

CITY OF SPARKS 2017 CDBG STREET IMPROVEMENTS FEDERALLY FUNDED

G ST. FROM ROCK BLVD TO 15TH ST. AND 16TH ST. FROM F ST. TO G ST.


CITY OF SPARKS, WASHOE COUNTY, NEVADA



COS PROJECT NUMBER: 16/17-007

PWP NO: WA-2017-035

APPROVALS


 JON R. ERICSON, P.E., P.T.O.E.
 CITY ENGINEER

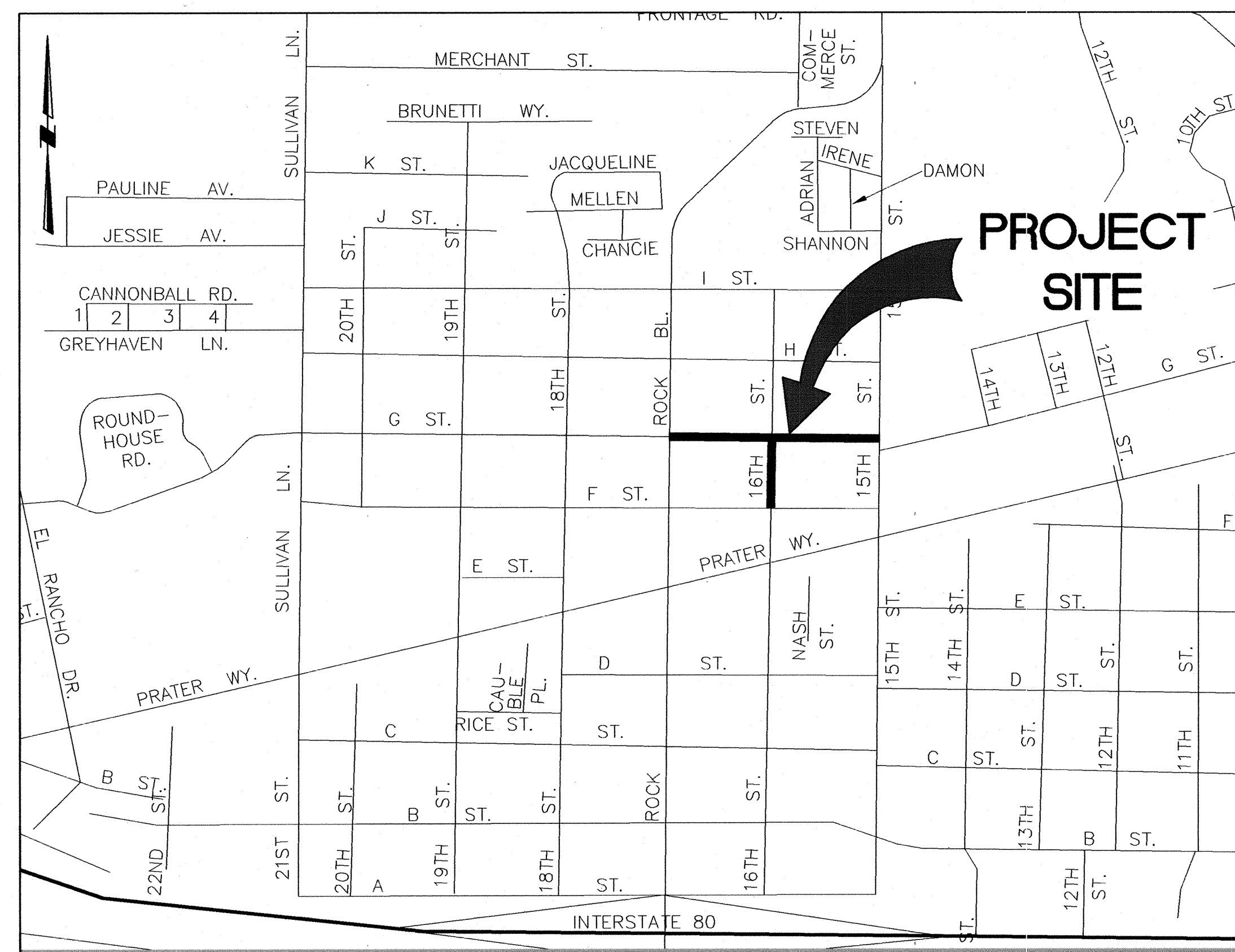
1/24/17
DATE

SPARKS CITY COUNCIL

MAYOR GENO MARTINI
 WARD ONE DONALD ABBOTT
 WARD TWO ED LAWSON
 WARD THREE RON SMITH
 WARD FOUR CHARLENE BYBEE
 WARD FIVE KRISTOPHER DAHIR
 CITY MANAGER STEPHEN DRISCOLL

CIVIL:

CFA, INC.
 1150 CORPORATE BOULEVARD
 RENO, NEVADA 89502
 (775) 856-1150 VOICE
 (775) 856-1160 FAX
 CONTACT: CATIE HARRISON, P.E.



VICINITY MAP
SCALE: NTS

BASIS OF BEARINGS AND COORDINATES:
 THE BASIS OF BEARINGS FOR THIS SURVEY IS NEVADA STATE PLANE, WEST ZONE NAD83(94) BASED ON REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS UTILIZING CORRECTIONS FROM THE NORTHERN NEVADA COOPERATIVE REAL TIME NETWORK. COORDINATES AND DISTANCES HEREON ARE AT GROUND LEVEL BASED ON A COMBINED GRID TO GROUND FACTOR OF 1.000197939.

BASIS OF ELEVATIONS:
 THE BASIS OF ELEVATIONS FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) BASED UPON CITY OF SPARKS BENCHMARK #56 BEING A DRIVE RIVET AND 2" ALUMINUM WASHER IN THE TOP OF CURB AT THE NORTHEAST CORNER OF PRATER WAY AND ROCK BLVD. WITH AN ELEVATION OF 4429.19 FEET.

PREPARED AND SUBMITTED BY:

CATHERINE HARRISON, P.E. _____ DATE _____
 PROJECT ENGINEER



BID SET

GENERAL NOTES

- 1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CITY OF SPARKS STANDARDS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (SDPWC), LATEST EDITION, AS ADOPTED BY CITY OF SPARKS, AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. ALL SPECIFICATIONS REFERENCED HEREIN REFER TO THE SSPWC UNLESS INDICATED OTHERWISE.
- 2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL THROUGHOUT CONSTRUCTION, IN ACCORDANCE WITH APPLICABLE PARTS OF SPECIFICATION SECTION 332, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD, LATEST EDITION).
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL SAFETY DURING CONSTRUCTION, AND ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS AND CODES. THE CONTRACTOR SHALL FENCE AND OR BARRICADE THE CONSTRUCTION AREA AS REQUIRED TO PROTECT ADJACENT SITES, VEHICULAR TRAFFIC, AND PEDESTRIAN TRAFFIC. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF OSHA AND NRS CHAPTER 618, IN THE CONSTRUCTION PRACTICES FOR ALL EMPLOYEES DIRECTLY ENGAGED IN THE CONSTRUCTION OF THIS PROJECT.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR PROTECTION OF ALL EXISTING AND PROPOSED PIPING, UTILITIES, TRAFFIC SIGNAL EQUIPMENT (BOTH ABOVE GROUND AND BELOW GROUND), STRUCTURES ADJACENT TO STREETS, AND ALL OTHER EXISTING IMPROVEMENTS THROUGHOUT CONSTRUCTION.
- 5. THE CONTRACTOR SHALL PURSUE WORK IN A CONTINUOUS AND DILIGENT MANNER TO ENSURE A TIMELY COMPLETION OF THE PROJECT.
- 6. ALL CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE OWNER SO THAT THE QUALITY OF WORK CAN BE CHECKED FOR APPROVAL.
- 7. THE CONTRACTOR SHALL INCORPORATE ADEQUATE DRAINAGE PROCEDURES DURING THE CONSTRUCTION PROCESS TO ELIMINATE EXCESSIVE PONDING AND/OR EROSION.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE IN A NEAT AND ORDERLY MANNER THROUGHOUT THE CONSTRUCTION PROCESS. ALL MATERIALS SHALL BE STORED WITHIN APPROVED CONSTRUCTION AREAS.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUOUS DUST CONTROL THROUGHOUT THE CONSTRUCTION OF ALL ITEMS SHOWN ON THESE DRAWINGS IN CONFORMITY WITH SECTION 40.030 OF WASHOE COUNTY AIR POLLUTION REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REGULAR CLEANING OF ALL MUD, DIRT, DEBRIS, ETC., FROM ANY AND ALL ADJACENT STREETS AND SIDEWALKS.
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AS REQUIRED BY CITY OF SPARKS. THE DUST CONTROL PERMIT SHALL BE AT THE CONTRACTOR'S EXPENSE. THE ENCROACHMENT, EXCAVATION, AND LANE CLOSURE PERMITS ARE "NO FEE" PERMITS FOR CITY PROJECTS.
- 11. ALL DIMENSIONS ARE TO FRONT FACE OF CURB UNLESS NOTED OTHERWISE.
- 12. SHOULD ANY PREHISTORIC OR HISTORIC REMAINS OR ARTIFACTS BE DISCOVERED DURING SITE DEVELOPMENT, WORK SHALL BE TEMPORARILY HALTED AT THE SPECIFIC SITE AND THE STATE HISTORIC PRESERVATION OFFICE OF THE DEPARTMENT OF MUSEUMS, LIBRARY AND ARTS, SHALL BE NOTIFIED TO RECORD AND PHOTOGRAPH THE SITE. THE PERIOD OF TEMPORARY DELAY SHALL BE LIMITED TO A MAXIMUM OF TWO (2) WORKING DAYS FROM THE DATE OF NOTIFICATION.
- 13. A PRECONSTRUCTION CONFERENCE WILL BE HELD WITH CITY OF SPARKS PRIOR TO ANY CONSTRUCTION.
- 14. NO MATERIALS OF ANY KIND SHALL BE STOCKPILED OR CONSTRUCTION EQUIPMENT PARKED ON CONCRETE OR ASPHALT SURFACES.
- 15. CONSTRUCTION OF STREET IMPROVEMENTS MUST ALLOW FOR THE PERPETUATION OF ALL EXISTING LEGAL ACCESSES AND EXISTING DRIVEWAYS.
- 16. THE CONTRACTOR SHALL FURNISH PRODUCT SUBMITTALS FOR PUBLIC IMPROVEMENTS INCLUDING MANUFACTURER'S SPECIFICATIONS, SHOP DRAWINGS, CONCRETE MIX DESIGNS, ASPHALT MIX DESIGNS, GRADATION CERTIFICATIONS, ETC. FOR REVIEW BY THE ENGINEER OF RECORD. SUBMITTALS SHALL BE FURNISHED PROMPTLY AFTER EXECUTION OF THE CONTRACT, BUT IN ALL CASES PRIOR TO DELIVERY OF SUCH MATERIALS.
- 17. THE CONTRACTOR UPON COMPLETION OF THE PROJECT, SHALL PREPARE AND SUBMIT RECORD DRAWINGS TO THE OWNER. SUBMITTAL SHALL BE IN THE FORM OF A CD IN 300 DPI, MULTIPAGE PDF FORMAT.
- 18. THE CONTRACTOR IS REQUIRED TO FILE A NOTICE OF INTENT (NOI) WITH THE NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR IS REQUIRED TO SUBMIT THE NOI, PAY THE ASSOCIATED FEES, AND PROVIDE A COPY OF THE NOI RECEIPT WITH THE EE PERMIT APPLICATION. BEST MANAGEMENT PRACTICES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL COMPLY AND MAINTAIN THE CONSTRUCTION SITE INSPECTION CHECKLIST, LOCATED IN APPENDIX D OF THE TRUCKEE MEADOWS BMP HANDBOOK. THE CHECKLIST SHALL BE ONSITE FOR REVIEW BY STATE AND LOCAL GOVERNMENT INSPECTORS. CONTRACTOR SHALL INSPECT THE SITE DAILY PRIOR TO FORECASTED RAIN EVENTS AND WITHIN 24 HOURS OF ANY RAIN EVENT. IF AN INSPECTOR DETERMINES THAT INSTALLED STORM WATER CONTROLS PLACE THE CITY AT RISK OF VIOLATING ITS NPDES PERMIT, THE INSPECTOR MAY ORDER A CHANGE TO THE STORM WATER CONTROLS. IF THE CHANGE IS NOT ACCEPTABLE OR IS NOT IMMEDIATELY IMPLEMENTED, A VIOLATION POSSIBLY RESULTING IN A FINE MAY BE ISSUED. THE CONTRACTOR SHALL NOT DISPOSE OR PLACE DEBRIS IN ANY CITY OF RENO MANHOLE, CATCH BASIN OR FACILITY.

UTILITY NOTES

- 1. UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CALL UNDERGROUND SERVICES ALERT, USA, AT (1-800-227-2600) PRIOR TO ANY EXCAVATION.
- 2. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES WHICH MAY CONFLICT WITH THE NEW WORK PRIOR TO BEGINNING CONSTRUCTION.
- 3. THE CONTRACTOR SHALL NOTIFY NV ENERGY AND TMWA AT LEAST 48 HOURS PRIOR TO THE START OF UTILITY CONSTRUCTION.
- 4. THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO AVOID SHUT OFF OR DISCONNECTION OF ACTIVE UTILITIES. IF SHUT OFFS ARE UNAVOIDABLE, THE CONTRACTOR SHALL COORDINATE THAT SHUT OFF WITH THE AFFECTED CUSTOMERS AND UTILITY COMPANIES AT LEAST 48 HOURS IN ADVANCE OF THE DISRUPTION OF THE SERVICE.
- 5. CONTRACTOR TO PROVIDE ALL MISCELLANEOUS PIPE, FITTINGS AND APPURTENANCES AS REQUIRED TO COMPLETE THE UTILITY WORK AS SHOWN.
- 6. A MANHOLE PROTECTION PLAN SHALL BE SUBMITTED AND APPROVED PRIOR TO ANY MANHOLE ADJUSTMENTS. THE PLAN SHALL CLEARLY IDENTIFY HOW THE CONTRACTOR WILL PROTECT FROM ALL DEBRIS ENTERING INTO THE SYSTEM AND A DETAIL OF HOW THE CONTRACTOR IS PREPARED FOR EMERGENCY OVERFLOWS. PRIOR TO PERFORMING ANY ADJUSTMENTS OR GROUTING THE ENGINEER OF RECORD SHALL OBSERVE AND VERIFY THAT THE CONTRACTOR IS IN COMPLIANCE WITH THE "MANHOLE PROTECTION PLAN".
- 7. MANHOLES AND CATCH BASINS SHALL BE PORTLAND CEMENT CONCRETE PER SPECIFICATION SECTION 204.00. MANHOLES AND CATCH BASINS SHALL BE PLACED PER APPLICABLE PARTS OF SPECIFICATION SECTIONS 305.00, 306.00, AND 311.00.
- 8. ALL CATCH BASIN COVERS DESIGNATED TO BE RESET TO GRADE SHALL BE REPLACED WITH A NEW FRAME AND COVER AT THE CONTRACTOR'S EXPENSE.
- 9. CONTRACTOR TO VACUUM CLEAN ALL STORM DRAIN & SANITARY SEWER MANHOLES AND CATCH BASINS AFTER REMOVING CONTAINMENT DEVICES UPON COMPLETION OF THE PROJECT.
- 10. ALL BMPS SHALL BE REMOVED FROM CATCH BASINS & MANHOLES PRIOR TO FINAL ACCEPTANCE & RELEASE OF RETENTION.
- 11. THE CONTRACTOR SHALL POTHOLE ALL WATER MAINS AHEAD OF CONSTRUCTION AND VERIFY THAT SUFFICIENT VERTICAL CLEARANCE EXISTS TO PROVIDE SUFFICIENT PROTECTIVE COVER AND TO ACCOMMODATE THE STREET STRUCTURAL SECTION. IF WATER PIPE IS NEAR THE SUBGRADE, THE CONTRACTOR MAY NEED TO PERFORM ADDITIONAL WORK TO SHIELD WATER MAINS FROM DAMAGE. SUCH WORK MAY INCLUDE, BUT NOT BE LIMITED TO, REDUCING EXCAVATION/PULVERIZATION DEPTH OVER THE PIPE ZONE, ADDING BASE OVER THE PIPE TO INCREASE COVER PRIOR TO COMPACTION, OR REDUCING VIBRATORY COMPACTION AND CONSTRUCTION TRAFFIC OVER THE PIPE ZONE. ACTUAL FIELD CONDITIONS SHOULD BE EXAMINED AND CONSTRUCTION METHODS DISCUSSED PRIOR TO BEGINNING EXCAVATION. WATER MAINS IN G STREET AND 16TH STREET ARE DI CL 350 PSI AND C-900 PVC CL 235 PSI.
- 12. TMWA WILL INSPECT, CLEAN, OPERATE AND DOCUMENT ALL TMWA-OWNED VALVES WITHIN THE CONSTRUCTION ZONE PRIOR TO THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL REVIEW AND VERIFY THIS INFORMATION WITH CITY OF SPARKS. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF TMWA'S INSPECTOR PRIOR TO CONSTRUCTION. THE FINAL LIST WILL BE USED FOR VALVE ADJUSTMENT/CLEANING VERIFICATION AT THE END OF THE PROJECT.
- 13. STEEL PLATES - THE USE OF STEEL PLATES SERVING AS A TEMPORARY TRENCH COVER SHALL ONLY BE USED WITHIN CLOSED TRAVEL LANES. THE USE OF STEEL PLATES WITHIN CLOSED TRAVEL LANES SERVING AS A TEMPORARY TRENCH COVER SHALL HAVE ASPHALT RAMPS CONSTRUCTED AROUND THE PERIMETER OF THE PLATE(S) FOR EMERGENCY VEHICLES AND CONSTRUCTION VEHICLES. WARNING SIGNS MUST BE APPROPRIATELY PLACED TO CAUTION MOTORISTS. STEEL PLATES WILL NOT BE ALLOWED IF SNOW OR FREEZING TEMPERATURES ARE EXPECTED.

