.

35. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE, AND TAKE NECESSARY PRECAUTIONS, TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER

1. ALL CONSTRUCTION SHALL CONFORM TO MAG STANDARDS, AZPDES STANDARDS AND SPECIFICATIONS AND GENERALLY ACCEPTED CONSTRUCTION PRACTICE.

2. THESE PLANS REPRESENT A REASONABLE EFFORT TO IMPLEMENT THE MOST CURRENT BEST MANAGEMENT PRACTICES (BMPS) IN MITIGATING STORM WATER POLLUTION DURING CONSTRUCTION. THE EFFECTIVENESS OF THE MITIGATION MEASURES DEPICTED IN THESE PLANS DEPEND IN PART ON PROPER INSTALLATION, IMPLEMENTATION, MAINTENANCE, AND REPAIR OF THE DEVICES SELECTED.

### MAINTENANCE:

IN GENERAL, ALL EROSION & SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. REFER TO THE ATTACHED EROSION & SEDIMENT CONTROL STANDARD NOTES FOR DETAILED MAINTENANCE AND REVEGATATION / STABILIZATION REQUIREMENTS.

	JOB NO:	51118		MONTEZUMA (
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