DEMOLITION NOTES

- 1. THE REMOVAL OF EXISTING IMPROVEMENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIAL TECHNICAL SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC, 2012), SECTION 301.00.
- 2. EXISTING IMPROVEMENTS, ADJACENT PROPERTY, FENCING, WALLS, UTILITIES AND OTHER FACILITIES, TREES AND PLANTS THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED FROM INJURY OR DAMAGE RESULTING FROM THE CONTRACTORS OPERATIONS IN ACCORDANCE WITH SPECIFICATION SECTION 301.04 AND 300.04.
- 3. THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, WATER & GAS VALVE COVERS, & UTILITY BOXES AND FRAME AND COVERS, BOTH HORIZONTALLY AND VERTICALLY, AS REQUIRED TO FIT THE NEW WORK. THE CONTRACTOR SHALL REPLACE ANY APPURTENANCE DAMAGED DURING RELOCATION AT THE COST OF THE CONTRACTOR.
- 4. ALL EXISTING FEATURES IN CONFLICT WITH PROPOSED SHALL BE REMOVED, RELOCATED AND/OR REPLACED. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER AND THE GOVERNING AGENCIES PRIOR TO SUCH REMOVAL, RELOCATION AND/OR REPLACEMENT.

UTILITY OWNERSHIP

SANITARY SEWER	---	CITY OF SPARKS
STORM DRAIN	---	CITY OF SPARKS
WATER	---	TMWA
GAS	---	NV ENERGY
ELECTRIC	---	NV ENERGY
TELEPHONE	---	AT&T
CABLE TV	---	CHARTER

LEGEND

	REMOVE AND REPLACE SIDEWALK		EXISTING STREET SIGN
	REMOVE AND REPLACE RESIDENTIAL DRIVEWAY APRON		EXISTING STREET LIGHTING AND TRAFFIC SIGNAL
	REMOVE AND REPLACE COMMERCIAL DRIVEWAY APRON		EXISTING FIRE HYDRANT
	REMOVE AND REPLACE CURB & GUTTER		EXISTING FIRE DEPARTMENT CONNECTIONS
	ASPHALT RECONSTRUCTION		EXISTING SURVEY MONUMENT
	EXISTING CURB & GUTTER		EXISTING POWER POLE
	PROPOSED CURB & GUTTER		EXISTING TRANSFORMER PAD
	EXISTING 1' CONTOUR		EXISTING ELECTRIC VAULT
	EXISTING 5' CONTOUR		EXISTING TELEPHONE VAULT
	PROPOSED 1' CONTOUR		EXISTING SANITARY SEWER MANHOLE
	PROPOSED 5' CONTOUR		EXISTING STORM DRAIN MANHOLE
	SAWCUT		EXISTING ELECTRIC MANHOLE
	EXISTING SPOT ELEVATION		EXISTING UTILITY MANHOLE
	PROPOSED SPOT ELEVATION		EXISTING GAS VALVE
	EXISTING SANITARY SEWER		EXISTING WATER METER
	EXISTING STORM DRAIN		EXISTING WATER VALVE
	EXISTING ELECTRIC		EXISTING TYPE 1 CATCH BASIN
	EXISTING GAS		EXISTING TYPE 4R CATCH BASIN
	EXISTING TELEPHONE		EXISTING TREE
	EXISTING OVERHEAD LINES		TEST PIT
	EXISTING CABLE		
	EXISTING FIBER OPTIC		
	EXISTING WATER LINE		
	EXISTING WATER AND GAS LINE		
	EXISTING PCC DRIVEWAY		
	EXISTING CHAINLINK FENCE		
	ABANDONED WATER LINE		
	PROPOSED PEDESTRIAN RAMP		



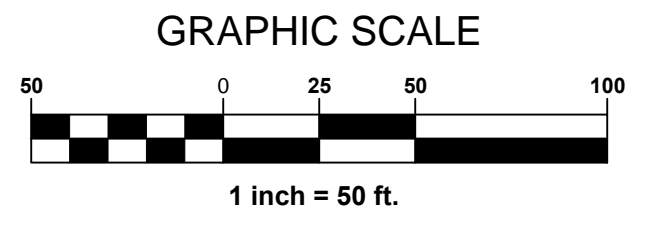
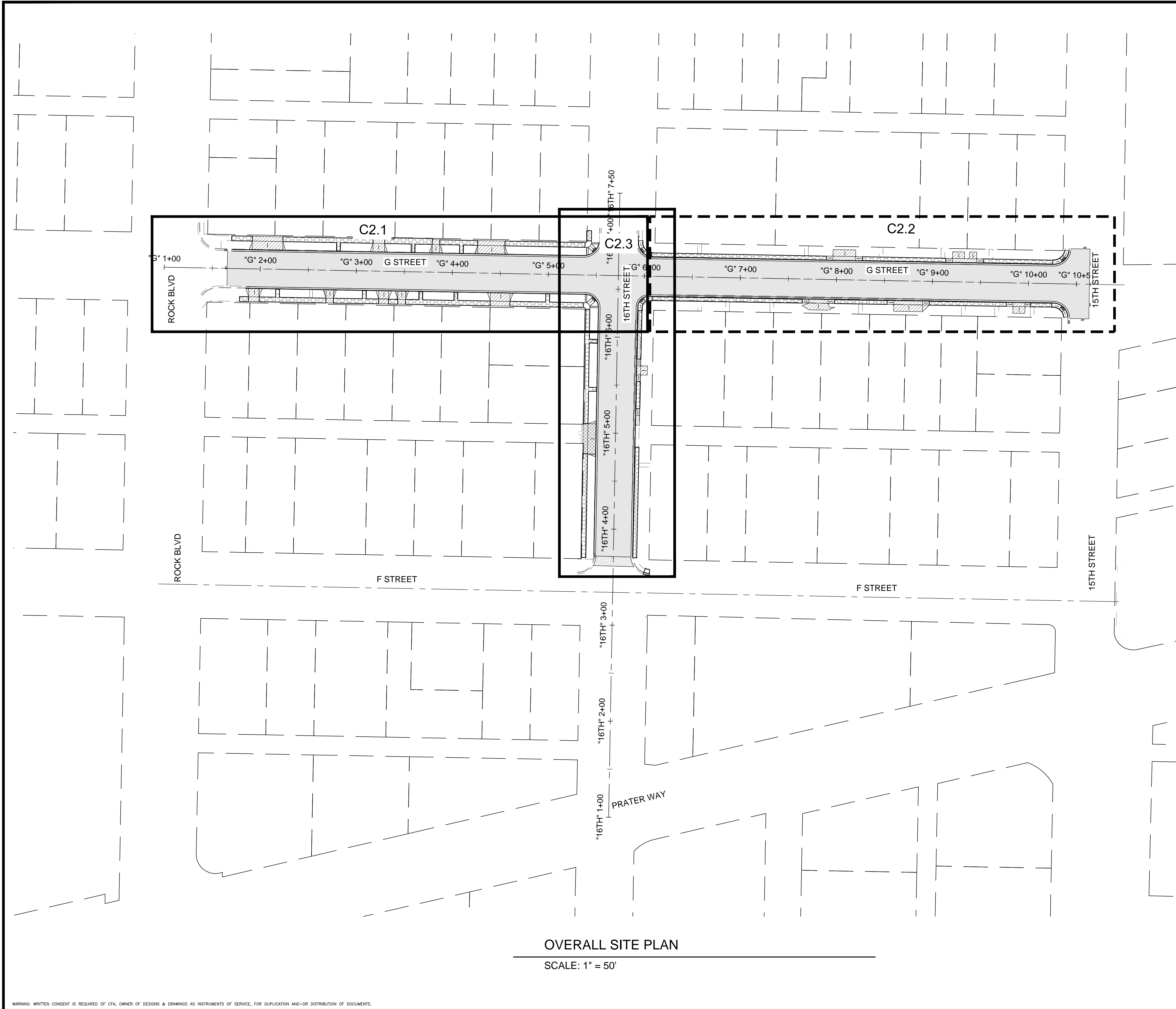
CAUTION - NOTICE TO CONTRACTOR

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND FEATURES AS SHOWN ON THESE PLANS IS BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE LOCATIONS AND/OR ELEVATIONS AT THE PROPOSED POINTS OF CONNECTION AND IN AREAS OF POSSIBLE CONFLICT PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, HE SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OR RELOCATE ALL EXISTING UTILITIES AND FEATURES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN APPROVALS FROM THE GOVERNING AGENCIES, THE ENGINEER, AND THE UTILITY COMPANIES PRIOR TO SUCH REMOVAL AND/OR RELOCATION.
4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH PRELIMINARY OR NONAPPROVED PLANS.
5. CONTRACTOR TO PROVIDE TRAFFIC CONTROL IN CONFORMANCE WITH THE LATEST EDITION OF MUTCD WHENEVER CONSTRUCTION IS IN PROGRESS WITHIN THE PUBLIC TRAVEL WAY.

CONCRETE & PAVEMENT NOTES

- 1. PORTLAND CEMENT CONCRETE SHALL MEET THE REQUIREMENTS OF SPECIFICATION SECTION 202.00. PC CONCRETE EXPOSED TO FREEZE-THAW ENVIRONMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND MEET THE SPECIFIC REQUIREMENTS OF SPECIFICATION SECTION 337.10.01.01
- 2. REFERENCE DETAIL 3, SHEET C3.1 FOR ASPHALTIC CONCRETE REQUIREMENTS.
- 3. TEMPORARY PAVEMENT SHALL MEET THE REQUIREMENTS OF ASTM D4215, PLACE COLD MIX, COLD LAID BITUMINOUS PAVING MIXTURE IN ACCORDANCE WITH ASTM D4215 IMMEDIATELY FOLLOWING BACKFILLING AND COMPACTION OF TRENCHES THROUGH EXISTING PAVEMENTS. THE CONTRACTOR SHALL MAINTAIN PAVEMENT IN A SAFE AND SMOOTH CONDITION UNTIL FINAL PAVEMENT CAN BE PLACED, TO THE SATISFACTION OF THE ENGINEER.
- 4. CURB, GUTTER AND SIDEWALK SHALL BE PLACED IN ACCORDANCE WITH SPECIFICATION SECTION 312.00.
- 5. CONCRETE PAVEMENTS SHALL BE PLACED IN ACCORDANCE WITH SPECIFICATION SECTION 314.00.
- 6. ASPHALT CONCRETE PAVEMENT SHALL BE PLACED IN ACCORDANCE WITH SPECIFICATION SECTION 320.00.

ENGINEERS - LAND SURVEYORS PLANNERS - LANDSCAPE ARCHITECTS 1150 CORPORATE BOULEVARD • RENO, NEVADA 89502 775-856-1150 MAIN • 775-856-1160 FAX • CFARENQ.COM	
2017 CDBG STREET IMPROVEMENTS	NEVADA GENERAL NOTES G ST. FROM ROCK BLVD TO 15TH ST. 16TH ST. FROM F ST. TO G ST.
JOB NO. 15101.04 BY RA DATE 01-06-2017	SHEET <div style="font-size: 2em; font-weight: bold;">C1.1</div> <div style="font-size: 3em; font-weight: bold; margin-left: 100px;">8</div>
REVISIONS DATE MARK	
BY	



DRAWING SCALE
 22" x 34" : 1"=50'
 11" x 17" : 1"=25'

SHEET INDEX

C1.0	TITLE SHEET
C1.1	GENERAL NOTES
C2.0	SHEET INDEX
C2.1	G STREET STA: 1+00 - 6+00
C2.2	G STREET STA: 6+00 - 10+50
C2.3	16TH STREET STA: 3+50 - 7+50
C3.0	DETAILS
C3.1	DETAILS

NO.	REVISIONS	DATE	BY



BID SET

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PLANNERS • LANDSCAPE ARCHITECTS
 1150 CORPORATE BOULEVARD • RENO, NEVADA 89502
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- CONTRACTOR TO PROVIDE TRAFFIC CONTROL IN CONFORMANCE WITH THE LATEST EDITION OF MUTCD WHENEVER CONSTRUCTION IS IN PROGRESS WITHIN THE PUBLIC TRAVEL WAY.

OVERALL SITE PLAN
 SCALE: 1" = 50'

2017 CDBG STREET IMPROVEMENTS

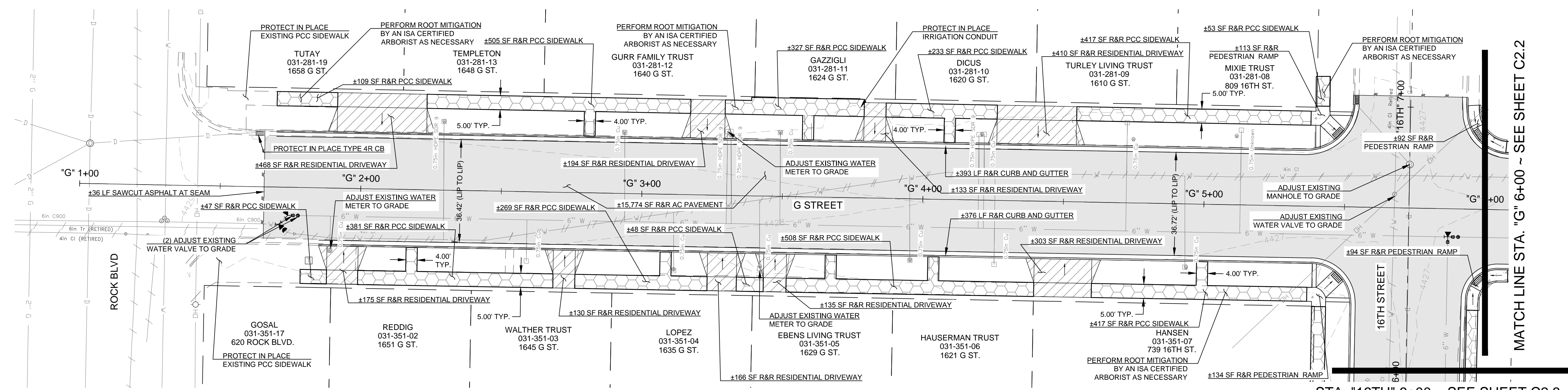
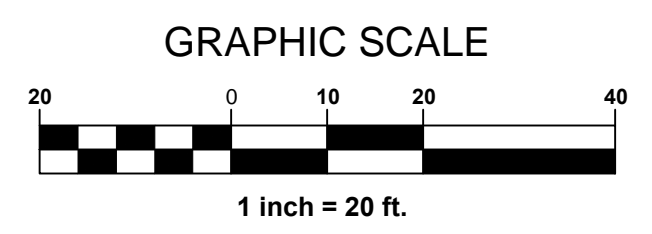
SHEET INDEX
 G ST. FROM ROCK BLVD TO 15TH ST.
 16TH ST. FROM F ST. TO G ST.

NEVADA
 SPARKS

JOB NO. 15101.04
 BY RA
 DATE 01-06-2017
 SHEET

C2.0
 8

DRAWING SCALE
 22" x 34": 1"=20'
 11"x17" : 1"=40'



STA. "16TH" 6+00 ~ SEE SHEET C2.3
 FOR CONTINUATION

ESTIMATED TOTALS SHEET C2.1

ITEM	QUANTITY
CURB AND GUTTER (6' C3.1)	769 LF
SIDEWALK (1' C3.0)	3,314 SF
RESIDENTIAL DRIVEWAY (6+7' C3.0)	2,114 SF
ASPHALT RECONSTRUCTION (3+4' C3.1)	15,774 SF
CONSTRUCT PEDESTRIAN RAMP (RAMP LENGTH VARIES TO COMPLY W/ ADA MAX. SLOPE.) (2' C3.0) OR (5' C3.0)	433 SF
SAWCUT (2' C3.1)	36 LF

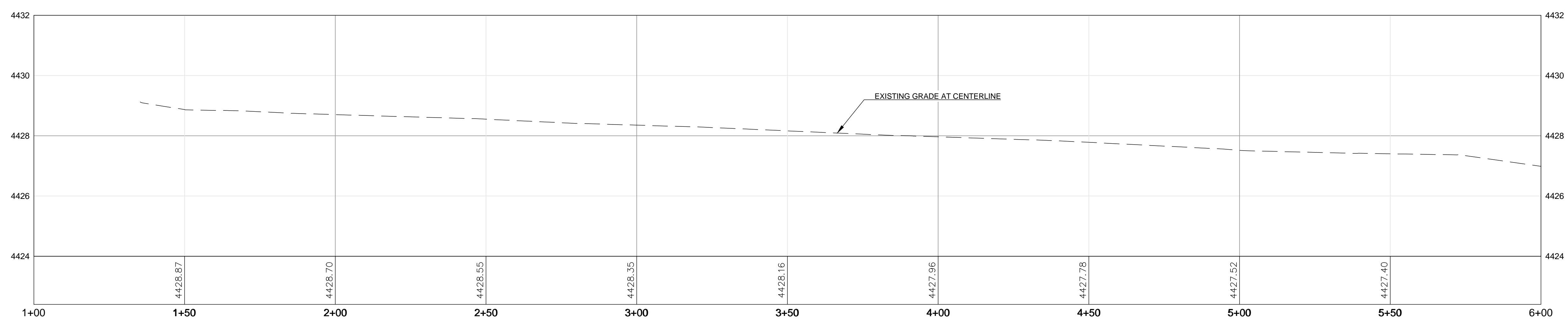
PLAN & PROFILE "G" STREET - STA: 1+00 - 6+00
 SCALE: 1" = 20' H
 2" V

LEGEND

	EXISTING ABANDONED WATER LINE
	EXISTING 36" WATER LINE
	EXISTING 6" WATER LINE
	EXISTING 2" GAS LINE
	EXISTING STORM DRAIN LINE
	EXISTING OVERHEAD LINE

DEMOLITION AND CONSTRUCTION NOTES

- NOT ALL EXISTING IMPROVEMENTS, ADJACENT PROPERTY, FENCING, WALLS, UTILITIES AND OTHER FACILITIES, TREES AND PLANTS ARE SHOWN ON THE PLANS. ALL EXISTING THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED FROM INJURY OR DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS IN ACCORDANCE WITH SPECIFICATION SECTION 301.04 AND 300.04.
- ALL SETTLING, DRAINAGE ISSUES, AND UNSUITABLE MATERIALS SHALL BE REMOVED, CORRECTED, AND REPLACED WITH RECYCLED AGGREGATE BASE OR IMPORTED TYPE 2, CLASS B AGGREGATE BASE.
- LENGTHS SHOWN FOR RAMPS ON DRIVEWAYS AND PEDESTRIAN RAMPS ARE FOR BID PURPOSES ONLY. LENGTHS SHALL BE VERIFIED IN FIELD AND CONFORM TO THE DETAILS AND SPECIFICATIONS PROVIDED.
- LINE AND GRADE FOR IMPROVEMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR IN COORDINATION WITH THE CITY OF SPARKS INSPECTOR.



BID SET

NO.	DATE	MARK	REVISIONS	BY



ENGINEERS - LAND SURVEYORS
PLANNERS - LANDSCAPE ARCHITECTS
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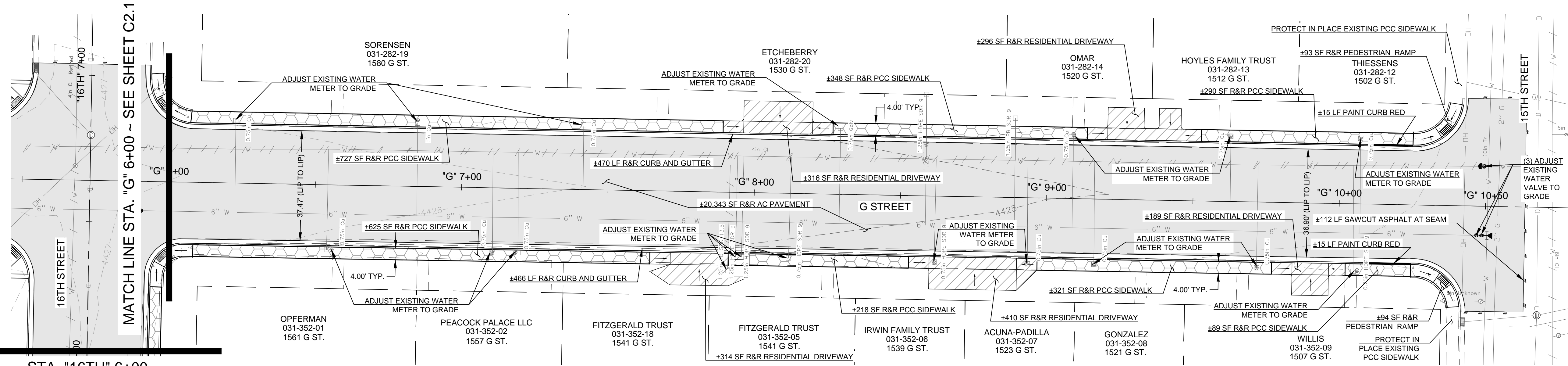
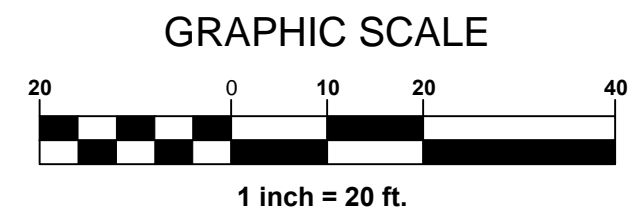
2017 CDBG STREET IMPROVEMENTS
 G ST. FROM ROCK BLVD TO 15TH ST.
G STREET
 "G" STA: 1+00 - 6+00

JOB NO. 15101.04
 BY JL
 DATE 01-06-2017

SHEET **C2.1**
 OF 8

NEVADA
 SPARKS

DRAWING SCALE
 22" x 34" : 1"=20'
 11" x 17" : 1"=40'



STA. "16TH" 6+00
 SEE SHEET C2.3 FOR
 CONTINUATION

ESTIMATED TOTALS SHEET C2.2

ITEM	QUANTITY
CURB AND GUTTER (6 C3.1)	936 LF
SIDEWALK (1 C3.0)	2,618 SF
RESIDENTIAL DRIVEWAY (6+7 C3.0)	1,525 SF
ASPHALT RECONSTRUCTION (3+4 C3.1)	20,343 SF
CONSTRUCT PEDESTRIAN RAMP (RAMP LENGTH VARIES TO COMPLY W/ ADA MAX. SLOPE.) (2 C3.0 OR 5 C3.0)	187 SF
SAWCUT (2 C3.1)	112 LF

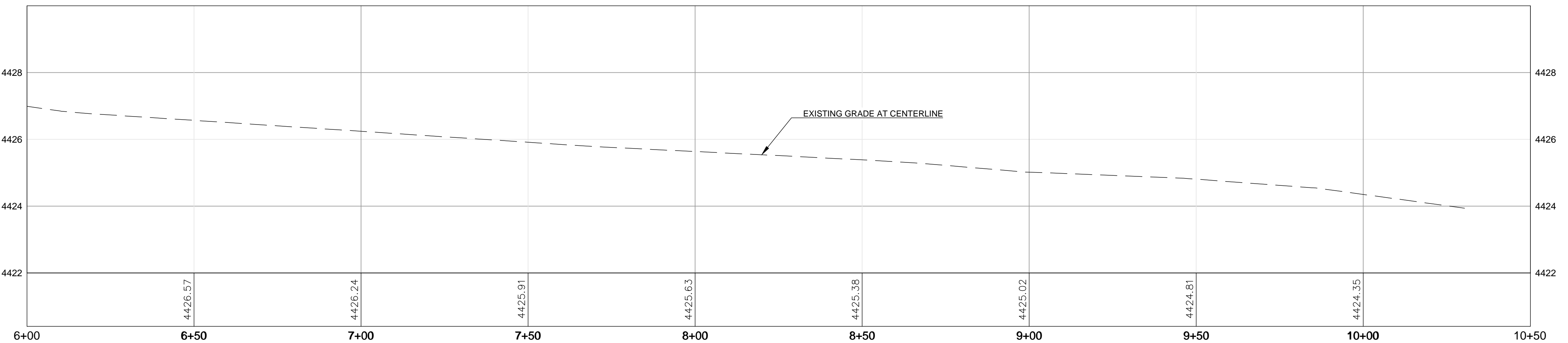
PLAN & PROFILE "G" STREET - STA: 6+00 - 10+50
 SCALE: 1" = 20' H
 2" V

LEGEND

	EXISTING ABANDONED WATER LINE
	EXISTING 36" WATER LINE
	EXISTING 6" WATER LINE
	EXISTING 2" GAS LINE
	EXISTING STORM DRAIN LINE
	EXISTING OVERHEAD LINE

DEMOLITION AND CONSTRUCTION NOTES

1. NOT ALL EXISTING IMPROVEMENTS, ADJACENT PROPERTY, FENCING, WALLS, UTILITIES AND OTHER FACILITIES, TREES AND PLANTS ARE SHOWN ON THE PLANS. ALL EXISTING THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED FROM INJURY OR DAMAGE RESULTING FROM THE CONTRACTORS OPERATIONS IN ACCORDANCE WITH SPECIFICATION SECTION 301.04 AND 300.04.
2. ALL SETTLING, DRAINAGE ISSUES, AND UNSUITABLE MATERIALS SHALL BE REMOVED, CORRECTED, AND REPLACED WITH RECYCLED AGGREGATE BASE OR IMPORTED TYPE 2, CLASS B AGGREGATE BASE.
3. LENGTHS SHOWN FOR RAMPS ON DRIVEWAYS AND PEDESTRIAN RAMPS ARE FOR BID PURPOSES ONLY. LENGTHS SHALL BE VERIFIED IN FIELD AND CONFORM TO THE DETAILS AND SPECIFICATIONS PROVIDED.
4. LINE AND GRADE FOR IMPROVEMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR IN COORDINATION WITH THE CITY OF SPARKS INSPECTOR.



BID SET

NO.	DATE	MARK	REVISIONS	BY

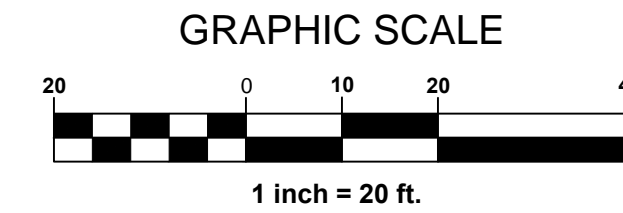
ENGINEERS - LAND SURVEYORS
PLANNERS - LANDSCAPE ARCHITECTS
 1150 CORPORATE BOULEVARD - RENO, NEVADA 89502
 775-856-1150 MAIN - 775-856-1160 FAX - CFARENO.COM

2017 CDBG STREET IMPROVEMENTS
 G ST. FROM ROCK BLVD TO 15TH ST.
G STREET
 "G" STA: 6+00 - 10+50

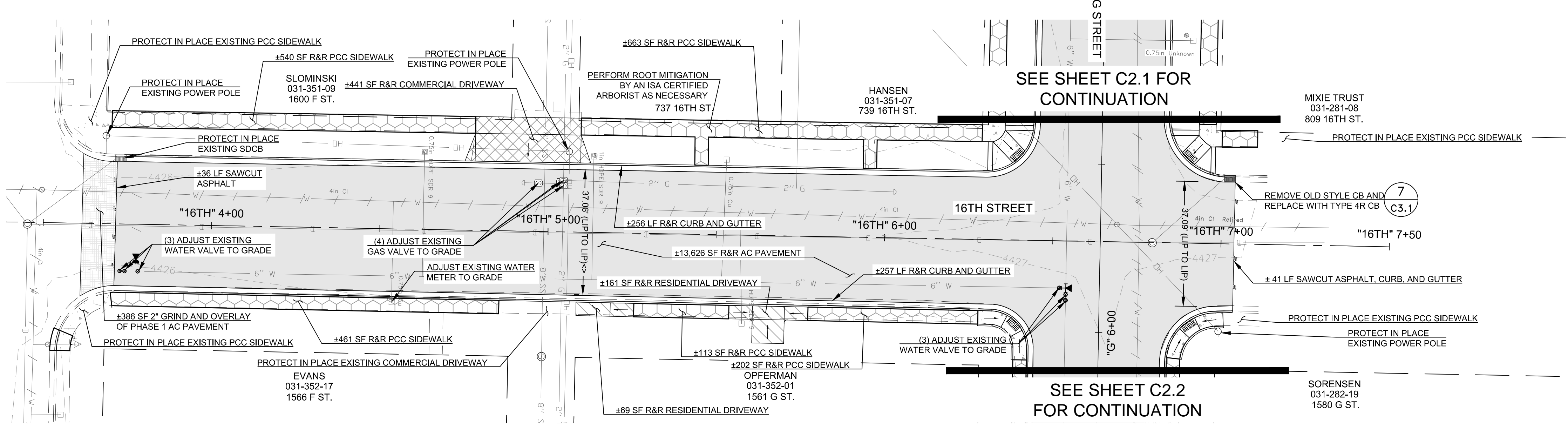
NEVADA
 SPARKS

JOB NO. 15101.04
 BY JL
 DATE 01-06-2017

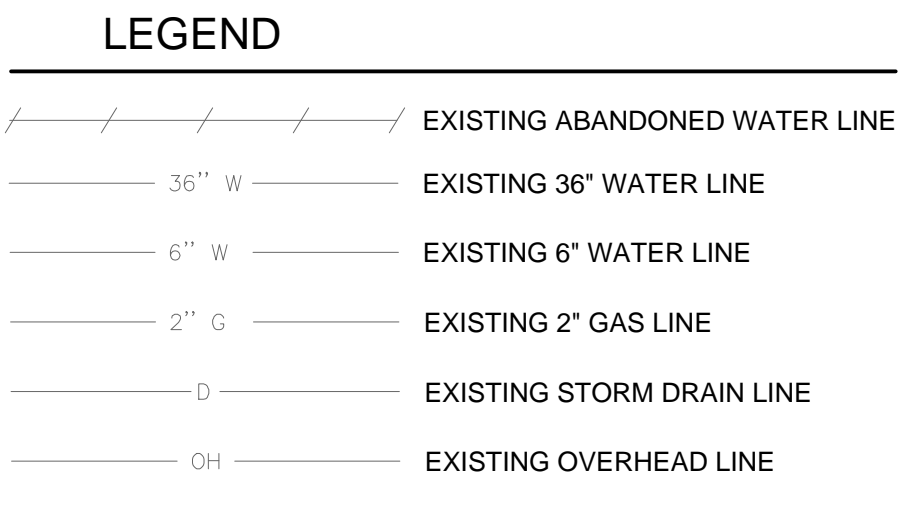
SHEET **C2.2**
 OF 8



DRAWING SCALE
 22" x 34": 1"=20'
 11" x 17": 1"=40'



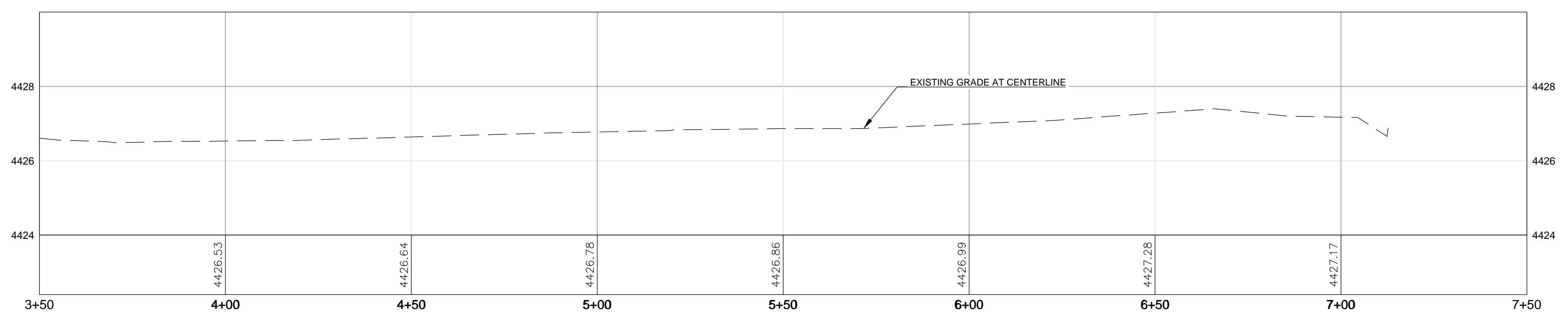
ESTIMATED TOTALS SHEET SHEET	
ITEM	QUANTITY
CURB AND GUTTER (6 C3.1)	513 LF
SIDEWALK (1 C3.0)	1,979 SF
RESIDENTIAL DRIVEWAY (6+7 C3.0)	230 SF
COMMERCIAL DRIVEWAY (6+7 C3.0)	441 SF
ASPHALT RECONSTRUCTION (3+4 C3.1)	13,626 SF
SAWCUT (2 C3.1)	77 LF
2" GRIND AND OVERLAY (1 C3.1)	386 SF



PLAN & PROFILE "16TH" STREET - STA: 3+50 - 7+50
 SCALE: 1" = 20' H
 2" V

DEMOLITION AND CONSTRUCTION NOTES

- NOT ALL EXISTING IMPROVEMENTS, ADJACENT PROPERTY, FENCING, WALLS, UTILITIES AND OTHER FACILITIES, TREES AND PLANTS ARE SHOWN ON THE PLANS. ALL EXISTING THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED FROM INJURY OR DAMAGE RESULTING FROM THE CONTRACTORS OPERATIONS IN ACCORDANCE WITH SPECIFICATION SECTION 301.04 AND 300.04.
- ALL SETTLING, DRAINAGE ISSUES, AND UNSUITABLE MATERIALS SHALL BE REMOVED, CORRECTED, AND REPLACED WITH RECYCLED AGGREGATE BASE OR IMPORTED TYPE 2, CLASS B AGGREGATE BASE.
- LENGTHS SHOWN FOR RAMPS ON DRIVEWAYS AND PEDESTRIAN RAMPS ARE FOR BID PURPOSES ONLY. LENGTHS SHALL BE VERIFIED IN FIELD AND CONFORM TO THE DETAILS AND SPECIFICATIONS PROVIDED.
- LINE AND GRADE FOR IMPROVEMENTS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR IN COORDINATION WITH THE CITY OF SPARKS INSPECTOR.



BID SET

NO.	DATE	MARK	REVISIONS	BY

REGISTERED PROFESSIONAL ENGINEER
 J. GERRISON
 Exp. 08-30-17
 CIVIL
 No. 19774
 01-24-2017

ENGINEERS - LAND SURVEYORS
PLANNERS - LANDSCAPE ARCHITECTS
 1150 CORPORATE BOULEVARD - RENO, NEVADA 89502
 775-856-1150 MAIN - 775-856-1160 FAX - CFARENO.COM

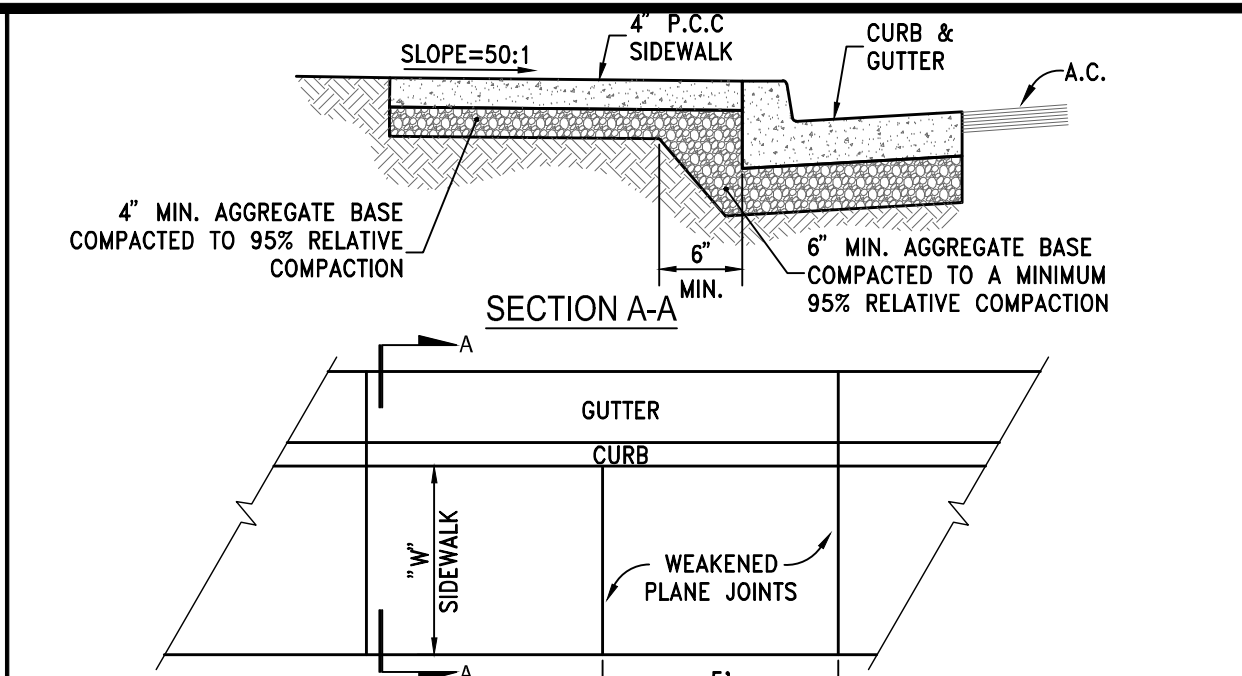
cfa

2017 CDBG STREET IMPROVEMENTS
 16TH ST. FROM F ST. TO G ST.
16TH STREET
 "16TH" STA: 3+50 - 7+50

NEVADA
 SPARKS

JOB NO. 15101.04
 BY JL
 DATE 01-06-2017

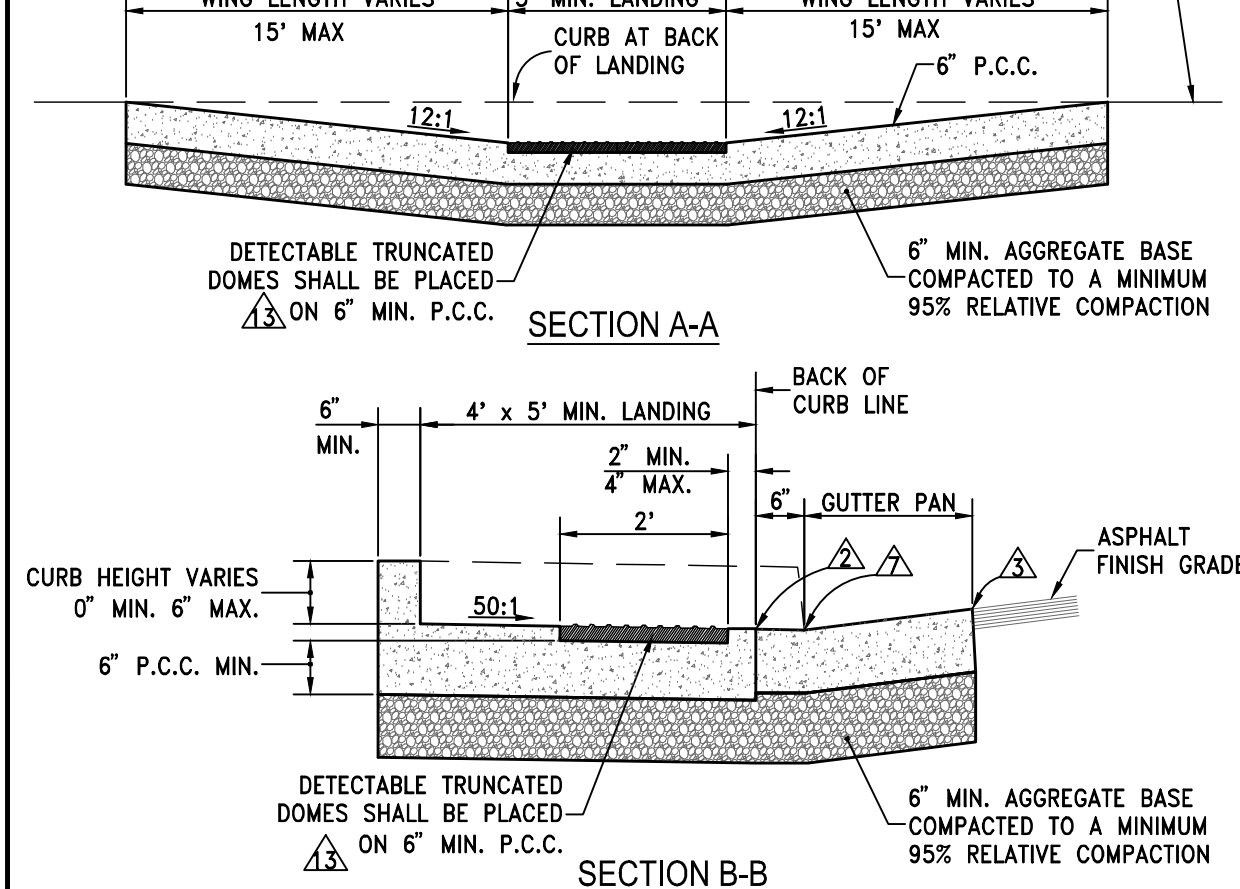
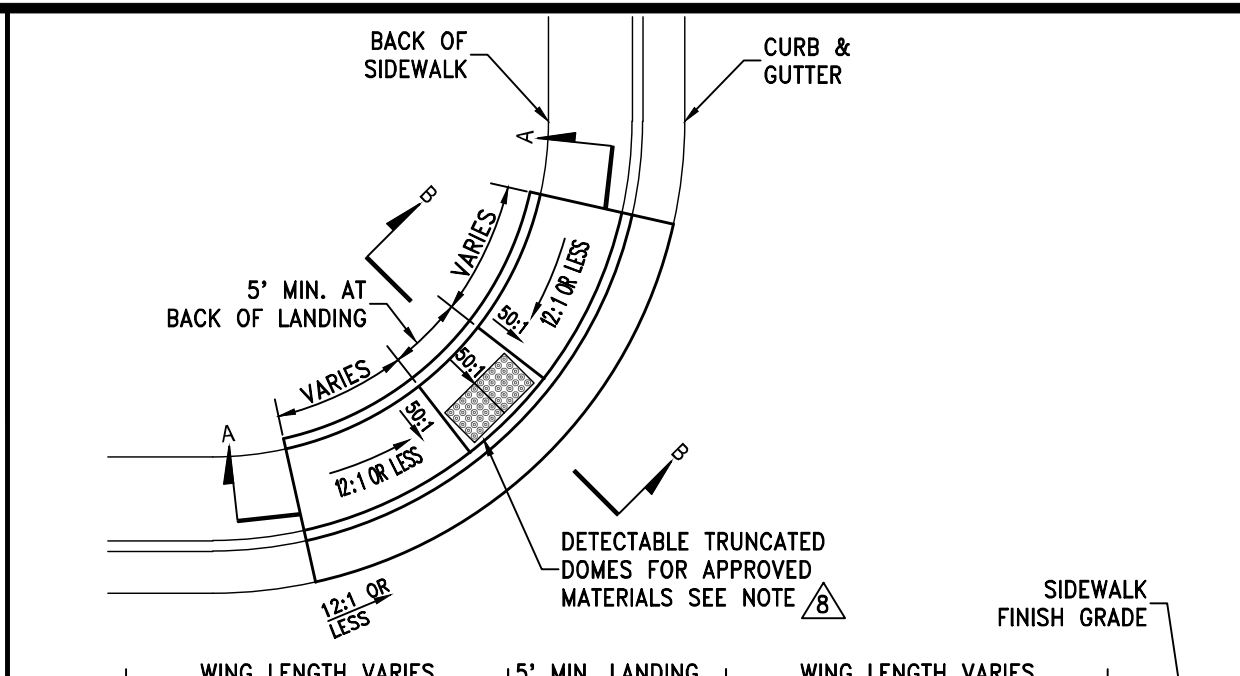
SHEET **C2.3**
 8



- NOTES:
1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ± 1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67.
 2. AGGREGATE BASE MATERIAL UNDER SIDEWALKS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
 3. SIDEWALK WIDTH "W" SHALL BE 4 FT MIN. ON RESIDENTIAL STREETS AND 6 FT MIN. ON COLLECTOR AND ARTERIAL STREETS.
 4. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 5 FT INTERVALS AND ACCORDANCE WITH SECTION 312 OF THE SSPWC.
 5. ALL ADJACENT CONCRETE REMOVAL SHALL BE TO NEAT SAW CUT LINES AT RIGHT ANGLES TO NEW SIDEWALK. DOWEL INTO EXISTING ADJACENT CONCRETE SIDEWALK WITH A MINIMUM OF TWO (2) No. 4 REINFORCEMENT BARS EQUALLY SPACED ACROSS WIDTH "W". DOWELS SHALL PENETRATE A MINIMUM OF 4" INTO EXISTING CONCRETE.
 6. SIDEWALKS SHALL NOT BE POURED MONOLITHICALLY WITH CURBS.
 7. COLORED CONCRETE AND PAVERS ARE NOT ALLOWED.
 8. TUNNELING AND/OR BORING IS NOT ALLOWED.
 9. FIBER-REINFORCED P.C.C. SHALL NOT BE PLACED IN RIGHT-OF-WAY.

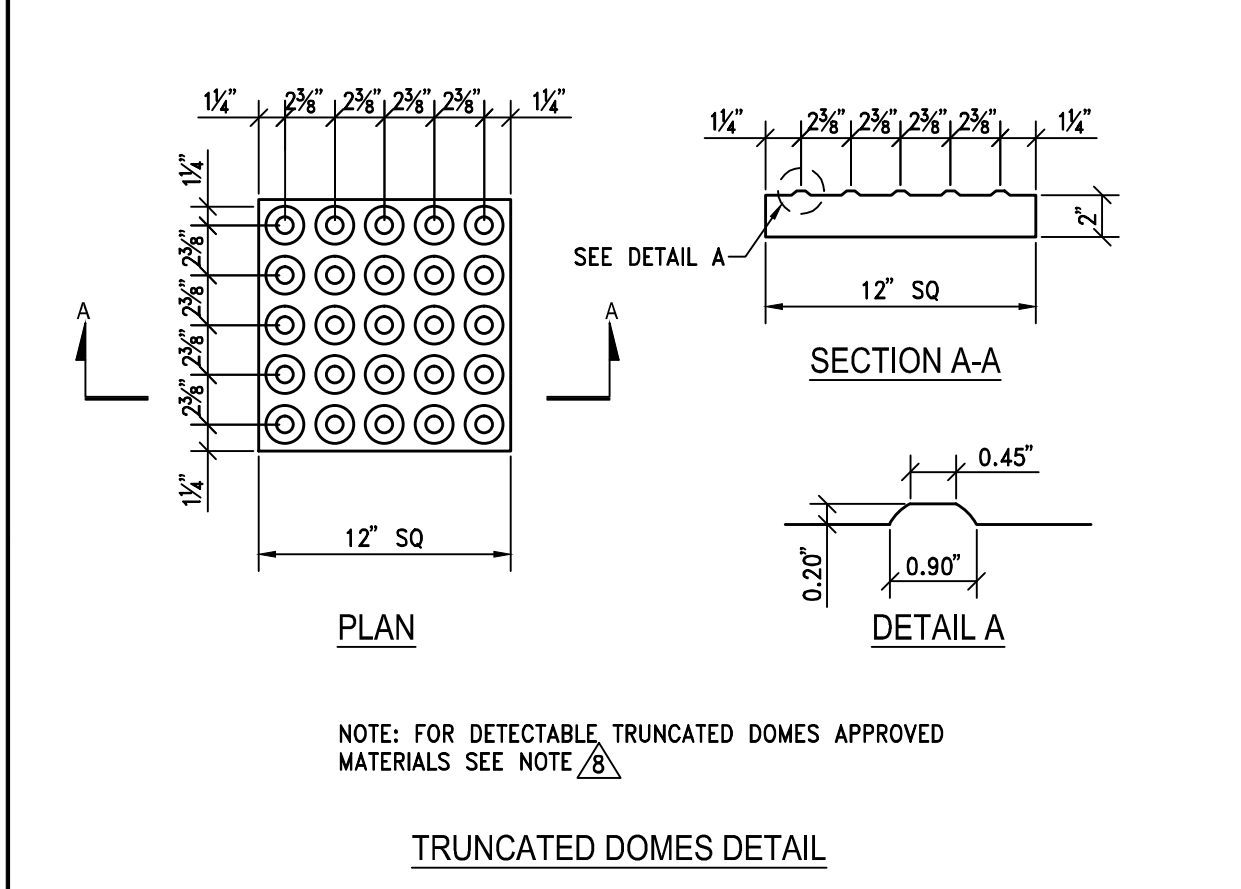
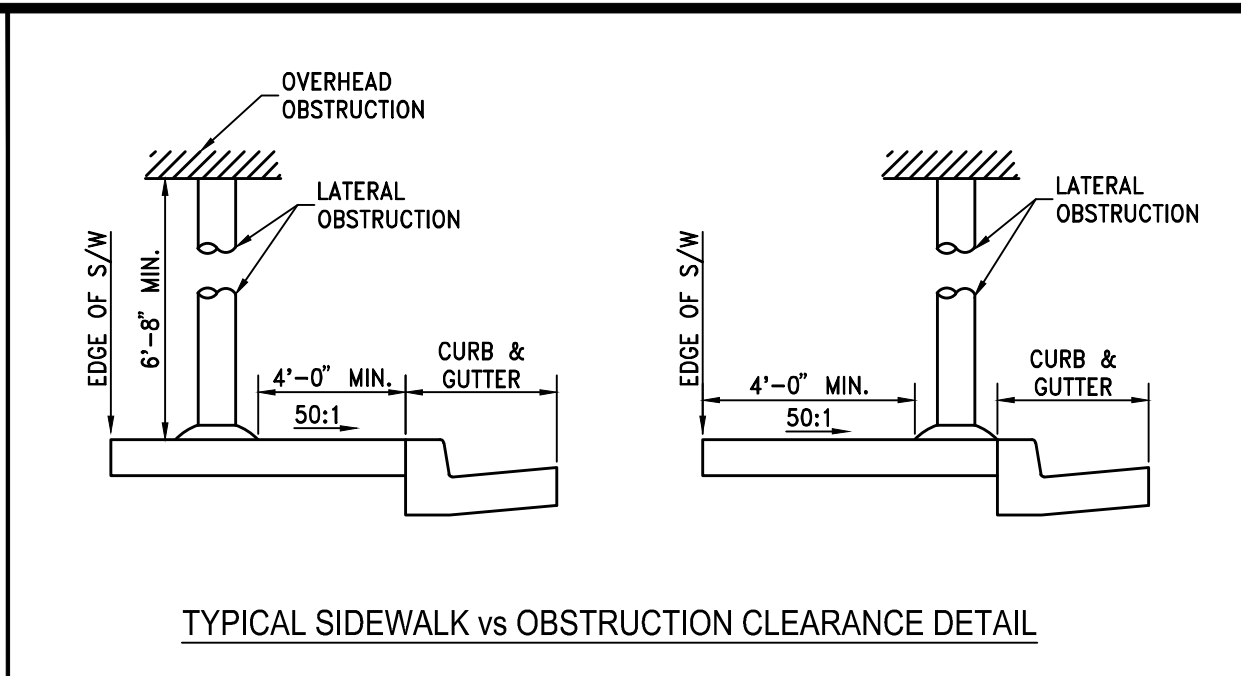
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
SIDEWALK DETAIL	R-104A
APPROVED BY:	DATE: 1/2013

1 **SIDEWALK DETAIL**
C3.0 N.T.S.



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
PEDESTRIAN RAMP - EXISTING SIDEWALKS	R-106A
APPROVED BY:	DATE: 1/2013

2 **PEDESTRIAN RAMP DETAIL**
C3.0 N.T.S.



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
PEDESTRIAN RAMP - DETAILS	R-106F
APPROVED BY:	DATE: 1/2013

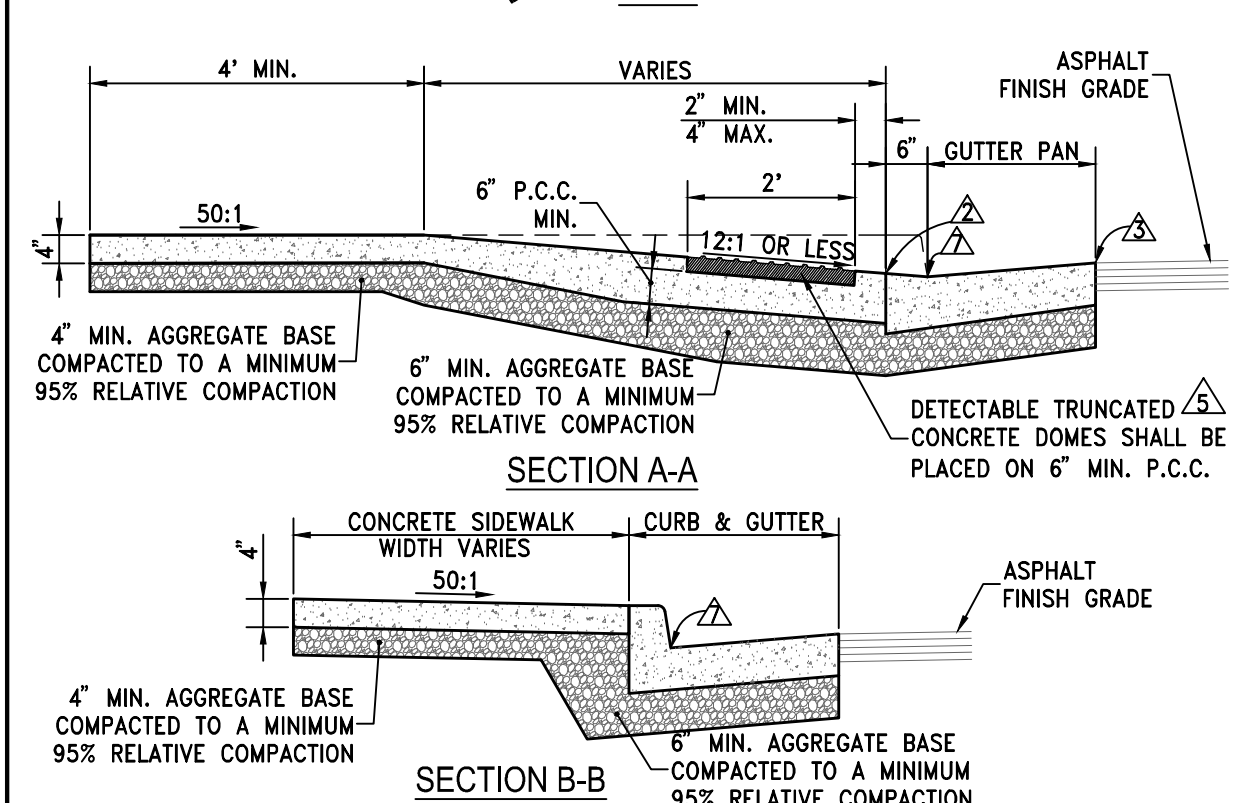
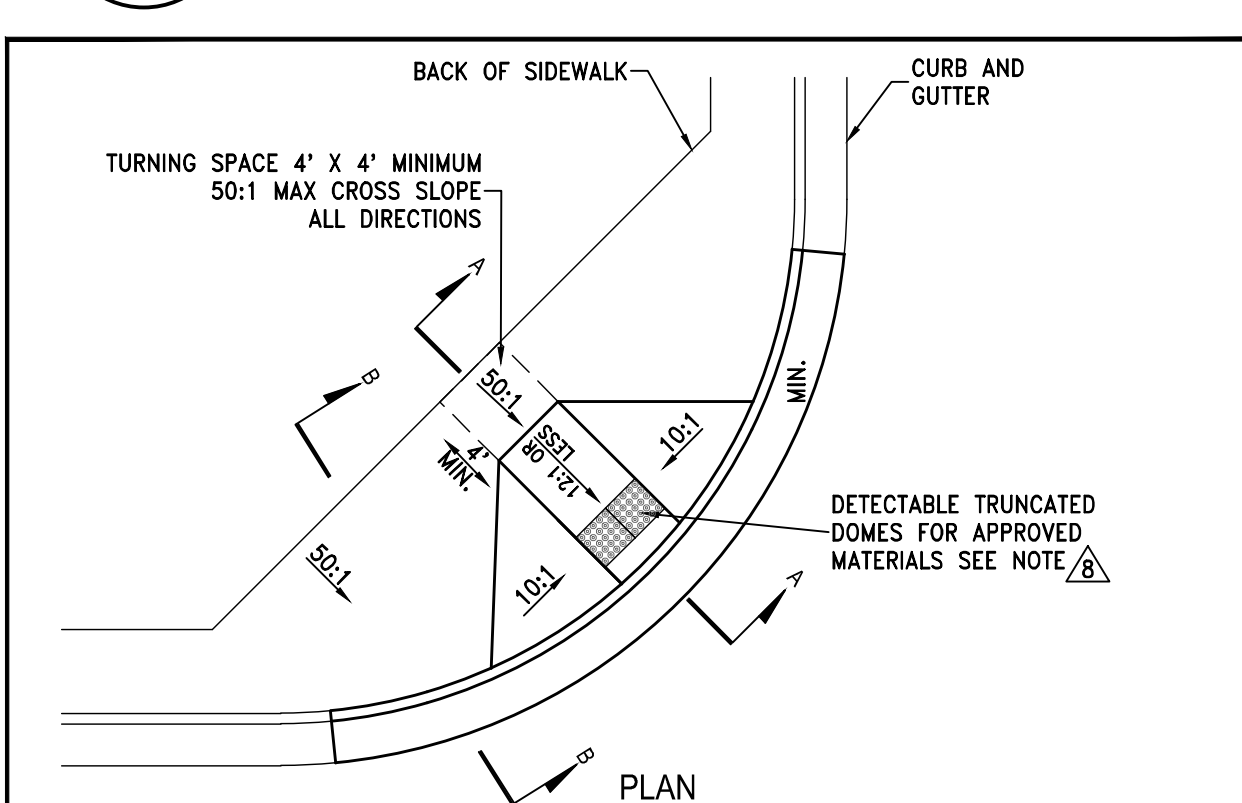
3 **PEDESTRIAN RAMP DETAIL**
C3.0 N.T.S.

- NOTES:
1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ± 1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67.
 2. AGGREGATE BASE MATERIAL UNDER DRIVEWAYS AND SIDEWALKS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. ALL MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
 3. RESIDENTIAL DRIVEWAYS SHALL BE POURED SEPARATE FROM CURB AND GUTTER.
 4. COMMERCIAL DRIVEWAYS MAY BE POURED MONOLITHIC WITH CURB AND GUTTER. COMMERCIAL DRIVEWAYS TO HAVE #4 BARS AT 18" ON CENTER LONGITUDINAL & TRANSVERSE EXTENDING INTO GUTTER PAN AND DRIVEWAY WINGS. MINIMUM 2" CONCRETE COVER FOR ALL REINFORCING BARS. WHEN COMMERCIAL DRIVEWAY APPROACH AND CURB & GUTTER IS POURED SEPARATELY, IT SHALL BE REQUIRED FOR EACH REINFORCING BAR TO BE DOWELED INTO ADJACENT CURB & GUTTER. DOWELS SHALL #4 REBAR, PENETRATE INTO CURB & GUTTER MINIMUM OF 6", SPACED AT 18" ON CENTER AND BE SECURELY TIED TO THE DRIVEWAY APPROACH REINFORCING.
 5. IF JOINT EXISTS WITHIN 4 FEET OF DRIVEWAY, REMOVE SIDEWALK AND CURB AND GUTTER TO THAT JOINT.
 6. ALL ADJACENT CONCRETE REMOVAL SHALL BE TO NEAT SAW CUT LINES AT RIGHT ANGLES. DOWEL INTO EXISTING ADJACENT DRIVEWAY APPROACH OR SIDEWALK WITH (2) No. 4 REINFORCEMENT BARS EQUALLY SPACED ACROSS WIDTH "W". DOWELS SHALL PENETRATE A MINIMUM OF 4" INTO EXISTING CONCRETE.
 7. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 5 FT INTERVALS AND IN ACCORDANCE WITH SECTION 312 OF THE SSPWC.

1. STORM DRAIN INLETS OR SIMILAR ACCESSES SHALL NOT BE LOCATED IN THE AREA AT THE BASE OF THE CURB RAMP OR LANDING AREA. IF OBSTRUCTIONS SUCH AS INLETS, UTILITY POLES, PULL BOXES, FIRE HYDRANTS, ETC. ARE ENCOUNTERED, THE LOCATION AND DIMENSIONS MAY BE ADJUSTED UPON APPROVAL OF THE ENGINEER.
- NO LIP SHALL BE PERMITTED AT THE CURB RAMP SLOPE TO GUTTER PAN.
- PLANTMIX BITUMINOUS SURFACE SHALL BE FLUSH WITH THE EDGE OF THE GUTTER PAN IN THE AREA OF THE CURB RAMP.
- ROUGH BROOM TEXTURE ON CURB RAMPS AND WINGS.
- DETECTABLE WARNING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SHALL BE PLACED ON MIN. SIX (6") INCHES OF P.C.C.
- ALL SLOPE RATES ARE RELATIVE TO LEVEL AND SHALL COMPLY WITH THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) STANDARDS, CURRENT VERSION.
- GUTTER SHALL MAINTAIN POSITIVE DRAINAGE TO PREVENT PONDING.
- DETECTABLE WARNING SHALL CONSIST OF PRECAST WETSET TILES WITH MIN. SIZE OF 2' X 2', COLOR DARK RED. APPROVED PRODUCTS INCLUDE: "CASTINACT", "TEKWAY DOME-TILES", "ARMOR CAST WET SET TILES", AND "ARCIS WET SET TILES". DETECTABLE WARNING SHALL BE CONSTRUCTED PER MANUFACTURER'S INSTALLATION GUIDELINES AND CONFORM TO ADAAG.
- CONCRETE REMOVAL SHALL BE TO NEAT SAW CUT LINES
- AGGREGATE BASE MATERIAL UNDER PEDESTRIAN RAMPS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
- PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ± 1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67.
- CONTRACTORS SHALL CORRECT ANY GRADE CONFLICT WITH EXISTING BOXES. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION REGARDING THE DEGREE OF MODIFICATIONS REQUIRED BY THE CONTRACTOR FOR GRADE CONFLICTS BETWEEN EXISTING BOXES AND NEW PEDESTRIAN RAMPS.
- SIDEWALK AT BOTH SIDES OF RAMP MAY BE RECONSTRUCTED TO MINIMIZE THE GRADE AT A HORIZONTAL DISTANCE TO BE DETERMINED IN THE FIELD, UPON APPROVAL OF THE ENGINEER, SUBJECT TO PROWAG REQUIREMENTS. CURB AT THE BACK OF WALK MAY BE NEEDED. A TRANSITION SECTION OF SIDEWALK MAY BE NECESSARY TO MATCH CROSS SLOPE OF EXISTING SIDEWALK TO PEDESTRIAN RAMP IMPROVEMENTS. TRANSITION SECTIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- CONTRACTOR SHALL CONSTRUCT ROUNDED CURBS WHERE THEY INTERSECT. RADIUS SHALL BE 1 FT MINIMUM MEASURED FROM FACE OF CURB. CURBS THAT INTERSECT AT A POINT SHALL NOT BE ALLOWED.

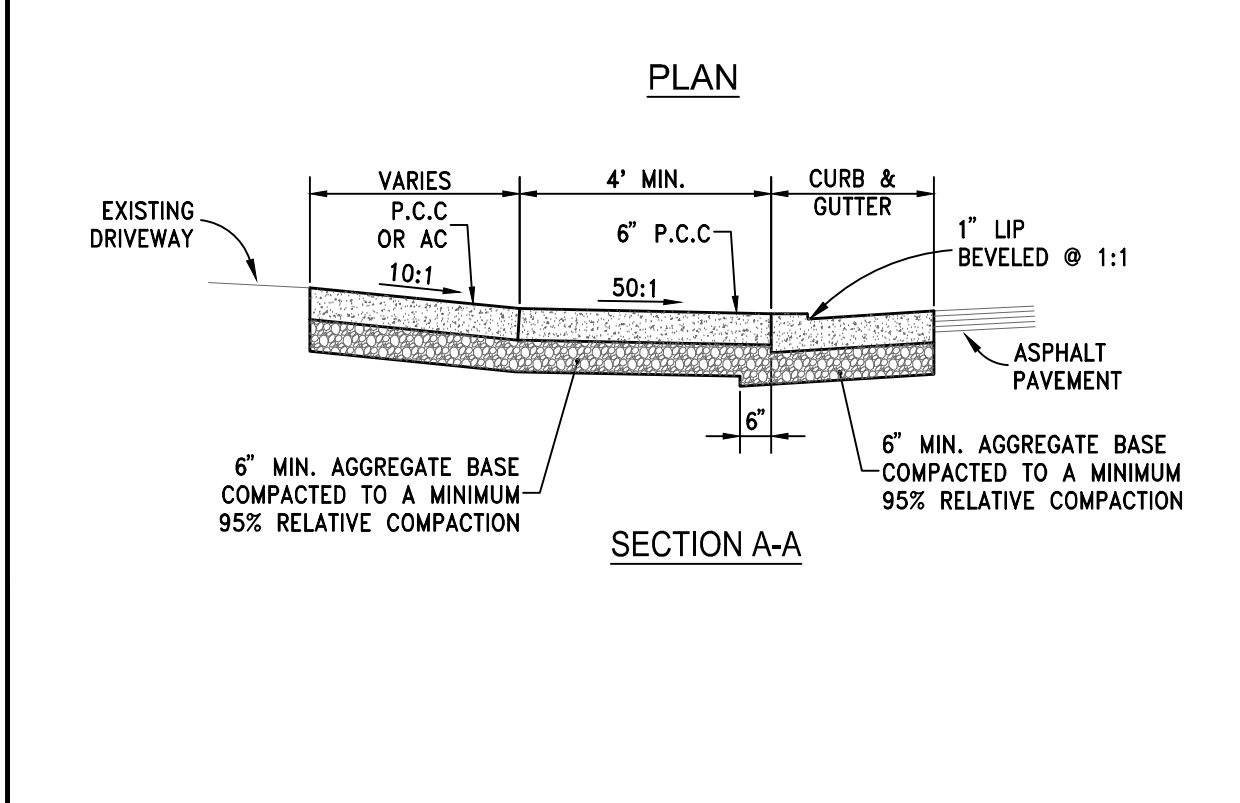
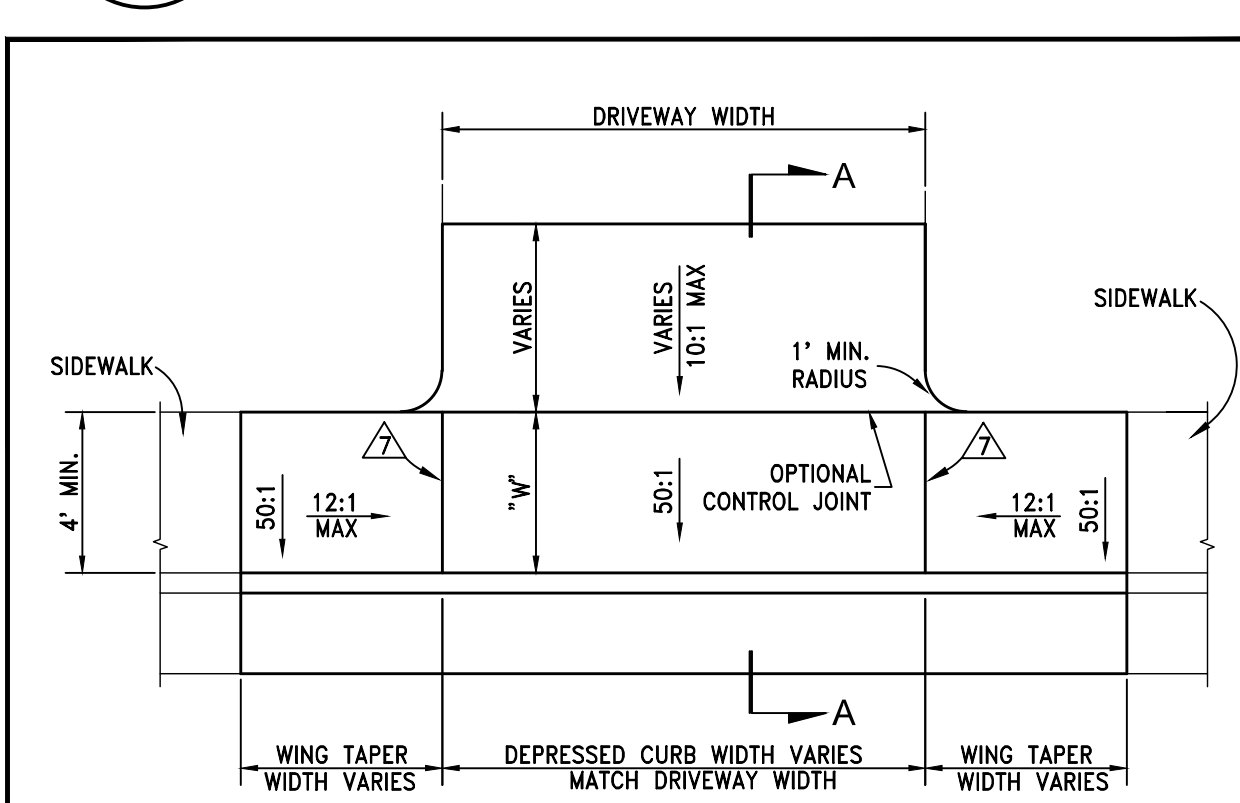
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
NOTES - PEDESTRIAN RAMP	R-106G
APPROVED BY:	DATE: 1/2013

4 **PEDESTRIAN RAMP NOTES**
C3.0 N.T.S.



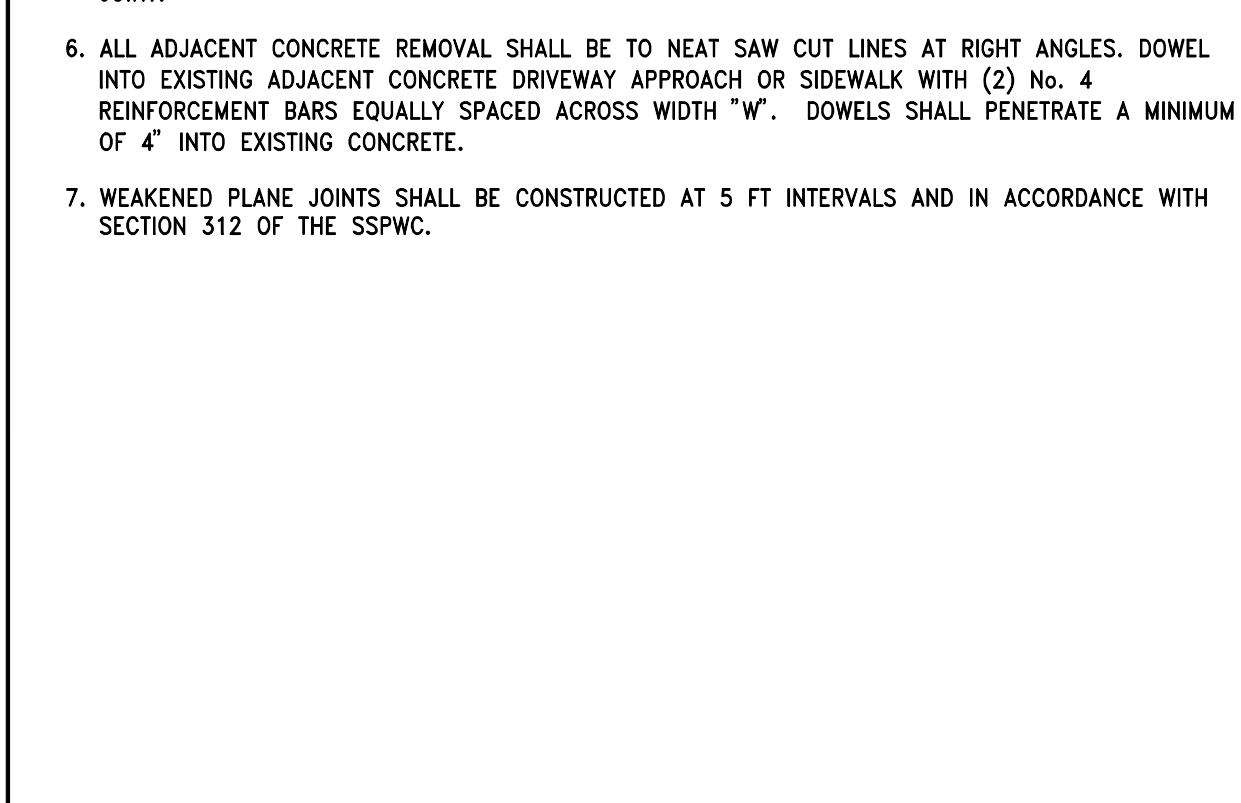
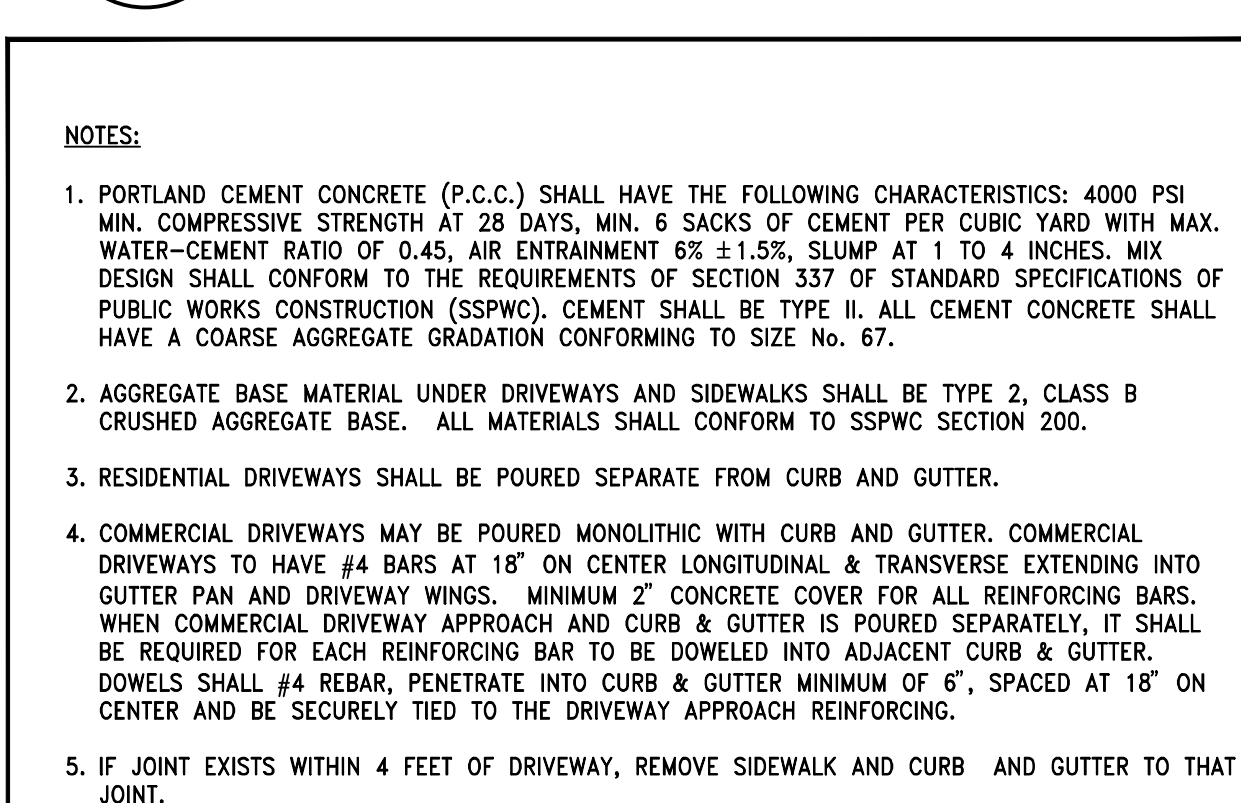
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
PEDESTRIAN RAMP - NARROW SIDEWALKS	R-106B
APPROVED BY:	DATE: 1/2013

5 **PEDESTRIAN RAMP DETAIL**
C3.0 N.T.S.



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
P.C.C. DRIVEWAY APRON	R-114A
APPROVED BY:	DATE: 1/2013

6 **P.C.C. DRIVEWAY APRON DETAIL**
C3.0 N.T.S.



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
NOTES - P.C.C. DRIVEWAY APRON	R-114B
APPROVED BY:	DATE: 3/2014

7 **P.C.C. DRIVEWAY APRON NOTES**
C3.0 N.T.S.



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
NOTES - P.C.C. DRIVEWAY APRON	R-114B
APPROVED BY:	DATE: 3/2014

8 **NOT USED**
C3.0 N.T.S.

BY	
REVISIONS	
DATE	
MARK	

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER J. HARRISON
 Exp. 06-30-17
 CIVIL
 No. 19714
 01-24-2017

ENGINEERS - LAND SURVEYORS
 PLANNERS - LANDSCAPE ARCHITECTS
 1150 CORPORATE BOULEVARD ■ RENO, NEVADA 89502
 775-856-1150 MAIN ■ 775-856-1160 FAX ■ CFARENO.COM

cfa

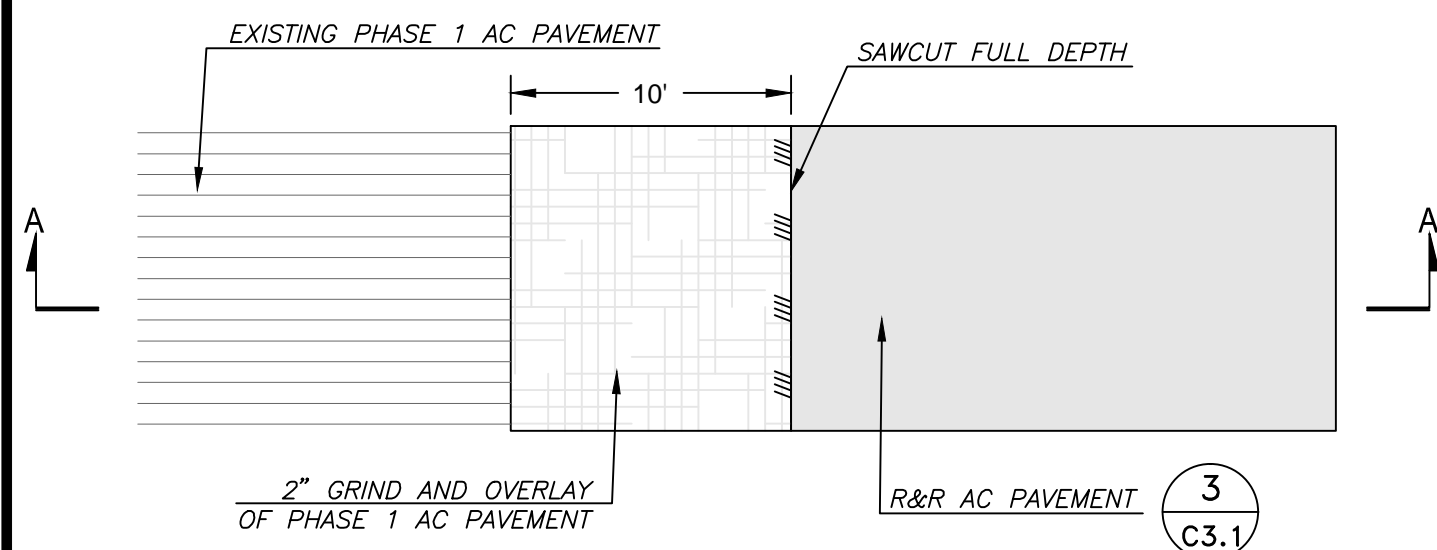
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2017 CDBG STREET IMPROVEMENTS
 16TH ST. FROM F ST. TO G ST.

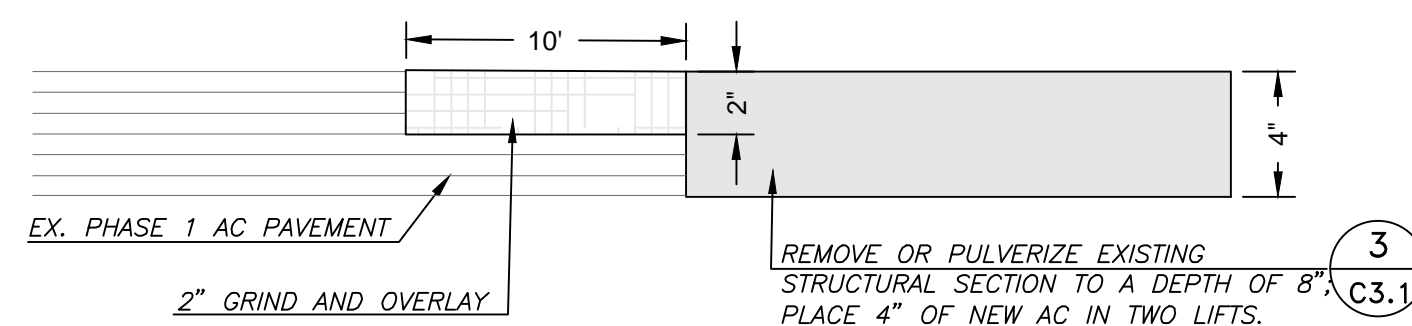
DETAILS

JOB NO. 15101.04
 BY JL
 DATE 01-06-2017

SHEET **C3.0** OF 8

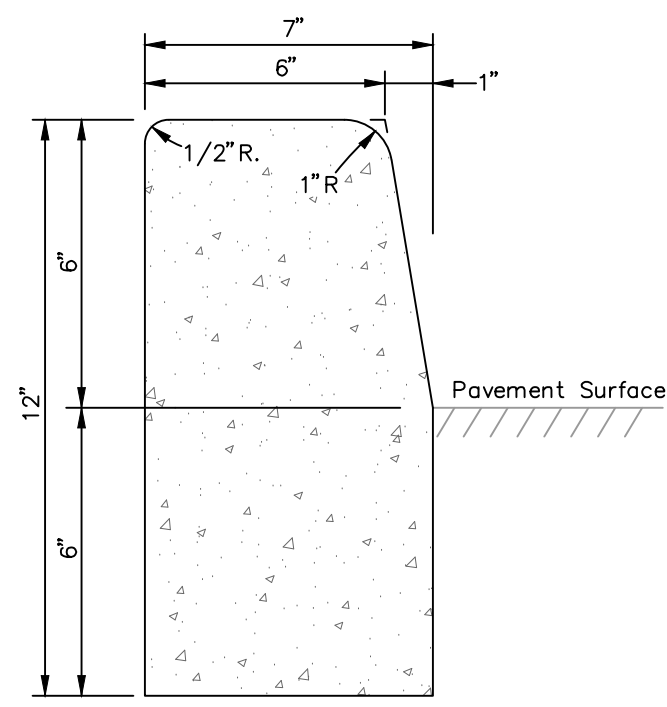


PLAN



SECTION A-A

1 ASPHALT TIE-IN DETAIL
C3.1 N.T.S.



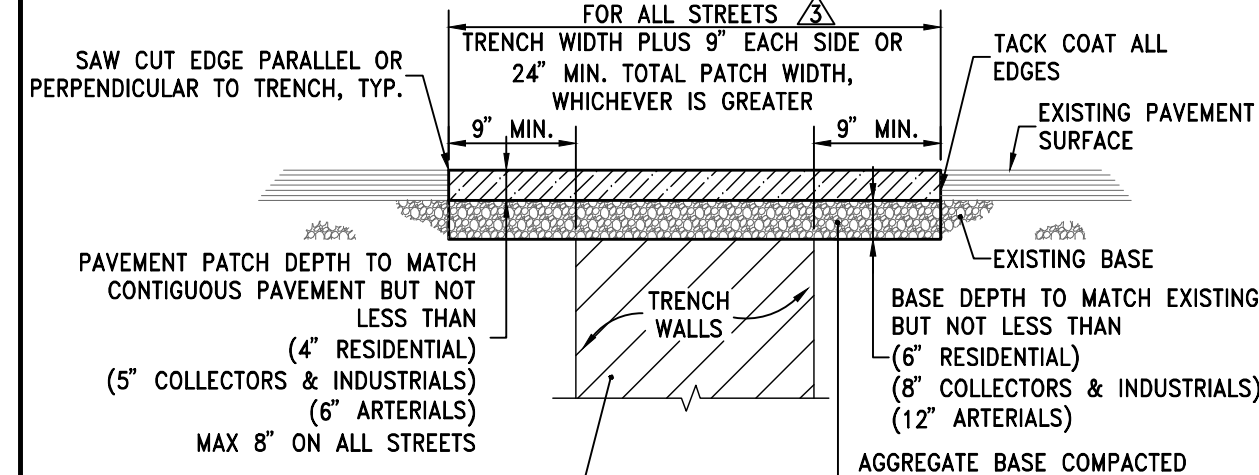
SUBGRADE TO BE COMPACTED TO 95% M.D.D.

1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH @ 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH A MAX. WATER/CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ± 1.5%, SLUMP AT 1 TO 4 INCHES. ALL MATERIALS SHALL CONFORM TO SSPWC SECTION 202.

2. EXPANSION JOINTS 1/2-INCH WIDE SHALL BE LOCATED IN CURBS AND GUTTERS AT EACH SIDE OF STRUCTURES, AT THE ENDS OF ALL CURB RETURNS, AND ABUTTING HARDENED IN-PLACE CURB AND GUTTER, EXCEPT THAT EXPANSION JOINTS SHALL NOT BE INSTALLED WITHIN 20 FEET OF AN ISLAND NOSE. EXPANSION JOINTS SHALL BE 1/2-INCH THICK, SHAPED TO THE CROSS SECTION OF THE CURB AND GUTTER, AND CONSTRUCTED AT RIGHT ANGLES TO THE CURB AND GUTTER. JOINT FILLER MATERIAL SHALL CONFORM TO SECTION 202.10. WEAKENED PLANE JOINTS SHALL BE EVERY 10 FEET AND LOCATED ON THE BACK, TOP AND EDGE OF THE CURB.

3. CURB AND GUTTER SECTIONS SHALL BE PLACED SEPARATELY FROM SIDEWALK SECTIONS.

5 PCC POST CURB DETAIL
C3.1 N.T.S.

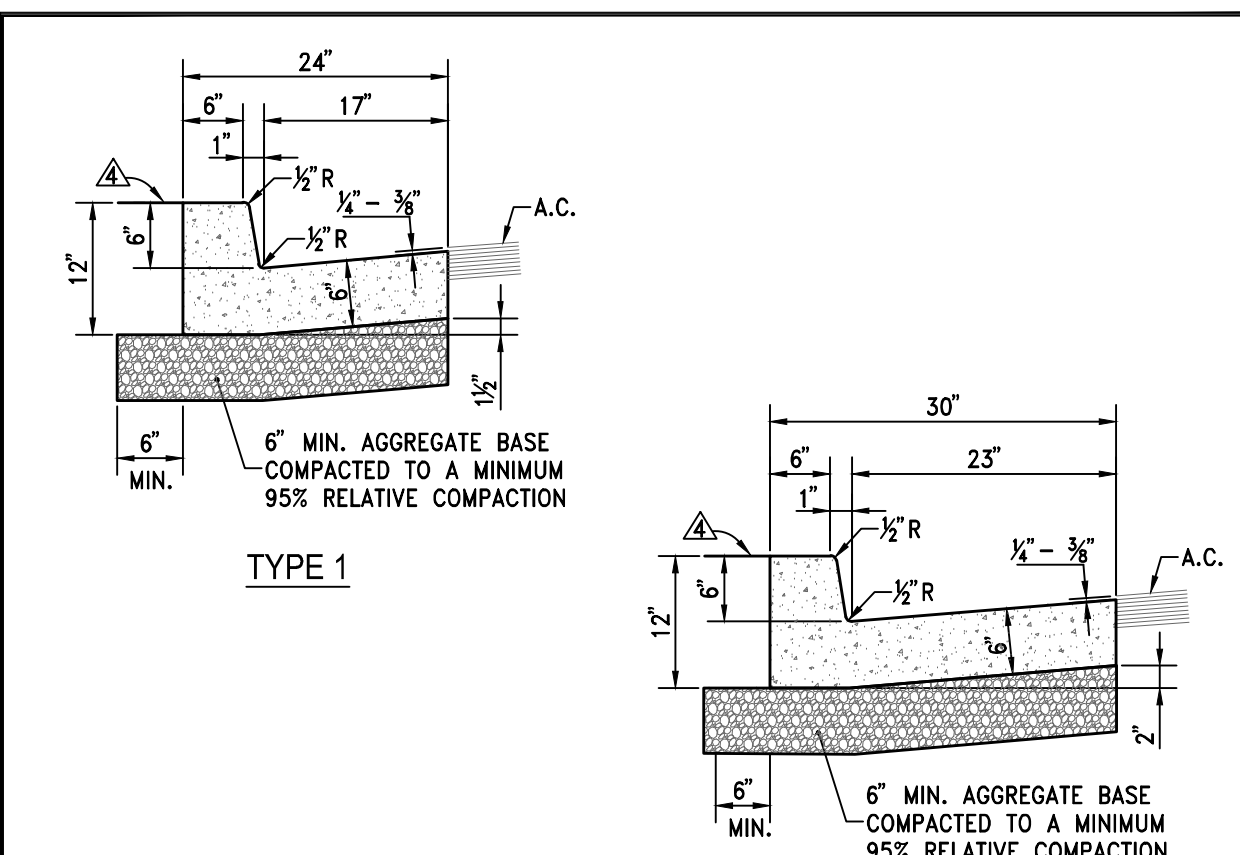


NOTES:

1. AN EXCAVATION/ENCROACHMENT PERMIT MUST BE OBTAINED FROM CITY OF RENO PRIOR TO CUTTING ANY PUBLIC RIGHT-OF-WAY.
2. IF SAW CUT IS WITHIN 2 FEET OF AN EXISTING PAVEMENT EDGE OR EXISTING PAVEMENT PATCH, REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE ENTIRE SECTION.
3. ALL PERMANENT PATCH REPLACEMENT REQUIREMENTS ARE MINIMUM WIDTHS ONLY AND INCLUDES ALL AREAS WHERE THE ASPHALT PAVEMENT HAS BEEN UNDERMINED. THE CITY ENGINEER MAY REQUIRE WIDER PATCH SECTIONS OR OTHERWISE ALTER THESE REQUIREMENTS.
4. AGGREGATE BASE MATERIAL UNDER BITUMINOUS PAVEMENT PATCH SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF LOOP DETECTORS, ADJUSTMENT OF UTILITIES AND SURVEY MONUMENTS TO GRADE AND INSTALLATION OF PERMANENT PAVEMENT MARKINGS.
6. FOR P.C.C. CURB REPLACEMENT, SAW CUT EXISTING PAVEMENT 18 INCHES MIN. FROM GUTTER LIP LINE, REMOVE AND REPLACE PAVEMENT TO SAW CUT EDGES. CONCRETE MAY BE POURED NEAT AGAINST EXISTING EDGE OF ASPHALT IF APPROVED BY CITY ENGINEER.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION
PERMANENT BITUMINOUS PAVEMENT PATCH
DRAWING No. R-120
APPROVED BY: DATE: 1/2013

2 PAVEMENT PATCH DETAIL
C3.1 N.T.S.

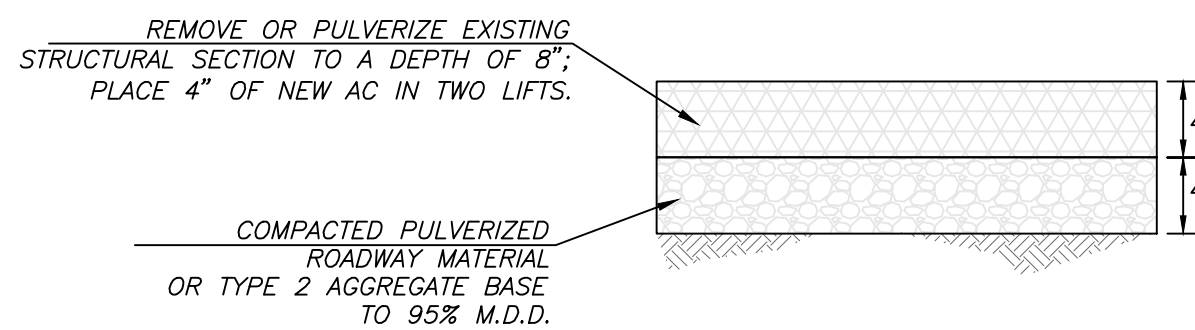


NOTES:

1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ± 1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67.
2. AGGREGATE BASE MATERIAL UNDER AND BEHIND CURB AND GUTTER SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
3. WEAKENED PLANE JOINTS SHALL BE EVERY 10 FEET AND LOCATED ON THE BACK, TOP AND FACE OF THE CURB AND THE TOP OF THE GUTTER PAN.
4. CURB & GUTTER SECTIONS SHALL BE PLACED SEPARATELY FROM SIDEWALK SECTIONS. WHEN SIDEWALK IS NOT REQUIRED DIRECTLY BEHIND THE CURB, BACKFILL TO TOP OF CURB FOR A HORIZONTAL DISTANCE OF 12" FROM BACK FACE OF CURB AND COMPACT TO 90% RELATIVE COMPACTION.
5. FOR REPLACEMENT OF EXISTING CURB AND GUTTER, MATCH EXISTING TYPE.
6. FIBER-REINFORCED P.C.C. SHALL NOT BE PLACED IN RIGHT-OF-WAY.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION
P.C.C. CURB & GUTTER
DRAWING No. R-109
APPROVED BY: DATE: 1/2013

6 PCC CURB AND GUTTER DETAIL
C3.1 N.T.S.



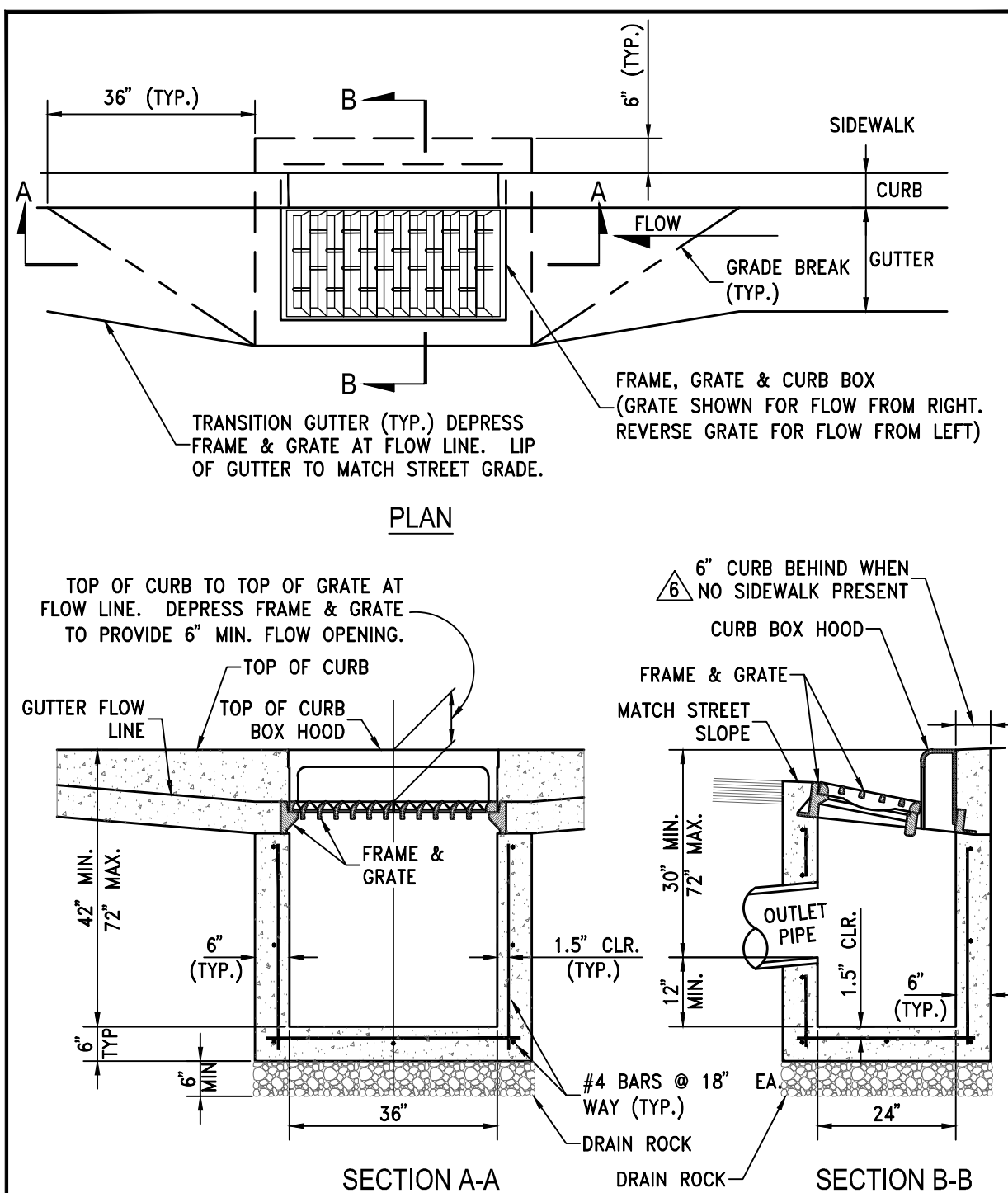
STRUCTURAL PAVEMENT SECTION NOTES:

PLANT MIX BITUMINOUS PAVEMENT SHALL BE A TYPE 3, 50 BLOW, 3% AIR VOID MIX USING PG64-28V ASPHALT CEMENT. AGGREGATES SHALL BE PRE-MARINATED WITH LIME PER NDOT SPECIFICATIONS. RECYCLED ASPHALT PAVEMENT (RAP) UP TO 15% WILL BE ALLOWED; HOWEVER, ALL VIRGIN AGGREGATES WILL BE SUBJECT TO LIME PRE-MARINATING PER NDOT SPECIFICATIONS.

GEOTECHNICAL REPORT NOT PROVIDED. ROADWAY ASPHALT SECTION THICKNESS, AGGREGATE BASE, AND SUBGRADE PREPARATION HAS BEEN PROVIDED BY THE CITY OF SPARKS FOR ROADWAY IMPROVEMENTS. NO WARRANTIES OR GUARANTEES ARE IMPLIED OR PROVIDED FOR THE MATERIALS PERFORMANCE OF ROADWAY AREA. PLANS PROVIDE LIMITS OF ASPHALT, CURB AND GUTTER, AND REMOVAL OF PROPOSED IMPROVEMENTS ONLY.

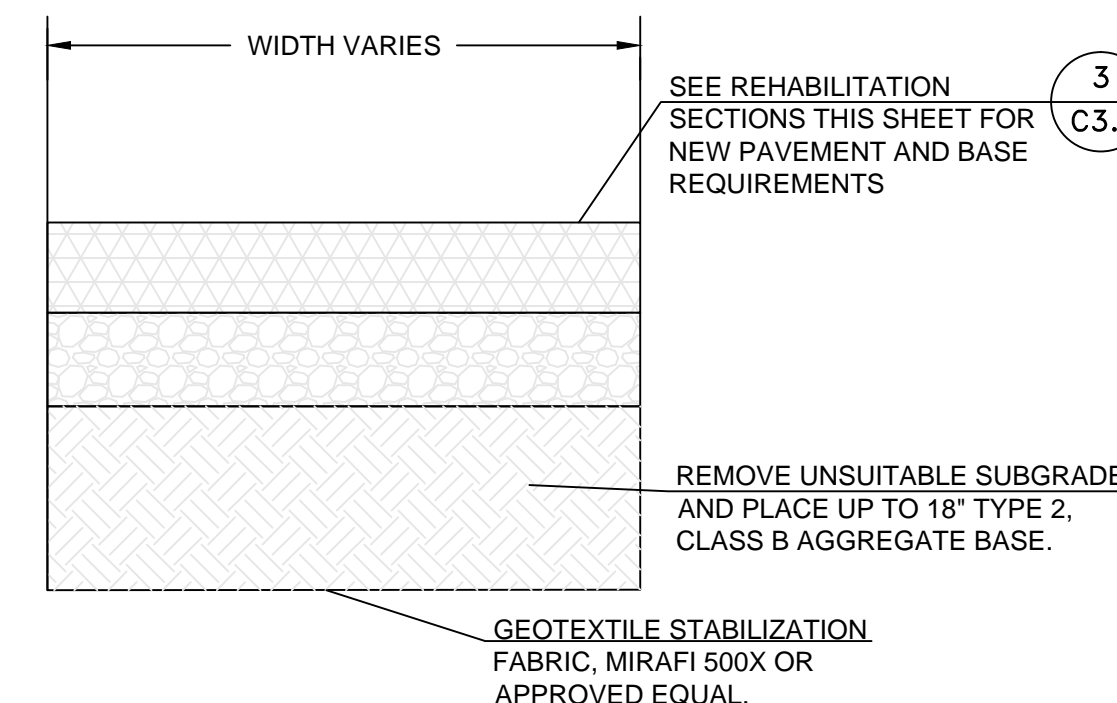
OVEREXCAVATE AND STABILIZE ANY UNSUITABLE SUBGRADE MATERIAL AS DIRECTED BY THE ENGINEER PRIOR TO PAVING OPERATIONS. REFERENCE DETAIL 4, SHEET C3.1.

3 ASPHALT SECTION DETAIL
C3.1 N.T.S.



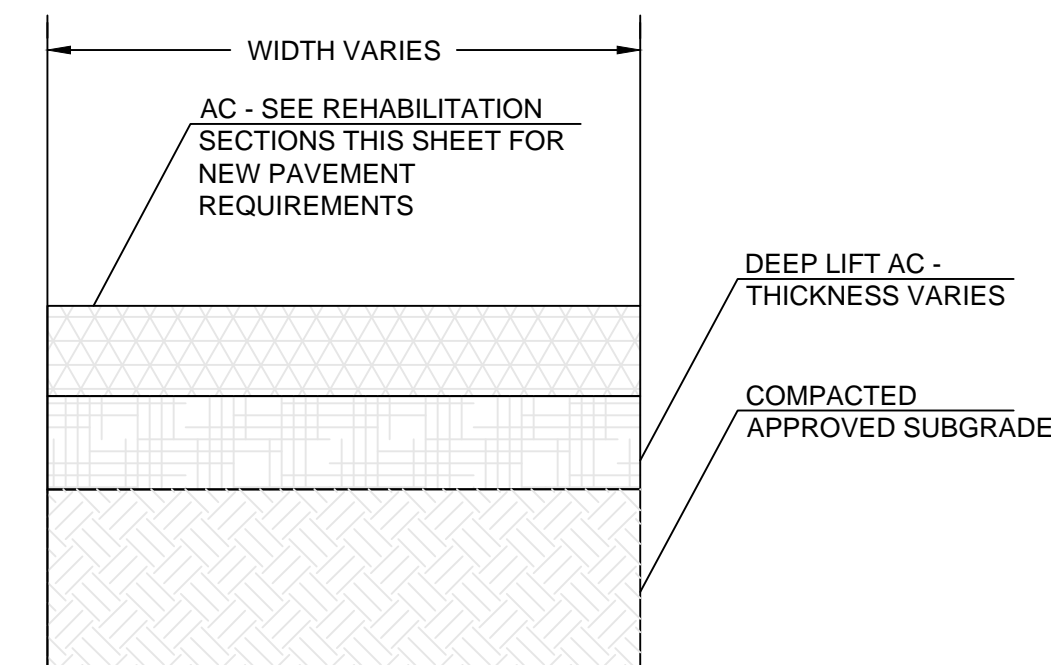
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION
CATCH BASIN TYPE 4-R
DRAWING No. R-206A
APPROVED BY: DATE: 1/2013

7 CATCH BASIN TYPE 4-R DETAIL
C3.1 N.T.S.



TYPICAL STABILIZATION SECTION

NOTE: LIMITS OF OVEREXCAVATION, WIDTHS, AND DEPTH TO BE DETERMINED BY THE ENGINEER.



ALTERNATE STABILIZATION SECTION

NOTE: LIMITS OF DEEP LIFT AC, WIDTHS, AND DEPTH TO BE DETERMINED BY THE ENGINEER.

4 OVEREXCAVATION SECTION FOR UNSUITABLE MATERIAL
C3.1 N.T.S.

8 NOT USED
C3.1 N.T.S.

REVISIONS	DATE	MARK

ENGINEERS • LAND SURVEYORS
PLANNERS • LANDSCAPE ARCHITECTS
 1150 CORPORATE BOULEVARD • RENO, NEVADA 89502
 775-856-1150 MAIN • 775-856-1160 FAX • CFARENO.COM

BID SET
 2017 CDBG STREET IMPROVEMENTS
 16TH ST. FROM F ST. TO G ST.

DETAILS
 SHEET C3.1 OF 8

JOB NO. 15101.04
 BY JL
 DATE 01-06-2017